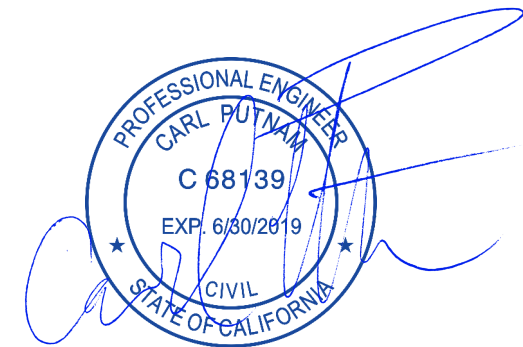


# Amerimax Exterior Home Products Equinox™ Patio Cover, Carport and Commercial Structure Engineering 2015 IBC

This report covers these maximum conditions

Ground Snow Loads	<b>10</b>	<b>psf</b>
	<b>20</b>	<b>psf</b>
Wind Speed and Exposure	<b>110 MPH EXPOSURE B</b> <b>110 MPH EXPOSURE C</b>	<b>or 120 MPH EXPOSURE B</b>
Maximum Ss =	<b>150%</b>	<b>Seismic Design Category D</b>

PAGES	SECTION DESCRIPTION
Pages 1-2 of 19	GENERAL NOTES GENERAL NOTES
Page 3 of 19	<b>LOUVER SPANS FOR COMMERCIAL AND PATIO STRUCTURES</b>
Page 4 of 19	<b>A. Tables for Attached Structures with Single Span Louvers with Two Posts ONLY</b>
Page 5 of 19	<b>B. Tables for Attached Structures with Single Span Louvers with at Least 3 Posts</b>
Page 6 of 19	<b>C. Tables for Attached Structures with Multi Span Louvers with Two Posts ONLY</b>
Page 7 of 19	<b>D. Tables for Freestanding Structures with Single Span Louvers with 4 posts</b>
Page 8 of 19	<b>E. Tables for Freestanding Structures with Single Span Louvers with at least 6 posts</b>
Page 9 of 19	<b>F. Tables for Freestanding Structures with Multi Span Louvers with 4 posts</b>
Page 10 of 19	<b>G. Tables for Attached Structures with Multi Span Louvers with at Least 3 Posts</b>
Page 11 of 19	<b>W. ATTACHMENT TO WALL</b>
Page 12 of 19	<b>X. MOMENT RESISTING FOOTING SIZE</b>
Page 13 of 19	EQUINOX STRUCTURAL CONFIGURATIONS
Page 14 of 19	EQUINOX STRUCTURAL CONFIGURATIONS
Page 15 of 19	COMPONENT PARTS AND CONNECTION DETAILS
Page 16 of 19	COMPONENT PARTS AND CONNECTION DETAILS
Page 17 of 19	COMPONENT PARTS AND CONNECTION DETAILS
Page 18 of 19	COMPONENT PARTS AND CONNECTION DETAILS
Page 19 of 19	COMPONENT PARTS AND CONNECTION DETAILS



JUN 14 2017

February 17, 2017

GENERAL NOTES:

1. DESIGNED IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE.
2. ALUMINUM DESIGN IN ACCORDANCE WITH THE 2015 EDITION OF ALUMINUM ASSOCIATION'S SPECIFICATIONS AND CHAPTER 20 OF THE INTERNATIONAL BUILDING CODE.
3. DESIGN LOADINGS:  $C_t = 1.2$ ,  $I = 1.0$ ,  $C_e = 1.0$  (ALL EXPOSURES EXCEPT B AND C WHEN LOCATED TIGHT AMONG CONIFERS)

GROUND SNOW LOAD	ROOF DESIGN LOAD
10 PSF	10 PSF LIVE LOAD ONLY
20 PSF	20 PSF LIVE LOAD ONLY
25 PSF	21 PSF DESIGN ROOF SNOW LOAD
30 PSF	25.2 PSF DESIGN ROOF SNOW LOAD
35.7 PSF	30 PSF DESIGN ROOF SNOW LOAD
43 PSF	36.1 PSF DESIGN ROOF SNOW LOAD

FOR  $0.25/12 < \text{SLOPE} < 1/12$

WIND SPEEDS IN THE 2015 IBC ARE "ULTIMATE DESIGN WIND SPEED." ALL STRUCTURES DESCRIBED IN THIS REPORT ARE DESIGNED USING PRESSURES CALCULATED FROM "ULTIMATE DESIGN WIND SPEEDS". FOR ATTACHED STRUCTURES THE MAXIMUM MEAN ROOF HEIGHT OF THE EXISTING STRUCTURE IS 30'.  $K_{zt}$  WAS ASSUMED AS 1.0 FOR ALL WIND LOADS. SITE LOCATIONS REQUIRING A HIGHER  $K_{zt}$  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  $S_s = 150\%$  SHOWN IN 2015 IBC FIGURE 1613.3.1(1)  
 $S_s > 150\%$  ARE NOT REQUIRED AS PER ASCE7-10 12.8.1.3  
 $S_s$  USED FOR TABLES SHOWN ON TABLES SHEET  
 $S_1$  NOT APPLICABLE TO THESE STRUCTURES  
 SITE CLASS = D  
 BASIC SEISMIC FORCE RESISTING SYSTEM  
     POSTS EMBEDDED INTO FOOTINGS = ORDINARY STEEL MOMENT FRAME  $\gg R = 2.0$   
     POSTS SURFACE MOUNTED = GENERIC SYSTEM  $\gg R = 1.25$   
 ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

THESE ROOFS ARE NOT SUBJECT TO MAINTENANCE WORKERS AND HAVE NOT BEEN EVALUATED FOR A CONCENTRATED 300 LBF LOAD.

