SANTA CLARA CITY

BUILDING PERMIT APPLICATION

BECOMES PERMIT WHEN SIGNED

Founded 1854 Santa Clara Utah

Building Dept: 435-656-4690
Inspections: 435-879-5313
Fax: 435-879-5298

☐ Owner/Builder
☒ Contractor

Date of Application: 6-9-16

Date Issued:

Permit No. SAC

BUILDING FEE SCHEDULE

∀ TYPE OF IMPROVEMENT / KIND OF CONSTRUCTION ∀

☐ New Home ☐ Addition ☐ Pool ☐ Tenant Finish

☐ Remodel ☐ Garage ☐ Ret. Wall ☒ Other (EXTEND EXISTING AWNING)

Building Address: 1620 GUBLER Drive

Property Tax ID#: SC-HAHS-11

Lot #: 11 Plat or Subdivision: Hafen Heights

Owner of Property: DAWA MASFIELD Phone:

Owner Mailing Address: City/Zip:

Business Name & Address: Lic. No.:

Architect or Engineer:

General Contractor: THE AWNING COMPANY State Lic. No.: 8105560-5501

General Email: bart@theawningco.com

General Address: 1509 S 270 E Phone: 801 639 9778

General City: ST George State: UT Zip: 84790

Electrical Contractor: State Lic. No.:

Electrical Address: Phone:

Electrical City: State: Zip:

Plumbing Contractor: State Lic. No.:

Plumbing Address: Phone

Plumbing Ci

∀ Building Square Footage ∀	Valuation:	$ 3000	
☐ Main Floor:	Building Fees	$ 83	25
☐ 2nd Story:	Plan Review Fees	$ 20	81
☐ Fin. Basement:	Water Connect	$	
☐ Garage:	Water Impact	$	
☐ Addition:	Sewer Impact - City	$	
☐ Other:	Sewer Impact – County	$	
Type of Construction / Occupancy Group	Electrical Connect	$	
	Electrical Impact 200 amp	$	
	Electrical Impact 400 amp	$	
Bedrooms:	Street Impact	$	
Bathrooms:	Parks/Trails Impact	$	
Garages:	Public Safety Impact	$	
Type of Construction Material	Storm Water Impact	$	
☐ Brick ☐ Frame ☐ Brick Var.	Storm Water Inspections	$	
☐ Steel ☐ Block ☐ Concrete	Maintenance Deposit	$ 100	00
Max. Occ. Load:	State Fee (1%)	$	83
Fire Sprinkler: ☐ Yes ☐ No	Environmental Mitigation Fee (1%) – City	$	
Plan Check OK By:	Environmental Mitigation Fee (2%) – County	$	
	➤➤ TOTAL	$ 204	89

Site Plan?

Wait until after PC 6/14 for Variance

435-668-2975 St. George
855-MHI-SERV Toll Free
801-973-2000 Salt Lake
208-362-2101 Boise

Mi re of Building Official: Date:

Me

Me ts:

OTE: 24 hours' notice is required for all inspections.

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Rea

Spe

Healt

Public

Geote

it becomes null and void if work or construction authorized is not ed within 180 days, or if construction or work is suspended or abandoned for f 180 days at any time after work is commenced. I here-by certify that I have examined this application and know the same to be true and correct. All of laws and ordinances governing this type of work will be complied with pecified herein or not the granting of a permit does not presume to give violate or cancel the provisions of any other state or local law regulating n or the performance of construction and that I make this statement under perjury. Maintenance Deposit is refundable after final inspection if: 1) site is 2) building is NOT occupied prior to final inspection and issuance of of Occupancy.

f Contractor or Authorized Agent: Date: 6-9-16

Signature of Owner: Date:

Print Name: Bart Skrbec Date: 6-9-16

Electrical Department			
Built to IRC/IBC			

Additional Notes:

Santa Clara Pool/Addition Permit Fees

Valuation	3,000
Building Fee	$83.25
Plan Review Fee	$20.81
Maint. Deposit	$100.00
Utah State Surcharge	$0.83
Total Building Permit Fee	**$204.89**

ROUND VALUATION TO NEAREST 1,000

CITY OF SANTA CLARA

Santa Clara City
Building Permit

Permit #:
Issue Date: 06/09/2016

Property Owner: Dana Mansfield
Type of Improvement: Awning
Address: 1620 Gubler Drive
City: State: UT Zip: 84765
Account: APN: SC-HAHS-11
Subdivision: Hafen Heights
Phase: Block: Lot#: 11
Zone: Sec: ;T S;R W

CONTRACTOR INFORMATION

Engineer of Record:
General Contractor: The Awning Company
License #: 8105560-5501
Address:
City: State:
Zip: Phone: (808) 639-9778
Email:

Electrical Contractor:
License #:
Phone:
Email:

Plumbing Contractor:
License #:
Phone:
Email:

Mechanical Contractor:
License #:
Phone:
Email:

BUILDING INFORMATION

Main Floor:	Sq. ft.	2nd Floor:	Sq. ft.
Basement:	Sq. ft.	Unfin. Basemt:	Sq. ft.
Garage:	Sq. ft.	Covered Patio:	Sq. ft.
Other:	Sq. ft.		

# Bedrooms:	# Bathrooms:
# Stories:	# Garages:
Max Occ. Load:	Type of Const:
Occ. Group: VB	Const. Material:
Division:	Fire Sprinkler:

PERMIT FEES

Valuation	$	3,000.00
Building Fees	$	83.25
Plan Review Fees	$	20.81
Maintenance Deposit	$	100.00
State Fee - 1%	$	0.83
Total Fees:	$	204.89

CITY OF SANTA CLARA

APPROVALS	DATE	INFO

Front Setback:	Rear Setback:
Left Setback:	Right Setback:

Notes:

This permit becomes null and void if work or construction authorized is not commenced within 180 days, or if construction or work is suspended or abandoned for a period of 180 days at any time after work is commenced. I here-by certify that I have read and examined this application and know the same to be true and correct. All provisions of laws and ordinances governing this type of work will be compiled with whether specified herein or not the granting of a permit does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction and that I make this statement under penalty of perjury. Maintenance Deposit is refundable after final inspection if: 1) site is kept clean 2) building is NOT occupied prior to final inspection and issuance of Certificate of Occupancy.

Signature of Contractor or Authorized Agent: Date:

Signature of Owner (If Owner/Builder): Date:

Application Approved By: Date:

Payment Received: Date:

Account 0561632

Location

Account Number 0561632
Parcel Number SC-HAHS-11
Tax District 09 - Santa Clara City
Acres 0.27
Situs 1620 GUBLER DR , SANTA CLARA
Legal Subdivision: HAFEN HEIGHTS (SC) Lot: 11

Parent Accounts 0098890
Parent Parcels SC-6-2-16-4411
Child Accounts
Child Parcels
Sibling Accounts
Sibling Parcels

Owner

Name MANSFIELD MATHEW & DANA TRS
1620 GUBLER DR
SANTA CLARA, UT 84765

Value

Market (2015) $229,600
Taxable $126,280
Tax Area: 09 **Tax Rate**: 0.011955

Type	Actual	Assessed	Acres
Primary Improved	$229,600	$126,280	0.270

Transfers

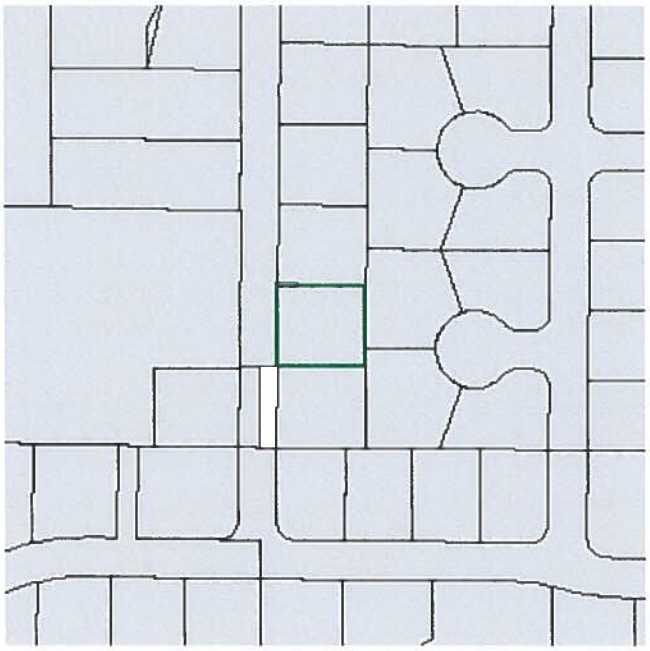
Entry Number	Recording Date	
00999476	01/26/2006 02:28:00 PM	B: 1837 P: 1927
00657934	08/09/1999 04:19:00 PM	B: 1343 P: 376
00618471	09/24/1998 03:39:00 PM	B: 1260 P: 198
00564952	05/06/1997 09:56:00 AM	B: 1097 P: 595
00564400	04/30/1997 10:45:00 AM	B: 1096 P: 35

"Tax"

Tax Year	Taxes
2015	$1,509.68
2014	$1,533.44

Images

- GIS



METALS BUILDING PRODUCTS PATIO COVER, CARPORT AND COMMERCIAL STRUCTURE ENGINEERING (2012 IBC)

PAGES	DRAWING	SECTION DESCRIPTION
1	MUSAGN01.DWG	GENERAL NOTES AND TRIBUTARY WIDTH DIAGRAM
1		GENERAL NOTES AND PROFESSIONAL ENGINEERING STAMPS

LATTICE COVER COMPONENTS AND CONNECTION DETAILS

1 PAGE	LAT01.DWG	STRUCTURAL CONFIGURATIONS
4 PAGES	LAT02.DWG LAT03.DWG LAT04.DWG LAT05.DWG	COMPONENTS/CONNECTION DETAILS
4 PAGES		LATTICE 1.0 RAFTER SPANS FOR COMMERCIAL AND PATIO STRUCTURES
6 PAGES		LATTICE 2 0 POST SPACINGS FOR LATTICE PATIO AND COMMERCIAL COVERS USING ALUMINUM AND STEEL HEADERS IN NORMAL WIND AREAS

[redacted]

SOLID COVER COMPONENTS AND CONNECTION DETAILS

11 PAGES	MUSA01.DWG	STRUCTURAL CONFIGURATIONS
	MUSA01b.DWG	STRUCTURAL CONFIGURATIONS
	MUSA02.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA03.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA04.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA05.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA06.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA07.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA08.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA09.DWG	COMPONENTS/CONNECTION DETAILS
	MUSA10.DWG	COMPONENTS/CONNECTION DETAILS
6 PAGES		4.0 PANEL SPANS FOR PATIO, CARPORT AND COMMERCIAL STRUCTURES
28 PAGES		5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN NORMAL WIND AREAS
[redacted]		[redacted]S

2 PAGES	Misc1a, Misc1b	7.0 MISC DETAILS
1 PAGE	Misc2	7.0 FAN BEAM DETAILS
1 PAGE	Misc3	7.0 POST AND FASTENER REQUIREMENTS FOR ALL STRUCTURES
1 PAGE	Misc4	7.0 CONCRETE FOOTING OPTIONS
2 PAGES	Misc5	7.0 REQUIREMENTS FOR LATTICE STRUCTURES WITH SURFACE MOUNTED POSTS ON CONCRETE SLABS OR FOOTINGS
1 PAGE	Misc6	7.0 FORCES ON EXISTING STRUCTURES
1 PAGE	Misc7	7.0 STRUCTURAL PROPERTIES OF BEAMS, FASCIA, PANELS AND RAFTERS FOR USE BY DESIGN PROFESSIONALS
1 PAGE	Misc8	7.0 CONCRETE SLAB REQUIREMENTS FOR CONSTRAINED FOOTINGS

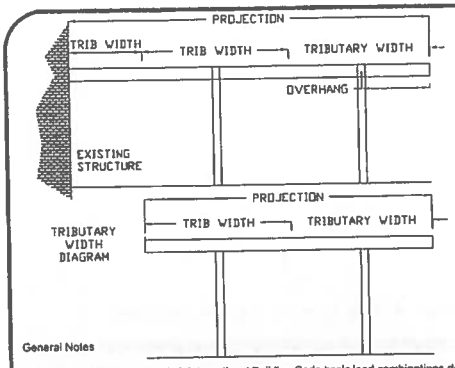
LICENSED PROFESSIONAL ENGINEER
CARL PITTAM
C 58739
EXP. 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER
No. 386906 2202
CARL PITTAM
STATE OF UTAH

MAR 05 2014

February 24, 2014



General Notes

1. Structural design per the 2012 International Building Code basic load combinations described in Section 1605.3.1 and no increases are permitted for resisting wind or seismic forces. Aluminum design in accordance with the 2010 edition of the Aluminum Associations's specifications and Chapter 20 of the IBC. Patio Covers as defined in IBC Appendix I shall be used only for recreational, outdoor living purposes and not as carports, garages, storage rooms or habitable rooms. Commercial Covers may be used for these purposes. Carports must have at least two opens sides and have floor surfaces made of approved noncombustible material or asphalt.
2. At least one horizontal dimension (projection or width) of cover shall be less than 30'.
3. Concrete mix: Fc = 2500, 3000 or 3500 psi at 28 days in negligible, moderate and severe conditions as shown in Figure 1904.2 of the 2012 IBC. Patio structures may be attached to concrete slab without footings when the post load is 750 lbf or less and the frost depth is zero. Concrete shall be set back a minimum of 4" from edge or expansion joint of a slab. Posts attached on slab will conform to Details LA35, MU100 or MU102.
4. Each application shall show a complete plot plan of the property and buildings. Circle the post spacing, span, etc., in the tables that fit that particular job.
5. Each installation shall bear an identifying decal giving the name and address of mfgr., live or snow load, design wind speed and exposure and ICC ESR number.
6. Light gauge steel shall be per ASTM A653 unless otherwise specified. Grade will be specified under individual details. Thickness is bare steel. Negative thickness tolerance is -5%.
7. Alternate alum. alloys may be substituted for those specified provided they are referenced in the 2010 ADM with equal or greater guaranteed minimum properties (Ftu, Fty, Fcy and E). Thickness indicated is bare metal and negative tolerance must comply with ANSI H35.2. 3004 H24 may be substituted for 3004 H34.
8. Lag screws shall be placed in holes prebored 70% diam. For concrete block construction, place masonry anchors as per the installation instructions.
9. Drainage which otherwise would go over a public sidewalk shall be collected and diverted under sidewalk.
10. Structures may not be enclosed unless additional engineering is provided or by approval of the local building authority.
11. A geotechnical investigation is not necessary unless required by 1803.2 of the 2012 IBC. Soil is assumed to be Class 5 of Table 1806.2 of the 2012 IBC. Bearing 1500 psf vert., 100 psf/ft. horiz and doubled as per 1806.3.4. These design values do not apply to mud, organic silts, organic clays, peat or unprepared fills and may require further soil investigation. The building official may assign a load bearing capacity. Units in a snow load area of 25 psf or less may be built on 1000 psf bearing soil w/o additional engineering. Minimum footing depth is the local frost depth.
12. The roof panels shall have a slope between 0.25" and 1" per foot.
13. All steel shall be galvanized ASTM A-653 G90, A123 G45 or A153 B-3, painted ASTM A755 or use an approved coating complying with IBC section 2203.2. Paint inside of all embedded posts from the bottom to 12" above grade. Where aluminum is in contact with dissimilar metals (other than stainless, aluminized or galvanized steel) or absorbent building materials, likely to be continuously or intermittently wet, the faying surfaces shall be painted or otherwise seperated in accordance with the Aluminum Design Manual Section M.7.
14. Wind velocity and Ground Snow/Live load are identified in all of the relevant tables. Roof snow loads have been determined in accordance with ASCE7-10 Section 7.3. Ct=1.2, I = 1.0, Ce=1.0 (All exposures except B and C when located tight among conifers)

Ground Snow Load	Applied Roof Load	
10 psf	10 psf	LIVE OR GROUND SNOW
20 psf	20 psf	LIVE OR GROUND SNOW
25 psf	21 psf	DESIGN ROOF SNOW LOAD
30 psf	25.2 psf	DESIGN ROOF SNOW LOAD
40 psf	33.6 psf	DESIGN ROOF SNOW LOAD
60 psf	50.4 psf	DESIGN ROOF SNOW LOAD

WIND SPEEDS IN THE 2012 IBC ARE "ULTIMATE DESIGN WIND SPEED." ALL STRUCTURES DESCRIBED IN THIS REPORT ARE DESIGNED USING PRESSURES CALCULATED FROM "ULTIMATE DESIGN WIND SPEEDS" FOR RISK CATEGORY II. FOR ATTACHED STRUCTURES THE MAXIMUM MEAN ROOF HEIGHT OF THE EXISTING STRUCTURE IS 30'. Kzt WAS ASSUMED AS 1.0 FOR ALL WIND LOADS. SITE LOCATIONS REQUIRING A HIGHER Kzt VALUE (ISOLATED HILLS, RIDGES, ESCARPMENTS) WILL REQUIRE HIGHER WIND LOADS AS PER ASCE7-10 SECTION 26.8 AND ARE OUTSIDE THE SCOPE OF THIS REPORT.

NOTE: EXPOSURE B: SHALL APPLY WHEN THE GROUND SURFACE ROUGHNESS CATEGORY B (URBAN AND SUBURBAN AREAS, WOODED AREAS, OR OTHER TERRAIN W/ NUMEROUS CLOSELY SPACED OBSTRUCTIONS HAVING THE SIZE OF A SINGLE FAMILY DWELLING OR LARGER) PREVAILS IN THE UPWIND DIRECTION FOR A DISTANCE OF AT LEAST 1500 FT.

EXPOSURE C: SHALL APPLY WHEN EXPOSURE B AND D (SMOOTH MUD FLATS, SALT FLATS, UNBROKEN ICE AND OTHER) DO NOT.

SEISMIC LOADING:
MAXIMUM Ss = 150% SHOWN IN 2012 IBC FIGURE 1613.3.1(1)
Ss >150% ARE NOT REQUIRED AS PER ASCE7-10 12.8.1.3
S1 NOT APPLICABLE TO THESE STRUCTURES
SITE CLASS = D
BASIC SEISMIC FORCE RESISTNG SYSTEM
POSTS EMBEDDED INTO FOOTINGS = ORDINARY STEEL MOMENT FRAME >> R=1.25
POSTS SURFACE MOUNTED = GENERIC SYSTEM >> R = 1.25
ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

FEB 24 2014

These roofs are not subject to maintainance workers and have not been evaluated for a 300 lbf concentrated load.
Maximum mean roof height of existing structure for attached units is 30'.

15. The width of single span attached solid cover structures must be at least 100% of the projection.
16. Multiple span units are allowed.
17. All structures must comply with one of the following:
    a. All structures with a roof snow load of 30 psf or less may be built in Seismic Design Category (SDC) A-D up to the maximum Ss noted in General Note #14.
    b. Structures with flat roof design snow loads over 30 psf complying with IBC Section 1613.1 Exception #1 do not require additional seismic analysis.
    c. Structures not complying with (a) or (b) require additional engineering seismic analysis.
18. All aluminum and steel solid panels are class A fire rated as indicated in IBC Section 1505.2 Exception #2.
19. All screws are self drilling (SDS) or sheet metal (SMS) and in conformance with ICC ESR-1976, ESR-2196 or equivalent and use head diameters equal to #8=$\frac{5}{16}$", #10=$\frac{3}{8}$", #12=$\frac{13}{32}$" and #14=$\frac{1}{2}$" or steel washers with similar diameters. All bolts are ASTM A307. All wood screws must comply with ANSI/ASME Standard B18.6.1 and AF&PA NDS-05 11.1.4. All lag screws must comply with ANSI/ASME B18.2.1 and AF&PA NDS 11.1.3. All washers are ASTM F844 w/ Dimensions complying with ASME B18.22.1 Type A. Steel nuts to be ASTM A563. The minimum washer diameter for bolted connections is 1". All fasteners will have a minimum edge distanc of 2x the fastener diameter.
20. Header splice shall not be located nearer to the end of the structure than the first interior post.
21. Wood used in connections shall be protected from weather as per IBC Section 1403.2 and/or 1503, whichever is more stringent.
22. Sliding snow is beyond the scope of this report. Drifting snow is covered under Detail M2.
23. All multispan tables assume equal spans within 20%. All specifications must be based on the longest actual span.

Revisions

METALS
building products

METALS BUILDING PRODUCTS
1055 SUNRISE HIGHWAY
BOHEMIA, NY 11741
(631) 563-4000

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68,387 EXP. 6-30-2014 CIVIL STATE OF CALIFORNIA

PROFESSIONAL ENGINEER No. 068916 2202 CARL PUTNAM STATE OF LOUISIANA

MAR 05 2014

Carl Putnam, P.E.
3441 IVYLINK PLACE
LYNCHBURG, VA 24503
CARLPUTNAM@COMCAST.NET

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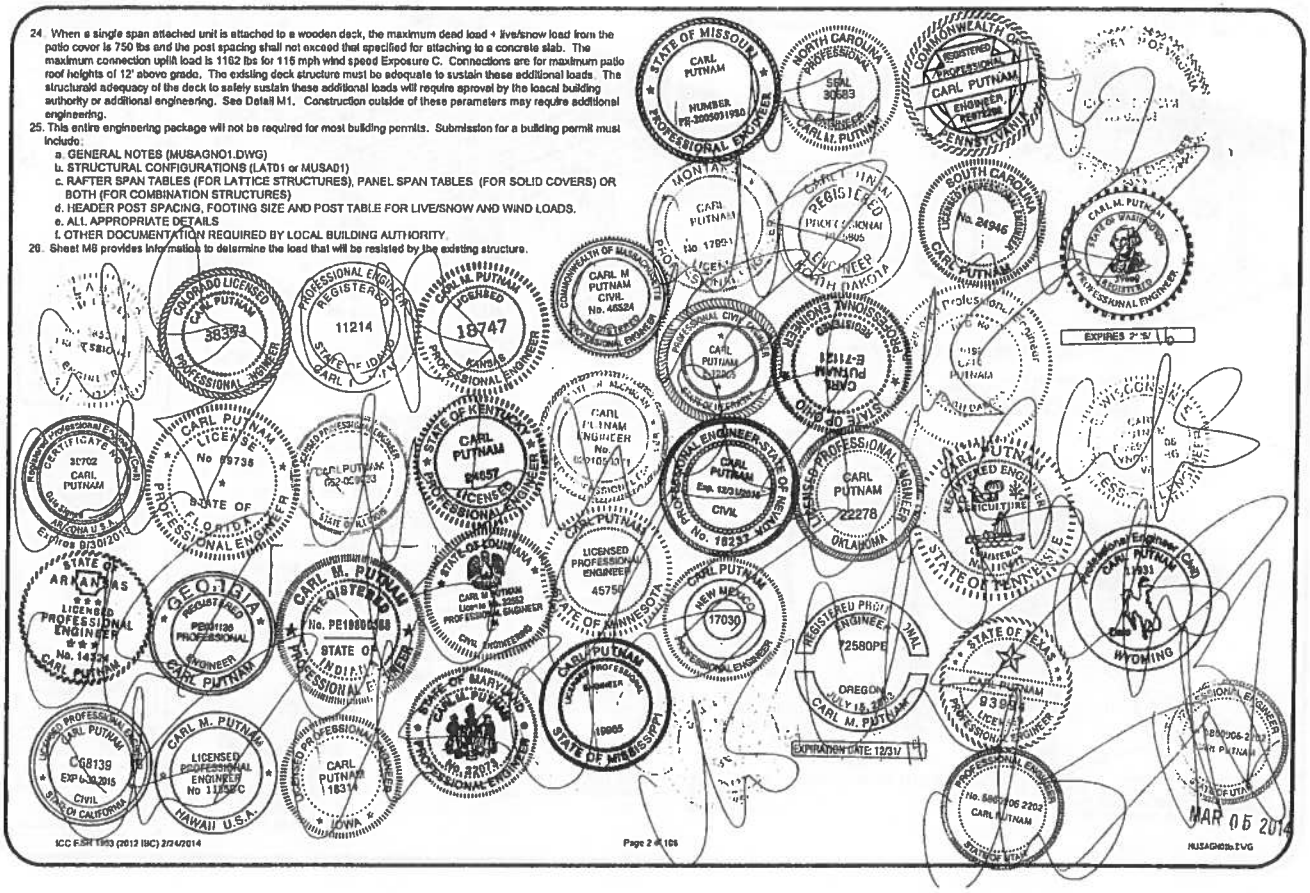
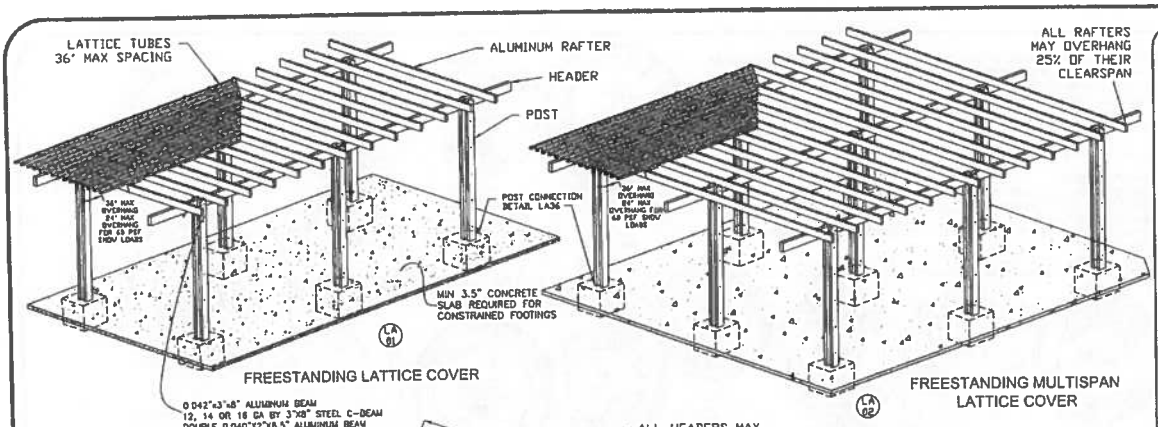
Check By CHP
Date
Filename PUSAGNBLDVG
Scale Page 2

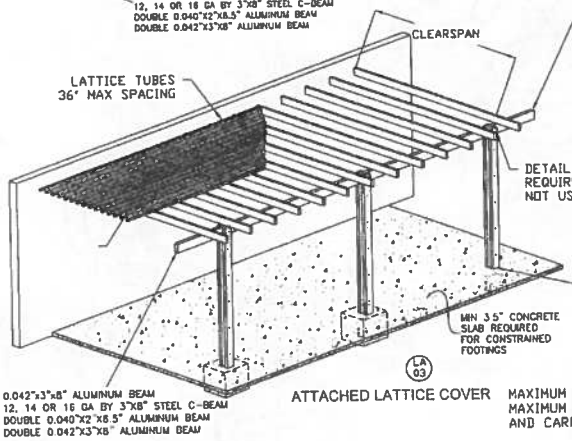
24. When a single span attached unit is attached to a wooden deck, the maximum dead load + live/snow load from the patio cover is 750 lbs and the post spacing shall not exceed that specified for attaching to a concrete slab. The maximum connection uplift load is 1162 lbs for 115 mph wind speed Exposure C. Connections are for maximum patio roof heights of 12' above grade. The existing deck structure must be adequate to sustain these additional loads. The structurald adequacy of the deck to safely sustain these additional loads will require aprovel by the local building authority or additional engineering. See Detail M1. Construction outside of these perameters may require additional engineering.

25. This entire engineering package will not be required for most building permits. Submission for a building permit must include:
   a. GENERAL NOTES (MUSAGNO1.DWG)
   b. STRUCTURAL CONFIGURATIONS (LAT01 or MUSA01)
   c. RAFTER SPAN TABLES (FOR LATTICE STRUCTURES), PANEL SPAN TABLES (FOR SOLID COVERS) OR BOTH (FOR COMBINATION STRUCTURES)
   d. HEADER POST SPACING, FOOTING SIZE AND POST TABLE FOR LIVE/SNOW AND WIND LOADS.
   e. ALL APPROPRIATE DETAILS
   f. OTHER DOCUMENTATION REQUIRED BY LOCAL BUILDING AUTHORITY.

26. Sheet M8 provides information to determine the load that will be resisted by the existing structure.







ATTACHED LATTICE COVER

MAXIMUM HEIGHT FOR PATIO COVERS IS 12'.
MAXIMUM HEIGHT FOR COMMERCIAL COVERS AND CARPORTS IS 15'.

COMPONENT DETAILS
LATTICE: LA21
RAFTERS: LA04, LA05, LA21(3X3 ONLY)
HEADERS: LA04, LA05, LA06, LA25, LA26
POSTS: LA15, LA17, LA19, LA20, LA22

CONNECTION DETAILS
LATTICE/RAFTER LA27
RAFTER/HEADER LA27, LA38, LA39
HEADER/POST LA24, LA25, LA26, LA28
POST/SLAB LA35
POST/FOOTING LA34, LA36
RAFTER/WALL LA38, LA31, LA32, LA33
HEADER/WALL LA40
NONSTRUCTURAL LA37, LA41

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68 39 EXP 6-30-2014 CIVIL STATE OF CALIFORNIA

FEB 24 2014

Revisions

METALS building products

METALS BUILDING PRODUCTS
1000 STEWART AVENUE, BETHPAGE, NY 11714
(631) 752-1000

PROFESSIONAL ENGINEER No. 68039 CARL PUTNAM STATE OF VIRGINIA

MAR 05 2014

Carl Putnam, P. E.
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CARLPUTNAM@COMCAST.NET

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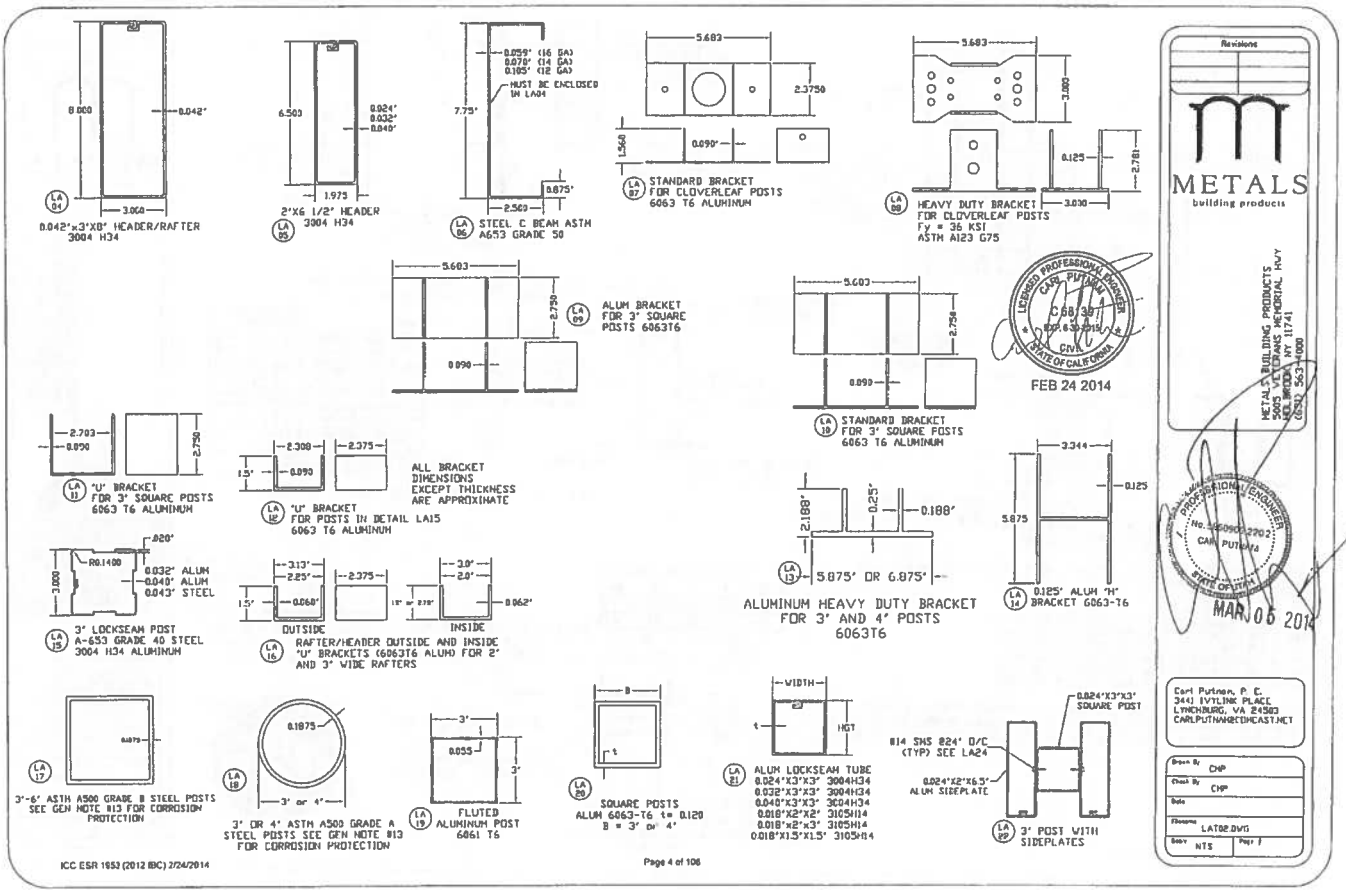
ICC ESR 1953 (2012 IBC) 2/24/2014



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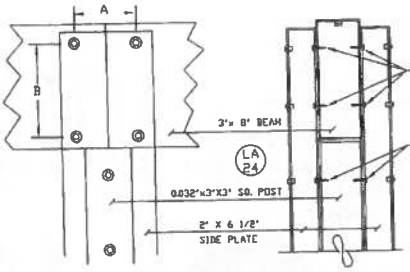
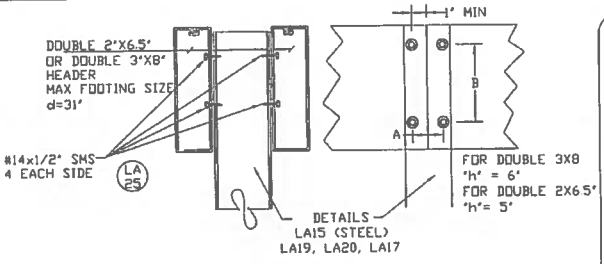
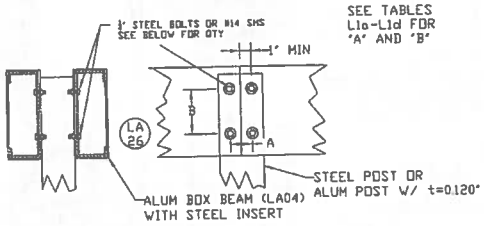
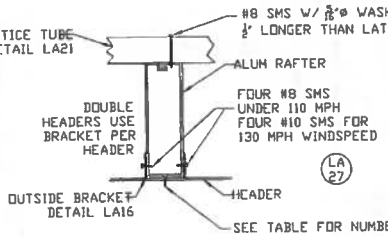






SEE TABLES
L1a-L1d FOR
"A" AND "B"



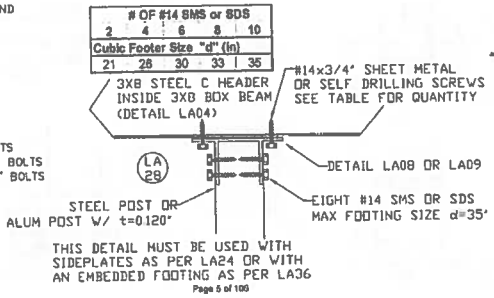
Wind Speed	t (in)	Header	Allowable Tri's Width No. of #8 Screws 2	3	4	5
115 mph Exp C	0.043	Double 2x6	11'	19'		
	0.042	0.042"x3"x6"	8'	9'	12'	15'
	0.043	Double 3x6	13'	15'		
140 mph Exp C	0.043	Double 2x6	9'	13'	15'	
	0.042	0.042"x3"x6"	5'	7'	8'	12'
	0.043	Double 3x6	9'	14'	15'	
			#14 Screws			
110 mph Exp C	0.043	Double 2x6	6'	12'	15'	
	0.042	0.042"x3"x6"	4'	6'	8'	11'
	0.043	Double 3x6	8'	12'	15'	
140 mph Exp C	150 min	8" Steel C	15'			
	180 min	Double Steel C	15'			
170 mph Exp C	150 min	8" Steel C	11'	19'		
	180 min	Double Steel C	15'			

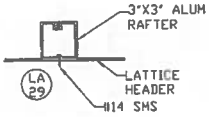
DOUBLE OR SINGLE 3X8 STEEL C BEAM. BOLT LAYOUT FOR SPLICED AND NON-SPLICED ATTACHMENT

FOOTING REQUIREMENTS
USE 4 BOLTS/SCREWS FOR FOOTINGS UP TO d=33"
USE 6 BOLTS/SCREWS FOR FOOTINGS UP TO d=38"
USE 8 BOLTS/SCREWS FOR FOOTINGS UP TO d=42"
USE 10 BOLTS/SCREWS FOR FOOTINGS UP TO d=45"
USE 12 BOLTS/SCREWS FOR FOOTINGS UP TO d=48"
USE 14 BOLTS/SCREWS FOR FOOTINGS UP TO d=50"

ALL C BEAMS USING TWICE THE "ON SLAB" SPACING REQUIRE FOUR 1/2" BOLTS
ALL C BEAMS USING THREE TIMES THE "ON SLAB" SPACING REQUIRE SIX 1/2" BOLTS
ALL C BEAMS USING FIVE TIMES THE "ON SLAB" SPACING REQUIRE EIGHT 1/2" BOLTS

# OF #14 SMS or SDS				
2	4	6	8	10
Cubic Footer Size "d" (in)				
21	28	30	33	35





Revisions

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METALS BUILDING PRODUCTS
5005 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
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LICENSED PROFESSIONAL ENGINEER
No. 58409-15-2202
CARL PUTNAM
STATE OF NEW YORK

MAR 05 2014

Carl Putnam, P. E.
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CARLPUTNAM@CHCASTNET

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Filename	LA703.DWG
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CARL PUTNAM
C 68 38 1
EXP. 6-30-2014
CIVIL
STATE OF CALIFORNIA

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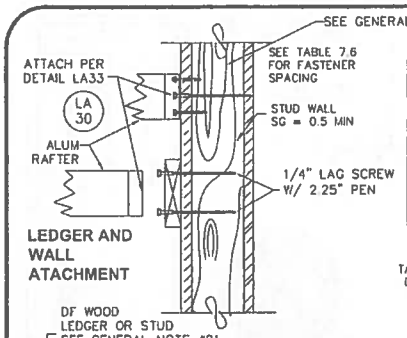


LEDGER AND WALL ATACHMENT

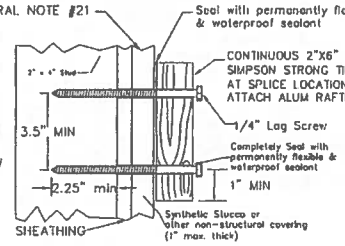
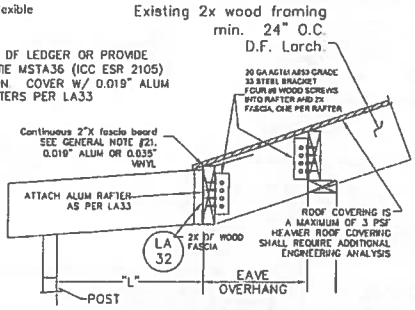
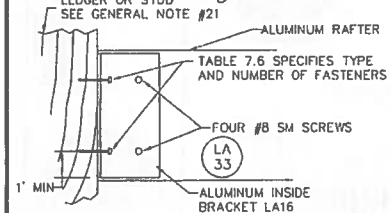


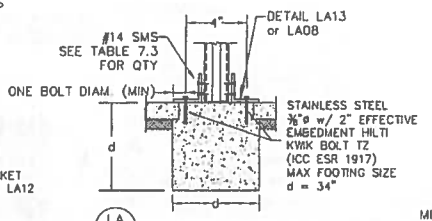
TABLE 7.7 SPECIFIES THE ALLOWABLE DISTANCE TO FIRST ROW OF POSTS

LA 31 STUCCO ATTACHMENT DETAIL WITH LEDGER BOARD

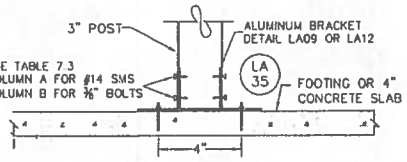


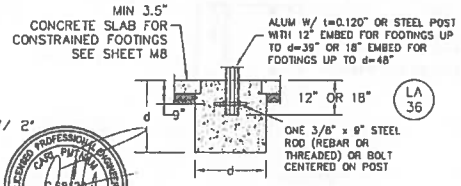
Live/Snow Load Bold Cover Wind	RAFTER SIZE (24" O/C)	MAX DISTANCE TO FIRST ROW OF POSTS "L" EAVE OVERHANG 6"	12"	18"	24"	30"
10 psf Lat.co=135 Exp C	2x4	23'-0"	20'-6"	12'-0"	7'-1"	3'-8"
	2x6	29'-0"	25'-0"	25'-0"	23'-10"	17'-1"
	2x8	35'-0"	25'-0"	25'-0"	25'-0"	25'-0"
10 psf Lat.co=140 Exp C	2x4	23'-0"	18'-3"	11'-6"	7'-1"	3'-8"
	2x6	25'-0"	25'-0"	23'-0"	22'-6"	16'-1"
	2x8	25'-0"	25'-0"	25'-0"	25'-0"	25'-0"
20 psf Lat.co=170 Exp C	2x4	19'-0"	16'-7"	5'-10"	3'-4"	1'-8"
	2x6	19'-0"	18'-0"	17'-1"	11'-8"	8'-4"
	2x8	19'-0"	19'-0"	19'-0"	18'-6"	18'-6"
25 psf Lat.co=170 Exp C	2x4	18'-0"	11'-3"	6'-4"	3'-8"	1'-8"
	2x6	18'-0"	18'-0"	18'-0"	12'-10"	8'-1"
	2x8	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
30 psf Lat.co=170 Exp C	2x4	17'-0"	9'-2"	5'-1"	2'-8"	0'-0"
	2x6	17'-0"	17'-0"	15'-3"	10'-4"	7'-1"
	2x8	17'-0"	17'-0"	17'-0"	17'-0"	14'-8"
40 psf Lat.co=170 Exp C	2x4	14'-0"	6'-7"	3'-4"	0'-0"	0'-0"
	2x6	14'-0"	14'-0"	11'-0"	7'-3"	4'-1"
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	10'-3"
50 psf Lat.co=170 Exp C	2x4	9'-0"	4'-6"	0'-0"	0'-0"	0'-0"
	2x6	9'-0"	9'-0"	8'-6"	4'-0"	2'-1"
	2x8	9'-0"	9'-0"	9'-0"	9'-0"	8'-10"





LA 34 ATTACHED SINGLE SPAN FOOTING





TWO STAINLESS 3/8" OR GALVANIZED 1/2" HILTI KWIK BOLT TZ ANCHOR (ICC ESR 1917) W/ 2" EMBEDMENT (OR EQUIVALENT) AND 3/4"ø WASHER FOR ATTACHMENT TO 4" CONCRETE SLAB UP TO 170 MPH EXP C WINDS.
ATTACHMENT TO FOOTINGS USE TWO ANCHORS FOR FOOTINGS UP TO d = 26"

POST ATTACHMENT DETAIL TO SLAB OR FOOTING
SINGLE SPAN ATTACHED UNITS

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C68136 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA

Revisions

METALS building products

Metal Building Products
5000 Veterans Memorial Hwy
Holbrook, NY 11741
(631) 563-4000

PROFESSIONAL ENGINEER No. 340390-2202 CARL PUTNAM STATE OF UTAH
MAR 05 2014

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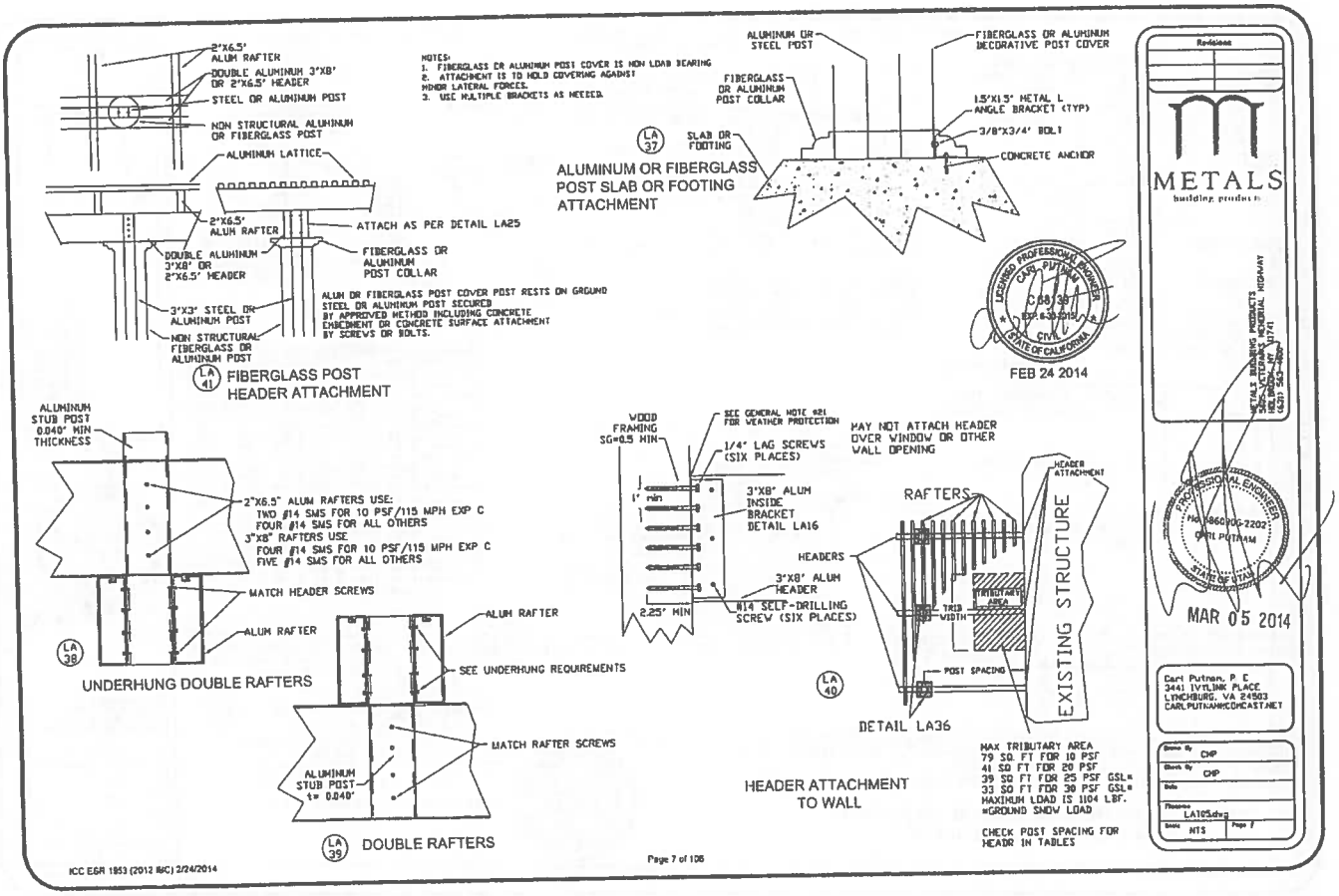
Scale Page #


2"X6.5" ALUM RAFTER
DOUBLE ALUMINUM 3"X8" OR 2"X6.5" HEADER
STEEL OR ALUMINUM POST
NON STRUCTURAL ALUMINUM OR FIBERGLASS POST
ALUMINUM LATTICE
2"X6.5" ALUM RAFTER
ATTACH AS PER DETAIL LA25
DOUBLE ALUMINUM 3"X8" OR 2"X6.5" HEADER
FIBERGLASS OR ALUMINUM POST COLLAR
3"X3" STEEL OR ALUMINUM POST
ALUM OR FIBERGLASS POST COVER POST RESTS ON GROUND STEEL OR ALUMINUM POST SECURED BY APPROVED METHOD INCLUDING CONCRETE EMBEDMENT OR CONCRETE SURFACE ATTACHMENT BY SCREWS OR BOLTS.
NON STRUCTURAL FIBERGLASS OR ALUMINUM POST
LA 41
FIBERGLASS POST HEADER ATTACHMENT
NOTES:
1. FIBERGLASS OR ALUMINUM POST COVER IS NON LOAD BEARING
2. ATTACHMENT IS TO HOLD COVERING AGAINST MINOR LATERAL FORCES.
3. USE MULTIPLE BRACKETS AS NEEDED.
ALUMINUM OR STEEL POST
FIBERGLASS OR ALUMINUM POST COLLAR
FIBERGLASS OR ALUMINUM DECORATIVE POST COVER
1.5"X1.5" METAL L ANGLE BRACKET (TYP)
3/8"X3/4" BOLT
CONCRETE ANCHOR
SLAB OR FOOTING
LA 37
ALUMINUM OR FIBERGLASS POST SLAB OR FOOTING ATTACHMENT
LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C068381
EXP. 6-30-2014
CIVIL
STATE OF CALIFORNIA
FEB 24 2014
ALUMINUM STUB POST 0.040" MIN THICKNESS
2"X6.5" ALUM RAFTERS USE:
TWO #14 SMS FOR 10 PSF/115 MPH EXP C
FOUR #14 SMS FOR ALL OTHERS
3"X8" RAFTERS USE
FOUR #14 SMS FOR 10 PSF/115 MPH EXP C
FIVE #14 SMS FOR ALL OTHERS
MATCH HEADER SCREWS
ALUM RAFTER
LA 38
UNDERHUNG DOUBLE RAFTERS
ALUM RAFTER
SEE UNDERHUNG REQUIREMENTS
MATCH RAFTER SCREWS
ALUMINUM STUB POST t= 0.040"
LA 39
DOUBLE RAFTERS
WOOD FRAMING SG=0.5 MIN
SEE GENERAL NOTE #21 FOR WEATHER PROTECTION
1/4" LAG SCREWS (SIX PLACES)
MAY NOT ATTACH HEADER OVER WINDOW OR OTHER WALL OPENING
1" min
3"X8" ALUM INSIDE BRACKET DETAIL LA16
3"X8" ALUM HEADER
#14 SELF-DRILLING SCREW (SIX PLACES)
2.25" MIN
HEADER ATTACHMENT
RAFTERS
HEADERS
TRIB WIDTH
TRIBUTARY AREA
POST SPACING
EXISTING STRUCTURE
LA 40
DETAIL LA36
MAX TRIBUTARY AREA
79 SQ. FT FOR 10 PSF
41 SQ FT FOR 20 PSF
39 SQ FT FOR 25 PSF GSL=
33 SQ FT FOR 30 PSF GSL=
MAXIMUM LOAD IS 1104 LBF.
=GROUND SNOW LOAD
CHECK POST SPACING FOR HEADR IN TABLES
HEADER ATTACHMENT TO WALL
Revisions
METALS
building products
METALS BUILDING PRODUCTS
3600 VETERANS MEMORIAL HIGHWAY
MELVILLE, NY 11741
(631) 242-2000
PROFESSIONAL ENGINEER
No. 1860906-2202
CARL PUTNAM
STATE OF UTAH
MAR 05 2014
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Page 7
ICC ESR 1953 (2012 IBC) 2/24/2014
Page 7 of 106

LATTICE 1.0 RAFTER SPANS FOR COMMERCIAL AND PATIO STRUCTURES IN LOW WIND AREAS

SINGLE SPAN TABLES

0.024"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 116	Exposure C 120
10 LIVE	24"	6'-7"	6'-7"	6'-7"	7'-3"
	20"	10'-4"	10'-2"	10'-0"	8'-2"
	16"	12'-9"	11'-6"	11'-4"	9'-4"
	12"	14'-11"	13'-5"	13'-2"	10'-11"
20 LIVE	24"	4'-4"	4'-4"	4'-4"	4'-4"
	20"	5'-2"	5'-2"	5'-2"	5'-2"
	16"	6'-6"	6'-6"	6'-6"	6'-6"
	12"	8'-7"	8'-7"	8'-7"	8'-7"
25	24"	4'-2"	4'-2"	4'-2"	4'-2"
	20"	4'-11"	4'-11"	4'-11"	4'-11"
	16"	6'-2"	6'-2"	6'-2"	6'-2"
	12"	8'-3"	8'-3"	8'-3"	8'-3"
30	24"	3'-5"	3'-5"	3'-5"	3'-5"
	20"	4'-2"	4'-2"	4'-2"	4'-2"
	16"	5'-2"	5'-2"	5'-2"	5'-2"
	12"	6'-10"	6'-10"	6'-10"	6'-10"
40	24"	2'-7"	2'-7"	2'-7"	2'-7"
	20"	3'-1"	3'-1"	3'-1"	3'-1"
	16"	3'-10"	3'-10"	3'-10"	3'-10"
	12"	5'-2"	5'-2"	5'-2"	5'-2"
60	24"	1'-9"	1'-9"	1'-9"	1'-9"
	20"	2'-1"	2'-1"	2'-1"	2'-1"
	16"	2'-7"	2'-7"	2'-7"	2'-7"
	12"	3'-5"	3'-5"	3'-5"	3'-5"

TABLE 1.1

0.032"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	24"	14'-7"	13'-7"	13'-5"	11'-3"
	20"	15'-11"	14'-11"	14'-8"	12'-4"
	16"	17'-9"	16'-8"	16'-5"	13'-10"
	12"	20'-4"	19'-1"	18'-10"	15'-11"
20 LIVE	24"	7'-5"	7'-5"	7'-5"	7'-5"
	20"	8'-11"	8'-11"	8'-11"	8'-11"
	16"	11'-1"	11'-1"	11'-1"	11'-1"
	12"	14'-7"	14'-7"	14'-7"	14'-7"
25	24"	7'-1"	7'-1"	7'-1"	7'-1"
	20"	8'-6"	8'-6"	8'-6"	8'-6"
	16"	10'-7"	10'-7"	10'-7"	10'-7"
	12"	14'-0"	14'-0"	14'-0"	14'-0"
30	24"	5'-11"	5'-11"	5'-11"	5'-11"
	20"	7'-1"	7'-1"	7'-1"	7'-1"
	16"	8'-10"	8'-10"	8'-10"	8'-10"
	12"	11'-9"	11'-9"	11'-9"	11'-9"
40	24"	4'-5"	4'-5"	4'-5"	4'-5"
	20"	5'-4"	5'-4"	5'-4"	5'-4"
	16"	6'-8"	6'-8"	6'-8"	6'-8"
	12"	8'-10"	8'-10"	8'-10"	8'-10"
60	24"	3'-0"	3'-0"	3'-0"	3'-0"
	20"	3'-7"	3'-7"	3'-7"	3'-7"
	16"	4'-5"	4'-5"	4'-5"	4'-5"
	12"	5'-11"	5'-11"	5'-11"	5'-11"

TABLE 1.2

0.040"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	24"	16'-0"	17'-8"	17'-5"	14'-9"
	20"	19'-6"	18'-11"	18'-9"	16'-2"
	16"	21'-11"	20'-3"	20'-1"	18'-0"
	12"	24'-8"	22'-1"	21'-11"	19'-8"
20 LIVE	24"	11'-3"	11'-3"	11'-3"	11'-3"
	20"	13'-5"	13'-5"	13'-5"	13'-5"
	16"	15'-8"	15'-8"	15'-8"	15'-8"
	12"	18'-0"	18'-0"	18'-0"	18'-0"
25	24"	10'-8"	10'-8"	10'-8"	10'-8"
	20"	12'-10"	12'-10"	12'-10"	12'-10"
	16"	15'-4"	15'-4"	15'-4"	15'-4"
	12"	17'-7"	17'-7"	17'-7"	17'-7"
30	24"	8'-11"	8'-11"	8'-11"	8'-11"
	20"	10'-8"	10'-8"	10'-8"	10'-8"
	16"	13'-4"	13'-4"	13'-4"	13'-4"
	12"	16'-2"	16'-2"	16'-2"	16'-2"
40	24"	6'-9"	6'-9"	6'-9"	6'-9"
	20"	8'-1"	8'-1"	8'-1"	8'-1"
	16"	10'-0"	10'-0"	10'-0"	10'-0"
	12"	13'-4"	13'-4"	13'-4"	13'-4"
60	24"	4'-6"	4'-6"	4'-6"	4'-6"
	20"	5'-5"	5'-5"	5'-5"	5'-5"
	16"	6'-9"	6'-9"	6'-9"	6'-9"
	12"	8'-11"	8'-11"	8'-11"	8'-11"

TABLE 1.3

0.042"x3"x8" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	36"	18'-1"	18'-1"	15'-11"	13'-6"
	32"	18'-1"	17'-2"	16'-11"	14'-3"
	24"	21'-0"	19'-10"	19'-6"	16'-5"
	16"	25'-4"	24'-0"	23'-8"	20'-0"
20 LIVE	36"	8'-2"	8'-2"	8'-2"	8'-2"
	32"	9'-2"	9'-2"	9'-2"	9'-2"
	24"	12'-2"	12'-2"	12'-2"	12'-2"
	16"	18'-1"	18'-1"	18'-1"	18'-1"
25	36"	7'-10"	7'-10"	7'-10"	7'-10"
	32"	8'-9"	8'-9"	8'-9"	8'-9"
	24"	11'-7"	11'-7"	11'-7"	11'-7"
	16"	17'-3"	17'-3"	17'-3"	17'-3"
30	36"	6'-6"	6'-6"	6'-6"	6'-6"
	32"	7'-4"	7'-4"	7'-4"	7'-4"
	24"	9'-9"	9'-9"	9'-9"	9'-9"
	16"	14'-5"	14'-5"	14'-5"	14'-5"
40	36"	4'-11"	4'-11"	4'-11"	4'-11"
	32"	5'-6"	5'-6"	5'-6"	5'-6"
	24"	7'-4"	7'-4"	7'-4"	7'-4"
	16"	10'-11"	10'-11"	10'-11"	10'-11"
60	36"	3'-3"	3'-3"	3'-3"	3'-3"
	32"	3'-8"	3'-8"	3'-8"	3'-8"
	24"	4'-11"	4'-11"	4'-11"	4'-11"
	16"	7'-4"	7'-4"	7'-4"	7'-4"

TABLE 1.4

3"x3" Rafter @6" o/c (Single and Multispan)

Ground Snow Load (psf)	Metal Gauge (In)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	0.024"	12'-5"	12'-5"	12'-5"	12'-5"
	0.032"	16'-11"	16'-11"	16'-11"	16'-11"
	0.040"	21'-1"	21'-1"	21'-1"	21'-1"
20 LIVE	0.024"	8'-5"	8'-5"	8'-5"	8'-5"
	0.032"	11'-9"	11'-9"	11'-9"	11'-9"
	0.040"	14'-10"	14'-10"	14'-10"	14'-10"
25	0.024"	8'-2"	8'-2"	8'-2"	8'-2"
	0.032"	11'-5"	11'-5"	11'-5"	11'-5"
	0.040"	14'-6"	14'-6"	14'-6"	14'-6"
30	0.024"	7'-4"	7'-4"	7'-4"	7'-4"
	0.032"	10'-4"	10'-4"	10'-4"	10'-4"
	0.040"	13'-1"	13'-1"	13'-1"	13'-1"
40	0.024"	6'-1"	6'-1"	6'-1"	6'-1"
	0.032"	8'-9"	8'-9"	8'-9"	8'-9"
	0.040"	11'-2"	11'-2"	11'-2"	11'-2"
60	0.024"	4'-6"	4'-6"	4'-6"	4'-6"
	0.032"	6'-9"	6'-9"	6'-9"	6'-9"
	0.040"	8'-10"	8'-10"	8'-10"	8'-10"

TABLE 1.5

NOTE: RAFTERS MAY OVERHANG 25% OF THEIR CLEARSPAN

0.024"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	24"	6'-9"	6'-9"	6'-9"	6'-9"
	20"	7'-9"	7'-9"	7'-9"	7'-9"
	16"	9'-1"	9'-1"	9'-1"	9'-1"
	12"	11'-0"	11'-0"	11'-0"	10'-11"
20 LIVE	24"	3'-10"	3'-10"	3'-10"	3'-10"
	20"	4'-6"	4'-6"	4'-6"	4'-6"
	16"	5'-4"	5'-4"	5'-4"	5'-4"
	12"	6'-9"	6'-9"	6'-9"	6'-9"
25	24"	3'-8"	3'-8"	3'-8"	3'-8"
	20"	4'-3"	4'-3"	4'-3"	4'-3"
	16"	5'-2"	5'-2"	5'-2"	5'-2"
	12"	6'-6"	6'-6"	6'-6"	6'-6"
30	24"	3'-1"	3'-1"	3'-1"	3'-1"
	20"	3'-8"	3'-8"	3'-8"	3'-8"
	16"	4'-5"	4'-5"	4'-5"	4'-5"
	12"	5'-7"	5'-7"	5'-7"	5'-7"
40	24"	2'-5"	2'-5"	2'-5"	2'-5"
	20"	2'-10"	2'-10"	2'-10"	2'-10"
	16"	3'-5"	3'-5"	3'-5"	3'-5"
	12"	4'-5"	4'-5"	4'-5"	4'-5"
60	24"	1'-7"	1'-7"	1'-7"	1'-7"
	20"	1'-11"	1'-11"	1'-11"	1'-11"
	16"	2'-5"	2'-5"	2'-5"	2'-5"
	12"	3'-1"	3'-1"	3'-1"	3'-1"

TABLE 1.6

0.032"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	24"	10'-2"	10'-2"	10'-2"	10'-2"
	20"	11'-6"	11'-6"	11'-6"	11'-6"
	16"	13'-4"	13'-4"	13'-4"	13'-4"
	12"	15'-11"	15'-11"	15'-11"	15'-11"
20 LIVE	24"	6'-1"	6'-1"	6'-1"	6'-1"
	20"	7'-0"	7'-0"	7'-0"	7'-0"
	16"	8'-3"	8'-3"	8'-3"	8'-3"
	12"	10'-2"	10'-2"	10'-2"	10'-2"
25	24"	5'-10"	5'-10"	5'-10"	5'-10"
	20"	6'-9"	6'-9"	6'-9"	6'-9"
	16"	8'-0"	8'-0"	8'-0"	8'-0"
	12"	9'-10"	9'-10"	9'-10"	9'-10"
30	24"	5'-0"	5'-0"	5'-0"	5'-0"
	20"	5'-10"	5'-10"	5'-10"	5'-10"
	16"	6'-11"	6'-11"	6'-11"	6'-11"
	12"	8'-8"	8'-8"	8'-8"	8'-8"
40	24"	3'-11"	3'-11"	3'-11"	3'-11"
	20"	4'-7"	4'-7"	4'-7"	4'-7"
	16"	5'-6"	5'-6"	5'-6"	5'-6"
	12"	6'-11"	6'-11"	6'-11"	6'-11"
60	24"	2'-9"	2'-9"	2'-9"	2'-9"
	20"	3'-3"	3'-3"	3'-3"	3'-3"
	16"	3'-11"	3'-11"	3'-11"	3'-11"
	12"	5'-0"	5'-0"	5'-0"	5'-0"

TABLE 1.7

0.040"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	24"	13'-8"	13'-8"	13'-8"	13'-8"
	20"	15'-4"	15'-4"	15'-4"	15'-4"
	16"	17'-7"	17'-7"	17'-7"	17'-7"
	12"	20'-9"	20'-9"	20'-9"	19'-8"
20 LIVE	24"	8'-5"	8'-5"	8'-5"	8'-5"
	20"	9'-8"	9'-8"	9'-8"	9'-8"
	16"	11'-4"	11'-4"	11'-4"	11'-4"
	12"	13'-8"	13'-8"	13'-8"	13'-8"
25	24"	8'-2"	8'-2"	8'-2"	8'-2"
	20"	9'-4"	9'-4"	9'-4"	9'-4"
	16"	10'-11"	10'-11"	10'-11"	10'-11"
	12"	13'-3"	13'-3"	13'-3"	13'-3"
30	24"	7'-1"	7'-1"	7'-1"	7'-1"
	20"	8'-2"	8'-2"	8'-2"	8'-2"
	16"	9'-7"	9'-7"	9'-7"	9'-7"
	12"	11'-9"	11'-9"	11'-9"	11'-9"
40	24"	5'-8"	5'-8"	5'-8"	5'-8"
	20"	6'-6"	6'-6"	6'-6"	6'-6"
	16"	7'-9"	7'-9"	7'-9"	7'-9"
	12"	9'-7"	9'-7"	9'-7"	9'-7"
60	24"	4'-0"	4'-0"	4'-0"	4'-0"
	20"	4'-8"	4'-8"	4'-8"	4'-8"
	16"	5'-8"	5'-8"	5'-8"	5'-8"
	12"	7'-1"	7'-1"	7'-1"	7'-1"

TABLE 1.8

0.042"x3"x8" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure: Exposure B 116	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	36"	11'-8"	11'-8"	11'-8"	11'-8"
	30"	12'-8"	12'-8"	12'-8"	12'-8"
	24"	15'-4"	15'-4"	15'-4"	15'-4"
	16"	19'-8"	19'-0"	19'-8"	19'-8"
20 LIVE	36"	6'-10"	6'-10"	6'-10"	6'-10"
	30"	7'-6"	7'-6"	7'-6"	7'-6"
	24"	9'-5"	9'-5"	9'-5"	9'-5"
	16"	12'-8"	12'-8"	12'-8"	12'-8"
25	36"	6'-7"	6'-7"	6'-7"	6'-7"
	30"	7'-3"	7'-3"	7'-3"	7'-3"
	24"	9'-1"	9'-1"	9'-1"	9'-1"
	16"	12'-2"	12'-2"	12'-2"	12'-2"
30	36"	5'-8"	5'-8"	5'-8"	5'-8"
	30"	6'-3"	6'-3"	6'-3"	6'-3"
	24"	7'-11"	7'-11"	7'-11"	7'-11"
	16"	10'-9"	10'-9"	10'-9"	10'-9"
40	36"	4'-5"	4'-5"	4'-5"	4'-5"
	30"	4'-10"	4'-10"	4'-10"	4'-10"
	24"	6'-3"	6'-3"	6'-3"	6'-3"
	16"	8'-8"	8'-8"	8'-8"	8'-8"
60	36"	3'-0"	3'-0"	3'-0"	3'-0"
	30"	3'-5"	3'-5"	3'-5"	3'-5"
	24"	4'-5"	4'-5"	4'-5"	4'-5"
	16"	6'-3"	6'-3"	6'-3"	6'-3"

TABLE 1.9

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4000

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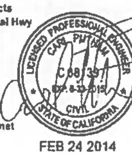

FEB 24 2014

LATTICE 1.0 DOUBLE RAFTER SPANS FOR COMMERCIAL AND PATIO STRUCTURES IN LOW WIND AREAS (REQUIRES DETAIL LA38 OR LA39

SINGLE SPAN TABLES

0.024"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	10'-8"	9'-2"	9'-0"	7'-3"
	40"	11'-8"	10'-2"	10'-0"	8'-2"
	32"	13'-0"	11'-6"	11'-4"	9'-4"
	24"	14'-11"	13'-5"	13'-2"	10'-11"
20 LIVE	48"	6'-8"	6'-8"	6'-8"	6'-8"
	40"	8'-0"	8'-0"	8'-0"	8'-0"
	32"	9'-3"	9'-3"	9'-3"	9'-3"
	24"	10'-8"	10'-8"	10'-8"	10'-8"
25	48"	6'-4"	6'-4"	6'-4"	6'-4"
	40"	7'-7"	7'-7"	7'-7"	7'-7"
	32"	9'-0"	9'-0"	9'-0"	9'-0"
	24"	10'-5"	10'-5"	10'-5"	10'-5"
30	48"	5'-3"	5'-3"	5'-3"	5'-3"
	40"	6'-4"	6'-4"	6'-4"	6'-4"
	32"	7'-11"	7'-11"	7'-11"	7'-11"
	24"	9'-6"	9'-6"	9'-6"	9'-6"
40	48"	4'-0"	4'-0"	4'-0"	4'-0"
	40"	4'-9"	4'-9"	4'-9"	4'-9"
	32"	5'-11"	5'-11"	5'-11"	5'-11"
	24"	7'-11"	7'-11"	7'-11"	7'-11"
60	48"	2'-8"	2'-8"	2'-8"	2'-8"
	40"	3'-2"	3'-2"	3'-2"	3'-2"
	32"	4'-0"	4'-0"	4'-0"	4'-0"
	24"	5'-3"	5'-3"	5'-3"	5'-3"

TABLE 1.19

0.032"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	14'-7"	13'-7"	13'-5"	11'-3"
	40"	15'-11"	14'-11"	14'-8"	12'-4"
	32"	17'-9"	16'-8"	16'-5"	13'-10"
	24"	20'-4"	19'-1"	18'-10"	15'-11"
20 LIVE	48"	10'-5"	10'-5"	10'-5"	10'-5"
	40"	11'-4"	11'-4"	11'-4"	11'-4"
	32"	12'-8"	12'-8"	12'-8"	12'-8"
	24"	14'-7"	14'-7"	14'-7"	14'-7"
25	48"	10'-2"	10'-2"	10'-2"	10'-2"
	40"	11'-1"	11'-1"	11'-1"	11'-1"
	32"	12'-5"	12'-5"	12'-5"	12'-5"
	24"	14'-3"	14'-3"	14'-3"	14'-3"
30	48"	9'-3"	9'-3"	9'-3"	9'-3"
	40"	10'-2"	10'-2"	10'-2"	10'-2"
	32"	11'-4"	11'-4"	11'-4"	11'-4"
	24"	13'-0"	13'-0"	13'-0"	13'-0"
40	48"	8'-0"	8'-0"	8'-0"	8'-0"
	40"	8'-9"	8'-9"	8'-9"	8'-9"
	32"	9'-10"	9'-10"	9'-10"	9'-10"
	24"	11'-4"	11'-4"	11'-4"	11'-4"
60	48"	6'-4"	6'-4"	6'-4"	6'-4"
	40"	7'-2"	7'-2"	7'-2"	7'-2"
	32"	8'-0"	8'-0"	8'-0"	8'-0"
	24"	9'-3"	9'-3"	9'-3"	9'-3"

TABLE 1.20

0.040"x2"x6.5" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	18'-0"	17'-8"	17'-5"	14'-9"
	40"	19'-8"	18'-11"	18'-9"	16'-2"
	32"	21'-11"	20'-3"	20'-1"	18'-0"
	24"	24'-8"	22'-1"	21'-11"	19'-8"
20 LIVE	48"	12'-10"	12'-10"	12'-10"	12'-10"
	40"	14'-1"	14'-1"	14'-1"	14'-1"
	32"	15'-8"	15'-8"	15'-8"	15'-8"
	24"	18'-0"	18'-0"	18'-0"	18'-0"
25	48"	12'-7"	12'-7"	12'-7"	12'-7"
	40"	13'-9"	13'-9"	13'-9"	13'-9"
	32"	15'-4"	15'-4"	15'-4"	15'-4"
	24"	17'-7"	17'-7"	17'-7"	17'-7"
30	48"	11'-6"	11'-6"	11'-6"	11'-6"
	40"	12'-7"	12'-7"	12'-7"	12'-7"
	32"	14'-0"	14'-0"	14'-0"	14'-0"
	24"	16'-2"	16'-2"	16'-2"	16'-2"
40	48"	10'-0"	10'-0"	10'-0"	10'-0"
	40"	10'-11"	10'-11"	10'-11"	10'-11"
	32"	12'-2"	12'-2"	12'-2"	12'-2"
	24"	14'-0"	14'-0"	14'-0"	14'-0"
60	48"	8'-2"	8'-2"	8'-2"	8'-2"
	40"	8'-11"	8'-11"	8'-11"	8'-11"
	32"	10'-0"	10'-0"	10'-0"	10'-0"
	24"	11'-6"	11'-6"	11'-6"	11'-6"

TABLE 1.21

0.042"x3"x8" Rafter (Single Span)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	72"	17'-3"	16'-2"	15'-11"	13'-5"
	64"	18'-3"	17'-2"	16'-11"	14'-3"
	48"	21'-0"	19'-10"	19'-6"	16'-5"
	32"	25'-4"	24'-0"	23'-8"	20'-0"
20 LIVE	72"	12'-4"	12'-4"	12'-4"	12'-4"
	64"	13'-0"	13'-0"	13'-0"	13'-0"
	48"	15'-0"	15'-0"	15'-0"	15'-0"
	32"	18'-3"	18'-3"	18'-3"	18'-3"
25	72"	12'-0"	12'-0"	12'-0"	12'-0"
	64"	12'-9"	12'-9"	12'-9"	12'-9"
	48"	14'-8"	14'-8"	14'-8"	14'-8"
	32"	17'-10"	17'-10"	17'-10"	17'-10"
30	72"	11'-0"	11'-0"	11'-0"	11'-0"
	64"	11'-8"	11'-8"	11'-8"	11'-8"
	48"	13'-5"	13'-5"	13'-5"	13'-5"
	32"	16'-4"	16'-4"	16'-4"	16'-4"
40	72"	9'-6"	9'-6"	9'-6"	9'-6"
	64"	10'-1"	10'-1"	10'-1"	10'-1"
	48"	11'-8"	11'-8"	11'-8"	11'-8"
	32"	14'-2"	14'-2"	14'-2"	14'-2"
60	72"	7'-9"	7'-9"	7'-9"	7'-9"
	64"	8'-3"	8'-3"	8'-3"	8'-3"
	48"	9'-6"	9'-6"	9'-6"	9'-6"
	32"	11'-8"	11'-8"	11'-8"	11'-8"

TABLE 1.22

Lattice Tubes

Ground Snow Load (psf)	Lattice Tube (in)	Wind Speed and Exposure Exp C 170
10 LIVE	1.5"	72"
	2"	72"
	2"x3"	72"
	3"	72"
20 LIVE	1.5"	72"
	2"	72"
	2"x3"	62"
	3"	72"
25	1.5"	72"
	2"	70"
	2"x3"	60"
	3"	72"
30	1.5"	66"
	2"	62"
	2"x3"	54"
	3"	72"
40	1.5"	55"
	2"	52"
	2"x3"	45"
	3"	66"
60	1.5"	43"
	2"	40"
	2"x3"	34"
	3"	50"

Table 1.23

NOTE: RAFTERS MAY OVERHANG 25% OF THEIR CLEARSPAN

0.024"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	8'-10"	8'-10"	8'-10"	7'-3"
	40"	9'-11"	9'-11"	9'-11"	8'-2"
	32"	11'-4"	11'-4"	11'-4"	9'-4"
	24"	13'-4"	13'-4"	13'-2"	10'-11"
20 LIVE	48"	5'-6"	5'-6"	5'-6"	5'-6"
	40"	6'-3"	6'-3"	6'-3"	6'-3"
	32"	7'-4"	7'-4"	7'-4"	7'-4"
	24"	8'-10"	8'-10"	8'-10"	8'-10"
25	48"	5'-3"	5'-3"	5'-3"	5'-3"
	40"	6'-1"	6'-1"	6'-1"	6'-1"
	32"	7'-1"	7'-1"	7'-1"	7'-1"
	24"	8'-7"	8'-7"	8'-7"	8'-7"
30	48"	4'-7"	4'-7"	4'-7"	4'-7"
	40"	5'-3"	5'-3"	5'-3"	5'-3"
	32"	6'-3"	6'-3"	6'-3"	6'-3"
	24"	7'-7"	7'-7"	7'-7"	7'-7"
40	48"	3'-7"	3'-7"	3'-7"	3'-7"
	40"	4'-2"	4'-2"	4'-2"	4'-2"
	32"	5'-0"	5'-0"	5'-0"	5'-0"
	24"	6'-3"	6'-3"	6'-3"	6'-3"
60	48"	2'-6"	2'-6"	2'-6"	2'-6"
	40"	3'-0"	3'-0"	3'-0"	3'-0"
	32"	3'-7"	3'-7"	3'-7"	3'-7"
	24"	4'-7"	4'-7"	4'-7"	4'-7"

TABLE 1.24

0.032"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	13'-2"	13'-2"	13'-2"	11'-3"
	40"	14'-6"	14'-6"	14'-6"	12'-4"
	32"	16'-3"	16'-3"	16'-3"	13'-10"
	24"	18'-9"	18'-9"	18'-9"	15'-11"
20 LIVE	48"	8'-11"	8'-11"	8'-11"	8'-11"
	40"	9'-11"	9'-11"	9'-11"	9'-11"
	32"	11'-3"	11'-3"	11'-3"	11'-3"
	24"	13'-2"	13'-2"	13'-2"	13'-2"
25	48"	8'-8"	8'-8"	8'-8"	8'-8"
	40"	9'-8"	9'-8"	9'-8"	9'-8"
	32"	10'-11"	10'-11"	10'-11"	10'-11"
	24"	12'-10"	12'-10"	12'-10"	12'-10"
30	48"	7'-9"	7'-9"	7'-9"	7'-9"
	40"	8'-8"	8'-8"	8'-8"	8'-8"
	32"	9'-11"	9'-11"	9'-11"	9'-11"
	24"	11'-7"	11'-7"	11'-7"	11'-7"
40	48"	6'-6"	6'-6"	6'-6"	6'-6"
	40"	7'-3"	7'-3"	7'-3"	7'-3"
	32"	8'-4"	8'-4"	8'-4"	8'-4"
	24"	9'-11"	9'-11"	9'-11"	9'-11"
60	48"	4'-11"	4'-11"	4'-11"	4'-11"
	40"	5'-7"	5'-7"	5'-7"	5'-7"
	32"	6'-6"	6'-6"	6'-6"	6'-6"
	24"	7'-9"	7'-9"	7'-9"	7'-9"

TABLE 1.25

0.040"x2"x6.5" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	48"	17'-0"	17'-0"	17'-0"	14'-9"
	40"	18'-7"	18'-7"	18'-7"	16'-2"
	32"	20'-9"	20'-3"	20'-1"	18'-0"
	24"	23'-10"	22'-1"	21'-11"	19'-8"
20 LIVE	48"	11'-11"	11'-11"	11'-11"	11'-11"
	40"	13'-1"	13'-1"	13'-1"	13'-1"
	32"	14'-8"	14'-8"	14'-8"	14'-8"
	24"	17'-0"	17'-0"	17'-0"	17'-0"
25	48"	11'-7"	11'-7"	11'-7"	11'-7"
	40"	12'-9"	12'-9"	12'-9"	12'-9"
	32"	14'-4"	14'-4"	14'-4"	14'-4"
	24"	16'-7"	16'-7"	16'-7"	16'-7"
30	48"	10'-6"	10'-6"	10'-6"	10'-6"
	40"	11'-7"	11'-7"	11'-7"	11'-7"
	32"	13'-0"	13'-0"	13'-0"	13'-0"
	24"	15'-1"	15'-1"	15'-1"	15'-1"
40	48"	9'-0"	9'-0"	9'-0"	9'-0"
	40"	9'-11"	9'-11"	9'-11"	9'-11"
	32"	11'-2"	11'-2"	11'-2"	11'-2"
	24"	13'-0"	13'-0"	13'-0"	13'-0"
60	48"	7'-1"	7'-1"	7'-1"	7'-1"
	40"	7'-11"	7'-11"	7'-11"	7'-11"
	32"	9'-0"	9'-0"	9'-0"	9'-0"
	24"	10'-6"	10'-6"	10'-6"	10'-6"

TABLE 1.26

0.042"x3"x8" Rafter (Multispan)

Ground Snow Load (psf)	Rafter Spacing (in)	Wind Speed and Exposure Exposure B 115	Exposure B 130	Exposure C 115	Exposure C 120
10 LIVE	36"	15'-7"	15'-7"	15'-7"	13'-5"
	30"	16'-7"	16'-7"	16'-7"	14'-3"
	24"	19'-2"	19'-2"	19'-2"	16'-5"
	16"	23'-5"	23'-5"	23'-5"	20'-0"
20 LIVE	36"	10'-8"	10'-8"	10'-8"	10'-8"
	30"	11'-4"	11'-4"	11'-4"	11'-4"
	24"	13'-4"	13'-4"	13'-4"	13'-4"
	16"	16'-7"	16'-7"	16'-7"	16'-7"
25	36"	10'-4"	10'-4"	10'-4"	10'-4"
	30"	11'-1"	11'-1"	11'-1"	11'-1"
	24"	13'-0"	13'-0"	13'-0"	13'-0"
	16"	16'-2"	16'-2"	16'-2"	16'-2"
30	36"	9'-3"	9'-3"	9'-3"	9'-3"
	30"	9'-11"	9'-11"	9'-11"	9'-11"
	24"	11'-9"	11'-9"	11'-9"	11'-9"
	16"	14'-8"	14'-8"	14'-8"	14'-8"
40	36"	7'-9"	7'-9"	7'-9"	7'-9"
	30"	8'-4"	8'-4"	8'-4"	8'-4"
	24"	9'-11"	9'-11"	9'-11"	9'-11"
	16"	12'-7"	12'-7"	12'-7"	12'-7"
60	36"	5'-11"	5'-11"	5'-11"	5'-11"
	30"	6'-5"	6'-5"	6'-5"	6'-5"
	24"	7'-9"	7'-9"	7'-9"	7'-9"
	16"	9'-11"	9'-11"	9'-11"	9'-11"

TABLE 1.27

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FEB 24 2014

PROFESSIONAL ENGINEER CARL PUTNAM STATE OF UTAH

MAR 05 2014

LATTICE COVER 2.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREAS

TABLE 2.1

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	0.042"x3"x8" Alum Beam LA0: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.042"x3"x8" Alum Beam LA2: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.040"x2"x8.5" Alum Beam LA2: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE	3	22'-8"	14'-10"	A	18	23	25	26	21'-1"	B	23	25	27	28	18'-8"	B	20	24	25	26
	3.5	19'-5"	13'-6"	A	18	23	24	26	19'-7"	B	21	25	26	28	17'-4"	D	20	23	25	26
	4	17'-0"	12'-8"	B	19	23	24	25	18'-3"	B	21	25	26	27	16'-2"	B	21	23	24	26
	4.5	15'-1"	11'-10"	B	19	22	24	25	17'-3"	C	22	24	26	27	15'-3"	B	21	23	24	25
	5	13'-7"	11'-2"	B	20	22	23	25	16'-4"	C	22	24	25	27	14'-6"	B	21	22	24	25
	5.5	12'-4"	10'-7"	B	20	22	23	24	15'-6"	C	23	24	25	26	13'-8"	B	22	22	23	25
	6	11'-4"	10'-1"	B	20	22	23	24	14'-10"	C	23	23	25	26	13'-2"	C	22	22	23	25
	6.5	10'-6"	9'-7"	B	20	21	23	24	14'-2"	C	23	23	25	26	12'-7"	C	22	22	23	24
	7	9'-8"	9'-2"	B	21	21	23	24	13'-8"	C	23	23	24	26	12'-2"	C	23	23	23	24
	7.5	9'-1"	8'-10"	B	21	21	22	24	13'-2"	C	24	24	24	26	11'-8"	C	23	23	23	24
	8	8'-6"	8'-5"	B	21	21	22	23	12'-8"	C	24	24	24	25	11'-4"	C	23	23	23	24
	8.5	8'-0"	8'-2"	B	21	21	22	23	12'-3"	D	24	24	24	25	10'-11"	C	23	23	23	24
	9	7'-6"	7'-10"	B	21	21	22	23	11'-10"	D	24	24	24	25	10'-7"	C	23	23	23	24
	9.5	7'-2"	7'-7"	B	21	21	22	23	11'-6"	D	25	25	25	25	10'-4"	C	24	24	24	24
	10	6'-9"	7'-4"	B	22	22	22	23	11'-2"	D	25	25	25	25	10'-0"	C	24	24	24	24
	11	6'-2"	6'-11"	B	22	22	22	23	10'-7"	E	25	25	25	25	9'-6"	D	24	24	24	24
	12	5'-8"	6'-6"	C	22	22	22	23	10'-1"	E	25	25	25	25	9'-1"	D	25	25	25	25
	13	5'-2"	6'-2"	C	22	22	22	23	9'-7"	E	26	26	26	26	8'-8"	E	25	25	25	25
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE	3	22'-8"	14'-10"	A	20	26	27	29	21'-1"	B	23	26	28	31	18'-8"	B	22	26	27	29
	3.5	19'-5"	13'-6"	A	21	25	27	28	19'-7"	B	24	27	28	30	17'-4"	B	23	25	27	28
	4	17'-0"	12'-8"	B	21	25	26	28	18'-3"	B	24	27	28	30	16'-2"	B	23	25	26	28
	4.5	15'-1"	11'-10"	B	22	24	26	27	17'-3"	C	25	26	28	29	15'-3"	B	24	25	26	28
	5	13'-7"	11'-2"	B	22	24	26	27	16'-4"	C	25	26	26	29	14'-6"	B	24	24	26	27
	5.5	12'-4"	10'-7"	B	22	24	25	27	15'-6"	C	25	26	27	28	13'-8"	B	24	24	26	27
	6	11'-4"	10'-1"	B	23	24	25	26	14'-10"	C	26	26	27	28	13'-2"	C	25	26	25	27
	6.5	10'-6"	9'-7"	B	23	23	25	26	14'-2"	C	26	26	27	28	12'-7"	C	25	25	25	27
	7	9'-8"	9'-2"	B	23	23	25	26	13'-8"	C	26	26	27	28	12'-2"	C	25	25	25	26
	7.5	9'-1"	8'-10"	B	23	23	24	26	13'-2"	C	27	27	27	28	11'-8"	C	26	26	26	26
	8	8'-4"	8'-5"	B	24	24	24	26	12'-8"	C	27	27	27	28	11'-4"	C	26	26	26	26
	8.5	8'-0"	8'-2"	B	24	24	24	25	12'-3"	D	27	27	27	27	10'-11"	C	26	26	26	26
	9	7'-6"	7'-10"	B	24	24	24	25	11'-10"	D	27	27	27	27	10'-7"	C	26	26	26	26
	9.5	7'-2"	7'-7"	B	24	24	24	25	11'-6"	D	28	28	28	28	10'-4"	C	27	27	27	27
	10	6'-9"	7'-4"	B	24	24	24	25	11'-2"	D	28	28	28	28	10'-0"	C	27	27	27	27
	11	6'-2"	6'-11"	B	24	24	24	25	10'-7"	E	28	28	28	28	9'-6"	D	27	27	27	27
	12	5'-8"	6'-6"	C	25	25	25	25	10'-1"	E	29	29	29	29	9'-1"	D	28	28	28	28
	13	5'-2"	6'-2"	C	25	25	25	25	9'-7"	E	29	29	29	29	8'-8"	E	28	28	28	28
115 MPH EXPOSURE B																				
20 LIVE	3	11'-10"	10'-4"	B	16	22	23	24	15'-2"	C	18	24	25	26	13'-8"	B	18	22	23	25
	3.5	10'-2"	9'-6"	B	16	21	23	24	14'-9"	C	18	23	25	26	12'-5"	C	18	22	23	24
	4	8'-11"	8'-8"	B	17	21	22	24	13'-8"	C	19	23	24	26	11'-7"	C	18	21	23	24
	4.5	7'-11"	8'-1"	B	17	21	22	23	12'-7"	D	20	22	24	25	10'-11"	C	19	21	22	24
	5	7'-1"	7'-7"	B	17	20	22	23	11'-6"	D	20	22	24	25	10'-3"	C	19	21	22	23
	5.5	6'-6"	7'-1"	B	17	20	21	23	10'-10"	E	20	22	23	25	9'-9"	D	19	21	22	23
	6	5'-11"	6'-8"	B	18	20	21	22	10'-4"	E	20	22	23	24	9'-4"	D	20	20	22	23
	6.5	5'-5"	6'-4"	C	18	20	21	22	9'-10"	E	21	21	23	24	8'-11"	D	20	20	22	23
	7	5'-1"	6'-0"	C	18	20	21	23	9'-6"	E	21	21	23	24	8'-6"	E	20	20	21	23
	7.5	4'-9"	5'-8"	C	18	19	21	22	9'-1"	E	21	21	23	24	8'-2"	E	20	20	21	22
	8	4'-6"	5'-6"	C	18	19	21	22	8'-8"	F	21	21	22	24	7'-10"	F	20	20	21	23
	8.5	4'-2"	5'-3"	C	18	19	20	22	8'-6"	F	21	21	22	23	7'-8"	E	21	21	21	22
	9	3'-11"	5'-0"	C	18	19	20	22	8'-1"	F	21	21	22	23	7'-5"	E	21	21	21	22
	9.5	3'-8"	4'-10"	C	18	19	21	22	7'-10"	F	22	22	22	23	7'-2"	E	21	21	21	22
	10	3'-6"	4'-8"	C	19	19	21	22	7'-7"	F	22	22	22	23	6'-11"	F	21	21	21	22
	11	3'-2"	4'-4"	C	19	20	21	22	7'-1"	F	22	22	22	23	6'-6"	F	21	21	21	22
	12	2'-11"	4'-0"	C	19	20	21	23	6'-8"	F	22	22	22	23	6'-2"	F	22	22	22	23
	13	2'-8"	3'-9"	C	19	20	22	23	6'-4"	F	22	22	22	23	5'-11"	F	22	22	22	23

TABLE 2.1

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	0.042"x3"x8" Alum Beam LA0: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.042"x3"x8" Alum Beam LA2: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.040"x2"x8.5" Alum Beam LA2: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
30	3	8'-0"	9'-1"	B	15	21	22	24	13'-8"	E	18	23	24	26	12'-0"	C	17	21	23	24
	3.5	6'-10"	8'-3"	C	16	21	22	23	12'-6"	E	18	23	24	25	11'-1"	D	17	21	22	24
	4	6'-0"	7'-7"	C	16	20	22	23	11'-6"	E	18	22	24	25	10'-3"	E	18	21	22	23
	4.5	5'-4"	7'-0"	C	16	20	21	23	10'-8"	F	19	22	23	25	9'-6"	E	18	21	22	23
	5	4'-10"	6'-6"	C	16	20	21	22	10'-1"	F	19	22	23	24	9'-1"	E	18	20	22	23
	5.5	4'-4"	6'-1"	C	17	20	21	22	9'-7"	F	19	21	23	24	8'-7"	F	18	20	21	23
	6	4'-0"	5'-9"	C	17	19	21	22	9'-1"	F	19	21	23	24	8'-2"	F	18	20	21	22
	6.5	3'-8"	5'-5"	C	17	19	20	22	8'-8"	F	20	21	22	24	7'-10"	F	18	20	21	22
	7	3'-5"	5'-2"	C	17	19	20	22	8'-3"	F	20	21	22	23	7'-6"	F	18	20	21	22
	7.5	3'-2"	4'-11"	D	17	19	20	21	7'-11"	F	20	21	22	23	7'-2"	F	19	19	21	22
	8	3'-0"	4'-8"	D	17	19	20	21	7'-7"	F	20	20	22	23	6'-11"	F	20	20	21	22
	8.5	2'-10"	4'-6"	D	17	19	20	21	7'-3"	F	20	20	22	23	6'-8"	F	20	20	20	22
	9	2'-8"	4'-3"	D	17	19	20	22	7'-0"	F	20	20	21	23	6'-6"	F	20	20	20	22
	9.5	2'-6"	4'-1"	D	17	19	21	22	6'-9"	F	21	21	21	23	6'-3"	F	20	20	21	22
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	8'-0"	9'-1"	B	17	23	26	26	13'-8"	E	20	25	27	28	12'-0"	C	19	23	25	26
	3.5	6'-10"	8'-3"	C	18	23	24	26	12'-6"	E	20	25	26	28	11'-1"	D	20	23	24	26
	4	6'-0"	7'-7"	C	18	22	24	25	11'-6"	E	21	24	26	27	10'-3"	E	20	23	24	26
	4.5	5'-4"	7'-0"	C	18	22	23	25	10'-8"	F	21	24	26	27	9'-6"	E	20	22	24	25
	5	4'-10"	6'-6"	C	18	22	23	24	10'-1"	F	21	24	25	26	9'-1"	E	21	22	24	25
	5.5	4'-4"	6'-1"	C	18	21	23	24	9'-7"	F	22	23	25	26	8'-7"	F	21	22	23	25
	6	4'-0"	5'-9"	C	19	21	23	24	9'-1"	F	22	23	25	26	8'-2"	F	21	22	23	24
	6.5	3'-8"	5'-5"	C	19	21	22	24	8'-8"	F	22	23	24	26	7'-10"	F	21	21	23	24
	7	3'-5"	5'-2"	C	19	21	22	23	8'-3"	F	22	23	24	25	7'-6"	F	22	22	23	24
	7.5	3'-2"	4'-11"	D	18	20	22	23	7'-11"	F	23	23	24	25	7'-2"	F	22	22	23	24
	8	3'-0"	4'-8"	D	19	20	22	23	7'-7"	F	23	23	24	25	6'-11"	F	22	22	22	24
	8.5	2'-10"	4'-6"	D	19	20	22	23	7'-3"	F	23	23	24	25	6'-8"	F	22	22	22	24
	9	2'-8"	4'-3"	D	19	21	22	24	7'-0"	F	23	23	23	25	6'-6"	F	22	22	22	24
	9.5	2'-6"	4'-1"	D	19	21	22	24	6'-9"	F	23	23	23	25	6'-3"	F	23	23	23	24
115 MPH EXPOSURE B																				
40	3	6'-1"	7'-7"	C	15	20	22	23	11'-7"	E	17	22	24	25	10'-4"	E	16	21	22	23
	3.5	5'-2"	6'-11"	C	15	20	21	23	10'-7"	F	17	22	23	24	9'-6"	E	17	20	22	23
	4	4'-6"	6'-3"	C	15	20	21	22	9'-9"	F	17	21	23	24	8'-10"	E	17	20	22	23
	4.5	4'-0"	5'-10"	C	15	19	21	22	9'-1"	F	18	21	23	24	8'-3"	F	17	20	21	22
	5	3'-7"	5'-4"	C	16	19	20	22	8'-7"	F	18	21	22	24	7'-9"	F	17	20	21	22
	5.5	3'-3"	5'-0"	D	16	19	20	21	8'-1"	F	18	21	22	23	7'-4"	F	18	19	21	22
	6	3'-0"	4'-8"	D	16	19	20	21	7'-7"	F	18	20	22	23	7'-0"	F	18	19	21	22
	6.5	2'-9"	4'-5"	D	16	18	20	21	7'-3"	F	19	20	22	23	6'-8"	F	18	19	20	22
	7	2'-7"	4'-2"	D	16	18	20	21	6'-11"	F	19	20	21	23	6'-4"	F	18	19	20	22
	7.5	2'-5"	3'-11"	D	16	18	20	21	6'-7"	F	19	20	21	22	6'-1"	F	18	19	20	21
	8	2'-3"	3'-9"	E	16	18	20	21	6'-3"	F	19	20	21	22	5'-10"	F	18	19	20	21
	8.5	2'-1"	3'-7"	E	16	18	20	21	6'-0"	F	19	20	21	22	5'-8"	F	19	19	20	21
	9	2'-0"	3'-5"	E	16	18	20	22	5'-10"	F	19	19	21	22	5'-5"	F	19	19	20	22
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
40	3	6'-1"	7'-7"	C	16	22	24	25	11'-7"	E	18	24	26	27						
	3.5	5'-2"	6'-11"	C	17	22	23	25	10'-7"	F	19	24	25	27						
	4	4'-6"	6'-3"	C	17	21	23	24	9'-9"	F	20	23	25	26						
	4.5	4'-0"	5'-10"	C	17	21	23	24	9'-1"	F	20	23	25	26						
	5	3'-7"	5'-4"	C	17	21	22	24	8'-7"	F	20	23	24	25						
	5.5	3'-3"	5'-0"	D	17	21	22	23	8'-1"	F	20	22	24	25						
	6	3'-0"	4'-8"	D	18	20	22	23	7'-7"	F	21	22	24	25						
	6.5	2'-9"	4'-5"	D	18	20	22	23	7'-3"	F	21	22	23	25						
	7	2'-7"	4'-2"	D	18	20	21	23	6'-11"	F	21	22	23	25						
	7.5	2'-5"	3'-11"	D	18	20	22	23	6'-7"	F	21	22	23	24						
	8	2'-3"	3'-9"	E	18	20	22	23	6'-3"	F	21	21	23	24						
	8.5	2'-1"	3'-7"	E	18	20	22	23	6'-0"	F	21	21	23	24						
	9	2'-0"	3'-5"	E	18	21	22	24	5'-10"	F	22	22	23	24						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68739 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 186....-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