THE BASIS OF THE DESIGN FORCES ARE IN ACCORDANCE WITH THE BASIC LOAD COMBINATIONS DESCRIBED IN IBC SECTION 1605.3.1 AND NO FURTHER INCREASES ARE PERMITTED FOR PATIO COVERS RESISTING WIND OR SEISMIC FORCES EXCEPT AS ALLOWED FOR WOOD CONSTRUCTION IN CHAPTER 23.

4. THIS ENTIRE ENGINEERING PACKAGE IS NOT REQUIRED FOR MOST BUILDING PERMITS. SUBMISSION FOR A BUILDING PERMIT MUST INCLUDE:
  - a. GENERAL NOTES (2 PAGES)
  - b. STRUCTURAL CONFIGURATIONS (1 PAGE)
  - c. LOUVER SPAN TABLES (1 PAGE)
  - d. HEADER POST SPACING, FOOTING SIZE AND POST TABLE FOR LIVE/SNOW, SEISMIC AND WIND LOAD (1 PAGE)
  - e. ALL APPROPRIATE DETAILS
  - f. OTHER DOCUMENTATION REQUIRED BY LOCAL BUILDING AUTHORITY.

5. CONCRETE MIX:  $F_c = 2500, 3000$  OR  $3500$  PSI FOR 28 DAYS IN NEGLIGIBLE, MODERATE, AND SEVERE CONDITIONS AS SHOWN IN FIGURE 1904.2 OF THE 2015 IBC. PATIO STRUCTURES MAY BE ATTACHED TO CONCRETE SLAB WITHOUT FOOTINGS WHEN THE POST LOAD IS  $750\#$  OR LESS AND THE FROST DEPTH IS ZERO. CONCRETE SHALL BE A MINIMUM OF 3.5 INCHES THICK AND NO CRACKS WITHIN 2'-6" OF POSTS. POSTS SHALL BE SET BACK A MINIMUM OF 4 INCHES FROM EDGE OR EXPANSION JOINT OF A SLAB.

6. FOOTINGS HAVE BEEN DESIGNED FOR CLASS 5 SOIL AS PER TABLE 1806.2. ALLOWABLE FOUNDATION PRESSURE IS 1500 POUNDS PER SQUARE FOOT. LATERAL BEARING PRESSURE IS 100 PSF/FT AND IS DOUBLED PER IBC SECTION 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 SNOW/LIVE 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.

7. 20 PSF AND HIGHER LIVE LOAD STRUCTURES MAY BE USED AS COVERS FOR PARKING OF MOTOR VEHICLES. CARPORTS MUST HAVE AT LEAST TWO OPEN SIDES AND HAVE FLOOR SURFACES MADE OF APPROVED NONCOMBUSTIBLE MATERIAL OR ASPHALT.

8. AT LEAST ONE HORIZONTAL DIMENSION (PROJECTION OR WIDTH) OF COVER SHALL BE LESS THAN 30'.

9. 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.

10. ALTERNATE ALUMINUM ALLOYS OF EQUAL OR HIGHER STRENGTHS MAY BE USED. 3004H2x ALUMINUM MAY BE SUBSTITUTED FOR 3004H3x.



<b>Amerimax™</b>		28921 US HWY 74 ROMOLAND, CA 92585	
EXTERIOR HOME PRODUCTS			
DRAWN BY:	CMP		
SCALE:	NONE	DRAWING OR PART NAME EQUINOX GENERAL NOTES	
DATE:		DRAWING OR PART NUMBER GN01-2015	SHEET 1 OF 2

GENERAL NOTES:  
 (CONTINUED FROM SHEET NO. 1)

11. STEEL FASTENERS SHALL BE EITHER STAINLESS (3000 SERIES) OR GALVANIZED. BOLTS SHALL BE ASTM A-307 HOT DIPPED GALVANIZED, MECHANICALLY GALVANIZED, ZINC ELECTROPLATED, ALUMINIZED OR 300 SERIES STAINLESS STEEL. CONCRETE ANCHOR BOLTS ARE SPECIFIED IN THE DETAILS. ALL WOOD SCREWS MUST COMPLY WITH ANSI/ASME STANDARD B18.6.1 AHD AND AWC NDS-2015 11.1.5. ALL LAG SCREWS MUST COMPLY WITH ANSI/ASME B18.2.1 AND AWC NDS-2015 11.1.4. ALL STEEL WASHERS TO BE ASTM F844 W/ DIMENSIONS IN ACCORDANCE WITH ASME B18.22.1, TYPE A. ALL STEEL NUTS TO BE ASTM A563. THE MINIMUM WASHER DIAMETER SHALL BE 1" FOR BOLTED CONNECTIONS. SCREWS AND BOLTS WILL HAVE A MINIMUM EDGE DISTANCE OF 2X FASTENER DIAMETER.

12. POSTS EMBEDDED IN CONCRETE SHALL BE CLEAN AND FREE FROM OILY SURFACES. ALUMINUM SHALL NOT BE EMBEDDED IN CONCRETE IF IT CONTAINS CHLORIDES OR CORROSIVE ADDITIVES. EMBEDDED ALUMINUM ELEMENTS WILL BE COVERED WITH PLASTIC TAPE OR OTHERWISE PROTECTED AS PER 2015 ADM M.7.3.

13. HEADER SPLICES SHALL NOT BE LOCATED NEARER TO THE END OF THE STRUCTURE THAN THE FIRST INTERIOR POST.

14. ALL SELF DRILLING AND SELF TAPPING SCREWS MUST COMPLY TO ICC- ESR 1271, 1408, 1976, 2196, 3006, 3215, 3223, 3231, 3294, 3528 OR 3558 AND USE HEADS W/ DIAMETERS EQUAL TO #8 =  $\frac{5}{16}$ ", #10 =  $\frac{3}{8}$ ", #12 =  $\frac{13}{32}$ " AND #14 =  $\frac{1}{2}$ " OR STEEL WASHERS OF SIMILAR DIAMETER AND AS PER GENERAL NOTE #11

15. STRUCTURES MAY NOT BE ENCLOSED IN ANY MANNER WITHOUT ADDITIONAL ENGINEERING ANALYSIS OR APPROVAL OF THE LOCAL BUILDING AUTHORITY.

16. STEEL AND ALUMINUM LOUVERS ARE CLASS A FIRE RATED AS INDICATED BY THE EXCEPTION #2 IN IBC SECTION 1505.2.

17. STRUCTURE TYPES A AND B MAY BE ATTACHED TO EAVE OVERHANGS PER DETAIL T.

18. WHERE ALUMINUM ALLOY PARTS ARE 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 SEPARATED IN ACCORDANCE WITH THE ALUMINUM DESIGN MANUAL M.7.

**20. 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 #3.
- 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.


21. DRIFTING SNOW IS ADDRESSED IN DETAIL X. SLIDING SNOW IS BEYOND THE SCOPE OF THIS REPORT.

22. ALL MULTISPAN TABLES AND DETAILS ASSUME EQUAL SPANS WITHIN 20%. ALL SPECIFICATIONS MUST BE BASED ON LONGEST ACTUAL SPAN.

23. WOOD USED IN CONNECTIONS SHALL BE PROTECTED FROM WEATHER AS PER IBC SECTION 1403.2 (WALLS) AND/OR 1503 (ROOFS), WHICHEVER IS MORE APPROPRIATE.

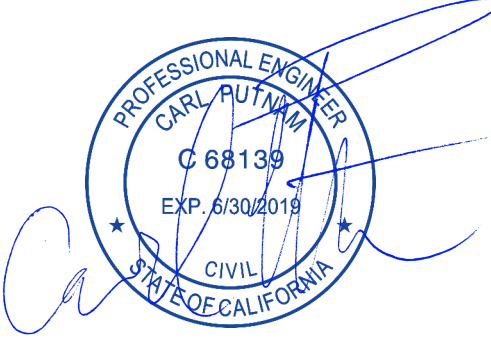
24. FREESTANDING STRUCTURES MUST USE DETAIL M. ATTACHED STRUCTURES MUST USE DETAIL M OR Q. DETAIL R OR S MAY BE CHOSEN FOR DETAIL Q.



		28921 US HWY 74 ROMOLAND, CA 92585	
DRAWN BY:	CMP	DRAWING OR PART NAME	EQUINOX GENERAL NOTES
SCALE:	NONE	DRAWING OR PART NUMBER	GN02-2015
DATE:			SHEET 2 OF 2

**LOUVER SPANS FOR COMMERCIAL AND PATIO STRUCTURES**

Ground Snow Load (psf)	Roof Design Load (psf)	Louver Description	Wind Speed and Exposure													
			Exposure B							Exposure C						
			110	115	120	130	140	150	160	140	140	140	140	140	150	160
10 LIVE	10	Extruded Alum Louver (Detail B)	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	13'-5"	14'-0"	14'-0"	14'-0"	13'-8"	13'-1"	12'-6"	12'-0"
20 LIVE	20	Extruded Alum Louver (Detail B)	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	13'-5"	14'-0"	14'-0"	14'-0"	13'-8"	13'-1"	12'-6"	12'-0"
25	21.0	Extruded Alum Louver (Detail B)	13'-10"	13'-3"	13'-1"	12'-9"	12'-6"	12'-3"	12'-0"	12'-9"	12'-7"	12'-6"	12'-1"	11'-10"	11'-6"	11'-2"
30	25.2	Extruded Alum Louver (Detail B)	12'-9"	12'-7"	12'-7"	12'-4"	12'-1"	11'-10"	11'-8"	12'-4"	12'-3"	12'-1"	11'-9"	11'-5"	11'-2"	10'-9"
35.7	30.0	Extruded Alum Louver (Detail B)	12'-4"	12'-3"	12'-1"	11'-10"	11'-8"	11'-5"	11'-2"	11'-10"	11'-9"	11'-8"	11'-3"	11'-0"	10'-8"	10'-4"
43	36.1	Extruded Alum Louver (Detail B)	11'-8"	11'-8"	11'-6"	11'-5"	11'-2"	10'-11"	10'-8"	11'-5"	11'-2"	11'-0"	10'-9"	10'-6"	0'-0"	0'-0"