LATTICE COVER 2.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREAS

TABLE 2.1

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	0.042"x3"x8" Alum Beam LA6: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	Freestanding or Multispan Units: FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.042"x3"x8" Alum Beam LA21: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	Freestanding or Multispan Units: FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Dble 0.040"x2"x6.5" Alum Beam LA21: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	Freestanding or Multispan Units: FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
	115 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
20 LIVE	3	11'-10"	10'-4"	B	18	24	25	27	15'-2"	C	21	26	27	29	13'-8"	B	20	24	25	27
	3.5	10'-2"	9'-6"	B	19	23	25	28	14'-8"	C	21	25	27	29	12'-5"	C	20	24	25	28
	4	8'-11"	8'-8"	B	19	23	24	26	13'-8"	C	22	25	26	28	11'-7"	C	21	23	25	28
	4.5	7'-11"	8'-1"	B	18	22	24	25	12'-2"	D	22	24	26	27	10'-11"	C	21	23	24	26
	5	7'-1"	7'-7"	B	19	22	24	25	11'-8"	D	22	24	26	27	10'-3"	C	21	23	24	26
	5.5	6'-5"	7'-1"	B	20	22	23	25	10'-10"	E	23	24	25	27	9'-9"	D	22	22	24	25
	6	5'-11"	6'-8"	B	20	22	23	25	10'-4"	E	23	24	25	27	9'-4"	D	22	22	24	25
	6.5	5'-5"	6'-4"	C	20	21	23	24	9'-10"	E	23	23	26	26	8'-11"	D	22	22	23	26
	7	5'-1"	6'-0"	C	20	21	23	24	9'-5"	E	23	23	25	26	8'-6"	E	23	23	23	26
	7.5	4'-9"	5'-9"	C	20	21	23	24	9'-1"	E	24	24	25	26	8'-3"	E	23	23	23	24
	8	4'-5"	5'-6"	C	20	21	22	24	8'-8"	F	24	24	24	25	7'-11"	E	23	23	23	24
	8.5	4'-2"	5'-3"	C	21	21	22	24	8'-6"	F	24	24	24	26	7'-8"	E	23	23	23	24
	9	3'-11"	5'-0"	C	21	21	22	24	8'-1"	F	24	24	24	25	7'-6"	E	23	23	23	24
	9.5	3'-8"	4'-10"	C	21	21	22	24	7'-10"	F	24	24	24	25	7'-3"	E	24	24	24	24
	10	3'-6"	4'-8"	C	21	21	23	24	7'-7"	F	24	24	24	25	6'-11"	F	24	24	24	24
	11	3'-2"	4'-4"	C	21	21	23	24	7'-1"	F	25	25	25	25	6'-6"	F	24	24	24	24
	115 MPH EXPOSURE B																			
25	3	9'-7"	10'-1"	B	16	22	23	24	14'-10"	D	18	23	25	26	13'-2"	C	17	22	23	25
	3.5	8'-2"	9'-2"	B	16	21	23	24	13'-4"	E	19	23	24	26	12'-2"	C	18	21	23	24
	4	7'-2"	8'-6"	C	17	21	22	23	12'-6"	E	19	23	24	25	11'-4"	D	18	21	23	24
	4.5	6'-4"	7'-10"	C	17	21	23	23	11'-10"	E	19	22	24	25	10'-7"	E	18	21	22	24
	5	5'-8"	7'-4"	C	17	20	22	23	11'-2"	F	20	22	23	25	10'-0"	E	19	21	22	23
	5.5	5'-2"	6'-11"	C	17	20	21	23	10'-7"	F	20	22	23	24	9'-6"	E	19	20	22	23
	6	4'-9"	6'-6"	C	17	20	21	22	10'-1"	F	20	22	23	24	9'-1"	E	19	20	22	23
	6.5	4'-5"	6'-2"	C	18	20	21	22	9'-7"	F	20	21	23	24	8'-8"	F	20	20	21	23
	7	4'-1"	5'-10"	C	18	19	21	22	9'-2"	F	21	21	23	24	8'-4"	F	20	20	21	23
	7.5	3'-10"	5'-7"	C	18	19	21	22	8'-10"	F	21	21	22	24	8'-0"	F	20	20	21	22
	8	3'-7"	5'-4"	C	18	19	20	22	8'-5"	F	21	21	22	23	7'-8"	F	20	20	21	22
	8.5	3'-4"	5'-1"	D	18	19	20	21	8'-2"	F	21	21	22	23	7'-6"	F	20	20	21	22
	9	3'-3"	4'-10"	D	18	19	20	22	7'-10"	F	21	21	22	23	7'-2"	F	21	21	21	22
	9.5	3'-0"	4'-8"	D	18	19	21	22	7'-7"	F	21	21	22	23	6'-11"	F	21	21	21	23
	115 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
25	3	9'-7"	10'-1"	B	18	24	25	28	14'-10"	D	20	26	27	29	13'-2"	C	20	24	26	27
	3.5	8'-2"	9'-2"	B	18	23	25	28	13'-6"	E	21	25	27	28	12'-2"	C	20	23	25	26
	4	7'-2"	8'-6"	C	19	23	24	26	12'-6"	E	21	25	26	28	11'-4"	D	21	23	25	26
	4.5	6'-4"	7'-10"	C	19	22	24	25	11'-10"	E	22	24	26	27	10'-7"	E	21	23	24	26
	5	5'-8"	7'-4"	C	19	22	24	25	11'-2"	F	22	24	26	27	10'-0"	E	21	23	24	25
	5.5	5'-2"	6'-11"	C	19	22	23	25	10'-7"	F	22	24	25	27	9'-6"	E	22	22	24	25
	6	4'-9"	6'-6"	C	20	22	23	24	10'-1"	F	23	24	25	26	9'-1"	E	22	22	24	25
	6.5	4'-5"	6'-2"	C	20	21	23	24	9'-7"	F	23	23	25	26	8'-8"	F	22	22	23	25
	7	4'-1"	5'-10"	C	20	21	23	24	9'-2"	F	23	23	25	26	8'-4"	F	22	21	23	26
	7.5	3'-10"	5'-7"	C	20	21	22	24	8'-10"	F	23	23	24	26	8'-0"	F	22	22	23	24
	8	3'-7"	5'-4"	C	20	21	22	24	8'-6"	F	24	24	24	26	7'-8"	F	23	23	23	24
	8.5	3'-4"	5'-1"	D	20	21	22	23	8'-2"	F	24	24	24	25	7'-6"	F	23	23	23	24
	9	3'-3"	4'-10"	D	20	21	22	24	7'-10"	F	24	24	24	25	7'-2"	F	23	23	23	24
	9.5	3'-0"	4'-8"	D	20	21	22	24	7'-7"	F	24	24	24	25	6'-11"	F	23	23	23	24
	10	2'-10"	4'-6"	D	21	21	23	24	7'-4"	F	24	24	24	25	6'-9"	F	24	24	24	24
	115 MPH EXPOSURE B																			
60	3	4'-1"	5'-10"	C	13	19	21	22	8'-2"	F	18	21	23	24	8'-4"	F	15	20	21	23
	3.5	3'-6"	5'-3"	C	14	19	20	22	8'-4"	F	18	21	22	23	7'-7"	F	15	20	21	22
	4	3'-0"	4'-9"	D	14	19	20	21	7'-8"	F	18	20	22	23	7'-0"	F	18	19	21	22
	4.5	2'-8"	4'-4"	D	14	18	20	21	7'-1"	F	18	20	21	23	6'-6"	F	18	19	20	22
	5	2'-6"	4'-0"	D	14	18	19	21	6'-7"	F	17	20	21	22	6'-2"	F	18	19	20	21
	5.5	2'-3"	3'-8"	E	14	18	19	20	6'-2"	F	17	20	21	22	5'-9"	F	18	19	20	21
	6	2'-0"	3'-6"	E	14	18	18	20	5'-10"	F	17	19	21	22	5'-6"	F	18	18	20	21
	6.5	1'-10"	3'-2"	E	14	18	19	21	5'-6"	F	17	19	21	22	5'-2"	F	17	18	20	21
	7	1'-9"	3'-0"	E	14	18	20	21	5'-3"	F	17	19	20	22	4'-11"	F	17	18	20	21
	7.5	1'-7"	2'-10"	E	14	18	20	21	5'-0"	F	17	19	20	21	4'-9"	F	17	18	20	21
	8	1'-6"	2'-8"	E	14	19	20	21	4'-8"	G	17	19	20	21	4'-6"	F	17	19	20	21
	8.5	1'-5"	2'-6"	E	14	19	20	21	4'-6"	G	17	19	20	21	4'-4"	F	17	19	20	21
	115 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
60	3	4'-1"	5'-10"	C	15	21	23	24	8'-2"	F	17	23	25	26	8'-4"	F	17	22	23	25
	3.5	3'-6"	5'-3"	C	15	21	22	24	8'-4"	F	18	23	24	25	7'-7"	F	17	21	23	24
	4	3'-0"	4'-9"	D	15	20	22	23	7'-8"	F	18	22	24	25	7'-0"	F	18	21	23	24
	4.5	2'-8"	4'-4"	D	16	20	21	23	7'-1"	F	18	22	23	25	6'-6"	F	18	21	22	24
	5	2'-5"	4'-0"	D	18	20	21	23	6'-7"	F	19	22	23	24	6'-3"	F	18	21	22	23
	5.5	2'-3"	3'-8"	E	18	19	21	22	6'-2"	F	19	21	23	24	5'-9"	F	18	20	22	23
	6	2'-0"	3'-5"	E	18	19	21	22	5'-10"	F	18	21	23	24	5'-6"	F	19	20	22	23
	6.5	1'-10"	3'-2"	E	18	20	21	22	5'-6"	F	19	21	22	24	5'-2"	F	19	20	21	23
	7	1'-9"	3'-0"	E	18	20	21	23	5'-3"	F	19	21	22	24	4'-11"	F	19	20	21	23

TABLE 2.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

PROJECTION OF SINGLE SPAN STUCTURES (FT)

OVER-HANG (FT)	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'
0'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'
1'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
2'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
3'	n/a	n/a	n/a	n/a	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10'	10.5'	11'	11.5'	12'	12.5'
5'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.5'	13'

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TABLE 2.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail #
0.024"x3"x3" Post w/ Sideplat	12'	C	LA22
Alum 0.032"x3"x3" Lockseam	11'	D	LA15
Alum 0.040"x3"x3" Lockseam	11'	E	LA15
Alum 0.050"x3"x3" Fluted	10'	F	LA19
Alum 0.075"x3"x3" Square	10'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	LA15
Alum 0.120"x3"x3" Square	10'	I	LA20
Steel 0.043"x3"x3" Lockseam	10'	J	LA15
Alum 0.120"x4"x4" Square	12'	K	LA20
3/16"x3"x3" Steel Squan	14'	L	LA17

TABLE 2.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU49
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU49
Alum 0.120"x3"x3" Square	d= 25"	8'	D	LA20
Alum 0.120"x3"x3" Square	d= 27"	8'	B	LA20
Alum 0.120"x4"x4" Square	d= 28"	8'	E	LA20
3/16"x3"x3" Steel Square	d= 29"	13'	F	LA17
Alum 0.120"x4"x4" Square	d= 32"	10'	E	LA20
3/16"x3"x3" Steel Square	d= 32"	10'	G	LA17
3/16"x4"x4" Steel Square	d= 35"	14'	I	LA17
3/16"x4"x4" Steel Squan	d= 38"	10'	J	LA17
3/16"x5"x5" Steel Square	d= 42"	14'	K	LA17
3/16"x6"x6" Steel Squan	d= 47"	15'	L	LA17

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C68139 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20 PSF MIN)
4. CHOOSE A RAFTER FROM SECTION 1.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 2.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 2.1 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 2.1
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 2.1 AND 2.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 2.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.6
10. USE THE APPROPRIATE DETAILS DETAILS MAY REQUIRE POST TO UPGRADED.
11. ALL LATTICE NOT USING DETAIL LA36 MUST COMPLY WITH TABLES L1 AND L2 ON SHEET MISC5

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 2.1
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-11 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET MISC3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
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Holbrook, NY 11741
(631) 563-4000

PROFESSIONAL ENGINEER No. 060906-2202 CARL PUTNAM STATE OF NEW YORK

MAR 05 2014

LATTICE COVER 2.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREAS

TABLE 2.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	16 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	16 GA Attached Single Span Structure: MIN POST TYPE	16 GA Attached Single Span Structure: FOOTER SIZE "d" (in)	16 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	16 GA 12' "d" (in)	16 GA 15' "d" (in)	14 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	14 GA Attached Single Span Structure: MIN POST TYPE	14 GA Attached Single Span Structure: FOOTER SIZE "d" (in)	14 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	14 GA 12' "d" (in)	14 GA 15' "d" (in)	12 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	12 GA Attached Structure: MIN POST TYPE	12 GA Attached Structure: FOOTER SIZE "d" (in)	12 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	12 GA 12' "d" (in)	12 GA 15' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE	5	13'-7"	20'-3"	C	24	25	28		23'-6"	E	26	26	29		30'-4"	F	27	27	29	
	5.5	12'-4"	18'-11"	D	24	25	28		21'-3"	E	26	26	29		28'-6"	F	28	28	29	
	6	11'-4"	17'-10"	D	24	24	27		21'-1"	E	26	26	28		26'-6"	F	29	28	29	
	6.5	10'-5"	16'-11"	D	25	25	27		20'-0"	E	26	26	28		27'-8"	F	29	29	29	
	7	9'-4"	16'-1"	E	25	25	27		19'-1"	F	26	26	28		26'-8"	F	29	29	29	
	7.5	9'-1"	15'-4"	E	25	26	26		18'-3"	F	26	26	27		25'-6"	F	30	30	30	
	8	8'-6"	14'-8"	E	25	25	28		17'-6"	F	27	27	27		24'-7"	F	30	30	30	
	8.5	8'-0"	14'-1"	E	25	25	28		16'-10"	F	27	27	27		23'-8"	F	30	30	30	
	9	7'-6"	13'-6"	E	26	26	26		16'-2"	F	27	27	27		22'-11"	F	30	30	30	
	9.5	7'-1"	13'-0"	E	26	26	26		15'-7"	F	27	27	27		22'-2"	G	31	31	31	
	10	6'-9"	12'-6"	E	26	26	26		15'-1"	F	27	27	27		21'-6"	G	31	31	31	
	10.5	6'-5"	12'-1"	E	26	26	26		14'-7"	F	27	27	27		20'-11"	G	31	31	31	
	11	6'-2"	11'-6"	E	26	26	26		14'-1"	F	28	28	28		20'-4"	G	31	31	31	
	11.5	5'-11"	11'-1"	E	26	26	26		13'-8"	F	28	28	28		19'-9"	G	31	31	31	
	12	5'-8"	10'-7"	E	26	26	26		13'-3"	F	28	28	28		19'-3"	G	32	32	32	
	13	5'-3"	9'-10"	E	26	26	26		12'-7"	F	28	28	28		18'-4"	G	32	32	32	
	14	4'-10"	9'-1"	E	26	26	26		11'-11"	F	28	28	28		17'-6"	G	32	32	32	
	15	4'-6"	8'-6"	E	26	26	26		11'-4"	F	28	28	28		16'-8"	G	32	32	32	
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE	5	13'-7"	20'-3"	C	27	27	30		23'-6"	E	28	28	32		30'-4"	F	31	31	32	
	5.5	12'-4"	18'-11"	D	27	27	30		22'-3"	E	29	29	31		29'-5"	F	31	31	32	
	6	11'-4"	17'-10"	D	27	27	30		21'-1"	E	29	29	31		28'-6"	F	32	32	32	
	6.5	10'-5"	16'-11"	D	28	28	29		20'-0"	E	29	29	30		27'-8"	F	33	33	33	
	7	9'-8"	16'-1"	E	28	28	29		19'-1"	F	30	30	30		26'-8"	F	33	33	33	
	7.5	9'-1"	15'-4"	E	28	28	29		18'-3"	F	30	30	30		25'-6"	F	33	33	33	
	8	8'-6"	14'-8"	E	28	28	29		17'-6"	F	30	30	30		24'-7"	F	34	34	34	
	8.5	8'-0"	14'-1"	E	28	28	28		16'-10"	F	30	30	30		23'-8"	F	34	34	34	
	9	7'-6"	13'-6"	E	29	29	29		16'-2"	F	30	30	30		22'-11"	F	34	34	34	
	9.5	7'-2"	13'-0"	E	29	29	29		15'-7"	F	31	31	31		22'-2"	G	34	34	34	
	10	6'-9"	12'-6"	E	29	29	29		15'-1"	F	31	31	31		21'-6"	G	35	35	35	
	10.5	6'-5"	12'-1"	E	29	29	29		14'-7"	F	31	31	31		20'-11"	G	35	35	35	
	11	6'-2"	11'-6"	E	29	29	29		14'-1"	F	31	31	31		20'-4"	G	35	35	35	
	11.5	5'-11"	11'-1"	E	29	29	29		13'-8"	F	31	31	31		19'-9"	G	35	35	35	
	12	5'-8"	10'-7"	E	29	29	29		13'-3"	F	31	31	31		19'-3"	G	35	35	35	
	13	5'-2"	9'-10"	E	29	29	29		12'-7"	F	32	32	32		18'-4"	G	36	36	36	
	14	4'-10"	9'-1"	E	29	29	29		11'-11"	F	32	32	32		17'-6"	G	36	36	36	
	15	4'-6"	8'-6"	E	29	29	29		11'-4"	F	32	32	32		16'-8"	G	36	36	36	
115 MPH EXPOSURE B																				
20 LIVE	5	7'-1"	13'-11"	E	21	23	25	27	15'-7"	F	22	24	26	28	22'-3"	G	25	26	27	29
	5.5	6'-8"	12'-1"	E	21	22	25	27	14'-7"	F	22	23	26	28	20'-11"	G	25	25	27	29
	6	5'-11"	11'-1"	E	21	22	25	26	13'-8"	F	22	23	26	28	19'-10"	G	25	25	27	28
	6.5	5'-6"	10'-3"	E	21	22	24	26	13'-0"	F	23	23	25	27	18'-10"	G	26	26	26	28
	7	5'-1"	9'-8"	E	21	21	24	26	12'-4"	F	23	23	25	27	18'-0"	G	26	26	26	28
	7.5	4'-9"	8'-11"	E	21	21	24	25	11'-8"	F	23	23	25	27	17'-3"	G	26	26	26	28
	8	4'-5"	8'-4"	E	21	21	23	25	11'-2"	F	23	23	25	26	16'-7"	G	26	26	26	27
	8.5	4'-2"	7'-10"	E	21	21	23	25	10'-7"	F	23	23	25	26	15'-11"	H	26	26	26	27
	9	3'-11"	7'-5"	E	21	21	23	25	10'-0"	F	23	23	24	26	15'-4"	H	27	27	27	27
	9.5	3'-9"	7'-1"	E	21	21	23	24	9'-6"	F	23	23	24	26	14'-10"	H	27	27	27	27
	10	3'-6"	6'-8"	E	21	21	22	24	9'-0"	F	23	23	24	25	14'-4"	H	27	27	27	27
	10.5	3'-4"	6'-4"	E	21	21	22	24	8'-7"	F	23	23	24	25	13'-11"	H	27	27	27	27
	11	3'-2"	6'-1"	E	21	21	22	24	8'-3"	F	23	23	23	25	13'-6"	H	27	27	27	27
	11.5	3'-1"	5'-10"	E	21	21	22	24	7'-10"	F	23	23	23	25	13'-1"	H	27	27	27	27
	12	2'-11"	5'-7"	E	21	21	23	24	7'-7"	F	23	23	23	25	12'-8"	H	27	27	27	27
	13	2'-8"	5'-2"	E	21	21	23	25	7'-0"	F	23	23	23	25	11'-8"	H	28	28	28	28
	14	2'-6"	4'-9"	E	21	21	23	25	6'-6"	F	23	23	23	25	11'-5"	H	28	28	28	28
	15	2'-4"	4'-6"	E	21	21	24	25	6'-1"	F	23	23	24	25	10'-11"	H	28	28	28	28

TABLE 2.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	16 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	16 GA Attached Single Span Structure: MIN POST TYPE	16 GA Attached Single Span Structure: FOOTER SIZE "d" (in)	16 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	16 GA 12' "d" (in)	16 GA 15' "d" (in)	14 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	14 GA Attached Single Span Structure: MIN POST TYPE	14 GA Attached Single Span Structure: FOOTER SIZE "d" (in)	14 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	14 GA 12' "d" (in)	14 GA 15' "d" (in)	12 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	12 GA Attached Single Span Structure: MIN POST TYPE	12 GA Attached Single Span Structure: FOOTER SIZE "d" (in)	12 GA Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	12 GA 12' "d" (in)	12 GA 15' "d" (in)
115 MPH EXPOSURE B																				
30	5	4'-10"	10'-6"	F	19	22	23	26	13'-4"	F	21	23	26	27	19'-4"	H	24	24	27	28
	5.5	4'-4"	9'-8"	F	19	21	24	26	12'-6"	F	21	23	26	27	18'-3"	H	24	24	26	28
	6	4'-0"	8'-11"	F	19	21	24	25	11'-5"	F	21	22	26	27	17'-3"	H	24	24	26	28
	6.5	3'-8"	8'-3"	F	19	21	23	25	11'-1"	F	21	22	25	28	16'-5"	H	24	24	26	27
	7	3'-6"	7'-8"	F	19	20	23	25	10'-4"	F	21	22	24	28	15'-8"	H	25	25	26	27
	7.5	3'-2"	7'-2"	F	19	20	23	24	9'-8"	F	21	21	24	26	15'-0"	H	25	25	25	27
	8	3'-0"	6'-9"	F	19	20	23	24	9'-1"	F	21	21	24	25	14'-4"	H	25	25	25	27
	8.5	2'-10"	6'-4"	F	19	20	22	24	8'-6"	F	21	21	23	25	13'-10"	H	25	25	25	26
	9	2'-8"	6'-0"	F	19	19	22	24	8'-1"	F	21	21	23	25	13'-3"	H	25	25	25	26
	9.5	2'-6"	5'-8"	F	19	19	22	24	7'-8"	F	21	21	23	25	12'-10"	I	25	25	25	26
	10	2'-5"	5'-4"	F	19	19	22	24	7'-3"	F	21	21	23	24	12'-5"	I	26	26	26	26
	10.5	2'-3"	5'-1"	F	19	20	22	24	6'-11"	F	21	21	23	24	12'-0"	I	26	26	26	26
	11	2'-2"	4'-11"	F	19	20	22	24	6'-7"	F	21	21	22	24	11'-7"	I	26	26	26	26
	11.5	2'-1"	4'-8"	F	19	20	22	24	6'-4"	F	21	21	22	24	11'-3"	I	26	26	26	26
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	4'-10"	10'-6"	F	22	24	27	29	13'-4"	F	23	25	28	30	19'-4"	H	27	27	29	31
	5.5	4'-4"	9'-8"	F	22	23	28	28	12'-6"	F	24	25	28	29	18'-3"	H	27	27	29	30
	6	4'-0"	8'-11"	F	22	23	28	28	11'-6"	F	24	24	27	29	17'-3"	H	27	27	28	30
	6.5	3'-8"	8'-3"	F	22	23	25	27	11'-1"	F	24	24	27	29	16'-6"	H	27	27	28	30
	7	3'-5"	7'-8"	F	22	22	28	27	10'-4"	F	24	24	27	28	15'-8"	H	28	28	28	30
	7.5	3'-2"	7'-2"	F	22	22	25	27	9'-8"	F	24	24	26	28	15'-0"	H	28	28	28	29
	8	3'-0"	6'-9"	F	22	22	26	28	9'-1"	F	24	24	26	28	14'-4"	H	28	28	28	29
	8.5	2'-10"	6'-4"	F	22	22	24	28	8'-6"	F	24	24	26	27	13'-10"	H	28	28	28	29
	9	2'-8"	6'-0"	F	22	22	24	26	8'-1"	F	24	24	25	27	13'-3"	H	28	28	28	29
	9.5	2'-6"	5'-8"	F	22	22	24	26	7'-8"	F	24	24	25	27	12'-10"	I	29	29	29	29
	10	2'-5"	5'-4"	F	22	22	24	26	7'-3"	F	24	24	26	27	12'-5"	I	29	29	29	29
	10.5	2'-3"	5'-1"	F	22	22	24	26	6'-11"	F	24	24	25	28	12'-0"	I	29	29	29	29
	11	2'-2"	4'-11"	F	22	22	24	26	6'-7"	F	24	24	24	26	11'-7"	I	29	29	29	29
	11.5	2'-1"	4'-8"	F	22	22	25	26	6'-4"	F	24	24	25	26	11'-3"	I	29	29	29	29
115 MPH EXPOSURE B																				
40	5	3'-7"	8'-1"	F	18	21	22	26	10'-11"	F	19	22	25	26	16'-2"	H	22	23	25	27
	5.5	3'-3"	7'-5"	F	18	20	23	25	10'-0"	F	20	22	24	26	16'-4"	H	23	23	25	27
	6	3'-0"	6'-8"	F	18	20	23	24	9'-2"	F	20	21	24	25	14'-8"	H	23	23	26	27
	6.5	2'-8"	6'-3"	F	18	20	22	24	8'-5"	F	20	21	23	25	13'-8"	H	23	23	25	26
	7	2'-7"	5'-10"	F	18	19	22	24	7'-10"	F	20	21	23	25	13'-1"	H	23	23	24	26
	7.5	2'-5"	5'-5"	F	18	19	22	23	7'-4"	F	20	20	23	25	12'-6"	I	23	23	24	26
	8	2'-3"	5'-1"	F	18	19	21	23	6'-11"	F	20	20	23	24	11'-11"	I	23	23	24	26
	8.5	2'-1"	4'-9"	F	18	19	21	23	6'-6"	F	20	20	22	24	11'-5"	I	24	24	24	26
	9	2'-0"	4'-6"	F	18	19	22	23	6'-1"	F	20	20	22	24	11'-0"	I	24	24	24	25
	9.5	1'-11"	4'-3"	F	18	19	22	23	5'-10"	F	20	20	22	24	10'-7"	I	24	24	24	25
	10	1'-9"	4'-1"	F	18	19	22	24	5'-6"	F	20	20	22	24	10'-3"	I	24	24	24	25
	10.5	1'-8"	3'-11"	F	18	20	22	24	5'-3"	F	20	20	22	24	9'-11"	I	24	24	24	25
	11	1'-7"	3'-8"	F	18	20	22	24	5'-0"	F	20	20	22	24	9'-7"	I	24	24	24	25
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
40	5	3'-7"	8'-1"	F	20	23	26	27	10'-11"	F	22	24	27	29						
	5.5	3'-3"	7'-5"	F	20	22	25	27	10'-0"	F	22	23	26	29						
	6	3'-0"	6'-8"	F	20	22	25	26	9'-2"	F	22	23	26	29						
	6.5	2'-8"	6'-3"	F	20	21	24	26	8'-5"	F	22	23	26	27						
	7	2'-7"	5'-10"	F	20	21	24	26	7'-10"	F	22	22	25	27						
	7.5	2'-5"	5'-5"	F	20	21	24	25	7'-4"	F	22	22	25	27						
	8	2'-3"	5'-1"	F	20	21	23	25	6'-11"	F	22	22	25	26						
	8.5	2'-1"	4'-9"	F	20	20	23	25	6'-6"	F	22	22	24	26						
	9	2'-0"	4'-6"	F	20	21	24	25	6'-1"	F	22	22	24	26						
	9.5	1'-11"	4'-3"	F	20	21	24	26	5'-10"	F	22	22	24	26						
	10	1'-9"	4'-1"	F	20	21	24	26	5'-6"	F	22	22	24	26						
	10.5	1'-8"	3'-11"	F	20	21	24	26	5'-3"	F	22	22	24	26						
	11	1'-7"	3'-8"	F	20	21	24	26	5'-0"	F	22	22	24	26						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 EXP 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5844006-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

LATTICE COVER 2.6 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREA!

TABLE 2.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	16 GA 3x8 Steel C Beam LADI: MAX POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	14 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	12 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20 LIVE	6	7'-1"	12'-11"	E	23	25	26	30	15'-7"	F	25	26	28	31	22'-2"	G	28	30	30	33
	5.5	6'-6"	12'-1"	E	23	24	27	29	14'-7"	F	25	26	28	30	20'-10"	G	28	28	29	31
	6	5'-11"	11'-1"	E	23	24	27	29	13'-8"	F	25	25	28	30	19'-10"	G	28	28	29	31
	6.5	5'-5"	10'-3"	E	23	24	27	28	12'-8"	F	25	25	28	30	18'-10"	G	29	29	29	30
	7	5'-1"	9'-6"	E	23	23	26	28	12'-4"	F	26	26	27	29	17'-3"	G	29	29	29	30
	7.5	4'-8"	8'-11"	E	23	23	26	28	11'-8"	F	26	26	27	29	16'-7"	G	29	29	29	32
	8	4'-5"	8'-4"	E	23	23	26	27	11'-3"	F	26	26	27	28	15'-11"	H	30	30	30	33
	8.5	4'-2"	7'-10"	E	23	23	25	27	10'-7"	F	26	26	27	28	15'-4"	H	30	30	30	30
	9	3'-11"	7'-5"	E	23	23	25	27	10'-2"	F	26	26	28	28	14'-10"	H	30	30	30	30
	9.5	3'-8"	7'-1"	E	23	23	25	27	9'-8"	F	26	26	28	29	14'-4"	H	30	30	30	30
	10	3'-6"	6'-8"	E	23	23	25	26	9'-4"	F	26	26	28	29	13'-11"	H	30	30	30	30
	10.5	3'-4"	6'-5"	E	23	23	24	26	9'-1"	F	26	26	28	27	13'-6"	H	31	31	31	31
	11	3'-2"	6'-1"	E	23	23	24	26	8'-3"	F	26	26	28	27	13'-1"	H	31	31	31	31
	11.5	3'-1"	5'-10"	E	23	23	23	26	7'-10"	F	26	26	28	27	12'-8"	H	31	31	31	31
	12	2'-11"	5'-7"	E	23	23	23	27	7'-7"	F	26	26	28	27	12'-6"	H	31	31	31	31
	12.5	2'-9"	5'-3"	E	23	23	25	27	7'-6"	F	26	26	28	27						
115 MPH EXPOSURE B																				
25	5	5'-9"	12'-4"	F	20	23	25	27	15'-1"	F	22	24	26	28	21'-4"	G	24	24	27	29
	5.5	5'-2"	11'-6"	F	20	22	25	27	14'-1"	F	22	23	26	28	19'-2"	H	25	25	27	28
	6	4'-8"	10'-7"	F	21	22	24	26	13'-3"	F	22	23	26	27	18'-4"	H	25	25	26	28
	6.5	4'-3"	9'-10"	F	21	21	24	26	12'-7"	F	22	23	26	27	17'-8"	H	26	26	26	29
	7	4'-1"	9'-1"	F	21	21	24	25	11'-11"	F	22	22	25	27	16'-9"	H	26	26	26	27
	7.5	3'-10"	8'-4"	F	21	21	23	25	11'-4"	F	23	23	25	27	16'-1"	H	26	26	26	27
	8	3'-7"	8'-0"	F	21	21	23	25	10'-9"	F	23	23	25	28	15'-8"	H	26	26	26	27
	8.5	3'-4"	7'-8"	F	21	21	23	25	10'-2"	F	23	23	24	28	14'-11"	H	26	26	26	27
	9	3'-2"	7'-1"	F	21	21	23	24	9'-7"	F	23	23	24	26	14'-6"	H	26	26	26	27
	9.5	3'-0"	6'-8"	F	21	21	23	24	9'-1"	F	23	23	24	26	13'-11"	H	27	27	27	27
	10	2'-10"	6'-4"	F	21	21	22	24	8'-6"	F	23	23	24	26	13'-6"	H	27	27	27	27
	10.5	2'-8"	6'-1"	F	21	21	22	24	8'-3"	F	23	23	23	26	13'-1"	H	27	27	27	27
	11	2'-7"	5'-10"	F	21	21	22	24	7'-10"	F	23	23	23	25	12'-8"	I	27	27	27	27
	11.5	2'-5"	5'-7"	F	21	21	23	24	7'-6"	F	23	23	23	25						
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	5	5'-9"	12'-4"	F	23	25	26	30	15'-1"	F	24	25	29	31	21'-4"	G	27	27	30	31
	5.5	5'-2"	11'-6"	F	23	24	27	29	14'-1"	F	25	25	28	30	20'-4"	H	28	28	29	31
	6	4'-8"	10'-7"	F	23	24	27	28	13'-3"	F	25	25	28	29	19'-3"	H	28	28	29	31
	6.5	4'-3"	9'-10"	F	23	23	26	28	12'-7"	F	25	25	28	29	18'-4"	H	28	28	29	30
	7	4'-1"	9'-1"	F	23	23	26	26	11'-11"	F	25	25	27	29	17'-8"	H	29	29	29	30
	7.5	3'-10"	8'-4"	F	23	23	26	27	11'-4"	F	25	25	27	29	16'-9"	H	29	29	29	30
	8	3'-7"	8'-0"	F	23	23	25	27	10'-9"	F	26	26	27	29	16'-1"	H	29	29	29	30
	8.5	3'-4"	7'-8"	F	23	23	25	27	10'-2"	F	26	26	28	29	15'-8"	H	29	29	29	29
	9	3'-2"	7'-1"	F	23	23	25	27	9'-7"	F	26	26	28	30	14'-11"	H	30	30	30	30
	9.5	3'-0"	6'-8"	F	23	23	24	26	9'-1"	F	26	26	28	30	14'-6"	H	30	30	30	30
	10	2'-10"	6'-4"	F	23	23	24	26	8'-6"	F	26	26	28	27	13'-11"	H	30	30	30	30
	10.5	2'-8"	6'-1"	F	23	23	24	26	8'-3"	F	26	26	28	27	13'-6"	H	30	30	30	30
	11	2'-7"	5'-10"	F	23	23	24	26	7'-10"	F	26	26	28	27	13'-1"	H	30	30	30	30
	11.5	2'-5"	5'-7"	F	23	23	25	26	7'-6"	F	26	26	28	27	12'-8"	I	30	30	30	30
	12	2'-4"	5'-4"	F	23	23	25	27	7'-3"	F	26	26	28	27	12'-4"	I	31	31	31	31

TABLE 2.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	16 GA 3x8 Steel C Beam LADI: MAX POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	14 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	12 GA 3x8 Steel C Beam LADI: MAX POST SPACING (FT)	Attached Single Span Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
60	5	7'-6"	7'-6"	F	16	18	22	23	7'-6"	F	17	20	23	25	12'-7"	I	23	22	24	28
	5.5	2'-3"	5'-0"	F	16	18	21	23	6'-6"	F	17	20	23	24	11'-8"	I	21	21	24	26
	6	2'-6"	4'-3"	F	16	18	21	23	6'-2"	F	17	20	22	24	11'-1"	I	21	21	24	25
	6.5	1'-10"	4'-3"	F	16	18	21	23	5'-9"	F	17	19	22	24	10'-6"	I	21	21	23	25
	7	1'-6"	3'-11"	F	16	18	21	23	5'-4"	F	17	19	22	23	9'-11"	I	21	21	23	25
	7.5	1'-7"	3'-6"	F	16	18	21	23	4'-11"	F	17	19	21	23	9'-6"	I	21	21	23	25
	8	1'-6"	3'-6"	F	16	18	21	23	4'-6"	F	17	19	21	23	9'-1"	I	21	21	23	26
	8.5	1'-5"	3'-3"	F	16	18	21	23	4'-4"	F	17	19	21	23	8'-6"	I	22	22	23	24
	9	1'-4"	3'-0"	F	16	18	22	23	4'-1"	F	17	19	22	23	8'-4"	I	22	22	23	24
	9.5	1'-3"	2'-11"	F	16	18	22	23	3'-11"	F	17	19	22	23	7'-11"	I	22	22	22	24
	10	1'-3"	2'-8"	F	16	18	22	24	3'-8"	F	17	19	22	24	7'-7"	I	22	22	22	24
	10.5	1'-2"	2'-7"	F	16	18	22	24	3'-6"	F	17	20	22	24	7'-3"	I	22	22	22	24
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
60	5	2'-6"	6'-6"	F	17	21	24	28	7'-6"	F	19	22	25	27	12'-7"	I	23	24	26	28
	5.5	2'-3"	6'-0"	F	17	21	23	25	6'-6"	F	19	22	25	28	11'-8"	I	23	23	26	26
	6	2'-0"	4'-7"	F	17	20	23	25	6'-2"	F	19	21	24	26	11'-1"	I	23	23	26	26
	6.5	1'-10"	4'-3"	F	17	20	23	25	5'-9"	F	19	21	24	26	10'-6"	I	24	24	26	27
	7	1'-6"	3'-11"	F	17	20	23	24	5'-4"	F	19	21	24	25	9'-11"	I	24	24	25	27
	7.5	1'-7"	3'-6"	F	17	20	23	25	4'-11"	F	19	20	23	25	9'-6"	I	24	24	25	27
	8	1'-6"	3'-3"	F	17	20	23	26	4'-6"	F	19	20	23	25	9'-1"	I	24	24	25	27
	8.5	1'-5"	3'-3"	F	17	20	23	25	4'-4"	F	19	20	23	25	8'-6"	I	24	24	26	27
	9	1'-4"	3'-0"	F	17	21	24	26	4'-1"	F	19	21	24	25	8'-4"	I	24	24	25	28

TABLE 2.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES
PROJECTION OF SINGLE SPAN STRUCTURES (FT)

OVER-HANG (FT)	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'
0'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'
1'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
2'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
3'	n/a	n/a	n/a	n/a	7.5'	8'	8.5'	9'	9'	9.5'	10'	10.5'	11'	11.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10'	10.5'	11'	11.5'	12'	12.5'
5'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.5'	13'

TABLE 2.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail #
0.024"x3"x3" Post w/ Stiffeners	12'	C	LA22
Alum 0.032"x3"x3" Lockseam	11'	D	LA15
Alum 0.040"x3"x3" Lockseam	11'	E	LA15
Alum 0.055"x3"x3" Fluted	10'	F	LA18
Alum 0.075"x3"x3" Square	10'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	LA15
Alum 0.120"x3"x3" Square	10'	I	LA20
Steel 0.043"x3"x3" Lockseam	10'	J	LA15
Alum 0.120"x4"x4" Square	12'	K	LA20
3/16"x3"x3" Steel Square	14'	L	LA17

TABLE 2.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	LA15
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	LA15
Alum 0.120"x3"x3" Square	d= 25"	8'	D	LA20
Alum 0.120"x3"x3" Square	d= 27"	8'	B	LA20
Alum 0.120"x4"x4" Square	d= 28"	8'	E	LA20
3/16"x3"x3" Steel Square	d= 29"	13'	F	LA17
Alum 0.120"x4"x4" Square	d= 32"	10'	E	LA20
3/16"x3"x3" Steel Square	d= 32"	10'	G	LA17
3/16"x4"x4" Steel Square	d= 35"	14'	I	LA17
3/16"x4"x4" Steel Square	d= 38"	10'	J	LA17
3/16"x5"x5" Steel Square	d= 42"	14'	K	LA17
3/16"x6"x6" Steel Square	d= 47"	15'	L	LA17

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20 PSF MIN)
4. CHOOSE A RAFTER FROM SECTION 1.6 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 2.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 2.5 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 2.5
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 2.5 AND 2.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 2.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 2.6
10. USE THE APPROPRIATE DETAILS DETAILS MAY REQUIRE POST TO UPGRADED.
11. ALL LATTICE NOT USING DETAIL LA36 MUST COMPLY WITH TABLES L1 AND L2 ON SHEET MISC5

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 2.5

SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING

SLAB 9. FOLLOW 9-11 FROM ABOVE

SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET MISC3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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FEB 24 2014

PROFESSIONAL ENGINEER No. 5860906 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

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LATTICE COVER 2.6 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREA!

TABLE 2.6

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	Double 16 GA 3x8 Steel C Beam LA2i						Double 14 GA 3x8 Steel C Beam LA2i						Double 12 GA 3x8 Steel C Beam LA2i					
				Attached Single Span Structure		Freestanding or Multispan Units				Attached Single Span Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units		
			MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE	5	13'-7"	30'-11"	F	28	30	31	X	32'-7"	F	28	28	31	X	36'-8"	F	30	29	30	X
	5.5	12'-4"	30'-1"	F	28	28	31	X	31'-8"	F	29	29	31	X	35'-2"	F	30	33	30	X
	6	11'-4"	29'-4"	F	29	29	30	X	31'-0"	F	29	29	31	X	34'-4"	F	30	33	30	X
	6.5	10'-5"	28'-8"	F	29	29	30	X	30'-4"	F	30	30	31	X	33'-8"	G	31	31	31	X
	7	9'-8"	28'-1"	F	30	30	30	X	29'-6"	F	30	30	30	X	33'-0"	G	32	32	32	X
	7.5	9'-1"	27'-6"	F	30	30	30	X	29'-2"	G	31	31	31	X	32'-5"	G	32	32	32	X
	8	8'-6"	26'-11"	G	31	31	31	X	28'-7"	G	31	31	31	X	31'-10"	G	33	33	33	X
	8.5	8'-0"	26'-2"	G	31	31	31	X	28'-1"	G	32	32	32	X	31'-4"	H	33	33	33	X
	9	7'-6"	25'-6"	G	31	31	31	X	27'-8"	G	32	32	32	X	30'-10"	H	33	33	33	X
	9.5	7'-2"	24'-10"	G	32	32	32	X	27'-2"	H	33	33	33	X	30'-4"	H	34	34	34	X
	10	6'-9"	24'-3"	G	32	32	32	X	26'-8"	H	33	33	33	X	29'-11"	H	34	34	34	X
	10.5	6'-5"	23'-7"	G	32	32	32	X	26'-3"	H	33	33	33	X	29'-6"	H	35	35	35	X
	11	6'-2"	23'-1"	G	33	33	33	X	25'-10"	H	34	34	34	X	29'-2"	H	35	35	35	X
	11.5	5'-11"	22'-7"	H	33	33	33	X	25'-4"	H	34	34	34	X	28'-9"	H	36	36	36	X
	12	5'-8"	22'-1"	H	33	33	33	X	24'-10"	H	34	34	34	X	28'-5"	H	36	36	36	X
	13	5'-3"	21'-2"	H	33	33	33	X	23'-11"	H	35	36	35	X	27'-8"	I	37	37	37	X
	14	4'-10"	20'-6"	H	34	34	34	X	23'-1"	H	36	35	35	X	27'-1"	I	37	37	37	X
	15	4'-6"	19'-8"	H	34	34	34	X	22'-4"	H	36	36	36	X	26'-6"	I	39	38	38	X
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE	5	13'-7"	30'-11"	F	31	31	34	X	32'-7"	F	32	32	34	X	36'-8"	F	33	33	33	X
	5.5	12'-4"	30'-1"	F	32	32	33	X	31'-8"	F	32	32	34	X	35'-2"	F	33	33	33	X
	6	11'-4"	29'-4"	F	32	32	33	X	31'-0"	F	33	33	34	X	34'-4"	F	34	34	34	X
	6.5	10'-8"	28'-8"	F	33	33	33	X	30'-4"	F	34	34	34	X	33'-8"	G	35	35	35	X
	7	9'-8"	28'-1"	F	34	34	34	X	29'-6"	F	34	34	34	X	33'-0"	G	35	35	35	X
	7.5	9'-1"	27'-6"	F	34	34	34	X	29'-2"	G	35	35	35	X	32'-5"	G	36	36	36	X
	8	8'-6"	26'-11"	G	35	35	35	X	28'-7"	G	35	35	36	X	31'-10"	G	37	37	37	X
	8.5	8'-0"	26'-2"	G	35	35	35	X	28'-1"	G	36	36	36	X	31'-4"	H	37	37	37	X
	9	7'-6"	25'-6"	G	35	35	35	X	27'-8"	G	36	36	36	X	30'-10"	H	38	38	38	X
	9.5	7'-2"	24'-10"	G	36	36	36	X	27'-2"	H	37	37	37	X	30'-4"	H	38	38	38	X
	10	6'-9"	24'-3"	G	36	36	36	X	26'-8"	H	37	37	37	X	29'-11"	H	38	38	38	X
	10.5	6'-5"	23'-7"	G	36	36	36	X	26'-3"	H	38	38	38	X	29'-6"	H	39	39	39	X
	11	6'-2"	23'-1"	G	37	37	37	X	25'-10"	H	38	38	38	X	29'-2"	H	39	39	39	X
	11.5	5'-11"	22'-7"	H	37	37	37	X	25'-4"	H	38	38	38	X	28'-9"	H	40	40	40	X
	12	5'-8"	22'-1"	H	37	37	37	X	24'-10"	H	39	39	39	X	28'-5"	H	40	40	40	X
	13	5'-3"	21'-2"	H	38	38	38	X	23'-11"	H	39	39	39	X	27'-8"	I	41	41	41	X
	14	4'-10"	20'-6"	H	38	38	38	X	23'-1"	H	40	40	40	X	27'-1"	I	42	42	42	X
	15	4'-6"	19'-8"	H	38	38	38	X	22'-4"	H	40	40	40	X	26'-6"	I	42	42	42	X
115 MPH EXPOSURE B																				
20 LIVE	5	7'-1"	24'-8"	G	28	28	29	31	26'-8"	G	26	27	30	32	30'-4"	H	27	27	29	31
	5.5	6'-5"	23'-7"	G	28	28	29	31	25'-10"	H	27	27	30	31	29'-5"	H	28	28	29	31
	6	5'-10"	22'-7"	H	28	28	29	30	25'-1"	H	27	27	29	31	28'-0"	H	29	29	29	31
	6.5	5'-5"	21'-8"	H	27	27	28	30	24'-5"	H	28	28	29	31	27'-8"	I	29	30	29	30
	7	5'-1"	20'-11"	H	27	27	28	30	23'-7"	H	28	28	29	31	27'-1"	I	30	30	30	30
	7.5	4'-8"	20'-2"	H	27	27	28	30	22'-10"	H	28	28	29	31	26'-6"	I	30	30	30	30
	8	4'-6"	19'-6"	H	28	28	29	30	22'-1"	H	29	29	29	30	25'-11"	I	30	30	30	30
	8.5	4'-2"	18'-11"	H	28	28	29	30	21'-6"	I	29	29	29	30	25'-5"	I	31	31	31	31
	9	3'-11"	18'-4"	H	28	28	28	30	20'-10"	I	29	29	29	30	24'-11"	I	31	31	31	31
	9.5	3'-9"	17'-9"	H	29	29	29	29	20'-4"	I	30	30	30	30	24'-6"	J	32	32	32	32
	10	3'-6"	17'-4"	H	29	29	29	29	19'-9"	I	30	30	30	30	24'-1"	J	32	32	32	32
	10.5	3'-4"	16'-10"	H	29	29	29	29	19'-4"	I	30	30	30	30	23'-8"	J	32	32	32	32
	11	3'-2"	16'-5"	I	29	29	29	29	18'-10"	I	30	30	30	30	23'-3"	J	33	33	33	33
	11.5	3'-1"	16'-0"	I	29	29	29	29	18'-5"	I	31	31	31	31	22'-9"	K	33	33	33	33
	12	2'-11"	15'-8"	I	29	29	29	29	18'-0"	I	31	31	31	31	22'-4"	K	33	33	33	33
	13	2'-8"	14'-11"	I	30	30	30	30	17'-3"	I	31	31	31	31	21'-8"	K	34	34	34	34
	14	2'-6"	14'-4"	I	30	30	30	30	16'-7"	J	32	32	32	32	21'-0"	K	34	34	34	34
	15	2'-4"	13'-9"	I	30	30	30	30	15'-11"	J	32	32	32	32	20'-1"	K	34	34	34	34

TABLE 2.6

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	Double 16 GA 3x8 Steel C Beam LA2i						Double 14 GA 3x8 Steel C Beam LA2i						Double 12 GA 3x8 Steel C Beam LA2i					
				Attached Single Span Structure		Freestanding or Multispan Units				Attached Single Span Structure		Freestanding or Multispan Units				Attached Single Span Structure		Freestanding or Multispan Units		
			MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
30	5	4'-10"	21'-10"	H	25	26	28	30	22'-3"	H	25	26	28	31	26'-6"	I	28	28	28	30
	5.5	4'-4"	21'-1"	H	25	25	28	30	22'-6"	I	26	26	28	30	25'-7"	I	27	27	28	30
	6	4'-0"	20'-2"	H	25	25	28	30	21'-10"	I	26	26	28	30	24'-10"	I	27	27	28	30
	6.5	3'-8"	19'-4"	I	26	26	28	30	21'-3"	I	27	27	28	30	24'-3"	J	28	28	28	30
	7	3'-6"	18'-7"	I	26	26	28	29	20'-9"	I	27	27	28	30	23'-7"	J	29	29	28	29
	7.5	3'-2"	17'-11"	I	26	26	27	29	20'-4"	I	27	27	28	30	23'-1"	J	29	29	29	29
	8	3'-0"	17'-4"	I	27	27	27	29	19'-10"	J	28	28	28	30	22'-7"	K	29	29	29	29
	8.5	2'-10"	16'-9"	I	27	27	27	28	19'-3"	J	28	28	28	29	22'-2"	K	29	29	29	29
	9	2'-8"	16'-3"	I	27	27	27	28	18'-8"	J	28	28	28	29	21'-9"	K	30	30	30	30
	9.5	2'-6"	15'-9"	I	27	27	27	28	18'-2"	J	29	29	29	29	21'-4"	K	30	30	30	30
	10	2'-5"	15'-4"	J	27	27	27	28	17'-8"	K	29	29	29	29	21'-0"	K	31	31	31	31
	10.5	2'-3"	14'-10"	J	28	28	28	28	17'-2"	K	29	29	29	29	20'-7"	L	31	31	31	31
	11	2'-2"	14'-6"	J	28	28	28	28	16'-9"	K	29	29	29	29	20'-4"	L	31	31	31	31
	11.5	2'-1"	14'-1"	J	28	28	28	28	16'-4"	K	29	29	29	29	20'-0"	L	31	31	31	31
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	4'-10"	21'-10"	H	28	29	31	33	23'-3"	H	28	28	31	33	26'-5"	I	29	29	31	33
	5.5	4'-4"	21'-1"	H	28	28	31	33	22'-6"	I	29	29	31	33	25'-7"	I	30	30	31	33
	6	4'-0"	20'-2"	H	29	28	31	32	21'-10"	I	29	29	31	33	24'-10"	I	31	31	31	32
	6.5	3'-8"	19'-4"	I	29	29	30	32	21'-3"	I	30	30	31	33	24'-2"	J	31	31	31	32
	7	3'-6"	18'-7"	I	29	29	33	32	20'-9"	I	30	30	31	33	23'-7"	J	32	32	32	32
	7.5	3'-2"	17'-11"	I	30	30	30	32	20'-4"	I	31	31	31	32	23'-1"	J	32	32	32	32
	8	3'-0"	17'-4"	I	30	30	30	31	19'-10"	J	31	31	31	32	22'-7"	K	33	33	33	33
	8.5	2'-10"	16'-9"	I	30	30	30	31	19'-3"	J	32	32	32	32	22'-2"	K	33	33	33	33
	9	2'-8"	16'-3"	I	30	30	30	31	18'-8"	J	32	32	32	32	21'-9"	K	33	33	33	33
	9.5	2'-6"	15'-9"	I	31	31	31	31	18'-2"	J	32	32	32	32	21'-4"	K	34	34	34	34
	10	2'-5"	15'-4"	J	31	31	31	31	17'-8"	K	32	32	32	32	21'-0"	K	34	34	34	34
	10.5	2'-3"	14'-10"	J	31	31	31	31	17'-2"	K	33	33	33	33	20'-7"	L	35	35	35	35
	11	2'-2"	14'-6"	J	31	31	31	31	16'-9"	K	33	33	33	33	20'-4"	L	35	35	35	35
	11.5	2'-1"	14'-1"	J	31	31	31	31	16'-4"	K	33	33	33	33	20'-0"	L	35	35	35	35
115 MPH EXPOSURE B																				
40	5	3'-7"	19'-2"	I	24	25	26	29	21'-1"	I	24	25	28	30	24'-0"	J	25	25	28	30
	5.5	3'-3"	18'-3"	I	24	25	27	29	20'-5"	I	25	25	28	30	23'-3"	J	26	26	28	29
	6	3'-0"	17'-5"	I	24	24	27	28	19'-10"	J	25	25	28	30	22'-7"	K	26	26	27	29
	6.5	2'-9"	16'-8"	I	24	24	27	29	19'-1"	J	26	26	28	29	22'-0"	K	27	27	27	28
	7	2'-7"	16'-0"	I	25	25	27	28	18'-6"	J	26	26	27	29	21'-6"	K	27	27	27	28
	7.5	2'-5"	15'-5"	J	25	25	26	28	17'-9"	K	26	26	27	29	21'-0"	K	28	28	28	29
	8	2'-3"	14'-10"	J	25	25	26	28	17'-2"	K	26	26	27	29	20'-6"	L	28	28	28	29
	8.5	2'-1"	14'-4"	J	25	25	26	28	16'-7"	K	27	27	27	29	20'-1"	L	28	28	29	29
	9	2'-0"	13'-10"	J	26	26	26	28	16'-1"	K	27	27	27	28	19'-8"	L	29	29	29	29
	9.5	1'-11"	13'-5"	J	26	26	26	27	15'-7"	K	27	27	27	28	19'-4"	L	29	29	29	29
	10	1'-9"	13'-0"	J	26	26	26	27	15'-1"	K	27	27	27	28	19'-0"	L	30	30	30	30
	10.5	1'-8"	12'-7"	K	26	26	26	27	14'-8"	K	28	28	28	28	18'-8"	L	30	30	30	30
	11	1'-7"	12'-3"	K	26	26	26	27	14'-3"	K	28	28	28	28	18'-4"	L	30	30	30	30
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
40	5	3'-7"	19'-2"	I	26	27	30	32	21'-1"	I	27	28	31	33						
	5.5	3'-3"	18'-3"	I	27	27	30	32	20'-5"	I	28	28	31	33						
	6	3'-0"	17'-5"	I	27	27	30	31	19'-10"	J	28	28	30	32						
	6.5	2'-9"	16'-8"	I	28	28	29	31	19'-1"	J	29	29	30	32						
	7	2'-7"	16'-0"	I	28	28	29	31	18'-5"	J	29	29	30	32						
	7.5	2'-5"	15'-5"	J	28	28	29	31	17'-9"	K	29	29	30	32						
	8	2'-3"	14'-10"	J	28	28	29	30	17'-2"	K	30	30	30	31						
	8.5	2'-1"	14'-4"	J	29	29	29	30	16'-7"	K	30	30	30	31						
	9	2'-0"	13'-10"	J	29	29	29	30	16'-1"	K	30	30	30	31						
	9.5	1'-11"	13'-5"	J	29	29	29	30	15'-7"	K	31	31	31	31						
	10	1'-9"	13'-0"	J	29	29	29	30	15'-1"	K	31	31	31	31						
	10.5	1'-8"	12'-7"	K	29	29	29	30	14'-8"	K	31	31	31	31						
	11	1'-7"	12'-3"	K	30	30	30	30	14'-3"	K	31	31	31	31						

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FEB 24 2014

PROFESSIONAL ENGINEER ... 2202 CARL PUTNAM

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LATTICE COVER 2.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS NORMAL WIND AREAS

TABLE 2.6

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	Double 16 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE (Attached Single Span Structure)	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	Double 14 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 12 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20 LIVE	5	7'-1"	24'-8"	G	29	29	32	34	26'-6"	G	29	29	32	34	33'-4"	H	31	31	32	34
	5.5	6'-6"	23'-7"	G	29	29	32	34	25'-10"	H	30	30	32	34	29'-5"	H	31	31	32	34
	6	5'-11"	22'-7"	H	29	30	31	33	25'-1"	H	31	31	32	34	28'-6"	H	32	32	32	33
	6.5	5'-6"	21'-9"	H	30	30	31	33	24'-5"	H	31	31	32	34	27'-6"	I	33	33	33	33
	7	5'-1"	20'-11"	H	30	30	31	33	23'-7"	H	32	32	32	34	27'-1"	I	33	33	33	33
	7.5	4'-8"	20'-3"	H	31	31	31	32	22'-10"	H	32	32	32	33	26'-6"	I	34	34	34	34
	8	4'-5"	19'-8"	H	31	31	31	32	22'-1"	H	32	32	32	33	25'-11"	I	34	34	34	34
	8.5	4'-2"	18'-11"	H	31	31	31	32	21'-6"	I	33	33	33	33	25'-5"	I	35	35	35	36
	9	3'-11"	18'-4"	H	32	33	33	32	20'-10"	I	33	33	33	33	24'-11"	I	35	35	36	36
	9.5	3'-8"	17'-8"	H	32	32	32	32	20'-4"	I	33	33	33	33	24'-6"	J	35	35	36	35
	10	3'-6"	17'-4"	H	32	32	32	32	19'-8"	I	34	34	34	34	24'-1"	J	36	36	36	36
	10.5	3'-4"	16'-10"	H	32	32	32	32	19'-4"	I	34	34	34	34	23'-6"	J	36	36	36	36
	11	3'-2"	16'-6"	I	33	33	33	33	18'-10"	I	34	34	34	34	23'-3"	J	37	37	37	37
	11.5	3'-1"	16'-0"	I	33	33	33	33	18'-5"	I	34	34	34	34	22'-8"	K	37	37	37	37
	12	2'-11"	15'-6"	I	33	33	33	33	18'-0"	I	35	35	35	35	22'-4"	K	37	37	37	37
	13	2'-8"	14'-11"	I	33	33	33	33	17'-3"	I	36	35	35	35	21'-6"	K	38	38	38	38
115 MPH EXPOSURE B																				
25	5	5'-9"	23'-2"	H	25	26	29	31	24'-8"	H	26	26	29	31	28'-1"	H	27	27	29	31
	5.5	5'-2"	22'-6"	H	25	26	29	30	23'-11"	H	26	26	29	31	27'-2"	I	27	27	29	30
	6	4'-8"	21'-10"	H	26	26	28	30	23'-3"	H	27	27	29	31	26'-6"	I	28	28	28	30
	6.5	4'-5"	21'-2"	H	27	27	28	30	22'-7"	I	27	27	29	31	26'-0"	I	28	28	28	30
	7	4'-1"	20'-6"	H	27	27	28	30	22'-1"	I	28	28	29	30	25'-1"	I	29	29	29	30
	7.5	3'-10"	19'-8"	I	27	27	28	30	21'-7"	I	28	28	28	30	24'-8"	J	29	29	29	30
	8	3'-7"	19'-0"	I	27	27	28	28	21'-1"	I	28	28	28	30	24'-4"	J	30	30	30	30
	8.5	3'-4"	18'-6"	I	28	28	28	29	20'-8"	I	29	29	29	30	23'-6"	J	30	30	30	30
	9	3'-3"	17'-10"	I	28	28	28	29	20'-4"	J	29	29	29	30	23'-1"	J	30	30	30	30
	9.5	3'-0"	17'-4"	I	28	28	28	29	19'-10"	J	29	29	29	30	22'-8"	K	31	31	31	31
	10	2'-10"	16'-10"	I	28	28	28	29	19'-4"	J	30	30	30	30	22'-3"	K	31	31	31	31
	10.5	2'-8"	16'-5"	I	29	29	29	29	18'-10"	J	30	30	30	30	21'-11"	K	31	31	31	31
	11	2'-7"	16'-0"	I	29	29	29	29	18'-5"	J	30	30	30	30	21'-7"	K	32	32	32	32
	11.5	2'-6"	15'-7"	I	29	29	29	29	18'-0"	J	30	30	30	30	21'-3"	K	32	32	32	32
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-9"	23'-2"	H	28	28	31	33	24'-8"	H	29	29	32	34	28'-1"	H	30	30	31	33
	5.5	5'-2"	12'-8"	H	29	29	31	33	23'-11"	H	29	29	32	34	27'-3"	I	31	31	31	33
	6	4'-9"	21'-10"	H	29	29	31	33	23'-3"	H	30	30	31	33	26'-5"	I	31	31	31	33
	6.5	4'-6"	21'-2"	H	29	30	31	33	22'-7"	I	30	30	31	33	25'-9"	I	32	32	32	33
	7	4'-1"	20'-6"	H	30	30	31	33	22'-1"	I	31	31	31	33	25'-1"	I	32	32	32	33
	7.5	3'-10"	19'-6"	I	31	31	31	32	21'-7"	I	31	31	31	33	24'-6"	J	33	33	33	33
	8	3'-7"	19'-0"	I	31	31	31	32	21'-1"	I	32	32	32	33	24'-4"	J	33	33	33	33
	8.5	3'-4"	18'-5"	I	31	31	31	32	20'-8"	I	32	32	32	33	23'-8"	J	34	34	34	34
	9	3'-3"	17'-10"	I	31	31	31	32	20'-4"	J	33	33	33	33	23'-1"	J	34	34	34	34
	9.5	3'-0"	17'-4"	I	32	32	33	32	19'-10"	J	33	33	33	33	22'-6"	K	35	35	35	36
	10	2'-10"	16'-10"	I	32	32	32	32	19'-4"	J	33	33	33	33	22'-3"	K	35	35	35	36
	10.5	2'-8"	16'-6"	I	32	32	32	32	18'-10"	J	34	34	34	34	21'-11"	K	35	35	35	35
	11	2'-7"	16'-0"	I	32	32	32	32	18'-5"	J	34	34	34	34	21'-7"	K	36	36	36	36
	11.5	2'-6"	15'-7"	I	33	33	33	33	18'-0"	J	34	34	34	34	21'-3"	K	36	36	36	36
	12	2'-4"	15'-3"	J	33	33	33	33	17'-7"	K	34	34	34	34	21'-0"	K	36	36	36	36

TABLE 2.6

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	MAX POST SPACING ON SLAB (FT)	Double 16 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE (Attached Single Span Structure)	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	Double 14 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 12 GA 3x8 Steel C Beam LA21: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
60	5	2'-5"	15'-6"	I	22	24	26	28	17'-10"	K	23	24	27	29	21'-6"	K	24	24	27	29
	5.5	2'-3"	14'-8"	J	22	23	28	28	16'-11"	K	23	24	27	28	20'-4"	L	25	25	27	29
	6	2'-0"	13'-11"	J	22	23	28	28	16'-2"	K	24	24	27	28	19'-8"	L	25	25	27	28
	6.5	1'-10"	13'-3"	J	23	23	28	27	15'-8"	K	24	24	26	28	19'-2"	L	26	26	28	28
	7	1'-8"	12'-8"	K	23	23	28	27	14'-8"	K	24	24	28	28	18'-8"	L	26	26	28	28
	7.5	1'-7"	12'-3"	K	23	23	26	27	14'-2"	K	24	24	28	28	18'-2"	L	26	26	26	28
	8	1'-6"	11'-8"	K	23	23	25	27	13'-8"	L	25	25	26	27	17'-8"	L	27	27	27	28
	8.5	1'-6"	11'-3"	K	24	24	25	26	13'-2"	L	25	25	26	27	17'-1"	L	27	27	27	28
	9	1'-4"	10'-10"	K	24	24	26	26	12'-8"	L	25	25	25	27	16'-8"	L	27	27	27	27
	9.5	1'-3"	10'-6"	K	24	24	24	26	12'-4"	L	25	25	25	27	16'-2"	L	28	28	28	28
	10	1'-2"	10'-2"	K	24	24	24	26	11'-11"	L	25	25	26	27	15'-8"	M	28	28	29	28
	10.5	1'-2"	9'-10"	K	24	24	24	26	11'-7"	L	25	25	25	27	15'-4"	M	28	28	28	28
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
60	5	2'-6"	15'-6"	I	25	26	29	31	17'-10"	K	26	27	30	32	21'-6"	K	27	27	29	31
	5.5	2'-2"	14'-8"	J	25	26	28	30	16'-11"	K	26	28	29	31	20'-4"	L	28	28	29	31
	6	2'-0"	13'-11"	J	25	25	28	30	16'-2	K	27	27	29	31	19'-8"	L	28	28	29	31
	6.5	1'-10"	13'-3"	J	26	26	28	30	15'-5"	K	27	27	29	31	19'-2"	L	29	29	29	31
	7	1'-9"	12'-8"	K	26	26	28	30	14'-8"	K	27	27	29	30	18'-8"	L	29	29	29	31
	7.5	1'-7"	12'-2"	K	26	26	27	29	14'-2"	K	27	27	28	30	18'-2"	L	30	30	30	30
	8	1'-6"	11'-8"	K	26	26	27	29	13'-8"	L	28	28	28	30	17'-8"	L	30	30	30	33
	8.5	1'-5"	11'-3"	K	26	26	27	29	13'-2"	L	28	28	28	30	17'-1"	L	30	30	30	30
	9	1'-4"	10'-10"	K	27	27	27	28	12'-8"	L	29	29	28	30	16'-8"	L	31	31	31	31

TABLE 2.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT): 8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'
0'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'
1'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
2'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
3'	n/a	n/a	n/a	n/a	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10'	10.5'	11'	11.5'	12'	12.5'
5'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12.5'	13'

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TABLE 2.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail #
0.024"x3"x3" Post w/ Sideplat	12'	C	LA22
Alum 0.032"x3"x3" Lockseam	11'	D	LA15
Alum 0.040"x3"x3" Lockseam	11'	E	LA15
Alum 0.055"x3"x3" Fluted	10'	F	LA19
Alum 0.075"x3"x3" Square	10'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	LA15
Alum 0.120"x3"x3" Square	10'	I	LA20
Steel 0.043"x3"x3" Lockseam	10'	J	LA15
Alum 0.120"x4"x4" Square	12'	K	LA20
3/16"x3"x3" Steel Squen	14'	L	LA17

TABLE 2.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	LA15
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	LA15
Alum 0.120"x3"x3" Square	d= 25"	8'	D	LA20
Alum 0.120"x3"x3" Square	d= 27"	8'	B	LA20
Alum 0.120"x4"x4" Square	d= 28"	8'	E	LA20
3/16"x3"x3" Steel Square	d= 29"	13'	F	LA17
Alum 0.120"x4"x4" Square	d= 32"	10'	E	LA20
3/16"x3"x3" Steel Square	d= 32"	10'	G	LA17
3/16"x4"x4" Steel Square	d= 35"	16'	I	LA17
3/16"x4"x4" Steel Squan	d= 36"	10'	J	LA17
3/16"x5"x5" Steel Square	d= 42"	14'	K	LA17
3/16"x6"x6" Steel Squan	d= 47"	15'	L	LA17

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN. COMMERCIAL UNITS USE 20 PSF MIN)
4. CHOOSE A RAFTER FROM SECTION 1.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 2.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 2.6 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 2.6
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 2.6 AND 2.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 2.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.0
10. USE THE APPROPRIATE DETAILS. DETAILS MAY REQUIRE POST TO UPGRADED.
11. ALL LATTICE NOT USING DETAIL LA36 MUST COMPLY WITH TABLES L1 AND L2 ON SHEET MISC5

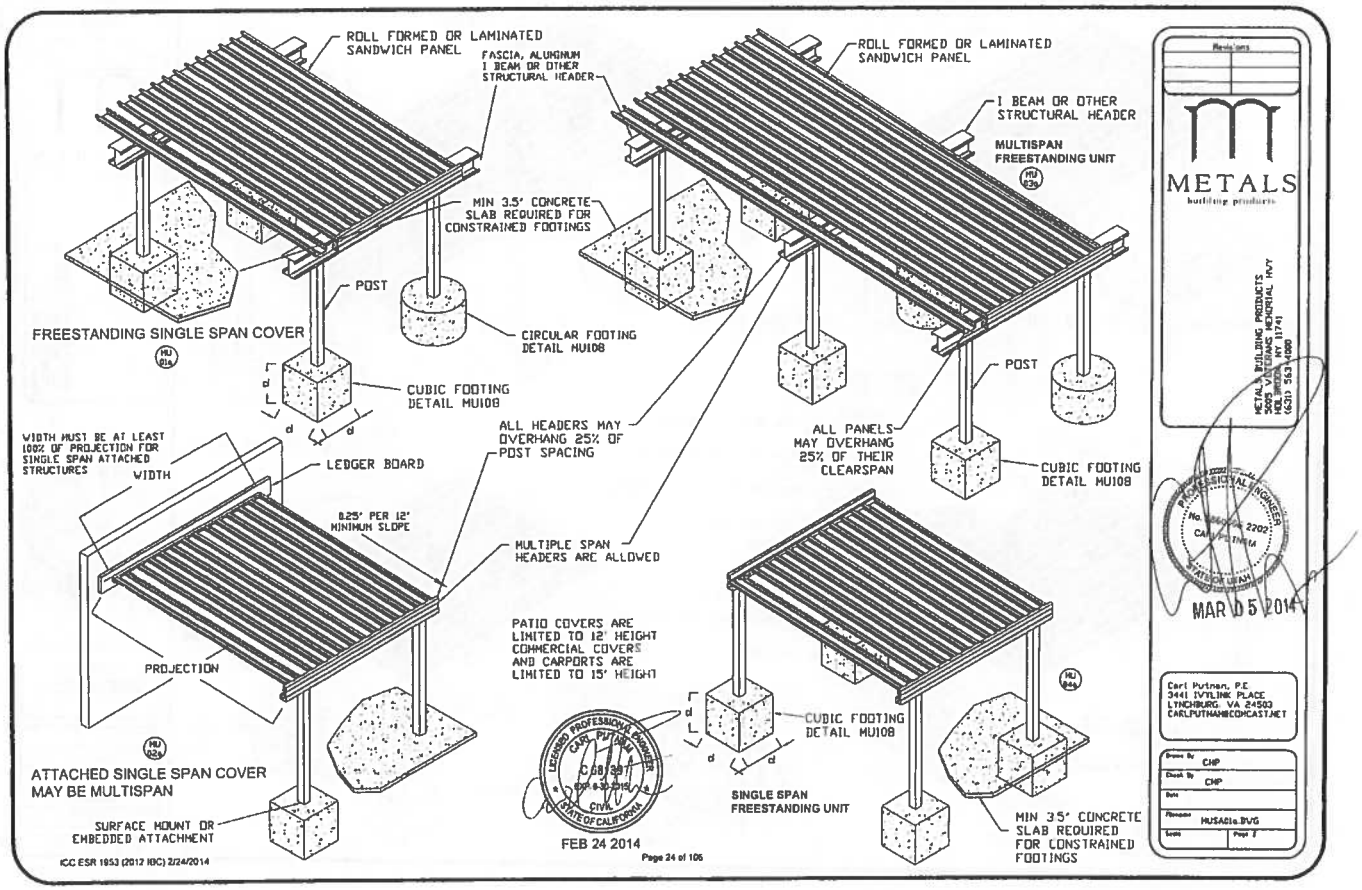
FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 2.6
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-11 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET MISC3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4000

PROFESSIONAL ENGINEER 5560909-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014


ROLL FORMED OR LAMINATED SANDWICH PANEL
FASCIA, ALUMINUM I BEAM OR OTHER STRUCTURAL HEADER
MIN 3.5" CONCRETE SLAB REQUIRED FOR CONSTRAINED FOOTINGS
POST
CIRCULAR FOOTING DETAIL MU108
FREESTANDING SINGLE SPAN COVER
MU 21a
CUBIC FOOTING DETAIL MU108
d
WIDTH MUST BE AT LEAST 100% OF PROJECTION FOR SINGLE SPAN ATTACHED STRUCTURES
WIDTH
LEDGER BOARD
0.25" PER 12" MINIMUM SLOPE
PROJECTION
MU 22a
ATTACHED SINGLE SPAN COVER MAY BE MULTISPAN
SURFACE MOUNT OR EMBEDDED ATTACHMENT
ICC ESR 1953 (2012 IBC) 2/24/2014
ALL HEADERS MAY OVERHANG 25% OF POST SPACING
MULTIPLE SPAN HEADERS ARE ALLOWED
PATIO COVERS ARE LIMITED TO 12' HEIGHT COMMERCIAL COVERS AND CARPORTS ARE LIMITED TO 15' HEIGHT
LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68 387 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA
FEB 24 2014
ROLL FORMED OR LAMINATED SANDWICH PANEL
I BEAM OR OTHER STRUCTURAL HEADER
MULTISPAN FREESTANDING UNIT
MU 23a
POST
ALL PANELS MAY OVERHANG 25% OF THEIR CLEARSPAN
CUBIC FOOTING DETAIL MU108
MU 24a
CUBIC FOOTING DETAIL MU108
SINGLE SPAN FREESTANDING UNIT
MIN 3.5" CONCRETE SLAB REQUIRED FOR CONSTRAINED FOOTINGS
METALS
building products
METAL BUILDING PRODUCTS
5005 VETERANS MEMORIAL HWY
HOL BROOK, NY 11741
(631) 563-1000
PROFESSIONAL ENGINEER No. 68387 2202 CALIFORNIA STATE OF UTAH
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Carl Putnam, P.E.
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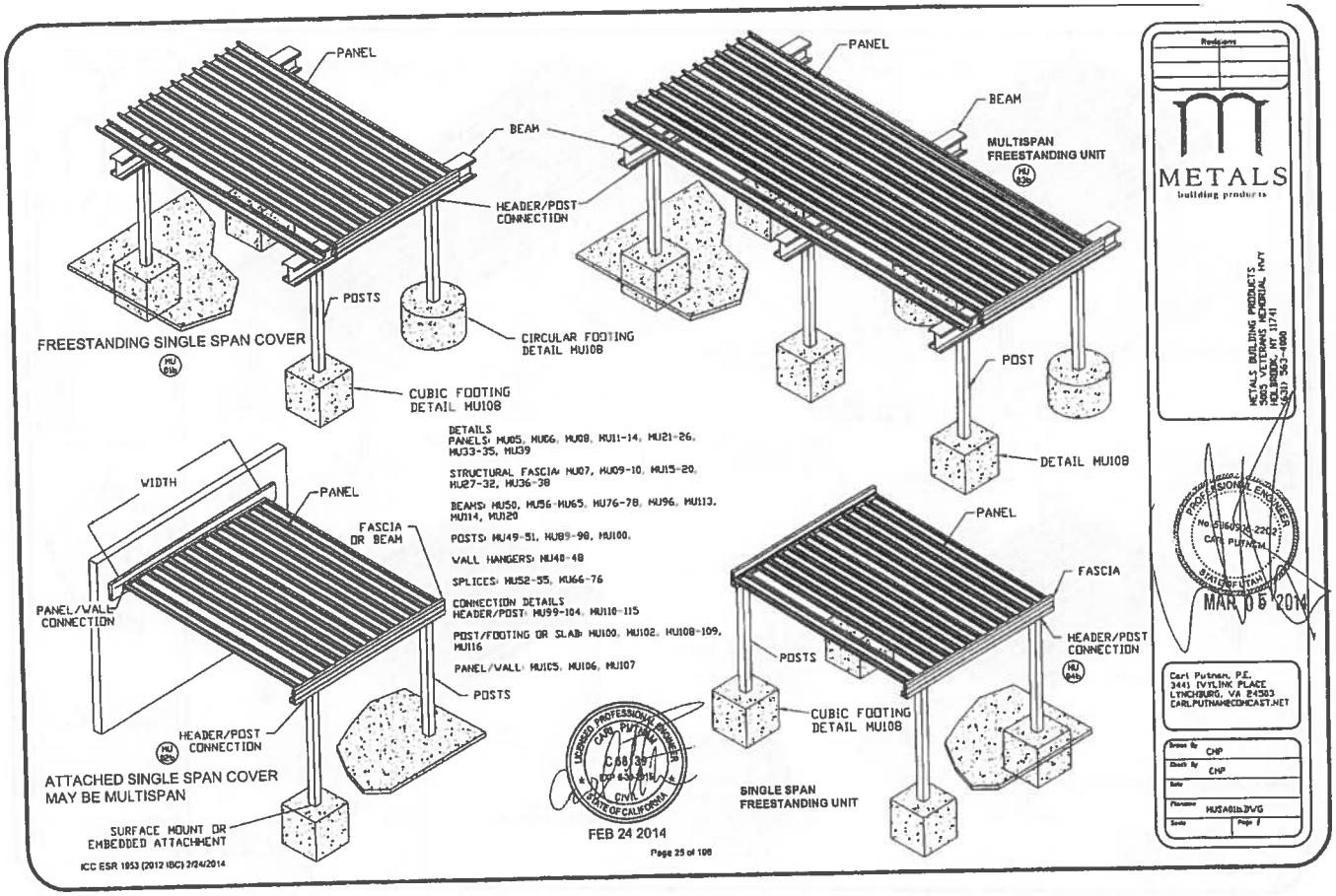
Drawn By CHP
Check By CHP
Date
Filename HUSA01a.DWG
Scale
Page 2


PANEL
BEAM
HEADER/POST CONNECTION
POSTS
CIRCULAR FOOTING DETAIL MU108
FREESTANDING SINGLE SPAN COVER
CUBIC FOOTING DETAIL MU108
PANEL
BEAM
MULTISPAN FREESTANDING UNIT
POST
DETAIL MU108
DETAILS
PANELS: MU05, MU06, MU08, MU11-14, MU21-26, MU33-35, MU39
STRUCTURAL FASCIA: MU07, MU09-10, MU15-20, MU27-32, MU36-38
BEAMS: MU50, MU56-MU65, MU76-78, MU96, MU113, MU114, MU120
POSTS: MU49-51, MU89-90, MU100,
WALL HANGERS: MU48-48
SPLICES: MU52-55, MU66-76
CONNECTION DETAILS
HEADER/POST: MU99-104, MU110-115
POST/FOOTING OR SLAB: MU100, MU102, MU108-109, MU116
PANEL/WALL: MU105, MU106, MU107
WIDTH
PANEL
FASCIA OR BEAM
PANEL/WALL CONNECTION
POSTS
HEADER/POST CONNECTION
ATTACHED SINGLE SPAN COVER MAY BE MULTISPAN
SURFACE MOUNT OR EMBEDDED ATTACHMENT
PANEL
FASCIA
HEADER/POST CONNECTION
POSTS
CUBIC FOOTING DETAIL MU108
SINGLE SPAN FREESTANDING UNIT
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CARL PUTNAM
C061391
EXP 6-30-2014
CIVIL
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Revisions
METALS
building products
METALS BUILDING PRODUCTS
3605 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
(631) 563-4800
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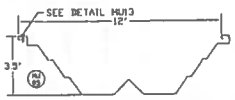
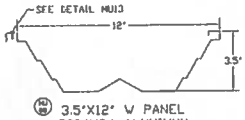
3.5" PANELS AND FASCIA

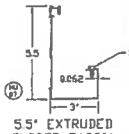


3.5"X12" AMBASSADOR PLUS PANEL
3004H34 ALUMINUM
ASTM A-653 GRADE 40 STEEL

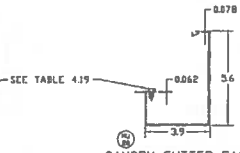
3.5"X12" VEE PANEL
3004H34 ALUMINUM



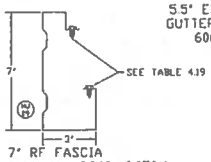
3.5"X12" W PANEL
3004H34 ALUMINUM
ASTM A-653 GRADE 40 STEEL



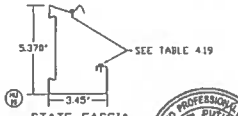
5.5" EXTRUDED
GUTTER FASCIA
6063T6



SAMSON GUTTER FASCIA
6063T6



7" RF FASCIA
3004H34 ALUM (t= 0.040, 0.050")



STATE FASCIA
3004H34 ALUMINUM

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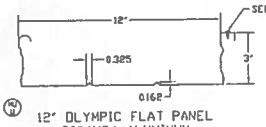
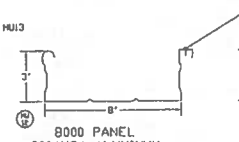
CARL PUTNAM
C 68 307
EXP. 03-31-2016
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

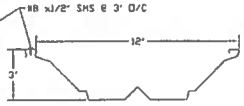
3.0" PANELS AND FASCIA



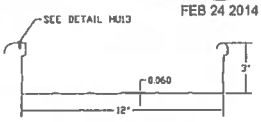
12" OLYMPIC FLAT PANEL
3004H34 ALUMINUM
ASTM A-653 GRADE 40 STEEL



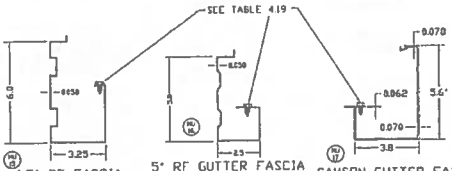
8000 PANEL
3004H34 ALUMINUM
ASTM A-653 GRADE 40 STEEL



3"X12" W PANEL
3004H34 ALUMINUM



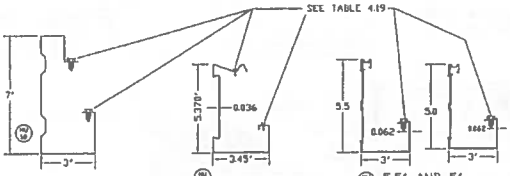
3"X12" RISER PANEL
3105 H14 ALUMINUM



6.5" RF FASCIA
3004H34 ALUMINUM

5" RF GUTTER FASCIA
3004H34 ALUMINUM

SAMSON GUTTER FASCIA
6063T6 ALUMINUM



7" RF FASCIA
3004H34 ALUM (t=0.040" & 0.050")

STATE FASCIA
3004H34 ALUMINUM

5.5" AND 5"
EXTRUDED
GUTTER FASCIA
6063T6 ALUM

METALS
building products

RETALS BUILDING PRODUCTS
5005 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
(631) 563-1000

PROFESSIONAL ENGINEER
No. 21629 05/2012
CARL PUTNAM
STATE OF UTAH

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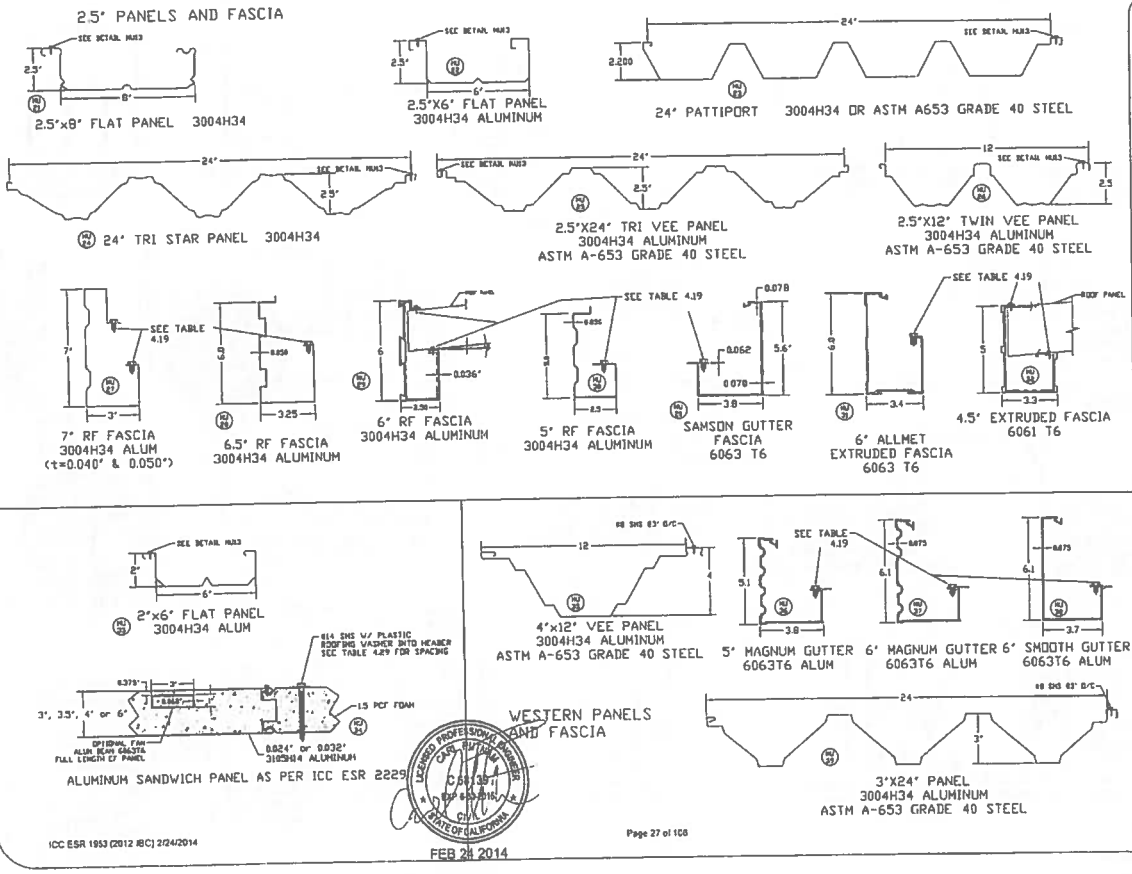
2.5" PANELS AND FASCIA



WESTERN PANELS AND FASCIA

METALS
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METALS BUILDING PRODUCTS
5005 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
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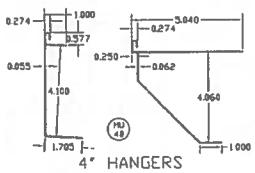
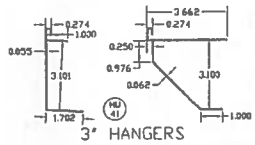
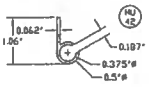
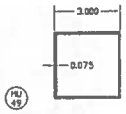


4" HANGERS
6063T6 ALUM

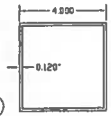


3" HANGERS
6063T6 ALUM





0.075"x3"x3" POST
6063T6 ALUM

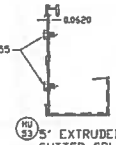


4"x4" POST
6063T6 ALUM

0.062"x3"x3"
MAGNUM POST
6063T6 ALUM

FASCIA SPLICES MUST BE WITHIN 12" OF A POST

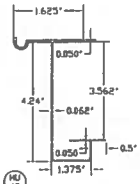
5.5" EXTRUDED
GUTTER SPLICE
6063 T6 ALUMINUM



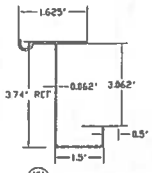
5" EXTRUDED
GUTTER SPLICE
6063 T6 ALUMINUM

5" ROLL FORMED
GUTTER SPLICE
3004 H34 ALUMINUM

HANGERS

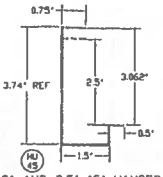


3-1/2" "J" RAIL

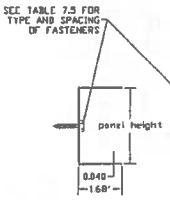


3" "J" RAIL

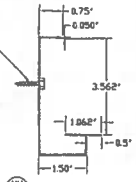
RAIL PROFILES



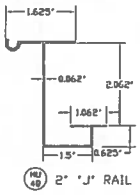
3" AND 2.5" "G" HANGER
ALUM. ALLOY 6063-T6



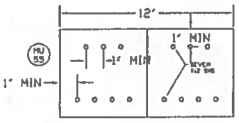
"C" HANGER



3-1/2" "G" RAIL



2" "J" RAIL



SCREW PATTERNS
FOR ALL FASCIA
SPLICES. ALL FASCIA
SPLICES MUST BE WITHIN
12" OF A POST

LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C061367
EXP. 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