JUN 14 2017



**A. Tables for Attached Structures with Single Span Louvers with Two Posts ONLY**

max Ss= 150% Seismic Design Category D

**Ground Snow Load 10 psf Table A1**

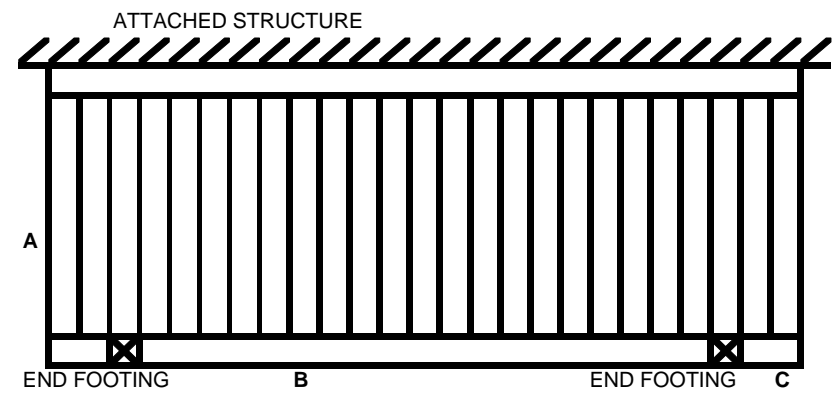
Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only Cube Footing End d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	B (on slab)	B		8	10	11
	10	6	3	24.0		24.0	19	612
10	8	4	23.8	24.0	21	817	1013	1111
10	10	5	18.2	23.0	23	983	1219	1337
10	12	6	14.5	21.7	24	1124	1394	1528
10	13	6.5	13.1	21.1	24	1189	1475	1617
10	14	7	11.9	20.6	25	1257	1559	1709

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	B (on slab)	B		8	9	11
	10	6	3	24.0		24.0	21	612
10	8	4	23.8	24.0	23	817	1013	1111
10	10	5	18.2	23.0	25	983	1219	1337
10	12	6	14.5	21.7	26	1124	1394	1528
10	13	6.5	13.1	21.1	26	1189	1475	1617
10	14	7	11.9	20.6	27	1257	1559	1709

**Ground Snow Load 20 psf Table A3**

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	B (on slab)	B		8	10	11
	20.0	6	3	17.3		21.7	19	562
20.0	8	4	12.0	19.8	20	695	861	945
20.0	10	5	8.8	18.4	21	817	1013	1111
20.0	12	6	6.6	17.3	22	932	1156	1268
20.0	13	6.5	5.8	16.9	23	989	1226	1345
20.0	14	7	5.1	16.4	23	1044	1294	1419

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	B (on slab)	B		8	10	11
	20.0	6	3	17.3		21.7	20	562
20.0	8	4	12.0	19.8	22	695	861	945
20.0	10	5	8.8	18.4	23	817	1013	1111
20.0	12	6	6.6	17.3	24	932	1156	1268
20.0	13	6.5	5.8	16.9	25	989	1226	1345
20.0	14	7	5.1	16.4	25	1044	1294	1419



- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a **SINGLE SPAN ATTACHED** Equinox cover **WITH ONLY TWO POSTS**.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 24".
  - Choose height of Structure
  - Determine **Uplift Footing Size**.
  - Determine **Overturning Moment** by cross indexing "A" and structure height
  - Choose Lateral Force Resisting System
    - Normal Knee Brace: Details R and Q**  
This knee brace is allowed if Moment Connection Value in Detail R is greater than **Overturning Moment**.
    - Strong Knee Brace: Details S and Q**  
This knee brace is allowed if Moment Connection Value in Detail S is greater than **Overturning Moment**.
    - Post embedded in footing: Detail M**
      - Determine "**Overturning Moment**" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from #5 (**Uplift Footing Size**) and **Overturning Moment** to determine allowable footing sizes.
  - Fasten to wall as per Detail J1 or T

**USE THE BELOW TABLES WHEN USING A 'B' LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)**

Post Height (ft)	8 ft								10 ft								Table A5
	B (ft)								B (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
	OVERTURNING MOMENT (LBF*FT)																
6	306	350	394	437	481	525	569	612	380	434	488	542	597	651	705	759	110 MPH EXPOSURE B
8	408	467	525	583	642	700	758	817	506	579	651	723	796	868	940	1013	110 MPH EXPOSURE B
10	510	583	656	729	802	875	948	1021	633	723	814	904	994	1085	1175	1266	110 MPH EXPOSURE B
12	612	700	787	875	962	1050	1137	1225	759	868	976	1085	1193	1302	1410	1519	110 MPH EXPOSURE B
13	663	758	853	948	1043	1137	1232	1327	823	940	1058	1175	1293	1410	1528	1645	110 MPH EXPOSURE B
14	715	817	919	1021	1123	1225	1327	1429	886	1013	1139	1266	1392	1519	1645	1772	110 MPH EXPOSURE B

Post Height (ft)	8 ft								10 ft								Table A6
	B (ft)								B (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
	OVERTURNING MOMENT (LBF*FT)																
6	306	350	394	437	481	525	569	612	380	434	488	542	597	651	705	759	110 MPH EXPOSURE C
8	408	467	525	583	642	700	758	817	506	579	651	723	796	868	940	1013	110 MPH EXPOSURE C
10	510	583	656	729	802	875	948	1021	633	723	814	904	994	1085	1175	1266	110 MPH EXPOSURE C
12	612	700	787	875	962	1050	1137	1225	759	868	976	1085	1193	1302	1410	1519	110 MPH EXPOSURE C
13	663	758	853	948	1043	1137	1232	1327	823	940	1058	1175	1293	1410	1528	1645	110 MPH EXPOSURE C
14	715	817	919	1021	1123	1225	1327	1429	886	1013	1139	1266	1392	1519	1645	1772	110 MPH EXPOSURE C

max A (ft)	B (ft)								Table A7
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
6	15	16	17	17	18	19	19	19	110 MPH EXPOSURE B
8	17	18	19	19	20	20	21	21	110 MPH EXPOSURE B
10	18	19	20	21	21	22	23	23	110 MPH EXPOSURE B
12	19	20	21	22	23	23	24	25	110 MPH EXPOSURE B
13	20	21	22	23	23	24	25	25	110 MPH EXPOSURE B
14	21	21	22	23	24	25	25	26	110 MPH EXPOSURE B

max A (ft)	B (ft)								Table A8
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
6	17	17	18	19	19	20	21	21	110 MPH EXPOSURE C
8	18	19	20	21	21	22	23	23	110 MPH EXPOSURE C
10	20	21	22	22	23	24	24	25	110 MPH EXPOSURE C
12	21	22	23	24	24	25	26	27	110 MPH EXPOSURE C
13	22	23	24	24	25	26	27	27	110 MPH EXPOSURE C
14	22	23	24	25	26	27	27	28	110 MPH EXPOSURE C

- FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS**
- SLAB 1** Follow Instructions #1-3 above.
  - SLAB 2** Maximum post spacing is "B (on slab)"
  - SLAB 3** Follow Instructions #5-8 above.
  - SLAB 4** Follow #9 above, embedding into concrete is not an option.
  - SLAB 5** Fasten to wall as per Detail J1 or T



JUN 14 2017

**B. Tables for Attached Structures with Single Span Louvers with at Least 3 Posts**

max Ss= 150% Seismic Design Category D

**Ground Snow Load 10 psf Table B1**

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only Cube Footing		Post Height (ft) Overturning Moment (lbf*ft)		
	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
	10	6	3	18.5	24.0	23	19	1050	1302
10	8	4	13.9	24.0	26	21	1400	1736	1904
10	10	5	11.1	23.0	27	23	1674	2076	2277
10	12	6	9.3	21.7	28	24	1898	2353	2581
10	13	6.5	8.5	21.1	29	24	1999	2479	2719
10	14	7	7.9	20.6	29	25	2106	2611	2864

**Ground Snow Load 20 psf Table B3**

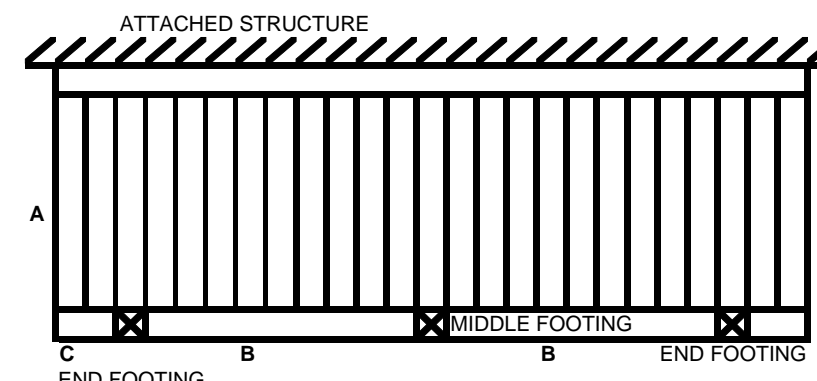
Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only		Post Height (ft) Overturning Moment (lbf*ft)		
	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
	20.0	6	3	10.6	21.7	23	19	949	1177
20.0	8	4	8.0	19.8	24	20	1156	1433	1572
20.0	10	5	6.4	18.4	25	21	1343	1665	1826
20.0	12	6	5.3	17.3	26	22	1514	1878	2060
20.0	13	6.5	4.9	16.9	27	23	1598	1982	2174
20.0	14	7	4.6	16.4	27	23	1679	2082	2283

**Single 0.125"x2"x8" Aluminum Header Table B2**

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only		Post Height (ft) Overturning Moment (lbf*ft)		
	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
	10	6	3	18.5	24.0	25	21	1050	1302
10	8	4	13.9	24.0	28	23	1400	1736	1904
10	10	5	11.1	23.0	29	25	1674	2076	2277
10	12	6	9.3	21.7	31	26	1898	2353	2581
10	13	6.5	8.5	21.1	31	26	1999	2479	2719
10	14	7	7.9	20.6	32	27	2106	2611	2864

**Single 0.125"x2"x8" Aluminum Header Table B4**

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only		Post Height (ft) Overturning Moment (lbf*ft)		
	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
	20.0	6	3	10.6	21.7	24	20	949	1177
20.0	8	4	8.0	19.8	26	22	1156	1433	1572
20.0	10	5	6.4	18.4	27	23	1343	1665	1826
20.0	12	6	5.3	17.3	28	24	1514	1878	2060
20.0	13	6.5	4.9	16.9	29	25	1598	1982	2174
20.0	14	7	4.6	16.4	29	25	1679	2082	2283



- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a **SINGLE SPAN ATTACHED** Equinox cover **WITH AT LEAST 3 POSTS**.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 24".
  - Choose height of Structure
  - Determine **Uplift Footing Size**.
  - Determine **Overturning Moment** by cross indexing "A" and structure height
  - Choose Lateral Force Resisting System
    - Normal Knee Brace: Details R and Q**  
This knee brace is allowed if Moment Connection Value in Detail R is greater than **Overturning Moment**.
    - Strong Knee Brace: Details S and Q**  
This knee brace is allowed if Moment Connection Value in Detail S is greater than **Overturning Moment**.
    - Post embedded in footing: Detail M**
      - Determine "**Overturning Moment**" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from #5 (**Uplift Footing Size**) and **Overturning Moment to determine allowable footing sizes**.
  - Fasten to wall as per Detail J1 or T

**USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)**

Post Height	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)			
6	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
OVERTURNING MOMENT (LBF*FT)																
6	437	525	612	700	787	875	962	1050	542	651	759	868	976	1085	1193	1302
8	583	700	817	933	1050	1167	1283	1400	723	868	1013	1157	1302	1447	1591	1736
10	729	875	1021	1167	1312	1458	1604	1750	904	1085	1266	1447	1627	1808	1989	2170
12	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604
13	948	1137	1327	1517	1706	1896	2085	2275	1175	1410	1645	1880	2116	2351	2586	2821
14	1021	1225	1429	1633	1837	2041	2246	2450	1266	1519	1772	2025	2278	2531	2785	3038

Table B5

Post Height	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)			
6	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
OVERTURNING MOMENT (LBF*FT)																
6	437	525	612	700	787	875	962	1050	542	651	759	868	976	1085	1193	1302
8	583	700	817	933	1050	1167	1283	1400	723	868	1013	1157	1302	1447	1591	1736
10	729	875	1021	1167	1312	1458	1604	1750	904	1085	1266	1447	1627	1808	1989	2170
12	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604
13	948	1137	1327	1517	1706	1896	2085	2275	1175	1410	1645	1880	2116	2351	2586	2821
14	1021	1225	1429	1633	1837	2041	2246	2450	1266	1519	1772	2025	2278	2531	2785	3038

Table B6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
UPLIFT ONLY CUBE FOOTING d (IN)								
6	17	19	19	20	21	22	23	23
8	19	20	21	22	23	24	25	26
10	21	22	23	24	25	26	27	28
12	22	23	25	26	27	28	29	29
13	23	24	25	26	27	28	29	30
14	23	25	26	27	28	29	30	31

Table B7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
UPLIFT ONLY CUBE FOOTING d (IN)								
6	19	20	21	22	23	24	24	25
8	21	22	23	24	25	26	27	28
10	22	24	25	26	27	28	29	30
12	24	25	27	28	29	30	31	32
13	24	26	27	29	30	31	32	33
14	25	27	28	29	30	31	32	33

Table B8

**FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS**

- SLAB 1** Follow Instructions #1-3 above.
- SLAB 2** Maximum post spacing is "B o(n slab)"
- SLAB 3** Follow Instructions #5-8 above.
- SLAB 4** Follow #9 above, embedding into concrete is not an option.
- SLAB 5** Fasten to wall as per Detail J1 or T



JUN 14 2017

C. Tables for Attached Structures with Multi Span Louvers with Two Posts ONLY

max Ss= 150% Seismic Design Category D

Ground Snow Load 10 psf

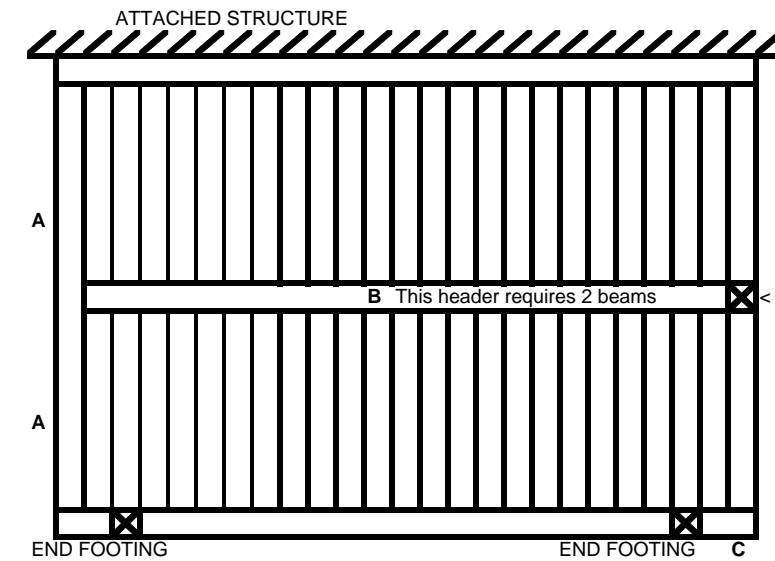
Table C1

Single 0.125"x2"x8" Aluminum Header					Uplift Only Cube Footing	Post Height (ft)		
Roof Design	110 MPH EXPOSURE B		Return Beams	B		8	10	11
Load (psf)	A	trib			End d (in)	Overturning Moment (lbf *ft)		
10	6	6	1	24.0	23	1050	1302	1428
10	8	8	1	24.0	26	1400	1736	1904
10	10	10	2	23.0	27	1674	2076	2277
10	12	12	3	21.7	28	1898	2353	2581
10	13	13	3	21.1	29	1999	2479	2719
10	14	14	4	20.6	29	2106	2611	2864

Ground Snow Load 20 psf

Table C3

Single 0.125"x2"x8" Aluminum Header					Uplift Only Cube Footing	Post Height (ft)		
Roof Design	110 MPH EXPOSURE B		Return Beams	B		8	10	11
Load (psf)	A	trib			End d (in)	Overturning Moment (lbf *ft)		
20.0	6	6	1	21.7	23	949	1177	1290
20.0	8	8	2	19.8	24	1156	1433	1572
20.0	10	10	3	18.4	25	1343	1665	1826
20.0	12	12	4	17.3	26	1514	1878	2060
20.0	13	13	5	16.9	27	1598	1982	2174
20.0	14	14	6	16.4	27	1679	2082	2283



Post at mid span OR use number of Return Beams.