Revisions

METALS
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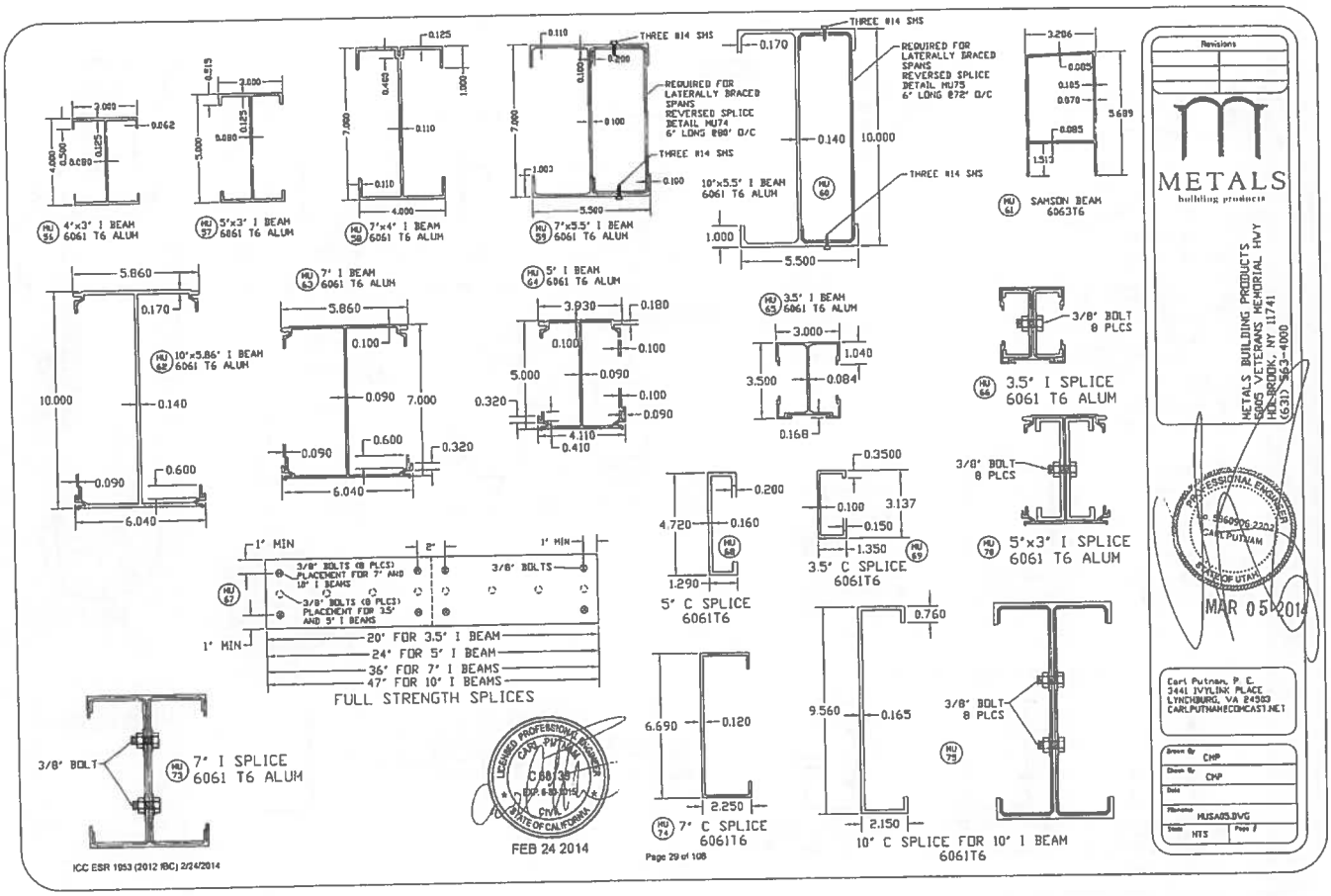
MU 56 4"x3" I BEAM 6061 T6 ALUM
MU 57 5"x3" I BEAM 6061 T6 ALUM
MU 58 7"x4" I BEAM 6061 T6 ALUM
MU 59 7"x5.5" I BEAM 6061 T6 ALUM
THREE #14 SMS
REQUIRED FOR LATERALLY BRACED SPANS REVERSED SPLICE DETAIL MU74 6" LONG @80" O/C
REQUIRED FOR LATERALLY BRACED SPANS REVERSED SPLICE DETAIL MU75 6" LONG @72" O/C
MU 60 10"x5.5" I BEAM 6061 T6 ALUM
MU 61 SAMSON BEAM 6063T6
MU 62 10"x5.86" I BEAM 6061 T6 ALUM
MU 63 7" I BEAM 6061 T6 ALUM
MU 64 5" I BEAM 6061 T6 ALUM
MU 65 3.5" I BEAM 6061 T6 ALUM
3/8" BOLT 8 PLCS
MU 66 3.5" I SPLICE 6061 T6 ALUM
MU 78 5"x3" I SPLICE 6061 T6 ALUM
MU 67 3/8" BOLTS (8 PLCS) PLACEMENT FOR 7" AND 10" I BEAMS
3/8" BOLTS (8 PLCS) PLACEMENT FOR 3.5" AND 5" I BEAMS
20" FOR 3.5" I BEAM
24" FOR 5" I BEAM
36" FOR 7" I BEAMS
47" FOR 10" I BEAMS
FULL STRENGTH SPLICES
MU 68 5" C SPLICE 6061T6
MU 69 3.5" C SPLICE 6061T6
MU 73 7" I SPLICE 6061 T6 ALUM
MU 74 7" C SPLICE 6061T6
MU 75 10" C SPLICE FOR 10" I BEAM 6061T6
ICC ESR 1053 (2012 IBC) 2/24/2014
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METALS BUILDING PRODUCTS
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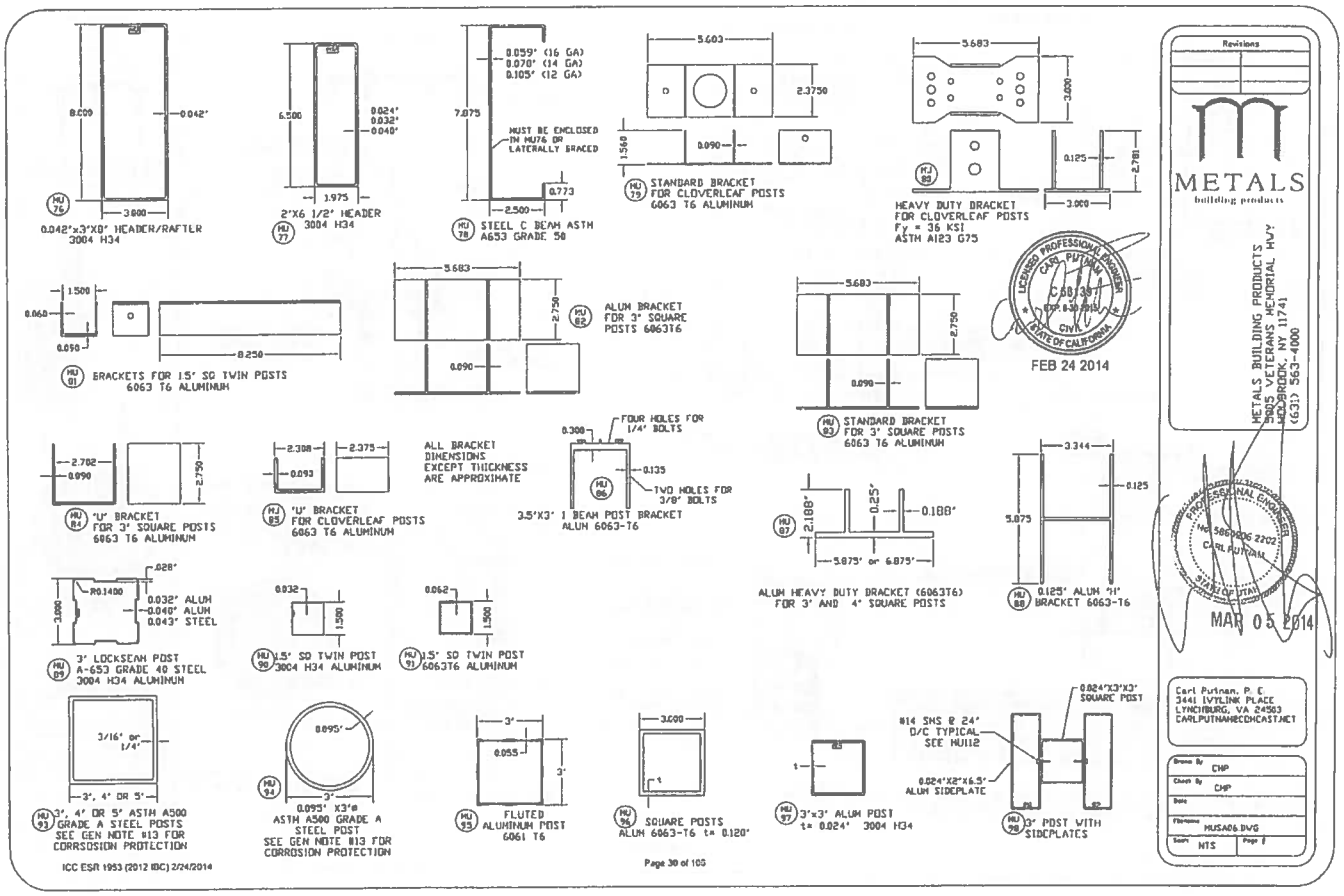
HU 76
0.042"x3"X8" HEADER/RAFTER
3004 H34
HU 77
2"X6 1/2" HEADER
3004 H34
HU 78
STEEL C BEAM ASTM
A653 GRADE 50
MUST BE ENCLOSED
IN HU76 OR
LATERALLY BRACED
HU 79
STANDARD BRACKET
FOR CLOVERLEAF POSTS
6063 T6 ALUMINUM
HU 80
HEAVY DUTY BRACKET
FOR CLOVERLEAF POSTS
Fy = 36 KSI
ASTM A123 G75
HU 81
BRACKETS FOR 15" SQ TWIN POSTS
6063 T6 ALUMINUM
HU 82
ALUM BRACKET
FOR 3" SQUARE
POSTS 6063T6
HU 83
STANDARD BRACKET
FOR 3" SQUARE POSTS
6063 T6 ALUMINUM
HU 84
"U" BRACKET
FOR 3" SQUARE POSTS
6063 T6 ALUMINUM
HU 85
"U" BRACKET
FOR CLOVERLEAF POSTS
6063 T6 ALUMINUM
ALL BRACKET
DIMENSIONS
EXCEPT THICKNESS
ARE APPROXIMATE
FOUR HOLES FOR
1/4" BOLTS
TWO HOLES FOR
3/8" BOLTS
HU 86
3.5"X3" I BEAM POST BRACKET
ALUM 6063-T6
HU 87
ALUM HEAVY DUTY BRACKET (6063T6)
FOR 3" AND 4" SQUARE POSTS
HU 88
0.125" ALUM "I"
BRACKET 6063-T6
HU 89
3" LOCKSEAM POST
A-653 GRADE 40 STEEL
3004 H34 ALUMINUM
HU 90
1.5" SQ TWIN POST
3004 H34 ALUMINUM
HU 91
1.5" SQ TWIN POST
6063T6 ALUMINUM
HU 93
3", 4" OR 5" ASTM A500
GRADE A STEEL POSTS
SEE GEN NOTE #13 FOR
CORROSION PROTECTION
HU 94
ASTM A500 GRADE A
STEEL POST
SEE GEN NOTE #13 FOR
CORROSION PROTECTION
HU 95
FLUTED
ALUMINUM POST
6061 T6
HU 96
SQUARE POSTS
ALUM 6063-T6 t= 0.120"
HU 97
3"x3" ALUM POST
t= 0.024" 3004 H34
#14 SMS @ 24"
O/C TYPICAL
SEE HU112
0.024"X2"X6.5"
ALUM SIDEPLATE
0.024"X3"X3"
SQUARE POST
HU 98
3" POST WITH
SIDEPLATES
Revisions
METALS
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METALS BUILDING PRODUCTS
3005 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
(631) 563-4000
LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
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STATE OF CALIFORNIA
FEB 24 2014
PROFESSIONAL ENGINEER
No. 586606 2202
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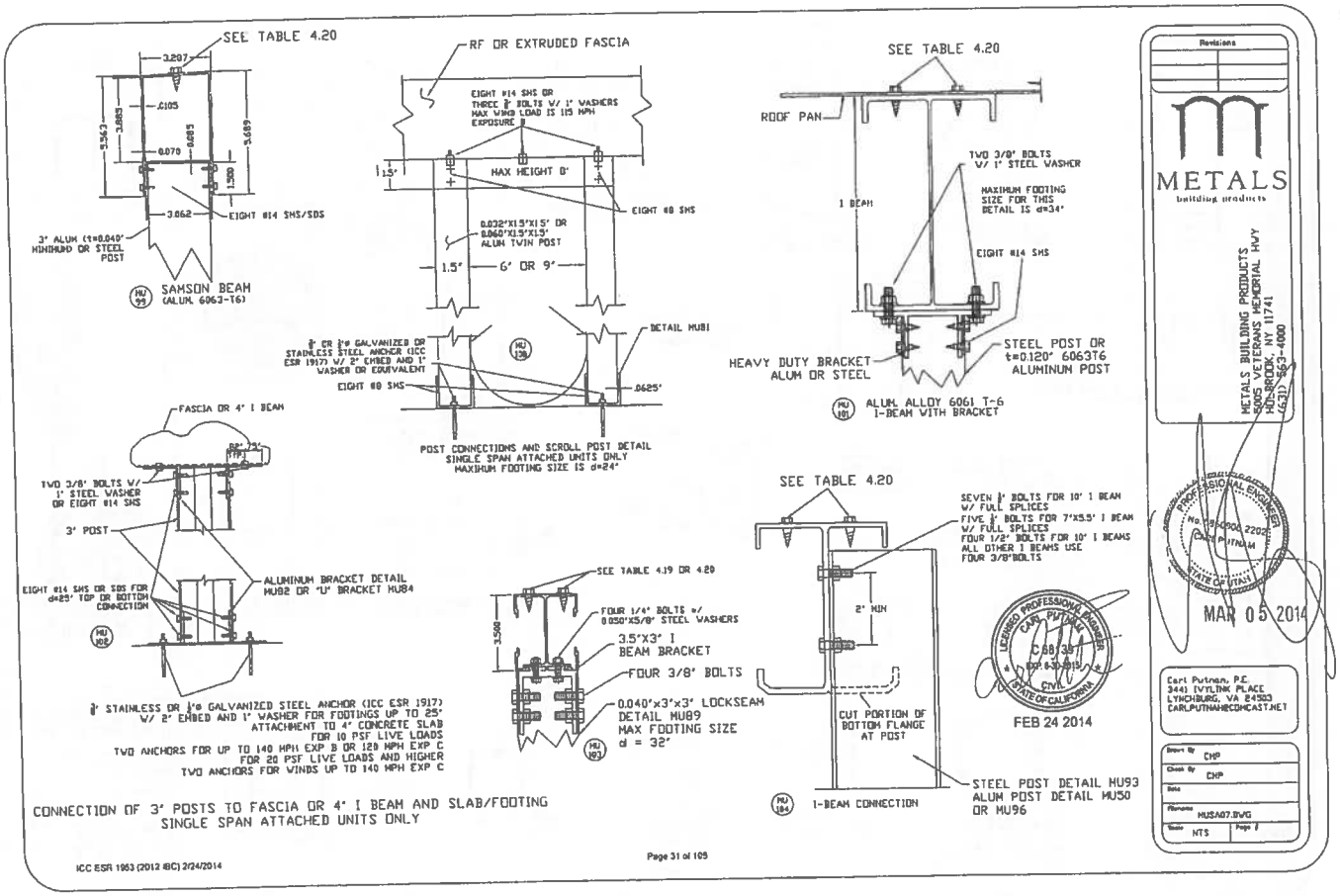
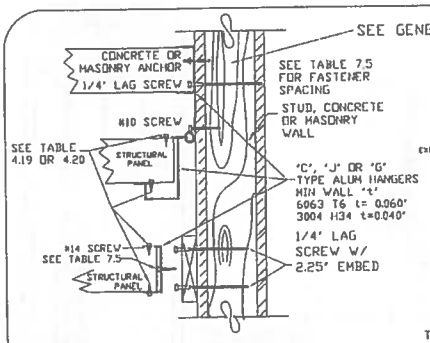


CONNECTION OF 3" POSTS TO FASCIA OR 4" I BEAM AND SLAB/FOOTING
SINGLE SPAN ATTACHED UNITS ONLY



MU 105 LEDGER AND WALL ATTACHMENT

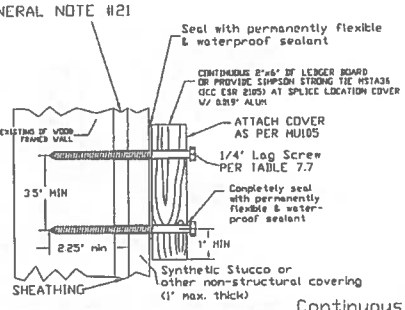
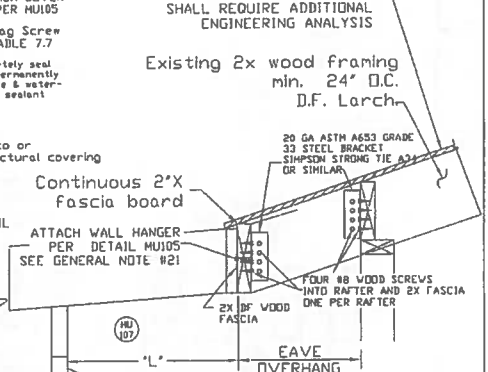


TABLE 7.7 SPECIFIES THE ALLOWABLE DISTANCE TO FIRST ROW OF POSTS

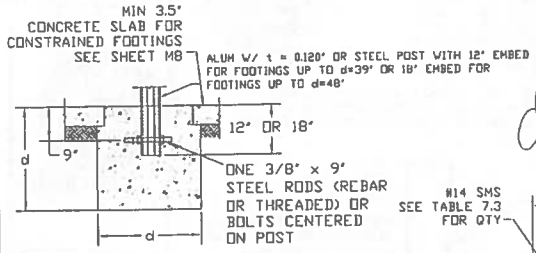
MU 106 STUCCO ATTACHMENT DETAIL WITH LEDGER BOARD

ALL WOOD WALL ATTACHMENT DETAILS MUST CONFORM TO GENERAL NOTE #21 FOR WEATHER PROTECTION

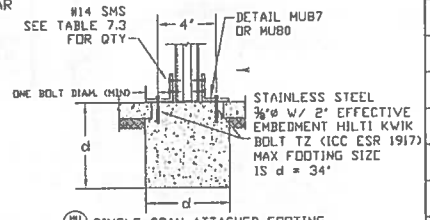
ROOF COVERING IS A MAXIMUM OF 3 PSF HEAVIER ROOF COVERING SHALL REQUIRE ADDITIONAL ENGINEERING ANALYSIS



Live/Snow Load Solid Cover Wind	RAFTER SIZE (24" O/C)	MAX DISTANCE TO FIRST ROW OF POSTS "L" EAVE OVERHANG 6"	12"	18"	24"	36"
10 psf 115 MPH EXP B	2x4	18'-0"	18'-0"	12'-0"	7'-1"	3'-8"
	2x6	18'-0"	18'-0"	18'-0"	18'-0"	17'-1"
	2x8	18'-0"	18'-0"	18'-0"	18'-0"	18'-0"
10 psf 115 MPH EXP C	2x4	17'-0"	17'-0"	12'-0"	7'-1"	3'-8"
	2x6	17'-0"	17'-0"	17'-0"	17'-0"	17'-0"
	2x8	17'-0"	17'-0"	17'-0"	17'-0"	17'-0"
10 psf 140 MPH EXP C	2x4	16'-0"	16'-0"	12'-0"	7'-1"	3'-8"
	2x6	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
	2x8	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
20 psf 140 MPH EXP C	2x4	16'-0"	10'-3"	8'-10"	3'-4"	1'-8"
	2x6	16'-0"	10'-0"	16'-0"	11'-9"	6'-4"
	2x8	16'-0"	16'-0"	16'-0"	16'-0"	16'-9"
25 psf 140 MPH EXP C	2x4	16'-0"	11'-3"	6'-4"	3'-8"	1'-9"
	2x6	16'-0"	16'-0"	16'-0"	12'-10"	9'-1"
	2x8	16'-0"	16'-0"	16'-0"	16'-0"	16'-0"
30 psf 140 MPH EXP C	2x4	16'-0"	9'-2"	6'-1"	2'-8"	1'-0"
	2x6	15'-0"	15'-0"	15'-0"	10'-4"	7'-1"
	2x8	15'-0"	15'-0"	15'-0"	15'-0"	14'-8"
40 psf	2x4	14'-0"	6'-7"	3'-4"	1'-4"	0'-0"
	2x6	14'-0"	14'-0"	11'-0"	7'-2"	4'-7"
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	10'-3"
50 psf	2x4	9'-10"	4'-0"	1'-7"	0'-2"	0'-0"
	2x6	12'-0"	11'-8"	8'-0"	4'-0"	2'-1"
	2x8	12'-0"	12'-0"	12'-0"	8'-8"	5'-10"



MU 108 FREESTANDING OR ATTACHED POURED FOOTING



MU 109 SINGLE SPAN ATTACHED FOOTING

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C-68/35 EXP. 6-30-2014 CIVIL STATE OF CALIFORNIA

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PROFESSIONAL ENGINEER 385/905-2202 CARL PUTNAM STATE OF UTAH

MAR 06 2014

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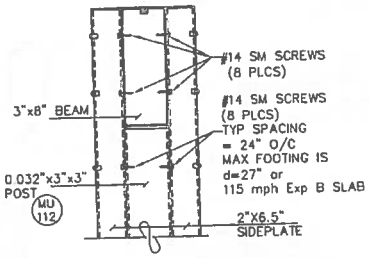
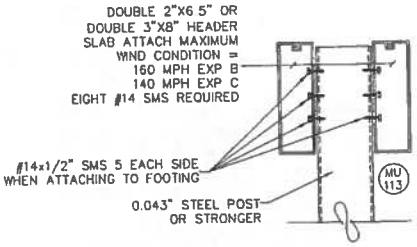
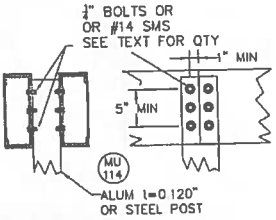






DOUBLE OR SINGLE 3"X8" STEEL C BEAM. BOLT LAYOUT FOR SPLICED AND NON-SPLICE ATTACHMENT

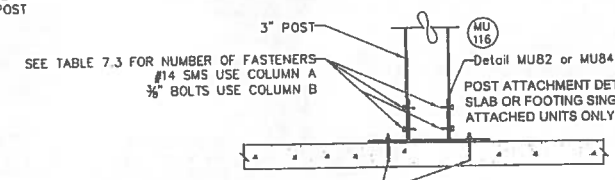
SINGLE 14 AND 16 GAUGE HEADERS USE FOUR ¼" BOLTS

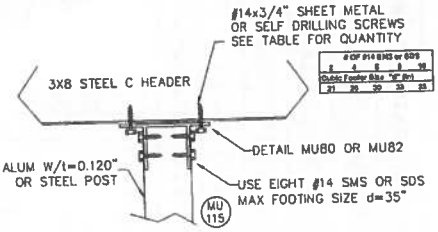
FOOTING REQUIREMENTS
USE 4 BOLTS/SCREWS FOR FOOTINGS UP TO d=33'
USE 6 BOLTS/SCREWS FOR FOOTINGS UP TO d=38'
USE 8 BOLTS/SCREWS FOR FOOTINGS UP TO d=42'
USE 10 BOLTS/SCREWS FOR FOOTINGS UP TO d=45'
USE 12 BOLTS/SCREWS FOR FOOTINGS UP TO d=48'
USE 14 BOLTS/SCREWS FOR FOOTINGS UP TO d=50'

ALL C BEAMS USING TWICE THE "ON SLAB" SPACING REQUIRE FOUR ¼" BOLTS
ALL C BEAMS USING THREE TIMES THE "ON SLAB" SPACING REQUIRE SIX ¼" BOLTS
ALL C BEAMS USING FIVE TIMES THE "ON SLAB" SPACING REQUIRE EIGHT ¼" BOLTS

LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C 68138
Exp 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014





# OF #14 SMS or SDS				
8	6	8	8	10
Outside Footer Size "d" (in)				
31	36	39	33	35

TWO STAINLESS STEEL ⅜" OR GALVANIZED ½" HILTI KWIK BOLT TZ (ICC ESR 1917) W/ 2" EMBEDMENT
W/ 3/4"ø WASHERS FOR FOOTINGS UP TO d = 26"
ATTACHMENT TO 4" CONCRETE SLAB
FOR 10 PSF LIVE LOADS
TWO ANCHORS UP TO 130 MPH EXP B OR 120 MPH EXP C
FOR 20 PSF LIVE LOADS AND HIGHER
TWO ANCHORS FOR WINDS UP TO UP TO 140 MPH EXP C

ICC ESR 1953 (2012 IBC) 2/24/2014

Revisions

METALS
building products

METALS BUILDING PRODUCTS
5005 VETERAN'S MEMORIAL HWY
HOLBROOK, NY 11741

PROFESSIONAL ENGINEER
No 16620 Exp 2202
Carl Putnam
STATE OF UTAH

MAR 05 2014

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3441 IVYLINK PLACE
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Date	
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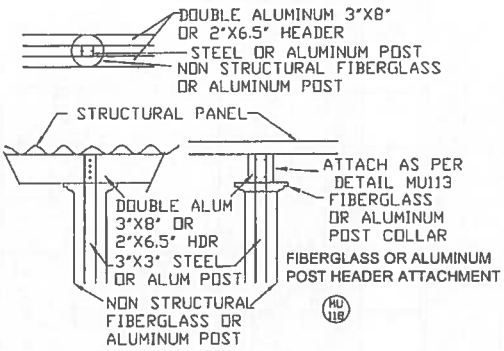
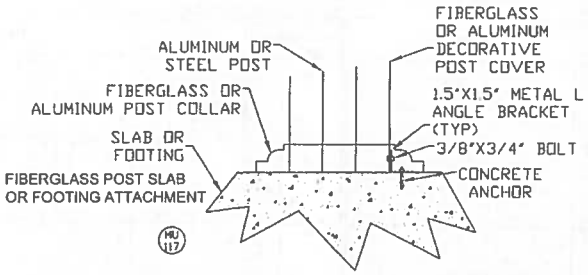


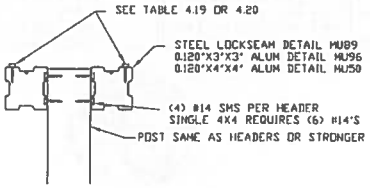


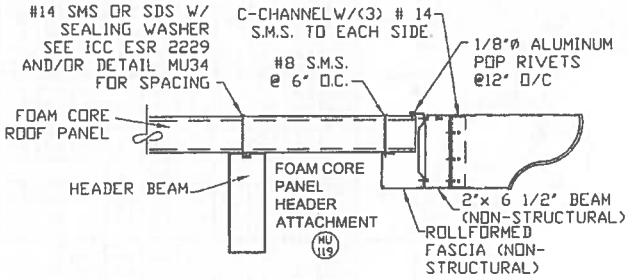
NOTES:
1. FIBERGLASS/ALUMINUM DECORATIVE POST COVER IS NON-LOAD BEARING
2. ATTACHMENT IS TO HOLD VERSUS MINOR LATERAL FORCES
3. USE MULTIPLE BRACKETS AS NEEDED.

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68 367 EXP 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

MU 120 SINGLE OR DOUBLE HEADERS





Revisions

METALS
building products

METALS BUILDING PRODUCTS
5005 VETERANS MEMORIAL HWY
HOLBROOK, NY 11741
(631) 563-4000

PROFESSIONAL ENGINEER No. E-050100-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

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SOLID COVERS 4.0: 3.5" PANEL SPANS FOR COMMERCIAL AND PATIO STRUCTURES

3.5"x12" W Panels (Single Span) Detail MU05 and MU06

Ground Snow Load (psf)	Panel Gauge	Wind Speed and Exposure								
		Exposure B			Exposure C					
	(in)	110	115	140	110	115	120	130	140	150
10 LIVE	0.020	12'-3"	11'-11"	10'-6"	11'-0"	10'-9"	10'-6"	8'-7"	8'-0"	7'-3"
	0.024	13'-10"	13'-5"	11'-10"	12'-5"	12'-2"	11'-10"	11'-2"	10'-9"	8'-9"
	0.032	16'-4"	15'-10"	14'-0"	14'-8"	14'-4"	14'-0"	13'-2"	12'-8"	12'-0"
	0.040	18'-3"	17'-11"	15'-11"	16'-8"	16'-3"	15'-11"	14'-11"	14'-5"	13'-8"
	Steel 0.018	12'-5"	11'-8"	6'-11"	7'-9"	7'-5"	6'-11"	6'-1"	5'-5"	3'-11"
	Steel 0.024	17'-5"	16'-11"	14'-6"	15'-8"	14'-11"	14'-3"	13'-1"	12'-2"	11'-4"
20 LIVE	0.020	9'-4"	9'-2"	8'-3"	8'-7"	8'-4"	8'-1"	7'-5"	6'-9"	6'-1"
	0.024	11'-4"	11'-2"	10'-4"	10'-9"	10'-6"	9'-2"	8'-10"	8'-5"	8'-0"
	0.032	13'-5"	13'-2"	12'-3"	12'-8"	12'-5"	12'-0"	11'-8"	11'-2"	10'-8"
	0.040	15'-3"	14'-11"	13'-11"	14'-5"	14'-2"	13'-8"	13'-3"	12'-8"	12'-2"
	Steel 0.018	7'-2"	6'-11"	5'-7"	6'-1"	5'-9"	5'-5"	4'-1"	3'-9"	3'-4"
	Steel 0.024	14'-5"	14'-2"	12'-8"	13'-7"	13'-1"	12'-3"	11'-8"	10'-6"	7'-7"
25	0.020	9'-4"	9'-0"	8'-1"	8'-5"	8'-3"	8'-1"	7'-3"	6'-7"	6'-1"
	0.024	11'-4"	11'-2"	9'-2"	10'-6"	10'-4"	9'-2"	8'-9"	8'-4"	8'-0"
	0.032	13'-5"	13'-2"	12'-0"	12'-5"	12'-3"	12'-0"	11'-8"	11'-2"	10'-8"
	0.040	15'-3"	14'-11"	13'-8"	14'-2"	13'-11"	13'-8"	13'-1"	12'-8"	12'-2"
	Steel 0.018	6'-11"	6'-9"	5'-5"	5'-11"	5'-7"	5'-5"	4'-1"	3'-8"	3'-4"
	Steel 0.024	14'-2"	14'-2"	12'-3"	13'-1"	12'-8"	12'-3"	11'-2"	10'-6"	7'-7"
30	0.020	8'-9"	8'-7"	7'-5"	8'-1"	7'-8"	7'-3"	6'-9"	6'-2"	5'-9"
	0.024	10'-6"	10'-4"	8'-10"	9'-2"	8'-11"	8'-9"	8'-5"	8'-1"	7'-9"
	0.032	12'-5"	12'-3"	11'-8"	11'-10"	11'-8"	11'-6"	11'-0"	10'-7"	9'-2"
	0.040	14'-2"	13'-11"	13'-1"	13'-5"	13'-3"	13'-1"	12'-6"	12'-0"	11'-9"
	Steel 0.018	6'-4"	6'-1"	4'-4"	5'-5"	5'-2"	4'-2"	3'-11"	3'-6"	3'-2"
	Steel 0.024	13'-1"	12'-8"	11'-2"	11'-10"	11'-6"	11'-2"	8'-6"	7'-9"	7'-2"
40	0.020	7'-10"	7'-5"	6'-8"	6'-11"	6'-7"	6'-4"	5'-10"	5'-6"	0'-0"
	0.024	9'-1"	8'-10"	8'-3"	8'-8"	8'-4"	8'-2"	7'-10"	7'-7"	7'-3"
	0.032	11'-4"	11'-2"	10'-7"	10'-8"	10'-7"	10'-5"	9'-3"	9'-0"	8'-7"
	0.040	12'-10"	12'-8"	12'-0"	12'-2"	12'-0"	11'-10"	11'-7"	11'-2"	10'-10"
	Steel 0.018	5'-4"	4'-7"	3'-10"	4'-1"	3'-11"	3'-9"	3'-5"	3'-2"	0'-0"
	Steel 0.024	10'-10"	10'-6"	8'-1"	8'-7"	8'-3"	7'-11"	7'-3"	6'-10"	6'-3"
60	0.020	5'-10"	5'-9"	0'-0"	5'-4"	4'-8"	0'-0"	0'-0"	0'-0"	0'-0"
	0.024	7'-10"	7'-9"	7'-3"	7'-6"	7'-4"	7'-3"	6'-9"	0'-0"	0'-0"
	0.032	9'-3"	9'-2"	8'-7"	8'-10"	8'-8"	8'-7"	8'-4"	0'-0"	0'-0"
	0.040	10'-6"	10'-6"	10'-5"	10'-6"	10'-6"	10'-5"	9'-6"	0'-0"	0'-0"
	Steel 0.018	3'-8"	3'-7"	0'-0"	3'-3"	3'-2"	0'-0"	0'-0"	0'-0"	0'-0"
	Steel 0.024	7'-3"	7'-2"	6'-3"	6'-7"	6'-5"	6'-3"	5'-11"	0'-0"	0'-0"

TABLE 4.1

3.5"x12" W Panels (Multispan) Detail MU05 and MU06

Ground Snow Load (psf)	Panel Gauge	Wind Speed and Exposure								
		Exposure B			Exposure C					
	(in)	110	115	140	110	115	120	130	140	150
10 LIVE	0.020	6'-11"	6'-5"	7'-0"	7'-7"	7'-3"	7'-0"	6'-4"	6'-0"	5'-8"
	0.024	11'-1"	10'-8"	8'-11"	9'-6"	9'-3"	8'-11"	8'-2"	7'-8"	7'-1"
	0.032	14'-10"	14'-4"	12'-3"	13'-0"	12'-8"	12'-3"	11'-4"	10'-9"	10'-1"
	0.040	18'-1"	17'-6"	15'-1"	15'-11"	15'-6"	15'-1"	14'-0"	13'-5"	12'-7"
	Steel 0.018	10'-5"	10'-1"	8'-7"	9'-1"	8'-10"	8'-7"	7'-11"	7'-6"	6'-9"
	Steel 0.024	13'-7"	13'-2"	11'-4"	12'-0"	11'-8"	11'-4"	10'-6"	10'-1"	9'-5"
20 LIVE	0.020	6'-7"	6'-4"	5'-8"	6'-0"	5'-10"	5'-6"	5'-2"	3'-11"	3'-7"
	0.024	8'-5"	8'-2"	7'-4"	7'-8"	7'-6"	7'-1"	6'-9"	6'-4"	5'-11"
	0.032	11'-7"	11'-4"	10'-4"	10'-9"	10'-6"	10'-1"	9'-8"	9'-1"	8'-7"
	0.040	14'-5"	14'-0"	12'-10"	13'-5"	13'-2"	12'-7"	12'-1"	11'-6"	10'-11"
	Steel 0.018	8'-1"	7'-11"	6'-11"	7'-5"	7'-2"	6'-9"	6'-4"	5'-9"	5'-4"
	Steel 0.024	10'-9"	10'-6"	9'-7"	10'-1"	9'-10"	9'-5"	9'-1"	8'-7"	8'-2"
25	0.020	6'-4"	6'-4"	5'-6"	5'-10"	5'-8"	5'-6"	4'-2"	3'-11"	3'-7"
	0.024	8'-2"	8'-2"	7'-1"	7'-6"	7'-4"	7'-1"	6'-7"	6'-4"	5'-11"
	0.032	11'-4"	11'-4"	10'-1"	10'-6"	10'-4"	10'-1"	9'-5"	9'-1"	8'-7"
	0.040	14'-0"	14'-0"	12'-7"	13'-2"	12'-10"	12'-7"	11'-11"	11'-6"	10'-11"
	Steel 0.018	7'-11"	7'-11"	6'-9"	7'-2"	6'-11"	6'-9"	6'-1"	5'-9"	5'-4"
	Steel 0.024	10'-6"	10'-6"	9'-5"	9'-10"	9'-7"	9'-5"	8'-11"	8'-7"	8'-2"
30	0.020	5'-10"	5'-8"	4'-4"	5'-4"	5'-2"	4'-2"	3'-11"	3'-6"	3'-5"
	0.024	7'-6"	7'-4"	6'-7"	6'-11"	6'-9"	6'-7"	6'-2"	5'-10"	5'-7"
	0.032	10'-6"	10'-4"	9'-5"	9'-10"	9'-8"	9'-5"	8'-11"	8'-5"	8'-2"
	0.040	13'-2"	12'-10"	11'-11"	12'-4"	12'-1"	11'-11"	11'-3"	10'-9"	10'-5"
	Steel 0.018	7'-2"	6'-11"	6'-1"	6'-6"	6'-4"	6'-1"	5'-7"	5'-2"	3'-2"
	Steel 0.024	9'-10"	9'-7"	8'-11"	9'-3"	9'-1"	8'-11"	8'-5"	8'-0"	7'-9"
40	0.020	4'-8"	4'-4"	3'-10"	4'-0"	3'-11"	3'-9"	3'-6"	3'-4"	3'-0"
	0.024	6'-6"	6'-4"	5'-10"	5'-11"	5'-10"	5'-8"	5'-6"	5'-2"	4'-1"
	0.032	9'-3"	9'-1"	8'-5"	8'-7"	8'-5"	8'-3"	8'-0"	7'-8"	7'-3"
	0.040	11'-8"	11'-6"	10'-9"	10'-11"	10'-9"	10'-7"	10'-3"	9'-10"	9'-5"
	Steel 0.018	5'-11"	5'-9"	5'-2"	5'-4"	5'-2"	3'-9"	3'-5"	3'-2"	0'-0"
	Steel 0.024	8'-9"	8'-7"	8'-0"	8'-2"	8'-0"	7'-11"	7'-6"	7'-4"	7'-0"
60	0.020	3'-6"	3'-5"	3'-0"	3'-2"	3'-1"	3'-0"	2'-10"	0'-0"	0'-0"
	0.024	4'-8"	4'-7"	4'-1"	4'-4"	4'-2"	4'-1"	3'-11"	0'-0"	0'-0"
	0.032	7'-0"	7'-0"	6'-11"	7'-0"	7'-0"	6'-11"	6'-7"	6'-5"	6'-2"
	0.040	9'-0"	9'-0"	8'-11"	9'-0"	9'-0"	8'-11"	8'-7"	8'-5"	8'-1"
	Steel 0.018	3'-8"	3'-7"	0'-0"	3'-3"	3'-2"	0'-0"	0'-0"	0'-0"	0'-0"
	Steel 0.024	6'-9"	6'-9"	6'-8"	6'-9"	6'-9"	6'-8"	6'-5"	6'-3"	6'-1"

TABLE 4.2

3.5"x12" Vee Panel (Single Span) Detail MU06

Ground Snow Load (psf)	Panel Gauge	Wind Speed and Exposure								
		Exposure B			Exposure C					
	(in)	110	115	140	110	115	120	130	140	150
10 LIVE	0.018	5'-10"	5'-7"	3'-2"	3'-5"	3'-3"	3'-2"	2'-11"	2'-8"	2'-6"
	0.024	7'-10"	7'-6"	6'-1"	6'-7"	6'-4"	6'-0"	5'-7"	5'-2"	3'-5"
	0.032	13'-0"	12'-5"	8'-3"	10'-11"	10'-5"	8'-2"	7'-6"	6'-11"	6'-6"
	0.040	16'-5"	15'-8"	12'-9"	13'-10"	13'-2"	12'-7"	11'-7"	10'-9"	8'-2"
20 LIVE	0.018	5'-10"	5'-7"	3'-2"	3'-5"	3'-3"	3'-2"	2'-11"	2'-8"	2'-6"
	0.024	7'-10"	7'-6"	6'-1"	6'-7"	6'-4"	6'-0"	5'-7"	5'-2"	3'-5"
	0.032	13'-0"	12'-5"	8'-3"	10'-11"	10'-5"	8'-2"	7'-6"	6'-11"	6'-6"
	0.040	15'-9"	15'-8"	12'-9"	13'-10"	13'-2"	12'-7"	11'-7"	10'-9"	8'-2"
25	0.018	5'-10"	5'-7"	3'-2"	3'-5"	3'-3"	3'-2"	2'-11"	2'-8"	2'-6"
	0.024	7'-10"	7'-6"	6'-1"	6'-7"	6'-4"	6'-0"	5'-7"	5'-2"	3'-5"
	0.032	13'-0"	12'-5"	8'-3"	10'-11"	10'-5"	8'-2"	7'-6"	6'-11"	6'-6"
	0.040	15'-9"	15'-8"	12'-9"	13'-10"	13'-2"	12'-7"	11'-7"	10'-9"	8'-2"
30	0.018	5'-6"	5'-4"	3'-2"	3'-5"	3'-3"	3'-2"	2'-11"	2'-8"	2'-6"
	0.024	7'-10"	7'-6"	6'-1"	6'-7"	6'-4"	6'-0"	5'-7"	5'-2"	3'-5"
	0.032	13'-0"	12'-5"	8'-3"	10'-11"	10'-5"	8'-2"	7'-6"	6'-11"	6'-6"
	0.040	16'-2"	15'-0"	12'-9"	13'-10"	13'-2"	12'-7"	11'-7"	10'-9"	8'-2"
40	0.018	4'-1"	4'-0"	3'-2"	3'-5"	3'-3"	3'-2"	2'-11"	2'-8"	0'-0"
	0.024	7'-10"	7'-6"	6'-1"	6'-7"	6'-4"	6'-0"	5'-7"	5'-2"	3'-5"
	0.032	11'-10"	11'-8"	8'-3"	10'-11"	10'-5"	8'-2"	7'-6"	6'-11"	6'-6"
	0.040	14'-1"	13'-11"	12'-9"	13'-4"	13'-2"	12'-7"	11'-7"	10'-9"	8'-2"
60	0.018	3'-2"	3'-1"	0'-0"	2'-10"	2'-9"	0'-0"	0'-0"	0'-0"	0'-0"
	0.024	6'-1"	5'-11"	5'-3"	5'-6"	5'-4"	5'-3"	0'-0"	0'-0"	0'-0"
	0.032	9'-8"	9'-7"	8'-3"	9'-3"	9'-1"	8'-2"	7'-8"	0'-0"	0'-0"
	0.040	11'-7"	11'-7"	11'-5"	11'-7"	11'-7"	11'-5"	11'-2"	10'-9"	8'-2"

TABLE 4.3

3.5"x12" Vee Panel (Multispan) Detail MU06

Ground Snow Load (psf)	Panel Gauge	Wind Speed and Exposure								
		Exposure B			Exposure C					
	(in)	110	115	140	110	115	120	130	140	150
10 LIVE	0.018	3'-10"	3'-8"	3'-0"	3'-3"	3'-2"	3'-0"	2'-9"	2'-7"	1'-11"
	0.024	6'-8"	6'-5"	5'-5"	5'-10"	5'-7"	5'-5"	4'-2"	3'-10"	3'-7"
	0.032	9'-5"	9'-1"	7'-10"	8'-3"	8'-0"	7'-10"	7'-3"	6'-11"	6'-6"
	0.040	12'-1"	11'-9"	10'-2"	10'-9"	10'-5"	10'-2"	9'-5"	9'-1"	8'-6"
20 LIVE	0.018	3'-1"	3'-0"	2'-2"	2'-9"	2'-7"	2'-2"	2'-0"	1'-10"	1'-8"
	0.024	4'-8"	4'-6"	3'-11"	4'-2"	4'-0"	3'-10"	3'-7"	3'-5"	3'-1"
	0.032	7'-5"	7'-3"	6'-7"	6'-11"	6'-9"	6'-6"	6'-3"	5'-10"	5'-7"
	0.040	9'-8"	9'-5"	8'-8"	9'-1"	8'-10"	8'-6"	8'-2"	7'-9"	7'-5"
25	0.018	3'-0"	2'-11"	2'-2"	2'-8"	2'-3"	2'-2"	2'-0"	1'-9"	1'-8"
	0.024	4'-6"	4'-5"	3'-10"	4'-1"	3'-11"	3'-10"	3'-7"	3'-4"	3'-1"
	0.032	7'-3"	7'-3"	6'-6"	6'-9"	6'-7"	6'-6"	6'-1"	5'-10"	5'-7"
	0.040	9'-5"	9'-5"	8'-8"	8'-10"	8'-8"	8'-6"	8'-0"	7'-9"	7'-5"
30	0.018	2'-9"	2'-9"	2'-1"	2'-2"	2'-1"	2'-0"	1'-11"	1'-9"	1'-7"
	0.024	4'-3"	4'-2"	3'-7"	3'-10"	3'-8"	3'-7"	3'-5"	3'-2"	3'-0"
	0.032	6'-9"	6'-7"	6'-1"	6'-4"	6'-3"	6'-1"	5'-9"	5'-6"	5'-4"
	0.040	8'-10"	8'-8"	8'-0"	8'-4"	8'-2"	8'-0"	7'-8"	7'-3"	7'-1"
40	0.018	2'-2"	2'-2"	1'-10"	2'-0"	1'-11"	1'-10"	1'-8"	1'-7"	0'-0"
	0.024	3'-8"	3'-7"	3'-3"	3'-5"	3'-4"	3'-3"	3'-0"	2'-11"	2'-8"
	0.032	6'-0"	5'-10"	5'-6"	5'-7"	5'-6"	5'-5"	5'-3"	4'-5"	4'-2"
	0.040	7'-11"	7'-9"	7'-3"	7'-5"	7'-3"	7'-2"	6'-11"	6'-8"	6'-5"
60	0.018	1'-9"	1'-9"	0'-0"	1'-7"	1'-7"	0'-0"	0'-0"	0'-0"	0'-0"
	0.024	3'-0"	3'-0"	2'-8"	2'-10"	2'-9"	2'-8"	2'-7"	0'-0"	0'-0"
	0.032	4'-7"	4'-6"	4'-2"	4'-3"	4'-2"	4'-2"	3'-11"	0'-0"	0'-0"
	0.040	6'-2"	6'-2"	6'-1"	6'-2"	6'-2"	6'-1"	5'-10"	5'-9"	5'-6"

TABLE 4.4

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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 58 351 Exp 6-30-2015 CIVIL STATE OF CALIFORNIA

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REGISTERED PROFESSIONAL ENGINEER 3800506-2302 CARL PUTNAM STATE OF VIRGINIA

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SOLID COVERS 4.8 3" PANEL SPANS FOR COMMERCIAL AND PATIO STRUCTURES

3"x8" 8000 Flat Panel (Single Span) MU12

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	11'-6"	11'-0"	7'-4"	7'-11"	7'-8"	7'-3"	6'-8"	6'-2"	5'-8"
	0.025	14'-6"	13'-9"	11'-3"	12'-1"	11'-7"	11'-1"	8'-4"	7'-8"	7'-2"
	0.032	17'-1"	16'-4"	13'-3"	14'-4"	13'-8"	13'-1"	12'-1"	11'-2"	10'-6"
	Steel 0.018	17'-10"	17'-4"	14'-0"	15'-2"	14'-5"	13'-10"	12'-8"	11'-9"	10'-11"
	Steel 0.024	21'-9"	20'-6"	17'-1"	18'-6"	17'-7"	16'-10"	15'-6"	14'-3"	13'-3"
20 LIVE	0.020	8'-8"	8'-6"	7'-4"	7'-11"	7'-6"	7'-3"	6'-8"	6'-2"	5'-8"
	0.025	12'-6"	12'-6"	11'-3"	11'-11"	11'-7"	11'-1"	8'-4"	7'-8"	7'-2"
	0.032	15'-4"	15'-1"	13'-3"	14'-4"	13'-8"	13'-1"	12'-1"	11'-2"	10'-5"
	Steel 0.018	14'-8"	14'-6"	13'-6"	14'-0"	13'-8"	13'-3"	12'-8"	11'-9"	10'-11"
	Steel 0.024	17'-7"	17'-3"	16'-1"	16'-7"	16'-4"	15'-10"	15'-4"	14'-3"	13'-3"
25	0.020	8'-8"	8'-5"	7'-4"	7'-11"	7'-6"	7'-3"	6'-8"	6'-2"	5'-8"
	0.025	12'-8"	12'-5"	11'-3"	11'-9"	11'-6"	11'-1"	8'-4"	7'-8"	7'-2"
	0.032	15'-4"	15'-1"	13'-3"	14'-3"	13'-8"	13'-1"	12'-1"	11'-2"	10'-5"
	Steel 0.018	14'-9"	14'-8"	13'-3"	13'-9"	13'-6"	13'-3"	12'-8"	11'-9"	10'-11"
	Steel 0.024	17'-3"	17'-3"	15'-10"	16'-4"	16'-1"	15'-10"	15'-2"	14'-3"	13'-3"
30	0.020	8'-2"	8'-0"	7'-3"	7'-7"	7'-6"	7'-2"	6'-8"	6'-2"	5'-8"
	0.025	11'-8"	11'-6"	10'-10"	11'-2"	11'-0"	10'-10"	8'-4"	7'-8"	7'-2"
	0.032	14'-3"	14'-0"	13'-2"	13'-7"	13'-6"	13'-1"	12'-1"	11'-2"	10'-6"
	Steel 0.018	13'-9"	13'-6"	12'-8"	13'-1"	12'-11"	12'-8"	12'-2"	11'-9"	10'-11"
	Steel 0.024	16'-4"	16'-1"	15'-2"	15'-7"	15'-4"	15'-2"	14'-6"	14'-0"	13'-3"
40	0.020	7'-6"	7'-3"	6'-10"	7'-0"	6'-11"	6'-9"	6'-8"	6'-2"	5'-8"
	0.025	10'-8"	10'-6"	9'-2"	9'-6"	9'-4"	9'-1"	8'-4"	7'-8"	7'-2"
	0.032	13'-0"	12'-10"	12'-2"	12'-4"	12'-2"	12'-0"	11'-8"	11'-2"	10'-5"
	Steel 0.018	12'-6"	12'-4"	11'-8"	11'-10"	11'-9"	11'-7"	11'-4"	10'-11"	10'-7"
	Steel 0.024	14'-11"	14'-9"	14'-0"	14'-2"	14'-0"	13'-10"	13'-6"	13'-1"	12'-8"
60	0.020	6'-6"	6'-5"	6'-0"	6'-2"	6'-1"	6'-0"	5'-10"	0'-0"	0'-0"
	0.025	8'-9"	8'-8"	8'-2"	8'-4"	8'-2"	8'-2"	7'-10"	0'-0"	0'-0"
	0.032	10'-8"	10'-8"	10'-7"	10'-8"	10'-8"	10'-7"	9'-7"	0'-0"	0'-0"
	Steel 0.018	10'-4"	10'-4"	9'-7"	10'-4"	9'-8"	9'-7"	9'-4"	0'-0"	0'-0"
	Steel 0.024	12'-4"	12'-4"	12'-2"	12'-4"	12'-4"	12'-2"	11'-10"	11'-8"	11'-5"

TABLE 4.5

3"x8" 8000 Flat Panel (Multispan) MU12

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	9'-2"	8'-10"	7'-9"	8'-2"	8'-8"	7'-8"	7'-4"	7'-0"	6'-8"
	0.025	11'-5"	11'-1"	9'-9"	10'-2"	9'-11"	9'-8"	9'-2"	8'-9"	8'-4"
	0.032	13'-4"	13'-0"	11'-8"	12'-8"	11'-9"	11'-6"	10'-9"	10'-4"	9'-10"
	Steel 0.018	13'-6"	13'-1"	11'-7"	12'-1"	11'-10"	11'-7"	10'-10"	10'-5"	9'-11"
	Steel 0.024	16'-4"	15'-10"	14'-1"	14'-9"	14'-5"	14'-1"	13'-4"	12'-10"	12'-2"
20 LIVE	0.020	7'-5"	7'-4"	6'-9"	7'-0"	6'-11"	6'-9"	6'-5"	6'-2"	5'-10"
	0.025	9'-4"	9'-2"	8'-8"	9'-0"	8'-7"	8'-4"	8'-1"	7'-8"	7'-5"
	0.032	11'-0"	10'-9"	10'-0"	10'-4"	10'-2"	9'-10"	9'-6"	9'-1"	8'-8"
	Steel 0.018	11'-1"	10'-10"	10'-1"	10'-5"	10'-3"	9'-11"	9'-7"	9'-2"	8'-8"
	Steel 0.024	13'-7"	13'-4"	12'-5"	12'-10"	12'-7"	12'-2"	11'-10"	11'-4"	10'-11"
25	0.020	7'-4"	7'-4"	6'-8"	6'-11"	6'-9"	6'-8"	6'-4"	6'-2"	5'-10"
	0.025	9'-2"	9'-2"	8'-4"	8'-7"	8'-6"	8'-4"	7'-11"	7'-8"	7'-5"
	0.032	10'-9"	10'-9"	9'-10"	10'-2"	10'-0"	9'-10"	9'-5"	9'-1"	8'-8"
	Steel 0.018	10'-10"	10'-10"	9'-11"	10'-3"	10'-1"	9'-11"	9'-5"	9'-2"	8'-8"
	Steel 0.024	13'-4"	13'-4"	12'-2"	12'-7"	12'-5"	12'-2"	11'-8"	11'-4"	10'-11"
30	0.020	6'-11"	6'-9"	6'-4"	6'-6"	6'-5"	6'-4"	6'-1"	5'-10"	5'-8"
	0.025	8'-7"	8'-6"	7'-11"	8'-2"	8'-1"	7'-11"	7'-7"	7'-3"	7'-1"
	0.032	10'-2"	10'-0"	9'-5"	9'-8"	9'-6"	9'-5"	9'-0"	8'-8"	8'-5"
	Steel 0.018	10'-3"	10'-1"	9'-5"	9'-9"	9'-7"	9'-5"	9'-0"	8'-7"	8'-5"
	Steel 0.024	12'-7"	12'-5"	11'-8"	12'-0"	11'-10"	11'-8"	11'-2"	10'-9"	10'-6"
45	0.020	6'-3"	6'-2"	5'-10"	5'-10"	5'-10"	6'-0"	5'-7"	5'-4"	5'-2"
	0.025	7'-10"	7'-8"	7'-3"	7'-5"	7'-3"	7'-2"	7'-0"	6'-8"	6'-6"
	0.032	9'-3"	9'-1"	8'-8"	8'-9"	8'-8"	8'-6"	8'-4"	8'-0"	7'-8"
	Steel 0.018	9'-3"	9'-2"	8'-7"	8'-8"	8'-7"	8'-6"	8'-3"	8'-0"	7'-8"
	Steel 0.024	11'-6"	11'-4"	10'-9"	10'-11"	10'-9"	10'-7"	10'-4"	10'-0"	9'-6"
60	0.020	5'-9"	5'-6"	5'-6"	4'-6"	4'-5"	0'-0"	0'-0"	0'-0"	0'-0"
	0.025	6'-4"	6'-4"	6'-3"	6'-4"	6'-4"	6'-3"	6'-1"	6'-0"	5'-10"
	0.032	7'-6"	7'-6"	7'-6"	7'-6"	7'-6"	7'-6"	7'-3"	7'-1"	6'-11"
	Steel 0.018	7'-6"	7'-6"	7'-4"	7'-5"	7'-5"	7'-4"	7'-2"	7'-0"	6'-10"
	Steel 0.024	9'-5"	9'-5"	9'-4"	9'-5"	9'-5"	9'-4"	9'-1"	8'-11"	8'-8"

TABLE 4.6

3"x12" W Panel (Single Span) MU13

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	8'-4"	8'-2"	7'-2"	7'-6"	7'-6"	7'-2"	6'-8"	6'-3"	5'-10"
	0.025	11'-6"	11'-5"	8'-8"	10'-6"	9'-1"	8'-9"	8'-3"	7'-8"	7'-3"
	0.028	12'-11"	12'-6"	11'-1"	11'-7"	11'-4"	11'-1"	10'-6"	8'-7"	7'-11"
	0.032	14'-2"	13'-9"	12'-2"	12'-9"	12'-5"	12'-2"	11'-6"	11'-0"	10'-5"
	0.040	16'-3"	15'-9"	13'-11"	14'-7"	14'-3"	13'-11"	13'-1"	12'-7"	12'-0"
20 LIVE	0.020	7'-3"	7'-2"	6'-6"	6'-6"	6'-6"	6'-4"	6'-1"	5'-10"	5'-6"
	0.025	8'-11"	8'-9"	7'-11"	8'-3"	8'-0"	7'-8"	7'-6"	7'-2"	6'-9"
	0.028	10'-7"	10'-6"	8'-8"	9'-1"	8'-10"	8'-7"	8'-3"	7'-10"	7'-5"
	0.032	11'-8"	11'-5"	10'-8"	11'-0"	10'-10"	10'-5"	9'-1"	8'-8"	8'-2"
	0.040	13'-4"	13'-1"	12'-2"	12'-7"	12'-5"	12'-0"	11'-7"	11'-1"	10'-8"
25	0.020	7'-2"	7'-0"	6'-4"	6'-7"	6'-6"	6'-4"	6'-0"	5'-9"	5'-6"
	0.025	8'-9"	8'-8"	7'-8"	8'-1"	7'-11"	7'-9"	7'-5"	7'-1"	6'-9"
	0.028	10'-5"	10'-5"	8'-7"	8'-11"	8'-8"	8'-7"	8'-2"	7'-9"	7'-5"
	0.032	11'-8"	11'-5"	10'-5"	10'-10"	10'-8"	10'-5"	9'-0"	8'-7"	8'-2"
	0.040	13'-1"	13'-1"	12'-8"	12'-8"	12'-2"	12'-0"	11'-5"	11'-1"	10'-8"
30	0.020	6'-10"	6'-8"	6'-1"	6'-4"	6'-2"	6'-0"	5'-10"	5'-7"	4'-3"
	0.025	8'-4"	8'-3"	7'-6"	7'-9"	7'-7"	7'-5"	7'-2"	6'-10"	6'-7"
	0.028	9'-2"	9'-1"	8'-3"	8'-7"	8'-4"	8'-2"	7'-10"	7'-6"	7'-3"
	0.032	10'-10"	10'-8"	9'-1"	9'-5"	9'-2"	9'-0"	8'-8"	8'-3"	8'-0"
	0.040	12'-5"	12'-2"	11'-6"	11'-9"	11'-7"	11'-5"	10'-11"	10'-6"	8'-2"
40	0.020	6'-3"	6'-1"	5'-8"	5'-10"	5'-8"	5'-7"	5'-3"	4'-2"	0'-0"
	0.025	7'-8"	7'-6"	7'-0"	7'-3"	7'-1"	6'-11"	6'-8"	0'-6"	6'-2"
	0.028	8'-6"	8'-3"	7'-8"	7'-11"	7'-9"	7'-7"	7'-4"	7'-1"	6'-10"
	0.032	9'-4"	9'-1"	8'-6"	8'-9"	8'-7"	8'-6"	8'-1"	7'-10"	7'-6"
	0.040	11'-3"	11'-1"	10'-6"	10'-8"	10'-6"	10'-5"	9'-3"	9'-0"	8'-7"
60	0.020	5'-3"	4'-8"	0'-0"	4'-4"	4'-2"	0'-0"	0'-0"	0'-0"	0'-0"
	0.025	6'-6"	6'-7"	6'-2"	6'-4"	6'-3"	6'-2"	6'-0"	0'-0"	0'-0"
	0.028	7'-4"	7'-3"	6'-10"	7'-8"	6'-10"	6'-10"	6'-7"	0'-0"	0'-0"
	0.032	8'-1"	8'-0"	7'-6"	7'-8"	7'-7"	7'-4"	7'-3"	0'-0"	0'-0"
	0.040	9'-3"	9'-2"	8'-7"	8'-10"	8'-8"	8'-7"	8'-4"	0'-0"	0'-0"

TABLE 4.7

3"x12" W Panel (Multispan) MU13

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	7'-10"	7'-6"	6'-2"	6'-8"	6'-6"	6'-2"	5'-7"	5'-3"	3'-9"
	0.025	10'-7"	10'-2"	8'-6"	9'-1"	8'-9"	8'-6"	7'-9"	7'-4"	6'-10"
	0.028	11'-11"	11'-6"	9'-9"	10'-4"	10'-1"	9'-9"	8'-11"	8'-6"	7'-11"
	0.032	13'-8"	13'-3"	11'-3"	12'-0"	11'-7"	11'-3"	10'-5"	9'-11"	9'-3"
	0.040	16'-3"	15'-9"	13'-11"	14'-7"	14'-3"	13'-11"	13'-1"	12'-6"	11'-8"
20 LIVE	0.020	5'-6"	5'-7"	4'-2"	5'-3"	4'-3"	4'-1"	3'-10"	3'-6"	3'-2"
	0.025	8'-0"	7'-8"	7'-0"	7'-4"	7'-2"	6'-10"	6'-6"	6'-1"	5'-8"
	0.028	9'-2"	8'-11"	8'-1"	8'-6"	8'-3"	7'-11"	7'-6"	7'-1"	6'-8"
	0.032	10'-8"	10'-6"	9'-8"	9'-11"	9'-8"	9'-3"	8'-10"	8'-4"	7'-11"
	0.040	13'-4"	13'-1"	12'-0"	12'-6"	12'-3"	11'-8"	11'-3"	10'-8"	10'-2"
25	0.020	5'-7"	5'-7"	4'-1"	4'-4"	4'-2"	4'-1"	3'-8"	3'-5"	3'-2"
	0.025	7'-9"	7'-9"	6'-10"	7'-2"	7'-0"	6'-10"	6'-4"	6'-1"	5'-8"
	0.028	8'-11"	8'-11"	7'-11"	8'-3"	8'-1"	7'-11"	7'-4"	7'-1"	6'-8"
	0.032	10'-6"	10'-5"	9'-3"	9'-8"	9'-6"	9'-3"	8'-8"	8'-4"	7'-11"
	0.040	13'-1"	13'-1"	11'-9"	12'-3"	12'-0"	11'-9"	11'-1"	10'-6"	10'-2"
30	0.020	4'-7"	4'-6"	3'-10"	4'-1"	3'-11"	3'-9"	3'-6"	3'-3"	3'-0"
	0.025	7'-2"	7'-0"	6'-4"	6'-5"	6'-6"	6'-4"	5'-11"	5'-7"	5'-4"
	0.028	8'-3"	8'-1"	7'-4"	7'-8"	7'-6"	7'-4"	6'-11"	6'-6"	6'-3"
	0.032	9'-6"	9'-6"	8'-8"	9'-1"	8'-10"	8'-8"	8'-2"	7'-9"	7'-6"
	0.040	12'-3"	12'-0"	11'-1"	11'-6"	11'-3"	11'-1"	10'-6"	10'-0"	9'-8"
40	0.020	4'-0"	3'-10"	3'-5"	3'-7"	3'-6"	3'-4"	3'-1"	2'-11"	2'-8"
	0.025	6'-2"	6'-1"	5'-7"	5'-8"	5'-7"	5'-6"	5'-3"	4'-3"	4'-0"
	0.028	7'-3"	7'-1"	6'-6"	6'-8"	6'-6"	6'-5"	6'-2"	5'-10"	5'-7"
	0.032	8'-6"	8'-4"	7'-8"	7'-11"	7'-9"	7'-7"	7'-4"	7'-0"	6'-8"
	0.040	10'-10"	10'-8"	10'-0"	10'-2"	10'-0"	9'-10"	9'-6"	9'-1"	8'-9"
60	0.020	3'-1"	3'-0"	2'-8"	2'-10"	2'-9"	2'-8"	0'-0"	0'-0"	0'-0"
	0.025	4'-6"	4'-5"	4'-8"	4'-2"	4'-0"	4'-0"	3'-9"	0'-0"	0'-0"
	0.028	5'-4"	5'-4"	5'-3"	5'-4"	5'-4"	5'-3"	4'-6"	0'-0"	0'-0"
	0.032	6'-5"	6'-5"	6'-4"	6'-3"	6'-5"	6'-4"	6'-1"	5'-11"	5'-8"
	0.040	8'-5"	8'-5"	8'-3"	8'-5"	8'-5"	8'-3"	8'-0"	7'-9"	7'-6"

TABLE 4.8

3"x12" Olympic Panel (Single Span) MU11

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	9'-5"	8'-1"	6'-7"	7'-1"	6'-10"	6'-0"	5'-7"	5'-2"	3'-5"
	0.025	12'-0"	11'-5"	7'-7"	8'-2"	7'-10"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	14'-1"	13'-6"	11'-0"	11'-10"	11'-4"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	15'-4"	14'-7"	11'-11"	12'-10"	12'-3"	10'-9"	8'-1"	7'-7"	7'-1"
	Steel 0.018	12'-8"	12'-2"	8'-0"	10'-8"	8'-3"	7'-3"	6'-8"	6'-3"	5'-10"
	Steel 0.024	17'-1"	16'-4"	13'-2"	14'-3"	13'-7"	11'-11"	11'-0"	8'-4"	7'-9"
20 LIVE	0.020	7'-9"	7'-7"	6'-7"	7'-1"	6'-10"	6'-0"	5'-7"	5'-2"	3'-5"
	0.025	10'-5"	10'-3"	7'-7"	8'-2"	7'-10"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	12'-8"	12'-5"	11'-0"	11'-10"	11'-4"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	13'-10"	13'-7"	11'-11"	12'-10"	12'-3"	10'-9"	8'-1"	7'-7"	7'-1"
	Steel 0.018	11'-3"	11'-0"	8'-0"	10'-6"	8'-3"	7'-3"	6'-9"	6'-3"	5'-10"
	Steel 0.024	14'-9"	14'-8"	13'-2"	13'-11"	13'-7"	11'-11"	11'-0"	8'-4"	7'-9"
25	0.020	7'-7"	7'-7"	6'-7"	7'-1"	6'-10"	6'-0"	5'-7"	5'-2"	3'-5"
	0.025	10'-3"	10'-3"	7'-7"	8'-2"	7'-10"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	12'-5"	12'-5"	11'-0"	11'-9"	11'-4"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	13'-7"	13'-7"	11'-11"	12'-10"	12'-3"	10'-9"	8'-1"	7'-7"	7'-1"
	Steel 0.018	11'-0"	11'-0"	8'-0"	10'-6"	8'-3"	7'-3"	6'-8"	6'-3"	5'-10"
	Steel 0.024	14'-5"	14'-5"	13'-2"	13'-8"	13'-6"	11'-11"	11'-0"	8'-4"	7'-9"
30	0.020	7'-2"	7'-0"	6'-7"	6'-10"	6'-8"	6'-0"	5'-7"	5'-2"	3'-5"
	0.025	9'-8"	9'-6"	7'-7"	8'-2"	7'-10"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	11'-8"	11'-7"	10'-10"	11'-3"	11'-0"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	12'-10"	12'-8"	11'-10"	12'-3"	12'-1"	10'-9"	8'-1"	7'-7"	7'-1"
	Steel 0.018	10'-6"	9'-8"	8'-0"	9'-2"	8'-3"	7'-3"	6'-8"	6'-3"	5'-10"
	Steel 0.024	13'-6"	13'-6"	12'-8"	13'-1"	12'-10"	11'-11"	11'-0"	8'-4"	7'-9"
40	0.020	6'-6"	6'-5"	6'-1"	6'-2"	6'-1"	5'-10"	5'-7"	5'-2"	3'-6"
	0.025	8'-10"	8'-8"	7'-7"	8'-2"	7'-10"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	10'-9"	10'-7"	10'-0"	10'-3"	10'-0"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	11'-8"	11'-8"	10'-11"	11'-1"	10'-11"	10'-7"	8'-1"	7'-7"	7'-1"
	Steel 0.018	9'-0"	8'-10"	8'-0"	8'-6"	8'-3"	7'-3"	6'-9"	6'-3"	5'-10"
	Steel 0.024	12'-6"	12'-4"	11'-8"	11'-10"	11'-8"	11'-3"	10'-11"	8'-4"	7'-9"
60	0.020	5'-4"	5'-4"	5'-3"	5'-4"	5'-4"	4'-9"	0'-0"	0'-0"	0'-0"
	0.025	7'-2"	7'-2"	7'-2"	7'-2"	7'-2"	6'-11"	6'-5"	6'-0"	5'-7"
	0.032	8'-9"	8'-9"	8'-6"	8'-9"	8'-9"	8'-1"	7'-6"	7'-0"	6'-7"
	0.036	9'-7"	9'-7"	9'-6"	9'-7"	9'-7"	8'-3"	8'-1"	7'-7"	7'-1"
	Steel 0.018	7'-10"	7'-9"	7'-3"	7'-9"	7'-4"	7'-1"	0'-0"	0'-0"	0'-0"
	Steel 0.024	10'-3"	10'-3"	9'-7"	10'-3"	9'-8"	9'-3"	0'-0"	0'-0"	0'-0"

TABLE 4.9

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4800

Carl Putnam, P. E.
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Lynchburg, VA 24503
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LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C 68139
EXP. 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

3"x12" Olympic Panel (Multispan) MU11

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	8'-4"	8'-1"	7'-1"	7'-6"	7'-3"	7'-1"	6'-8"	6'-5"	6'-1"
	0.025	9'-7"	9'-3"	8'-2"	8'-7"	8'-4"	8'-2"	7'-8"	7'-4"	7'-0"
	0.032	11'-2"	10'-10"	9'-7"	10'-0"	9'-9"	9'-7"	9'-0"	8'-8"	8'-2"
	0.036	12'-0"	11'-8"	10'-4"	10'-10"	10'-7"	10'-4"	9'-8"	9'-4"	8'-10"
	Steel 0.018	8'-8"	8'-3"	7'-2"	7'-7"	7'-5"	7'-2"	6'-8"	6'-3"	5'-11"
	Steel 0.024	12'-10"	12'-6"	11'-1"	11'-7"	11'-4"	11'-1"	10'-5"	8'-8"	8'-3"
20 LIVE	0.020	6'-9"	6'-8"	6'-2"	6'-5"	6'-3"	6'-1"	5'-10"	5'-7"	5'-4"
	0.025	7'-10"	7'-8"	7'-1"	7'-4"	7'-3"	7'-0"	6'-9"	6'-5"	6'-2"
	0.032	9'-2"	9'-0"	8'-4"	8'-8"	8'-6"	8'-2"	7'-11"	7'-7"	7'-3"
	0.036	9'-10"	9'-8"	9'-0"	9'-4"	9'-2"	8'-10"	8'-7"	8'-2"	7'-10"
	Steel 0.018	7'-3"	7'-2"	6'-4"	6'-8"	6'-6"	6'-3"	6'-0"	5'-8"	5'-4"
	Steel 0.024	10'-8"	10'-6"	9'-9"	9'-2"	8'-10"	8'-8"	8'-4"	7'-11"	7'-6"
25	0.020	6'-8"	6'-6"	6'-1"	6'-3"	6'-2"	6'-1"	5'-9"	5'-7"	5'-4"
	0.025	7'-8"	7'-8"	7'-0"	7'-3"	7'-1"	7'-0"	6'-8"	6'-5"	6'-2"
	0.032	9'-0"	8'-8"	8'-2"	8'-6"	8'-4"	8'-2"	7'-10"	7'-7"	7'-3"
	0.036	9'-8"	9'-8"	8'-10"	9'-2"	9'-0"	8'-10"	8'-5"	8'-2"	7'-10"
	Steel 0.018	7'-2"	7'-0"	6'-3"	6'-7"	6'-4"	6'-3"	5'-11"	5'-8"	5'-4"
	Steel 0.024	10'-5"	10'-5"	8'-8"	9'-0"	8'-9"	8'-8"	8'-3"	7'-10"	7'-6"
30	0.020	6'-3"	6'-2"	5'-8"	5'-11"	5'-10"	5'-8"	5'-6"	5'-3"	4'-8"
	0.025	7'-3"	7'-1"	6'-8"	6'-10"	6'-9"	6'-8"	6'-4"	6'-1"	5'-11"
	0.032	8'-6"	8'-4"	7'-10"	8'-1"	7'-11"	7'-10"	7'-6"	7'-2"	7'-0"
	0.036	9'-2"	9'-0"	8'-5"	8'-8"	8'-7"	8'-6"	8'-1"	7'-9"	7'-7"
	Steel 0.018	6'-8"	6'-8"	6'-0"	6'-3"	6'-1"	5'-11"	5'-8"	5'-5"	5'-2"
	Steel 0.024	9'-3"	9'-2"	8'-4"	8'-8"	8'-5"	8'-3"	7'-11"	7'-7"	7'-4"
40	0.020	5'-8"	5'-7"	5'-3"	5'-4"	5'-3"	5'-3"	4'-7"	4'-6"	4'-3"
	0.025	6'-7"	6'-5"	6'-1"	6'-2"	6'-1"	6'-0"	5'-10"	5'-8"	5'-6"
	0.032	7'-8"	7'-7"	7'-2"	7'-3"	7'-2"	7'-1"	6'-11"	6'-8"	6'-5"
	0.036	8'-4"	8'-2"	7'-9"	7'-10"	7'-8"	7'-8"	7'-5"	7'-2"	6'-11"
	Steel 0.018	6'-2"	6'-0"	5'-7"	5'-9"	5'-8"	5'-6"	5'-3"	4'-7"	0'-0"
	Steel 0.024	8'-6"	8'-4"	7'-9"	8'-0"	7'-10"	7'-8"	7'-4"	7'-2"	6'-10"
60	0.020	4'-7"	4'-6"	4'-3"	4'-4"	4'-3"	4'-3"	4'-1"	0'-0"	0'-0"
	0.025	5'-4"	5'-4"	5'-3"	5'-4"	5'-4"	5'-3"	4'-9"	0'-0"	0'-0"
	0.032	6'-3"	6'-3"	6'-2"	6'-3"	6'-3"	6'-2"	6'-0"	5'-11"	5'-9"
	0.036	6'-9"	6'-9"	6'-8"	6'-9"	6'-9"	6'-8"	6'-8"	6'-4"	6'-2"
	Steel 0.018	5'-3"	5'-2"	0'-0"	4'-8"	4'-7"	0'-0"	0'-0"	0'-0"	0'-0"
	Steel 0.024	7'-4"	7'-4"	6'-10"	7'-0"	6'-11"	6'-10"	6'-7"	0'-0"	0'-0"

TABLE 4.10

3"x12" Riser Flat Panel (Single Span) MU14

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.024	8'-1"	7'-6"	6'-4"	6'-9"	6'-6"	6'-3"	5'-8"	0'-0"	0'-0"
	0.030	11'-7"	11'-1"	7'-4"	7'-11"	7'-7"	7'-3"	6'-8"	0'-0"	0'-0"
20 LIVE	0.024	8'-1"	7'-6"	6'-4"	6'-9"	6'-6"	6'-3"	5'-8"	0'-0"	0'-0"
	0.030	11'-8"	10'-10"	7'-4"	7'-11"	7'-7"	7'-3"	6'-8"	0'-0"	0'-0"

TABLE 4.11

3"x12" Riser Flat Panel (Multispan) MU14

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure								
		Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.024	7'-5"	7'-2"	6'-2"	6'-6"	6'-4"	6'-2"	5'-8"	0'-0"	0'-0"
	0.030	8'-8"	8'-5"	7'-3"	7'-8"	7'-5"	7'-3"	6'-8"	0'-0"	0'-0"
20 LIVE	0.024	5'-10"	5'-9"	5'-3"	5'-5"	5'-4"	4'-5"	4'-3"	0'-0"	0'-0"
	0.030	6'-11"	6'-9"	6'-2"	6'-5"	6'-3"	6'-0"	5'-10"	0'-0"	0'-0"

TABLE 4.12

PROFESSIONAL ENGINEER
No 6060906-2202
CARL PUTNAM
STATE OF UTAH

MAR 05 2014

SOLID COVERS 4.8: 2.5" PANEL SPANS FOR COMMERCIAL AND PATIO STRUCTURES

2.5"x6" Flat Panel (Single Span) MU22

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	13'-6"	13'-3"	11'-1"	11'-11"	11'-5"	10'-11"	8'-2"	7'-7"	7'-1"
	0.024	16'-6"	15'-1"	12'-11"	13'-11"	13'-4"	12'-9"	11'-9"	10'-10"	8'-3"
	0.032	17'-2"	16'-10"	15'-6"	16'-0"	15'-9"	15'-6"	14'-7"	13'-6"	12'-7"
	0.040	18'-5"	18'-1"	16'-8"	17'-2"	16'-11"	16'-8"	16'-0"	15'-7"	15'-0"
	Steel 0.018	17'-7"	17'-1"	14'-3"	16'-5"	14'-9"	14'-1"	12'-11"	12'-0"	11'-2"
20 LIVE	0.020	11'-3"	11'-0"	9'-2"	10'-7"	10'-5"	9'-1"	8'-2"	7'-7"	7'-1"
	0.024	12'-9"	12'-6"	11'-6"	12'-0"	11'-10"	11'-5"	11'-1"	10'-7"	8'-3"
	0.032	15'-1"	14'-11"	14'-3"	14'-7"	14'-5"	14'-1"	13'-9"	13'-3"	12'-7"
	0.040	16'-3"	16'-0"	15'-3"	15'-7"	15'-5"	15'-1"	14'-10"	14'-5"	14'-0"
	Steel 0.018	14'-7"	14'-4"	13'-4"	13'-9"	13'-7"	13'-1"	12'-9"	12'-0"	11'-2"
25	0.020	11'-3"	11'-0"	9'-1"	10'-5"	9'-2"	9'-1"	8'-2"	7'-7"	7'-1"
	0.024	12'-9"	12'-6"	11'-5"	11'-10"	11'-6"	11'-5"	10'-11"	10'-7"	8'-3"
	0.032	15'-1"	14'-11"	14'-1"	14'-5"	14'-3"	14'-1"	13'-7"	13'-3"	12'-7"
	0.040	16'-3"	16'-0"	15'-1"	15'-6"	15'-3"	15'-1"	14'-8"	14'-5"	14'-0"
	Steel 0.018	14'-4"	14'-4"	13'-1"	13'-7"	13'-4"	13'-1"	12'-6"	12'-0"	11'-2"
30	0.020	10'-6"	9'-7"	8'-9"	9'-1"	8'-10"	8'-7"	8'-2"	7'-7"	7'-1"
	0.024	11'-10"	11'-6"	10'-11"	11'-3"	11'-1"	10'-11"	10'-6"	9'-1"	8'-3"
	0.032	14'-5"	14'-3"	13'-7"	13'-11"	13'-9"	13'-7"	13'-1"	12'-7"	12'-3"
	0.040	15'-5"	15'-3"	14'-8"	14'-11"	14'-10"	14'-8"	14'-3"	13'-11"	13'-8"
	Steel 0.018	13'-7"	13'-4"	12'-6"	12'-11"	12'-9"	12'-6"	12'-0"	11'-7"	11'-2"
40	0.020	8'-11"	8'-9"	8'-2"	8'-5"	8'-3"	8'-1"	7'-9"	7'-6"	7'-1"
	0.024	10'-9"	10'-7"	9'-3"	9'-7"	9'-4"	9'-2"	8'-10"	8'-7"	8'-2"
	0.032	13'-5"	13'-3"	12'-7"	12'-9"	12'-7"	12'-5"	12'-1"	11'-8"	11'-4"
	0.040	14'-6"	14'-5"	13'-11"	14'-0"	13'-11"	13'-9"	13'-7"	13'-3"	13'-0"
	Steel 0.018	12'-4"	12'-2"	11'-7"	11'-9"	11'-7"	11'-5"	11'-2"	10'-10"	10'-6"
60	0.020	7'-9"	7'-6"	7'-2"	7'-6"	7'-3"	7'-2"	7'-0"	0'-0"	0'-0"
	0.024	8'-10"	8'-9"	8'-2"	8'-5"	8'-3"	8'-2"	7'-11"	0'-0"	0'-0"
	0.032	11'-0"	11'-0"	10'-11"	11'-0"	11'-0"	10'-11"	10'-7"	10'-5"	0'-0"
	0.040	12'-9"	12'-9"	12'-7"	12'-9"	12'-9"	12'-7"	12'-3"	12'-0"	11'-9"
	Steel 0.018	10'-2"	10'-2"	9'-6"	9'-9"	9'-7"	9'-6"	9'-2"	0'-0"	0'-0"

TABLE 4.13

2.5"x6" Flat Panel (Multispan) MU22

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	11'-5"	11'-1"	9'-9"	10'-2"	10'-0"	9'-9"	9'-2"	8'-10"	8'-4"
	0.024	13'-3"	12'-10"	11'-4"	11'-10"	11'-7"	11'-4"	10'-8"	10'-3"	9'-9"
	0.032	16'-3"	15'-9"	14'-0"	14'-7"	14'-3"	14'-0"	13'-2"	12'-8"	12'-0"
	0.040	18'-5"	18'-1"	16'-7"	17'-2"	16'-11"	16'-7"	15'-7"	15'-0"	14'-3"
	Steel 0.018	14'-0"	13'-7"	12'-1"	12'-7"	12'-4"	12'-1"	11'-4"	10'-11"	10'-5"
20 LIVE	0.020	9'-4"	9'-2"	8'-6"	8'-10"	8'-8"	8'-4"	8'-1"	7'-9"	7'-5"
	0.024	10'-10"	10'-8"	9'-11"	10'-3"	10'-1"	9'-9"	9'-5"	9'-0"	8'-6"
	0.032	13'-5"	13'-2"	12'-3"	12'-8"	12'-5"	12'-0"	11'-8"	11'-2"	10'-8"
	0.040	15'-10"	15'-7"	14'-6"	15'-0"	14'-9"	14'-3"	13'-10"	13'-3"	12'-9"
	Steel 0.018	11'-7"	11'-4"	10'-7"	10'-11"	10'-9"	10'-5"	9'-0"	8'-7"	8'-2"
25	0.020	9'-2"	9'-2"	8'-4"	8'-8"	8'-6"	8'-4"	8'-0"	7'-9"	7'-5"
	0.024	10'-8"	10'-8"	9'-9"	10'-1"	9'-11"	9'-9"	9'-3"	9'-0"	8'-8"
	0.032	13'-2"	13'-2"	12'-0"	12'-5"	12'-3"	12'-0"	11'-6"	11'-2"	10'-8"
	0.040	15'-7"	15'-7"	14'-3"	14'-9"	14'-6"	14'-3"	13'-7"	13'-3"	12'-9"
	Steel 0.018	11'-4"	11'-4"	10'-5"	10'-9"	10'-7"	10'-5"	8'-11"	8'-6"	8'-2"
30	0.020	8'-8"	8'-6"	8'-0"	8'-3"	8'-1"	8'-0"	7'-8"	7'-4"	7'-2"
	0.024	10'-1"	9'-11"	9'-3"	9'-7"	9'-5"	9'-3"	8'-11"	8'-7"	8'-4"
	0.032	12'-5"	12'-3"	11'-6"	11'-10"	11'-8"	11'-6"	11'-0"	10'-7"	10'-4"
	0.040	14'-9"	14'-6"	13'-7"	14'-1"	13'-10"	13'-7"	13'-1"	12'-7"	12'-3"
	Steel 0.018	10'-9"	10'-7"	9'-0"	9'-5"	9'-2"	8'-11"	8'-7"	8'-3"	7'-11"
40	0.020	7'-10"	7'-9"	7'-4"	7'-5"	7'-4"	7'-3"	7'-1"	6'-10"	6'-7"
	0.024	9'-2"	9'-0"	8'-7"	8'-8"	8'-7"	8'-6"	8'-3"	7'-11"	7'-8"
	0.032	11'-4"	11'-2"	10'-7"	10'-8"	10'-7"	10'-5"	10'-2"	9'-10"	9'-6"
	0.040	13'-6"	13'-3"	12'-7"	12'-9"	12'-7"	12'-5"	12'-1"	11'-9"	11'-4"
	Steel 0.018	9'-3"	9'-0"	8'-6"	8'-9"	8'-6"	8'-4"	8'-0"	7'-9"	7'-5"
60	0.020	6'-5"	6'-5"	6'-4"	6'-5"	6'-5"	6'-4"	6'-2"	6'-1"	5'-11"
	0.024	7'-6"	7'-6"	7'-6"	7'-6"	7'-6"	7'-6"	7'-2"	7'-1"	6'-11"
	0.032	9'-3"	9'-3"	9'-2"	9'-3"	9'-3"	9'-2"	8'-11"	8'-9"	8'-6"
	0.040	11'-0"	11'-0"	10'-11"	11'-0"	11'-0"	10'-11"	10'-7"	10'-5"	10'-2"
	Steel 0.018	8'-0"	7'-11"	7'-5"	7'-8"	7'-6"	7'-5"	7'-2"	0'-0"	0'-0"

TABLE 4.14

2.5"x12" Twin Vee Panel (Single Span) MU26

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	8'-11"	8'-9"	7'-7"	8'-0"	7'-11"	7'-7"	7'-2"	6'-8"	6'-3"
	0.027	13'-3"	12'-11"	11'-4"	11'-11"	11'-8"	11'-4"	10'-8"	8'-10"	8'-2"
	0.040	15'-3"	15'-0"	13'-10"	14'-3"	14'-0"	13'-10"	13'-3"	12'-11"	12'-6"
	Steel 0.018"	13'-8"	13'-3"	11'-9"	12'-4"	12'-0"	11'-9"	11'-1"	10'-7"	8'-0"
	Steel 0.024"	15'-11"	15'-6"	13'-9"	14'-4"	14'-1"	13'-9"	12'-11"	12'-6"	11'-11"
20 LIVE	0.020	7'-9"	7'-7"	6'-10"	7'-2"	6'-11"	6'-9"	6'-6"	6'-2"	5'-10"
	0.027	10'-11"	10'-8"	8'-11"	9'-4"	9'-1"	8'-10"	8'-8"	8'-1"	7'-8"
	0.040	13'-5"	13'-3"	12'-8"	12'-11"	12'-9"	12'-6"	12'-3"	11'-11"	11'-7"
	Steel 0.018"	11'-3"	11'-1"	9'-3"	10'-8"	10'-6"	9'-2"	8'-10"	8'-5"	8'-0"
	Steel 0.024"	13'-2"	12'-11"	12'-1"	12'-6"	12'-3"	11'-11"	11'-6"	11'-0"	10'-7"
25	0.020	7'-7"	7'-6"	6'-9"	7'-0"	6'-10"	6'-9"	6'-5"	6'-1"	5'-10"
	0.027	10'-6"	10'-6"	8'-10"	9'-2"	8'-11"	8'-10"	8'-4"	8'-0"	7'-8"
	0.040	13'-3"	13'-3"	12'-6"	12'-9"	12'-8"	12'-6"	12'-1"	11'-11"	11'-7"
	Steel 0.018"	11'-1"	11'-1"	9'-2"	10'-6"	9'-3"	9'-2"	8'-9"	8'-4"	8'-0"
	Steel 0.024"	12'-11"	12'-11"	11'-11"	12'-3"	12'-1"	11'-11"	11'-4"	11'-0"	10'-7"
30	0.020	7'-3"	7'-2"	6'-6"	6'-9"	6'-7"	6'-5"	6'-2"	5'-11"	5'-8"
	0.027	9'-6"	9'-4"	8'-6"	8'-10"	8'-7"	8'-4"	8'-1"	7'-9"	7'-5"
	0.040	12'-9"	12'-8"	12'-1"	12'-4"	12'-3"	12'-1"	11'-9"	11'-6"	11'-3"
	Steel 0.018"	10'-6"	9'-8"	8'-10"	9'-2"	8'-11"	8'-9"	8'-5"	8'-1"	7'-9"
	Steel 0.024"	12'-3"	12'-1"	11'-4"	11'-8"	11'-6"	11'-4"	10'-11"	10'-6"	9'-1"
40	0.020	6'-8"	6'-6"	6'-1"	6'-3"	6'-1"	6'-0"	5'-9"	5'-7"	5'-4"
	0.027	8'-8"	8'-6"	7'-11"	8'-2"	8'-0"	7'-10"	7'-6"	7'-4"	7'-0"
	0.040	12'-0"	11'-11"	11'-6"	11'-7"	11'-6"	11'-5"	11'-2"	10'-10"	10'-6"
	Steel 0.018"	9'-1"	8'-10"	8'-3"	8'-6"	8'-4"	8'-2"	7'-10"	7'-7"	7'-4"
	Steel 0.024"	11'-2"	11'-0"	10'-6"	10'-7"	10'-6"	9'-7"	9'-2"	8'-11"	8'-7"
60	0.020	5'-9"	5'-6"	5'-4"	5'-6"	5'-5"	5'-4"	5'-2"	0'-0"	0'-0"
	0.027	7'-6"	7'-5"	7'-0"	7'-2"	7'-1"	7'-0"	6'-9"	0'-0"	0'-0"
	0.040	10'-2"	10'-2"	9'-6"	9'-9"	9'-7"	9'-6"	9'-2"	0'-0"	0'-0"
	Steel 0.018"	7'-10"	7'-9"	7'-4"	7'-6"	7'-4"	7'-4"	7'-1"	0'-0"	0'-0"
	Steel 0.024"	9'-2"	9'-1"	8'-7"	8'-9"	8'-8"	8'-7"	8'-4"	0'-0"	0'-0"

TABLE 4.15

Metals Building Products
5085 Veteran's Memorial Hwy
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FEB 24 2014

2.5"x6" Flat Panel (Single Span) MU21

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.022	11'-4"	10'-11"	7'-3"	7'-10"	7'-6"	7'-2"	6'-7"	6'-1"	5'-8"
	0.028	12'-11"	12'-6"	10'-6"	11'-4"	10'-10"	8'-5"	7'-9"	7'-2"	6'-8"
	0.035	14'-10"	14'-6"	12'-3"	13'-3"	12'-8"	12'-1"	11'-2"	8'-5"	7'-10"
	0.040	16'-4"	15'-10"	13'-6"	14'-7"	13'-11"	13'-4"	12'-3"	11'-4"	10'-7"
20 LIVE	0.022	8'-7"	8'-5"	7'-3"	7'-10"	7'-6"	7'-2"	6'-7"	6'-1"	5'-8"
	0.028	10'-7"	10'-5"	8'-9"	9'-1"	8'-10"	8'-5"	7'-9"	7'-2"	6'-8"
	0.035	12'-2"	12'-0"	11'-2"	11'-6"	11'-4"	10'-11"	10'-7"	8'-5"	7'-10"
	0.040	13'-6"	13'-3"	12'-4"	12'-9"	12'-6"	12'-1"	11'-9"	11'-3"	10'-7"
25	0.022	8'-6"	8'-4"	7'-3"	7'-10"	7'-6"	7'-2"	6'-7"	6'-1"	5'-8"
	0.028	10'-5"	10'-5"	8'-7"	8'-11"	8'-9"	8'-5"	7'-9"	7'-2"	6'-8"
	0.035	12'-0"	12'-0"	10'-11"	11'-4"	11'-2"	10'-11"	10'-6"	8'-5"	7'-10"
	0.040	13'-3"	13'-3"	12'-1"	12'-6"	12'-4"	12'-1"	11'-7"	11'-3"	10'-7"
30	0.022	8'-1"	7'-11"	7'-3"	7'-6"	7'-4"	7'-2"	6'-7"	6'-1"	5'-8"
	0.028	9'-3"	9'-1"	8'-3"	8'-7"	8'-4"	8'-2"	7'-9"	7'-2"	6'-8"
	0.035	11'-4"	11'-2"	10'-6"	10'-9"	10'-7"	10'-6"	9'-1"	8'-5"	7'-10"
	0.040	12'-6"	12'-4"	11'-7"	11'-11"	11'-9"	11'-7"	11'-1"	10'-8"	10'-5"
40	0.022	7'-6"	7'-3"	6'-9"	7'-0"	6'-10"	6'-8"	6'-5"	6'-1"	5'-8"
	0.028	8'-6"	8'-3"	7'-9"	8'-0"	7'-10"	7'-8"	7'-4"	7'-2"	6'-8"
	0.035	9'-9"	9'-6"	8'-11"	9'-2"	9'-0"	8'-10"	8'-5"	8'-3"	7'-10"
	0.040	11'-5"	11'-3"	10'-8"	10'-10"	10'-8"	10'-6"	9'-4"	9'-1"	8'-8"
60	0.022	6'-5"	6'-4"	5'-11"	6'-1"	6'-0"	5'-11"	5'-9"	0'-0"	0'-0"
	0.028	7'-4"	7'-3"	5'-10"	7'-0"	6'-11"	6'-10"	6'-7"	0'-0"	0'-0"
	0.035	8'-5"	8'-4"	7'-10"	8'-1"	7'-11"	7'-10"	7'-7"	0'-0"	0'-0"
	0.040	9'-4"	9'-3"	8'-8"	8'-11"	8'-9"	8'-8"	8'-5"	0'-0"	0'-0"

TABLE 4.16

2.5"x6" Flat Panel (Multispan) MU21

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.022	9'-2"	8'-11"	7'-10"	8'-2"	8'-0"	7'-10"	7'-4"	7'-1"	6'-8"
	0.028	10'-9"	10'-5"	9'-2"	9'-7"	9'-5"	9'-2"	8'-7"	8'-4"	7'-10"
	0.035	12'-5"	12'-1"	10'-8"	11'-2"	10'-11"	10'-8"	10'-0"	9'-8"	9'-2"
	0.040	13'-8"	13'-3"	11'-9"	12'-3"	12'-0"	11'-9"	11'-0"	10'-7"	10'-1"
20 LIVE	0.022	7'-6"	7'-4"	6'-10"	7'-1"	6'-11"	6'-8"	6'-6"	6'-2"	5'-11"
	0.028	8'-10"	8'-7"	8'-0"	8'-4"	8'-2"	7'-10"	7'-7"	7'-3"	7'-0"
	0.035	10'-3"	10'-0"	9'-4"	9'-8"	9'-6"	9'-2"	8'-11"	8'-6"	8'-2"
	0.040	11'-3"	11'-0"	10'-3"	10'-7"	10'-5"	10'-1"	9'-9"	9'-4"	9'-0"
25	0.022	7'-4"	7'-4"	6'-8"	6'-11"	6'-10"	6'-8"	6'-4"	6'-2"	5'-11"
	0.028	8'-7"	8'-7"	7'-10"	8'-2"	8'-0"	7'-10"	7'-6"	7'-3"	7'-0"
	0.035	10'-0"	10'-0"	9'-2"	9'-6"	9'-4"	9'-2"	8'-9"	8'-6"	8'-2"
	0.040	11'-0"	11'-0"	10'-1"	10'-5"	10'-3"	10'-1"	9'-8"	9'-4"	9'-0"
30	0.022	6'-11"	6'-10"	6'-4"	6'-7"	6'-6"	6'-4"	6'-1"	5'-10"	5'-8"
	0.028	8'-2"	8'-0"	7'-6"	7'-9"	7'-7"	7'-6"	7'-2"	6'-11"	6'-9"
	0.035	9'-6"	9'-4"	8'-9"	9'-0"	8'-11"	8'-9"	8'-5"	8'-1"	7'-10"
	0.040	10'-5"	10'-3"	9'-8"	9'-11"	9'-9"	9'-8"	9'-3"	8'-10"	8'-8"
40	0.022	6'-3"	6'-2"	5'-10"	5'-11"	5'-10"	5'-9"	5'-8"	5'-5"	5'-3"
	0.028	7'-5"	7'-3"	6'-11"	7'-0"	6'-11"	6'-10"	6'-8"	6'-5"	6'-3"
	0.035	8'-8"	8'-6"	8'-1"	8'-2"	8'-1"	8'-0"	7'-9"	7'-6"	7'-3"
	0.040	9'-6"	9'-4"	8'-10"	9'-0"	8'-10"	8'-9"	8'-7"	8'-3"	8'-0"
60	0.022	5'-1"	5'-1"	4'-9"	4'-10"	4'-9"	4'-9"	4'-7"	0'-0"	0'-0"
	0.028	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	6'-0"	5'-10"	5'-8"	5'-7"
	0.035	7'-1"	7'-1"	7'-0"	7'-1"	7'-1"	7'-0"	6'-9"	6'-8"	6'-6"
	0.040	7'-9"	7'-9"	7'-8"	7'-9"	7'-9"	7'-8"	7'-6"	7'-4"	7'-2"

TABLE 4.17

2.5"x12" Twin Vee Panel (Multispan) MU26

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure: Exposure B			Exposure C					
		110	115	140	110	115	120	130	140	150
10 LIVE	0.020	10'-2"	9'-11"	8'-8"	9'-2"	8'-11"	8'-9"	8'-2"	7'-11"	7'-6"
	0.027	13'-3"	12'-11"	11'-4"	11'-11"	11'-8"	11'-4"	10'-8"	10'-3"	9'-9"
	0.040	15'-3"	15'-0"	13'-10"	14'-3"	14'-0"	13'-10"	13'-3"	12'-11"	12'-6"
	Steel 0.018"	12'-7"	12'-3"	10'-9"	11'-4"	11'-0"	10'-9"	8'-10"	8'-4"	7'-11"
	Steel 0.024"	15'-5"	15'-0"	13'-4"	13'-11"	13'-7"	13'-4"	12'-6"	12'-1"	11'-6"
20 LIVE	0.020	8'-4"	8'-2"	7'-7"	7'-11"	7'-8"	7'-6"	7'-3"	6'-11"	6'-8"
	0.027	10'-11"	10'-8"	9'-11"	10'-3"	10'-1"	9'-9"	9'-6"	9'-1"	8'-8"
	0.040	13'-5"	13'-3"	12'-8"	12'-11"	12'-9"	12'-6"	12'-3"	11'-11"	11'-7"
	Steel 0.018"	9'-7"	9'-5"	8'-5"	8'-10"	8'-7"	8'-4"	8'-0"	7'-7"	7'-2"
	Steel 0.024"	12'-9"	12'-6"	11'-8"	12'-1"	11'-11"	11'-6"	11'-2"	10'-8"	9'-1"
25	0.020	8'-2"	8'-2"	7'-6"	7'-9"	7'-7"	7'-6"	7'-2"	6'-11"	6'-8"
	0.027	10'-8"	10'-8"	9'-9"	10'-1"	9'-11"	9'-9"	9'-4"	9'-1"	8'-8"
	0.040	13'-3"	13'-3"	12'-6"	12'-9"	12'-8"	12'-6"	12'-1"	11'-11"	11'-7"
	Steel 0.018"	9'-5"	9'-3"	8'-4"	8'-8"	8'-5"	8'-4"	7'-11"	7'-6"	7'-2"
	Steel 0.024"	12'-6"	12'-6"	11'-6"	11'-11"	11'-8"	11'-6"	11'-0"	10'-8"	9'-1"
30	0.020	7'-9"	7'-7"	7'-2"	7'-4"	7'-3"	7'-2"	6'-10"	6'-7"	6'-5"
	0.027	10'-1"	9'-11"	9'-4"	9'-7"	9'-6"	9'-4"	8'-11"	8'-7"	8'-4"
	0.040	12'-9"	12'-8"	12'-1"	12'-4"	12'-3"	12'-1"	11'-9"	11'-6"	11'-3"
	Steel 0.018"	8'-11"	8'-10"	8'-0"	8'-4"	8'-1"	7'-11"	7'-7"	7'-3"	6'-11"
	Steel 0.024"	11'-11"	11'-8"	11'-0"	11'-4"	11'-2"	11'-0"	10'-6"	9'-2"	8'-9"
40	0.040	12'-0"	11'-11"	11'-6"	11'-7"	11'-6"	11'-5"	11'-2"	10'-10"	10'-6"
	Steel 0.024"	10'-10"	10'-8"	9'-4"	9'-8"	9'-5"	9'-3"	8'-10"	8'-7"	8'-3"
60	0.040	10'-2"	10'-2"	10'-1"	10'-2"	10'-2"	10'-1"	9'-10"	9'-8"	9'-5"
	Steel 0.024"	8'-10"	8'-9"	8'-3"	8'-8"	8'-4"	8'-3"	8'-0"	0'-0"	0'-0"

TABLE 4.18

MAR 05 2014

SOLID COVERS 4.0: MISCELLANEOUS SPANS FOR COMMERCIAL AND PATIO STRUCTURES

2.5"x24" Tri Vee Panel (Single) MU25

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130	140	150
10 LIVE	0.018	7'-4"	7'-2"	5'-9"	6'-4"	6'-0"	5'-7"	5'-2"	3'-2"	2'-9"
	0.024	8'-10"	8'-8"	6'-11"	7'-7"	7'-3"	0'-9"	6'-3"	5'-10"	5'-5"
	0.032	12'-2"	11'-10"	8'-5"	11'-0"	10'-0"	8'-2"	7'-7"	7'-1"	6'-7"
	0.040	13'-4"	13'-2"	12'-0"	12'-6"	12'-4"	11'-9"	10'-11"	8'-4"	7'-9"
20 LIVE	0.018	6'-5"	6'-2"	5'-6"	5'-10"	5'-8"	5'-6"	5'-2"	3'-2"	0'-0"
	0.024	7'-9"	7'-6"	6'-8"	7'-0"	6'-10"	6'-7"	6'-3"	5'-10"	5'-5"
	0.032	9'-4"	9'-1"	8'-1"	8'-6"	8'-4"	8'-0"	7'-7"	7'-1"	6'-7"
	0.040	11'-0"	11'-7"	10'-7"	11'-2"	10'-9"	10'-5"	0'-11"	8'-4"	7'-9"
25	0.018	6'-4"	6'-2"	5'-6"	5'-9"	5'-8"	5'-5"	4'-8"	3'-2"	0'-0"
	0.024	7'-7"	7'-6"	6'-7"	6'-11"	0'-10"	6'-6"	6'-2"	5'-10"	5'-5"
	0.032	9'-3"	9'-1"	8'-0"	8'-5"	8'-4"	7'-11"	7'-6"	7'-1"	6'-7"
	0.040	11'-9"	11'-7"	10'-5"	10'-11"	10'-9"	9'-3"	8'-10"	8'-4"	7'-9"
30	0.018	6'-0"	5'-10"	5'-3"	5'-6"	5'-5"	5'-2"	4'-6"	3'-2"	0'-0"
	0.024	7'-3"	7'-0"	6'-4"	6'-8"	6'-6"	6'-3"	6'-0"	5'-9"	5'-5"
	0.032	8'-10"	8'-6"	7'-9"	8'-1"	7'-11"	7'-8"	7'-4"	7'-0"	6'-7"
	0.040	10'-11"	10'-11"	9'-0"	10'-5"	9'-3"	8'-11"	8'-7"	8'-3"	7'-8"
40	0.018	5'-6"	5'-6"	4'-7"	4'-9"	4'-8"	4'-6"	4'-4"	0'-0"	0'-0"
	0.024	6'-7"	6'-6"	5'-11"	6'-2"	6'-1"	5'-10"	5'-8"	5'-5"	5'-3"
	0.032	8'-0"	7'-11"	7'-3"	7'-6"	7'-5"	7'-1"	6'-11"	6'-7"	6'-5"
	0.040	9'-4"	9'-3"	8'-6"	8'-10"	8'-8"	8'-4"	8'-1"	7'-9"	7'-6"
60	0.018	4'-7"	4'-6"	0'-0"	4'-4"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"
	0.024	5'-9"	5'-9"	5'-3"	5'-8"	5'-5"	5'-3"	0'-0"	0'-0"	0'-0"
	0.032	7'-0"	6'-11"	6'-5"	6'-8"	6'-7"	6'-5"	0'-0"	0'-0"	0'-0"
	0.040	8'-3"	8'-2"	7'-6"	7'-9"	7'-9"	7'-6"	0'-0"	0'-0"	0'-0"