Single 0.125"x2"x8" Aluminum Header					Uplift Only Cube Footing	Post Height (ft)		
Roof Design	110 MPH EXPOSURE C or 120 MPH EXPOSURE B		Return Beams	B		8	10	11
Load (psf)	A	trib			End d (in)	Overturning Moment (lbf *ft)		
10	6	6	1	24.0	25	1050	1302	1428
10	8	8	1	24.0	28	1400	1736	1904
10	10	10	2	23.0	29	1674	2076	2277
10	12	12	3	21.7	31	1898	2353	2581
10	13	13	3	21.1	31	1999	2479	2719
10	14	14	4	20.6	32	2106	2611	2864

Table C2

Single 0.125"x2"x8" Aluminum Header					Uplift Only Cube Footing	Post Height (ft)		
Roof Design	110 MPH EXPOSURE C or 120 MPH EXPOSURE B		Return Beams	B		8	10	11
Load (psf)	A	trib			End d (in)	Overturning Moment (lbf *ft)		
20.0	6	6	1	21.7	24	949	1177	1290
20.0	8	8	2	19.8	26	1156	1433	1572
20.0	10	10	3	18.4	27	1343	1665	1826
20.0	12	12	4	17.3	28	1514	1878	2060
20.0	13	13	5	16.9	29	1598	1982	2174
20.0	14	14	6	16.4	29	1679	2082	2283

Table C4

USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)

Post Height (ft)	8 ft								10 ft										
	B (ft)		12	14	16	18	20	22	24	B (ft)		10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)																		
max A (ft)	6	470	525	612	700	787	875	962	1050	583	651	759	868	976	1085	1193	1302	1411	1520
	8	627	700	817	933	1050	1167	1283	1400	777	868	1013	1157	1302	1447	1591	1736	1881	2026
	10	783	875	1021	1167	1312	1458	1604	1750	971	1085	1266	1447	1627	1808	1989	2170	2351	2532
	12	940	1050	1225	1400	1575	1750	1925	2100	1166	1302	1519	1736	1953	2170	2387	2604	2821	3038
	13	1018	1137	1327	1517	1706	1896	2085	2275	1263	1410	1645	1880	2116	2351	2586	2821	3056	3291
	14	1097	1225	1429	1633	1837	2041	2246	2450	1360	1519	1772	2025	2278	2531	2785	3038	3291	3544

Table C5

Post Height (ft)	8 ft								10 ft										
	B (ft)		12	14	16	18	20	22	24	B (ft)		10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)																		
max A (ft)	6	571	571	612	700	787	875	962	1050	708	708	759	868	976	1085	1193	1302	1411	1520
	8	761	761	817	933	1050	1167	1283	1400	944	944	1013	1157	1302	1447	1591	1736	1881	2026
	10	951	951	1021	1167	1312	1458	1604	1750	1179	1179	1266	1447	1627	1808	1989	2170	2351	2532
	12	1141	1141	1225	1400	1575	1750	1925	2100	1415	1415	1519	1736	1953	2170	2387	2604	2821	3038
	13	1237	1237	1327	1517	1706	1896	2085	2275	1533	1533	1645	1880	2116	2351	2586	2821	3056	3291
	14	1332	1332	1429	1633	1837	2041	2246	2450	1651	1651	1772	2025	2278	2531	2785	3038	3291	3544

Table C6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	17	19	19	20	21	22	23	23
8	19	20	21	22	23	24	25	26
10	21	22	23	24	25	26	27	28
12	22	23	25	26	27	28	29	29
13	23	24	25	26	27	28	29	30
14	23	25	26	27	28	29	30	31

Table C7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	19	20	21	22	23	24	24	25
8	21	22	23	24	25	26	27	28
10	22	24	25	26	27	28	29	30
12	24	25	27	28	29	30	31	32
13	24	26	27	29	30	31	32	33
14	25	27	28	29	30	31	32	33

Table C8

INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a MULTI SPAN ATTACHED Equinox cover WITH ONLY 2 POSTS
- Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
- Choose "A". "A" will be limited by maximum louver panel span.
- Determine maximum "B" from tables on this page
- The maximum "C" is 24".
- Choose height of Structure
- Determine Uplift Footing Size.
- Determine Overturning Moment by cross indexing "A" and structure height
- Choose Lateral Force Resisting System
  - Normal Knee Brace: Details R and Q**  
This knee brace is allowed if Moment Connection Value in Detail R is greater than Overturning Moment.
  - Strong Knee Brace: Details S and Q**  
This knee brace is allowed if Moment Connection Value in Detail S is greater than Overturning Moment.
  - Post embedded in footing: Detail M**
    - Determine "Overturning Moment" from tables on this page
    - Go to Tables F1 or F2. Cross index the required footing size from #5 (Uplift Footing Size) and Overturning Moment to determine allowable footing sizes.
- Use mid post OR number of return beams indicated in tables (C1-C4).
- Fasten to wall as per Detail J1
- If there is no mid span post, fasten ends of cover as per Detail J2.



JUN 14 2017



D. Tables for Freestanding Structures with Single Span Louvers with 4 posts

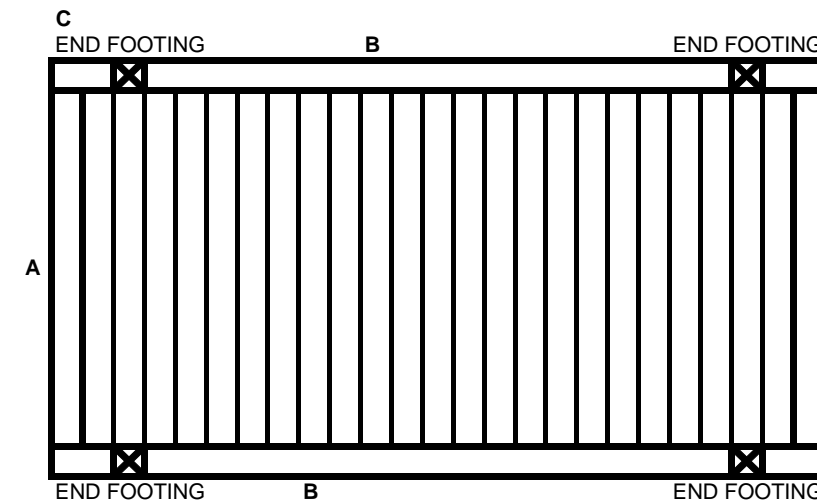
max Ss= 150% Seismic Design Category D

Ground Snow Load 10 psf Table D1

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B			Uplift Only Cube Footing End d (in)	Post Height (ft) 8 10 11 Overturning Moment (lbf *ft)		
	A	trib	B		8	10	11
10	6	3	24.0	19	1225	1519	1666
10	8	4	24.0	21	1633	2025	2221
10	10	5	23.0	23	1966	2438	2674
10	12	6	21.7	24	2248	2787	3057
10	13	6.5	21.1	24	2378	2949	3235
10	14	7	20.6	25	2514	3117	3419