TABLE 4.21

2.5"x24" Tri Star Panel (Single and Multispan) MU24

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130	140	150
10 LIVE	0.020	7'-4"	7'-2"	6'-0"	6'-7"	6'-4"	5'-10"	5'-0"	5'-2"	4'-2"
	0.025	8'-8"	8'-6"	7'-2"	7'-10"	7'-6"	7'-0"	6'-8"	6'-3"	5'-11"
	0.032	11'-7"	11'-4"	8'-8"	10'-6"	8'-11"	8'-4"	7'-11"	7'-0"	7'-1"
	Steel 0.015	8'-10"	8'-7"	7'-1"	7'-10"	7'-6"	6'-11"	6'-6"	6'-1"	5'-8"
	Steel 0.018	11'-6"	11'-5"	9'-10"	10'-6"	10'-3"	9'-7"	8'-2"	7'-8"	7'-2"
20 LIVE	0.020	6'-4"	6'-1"	5'-4"	5'-8"	5'-6"	5'-3"	4'-5"	4'-1"	0'-0"
	0.025	7'-6"	7'-3"	6'-6"	6'-10"	6'-8"	6'-4"	6'-1"	5'-9"	5'-6"
	0.032	8'-11"	8'-8"	7'-8"	8'-2"	7'-11"	7'-7"	7'-3"	6'-10"	6'-7"
	Steel 0.015	7'-6"	7'-3"	6'-3"	6'-8"	6'-6"	6'-2"	5'-10"	5'-6"	0'-0"
	Steel 0.018	9'-7"	9'-5"	8'-7"	9'-1"	8'-9"	8'-5"	8'-1"	7'-8"	7'-2"
25	0.020	6'-2"	6'-1"	5'-3"	5'-7"	5'-6"	5'-2"	4'-4"	4'-1"	0'-0"
	0.025	7'-5"	7'-3"	6'-4"	6'-9"	6'-8"	6'-3"	6'-0"	5'-9"	5'-5"
	0.032	8'-9"	8'-8"	7'-7"	8'-0"	7'-11"	7'-6"	7'-2"	6'-10"	6'-6"
	Steel 0.015	7'-4"	7'-3"	6'-2"	6'-7"	6'-6"	6'-1"	5'-9"	5'-5"	0'-0"
	Steel 0.018	9'-7"	9'-5"	8'-5"	8'-11"	8'-9"	8'-4"	8'-1"	7'-8"	7'-2"
30	0.020	5'-10"	5'-8"	4'-7"	5'-4"	5'-2"	4'-6"	4'-2"	4'-0"	0'-0"
	0.025	7'-0"	6'-10"	6'-1"	6'-5"	6'-3"	6'-1"	5'-9"	5'-6"	5'-3"
	0.032	8'-4"	8'-2"	7'-4"	7'-8"	7'-6"	7'-3"	6'-11"	6'-8"	6'-4"
	Steel 0.015	6'-11"	6'-9"	5'-11"	6'-3"	6'-1"	5'-10"	5'-0"	5'-2"	0'-0"
	Steel 0.018	8'-11"	8'-11"	8'-1"	8'-5"	8'-4"	7'-11"	7'-7"	7'-5"	7'-1"
40	0.020	5'-3"	5'-2"	4'-3"	4'-6"	4'-5"	4'-2"	3'-11"	0'-0"	0'-0"
	0.025	6'-4"	6'-3"	5'-9"	6'-0"	5'-10"	5'-7"	5'-5"	5'-2"	0'-0"
	0.032	7'-7"	7'-6"	6'-10"	7'-2"	7'-0"	6'-9"	6'-6"	6'-3"	6'-0"
	Steel 0.015	6'-2"	6'-1"	5'-5"	5'-9"	5'-7"	5'-3"	4'-6"	0'-0"	0'-0"
	Steel 0.018	8'-1"	7'-11"	7'-5"	7'-7"	7'-6"	7'-3"	7'-0"	6'-9"	6'-6"
60	0.020	4'-3"	4'-2"	0'-0"	3'-11"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"
	0.025	5'-6"	5'-6"	0'-0"	5'-3"	5'-2"	0'-0"	0'-0"	0'-0"	0'-0"
	0.032	6'-8"	6'-7"	6'-1"	6'-4"	6'-3"	6'-0"	0'-0"	0'-0"	0'-0"
	Steel 0.015	5'-2"	4'-10"	0'-0"	4'-6"	0'-0"	0'-0"	0'-0"	0'-0"	0'-0"
	Steel 0.018	6'-6"	6'-6"	6'-4"	6'-6"	6'-5"	6'-3"	6'-1"	5'-11"	5'-9"

TABLE 4.23

24" Pattiport (Single Span) MU23

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130
10 LIVE	0.020	7'-11"	7'-9"	6'-7"	7'-2"	6'-11"	6'-6"	6'-1"
	0.025	10'-11"	10'-7"	8'-0"	8'-8"	8'-5"	7'-10"	7'-5"
	0.032	12'-5"	12'-2"	10'-9"	11'-6"	11'-3"	10'-7"	8'-9"
	0.040	13'-4"	13'-1"	11'-11"	12'-6"	12'-4"	11'-10"	11'-0"
	0.050	14'-4"	14'-1"	12'-10"	13'-5"	13'-2"	12'-8"	12'-4"
	Steel 0.018	11'-7"	11'-3"	8'-0"	10'-0"	9'-0"	7'-10"	7'-3"
	Steel 0.024	13'-5"	13'-1"	11'-5"	12'-2"	11'-11"	11'-3"	10'-9"
	Steel 0.030	14'-11"	14'-0"	12'-9"	13'-6"	13'-3"	12'-6"	12'-1"
20 LIVE	0.020	8'-11"	8'-8"	6'-0"	6'-4"	6'-2"	5'-11"	5'-7"
	0.025	8'-5"	8'-1"	7'-3"	7'-8"	7'-5"	7'-2"	6'-10"
	0.032	10'-7"	10'-4"	8'-6"	9'-0"	8'-9"	8'-5"	8'-0"
	0.040	11'-10"	11'-8"	10'-10"	11'-4"	11'-0"	10'-8"	0'-2"
	0.050	12'-8"	12'-6"	11'-10"	12'-3"	11'-11"	11'-9"	11'-4"
	Steel 0.018	9'-0"	8'-8"	7'-9"	8'-2"	8'-0"	7'-8"	7'-3"
	Steel 0.024	11'-3"	11'-0"	9'-1"	10'-8"	9'-4"	0'-0"	8'-7"
	Steel 0.030	12'-6"	12'-3"	11'-3"	11'-10"	11'-6"	11'-1"	10'-8"

TABLE 4.25

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FEB 24 2014

2.5"x24" Tri Vee Panel (Multispan) MU25

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130	140	150
10 LIVE	0.018	7'-3"	7'-0"	6'-0"	6'-6"	6'-3"	5'-10"	5'-7"	5'-3"	4'-0"
	0.024	9'-1"	8'-10"	7'-8"	8'-2"	8'-0"	7'-6"	7'-2"	6'-10"	6'-6"
	0.032	11'-1"	10'-10"	9'-5"	10'-0"	9'-10"	9'-2"	8'-10"	8'-5"	8'-0"
	0.040	13'-0"	12'-7"	11'-0"	11'-9"	11'-5"	10'-9"	10'-4"	9'-10"	9'-5"
20 LIVE	0.018	5'-10"	5'-9"	4'-6"	5'-6"	5'-3"	4'-5"	4'-2"	3'-10"	3'-8"
	0.024	7'-8"	7'-4"	6'-8"	7'-1"	6'-10"	6'-7"	6'-3"	6'-0"	5'-9"
	0.032	9'-2"	9'-0"	8'-3"	8'-8"	8'-5"	8'-2"	7'-9"	7'-6"	7'-2"
	0.040	10'-9"	10'-7"	9'-8"	10'-2"	9'-10"	9'-6"	9'-1"	8'-9"	8'-5"
25	0.018	5'-10"	5'-9"	4'-5"	5'-4"	5'-3"	4'-4"	4'-1"	3'-10"	3'-8"
	0.024	7'-6"	7'-4"	6'-7"	6'-11"	6'-10"	6'-6"	6'-3"	6'-0"	5'-9"
	0.032	9'-2"	9'-0"	8'-2"	8'-6"	8'-5"	8'-0"	7'-9"	7'-6"	7'-2"
	0.040	10'-9"	10'-7"	9'-6"	10'-0"	9'-10"	9'-5"	9'-1"	8'-9"	8'-5"
30	0.018	5'-4"	5'-4"	4'-3"	4'-6"	4'-4"	4'-2"	3'-11"	3'-9"	3'-6"
	0.024	6'-11"	6'-11"	6'-3"	6'-7"	6'-6"	6'-2"	5'-11"	5'-9"	5'-7"
	0.032	8'-6"	8'-6"	7'-9"	8'-2"	8'-0"	7'-8"	7'-4"	7'-2"	6'-11"
	0.040	10'-0"	10'-0"	9'-1"	9'-6"	9'-5"	9'-0"	8'-8"	8'-5"	8'-2"
40	0.018	4'-5"	4'-4"	3'-10"	4'-1"	4'-0"	3'-9"	3'-8"	3'-5"	3'-3"
	0.024	6'-3"	6'-2"	5'-9"	5'-11"	5'-10"	5'-8"	5'-6"	5'-4"	4'-7"
	0.032	7'-9"	7'-8"	7'-2"	7'-4"	7'-3"	7'-1"	6'-10"	6'-8"	6'-5"
	0.040	9'-1"	9'-0"	8'-5"	8'-8"	8'-6"	8'-4"	8'-1"	7'-9"	7'-7"
60	0.018	3'-9"	3'-8"	3'-4"	3'-6"	3'-5"	3'-3"	0'-0"	0'-0"	0'-0"
	0.024	5'-2"	5'-2"	4'-7"	4'-9"	4'-9"	4'-7"	0'-0"	0'-0"	0'-0"
	0.032	6'-5"	6'-5"	6'-3"	6'-5"	6'-4"	6'-2"	6'-1"	5'-11"	5'-9"
	0.040	7'-7"	7'-7"	7'-4"	7'-7"	7'-6"	7'-3"	7'-2"	7'-0"	6'-10"

TABLE 4.22

2"x6" Flat Panel (Single and Multispan) MU33

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130	140	150
10 LIVE	0.020	10'-9"	10'-6"	7'-11"	8'-7"	8'-3"	7'-0"	7'-4"	6'-10"	6'-5"
	0.024	12'-3"	11'-11"	10'-6"	11'-1"	10'-10"	8'-11"	8'-4"	7'-10"	7'-4"
	0.032	13'-6"	13'-3"	12'-1"	12'-7"	12'-5"	11'-11"	11'-0"	10'-11"	10'-5"
	0.040	14'-5"	14'-2"	12'-11"	13'-8"	13'-4"	12'-9"	12'-6"	12'-1"	11'-8"
20 LIVE	0.020	8'-3"	8'-0"	7'-2"	7'-7"	7'-4"	7'-1"	6'-9"	6'-5"	6'-2"
	0.024	9'-6"	9'-2"	8'-2"	8'-8"	8'-5"	8'-1"	7'-8"	7'-4"	7'-0"
	0.032	11'-11"	11'-8"	10'-9"	11'-3"	10'-11"	10'-7"	9'-1"	8'-7"	8'-3"
	0.040	12'-9"	12'-8"	11'-11"	12'-4"	12'-1"	11'-10"	11'-4"	10'-11"	10'-6"
25	0.020	8'-2"	8'-0"	7'-1"	7'-5"	7'-4"	7'-0"	6'-8"	6'-6"	6'-1"
	0.024	9'-4"	9'-2"	8'-1"	8'-6"	8'-5"	8'-0"	7'-7"	7'-4"	7'-0"
	0.032	11'-11"	11'-8"	10'-7"	11'-1"	10'-11"	10'-5"	8'-11"	8'-7"	8'-2"
	0.040	12'-9"	12'-8"	11'-10"	12'-2"	12'-1"	11'-8"	11'-4"	10'-11"	10'-6"
30	0.020	7'-9"	7'-7"	6'-10"	7'-2"	7'-0"	6'-9"	0'-0"	0'-3"	5'-11"
	0.024	8'-11"	8'-8"	7'-10"	8'-2"	8'-0"	7'-8"	7'-5"	7'-1"	6'-9"
	0.032	11'-1"	11'-1"	9'-2"	10'-7"	10'-5"	9'-1"	8'-8"	8'-4"	8'-0"
	0.040	12'-2"	12'-2"	11'-4"	11'-10"	11'-6"	11'-3"	10'-9"	10'-5"	8'-11"
40	0.020	7'-1"	7'-0"	6'-5"	6'-8"	6'-6"	6'-3"	6'-1"	5'-10"	5'-8"
	0.024	8'-1"	8'-0"	7'-4"	7'-7"	7'-6"	7'-2"	7'-0"	6'-8"	6'-5"
	0.032	9'-6"	9'-4"	8'-7"	8'-11"	8'-9"	8'-6"	8'-2"	7'-10"	7'-7"
	0.040	11'-4"	11'-3"	10'-6"	10'-9"	10'-8"	10'-5"	9'-2"	8'-10"	8'-6"
60	0.020	6'-3"	6'-2"	5'-8"	5'-11"	5'-10"	5'-8"	0'-0"	0'-0"	0'-0"
	0.024	7'-1"	7'-0"	6'-6"	6'-9"	6'-8"	6'-5"	0'-0"	0'-0"	0'-0"
	0.032	8'-4"	8'-3"	7'-6"	7'-11"	7'-10"	7'-7"	0'-0"	0'-0"	0'-0"
	0.040	9'-4"	9'-3"	8'-7"	8'-11"	8'-10"	8'-6"	0'-0"	0'-0"	0'-0"

TABLE 4.24

24" Pattiport (Multispan) MU23

Ground Snow Load (psf)	Panel Gauge (in)	Wind Speed and Exposure — Exposure B 110	115	140	Exposure C 110	115	120	130
10 LIVE	0.020	9'-0"	8'-9"	7'-7"	8'-1"	7'-11"	7'-6"	7'-2"
	0.025	10'-11"	10'-7"	9'-2"	9'-10"	9'-7"	9'-0"	8'-8"
	0.032	12'-5"	12'-2"	10'-9"	11'-6"	11'-3"	10'-7"	10'-2"
	0.040	13'-4"	13'-1"	11'-11"	12'-6"	12'-4"	11'-10"	11'-6"
	0.050	14'-4"	14'-1"	12'-10"	13'-5"	13'-2"	12'-8"	12'-4"
	Steel 0.018	10'-5"	10'-2"	8'-10"	9'-5"	9'-2"	8'-8"	8'-4"
	Steel 0.024	12'-5"	12'-1"	10'-7"	11'-3"	11'-0"	10'-4"	10'-0"
	Steel 0.030	14'-2"	13'-9"	12'-1"	12'-10"	12'-7"	11'-10"	11'-5"
20 LIVE	0.020	7'-5"	7'-4"	6'-6"	7'-1"	6'-10"	6'-7"	6'-4"
	0.025	9'-0"	8'-10"	8'-1"	8'-6"	8'-3"	8'-0"	7'-8"
	0.032	10'-7"	10'-4"	9'-6"	10'-0"	9'-8"	9'-4"	9'-0"
	0.040	11'-10"	11'-8"	10'-10"	11'-4"	11'-0"	10'-8"	10'-3"
	0.050	12'-8"	12'-6"	11'-10"	12'-3"	11'-11"	11'-9"	11'-4"
	Steel 0.018	8'-8"	8'-6"	7'-9"	8'-2"	7'-11"	7'-8"	7'-4"
	Steel 0.024	10'-4"	10'-2"	9'-4"	9'-10"	9'-6"	9'-2"	8'-10"
	Steel 0.030	11'-10"	11'-7"	10'-8"	11'-3"	10'-10"	10'-6"	10'-1"

Table 4.26

PROFESSIONAL ENGINEER No. 5850906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVERS 4.0: WESTERN PANEL SPANS FOR COMMERCIAL AND PATIO STRUCTURES

4"x12" Western Vee Panel (Single Span) MU36

Ground Snow Load (psf)	Panel Gauge (in)	Exposure B 115	Exposure B 130	Exposure B 140	Exposure C 115	Exposure C 130	Exposure C 140
10 LIVE	0.020	6'-9"	5'-11"	5'-6"	5'-8"	3'-6"	3'-3"
	0.024	10'-5"	7'-6"	6'-11"	7'-2"	6'-4"	5'-10"
	0.032	13'-6"	11'-11"	11'-0"	11'-4"	8'-2"	7'-7"
	0.040	17'-1"	15'-0"	13'-11"	14'-4"	12'-8"	11'-9"
	Steel 0.018	16'-9"	15'-6"	14'-2"	14'-10"	12'-0"	11'-7"
	Steel 0.024	19'-6"	18'-1"	17'-3"	17'-8"	16'-3"	15'-7"
20	0.020	6'-9"	5'-11"	5'-6"	5'-8"	3'-6"	3'-3"
	0.024	10'-5"	7'-6"	6'-11"	7'-2"	6'-4"	5'-10"
	0.032	13'-6"	11'-11"	11'-0"	11'-4"	8'-2"	7'-7"
	0.040	17'-1"	15'-0"	13'-11"	14'-4"	12'-8"	11'-9"
	Steel 0.018	12'-6"	11'-7"	10'-10"	11'-2"	7'-10"	7'-2"
	Steel 0.024	16'-3"	15'-8"	15'-2"	15'-5"	14'-6"	13'-10"
25	0.020	6'-9"	5'-11"	5'-6"	5'-8"	3'-6"	3'-3"
	0.024	10'-5"	7'-6"	6'-11"	7'-2"	6'-4"	5'-10"
	0.032	13'-6"	11'-11"	11'-0"	11'-4"	8'-2"	7'-7"
	0.040	17'-1"	15'-0"	13'-11"	14'-4"	12'-8"	11'-9"
	Steel 0.018	12'-6"	11'-2"	10'-5"	10'-10"	7'-8"	7'-0"
	Steel 0.024	16'-3"	15'-5"	14'-11"	15'-2"	14'-3"	13'-10"
30	0.020	6'-9"	5'-11"	5'-6"	5'-8"	3'-6"	3'-3"
	0.024	10'-5"	7'-6"	6'-11"	7'-2"	6'-4"	5'-10"
	0.032	13'-6"	11'-11"	11'-0"	11'-4"	8'-2"	7'-7"
	0.040	17'-0"	15'-0"	13'-11"	14'-4"	12'-8"	11'-9"
	Steel 0.018	10'-10"	8'-6"	7'-10"	8'-1"	7'-2"	6'-7"
	Steel 0.024	15'-2"	14'-8"	14'-3"	14'-6"	13'-5"	12'-5"
40	0.020	6'-7"	5'-11"	5'-6"	5'-8"	3'-6"	3'-3"
	0.024	10'-5"	7'-6"	6'-11"	7'-2"	6'-4"	5'-10"
	0.032	13'-1"	11'-11"	11'-0"	11'-4"	8'-2"	7'-7"
	0.040	15'-8"	15'-0"	13'-11"	14'-4"	12'-8"	11'-9"
	Steel 0.018	7'-10"	7'-4"	6'-10"	7'-0"	6'-2"	5'-10"
	Steel 0.024	13'-10"	12'-9"	12'-5"	12'-6"	11'-6"	10'-9"
60	0.020	4'-7"	4'-3"	0'-0"	4'-1"	0'-0"	0'-0"
	0.024	7'-10"	7'-3"	6'-11"	7'-0"	6'-4"	0'-0"
	0.032	10'-10"	10'-10"	10'-9"	10'-10"	8'-2"	0'-0"
	0.040	13'-0"	13'-0"	12'-11"	13'-0"	12'-7"	11'-9"
	Steel 0.018	6'-1"	5'-8"	5'-4"	5'-6"	0'-0"	0'-0"
	Steel 0.024	9'-4"	8'-8"	8'-3"	8'-5"	7'-9"	0'-0"

TABLE 4.27

4"x12" Western Vee Panel (Multispan) MU35

Ground Snow Load (psf)	Panel Gauge (in)	Exposure B 115	Exposure B 130	Exposure B 140	Exposure C 115	Exposure C 130	Exposure C 140
10 LIVE	0.020	5'-8"	4'-4"	4'-0"	4'-2"	3'-6"	3'-4"
	0.025	7'-6"	6'-10"	6'-5"	6'-7"	5'-11"	5'-8"
	0.032	10'-0"	9'-2"	8'-8"	8'-11"	8'-1"	7'-8"
	0.040	12'-10"	11'-10"	11'-2"	11'-6"	10'-6"	10'-0"
	Steel 0.018	13'-0"	11'-9"	11'-1"	11'-5"	10'-2"	9'-8"
	Steel 0.024	16'-8"	15'-2"	14'-4"	14'-9"	13'-4"	12'-9"
20	0.020	4'-0"	3'-8"	3'-5"	3'-6"	3'-2"	2'-11"
	0.025	5'-11"	5'-8"	5'-5"	5'-6"	4'-4"	4'-1"
	0.032	8'-1"	7'-8"	7'-4"	7'-6"	6'-11"	6'-7"
	0.040	10'-5"	10'-0"	9'-7"	9'-9"	9'-1"	8'-7"
	Steel 0.018	10'-2"	9'-8"	9'-2"	9'-5"	8'-7"	8'-0"
	Steel 0.024	13'-4"	12'-9"	12'-2"	12'-5"	11'-6"	10'-10"
25	0.020	3'-11"	3'-7"	3'-4"	3'-5"	3'-1"	2'-11"
	0.025	5'-11"	5'-6"	5'-3"	5'-5"	4'-3"	4'-0"
	0.032	8'-1"	7'-6"	7'-3"	7'-4"	6'-10"	6'-7"
	0.040	10'-5"	9'-9"	9'-5"	9'-7"	8'-11"	8'-7"
	Steel 0.018	10'-2"	9'-5"	8'-11"	9'-2"	8'-4"	8'-0"
	Steel 0.024	13'-4"	12'-5"	11'-11"	12'-2"	11'-3"	10'-10"
30	0.020	3'-8"	3'-4"	3'-2"	3'-3"	2'-11"	2'-9"
	0.025	5'-5"	5'-2"	4'-4"	4'-5"	4'-1"	3'-10"
	0.032	7'-4"	7'-1"	6'-10"	6'-11"	6'-5"	6'-2"
	0.040	9'-7"	9'-3"	8'-11"	9'-1"	8'-6"	8'-1"
	Steel 0.018	9'-2"	8'-9"	8'-4"	8'-7"	7'-10"	7'-4"
	Steel 0.024	12'-2"	11'-8"	11'-3"	11'-6"	10'-8"	10'-2"
40	0.020	3'-2"	3'-0"	2'-10"	2'-11"	2'-8"	2'-2"
	0.025	4'-4"	4'-2"	3'-11"	4'-0"	3'-8"	3'-6"
	0.032	6'-7"	6'-3"	6'-2"	6'-2"	5'-10"	5'-7"
	0.040	8'-7"	8'-2"	8'-1"	8'-1"	7'-9"	7'-5"
	Steel 0.018	8'-0"	7'-6"	7'-4"	7'-4"	6'-11"	6'-7"
	Steel 0.024	10'-10"	10'-4"	10'-2"	10'-2"	9'-8"	9'-3"
60	0.020	2'-7"	2'-3"	0'-0"	2'-2"	0'-0"	0'-0"
	0.025	3'-7"	3'-5"	3'-4"	3'-4"	3'-2"	0'-0"
	0.032	5'-2"	5'-2"	4'-8"	5'-2"	4'-6"	0'-0"
	0.040	6'-10"	6'-10"	6'-9"	6'-10"	6'-7"	6'-5"
	Steel 0.018	5'-11"	5'-11"	5'-10"	5'-11"	5'-7"	5'-5"
	Steel 0.024	8'-6"	8'-6"	8'-5"	8'-6"	8'-1"	7'-11"

TABLE 4.28

3"x24" Western Panel (Single Span) MU39

Ground Snow Load (psf)	Panel Gauge (in)	Exposure B 115	Exposure B 130	Exposure B 140	Exposure C 115	Exposure C 130	Exposure C 140
10 LIVE	0.020	7'-4"	6'-5"	6'-0"	6'-2"	5'-5"	3'-7"
	0.025	10'-5"	8'-2"	7'-6"	7'-9"	6'-10"	6'-4"
	0.032	13'-4"	12'-4"	11'-9"	12'-0"	10'-10"	8'-2"
	0.040	15'-7"	14'-10"	14'-4"	14'-7"	13'-3"	12'-4"
	Steel 0.018	13'-3"	12'-3"	11'-8"	12'-0"	11'-0"	10'-7"
20	0.020	6'-5"	6'-0"	5'-9"	5'-10"	5'-5"	3'-7"
	0.025	8'-0"	7'-6"	7'-2"	7'-4"	6'-10"	6'-4"
	0.032	11'-0"	10'-8"	9'-3"	10'-5"	8'-9"	8'-2"
	0.040	13'-5"	13'-0"	12'-6"	12'-9"	11'-11"	11'-5"
	Steel 0.018	11'-0"	10'-7"	9'-3"	10'-5"	8'-9"	8'-4"
25	0.020	6'-3"	5'-11"	5'-8"	5'-9"	5'-5"	3'-7"
	0.025	7'-11"	7'-5"	7'-1"	7'-2"	6'-9"	6'-4"
	0.032	11'-0"	10'-5"	9'-1"	9'-3"	8'-8"	8'-2"
	0.040	13'-5"	12'-9"	12'-4"	12'-6"	11'-9"	11'-5"
	Steel 0.018	11'-0"	10'-5"	9'-1"	9'-3"	8'-8"	8'-3"
30	0.020	6'-0"	5'-8"	5'-5"	5'-6"	5'-2"	3'-7"
	0.025	7'-8"	7'-1"	6'-10"	6'-11"	6'-6"	6'-3"
	0.032	9'-8"	9'-1"	8'-9"	8'-10"	8'-4"	8'-0"
	0.040	12'-6"	12'-1"	11'-9"	11'-11"	11'-3"	10'-10"
	Steel 0.018	9'-7"	9'-1"	8'-9"	8'-10"	8'-4"	8'-0"
40	0.020	5'-5"	5'-3"	4'-9"	4'-9"	4'-6"	3'-7"
	0.025	6'-10"	6'-7"	6'-5"	6'-5"	6'-1"	5'-11"
	0.032	8'-9"	8'-5"	8'-2"	8'-3"	7'-9"	7'-7"
	0.040	11'-5"	11'-0"	10'-10"	10'-10"	10'-6"	9'-3"
	Steel 0.018	8'-9"	8'-5"	8'-2"	8'-3"	7'-9"	7'-7"
60	0.020	4'-7"	4'-4"	0'-0"	4'-4"	0'-0"	0'-0"
	0.025	6'-0"	5'-9"	5'-8"	5'-8"	5'-5"	0'-0"
	0.032	7'-8"	7'-5"	7'-3"	7'-3"	7'-0"	0'-0"
	0.040	9'-5"	9'-1"	8'-10"	8'-11"	8'-7"	0'-0"
	Steel 0.018	7'-8"	7'-5"	7'-3"	7'-4"	7'-0"	0'-0"

TABLE 4.29

3"x24" Western Panel (Multispan) MU39

Ground Snow Load (psf)	Panel Gauge (in)	Exposure B 115	Exposure B 130	Exposure B 140	Exposure C 115	Exposure C 130	Exposure C 140
10 LIVE	0.020	7'-3"	6'-7"	6'-4"	6'-5"	5'-11"	5'-8"
	0.025	9'-2"	8'-5"	8'-0"	8'-2"	7'-6"	7'-2"
	0.032	11'-9"	10'-10"	10'-4"	10'-7"	9'-8"	9'-4"
	0.040	14'-5"	13'-4"	12'-8"	13'-0"	11'-11"	11'-6"
	Steel 0.018	12'-1"	11'-1"	10'-7"	10'-10"	9'-10"	9'-5"
20	0.020	5'-11"	5'-8"	5'-5"	5'-6"	5'-2"	4'-4"
	0.025	7'-6"	7'-2"	6'-11"	7'-1"	6'-7"	6'-3"
	0.032	9'-8"	9'-4"	9'-0"	9'-2"	8'-6"	8'-2"
	0.040	11'-11"	11'-6"	11'-1"	11'-3"	10'-6"	10'-1"
	Steel 0.018	9'-10"	9'-5"	9'-1"	9'-3"	8'-7"	8'-2"
25	0.020	5'-11"	5'-6"	5'-4"	5'-5"	4'-6"	4'-3"
	0.025	7'-6"	7'-1"	6'-10"	6'-11"	6'-6"	6'-3"
	0.032	9'-8"	9'-2"	8'-10"	9'-0"	8'-5"	8'-2"
	0.040	11'-11"	11'-3"	10'-10"	11'-1"	10'-4"	10'-1"
	Steel 0.018	9'-10"	9'-3"	8'-11"	9'-1"	8'-5"	8'-2"
30	0.020	5'-5"	5'-3"	4'-7"	5'-2"	4'-4"	4'-1"
	0.025	6'-11"	6'-8"	6'-6"	6'-7"	6'-2"	5'-11"
	0.032	9'-0"	8'-8"	8'-5"	8'-6"	8'-0"	7'-9"
	0.040	11'-1"	10'-8"	10'-4"	10'-6"	9'-11"	9'-6"
	Steel 0.018	9'-1"	8'-9"	8'-5"	8'-7"	8'-0"	7'-8"
40	0.020	4'-7"	4'-4"	4'-2"	4'-3"	3'-11"	3'-10"
	0.025	6'-3"	6'-0"	5'-11"	5'-11"	5'-8"	5'-6"
	0.032	8'-2"	7'-10"	7'-9"	7'-9"	7'-5"	7'-2"
	0.040	10'-1"	9'-8"	9'-6"	9'-6"	9'-2"	8'-10"
	Steel 0.018	8'-2"	7'-9"	7'-8"	7'-8"	7'-4"	7'-0"
60	0.020	3'-11"	3'-9"	3'-7"	3'-8"	3'-6"	0'-0"
	0.025	5'-2"	5'-2"	4'-9"	4'-9"	4'-7"	0'-0"
	0.032	6'-8"	6'-8"	6'-8"	6'-8"	6'-5"	6'-4"
	0.040	8'-3"	8'-3"	8'-2"	8'-3"	8'-0"	7'-10"
	Steel 0.018	6'-6"	6'-6"	6'-5"	6'-5"	6'-2"	6'-0"

TABLE 4.30

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FEB 24 2014

MAR 05 2014

SOLID COVERS 4.0: PANEL SCREW SPACINGS

MAXIMUM ALLOWABLE TRIB WIDTH FOR PANEL/HEADER/SCREW COMBINATIONS

Headers	Panel thickness (in)	Number of #10 Sheet Metal Screws Required per foot at Header/Panel Connection											
		2	3	4	2	3	4	2	3	4	3	4	5
		115 mph Exp B			115 mph Exp C			130 mph Exp C			140 mph Exp C		
All Beams	0.018	MAX	MAX	MAX	4'	MAX	MAX	3'	MAX	MAX	MAX	MAX	MAX
All Fascia	0.018	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
All Beams	0.02	6'	10'	MAX	5'	7'	9'	4'	5'	7'	5'	6'	8'
All Fascia	0.02	6'	MAX	MAX	5'	MAX	MAX	4'	5'	MAX	5'	6'	MAX
All Beams	0.024	8'	MAX	MAX	5'	8'	MAX	4'	6'	9'	6'	7'	MAX
All Fascia	0.024	MAX	MAX	MAX	5'	MAX	MAX	4'	MAX	MAX	MAX	MAX	MAX
All Beams	0.027	9'	MAX	MAX	6'	MAX	MAX	5'	7'	MAX	6'	MAX	MAX
All Fascia	0.027	MAX	MAX	MAX	MAX	MAX	MAX	5'	MAX	MAX	MAX	MAX	MAX
All Beams	0.032	10'	MAX	MAX	7'	11'	MAX	6'	9'	MAX	7'	10'	MAX
State Fascia	0.032	MAX	MAX	MAX	7'	MAX	MAX	5'	MAX	MAX	MAX	MAX	MAX
0.040" Fascia	0.032	MAX	MAX	MAX	7'	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
Steel 24 Ga Fascia	0.032	MAX	MAX	MAX	7'	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
All other Fascia	0.032	MAX	MAX	MAX	7'	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
Alum 3x8	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
All Other Beams	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
State Fascia	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
0.040" Fascia	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
Steel 24 Ga Fascia	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
All Other Fascia	0.036	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
Alum 3x8	0.04	11'	MAX	MAX	8'	12'	MAX	6'	9'	MAX	8'	11'	MAX
All Other Beams	0.04	13'	MAX	MAX	9'	MAX	MAX	7'	11'	MAX	9'	MAX	MAX
State Fascia	0.04	MAX	MAX	MAX	7'	MAX	MAX	5'	8'	MAX	7'	MAX	MAX
0.040" Fascia	0.04	MAX	MAX	MAX	8'	MAX	MAX	6'	MAX	MAX	8'	MAX	MAX
Steel 24 Ga Fascia	0.04	MAX	MAX	MAX	MAX	MAX	MAX	7'	MAX	MAX	MAX	MAX	MAX
All Other Fascia	0.04	MAX	MAX	MAX	8'	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
Alum 3x8	0.05	MAX	MAX	MAX	8'	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
All Other Beams	0.05	MAX	MAX	MAX	MAX	MAX	MAX	9'	MAX	MAX	MAX	MAX	MAX
State Fascia	0.05	MAX	MAX	MAX	MAX	MAX	MAX	5'	MAX	MAX	MAX	MAX	MAX
0.040" Fascia	0.05	MAX	MAX	MAX	MAX	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX
Steel 24 Ga Fascia	0.05	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX
All Other Fascia	0.05	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX

Table 4.19

All panel thicknesses are for aluminum
All Steel Panels use 0.050" thickness
"MAX" means maximum possible tributary width
Double 2"x6 5" require the specified number of screws per header
Other double headers only require the given number
If panel thickness is not listed then use next smallest gauge
This table specifies screws per foot of panel, 6" panels would use half the number per panel,
24" panels would use double per panel

MAXIMUM ALLOWABLE TRIB WIDTH FOR PANEL/HEADER/SCREW COMBINATIONS

Headers	Number of #14 Sheet Metal Screws Required per foot at Header/Panel Connection									Panel thickness (in)
	1	2	1	2	2	3	1	2	3	
	115 mph Exp B		115 mph Exp C		130 mph Exp C		140 mph Exp C			
All Beams	MAX	MAX	4'	MAX	MAX	MAX	MAX	MAX	MAX	0.018
All Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.018
All Beams	7'	MAX	5'	MAX	7'	MAX	3'	6'	MAX	0.020
All Fascia	7'	MAX	5'	MAX	MAX	MAX	3'	MAX	MAX	0.020
All Beams	8'	MAX	6'	MAX	9'	MAX	4'	8'	MAX	0.024
All Fascia	7'	MAX	5'	MAX	MAX	MAX	3'	MAX	MAX	0.024
All Beams	8'	MAX	6'	MAX	MAX	MAX	4'	MAX	MAX	0.027
All Fascia	MAX	MAX	5'	MAX	MAX	MAX	3'	MAX	MAX	0.027
All Beams	8'	MAX	6'	MAX	9'	MAX	4'	8'	MAX	0.032
State Fascia	7'	MAX	5'	MAX	MAX	MAX	3'	MAX	MAX	0.032
0.040" Fascia	8'	MAX	6'	MAX	MAX	MAX	4'	MAX	MAX	0.032
Steel 24 Ga Fascia	MAX	MAX	7'	MAX	MAX	MAX	5'	MAX	MAX	0.032
All other Fascia	MAX	MAX	6'	MAX	MAX	MAX	4'	MAX	MAX	0.032
Alum 3x8	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
All Other Beams	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
State Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
0.040" Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
Steel 24 Ga Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
All Other Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.036
Alum 3x8	8'	MAX	6'	12'	9'	MAX	4'	8'	MAX	0.040
All Other Beams	13'	MAX	9'	MAX	MAX	MAX	6'	MAX	MAX	0.040
State Fascia	7'	MAX	5'	MAX	MAX	MAX	3'	7'	MAX	0.040
0.040" Fascia	8'	MAX	6'	MAX	MAX	MAX	4'	8'	MAX	0.040
Steel 24 Ga Fascia	MAX	MAX	MAX	MAX	MAX	MAX	6'	MAX	MAX	0.040
All Other Fascia	9'	MAX	6'	MAX	MAX	MAX	4'	MAX	MAX	0.040
Alum 3x8	8'	MAX	6'	MAX	MAX	MAX	MAX	MAX	MAX	0.050
All Other Beams	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.050
State Fascia	MAX	MAX	5'	MAX	MAX	MAX	MAX	MAX	MAX	0.050
0.040" Fascia	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX	MAX	0.050
Steel 24 Ga Fascia	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	MAX	0.050
All Other Fascia	MAX	MAX	6'	MAX	MAX	MAX	MAX	MAX	MAX	0.050

Table 4.20

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MAR 05 2014

SOLID COVER 3.8 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 3.1

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	0.042"x3x8" Detail MU76 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.042"x3"x8" Detail MU113 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.042"x3"x8.5" MU113 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	17'-6"	B	18	24	25	27	18'-11"	C	22	26	27	29	18'-6"	B	21	24	26	27
	3.5	19'-9"	18'-6"	B	20	23	25	26	15'-6"	C	27	25	27	28	17'-11"	B	22	24	25	27
	4	17'-6"	17'-11"	B	20	23	24	26	14'-7"	C	23	25	27	30	17'-11"	C	22	23	26	28
	4.5	15'-11"	9'-3"	B	19	23	24	25	13'-6"	C	23	25	26	27	17'-2"	C	22	23	25	28
	5	13'-7"	8'-6"	B	21	22	24	25	12'-11"	C	24	24	26	27	17'-6"	C	23	23	24	26
	5.5	12'-6"	8'-2"	B	21	22	23	25	12'-3"	D	24	24	26	27	16'-11"	C	23	23	24	25
	6	11'-6"	7'-8"	B	21	22	23	24	11'-6"	D	24	24	25	27	16'-6"	C	23	23	24	26
	6.5	10'-9"	7'-4"	B	21	22	23	24	11'-2"	D	25	25	25	26	16'-0"	C	24	24	24	25
	7	9'-8"	7'-0"	B	22	21	23	24	10'-8"	E	25	25	25	26	15'-7"	D	24	24	24	25
	7.5	9'-1"	6'-8"	C	22	22	22	24	10'-3"	E	25	25	25	26	15'-3"	D	24	24	24	24
	8	8'-6"	6'-4"	C	22	22	22	23	9'-11"	E	25	25	26	26	14'-11"	D	24	24	24	24
	8.5	8'-0"	6'-1"	C	22	22	22	23	9'-6"	E	26	26	26	26	14'-7"	E	25	25	25	25
	9	7'-6"	5'-10"	C	22	22	22	23	9'-2"	E	26	26	26	26	14'-4"	E	25	25	25	25
	9.5	7'-2"	5'-6"	C	22	22	22	23	8'-11"	E	26	26	26	26	14'-1"	E	25	25	25	25
	10	6'-8"	5'-3"	C	22	22	22	23	8'-8"	F	26	26	26	26	13'-10"	E	25	25	25	25
	11	6'-3"	5'-1"	C	23	23	23	23	8'-5"	F	26	26	26	26	13'-6"	E	26	26	26	26
	12	5'-8"	4'-9"	C	23	23	23	23	7'-8"	F	27	27	27	27	13'-1"	E	26	26	26	26
	13	5'-3"	4'-6"	C	23	23	23	23	7'-4"	F	27	27	27	27	12'-8"	F	26	26	26	26
116 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	18'-6"	B	21	25	27	28	15'-4"	C	24	26	29	31	17'-6"	B	23	26	27	29
	3.5	19'-9"	9'-7"	B	21	25	26	28	14'-7"	C	24	26	28	30	17'-7"	C	23	25	27	29
	4	17'-6"	9'-10"	B	22	24	26	27	13'-7"	C	25	27	28	30	17'-0"	C	24	25	27	28
	4.5	15'-11"	9'-3"	B	22	24	26	27	12'-4"	D	25	26	29	29	16'-6"	C	24	25	26	28
	5	13'-7"	7'-8"	B	22	24	25	27	11'-8"	D	26	26	28	29	16'-11"	C	25	25	26	27
	5.5	12'-4"	7'-3"	B	23	23	25	26	11'-0"	E	26	26	27	29	16'-6"	C	25	25	26	27
	6	11'-4"	6'-10"	B	23	23	25	26	10'-6"	E	26	26	27	29	16'-1"	D	25	25	26	27
	6.5	10'-3"	6'-6"	C	23	23	24	26	10'-0"	E	27	27	27	28	15'-8"	D	26	26	26	26
	7	9'-8"	6'-3"	C	23	23	24	25	9'-7"	E	27	27	27	28	15'-4"	E	26	26	26	26
	7.5	9'-1"	6'-10"	C	23	23	24	25	9'-2"	E	27	27	27	28	15'-0"	E	27	27	27	27
	8	8'-6"	5'-7"	C	24	24	24	25	8'-10"	E	27	27	27	28	14'-7"	E	27	27	27	27
	8.5	8'-0"	5'-4"	C	24	24	24	25	8'-6"	F	28	28	28	28	14'-4"	E	27	27	27	27
	9	7'-6"	5'-2"	C	24	24	24	24	8'-3"	F	28	28	28	28	14'-1"	E	27	27	27	27
	9.5	7'-2"	4'-11"	C	24	24	24	24	7'-11"	F	28	28	28	28	13'-10"	E	27	27	27	27
	10	6'-8"	4'-8"	C	24	24	24	24	7'-7"	F	28	28	28	28	13'-6"	F	28	28	28	28
	11	6'-3"	4'-6"	C	24	24	24	24	6'-10"	F	29	29	29	29	13'-1"	F	28	28	28	28
	12	5'-8"	4'-1"	C	24	24	24	24	6'-6"	F	29	29	29	29	12'-8"	F	28	28	28	28
	13	5'-3"	3'-10"	C	25	25	25	25												
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	17'-4"	B	18	24	26	27	18'-6"	C	22	26	28	29	14'-7"	B	21	23	26	27
	3.5	19'-9"	18'-4"	B	20	24	25	26	15'-3"	C	23	26	27	29	13'-6"	B	22	24	26	27
	4	17'-6"	9'-7"	B	21	23	25	26	14'-2"	C	23	25	27	28	12'-7"	C	22	24	26	27
	4.5	15'-11"	8'-11"	B	21	23	24	26	13'-3"	C	24	25	27	28	11'-10"	C	23	23	25	26
	5	13'-7"	8'-4"	B	21	23	24	25	12'-6"	C	24	25	26	28	11'-2"	C	23	23	25	26
	5.5	12'-4"	7'-10"	B	21	22	24	25	11'-10"	D	25	25	26	27	10'-7"	C	24	24	24	26
	6	11'-4"	7'-5"	B	22	22	23	25	11'-4"	D	25	25	26	27	10'-1"	C	24	24	24	25
	6.5	10'-3"	7'-1"	B	22	22	23	25	10'-8"	E	25	25	25	27	9'-8"	C	24	24	24	25
	7	9'-8"	6'-8"	B	22	22	23	24	10'-4"	E	25	25	25	26	9'-4"	D	25	25	25	25
	7.5	9'-1"	6'-6"	C	22	22	23	24	9'-11"	E	25	26	26	26	9'-1"	D	25	25	25	25
	8	8'-6"	6'-1"	C	22	22	23	24	9'-7"	E	26	26	26	26	8'-10"	E	25	25	25	25
	8.5	8'-0"	5'-10"	C	22	22	22	24	9'-2"	E	26	26	26	26	8'-7"	E	26	26	26	26
	9	7'-6"	5'-8"	C	22	22	22	23	8'-11"	E	26	26	26	26	8'-4"	E	26	26	26	26
	9.5	7'-2"	5'-5"	C	22	22	22	23	8'-8"	F	27	27	27	27	8'-1"	E	26	26	26	26
	10	6'-8"	5'-3"	C	22	22	22	23	8'-3"	F	27	27	27	27	7'-10"	E	26	26	26	26
	11	6'-3"	4'-10"	C	23	23	23	23	7'-10"	F	27	27	27	27	7'-7"	E	26	26	26	26
	12	5'-8"	4'-7"	C	23	23	23	23	7'-6"	F	27	27	27	27	7'-4"	F	27	27	27	27
	13	5'-3"	4'-3"	C	23	23	23	23	7'-1"	F	27	27	27	27	7'-1"	F	27	27	27	27

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	0.042"x3"x8" Detail MU76 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.042"x3"x8" Detail MU113 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.040"x2"x8.5" MU113 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
20	3	11'-10"	9'-2"	B	18	23	25	26	13'-8"	C	21	25	27	29	12'-2"	C	20	24	25	26
	3.5	10'-2"	8'-5"	B	19	22	24	25	12'-1"	C	22	25	28	30	11'-3"	C	21	23	25	28
	4	8'-11"	7'-8"	B	19	22	24	25	11'-6"	D	22	24	26	27	10'-5"	C	21	23	24	26
	4.5	7'-11"	7'-2"	B	19	22	23	25	10'-11"	E	22	24	25	27	9'-8"	C	22	23	24	25
	5	7'-1"	6'-8"	C	20	22	23	24	10'-3"	E	23	24	26	26	9'-3"	D	22	22	24	25
	5.5	6'-5"	6'-3"	C	20	21	23	24	9'-8"	E	23	23	25	26	8'-8"	D	22	23	23	25
	6	5'-11"	5'-10"	C	20	21	22	24	9'-2"	E	23	23	25	26	8'-4"	E	22	23	23	24
	6.5	5'-5"	5'-7"	C	20	21	22	23	8'-8"	E	23	23	24	26	8'-0"	E	23	23	23	24
	7	5'-1"	5'-3"	C	20	21	22	23	8'-4"	F	24	24	24	25	7'-8"	E	23	23	23	24
	7.5	4'-8"	5'-0"	C	20	20	22	23	8'-0"	F	24	24	24	25	7'-4"	E	23	23	23	24
	8	4'-4"	4'-8"	C	21	21	22	23	7'-8"	F	24	24	24	25	7'-1"	E	23	23	23	24
	8.5	4'-2"	4'-6"	C	21	21	21	23	7'-5"	F	24	24	24	25	6'-10"	F	24	24	24	24
	9	3'-11"	4'-4"	C	21	21	21	23	7'-2"	F	24	24	24	25	6'-7"	F	24	24	24	24
	9.5	3'-8"	4'-2"	C	21	21	21	22	6'-11"	F	25	25	25	25	6'-4"	F	24	24	24	24
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-8"	B	20	25	26	28	13'-8"	C	23	27	29	30	11'-6"	C	22	25	27	28
	3.5	10'-2"	7'-8"	B	21	24	26	27	11'-6"	D	24	27	28	30	10'-8"	C	23	25	27	28
	4	8'-11"	7'-1"	B	21	24	25	27	10'-10"	E	24	26	28	29	9'-9"	D	23	25	26	28
	4.5	7'-11"	6'-7"	C	21	23	25	26	10'-1"	E	24	26	27	29	9'-1"	D	24	24	26	27
	5	7'-1"	6'-1"	C	21	23	25	26	9'-4"	E	25	25	27	28	8'-7"	E	24	24	26	27
	5.5	6'-5"	5'-8"	C	22	23	24	26	8'-8"	E	25	25	27	28	8'-2"	E	24	24	25	27
	6	5'-11"	5'-4"	C	22	22	24	25	8'-0"	F	25	25	26	28	7'-8"	E	25	25	25	26
	6.5	5'-5"	5'-1"	C	22	22	24	25	7'-5"	F	26	26	26	27	7'-1"	E	25	25	25	26
	7	5'-1"	4'-8"	C	22	22	23	25	7'-0"	F	26	26	26	27	6'-6"	F	26	26	26	26
	7.5	4'-8"	4'-6"	C	22	22	23	25	6'-7"	F	27	27	27	27	6'-2"	F	26	26	26	26
	8	4'-4"	4'-4"	C	22	22	23	24	6'-3"	F	27	27	27	27	5'-11"	F	26	26	26	26
	8.5	4'-2"	4'-1"	C	22	22	23	24	5'-8"	F	27	27	27	27	5'-8"	F	26	26	26	26
	9	3'-11"	3'-11"	C	23	23	23	24												
115 MPH EXPOSURE B																				
25	3	11'-4"	8'-1"	B	18	23	24	25	12'-4"	C	21	25	27	29	12'-1"	C	20	24	25	26
	3.5	9'-8"	8'-3"	B	19	23	24	25	11'-1"	C	21	23	26	28	11'-1"	C	21	23	25	26
	4	8'-6"	7'-7"	B	19	22	24	25	10'-6"	D	21	23	25	27	10'-4"	C	21	23	24	26
	4.5	7'-8"	7'-1"	B	19	22	23	25	10'-0"	E	22	24	25	27	9'-8"	D	21	23	24	26
	5	6'-9"	6'-7"	C	20	22	23	24	9'-3"	E	23	24	25	26	9'-3"	D	22	22	24	25
	5.5	6'-2"	6'-3"	C	20	21	23	24	8'-8"	E	23	23	25	26	8'-8"	E	22	23	23	25
	6	5'-8"	5'-8"	C	20	21	22	24	8'-1"	E	23	23	25	26	8'-3"	E	22	22	23	24
	6.5	5'-2"	5'-5"	C	20	21	22	23	7'-6"	F	24	24	24	26	7'-10"	E	23	23	23	24
	7	4'-10"	5'-2"	C	20	21	22	23	7'-1"	F	24	24	24	25	7'-8"	E	23	23	23	24
	7.5	4'-6"	5'-11"	C	20	20	22	23	6'-7"	F	24	24	24	25	7'-3"	E	23	23	23	24
	8	4'-2"	4'-8"	C	20	20	21	23	6'-2"	F	24	24	24	25	7'-0"	F	23	23	23	23
	8.5	4'-0"	4'-6"	C	21	21	21	23	5'-8"	F	24	24	24	25	6'-8"	F	24	24	24	24
	9	3'-8"	4'-3"	C	21	21	21	23												
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	8'-4"	B	20	23	26	28	12'-8"	C	23	27	29	30	11'-8"	C	22	25	27	28
	3.5	9'-8"	7'-7"	B	20	24	25	27	11'-8"	D	23	25	28	30	10'-8"	C	23	25	27	28
	4	8'-6"	6'-11"	B	21	24	25	27	10'-8"	E	24	26	28	29	9'-11"	D	23	25	26	28
	4.5	7'-8"	6'-5"	C	21	23	25	26	9'-11"	E	24	26	27	29	9'-4"	D	24	24	26	27
	5	6'-9"	5'-11"	C	21	23	25	26	9'-4"	E	25	25	27	28	8'-10"	E	24	24	26	27
	5.5	6'-2"	5'-7"	C	21	23	24	26	8'-10"	E	25	25	27	28	8'-5"	E	24	24	25	27
	6	5'-8"	5'-3"	C	22	22	24	25	8'-4"	F	25	25	26	28	7'-11"	F	25	25	26	27
	6.5	5'-2"	4'-11"	C	22	22	24	25	7'-11"	F	25	25	26	28	7'-7"	F	26	26	26	27
	7	4'-10"	4'-8"	C	22	22	23	25	7'-7"	F	26	26	26	27	7'-3"	F	26	26	26	27
	7.5	4'-6"	4'-5"	C	22	22	23	24	6'-11"	F	26	26	26	27	6'-11"	F	26	26	26	27
	8	4'-3"	4'-3"	C	22	22	23	24	6'-6"	F	26	26	26	26	6'-7"	F	26	26	26	26
	8.5	4'-0"	4'-0"	C	22	22	23	24												
	9	3'-9"	3'-10"	C	22	22	23	24												

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FEB 24 2014

PROFESSIONAL ENGINEER No. 58591906-2201 CARL PUTNAM STATE OF CALIFORNIA

MAR 06 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.1

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	0.042"x3"x8" Detail MU76 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.042"x3"x8" Detail MU113 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Double 0.040"x2"x6.5" MU113 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	10'-2"	B	21	26	27	28	15'-0"	C	24	28	30	31	13'-4"	C	23	28	28	29
	3.5	19'-5"	9'-4"	B	22	25	27	28	13'-10"	C	25	28	29	31	12'-3"	C	24	26	27	29
	4	17'-0"	8'-7"	B	22	25	26	28	12'-10"	C	25	27	29	30	11'-5"	C	24	25	27	28
	4.5	15'-1"	8'-0"	B	23	24	26	27	12'-0"	D	26	27	28	30	10'-9"	C	25	25	27	28
	5	13'-7"	7'-5"	B	23	24	26	27	11'-4"	D	26	28	28	29	10'-2"	C	25	25	26	28
	5.5	12'-4"	7'-0"	B	23	24	25	27	10'-9"	E	27	27	28	29	9'-8"	D	26	26	26	27
	6	11'-4"	6'-7"	C	23	23	25	26	10'-2"	E	27	27	27	29	9'-2"	D	26	26	26	27
	6.5	10'-5"	6'-3"	C	24	24	25	26	9'-8"	E	27	27	27	29	8'-9"	D	26	26	26	27
	7	9'-8"	5'-11"	C	24	24	24	26	9'-4"	E	28	28	28	28	8'-5"	E	27	27	27	27
	7.5	9'-1"	5'-8"	C	24	24	24	26	8'-11"	E	28	28	28	28	8'-1"	E	27	27	27	27
	8	8'-6"	5'-5"	C	24	24	24	25	8'-7"	F	28	28	28	28	7'-10"	E	27	27	27	27
	8.5	8'-0"	5'-2"	C	24	24	24	26	8'-3"	F	28	28	28	28	7'-6"	E	27	27	27	27
	9	7'-8"	4'-11"	C	24	24	24	26	8'-0"	F	28	28	28	28	7'-3"	E	28	28	28	28
	9.5	7'-2"	4'-8"	C	24	24	24	25	7'-8"	F	29	29	29	29	7'-1"	E	28	28	28	28
	10	6'-8"	4'-7"	C	25	25	25	25	7'-5"	F	29	29	29	29	6'-10"	F	28	28	28	30
	11	6'-2"	4'-3"	C	25	26	25	25	7'-0"	F	29	29	29	29	6'-5"	F	28	28	28	28
110 MPH EXPOSURE B																				
30	3	11'-10"	9'-5"	B	18	22	24	25	14'-0"	C	21	25	26	28	12'-5"	C	18	23	25	26
	3.5	10'-2"	8'-7"	B	18	22	24	25	12'-10"	C	21	24	26	27	11'-6"	C	20	23	24	26
	4	8'-11"	7'-11"	B	18	22	23	25	11'-11"	D	21	24	26	27	10'-8"	C	21	22	24	26
	4.5	7'-11"	7'-4"	B	18	22	23	24	11'-2"	D	22	24	25	26	10'-0"	C	21	22	24	25
	5	7'-1"	6'-10"	C	19	21	23	24	10'-6"	E	22	23	25	26	9'-6"	D	21	22	23	25
	5.5	6'-5"	6'-5"	C	19	21	22	24	9'-11"	E	22	23	24	26	8'-11"	D	22	22	23	24
	6	5'-11"	6'-0"	C	20	21	22	23	9'-5"	E	23	23	24	25	8'-6"	E	22	22	23	24
	6.5	5'-5"	5'-8"	C	20	20	22	23	9'-0"	E	23	23	24	25	8'-2"	E	22	22	23	24
	7	5'-1"	5'-5"	C	20	20	22	23	8'-7"	F	23	23	24	25	7'-10"	E	22	22	22	24
	7.5	4'-8"	5'-3"	C	20	20	21	23	8'-3"	F	23	23	23	25	7'-6"	E	23	23	23	23
	8	4'-5"	4'-11"	C	20	20	21	22	7'-11"	F	24	24	24	25	7'-3"	E	23	23	23	23
	8.5	4'-2"	4'-8"	C	20	20	21	22	7'-7"	F	24	24	24	24	7'-0"	F	23	23	23	23
	9	3'-11"	4'-6"	C	20	20	21	22	7'-4"	F	24	24	24	24	6'-8"	F	23	23	23	23
	9.5	3'-8"	4'-4"	C	20	20	21	22	7'-1"	F	24	24	24	24	6'-6"	F	23	23	23	23
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-8"	B	20	24	26	27	13'-0"	C	23	27	28	30	11'-7"	C	22	25	28	28
	3.5	10'-2"	7'-11"	B	20	24	25	27	11'-11"	D	23	26	28	29	10'-6"	C	22	24	26	27
	4	8'-11"	7'-3"	B	20	23	25	26	11'-1"	E	23	26	27	28	9'-11"	C	23	24	26	27
	4.5	7'-11"	6'-8"	C	21	23	25	26	10'-4"	E	24	25	27	28	9'-4"	D	23	24	25	27
	5	7'-1"	6'-3"	C	21	23	24	26	9'-9"	E	24	25	26	28	8'-9"	D	23	23	25	26
	5.5	6'-5"	5'-10"	C	21	22	24	25	9'-2"	E	25	25	26	28	8'-4"	E	24	24	25	26
	6	5'-11"	5'-6"	C	21	22	24	25	8'-8"	F	25	25	26	27	7'-11"	E	24	24	24	26
	6.5	5'-5"	5'-2"	C	21	22	23	25	8'-3"	F	25	25	25	27	7'-6"	E	24	24	24	26
	7	5'-1"	4'-11"	C	22	22	23	24	7'-11"	F	25	25	25	27	7'-3"	E	25	25	25	25
	7.5	4'-8"	4'-8"	C	22	22	23	24	7'-7"	F	26	26	26	26	6'-11"	F	25	25	25	25
	8	4'-5"	4'-6"	C	22	22	23	24	7'-3"	F	26	26	26	26	6'-8"	F	25	25	25	25
	8.5	4'-2"	4'-3"	C	22	22	22	24	7'-0"	F	26	26	26	26	6'-5"	F	25	25	25	25
	9	3'-11"	4'-0"	C	22	22	22	24	6'-8"	F	26	26	26	26	6'-3"	F	25	25	25	25
	9.5	3'-8"	3'-10"	C	22	22	22	23	6'-6"	F	26	26	26	26	6'-0"	F	26	26	26	26
	10	3'-6"	3'-6"	C	22	21	22	23	6'-3"	F	26	26	26	26	5'-10"	F	26	26	26	26
115 MPH EXPOSURE B																				
30	3	8'-8"	8'-5"	B	18	23	24	25	12'-8"	C	20	25	26	28	11'-3"	C	23	23	25	26
	3.5	8'-2"	7'-6"	B	18	22	24	25	11'-7"	D	21	24	26	27	10'-4"	C	20	23	24	26
	4	7'-1"	7'-0"	B	19	22	23	24	10'-9"	E	21	24	25	27	9'-8"	D	21	22	24	25
	4.5	6'-4"	6'-8"	C	19	21	23	24	10'-0"	E	22	24	25	26	9'-0"	D	21	22	24	25
	5	5'-8"	6'-0"	C	19	21	23	24	9'-5"	E	22	23	25	26	8'-6"	E	21	22	23	25
	5.5	5'-2"	5'-8"	C	19	21	22	23	8'-11"	E	22	23	24	26	8'-1"	E	22	22	23	24
	6	4'-9"	5'-3"	C	19	21	22	23	8'-6"	F	23	23	24	25	7'-8"	E	22	22	23	24
	6.5	4'-4"	5'-0"	C	19	20	22	23	8'-0"	F	23	23	24	25	7'-4"	E	22	22	23	24
	7	4'-1"	4'-8"	C	20	20	22	23	7'-8"	F	23	23	24	25	7'-0"	E	22	22	22	24
	7.5	3'-9"	4'-6"	C	20	20	21	23	7'-4"	F	23	23	23	25	6'-8"	F	23	23	23	23
	8	3'-6"	4'-3"	C	20	20	21	22	7'-0"	F	23	23	23	24	6'-6"	F	23	23	23	23
	8.5	3'-4"	4'-1"	C	20	20	21	22	6'-9"	F	23	23	23	24	6'-3"	F	23	23	23	23
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	8'-8"	7'-10"	B	20	24	26	27	11'-10"	D	23	27	28	30	10'-2"	C	22	25	27	28
	3.5	8'-2"	7'-1"	B	20	24	25	27	10'-10"	D	23	26	28	29	9'-8"	C	22	25	26	28
	4	7'-1"	6'-8"	C	20	23	25	26	10'-1"	E	23	26	27	29	9'-1"	D	23	24	25	27
	4.5	6'-4"	6'-0"	C	21	23	25	26	9'-4"	E	24	25	27	28	8'-6"	E	23	24	25	27
	5	5'-8"	5'-7"	C	21	23	24	26	8'-10"	E	24	25	27	28	8'-0"	E	23	24	25	26
	5.5	5'-2"	5'-2"	C	21	22	24	25	8'-3"	E	24	25	26	28	7'-7"	E	24	24	25	26
	6	4'-9"	4'-10"	C	21	22	24	25	7'-10"	F	25	25	26	27	7'-2"	E	24	24	25	26
	6.5	4'-4"	4'-7"	C	21	22	23	25	7'-5"	F	25	25	26	27	6'-10"	F	24	24	24	26
	7	4'-1"	4'-5"	C	21	22	23	24	7'-1"	F	25	25	25	27	6'-6"	F	25	25	25	25

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU106
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU106
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU88
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.055"x3"x3" Fluted	12'	F	MU95
Alum 0.075"x3"x3" Square	12'	G	MU41
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU93
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU39
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

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GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.1 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.1
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.1 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.1

SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING

SLAB 9. FOLLOW 9-10 FROM ABOVE

SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
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PROFESSIONAL ENGINEER No. 5800XX-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA

TABLE 5.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	5" RF Fascia (Detail MU16) POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)	8.5" RF Fascia (Detail MU15) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)	8" Extruded Fascia (Detail MU31) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-4"	8'-7"	A	18	23	24	25	16'-4"	A	19	23	25	26	14'-7"	B	21	24	26	27
	3.5	19'-5"	8'-6"	A	18	22	24	25	8'-6"	B	19	23	24	25	13'-6"	B	21	24	25	26
	4	17'-8"	7'-11"	A	19	22	23	25	8'-0"	B	19	22	24	25	12'-6"	C	22	23	25	26
	4.5	16'-1"	7'-4"	B	19	22	23	24	7'-6"	B	20	22	23	24	11'-6"	C	22	23	24	25
	5	13'-7"	6'-10"	B	19	21	23	24	6'-11"	B	20	21	23	24	10'-9"	C	22	22	24	25
	5.5	12'-4"	6'-6"	B	19	21	22	24	6'-6"	B	20	21	22	24	10'-1"	C	23	23	24	25
	6	11'-4"	6'-0"	B	20	21	22	23	6'-1"	B	20	21	22	23	9'-6"	C	23	23	24	25
	6.5	10'-5"	5'-6"	B	20	20	22	23	5'-8"	B	20	20	22	23	9'-0"	C	23	23	23	24
	7	9'-6"	5'-0"	B	20	20	22	23	5'-5"	B	20	20	22	23	8'-1	C	23	23	23	24
	7.5	9'-1"	5'-0"	B	20	20	21	23	5'-2"	B	20	20	21	23	7'-9"	C	23	23	23	24
	8	8'-4"	4'-11"	B	20	20	21	22	5'-0"	B	21	21	21	22	7'-6"	C	24	24	24	24
	8.5	8'-0"	4'-6"	B	20	20	21	22	4'-9"	B	21	21	21	22	7'-1"	C	24	24	24	24
	9	7'-8"	4'-3"	B	20	20	21	22	4'-6"	B	21	21	21	22	6'-11"	C	24	24	24	24
	9.5	7'-3"	4'-3"	B	20	20	21	22	4'-4"	B	21	21	21	22	6'-7"	C	24	24	24	24
	10	6'-8"	4'-1"	B	20	20	21	22	4'-2"	B	21	21	21	22	6'-1"	D	24	24	24	24
	11	6'-7"	3'-10"	B	21	21	21	21	3'-8"	B	21	21	21	21	5'-9"	D	24	24	24	24
	12	6'-0"	3'-7"	B	21	21	21	21	3'-6"	B	21	21	21	21	5'-4"	D	24	24	24	24
	13	5'-3"	3'-4"	B	21	21	21	21												
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-4"	8'-8"	A	20	24	26	27	9'-3"	B	20	25	26	28	13'-2"	B	23	26	27	29
	3.5	19'-8"	7'-8"	A	20	24	25	27	8'-4"	B	20	24	26	27	12'-0"	C	23	25	26	28
	4	17'-9"	7'-0"	B	20	23	25	26	7'-3"	B	21	24	26	27	11'-0"	C	23	25	26	28
	4.5	16'-1"	6'-4"	B	20	23	24	26	7'-0"	B	21	23	25	26	10'-3"	C	24	24	26	27
	5	13'-7"	5'-10"	B	21	23	24	25	6'-5"	B	21	23	24	26	9'-6"	C	24	24	25	27
	5.5	12'-4"	5'-7"	B	21	22	24	25	6'-0"	B	21	23	24	25	8'-10"	C	24	24	25	26
	6	11'-4"	5'-3"	B	21	22	23	25	5'-7"	B	21	22	24	25	8'-4"	C	24	24	25	26
	6.5	10'-5"	4'-8"	B	21	22	23	24	5'-3"	B	22	22	23	25	7'-10"	C	25	25	25	26
	7	9'-6"	4'-3"	B	21	21	23	24	5'-0"	B	22	22	23	24	7'-6"	C	25	25	25	26
	7.5	9'-1"	4'-0"	B	21	21	23	24	4'-9"	B	22	22	23	24	7'-1"	C	25	25	25	25
	8	8'-4"	4'-3"	B	22	22	22	24	4'-6"	B	22	22	23	24	6'-8"	C	25	25	25	25
	8.5	8'-0"	4'-0"	B	22	22	22	24	4'-3"	B	22	22	22	24	6'-3"	D	25	25	25	25
	9	7'-8"	3'-10"	B	22	22	22	23	4'-1"	B	22	22	22	24	6'-11"	D	25	25	25	25
	9.5	7'-3"	3'-8"	B	22	22	22	23	3'-11"	B	22	22	22	23	5'-8"	D	25	25	25	25
	10	6'-8"	3'-7"	B	22	22	22	23	3'-9"	B	22	22	22	23	5'-4"	D	25	25	25	25
	11	6'-3"	3'-3"	B	22	22	22	23	3'-7"	B	22	22	22	23	4'-11"	D	25	25	25	25
	12	5'-8"	3'-1"	B	22	22	22	23	3'-5"	B	22	22	22	23	4'-7"	D	25	25	25	25
	13	5'-2"	2'-10"	B	22	22	22	22	3'-3"	B	22	22	22	22	4'-3"	D	25	25	25	25
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-4"	8'-3"	A	18	23	25	26	16'-1"	A	19	24	25	28	14'-3"	B	21	24	26	27
	3.5	19'-4"	8'-4"	A	19	23	24	26	8'-1"	B	19	23	25	26	13'-0"	B	22	24	25	27
	4	17'-8"	7'-8"	A	19	22	24	25	8'-4"	B	20	23	24	25	11'-11"	C	22	24	25	26
	4.5	15'-1"	7'-1"	B	19	22	23	25	7'-8"	B	20	22	24	25	11'-1"	C	22	23	25	26
	5	13'-1"	6'-7"	B	20	22	23	24	6'-8"	B	20	22	23	24	9'-8"	C	23	23	24	26
	5.5	12'-4"	6'-2"	B	20	21	23	24	6'-3"	B	20	21	23	24	9'-1"	C	23	23	24	25
	6	11'-4"	5'-8"	B	20	21	22	24	5'-10"	B	21	21	23	24	8'-6"	C	23	23	23	25
	6.5	10'-5"	5'-4"	B	20	21	22	23	5'-6"	B	21	21	22	23	7'-10"	C	24	24	24	24
	7	9'-6"	5'-2"	B	20	21	22	23	5'-3"	B	21	21	22	23	7'-6"	C	24	24	24	24
	7.5	9'-1"	4'-11"	B	20	20	22	23	5'-0"	B	21	21	22	23	7'-1"	C	24	24	24	24
	8	8'-4"	4'-8"	B	20	20	21	23	4'-8"	B	21	21	22	23	6'-8"	C	24	24	24	24
	8.5	8'-0"	4'-6"	B	21	21	21	22	4'-6"	B	21	21	21	22	6'-3"	D	24	24	24	24
	9	7'-8"	4'-3"	B	21	21	21	22	4'-4"	B	21	21	21	22	5'-10"	D	24	24	24	24
	9.5	7'-2"	4'-1"	B	21	21	21	22	4'-2"	B	21	21	21	22	5'-6"	D	24	24	24	24
	10	6'-8"	3'-11"	B	21	21	21	22	3'-10"	B	21	21	21	22	5'-2"	D	24	24	24	24
	11	6'-2"	3'-8"	B	21	21	21	22	3'-7"	B	21	21	21	22	4'-10"	D	24	24	24	24
	12	5'-8"	3'-6"	B	21	21	21	21	3'-5"	B	21	21	21	21	4'-7"	D	24	24	24	24
	13	5'-2"	3'-3"	B	21	21	21	21	3'-3"	B	21	21	21	21	4'-3"	D	24	24	24	24

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	5" RF Fascia (Detail MU16) POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)	8.5" RF Fascia (Detail MU15) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)	8" Extruded Fascia (Detail MU31) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "W" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "A" (in)	10' "A" (in)	12' "A" (in)
113 MPH EXPOSURE B																				
20	3	17'-10"	7'-4"	B	17	22	23	26	6'-6"	B	18	22	24	25	11'-8"	C	20	23	25	26
	3.5	16'-2"	6'-7"	B	17	22	23	24	7'-2"	B	18	22	23	25	10'-8"	C	20	23	24	26
	4	6'-11"	6'-6"	B	18	21	23	24	6'-6"	B	18	21	23	24	9'-8"	C	20	22	24	25
	4.5	7'-11"	6'-6"	B	18	21	22	23	5'-11"	B	18	21	23	24	8'-8"	C	21	22	23	25
	5	7'-1"	6'-2"	B	18	20	22	23	5'-6"	B	18	21	22	23	8'-1"	C	21	22	23	24
	5.5	6'-6"	5'-8"	B	18	20	22	23	5'-1"	B	19	20	22	23	7'-7"	C	21	21	23	24
	6	5'-11"	5'-4"	B	18	20	21	23	4'-8"	B	19	20	22	23	7'-1"	C	21	21	23	24
	6.5	5'-5"	4'-3"	B	18	20	21	22	4'-3"	B	19	20	21	23	6'-8"	C	21	21	22	23
	7	5'-1"	4'-0"	B	19	19	21	22	4'-0"	B	19	20	21	22	6'-4"	D	22	22	22	23
	7.5	4'-8"	3'-7"	B	19	19	20	22	3'-11"	B	19	19	21	22	6'-0"	D	22	22	22	23
	8	4'-3"	3'-5"	B	19	19	20	22	3'-7"	B	19	19	20	22	5'-8"	D	22	22	22	23
	8.5	3'-10"	3'-3"	B	19	19	20	21	3'-5"	B	19	19	20	21	5'-3"	D	22	22	22	22
	9	3'-6"	3'-1"	B	19	19	20	21	3'-3"	B	19	19	20	21	5'-0"	D	22	22	22	22
113 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	17'-10"	6'-8"	B	19	24	25	28	7'-3"	B	19	24	26	27	10'-7"	C	22	25	27	28
	3.5	16'-2"	6'-1"	B	19	23	25	26	6'-6"	B	19	23	25	26	9'-6"	C	22	24	26	27
	4	6'-11"	5'-8"	B	19	23	24	25	5'-11"	B	20	23	24	26	8'-6"	C	22	24	25	27
	4.5	7'-11"	5'-6"	B	19	22	24	25	5'-4"	B	20	23	24	25	7'-8"	C	23	23	25	26
	5	7'-1"	5'-0"	B	20	22	23	25	4'-11"	B	20	22	24	25	6'-11"	C	23	23	24	26
	5.5	6'-6"	4'-4"	B	20	22	23	24	4'-7"	B	20	22	23	25	6'-4"	D	23	23	24	25
	6	5'-11"	4'-1"	B	20	21	23	24	4'-3"	B	20	22	23	24	5'-9"	D	23	23	24	25
	6.5	5'-5"	3'-10"	B	20	21	23	24	4'-0"	B	20	21	23	24	5'-4"	D	23	23	24	25
	7	5'-1"	3'-7"	B	20	21	22	24	3'-8"	B	21	21	22	24	4'-11"	D	24	24	24	25
	7.5	4'-8"	3'-6"	B	20	21	22	23	3'-6"	B	20	21	22	24	4'-7"	D	24	24	24	24
	8	4'-3"	3'-1"	B	20	20	22	23	3'-3"	B	21	21	22	23	4'-3"	D	24	24	24	24
	8.5	3'-10"	2'-10"	B	20	20	22	23	3'-1"	B	21	21	22	23	3'-11"	D	24	24	24	24
	9	3'-6"	2'-8"	B	20	20	21	23	2'-11"	B	21	21	22	23	3'-8"	D	24	24	24	24
115 MPH EXPOSURE B																				
20	3	17'-10"	7'-3"	B	17	22	23	26	7'-10"	B	17	22	24	25	11'-4"	C	20	23	25	26
	3.5	16'-2"	6'-6"	B	17	21	23	24	7'-1"	B	18	22	23	25	10'-3"	C	20	23	24	26
	4	6'-10"	6'-1"	B	18	21	22	24	6'-5"	B	18	21	23	24	9'-4"	C	20	22	24	25
	4.5	7'-10"	5'-8"	B	18	21	22	23	5'-10"	B	18	21	22	24	8'-8"	C	21	22	23	25
	5	7'-1"	5'-1"	B	18	20	22	23	5'-5"	B	18	21	22	23	8'-0"	C	21	22	23	24
	5.5	6'-5"	4'-8"	B	18	20	22	23	5'-0"	B	19	20	22	23	7'-6"	C	21	21	23	24
	6	5'-10"	4'-5"	B	18	20	21	23	4'-6"	B	19	20	21	23	7'-0"	C	21	21	22	24
	6.5	5'-5"	4'-2"	B	19	20	21	22	4'-4"	B	19	20	21	22	6'-7"	C	21	21	22	23
	7	4'-10"	3'-11"	B	19	19	21	22	4'-1"	B	19	20	21	22	6'-3"	D	21	21	22	23
	7.5	4'-6"	3'-8"	B	19	19	21	23	3'-11"	B	19	19	21	22	5'-11"	D	22	22	22	23
	8	4'-3"	3'-6"	B	19	19	20	22	3'-8"	B	19	19	21	22	5'-8"	D	22	22	22	23
	8.5	4'-0"	3'-4"	B	19	19	20	21	3'-6"	B	19	19	20	22	5'-4"	D	22	22	22	23
	9	3'-8"	3'-2"	B	19	19	20	21	3'-4"	B	19	19	20	21	5'-2"	D	22	22	22	22
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	17'-10"	6'-7"	B	18	23	25	26	7'-1"	B	18	24	26	27	10'-2"	C	22	25	27	28
	3.5	16'-2"	6'-0"	B	18	23	24	26	6'-4"	B	19	23	25	26	9'-2"	C	22	24	26	27
	4	6'-8"	5'-4"	B	19	22	24	25	5'-9"	B	19	23	24	26	8'-2"	C	22	24	25	27
	4.5	7'-6"	5'-11"	B	19	22	24	25	5'-3"	B	20	22	24	25	7'-4"	C	23	23	25	26
	5	6'-9"	4'-6"	B	19	22	23	25	4'-10"	B	20	22	24	25	6'-8"	C	23	23	24	26
	5.5	6'-3"	4'-3"	B	20	21	23	24	4'-6"	B	20	22	23	25	6'-2"	D	23	23	24	25
	6	5'-8"	3'-11"	B	20	21	23	24	4'-2"	B	20	21	23	24	5'-7"	D	23	23	24	25
	6.5	5'-3"	3'-8"	B	20	21	22	24	3'-11"	B	20	21	22	24	5'-2"	D	24	24	24	25
	7	4'-10"	3'-6"	B	20	21	22	23	3'-8"	B	20	21	22	23	4'-10"	D	24	24	24	24
	7.5	4'-6"	3'-3"	B	20	21	22	23	3'-5"	B	20	20	22	23	4'-6"	D	24	24	24	24
	8	4'-3"	3'-1"	B	20	20	22	23	3'-3"	B	20	20	22	23	4'-3"	D	24	24	24	24
	8.5	3'-10"	2'-9"	B	20	20	22	23	3'-1"	B	20	20	22	23	3'-11"	D	24	24	24	24
	9	3'-6"	2'-10"	B	20	20	21	23	2'-11"	B	20	20	22	23	3'-8"	D	24	24	24	24

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PROFESSIONAL ENGINEER 560906 CARL PUTNAM STATE OF UTAH

FEB 24 2014

MAR 05 2014

SOLID COVER 5.8 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" RF Fascia (Detail MU16) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	6.5" RF Fascia (Detail MU15) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	6" Extruded Fascia (Detail MU31) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	8'-3"	A	20	25	26	26	5'-8"	B	21	25	27	28	12'-10"	D	23	28	26	29
	3.5	19'-5"	7'-5"	B	20	24	26	27	6'-1"	B	21	24	26	27	11'-7"	C	24	25	27	29
	4	17'-8"	6'-9"	B	21	24	25	27	7'-4"	B	21	24	26	27	10'-8"	C	24	25	27	28
	4.5	15'-1"	6'-3"	B	21	23	25	26	6'-8"	B	21	24	25	26	9'-10"	C	24	25	26	28
	5	13'-7"	5'-10"	B	21	23	24	26	6'-3"	B	22	23	25	26	9'-2"	C	24	24	26	27
	5.5	12'-4"	5'-5"	B	21	23	24	25	5'-10"	B	22	23	24	26	8'-7"	C	25	26	25	27
	6	11'-4"	5'-1"	B	21	22	24	25	5'-5"	B	22	23	24	25	8'-1"	C	25	25	25	27
	6.5	10'-5"	4'-9"	B	22	22	24	25	5'-1"	B	22	22	24	26	7'-7"	C	25	25	25	26
	7	9'-8"	4'-6"	B	22	22	23	25	4'-10"	B	22	22	24	25	7'-2"	C	25	25	25	26
	7.5	9'-1"	4'-4"	B	22	22	23	24	4'-8"	B	22	22	23	25	6'-10"	C	25	25	25	26
	8	8'-6"	4'-1"	B	22	22	23	24	4'-4"	B	22	22	23	24	6'-6"	C	26	26	26	26
	8.5	8'-0"	3'-11"	B	22	22	23	24	4'-1"	B	22	22	23	24	6'-3"	D	20	20	26	26
	9	7'-6"	3'-8"	B	22	22	21	24	3'-11"	B	22	22	23	24	6'-0"	D	20	26	26	26
	9.5	7'-2"	3'-7"	B	17	22	22	24	3'-9"	B	23	23	23	24	5'-9"	D	26	26	26	26
	10	6'-9"	3'-5"	B	22	22	22	23	3'-7"	B	23	23	23	24	5'-6"	D	26	26	26	26
	11	6'-2"	3'-2"	B	22	22	22	23	3'-3"	B	23	23	23	23	5'-1"	D	26	26	26	26
110 MPH EXPOSURE B																				
20	3	11'-10"	7'-7"	A	17	22	23	24	8'-2"	B	17	22	23	25	11'-8"	C	19	23	24	26
	3.5	10'-2"	6'-10"	B	17	21	23	24	7'-4"	B	17	22	23	24	10'-8"	C	23	22	24	25
	4	8'-11"	6'-2"	B	17	21	22	23	6'-8"	B	18	21	22	24	9'-9"	C	23	22	23	25
	4.5	7'-11"	5'-8"	B	17	20	22	23	6'-1"	B	18	21	22	23	9'-0"	C	23	22	23	24
	5	7'-1"	5'-3"	B	18	20	21	23	5'-8"	B	18	20	22	23	8'-4"	C	23	21	23	24
	5.5	6'-5"	4'-11"	B	18	20	21	22	5'-3"	B	18	20	21	23	7'-10"	C	21	21	22	24
	6	5'-11"	4'-7"	B	18	20	21	22	4'-11"	B	18	20	21	22	7'-4"	C	21	21	22	23
	6.5	5'-5"	4'-4"	B	18	19	21	22	4'-7"	B	18	20	21	22	6'-11"	C	21	21	22	23
	7	5'-1"	4'-1"	B	18	19	20	22	4'-4"	B	18	19	21	22	6'-6"	C	21	21	22	23
	7.5	4'-9"	3'-11"	B	18	19	20	21	4'-1"	B	19	19	20	22	6'-2"	D	21	21	21	23
	8	4'-6"	3'-8"	B	18	19	20	21	3'-10"	B	19	19	20	21	5'-11"	D	21	21	21	22
	8.5	4'-2"	3'-6"	B	18	19	20	21	3'-8"	B	19	19	20	21	5'-8"	D	21	21	21	22
	9	3'-11"	3'-4"	B	18	19	20	21	3'-6"	B	19	19	20	21	5'-5"	D	22	22	22	22
	9.5	3'-9"	3'-2"	B	18	19	20	21	3'-4"	B	19	19	20	21	5'-2"	D	22	22	22	22
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-11"	B	18	23	25	26	7'-6"	B	19	24	25	25	10'-10"	C	21	25	26	27
	3.5	10'-2"	8'-2"	B	19	23	24	25	6'-8"	B	18	23	25	26	9'-9"	C	22	24	26	27
	4	8'-11"	5'-8"	B	19	22	24	25	6'-1"	B	19	23	24	25	8'-11"	C	22	24	25	26
	4.5	7'-11"	5'-2"	B	19	22	23	25	5'-6"	B	19	22	24	25	8'-2"	C	22	23	25	26
	5	7'-1"	4'-8"	B	19	22	23	24	5'-1"	B	20	22	23	25	7'-7"	C	22	23	24	26
	5.5	6'-5"	4'-6"	B	19	21	23	24	4'-8"	B	20	21	23	24	7'-1"	C	23	23	24	25
	6	5'-11"	4'-2"	B	19	21	22	24	4'-5"	B	20	21	23	24	6'-8"	C	23	23	24	25
	6.5	5'-6"	3'-11"	B	20	21	22	23	4'-1"	B	20	21	22	24	6'-3"	D	23	23	23	25
	7	5'-1"	3'-8"	B	20	20	22	23	3'-10"	B	20	21	22	23	5'-11"	D	23	23	23	24
	7.5	4'-9"	3'-6"	B	20	20	22	23	3'-8"	B	20	20	21	23	5'-7"	D	23	23	23	24
	8	4'-6"	3'-4"	B	20	20	22	23	3'-5"	B	20	20	21	23	5'-4"	D	23	23	23	24
	8.5	4'-2"	3'-2"	B	20	20	21	23	3'-3"	B	20	20	21	23	5'-1"	D	23	23	23	24
	9	3'-11"	3'-0"	B	20	20	21	22	3'-1"	B	20	20	21	23	4'-10"	D	23	23	23	24
	9.5	3'-9"	2'-10"	B	20	20	21	22	3'-0"	B	20	20	21	22	4'-8"	E	23	23	23	23
	10	3'-6"	2'-8"	B	20	20	21	22	2'-10"	B	20	20	21	22	4'-5"	E	24	24	24	24

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" RF Fascia (Detail MU16) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	6.5" RF Fascia (Detail MU15) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)	6" Extruded Fascia (Detail MU31) MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
30	3	8'-6"	8'-8"	B	17	22	23	24	7'-2"	B	17	22	23	25	10'-5"	C	18	23	24	26
	3.5	8'-3"	6'-9"	B	17	21	23	24	6'-6"	B	17	21	23	24	9'-8"	C	20	22	24	25
	4	7'-1"	6'-5"	B	17	21	22	23	5'-10"	B	17	21	22	24	8'-7"	C	20	22	23	25
	4.5	6'-4"	5'-8"	B	17	20	22	23	5'-4"	B	18	21	22	23	7'-11"	C	20	22	23	24
	5	5'-8"	4'-7"	B	17	20	21	23	4'-11"	B	18	20	22	23	7'-4"	C	20	21	23	24
	5.5	5'-2"	4'-3"	B	17	20	21	22	4'-6"	B	18	20	21	23	6'-10"	C	20	21	22	24
	6	4'-9"	4'-0"	B	18	20	21	22	4'-2"	B	18	20	21	22	6'-5"	C	21	21	22	23
	6.5	4'-4"	3'-9"	B	18	19	21	22	3'-11"	B	18	19	21	22	6'-0"	D	21	21	22	23
	7	4'-1"	3'-6"	B	18	19	20	22	3'-8"	B	18	19	21	22	5'-8"	D	21	21	22	23
	7.5	3'-9"	3'-4"	B	18	19	20	21	3'-6"	B	18	19	20	22	5'-4"	D	21	21	21	23
	8	3'-6"	3'-2"	B	18	19	20	21	3'-4"	B	18	19	20	21	5'-1"	D	21	21	21	22
	8.5	3'-4"	3'-0"	B	18	19	20	21	3'-2"	B	18	19	20	21	4'-10"	D	21	21	21	22
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	9'-6"	6'-2"	B	18	23	25	26	6'-8"	B	18	23	25	26	9'-8"	C	21	25	26	27
	3.5	8'-2"	5'-6"	B	18	23	24	26	5'-11"	B	19	23	24	26	8'-8"	C	21	24	26	27
	4	7'-1"	5'-0"	B	19	22	24	25	5'-4"	B	19	22	24	25	7'-11"	C	22	24	25	26
	4.5	6'-4"	4'-7"	B	19	22	23	25	4'-10"	B	19	22	24	25	7'-3"	C	22	23	25	26
	5	5'-8"	4'-3"	B	19	21	23	24	4'-6"	B	19	22	23	25	6'-8"	C	22	23	24	26
	5.5	5'-2"	3'-11"	B	19	21	23	24	4'-1"	B	19	21	23	24	6'-3"	D	22	22	24	26
	6	4'-9"	3'-8"	B	19	21	22	24	3'-10"	B	20	21	23	24	5'-10"	D	22	22	24	26
	6.5	4'-4"	3'-6"	B	19	21	22	23	3'-7"	B	20	21	22	24	5'-6"	D	23	23	23	26
	7	4'-1"	3'-3"	B	19	20	22	23	3'-4"	B	20	21	22	23	5'-3"	D	23	23	23	24

TABLE 6.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVERHANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT): 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU108
Twin 0.032"x1.5"x1.5" Scroll	9'	B	MU109
0.024"x3"x3" Post w/ Sidep'ate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU99
Alum 0.040"x3"x3" Lockseam	11'	E	MU99
Alum 0.055"x3"x3" Fluted	12'	F	MU96
Alum 0.075"x3"x3" Square	12'	G	MU98
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU98
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU98
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU98
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN. COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.5 THAT HAS ADEQUATE POST SPACING
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.5
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.5 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.5
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4000

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3441 Ivylink Place
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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 60139 EXP 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER 186060S 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 3.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA

TABLE 5-5

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7" RF Alum Fascia (t=0.040" MU09) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7" RF Alum Fascia (t=0.050" MU09) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Samson Gutter Fascia (Detail MU20) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	6'-3"	A	17	22	23	25	11'-7"	B	19	24	25	26	14'-3"	B	21	24	25	27
	3.5	19'-6"	7'-3"	A	17	21	23	24	10'-9"	B	18	23	24	26	13'-3"	B	21	24	25	26
	4	17'-0"	6'-6"	A	18	21	22	24	9'-7"	B	20	23	24	25	12'-6"	C	22	23	25	26
	4.5	15'-1"	5'-11"	A	18	21	22	23	8'-6"	B	13	22	24	26	11'-6"	C	22	23	24	26
	5	13'-7"	5'-5"	A	18	20	22	23	7'-8"	B	20	22	23	24	10'-9"	C	22	23	24	25
	5.5	12'-4"	5'-0"	A	18	20	21	22	7'-2"	B	20	21	23	24	9'-10"	C	23	23	23	25
	6	11'-4"	4'-8"	A	18	20	21	22	6'-8"	B	20	21	22	24	9'-3"	C	23	23	23	24
	6.5	10'-5"	4'-4"	A	18	19	21	22	6'-3"	B	20	21	22	23	8'-11"	C	23	23	23	24
	7	9'-8"	4'-1"	A	18	19	20	22	5'-11"	B	20	21	22	23	8'-7"	C	24	24	24	24
	7.5	9'-1"	3'-10"	A	18	19	20	21	5'-7"	B	21	21	22	23	8'-3"	C	24	24	24	24
	8	8'-6"	3'-7"	A	18	19	20	21	5'-4"	B	21	21	21	23	7'-11"	D	24	24	24	24
	8.5	8'-0"	3'-5"	A	18	19	20	21	5'-0"	B	21	21	21	22	7'-7"	D	24	24	24	24
	9	7'-6"	3'-3"	A	18	18	20	21	4'-10"	B	21	21	21	22	7'-4"	D	24	24	24	24
	9.5	7'-2"	3'-1"	A	18	18	20	21	4'-7"	B	21	21	21	22	7'-1"	D	24	24	24	24
	10	6'-9"	2'-11"	A	18	18	19	21	4'-5"	B	21	21	21	22	6'-9"	E	25	25	25	25
	11	6'-2"	2'-8"	A	18	18	19	20	4'-0"	B	21	21	21	21	6'-3"	E	25	25	25	25
	12	5'-8"	2'-6"	A	18	18	19	20	3'-8"	B	21	21	21	21	5'-11"	E	25	25	25	25
	13	5'-3"	2'-4"	A	18	18	19	20	3'-6"	B	21	21	21	21						
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	7'-1"	A	18	23	25	26	8'-10"	B	20	25	27	28	12'-6"	B	23	26	27	29
	3.5	19'-9"	6'-3"	A	18	22	24	26	8'-6"	B	21	24	26	27	12'-1"	C	23	26	27	28
	4	17'-6"	5'-7"	A	19	22	24	25	7'-11"	B	21	24	25	27	11'-3"	C	24	25	26	28
	4.5	15'-7"	5'-1"	A	19	22	23	25	7'-3"	B	21	23	26	28	10'-6"	C	24	24	26	27
	5	14'-0"	4'-7"	A	19	21	23	24	6'-8"	B	21	23	24	26	9'-10"	C	24	24	26	27
	5.5	12'-7"	4'-3"	A	19	21	22	24	6'-3"	B	22	23	24	25	9'-3"	C	25	25	25	27
	6	11'-4"	3'-11"	A	19	21	22	23	5'-8"	B	22	23	24	25	8'-8"	C	25	25	25	26
	6.5	10'-5"	3'-8"	A	19	20	22	23	5'-3"	B	22	22	23	25	7'-11"	D	25	25	25	26
	7	9'-6"	3'-5"	A	19	20	22	23	4'-8"	B	22	22	23	24	7'-7"	D	26	26	26	26
	7.5	9'-1"	3'-3"	A	19	20	21	23	4'-6"	B	22	22	23	24	7'-2"	D	26	26	26	26
	8	8'-6"	3'-0"	A	19	20	21	22	4'-3"	B	22	22	23	24	6'-8"	D	26	26	26	26
	8.5	8'-0"	2'-10"	A	19	20	21	22	4'-1"	B	22	22	22	24	6'-5"	E	26	26	26	26
	9	7'-6"	2'-8"	A	19	19	21	22	3'-11"	B	22	22	22	23	6'-2"	E	27	27	27	27
	9.5	7'-2"	2'-7"	A	19	19	21	22	3'-8"	B	22	22	22	23	5'-11"	E	27	27	27	27
	10	6'-9"	2'-6"	A	19	19	21	22	3'-6"	B	22	22	22	23	5'-8"	E	27	27	27	27
	11	6'-2"	2'-3"	A	19	19	20	22	3'-3"	B	22	22	22	22	5'-3"	E	27	27	27	27
	12	5'-8"	2'-1"	A	19	19	20	21	3'-1"	B	22	22	22	22	5'-3"	E	27	27	27	27
	13	5'-3"	1'-11"	A	20	20	20	21												
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	7'-10"	A	17	22	24	26	10'-0"	B	19	24	26	27	13'-10"	B	21	24	26	27
	3.5	19'-6"	6'-11"	A	18	22	23	24	9'-4"	B	20	23	25	26	12'-10"	B	22	24	25	27
	4	17'-0"	6'-3"	A	18	21	23	24	8'-8"	B	20	23	24	26	12'-0"	C	22	23	25	26
	4.5	15'-1"	5'-8"	A	18	21	22	23	8'-0"	B	20	22	23	25	11'-4"	C	23	23	25	26
	5	13'-7"	5'-2"	A	18	20	22	23	7'-6"	B	20	22	23	24	10'-7"	C	23	23	24	25
	5.5	12'-4"	4'-8"	A	18	20	21	22	7'-2"	B	20	21	23	24	9'-11"	C	23	23	24	25
	6	11'-4"	4'-5"	A	18	20	21	22	6'-8"	B	20	21	22	24	9'-5"	C	24	24	24	25
	6.5	10'-5"	4'-1"	A	18	19	21	22	6'-3"	B	20	21	22	23	8'-10"	C	24	24	24	25
	7	9'-8"	3'-10"	A	18	19	21	22	5'-11"	B	21	21	22	23	8'-6"	D	24	24	24	24
	7.5	9'-1"	3'-8"	A	18	19	20	22	5'-7"	B	21	21	22	23	8'-2"	D	24	24	24	24
	8	8'-6"	3'-5"	A	18	19	20	21	5'-4"	B	21	21	22	23	7'-11"	D	24	24	24	24
	8.5	8'-0"	3'-3"	A	18	19	20	21	5'-0"	B	21	21	22	23	7'-7"	D	24	24	24	24
	9	7'-6"	3'-0"	A	18	18	20	21	4'-10"	B	21	21	22	23	7'-4"	D	25	25	25	25
	9.5	7'-2"	2'-11"	A	18	18	20	21	4'-7"	B	21	21	22	23	7'-1"	D	25	25	25	25
	10	6'-9"	2'-9"	A	18	18	19	21	4'-5"	B	21	21	21	22	6'-10"	D	25	25	25	25
	11	6'-2"	2'-6"	A	18	18	19	20	4'-2"	B	21	21	21	22	6'-6"	E	25	25	25	25
	12	5'-8"	2'-4"	A	19	18	19	20	3'-10"	B	21	21	21	22	6'-3"	E	25	25	25	25
	13	5'-3"	2'-2"	A	19	18	19	20	3'-8"	B	21	21	21	21	6'-0"	E	25	25	25	25
115 MPH EXPOSURE C or 135 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	7'-10"	A	18	23	25	26	8'-6"	B	21	24	26	27	11'-7"	C	23	26	27	28
	3.5	19'-6"	6'-11"	A	18	22	24	26	7'-11"	B	21	24	25	27	10'-9"	C	24	25	26	28
	4	17'-0"	6'-3"	A	19	22	24	25	7'-3"	B	21	23	26	28	9'-10"	C	24	24	26	27
	4.5	15'-1"	5'-8"	A	19	22	23	25	6'-8"	B	21	23	24	26	9'-3"	C	25	25	25	27
	5	13'-7"	5'-2"	A	19	21	23	24	6'-3"	B	22	23	24	25	8'-8"	C	25	25	25	26
	5.5	12'-4"	4'-8"	A	19	21	22	24	5'-8"	B	22	22	23	25	7'-11"	D	25	25	25	26
	6	11'-4"	4'-5"	A	19	21	22	23	5'-3"	B	22	22	23	24	7'-7"	D	26	26	26	26
	6.5	10'-5"	4'-1"	A	19	20	21	23	4'-8"	B	22	22	23	24	7'-2"	D	26	26	26	26
	7	9'-8"	3'-10"	A	19	20	21	22	4'-6"	B	22	22	23	24	6'-8"	D	26	26	26	26
	7.5	9'-1"	3'-8"	A	19	19	21	22	4'-1"	B	22	22	22	24	6'-5"	E	26	26	26	26
	8	8'-6"	3'-5"	A	19	19	21	22	3'-11"	B	22	22	22	23	6'-2"	E	27	27	27	27
	8.5	8'-0"	3'-3"	A	19	19	20	22	3'-8"	B	22	22	22	23	5'-11"	E	27	27	27	27
	9	7'-6"	3'-0"	A	19	19	20	21	3'-6"	B	22	22	22	22	5'-8"	E	27	27	27	27
	9.5	7'-2"	2'-11"	A	19	19	20	21	3'-3"	B	22	22	22	22	5'-3"	E	27	27	27	27
	10	6'-9"	2'-9"	A	19	19	20	21	3'-1"	B	22	22	22	22	5'-3"	E	27	27	27	27
	11	6'-2"	2'-6"	A	19	19	20	21												
	12	5'-8"	2'-4"	A	19	19	20	21												
	13	5'-3"	2'-2"	A	19	18	19	20												
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	7'-10"	A	17	22	24	26	10'-0"	B	19	24	26	27	13'-10"	B	21	24	26	27
	3.5	19'-6"	6'-11"	A	18	22	23	24	9'-4"	B	20	23	25	26	12'-10"	B	22	24	25	27
	4	17'-0"	6'-3"	A	18	21	23	24	8'-8"	B	20	23	24	26	12'-0"	C	22	23	25	26
	4.5	15'-1"	5'-8"	A	18	21	22	23	8'-0"	B	20	22	23	25	11'-4"	C	23	23	25	26
	5	13'-7"	5'-2"	A	18	20	22	23	7'-6"	B	20	22	23	24	10'-7"	C	23	23	24	25
	5.5	12'-4"	4'-8"	A	18	20	21	22	7'-2"	B	20	21	23	24	9'-11"	C	23	23	24	25
	6	11'-4"	4'-5"	A	18	20	21	22	6'-8"	B	21	21	23	24	9'-5"	C	24	24	24	25
	6.5	10'-5"	4'-1"	A	18	19	21	22	6'-3"	B	21	21	22	23	8'-10"	C	24	24	24	25
	7	9'-8"	3'-10"	A	18	19	21	22	5'-11"	B	21	21	22	23	8'-6"	D	24	24	24	24
	7.5	9'-1"	3'-8"	A	18	19	21	22	5'-7"	B	21	21	22	23	8'-2"	D	24	24	24	24
	8	8'-6"	3'-5"	A	18	19	20	22	5'-4"	B	21	21	22	23	7'-11"	D	24	24	24	24
	8.5	8'-0"	3'-3"	A	18	19	20	21	5'-0"	B	21	21	22	23	7'-7"	D	25	25	25	25
	9	7'-6"	3'-0"	A	18	19	20	21	4'-10"	B	21	21	22	23	7'-4"	D	25	25	25	25
	9.5	7'-2"	2'-11"	A	18	19	20	21	4'-7"	B	21	21	22	23	7'-1"	D	25	25	25	25
	10	6'-9"	2'-9"	A	19	19	20	21	4'-5"	B	21	21	21	22	6'-10"	D	25	25	25	25
	11	6'-2"	2'-6"	A	19	19	20	21	4'-2"	B	21	21	21	22	6'-6"	E	25	25	25	25
	12	5'-8"	2'-4"	A	19	19	20	20	3'-10"	B	21	21	21	22	6'-3"	E	25	25	25	25
	13	5'-3"	2'-2"	A	19	18	19	20	3'-7"	B	21	21	21	22	6'-0"	E	25	25	25	25
115 MPH EXPOSURE C or 135 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	7'-10"	A	18	23	25	26	8'-6"	B	21	24	26	27	11'-7"	C	23	26	27	28
	3.5	19'-6"	6'-11"	A	18	22	24	26	7'-11"	B	21	24	25	27	10'-9"	C	24	25	26	28
	4	17'-0"	6'-3"	A	19	22	24	25	7'-3"	B	21	23	26	28	9'-10"	C	24	24	26	27
	4.5	15'-1"	5'-8"	A	19	22	23	25	6'-8"	B	21	23	24	26	9'-3"	C	25	25	25	27
	5	13'-7"	5'-2"	A	19	21	23	24	6'-3"	B	22	23	24	25	8'-8"	C	25	25	25	26
	5.5	12'-4"	4'-8"	A	19	21	22	24	5'-8"	B	22	22	23	25	7'-11"	D	25	25	25	26
	6	11'-4"	4'-5"	A	19	21	22	23	5'-3"	B	22	22	23	24	7'-7"	D	26	26	26	26
	6.5	10'-5"	4'-1"	A	19	20	21	23	4'-8"	B	22	22	23	24	7'-2"	D	26	26	26	26
	7	9'-8"	3'-10"	A	19	20	21	22	4'-6"	B	22	22	23	24	6'-8"	D	26	26	26	26
	7.5	9'-1"	3'-8"	A	19	19	21	22	4'-1"	B	22	22	22	24	6'-5"	E	26	26	26	26
	8	8'-6"	3'-5"	A	19	19	21	22	3'-11"	B	22	22	22	23	6'-2"	E	27	27	27	27
	8.5	8'-0"	3'-3"	A	19	19	20	22	3'-8"	B	22	22	22	23	5'-11"	E	27	27	27	27
	9	7'-6"	3'-0"	A	19	19	20	21	3'-6"	B	22	22	22	22	5'-8"	E	27	27	27	27
	9.5	7'-2"	2'-11"	A	19	19	20	21	3'-3"	B	22	22	22	22	5'-3"	E	27	27	27	27
	10	6'-9"	2'-9"	A	19	19	20	21	3'-1"	B	22	22	22	22	5'-3"	E	27	27	27	27
	11	6'-2"	2'-6"	A	19	19	20	21												
	12	5'-8"	2'-4"	A	19	19	20	21												
	13	5'-3"	2'-2"	A	19	18	19	20												

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7" RF Alum Fascia (t=0.040" MU09) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7" RF Alum Fascia (t=0.050" MU09) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	Samson Gutter Fascia (Detail MU20) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
110 MPH EXPOSURE B																				
20	3	11'-10"	5'-11"	A	16	21	22	24	8'-4"	B	18	23	24	25	11'-6"	C	20	23	25	26
	3.5	10'-3"	5'-2"	A	16	21	22	23	7'-5"	B	18	22	24	25	10'-9"	C	20	23	24	26
	4	9'-11"	4'-6"	A	16	20	21	23	6'-8"	B	18	22	23	24	9'-10"	C	21	23	24	25
	4.5	7'-11"	4'-0"	A	16	20	21	22	6'-1"	B	18	21	23	24	9'-3"	C	21	22	24	25
	5	7'-1"	3'-10"	A	16	19	21	22	5'-7"	B	19	21	22	23	8'-7"	C	21	22	23	25
	5.5	6'-6"	3'-6"	A	16	19	20	22	5'-2"	B	19	20	22	23	8'-1"	C	22	22	23	24
	6	6'-11"	3'-3"	A	16	19	20	21	4'-10"	B	19	20	22	23	7'-7"	D	22	22	23	24
	6.5	6'-6"	3'-0"	A	16	19	20	21	4'-6"	B	19	20	21	22	7'-2"	D	22	22	23	24
	7	5'-1"	2'-10"	A	17	18	20	21	4'-3"	B	19	21	21	22	6'-10"	D	22	22	23	24
	7.5	4'-8"	2'-8"	A	17	18	19	21	3'-11"	B	19	21	21	22	6'-6"	E	22	22	22	23
	8	4'-3"	2'-6"	A	17	18	19	20	3'-8"	B	19	21	21	22	6'-3"	E	22	22	22	23
	8.5	4'-2"	2'-4"	A	17	18	19	20	3'-6"	B	19	19	21	22	6'-0"	E	22	22	22	23
	9	3'-11"	2'-3"	A	17	18	19	20	3'-3"	B	19	19	20	21	5'-9"	E	22	22	22	23
	9.5	3'-8"	2'-1"	A	17	17	19	20	3'-2"	B	19	19	20	21						
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	6'-4"	A	17	22	24	25	7'-7"	B	19	24	26	27	10'-11"	C	22	25	27	28
	3.5	10'-3"	5'-6"	A	17	22	23	25	6'-9"	B	20	24	25	26	9'-11"	C	22	25	26	28
	4	9'-11"	4'-9"	A	18	21	23	24	6'-0"	B	20	23	25	26	9'-1"	C	23	24	26	27
	4.5	7'-11"	4'-3"	A	18	21	22	24	5'-6"	B	20	23	24	26	8'-5"	C	23	24	25	27
	5	7'-1"	3'-8"	A	18	21	22	23	5'-0"	B	20	22	24	25	7'-11"	D	23	23	25	26
	5.5	6'-6"	3'-1"	A	18	20	22	23	4'-8"	B	20	22	23	25	7'-6"	D	24	24	25	26
	6	5'-11"	2'-11"	A	18	20	22	23	4'-3"	B	20	22	23	24	7'-0"	D	24	24	24	26
	6.5	5'-5"	2'-6"	A	18	20	22	23	4'-0"	B	20	21	23	24	6'-7"	E	24	24	24	25
	7	5'-1"	2'-6"	A	18	20	21	22	3'-8"	B	20	21	22	24	6'-3"	E	24	24	24	25
	7.5	4'-8"	2'-4"	A	18	19	21	22	3'-6"	B	20	21	22	24	6'-0"	E	24	24	24	25
	8	4'-3"	2'-2"	A	18	19	21	22	3'-3"	B	20	21	22	23	5'-8"	E	24	24	24	25
	8.5	4'-0"	2'-1"	A	18	19	20	22	3'-1"	B	20	21	22	23	5'-3"	E	25	25	25	25
	9	3'-9"	1'-11"	A	18	18	20	22	2'-10"	B	21	21	22	23	5'-2"	E	25	25	25	25
115 MPH EXPOSURE B																				
20	3	11'-4"	5'-10"	A	16	21	22	24	8'-3"	B	18	23	24	25	11'-1"	C	20	23	25	26
	3.5	9'-8"	5'-1"	A	16	20	22	23	7'-4"	B	18	22	23	25	10'-7"	C	20	23	24	26
	4	9'-6"	4'-7"	A	16	20	21	23	6'-7"	B	18	22	23	24	9'-9"	C	21	23	24	25
	4.5	7'-6"	4'-1"	A	16	20	21	22	6'-0"	B	18	21	23	24	9'-1"	C	21	22	24	25
	5	6'-9"	3'-8"	A	16	19	21	22	5'-6"	B	18	21	22	23	8'-6"	C	21	22	23	25
	5.5	6'-2"	3'-5"	A	16	19	20	22	5'-1"	B	19	20	22	23	7'-11"	D	21	22	23	24
	6	5'-8"	3'-2"	A	16	19	20	21	4'-9"	B	19	20	22	23	7'-6"	D	22	22	23	24
	6.5	5'-3"	2'-11"	A	16	18	20	21	4'-5"	B	19	20	21	22	7'-1"	D	22	22	22	24
	7	4'-10"	2'-9"	A	16	18	20	21	4'-2"	B	19	20	21	22	6'-9"	E	22	22	22	24
	7.5	4'-6"	2'-7"	A	16	18	19	21	3'-11"	B	19	19	21	22	6'-6"	E	22	22	22	23
	8	4'-3"	2'-6"	A	16	18	19	20	3'-8"	B	19	19	21	22	6'-3"	E	22	22	22	23
	8.5	4'-0"	2'-5"	A	16	18	19	20	3'-6"	B	19	19	20	22	5'-11"	E	22	22	22	23
	9	3'-9"	2'-3"	A	16	18	19	20	3'-4"	B	19	19	20	21	5'-9"	E	23	23	23	23
115 MPH EXPOSURE C or 135 MPH EXPOSURE B																				
20	3	11'-4"	5'-10"	A	17	22	24	25	7'-6"	B	19	24	26	27	10'-7"	C	22	25	27	28
	3.5	9'-8"	4'-9"	A	17	22	23	25	6'-6"	B	19	23	25	26	9'-9"	C	22	25	26	28
	4	9'-6"	4'-0"	A	17	21	23	24	5'-10"	B	20	23	24	26	9'-1"	C	23	24	26	27
	4.5	7'-6"	3'-6"	A	17	21	22	24	5'-4"	B	20	22	24	25	8'-5"	C	23	24	25	27
	5	6'-9"	3'-4"	A	17	21	22	23	4'-11"	B	20	22	24	25	7'-11"	D	23	23	25	26
	5.5	6'-2"	3'-1"	A	18	20	22	23	4'-6"	B	20	22	23	25	7'-6"	D	24	24	25	26
	6	5'-8"	2'-7"	A	18	20	21	22	4'-3"	B	20	21	23	24	7'-0"	D	24	24	24	26
	6.5	5'-3"	2'-7"	A	18	20	21	22	3'-11"	B	20	21	23	24	6'-7"	E	24	24	24	25
	7	4'-10"	2'-5"	A	18	19	21	22	3'-8"	B	20	21	22	24	6'-3"	E	24	24	24	25
	7.5	4'-6"	2'-3"	A	18	19	21	22	3'-6"	B	20	21	22	23	6'-0"	E	24	24	24	25
	8	4'-3"	2'-1"	A	18	19	21	22	3'-3"	B	20	20	22	23	5'-8"	E	24	24	24	25
	8.5	4'-0"	2'-0"	A	18	19	20	22	3'-1"	B	20	20	22	23	5'-3"	E	25	25	25	25
	9	3'-9"	1'-11"	A	18	18	20	22	2'-11"	B	20	20	22	23						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 58 307 EXP 6-30-2015 CIVIL STATE OF CALIFORNIA

PROFESSIONAL ENGINEER SE50906 2202 CARL PUTNAM STATE OF UTAH

FEB 24 2014

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.6

			7" RF Alum Fascia (t=0.040" MU09)						7" RF Alum Fascia (t=0.050" MU09)						Samson Gutter Fascia (Detail MU20)					
				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units		
GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
	115 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
10 LIVE LOAD ONLY	3	22'-8"	6'-6"	A	19	24	25	27	8'-6"	B	21	25	27	28	12'-6"	B	23	26	28	29
	3.5	19'-3"	6'-0"	A	19	23	25	26	8'-5"	B	21	25	26	28	11'-9"	C	24	26	27	29
	4	17'-8"	5'-4"	A	18	23	24	25	7'-6"	B	21	24	26	27	10'-11"	C	24	25	27	28
	4.5	15'-1"	4'-10"	A	19	22	24	25	7'-0"	B	22	24	25	27	10'-2"	C	25	25	28	28
	5	13'-7"	4'-8"	A	19	22	23	25	6'-5"	B	22	23	25	26	9'-7"	C	25	25	26	27
	5.5	12'-4"	4'-1"	A	19	21	23	24	5'-11"	B	22	23	24	26	9'-0"	C	25	25	26	27
	6	11'-4"	3'-8"	A	19	21	23	24	5'-6"	B	22	23	24	26	8'-6"	C	25	25	25	27
	6.5	10'-5"	3'-6"	A	18	21	22	24	5'-2"	B	22	22	24	25	8'-1"	D	26	26	26	27
	7	9'-8"	3'-3"	A	20	21	22	23	4'-10"	B	22	22	24	26	7'-8"	D	26	26	26	26
	7.5	9'-1"	3'-1"	A	20	20	22	23	4'-7"	B	22	22	23	25	7'-4"	D	26	26	26	26
	8	8'-6"	2'-11"	A	20	20	22	23	4'-4"	B	22	22	23	24	7'-0"	D	26	26	26	26
	8.5	8'-0"	2'-8"	A	20	20	21	23	4'-1"	B	22	22	23	24	6'-8"	E	26	26	26	26
	9	7'-6"	2'-7"	A	20	20	21	23	3'-11"	B	22	22	23	24	6'-6"	E	27	27	27	27
	9.5	7'-2"	2'-6"	A	20	20	21	22	3'-8"	B	23	23	23	24	6'-3"	E	27	27	27	27
	10	6'-8"	2'-4"	A	20	20	21	22	3'-7"	B	23	23	23	24	6'-0"	E	27	27	27	27
	11	6'-2"	2'-2"	A	20	20	21	22	3'-3"	B	23	23	23	23	5'-7"	E	27	27	27	27
	110 MPH EXPOSURE B																			
20	3	11'-10"	6'-1"	A	16	21	22	23	8'-7"	B	17	22	24	25	11'-10"	C	18	23	24	26
	3.5	10'-2"	5'-5"	A	16	20	22	23	7'-6"	B	18	22	23	24	11'-0"	C	20	23	24	25
	4	8'-11"	4'-10"	A	16	20	21	22	6'-11"	B	18	21	23	24	10'-1"	C	20	22	24	25
	4.5	7'-11"	4'-4"	A	16	19	21	22	6'-3"	B	18	21	22	23	9'-5"	C	21	22	23	24
	5	7'-1"	3'-11"	A	16	19	20	22	5'-8"	B	18	20	22	23	8'-9"	C	21	22	23	24
	5.5	6'-5"	3'-8"	A	16	19	20	21	5'-4"	B	18	20	22	23	8'-3"	C	21	21	23	24
	6	5'-11"	3'-4"	A	16	18	20	21	5'-0"	B	18	20	21	23	7'-10"	D	21	21	22	24
	6.5	5'-6"	3'-1"	A	16	18	19	21	4'-8"	B	18	20	21	22	7'-5"	D	21	21	22	23
	7	5'-1"	2'-11"	A	16	18	19	21	4'-4"	B	18	19	21	22	7'-0"	D	22	22	22	23
	7.5	4'-9"	2'-8"	A	16	18	19	20	4'-1"	B	18	19	20	22	6'-9"	E	22	22	22	23
	8	4'-6"	2'-7"	A	16	18	19	20	3'-10"	B	19	19	20	21	6'-5"	E	22	22	22	23
	8.5	4'-2"	2'-5"	A	16	17	19	20	3'-8"	B	19	19	20	21	6'-2"	E	22	22	22	23
	9	3'-11"	2'-4"	A	16	17	19	20	3'-6"	B	19	19	20	21	5'-11"	E	22	22	22	22
	9.5	3'-8"	2'-2"	A	16	17	19	20	3'-4"	B	19	19	20	21	5'-8"	E	22	22	22	22
	110 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
30	3	11'-10"	5'-8"	A	17	22	24	25	7'-9"	B	19	24	26	27	11'-1"	C	21	25	26	28
	3.5	10'-2"	4'-10"	A	17	22	23	24	6'-11"	B	19	23	25	26	10'-1"	C	22	24	26	27
	4	8'-11"	4'-3"	A	17	21	23	24	6'-3"	B	19	23	24	26	9'-4"	C	22	24	26	27
	4.5	7'-11"	3'-10"	A	17	21	23	23	5'-8"	B	20	22	24	25	8'-8"	C	22	23	25	26
	5	7'-1"	3'-6"	A	17	20	22	23	5'-2"	B	20	22	23	25	8'-1"	C	23	23	25	26
	5.5	6'-6"	3'-3"	A	17	20	21	23	4'-8"	B	20	21	23	24	7'-7"	D	23	23	24	26
	6	5'-11"	3'-0"	A	17	20	21	22	4'-4"	B	20	21	23	24	7'-2"	D	23	23	24	25
	6.5	5'-5"	2'-9"	A	17	19	21	22	4'-3"	B	20	21	22	24	6'-9"	D	23	23	24	25
	7	5'-1"	2'-7"	A	17	19	21	22	3'-10"	B	20	21	22	23	6'-5"	E	24	24	24	25
	7.5	4'-8"	2'-5"	A	18	19	20	22	3'-8"	B	20	20	22	23	6'-1"	E	24	24	24	25
	8	4'-5"	2'-3"	A	18	19	20	22	3'-5"	B	20	20	22	23	5'-10"	E	24	24	24	24
	8.5	4'-2"	2'-2"	A	18	19	20	21	3'-3"	B	20	20	21	23	5'-7"	E	24	24	24	24
	9	3'-11"	2'-0"	A	18	19	20	21	3'-1"	B	20	20	21	22	5'-4"	F	24	24	24	24
	9.5	3'-8"	1'-11"	A	18	18	20	21	2'-11"	B	20	20	21	22	5'-2"	E	24	24	24	24
	10	3'-6"	1'-10"	A	18	18	20	21	2'-10"	B	20	23	21	22	5'-0"	E	24	24	24	24

			7" RF Alum Fascia (t=0.040" MU09)						7" RF Alum Fascia (t=0.050" MU09)						Samson Gutter Fascia (Detail MU20)					
				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units		
GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
	115 MPH EXPOSURE B																			
30	3	8'-6"	6'-3"	A	15	21	22	23	7'-6"	B	17	22	24	25	10'-8"	C	19	23	24	25
	3.5	8'-2"	4'-7"	A	15	20	21	23	6'-8"	B	17	22	23	24	9'-9"	C	20	23	24	25
	4	7'-1"	4'-1"	A	15	20	21	22	6'-11"	B	18	21	22	24	9'-0"	C	20	22	24	25
	4.5	6'-4"	3'-8"	A	16	18	21	22	5'-6"	B	18	21	22	23	8'-4"	C	20	22	23	24
	5	5'-8"	3'-4"	A	16	19	20	21	4'-11"	B	18	20	22	23	7'-9"	D	21	21	23	24
	5.5	5'-2"	3'-1"	A	16	19	20	21	4'-7"	B	18	20	21	23	7'-4"	D	21	21	23	24
	6	4'-8"	2'-10"	A	16	18	20	21	4'-3"	B	18	20	21	22	6'-11"	D	21	21	22	24
	6.5	4'-4"	2'-8"	A	16	18	18	21	3'-11"	B	18	19	21	22	6'-6"	E	21	21	22	23
	7	4'-1"	2'-5"	A	16	18	19	20	3'-8"	B	18	19	21	22	6'-2"	E	21	21	22	23
	7.5	3'-8"	2'-4"	A	16	18	18	20	3'-6"	B	18	19	20	22	5'-11"	E	22	22	22	23
	8	3'-6"	2'-2"	A	16	18	19	20	3'-3"	B	18	19	20	21	5'-8"	E	22	22	22	23
	8.5	3'-4"	2'-0"	A	16	17	19	20	3'-1"	B	18	19	20	21	5'-6"	E	22	22	22	23
	115 MPH EXPOSURE C or 130 MPH EXPOSURE B																			
33	3	8'-6"	4'-8"	A	17	22	23	25	6'-10"	B	19	24	25	27	10'-1"	C	21	25	26	26
	3.5	8'-2"	4'-2"	A	17	21	23	24	6'-1"	B	19	23	25	26	9'-1"	C	22	24	26	27
	4	7'-1"	3'-8"	A	17	21	22	24	5'-5"	B	19	23	24	25	8'-4"	C	22	24	25	27
	4.5	6'-4"	3'-4"	A	17	21	22	23	4'-11"	B	19	22	24	25	7'-8"	D	22	23	25	26
	5	5'-8"	3'-0"	A	17	20	22	23	4'-6"	B	19	22	23	25	7'-2"	D	23	23	25	26
	5.5	5'-2"	2'-8"	A	17	20	21	23	4'-2"	B	19	21	23	24	6'-8"	D	23	23	24	26
	6	4'-8"	2'-7"	A	17	20	21	22	3'-10"	B	20	21	23	24	6'-5"	E	23	23	24	25
	6.5	4'-4"	2'-4"	A	17	19	21	22	3'-7"	B	20	21	22	24	6'-0"	E	23	23	24	25
	7	4'-1"	2'-2"	A	17	19	21	22	3'-4"	B	20	21	22	23	5'-9"	E	23	23	24	25

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.052"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU88
Alum 0.040"x3"x3" Lockseam	11'	E	MU88
Alum 0.055"x3"x3" Fluted	12'	F	MU86
Alum 0.076"x3"x3" Square	12'	G	MU43
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU98
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU98
Alum 0.120"x3"x3" Square	d= 27"	8'	D	MU98
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C 68130
EXP. 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.6 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.6
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.6 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.6

SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING

SLAB 9. FOLLOW 8-10 FROM ABOVE

SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4090

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No. 080906-2202
CARL PUTNAM
STATE OF UTAH

MAR 05 2014

SOLID COVER 5.9 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.7

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" & 5.5" Extruded Alum Fascia (MU07) MAX POST SPACING (FT)	MU07 Attached Structure MIN POST TYPE	MU07 Attached Structure FOOTER SIZE "d" (in)	MU07 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU07 10' "d" (in)	MU07 12' "d" (in)	4.5" Extruded Alum Fascia (MU32) MAX POST SPACING (FT)	MU32 Attached Structure MIN POST TYPE	MU32 Attached Structure FOOTER SIZE "d" (in)	MU32 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU32 10' "d" (in)	MU32 12' "d" (in)	6" RF Fascia Detail MU29 MAX POST SPACING (FT)	MU29 Attached Structure MIN POST TYPE	MU29 Attached Structure FOOTER SIZE "d" (in)	MU29 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU29 10' "d" (in)	MU29 12' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	27'-6"	11'-5"	B	19	24	25	26	10'-1"	A	19	23	24	26	6'-10"	A	18	20	22	23
	3.5	19'-3"	10'-4"	B	20	23	25	26	9'-2"	A	19	23	24	25	6'-0"	A	18	23	21	23
	4	17'-[illegible]	9'-9"	B	20	23	24	25	8'-5"	B	19	22	24	25	5'-5"	A	18	23	21	22
	4.5	15'-1"	8'-10"	B	20	22	24	25	7'-8"	B	19	22	23	24	4'-11"	A	17	19	20	22
	5	13'-7"	8'-3"	B	20	22	23	25	7'-3"	B	20	21	23	24	4'-8"	A	17	19	20	21
	5.5	12'-4"	7'-6"	B	21	22	23	24	6'-6"	B	20	21	23	24	4'-1"	A	17	18	20	21
	6	11'-4"	7'-3"	B	21	21	23	24	6'-5"	B	20	21	22	24	3'-8"	A	17	18	20	21
	6.5	10'-5"	6'-10"	B	21	21	23	24	6'-0"	B	20	21	22	23	3'-6"	A	17	18	19	21
	7	9'-8"	6'-6"	B	21	21	22	24	5'-8"	B	20	20	22	23	3'-3"	A	17	18	19	20
	7.5	9'-1"	6'-3"	B	21	21	22	23	5'-5"	B	20	20	22	23	3'-1"	A	17	18	19	20
	8	8'-6"	5'-11"	B	21	21	22	23	5'-2"	B	20	20	21	23	2'-11"	A	17	17	19	20
	8.5	8'-0"	5'-8"	B	21	21	22	23	4'-11"	B	21	21	21	22	2'-8"	A	17	17	19	20
	9	7'-6"	5'-5"	B	22	22	22	23	4'-8"	B	21	21	21	22	2'-7"	A	17	17	18	20
	9.5	7'-2"	5'-2"	C	22	22	22	23	4'-7"	B	21	21	21	22	2'-6"	A	17	17	18	20
	10	6'-9"	5'-0"	C	22	22	22	22	4'-4"	B	21	21	21	22	2'-4"	A	17	17	18	19
	11	6'-2"	4'-8"	C	22	22	22	22	4'-1"	B	21	21	21	22	2'-2"	A	17	17	18	19
	12	5'-8"	4'-4"	C	22	22	22	22	3'-9"	B	21	21	21	21	2'-0"	A	17	17	18	19
	13	5'-2"	4'-1"	C	22	22	22	22	3'-7"	B	21	21	21	21	1'-10"	A	17	17	18	19
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	27'-6"	10'-2"	B	21	25	27	28	9'-0"	A	20	24	26	27	5'-10"	A	17	22	23	24
	3.5	19'-6"	9'-2"	B	21	25	26	28	8'-1"	B	20	24	25	27	5'-2"	A	17	21	23	24
	4	17'-6"	8'-8"	B	21	24	26	27	7'-5"	B	21	24	25	26	4'-7"	A	18	21	22	23
	4.5	15'-1"	7'-9"	B	22	24	25	27	6'-10"	B	21	23	25	26	4'-2"	A	18	23	22	23
	5	13'-1"	7'-3"	B	22	23	25	26	6'-4"	B	21	23	24	26	3'-8"	A	18	20	21	23
	5.5	12'-4"	6'-8"	B	22	23	25	26	5'-11"	B	21	22	24	25	3'-5"	A	18	20	21	22
	6	11'-4"	6'-1"	B	22	23	24	26	5'-7"	B	21	22	24	26	3'-2"	A	18	19	21	22
	6.5	10'-5"	6'-0"	B	23	23	24	25	5'-3"	B	22	22	23	25	3'-0"	A	18	19	21	22
	7	9'-8"	6'-0"	B	23	23	24	25	5'-0"	B	22	22	23	24	2'-9"	A	18	19	20	22
	7.5	9'-1"	5'-6"	B	23	23	23	25	4'-8"	B	22	22	23	24	2'-7"	A	18	19	20	21
	8	8'-4"	5'-3"	C	23	23	23	25	4'-6"	B	22	22	23	24	2'-6"	A	18	19	20	21
	8.5	8'-0"	4'-11"	C	23	23	23	24	4'-3"	B	22	22	23	24	2'-4"	A	18	19	20	21
	9	7'-6"	4'-8"	C	23	23	23	24	4'-1"	B	22	22	22	24	2'-2"	A	18	19	20	21
	9.5	7'-3"	4'-6"	C	23	23	23	24	3'-11"	B	22	22	22	23	2'-1"	A	18	18	20	21
	10	6'-8"	4'-4"	C	23	23	23	24	3'-9"	B	22	22	22	23	2'-0"	A	18	18	19	21
	11	6'-2"	4'-0"	C	23	23	23	24	3'-6"	B	22	22	22	23	1'-9"	A	18	18	19	21
	12	5'-8"	3'-9"	C	24	24	24	24	3'-3"	B	23	23	23	23	1'-8"	A	18	18	19	21
	13	5'-2"	3'-6"	C	24	24	24	24	3'-0"	B	23	23	23	23	1'-6"	A	18	18	20	21
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-9"	11'-0"	B	20	24	26	27	9'-9"	A	18	23	25	26	6'-6"	A	18	21	22	23
	3.5	19'-5"	10'-0"	B	20	24	25	26	8'-10"	A	19	23	24	26	5'-6"	A	17	20	22	23
	4	17'-0"	9'-3"	B	20	23	25	26	8'-1"	B	19	22	24	26	5'-2"	A	17	20	21	22
	4.5	15'-1"	8'-9"	B	21	23	24	25	7'-6"	B	20	22	24	25	4'-8"	A	17	19	21	22
	5	13'-7"	7'-11"	B	21	22	24	25	7'-0"	B	20	22	23	24	4'-3"	A	17	19	20	22
	5.5	12'-4"	7'-6"	B	21	22	23	25	6'-6"	B	20	21	23	24	3'-11"	A	17	19	20	21
	6	11'-4"	7'-0"	B	21	22	23	24	6'-2"	B	20	21	23	24	3'-7"	A	17	19	20	21
	6.5	10'-8"	6'-7"	B	21	22	23	24	5'-9"	B	20	21	22	24	3'-4"	A	17	18	20	21
	7	9'-8"	6'-3"	B	21	21	23	24	5'-6"	B	21	21	22	23	3'-1"	A	17	18	19	21
	7.5	9'-1"	5'-11"	B	22	22	23	24	5'-3"	B	21	21	22	23	2'-11"	A	17	18	19	20
	8	8'-6"	5'-8"	B	22	22	22	24	5'-0"	B	21	21	22	23	2'-9"	A	17	18	19	20
	8.5	8'-0"	5'-5"	B	22	22	22	23	4'-9"	B	21	21	22	23	2'-7"	A	17	18	19	20
	9	7'-6"	5'-2"	B	22	22	22	23	4'-6"	B	21	21	21	23	2'-6"	A	17	17	19	20
	9.5	7'-3"	5'-0"	C	22	22	22	23	4'-4"	B	21	21	21	22	2'-4"	A	17	17	19	20
	10	6'-8"	4'-9"	C	22	22	22	23	4'-2"	B	21	21	21	22	2'-3"	A	17	17	18	20
	11	6'-2"	4'-6"	C	22	22	22	22	3'-11"	B	21	21	21	22	2'-0"	A	17	17	18	20
	12	5'-8"	4'-3"	C	22	22	22	22	3'-7"	B	21	21	21	22	1'-10"	A	17	17	18	20
	13	5'-2"	3'-10"	C	23	23	23	23	3'-5"	B	22	22	22	22	1'-8"	A	17	17	19	20

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" & 5.5" Extruded Alum Fascia (MU07) MAX POST SPACING (FT)	MU07 Attached Structure MIN POST TYPE	MU07 Attached Structure FOOTER SIZE "d" (in)	MU07 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU07 10' "d" (in)	MU07 12' "d" (in)	4.5" Extruded Alum Fascia (MU32) MAX POST SPACING (FT)	MU32 Attached Structure MIN POST TYPE	MU32 Attached Structure FOOTER SIZE "d" (in)	MU32 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU32 10' "d" (in)	MU32 12' "d" (in)	6" RF Fascia Detail MU29 MAX POST SPACING (FT)	MU29 Attached Structure MIN POST TYPE	MU29 Attached Structure FOOTER SIZE "d" (in)	MU29 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU29 10' "d" (in)	MU29 12' "d" (in)
115 MPH EXPOSURE B																				
20	3	11'-10"	8'-10"	B	18	22	24	26	7'-9"	B	17	22	24	25	4'-11"	A	15	20	21	22
	3.5	10'-2"	7'-11"	B	18	22	24	25	7'-0"	B	18	22	23	24	4'-3"	A	16	19	20	22
	4	8'-11"	7'-3"	B	18	22	23	25	6'-5"	B	18	21	23	24	3'-8"	A	15	19	20	21
	4.5	7'-11"	6'-8"	B	18	22	23	24	5'-10"	B	18	21	22	24	3'-6"	A	16	18	20	21
	5	7'-1"	6'-2"	B	18	21	23	24	5'-8"	B	18	21	22	23	3'-1"	A	15	18	19	21
	5.5	6'-5"	5'-9"	B	19	21	22	24	5'-1"	B	18	20	22	23	2'-10"	A	15	18	19	20
	6	5'-11"	5'-6"	B	19	21	22	23	4'-8"	B	19	20	22	23	2'-7"	A	15	18	19	20
	6.5	5'-5"	5'-1"	C	20	20	22	23	4'-6"	B	19	20	21	23	2'-6"	A	15	17	19	20
	7	5'-1"	4'-10"	C	20	20	22	23	4'-3"	B	19	20	21	22	2'-3"	A	15	17	18	20
	7.5	4'-8"	4'-7"	C	20	20	21	23	4'-0"	B	19	19	21	22	2'-1"	A	15	17	18	20
	8	4'-6"	4'-4"	C	20	20	21	22	3'-9"	B	19	19	21	22	2'-0"	A	15	17	18	19
	8.5	4'-2"	4'-1"	C	20	20	21	22	3'-7"	B	19	19	20	22	1'-10"	A	15	17	18	19
	9	3'-11"	3'-11"	C	20	20	21	22	3'-5"	B	19	19	20	22	1'-9"	A	15	17	18	19
	9.5	3'-9"	3'-9"	C	20	20	21	22	3'-3"	B	19	19	20	21	1'-8"	A	15	16	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-1"	B	20	24	26	27	7'-2"	B	19	24	26	27	4'-4"	A	16	21	22	24
	3.5	10'-2"	7'-3"	B	20	24	26	27	6'-5"	B	19	23	25	26	3'-10"	A	16	20	22	23
	4	8'-11"	6'-7"	B	20	23	25	26	5'-10"	B	20	23	24	26	3'-4"	A	16	20	21	23
	4.5	7'-11"	6'-1"	B	21	23	25	26	5'-4"	B	20	22	24	25	3'-0"	A	16	20	21	22
	5	7'-1"	5'-6"	B	21	23	24	26	4'-11"	B	20	22	24	25	2'-9"	A	16	19	21	22
	5.5	6'-5"	5'-3"	C	21	22	24	25	4'-7"	B	20	22	23	25	2'-6"	A	16	19	20	22
	6	5'-11"	4'-11"	C	21	22	24	25	4'-4"	B	20	22	23	24	2'-4"	A	17	19	20	22
	6.5	5'-6"	4'-7"	C	21	22	23	25	4'-0"	B	20	21	23	24	2'-2"	A	17	19	20	21
	7	5'-1"	4'-4"	C	21	22	23	24	3'-10"	B	20	21	23	24	2'-0"	A	17	18	20	21
	7.5	4'-8"	4'-1"	C	22	22	23	24	3'-7"	B	21	21	22	24	1'-10"	A	17	18	20	21
	8	4'-6"	3'-11"	C	22	22	23	24	3'-5"	B	21	21	22	23	1'-9"	A	17	18	20	21
	8.5	4'-2"	3'-9"	C	22	22	22	24	3'-3"	B	21	21	22	23	1'-8"	A	17	18	19	21
	9	3'-11"	3'-6"	C	22	22	22	24	3'-1"	B	21	21	22	23	1'-7"	A	17	18	19	21
	9.5	3'-9"	3'-6"	C	22	22	22	23	2'-11"	B	21	21	22	23	1'-6"	A	17	18	19	21
115 MPH EXPOSURE B																				
25	3	11'-4"	8'-6"	B	18	23	24	26	7'-4"	B	17	22	24	26	4'-10"	A	15	23	21	22
	3.5	9'-8"	7'-10"	B	18	22	24	25	6'-11"	B	18	22	23	24	4'-2"	A	15	19	20	22
	4	8'-6"	7'-2"	B	18	22	23	25	6'-4"	B	18	21	23	24	3'-9"	A	15	18	20	21
	4.5	7'-6"	6'-7"	B	18	22	23	24	5'-9"	B	18	21	22	24	3'-4"	A	15	18	20	21
	5	6'-9"	6'-1"	B	18	21	23	24	5'-4"	B	18	21	22	23	3'-0"	A	15	18	19	21
	5.5	6'-2"	5'-8"	B	18	21	22	24	5'-0"	B	18	20	22	23	2'-9"	A	15	18	19	20
	6	5'-8"	5'-4"	B	19	21	22	23	4'-8"	B	19	20	21	23	2'-7"	A	15	18	19	20
	6.5	5'-2"	5'-0"	C	19	20	22	23	4'-6"	B	19	20	21	22	2'-4"	A	15	17	19	20
	7	4'-10"	4'-9"	C	20	20	22	23	4'-2"	B	19	20	21	22	2'-2"	A	15	17	18	20
	7.5	4'-6"	4'-6"	C	20	23	21	23	3'-11"	B	19	19	21	22	2'-1"	A	15	17	18	20
	8	4'-3"	4'-3"	C	20	23	21	23	3'-9"	B	19	19	21	22	1'-11"	A	15	17	18	19
	8.5	4'-0"	4'-1"	C	20	20	21	22	3'-7"	B	19	19	20	22	1'-10"	A	15	17	18	19
	9	3'-9"	3'-10"	C	20	20	21	22	3'-5"	B	19	19	20	21	1'-9"	A	15	17	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	7'-11"	B	20	24	26	27	7'-0"	B	19	24	25	27						
	3.5	9'-8"	7'-1"	B	20	24	25	27	6'-3"	B	19	23	25	26						
	4	8'-6"	6'-6"	B	20	23	24	26	5'-8"	B	19	23	24	26						
	4.5	7'-6"	5'-11"	B	20	23	24	26	5'-3"	B	20	22	24	25						
	5	6'-9"	5'-6"	B	21	23	24	25	4'-10"	B	20	22	24	25						
	5.5	6'-2"	5'-1"	C	21	22	24	25	4'-6"	B	20	22	23	25						
	6	5'-8"	4'-9"	C	21	22	23	25	4'-2"	B	20	21	23	24						
	6.5	5'-2"	4'-6"	C	21	22	23	25	3'-11"	B	20	21	23	24						
	7	4'-10"	4'-3"	C	21	21	23	24	3'-8"	B	20	21	22	24						
	7.5	4'-6"	4'-0"	C	21	21	23	24	3'-6"	B	20	21	22	24						
	8	4'-3"	3'-9"	C	21	21	23	24	3'-4"	B	20	21	22	23						
	8.5	4'-0"	3'-7"	C	21	21	22	24	3'-2"	B	21	21	22	23						
	9	3'-9"	3'-5"	C	22	22	22	23	3'-0"	B	21	21	22	23						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 58139 Exp. 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5050[illegible] 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.7

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" & 5.5" Extruded Alum Fascia (MU07) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'	4.5" Extruded Alum Fascia (MU32) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'	6" RF Fascia Detail MU28 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	9'-10"	B	21	26	27	29	8'-6"	B	20	25	28	28	5'-8"	A	18	22	23	25
	3.5	19'-5"	8'-11"	B	22	25	27	28	7'-10"	B	21	24	26	27	4'-11"	A	18	21	23	24
	4	17'-0"	8'-2"	B	22	26	28	27	7'-2"	B	21	24	25	27	4'-3"	A	18	21	22	24
	4.5	15'-1"	7'-6"	B	22	24	26	27	6'-7"	B	21	23	25	26	4'-0"	A	18	21	22	23
	5	13'-7"	7'-0"	B	23	24	25	27	6'-2"	B	21	23	25	26	3'-7"	A	18	20	22	23
	5.5	12'-4"	6'-6"	B	23	23	25	26	5'-9"	B	22	23	24	26	3'-4"	A	18	20	21	23
	6	11'-4"	6'-2"	B	23	23	25	26	5'-5"	B	22	23	24	26	3'-1"	A	18	20	21	22
	6.5	10'-5"	5'-9"	B	23	23	24	26	5'-1"	B	22	22	24	25	2'-10"	A	18	19	21	22
	7	9'-8"	5'-6"	B	23	23	24	25	4'-10"	B	22	22	24	25	2'-8"	A	18	19	21	22
	7.5	9'-1"	5'-2"	C	23	23	24	26	4'-7"	B	22	22	23	25	2'-6"	A	18	19	20	22
	8	8'-6"	4'-11"	C	23	23	24	25	4'-4"	B	22	22	23	24	2'-4"	A	18	19	20	22
	8.5	8'-0"	4'-9"	C	23	23	23	25	4'-2"	B	22	22	23	24	2'-2"	A	18	19	20	21
	9	7'-6"	4'-6"	C	24	24	24	25	3'-11"	B	23	23	23	24	2'-1"	A	18	18	20	21
	9.5	7'-2"	4'-4"	C	24	24	24	24	3'-9"	B	23	23	23	24	2'-0"	A	18	18	20	21
	10	6'-9"	4'-2"	C	24	24	24	24	3'-8"	B	23	23	23	24	1'-10"	A	18	18	20	21
	11	6'-2"	3'-10"	C	24	24	24	24	3'-4"	B	23	23	23	23	1'-8"	A	18	18	20	21
110 MPH EXPOSURE B																				
20	3	11'-10"	9'-1"	B	18	23	24	25	8'-0"	B	17	22	23	25	5'-1"	A	16	19	21	22
	3.5	10'-3"	8'-2"	B	18	22	23	25	7'-3"	B	17	21	23	24	4'-5"	A	15	19	20	21
	4	8'-11"	7'-5"	B	18	22	23	24	6'-7"	B	18	21	22	24	3'-11"	A	15	18	20	21
	4.5	7'-11"	6'-10"	B	19	21	23	24	6'-0"	B	18	21	22	23	3'-6"	A	15	18	19	21
	5	7'-1"	6'-4"	B	19	21	22	23	5'-7"	B	18	20	22	23	3'-2"	A	15	18	19	20
	5.5	6'-5"	5'-11"	B	19	21	22	23	5'-2"	B	18	20	21	23	2'-11"	A	15	18	19	20
	6	5'-11"	5'-7"	B	19	20	22	23	4'-11"	B	18	20	21	22	2'-8"	A	15	17	19	20
	6.5	5'-6"	5'-3"	C	19	20	21	23	4'-7"	B	18	20	21	22	2'-6"	A	15	17	18	20
	7	5'-1"	4'-11"	C	19	20	21	22	4'-4"	B	18	19	21	22	2'-4"	A	15	17	18	19
	7.5	4'-9"	4'-8"	C	19	20	21	22	4'-1"	B	19	19	21	22	2'-2"	A	15	17	18	19
	8	4'-6"	4'-6"	C	19	19	21	22	3'-11"	B	19	19	20	22	2'-1"	A	15	17	18	19
	8.5	4'-2"	4'-3"	C	20	20	21	22	3'-9"	B	19	19	20	21	1'-11"	A	15	16	18	19
	9	3'-11"	4'-1"	C	20	20	20	22	3'-7"	B	19	19	20	21	1'-10"	A	15	16	18	19
	9.5	3'-8"	3'-11"	C	20	20	20	22	3'-5"	B	19	19	20	21	1'-9"	A	15	16	18	19
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-3"	B	19	24	26	27	7'-4"	B	19	23	25	26	4'-6"	A	16	21	22	23
	3.5	10'-2"	7'-5"	B	20	24	25	26	6'-7"	B	19	23	24	26	3'-11"	A	16	20	21	23
	4	8'-11"	6'-9"	B	20	23	25	26	6'-0"	B	19	22	24	25	3'-6"	A	16	20	21	22
	4.5	7'-11"	6'-3"	B	20	23	24	26	5'-6"	B	19	22	24	25	3'-1"	A	16	19	21	22
	5	7'-1"	5'-9"	B	20	22	24	25	5'-1"	B	20	22	23	25	2'-10"	A	16	19	20	22
	5.5	6'-5"	5'-5"	B	21	22	23	25	4'-9"	B	20	21	23	24	2'-7"	A	16	19	20	21
	6	5'-11"	5'-0"	C	21	22	23	25	4'-6"	B	20	21	23	24	2'-5"	A	16	19	20	21
	6.5	5'-5"	4'-9"	C	21	21	23	24	4'-3"	B	20	21	22	24	2'-2"	A	16	18	20	21
	7	5'-1"	4'-6"	C	21	21	23	24	3'-11"	B	20	21	22	23	2'-1"	A	16	18	20	21
	7.5	4'-9"	4'-3"	C	21	21	22	24	3'-8"	B	20	20	22	23	1'-11"	A	16	18	19	21
	8	4'-5"	4'-0"	C	21	21	22	24	3'-6"	B	20	20	22	23	1'-10"	A	16	18	19	21
	8.5	4'-2"	3'-10"	C	21	21	22	23	3'-4"	B	20	20	22	23	1'-8"	A	16	18	19	20
	9	3'-11"	3'-8"	C	21	21	22	23	3'-2"	B	20	20	21	23	1'-7"	A	16	17	19	20
	9.5	3'-9"	3'-6"	C	21	21	22	23	3'-0"	B	20	20	21	23	1'-6"	A	16	17	19	20
	10	3'-6"	3'-4"	C	21	21	22	23	2'-11"	B	20	20	21	22	1'-6"	A	16	18	19	20

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	5" & 5.5" Extruded Alum Fascia (MU07) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'	4.5" Extruded Alum Fascia (MU32) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'	6" RF Fascia Detail MU28 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10'	12'
115 MPH EXPOSURE B																				
30	3	8'-4"	8'-0"	D	18	22	24	25	7'-1"	B	17	22	23	25	4'-4"	A	14	19	20	22
	3.5	8'-2"	7'-2"	D	18	22	23	25	6'-4"	B	17	21	23	24	3'-8"	A	14	19	20	21
	4	7'-1"	6'-6"	D	18	21	23	24	5'-9"	B	17	21	22	24	3'-4"	A	14	18	20	21
	4.5	6'-4"	6'-0"	B	18	21	23	24	5'-3"	B	18	21	22	23	3'-0"	A	15	18	19	21
	5	5'-8"	5'-7"	D	18	21	22	23	4'-11"	B	18	20	22	23	2'-8"	A	15	18	19	20
	5.5	5'-2"	5'-2"	B	18	21	22	23	4'-6"	B	18	20	21	23	2'-6"	A	15	17	19	20
	6	4'-8"	4'-10"	C	18	20	22	23	4'-3"	B	18	20	21	22	2'-3"	A	15	17	18	20
	6.5	4'-4"	4'-7"	C	18	20	21	23	4'-0"	B	18	19	21	22	2'-1"	A	15	17	18	20
	7	4'-1"	4'-3"	C	18	20	21	22	3'-9"	B	18	19	21	22	1'-11"	A	15	17	18	19
	7.5	3'-9"	4'-1"	C	19	20	21	22	3'-7"	B	18	19	20	22	1'-10"	A	15	17	18	19
	8	3'-6"	3'-10"	C	19	19	21	22	3'-4"	B	18	19	20	21	1'-8"	A	15	17	18	19
	8.5	3'-4"	3'-8"	C	19	19	21	22	3'-2"	B	18	19	20	21	1'-7"	A	15	16	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	9'-4"	7'-5"	B	19	24	26	27	6'-6"	B	18	23	25	26	3'-11"	A	16	20	22	23
	3.5	8'-2"	6'-8"	B	20	23	25	26	5'-10"	B	19	23	24	26	3'-6"	A	16	20	21	23
	4	7'-1"	6'-0"	B	20	23	25	26	5'-4"	B	19	22	24	25	3'-0"	A	16	20	21	22
	4.5	6'-4"	5'-6"	B	20	23	24	26	4'-10"	B	19	22	24	25	2'-8"	A	16	19	21	22
	5	5'-8"	5'-1"	C	20	22	24	25	4'-6"	B	19	22	23	25	2'-4"	A	16	19	20	22
	5.5	5'-2"	4'-9"	C	20	22	23	25	4'-2"	B	19	21	23	24	2'-3"	A	16	19	20	22
	6	4'-8"	4'-5"	C	20	22	23	25	3'-11"	B	20	21	23	24	2'-0"	A	16	18	20	21
	6.5	4'-4"	4'-2"	C	21	21	23	24	3'-8"	B	20	21	22	24	1'-11"	A	16	18	20	21
	7	4'-1"	3'-11"	C	21	21	23	24	3'-6"	B	20	21	22	23	1'-8"	A	16	18	20	21

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVERHANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU109
Twin 0.062"x1.5"x1.5" Scroll	8'	B	MU109
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU89
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.055"x3"x3" Fluted	12'	F	MU65
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	MU88
Alum 0.120"x3"x3" Square	12'	I	MU36
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Squar	12'	K	MU59
3/16"x3"x3" Steel Squar	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Squar	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Squar	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.7 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.7
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.7 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.7
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
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FEB 24 2014

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.8

			5" Magnum Gutter (MU36)						6" Magnum Gutter (MU37)						6" Smooth Gutter (MU38)					
				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units		
						MAX POST LENGTH 8'	10'	12'				MAX POST LENGTH 8'	10'	12'				MAX POST LENGTH 8'	10'	12'
GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	CONSTRAINED FOOTER "d" (in)	"d" (in)	"d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	CONSTRAINED FOOTER "d" (in)	"d" (in)	"d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	CONSTRAINED FOOTER "d" (in)	"d" (in)	"d" (in)
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-5"	13'-3"	B	23	24	26	27	15'-11"	B	21	26	27	28	15'-8"	B	21	24	26	27
	3.5	19'-5"	12'-6"	B	21	24	25	27	15'-1"	C	22	25	27	28	14'-2"	C	22	24	26	27
	4	17'-6"	10'-11"	B	21	23	25	28	14'-5"	C	23	25	26	28	13'-6"	C	22	24	25	26
	4.5	16'-1"	10'-1"	B	21	23	24	28	13'-11"	C	23	25	26	26	12'-11"	C	23	23	25	26
	5	13'-7"	9'-4"	B	21	23	24	25	13'-6"	D	24	25	26	27	12'-3"	C	23	23	25	26
	5.5	12'-4"	8'-8"	B	21	22	24	25	12'-9"	D	24	24	26	27	11'-8"	C	24	24	24	26
	6	11'-4"	8'-3"	C	22	22	23	25	12'-2"	E	25	25	26	27	11'-2"	D	24	24	24	25
	6.5	10'-5"	7'-9"	C	22	22	23	24	11'-7"	E	25	25	25	27	10'-9"	D	24	24	24	25
	7	9'-6"	7'-4"	C	22	22	23	24	11'-2"	E	25	26	26	25	10'-8"	E	25	25	25	25
	7.5	9'-1"	6'-11"	C	22	22	23	24	10'-8"	E	26	25	26	26	10'-0"	E	25	25	25	25
	8	8'-6"	6'-7"	C	22	22	22	24	10'-4"	E	26	26	26	26	9'-9"	E	26	25	25	25
	8.5	8'-0"	6'-4"	C	22	22	22	23	9'-11"	E	26	26	26	26	9'-5"	E	26	25	25	25
	9	7'-6"	6'-0"	C	22	22	22	23	9'-7"	F	26	26	26	26	9'-2"	E	26	26	26	26
	9.5	7'-2"	5'-9"	C	22	22	22	23	9'-4"	F	26	26	26	26	8'-11"	E	26	26	26	26
	10	6'-9"	5'-6"	C	23	23	23	23	9'-0"	F	26	26	26	26	8'-4"	F	26	26	26	26
	11	6'-2"	5'-1"	C	23	23	23	23	8'-6"	F	27	27	27	27	8'-3"	F	26	26	26	26
	12	5'-8"	4'-8"	C	23	23	23	23	8'-1"	F	27	27	27	27	7'-9"	F	27	27	27	27
	13	5'-3"	4'-5"	C	23	23	23	23	7'-8"	F	27	27	27	27	7'-6"	F	27	27	27	27
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	11'-8"	B	22	26	28	29	14'-11"	C	24	27	29	31	14'-5"	C	23	28	28	29
	3.5	19'-5"	10'-7"	B	22	25	27	28	14'-2"	C	24	27	29	30	13'-4"	C	24	26	27	29
	4	17'-6"	9'-7"	B	22	25	26	28	13'-5"	C	25	27	28	30	12'-6"	C	24	25	27	28
	4.5	15'-1"	8'-10"	B	23	24	26	27	12'-10"	D	26	27	28	30	11'-9"	C	25	25	27	28
	5	13'-7"	8'-3"	B	23	24	26	27	12'-1"	E	26	26	28	29	11'-2"	D	25	26	26	28
	5.5	12'-4"	7'-7"	C	23	24	25	27	11'-6"	E	26	26	27	29	10'-8"	D	26	26	26	27
	6	11'-4"	7'-3"	C	23	23	25	26	10'-11"	E	27	27	27	29	10'-3"	E	26	26	26	27
	6.5	10'-6"	6'-9"	C	23	23	25	26	10'-6"	E	27	27	27	28	9'-10"	E	27	27	27	27
	7	9'-6"	6'-4"	C	24	24	24	26	10'-0"	E	27	27	27	28	9'-6"	E	27	27	27	27
	7.5	9'-1"	6'-0"	C	24	24	24	25	9'-7"	F	28	28	28	28	9'-2"	E	27	27	27	27
	8	8'-6"	5'-8"	C	24	24	24	25	9'-3"	F	28	28	28	28	8'-10"	E	27	27	27	27
	8.5	8'-0"	5'-5"	C	24	24	24	25	8'-11"	F	28	28	28	28	8'-7"	F	28	28	28	28
	9	7'-6"	5'-3"	C	24	24	24	25	8'-7"	F	28	28	28	28	8'-3"	F	28	28	28	28
	9.5	7'-2"	4'-11"	C	24	24	24	24	8'-4"	F	29	29	29	29	8'-0"	F	28	28	28	28
	10	6'-9"	4'-8"	C	24	24	24	24	8'-1"	F	29	29	29	29	7'-9"	F	28	28	28	28
	11	6'-2"	4'-4"	C	24	24	24	24	7'-7"	F	29	29	29	29	7'-4"	F	29	29	29	29
	12	5'-8"	4'-1"	C	24	24	24	24	7'-2"	F	29	29	29	29	6'-11"	F	29	29	29	29
	13	5'-3"	3'-9"	C	24	24	24	24	6'-10"	F	30	30	30	30	6'-7"	F	29	29	29	29
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	12'-9"	B	21	25	28	28	15'-7"	B	22	26	28	29	15'-4"	B	22	25	28	28
	3.5	19'-5"	11'-6"	B	21	24	26	27	14'-10"	C	23	26	27	29	14'-3"	C	22	24	26	27
	4	17'-0"	10'-6"	B	21	24	26	27	14'-2"	C	23	25	27	28	13'-4"	C	23	24	26	27
	4.5	14'-1"	9'-8"	B	21	23	25	28	13'-7"	C	24	25	27	28	12'-7"	C	23	24	26	27
	5	13'-7"	9'-0"	B	22	23	24	28	13'-0"	D	25	25	26	29	11'-11"	C	24	24	25	26
	5.5	12'-4"	8'-5"	B	22	23	24	25	12'-4"	D	25	25	26	28	11'-4"	C	24	24	25	26
	6	11'-4"	7'-10"	C	22	22	24	25	11'-9"	E	25	25	26	27	10'-11"	D	25	25	25	26
	6.5	10'-6"	7'-6"	C	22	22	23	25	11'-3"	E	25	25	26	27	10'-6"	D	25	25	25	26
	7	9'-6"	7'-0"	C	22	22	23	24	10'-8"	E	26	26	26	27	10'-1"	E	25	25	25	25
	7.5	9'-1"	6'-8"	C	22	22	23	24	10'-4"	E	26	26	26	26	9'-9"	E	25	25	25	25
	8	8'-6"	6'-4"	C	23	23	23	24	10'-0"	E	26	26	26	26	9'-5"	E	26	26	26	25
	8.5	8'-0"	6'-0"	C	23	23	23	24	9'-7"	F	26	26	26	26	9'-2"	E	26	26	26	26
	9	7'-6"	5'-9"	C	23	23	23	24	9'-4"	F	27	27	27	27	8'-11"	E	26	26	26	26
	9.5	7'-2"	5'-6"	C	23	23	23	23	9'-0"	F	27	27	27	27	8'-8"	F	26	26	26	26
	10	6'-9"	5'-3"	C	23	23	23	23	8'-8"	F	27	27	27	27	8'-5"	F	27	27	27	27
	11	6'-2"	4'-10"	C	23	23	23	23	8'-3"	F	27	27	27	27	7'-11"	F	27	27	27	27
	12	5'-8"	4'-6"	C	23	23	23	23	7'-10"	F	28	28	28	28	7'-6"	F	27	27	27	27
	13	5'-3"	4'-3"	C	23	23	23	23	7'-5"	F	30	28	28	28	7'-2"	F	28	28	28	28
115 MPH EXPOSURE B																				
20	3	11'-10"	10'-1"	B	19	24	25	28	13'-10"	C	21	23	27	28	12'-11"	C	21	24	25	27
	3.5	10'-2"	9'-1"	B	19	23	24	26	13'-1"	D	22	25	27	28	12'-0"	C	21	24	25	26
	4	8'-11"	8'-3"	B	18	23	24	25	12'-2"	D	22	25	26	27	11'-2"	D	22	23	25	26
	4.5	7'-11"	7'-8"	C	20	22	24	25	11'-4"	E	23	24	26	27	10'-7"	D	22	23	24	26
	5	7'-1"	6'-11"	C	20	22	23	24	10'-8"	E	23	24	25	27	10'-0"	E	22	23	24	26
	5.5	6'-6"	6'-5"	C	20	21	23	24	10'-1"	E	23	24	25	26	9'-7"	E	23	23	24	26
	6	5'-11"	6'-0"	C	20	21	23	24	9'-7"	F	24	24	25	26	9'-3"	E	23	23	24	26
	6.5	5'-6"	5'-8"	C	20	21	22	23	9'-2"	F	24	24	25	26	8'-10"	E	23	23	23	25
	7	5'-1"	5'-4"	C	20	21	22	23	8'-9"	F	24	24	24	26	8'-5"	F	24	24	24	25
	7.5	4'-9"	5'-0"	C	20	20	22	23	8'-5"	F	24	24	24	25	8'-1"	F	24	24	24	24
	8	4'-5"	4'-8"	C	21	21	22	23	8'-1"	F	24	24	24	25	7'-8"	F	24	24	24	24
	8.5	4'-2"	4'-6"	C	21	21	21	23	7'-9"	F	25	25	25	25	7'-6"	F	24	24	24	24
	9	3'-11"	4'-4"	C	21	21	21	22	7'-6"	F	25	25	25	25	7'-3"	F	25	25	25	25
	9.5	3'-9"	4'-1"	C	21	21	21	22	7'-3"	F	25	25	26	26	7'-0"	F	25	25	25	25
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	9'-3"	B	21	25	27	28	13'-3"	D	23	27	29	30	12'-1"	C	23	26	27	28
	3.5	10'-2"	8'-3"	B	21	25	26	28	12'-2"	E	24	27	28	30	11'-3"	D	23	25	27	28
	4	8'-11"	7'-6"	C	21	24	26	27	11'-4"	E	24	26	28	29	10'-6"	D	24	25	27	28
	4.5	7'-11"	6'-10"	C	21	24	25	27	10'-7"	E	25	26	28	29	9'-11"	E	24	25	26	28
	5	7'-1"	6'-3"	C	22	23	25	26	9'-11"	E	26	26	27	29	9'-6"	E	25	25	26	27
	5.5	6'-6"	5'-10"	C	22	23	24	26	9'-5"	F	26	26	27	28	8'-8"	E	25	25	26	27
	6	5'-11"	5'-5"	C	22	23	24	25	8'-11"	F	26	26	27	28	8'-3"	F	25	25	26	27
	6.5	5'-6"	5'-1"	C	22	22	24	25	8'-6"	F	26	26	26	26	8'-2"	F	26	26	26	27
	7	5'-1"	4'-9"	C	22	22	23	25	8'-1"	F	26	26	26	27	7'-10"	F	26	26	26	26
	7.5	4'-9"	4'-6"	C	22	22	23	25	7'-9"	F	27	27	27	27	7'-6"	F	26	26	26	26
	8	4'-6"	4'-3"	C	22	23	23	24	7'-6"	F	27	27	27	27	7'-2"	F	26	26	26	26
	8.5	4'-3"	4'-0"	C	22	22	23	24	7'-2"	F	27	27	27	27	6'-11"	F	27	27	27	27
	9	3'-11"	3'-10"	C	22	22	23	24	6'-11"	F	27	27	27	27	6'-8"	F	27	27	27	27
	9.5	3'-9"	3'-8"	C	22	22	23	24	6'-8"	F	27	27	27	27	6'-5"	F	27	27	27	27
115 MPH EXPOSURE B																				
25	3	11'-4"	10'-4"	B	19	24	25	26	13'-8"	C	21	25	27	28	12'-10"	C	21	24	25	27
	3.5	9'-8"	8'-11"	B	18	23	24	26	12'-11"	D	22	25	26	28	11'-10"	C	21	24	25	26
	4	8'-6"	8'-1"	C	18	22	24	26	12'-0"	E	22	23	26	27	11'-1"	D	22	23	25	26
	4.5	7'-6"	7'-5"	C	20	22	23	25	11'-3"	E	23	24	26	27	10'-4"	D	22	23	24	26
	5	6'-6"	6'-10"	C	20	22	23	24	10'-7"	E	23	24	25	27	9'-11"	E	22	23	24	25
	5.5	6'-2"	6'-4"	C	20	21	23	24	10'-0"	E	23	24	25	26	9'-6"	E	23	23	24	25
	6	5'-8"	5'-11"	C	20	21	22	24	9'-6"	F	23	23	25	26	9'-1"	E	23	23	24	25
	6.5	5'-3"	5'-7"	C	20	21	22	23	9'-1"	F	24	24	24	26	8'-8"	F	23	23	23	25
	7	4'-10"	5'-3"	C	20	21	22	23	8'-6"	F	24	24	24	26	8'-4"	F	24	24	24	24
	7.5	4'-6"	4'-11"	C	20	20	22	23	8'-4"	F	24	24	24	25	8'-0"	F	24	24	24	24
	8	4'-3"	4'-8"	C	20	20	21	23	8'-0"	F	24	24	24	25	7'-8"	F	24	24	24	24
	8.5	4'-0"	4'-6"	C	20	20	21	23	7'-8"	F	25	25	25	25	7'-6"	F	24	24	24	24
	9	3'-9"	4'-3"	C	21	21	21	22	7'-6"	F	25	25	25	25	7'-2"	F	24	24	24	24
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	8'-8"	B	21	25	27	28	13'-6"	D	23	27	29	30						
	3.5	9'-8"	8'-0"	B	21	24	26	27	11'-11"	E	24	27	28	30						
	4	8'-6"	7'-3"	C	21	24	26	27	11'-1"	E	24	26	28	29						
	4.5	7'-6"	6'-8"	C	21	23	25	26	10'-4"	E	25	26	27	29						
	5	6'-8"	6'-1"	C	21	23	25	26	9'-9"	E	25	25	27	29						
	5.5	6'-2"	5'-8"	C	22	23	24	26	9'-2"	F	25	25	27	28						
	6	5'-8"	5'-3"	C	22	22	24	25	8'-8"	F	26	26	26	28						
	6.5	5'-2"	4'-11"	C	22	22	24	25	8'-4"	F	26	26	26	28						
	7	4'-10"	4'-8"	C	22	22	23	25	7'-11"	F	26	26	26	27						
	7.5	4'-6"	4'-4"	C	22	22	23	24	7'-7"	F	26	26	26	27						
	8	4'-3"	4'-2"	C	22	22	23	24	7'-4"	F	27	27	27	27						
	8.5	4'-0"	3'-11"	C	22	22	23	24	7'-0"	F	27	27	27	27						
	9	3'-9"	3'-9"	C	22	22	22	24	6'-8"	F	27	27	27	27						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 EXP 6-30-2016 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5860906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.8

Column groups: 5" Magnum Gutter (MU36), 6" Magnum Gutter (MU37), 6" Smooth Gutter (MU38). In each group, MAX POST SPACING is for the Attached Structure; MIN POST TYPE, FOOTER SIZE and MAX POST LENGTH (CONSTRAINED FOOTER) 8' / 10' / 12' are for Freestanding or Multispan Units.

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU36 MAX POST SPACING (FT)	MU36 MIN POST TYPE	MU36 FOOTER SIZE "d" (in)	MU36 8' "d" (in)	MU36 10' "d" (in)	MU36 12' "d" (in)	MU37 MAX POST SPACING (FT)	MU37 MIN POST TYPE	MU37 FOOTER SIZE "d" (in)	MU37 8' "d" (in)	MU37 10' "d" (in)	MU37 12' "d" (in)	MU38 MAX POST SPACING (FT)	MU38 MIN POST TYPE	MU38 FOOTER SIZE "d" (in)	MU38 8' "d" (in)	MU38 10' "d" (in)	MU38 12' "d" (in)
10 LIVE LOAD ONLY	3	22'-8"	11'-4"	B	22	28	28	29	14'-6"	C	24	28	30	31	14'-1"	C	24	27	28	30
	3.5	19'-5"	10'-3"	B	23	26	27	29	13'-11"	C	25	28	29	31	13'-6"	C	24	28	28	29
	4	17'-0"	9'-4"	B	23	25	27	28	13'-4"	D	26	27	29	30	12'-2"	C	25	28	27	29
	4.5	15'-1"	8'-8"	B	23	25	26	28	12'-6"	D	26	27	29	30	11'-6"	C	26	28	27	28
	5	13'-7"	7'-11"	C	23	24	26	27	11'-10"	E	27	27	28	30	10'-11"	D	26	28	27	28
	5.5	12'-4"	7'-4"	C	24	24	26	27	11'-2"	E	27	27	28	29	10'-5"	D	26	28	26	28
	6	11'-4"	6'-11"	C	24	24	25	27	10'-7"	E	27	27	28	29	10'-0"	E	27	27	27	28
	6.5	10'-6"	6'-6"	C	24	24	25	26	10'-2"	E	28	28	28	29	9'-7"	E	27	27	27	27
	7	9'-8"	6'-1"	C	24	24	25	26	9'-8"	F	28	28	28	29	9'-3"	E	27	27	27	27
	7.5	9'-1"	5'-5"	C	24	24	24	26	9'-4"	F	28	28	28	28	8'-11"	E	28	28	28	29
	8	8'-6"	5'-6"	C	24	24	24	25	9'-0"	F	28	28	28	28	8'-7"	F	28	28	28	28
	8.5	8'-0"	5'-2"	C	24	24	24	25	8'-8"	F	29	29	29	29	8'-4"	F	28	28	28	28
	9	7'-6"	5'-0"	C	24	24	24	25	8'-4"	F	29	29	29	29	8'-0"	F	28	29	29	29
	9.5	7'-2"	4'-9"	C	24	24	24	25	8'-1"	F	29	29	29	29	7'-9"	F	28	28	28	29
	10	6'-9"	4'-6"	C	24	24	24	25	7'-10"	F	29	29	29	29	7'-6"	F	29	29	29	29
	11	6'-2"	4'-2"	C	25	25	25	25	7'-4"	F	30	30	30	30	7'-1"	F	29	28	29	29

110 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU36 MAX POST SPACING (FT)	MU36 MIN POST TYPE	MU36 FOOTER SIZE "d" (in)	MU36 8' "d" (in)	MU36 10' "d" (in)	MU36 12' "d" (in)	MU37 MAX POST SPACING (FT)	MU37 MIN POST TYPE	MU37 FOOTER SIZE "d" (in)	MU37 8' "d" (in)	MU37 10' "d" (in)	MU37 12' "d" (in)	MU38 MAX POST SPACING (FT)	MU38 MIN POST TYPE	MU38 FOOTER SIZE "d" (in)	MU38 8' "d" (in)	MU38 10' "d" (in)	MU38 12' "d" (in)
20	3	11'-10"	10'-5"	B	19	23	25	26	14'-0"	C	21	25	26	28	13'-2"	C	20	24	25	26
	3.5	10'-2"	9'-4"	B	19	23	24	26	13'-4"	D	21	24	26	27	12'-3"	C	21	23	25	26
	4	8'-11"	8'-6"	B	19	22	24	25	12'-5"	D	22	24	26	27	11'-6"	C	21	23	24	25
	4.5	7'-11"	7'-9"	C	19	22	23	24	11'-6"	E	22	24	25	27	10'-6"	D	22	23	24	25
	5	7'-1"	7'-2"	C	19	21	23	24	10'-11"	E	22	23	25	26	10'-3"	E	22	22	24	25
	5.5	6'-5"	6'-8"	C	20	21	22	24	10'-4"	E	23	23	25	26	9'-9"	E	22	22	23	25
	6	5'-11"	6'-3"	C	20	21	22	23	9'-10"	E	23	23	24	26	9'-4"	E	22	23	23	24
	6.5	5'-5"	5'-10"	C	20	21	22	23	9'-5"	F	23	23	24	25	9'-0"	E	23	23	23	24
	7	5'-1"	5'-6"	C	20	20	22	23	9'-0"	F	23	23	24	26	8'-8"	F	23	23	23	24
	7.5	4'-8"	5'-2"	C	20	20	21	23	8'-7"	F	24	24	24	25	8'-3"	F	23	23	23	24
	8	4'-5"	4'-11"	C	20	20	21	22	8'-3"	F	24	24	24	25	8'-0"	F	24	24	24	24
	8.5	4'-2"	4'-8"	C	20	20	21	22	8'-0"	F	24	24	24	25	7'-8"	F	24	24	24	24
	9	3'-11"	4'-5"	C	20	20	21	22	7'-8"	F	24	24	24	24	7'-6"	F	24	24	24	24
	9.5	3'-9"	4'-3"	C	20	20	21	22	7'-5"	F	24	24	24	24	7'-3"	F	24	24	24	24

110 MPH EXPOSURE C or 130 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU36 MAX POST SPACING (FT)	MU36 MIN POST TYPE	MU36 FOOTER SIZE "d" (in)	MU36 8' "d" (in)	MU36 10' "d" (in)	MU36 12' "d" (in)	MU37 MAX POST SPACING (FT)	MU37 MIN POST TYPE	MU37 FOOTER SIZE "d" (in)	MU37 8' "d" (in)	MU37 10' "d" (in)	MU37 12' "d" (in)	MU38 MAX POST SPACING (FT)	MU38 MIN POST TYPE	MU38 FOOTER SIZE "d" (in)	MU38 8' "d" (in)	MU38 10' "d" (in)	MU38 12' "d" (in)
20	3	11'-10"	9'-8"	B	20	25	26	28	13'-4"	C	23	27	28	30	12'-4"	C	22	25	27	28
	3.5	10'-2"	8'-6"	B	21	24	26	27	12'-8"	D	23	26	28	29	11'-8"	C	23	25	26	28
	4	8'-11"	7'-8"	C	21	24	25	27	11'-6"	E	24	26	27	29	10'-6"	D	23	24	26	27
	4.5	7'-11"	7'-0"	C	21	23	25	26	10'-9"	E	24	25	27	28	10'-1"	E	24	24	26	27
	5	7'-1"	6'-6"	C	21	23	24	26	10'-2"	E	25	26	27	28	9'-7"	E	24	24	25	27
	5.5	6'-5"	6'-0"	C	21	22	24	25	9'-7"	F	25	26	26	28	9'-2"	E	25	25	25	27
	6	5'-11"	5'-7"	C	21	22	24	25	9'-1"	F	25	25	26	27	8'-8"	F	25	25	25	26
	6.5	5'-5"	5'-3"	C	22	22	23	25	8'-8"	F	26	25	26	27	8'-4"	F	25	25	25	26
	7	5'-1"	4'-11"	C	22	22	23	24	8'-3"	F	26	26	26	27	8'-0"	F	25	25	25	26
	7.5	4'-8"	4'-8"	C	22	22	23	24	7'-11"	F	26	26	26	27	7'-8"	F	26	26	26	26
	8	4'-5"	4'-5"	C	22	22	23	24	7'-8"	F	26	26	26	27	7'-4"	F	26	26	26	26
	8.5	4'-3"	4'-3"	C	22	22	22	24	7'-4"	F	26	26	26	26	7'-1"	F	26	26	26	26
	9	3'-11"	4'-0"	C	22	22	22	24	7'-1"	F	27	27	27	27	6'-10"	F	26	26	26	26
	9.5	3'-9"	3'-9"	C	22	22	22	23	6'-10"	F	27	27	27	27	6'-7"	F	26	26	26	26
	10	3'-8"	3'-7"	C	22	22	22	23	6'-7"	F	27	27	27	27	6'-5"	F	27	27	27	27

115 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU36 MAX POST SPACING (FT)	MU36 MIN POST TYPE	MU36 FOOTER SIZE "d" (in)	MU36 8' "d" (in)	MU36 10' "d" (in)	MU36 12' "d" (in)	MU37 MAX POST SPACING (FT)	MU37 MIN POST TYPE	MU37 FOOTER SIZE "d" (in)	MU37 8' "d" (in)	MU37 10' "d" (in)	MU37 12' "d" (in)	MU38 MAX POST SPACING (FT)	MU38 MIN POST TYPE	MU38 FOOTER SIZE "d" (in)	MU38 8' "d" (in)	MU38 10' "d" (in)	MU38 12' "d" (in)
30	3	9'-6"	8'-1"	B	18	23	25	26	13'-1"	D	21	25	27	28	12'-0"	C	20	24	26	26
	3.5	8'-2"	8'-3"	B	19	23	24	25	12'-1"	E	21	25	26	27	11'-2"	D	21	23	25	26
	4	7'-1"	7'-4"	C	19	22	23	25	11'-2"	E	22	24	26	27	10'-5"	D	21	23	24	26
	4.5	6'-4"	6'-9"	C	19	22	23	24	10'-5"	E	22	24	25	27	9'-10"	E	22	23	24	25
	5	5'-8"	6'-2"	C	19	21	23	24	9'-10"	E	22	23	25	26	9'-4"	E	22	22	24	25
	5.5	5'-2"	5'-9"	C	19	21	22	24	9'-3"	F	23	23	25	26	8'-11"	E	22	22	24	25
	6	4'-9"	5'-4"	C	19	21	22	23	8'-10"	F	23	23	24	26	8'-6"	F	23	23	23	25
	6.5	4'-4"	5'-0"	C	19	20	22	23	8'-5"	F	23	23	24	26	8'-1"	F	23	23	23	24
	7	4'-1"	4'-8"	C	20	20	21	23	8'-0"	F	23	23	24	25	7'-9"	F	23	23	23	24
	7.5	3'-9"	4'-5"	C	20	20	21	22	7'-8"	F	24	24	24	25	7'-6"	F	23	23	23	24
	8	3'-6"	4'-2"	C	20	20	21	22	7'-4"	F	24	24	24	25	7'-1"	F	23	23	23	24
	8.5	3'-4"	4'-0"	C	20	20	21	22	7'-1"	F	24	24	24	25	6'-10"	F	24	24	24	24

115 MPH EXPOSURE C or 130 MPH EXPOSURE D

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU36 MAX POST SPACING (FT)	MU36 MIN POST TYPE	MU36 FOOTER SIZE "d" (in)	MU36 8' "d" (in)	MU36 10' "d" (in)	MU36 12' "d" (in)	MU37 MAX POST SPACING (FT)	MU37 MIN POST TYPE	MU37 FOOTER SIZE "d" (in)	MU37 8' "d" (in)	MU37 10' "d" (in)	MU37 12' "d" (in)	MU38 MAX POST SPACING (FT)	MU38 MIN POST TYPE	MU38 FOOTER SIZE "d" (in)	MU38 8' "d" (in)	MU38 10' "d" (in)	MU38 12' "d" (in)
33	3	9'-6"	8'-5"	B	20	25	26	28	12'-4"	D	23	27	28	30	11'-4"	C	22	25	27	28
	3.5	8'-1"	7'-8"	C	20	24	26	27	11'-4"	D	23	26	28	29	10'-6"	D	23	25	27	28
	4	7'-1"	6'-8"	C	21	24	25	26	10'-4"	E	24	26	28	29	9'-10"	E	23	25	26	28
	4.5	6'-4"	6'-2"	C	21	23	25	26	9'-8"	E	24	26	27	29	9'-4"	E	24	24	26	27
	5	5'-8"	5'-8"	C	21	23	24	26	9'-2"	E	25	25	27	28	8'-10"	F	24	24	26	27
	5.5	5'-2"	5'-3"	C	21	22	24	26	8'-8"	F	25	25	26	28	8'-4"	F	25	25	25	27
	6	4'-9"	4'-10"	C	21	22	24	26	8'-3"	F	25	25	26	28	7'-11"	F	25	25	25	26
	6.5	4'-4"	4'-7"	C	21	22	23	25	7'-10"	F	25	25	26	27	7'-7"	F	25	25	25	26
	7	4'-1"	4'-3"	C	21	22	23	24	7'-6"	F	26	26	26	27	7'-2"	F	25	25	25	26

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

PROJECTION OF SINGLE SPAN STUCTURES (FT)

OVERHANG (FT)	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU109
0.024"x3"x3" Post w/ Sideplate	12'	C	MU113
Alum 0.032"x3"x3" Lockseam	11'	D	MU65
Alum 0.040"x3"x3" Lockseam	11'	E	MU65
Alum 0.055"x3"x3" Fluted	12'	F	MU95
Alum 0.075"x3"x3" Square	12'	G	MU48
Steel 0.043"x3"x3" Lockseam	12'	H	MU65
Alum 0.120"x3"x3" Square	12'	I	MU36
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	18'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.8 THAT HAS ADEQUATE POST SPACING
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.8
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.8 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.8
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4000

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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C68139 Exp. 6-30-2016 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5863906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.9

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	0.043"x3"x3" Steel Lockseam MU89: MAX POST SPACING (FT)	0.043"x3"x3" Steel Lockseam MU89: Attached Structure: MIN POST TYPE	0.043"x3"x3" Steel Lockseam MU89: Attached Structure: FOOTER SIZE "d" (in)	0.043"x3"x3" Steel Lockseam MU89: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU89: 10' "d" (in)	MU89: 12' "d" (in)	0.120"x3"x3" Alum Beam MU96: MAX POST SPACING (FT)	MU96: Attached Structure: MIN POST TYPE	MU96: Attached Structure: FOOTER SIZE "d" (in)	MU96: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU96: 10' "d" (in)	MU96: 12' "d" (in)	0.120"x4"x4" Alum Beam MU50: MAX POST SPACING (FT)	MU50: Attached Structure: MIN POST TYPE	MU50: Attached Structure: FOOTER SIZE "d" (in)	MU50: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU50: 10' "d" (in)	MU50: 12' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	11'-3"	B	19	20	21	23	11'-2"	B	19	20	21	23	15'-1"	B	21	22	24	25
	3.5	19'-5"	10'-9"	B	20	20	21	22	10'-6"	B	19	20	21	22	14'-4"	C	21	22	23	25
	4	17'-6"	10'-0"	B	20	20	21	22	10'-2"	B	20	20	21	22	13'-8"	C	22	22	23	24
	4.5	16'-1"	9'-4"	B	21	21	21	22	9'-8"	B	21	21	21	22	13'-3"	C	23	23	23	24
	5	13'-7"	8'-8"	B	21	21	21	22	9'-6"	B	21	21	21	22	12'-8"	C	24	24	24	24
	5.5	12'-4"	8'-3"	B	21	21	21	21	9'-2"	C	22	22	22	22	12'-4"	D	24	24	24	24
	6	11'-4"	7'-10"	B	21	21	21	21	8'-10"	C	22	22	22	22	12'-0"	D	25	25	25	26
	6.5	10'-5"	7'-5"	B	22	22	22	22	8'-6"	C	23	23	23	23	11'-8"	E	25	25	25	25
	7	9'-6"	7'-1"	C	22	22	22	22	8'-3"	C	23	23	23	23	11'-4"	E	25	26	25	25
	7.5	9'-1"	6'-9"	C	22	22	22	22	8'-3"	C	23	23	23	23	11'-1"	E	26	26	26	26
	8	8'-6"	6'-6"	C	22	22	22	22	8'-1"	C	24	24	24	24	10'-10"	F	26	26	26	26
	8.5	8'-0"	6'-3"	C	22	22	22	22	7'-11"	D	24	24	24	24	10'-8"	F	27	27	27	27
	9	7'-6"	6'-0"	C	22	22	22	22	7'-8"	D	24	24	24	24	10'-6"	F	27	27	27	27
	9.5	7'-2"	5'-10"	C	23	23	23	23	7'-7"	D	25	25	25	25	10'-3"	F	27	27	27	27
	10	6'-8"	5'-7"	C	23	23	23	23	7'-6"	E	25	25	25	25	10'-1"	F	27	27	27	27
	11	6'-2"	5'-3"	C	23	23	23	23	7'-3"	E	25	25	25	25	9'-9"	F	28	28	28	28
	12	5'-6"	4'-9"	C	23	23	23	23	6'-7"	E	25	26	25	25	8'-11"	F	28	28	28	28
	13	5'-2"	4'-6"	C	23	23	23	23	6'-6"	E	26	26	26	26	8'-6"	F	29	29	29	29
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	10'-7"	B	21	22	23	24	10'-6"	B	21	22	23	24	14'-1"	C	23	24	25	27
	3.5	19'-5"	9'-6"	B	22	22	23	24	9'-11"	B	22	22	23	24	13'-6"	C	24	24	25	27
	4	17'-6"	8'-11"	B	22	22	22	24	9'-6"	B	22	22	23	24	12'-10"	C	25	25	25	26
	4.5	16'-1"	8'-4"	B	22	22	22	23	9'-2"	C	23	23	23	24	12'-4"	D	25	25	25	26
	5	13'-7"	7'-9"	B	23	23	23	23	8'-10"	C	23	23	23	24	11'-11"	D	26	26	26	26
	5.5	12'-4"	7'-4"	B	23	23	23	23	8'-7"	C	24	24	24	24	11'-8"	E	26	26	26	26
	6	11'-4"	6'-11"	C	23	23	23	23	8'-4"	C	24	24	24	24	11'-2"	E	27	27	27	27
	6.5	10'-5"	6'-7"	C	23	23	23	23	8'-1"	C	25	25	25	26	10'-11"	E	27	27	27	27
	7	9'-6"	6'-3"	C	23	23	23	23	7'-11"	D	25	26	26	26	10'-8"	F	28	28	28	28
	7.5	9'-1"	6'-6"	C	24	24	24	24	7'-8"	D	26	26	26	26	10'-6"	F	28	28	28	28
	8	8'-6"	6'-6"	C	24	24	24	24	7'-7"	F	26	26	26	26	10'-2"	F	29	29	29	29
	8.5	8'-4"	6'-0"	C	24	24	24	24	7'-5"	E	26	26	26	26	10'-0"	F	29	29	29	29
	9	7'-4"	5'-4"	C	24	24	24	24	7'-3"	E	27	27	27	27	9'-8"	F	30	30	30	30
	9.5	7'-2"	5'-1"	C	24	24	24	24	7'-1"	E	27	27	27	27	9'-7"	F	30	30	30	30
	10	6'-6"	4'-11"	C	24	24	24	24	7'-0"	E	27	27	27	27	9'-6"	F	30	30	30	30
	11	6'-2"	4'-8"	C	25	25	25	25	6'-9"	F	28	28	28	28	9'-2"	F	31	31	31	31
	12	5'-8"	4'-4"	C	25	25	25	25	6'-2"	F	28	28	28	28	8'-4"	F	31	31	31	31
	13	5'-2"	4'-1"	C	25	25	25	25	5'-6"	F	28	28	28	28	8'-3"	F	31	31	31	31
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	11'-1"	B	20	20	22	23	11'-8"	B	20	20	22	23	14'-8"	B	22	23	24	25
	3.5	19'-5"	10'-6"	B	20	20	22	23	10'-6"	B	20	20	22	23	14'-1"	C	22	22	24	25
	4	17'-6"	9'-9"	B	21	21	21	23	10'-6"	B	21	21	21	23	13'-8"	C	23	23	24	26
	4.5	16'-1"	9'-0"	B	21	21	21	22	9'-7"	B	21	21	21	23	12'-11"	C	24	24	24	25
	5	13'-7"	8'-6"	B	21	21	21	22	9'-3"	B	22	22	22	22	12'-6"	C	24	24	24	25
	5.5	12'-4"	8'-4"	B	21	21	21	22	8'-11"	C	22	22	23	22	12'-1"	D	25	25	25	26
	6	11'-4"	7'-6"	B	22	22	22	22	8'-6"	C	23	23	23	23	11'-8"	E	25	26	25	25
	6.5	10'-5"	7'-2"	B	22	22	22	22	8'-4"	C	23	23	23	23	11'-5"	E	26	26	26	26
	7	9'-6"	6'-11"	C	22	22	22	22	8'-3"	C	24	24	24	24	11'-2"	E	26	26	26	26
	7.5	9'-1"	6'-8"	C	22	22	22	22	8'-1"	C	24	24	24	24	10'-11"	E	26	26	26	26
	8	8'-6"	6'-3"	C	22	22	22	22	7'-11"	C	24	24	24	24	10'-8"	F	27	27	27	27
	8.5	8'-0"	6'-0"	C	23	23	23	23	7'-8"	D	25	25	25	25	10'-5"	F	27	27	27	27
	9	7'-6"	5'-10"	C	23	23	23	23	7'-7"	D	25	25	25	25	10'-3"	F	28	28	28	28
	9.5	7'-2"	5'-7"	C	23	23	23	23	7'-5"	E	25	25	25	25	10'-1"	F	28	28	28	28
	10	6'-9"	5'-3"	C	23	23	23	23	7'-4"	E	26	26	26	26	9'-11"	F	28	28	28	28
	11	6'-2"	5'-1"	C	23	23	23	23	7'-1"	E	26	26	26	26	9'-7"	F	29	29	29	29
	12	5'-6"	4'-9"	C	24	24	24	24	6'-6"	E	26	26	26	26	9'-0"	F	29	29	29	29
	13	5'-2"	4'-6"	C	24	24	24	24	6'-4"	F	26	26	26	26	8'-6"	F	29	29	29	29
115 MPH EXPOSURE B																				
20	3	11'-10"	9'-4"	B	18	20	21	22	9'-8"	B	18	20	21	23	13'-1"	C	21	22	24	25
	3.5	10'-2"	8'-8"	B	18	19	21	22	9'-3"	B	19	20	21	22	12'-8"	C	21	22	23	25
	4	8'-11"	7'-10"	B	19	19	21	22	8'-10"	C	20	20	21	22	11'-11"	D	22	22	23	24
	4.5	7'-11"	7'-3"	B	19	19	20	21	8'-6"	C	21	21	21	22	11'-8"	E	23	23	23	24
	5	7'-1"	6'-8"	C	20	20	20	21	8'-2"	C	21	21	21	22	11'-0"	E	23	23	23	24
	5.5	6'-6"	6'-4"	C	20	20	20	21	7'-11"	C	21	21	21	22	10'-8"	F	24	24	24	24
	6	5'-11"	6'-0"	C	20	20	20	21	7'-8"	D	22	22	22	22	10'-5"	F	24	24	24	24
	6.5	5'-6"	5'-9"	C	20	20	20	21	7'-6"	E	22	22	22	22	10'-1"	F	25	25	25	25
	7	5'-1"	5'-5"	C	21	21	21	21	7'-4"	E	23	23	23	23	9'-10"	F	25	25	25	25
	7.5	4'-8"	5'-2"	C	21	21	21	21	7'-3"	E	23	23	23	23	9'-8"	F	25	25	25	26
	8	4'-5"	5'-0"	C	21	21	21	21	7'-0"	E	23	23	23	23	9'-6"	F	26	26	26	26
	8.5	4'-2"	4'-8"	C	21	21	21	21	6'-10"	F	24	24	24	24	9'-3"	F	26	26	26	26
	9	3'-11"	4'-7"	C	21	21	21	21	6'-8"	F	24	24	24	24	9'-1"	F	26	26	26	26
	9.5	3'-8"	4'-6"	C	21	21	21	21	6'-7"	F	24	24	24	24	8'-11"	F	27	27	27	27
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	8'-6"	B	20	21	23	24	9'-3"	B	21	22	23	24	12'-6"	C	23	24	26	27
	3.5	10'-2"	7'-10"	B	21	21	22	24	8'-10"	C	21	21	23	24	11'-11"	D	24	24	25	27
	4	8'-11"	7'-3"	B	21	21	22	23	8'-6"	C	22	22	23	24	11'-4"	E	24	24	25	26
	4.5	7'-11"	6'-8"	C	21	21	22	23	8'-1"	C	23	23	23	24	10'-11"	E	25	25	25	26
	5	7'-1"	6'-3"	C	22	22	23	23	7'-10"	D	23	23	23	24	10'-7"	F	26	26	26	26
	5.5	6'-6"	5'-10"	C	22	22	22	23	7'-7"	D	24	24	24	24	10'-3"	F	26	26	26	26
	6	5'-11"	5'-6"	C	22	22	22	23	7'-4"	E	24	24	24	24	9'-11"	F	27	27	27	27
	6.5	5'-6"	5'-3"	C	22	22	22	23	7'-2"	E	25	25	25	25	9'-8"	F	27	27	27	27
	7	5'-1"	5'-0"	C	22	22	22	22	7'-0"	E	25	25	25	25	9'-6"	F	28	28	28	28
	7.5	4'-8"	4'-9"	C	23	23	23	23	6'-10"	F	25	25	25	25	9'-3"	F	28	28	28	28
	8	4'-5"	4'-6"	C	23	23	23	23	6'-8"	F	26	26	26	26	9'-0"	F	29	29	29	29
	8.5	4'-2"	4'-4"	C	23	23	23	23	6'-7"	F	26	26	26	26	8'-10"	F	29	29	29	29
	9	3'-11"	4'-2"	C	23	23	23	23	6'-5"	F	26	26	26	26	8'-7"	F	29	29	29	29
	9.5	3'-8"	4'-0"	C	23	23	23	23	6'-4"	F	27	27	27	27	8'-4"	F	29	29	29	29
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	8'-5"	B	20	21	23	24	9'-2"	B	21	22	23	24	12'-4"	C	23	24	25	27
	3.5	9'-8"	7'-8"	B	21	21	22	24	8'-9"	C	21	21	23	24	11'-8"	D	24	24	25	26
	4	8'-6"	7'-1"	C	21	21	22	23	8'-4"	C	22	22	23	24	11'-3"	E	24	24	25	26
	4.5	7'-6"	6'-8"	C	21	21	22	23	8'-0"	C	23	23	23	24	10'-10"	E	25	25	25	26
	5	6'-9"	6'-1"	C	21	21	21	23	7'-9"	D	23	23	23	24	10'-5"	F	26	26	26	26
	5.5	6'-2"	5'-9"	C	22	22	22	23	7'-6"	D	24	24	24	24	10'-1"	F	26	26	26	26
	6	5'-8"	5'-5"	C	22	22	22	22	7'-3"	E	24	24	24	24	9'-10"	F	27	27	27	27
	6.5	5'-3"	5'-1"	C	22	22	22	22	7'-1"	E	25	25	25	25	9'-7"	F	27	27	27	27
	7	4'-10"	4'-10"	C	22	22	22	22	6'-11"	E	25	25	25	25	9'-4"	F	28	28	28	28
	7.5	4'-6"	4'-8"	C	22	22	22	22	6'-9"	F	25	25	25	25	9'-1"	F	28	28	28	28
	8	4'-3"	4'-6"	C	23	23	23	23	6'-7"	F	26	26	26	26	8'-11"	F	28	28	28	28
	8.5	4'-0"	4'-3"	C	23	23	23	23	6'-6"	F	26	26	26	26	8'-8"	F	29	29	29	29
	9	3'-9"	4'-1"	C	23	23	23	23	6'-4"	F	26	26	26	26	8'-5"	F	29	29	29	29
115 MPH EXPOSURE B																				
25	3	11'-4"	9'-3"	B	18	20	21	22	9'-8"	B	19	20	21	23						
	3.5	9'-8"	8'-5"	B	19	19	21	22	9'-3"	B	19	20	21	22						
	4	8'-6"	7'-9"	B	19	19	20	22	8'-8"	C	20	20	21	22						
	4.5	7'-6"	7'-2"	C	19	19	20	21	8'-6"	C	20	20	21	22						
	5	6'-9"	6'-6"	C	20	20	20	21	8'-1"	C	21	21	21	22						
	5.5	6'-2"	6'-4"	C	20	20	20	21	7'-10"	D	21	21	21	22						
	6	5'-8"	5'-11"	C	20	20	20	21	7'-8"	D	22	22	22	22						
	6.5	5'-3"	5'-8"	C	20	20	20	21	7'-6"	E	22	22	22	22						
	7	4'-10"	5'-4"	C	20	20	20	21	7'-3"	E	23	23	23	23						
	7.5	4'-6"	5'-1"	C	21	21	21	21	7'-1"	E	23	23	23	23						
	8	4'-3"	4'-11"	C	21	21	21	21	6'-11"	E	23	23	23	23						
	8.5	4'-0"	4'-8"	C	21	21	21	21	6'-10"	F	24	24	24	24						
	9	3'-9"	4'-6"	C	21	21	21	21	6'-8"	F	24	24	24	24						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 EXP. 6-30-2016 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 8550906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.9 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.9

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	0.043"x3"x3" Steel Lockseam MU89: MAX POST SPACING (FT)	MU89 Attached Structure: MIN POST TYPE	MU89 Attached Structure: FOOTER SIZE "d" (in)	MU89 Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	MU89: 10' "d" (in)	MU89: 12' "d" (in)	0.120"x3"x3" Alum Beam MU96: MAX POST SPACING (FT)	MU96 Attached Structure: MIN POST TYPE	MU96 Attached Structure: FOOTER SIZE "d" (in)	MU96 Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	MU96: 10' "d" (in)	MU96: 12' "d" (in)	0.120"x4"x4" Alum Beam MU50: MAX POST SPACING (FT)	MU50 Attached Structure: MIN POST TYPE	MU50 Attached Structure: FOOTER SIZE "d" (in)	MU50 Freestanding or Multispan Units, MAX POST LENGTH, CONSTRAINED FOOTER: 8' "d" (in)	MU50: 10' "d" (in)	MU50: 12' "d" (in)
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-0"	10'-4"	B	22	22	24	25	10'-4"	U	21	22	23	25	13'-11"	C	24	24	26	27
	3.5	19'-5"	9'-6"	B	22	22	23	24	9'-9"	B	22	22	23	25	13'-2"	C	25	25	26	27
	4	17'-0"	8'-6"	B	22	22	23	24	9'-4"	B	23	23	23	24	12'-7"	C	25	25	25	27
	4.5	15'-1"	8'-1"	B	23	23	23	24	8'-0"	C	24	24	24	24	12'-3"	D	26	26	26	27
	5	13'-7"	7'-7"	B	23	23	23	24	8'-8"	C	24	24	24	24	11'-6"	E	27	27	27	27
	5.5	12'-4"	7'-1"	C	23	23	23	23	8'-5"	C	25	25	25	25	11'-4"	E	27	27	27	27
	6	11'-4"	6'-8"	C	24	24	24	24	8'-2"	C	25	25	25	25	11'-0"	E	28	28	28	28
	6.5	10'-5"	6'-5"	C	24	24	24	24	7'-11"	C	25	25	26	25	10'-9"	F	28	28	28	30
	7	9'-8"	6'-1"	C	24	24	24	24	7'-8"	D	26	26	26	26	10'-6"	F	29	29	29	29
	7.5	9'-1"	5'-10"	C	24	24	24	24	7'-3"	D	26	26	26	26	10'-3"	F	29	29	29	29
	8	8'-6"	5'-7"	C	24	24	24	24	7'-5"	E	27	27	27	27	10'-0"	F	30	30	30	30
	8.5	8'-0"	5'-4"	C	24	24	24	24	7'-3"	E	27	27	27	27	9'-10"	F	30	30	30	30
	9	7'-6"	5'-2"	C	25	25	25	25	7'-2"	E	27	27	27	27	9'-7"	F	30	30	30	30
	9.5	7'-2"	4'-11"	C	25	25	25	25	7'-0"	E	28	28	28	28	9'-5"	F	31	31	31	31
	10	6'-9"	4'-8"	C	25	25	25	25	6'-11"	F	28	28	28	28	9'-3"	F	31	31	31	31
	11	6'-2"	4'-6"	C	25	25	25	25	6'-8"	F	29	29	29	29	9'-0"	F	32	32	32	32
110 MPH EXPOSURE B																				
20	3	11'-10"	8'-7"	B	18	19	21	22	9'-10"	B	18	20	21	22	13'-3"	C	20	22	23	24
	3.5	10'-2"	8'-6"	B	18	18	20	22	9'-4"	B	19	19	21	22	12'-7"	C	21	21	23	24
	4	8'-11"	8'-0"	B	18	19	20	21	8'-11"	C	19	19	21	22	12'-1"	D	21	21	23	24
	4.5	7'-11"	7'-8"	B	18	19	20	21	8'-7"	C	20	20	20	22	11'-7"	E	22	22	22	24
	5	7'-1"	6'-11"	C	19	19	20	21	8'-4"	C	20	20	20	21	11'-3"	E	23	23	23	24
	5.5	6'-6"	6'-7"	C	20	19	20	21	8'-0"	C	21	21	21	21	10'-10"	F	23	23	23	23
	6	5'-11"	6'-2"	C	20	20	20	20	7'-10"	D	21	21	21	21	10'-6"	F	24	24	24	24
	6.5	5'-6"	5'-10"	C	20	20	20	20	7'-7"	D	22	22	22	22	10'-3"	F	24	24	24	24
	7	5'-1"	5'-7"	C	20	20	20	20	7'-6"	E	22	22	22	22	10'-0"	F	24	24	24	24
	7.5	4'-9"	5'-4"	C	20	20	20	20	7'-3"	E	22	22	22	22	9'-9"	F	25	25	25	25
	8	4'-6"	5'-1"	C	20	20	20	20	7'-1"	E	23	23	23	23	9'-7"	F	25	25	25	25
	8.5	4'-2"	4'-11"	C	20	20	20	20	6'-11"	E	23	23	23	23	9'-4"	F	25	25	25	25
	9	3'-11"	4'-8"	C	21	21	21	21	6'-10"	F	23	23	23	23	9'-2"	F	26	26	26	26
	9.5	3'-8"	4'-6"	C	21	21	21	21	6'-8"	F	24	24	24	24	9'-0"	F	26	26	26	26
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	10'-10"	8'-10"	B	20	21	22	24	9'-5"	B	20	21	23	24	12'-6"	C	22	23	25	26
	3.5	10'-2"	8'-0"	B	20	20	22	23	8'-11"	C	21	21	22	24	12'-0"	D	23	23	25	26
	4	8'-11"	7'-4"	B	21	21	22	23	8'-6"	C	22	22	22	24	11'-6"	E	24	24	24	26
	4.5	7'-10"	6'-10"	C	21	21	21	23	8'-2"	C	22	22	22	23	11'-1"	E	24	24	24	26
	5	7'-1"	6'-5"	C	21	21	21	22	7'-11"	C	23	23	23	23	10'-8"	F	25	25	25	25
	5.5	6'-6"	6'-0"	C	21	21	21	22	7'-8"	D	23	23	23	23	10'-4"	F	26	26	26	26
	6	5'-11"	5'-8"	C	22	22	22	22	7'-6"	E	24	24	24	24	10'-1"	F	26	26	26	26
	6.5	5'-6"	5'-4"	C	22	22	22	22	7'-3"	E	24	24	24	24	9'-9"	F	27	27	27	27
	7	5'-1"	5'-1"	C	22	22	22	22	7'-1"	E	24	24	24	24	9'-6"	F	27	27	27	27
	7.5	4'-9"	4'-10"	C	22	22	22	22	6'-11"	E	25	25	25	25	9'-4"	F	27	27	27	27
	8	4'-5"	4'-8"	C	22	22	22	22	6'-9"	F	25	25	25	25	9'-1"	F	28	28	28	28
	8.5	4'-2"	4'-6"	C	22	22	22	22	6'-8"	F	25	25	26	25	8'-11"	F	28	28	28	28
	9	3'-11"	4'-3"	C	22	22	22	22	6'-6"	F	26	26	26	25	8'-9"	F	28	28	28	28
	9.5	3'-8"	4'-1"	C	23	23	23	23	6'-5"	F	26	26	26	26	8'-6"	F	29	29	29	29
	10	3'-6"	4'-0"	C	23	23	23	23	6'-3"	F	26	26	26	26	8'-3"	F	29	29	29	29
115 MPH EXPOSURE B																				
30	3	9'-6"	8'-0"	B	18	18	21	22	9'-3"	D	18	20	21	22	12'-5"	C	21	22	23	25
	3.5	8'-2"	7'-8"	B	18	18	20	22	8'-8"	C	19	20	21	22	11'-10"	D	21	22	23	24
	4	7'-1"	7'-2"	B	19	19	20	21	8'-5"	C	20	20	21	22	11'-4"	E	22	22	23	24
	4.5	6'-4"	6'-7"	C	19	19	20	21	8'-1"	C	20	20	21	22	10'-10"	E	22	22	22	24
	5	5'-8"	6'-2"	C	19	19	20	21	7'-9"	D	21	21	21	22	10'-6"	F	23	23	23	24
	5.5	5'-2"	5'-9"	C	19	19	20	21	7'-6"	D	21	21	21	22	10'-2"	F	23	23	23	24
	6	4'-9"	5'-6"	C	20	20	20	21	7'-4"	E	21	21	21	22	9'-10"	F	24	24	24	24
	6.5	4'-4"	5'-3"	C	20	20	20	20	7'-1"	E	22	22	22	22	9'-7"	F	24	24	24	24
	7	4'-1"	4'-11"	C	20	20	20	20	6'-11"	E	22	22	22	22	9'-4"	F	25	25	25	25
	7.5	3'-9"	4'-8"	C	20	20	20	20	6'-9"	F	23	23	23	23	9'-2"	F	25	25	25	25
	8	3'-6"	4'-6"	C	20	20	20	20	6'-8"	F	23	23	23	23	9'-0"	F	25	25	25	25
	8.5	3'-4"	4'-4"	C	20	20	20	20	6'-6"	F	23	23	23	23	8'-9"	F	26	26	26	26
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	9'-6"	8'-8"	B	20	21	22	24	8'-10"	C	23	21	23	24	12'-0"	D	23	24	25	27
	3.5	8'-3"	7'-3"	B	20	21	22	23	8'-5"	C	21	21	23	24	11'-4"	E	23	23	25	26
	4	7'-1"	6'-8"	C	20	20	22	23	8'-1"	C	22	22	22	24	10'-10"	E	24	24	25	26
	4.5	6'-4"	6'-2"	C	21	21	21	23	7'-9"	C	22	22	22	24	10'-5"	F	25	25	25	26
	5	5'-8"	5'-9"	C	21	21	21	23	7'-6"	D	23	23	23	24	10'-1"	F	25	25	25	26
	5.5	5'-2"	5'-4"	C	21	21	21	22	7'-3"	E	23	23	23	23	9'-9"	F	26	26	26	26
	6	4'-9"	5'-1"	C	21	21	21	22	7'-0"	E	24	24	24	24	9'-6"	F	26	26	26	26
	6.5	4'-4"	4'-10"	C	22	22	22	22	6'-10"	E	24	24	24	24	9'-3"	F	27	27	27	27
	7	4'-1"	4'-7"	C	22	22	22	22	6'-8"	F	25	25	25	25	9'-0"	F	27	27	27	27

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT): 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU113
Alum 0.032"x3"x3" Lockseam	11'	D	MU89
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.055"x3"x3" Fluted	12'	F	MU85
Alum 0.075"x3"x3" Square	12'	G	MU96
Steel 0.043"x3"x3" Lockseam	12'	H	MU96
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU96
Alum 0.120"x4"x4" Squarr	12'	K	MU50
3/16"x3"x3" Steel Squarr	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Squarr	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Squarr	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.9 THAT HAS ADEQUATE POST SPACING
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.9
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.9 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.9
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5005 Veteran's Memorial Hwy
Holbrook, NY 11741
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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 Exp 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER 5060 106 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.8 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 6.19

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Double 0.043"x3"x3" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x3"x3" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x4"x4" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	12'-8"	C	23	23	23		11'-11"	C	23	23	23		10'-6"	E	25	25	25	
	5.5	12'-4"	11'-1"	C	24	24	24		11'-8"	C	24	24	24		10'-1"	C	26	26	26	
	6	11'-4"	11'-3"	D	24	24	24		11'-2"	D	24	24	24		9'-8"	F	27	27	27	
	6.5	10'-8"	11'-0"	D	24	24	24		10'-11"	D	24	24	24		9'-4"	F	27	27	27	
	7	9'-8"	10'-8"	E	23	25	26		10'-4"	E	25	25	25		9'-0"	F	27	27	27	
	7.5	9'-1"	10'-4"	E	25	26	26		10'-0"	E	25	26	26		8'-6"	F	26	26	26	
	8	8'-8"	10'-0"	E	26	26	26		10'-2"	E	26	26	26		12'-4"	F	26	26	26	
	8.5	8'-4"	10'-0"	E	26	26	26		10'-0"	E	26	26	26		12'-0"	F	26	26	26	
	9	7'-8"	9'-10"	F	26	26	26		9'-8"	F	26	26	26		11'-7"	F	26	26	26	
	9.5	7'-3"	9'-5"	F	27	27	27		9'-4"	F	27	27	27		11'-3"	F	27	27	27	
	10	6'-8"	9'-5"	F	27	27	27		9'-0"	F	27	27	27		10'-8"	F	27	27	27	
	10.5	6'-4"	9'-4"	F	27	27	27		8'-7"	F	27	27	27		10'-4"	F	27	27	27	
	11	6'-3"	9'-3"	F	28	28	28		8'-4"	F	27	27	27		10'-0"	F	27	27	27	
	11.5	5'-11"	9'-1"	F	28	28	28		8'-0"	F	28	28	28		12'-0"	G	31	31	31	
	12	5'-8"	8'-11"	F	28	28	28		8'-10"	F	28	28	28		11'-8"	G	31	31	31	
	13	5'-2"	8'-8"	F	29	29	29		8'-6"	F	28	28	28		10'-4"	G	31	31	31	
	14	4'-10"	8'-6"	F	29	29	29		7'-11"	F	28	28	28		10'-0"	G	32	32	32	
	15	4'-6"	8'-5"	F	29	29	29		7'-6"	F	29	29	29							
119 MPH EXPOSURE C or 139 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-3"	11'-3"	D	25	25	25		11'-2"	D	25	25	25		10'-0"	F	28	29	29	
	5.5	12'-4"	10'-10"	D	26	29	29		10'-8"	D	26	29	29		14'-0"	F	29	29	29	
	6	11'-4"	10'-7"	E	26	29	29		10'-4"	E	26	29	29		14'-1"	F	29	29	29	
	6.5	10'-8"	10'-3"	E	27	27	27		10'-2"	E	27	27	27		13'-6"	F	30	30	30	
	7	9'-8"	10'-0"	E	27	27	27		9'-11"	E	27	27	27		13'-3"	F	30	30	30	
	7.5	9'-1"	9'-10"	F	28	28	28		9'-6"	F	28	28	28		13'-1"	F	31	31	31	
	8	8'-8"	9'-7"	F	28	28	28		9'-2"	F	28	28	28		12'-10"	F	31	31	31	
	8.5	8'-4"	9'-6"	F	29	29	29		8'-7"	F	29	29	29		12'-7"	F	32	32	32	
	9	7'-8"	9'-3"	F	29	29	29		8'-4"	F	29	29	29		12'-4"	F	32	32	32	
	9.5	7'-3"	9'-1"	F	29	29	29		8'-0"	F	29	29	29		12'-1"	G	32	32	32	
	10	6'-8"	8'-11"	F	30	30	30		8'-10"	F	30	30	30		11'-11"	G	33	33	33	
	10.5	6'-4"	8'-8"	F	30	30	30		8'-6"	F	30	30	30		11'-8"	G	33	33	33	
	11	6'-3"	8'-7"	F	30	30	30		8'-1"	F	30	30	30		11'-4"	G	34	34	34	
	11.5	5'-11"	8'-6"	F	31	31	31		8'-5"	F	31	31	31		11'-2"	G	34	34	34	
	12	5'-8"	8'-5"	F	31	31	31		8'-1"	F	31	31	31		10'-11"	H	35	35	35	
	13	5'-2"	7'-11"	F	31	31	31		7'-8"	F	31	31	31		10'-8"	H	34	34	34	
	14	4'-10"	7'-8"	F	32	32	32		7'-3"	F	32	32	32		10'-6"	H	35	35	35	
	15	4'-6"	7'-6"	F	32	32	32													
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	11'-8"	C	24	24	24		11'-4"	C	24	24	24		10'-6"	E	26	26	26	
	5.5	12'-4"	11'-6"	C	24	24	24		11'-1"	C	24	24	24		10'-3"	F	27	27	27	
	6	11'-4"	11'-1"	D	25	25	25		11'-0"	D	25	25	25		14'-0"	F	27	27	27	
	6.5	10'-8"	10'-8"	E	25	25	25		10'-8"	E	25	25	25		14'-4"	F	28	28	28	
	7	9'-8"	10'-6"	E	26	26	26		10'-3"	E	26	26	26		13'-8"	F	28	28	28	
	7.5	9'-1"	10'-3"	E	26	26	26		10'-0"	E	26	26	26		13'-4"	F	29	29	29	
	8	8'-8"	10'-0"	E	26	26	26		9'-8"	F	27	27	27		13'-2"	F	29	29	29	
	8.5	8'-4"	9'-10"	F	27	27	27		9'-3"	F	27	27	27		12'-11"	F	30	30	30	
	9	7'-8"	9'-8"	F	27	27	27		8'-8"	F	27	27	27		12'-8"	F	30	30	30	
	9.5	7'-3"	9'-6"	F	27	27	27		8'-3"	F	28	28	28		12'-5"	F	31	31	31	
	10	6'-8"	9'-4"	F	28	28	28		8'-1"	F	28	28	28		12'-1"	G	31	31	31	
	10.5	6'-4"	9'-3"	F	28	28	28		8'-10"	F	28	28	28		11'-10"	G	32	32	32	
	11	6'-3"	9'-2"	F	28	28	28		8'-6"	F	29	29	29		11'-7"	G	32	32	32	
	11.5	5'-11"	9'-1"	F	29	29	29		8'-2"	F	29	29	29		11'-4"	G	32	32	32	
	12	5'-8"	8'-11"	F	29	29	29		7'-9"	F	29	29	29		11'-2"	G	33	33	33	
	13	5'-2"	8'-8"	F	30	30	30		7'-7"	F	30	30	30		10'-9"	H	33	33	33	
	14	4'-10"	8'-6"	F	30	30	30													
	15	4'-6"	7'-10"	F	30	30	30													

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Double 0.043"x3"x3" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x3"x3" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x4"x4" (Detail MU120) Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
20	5	7'-1"	10'-8"	E	23	23	23	24	10'-4"	E	23	23	23	24	13'-11"	F	26	25	25	27
	5.5	6'-8"	10'-1"	E	23	23	23	24	10'-0"	E	23	23	23	24	13'-6"	F	28	26	26	27
	6	6'-11"	9'-8"	F	24	24	24	24	9'-8"	F	24	24	24	24	13'-1"	F	28	28	28	28
	6.5	6'-6"	9'-6"	F	24	24	24	24	9'-4"	F	24	24	24	24	12'-8"	F	27	27	27	27
	7	6'-1"	9'-3"	F	24	24	24	24	9'-0"	F	24	24	24	24	12'-4"	F	27	27	27	27
	7.5	5'-8"	9'-1"	F	25	25	25	25	8'-8"	F	25	26	25	25	12'-2"	F	27	27	27	27
	8	5'-5"	8'-11"	F	25	25	25	25	8'-10"	F	25	25	25	25	11'-11"	G	28	28	28	28
	8.5	5'-2"	8'-8"	F	26	26	26	26	8'-6"	F	26	26	26	26	11'-8"	G	28	28	28	28
	9	4'-11"	8'-6"	F	26	26	26	26	8'-2"	F	26	26	26	26	11'-6"	G	29	29	29	29
	9.5	4'-8"	8'-4"	F	26	26	26	26	8'-0"	F	26	26	26	26	11'-3"	G	29	29	29	29
	10	4'-6"	8'-1"	F	28	28	28	28	7'-11"	F	27	27	27	27	10'-10"	H	30	30	30	30
	10.5	4'-4"	7'-11"	F	27	27	27	27	7'-10"	F	27	27	27	27	10'-8"	H	30	30	30	30
	11	4'-2"	7'-9"	F	27	27	27	27							10'-6"	H	30	30	30	30
	11.5	3'-11"	7'-7"	F	27	27	27	27												
115 MPH EXPOSURE C or 139 MPH EXPOSURE B																				
20	5	7'-1"	9'-11"	E	25	25	25	26	9'-10"	E	25	25	25	26	13'-4"	F	29	29	29	29
	5.5	6'-8"	9'-6"	F	26	29	29	29	9'-7"	F	26	29	29	29	12'-11"	F	29	29	29	29
	6	6'-11"	9'-4"	F	26	29	29	29	9'-3"	F	26	29	29	29	12'-6"	F	29	29	29	29
	6.5	6'-6"	9'-1"	F	27	27	27	27	8'-8"	F	27	27	27	27	12'-2"	F	29	29	29	29
	7	6'-1"	8'-11"	F	27	27	27	27	8'-10"	F	27	27	27	27	11'-11"	G	30	30	30	30
	7.5	5'-8"	8'-8"	F	28	29	29	29	8'-7"	F	27	27	27	27	11'-7"	G	30	30	30	30
	8	5'-5"	8'-6"	F	28	29	29	29	8'-4"	F	28	29	29	29	11'-4"	G	31	31	31	31
	8.5	5'-2"	8'-3"	F	28	29	29	29	8'-0"	F	28	29	29	29	11'-2"	G	31	31	31	31
	9	4'-11"	8'-0"	F	29	29	29	29	8'-1"	F	29	29	29	29	10'-11"	H	32	32	32	32
	9.5	4'-8"	7'-10"	F	29	29	29	29	7'-11"	F	29	29	29	29	10'-8"	H	32	32	32	32
	10	4'-6"	7'-7"	F	29	29	29	29	7'-10"	F	29	29	29	29	10'-7"	H	32	32	32	32
	10.5	4'-4"	7'-5"	F	29	29	29	29	7'-8"	G	30	30	30	30	10'-5"	H	33	33	33	33
	11	4'-2"	7'-3"	G	29	29	29	29	7'-7"	G	30	30	30	30	10'-3"	H	33	33	33	33
	11.5	3'-11"	7'-1"	G	30	30	30	30	7'-6"	G	30	30	30	30	10'-1"	H	33	33	33	33
115 MPH EXPOSURE B																				
20	5	6'-8"	10'-4"	E	23	23	23	24	10'-3"	E	23	23	23	24	13'-10"	F	26	26	26	27
	5.5	6'-2"	10'-0"	E	23	23	23	24	9'-11"	E	23	23	23	24	13'-5"	F	26	26	26	27
	6	5'-8"	9'-8"	F	24	24	24	24	9'-6"	F	24	24	24	24	13'-0"	F	28	28	28	28
	6.5	5'-2"	9'-6"	F	24	24	24	24	9'-2"	F	24	24	24	24	12'-8"	F	28	28	28	28
	7	4'-10"	9'-3"	F	24	24	24	24	8'-3"	F	24	24	24	24	12'-4"	F	27	27	27	27
	7.5	4'-6"	9'-0"	F	25	25	25	25	8'-11"	F	25	25	25	25	12'-1"	G	27	27	27	27
	8	4'-3"	8'-10"	F	25	25	25	25	8'-8"	F	25	26	25	25	11'-10"	G	28	28	28	28
	8.5	4'-0"	8'-8"	F	26	26	26	26	8'-7"	F	25	26	26	26	11'-7"	G	28	28	28	28
	9	3'-8"	8'-5"	F	26	26	26	26	8'-4"	F	26	26	26	26	11'-4"	G	29	29	29	29
	9.5	3'-5"	8'-3"	F	26	26	26	26	8'-2"	F	26	26	26	26	11'-2"	G	29	29	29	29
	10	3'-4"	8'-0"	F	26	26	26	26	8'-1"	F	26	26	26	26	10'-11"	H	29	29	29	29
	10.5	3'-2"	7'-10"	F	26	26	26	26	8'-0"	F	27	27	27	27	10'-9"	H	29	29	29	29
	11	3'-1"	7'-8"	F	27	27	27	27	7'-10"	F	27	27	27	27	10'-7"	H	30	30	30	30
115 MPH EXPOSURE C or 139 MPH EXPOSURE B																				
20	5	6'-8"	9'-10"	F	25	25	25	26	9'-8"	E	25	25	25	26	13'-10"	F	29	29	29	29
	5.5	6'-3"	9'-6"	F	26	26	26	26	9'-6"	F	26	26	26	26	13'-5"	F	29	29	29	29
	6	5'-8"	9'-3"	F	26	26	26	26	9'-2"	F	26	26	26	26	13'-0"	F	29	29	29	29
	6.5	5'-3"	9'-0"	F	27	27	27	27	8'-11"	F	27	27	27	27	12'-8"	F	29	29	29	29
	7	4'-10"	8'-8"	F	27	27	27	27	8'-8"	F	27	27	27	27	12'-4"	F	29	29	29	29
	7.5	4'-6"	8'-7"	F	27	27	27	27	8'-5"	F	27	27	27	27	12'-1"	G	30	30	30	30
	8	4'-3"	8'-4"	F	28	28	28	28	8'-2"	F	28	28	28	28	11'-10"	G	30	30	30	30
	8.5	4'-0"	8'-1"	F	28	28	28	28	8'-0"	F	28	28	28	28	11'-7"	G	31	31	31	31
	9	3'-9"	7'-10"	F	28	28	28	28	7'-10"	F	29	29	29	29	11'-4"	G	31	31	31	31
	9.5	3'-5"	7'-8"	F	29	29	29	29	7'-9"	F	29	29	29	29	11'-2"	G	32	32	32	32
	10	3'-4"	7'-6"	F	29	29	29	29	7'-8"	F	29	29	29	29	10'-11"	H	32	32	32	32
	10.5	3'-2"	7'-3"	F	29	29	29	29	7'-7"	G	30	30	30	30	10'-9"	H	33	33	33	33
	11	3'-1"	7'-1"	G	29	29	29	29	7'-6"	G	30	30	30	30	10'-7"	H	33	33	33	33

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68 397 EXP. 6-30-2014 STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5860206-2202 CARL POTNAM STATE OF WASHINGTON

MAR 05 2014

SOLID COVER 5.8 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.10

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Double 0.043"x3"x3" (Detail MU120) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x3"x3" (Detail MU120) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)	Double 0.120"x4"x4" (Detail MU120) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	11'-6"	D	26	26	26		10'-11"	D	26	26	26		14'-6"	F	29	29	29	
	5.5	12'-4"	10'-8"	E	27	27	27		10'-7"	E	27	27	27		14'-4"	F	29	29	29	
	6	11'-4"	10'-6"	E	27	27	27		10'-4"	E	27	27	27		13'-11"	F	30	30	30	
	6.5	10'-5"	10'-1"	E	28	28	28		10'-0"	E	28	28	28		13'-6"	F	30	30	33	
	7	9'-8"	9'-10"	F	28	28	28		9'-9"	F	28	28	28		13'-2"	F	31	31	31	
	7.5	9'-1"	9'-8"	F	29	29	29		9'-7"	F	28	28	28		12'-11"	F	31	31	31	
	8	8'-6"	9'-5"	F	29	29	29		9'-4"	F	29	29	29		12'-7"	F	32	32	32	
	8.5	8'-0"	9'-3"	F	29	29	29		9'-3"	F	29	29	29		12'-4"	F	32	32	32	
	9	7'-6"	9'-1"	F	30	30	30		9'-0"	F	30	30	30		12'-2"	G	33	33	33	
	9.5	7'-2"	8'-11"	F	30	30	30		8'-10"	F	30	30	30		11'-11"	G	33	33	33	
	10	6'-8"	8'-9"	F	30	30	30		8'-8"	F	30	30	30		11'-8"	G	33	33	33	
	10.5	6'-5"	8'-7"	F	31	31	31		8'-6"	F	31	31	31		11'-6"	G	34	34	34	
	11	6'-2"	8'-5"	F	31	31	31		8'-5"	F	31	31	31		11'-4"	G	34	34	34	
	11.5	5'-11"	8'-3"	F	31	31	31		8'-3"	F	31	31	31		11'-2"	G	35	35	35	
	12	5'-8"	8'-1"	F	31	31	31		8'-2"	F	32	32	32		11'-0"	H	35	35	35	
	13	5'-2"	7'-8"	F	32	32	32		7'-11"	F	32	32	32		10'-6"	H	36	36	36	
110 MPH EXPOSURE B																				
20	5	7'-1"	10'-6"	E	22	22	22	24	10'-6"	E	22	22	22	24	14'-1"	F	24	24	25	26
	5.5	6'-8"	10'-3"	E	23	23	23	24	10'-2"	E	23	23	23	24	13'-6"	F	25	25	25	26
	6	5'-11"	9'-11"	F	23	23	23	24	9'-10"	E	23	23	23	24	13'-3"	F	25	25	25	26
	6.5	5'-5"	9'-6"	F	23	23	23	24	9'-7"	F	23	23	23	24	12'-11"	F	26	26	26	26
	7	5'-1"	9'-6"	F	24	24	24	24	9'-4"	F	24	24	24	24	12'-7"	F	26	26	26	26
	7.5	4'-9"	9'-2"	F	24	24	24	24	9'-2"	F	24	24	24	24	12'-4"	F	27	27	27	27
	8	4'-5"	9'-0"	F	25	25	25	25	8'-11"	F	25	25	25	25	12'-1"	G	27	27	27	27
	8.5	4'-2"	8'-10"	F	25	25	25	25	8'-9"	F	25	25	25	25	11'-10"	G	27	27	27	27
	9	3'-11"	8'-8"	F	25	25	25	25	8'-7"	F	25	25	25	26	11'-7"	G	28	28	28	28
	9.5	3'-8"	8'-6"	F	26	26	26	26	8'-5"	F	25	25	25	25	11'-5"	G	28	28	28	28
	10	3'-6"	8'-3"	F	26	26	26	26	8'-4"	F	26	26	26	26	11'-3"	G	28	28	28	28
	10.5	3'-4"	8'-1"	F	26	26	26	26	8'-2"	F	26	26	26	26	11'-0"	H	29	29	29	29
	11	3'-3"	7'-11"	F	26	26	26	26	8'-0"	F	26	26	26	26	10'-10"	H	29	29	29	29
	11.5	3'-1"	7'-8"	F	26	26	26	26	7'-11"	F	27	27	27	27	10'-8"	H	29	29	29	29
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	10'-1"	E	25	25	25	26	10'-0"	E	24	24	24	26	13'-6"	F	27	27	27	28
	5.5	6'-8"	9'-9"	F	25	25	25	26	9'-8"	F	25	25	25	26	13'-0"	F	28	28	28	28
	6	5'-11"	9'-6"	F	26	26	26	26	9'-5"	F	25	25	25	26	12'-8"	F	28	28	28	28
	6.5	5'-6"	9'-3"	F	26	26	26	26	9'-2"	F	26	26	26	26	12'-4"	F	29	29	29	29
	7	5'-1"	9'-0"	F	26	26	26	26	8'-11"	F	26	26	26	26	12'-0"	G	29	29	29	29
	7.5	4'-9"	8'-8"	F	27	27	27	27	8'-8"	F	27	27	27	27	11'-8"	G	30	30	30	30
	8	4'-5"	8'-7"	F	27	27	27	27	8'-6"	F	27	27	27	27	11'-6"	G	30	30	30	30
	8.5	4'-3"	8'-5"	F	28	28	28	28	8'-4"	F	28	28	28	28	11'-3"	G	30	30	30	30
	9	3'-11"	8'-2"	F	28	28	28	28	8'-2"	F	28	28	28	28	11'-1"	G	31	31	31	31
	9.5	3'-8"	7'-11"	F	28	28	28	28	8'-1"	F	28	28	28	28	10'-10"	H	31	31	31	31
	10	3'-6"	7'-8"	F	28	28	28	28	7'-11"	F	29	29	29	29	10'-8"	H	32	32	32	32
	10.5	3'-4"	7'-7"	F	29	29	29	29	7'-9"	F	29	29	29	29	10'-6"	H	32	32	32	32
	11	3'-2"	7'-4"	F	29	29	29	29	7'-8"	G	29	29	29	29	10'-4"	H	32	32	32	32
	11.5	3'-1"	7'-3"	G	29	29	29	29	7'-7"	G	29	29	29	29	10'-2"	H	32	32	32	32
	12	2'-11"	7'-1"	G	29	29	29	29	7'-5"	G	30	30	30	30	10'-1"	H	33	33	33	33
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-8"	9'-6"	F	25	25	25	26	9'-6"	F	25	25	25	26	12'-8"	F	27	27	27	29
	5.5	5'-2"	9'-2"	F	25	25	25	26	9'-2"	F	25	25	25	26	12'-4"	F	28	28	28	29
	6	4'-9"	8'-11"	F	26	26	26	26	8'-10"	F	26	26	26	26	12'-0"	G	28	28	28	29
	6.5	4'-4"	8'-8"	F	26	26	26	26	8'-6"	F	26	26	26	26	11'-8"	G	29	29	29	29
	7	4'-1"	8'-6"	F	27	27	27	27	8'-6"	F	27	27	27	27	11'-4"	G	29	29	29	29
	7.5	3'-9"	8'-3"	F	27	27	27	27	8'-3"	F	27	27	27	27	11'-1"	G	30	30	30	30
	8	3'-6"	8'-0"	F	27	27	27	27	8'-1"	F	27	27	27	27	10'-10"	H	30	30	30	30
	8.5	3'-4"	7'-8"	F	28	28	28	28	7'-11"	F	28	28	28	28	10'-8"	H	31	31	31	31
	9	3'-2"	7'-6"	F	28	28	28	28	7'-9"	F	28	28	28	28	10'-5"	H	31	31	31	31
	9.5	3'-0"	7'-4"	F	29	29	29	29	7'-7"	G	29	29	29	29	10'-3"	H	32	32	32	32
	10	2'-10"	7'-1"	G	28	28	28	28	7'-6"	G	29	29	29	29	10'-1"	H	32	32	32	32
	10.5	2'-9"	6'-11"	G	29	29	29	29	7'-4"	G	29	29	29	29	9'-11"	H	32	32	32	32
115 MPH EXPOSURE B																				
30	5	5'-6"	9'-11"	E	22	22	23	24	9'-10"	E	22	22	23	24	13'-3"	F	26	25	25	27
	5.5	5'-2"	9'-7"	F	23	23	23	24	9'-6"	F	23	23	23	24	12'-10"	F	26	26	25	26
	6	4'-8"	9'-4"	F	23	23	23	24	9'-3"	F	23	23	23	24	12'-5"	F	26	26	26	26
	6.5	4'-4"	9'-1"	F	24	24	24	24	9'-0"	F	24	24	24	24	12'-1"	F	26	26	26	26
	7	4'-1"	8'-10"	F	24	24	24	24	8'-8"	F	24	24	24	24	11'-10"	G	27	27	27	27
	7.5	3'-8"	8'-8"	F	24	24	24	24	8'-7"	F	24	24	24	24	11'-7"	G	27	27	27	27
	8	3'-6"	8'-5"	F	25	25	25	25	8'-6"	F	25	25	25	25	11'-4"	G	27	27	27	27
	8.5	3'-4"	8'-2"	F	25	25	25	25	8'-3"	F	25	25	25	25	11'-1"	G	28	28	28	28
	9	3'-2"	7'-11"	F	25	25	25	25	8'-1"	F	25	25	25	25	10'-10"	H	28	28	28	28

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twn 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twn 0.082"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU90
Alum 0.040"x3"x3" Lockseam	11'	E	MU90
Alum 0.055"x3"x3" Fluted	12'	F	MU95
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN. COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.8 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.10 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.10
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.10 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.6 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-8 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.10
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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FEB 24 2014

MAR 05 2014

SOLID COVER 5.9 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.11

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Samson Beam (Detail MU99): MAX POST SPACING (FT)	Samson Beam: Attached Structure: MIN POST TYPE	Samson Beam: Attached Structure: FOOTER SIZE "d" (in)	Samson Beam: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	Samson Beam: 10' "d" (in)	Samson Beam: 12' "d" (in)	3.5"x3" Alum I Beam (Detail MU85): MAX POST SPACING (FT)	Alum I Beam: Attached Structure: MIN POST TYPE	Alum I Beam: Attached Structure: FOOTER SIZE "d" (in)	Alum I Beam: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	Alum I Beam: 10' "d" (in)	Alum I Beam: 12' "d" (in)	no beam: MAX POST SPACING (FT)	no beam: Attached Structure: MIN POST TYPE	no beam: Attached Structure: FOOTER SIZE "d" (in)	no beam: Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	no beam: 10' "d" (in)	no beam: 12' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	15'-1"	B	21	24	25	26	12'-1"	B	20	21	22	23	8'-0"	A	8	14	16	17
	3.5	19'-5"	14'-4"	C	22	23	25	26	11'-8"	B	20	21	22	23	8'-0"	A	8	14	16	17
	4	17'-0"	13'-8"	C	22	23	25	26	11'-6"	B	21	21	22	23	8'-0"	A	8	15	15	17
	4.5	15'-1"	13'-2"	C	23	23	24	26	10'-7"	B	21	21	22	23	8'-0"	A	8	15	16	17
	5	13'-7"	12'-8"	C	24	24	24	25	10'-2"	C	22	22	22	23	8'-0"	A	8	16	16	18
	5.5	12'-4"	12'-2"	D	24	24	24	25	9'-10"	C	22	22	22	23	8'-0"	A	8	16	16	18
	6	11'-4"	11'-7"	D	24	24	24	25	9'-7"	C	23	23	23	23	8'-0"	A	8	15	17	18
	6.5	10'-6"	11'-1"	D	25	25	25	25	9'-4"	C	23	23	23	23	8'-0"	A	8	15	17	18
	7	9'-8"	10'-7"	E	25	25	25	25	9'-1"	C	24	24	24	24	8'-0"	A	8	15	17	18
	7.5	9'-1"	10'-3"	E	25	25	25	25	8'-11"	D	24	24	24	24	8'-0"	A	8	16	17	18
	8	8'-6"	9'-8"	E	25	25	25	25	8'-8"	D	24	24	24	24	8'-0"	A	8	16	17	18
	8.5	8'-0"	9'-5"	E	25	25	25	25	8'-6"	E	25	25	25	25	8'-0"	A	8	16	17	18
	9	7'-6"	9'-1"	E	26	26	26	26	8'-4"	E	25	25	26	26	8'-0"	A	8	16	17	18
	9.5	7'-2"	8'-8"	E	26	26	26	26	8'-3"	E	25	25	25	25	8'-0"	A	8	16	17	19
	10	6'-9"	8'-8"	E	26	26	26	26	8'-1"	E	26	26	26	26	8'-0"	A	8	16	17	19
	11	6'-2"	8'-0"	F	26	26	26	26	7'-10"	F	26	26	26	26	8'-0"	A	8	16	18	19
	12	5'-8"	7'-7"	F	27	27	27	27	7'-3"	F	26	26	26	26	8'-0"	A	8	17	18	19
	13	5'-2"	7'-2"	F	27	27	27	27	6'-11"	F	27	27	27	27	8'-0"	A	8	17	18	19
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	14'-2"	C	23	25	27	29	11'-4"	B	21	22	24	25	8'-0"	A	8	16	17	18
	3.5	19'-5"	13'-6"	C	24	25	27	28	10'-8"	B	22	22	24	26	8'-0"	A	8	16	17	18
	4	17'-0"	12'-10"	C	25	26	28	28	10'-3"	B	23	23	23	25	8'-0"	A	8	16	17	18
	4.5	15'-1"	12'-3"	D	25	25	28	28	9'-10"	C	24	24	24	25	8'-0"	A	8	16	18	19
	5	13'-7"	11'-7"	D	26	26	26	27	9'-6"	C	24	24	24	24	8'-0"	A	8	16	18	19
	5.5	12'-4"	10'-11"	D	26	26	26	27	9'-3"	C	25	25	25	25	8'-0"	A	8	16	18	19
	6	11'-4"	10'-6"	E	26	26	26	27	9'-0"	C	25	25	25	25	8'-0"	A	8	17	18	19
	6.5	10'-5"	9'-11"	E	27	27	27	27	8'-8"	D	26	26	26	26	8'-0"	A	8	17	18	20
	7	9'-8"	9'-6"	E	27	27	27	27	8'-6"	D	26	26	26	26	8'-0"	A	8	17	18	20
	7.5	9'-1"	9'-1"	E	27	27	27	27	8'-4"	E	26	26	26	26	8'-0"	A	8	17	18	20
	8	8'-6"	8'-8"	E	27	27	27	27	8'-3"	E	27	27	27	27	8'-0"	A	8	17	19	20
	8.5	8'-0"	8'-4"	E	28	28	28	28	8'-0"	E	27	27	27	27	8'-0"	A	8	17	19	20
	9	7'-6"	8'-1"	F	28	28	28	28	7'-10"	E	27	27	27	27	8'-0"	A	8	17	19	20
	9.5	7'-2"	7'-10"	F	28	28	28	28	7'-8"	F	28	28	28	28	8'-0"	A	8	17	18	20
	10	6'-9"	7'-7"	F	28	28	28	28	7'-5"	F	28	28	28	28	8'-0"	A	8	18	19	20
	11	6'-2"	7'-1"	F	28	28	28	28	7'-4"	F	29	28	28	28	8'-0"	A	8	18	19	21
	12	5'-8"	6'-8"	F	29	29	29	29	6'-8"	F	29	29	29	29	8'-0"	A	8	18	19	21
	13	5'-2"	6'-4"	F	29	29	29	29	6'-6"	F	29	29	29	29	8'-0"	A	8	18	22	21
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-8"	14'-10"	B	22	24	26	27	11'-10"	B	20	21	23	24	8'-0"	A	8	15	16	17
	3.5	19'-5"	14'-1"	C	22	24	25	27	11'-3"	B	21	21	23	24	8'-0"	A	8	15	16	18
	4	17'-0"	13'-6"	C	23	24	25	26	10'-8"	B	21	21	22	23	8'-0"	A	8	15	16	18
	4.5	15'-1"	12'-11"	C	24	24	25	26	10'-4"	B	22	22	22	23	8'-0"	A	8	15	17	18
	5	13'-7"	12'-8"	C	24	24	25	26	10'-0"	C	22	22	22	23	8'-0"	A	8	15	17	18
	5.5	12'-4"	11'-10"	D	24	24	24	25	9'-8"	C	23	23	23	23	8'-0"	A	8	16	17	18
	6	11'-4"	11'-3"	D	25	25	25	25	9'-5"	C	23	23	23	23	8'-0"	A	8	16	17	18
	6.5	10'-5"	10'-8"	E	25	25	25	25	9'-2"	C	24	24	24	24	8'-0"	A	8	16	17	18
	7	9'-8"	10'-3"	E	25	25	26	26	8'-11"	C	24	24	24	24	8'-0"	A	8	16	17	18
	7.5	9'-1"	9'-10"	E	26	26	26	26	8'-8"	D	25	25	25	25	8'-0"	A	8	16	17	18
	8	8'-6"	9'-5"	E	26	26	26	26	8'-6"	D	25	25	25	25	8'-0"	A	8	16	17	19
	8.5	8'-0"	9'-1"	E	26	26	26	26	8'-4"	E	25	25	25	25	8'-0"	A	8	16	18	19
	9	7'-6"	8'-8"	E	26	26	26	26	8'-2"	E	26	26	26	26	8'-0"	A	8	16	18	19
	9.5	7'-2"	8'-6"	E	26	26	26	26	8'-1"	E	26	26	26	26	8'-0"	A	8	16	18	19
	10	6'-9"	8'-3"	F	26	26	26	26	7'-11"	E	26	26	26	26	8'-0"	A	8	17	18	19
	11	6'-3"	7'-8"	F	27	27	27	27	7'-8"	F	27	27	27	27	8'-0"	A	8	17	18	19
	12	5'-8"	7'-3"	F	27	27	27	27	7'-5"	F	27	27	27	27	8'-0"	A	8	17	18	20
	13	5'-2"	6'-11"	F	27	27	27	27	6'-10"	F	27	27	27	27	8'-0"	A	8	17	19	20
115 MPH EXPOSURE B																				
20	3	11'-10"	13'-1"	C	21	23	25	26	10'-6"	B	19	21	22	23	8'-0"	A	8	15	16	17
	3.5	10'-2"	12'-6"	C	21	23	25	26	9'-11"	C	20	20	22	23	8'-0"	A	8	15	16	18
	4	8'-11"	11'-7"	D	22	23	24	26	9'-6"	C	20	20	22	23	8'-0"	A	8	15	16	18
	4.5	7'-11"	10'-10"	D	22	23	24	25	9'-2"	C	21	21	22	23	8'-0"	A	8	15	17	18
	5	7'-1"	10'-2"	E	23	23	24	25	8'-10"	C	22	22	22	23	8'-0"	A	8	16	17	18
	5.5	6'-6"	9'-7"	E	23	23	23	25	8'-7"	D	22	22	22	22	8'-0"	A	8	16	17	18
	6	5'-11"	9'-1"	E	23	23	23	24	8'-4"	E	22	22	22	22	8'-0"	A	8	16	17	18
	6.5	5'-5"	8'-8"	E	23	23	23	24	8'-1"	E	23	23	23	23	8'-0"	A	8	16	17	18
	7	5'-1"	8'-3"	F	24	24	24	24	7'-11"	E	23	23	23	23	8'-0"	A	8	16	17	18
	7.5	4'-8"	7'-11"	F	24	24	24	24	7'-8"	F	24	24	24	24	8'-0"	A	8	16	17	18
	8	4'-6"	7'-7"	F	24	24	24	24	7'-6"	F	24	24	24	24	8'-0"	A	8	16	17	19
	8.5	4'-2"	7'-3"	F	24	24	24	24	7'-5"	F	24	24	24	24	8'-0"	A	8	16	18	19
	9	3'-11"	7'-0"	F	24	24	24	24	7'-3"	F	25	25	25	25	8'-0"	A	8	16	18	19
	9.5	3'-9"	6'-8"	F	24	24	24	24	7'-1"	F	25	25	25	25	8'-0"	A	8	18	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	12'-6"	C	23	23	27	28	10'-0"	C	21	22	24	25	8'-0"	A	8	16	18	19
	3.5	10'-2"	11'-8"	D	24	25	27	28	9'-6"	C	22	22	24	25	8'-0"	A	8	16	18	19
	4	8'-11"	10'-8"	E	24	24	26	27	9'-1"	C	23	23	23	25	8'-0"	A	8	16	18	19
	4.5	7'-11"	10'-0"	E	24	24	26	27	8'-8"	D	23	23	23	25	8'-0"	A	8	16	18	19
	5	7'-1"	9'-5"	E	25	25	25	27	8'-5"	D	24	24	24	24	8'-0"	A	8	17	18	20
	5.5	6'-6"	8'-10"	E	25	25	25	26	8'-2"	E	24	24	24	24	8'-0"	A	8	17	18	20
	6	5'-11"	8'-5"	F	25	25	25	26	7'-11"	E	25	25	25	25	8'-0"	A	8	17	18	20
	6.5	5'-6"	8'-0"	F	26	26	26	26	7'-8"	F	26	25	25	25	8'-0"	A	8	17	18	20
	7	5'-1"	7'-7"	F	26	26	26	26	7'-6"	F	26	26	26	26	8'-0"	A	8	17	19	20
	7.5	4'-9"	7'-3"	F	26	26	26	26	7'-4"	F	26	26	26	26	8'-0"	A	8	17	19	20
	8	4'-6"	6'-11"	F	26	26	26	26	7'-2"	F	26	26	26	26	8'-0"	A	8	17	19	20
	8.5	4'-3"	6'-8"	F	26	26	26	26	7'-1"	F	27	27	27	27	8'-0"	A	8	18	19	20
	9	3'-11"	6'-5"	F	27	27	27	27	6'-11"	F	27	27	27	27	8'-0"	A	8	18	19	21
	9.5	3'-8"	6'-2"	F	27	27	27	27	6'-9"	F	27	27	27	27	8'-0"	A	8	18	19	21
115 MPH EXPOSURE B																				
25	3	11'-4"	13'-0"	C	21	23	25	26	10'-5"	B	19	21	22	23	8'-0"	A	8	15	16	17
	3.5	9'-8"	12'-4"	C	21	23	25	26	9'-11"	C	20	20	22	23	8'-0"	A	8	15	16	18
	4	8'-6"	11'-6"	D	22	23	24	26	9'-5"	C	20	20	22	23	8'-0"	A	8	15	16	18
	4.5	7'-6"	10'-8"	E	22	22	24	25	9'-1"	C	21	21	21	23	8'-0"	A	8	15	17	18
	5	6'-9"	10'-0"	E	22	22	24	25	8'-8"	D	21	21	21	23	8'-0"	A	8	15	17	18
	5.5	6'-2"	9'-6"	E	23	23	23	25	8'-6"	D	22	22	22	23	8'-0"	A	8	15	17	18
	6	5'-8"	9'-0"	E	23	23	23	24	8'-3"	E	22	22	22	22	8'-0"	A	8	16	17	18
	6.5	5'-2"	8'-8"	E	23	23	23	24	8'-0"	E	23	23	23	23	8'-0"	A	8	16	17	18
	7	4'-10"	8'-2"	F	23	23	23	24	7'-10"	E	23	23	23	23	8'-0"	A	8	16	17	18
	7.5	4'-6"	7'-10"	F	24	24	24	24	7'-8"	F	24	24	24	24	8'-0"	A	8	16	17	18
	8	4'-3"	7'-8"	F	24	24	24	24	7'-6"	F	24	24	24	24	8'-0"	A	8	16	17	18
	8.5	4'-0"	7'-2"	F	24	24	24	24	7'-4"	F	24	24	24	24	8'-0"	A	8	16	18	19
	9	3'-9"	6'-11"	F	24	24	24	24	7'-2"	F	24	24	24	24	8'-0"	A	8	16	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	12'-4"	C	23	25	27	28	9'-11"	C	21	22	24	25						
	3.5	9'-8"	11'-6"	D	23	25	26	28	9'-5"	C	22	22	24	25						
	4	8'-6"	10'-8"	E	24	24	26	27	9'-0"	C	23	23	23	25						
	4.5	7'-6"	9'-10"	E	24	24	26	27	8'-8"	D	23	23	23	25						
	5	6'-9"	9'-3"	E	25	25	25	27	8'-4"	E	24	24	24	24						
	5.5	6'-2"	8'-8"	E	25	25	26	26	8'-1"	E	24	24	24	24						
	6	5'-8"	8'-3"	F	25	25	25	26	7'-10"	E	25	25	25	25						
	6.5	5'-2"	7'-10"	F	26	25	25	26	7'-8"	F	25	25	25	26						
	7	4'-10"	7'-6"	F	26	26	26	26	7'-6"	F	26	26	26	26						
	7.5	4'-6"	7'-1"	F	26	26	26	26	7'-3"	F	26	26	26	26						
	8	4'-3"	6'-10"	F	26	26	26	26	7'-1"	F	26	26	26	26						
	8.5	4'-0"	6'-6"	F	26	26	26	26	7'-0"	F	27	27	27	27						
	9	3'-8"	6'-3"	F	26	26	26	26	6'-10"	F	27	27	27	27						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68739 CIVIL STATE OF CALIFORNIA

FEB 24 2014

CARL PUTNAM

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.11

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Samson Beam (Detail MU99): MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	3.5"x3" Alum I Beam (Detail MU65): MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	no beam: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	27'-8"	17'-11"	C	24	26	28	29	11'-1"	B	23	23	24	25	8'-0"	A	0	16	18	19
	3.5	19'-5"	15'-2"	C	25	26	27	29	10'-7"	B	23	23	24	25	8'-0"	A	0	16	18	19
	4	17'-0"	13'-7"	C	25	25	27	28	10'-1"	C	23	23	24	25	8'-0"	A	0	16	18	19
	4.5	15'-1"	11'-11"	D	26	26	27	28	9'-8"	C	24	24	24	25	8'-0"	A	0	16	18	19
	5	13'-7"	11'-3"	D	26	26	26	28	9'-4"	C	25	25	25	25	8'-0"	A	0	17	18	20
	5.5	12'-4"	10'-7"	E	27	27	27	27	9'-1"	C	25	25	25	25	8'-0"	A	0	17	18	20
	6	11'-4"	10'-1"	E	27	27	27	27	8'-10"	D	26	26	26	26	8'-0"	A	0	17	18	20
	6.5	10'-5"	9'-7"	E	27	27	27	27	8'-7"	D	26	26	26	26	8'-0"	A	0	17	19	20
	7	9'-8"	9'-2"	E	27	27	27	27	8'-4"	E	27	27	27	27	8'-0"	A	0	17	18	20
	7.5	9'-1"	8'-8"	E	28	28	28	28	8'-2"	E	27	27	27	27	8'-0"	A	0	17	18	20
	8	8'-6"	8'-5"	F	28	28	28	28	8'-0"	E	27	27	27	27	8'-0"	A	0	17	19	20
	8.5	8'-0"	8'-1"	F	28	28	28	28	7'-10"	E	28	28	28	28	8'-0"	A	0	18	19	20
	9	7'-6"	7'-10"	F	28	28	28	28	7'-6"	F	28	28	28	28	8'-0"	A	0	18	19	21
	9.5	7'-2"	7'-7"	F	28	28	28	28	7'-7"	F	28	28	28	28	8'-0"	A	0	18	19	21
	10	6'-5"	7'-4"	F	29	29	29	29	7'-5"	F	28	29	29	29	8'-0"	A	0	18	19	21
	11	6'-2"	6'-10"	F	29	29	29	29	7'-2"	F	29	29	29	29	8'-0"	A	0	18	20	21
110 MPH EXPOSURE B																				
20	3	11'-10"	13'-7"	C	20	23	24	26	10'-7"	B	18	20	22	23	8'-0"	A	0	14	16	17
	3.5	10'-2"	12'-7"	C	21	23	24	25	10'-1"	C	19	20	21	23	8'-0"	A	0	14	16	17
	4	8'-11"	11'-10"	D	21	22	24	25	9'-8"	C	20	20	21	22	8'-0"	A	0	15	16	17
	4.5	7'-11"	11'-1"	D	22	22	24	25	9'-3"	C	20	20	21	22	8'-0"	A	0	15	16	17
	5	7'-1"	10'-5"	E	22	22	23	24	8'-11"	C	21	21	21	22	8'-0"	A	0	15	16	18
	5.5	6'-5"	9'-10"	E	22	22	23	24	8'-8"	D	21	21	21	22	8'-0"	A	0	15	18	18
	6	5'-11"	9'-4"	E	23	23	23	24	8'-6"	E	22	22	22	22	8'-0"	A	0	15	17	18
	6.5	5'-8"	8'-10"	E	23	23	23	24	8'-2"	E	22	22	22	22	8'-0"	A	0	15	17	18
	7	5'-1"	8'-5"	F	23	23	23	23	8'-0"	E	23	23	23	23	8'-0"	A	0	15	17	18
	7.5	4'-8"	8'-1"	F	23	23	23	23	7'-10"	E	23	23	23	23	8'-0"	A	0	16	17	18
	8	4'-6"	7'-8"	F	23	23	23	23	7'-8"	F	23	23	23	23	8'-0"	A	0	16	17	18
	8.5	4'-3"	7'-6"	F	24	24	24	24	7'-6"	F	24	24	24	24	8'-0"	A	0	16	17	18
	9	3'-11"	7'-2"	F	24	24	24	24	7'-4"	F	24	24	24	24	8'-0"	A	0	16	17	18
	9.5	3'-8"	6'-11"	F	24	24	24	24	7'-3"	F	24	24	24	24	8'-0"	A	0	15	17	18
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	12'-6"	C	22	25	26	28	10'-2"	C	21	22	23	25	8'-0"	A	0	16	17	19
	3.5	10'-2"	11'-10"	D	23	24	26	27	9'-7"	C	21	22	23	24	8'-0"	A	0	16	17	19
	4	8'-11"	11'-0"	D	23	24	26	27	9'-2"	C	22	22	23	24	8'-0"	A	0	16	17	19
	4.5	7'-11"	10'-3"	E	24	24	25	27	8'-10"	C	23	23	23	24	8'-0"	A	0	16	18	19
	5	7'-1"	9'-7"	E	24	24	25	26	8'-6"	D	23	23	23	24	8'-0"	A	0	16	18	19
	5.5	6'-5"	9'-1"	E	24	24	25	26	8'-3"	E	24	24	24	24	8'-0"	A	0	16	18	19
	6	5'-11"	8'-7"	E	25	25	25	26	8'-0"	E	24	24	24	24	8'-0"	A	0	17	18	19
	6.5	5'-5"	8'-2"	F	25	25	25	25	7'-10"	E	25	25	25	25	8'-0"	A	0	17	18	20
	7	5'-1"	7'-8"	F	25	25	25	25	7'-8"	F	25	25	25	25	8'-0"	A	0	17	18	20
	7.5	4'-8"	7'-6"	F	25	25	25	25	7'-6"	F	25	25	25	25	8'-0"	A	0	17	18	20
	8	4'-6"	7'-1"	F	26	26	26	26	7'-4"	F	26	26	26	26	8'-0"	A	0	17	19	20
	8.5	4'-3"	6'-10"	F	26	26	26	26	7'-2"	F	26	26	26	26	8'-0"	A	0	17	19	20
	9	3'-11"	6'-7"	F	26	26	26	26	7'-0"	F	26	26	26	26	8'-0"	A	0	17	19	20
	9.5	3'-8"	6'-4"	F	26	26	26	26	6'-11"	F	27	27	27	27	8'-0"	A	0	17	19	20
	10	3'-6"	6'-2"	F	26	26	26	26	6'-9"	F	27	27	27	27	8'-0"	A	0	18	19	20

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	Samson Beam (Detail MU99): MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	3.5"x3" Alum I Beam (Detail MU65): MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	no beam: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
30	3	9'-8"	12'-5"	C	20	23	25	26	9'-11"	C	19	20	22	23	8'-0"	A	0	15	16	17
	3.5	8'-2"	11'-6"	D	21	23	24	26	9'-6"	C	20	20	22	23	8'-0"	A	0	15	16	18
	4	7'-1"	10'-8"	E	21	22	24	25	9'-0"	C	20	20	21	23	8'-0"	A	0	15	16	18
	4.5	6'-4"	9'-11"	E	22	22	24	26	8'-8"	D	21	21	21	22	8'-0"	A	0	15	17	18
	5	5'-6"	9'-3"	E	22	22	23	24	8'-5"	D	21	21	21	22	8'-0"	A	0	15	17	18
	5.5	5'-2"	8'-8"	E	22	22	23	24	8'-1"	E	22	22	22	22	8'-0"	A	0	15	17	18
	6	4'-8"	8'-3"	F	22	22	23	24	7'-11"	E	22	22	22	22	8'-0"	A	0	15	17	18
	6.5	4'-4"	7'-11"	F	23	23	23	24	7'-8"	F	22	22	22	22	8'-0"	A	0	15	17	18
	7	4'-1"	7'-6"	F	23	23	23	24	7'-6"	F	23	23	23	23	8'-0"	A	0	15	17	18
	7.5	3'-9"	7'-2"	F	23	23	23	23	7'-4"	F	23	23	23	23	8'-0"	A	0	15	17	18
	8	3'-6"	6'-11"	F	23	23	23	23	7'-2"	F	24	24	24	24	8'-0"	A	0	15	17	18
	8.5	3'-4"	6'-7"	F	23	23	23	23	7'-0"	F	24	24	24	24	8'-0"	A	0	15	18	19
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	9'-4"	11'-10"	D	22	25	27	28	9'-7"	C	21	22	24	25	8'-0"	A	0	16	18	19
	3.5	8'-3"	10'-9"	E	23	25	26	27	9'-1"	C	22	22	23	25	8'-0"	A	0	16	18	19
	4	7'-1"	9'-11"	E	23	24	26	27	8'-8"	C	22	22	23	25	8'-0"	A	0	16	18	19
	4.5	6'-4"	9'-3"	E	24	24	25	27	8'-4"	D	23	23	23	24	8'-0"	A	0	16	18	19
	5	5'-6"	8'-6"	E	24	24	25	26	8'-1"	E	23	23	23	24	8'-0"	A	0	17	18	20
	5.5	5'-2"	8'-2"	F	24	24	25	26	7'-10"	E	24	24	24	24	8'-0"	A	0	17	18	20
	6	4'-8"	7'-8"	F	25	25	25	26	7'-7"	E	24	24	24	24	8'-0"	A	0	17	18	20
	6.5	4'-4"	7'-4"	F	25	25	25	25	7'-5"	F	25	25	25	25	8'-0"	A	0	17	18	20
	7	4'-1"	7'-0"	F	25	25	25	25	7'-2"	F	25	25	25	25	8'-0"	A	0	17	19	20

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVERHANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT): 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	8'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU88
Alum 0.040"x3"x3" Lockseam	11'	E	MU88
Alum 0.056"x3"x3" Fluted	12'	F	MU91
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU88
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.11 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.11
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.11 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.11

SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING

SLAB 9. FOLLOW 9-10 FROM ABOVE

SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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FEB 24 2014

MAR 05 2014

SOLID COVER 3.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.12

			4"x3" I Beam (Detail MU56)						5"x3" Alum I Beam (Detail MU57)						5"x4.11" I Beam (Detail MU65)					
				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units				Attached Structure		Freestanding or Multispan Units		
						MAX POST LENGTH CONSTRAINED FOOTER						MAX POST LENGTH CONSTRAINED FOOTER						MAX POST LENGTH CONSTRAINED FOOTER		
GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	13'-7"	B	20	22	23	24	15'-6"	B	21	23	25	26	18'-6"	C	22	24	26	27
	3.5	19'-6"	12'-11"	B	21	22	23	24	14'-10"	C	22	23	24	26	17'-1"	C	23	24	25	27
	4	17'-6"	12'-4"	C	22	22	23	24	14'-3"	C	23	23	24	26	16'-4"	C	24	24	25	26
	4.5	15'-1"	11'-11"	C	22	22	23	24	13'-10"	C	23	23	24	25	15'-8"	D	24	24	25	26
	5	13'-7"	11'-6"	C	23	23	23	24	13'-6"	D	24	24	24	25	15'-2"	E	26	25	25	26
	5.5	12'-4"	11'-1"	C	23	23	23	23	13'-1"	D	25	25	25	25	14'-8"	E	26	26	26	26
	6	11'-4"	10'-10"	C	24	24	24	24	12'-8"	E	25	25	25	25	14'-4"	F	26	26	26	26
	6.5	10'-6"	10'-6"	D	24	24	24	24	12'-4"	E	26	26	26	26	13'-11"	F	26	26	26	26
	7	9'-8"	10'-3"	D	25	25	25	25	12'-0"	E	26	26	26	26	13'-7"	F	27	27	27	27
	7.5	9'-1"	10'-0"	E	25	25	25	25	11'-8"	F	26	26	26	26	13'-3"	F	27	27	27	27
	8	8'-6"	9'-10"	E	25	25	25	25	10'-10"	F	26	26	26	26	13'-0"	F	26	28	28	28
	8.5	8'-0"	9'-7"	E	26	26	26	26	10'-4"	F	26	26	26	26	12'-9"	F	28	28	28	28
	9	7'-6"	9'-2"	E	26	26	26	26	9'-11"	F	26	26	26	26	12'-6"	F	28	28	28	28
	9.5	7'-2"	8'-10"	E	26	26	26	26	9'-6"	F	26	26	26	26	12'-3"	F	29	29	29	29
	10	6'-9"	8'-6"	E	26	26	26	26	9'-1"	F	27	27	27	27	12'-1"	F	29	29	29	29
	11	6'-2"	7'-11"	F	26	26	26	26	8'-6"	F	27	27	27	27	11'-8"	F	30	30	30	30
	12	5'-8"	7'-8"	F	26	26	26	26	7'-10"	F	27	27	27	27	10'-8"	F	30	30	30	30
	13	5'-2"	6'-11"	F	26	26	26	26	7'-4"	F	27	27	27	27	10'-3"	F	30	30	30	30
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	12'-6"	B	22	23	25	26	14'-0"	C	23	24	25	26	16'-10"	C	25	26	27	28
	3.5	19'-6"	12'-1"	C	23	23	25	26	13'-6"	C	24	25	26	27	16'-0"	D	25	26	27	29
	4	17'-6"	11'-7"	C	24	24	24	26	12'-11"	C	25	25	26	27	15'-4"	E	26	26	27	28
	4.5	15'-1"	11'-1"	C	24	24	24	26	12'-6"	D	25	26	26	27	14'-8"	E	27	27	27	28
	5	13'-7"	10'-6"	C	25	25	25	25	12'-2"	E	26	26	26	27	14'-3"	E	28	28	28	28
	5.5	12'-4"	10'-6"	D	26	26	26	26	11'-10"	E	27	27	27	27	13'-8"	F	28	28	28	28
	6	11'-4"	10'-1"	E	26	26	26	26	11'-7"	E	27	27	27	27	13'-5"	F	29	29	29	29
	6.5	10'-6"	9'-10"	E	27	27	27	27	11'-4"	F	28	28	28	28	13'-0"	F	29	29	29	29
	7	9'-8"	9'-7"	E	27	27	27	27	10'-8"	F	28	28	28	28	12'-8"	F	30	30	30	30
	7.5	9'-1"	9'-2"	E	27	27	27	27	9'-11"	F	28	28	28	28	12'-5"	F	30	30	30	30
	8	8'-6"	8'-8"	E	27	27	27	27	9'-5"	F	28	28	28	28	12'-2"	F	31	31	31	31
	8.5	8'-0"	8'-4"	E	27	27	27	27	8'-11"	F	29	28	28	28	11'-11"	F	31	31	31	31
	9	7'-6"	8'-0"	F	28	28	28	28	8'-6"	F	29	29	28	28	11'-6"	F	31	31	31	31
	9.5	7'-2"	7'-8"	F	28	28	28	28	8'-2"	F	28	28	28	28	11'-3"	F	32	32	32	32
	10	6'-9"	7'-4"	F	28	28	28	28	7'-10"	F	28	28	28	28	10'-10"	F	32	32	32	32
	11	6'-2"	6'-10"	F	28	28	28	28	7'-3"	F	29	29	29	29	10'-1"	F	32	32	32	32
	12	5'-8"	6'-4"	F	28	28	28	28	6'-9"	F	29	29	29	29	9'-6"	G	32	32	32	32
	13	5'-2"	5'-11"	F	28	28	29	29	6'-3"	F	29	29	29	29	8'-11"	G	32	32	32	33
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-6"	13'-4"	B	21	22	24	25	15'-1"	B	22	24	25	26	17'-6"	C	23	24	26	27
	3.5	19'-3"	12'-8"	B	22	22	23	25	14'-6"	C	23	23	25	26	16'-8"	C	24	24	26	27
	4	17'-8"	12'-1"	C	22	22	23	24	13'-11"	C	23	23	25	26	16'-0"	D	24	24	25	27
	4.5	16'-1"	11'-6"	C	23	23	23	24	13'-5"	C	24	24	26	26	15'-6"	E	26	25	25	27
	5	13'-7"	11'-3"	C	23	23	23	24	13'-1"	D	25	25	25	26	14'-11"	E	26	26	26	28
	5.5	12'-4"	10'-11"	C	24	24	24	24	12'-9"	E	25	25	26	26	14'-8"	E	26	26	26	28
	6	11'-4"	10'-7"	D	24	24	24	24	12'-5"	E	26	26	26	26	14'-4"	F	27	27	27	27
	6.5	10'-6"	10'-4"	D	25	25	25	25	12'-2"	E	26	26	26	26	13'-8"	F	27	27	27	27
	7	9'-8"	10'-1"	E	25	25	25	25	11'-8"	E	26	26	26	26	13'-4"	F	28	28	28	28
	7.5	9'-1"	9'-10"	E	26	26	26	26	10'-11"	F	26	26	26	26	13'-0"	F	28	28	28	28
	8	8'-6"	9'-7"	E	26	26	26	26	10'-6"	F	27	27	27	27	12'-9"	F	28	28	28	28
	8.5	8'-0"	9'-3"	E	26	26	26	26	9'-11"	F	27	27	27	27	12'-6"	F	29	29	29	29
	9	7'-6"	8'-10"	E	26	26	26	26	9'-6"	F	27	27	27	27	12'-3"	F	29	29	29	29
	9.5	7'-2"	8'-6"	E	26	26	26	26	9'-1"	F	27	27	27	27	12'-0"	F	30	30	30	30
	10	6'-9"	8'-2"	E	26	26	26	26	8'-9"	F	27	27	27	27	11'-10"	F	30	30	30	30
	11	6'-2"	7'-7"	F	27	27	27	27	8'-1"	F	27	27	27	27	11'-2"	F	30	30	30	30
	12	5'-8"	7'-1"	F	27	27	27	27	7'-6"	F	27	27	27	27	10'-5"	F	30	30	30	30
	13	5'-2"	6'-7"	F	27	27	27	27	7'-0"	F	27	27	27	27	9'-10"	F	31	31	31	31
115 MPH EXPOSURE B																				
20	3	11'-10"	11'-10"	C	20	22	23	24	14'-4"	C	21	23	25	26	15'-6"	D	22	24	25	27
	3.5	10'-2"	11'-3"	C	21	21	23	24	13'-7"	D	22	23	25	26	14'-10"	E	23	24	25	26
	4	8'-11"	10'-8"	C	21	21	23	24	13'-0"	E	23	23	24	26	14'-2"	E	23	23	25	26
	4.5	7'-11"	10'-4"	D	22	22	22	24	12'-4"	E	23	23	24	25	13'-6"	F	24	24	26	26
	5	7'-1"	9'-11"	E	22	22	22	24	11'-8"	E	23	23	24	25	13'-2"	F	25	25	26	26
	5.5	6'-5"	9'-8"	E	23	23	23	23	10'-7"	F	24	24	24	25	12'-9"	F	25	25	25	26
	6	5'-11"	9'-2"	E	23	23	23	23	9'-11"	F	24	24	24	24	12'-6"	F	26	26	26	26
	6.5	5'-6"	8'-6"	E	23	23	23	23	9'-4"	F	24	24	24	24	12'-1"	F	26	26	26	26
	7	5'-1"	8'-2"	E	23	23	23	23	8'-9"	F	24	24	24	24	11'-9"	F	27	27	27	27
	7.5	4'-9"	7'-9"	F	24	24	24	24	8'-4"	F	24	24	24	24	11'-5"	F	27	27	27	27
	8	4'-5"	7'-5"	F	24	24	24	24	7'-10"	F	24	24	24	24	10'-11"	F	27	27	27	27
	8.5	4'-2"	7'-0"	F	24	24	24	24	7'-6"	F	24	24	24	24	10'-6"	F	27	27	27	27
	9	3'-11"	6'-8"	F	24	24	24	24	7'-2"	F	24	24	24	24	10'-0"	F	27	27	21	27
	9.5	3'-8"	6'-6"	F	24	24	24	24	6'-10"	F	24	24	24	24	9'-7"	F	27	27	27	27
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	3	11'-10"	11'-3"	C	22	23	25	26	13'-8"	D	24	25	27	28	14'-11"	E	24	26	27	28
	3.5	10'-2"	10'-8"	C	23	23	25	26	13'-0"	E	24	25	27	28	14'-2"	E	25	25	27	28
	4	8'-11"	10'-3"	D	24	24	24	26	12'-3"	E	25	26	26	26	13'-7"	F	26	26	27	29
	4.5	7'-11"	9'-10"	E	24	24	24	26	11'-3"	F	25	26	26	27	13'-1"	F	27	27	27	28
	5	7'-1"	9'-6"	E	25	26	25	25	10'-4"	F	26	26	26	27	12'-7"	F	27	27	27	28
	5.5	6'-6"	8'-11"	E	25	25	25	25	9'-7"	F	26	26	26	28	12'-3"	F	28	28	28	28
	6	5'-11"	8'-4"	F	25	25	25	25	8'-11"	F	26	26	26	28	11'-10"	F	28	28	28	28
	6.5	5'-5"	7'-10"	F	25	26	25	26	8'-5"	F	26	26	26	26	11'-7"	F	29	29	29	29
	7	5'-1"	7'-6"	F	26	26	26	26	7'-11"	F	26	26	26	26	10'-11"	F	29	29	29	29
	7.5	4'-9"	7'-0"	F	26	26	26	26	7'-6"	F	26	26	26	26	10'-5"	F	29	29	29	29
	8	4'-5"	6'-8"	F	26	26	26	26	7'-1"	F	26	26	26	26	9'-11"	F	29	29	29	29
	8.5	4'-2"	6'-4"	F	26	26	26	26	6'-8"	F	26	26	26	26	9'-6"	G	30	30	30	30
	9	3'-11"	6'-1"	F	26	26	26	26	6'-6"	F	26	26	26	26	9'-1"	G	30	30	30	30
	9.5	3'-8"	5'-10"	F	26	26	26	26	6'-1"	F	27	27	27	27	8'-8"	G	30	30	30	30
115 MPH EXPOSURE B																				
25	3	11'-4"	11'-8"	C	20	22	23	24	14'-2"	C	21	23	25	26	16'-6"	D	22	24	25	27
	3.5	9'-8"	11'-2"	C	21	21	23	24	13'-6"	D	22	23	25	26	14'-9"	E	23	24	25	26
	4	8'-6"	10'-8"	C	21	21	23	24	12'-11"	E	23	23	24	26	14'-1"	F	23	23	25	26
	4.5	7'-6"	10'-3"	D	22	22	22	24	12'-2"	E	23	23	24	25	13'-7"	F	24	24	25	26
	5	6'-9"	9'-11"	E	22	22	22	23	11'-3"	F	23	23	24	25	13'-1"	F	25	26	25	26
	5.5	6'-2"	9'-7"	E	23	23	23	23	10'-6"	F	24	24	24	25	12'-6"	F	25	25	26	26
	6	5'-8"	9'-1"	E	23	23	23	23	9'-9"	F	24	24	24	24	12'-4"	F	26	26	26	26
	6.5	5'-2"	8'-8"	E	23	23	23	23	9'-2"	F	24	24	24	24	12'-0"	F	26	26	26	26
	7	4'-10"	8'-1"	F	23	23	23	23	8'-8"	F	24	24	24	24	11'-8"	F	26	26	26	26
	7.5	4'-6"	7'-8"	F	23	23	23	23	8'-2"	F	24	24	24	24	11'-3"	F	27	27	27	27
	8	4'-3"	7'-3"	F	24	24	24	24	7'-8"	F	24	24	24	24	10'-9"	F	27	27	27	27
	8.5	4'-0"	6'-11"	F	24	24	24	24	7'-4"	F	24	24	24	24	10'-3"	F	27	27	27	27
	9	3'-8"	6'-7"	F	24	24	24	24	7'-0"	F	24	24	24	24	9'-10"	F	27	27	27	27
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	3	11'-4"	11'-2"	C	22	23	25	26	13'-8"	D	24	25	27	28						
	3.5	9'-8"	10'-7"	C	23	23	25	26	12'-10"	E	24	25	26	28						
	4	8'-6"	10'-2"	D	24	24	24	26	11'-11"	E	25	25	26	27						
	4.5	7'-6"	9'-6"	E	24	24	24	26	10'-11"	F	25	26	26	27						
	5	6'-9"	9'-4"	E	25	25	26	25	10'-1"	F	26	26	25	25						
	5.5	6'-2"	8'-8"	E	25	25	25	25	9'-4"	F	26	25	25	26						
	6	5'-8"	8'-2"	F	25	26	26	25	8'-8"	F	26	26	26	25						
	6.5	5'-1"	7'-8"	F	25	25	25	25	8'-2"	F	26	26	26	26						
	7	4'-10"	7'-3"	F	25	25	25	25	7'-8"	F	26	26	26	26						
	7.5	4'-6"	6'-10"	F	25	25	25	25	7'-3"	F	26	26	26	26						
	8	4'-3"	6'-6"	F	26	26	26	26	6'-10"	F	26	26	26	26						
	8.5	4'-0"	6'-2"	F	26	26	26	26	6'-6"	F	26	26	26	26						
	9	3'-8"	5'-11"	F	26	26	26	26	6'-2"	F	26	26	26	26						

LICENSED PROFESSIONAL ENGINEER
CARL PUTNAM
C 58135
EXP. 6-30-2015
CIVIL
STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER
No. 5860906-2202
CARL PUTNAM
STATE OF UTAH

MAR 06 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.12

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	4"x3" I Beam (Detail MU56) MAX POST SPACING (FT)	MU56 Attached Structure MIN POST TYPE	MU56 FOOTER SIZE "d" (in)	MU56 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU56 10' "d" (in)	MU56 12' "d" (in)	5"x3" Alum I Beam (Detail MU57) MAX POST SPACING (FT)	MU57 Attached Structure MIN POST TYPE	MU57 FOOTER SIZE "d" (in)	MU57 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU57 10' "d" (in)	MU57 12' "d" (in)	5"x4 11" I Beam (Detail MU65) MAX POST SPACING (FT)	MU65 Attached Structure MIN POST TYPE	MU65 FOOTER SIZE "d" (in)	MU65 Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	MU65 10' "d" (in)	MU65 12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	3	22'-0"	12'-4"	B	23	24	25	27	13'-8"	C	24	26	27	28	16'-7"	C	26	26	28	29
	3.5	18'-9"	11'-9"	C	24	24	25	26	13'-1"	C	24	25	27	28	15'-9"	D	26	26	28	29
	4	17'-6"	11'-4"	C	24	24	25	26	12'-7"	C	25	25	26	28	15'-1"	E	27	27	27	29
	4.5	15'-1"	10'-11"	C	25	25	25	26	12'-3"	D	26	26	28	28	14'-6"	E	28	28	28	29
	5	13'-7"	10'-7"	D	26	26	29	29	11'-10"	E	27	27	27	27	14'-0"	F	28	28	28	28
	5.5	12'-4"	10'-3"	D	26	26	26	29	11'-3"	E	27	27	27	27	13'-1"	F	29	29	29	29
	6	11'-4"	9'-11"	E	27	27	27	27	11'-4"	F	28	28	28	28	13'-2"	F	29	29	29	29
	6.5	10'-5"	9'-6"	E	27	27	27	27	12'-6"	F	28	28	28	28	12'-10"	F	30	30	30	30
	7	9'-8"	9'-4"	E	28	28	28	28	12'-1"	F	28	28	28	28	12'-6"	F	30	30	30	30
	7.5	9'-1"	8'-10"	F	28	28	28	28	9'-6"	F	28	28	28	28	12'-3"	F	31	31	31	31
	8	8'-6"	8'-6"	E	28	28	28	28	9'-0"	F	28	28	29	29	11'-11"	F	31	31	31	31
	8.5	8'-0"	8'-0"	F	28	28	28	28	8'-7"	F	29	29	29	28	11'-8"	F	32	32	32	32
	9	7'-6"	7'-8"	F	28	28	28	28	8'-3"	F	29	29	29	29	11'-4"	F	32	32	32	32
	9.5	7'-3"	7'-4"	F	28	28	29	29	7'-10"	F	29	29	29	28	10'-11"	F	32	32	32	32
	10	6'-8"	7'-1"	F	28	28	28	28	7'-6"	F	29	29	29	29	10'-6"	F	32	32	32	32
	11	6'-3"	6'-7"	F	29	29	29	29	6'-11"	F	29	29	29	29	9'-9"	F	33	33	33	33
110 MPH EXPOSURE B																				
20	3	11'-10"	12'-0"	C	19	21	23	24	14'-6"	C	21	23	24	28	16'-10"	D	21	23	25	26
	3.5	10'-2"	11'-4"	C	20	21	22	24	13'-6"	D	21	23	24	25	15'-1"	E	22	23	25	26
	4	8'-11"	10'-10"	C	21	21	22	23	13'-2"	E	22	23	24	25	14'-5"	E	23	23	24	26
	4.5	7'-11"	10'-6"	D	21	21	22	23	12'-6"	E	23	23	24	25	13'-10"	F	23	23	24	26
	5	7'-1"	10'-1"	E	22	22	22	23	11'-6"	E	23	23	23	25	13'-4"	F	24	24	24	25
	5.5	6'-6"	9'-9"	E	22	22	22	23	10'-11"	F	23	23	23	24	12'-11"	F	24	24	24	25
	6	5'-11"	9'-5"	E	23	23	23	23	10'-3"	F	23	23	23	24	12'-7"	F	25	25	25	25
	6.5	5'-6"	8'-11"	E	23	23	23	23	9'-7"	F	23	23	23	24	12'-3"	F	25	25	25	25
	7	5'-1"	8'-8"	E	23	23	23	23	9'-1"	F	24	24	24	24	11'-11"	F	26	26	26	26
	7.5	4'-8"	8'-0"	F	23	23	23	23	8'-7"	F	24	24	24	24	11'-8"	F	26	26	26	26
	8	4'-6"	7'-7"	F	23	23	23	23	8'-3"	F	24	24	24	24	11'-3"	F	26	26	26	26
	8.5	4'-3"	7'-3"	F	23	23	23	23	7'-9"	F	24	24	24	24	10'-8"	F	27	27	27	27
	9	3'-11"	6'-11"	F	23	23	23	23	7'-4"	F	24	24	24	24	10'-4"	F	27	27	27	27
	9.5	3'-8"	6'-6"	F	24	24	24	24	7'-1"	F	24	24	24	24	9'-11"	F	27	27	27	27
110 MPH EXPOSURE C or 120 MPH EXPOSURE B																				
20	3	11'-10"	11'-5"	C	22	23	24	26	13'-10"	D	23	25	26	28	14'-2"	E	24	25	27	28
	3.5	10'-2"	10'-10"	C	22	23	24	26	13'-2"	E	24	24	26	27	14'-4"	E	25	25	27	28
	4	8'-11"	10'-4"	D	23	23	24	26	12'-7"	E	25	25	26	27	13'-6"	F	25	25	26	28
	4.5	7'-11"	10'-0"	E	24	24	24	25	11'-6"	E	25	26	25	27	13'-3"	F	26	26	26	27
	5	7'-1"	9'-6"	F	24	24	24	25	10'-9"	F	25	25	25	26	12'-6"	F	27	27	27	27
	5.5	6'-5"	9'-2"	E	25	25	25	25	9'-10"	F	25	25	25	26	12'-4"	F	27	27	27	27
	6	5'-11"	8'-7"	E	25	25	25	25	9'-3"	F	25	25	25	26	12'-0"	F	28	28	28	28
	6.5	5'-5"	8'-1"	F	25	25	25	25	8'-6"	F	25	25	25	25	11'-6"	F	28	28	28	28
	7	5'-1"	7'-7"	F	25	25	25	25	8'-3"	F	26	26	26	26	11'-3"	F	28	28	28	28
	7.5	4'-9"	7'-3"	F	25	25	25	25	7'-8"	F	26	26	26	26	10'-8"	F	29	29	29	29
	8	4'-5"	6'-10"	F	25	25	25	26	7'-3"	F	26	26	26	26	10'-3"	F	29	29	29	29
	8.5	4'-3"	6'-6"	F	25	25	25	25	6'-11"	F	25	26	26	26	9'-9"	F	29	29	29	29
	9	3'-11"	6'-3"	F	25	25	25	26	6'-7"	F	26	26	26	26	9'-4"	G	29	29	29	29
	9.5	3'-8"	6'-0"	F	26	26	26	26	6'-3"	F	26	26	26	26	8'-11"	G	29	29	29	29
	10	3'-6"	6'-9"	F	26	26	26	26	6'-0"	F	26	26	26	26	8'-7"	G	29	29	29	29
115 MPH EXPOSURE B																				
30	3	9'-6"	11'-3"	C	20	21	23	24	13'-7"	D	21	23	25	26	14'-10"	E	22	24	25	28
	3.5	8'-2"	10'-8"	C	20	21	23	24	12'-11"	E	22	23	24	26	14'-1"	E	22	23	25	28
	4	7'-1"	10'-2"	D	21	21	22	24	12'-1"	E	22	23	24	25	13'-6"	F	23	23	25	26
	4.5	6'-4"	9'-10"	E	22	22	22	23	11'-1"	F	22	23	24	25	13'-0"	F	24	24	24	26
	5	5'-8"	9'-5"	E	22	22	22	23	10'-2"	F	23	23	23	24	12'-6"	F	24	24	24	25
	5.5	5'-2"	8'-8"	E	22	22	22	23	9'-6"	F	23	23	23	24	12'-2"	F	25	25	25	25
	6	4'-8"	8'-3"	E	22	22	22	23	8'-10"	F	23	23	23	24	11'-9"	F	25	25	25	26
	6.5	4'-4"	7'-8"	F	23	23	23	23	8'-3"	F	23	23	23	23	11'-5"	F	26	26	26	26
	7	4'-1"	7'-4"	F	23	23	23	23	7'-8"	F	23	23	23	23	10'-10"	F	26	26	26	26
	7.5	3'-9"	6'-11"	F	23	23	23	23	7'-4"	F	23	23	23	23	10'-3"	F	26	26	26	26
	8	3'-6"	6'-3"	F	23	23	23	23	7'-0"	F	23	23	23	23	9'-9"	F	26	26	26	26
	8.5	3'-4"	6'-3"	F	23	23	23	23	6'-7"	F	23	23	23	23	9'-4"	G	26	26	26	26
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	3	9'-6"	10'-10"	C	22	23	25	26	13'-1"	E	23	26	27	28	14'-4"	E	24	26	27	28
	3.5	8'-2"	10'-3"	D	23	23	24	26	12'-4"	E	24	26	26	26	13'-7"	F	26	26	27	28
	4	7'-1"	9'-10"	E	23	23	24	26	11'-1"	E	24	24	26	27	13'-0"	F	26	26	27	28
	4.5	6'-4"	9'-5"	E	24	24	24	25	10'-2"	E	24	24	25	27	12'-6"	F	26	26	26	28
	5	5'-8"	8'-8"	E	24	24	24	25	9'-4"	E	25	25	25	26	12'-1"	F	27	27	27	28
	5.5	5'-2"	8'-1"	F	24	24	24	25	8'-8"	F	25	25	26	26	11'-6"	F	27	27	27	27
	6	4'-8"	7'-7"	F	24	24	24	24	8'-1"	F	25	25	25	25	11'-2"	F	28	28	28	28
	6.5	4'-4"	7'-1"	F	25	25	25	25	7'-7"	F	25	25	25	25	10'-8"	F	28	28	28	28
	7	4'-1"	6'-8"	F	25	25	25	25	7'-1"	F	25	25	25	25	9'-11"	F	28	28	28	28

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU89
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.065"x3"x3" Fluted	12'	F	MU86
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU86
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	D	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU86
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU86
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 36"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.12 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.12
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.12 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.12
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 8-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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FEB 24 2014

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.12

Column groups: 7"X4" Alum I Beam (Detail MU58); 7"X5.86" Alum I Beam (Detail MU63); 10"X5.86" Alum I Beam (Detail MU62). Each group: Attached Structure (Max Post Spacing (FT), Min Post Type, Footer Size "d" (in)); Freestanding or Multispan Units (Max Post Length 8', 12', 15' – Constrained Footer "d" (in)). X = crossed-out cell.

115 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	18'-10"	F	27	27	27	X	21'-2"	F	28	28	28	X	29'-7"	G	31	31	31	X
	5.5	12'-4"	18'-4"	F	27	27	27	X	20'-6"	F	29	29	29	X	28'-10"	G	32	32	32	X
	6	11'-4"	17'-11"	F	28	28	28	X	19'-11"	F	29	29	29	X	28'-1"	H	33	33	33	X
	6.5	10'-6"	17'-6"	F	29	29	29	X	19'-5"	F	30	30	30	X	27'-6"	H	33	33	33	X
	7	9'-8"	17'-2"	F	29	29	29	X	18'-7"	F	30	30	30	X	27'-0"	H	34	34	34	X
	7.5	9'-1"	16'-10"	F	30	30	30	X	17'-8"	F	30	30	30	X	26'-5"	H	34	34	34	X
	8	8'-6"	16'-7"	F	30	30	30	X	16'-10"	F	30	30	30	X	26'-0"	H	35	35	35	X
	8.5	8'-0"	16'-4"	G	31	31	31	X	16'-1"	G	30	30	30	X	25'-7"	H	35	35	35	X
	9	7'-6"	16'-1"	G	31	31	31	X	15'-4"	G	31	31	31	X	25'-2"	I	36	36	36	X
	9.5	7'-2"	15'-10"	G	31	31	31	X	14'-8"	G	31	31	31	X	24'-10"	I	36	36	36	X
	10	6'-9"	15'-7"	G	32	32	32	X	14'-2"	G	31	31	31	X	24'-6"	I	37	37	37	X
	10.5	6'-6"	15'-5"	G	32	32	32	X	13'-8"	G	31	31	31	X	24'-2"	I	37	37	37	X
	11	6'-2"	15'-3"	H	33	33	33	X	13'-3"	G	31	31	31	X	23'-10"	I	38	38	38	X
	11.5	5'-11"	15'-0"	H	33	33	33	X	12'-8"	G	31	31	31	X	23'-7"	I	38	38	38	X
	12	5'-8"	14'-10"	H	33	33	33	X	12'-3"	G	31	31	31	X	23'-4"	J	39	39	39	X
	13	5'-2"	14'-4"	H	34	34	34	X	11'-6"	G	31	31	31	X	22'-10"	J	39	39	39	X
	14	4'-10"	13'-9"	H	34	34	34	X	10'-9"	G	31	31	31	X	21'-6"	J	43	40	40	X
	15	4'-6"	13'-6"	H	34	34	34	X	10'-2"	G	32	32	32	X	21'-6"	J	40	40	40	X

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	17'-1"	F	29	29	29	X	19'-10"	F	31	31	31	X	26'-10"	G	34	34	34	X
	5.5	12'-4"	16'-8"	F	30	30	30	X	18'-3"	F	31	31	31	X	26'-2"	H	35	35	35	X
	6	11'-4"	16'-3"	F	31	31	31	X	18'-1"	F	32	32	32	X	25'-6"	H	36	36	36	X
	6.5	10'-6"	15'-11"	F	31	31	31	X	17'-1"	F	32	32	32	X	25'-0"	H	36	36	36	X
	7	9'-8"	15'-8"	F	32	32	32	X	16'-2"	F	32	32	32	X	24'-6"	H	37	37	37	X
	7.5	9'-1"	15'-4"	G	32	32	32	X	15'-4"	G	32	32	32	X	24'-1"	H	37	37	37	X
	8	8'-6"	15'-1"	G	33	33	33	X	14'-7"	G	32	32	32	X	23'-8"	I	38	38	38	X
	8.5	8'-0"	14'-10"	G	33	33	33	X	13'-11"	G	33	33	33	X	23'-3"	I	38	38	38	X
	9	7'-6"	14'-7"	G	34	34	34	X	13'-3"	G	33	33	33	X	22'-11"	I	39	39	39	X
	9.5	7'-2"	14'-5"	G	34	34	34	X	12'-8"	G	33	33	33	X	22'-7"	I	40	40	40	X
	10	6'-9"	14'-3"	H	35	35	35	X	12'-2"	G	33	33	33	X	22'-3"	I	40	40	40	X
	10.5	6'-6"	14'-0"	H	35	35	35	X	11'-8"	G	33	33	33	X	22'-0"	I	41	41	41	X
	11	6'-2"	13'-10"	H	35	35	35	X	11'-3"	G	33	33	33	X	21'-9"	J	41	41	41	X
	11.5	5'-11"	13'-8"	H	36	36	36	X	10'-10"	G	33	33	33	X	21'-6"	J	42	42	42	X
	12	5'-8"	13'-4"	H	36	36	36	X	10'-6"	G	33	33	33	X	21'-3"	J	42	42	42	X
	13	5'-2"	12'-7"	H	36	36	36	X	9'-10"	G	33	33	33	X	20'-4"	J	43	43	43	X
	14	4'-10"	11'-11"	H	37	37	37	X	9'-7"	G	34	34	34	X	19'-3"	K	43	43	43	X
	15	4'-6"	11'-4"	H	37	37	37	X	8'-6"	G	34	34	34	X	18'-3"	K	43	43	43	X

115 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	18'-4"	F	27	27	27	X	20'-9"	F	28	28	28	X	28'-10"	G	32	32	32	X
	5.5	12'-4"	17'-11"	F	28	28	28	X	20'-1"	F	28	29	29	X	28'-1"	G	33	33	33	X
	6	11'-4"	17'-6"	F	29	29	29	X	19'-6"	F	30	30	30	X	27'-5"	H	33	33	33	X
	6.5	10'-6"	17'-1"	F	29	29	29	X	18'-9"	F	30	30	30	X	26'-10"	H	34	34	34	X
	7	9'-8"	16'-8"	F	30	30	30	X	17'-9"	F	30	30	30	X	26'-3"	H	35	35	35	X
	7.5	9'-1"	16'-5"	F	30	30	30	X	16'-11"	F	31	31	31	X	25'-10"	H	35	35	35	X
	8	8'-6"	16'-2"	F	31	31	31	X	16'-1"	F	31	31	31	X	25'-4"	H	36	36	36	X
	8.5	8'-0"	15'-11"	G	31	31	31	X	15'-4"	G	31	31	31	X	24'-11"	H	36	36	36	X
	9	7'-6"	15'-8"	G	32	32	32	X	14'-8"	G	31	31	31	X	24'-7"	I	37	37	37	X
	9.5	7'-2"	15'-5"	G	32	32	32	X	14'-1"	G	31	31	31	X	24'-2"	I	37	37	37	X
	10	6'-9"	15'-3"	G	33	33	33	X	13'-6"	G	31	31	31	X	23'-10"	I	38	38	38	X
	10.5	6'-6"	15'-0"	G	33	33	33	X	13'-0"	G	31	31	31	X	23'-7"	I	38	38	38	X
	11	6'-2"	14'-10"	H	33	33	33	X	12'-7"	G	31	31	31	X	23'-3"	I	39	39	39	X
	11.5	5'-11"	14'-8"	H	34	34	34	X	12'-1"	G	32	32	32	X	23'-0"	I	39	39	39	X
	12	5'-8"	14'-6"	H	34	34	34	X	11'-8"	G	32	32	32	X	22'-8"	J	39	39	39	X
	13	5'-2"	13'-8"	H	34	34	34	X	10'-11"	G	32	32	32	X	22'-3"	J	40	40	40	X
	14	4'-10"	13'-1"	H	35	35	35	X	10'-3"	G	32	32	32	X	21'-2"	J	41	41	41	X
	15	4'-6"	12'-6"	H	35	35	35	X	9'-8"	G	32	32	32	X	20'-1"	J	41	41	41	X

115 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
20	5	7'-1"	17'-8"	F	27	27	27	27	17'-8"	F	27	27	27	27	28'-2"	H	32	32	32	32
	5.5	6'-6"	17'-0"	G	28	28	28	28	16'-5"	F	27	27	27	27	27'-3"	I	32	32	32	32
	6	5'-11"	16'-8"	G	28	28	28	28	15'-4"	G	28	28	30	30	26'-6"	I	33	33	33	33
	6.5	5'-6"	16'-1"	G	29	29	29	29	14'-5"	G	28	29	30	30	25'-8"	I	34	34	34	34
	7	5'-1"	15'-8"	G	29	29	29	29	13'-8"	G	28	29	29	29	25'-2"	I	34	34	34	34
	7.5	4'-9"	15'-4"	H	30	30	30	30	12'-11"	G	28	28	28	28	24'-7"	I	35	35	35	35
	8	4'-5"	15'-0"	H	30	30	30	30	12'-3"	G	28	28	28	28	24'-1"	J	35	35	35	35
	8.5	4'-2"	14'-8"	H	30	30	30	30	11'-8"	G	28	28	28	28	23'-7"	J	36	36	36	36
	9	3'-11"	14'-4"	H	31	31	31	31	11'-1"	G	28	28	28	28	22'-8"	J	36	36	36	36
	9.5	3'-9"	13'-8"	H	31	31	31	31	10'-7"	G	28	28	28	28	21'-9"	J	36	36	36	36
	10	3'-6"	13'-4"	H	31	31	31	31	10'-2"	G	28	28	28	28	21'-0"	J	36	36	36	36
	10.5	3'-4"	13'-0"	H	31	31	31	31	9'-9"	G	29	29	29	29	20'-3"	J	36	36	36	36
	11	3'-2"	12'-1"	H	31	31	31	31	9'-5"	G	29	29	29	29	19'-7"	K	36	36	36	36
	11.5	3'-1"	11'-9"	H	31	31	31	31	9'-0"	G	29	29	29	29	18'-11"	K	37	37	37	37

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
20	5	7'-1"	16'-8"	G	30	30	30	30	16'-0"	G	29	29	29	29	26'-2"	I	35	35	35	35
	5.5	6'-5"	16'-3"	G	31	31	31	31	14'-11"	G	30	30	30	30	25'-6"	I	36	36	36	36
	6	5'-11"	16'-0"	G	31	31	31	31	13'-11"	G	30	30	30	30	24'-11"	I	36	36	36	36
	6.5	5'-6"	15'-4"	H	32	32	32	32	13'-1"	G	30	30	30	30	24'-5"	I	37	37	37	37
	7	5'-1"	15'-0"	H	32	32	32	32	12'-4"	G	30	30	30	30	23'-11"	J	38	38	38	38
	7.5	4'-9"	14'-6"	H	33	33	33	33	11'-7"	G	30	30	30	30	23'-6"	J	38	38	38	38
	8	4'-5"	13'-10"	H	33	33	33	33	11'-0"	G	30	30	30	30	22'-6"	J	39	39	39	39
	8.5	4'-2"	13'-3"	H	33	33	33	33	10'-6"	G	31	31	31	31	21'-6"	J	39	39	39	39
	9	3'-11"	12'-9"	H	33	33	33	33	10'-0"	G	31	31	31	31	20'-6"	J	39	39	39	39
	9.5	3'-9"	12'-3"	H	33	33	33	33	9'-6"	G	31	31	31	31	19'-10"	K	39	39	39	39
	10	3'-6"	11'-10"	H	34	34	34	34	9'-1"	G	31	31	31	31	19'-1"	K	39	39	39	39
	10.5	3'-4"	11'-6"	H	34	34	34	34	8'-9"	G	31	31	31	31	18'-5"	K	40	40	40	40
	11	3'-2"	11'-0"	H	34	34	34	34	8'-5"	G	31	31	31	31	17'-8"	K	40	40	40	40
	11.5	3'-1"	10'-8"	H	34	34	34	34	8'-1"	G	31	31	31	31	17'-2"	K	40	40	40	40

115 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
25	5	6'-8"	17'-0"	F	27	27	27	27	17'-3"	F	27	27	27	27	27'-11"	H	32	32	32	32
	5.5	6'-2"	16'-10"	G	28	28	28	28	16'-2"	G	27	27	27	27	27'-1"	I	32	32	32	32
	6	5'-8"	16'-5"	G	28	28	28	28	15'-2"	G	27	27	27	27	26'-4"	I	33	33	33	33
	6.5	5'-2"	15'-11"	G	29	29	29	29	14'-3"	G	28	28	28	28	25'-7"	I	33	33	33	33
	7	4'-10"	15'-7"	H	29	29	29	29	13'-6"	G	28	28	29	30	25'-0"	I	34	34	34	34
	7.5	4'-6"	15'-2"	H	30	30	30	30	12'-9"	G	28	28	28	28	24'-5"	J	35	35	35	35
	8	4'-3"	14'-11"	H	30	30	30	30	12'-1"	G	28	28	28	28	23'-11"	J	35	35	35	35
	8.5	4'-0"	14'-4"	H	30	30	30	30	11'-6"	G	28	28	28	28	23'-3"	J	35	35	35	35
	9	3'-9"	13'-9"	H	30	30	30	30	10'-11"	G	28	28	28	28	22'-4"	J	36	36	36	36
	9.5	3'-7"	13'-3"	H	31	31	31	31	10'-5"	G	28	28	28	28	21'-6"	J	36	36	36	36
	10	3'-4"	12'-8"	H	31	31	31	31	10'-0"	G	28	28	28	28	20'-8"	J	36	36	36	36
	10.5	3'-2"	12'-4"	H	31	31	31	31	9'-7"	G	28	28	28	28	19'-11"	K	36	36	36	36
	11	3'-1"	11'-11"	H	31	31	31	31	9'-3"	G	28	28	28	28	19'-3"	K	36	36	36	36

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

Ground Snow Load (PSF)	Trib Width (FT)	Post Spacing on Slab (FT)	7"X4" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Max Post Spacing (FT)	Min Post Type	Footer Size "d" (in)	8' "d" (in)	12' "d" (in)	15' "d" (in)
25	5	6'-8"	16'-7"	G	30	30	30	30	15'-7"	G	29	29	29	29
	5.5	6'-2"	16'-1"	G	30	30	30	30	14'-6"	G	29	29	29	29
	6	5'-8"	15'-7"	G	31	31	31	31	13'-6"	G	30	30	30	30
	6.5	5'-2"	15'-2"	H	32	32	32	32	12'-8"	G	30	30	30	30
	7	4'-10"	14'-10"	H	32	32	32	32	11'-11"	G	30	30	30	30
	7.5	4'-6"	14'-2"	H	32	32	32	32	11'-4"	G	30	30	30	30
	8	4'-3"	13'-6"	H	33	33	33	33	10'-8"	G	30	30	30	30
	8.5	4'-0"	13'-0"	H	33	33	33	33	10'-2"	G	30	30	30	30
	9	3'-9"	12'-5"	H	33	33	33	33	9'-8"	G	30	30	30	30
	9.5	3'-7"	11'-11"	H	33	33	33	33	9'-3"	G	30	30	30	30
	10	3'-4"	11'-6"	H	33	33	33	33	8'-10"	G	31	31	31	31
	10.5	3'-2"	11'-1"	H	33	33	33	33	8'-6"	G	31	31	31	31
	11	3'-1"	10'-8"	H	34	34	34	34	8'-2"	G	31	31	31	31

10"X5.86" columns for this group: [illegible]

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 EXP. 6-30-2014 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5860906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA*

TABLE 5.13

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7"X4" Alum I Beam (Detail MU58) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Alum I Beam (Detail MU63) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Alum I Beam (Detail MU62) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	18'-6"	F	30	30	30		19'-5"	F	31	31	31		26'-3"	G	35	35	35	
	5.5	12'-4"	16'-3"	F	31	31	31		18'-8"	F	32	32	32		25'-6"	H	36	36	36	
	6	11'-4"	15'-11"	F	31	31	31		17'-8"	F	32	32	32		24'-11"	H	36	36	36	
	6.5	10'-5"	15'-3"	F	32	32	32		16'-8"	F	32	32	32		24'-5"	H	37	37	37	
	7	9'-8"	15'-3"	F	32	32	32		15'-7"	G	33	33	33		23'-11"	H	38	38	38	
	7.5	9'-1"	15'-0"	G	33	33	33		14'-8"	G	33	33	33		23'-6"	H	38	38	38	
	8	8'-6"	14'-9"	G	34	34	34		14'-0"	G	33	33	33		23'-1"	I	39	39	39	
	8.5	8'-0"	14'-6"	G	34	34	34		13'-4"	G	33	33	33		22'-8"	I	40	40	40	
	9	7'-6"	14'-3"	G	35	35	35		12'-9"	G	33	33	33		22'-4"	I	40	40	40	
	9.5	7'-2"	14'-1"	H	35	35	35		12'-3"	G	33	33	33		22'-0"	I	41	41	41	
	10	6'-9"	13'-10"	H	35	35	35		11'-9"	G	34	34	34		21'-9"	I	41	41	41	
	10.5	6'-5"	13'-8"	H	36	36	36		11'-3"	G	34	34	34		21'-5"	J	42	42	42	
	11	6'-2"	13'-6"	H	36	36	36		10'-10"	G	34	34	34		21'-2"	J	42	42	42	
	11.5	5'-11"	13'-3"	H	37	37	37		10'-6"	G	34	34	34		20'-11"	J	43	43	43	
	12	5'-8"	12'-10"	H	37	37	37		10'-1"	G	34	34	34		20'-6"	J	43	43	43	
	13	5'-3"	12'-3"	H	37	37	37		9'-5"	G	34	34	34		19'-7"	K	43	43	43	
110 MPH EXPOSURE B																				
20	5	7'-1"	17'-9"	F	26	26	26	26	16'-2"	F	27	27	27	27	28'-4"	H	31	31	31	31
	5.5	6'-5"	17'-3"	G	27	27	27	27	16'-11"	F	27	27	27	27	27'-8"	H	31	31	31	31
	6	5'-11"	16'-9"	G	27	27	27	27	15'-10"	G	27	27	27	27	26'-10"	I	32	32	32	32
	6.5	5'-6"	16'-3"	G	28	28	28	28	14'-11"	G	27	27	27	27	26'-2"	I	33	33	33	33
	7	5'-1"	15'-11"	G	28	28	28	28	14'-1"	G	27	27	27	27	25'-6"	I	33	33	33	33
	7.5	4'-9"	15'-6"	H	29	29	29	29	13'-4"	G	27	27	27	27	24'-11"	I	34	34	34	34
	8	4'-5"	15'-2"	H	29	29	29	29	12'-8"	G	28	28	28	28	24'-6"	J	34	34	34	34
	8.5	4'-2"	14'-11"	H	30	30	30	30	12'-0"	G	28	28	28	28	23'-11"	J	35	35	35	35
	9	3'-11"	14'-4"	H	30	30	30	30	11'-6"	G	28	28	28	28	23'-4"	J	35	35	35	35
	9.5	3'-8"	13'-10"	H	30	30	30	30	11'-0"	G	28	28	28	28	22'-6"	J	36	35	35	35
	10	3'-6"	13'-4"	H	30	30	30	30	10'-6"	G	28	28	28	28	21'-7"	J	36	35	35	35
	10.5	3'-4"	12'-11"	H	30	30	30	30	10'-1"	G	28	28	28	28	20'-10"	J	36	36	36	36
	11	3'-2"	12'-6"	H	30	30	30	30	9'-8"	G	28	28	28	28	20'-2"	J	36	36	36	36
	11.5	3'-1"	12'-1"	H	31	31	31	31	9'-4"	G	28	28	28	28	19'-6"	K	36	36	36	36
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	17'-0"	G	29	29	29	29	16'-5"	F	29	29	29	29	26'-10"	H	34	34	34	34
	5.5	6'-6"	16'-8"	G	30	30	30	30	15'-3"	G	29	29	29	29	26'-2"	I	35	35	35	35
	6	5'-11"	16'-0"	G	30	30	30	30	14'-4"	G	29	29	29	29	25'-6"	I	36	36	36	36
	6.5	5'-6"	15'-7"	G	31	31	31	31	13'-6"	G	29	29	29	29	24'-11"	I	36	36	36	36
	7	5'-1"	15'-2"	H	31	31	31	31	12'-8"	G	30	30	30	30	24'-4"	J	37	37	37	37
	7.5	4'-9"	14'-10"	H	32	32	32	32	11'-11"	G	30	30	30	30	23'-9"	J	37	37	37	37
	8	4'-5"	14'-3"	H	32	32	32	32	11'-4"	G	30	30	30	30	23'-0"	J	38	38	38	38
	8.5	4'-2"	13'-7"	H	32	32	32	32	10'-8"	G	30	30	30	30	22'-1"	J	38	38	38	38
	9	3'-11"	13'-1"	H	33	33	33	33	10'-3"	G	30	30	30	30	21'-3"	J	38	38	38	38
	9.5	3'-8"	12'-7"	H	33	33	33	33	9'-10"	G	30	30	30	30	20'-4"	J	38	38	38	38
	10	3'-6"	12'-1"	H	33	33	33	33	9'-6"	G	30	30	30	30	19'-7"	K	39	39	39	39
	10.5	3'-4"	11'-9"	H	33	33	33	33	9'-0"	G	30	30	30	30	18'-11"	K	39	39	39	39
	11	3'-2"	11'-3"	H	33	33	33	33	8'-8"	G	30	30	30	30	18'-3"	K	39	39	39	39
	11.5	3'-1"	10'-11"	H	33	33	33	33	8'-4"	G	30	30	30	30	17'-7"	K	39	39	39	39
	12	2'-11"	10'-7"	H	33	33	33	33	8'-0"	G	30	30	30	30	17'-1"	K	39	39	39	39

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7"X4" Alum I Beam (Detail MU58) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	7"X5.86" Alum I Beam (Detail MU63) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	10"X5.86" Alum I Beam (Detail MU62) MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-8"	16'-0"	G	30	30	30	30	14'-6"	G	29	29	29	29	25'-8"	I	35	35	35	35
	5.5	5'-2"	15'-6"	G	30	30	30	30	13'-5"	G	29	29	29	29	24'-11"	I	35	35	35	35
	6	4'-9"	15'-1"	H	31	31	31	31	12'-7"	G	29	29	29	29	24'-3"	J	36	36	36	36
	6.5	4'-4"	14'-8"	H	31	31	31	31	11'-9"	G	29	29	29	29	23'-7"	J	37	37	37	37
	7	4'-1"	13'-11"	H	31	31	31	31	11'-1"	G	29	29	29	29	22'-9"	J	37	37	37	37
	7.5	3'-9"	13'-3"	H	32	32	32	32	10'-6"	G	29	29	29	29	21'-9"	J	37	37	37	37
	8	3'-6"	12'-8"	H	32	32	32	32	9'-11"	G	29	29	29	29	20'-5"	J	37	37	37	37
	8.5	3'-4"	12'-1"	H	32	32	32	32	9'-5"	G	29	29	29	29	19'-7"	K	38	38	38	38
	9	3'-3"	11'-7"	H	32	32	32	32	8'-11"	G	30	30	30	30	18'-9"	K	38	38	38	38
	9.5	3'-0"	11'-2"	H	32	32	32	32	8'-6"	G	30	30	30	30	18'-0"	K	38	38	38	38
	10	2'-10"	10'-9"	H	33	33	33	33	8'-2"	G	30	30	30	30	17'-4"	K	38	38	38	38
	10.5	2'-8"	10'-4"	H	33	33	33	33	7'-10"	G	30	30	30	30	16'-8"	K	38	38	38	38
115 MPH EXPOSURE B																				
30	5	5'-8"	16'-0"	G	27	27	27	27	15'-10"	F	26	26	26	26	26'-9"	I	31	31	31	31
	5.5	5'-2"	16'-2"	G	27	27	27	27	14'-6"	G	26	26	26	26	25'-11"	I	32	32	32	32
	6	4'-9"	15'-8"	G	28	28	28	28	13'-9"	G	26	26	26	26	25'-2"	I	32	32	32	32
	6.5	4'-4"	15'-3"	H	28	28	28	28	12'-10"	G	27	27	27	27	24'-6"	I	33	33	33	33
	7	4'-1"	14'-11"	H	28	28	28	28	12'-1"	G	27	27	27	27	23'-11"	J	34	34	34	34
	7.5	3'-9"	14'-4"	H	29	29	29	29	11'-5"	G	27	27	27	27	23'-3"	J	34	34	34	34
	8	3'-6"	13'-8"	H	29	29	29	29	10'-10"	G	27	27	27	27	22'-2"	J	34	34	34	34
	8.5	3'-4"	13'-1"	H	29	29	29	29	10'-4"	G	27	27	27	27	21'-3"	J	34	34	34	34
	9	3'-2"	12'-7"	H	29	29	29	29	9'-10"	G	27	27	27	27	20'-4"	J	35	35	35	35

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU98
Alum 0.040"x3"x3" Lockseam	11'	E	MU98
Alum 0.055"x3"x3" Fluted	12'	F	MU95
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 28"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.13 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.13
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.13 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.13
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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FEB 24 2014

PROFESSIONAL ENGINEER No. 5460906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.14

Column groups: MU50 = 7"x5.5" Alum I Beam (MU50) unbraced; MU59 = 7"x5.5" Alum I Beam (MU59) lat braced; MU73 = 7"x5.5" Alum I Beam (MU73) full splices. Within each group: Attached Structure (Max Post Spacing, Min Post Type, Footer Size); Freestanding or Multispan Units (Max Post Length 8', 10', 12' — Constrained Footer "d" (in)).

110 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU50 MAX POST SPACING (FT)	MU50 MIN POST TYPE	MU50 FOOTER SIZE "d" (in)	MU50 8' "d" (in)	MU50 10' "d" (in)	MU50 12' "d" (in)	MU59 MAX POST SPACING (FT)	MU59 MIN POST TYPE	MU59 FOOTER SIZE "d" (in)	MU59 8' "d" (in)	MU59 10' "d" (in)	MU59 12' "d" (in)	MU73 MAX POST SPACING (FT)	MU73 MIN POST TYPE	MU73 FOOTER SIZE "d" (in)	MU73 8' "d" (in)	MU73 10' "d" (in)	MU73 12' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	20'-0"	F	28	28	28	28	20'-8"	F	28	28	28	28	26'-6"	F	30	30	30	30
	5.5	12'-4"	20'-2"	F	28	28	28	28	23'-2"	F	28	28	28	28	25'-10"	G	31	31	31	31
	6	11'-4"	19'-7"	F	29	29	29	29	19'-7"	F	29	29	29	29	25'-1"	G	31	31	31	31
	6.5	10'-6"	19'-1"	F	29	29	29	29	18'-1"	F	29	29	29	29	24'-5"	G	32	32	32	32
	7	9'-4"	18'-0"	F	30	30	30	30	18'-3"	F	30	30	30	30	22'-10"	H	32	32	32	32
	7.5	9'-1"	17'-8"	F	30	30	30	30	17'-8"	F	30	30	30	30	23'-3"	H	33	33	33	33
	8	8'-8"	16'-8"	F	30	30	30	30	16'-8"	F	30	30	30	30	22'-8"	H	33	33	33	33
	8.5	8'-0"	15'-11"	F	30	30	30	30	16'-11"	F	30	30	30	30	22'-4"	H	34	34	34	34
	9	7'-6"	15'-3"	G	30	30	30	30	15'-3"	G	30	30	30	30	21'-11"	H	34	34	34	34
	9.5	7'-2"	14'-8"	G	31	31	31	31	14'-8"	G	31	31	31	31	21'-6"	H	35	35	35	35
	10	6'-8"	14'-1"	G	31	31	31	31	14'-1"	G	31	31	31	31	21'-2"	H	35	35	35	35
	10.5	6'-5"	13'-7"	G	31	31	31	31	13'-7"	G	31	31	31	31	20'-10"	H	36	36	36	36
	11	6'-2"	13'-1"	G	31	31	31	31	13'-1"	G	31	31	31	31	20'-6"	I	36	36	36	36
	11.5	5'-11"	12'-7"	G	31	31	31	31	12'-7"	G	31	31	31	31	20'-2"	I	36	36	36	36
	12	5'-8"	12'-3"	G	31	31	31	31	12'-3"	G	31	31	31	31	19'-11"	I	37	37	37	37
	13	5'-2"	11'-6"	G	31	31	31	31	11'-3"	G	31	31	31	31	19'-4"	I	37	37	37	37
	14	4'-10"	10'-9"	G	31	31	31	31	10'-9"	G	31	31	31	31	17'-8"	I	37	37	37	37
	15	4'-6"	10'-1"	G	31	31	31	31	10'-1"	G	31	31	31	31	17'-8"	I	38	38	38	38

110 MPH EXPOSURE C or 130 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU50 MAX POST SPACING (FT)	MU50 MIN POST TYPE	MU50 FOOTER SIZE "d" (in)	MU50 8' "d" (in)	MU50 10' "d" (in)	MU50 12' "d" (in)	MU59 MAX POST SPACING (FT)	MU59 MIN POST TYPE	MU59 FOOTER SIZE "d" (in)	MU59 8' "d" (in)	MU59 10' "d" (in)	MU59 12' "d" (in)	MU73 MAX POST SPACING (FT)	MU73 MIN POST TYPE	MU73 FOOTER SIZE "d" (in)	MU73 8' "d" (in)	MU73 10' "d" (in)	MU73 12' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	19'-6"	F	31	31	31	31	19'-6"	F	31	31	31	31	24'-11"	G	33	33	33	33
	5.5	12'-4"	18'-10"	F	31	31	31	31	18'-10"	F	31	31	31	31	24'-2"	G	34	34	34	34
	6	11'-4"	18'-0"	F	32	32	32	32	18'-0"	F	32	32	32	32	23'-6"	H	35	35	35	35
	6.5	10'-6"	16'-11"	F	32	32	32	32	16'-11"	F	32	32	32	32	22'-10"	H	35	35	35	35
	7	9'-4"	16'-4"	F	32	32	32	32	16'-4"	F	32	32	32	32	22'-4"	H	36	36	36	36
	7.5	9'-1"	15'-3"	G	32	32	32	32	15'-3"	G	32	32	32	32	21'-10"	H	36	36	36	36
	8	8'-8"	14'-8"	G	32	32	32	32	14'-8"	G	32	32	32	32	21'-4"	H	37	37	37	37
	8.5	8'-0"	13'-10"	G	32	32	32	32	13'-10"	G	32	32	32	32	20'-11"	H	37	37	37	37
	9	7'-6"	13'-2"	G	33	33	33	33	13'-2"	G	33	33	33	33	20'-6"	H	38	38	38	38
	9.5	7'-2"	12'-8"	G	33	33	33	33	12'-8"	G	33	33	33	33	20'-2"	I	38	38	38	38
	10	6'-8"	12'-1"	G	33	33	33	33	12'-1"	G	33	33	33	33	19'-10"	I	39	39	39	39
	10.5	6'-5"	11'-8"	G	33	33	33	33	11'-8"	G	33	33	33	33	19'-6"	I	39	39	39	39
	11	6'-2"	11'-3"	G	33	33	33	33	11'-3"	G	33	33	33	33	19'-2"	I	40	40	40	40
	11.5	5'-11"	10'-10"	G	33	33	33	33	10'-10"	G	33	33	33	33	18'-11"	I	40	40	40	40
	12	5'-8"	10'-5"	G	33	33	33	33	10'-5"	G	33	33	33	33	18'-8"	I	40	40	40	40
	13	5'-2"	9'-8"	G	33	33	33	33	9'-8"	G	33	33	33	33	18'-2"	J	41	41	41	41
	14	4'-10"	9'-2"	G	33	33	33	33	9'-2"	G	33	33	33	33	16'-8"	J	41	41	41	41
	15	4'-6"	8'-7"	G	34	34	34	34	8'-7"	G	34	34	34	34	16'-3"	J	41	41	41	41

115 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU50 MAX POST SPACING (FT)	MU50 MIN POST TYPE	MU50 FOOTER SIZE "d" (in)	MU50 8' "d" (in)	MU50 10' "d" (in)	MU50 12' "d" (in)	MU59 MAX POST SPACING (FT)	MU59 MIN POST TYPE	MU59 FOOTER SIZE "d" (in)	MU59 8' "d" (in)	MU59 10' "d" (in)	MU59 12' "d" (in)	MU73 MAX POST SPACING (FT)	MU73 MIN POST TYPE	MU73 FOOTER SIZE "d" (in)	MU73 8' "d" (in)	MU73 10' "d" (in)	MU73 12' "d" (in)
10 LIVE LOAD ONLY	5	13'-7"	20'-4"	F	28	28	28	28	20'-4"	F	28	28	28	28	26'-1"	G	31	31	31	31
	5.5	12'-4"	19'-8"	F	29	29	29	29	19'-8"	F	29	29	29	29	25'-4"	G	32	32	32	32
	6	11'-4"	19'-2"	F	30	30	30	30	19'-7"	F	30	30	30	30	24'-7"	G	32	32	32	32
	6.5	10'-5"	18'-6"	F	30	30	30	30	18'-5"	F	30	30	30	30	23'-11"	G	33	33	33	33
	7	9'-8"	17'-6"	F	30	30	30	30	17'-8"	F	30	30	30	30	23'-4"	H	33	33	33	33
	7.5	9'-1"	15'-8"	F	31	31	31	31	16'-8"	F	31	31	31	31	22'-10"	H	34	34	34	34
	8	8'-6"	16'-8"	F	31	31	31	31	16'-8"	F	31	31	31	31	22'-4"	H	34	34	34	34
	8.5	8'-0"	15'-3"	F	31	31	31	31	15'-3"	F	31	31	31	31	21'-11"	H	35	35	35	35
	9	7'-6"	14'-7"	G	31	31	31	31	14'-7"	G	31	31	31	31	21'-6"	H	35	35	35	35
	9.5	7'-2"	14'-0"	G	31	31	31	31	14'-0"	G	31	31	31	31	21'-1"	H	36	36	36	36
	10	6'-8"	13'-5"	G	31	31	31	31	13'-5"	G	31	31	31	31	20'-8"	H	36	36	36	36
	10.5	6'-5"	12'-11"	G	31	31	31	31	12'-11"	G	31	31	31	31	20'-3"	I	36	36	36	36
	11	6'-2"	12'-6"	G	31	31	31	31	12'-6"	G	31	31	31	31	20'-1"	I	37	37	37	37
	11.5	5'-11"	12'-0"	G	31	31	31	31	12'-0"	G	31	31	31	31	19'-8"	I	37	37	37	37
	12	5'-8"	11'-7"	G	32	32	32	32	11'-7"	G	32	32	32	32	19'-4"	I	38	38	38	38
	13	5'-2"	10'-10"	G	32	32	32	32	10'-10"	G	32	32	32	32	18'-3"	I	38	38	38	38
	14	4'-10"	10'-3"	G	32	32	32	32	10'-3"	G	32	32	32	32	17'-5"	I	38	38	38	38
	15	4'-6"	9'-8"	G	32	32	32	32	9'-8"	G	32	32	32	32	17'-0"	I	39	39	39	39

115 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU59 unbraced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU59 lat braced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU73 MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
20	5	7'-1"	17'-6"	F	27	27	27	27	17'-6"	F	27	27	27	27	23'-1"	H	30	30	30	30
	5.5	6'-5"	16'-4"	F	27	27	27	27	16'-4"	F	27	27	27	27	22'-5"	H	30	30	30	30
	6	5'-11"	15'-3"	G	27	27	27	27	15'-3"	G	27	27	27	27	21'-9"	H	31	31	31	31
	6.5	5'-6"	14'-4"	G	28	28	28	28	14'-4"	G	28	28	28	28	21'-2"	H	31	31	31	31
	7	5'-1"	13'-7"	G	28	28	28	28	13'-7"	G	28	28	28	28	20'-6"	H	32	32	32	32
	7.5	4'-9"	12'-10"	G	28	28	28	28	12'-10"	G	28	28	28	28	20'-2"	I	32	32	32	32
	8	4'-5"	12'-2"	G	28	28	28	28	12'-2"	G	28	28	28	28	19'-9"	I	33	33	33	33
	8.5	4'-2"	11'-7"	G	28	28	28	28	11'-7"	G	28	28	28	28	19'-4"	I	33	33	33	33
	9	3'-11"	11'-1"	G	28	28	28	28	11'-1"	G	28	28	28	28	19'-0"	I	34	34	34	34
	9.5	3'-9"	10'-7"	G	29	29	29	29	10'-7"	G	29	29	29	29	18'-8"	I	34	34	34	34
	10	3'-6"	10'-1"	G	29	29	29	29	10'-1"	G	29	29	29	29	18'-4"	I	35	35	35	35
	10.5	3'-4"	9'-9"	G	29	29	29	29	9'-9"	G	29	29	29	29	18'-1"	J	35	35	35	35
	11	3'-2"	9'-4"	G	29	29	29	29	9'-4"	G	29	29	29	29	17'-9"	J	35	35	35	35
	11.5	3'-1"	9'-0"	G	29	29	29	29	9'-0"	G	29	29	29	29	17'-6"	J	36	36	36	36

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU59 unbraced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU59 lat braced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU73 MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
20	5	7'-1"	15'-11"	F	29	29	29	29	15'-11"	F	29	29	29	29	22'-1"	H	33	33	33	33
	5.5	6'-5"	14'-9"	G	30	30	30	30	14'-9"	G	30	30	30	30	21'-5"	H	34	34	34	34
	6	5'-11"	13'-10"	G	30	30	30	30	13'-10"	G	30	30	30	30	20'-10"	H	34	34	34	34
	6.5	5'-6"	13'-0"	G	30	30	30	30	13'-0"	G	30	30	30	30	20'-3"	I	35	35	35	35
	7	5'-1"	12'-3"	G	30	30	30	30	12'-3"	G	30	30	30	30	19'-9"	I	35	35	35	35
	7.5	4'-9"	11'-7"	G	30	30	30	30	11'-7"	G	30	30	30	30	19'-4"	I	36	36	36	36
	8	4'-5"	10'-11"	G	30	30	30	30	10'-11"	G	30	30	30	30	18'-11"	I	36	36	36	36
	8.5	4'-2"	10'-5"	G	31	31	31	31	10'-5"	G	31	31	31	31	18'-6"	I	37	37	37	37
	9	3'-11"	9'-11"	G	31	31	31	31	9'-11"	G	31	31	31	31	18'-2"	J	37	37	37	37
	9.5	3'-9"	9'-6"	G	31	31	31	31	9'-6"	G	31	31	31	31	17'-10"	J	38	38	38	38
	10	3'-6"	9'-1"	G	31	31	31	31	9'-1"	G	31	31	31	31	17'-7"	J	38	38	38	38
	10.5	3'-4"	8'-8"	G	31	31	31	31	8'-8"	G	31	31	31	31	17'-3"	J	39	39	39	39
	11	3'-2"	8'-4"	G	31	31	31	31	8'-4"	G	31	31	31	31	17'-0"	J	39	39	39	39
	11.5	3'-1"	8'-0"	G	31	31	31	31	8'-0"	G	31	31	31	31	16'-9"	K	40	40	40	40

115 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU59 unbraced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU59 lat braced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU73 MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
25	5	6'-8"	17'-3"	F	27	27	27	27	17'-3"	F	27	27	27	27	23'-0"	H	30	30	30	30
	5.5	6'-2"	16'-1"	F	27	27	27	27	16'-1"	F	27	27	27	27	22'-3"	H	30	30	30	30
	6	5'-8"	15'-1"	G	27	27	27	27	15'-1"	G	27	27	27	27	21'-7"	H	31	31	31	31
	6.5	5'-2"	14'-2"	G	27	27	27	27	14'-2"	G	27	27	27	27	21'-0"	H	31	31	31	31
	7	4'-10"	13'-4"	G	28	28	28	28	13'-4"	G	28	28	28	28	20'-6"	H	32	32	32	32
	7.5	4'-6"	12'-7"	G	28	28	28	28	12'-7"	G	28	28	28	28	20'-1"	I	32	32	32	32
	8	4'-3"	12'-0"	G	28	28	28	28	12'-0"	G	28	28	28	28	19'-8"	I	33	33	33	33
	8.5	4'-0"	11'-6"	G	28	28	28	28	11'-6"	G	28	28	28	28	19'-3"	I	33	33	33	33
	9	3'-9"	10'-10"	G	28	28	28	28	10'-10"	G	28	28	28	28	18'-10"	I	34	34	34	34
	9.5	3'-7"	10'-5"	G	28	28	28	28	10'-5"	G	28	28	28	28	18'-6"	I	34	34	34	34
	10	3'-4"	9'-11"	G	28	28	28	28	9'-11"	G	28	28	28	28	18'-3"	J	35	35	35	35
	10.5	3'-2"	9'-7"	G	28	28	28	28	9'-7"	G	28	28	28	28	17'-11"	J	35	35	35	35
	11	3'-1"	9'-2"	G	28	28	28	28	9'-2"	G	28	28	28	28	17'-8"	J	35	35	35	35

115 MPH EXPOSURE C or 130 MPH EXPOSURE B

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MU59 unbraced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	MU59 lat braced MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
25	5	6'-8"	15'-6"	F	29	29	29	29	15'-6"	F	29	29	29	29
	5.5	6'-2"	14'-6"	G	29	29	29	29	14'-5"	G	29	29	29	29
	6	5'-8"	13'-6"	G	30	30	30	30	13'-6"	G	30	30	30	30
	6.5	5'-2"	12'-7"	G	30	30	30	30	12'-3"	G	30	30	30	30
	7	4'-10"	11'-11"	G	30	30	30	30	11'-11"	G	30	30	30	30
	7.5	4'-6"	11'-3"	G	30	30	30	30	11'-3"	G	30	30	30	30
	8	4'-3"	10'-8"	G	30	30	30	30	10'-8"	G	30	30	30	30
	8.5	4'-0"	10'-1"	G	30	30	30	30	10'-1"	G	30	30	30	30
	9	3'-9"	9'-8"	G	30	30	30	30	9'-8"	G	30	30	30	30
	9.5	3'-7"	9'-2"	G	30	30	30	30	9'-2"	G	30	30	30	30
	10	3'-4"	8'-10"	G	30	30	30	30	8'-10"	G	30	30	30	30
	10.5	3'-2"	8'-6"	G	31	31	31	31	8'-5"	G	31	31	31	31
	11	3'-1"	8'-1"	G	31	31	31	31	8'-1"	G	31	31	31	31

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 58139 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5860906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.14

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7"x5.5" Alum I Beam (MU59) unbraced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7"x5.5" Alum I Beam (MU59) lat braced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7"x5.5" Alum I Beam (MU73) full splices: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	19'-2"	F	31	31	31	31	19'-2"	F	31	31	31	31	24'-6"	G	34	34	34	34
	5.5	12'-4"	18'-6"	F	32	32	32	32	18'-6"	F	32	32	32	32	23'-8"	G	35	36	35	35
	6	11'-4"	17'-4"	F	32	32	32	32	17'-4"	F	32	32	32	32	23'-1"	H	35	36	35	36
	6.5	10'-5"	16'-4"	F	32	32	32	32	16'-4"	F	32	32	32	32	22'-6"	H	36	36	36	36
	7	9'-8"	15'-6"	G	33	33	33	33	15'-6"	G	33	33	33	33	21'-11"	H	37	37	37	37
	7.5	9'-1"	14'-8"	G	33	33	33	33	14'-8"	G	33	33	33	33	21'-5"	H	37	37	37	37
	8	8'-6"	13'-11"	G	33	33	33	33	13'-11"	G	33	33	33	33	21'-0"	H	38	38	38	38
	8.5	8'-0"	13'-4"	G	33	33	33	33	13'-4"	G	33	33	33	33	20'-7"	H	38	38	38	38
	9	7'-6"	12'-8"	G	33	33	33	33	12'-8"	G	33	33	33	33	20'-2"	I	39	39	39	39
	9.5	7'-3"	12'-2"	G	33	33	33	33	12'-2"	G	33	33	33	33	19'-10"	I	39	39	39	39
	10	6'-9"	11'-8"	G	33	33	33	33	11'-8"	G	33	33	33	33	19'-6"	I	40	40	40	40
	10.5	6'-6"	11'-2"	G	34	34	34	34	11'-2"	G	34	34	34	34	19'-2"	I	40	40	40	40
	11	6'-2"	10'-9"	G	34	34	34	34	10'-9"	G	34	34	34	34	18'-10"	J	41	41	41	41
	11.5	5'-11"	10'-5"	G	34	34	34	34	10'-5"	G	34	34	34	34	18'-7"	I	41	41	41	41
	12	5'-6"	10'-0"	G	34	34	34	34	10'-0"	G	34	34	34	34	18'-4"	I	41	41	41	41
	13	5'-2"	9'-4"	G	34	34	34	34	9'-4"	G	34	34	34	34	17'-10"	J	42	42	42	42
110 MPH EXPOSURE B																				
20	5	7'-1"	16'-0"	F	28	28	28	28	16'-0"	F	28	28	28	27	23'-5"	H	28	29	29	29
	5.5	6'-8"	15'-10"	F	27	27	27	27	15'-10"	F	27	27	27	27	22'-9"	H	28	29	29	29
	6	5'-11"	15'-0"	F	27	27	27	27	15'-0"	F	27	27	27	27	22'-1"	H	30	30	30	30
	6.5	5'-6"	14'-10"	G	27	27	27	27	14'-10"	G	27	27	27	27	21'-6"	H	31	31	31	31
	7	5'-1"	14'-0"	G	27	27	27	27	14'-0"	G	27	27	27	27	20'-11"	H	31	31	31	31
	7.5	5'-0"	13'-3"	G	27	27	27	27	13'-3"	G	27	27	27	27	20'-6"	H	32	32	32	32
	8	4'-6"	12'-7"	G	27	27	27	27	12'-7"	G	27	27	27	27	20'-0"	I	32	32	32	32
	8.5	4'-2"	12'-0"	G	28	28	28	28	12'-0"	G	28	28	28	28	19'-6"	I	32	32	32	32
	9	3'-11"	11'-8"	G	28	28	28	28	11'-8"	G	28	28	28	28	19'-3"	I	33	33	33	33
	9.5	3'-9"	10'-11"	G	28	28	28	28	10'-11"	G	28	28	28	28	18'-11"	I	33	33	33	33
	10	3'-6"	10'-6"	G	28	28	28	28	10'-6"	G	28	28	28	28	18'-7"	I	34	34	34	34
	10.5	3'-4"	10'-1"	G	28	28	28	28	10'-1"	G	28	28	28	28	18'-4"	I	34	34	34	34
	11	3'-2"	9'-8"	G	28	28	28	28	9'-8"	G	28	28	28	28	18'-0"	J	34	34	34	34
	11.5	3'-1"	9'-4"	G	28	28	28	28	9'-4"	G	28	28	28	28	17'-8"	J	35	35	35	35
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	16'-4"	F	29	29	29	29	16'-4"	F	29	29	29	29	22'-6"	H	32	32	32	32
	5.5	6'-5"	15'-2"	G	29	29	29	29	15'-2"	G	29	29	29	29	21'-8"	H	33	33	33	33
	6	5'-11"	14'-2"	G	29	29	29	29	14'-2"	G	29	29	29	29	21'-1"	H	33	33	33	33
	6.5	5'-5"	13'-4"	G	29	29	29	29	13'-4"	G	29	29	29	29	20'-6"	H	34	34	34	34
	7	5'-1"	12'-7"	G	30	30	30	30	12'-7"	G	30	30	30	30	20'-0"	I	34	34	34	34
	7.5	4'-8"	11'-11"	G	30	30	30	30	11'-11"	G	30	30	30	30	19'-7"	I	35	35	35	35
	8	4'-6"	11'-3"	G	30	30	30	30	11'-3"	G	30	30	30	30	19'-2"	I	35	35	35	35
	8.5	4'-2"	10'-9"	G	30	30	30	30	10'-9"	G	30	30	30	30	18'-9"	I	36	36	36	36
	9	3'-11"	10'-3"	G	30	30	30	30	10'-3"	G	30	30	30	30	18'-5"	I	36	36	36	36
	9.5	3'-9"	9'-8"	G	30	30	30	30	9'-8"	G	30	30	30	30	18'-1"	J	37	37	37	37
	10	3'-6"	9'-4"	G	30	30	30	30	9'-4"	G	30	30	30	30	17'-9"	J	37	37	37	37
	10.5	3'-4"	9'-0"	G	30	30	30	30	9'-0"	G	30	30	30	30	17'-6"	J	38	38	38	38
	11	3'-2"	8'-7"	G	30	30	30	30	8'-7"	G	30	30	30	30	17'-2"	J	38	38	38	38
	11.5	3'-1"	8'-3"	G	30	30	30	30	8'-3"	G	30	30	30	30	16'-11"	K	38	38	38	38
	12	2'-11"	8'-0"	G	30	30	30	30	8'-0"	G	30	30	30	30	16'-8"	K	39	39	39	39

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	7"x5.5" Alum I Beam (MU59) unbraced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7"x5.5" Alum I Beam (MU59) lat braced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	7"x5.5" Alum I Beam (MU73) full splices: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
30	5	5'-6"	15'-6"	F	26	26	26	26	15'-8"	F	26	26	26	27	22'-6"	H	29	29	29	29
	5.5	5'-1"	14'-7"	G	26	26	26	26	14'-7"	G	26	26	26	26	21'-4"	H	30	30	30	30
	6	4'-8"	13'-8"	G	26	26	26	26	13'-8"	G	26	26	26	26	20'-8"	H	30	30	30	30
	6.5	4'-4"	12'-10"	G	27	27	27	27	12'-10"	G	27	27	27	27	20'-2"	I	31	31	31	31
	7	4'-1"	12'-1"	G	27	27	27	27	12'-1"	G	27	27	27	27	19'-6"	I	31	31	31	31
	7.5	3'-9"	11'-5"	G	27	27	27	27	11'-5"	G	27	27	27	27	19'-2"	I	32	32	32	32
	8	3'-6"	10'-10"	G	27	27	27	27	10'-10"	G	27	27	27	27	18'-9"	I	32	32	32	32
	8.5	3'-4"	10'-3"	G	27	27	27	27	10'-3"	G	27	27	27	27	18'-5"	I	33	33	33	33
	9	3'-2"	9'-9"	G	27	27	27	27	9'-9"	G	27	27	27	27	18'-1"	J	33	33	33	33
	9.5	3'-0"	9'-4"	G	27	27	27	27	9'-4"	G	27	27	27	27	17'-9"	J	34	34	34	34
	10	2'-10"	8'-11"	G	27	27	27	27	8'-11"	G	27	27	27	27	17'-5"	J	34	34	34	34
	10.5	2'-8"	8'-7"	G	27	27	27	27	8'-7"	G	27	27	27	27	17'-2"	J	34	34	34	34
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-0"	14'-5"	G	28	28	28	28	14'-5"	G	28	28	28	29	21'-3"	H	32	32	32	32
	5.5	5'-2"	13'-4"	G	29	29	29	29	13'-4"	F	29	29	29	29	20'-6"	H	33	33	33	33
	6	4'-9"	12'-6"	G	29	29	29	29	12'-6"	G	29	29	29	29	19'-11"	I	34	34	34	34
	6.5	4'-4"	11'-8"	G	29	29	29	29	11'-8"	G	29	29	29	29	19'-4"	I	34	34	34	34
	7	4'-1"	11'-0"	G	29	29	29	29	11'-0"	G	29	29	29	29	18'-11"	I	35	35	35	35
	7.5	3'-8"	10'-5"	G	29	29	29	29	10'-5"	G	29	29	29	29	18'-6"	I	35	35	35	35
	8	3'-6"	9'-10"	G	29	29	29	29	9'-10"	G	29	29	29	29	18'-1"	J	36	36	36	36
	8.5	3'-4"	9'-4"	G	29	29	29	29	9'-4"	G	29	29	29	29	17'-9"	J	36	36	36	36
	9	3'-2"	8'-11"	G	30	30	30	30	8'-11"	G	30	30	30	30	17'-5"	J	37	37	37	37

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVERHANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT): 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU113
Alum 0.032"x3"x3" Lockseam	11'	D	MU89
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.055"x3"x3" Fluted	12'	F	MU96
Alum 0.075"x3"x3" Square	12'	G	MU98
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU98
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU98
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU98
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES
1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.14 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.14
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.14 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.14
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 8-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5895 Veteran's Memorial Hwy
Holbrook, NY 11741
(631) 563-4060

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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C68139 EXP. 6-30-2014 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5850506-2202 CARL PUTNAM STATE OF UTAH

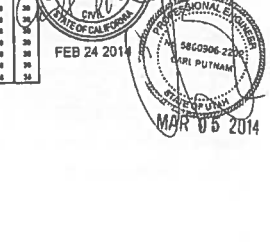
MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.15

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	10"x5.5" Alum I Beam (MU60) unbraced: POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU60) 1st braced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU76) full splices: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	31'-10"	G	32	32	33	35	36'-6"	H	34	34	34	36	39'-10"	H	34	34	36	37
	5.5	12'-4"	30'-5"	H	33	33	33	34	34'-10"	H	34	34	34	36	38'-7"	H	35	35	35	36
	6	11'-4"	29'-4"	H	33	33	33	34	33'-4"	H	34	34	34	36	37'-5"	I	36	36	36	36
	6.5	10'-5"	28'-4"	H	34	34	34	34	32'-0"	H	35	35	36	36	36'-4"	I	37	37	37	37
	7	9'-6"	27'-6"	H	34	34	34	34	30'-11"	H	35	36	36	36	35'-7"	I	37	37	37	37
	7.5	8'-11"	26'-8"	H	35	35	35	35	29'-11"	I	36	36	36	36	34'-8"	I	38	38	38	38
	8	8'-4"	26'-2"	H	35	35	35	35	29'-1"	I	36	36	36	36	34'-0"	I	38	38	38	38
	8.5	8'-0"	25'-7"	H	35	35	35	35	28'-4"	I	37	37	37	37	33'-4"	J	38	38	38	38
	9	7'-8"	25'-1"	I	36	36	36	36	27'-6"	I	37	37	37	37	32'-8"	J	39	39	39	39
	9.5	7'-3"	24'-7"	I	36	36	36	36	27'-0"	I	37	37	37	37	32'-2"	J	40	40	40	40
	10	6'-9"	24'-2"	I	37	37	37	37	26'-1"	I	38	38	38	38	31'-7"	K	41	41	41	41
	10.5	6'-6"	23'-8"	I	37	37	37	37	25'-6"	I	38	38	38	38	31'-1"	K	41	41	41	41
	11	6'-3"	23'-5"	I	38	38	38	38	25'-11"	I	38	38	38	38	30'-7"	K	41	41	41	41
	11.5	5'-11"	22'-8"	I	38	38	38	38	25'-6"	I	38	38	38	38	30'-2"	K	41	41	41	41
	12	5'-8"	22'-3"	I	38	38	38	38	32'-3"	I	38	38	38	38	29'-6"	K	42	42	42	42
	13	5'-2"	20'-7"	I	38	38	38	38	30'-7"	I	38	38	38	38	28'-11"	K	43	43	43	43
	14	4'-10"	19'-3"	I	38	38	38	38	29'-3"	I	38	38	38	38	28'-7"	K	42	42	42	42
	15	4'-6"	18'-0"	I	38	38	38	38	28'-0"	I	38	38	38	38	28'-11"	L	43	43	43	43
118 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	30'-8"	H	35	35	36	37	34'-4"	H	37	37	37	38	37'-1"	H	38	38	38	39
	5.5	12'-4"	27'-4"	H	35	35	36	37	32'-7"	H	37	37	37	38	35'-10"	I	38	39	39	39
	6	11'-4"	26'-6"	H	36	36	36	38	31'-2"	I	38	38	38	38	34'-6"	I	39	39	39	39
	6.5	10'-6"	25'-6"	H	37	37	37	37	30'-0"	I	38	38	38	38	33'-10"	I	40	40	40	40
	7	9'-8"	24'-11"	H	37	37	37	37	28'-11"	I	39	39	39	39	33'-0"	I	41	41	41	41
	7.5	9'-1"	24'-4"	H	38	38	38	38	28'-0"	I	39	39	39	39	32'-3"	J	41	41	41	41
	8	8'-6"	23'-9"	I	38	38	38	38	27'-3"	I	40	40	40	40	31'-7"	J	42	42	42	42
	8.5	8'-0"	23'-3"	I	38	38	38	38	26'-6"	I	40	40	40	40	30'-11"	J	43	43	43	43
	9	7'-8"	22'-8"	I	39	39	39	39	25'-11"	I	40	40	40	40	30'-4"	K	43	43	43	43
	9.5	7'-3"	22'-2"	I	40	40	40	40	25'-16"	I	40	40	40	40	29'-10"	K	44	44	44	44
	10	6'-9"	22'-0"	I	40	40	40	40	32'-9"	I	41	41	41	41	29'-4"	K	44	44	44	44
	10.5	6'-6"	21'-6"	I	40	40	40	40	31'-9"	I	41	41	41	41	28'-10"	K	45	45	45	45
	11	6'-3"	20'-9"	I	41	41	41	41	30'-8"	I	41	41	41	41	28'-6"	K	45	45	45	45
	11.5	5'-11"	19'-11"	I	41	41	41	41	29'-11"	I	41	41	41	41	28'-0"	K	46	46	46	46
	12	5'-8"	19'-2"	I	41	41	41	41	29'-5"	I	41	41	41	41	27'-7"	L	46	46	46	46
	13	5'-2"	17'-9"	I	41	41	41	41	27'-8"	I	41	41	41	41	26'-11"	L	47	47	47	47
	14	4'-10"	16'-6"	I	41	41	41	41	26'-6"	I	41	41	41	41	24'-10"	L	47	47	47	47
	15	4'-6"	15'-6"	J	41	41	41	41	25'-6"	J	41	41	41	41	24'-6"	L	47	47	47	47
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	31'-6"	G	33	33	34	35	35'-11"	H	34	34	36	37	38'-6"	H	36	39	36	37
	5.5	12'-4"	29'-8"	H	33	33	33	35	34'-1"	H	35	35	36	36	37'-8"	H	36	36	36	37
	6	11'-4"	28'-7"	H	34	34	34	35	32'-8"	H	35	35	36	36	36'-6"	I	37	37	37	37
	6.5	10'-6"	27'-7"	H	34	34	34	34	31'-8"	H	36	36	36	36	35'-8"	I	37	37	37	37
	7	9'-8"	26'-10"	H	35	35	35	35	30'-6"	H	36	36	36	36	34'-10"	I	38	38	38	38
	7.5	9'-1"	26'-1"	H	35	35	35	35	29'-6"	I	37	37	37	37	34'-1"	I	39	39	39	39
	8	8'-6"	25'-6"	H	36	36	36	36	28'-6"	I	37	37	37	37	33'-4"	J	39	39	39	39
	8.5	8'-0"	24'-11"	H	36	36	36	36	27'-8"	I	38	38	38	38	32'-8"	J	40	40	40	40
	9	7'-8"	24'-6"	I	37	37	37	37	27'-1"	I	38	38	38	38	32'-1"	J	40	40	40	40
	9.5	7'-3"	24'-0"	I	37	37	37	37	26'-3"	I	38	38	38	38	31'-6"	J	41	41	41	41
	10	6'-9"	23'-7"	I	38	38	38	38	25'-7"	I	38	38	38	38	30'-11"	K	41	41	41	41
	10.5	6'-6"	23'-3"	I	38	38	38	38	25'-11"	I	38	38	38	38	30'-6"	K	42	42	42	42
	11	6'-3"	22'-10"	I	38	38	38	38	25'-11"	I	38	38	38	38	29'-6"	K	42	42	42	42
	11.5	5'-11"	22'-6"	I	38	38	38	38	22'-6"	I	39	39	39	39	29'-1"	K	43	43	43	43
	12	5'-8"	21'-3"	I	39	39	39	39	21'-3"	I	39	39	39	39	28'-6"	K	44	44	44	44
	13	5'-2"	19'-8"	I	39	39	39	39	19'-8"	I	39	39	39	39	28'-0"	K	43	43	43	43
	14	4'-10"	18'-4"	I	39	39	39	39	18'-4"	I	39	39	39	39	26'-4"	L	44	44	44	44
	15	4'-6"	17'-3"	I	39	39	39	39	17'-3"	I	39	39	39	39	25'-5"	L	44	44	44	44

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	10"x5.5" Alum I Beam (MU60) unbraced: POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU60) 1st braced: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU76) full splices: MAX POST SPACING (FT)	Attached Structure: MIN POST TYPE	Attached Structure: FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH CONSTRAINED FOOTER 8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
20	5	7'-1"	31'-0"	I	33	33	34	36	31'-10"	I	33	33	34	35	34'-8"	I	34	34	36	38
	5.5	6'-6"	28'-8"	I	33	33	33	36	30'-3"	I	33	33	34	35	32'-5"	I	35	35	36	38
	6	6'-11"	26'-7"	I	34	34	34	36	28'-11"	I	34	34	34	35	32'-6"	J	35	35	36	38
	6.5	6'-6"	27'-7"	I	34	34	34	36	27'-8"	I	34	34	34	35	31'-8"	J	36	36	36	38
	7	6'-1"	26'-10"	J	35	35	35	35	26'-10"	J	35	35	35	35	30'-10"	K	37	37	37	37
	7.5	4'-8"	25'-6"	J	35	35	35	35	25'-8"	J	35	35	35	35	30'-3"	K	37	37	37	37
	8	4'-5"	23'-11"	J	35	35	35	35	22'-11"	J	35	35	35	35	29'-8"	K	38	38	38	38
	8.5	4'-2"	22'-7"	J	35	35	35	35	22'-7"	J	35	35	35	35	29'-11"	K	38	38	38	38
	9	3'-11"	21'-4"	J	35	35	35	35	21'-4"	J	35	35	35	35	28'-4"	K	38	38	38	38
	9.5	3'-9"	20'-3"	J	35	35	35	35	20'-3"	J	35	35	35	35	27'-10"	L	38	38	38	38
	10	3'-6"	19'-3"	J	35	35	35	35	19'-3"	J	35	35	35	35	27'-6"	L	40	40	40	40
	10.5	3'-4"	18'-4"	J	35	35	35	35	18'-4"	J	35	35	35	35	26'-11"	L	40	40	40	40
	11	3'-2"	17'-6"	J	35	35	35	35	17'-6"	J	35	35	35	35	26'-6"	L	40	40	40	40
	11.5	3'-1"	16'-9"	J	35	35	35	35	16'-9"	J	35	35	35	35	26'-2"	L	41	41	41	41
118 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	30'-8"	I	36	36	36	38	30'-8"	I	37	37	37	38	37'-6"	J	38	38	38	38
	5.5	6'-6"	28'-10"	I	36	36	36	37	29'-11"	I	37	37	37	38	37'-0"	J	38	38	38	38
	6	6'-11"	25'-10"	I	37	37	37	37	27'-6"	J	38	38	38	38	34'-1"	J	39	39	39	39
	6.5	6'-6"	25'-6"	I	37	37	37	37	26'-7"	J	38	38	38	38	33'-3"	K	40	40	40	40
	7	5'-1"	24'-4"	J	38	38	38	38	24'-11"	J	38	38	38	38	32'-6"	K	40	40	40	40
	7.5	4'-9"	23'-3"	J	38	38	38	38	23'-3"	J	38	38	38	38	32'-0"	K	41	41	41	41
	8	4'-5"	21'-8"	J	38	38	38	38	21'-8"	J	38	38	38	38	30'-3"	K	42	42	42	42
	8.5	4'-2"	20'-8"	J	38	38	38	38	20'-8"	J	38	38	38	38	27'-6"	L	42	42	42	42
	9	3'-11"	19'-3"	J	38	38	38	38	19'-3"	J	38	38	38	38	27'-2"	L	43	43	43	43
	9.5	3'-9"	18'-3"	J	38	38	38	38	18'-3"	J	38	38	38	38	26'-6"	L	43	43	43	43
	10	3'-6"	17'-4"	J	38	38	38	38	17'-4"	J	38	38	38	38	26'-2"	L	44	44	44	44
	10.5	3'-4"	16'-6"	J	38	38	38	38	16'-6"	J	38	38	38	38	25'-8"	L	44	44	44	44
	11	3'-2"	15'-9"	J	38	38	38	38	15'-9"	J	38	38	38	38	25'-4"	L	45	45	45	45
	11.5	3'-1"	15'-1"	J	38	38	38	38	15'-1"	J	38	38	38	38	25'-0"	L	45	45	45	45
115 MPH EXPOSURE B																				
25	5	6'-8"	31'-8"	I	33	33	34	35	31'-3"	I	33	33	34	35	34'-4"	I	34	34	35	36
	5.5	6'-3"	29'-8"	I	33	33	33	35	30'-6"	I	33	33	34	35	33'-3"	J	35	35	35	36
	6	5'-8"	28'-7"	I	34	34	34	35	29'-4"	I	34	34	34	35	32'-3"	J	35	35	35	36
	6.5	5'-3"	27'-7"	I	34	34	34	34	27'-7"	I	34	34	34	34	31'-6"	J	36	36	36	36
	7	4'-10"	26'-8"	J	35	35	35	35	25'-8"	J	35	35	35	35	30'-6"	K	36	36	36	36
	7.5	4'-6"	25'-3"	J	35	35	35	35	25'-3"	J	35	35	35	35	29'-11"	K	37	37	37	37
	8	4'-3"	23'-7"	J	35	35	35	35	23'-7"	J	35	35	35	35	29'-4"	K	38	38	38	38
	8.5	4'-0"	22'-3"	J	35	35	35	35	22'-3"	J	35	35	35	35	28'-8"	K	38	38	38	38
	9	3'-8"	21'-0"	J	35	35	35	35	21'-0"	J	35	35	35	35	28'-3"	L	38	38	38	38
	9.5	3'-7"	19'-11"	J	35	35	35	35	19'-11"	J	35	35	35	35	27'-8"	L	38	38	38	38
	10	3'-4"	18'-11"	J	35	35	35	35	18'-11"	J	35	35	35	35	27'-3"	L	39	39	39	39
	10.5	3'-2"	18'-0"	J	35	35	35	35	18'-0"	J	35	35	35	35	26'-8"	L	40	40	40	40
	11	3'-1"	17'-3"	J	35	35	35	35	17'-3"	J	35	35	35	35	26'-4"	L	40	40	40	40
118 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	5	6'-8"	31'-0"	I	36	36	36	38	32'-1"	I	36	36	37	38	35'-7"	J	37	37	37	38
	5.5	6'-3"	29'-10"	I	36	36	36	37	29'-7"	I	37	37	37	38	34'-7"	J	37	37	37	38
	6	5'-8"	28'-10"	I	37	37	37	37	28'-3"	J	37	37	37	37	33'-3"	J	38	38	38	38
	6.5	5'-3"	28'-0"	I	37	37	37	37	26'-3"	J	38	38	38	38	32'-6"	J	38	38	38	38
	7	4'-10"	24'-4"	J	38	38	38	38	24'-4"	J	38	38	38	38	31'-7"	J	38	38	38	38
	7.5	4'-6"	23'-6"	J	38	38	38	38	23'-6"	J	38	38	38	38	31'-2"	J	38	38	38	38
	8	4'-3"	21'-2"	J	38	38	38	38	21'-2"	J	38	38	38	38	30'-11"	J	38	38	38	38
	8.5	4'-0"	19'-11"	J	38	38	38	38	19'-11"	J	38	38	38	38	28'-6"	J	38	38	38	38
	9	3'-8"	18'-9"	J	38	38	38	38	18'-9"	J	38	38	38	38	27'-9"	J	38	38	38	38
	9.5	3'-7"	17'-9"	J	38	38	38	38	17'-9"	J	38	38	38	38	27'-3"	J	38	38	38	38
	10	3'-4"	16'-10"	J	38	38	38	38	16'-10"	J	38	38	38	38	26'-10"	J	38	38	38	38
	10.5	3'-2"	16'-1"	J	38	38	38	38	16'-1"	J	38	38	38	38	26'-4"	J	38	38	38	38
	11	3'-1"	15'-4"	J	38	38	38	38	15'-4"	J	38	38	38	38	26'-0"	J	38	38	38	38



SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.15

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	10"x5.5" Alum I Beam (MU60) unbraced: Attached Structure MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU60) lat braced: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU76) full splices: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	26'-0"	H	36	36	36	36	33'-0"	H	36	36	36	38	35'-11"	I	39	39	39	43
	5.5	12'-4"	25'-10"	H	36	36	36	37	32'-1"	I	38	38	38	38	34'-6"	I	39	38	38	43
	6	11'-4"	25'-10"	H	37	37	37	37	30'-8"	I	39	38	38	38	33'-8"	I	40	40	40	40
	6.5	10'-6"	25'-0"	H	37	37	37	37	29'-5"	I	38	38	38	38	32'-10"	I	41	41	41	41
	7	9'-8"	24'-4"	H	38	38	38	38	28'-5"	I	40	40	40	40	32'-0"	J	42	42	42	42
	7.5	9'-1"	23'-8"	I	38	38	38	38	27'-7"	I	40	40	40	40	31'-3"	J	42	42	42	42
	8	8'-6"	23'-2"	I	39	39	39	39	26'-6"	I	41	41	41	41	30'-7"	J	43	43	43	43
	8.5	8'-0"	22'-8"	I	40	40	40	40	25'-7"	I	41	41	41	41	30'-0"	K	43	43	43	43
	9	7'-8"	22'-3"	I	40	40	40	40	24'-3"	I	41	41	41	41	29'-5"	K	44	44	44	44
	9.5	7'-2"	21'-10"	I	40	40	40	40	23'-0"	I	41	41	41	41	28'-11"	K	44	44	44	44
	10	6'-9"	21'-5"	I	41	41	41	41	21'-11"	I	41	41	41	41	28'-5"	K	45	45	45	45
	10.5	6'-6"	20'-11"	I	41	41	41	41	20'-11"	I	41	41	41	41	28'-0"	K	45	45	45	45
	11	6'-3"	20'-0"	J	41	41	41	41	20'-0"	J	41	41	41	41	27'-7"	K	46	46	46	46
	11.5	5'-11"	19'-2"	J	41	41	41	41	19'-2"	J	41	41	41	41	27'-2"	L	46	46	46	46
	12	5'-8"	18'-6"	J	41	41	41	41	18'-6"	J	41	41	41	41	26'-10"	L	47	47	47	47
	13	5'-2"	17'-1"	J	41	41	41	41	17'-1"	J	41	41	41	41	26'-1"	L	48	48	48	48
110 MPH EXPOSURE B																				
20	5	7'-1"	31'-10"	I	32	32	33	35	32'-3"	I	32	33	33	35	35'-0"	I	33	33	34	36
	5.5	6'-6"	30'-6"	I	33	33	33	34	30'-4"	I	33	33	33	34	33'-11"	I	34	34	34	35
	6	5'-11"	29'-3"	I	33	33	33	34	29'-3"	I	33	33	33	34	32'-11"	J	34	34	34	35
	6.5	5'-5"	28'-2"	I	33	33	33	34	28'-2"	I	33	33	33	34	32'-1"	J	35	35	35	35
	7	5'-1"	27'-2"	I	34	34	34	34	27'-2"	I	34	34	34	34	31'-3"	J	36	36	36	36
	7.5	4'-8"	26'-4"	J	34	34	34	34	26'-4"	J	34	34	34	34	30'-7"	K	36	36	36	36
	8	4'-6"	24'-8"	J	34	34	34	34	24'-8"	J	34	34	34	34	29'-11"	K	37	37	37	37
	8.5	4'-2"	23'-3"	J	34	34	34	34	23'-3"	J	34	34	34	34	29'-4"	K	37	37	37	37
	9	3'-11"	22'-0"	J	34	34	34	34	22'-0"	J	34	34	34	34	28'-8"	K	38	38	38	38
	9.5	3'-8"	20'-10"	J	34	34	34	34	20'-10"	J	34	34	34	34	28'-3"	K	38	38	38	38
	10	3'-6"	19'-10"	J	34	34	34	34	19'-10"	J	34	34	34	34	27'-8"	L	38	38	38	38
	10.5	3'-4"	18'-11"	J	34	34	34	34	18'-11"	J	34	34	34	34	27'-4"	L	39	39	39	38
	11	3'-2"	18'-1"	J	34	34	34	34	18'-1"	J	34	34	34	34	26'-11"	L	39	39	39	39
	11.5	3'-1"	17'-4"	J	34	34	34	34	17'-4"	J	34	34	34	34	26'-6"	L	40	40	40	40
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	28'-0"	I	35	35	35	37	30'-0"	I	36	36	36	36	33'-8"	I	37	37	37	38
	5.5	6'-5"	27'-6"	I	35	35	35	37	29'-3"	I	36	36	36	37	32'-6"	J	37	37	37	38
	6	5'-11"	26'-6"	I	36	36	36	36	28'-0"	I	37	37	37	37	31'-6"	J	38	38	38	38
	6.5	5'-5"	25'-8"	I	37	37	37	37	26'-11"	J	37	37	37	37	30'-7"	K	39	39	39	39
	7	5'-1"	24'-11"	J	37	37	37	37	25'-7"	J	37	37	37	37	29'-10"	K	39	39	39	39
	7.5	4'-8"	23'-10"	J	37	37	37	37	23'-10"	J	37	37	37	37	29'-2"	K	40	40	40	40
	8	4'-5"	22'-4"	J	37	37	37	37	22'-4"	J	37	37	37	37	28'-7"	K	41	41	41	41
	8.5	4'-2"	21'-0"	J	37	37	37	37	21'-0"	J	37	37	37	37	28'-0"	L	41	41	41	41
	9	3'-11"	19'-10"	J	37	37	37	37	19'-10"	J	37	37	37	37	27'-6"	L	42	42	42	42
	9.5	3'-8"	18'-9"	J	37	37	37	37	18'-9"	J	37	37	37	37	27'-0"	L	42	42	42	42
	10	3'-6"	17'-10"	J	37	37	37	37	17'-10"	J	37	37	37	37	26'-6"	L	43	43	43	43
	10.5	3'-4"	17'-0"	J	37	37	37	37	17'-0"	J	37	37	37	37	26'-1"	L	43	43	43	43
	11	3'-2"	16'-2"	J	37	37	37	37	16'-2"	J	37	37	37	37	25'-8"	L	44	44	44	44
	11.5	3'-1"	15'-6"	J	37	37	37	37	15'-6"	J	37	37	37	37	25'-4"	L	44	44	44	44
	12	2'-11"	14'-10"	J	37	37	37	37	14'-10"	J	37	37	37	37	24'-11"	L	44	44	44	44

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	10"x5.5" Alum I Beam (MU60) unbraced: Attached Structure MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU60) lat braced: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)	10"x5.5" Alum I Beam (MU76) full splices: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' "d" (in)	10' "d" (in)	12' "d" (in)
115 MPH EXPOSURE B																				
30	5	6'-8"	30'-3"	I	32	32	34	36	30'-3"	I	32	32	34	35	32'-10"	J	33	33	34	36
	5.5	5'-2"	28'-9"	I	33	33	33	35	28'-9"	I	33	33	33	35	31'-10"	J	34	34	34	36
	6	4'-9"	27'-6"	J	33	33	33	34	27'-6"	J	33	33	33	34	30'-11"	J	35	35	35	35
	6.5	4'-4"	26'-5"	J	34	34	34	34	26'-6"	J	34	34	34	34	30'-1"	K	35	35	35	35
	7	4'-1"	24'-7"	J	34	34	34	34	24'-7"	J	34	34	34	34	29'-4"	K	36	36	36	36
	7.5	3'-9"	22'-11"	J	34	34	34	34	22'-11"	J	34	34	34	34	28'-8"	K	36	36	36	36
	8	3'-6"	21'-6"	J	34	34	34	34	21'-6"	J	34	34	34	34	28'-1"	K	37	37	37	37
	8.5	3'-4"	20'-2"	J	34	34	34	34	20'-2"	J	34	34	34	34	27'-6"	L	37	37	37	37
	9	3'-2"	19'-0"	J	34	34	34	34	19'-0"	J	34	34	34	34	27'-0"	L	38	38	38	38
	9.5	3'-0"	18'-0"	J	34	34	34	34	18'-0"	J	34	34	34	34	26'-6"	L	38	38	38	38
	10	2'-10"	17'-1"	J	34	34	34	34	17'-1"	J	34	34	34	34	26'-1"	L	38	39	39	39
	10.5	2'-8"	16'-3"	J	34	34	34	34	16'-3"	J	34	34	34	34	25'-7"	L	38	39	39	39
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-8"	28'-8"	I	36	36	36	36	28'-1"	J	36	36	36	36	31'-1"	J	37	37	37	38
	5.5	5'-3"	26'-10"	J	36	36	36	37	27'-4"	I	37	37	37	36	30'-7"	K	38	38	38	38
	6	4'-9"	25'-10"	J	37	37	37	37	26'-5"	J	37	37	37	37	29'-9"	K	39	39	39	39
	6.5	4'-4"	24'-6"	J	37	37	37	37	24'-6"	J	37	37	37	37	28'-11"	K	39	39	39	39
	7	4'-1"	22'-6"	J	37	37	37	37	22'-6"	J	37	37	37	37	28'-3"	K	40	40	40	40
	7.5	3'-9"	21'-1"	J	37	37	37	37	21'-1"	J	37	37	37	37	27'-7"	L	40	40	40	40
	8	3'-6"	19'-8"	J	37	37	37	37	19'-8"	J	37	37	37	37	27'-0"	L	41	41	41	41
	8.5	3'-4"	18'-6"	J	37	37	37	37	18'-6"	J	37	37	37	37	26'-8"	L	42	42	42	42
	9	3'-2"	17'-6"	J	37	37	37	37	17'-6"	J	37	37	37	37	25'-11"	L	42	42	42	42

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

OVER-HANG (FT)	PROJECTION OF SINGLE SPAN STUCTURES (FT) 6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU180
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU180
0.024"x3"x3" Post w/ Sideplate	12'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU88
Alum 0.040"x3"x3" Lockseam	11'	E	MU88
Alum 0.055"x3"x3" Fluted	12'	F	MU86
Alum 0.075"x3"x3" Square	12'	G	MU48
Steel 0.043"x3"x3" Lockseam	12'	H	MU88
Alum 0.120"x3"x3" Square	12'	I	MU99
Steel 0.043"x3"x3" Lockseam	12'	J	MU88
Alum 0.120"x4"x4" Square	12'	K	MU56
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU80
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.15 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.15
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.15 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.15
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
5805 Veteran's Memorial Hwy
Holbrook, NY 11741
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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 58739 EXP 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER 5600906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.9 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 9.16

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	16 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	14 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	12 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	18'-0"	E	25	25	30		17'-10"	F	26	26	29		24'-4"	F	29	29	30	
	5.5	12'-4"	17'-4"	E	25	25	29		16'-9"	F	27	27	29		23'-1"	F	30	30	30	
	6	11'-4"	15'-3"	E	25	25	27		15'-10"	F	27	27	28		22'-0"	F	30	30	30	
	6.5	10'-5"	12'-8"	E	26	26	27		15'-0"	F	27	27	28		21'-0"	G	31	31	31	
	7	9'-6"	11'-8"	E	26	26	27		14'-3"	F	27	27	28		20'-0"	G	31	31	31	
	7.5	8'-7"	11'-0"	E	26	26	26		13'-7"	F	28	28	28		19'-4"	G	31	31	31	
	8	8'-0"	10'-3"	E	26	26	26		12'-9"	F	28	28	28		18'-10"	G	31	31	31	
	8.5	8'-0"	9'-8"	E	26	28	28		12'-0"	F	28	28	28		18'-2"	G	32	32	32	
	9	7'-8"	9'-3"	E	26	28	28		11'-11"	F	28	28	28		17'-6"	G	32	32	32	
	9.5	7'-3"	8'-8"	E	28	28	28		11'-6"	F	28	28	28		16'-11"	G	32	32	32	
	10	6'-9"	8'-3"	E	28	28	28		11'-1"	F	28	28	28		16'-6"	G	32	32	32	
	10.5	6'-3"	7'-10"	E	28	28	28		10'-7"	F	28	28	28		16'-1"	H	33	33	33	
	11	6'-3"	7'-6"	E	28	28	28		10'-2"	F	28	28	28		15'-6"	H	33	33	33	
	11.5	5'-11"	7'-2"	E	28	28	28		9'-8"	F	28	28	28		15'-1"	H	33	33	33	
	12	5'-8"	6'-11"	E	28	28	28		9'-4"	F	28	28	28		14'-7"	H	33	33	33	
	13	5'-3"	6'-6"	E	28	28	28		8'-7"	F	28	28	28		13'-10"	H	33	33	33	
	14	4'-10"	5'-11"	E	28	28	28		8'-0"	F	28	28	28		13'-2"	H	34	34	34	
	15	4'-6"	5'-6"	E	28	28	28		7'-5"	F	28	28	28		12'-7"	H	34	34	34	
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	12'-11"	E	27	27	30		15'-4"	F	26	29	31		22'-1"	F	33	33	33	
	5.5	12'-4"	12'-1"	E	27	27	29		14'-6"	F	29	29	30		20'-10"	G	32	32	32	
	6	11'-4"	11'-1"	E	27	27	29		13'-8"	F	29	29	30		19'-8"	G	33	33	33	
	6.5	10'-5"	10'-3"	E	27	27	28		13'-11"	F	29	29	30		18'-10"	G	33	33	33	
	7	9'-6"	9'-8"	E	27	27	28		13'-3"	F	29	29	29		18'-0"	G	33	33	33	
	7.5	8'-7"	9'-1"	E	27	27	27		12'-6"	F	29	29	29		17'-3"	G	34	34	34	
	8	8'-0"	8'-4"	E	27	27	27		11'-3"	F	30	30	30		16'-6"	G	34	34	34	
	8.5	8'-0"	7'-10"	E	27	27	27		10'-7"	F	30	30	30		15'-11"	G	34	34	34	
	9	7'-8"	7'-5"	E	27	27	27		10'-0"	F	30	30	30		15'-4"	G	34	34	34	
	9.5	7'-3"	7'-1"	E	27	27	27		9'-8"	F	30	30	30		14'-8"	H	35	35	35	
	10	6'-9"	6'-8"	E	27	27	27		9'-0"	F	30	30	30		13'-10"	H	35	35	35	
	10.5	6'-6"	6'-5"	E	27	27	27		8'-7"	F	30	30	30		13'-6"	H	35	35	35	
	11	6'-3"	6'-1"	E	27	27	27		8'-3"	F	30	30	30		13'-1"	H	35	35	35	
	11.5	5'-11"	5'-10"	E	27	27	27		7'-10"	F	30	30	30		12'-6"	H	35	35	35	
	12	5'-8"	5'-7"	E	27	27	27		7'-7"	F	30	30	30		12'-0"	H	36	36	36	
	13	5'-3"	5'-2"	E	27	27	27		7'-0"	F	30	30	30		11'-3"	H	36	36	36	
	14	4'-10"	4'-9"	E	27	27	27		6'-6"	F	30	30	30		10'-11"	H	36	36	36	
	15	4'-6"	4'-6"	E	27	27	27		6'-1"	F	30	30	30							
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	14'-9"	E	25	28	30		17'-3"	F	27	27	30		23'-10"	F	30	30	31	
	5.5	12'-4"	13'-8"	E	26	29	29		16'-3"	F	27	27	29		22'-10"	F	31	31	31	
	6	11'-4"	12'-6"	E	26	26	28		15'-3"	F	27	27	29		21'-9"	F	31	31	31	
	6.5	10'-5"	11'-11"	E	26	26	27		14'-6"	F	28	28	28		20'-8"	G	31	31	31	
	7	9'-6"	11'-1"	E	26	26	27		13'-8"	F	28	28	28		19'-9"	G	32	32	32	
	7.5	8'-7"	10'-4"	E	26	26	27		13'-1"	F	28	28	28		19'-2"	G	32	32	32	
	8	8'-0"	9'-9"	E	28	28	26		12'-6"	F	28	28	28		18'-6"	G	32	32	32	
	8.5	8'-0"	9'-3"	E	26	26	26		11'-11"	F	28	28	28		18'-11"	G	33	33	33	
	9	7'-8"	8'-8"	E	26	26	26		11'-6"	F	28	28	28		17'-4"	G	33	33	33	
	9.5	7'-3"	8'-3"	E	26	26	26		10'-8"	F	29	29	29		16'-11"	G	33	33	33	
	10	6'-9"	7'-10"	E	26	28	28		10'-2"	F	29	29	29		16'-6"	G	33	33	33	
	10.5	6'-3"	7'-6"	E	26	28	28		9'-7"	F	29	29	29		16'-1"	H	34	34	34	
	11	6'-3"	7'-1"	E	26	28	28		9'-2"	F	29	29	29		15'-4"	H	34	34	34	
	11.5	5'-11"	6'-10"	E	28	28	28		8'-10"	F	29	29	29		14'-7"	H	34	34	34	
	12	5'-8"	6'-6"	E	28	28	28		8'-1"	F	29	29	29		13'-11"	H	34	34	34	
	13	5'-3"	6'-0"	E	28	28	28		7'-7"	F	29	29	29		13'-4"	H	34	34	34	
	14	4'-10"	5'-7"	E	28	28	28		7'-1"	F	29	29	29		12'-7"	H	34	34	34	
	15	4'-6"	5'-3"	E	28	28	28													

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	16 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	14 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)	12 Gauge 3x5 Steel C MU78 Attached Structure: MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	Freestanding or Multispan Units: MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	15' "d" (in)
115 MPH EXPOSURE B																				
20	5	7'-1"	10'-9"	E	23	24	27	28	13'-6"	F	25	25	28	30	16'-9"	G	30	28	29	31
	5.5	6'-8"	9'-10"	E	23	23	26	28	12'-6"	F	25	25	28	29	16'-4"	G	29	29	29	31
	6	6'-11"	9'-4"	E	23	23	26	27	11'-9"	F	25	25	27	29	15'-4"	G	29	29	29	30
	6.5	6'-6"	8'-4"	E	23	23	25	27	11'-1"	F	25	25	27	29	15'-0"	G	29	29	29	30
	7	6'-1"	7'-8"	E	23	23	25	27	10'-5"	F	25	25	27	28	14'-6"	G	29	29	29	30
	7.5	4'-8"	7'-3"	E	23	23	25	26	9'-8"	F	25	25	26	28	13'-10"	H	29	29	29	29
	8	4'-3"	6'-8"	E	23	23	24	26	9'-2"	F	25	25	26	28	14'-5"	H	30	30	30	30
	8.5	4'-3"	6'-4"	E	23	23	24	26	8'-7"	F	25	25	26	27	13'-10"	H	30	30	30	30
	9	3'-11"	6'-0"	E	23	23	24	26	8'-1"	F	25	25	25	27	13'-4"	H	30	30	30	30
	9.5	3'-8"	5'-8"	E	23	23	24	25	7'-6"	F	25	25	25	27	12'-10"	H	30	30	30	30
	10	3'-6"	5'-5"	E	23	23	23	25	7'-1"	F	25	25	25	26	12'-4"	H	30	30	30	30
	10.5	3'-4"	5'-3"	E	23	23	23	25	6'-8"	F	25	25	25	26	11'-8"	H	31	31	31	31
	11	3'-3"	4'-11"	E	23	23	23	25	6'-4"	F	25	25	25	26	11'-4"	H	31	31	31	31
	11.5	3'-1"	4'-8"	E	23	23	23	24												
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	9'-8"	E	26	25	28	30	12'-9"	F	27	27	30	32	16'-3"	G	31	31	31	33
	5.5	6'-8"	8'-10"	E	26	25	28	30	11'-11"	F	27	27	30	31	15'-7"	G	31	31	31	33
	6	6'-11"	8'-1"	E	26	25	27	29	10'-10"	F	28	28	29	31	15'-3"	G	31	31	31	33
	6.5	6'-6"	7'-8"	E	26	25	27	29	10'-1"	F	28	28	29	31	14'-6"	H	32	32	32	32
	7	6'-1"	6'-11"	E	25	25	27	28	9'-4"	F	28	28	28	30	14'-0"	H	32	32	32	32
	7.5	4'-8"	6'-6"	E	25	25	26	28	8'-9"	F	28	28	28	30	13'-6"	H	33	33	33	33
	8	4'-3"	6'-1"	E	25	25	26	26	8'-3"	F	28	28	28	29	13'-10"	H	33	33	33	33
	8.5	4'-3"	5'-9"	E	25	25	26	27	7'-8"	F	28	28	28	29	12'-8"	H	33	33	33	33
	9	3'-11"	5'-6"	E	25	25	25	27	7'-3"	F	28	28	28	29	11'-11"	H	33	33	33	33
	9.5	3'-8"	5'-1"	E	25	25	25	27	6'-11"	F	28	28	28	29	11'-4"	H	33	33	33	33
	10	3'-6"	4'-10"	E	25	25	25	27	6'-7"	F	28	28	28	28	11'-2"	H	34	34	34	34
	10.5	3'-4"	4'-7"	E	25	25	25	27	6'-3"	F	28	28	28	28	10'-10"	H	34	34	34	34
	11	3'-3"	4'-5"	E	25	25	25	26	6'-0"	F	28	28	28	28	10'-6"	H	34	34	34	34
	11.5	3'-1"	4'-3"	E	25	25	25	26	5'-8"	F	28	28	28	28						
115 MPH EXPOSURE B																				
20	5	6'-8"	10'-0"	E	23	24	27	28	13'-5"	F	25	25	28	30	16'-6"	G	28	28	29	31
	5.5	6'-3"	9'-10"	E	23	23	26	28	12'-6"	F	25	25	28	29	16'-4"	G	28	28	29	31
	6	6'-8"	9'-8"	E	23	23	26	27	11'-8"	F	25	25	27	29	17'-4"	G	29	29	29	30
	6.5	6'-3"	9'-4"	E	23	23	25	27	11'-1"	F	25	25	27	29	16'-8"	G	29	29	29	29
	7	6'-10"	7'-8"	E	23	23	25	27	10'-5"	F	25	25	27	28	15'-8"	H	29	29	29	30
	7.5	4'-8"	7'-3"	E	23	23	25	26	9'-8"	F	25	25	26	28	16'-0"	H	29	29	29	29
	8	4'-3"	6'-9"	E	23	23	24	26	9'-2"	F	25	25	26	28	14'-9"	H	30	30	30	30
	8.5	4'-8"	6'-4"	E	23	23	24	26	8'-7"	F	25	25	26	27	13'-10"	H	30	30	30	30
	9	3'-8"	6'-0"	E	23	23	24	25	8'-1"	F	25	25	25	27	13'-4"	H	30	30	30	30
	9.5	3'-3"	5'-8"	E	23	23	24	25	7'-6"	F	25	25	25	26	12'-8"	H	30	30	30	30
	10	3'-4"	5'-5"	E	23	23	23	25	7'-1"	F	25	25	25	26	12'-4"	H	31	31	31	31
	10.5	3'-3"	5'-2"	E	23	23	23	25	6'-8"	F	25	25	25	26	11'-8"	H	31	31	31	31
	11	3'-1"	4'-11"	E	23	23	23	25	6'-4"	F	25	25	25	26	11'-4"	H	31	31	31	31
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	5	6'-8"	9'-4"	E	25	25	28	30	12'-1"	F	27	27	30	32						
	5.5	6'-3"	8'-6"	E	26	25	28	30	11'-4"	F	27	27	29	31						
	6	6'-8"	7'-10"	E	26	25	27	29	10'-8"	F	27	27	29	31						
	6.5	6'-3"	7'-3"	E	25	25	27	29	9'-8"	F	27	27	29	30						
	7	6'-10"	6'-8"	E	25	25	26	28	9'-0"	F	27	27	29	30						
	7.5	4'-8"	6'-3"	E	25	25	26	28	8'-5"	F	27	27	28	30						
	8	4'-3"	5'-10"	E	25	25	26	26	7'-11"	F	27	27	27	29						
	8.5	4'-8"	5'-6"	E	25	25	26	27	7'-6"	F	27	27	27	29						
	9	3'-8"	5'-2"	E	25	25	25	27	7'-1"	F	27	27	27	29						
	9.5	3'-3"	4'-11"	E	25	25	25	27	6'-8"	F	27	27	27	29						
	10	3'-4"	4'-8"	E	25	25	25	27	6'-4"	F	27	27	27	29						
	10.5	3'-3"	4'-6"	E	25	25	25	26	6'-1"	F	27	27	27	29						
	11	3'-1"	4'-3"	E	25	25	25	26	5'-8"	F	27	27	27	28						

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68138 Exp 6-30-2014 CIVIL STATE OF CALIFORNIA

PROFESSIONAL ENGINEER No. 5860996-202 CARL PUTNAM STATE OF UTAH

FEB 24 2014

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA

TABLE 5.16

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	16 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	16 Ga. Attached Structure: MIN POST TYPE	16 Ga. Attached Structure: FOOTER SIZE "d" (in)	16 Ga. Freestanding or Multispan Units, MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	16 Ga. 12' "d" (in)	16 Ga. 16' "d" (in)	14 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	14 Ga. MIN POST TYPE	14 Ga. FOOTER SIZE "d" (in)	14 Ga. 8' "d" (in)	14 Ga. 12' "d" (in)	14 Ga. 16' "d" (in)	12 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	12 Ga. MIN POST TYPE	12 Ga. FOOTER SIZE "d" (in)	12 Ga. 8' "d" (in)	12 Ga. 12' "d" (in)	12 Ga. 16' "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	12'-6"	E	27	27	30	X	16'-0"	F	29	29	31	X	21'-6"	F	33	33	33	X
	5.5	12'-4"	11'-6"	E	27	27	30	X	14'-1"	F	29	29	31	X	20'-3"	G	33	33	33	X
	6	11'-4"	10'-7"	E	27	27	29	X	13'-3"	F	29	29	30	X	19'-3"	G	33	33	33	X
	6.5	10'-6"	9'-10"	E	27	27	29	X	12'-6"	F	30	30	30	X	18'-4"	G	34	34	34	X
	7	9'-8"	9'-1"	E	27	27	28	X	11'-11"	F	30	30	30	X	17'-6"	G	34	34	34	X
	7.5	9'-1"	8'-6"	E	27	27	28	X	11'-4"	F	30	30	30	X	16'-9"	G	34	34	34	X
	8	8'-6"	8'-0"	E	27	27	27	X	10'-9"	F	30	30	30	X	16'-1"	G	35	35	35	X
	8.5	8'-0"	7'-6"	E	27	27	27	X	10'-2"	F	30	30	30	X	15'-9"	G	35	35	35	X
	9	7'-6"	7'-1"	E	27	27	27	X	9'-7"	F	30	30	30	X	14'-11"	H	35	35	35	X
	9.5	7'-2"	6'-8"	E	27	27	27	X	9'-1"	F	30	30	30	X	14'-4"	H	35	35	35	X
	10	6'-9"	6'-5"	E	27	27	27	X	8'-6"	F	30	30	30	X	13'-11"	H	35	35	35	X
	10.5	6'-5"	6'-1"	E	27	27	27	X	8'-3"	F	30	30	30	X	13'-6"	H	36	36	36	X
	11	6'-2"	5'-10"	E	27	27	27	X	7'-10"	F	30	30	30	X	13'-0"	H	36	36	36	X
	11.5	5'-11"	5'-7"	E	27	27	27	X	7'-6"	F	30	30	30	X	13'-0"	H	36	36	36	X
	12	5'-8"	5'-4"	E	27	27	27	X	7'-2"	F	30	30	30	X	12'-4"	H	36	36	36	X
	13	5'-2"	4'-11"	E	27	27	27	X	6'-6"	F	30	30	30	X	11'-6"	H	36	36	36	X
110 MPH EXPOSURE B																				
20	5	7'-1"	11'-2"	E	23	24	26	28	13'-6"	F	24	25	28	28	19'-11"	G	27	27	28	31
	5.5	6'-5"	10'-2"	E	23	23	26	28	12'-10"	F	24	24	27	28	18'-8"	G	28	28	28	30
	6	5'-11"	9'-4"	E	23	23	25	27	12'-1"	F	25	25	27	28	17'-8"	G	28	28	28	30
	6.5	5'-5"	8'-4"	E	23	23	25	27	11'-6"	F	25	25	26	28	16'-11"	G	28	28	28	29
	7	5'-1"	8'-0"	E	23	23	25	26	10'-10"	F	25	25	26	28	16'-1"	G	29	29	29	29
	7.5	4'-9"	7-4	E	23	23	24	26	10'-1"	F	25	25	26	27	15'-5"	H	29	29	29	29
	8	4'-6"	7'-0"	E	23	23	24	26	9'-6"	F	25	25	25	27	14'-9"	H	29	29	29	29
	8.5	4'-2"	6'-7"	E	23	23	24	25	8'-11"	F	25	25	25	27	14'-2"	H	29	29	29	29
	9	3'-11"	6'-3"	E	23	23	23	25	8'-4"	F	25	25	26	27	13'-6"	H	29	29	29	29
	9.5	3'-8"	5'-11"	E	23	23	23	25	8'-0"	F	25	25	25	26	13'-2"	H	30	30	30	30
	10	3'-6"	5'-8"	E	23	23	23	25	7'-7"	F	25	25	25	26	12'-9"	H	30	30	30	30
	10.5	3'-4"	5'-4"	E	23	23	23	24	7'-3"	F	25	25	25	26	12'-4"	H	30	30	30	30
	11	3'-2"	5'-1"	E	23	23	23	24	6'-11"	F	25	25	25	26	12'-0"	H	30	30	30	30
	11.5	3'-1"	4'-11"	E	23	23	23	24	6'-7"	F	25	25	25	26	11'-7"	H	30	30	30	30
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	10'-0"	E	24	25	28	30	12'-9"	F	26	26	29	31	18'-6"	G	30	30	31	33
	5.5	6'-8"	9'-1"	E	24	25	27	28	11'-11"	F	27	27	29	31	17'-6"	G	30	30	30	32
	6	5'-11"	8'-4"	E	24	24	27	28	11'-2"	F	27	27	29	31	16'-6"	G	31	31	31	32
	6.5	5'-6"	7'-8"	E	25	25	27	28	10'-4"	F	27	27	28	30	15'-8"	H	31	31	31	32
	7	5'-1"	7'-2"	E	25	25	26	28	9'-8"	F	27	27	28	30	15'-0"	H	31	31	31	31
	7.5	4'-9"	6'-8"	E	25	25	26	28	9'-0"	F	27	27	27	29	14'-4"	H	32	32	32	32
	8	4'-9"	6'-3"	E	25	25	26	27	8'-6"	F	27	27	27	29	13'-8"	H	32	32	32	33
	8.5	4'-2"	5'-11"	E	25	25	25	27	8'-0"	F	27	27	27	29	13'-2"	H	32	32	32	32
	9	3'-11"	5'-7"	E	25	25	25	27	7'-7"	F	27	27	27	28	12'-8"	H	32	32	32	32
	9.5	3'-9"	5'-4"	E	25	25	25	27	7'-2"	F	27	27	27	28	12'-3"	H	32	32	32	32
	10	3'-6"	5'-0"	E	25	25	25	26	6'-10"	F	27	27	27	28	11'-10"	H	33	33	33	33
	10.5	3'-4"	4'-9"	E	25	25	25	26	6'-6"	F	27	27	27	27	11'-6"	H	33	33	33	33
	11	3'-2"	4'-7"	E	25	25	25	26	6'-2"	F	27	27	27	27	11'-1"	H	33	33	33	33
	11.5	3'-1"	4'-4"	E	25	25	25	26	5'-11"	F	27	27	27	27	10'-8"	H	33	33	33	33
	12	2'-11"	4'-2"	E	25	25	25	26	5'-8"	F	27	27	27	27	10'-5"	H	33	33	33	33

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	16 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	16 Ga. Attached Structure: MIN POST TYPE	16 Ga. Attached Structure: FOOTER SIZE "d" (in)	16 Ga. Freestanding or Multispan Units, MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	16 Ga. 12' "d" (in)	16 Ga. 16' "d" (in)	14 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	14 Ga. MIN POST TYPE	14 Ga. FOOTER SIZE "d" (in)	14 Ga. 8' "d" (in)	14 Ga. 12' "d" (in)	14 Ga. 16' "d" (in)	12 Gauge 3x8 Steel C MU78: MAX POST SPACING (FT)	12 Ga. MIN POST TYPE	12 Ga. FOOTER SIZE "d" (in)	12 Ga. 8' "d" (in)	12 Ga. 12' "d" (in)	12 Ga. 16' "d" (in)
115 MPH EXPOSURE B																				
30	5	5'-8"	9'-4"	E	22	23	26	28	12'-1"	F	24	25	27	29	17'-8"	G	27	27	28	30
	5.5	5'-2"	8'-6"	E	22	23	25	27	11'-4"	F	24	24	27	29	16'-8"	G	27	27	28	30
	6	4'-8"	7'-10"	E	22	22	25	27	10'-6"	F	24	24	27	28	15'-10"	G	28	28	28	30
	6.5	4'-4"	7'-2"	E	22	22	25	26	9'-9"	F	24	24	26	28	15'-0"	H	28	28	28	29
	7	4'-1"	6'-8"	E	22	22	24	26	9'-0"	F	24	24	26	27	14'-4"	H	28	28	28	29
	7.5	3'-8"	6'-3"	E	22	22	24	26	8'-5"	F	24	24	25	27	13'-8"	H	29	29	28	29
	8	3'-6"	5'-10"	E	22	22	24	26	7'-11"	F	24	24	25	27	13'-1"	H	29	29	29	29
	8.5	3'-4"	5'-6"	E	22	22	23	25	7'-6"	F	24	24	25	26	12'-7"	H	29	29	29	29
	9	3'-2"	5'-3"	E	22	22	23	25	7'-1"	F	24	24	25	26	12'-1"	H	29	29	29	29
	9.5	3'-0"	4'-11"	E	22	22	23	25	6'-8"	F	24	24	24	26	11'-8"	H	29	29	29	29
	10	2'-10"	4'-8"	E	22	22	23	24	6'-4"	F	24	24	24	26	11'-3"	H	29	29	29	29
	10.5	2'-8"	4'-6"	E	22	22	23	24	6'-1"	F	24	24	24	25	10'-11"	H	30	30	30	30
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-8"	8'-6"	E	24	25	28	30	11'-4"	F	26	26	29	31	16'-8"	G	30	30	31	33
	5.5	5'-2"	7'-9"	E	24	24	27	29	10'-6"	F	26	26	29	31	15'-6"	H	30	30	30	32
	6	4'-8"	7'-1"	E	24	24	27	29	9'-7"	F	26	26	28	30	14'-11"	H	31	31	31	32
	6.5	4'-4"	6'-7"	E	24	24	26	28	8'-10"	F	26	26	28	30	14'-1"	H	31	31	31	32
	7	4'-1"	6'-1"	E	24	24	26	28	8'-3"	F	26	26	28	29	13'-5"	H	31	31	31	31
	7.5	3'-9"	5'-8"	E	24	24	26	27	7'-8"	F	26	26	27	29	12'-10"	H	31	31	31	31
	8	3'-6"	5'-4"	E	24	24	25	27	7'-2"	F	26	26	27	29	12'-4"	H	32	32	32	32
	8.5	3'-4"	5'-0"	E	24	24	25	27	6'-9"	F	26	26	27	29	11'-10"	H	32	32	32	32
	9	3'-2"	4'-8"	E	24	24	25	27	6'-5"	F	26	26	26	29	11'-4"	H	32	32	32	32

OVERHANG (FT)	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
	TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES — PROJECTION OF SINGLE SPAN STUCTURES (FT)																
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	8'	B	MU100
0.024"x3"x3" Post w/ Sideplate	12'	C	MU113
Alum 0.032"x3"x3" Lockseam	11'	D	MU89
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.065"x3"x3" Fluted	12'	F	MU85
Alum 0.075"x3"x3" Square	12'	G	MU49
Steel 0.043"x3"x3" Lockseam	12'	H	MU89
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU83

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	16'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU83
3/16"x4"x4" Steel Square	d= 35"	14'	I	MU83
3/16"x4"x4" Steel Square	d= 38"	10'	J	MU83
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU83
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU83

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.16 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.16
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.16 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN
SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.16
SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING
SLAB 9. FOLLOW 9-10 FROM ABOVE
SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

Metals Building Products
8005 Veteran's Memorial Hwy
Holbrook, NY 11741
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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68139 EXP. 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER No. 5860006-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.13

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Double 16 Gauge 3x8 Steel C MU114 Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)	Double 14 Gauge 3x8 Steel C MU114 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)	Double 12 Gauge 3x8 Steel C MU114 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)
110 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	12'-7"	25'-4"	F	30	30	32		27'-8"	F	30	32	32		30'-8"	G	32	32	32	
	5.5	13'-9"	24'-8"	F	30	30	31		26'-3"	G	31	31	32		29'-6"	G	32	32	32	
	6	11'-4"	23'-10"	G	31	31	31		25'-0"	G	32	32	32		28'-10"	G	33	33	33	
	6.5	10'-6"	23'-3"	G	31	31	31		24'-0"	G	32	32	32		28'-1"	H	33	33	33	
	7	9'-8"	22'-7"	G	32	32	32		24'-1"	G	33	33	33		27'-5"	H	34	34	34	
	7.5	9'-1"	22'-1"	G	32	32	32		23'-7"	G	33	33	33		26'-10"	H	35	35	35	
	8	8'-6"	21'-6"	G	33	33	33		23'-1"	H	34	34	34		26'-3"	H	35	35	35	
	8.5	8'-0"	21'-2"	G	33	33	33		22'-7"	H	34	34	34		25'-8"	H	36	36	36	
	9	7'-6"	20'-10"	H	34	34	34		22'-2"	H	34	34	34		25'-3"	H	36	36	36	
	9.5	7'-2"	20'-3"	H	34	34	34		21'-9"	H	35	35	35		24'-9"	H	36	36	36	
	10	6'-8"	19'-9"	H	34	34	34		21'-5"	H	35	35	35		24'-4"	H	37	37	37	
	10.5	6'-6"	19'-3"	H	35	35	35		21'-1"	H	35	35	35		23'-11"	H	37	37	37	
	11	6'-2"	18'-9"	H	35	35	35		20'-8"	H	36	36	36		23'-7"	H	38	38	38	
	11.5	5'-11"	18'-3"	H	35	35	35		20'-4"	H	36	36	36		23'-3"	I	38	38	38	
	12	5'-8"	17'-10"	H	35	35	35		20'-0"	H	37	37	37		22'-11"	I	38	38	38	
	13	5'-2"	17'-0"	H	36	36	36		19'-6"	H	37	37	37		22'-4"	J	39	39	39	
	14	4'-10"	16'-4"	H	36	36	36		18'-10"	H	39	39	39		21'-9"	J	40	40	40	
	15	4'-6"	15'-8"	H	36	36	36		18'-2"	I	39	39	39		21'-3"	J	40	40	40	
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	23'-4"	G	32	33	34		25'-1"	G	33	33	34		28'-6"	G	35	35	35	
	5.5	12'-4"	22'-8"	G	33	33	34		24'-3"	G	34	34	34		27'-7"	G	35	35	35	
	6	11'-4"	22'-1"	G	34	34	34		23'-7"	G	35	35	35		26'-10"	H	36	36	36	
	6.5	10'-5"	21'-6"	G	34	34	34		22'-11"	G	35	35	35		26'-1"	H	37	37	37	
	7	9'-8"	21'-0"	G	35	35	35		22'-5"	H	36	36	36		25'-4"	H	38	38	38	
	7.5	9'-1"	20'-6"	H	36	36	36		21'-11"	H	36	36	36		24'-7"	H	38	38	38	
	8	8'-6"	19'-11"	H	36	36	36		21'-6"	H	37	37	37		23'-10"	H	39	39	39	
	8.5	8'-0"	19'-3"	H	36	36	36		20'-7"	H	38	38	38		23'-6"	H	39	39	39	
	9	7'-6"	18'-7"	H	37	37	37		20'-2"	H	38	38	38		22'-8"	H	40	40	40	
	9.5	7'-2"	18'-0"	H	37	37	37		19'-10"	H	39	39	39		22'-1"	I	40	40	40	
	10	6'-8"	17'-6"	H	37	37	37		19'-3"	H	39	39	39		22'-3"	J	41	41	41	
	10.5	6'-6"	17'-1"	H	37	37	37		19'-1"	H	39	39	39		21'-11"	J	41	41	41	
	11	6'-2"	16'-7"	H	38	38	38		18'-11"	H	40	40	40		21'-7"	J	42	42	42	
	11.5	5'-11"	16'-2"	H	38	38	38		18'-6"	H	40	40	40		21'-3"	J	42	42	42	
	12	5'-8"	15'-11"	H	38	38	38		17'-8"	I	41	41	41		20'-6"	J	43	43	43	
	13	5'-2"	15'-1"	H	39	39	39		16'-10"	J	41	41	41		20'-3"	J	44	44	44	
	14	4'-10"	14'-3"	H	39	39	39		16'-2"	J	41	41	41		19'-8"	J	44	44	44	
	15	4'-6"	13'-10"	H	39	39	39													
115 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	24'-10"	F	30	30	32		26'-6"	G	31	31	33		30'-1"	G	32	32	32	
	5.5	12'-4"	24'-4"	G	31	31	32		25'-7"	G	32	32	32		29'-1"	G	33	33	33	
	6	11'-4"	23'-4"	G	32	32	32		24'-11"	G	33	33	33		28'-2"	G	34	34	34	
	6.5	10'-5"	22'-8"	G	32	32	32		24'-3"	G	33	33	33		27'-7"	H	34	34	34	
	7	9'-8"	22'-3"	G	33	33	33		23'-8"	G	33	33	33		26'-11"	H	35	35	35	
	7.5	9'-1"	21'-8"	G	33	33	33		23'-2"	H	34	34	34		26'-6"	H	36	36	36	
	8	8'-6"	21'-2"	G	34	34	34		22'-7"	H	35	35	35		25'-9"	H	36	36	36	
	8.5	8'-0"	20'-8"	H	34	34	34		22'-3"	H	35	35	35		25'-4"	H	37	37	37	
	9	7'-6"	20'-3"	H	34	34	34		21'-9"	H	36	36	36		24'-10"	H	38	38	38	
	9.5	7'-2"	19'-7"	H	35	35	35		21'-4"	H	36	36	36		24'-5"	H	38	38	38	
	10	6'-8"	19'-1"	H	35	35	35		20'-8"	H	37	37	37		23'-8"	H	39	39	39	
	10.5	6'-6"	18'-7"	H	36	36	36		20'-4"	H	37	37	37		23'-4"	H	39	39	39	
	11	6'-2"	18'-2"	H	36	36	36		19'-11"	H	38	38	38		22'-8"	I	40	40	40	
	11.5	5'-11"	17'-8"	H	36	36	36		19'-6"	H	38	38	38		22'-1"	J	41	41	41	
	12	5'-8"	17'-3"	H	36	36	36		18'-9"	H	39	39	39		21'-7"	J	41	41	41	
	13	5'-2"	16'-6"	H	37	37	37		18'-1"	H	39	39	39		21'-3"	J	42	42	42	
	14	4'-10"	15'-10"	H	37	37	37		17'-6"	I	41	41	41		20'-6"	J	43	43	43	
	15	4'-6"	15'-2"	H	37	37	37		16'-10"	J	41	41	41		20'-3"	J	44	44	44	
									16'-2"	J	41	41	41		19'-8"	J	44	44	44	

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	Double 16 Gauge 3x8 Steel C MU114 Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)	Double 14 Gauge 3x8 Steel C MU114 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)	Double 12 Gauge 3x8 Steel C MU114 MAX POST SPACING (FT)	Attached Structure MIN POST TYPE	Attached Structure FOOTER SIZE "d" (in)	Freestanding or Multispan Units MAX POST LENGTH 8' CONSTRAINED FOOTER "d" (in)	12' "d" (in)	16' "d" (in)
110 MPH EXPOSURE B																				
20	5	7'-1"	21'-10"	G	29	29	31	33	23'-3"	G	30	30	32	34	26'-6"	H	31	31	31	33
	5.5	6'-8"	21'-1"	G	30	30	31	33	22'-6"	H	30	30	31	33	25'-7"	H	32	32	32	33
	6	6'-11"	20'-5"	H	30	30	31	33	21'-11"	H	31	31	31	33	24'-10"	H	32	32	32	33
	6.5	6'-6"	19'-9"	H	31	31	31	32	21'-4"	H	31	31	31	33	24'-3"	H	33	33	33	33
	7	6'-1"	19'-11"	H	31	31	31	32	20'-9"	H	32	32	32	33	23'-7"	H	33	33	33	33
	7.5	4'-8"	19'-3"	H	31	31	31	32	20'-4"	H	33	33	33	33	23'-1"	H	34	34	34	34
	8	4'-5"	17'-7"	H	32	32	32	32	19'-10"	H	33	33	33	33	22'-7"	I	34	34	34	34
	8.5	4'-3"	17'-8"	H	32	32	32	32	19'-6"	H	33	33	33	33	22'-2"	J	35	35	35	35
	9	3'-11"	16'-8"	H	32	32	32	32	19'-2"	H	34	34	34	34	21'-9"	J	35	35	35	35
	9.5	3'-8"	16'-8"	H	33	33	33	33	18'-6"	H	34	34	34	34	21'-4"	J	36	36	36	36
	10	3'-6"	16'-4"	H	33	33	33	33	17'-11"	I	34	34	34	34	21'-0"	J	36	36	36	36
	10.5	3'-4"	15'-7"	H	33	33	33	33	17'-6"	I	35	35	35	35	20'-8"	J	37	37	37	37
	11	3'-2"	14'-6"	H	33	33	33	33	17'-1"	J	35	35	35	35	20'-4"	J	37	37	37	37
	11.5	3'-1"	14'-1"	H	33	33	33	33	16'-8"	J	35	35	35	35	20'-0"	J	37	37	37	37
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	21'-0"	G	32	32	34	36	22'-6"	H	33	33	34	36	25'-5"	H	34	34	34	36
	5.5	6'-8"	20'-4"	H	33	33	33	36	21'-8"	H	34	34	34	36	24'-8"	H	35	35	35	36
	6	6'-11"	19'-8"	H	33	33	33	35	21'-1"	H	34	34	34	36	23'-11"	H	36	36	36	36
	6.5	6'-6"	19'-2"	H	34	34	34	35	20'-6"	H	35	35	35	36	23'-4"	H	36	36	36	36
	7	6'-1"	17'-10"	H	34	34	34	35	20'-0"	H	36	36	36	36	22'-8"	I	37	37	37	37
	7.5	4'-8"	17'-3"	H	35	35	35	35	19'-7"	H	36	36	36	36	22'-3"	J	38	38	38	38
	8	4'-5"	16'-7"	H	35	35	35	35	19'-1"	H	37	37	37	37	21'-9"	J	38	38	38	38
	8.5	4'-3"	16'-8"	H	35	35	35	35	18'-8"	I	37	37	37	37	21'-4"	J	39	39	39	39
	9	3'-11"	15'-8"	H	35	35	35	35	17'-11"	I	37	37	37	37	20'-11"	J	39	39	39	39
	9.5	3'-8"	15'-8"	H	36	36	36	36	17'-6"	J	38	38	38	38	20'-6"	J	40	40	40	40
	10	3'-6"	14'-7"	H	36	36	36	36	16'-11"	J	38	38	38	38	20'-2"	J	40	40	40	40
	10.5	3'-4"	14'-2"	H	36	36	36	36	16'-7"	J	38	38	38	38	19'-10"	J	41	41	41	41
	11	3'-2"	13'-8"	H	36	36	36	36	16'-2"	J	38	38	38	38	19'-7"	J	41	41	41	41
	11.5	3'-1"	13'-3"	H	37	37	37	37	15'-8"	J	39	39	39	39	19'-3"	J	41	41	41	41
115 MPH EXPOSURE B																				
25	5	6'-8"	21'-10"	G	29	29	31	33	22'-7"	G	30	30	32	34	25'-2"	H	31	31	31	33
	5.5	6'-3"	21'-1"	G	30	30	31	33	22'-0"	H	30	30	31	33	23'-7"	H	32	32	32	33
	6	6'-0"	20'-5"	H	30	30	31	33	21'-11"	H	31	31	31	33	24'-10"	H	32	32	32	33
	6.5	5'-7"	19'-9"	H	31	31	31	32	21'-4"	H	31	31	31	33	24'-3"	H	33	33	33	33
	7	4'-10"	19'-1"	H	31	31	31	32	20'-9"	H	32	32	32	33	23'-7"	H	33	33	33	33
	7.5	4'-8"	18'-3"	H	31	31	31	32	20'-4"	H	33	33	33	33	23'-1"	I	34	34	34	34
	8	4'-3"	17'-7"	H	32	32	32	32	19'-10"	H	33	33	33	33	22'-7"	I	34	34	34	34
	8.5	4'-0"	17'-0"	H	32	32	32	32	19'-6"	H	33	33	33	33	22'-2"	J	35	35	35	35
	9	3'-9"	16'-4"	H	32	32	32	32	19'-0"	H	34	34	34	34	21'-9"	J	36	36	36	36
	9.5	3'-7"	15'-9"	H	32	32	32	32	18'-6"	I	34	34	34	34	21'-4"	J	36	36	36	36
	10	3'-4"	15'-4"	H	33	33	33	33	17'-11"	I	34	34	34	34	21'-0"	J	36	36	36	36
	10.5	3'-3"	15'-1"	H	33	33	33	33	17'-6"	J	35	35	35	35	20'-8"	J	37	37	37	37
	11	3'-1"	14'-8"	H	33	33	33	33	17'-1"	J	35	35	35	35	20'-4"	J	37	37	37	37
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
25	5	6'-8"	20'-8"	G	32	32	34	36	22'-1"	H	33	33	34	36	24'-8"	H	34	34	34	36
	5.5	6'-2"	20'-0"	H	33	33	33	36	21'-5"	H	34	34	34	36	23'-11"	H	35	35	35	36
	6	5'-8"	19'-1"	H	33	33	33	36	20'-10"	H	34	34	34	36	23'-4"	H	36	36	36	36
	6.5	5'-3"	18'-3"	H	34	34	34	36	20'-4"	H	35	35	35	36	22'-8"	I	37	37	37	37
	7	4'-10"	17'-6"	H	34	34	34	34	19'-11"	H	35	35	35	35	22'-3"	J	38	38	38	38
	7.5	4'-6"	16'-10"	H	34	34	34	34	19'-6"	H	36	36	36	36	21'-9"	J	38	38	38	38
	8	4'-3"	16'-3"	H	35	35	35	35	18'-6"	H	36	36	36	36	21'-4"	J	39	39	39	39
	8.5	4'-0"	15'-6"	H	35	35	35	35	18'-1"	I	37	37	37	37	21'-0"	J	39	39	39	39
	9	3'-9"	15'-3"	H	35	35	35	35	17'-7"	I	37	37	37	37	20'-8"	J	40	40	40	40
	9.5	3'-7"	14'-8"	H	36	36	36	36	17'-1"	J	37	37	37	37	20'-4"	J	40	40	40	40
	10	3'-4"	14'-3"	H	36	36	36	36	16'-8"	J	38	38	38	38	20'-0"	J	41	41	41	41
	10.5	3'-3"	13'-10"	H	36	36	36	36	16'-3"	J	38	38	38	38						
	11	3'-1"	13'-6"	H	36	36	36	36	16'-10"	J	38	38	38	38						

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PROFESSIONAL ENGINEER 360906-2202 CARL W. PUTNAM STATE OF UTAH

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SOLID COVER 5.0 POST SPACINGS FOR PATIO AND COMMERCIAL COVERS IN 115 MPH WIND AREA:

TABLE 5.17

Columns 4–9: Double 16 Gauge 3x8 Steel C MU114. Columns 10–15: Double 14 Gauge 3x8 Steel C MU114. Columns 16–21: Double 12 Gauge 3x8 Steel C MU114. In each gauge group, MIN POST TYPE and FOOTER SIZE are for an Attached Structure; MAX POST LENGTH is for Freestanding or Multispan Units.

GROUND SNOW LOAD (PSF)	TRIB WIDTH (FT)	POST SPACING ON SLAB (FT)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' CONSTRAINED FOOTER "d" (in)	12' CONSTRAINED FOOTER "d" (in)	15' CONSTRAINED FOOTER "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' CONSTRAINED FOOTER "d" (in)	12' CONSTRAINED FOOTER "d" (in)	15' CONSTRAINED FOOTER "d" (in)	MAX POST SPACING (FT)	MIN POST TYPE	FOOTER SIZE "d" (in)	8' CONSTRAINED FOOTER "d" (in)	12' CONSTRAINED FOOTER "d" (in)	15' CONSTRAINED FOOTER "d" (in)
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
10 LIVE LOAD ONLY	5	13'-7"	23'-1"	G	33	33	34	X	24'-8"	G	34	34	35	X	28'-0"	C	36	36	36	X
	5.5	12'-4"	22'-5"	G	34	34	34	X	23'-10"	G	35	35	35	X	27'-3"	H	36	36	36	X
	6	11'-4"	21'-9"	G	35	35	35	X	23'-2"	G	35	35	35	X	26'-4"	H	37	37	37	X
	6.5	10'-5"	21'-2"	G	35	35	35	X	22'-7"	H	36	36	36	X	25'-4"	H	38	38	38	X
	7	9'-8"	20'-8"	H	36	36	36	X	22'-0"	H	37	37	37	X	25'-6"	H	38	38	38	X
	7.5	9'-1"	20'-0"	H	36	36	36	X	21'-6"	H	37	37	37	X	24'-8"	H	39	39	39	X
	8	8'-6"	19'-4"	H	37	37	37	X	21'-1"	H	38	38	38	X	23'-11"	H	39	39	39	X
	8.5	8'-0"	18'-8"	H	37	37	37	X	20'-8"	H	38	38	38	X	23'-6"	H	40	40	40	X
	9	7'-6"	18'-1"	H	37	37	37	X	20'-3"	H	39	39	39	X	23'-0"	H	40	40	40	X
	9.5	7'-2"	17'-7"	H	38	38	38	X	19'-11"	H	39	39	39	X	22'-7"	I	41	41	41	X
	10	6'-9"	17'-1"	H	38	38	38	X	19'-7"	H	40	40	40	X	22'-3"	J	41	41	41	X
	10.5	6'-5"	16'-7"	H	38	38	38	X	19'-1"	H	40	40	40	X	21'-10"	J	42	42	42	X
	11	6'-2"	16'-2"	H	38	38	38	X	18'-8"	H	40	40	40	X	21'-6"	J	42	42	42	X
	11.5	5'-11"	15'-9"	H	39	39	39	X	18'-2"	H	41	41	41	X	21'-3"	J	43	43	43	X
	12	5'-6"	15'-5"	H	39	39	39	X	17'-10"	I	41	41	41	X	20'-11"	J	43	43	43	X
	13	5'-2"	14'-8"	H	39	39	39	X	17'-1"	J	41	41	41	X	20'-4"	J	44	44	44	X
110 MPH EXPOSURE B																				
20	5	7'-1"	22'-1"	G	28	28	31	32	23'-7"	G	29	29	31	33	26'-10"	H	30	30	31	33
	5.5	6'-9"	21'-6"	G	29	29	30	32	22'-10"	G	30	30	31	33	25'-11"	H	31	31	31	32
	6	5'-11"	20'-10"	G	29	29	30	32	22'-2"	H	30	30	31	32	25'-3"	H	31	31	31	32
	6.5	5'-6"	20'-2"	H	30	30	30	32	21'-7"	H	31	31	31	32	24'-7"	H	32	32	32	32
	7	5'-1"	19'-4"	H	30	30	30	32	21'-1"	H	31	31	31	32	23'-11"	H	33	33	33	33
	7.5	4'-9"	18'-8"	H	31	31	31	31	20'-7"	H	32	32	32	32	23'-5"	H	33	33	33	33
	8	4'-5"	18'-0"	H	31	31	31	31	20'-2"	H	32	32	32	32	22'-11"	H	34	34	34	34
	8.5	4'-2"	17'-5"	H	31	31	31	31	19'-9"	H	33	33	33	33	22'-5"	I	34	34	34	34
	9	3'-11"	16'-10"	H	31	31	31	31	19'-4"	H	33	33	33	33	22'-0"	J	34	34	34	34
	9.5	3'-9"	16'-4"	H	32	32	32	32	18'-10"	H	33	33	33	33	21'-6"	J	35	35	35	35
	10	3'-6"	15'-10"	H	32	32	32	32	18'-4"	H	34	34	34	34	21'-2"	J	35	35	35	35
	10.5	3'-4"	15'-5"	H	32	32	32	32	17'-10"	I	34	34	34	34	20'-11"	J	36	36	36	36
	11	3'-2"	15'-0"	H	32	32	32	32	17'-5"	I	34	34	34	34	20'-7"	J	36	36	36	36
	11.5	3'-1"	14'-8"	H	33	33	33	33	17'-0"	J	34	34	34	34	20'-3"	J	36	36	36	36
110 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
20	5	7'-1"	21'-3"	G	31	31	33	35	22'-9"	H	32	32	34	36	25'-9"	H	34	34	34	35
	5.5	6'-5"	20'-1"	H	32	32	33	35	21'-11"	H	33	33	33	35	24'-11"	H	34	34	34	35
	6	5'-11"	19'-10"	H	33	33	33	35	21'-4"	H	33	33	33	35	24'-3"	H	35	35	35	35
	6.5	5'-6"	18'-11"	H	33	33	33	34	20'-8"	H	34	34	34	35	23'-7"	H	36	36	36	36
	7	5'-1"	18'-2"	H	33	33	33	34	20'-3"	H	35	35	35	35	23'-0"	H	36	36	36	36
	7.5	4'-9"	17'-8"	H	34	34	34	34	19'-6"	H	35	35	35	35	22'-6"	I	37	37	37	37
	8	4'-5"	16'-11"	H	34	34	34	34	19'-4"	H	36	36	36	36	22'-0"	J	37	37	37	37
	8.5	4'-2"	16'-4"	H	34	34	34	34	18'-10"	H	36	36	36	36	21'-7"	J	38	38	38	38
	9	3'-11"	15'-10"	H	35	35	35	35	18'-3"	I	36	36	36	36	21'-2"	J	38	38	38	38
	9.5	3'-9"	15'-4"	H	35	35	35	35	17'-8"	I	37	37	37	37	20'-10"	J	39	39	39	39
	10	3'-6"	14'-10"	H	35	35	35	35	17'-3"	J	37	37	37	37	20'-5"	J	39	39	39	39
	10.5	3'-4"	14'-5"	H	35	35	35	36	16'-10"	J	37	37	37	37	20'-1"	J	40	40	40	40
	11	3'-2"	14'-1"	H	36	36	36	36	16'-5"	J	38	38	38	38	19'-10"	J	40	40	40	40
	11.5	3'-1"	13'-9"	H	36	36	36	36	16'-0"	J	38	38	38	38	19'-4"	J	40	40	40	40
	12	2'-11"	13'-4"	H	36	36	36	36	15'-8"	J	38	38	38	38	19'-3"	J	41	41	41	41
115 MPH EXPOSURE B																				
30	5	5'-6"	20'-6"	G	29	29	31	33	22'-2"	H	29	29	31	33	25'-2"	H	30	30	31	33
	5.5	5'-2"	20'-6"	H	29	29	31	32	21'-5"	H	30	30	31	33	24'-4"	H	31	31	31	33
	6	4'-9"	19'-1"	H	30	30	30	32	20'-10"	H	30	30	31	33	23'-6"	H	32	32	32	32
	6.5	4'-4"	18'-3"	H	30	30	30	32	20'-3"	H	31	31	31	33	23'-1"	H	32	32	32	32
	7	4'-1"	17'-6"	H	30	30	30	32	19'-8"	H	31	31	31	32	22'-6"	I	33	33	33	33
	7.5	3'-9"	16'-10"	H	31	31	31	31	19'-4"	H	32	32	32	32	22'-5"	J	33	33	33	33
	8	3'-6"	16'-3"	H	31	31	31	31	18'-9"	H	32	32	32	32	21'-6"	J	34	34	34	34
	8.5	3'-4"	15'-8"	H	31	31	31	31	18'-2"	H	33	33	33	33	21'-1"	J	34	34	34	34
	9	3'-2"	15'-3"	H	31	31	31	31	17'-7"	I	33	33	33	33	20'-8"	J	35	35	35	35
	9.5	3'-0"	14'-8"	H	32	32	32	32	17'-1"	J	33	33	33	33	20'-4"	J	35	35	35	35
	10	2'-10"	14'-3"	H	32	32	32	32	16'-8"	J	33	33	33	33	19'-11"	J	36	36	36	36
	10.5	2'-8"	13'-10"	H	32	32	32	32	16'-2"	J	34	34	34	34	19'-6"	J	36	36	36	36
115 MPH EXPOSURE C or 130 MPH EXPOSURE B																				
30	5	5'-6"	20'-6"	H	32	32	33	35	21'-5"	H	32	32	31	36	24'-4"	H	34	34	34	36
	5.5	5'-2"	19'-8"	H	32	32	33	35	20'-6"	H	33	33	34	36	23'-7"	H	35	35	35	35
	6	4'-9"	18'-1"	H	33	33	33	35	20'-7"	H	34	34	34	35	22'-11"	I	35	35	35	36
	6.5	4'-4"	17'-4"	H	33	33	33	34	19'-7"	H	34	34	34	35	22'-4"	J	36	36	36	36
	7	4'-1"	16'-7"	H	33	33	33	34	19'-1"	H	35	35	35	35	21'-8"	J	37	37	37	37
	7.5	3'-9"	16'-0"	H	34	34	34	34	18'-5"	H	36	35	35	35	21'-3"	J	37	37	37	37
	8	3'-6"	15'-5"	H	34	34	34	34	17'-10"	H	36	36	36	36	20'-10"	J	38	38	38	38
	8.5	3'-4"	14'-10"	H	34	34	34	34	17'-3"	I	36	36	36	36	20'-5"	J	38	38	38	38
	9	3'-2"	14'-4"	H	35	35	35	35	16'-9"	I	36	36	36	36	20'-0"	J	39	39	39	39

TABLE 5.2 TRIBUTARY WIDTHS FOR SINGLE SPAN ATTACHED STRUCTURES

PROJECTION OF SINGLE SPAN STUCTURES (FT)

OVERHANG (FT)	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'	17'	18'	19'	20'	21'	22'
0'	3'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'
1'	3.5'	4'	4.5'	5'	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'
2'	n/a	n/a	n/a	5.5'	6'	6.5'	7'	7.5'	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'
3'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	8'	8.5'	9'	9.5'	10'	10.5'	11'	11.5'	12'	12.5'
4'	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	10.5'	11'	11.5'	12'	12.5'	13'

TABLE 5.3 Post Requirements for Attached Single Span Structures

Post Description	Max Hgt	POST Code	Detail
Twin 0.032"x1.5"x1.5" Scroll	8'	A	MU100
Twin 0.062"x1.5"x1.5" Scroll	9'	B	MU100
0.024"x3"x3" Post w/ Sideplate	10'	C	MU112
Alum 0.032"x3"x3" Lockseam	11'	D	MU98
Alum 0.040"x3"x3" Lockseam	11'	E	MU89
Alum 0.066"x3"x3" Fluted	12'	F	MU95
Alum 0.075"x3"x3" Square	12'	G	MU48
Steel 0.043"x3"x3" Lockseam	12'	H	MU38
Alum 0.120"x3"x3" Square	12'	I	MU96
Steel 0.043"x3"x3" Lockseam	12'	J	MU89
Alum 0.120"x4"x4" Square	12'	K	MU50
3/16"x3"x3" Steel Square	12'	L	MU93

TABLE 5.4 Post Requirements for Freestanding Structures or Multispan Attached Structures

Post Description	Maximum Footing	Max Height	POST Code	Detail #
Steel 0.043"x3"x3" Lockseam	d= 20"	8'	C	MU89
Steel 0.043"x3"x3" Lockseam	d= 22"	8'	B	MU89
Alum 0.120"x3"x3" Square	d= 25"	8'	D	MU96
Alum 0.120"x3"x3" Square	d= 27"	8'	B	MU96
Alum 0.120"x4"x4" Square	d= 28"	8'	E	MU50
3/16"x3"x3" Steel Square	d= 29"	13'	F	MU93
Alum 0.120"x4"x4" Square	d= 32"	10'	E	MU50
3/16"x3"x3" Steel Square	d= 32"	10'	G	MU93
3/16"x4"x4" Steel Square	d= 36"	14'	I	MU93
3/16"x4"x4" Steel Square	d= 36"	10'	J	MU93
3/16"x5"x5" Steel Square	d= 42"	14'	K	MU93
3/16"x6"x6" Steel Square	d= 47"	15'	L	MU93

GENERAL INSTRUCTIONS FOR THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED STRUCTURE
2. CHOOSE PROJECTION, WIDTH AND OVERHANG OF UNIT
3. DETERMINE WIND AND LIVE OR SNOW LOAD OF STRUCTURE SITE (PATIO UNITS USE 10 PSF MIN, COMMERCIAL UNITS USE 20PSF MIN)
4. CHOOSE A PANEL FROM SECTION 4.0 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS
5. DETERMINE TRIBUTARY WIDTH FROM TABLE 5.2 OR CALCULATE FROM TRIBUTARY DIAGRAM ON PAGE 1
6. CHOOSE A HEADER FROM TABLE 5.17 THAT HAS ADEQUATE POST SPACING.
7. USE THE APPROPRIATE FOOTER SIZE SHOWN IN TABLE 5.17
8. FOR SINGLE SPAN ATTACHED UNIT USE THE POST SHOWN IN TABLE 5.17 AND 5.3 UPGRADE THE POST IF THE HEIGHT IS NOT SUFFICIENT FREESTANDING AND MULTISPAN UNITS USE TABLE 5.4
9. FIND THE O/C SPACING OR # OF FASTENERS FOR ATTACHING TO WALL FROM TABLE 7.5 OR TABLE 7.7
10. USE THE APPROPRIATE DETAILS

FOR PATIO SLABS FOLLOW 1-6 FROM ABOVE THEN

SLAB 7. DETERMINE MAXIMUM POST SPACING ON SLAB FROM TABLE 5.17

SLAB 8. USE THE SMALLER OF THE POST SPACING ON SLAB OR HEADER POST SPACING

SLAB 9. FOLLOW 9-10 FROM ABOVE

SLAB 10. FOR TWO POST STRUCTURES USE TABLE 7.1 ON SHEET Misc3 FOR SLAB REQUIREMENTS INSTEAD OF THESE TABLES

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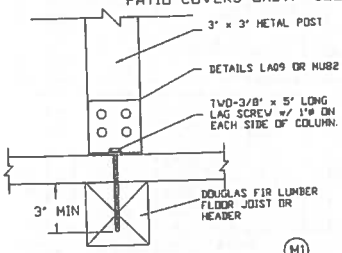
ATTACHMENT TO WOODEN DECK FOR SINGLE SPAN ATTACHED PATIO COVERS ONLY. SEE GENERAL NOTE #24



ATTACHED STRUCTURE POST TO DECK FLOOR JOIST

M1

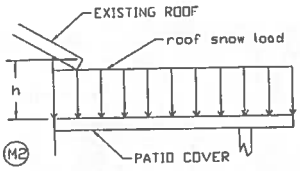
POST SPACING RESTRICTING SLAB SACING AS SHOWN IN SECTIONS 2.0, 3.0, 5.9 AND 6.0

THESE ADDITIONAL RESTRICTIONS APPLY:

MAXIMUM WIND SPEED IS
SOLID COVERS
FOR 10 PSF LIVE/SNOW LADD
150 MPH EXP B
130 MPH EXP C

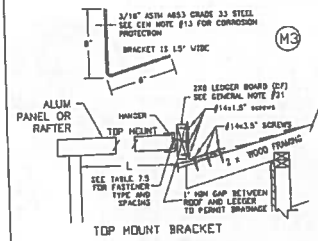
FOR 20 PSF AND GREATER LIVE/SNOW LADD
140 MPH EXP C

FOR LATTICE COVERS, ALL SNOW/LIVE LOADS
160 MPH EXP C



STRUCTURES COMPLYING WITH THIS DETAIL DO NOT REQUIRE ADDITIONAL DRIFTING SNOW CONSIDERATIONS

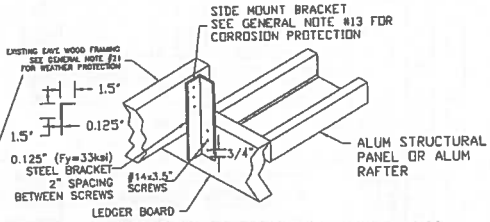
GROUND SNOW LOAD (PSF)	MAXIMUM "h" (IN)
20	17
25	18
30	20
40	25
50	30
60	33



TOP MOUNT BRACKET

ALTERNATIVE EAVE ATTACHMENT
EAVE OVERHANG AND "L" MUST ALSO COMPLY WITH DETAIL MU107 OR LA32

NOT ALLOWED IN SNOW LOAD AREAS
MAX WIND LOAD IS 140 MPH EXP C



Live Load (psf)	Wind Speed and Exposure	MAX "L" FOR TOP OR SIDE MOUNT			
		16" o/c	24"o/c	16" o/c	24"o/c
10	130 mph Exp B	23'-8"	16'-10"	23'-8"	16'-10"
	140 mph Exp B	21'-10"	14'-7"	23'-8"	16'-10"
	110 mph Exp C	23'-8"	16'-10"	23'-8"	16'-10"
	115 mph Exp C	23'-1"	16'-4"	23'-8"	16'-10"
	130 mph Exp C	18'-4"	12'-3"	23'-8"	16'-10"
	140 mph Exp C	16'-0"	10'-8"	23'-8"	16'-10"
20	140 mph Exp C	12'-6"	8'-3"	12'-6"	8'-3"
		Solid Covers		Lattice Covers	

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THESE DETAILS ARE APPLICABLE TO SOLID OR LATTICE COVERS

Revisions

METALS
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METALS BUILDING PRODUCTS
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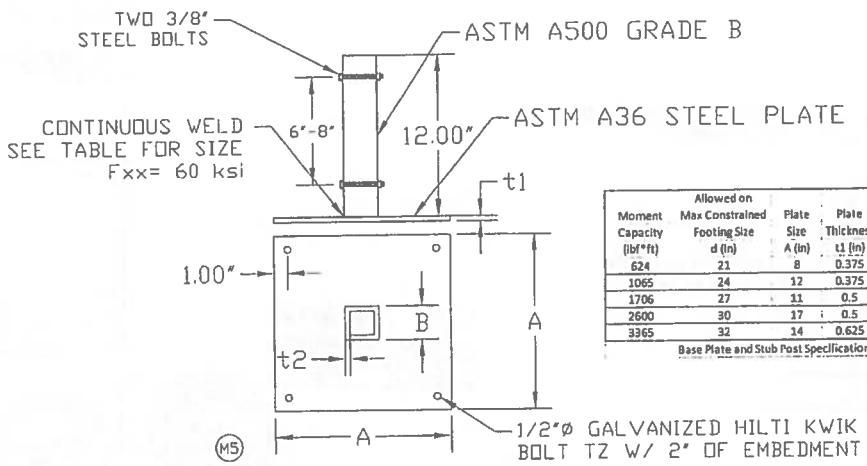

Moment Capacity (lbf*ft)	Allowed on Max Constrained Footing Size d (in)	Plate Size A (in)	Plate Thickness t1 (in)	Stub Post Size B (in)	Stub Post Size t2 (in)	Minimum Weld Size (in)
624	21	8	0.375	2.5	0.125	0.125
1065	24	12	0.375	2.5	0.125	0.125
1706	27	11	0.5	2.5	0.125	0.125
2600	30	17	0.5	2.5	0.188	0.188
3365	32	14	0.625	2.5	0.25	0.25

Base Plate and Stub Post Specifications

WELDED MOMENT RESISTING STEEL BASE PLATE
ALTERNATIVE TO POST EMBEDMENT IN CONCRETE FOOTING
THE WELDED POST BRACKET MUST BE VERIFIED TO
COMPLY WITH THE REQUIREMENTS IN DETAIL M5 OF THESE
PLANS AND FABRICATED IN ACCORDANCE W/ SECTION
1704.2.5.2 BY AN APPROVED FABRICATOR TO THE
SATISFACTION OF THE CODE OFFICIAL

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68/38 EXP. 6-30-2014 CIVIL STATE OF CALIFORNIA

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Revisions

METALS
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METALS BUILDING PRODUCTS
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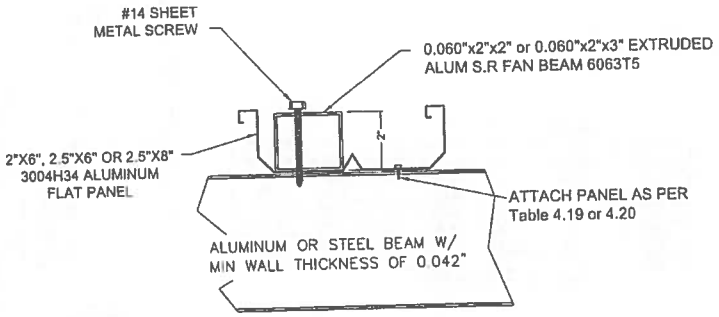
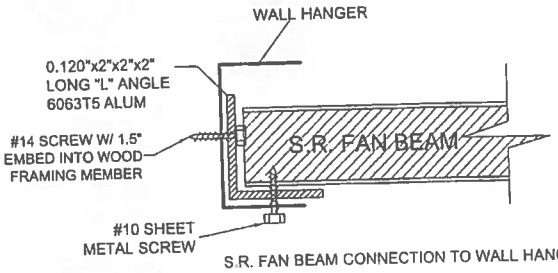
1. CONFORMANACE TO THE APPLICABLE ELECTRICAL CODE IS OUTSIDE THE SCOPE OF THIS DETAIL AND MUST BE APPROVED SEPERATELY.
2. MAXIMUM FAN WEIGHT IS 30 LBF.

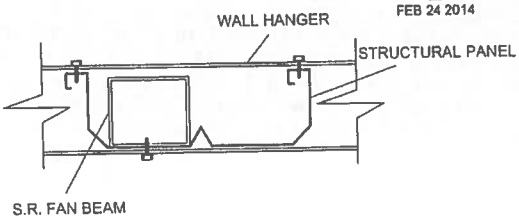


S.R. FAN BEAM CONNECTION TO HEADER

FAN BEAM	Allowable Fan Beam Spans
0.060"x2"x2"	14'-9"
0.060"x2"x3"	17'-5"



S.R. FAN BEAM CONNECTION TO WALL HANGER



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PROFESSIONAL ENGINEER No. 3560905 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

Reserved for Engineer Seal

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Project	Sheet
Date 2-24-14	MISC2
Scale NOTED	

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EXC. 5/5/09

ICC ESR 1953 (2012 IBC) 2/24/2014

7.0 POST AND FASTENER REQUIREMENTS FOR COMMERCIAL AND PATIO STRUCTURES

Trib Width (ft)	Allowable Width for Attached Two Post Structures on Slab — Live or Ground Snow Load 10 psf	20 psf
3	42'-10"	22'-7"
3.5	36'-8"	19'-4"
4	32'-1"	16'-11"
4.5	28'-6"	15'-1"
5	25'-9"	13'-6"
5.5	23'-4"	12'-4"
6	21'-5"	11'-3"
6.5	19'-9"	10'-5"
7	18'-4"	n/a
7.5	17'-1"	n/a
8	16'-0"	n/a
8.5	15'-1"	n/a
9	14'-3"	n/a

Table 7.1

POST CODE	POST DESCRIPTIONS	DETAIL	MAX POST HGHT
A	Twin 0.032"x1.5"x1.5" Scroll	MU100	6'
B	Twin 0.062"x1.5"x1.5" Scroll	MU100	9'
C	0.024"x3"x3" Post w/ Sideplates	MU112	12'
D	Alum 0.032"x3"x3" Lockseam	MU89	11'
E	Alum 0.043"x3"x3" Lockseam	MU89	11'
F	Alum 0.065"x3"x3" Fluted	MU95	10'
G	Alum 0.075"x3"x3" Square	MU49	10'
H	Steel 0.043"x3"x3" Lockseam	MU89	12'
I	Alum 0.120"x3"x3" Square	MU98	10'
J	Steel 0.043"x3"x3" Lockseam	MU89	10'
K	Alum 0.120"x4"x4" Square	MU53	12'
L	3/16"x3"x3" Steel Square	MU93	14'

Table 7.2

Table 7.3: Required Number of Fasteners for Shearing Loads

	Footer Size d (in)	Design Uplift (lbs)	Aluminum Material Gage (in) 0.024	0.024	0.032	0.036	0.040	0.045	0.060	0.080	Steel Gage (in) 0.043	0.043
			A	B	C	D	E	F	G	H	I	J
			#14 SMS	3/8" B BOLT	3/8" B BOLT	#14 SMS	#14 SMS	3/8" B BOLT	#14 SMS	3/8" B BOLT	#14 SMS	3/8" B BOLT
			[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	12	90	1	1	1	1	1	1	1	1	1	1
	13	114	1	1	1	1	1	1	1	1	1	1
	14	143	2	1	1	1	1	1	1	1	1	1
	15	176	2	1	1	1	1	1	1	1	1	1
	16	213	2	1	1	2	2	1	1	1	1	1
	17	255	2	1	1	2	2	1	1	1	1	1
	18	304	3	1	1	2	2	1	1	1	1	1
	19	357	3	1	1	2	2	1	2	1	1	1
20 psf Slab 115C	20	463	4	1	1	3	3	1	2	1	1	1
	21	482	4	1	1	3	3	1	2	1	1	1
	22	555	6	1	1	3	3	1	2	1	2	1
	23	634	5	2	1	4	4	1	3	1	2	1
10 psf Slab 115B	24	800	7	2	2	5	4	2	3	1	2	1
	25	814	7	2	2	5	4	2	3	1	2	1
	26	915	8	2	2	5	5	2	3	1	2	1
10 psf Slab 115C	27	1139	8	2	2	6	6	2	4	1	3	1
	28	1143	9	2	2	6	6	2	4	1	3	1
	29	1270	n/a	3	2	7	7	2	5	1	3	1
	30	1406	n/a	3	2	8	7	2	5	2	3	1
	31	1552	n/a	3	2	9	8	3	6	2	4	2
	32	1707	n/a	3	3	9	9	3	6	2	4	2
	33	1872	n/a	4	3	n/a	9	3	7	2	4	2
	34	2047	n/a	4	3	n/a	n/a	3	7	2	5	2
	35	2233	n/a	4	3	n/a	n/a	4	8	2	5	2
	36	2430	n/a	5	4	n/a	n/a	4	8	2	5	2
	37	2638	n/a	5	4	n/a	n/a	4	9	2	6	2
	38	2858	n/a	5	4	n/a	n/a	5	n/a	3	6	2
	39	3090	n/a	6	4	n/a	n/a	5	n/a	3	7	3
	40	3333	n/a	6	5	n/a	n/a	5	n/a	3	7	3
	41	3590	n/a	7	5	n/a	n/a	6	n/a	3	8	3
	42	3859	n/a	7	5	n/a	n/a	6	n/a	3	8	3
	43	4141	n/a	8	6	n/a	n/a	6	n/a	3	9	3
	44	4437	n/a	8	6	n/a	n/a	7	n/a	4	9	3
	45	4746	n/a	9	7	n/a	n/a	7	n/a	4	n/a	4
	46	5070	n/a	9	7	n/a	n/a	8	n/a	4	n/a	4
	47	5407	n/a	n/a	7	n/a	n/a	8	n/a	4	n/a	4
	48	5760	n/a	n/a	8	n/a	n/a	9	n/a	5	n/a	4
	49	6128	n/a	n/a	8	n/a	n/a	9	n/a	5	n/a	5
	50	6510	n/a	n/a	9	n/a	n/a	n/a	n/a	5	n/a	5

Table 7.4: Required Number of Fasteners for Tension Loads

Aluminum Gage (in) 0.036	0.06	0.060	0.090	0.100	Design Uplift (lbs)	Footer Size d (in)
K	L	M	N	O		
3/8" B BOLT	#14 SMS	3/8" B BOLT	3/8" B BOLT	#14 SMS		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
1	1	1	1	1	90	12
1	1	1	1	1	114	13
2	2	1	1	1	143	14
2	2	1	1	1	176	15
2	2	2	1	2	213	16
3	2	2	1	2	256	17
3	3	2	2	2	304	18
3	3	2	2	2	357	19
4	4	3	2	3	403	20
4	4	3	2	3	482	21
5	5	3	3	3	555	22
6	5	4	3	3	634	23
7	7	5	3	4	800	24
7	7	5	4	4	814	25
8	7	5	4	5	915	26
n/a	9	6	5	6	1139	27
n/a	9	6	5	6	1143	28
n/a	n/a	7	5	6	1270	29
n/a	n/a	8	6	7	1406	30
n/a	n/a	9	6	8	1552	31
n/a	n/a	9	7	8	1707	32
n/a	n/a	n/a	7	8	1872	33
n/a	n/a	n/a	8	n/a	2047	34
n/a	n/a	n/a	8	n/a	2233	35
n/a	n/a	n/a	n/a	n/a	2430	36
n/a	n/a	n/a	n/a	n/a	2638	37
n/a	n/a	n/a	n/a	n/a	2858	38
n/a	n/a	n/a	n/a	n/a	3090	39
n/a	n/a	n/a	n/a	n/a	3333	40
n/a	n/a	n/a	n/a	n/a	3590	41
n/a	n/a	n/a	n/a	n/a	3859	42
n/a	n/a	n/a	n/a	n/a	4141	43
n/a	n/a	n/a	n/a	n/a	4437	44
n/a	n/a	n/a	n/a	n/a	4746	45
n/a	n/a	n/a	n/a	n/a	5070	46
n/a	n/a	n/a	n/a	n/a	5407	47
n/a	n/a	n/a	n/a	n/a	5760	48
n/a	n/a	n/a	n/a	n/a	6128	49
n/a	n/a	n/a	n/a	n/a	6510	50

Fastener Terminology
#14 SMS = #14 sheet metal or SDS screw, 1/2" minimum length
3/8" B = 3/8" Diameter Bolt
See General Notes for specifics on fasteners

1. Clearspan on this chart is the distance from the wall to the first row of columns.
2. Hilti Kwik Bolt TZ 3/8" diameter and 2" embed and 1" dia steel washer ICC ESR 1917 or othe anchor w/ 300# allowable shear and 200# allowable tensile vs live snow, wind and seismic loads.
3. Masonry anchors must have an allowable shear value of 300# and 200# tensile for live, snow, wind or seismic loads or be specified by a design professional.
4. #14 screws must have 1.5" of penetration into solid wood.
5. 1/4" Lag screws must have 2 1/4" of penetration into studs and 0.5" washers. These lag screws must be installed as per AFP&A NDS Section 11.1.3. See General Note #19 for washer specifications.
6. 10 and 20 psf are live or snow loads, 25- 60 psf are snow loads.
7. For ANC3 and ANC4 wood framing must be SG=0.5 or denser (Douglas Fir-Larch

TABLE 7.5: WALL ATTACHMENTS FOR SOLID COVER STRUCTURES

WIND SPEED (MPH) AND EXPOSURE	LIVE/ SNOW LOAD (PSF)	ANC 1: O/C SPACING CONCRETE ANCHORS	ANC 2: O/C SPACING MASONRY ANCHORS	PANEL SPAN (FT)	ANC 3: NUMBER OF FASTENERS PER STUD @ 16" O/C SPACING — #14 X 2" SCREWS	ANC 4: 1/4" LAG SCREWS
140 B	10	12"	10"	17'	1	1
115 C	LIVE			24'	2	2
140 B	20	9"	7"	13'	2	2
140 C	LIVE		7"	20'	3	3
	25	9"	7"	13'	2	2
			7"	20'	3	3
	30	9"	7"	12'	2	2
				18'	3	3
	40	9"	7"	14'	3	3
	60	8"	7"	8'	3	3

1. Spacing between bolts and screws shall be 2.5 times the shank diameter
2. The edge distance of bolts and screws shall be 3 times the shank diameter
3. Connections shall be arranged so that the center of resistance of the connection shall coincide with the resultant line of action of the load

TABLE 7.6: WALL ATTACHMENTS FOR LATTICE COVERS

GRND SNOW LOAD (PSF)	Wind Speed and Exposure	# of Screws* per Rafter	ALUMINUM RAFTER SPACING 12"	16"	24"	32"	36"
			MAXIMUM ALUMINUM RAFTER SPAN				
10 LIVE	140 Exp B	2	26'	26'	24'	16'	16'
	115 Exp C	3	26'	26'	26'	26'	24'
20 LIVE	170 Exp B	2	18'	18'	12'	9'	8'
	160 Exp C	3	18'	18'	18'	14'	12'
		4	18'	18'	18'	18'	16'
25		2	18'	16'	13'	10'	8'
		3	18'	18'	18'	15'	13'
		4	18'	18'	18'	18'	18'
30	170 Exp C	2	17'	17'	11'	8'	7'
		3	17'	17'	17'	13'	11'
		4	17'	17'	17'	17'	15'
40		2	15'	13'	8'	6'	5'
		3	15'	15'	13'	9'	8'
		4	15'	15'	15'	13'	11'
60		2	11'	8'	5'	4'	3'
		3	12'	12'	8'	6'	5'

*Screws are #14 screws w/ 1.5" embedment into G=0.5 solid wood (Douglas Fir

TABLE 7.7 STUCCO ATTACHMENT TO WALL
ALLOWABLE DISTANCE TO FIRST ROW OF POSTS

Ground Snow Load (psf)		16" o/c 2 Lag	16" o/c 3 Lags	24" o/c 3 Lags	24" o/c 4 Lags	Exp B	Exp C
Live	10	13'-6"	20'-2"	13'-6"	18'	130 mph	N/A
Live	10	13'	18'-6"	13'	17'-4"	140 mph	115 mph
Live	10	10'-9"	15'-1"	10'-9"	14'-4"		130 mph
Live	10	9'-3"	13'-10"	9'-3"	12'-4"		140 mph
Live	20	7'-1"	10'-7"	7'-1"	9'-5"		140 mph
	25	7'-8"	11'-7"	7'-8"	10'-3"		140 mph
	30	6'-8"	9'-9"	6'-8"	8'-8"		140 mph
	40	4'-10"	7'-5"	4'-10"	6'-7"		140 mph
	60	3'-4"	5'	3'-4"	4'-5"		140 mph

Lag = 1/4" Lag Screw with 2.25" penetration into G=0.5 wood (Douglas Fir)
Lattice Structures always use 115 mph Exposure B for the wind condition

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PROFESSIONAL ENGINEER No. 6860906-2202 CARL PUTNAM STATE OF UTAH

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7.0 CONCRETE FOOTING OPTIONS

EQUIVALENT FOOTINGS FOR FREESTAND AND ATTACHED					
CONSTRAINED FOOTING (IN)	NON CONSTRAINED FOOTING (IN)	DIAMETER OF CIRCULAR FOOTINGS (IN)			
		12"	18"	24"	36"
		DEPTH OF CIRCULAR FOOTINGS (IN)			
14"	17"	24"	14"	14"	14"
15"	18"	30"	15"	15"	15"
16"	19"	36"	16"	16"	16"
17"	21"	43"	19"	17"	17"
18"	22"	52"	23"	18"	18"
19"	23"	61"	27"	19"	19"
20"	24"	n/a	31"	20"	20"
21"	26"	n/a	36"	21"	21"
22"	27"	n/a	42"	24"	22"
23"	28"	n/a	48"	27"	23"
24"	30"	n/a	54"	31"	24"
25"	31"	n/a	61"	35"	25"
26"	32"	n/a	69"	39"	26"
27"	34"	n/a	77"	44"	27"
28"	35"	n/a	86"	49"	28"
29"	36"	n/a	n/a	54"	29"
30"	38"	n/a	n/a	60"	30"
31"	39"	n/a	n/a	66"	31"
32"	40"	n/a	n/a	72"	32"
33"	42"	n/a	n/a	79"	35"
34"	43"	n/a	n/a	87"	39"
35"	44"	n/a	n/a	95"	42"
36"	46"	n/a	n/a	103"	46"
37"	47"	n/a	n/a	112"	50"
38"	48"	n/a	n/a	n/a	54"
39"	50"	n/a	n/a	n/a	58"
40"	51"	n/a	n/a	n/a	63"
41"	53"	n/a	n/a	n/a	68"
42"	54"	n/a	n/a	n/a	73"
43"	55"	n/a	n/a	n/a	78"
44"	57"	n/a	n/a	n/a	84"

TABLE 7.8

CONVERSION TO SQUARE TOP FOOTING

	For Single Span Attached Footings Only			
	Footing Depth			
	18"	24"	30"	36"
d (in)	Required Side of Square Footing			
20"	21"	18"	16"	15"
21"	23"	20"	18"	16"
22"	24"	21"	19"	17"
23"	26"	23"	20"	18"
24"	28"	24"	21"	20"
25"	29"	26"	23"	21"
26"	31"	27"	24"	22"
27"	33"	29"	26"	23"
28"	35"	30"	27"	25"
29"	37"	32"	29"	26"
30"	39"	34"	30"	27"
31"	41"	35"	32"	29"
32"	43"	37"	33"	30"
33"	45"	39"	35"	32"
34"	47"	40"	36"	33"
35"	49"	42"	38"	35"
36"	51"	44"	39"	36"
37"	53"	46"	41"	38"
38"	55"	48"	43"	39"
39"	57"	50"	44"	41"
40"	60"	52"	46"	42"
41"	N/A	54"	48"	44"
42"	N/A	56"	50"	45"
43"	N/A	58"	51"	47"
44"	N/A	60"	53"	49"
45"	N/A	N/A	55"	50"
46"	N/A	N/A	57"	52"
47"	N/A	N/A	59"	54"
48"	N/A	N/A	N/A	55"
49"	N/A	N/A	N/A	57"
50"	N/A	N/A	N/A	59"

TABLE 7.9

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Lynchburg, VA 24503

SITE SPECIFIC FOOTING TABLE
for SINGLE SPAN Attached Structures

Trib Area (sq ft)	Wind Condition 115 mph Exp B	115 mph Exp C	140 mph Exp C	Lattice Trib Area (sq ft)
	Required "d" of Footing (in)			
15	15"	17"	20"	25
20	17"	19"	21"	33
25	18"	20"	23"	42
30	19"	21"	25"	50
35	20"	23"	26"	58
40	21"	24"	27"	67
45	22"	25"	28"	75
50	23"	25"	29"	83
55	23"	26"	30"	92
60	24"	27"	31"	100
65	25"	28"	32"	108
70	25"	28"	33"	117
80	26"	30"	34"	133
90	27"	31"	35"	150
100	28"	32"	37"	167
110	29"	33"	38"	183
120	30"	34"	39"	200
130	31"	35"	40"	217
140	32"	36"	41"	233
150	33"	37"	42"	250
160	33"	37"	43"	267
170	34"	38"	44"	283
180	35"	39"	45"	300
190	35"	40"	45"	317
200	36"	40"	46"	333
210	36"	41"	47"	350
220	37"	42"	48"	367
230	38"	42"	48"	383
240	38"	43"	49"	400

TABLE 7.10

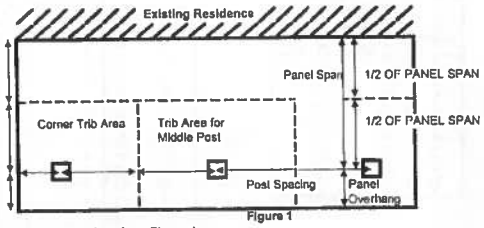

Figure 1

Determine Trib Area from Figure 1

INSTRUCTIONS TO USE TABLE 7.10
1. TABLE IS FOR SINGLE SPAN ATTACHED UNITS ONLY
2. DETERMINE ACTUAL TRIBUTARY AREA
   FOR MIDDLE POSTS THIS IS:
   TRIB WIDTH x POST SPACING
   FOR END POSTS THIS IS:
   (OVERHANG+ HALF OF POST SPACING) x TRIB WIDTH
3. DETERMINE FOOTING SIZE FOR WIND CONDITION
4. FOR LATTICE USE LAST COLUMN FOR TRIB AREA

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REGIONAL ENGINEER 1800906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

7.0 Requirements for Surface Mounted Posts on Concrete Slabs or Footings for Single Span Attached Lattice Structur

REQUIRED NUMBER OF POSTS FOR SINGLE SPAN LATTICE UNITS WITH SURFACE MOUNTED POSTS ON CONCRETE SLABS OR FOOTINGS

Table L1a: Use this table for the following header
Moment Frame A = 367 lbf*ft

Wind Speed	Required Number of Posts	Post Height (ft) 8'	9'	10'	11'	12'	8'	9'	10'	11'	12'
		Wind Exposure B					Wind Exposure C				
		MAXIMUM TRIBUTARY WIDTH ALLOWED									
110 mph	2 or 3	7'	5.5'	4'	3'	2'	4'	2.5'	1.5'	1'	0'
	4	12'	10'	8'	6.5'	5.5'	7'	5.5'	4.5'	3'	2'
	5	15'	14'	12'	10'	8.5'	10.5'	8.5'	7'	5.5'	4.5'
	6	15'	15'	15'	13.5'	11.5'	13.5'	11.5'	9.5'	8'	6.5'
	7	15'	15'	15'	15'	15'	15'	14'	12'	10'	8.5'
115 mph	2 or 3	6'	5'	3.5'	2.5'	1.5'	3.5'	2'	1.5'	0.5'	0'
	4	10.5'	8.5'	7'	5.5'	4.5'	6.5'	5'	3.5'	2.5'	1.5'
	5	15'	12.5'	10.5'	9'	7.5'	9'	7.5'	6'	4.5'	3.5'
	6	15'	15'	14'	12'	10.5'	12'	10'	8.5'	7'	5.5'
	7	15'	15'	15'	15'	13'	15'	12.5'	10.5'	9'	7.5'
130 mph	2 or 3	4.5'	3'	2'	1'	0.5'	2'	1'	0.5'	0'	0'
	4	7.5'	6'	5'	3.5'	2.5'	4.5'	3'	2'	1'	0.5'
	5	11'	9'	7.5'	6'	5'	6.5'	5'	4'	3'	2'
	6	14.5'	12'	10.5'	8.5'	7'	9'	7'	6'	4.5'	3.5'
	7	15'	15'	13'	11'	9.5'	11.5'	9.5'	7.5'	6'	5'
140 mph	2 or 3	3.5'	2.5'	1.5'	0.5'	0'	1.5'	0.5'	0'	0'	0'
	4	6.5'	5'	3.5'	2.5'	1.5'	3.5'	2.5'	1.5'	0.5'	0'
	5	9.5'	7.5'	6'	4.5'	3.5'	5.5'	4'	3'	2'	1'
	6	12.5'	10'	8.5'	7'	5.5'	7.5'	6'	4.5'	3.5'	2.5'
	7	15'	13'	10.5'	9'	7.5'	9.5'	7.5'	6'	5'	3.5'
150 mph	2 or 3	2.5'	1.5'	0.5'	0'	0'	1'	0'	0'	0'	0'
	4	5'	4'	3'	2'	1'	2.5'	1.5'	0.5'	0'	0'
	5	8'	6'	5'	3.5'	2.5'	4.5'	3'	2'	1'	0.5'
	6	10.5'	8.5'	7'	5.5'	4.5'	6'	4.5'	3.5'	2.5'	1.5'
	7	13'	10.5'	9'	7.5'	6'	8'	6'	5'	3.5'	2.5'
170 mph	2 or 3	1.5'	0.5'	0'	0'	0'	0'	0'	0'	0'	0'
	4	3.5'	2.5'	1.5'	0.5'	0'	1.5'	0.5'	0'	0'	0'
	5	5.5'	4'	3'	2'	1'	3'	2'	1'	0'	0'
	6	7.5'	6'	4.5'	3.5'	2.5'	4'	3'	2'	1'	0'
	7	9.5'	7.5'	6'	5'	4'	5.5'	4'	3'	2'	1'

Table L1b: Use this table for the following header
Moment Frame B = 489 lbf*ft

Wind Speed	Required Number of Posts	Post Height (ft) 8'	9'	10'	11'	12'	8'	9'	10'	11'	12'
		Wind Exposure B					Wind Exposure C				
		MAXIMUM TRIBUTARY WIDTH ALLOWED									
110 mph	2 or 3	10'	8.5'	7'	5.5'	4'	6'	4.5'	3.5'	2.5'	1.5'
	4	15'	14'	12'	10'	8.5'	10.5'	8.5'	7'	5.5'	4.5'
	5	15'	15'	15'	14.5'	12.5'	14.5'	12'	10'	8.5'	7'
	6	15'	15'	15'	15'	15'	15'	15'	13.5'	11.5'	10'
	7	15'	15'	15'	15'	15'	15'	15'	15'	14.5'	13'
115 mph	2 or 3	9'	7.5'	6'	4.5'	3.5'	5.5'	4'	3'	2'	1'
	4	15'	12.5'	10.5'	9'	7.5'	9'	7.5'	6'	4.5'	3.5'
	5	15'	16'	15'	13'	11'	13'	11'	9'	7.5'	6'
	6	15'	15'	15'	15'	15'	15'	14.5'	12'	10.5'	8.5'
	7	15'	15'	15'	15'	15'	15'	15'	15'	13'	11.5'
130 mph	2 or 3	6.5'	5'	4'	3'	2'	3.5'	2.5'	1.5'	0.5'	0'
	4	11'	9'	7.5'	6'	5'	6.5'	5'	4'	3'	2'
	5	15'	13'	11'	9.5'	8'	9.5'	8'	6.5'	5'	4'
	6	15'	15'	15'	12.5'	11'	13'	10.5'	9'	7.5'	6'
	7	15'	15'	15'	15'	14'	15'	13.5'	11.5'	9.5'	8'
140 mph	2 or 3	5.5'	4'	3'	2'	1'	2.5'	1.5'	1'	0'	0'
	4	9.5'	7.5'	6'	4.5'	3.5'	5.5'	4'	3'	2'	1'
	5	13'	11'	9'	7.5'	6'	8'	6.5'	5'	4'	3'
	6	15'	14.5'	12.5'	10.5'	9'	10.5'	8.5'	7'	5.5'	4.5'
	7	15'	15'	15'	13.5'	11.5'	13.5'	11'	9'	7.5'	6.5'
150 mph	2 or 3	4.5'	3'	2'	1'	0.5'	2'	1'	0.5'	0'	0'
	4	7.5'	6'	5'	3.5'	2.5'	4.5'	3'	2'	1'	0.5'
	5	11'	9'	7.5'	6'	5'	6.5'	5'	4'	3'	2'
	6	14.5'	12.5'	10.5'	8.5'	7'	9'	7'	6'	4.5'	3.5'
	7	15'	16'	13'	11'	9.5'	11.5'	9.5'	7.5'	6'	5'
170 mph	2 or 3	3'	2'	1'	0'	0'	1'	0'	0'	0'	0'
	4	5.5'	4'	3'	2'	1'	3'	2'	1'	0'	0'
	5	8'	6.5'	5'	4'	3'	4.5'	3.5'	2.5'	1.5'	0.5'
	6	11'	9'	7.5'	6'	4.5'	6.5'	5'	3.5'	2.5'	1.5'
	7	13.5'	11.5'	9.5'	8'	6.5'	8'	6.5'	5'	4'	3'

Moment Frame A: Detail LA24, 4 screws, A=5", B= 7", sideplates = 0.024"
Moment Frame A: Detail LA25, 4 screws, A=2", B= 5", DBL HEADER
Moment Frame B: Detail LA24, 4 screws, A=5", B= 7", sideplates = 0 032"
Moment Frame B: Detail LA24, 6 screws, A=5", B= 7", sideplates = 0 024"
Moment Frame C: Detail LA24, 8 screws, A=4", B= 6", sideplates = 0.024"
Moment Frame C: Detail LA25, 4 screws, A=2", B= 7", DBL HEADER
Moment Frame C: Detail LA25, 6 screws, A=2", B= 5", DBL HEADER
Moment Frame C: Detail LA26, 4 BOLTS, A=2", B= 7", SINGLE STEEL C
Moment Frame D: Detail LA26, 4 BOLTS, A=2", B= 5", DBL STEEL C

Tables L1 and L2 need to be checked for surfac
mount concrete attachmen

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Seismic Size Requirements

Table L2a
Moment Frame A

Ss	Size Allowed (cubic feet)	
20%	1575	
30%	1050	***
40%	788	
50%	720	**
60%	600	*
70%	514	
80%	525	
90%	467	
100%	420	
110%	417	
120%	382	
130%	388	
140%	360	
150%	336	

Table L2b
Moment Frame B

Ss	Size Allowed (cubic feet)	
20%	2099	
30%	1399	
40%	1050	
50%	960	***
60%	800	
70%	685	
80%	700	**
90%	622	
100%	560	
110%	555	*
120%	509	
130%	517	
140%	480	
150%	448	

Directions for using Seismic Table L2a, L2b, L2c or L2d******
1. Determine Tributary width
2. Determine width of structure
3. Determine height of structure
4. Determine number of posts structure has
5. Determine Ss for your area (contac your local building department)****
6. Choose Table L2a-d based on the header
7. Determine the maximum size allowed on the chart
8. Multiply #1, #2 and #3 and divide by #4*****
9. If #8 is lower than #7 the structure is OK for seismic
10. If your Ss is over 150% use 150%

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*no check needed for Patio Covers attached to slab under these conditions
**no check needed for Patio Covers that are 10' tall attached to slab under these conditions
***no check needed for Patio Covers that are 8' tall attached to slab under these conditions
****Ss is the Maximum Considered Earthquake Ground Motion (0.2 sec) mapped on Figure 1613.3.1(1) in the 2012 IBC
***** Alternatively, divide by these numbers
For 2 post Structures divide by 3
For 3 post Structures divide by 3
For 4 post Structures divide by 4.5
For 5 post Structures divide by 6
For all others add 1.5 to number of posts
****** Not for use in areas with flat roof snow loads exceeds 30 psf

Misc5a-2012

7.0 Requirements for Surface Mounted Posts on Concrete Slabs or Footings for Single Span Attached Lattice Structur

REQUIRED NUMBER OF POSTS FOR SINGLE SPAN LATTICE UNITS WITH SURFACE MOUNTED POSTS ON CONCRETE SLABS OR FOOTINGS

Table L1c: Use this table for the following header:
Moment Frame C = 536 lbf*ft

Wind Speed	Required Number of Posts	Post Height (ft) 8'	9'	10'	11'	12'	8'	9'	10'	11'	12'
		Wind Exposure B					Wind Exposure C				
		MAXIMUM TRIBUTARY WIDTH ALLOWED									
110 mph	2 or 3	11.5'	9.5'	8'	6.5'	5'	7'	5.5'	4'	3'	2'
	4	15'	15'	13.5'	11.5'	9.5'	11.5'	9.5'	8'	6.5'	5'
	5	15'	15'	15'	15'	14.5'	15'	13.5'	11.5'	10'	8'
	6	15'	15'	15'	15'	15'	15'	15'	15'	13'	11.5'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	14.5'
115 mph	2 or 3	10.5'	8.5'	7'	5.5'	4.5'	6'	4.5'	3.5'	2.5'	1.5'
	4	15'	14'	12'	10'	8.5'	10.5'	8.5'	7'	5.5'	4.5'
	5	15'	15'	15'	14.5'	12.5'	14.5'	12.5'	10.5'	8.5'	7'
	6	15'	15'	15'	15'	15'	15'	15'	13.5'	11.5'	10'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	13'
130 mph	2 or 3	7.5'	6'	4.5'	3.5'	2.5'	4'	3'	2'	1'	0'
	4	12.5'	10.5'	8.5'	7'	5.5'	7.5'	6'	4.5'	3.5'	2.5'
	5	15'	15'	12.5'	10.5'	9'	11'	9'	7.5'	6'	4.5'
	6	15'	15'	15'	14.5'	12.5'	14.5'	12'	10'	8.5'	7'
	7	15'	15'	15'	15'	15'	15'	15'	12.5'	11'	9'
140 mph	2 or 3	6'	4.5'	3.5'	2.5'	1.5'	3'	2'	1'	0.5'	0'
	4	10.5'	8.5'	7'	5.5'	4.5'	6'	4.5'	3.5'	2.5'	1.5'
	5	15'	12.5'	10.5'	8.5'	7'	9'	7.5'	6'	4.5'	3.5'
	6	15'	15'	14'	12'	10'	12'	10'	8'	6.5'	5.5'
	7	15'	15'	15'	15'	13'	15'	12.5'	10.5'	9'	7.5'
150 mph	2 or 3	5'	3.5'	2.5'	1.5'	1'	2.5'	1.5'	0.5'	0'	0'
	4	8.5'	7'	5.5'	4.5'	3.5'	5'	3.5'	2.5'	1.5'	1'
	5	12.5'	10.5'	8.5'	7'	5.5'	7.5'	6'	4.5'	3.5'	2.5'
	6	15'	13.5'	11.5'	10'	8'	10'	8'	6.5'	5.5'	4'
	7	15'	15'	14.5'	12.5'	10.5'	12.5'	10.5'	8.5'	7'	6'
170 mph	2 or 3	3.5'	2'	1.5'	0.5'	0'	1.5'	0.5'	0'	0'	0'
	4	6'	5'	3.5'	2.5'	1.5'	3.5'	2'	1.5'	0.5'	0'
	5	9'	7.5'	6'	4.5'	3.5'	5.5'	4'	3'	2'	1'
	6	12'	10'	8.5'	7'	5.5'	7.5'	5.5'	4.5'	3.5'	2.5'
	7	15'	12.5'	10.5'	9'	7.5'	9'	7.5'	6'	4.5'	3.5'

Table L1d: Use this table for the following header:
Moment Frame D = 793 lbf*ft

Wind Speed	Required Number of Posts	Post Height (ft) 8'	9'	10'	11'	12'	8'	9'	10'	11'	12'
		Wind Exposure B					Wind Exposure C				
		MAXIMUM TRIBUTARY WIDTH ALLOWED									
110 mph	2 or 3	15'	15'	13'	11'	9.5'	11.5'	9.5'	7.5'	6'	5'
	4	15'	15'	15'	15'	15'	15'	15'	13'	11'	9.5'
	5	15'	15'	15'	15'	15'	15'	15'	15'	15'	14'
	6	15'	15'	15'	15'	15'	15'	15'	15'	15'	15'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	15'
115 mph	2 or 3	15'	14'	11.5'	10'	8.5'	10'	8.5'	6.5'	5.5'	4'
	4	15'	15'	15'	15'	14.5'	15'	14'	12'	10'	8.5'
	5	15'	15'	15'	15'	15'	15'	15'	15'	14.5'	12.5'
	6	15'	15'	16'	15'	15'	15'	15'	15'	16'	15'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	15'
130 mph	2 or 3	12.5'	10'	8.5'	7'	5.5'	7.5'	6'	4.5'	3.5'	2.5'
	4	15'	15'	14.5'	12.5'	10.5'	12.5'	10.5'	8.5'	7'	5.5'
	5	15'	15'	15'	15'	15'	15'	14.5'	12.5'	10.5'	9'
	6	15'	15'	15'	15'	15'	15'	15'	15'	14'	12'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	15'
140 mph	2 or 3	10'	8.5'	7'	5.5'	4'	6'	4.5'	3.5'	2.5'	1.5'
	4	15'	14'	12'	10'	8.5'	10.5'	8.5'	7'	5.5'	4.5'
	5	15'	15'	15'	14.5'	12.5'	14.5'	12'	10.5'	8.5'	7'
	6	15'	15'	15'	15'	15'	15'	15'	13.5'	11.5'	10'
	7	15'	15'	15'	15'	15'	15'	15'	15'	15'	13'
150 mph	2 or 3	8.5'	7'	5.5'	4'	3'	5'	3.5'	2.5'	1.5'	0.5'
	4	14'	12'	10'	8.5'	7'	8.5'	7'	5.5'	4.5'	3'
	5	15'	15'	14.5'	12.5'	10.5'	12.5'	10.5'	8.5'	7'	5.5'
	6	15'	15'	15'	15'	14'	15'	13.5'	11.5'	9.5'	8'
	7	15'	15'	15'	15'	15'	15'	15'	14.5'	12.5'	10.5'
170 mph	2 or 3	5'	4.5'	3.5'	2.5'	1.5'	3'	2'	1'	0.5'	0'
	4	10.5'	8.5'	7'	5.5'	4.5'	6'	5'	3.5'	2.5'	1.5'
	5	15'	12.5'	10.5'	8.5'	7.5'	9'	7.5'	6'	4.5'	3.5'
	6	15'	15'	14'	12'	10'	12'	10'	8'	6.5'	5.5'
	7	15'	15'	15'	15'	13'	15'	12.5'	10.5'	9'	7.5'

Moment Frame A: Detail LA24, 4 screws, A=5", B= 7", sideplates = 0.024"
Moment Frame A: Detail LA25, 4 screws, A=2", B= 5", DBL HEADER
Moment Frame B: Detail LA24, 4 screws, A=5", B= 7", sideplates = 0.032"
Moment Frame B: Detail LA24, 6 screws, A=5", B= 7", sideplates = 0.024"
Moment Frame C: Detail LA24, 8 screws, A=4", B= 6", sideplates = 0.024"
Moment Frame C: Detail LA25, 4 screws, A=2", B= 7", DBL HEADER
Moment Frame C: Detail LA25, 6 screws, A=2", B= 5", DBL HEADER
Moment Frame C: Detail LA26, 4 BOLTS, A=2", B= 7", SINGLE STEEL C
Moment Frame D: Detail LA26, 4 BOLTS, A=2", B= 5", DBL STEEL C

Tables L1 and L2 need to be checked for surface mount concrete attachmen

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Seismic Size Requirements

Table L2c
Moment Frame C

Ss	Size Allowed (cubic feet)	
20%	2301	
30%	1534	
40%	1150	
50%	1052	
60%	877	***
70%	751	
80%	767	**
90%	682	
100%	614	
110%	608	
120%	558	
130%	566	*
140%	526	
150%	491	

Table L2d
Moment Frame D

Ss	Size Allowed (cubic feet)	
20%	3404	
30%	2269	
40%	1702	
50%	1556	
60%	1297	
70%	1112	
80%	1135	
90%	1009	
100%	908	
110%	900	
120%	825	
130%	838	***
140%	778	
150%	728	**

Directions for using Seismic Table L2a, L2b, L2c or L2d****

1. Determine Tributary width
2. Determine width of structure
3. Determine height of structure
4. Determine number of posts structure has
5. Determine Se for your area (contac your local building department)****
6. Choose Table L2a-d based on the header
7. Determine the maximum size allowed on the chart
8. Multiply #1, #2 and #3 and divide by #4*****
9. If #8 is lower than #7 the structure is OK for seismic
10. If your Sa is over 150% use 150%

*no check needed for Patio Covers attached to slab under these conditions
**no check needed for Patio Covers that are 10' tall attached to slab under these conditions
***no check needed for Patio Covers that are 8' tall attached to slab under these conditions
****Ss is the Maximum Considered Earthquake Ground Motion (0.2 sec) mapped on Figure 1613.3.1(1) in the 2012 IBC
***** Alternatively, divide by these numbers
For 2 post Structures divide by 3
For 3 post Structures divide by 3
For 4 post Structures divide by 4.5
For 5 post Structures divide by 6
For all others add 1.5 to number of posts
****** Not for use in areas with flat roof snow loads exceeds 30 psf.

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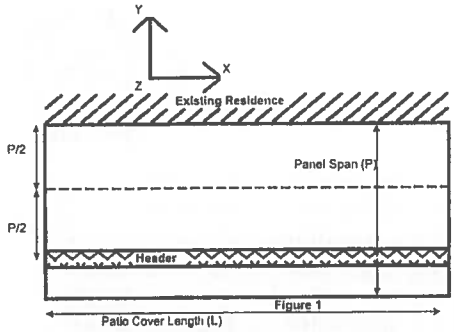

Figure 1

Determine Snow Loads on Existing Structure

1 Determine Roof Snow/Live Load, S. See General Note 3.
2 Dead Load = 1 psf
3 Add Dead and Live/Snow Loads, multiply by half of Panel Span
Wall Load = (D + S) P /2
4 Result is wall load in pounds per linear foot.

Determine Wind Loads on Existing Structure

1 Determine Wind Load, W+ or W-. See Table 1
2 Dead Load included in Down and Up loads
3 Multiply W+ or W- by half of Panel Span
Wall Load = W P /2
4 Result is wall load in pounds per linear foot.
5 Maximum Shear Load in X direction is 296 lbf (140 mph Exposure C, 17' Panel Span)
Max load in Y direction (towards house) is 52 plf (140 mph Exp C, 10" I beam)
Max load in Y direction due to force couple resisting lateral is 102 plf
(140 mph Exp C, Projection = Width)

Determine Seismic Loads on Existing Structure (Excludes Roof Snow Load over 30 psf)

1 Vertical Loads and Horizontal Loads = maximum of 1 psf

Combination Loads based on Equation 16-11

1 Determine Combination Load, C. See Table 2
3 Multiply C by half of Panel Span
Wall Load = C P /2
4 Result is wall load in pounds per linear foot.

Kz	0.7	0.98 height factor, Exposure B and C
Kzt	1	Topographic factor
Kd	0.85	Wind Directionality factor
I	1	Importance Factor
G	0.85	Gust Factor
Cnet	1.2	Net Pressure Coefficent
Dead	1 psf	

Wind Speed (mph)	Exposure	qh (psf)	C&C (psf)	Design Down Load (psf) W+	Design Up Load (psf) W-
110	B	18.4	11.3	12.3	10.7
115	B	20.1	12.3	13.3	11.7
120	B	21.9	13.4	14.4	12.8
130	B	25.7	15.8	16.8	15.2
140	B	29.9	18.3	19.3	17.7
110	C	25.8	15.8	16.8	15.2
115	C	28.2	17.3	18.3	16.7
120	C	30.7	18.8	19.8	18.2
130	C	36.0	22.1	23.1	21.5
140	C	41.8	25.6	26.6	25.0

TABLE 1

Combination Loads: Snow + Wind +Dead Loads								
Wind Speed (mph)	Exposure	Wind Load (psf)	Live Loads (psf) 10	20	Ground Snow Loads (psf) 25	30	40	60
Roof Live /Snow Loads + Dead			11	21	22	26.2	34.6	51.4
110	B	11.3	17.0	24.5	25.2	28.4	34.7	47.3
115	B	12.3	17.7	25.2	26.0	29.1	35.4	48.0
120	B	13.4	18.6	26.1	26.8	30.0	36.3	48.9
130	B	15.8	20.3	27.8	28.6	31.7	38.0	50.6
140	B	18.3	22.2	29.7	30.5	33.6	39.9	52.5
110	C	15.8	20.3	27.8	28.6	31.7	38.0	50.6
115	C	17.3	21.4	28.9	29.7	32.8	39.1	51.7
120	C	18.8	22.6	30.1	30.8	34.0	40.3	52.9
130	C	22.1	25.0	32.5	33.3	36.4	42.7	55.3
140	C	25.6	27.7	35.2	35.9	39.1	45.4	58.0

TABLE 2

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LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68 387 Exp. 6-30-2014 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER 1360906 2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

Misc6-2012

Metals USA Structural Properties of Beams, Fascia, Panels and Rafters for Use by Design Professionals

Structural Element	I (in^4) top in compression	I (in^4) bottom in compression	ASSUMES FULL LATERAL BRACING Max Allowable Moment (top in compression) (lb*ft)	Max Allowable Moment (bottom in compression) (lb*ft)	Max Allowable Shear (lbf)	Material	E (ksi)	Ftu or Fu (ksi)	Fty or Fy (ksi)	Fcy (ksi)
Rafters										
0.024"x2"x6.5" Aluminum Rafter LA86	2.176	same	272	273	161	3004H34	10100	32	25	22
0.032"x2"x6.5" Aluminum Rafter LA86	2.929	same	362	494	406	3004H34	10100	32	25	22
0.040"x2"x6.5" Aluminum Rafter LA86	3.683	same	651	768	600	3004H34	10100	32	25	22
0.042"x2"x8" Aluminum Rafter LA84	7.387	same	1154	1030	747	3004H34	10100	32	25	22
0.024"x2"x4" Aluminum Rafter LA21	0.432	same	138	134	360	3004H34	10100	32	25	22
0.032"x2"x4" Aluminum Rafter LA21	0.576	same	236	236	903	3004H34	10100	32	25	22
0.040"x2"x4" Aluminum Rafter LA21	0.72	same	300	343	1336	3004H34	10100	32	25	22
Aluminum Panels										
0.024"x2.5"x12" W Panel MU05 MU06	0.574	same	234	311	449	3004H34	10100	32	25	22
0.030"x2.5"x12" W Panel MU05 MU06	0.689	same	417	390	529	3004H34	10100	32	25	22
0.032"x2.5"x12" W Panel MU05 MU06	0.919	same	617	567	704	3004H34	10100	32	25	22
0.040"x2.5"x12" W Panel MU05 MU06	1.140	same	693	725	725	3004H34	10100	32	25	22
0.024"x2.5"x12" Vee Panel MU05	0.547	same	193	77	681	3004H34	10100	32	25	22
0.030"x2.5"x12" Vee Panel MU05	0.675	same	371	129	900	3004H34	10100	32	25	22
0.032"x2.5"x12" Vee Panel MU05	0.901	same	514	232	1211	3004H34	10100	32	25	22
0.040"x2.5"x12" Vee Panel MU05	1.126	same	673	366	1314	3004H34	10100	32	25	22
0.024"x3"x8" Flat Panel MU12	0.572	same	162	122	393	3004H34	10100	32	25	22
0.025"x3"x8" Flat Panel MU12	0.716	same	253	189	482	3004H34	10100	32	25	22
0.032"x3"x8" Flat Panel MU12	0.914	same	495	251	629	3004H34	10100	32	25	22
0.020"x3"x12" W Panel MU13	0.432	same	180	238	701	3004H34	10100	32	25	22
0.025"x3"x12" W Panel MU13	0.539	same	297	366	852	3004H34	10100	32	25	22
0.030"x3"x12" W Panel MU13	0.804	same	348	473	1066	3004H34	10100	32	25	22
0.032"x3"x12" W Panel MU13	0.891	same	432	528	1212	3004H34	10100	32	25	22
0.040"x3"x12" W Panel MU13	0.963	same	587	730	1523	3004H34	10100	32	25	22
0.020"x3"x12" Flat Panel MU11	0.684	same	166	130	385	3004H34	10100	32	25	22
0.025"x3"x12" Flat Panel MU11	0.829	same	316	187	492	3004H34	10100	32	25	22
0.032"x3"x12" Flat Panel MU11	1.087	same	504	270	629	3004H34	10100	32	25	22
0.036"x3"x12" Flat Panel MU11	1.194	same	683	315	708	3004H34	10100	32	25	22
0.020"x2.5"x6" Flat Panel MU22	0.304	same	165	130	770	3004H34	10100	32	25	22
0.024"x2.5"x6" Flat Panel MU22	0.365	same	254	186	924	3004H34	10100	32	25	22
0.032"x2.5"x6" Flat Panel MU22	0.465	same	398	226	1232	3004H34	10100	32	25	22
0.040"x2.5"x6" Flat Panel MU22	0.608	same	532	404	1540	3004H34	10100	32	25	22
0.020"x2.5"x12" Panel MU26	0.34	same	216	301	886	3004H34	10100	32	25	22
0.027"x2.5"x12" Panel MU26	0.472	same	360	414	1279	3004H34	10100	32	25	22
0.040"x2.5"x12" Panel MU26	0.679	same	677	606	2680	3004H34	10100	32	25	22
0.020"x2.5"x6" Flat Panel MU21	0.354	same	170	130	401	3004H34	10100	32	25	22
0.025"x2.5"x6" Flat Panel MU21	0.45	same	225	165	644	3004H34	10100	32	25	22
0.032"x2.5"x6" Flat Panel MU21	0.553	same	312	223	805	3004H34	10100	32	25	22
0.040"x2.5"x6" Flat Panel MU21	0.643	same	383	270	920	3004H34	10100	32	25	22
0.019"x2.5"x24" Panel MU25	0.43	same	305	210	363	3004H34	10100	32	25	22
0.024"x2.5"x24" Panel MU25	0.573	same	443	373	815	3004H34	10100	32	25	22
0.032"x2.5"x24" Panel MU25	0.764	same	668	563	1061	3004H34	10100	32	25	22
0.040"x2.5"x24" Panel MU25	0.955	same	900	757	2024	3004H34	10100	32	25	22
0.025"x2.5"x24" Panel MU24	0.504	same	386	33	588	3004H34	10100	32	25	22
0.032"x2.5"x24" Panel MU24	0.63	same	536	430	983	3004H34	10100	32	25	22
0.032"x2.5"x24" Panel MU24	0.805	same	741	604	2082	3004H34	10100	32	25	22
0.024"x2"x24" Patioport	0.487	same	380	643	1221	3004H34	10100	32	25	22
0.030"x2"x24" Patioport	0.634	same	529	842	2370	3004H34	10100	32	25	22
0.032"x2"x24" Patioport	0.773	same	731	1101	2981	3004H34	10100	32	25	22
0.040"x2"x24" Patioport	0.900	same	953	1329	5671	3004H34	10100	32	25	22
0.050"x2"x24" Patioport	1.200	same	1206	1736	7252	3004H34	10100	32	25	22
0.020"x2"x6" Flat Panel MU33	0.154	same	126	264	525	3004H34	10100	32	25	22
0.024"x2"x6" Flat Panel MU33	0.185	same	180	317	630	3004H34	10100	32	25	22
0.032"x2"x6" Flat Panel MU33	0.248	same	232	393	840	3004H34	10100	32	25	22
0.040"x2"x6" Flat Panel MU33	0.308	same	294	674	1050	3004H34	10100	32	25	22
0.020"x4"x12" Vee Panel MU35	0.828	same	769	195	845	3004H34	10100	32	25	22
0.024"x4"x12" Vee Panel MU35	1.032	same	468	165	1056	3004H34	10100	32	25	22
0.032"x4"x12" Vee Panel MU35	1.321	same	779	274	1334	3004H34	10100	32	25	22
0.040"x4"x12" Vee Panel MU35	1.632	same	1188	432	1631	3004H34	10100	32	25	22
0.020"x3"x24" Panel MU30	0.761	same	304	347	450	3004H34	10100	32	25	22
0.024"x3"x24" Panel MU30	0.952	same	479	399	834	3004H34	10100	32	25	22
0.032"x3"x24" Panel MU30	1.219	same	707	639	1874	3004H34	10100	32	25	22
0.040"x3"x24" Panel MU30	1.523	same	1177	916	3661	3004H34	10100	32	25	22
Steel Panels										
0.018"x2.5"x12" W Panel MU05 MU06	0.504	0.373	490	314	383	ASTM A653 Grade 40	29000	55	40	
0.024"x2.5"x12" W Panel MU05 MU06	0.646	0.606	686	490	603	ASTM A653 Grade 40	29000	55	40	
0.018"x3"x8" Flat Panel MU12	0.4334	0.2510	470	284	333	ASTM A653 Grade 40	29000	55	40	
0.024"x3"x8" Flat Panel MU12	0.6253	0.1607	670	413	732	ASTM A653 Grade 40	29000	55	40	
0.018"x3"x12" Flat Panel MU11	0.487	0.263	436	214	366	ASTM A653 Grade 40	29000	55	40	
0.024"x3"x12" Flat Panel MU11	0.7211	0.3036	794	374	732	ASTM A653 Grade 40	29000	55	40	
0.018"x2.5"x6" Flat Panel MU22	0.2533	0.1827	344	221	734	ASTM A653 Grade 40	29000	55	40	
0.018"x2.5"x12" Panel MU26	0.2881	0.2337	486	282	630	ASTM A653 Grade 40	29000	55	40	
0.024"x2.5"x12" Panel MU26	0.3734	0.3030	562	523	1176	ASTM A653 Grade 40	29000	55	40	
0.018"x2.5"x24" Panel MU24	0.329	0.3084	519	530	476	ASTM A653 Grade 40	29000	55	40	
0.024"x2.5"x24" Panel MU24	0.4050	0.4167	641	806	825	ASTM A653 Grade 40	29000	55	40	
0.018"x2"x24" Patioport	0.4198	0.3436	619	586	1831	ASTM A653 Grade 40	29000	55	40	
0.024"x2"x24" Patioport	0.5773	0.4827	820	729	4263	ASTM A653 Grade 40	29000	55	40	
0.030"x2"x24" Patioport	0.7222	0.6002	1084	956	8606	ASTM A653 Grade 40	29000	55	40	
0.018"x4"x12" Vee Panel MU35	0.6862	0.9954	640	592	210	ASTM A653 Grade 40	29000	55	40	
0.024"x4"x12" Vee Panel MU35	0.9416	0.730	865	731	319	ASTM A653 Grade 40	29000	55	40	
0.018"x3"x24" Panel MU30	0.8340	0.5636	795	741	634	ASTM A653 Grade 40	29000	55	40	
Aluminum Headers										
0.042"x3"x8" Aluminum Header MU76	7.987	same	1184	1830	747	3004H34	10100	32	25	22
Double 0.042"x3"x8" Aluminum Header	15.614	same	2330	2076	1494	3004H34	10100	32	25	22
Double 0.040"x3"x6.5" Aluminum Header	7.366	same	1782	1377	1800	3004H34	10100	32	25	22
Sunroom Beam MU80	4.08	same	2170	2254	3223	6063T6	10100	30	25	25
0.120"x3"x3" Square Header	1.91	same	1782	1782	5794	6063T6	10100	30	25	25
0.120"x4"x4" Square Header	4.68	same	3209	3229	7894	6063T6	10100	30	25	25
Double 0.120"x3"x3" Square Header MU130	3.82	same	3604	3564	11588	6063T6	10100	30	25	25
Double 0.120"x4"x4" Square Header MU128	9.36	same	6456	6058	15788	6063T6	10100	30	25	25
4"x3" I beam MU83	3.433	same	3317	3317	3366	6061T6	10100	30	35	35
5"x3" I beam MU87	6.1	same	4834	4634	3795	6061T6	10100	30	35	35
7"x4" I beam MU86	18.35	same	10290	9837	7131	6061T6	10100	30	35	35
2.5"x3" I beam MU88	2.4	same	2829	2895	3027	6061T6	10100	30	35	35
8"x4.11" I beam MU84	7.168	same	6186	6284	4369	6061T6	10100	30	35	35
7"x8.48" I beam MU83	21.525	same	11175	10779	4357	6061T6	10100	30	35	35
7"x5.9" I beam MU90	20.33	same	16827	16627	7238	6061T6	10100	30	35	35
7"x5.9" I beam MU90 (full spliced)	42.82	same	34439	34409	28083					
10"x5.5" I beam MU89	86.7	same	24016	24016	11309	6061T6	10100	30	35	35
10"x5.5" I beam MU89 (full spliced)	142.3	same	56245	56246	72557					
10"x6.56" I beam MU82	77.1	same	27477	29190	11142	6061T6	10100	30	35	35
Aluminum Fascia										
4.5" Extruded Fascia MU33	1.65	same	787	888	1900					
5" RF Fascia MU16	1.230	same	754	853	983	3004H34	10100	32	25	22
6.5" RF Fascia MU15	3.32	same	1016	1116	1790	3004H34	10100	32	25	22
6" Extruded Fascia MU31	4.198	same	1033	1382	2309	6063T6	10100	30	25	25
7" RF Fascia (with 0.027") MU09	4.394	same	1114	948	1485	3004H34	10100	32	25	22
7" RF Fascia (with 0.032") MU09	5.423	same	1522	1429	2041	3004H34	10100	32	25	22
5" Extruded Fascia MU08	2.23	same	1030	1195	2136	6063T6	10100	30	25	25
5.5" Extruded Fascia MU20	2.809	same	1030	1135	2136	6063T6	10100	30	25	25
6" RF Fascia MU29	2.231	same	646	783	8851	3004H34	10100	32	25	22
Sunroom Gutter Fascia MU89	3.91	same	1326	1781	6294	6063T6	10100	30	25	25
5" Magnum Gutter MU36	3.49	same	1830	1751	8988	6063T6	10100	30	25	25
7" Magnum Gutter MU37	5.43	same	2251	2321	7820	6063T6	10100	30	25	25
6" Smooth Gutter MU38	5.15	same	1833	2142	5449	6063T6	10100	30	25	25
Steel Headers										
12 Gauge Steel C Beam LA86	13.279	same	9549	8849	11304	ASTM A653 Grade 50	29000	65	50	
14 Gauge Steel C Beam LA86	9.841	same	5421	5421	4029	ASTM A653 Grade 50	29000	65	50	
16 Gauge Steel C Beam LA86	7.462	same	4005	4005	2234	ASTM A653 Grade 50	29000	65	50	
Double 12 Gauge Steel C Beam LA86	26.558	same	17898	17898	23038	ASTM A653 Grade 50	29000	65	50	
Double 14 Gauge Steel C Beam LA86	18.082	same	11642	11542	8058	ASTM A653 Grade 50	29000	65	50	
Double 16 Gauge Steel C Beam LA86	14.924	same	9010	9010	4788	ASTM A653 Grade 50	29000	65	50	
0.043"x3"x8" Lockseam Header MU81	8.8080	same	1970	1970	7363	ASTM A653 Grade 40	29000	55	40	
Double 0.043"x3"x8" Header MU130	16.190	same	2136	2136	14728	ASTM A653 Grade 40	29000	55	40	

Mar7-2012

LICENSED PROFESSIONAL ENGINEER CARL PUTNAM C 68135 Exp 6-30-2015 CIVIL STATE OF CALIFORNIA

FEB 24 2014

PROFESSIONAL ENGINEER 4860906-2202 CARL PUTNAM STATE OF UTAH

MAR 05 2014

CONSTRAINED FOOTING SIZE d (IN)	REQUIRED SLAB AREA PER POST (SQUARE FEET)			
	CONCRETE SLAB THICKNESS (IN)			
	3.5"	5.5"	7.25"	9.25"
20	26	17	13	10
21	31	20	15	12
22	36	23	17	14
23	41	26	20	16
24	47	30	23	18
25	54	34	26	20
26	61	39	30	23
27	70	44	34	26
28	78	50	38	30
29	88	56	42	33
30	98	63	48	37
31	110	70	53	41
32	122	78	59	46
33	135	86	65	51
34	149	95	72	56
35	164	104	79	62
36	180	115	87	68
37	198	126	95	75
38	216	137	104	82
39	236	150	114	89
40	257	163	124	97
41	279	178	135	106
42	303	193	146	114
43	328	208	158	124
44	354	225	171	134
45	382	243	185	145
46	412	262	199	156
47	443	282	214	168
48	476	303	230	180
49	511	325	247	193
50	547	348	264	207

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Misc8-2012