Ground Snow Load 20 psf Table D3

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B			Uplift Only End d (in)	Post Height (ft) 8 10 11 Overturning Moment (lbf *ft)		
	A	trib	B		8	10	11
20.0	6	3	21.7	19	1222	1515	1662
20.0	8	4	19.8	20	1389	1723	1889
20.0	10	5	18.4	21	1634	2026	2222
20.0	12	6	17.3	22	1864	2312	2536
20.0	13	6.5	16.9	23	1977	2452	2689
20.0	14	7	16.4	23	2087	2588	2839



Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B			Uplift Only End d (in)	Post Height (ft) 8 10 11 Overturning Moment (lbf *ft)		
	A	trib	B		8	10	11
10	6	3	24.0	21	1332	1651	1811
10	8	4	24.0	23	1633	2025	2221
10	10	5	23.0	25	1966	2438	2674
10	12	6	21.7	26	2248	2787	3057
10	13	6.5	21.1	26	2378	2949	3235
10	14	7	20.6	27	2514	3117	3419

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B			Uplift Only End d (in)	Post Height (ft) 8 10 11 Overturning Moment (lbf *ft)		
	A	trib	B		8	10	11
20.0	6	3	21.7	20	1222	1515	1662
20.0	8	4	19.8	22	1389	1723	1889
20.0	10	5	18.4	23	1634	2026	2222
20.0	12	6	17.3	24	1864	2312	2536
20.0	13	6.5	16.9	25	1977	2452	2689
20.0	14	7	16.4	25	2087	2588	2839

Table D2

Table D4

USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)

Post Height max A (ft)	8 ft								10 ft							
	B (ft)								B (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
6	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604
8	1167	1400	1633	1866	2100	2333	2566	2800	1447	1736	2025	2314	2604	2893	3182	3472
10	1458	1750	2041	2333	2625	2916	3208	3500	1808	2170	2531	2893	3255	3616	3978	4340
12	1750	2100	2450	2800	3150	3500	3850	4200	2170	2604	3038	3472	3906	4340	4774	5207
13	1896	2275	2654	3033	3412	3791	4170	4550	2351	2821	3291	3761	4231	4701	5171	5641
14	2041	2450	2858	3266	3675	4083	4491	4900	2531	3038	3544	4050	4557	5063	5569	6075

Table D5

Post Height max A (ft)	8 ft								10 ft							
	B (ft)								B (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
6	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604
8	1167	1400	1633	1866	2100	2333	2566	2800	1447	1736	2025	2314	2604	2893	3182	3472
10	1458	1750	2041	2333	2625	2916	3208	3500	1808	2170	2531	2893	3255	3616	3978	4340
12	1750	2100	2450	2800	3150	3500	3850	4200	2170	2604	3038	3472	3906	4340	4774	5207
13	1896	2275	2654	3033	3412	3791	4170	4550	2351	2821	3291	3761	4231	4701	5171	5641
14	2041	2450	2858	3266	3675	4083	4491	4900	2531	3038	3544	4050	4557	5063	5569	6075

Table D6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	15	16	17	17	18	19	19	19
8	17	18	19	19	20	20	21	21
10	18	19	20	21	21	22	23	23
12	19	20	21	22	23	23	24	25
13	20	21	22	23	23	24	25	25
14	21	21	22	23	24	25	25	26

Table D7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	17	17	18	19	19	20	21	21
8	18	19	20	21	21	22	23	23
10	20	21	22	22	23	24	24	25
12	21	22	23	24	24	25	26	27
13	22	23	24	24	25	26	27	27
14	22	23	24	25	26	27	27	28

Table D8

- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a SINGLE SPAN FREESTANDING Equinox cover WITH ONLY FOUR POSTS.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 24".
  - Choose height of Structure
  - Determine Uplift Footing Size.
  - Determine Overturning Moment by cross indexing "A" and structure height
  - Lateral Force Resisting System DETAIL M
    - Normal Knee Brace: Details R and Q IS NOT ALLOWED Moment.
    - Strong Knee Brace: Details S and Q IS NOT ALLOWED Moment.
    - Post embedded in footing: Detail M
      - Determine "Overturning Moment" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from #5 (Uplift Footing Size) and Overturning Moment to determine allowable footing sizes.



JUN 14 2017



E. Tables for Freestanding Structures with Single Span Louvers with at least 6 posts

max Ss= 150% Seismic Design Category D

**Ground Snow Load 10 psf** Table E1

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B		Uplift Only Cube Footing Middle d (in)    End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	10	6		3	24.0	23	19
10	8	4	24.0	26	21	1880 2331 2557	
10	10	5	23.0	27	23	1799 2231 2447	
10	12	6	21.7	28	24	1898 2353 2581	
10	13	6.5	21.1	29	24	1999 2479 2719	
10	14	7	20.6	29	25	2106 2611 2864	

**Ground Snow Load 20 psf** Table E3

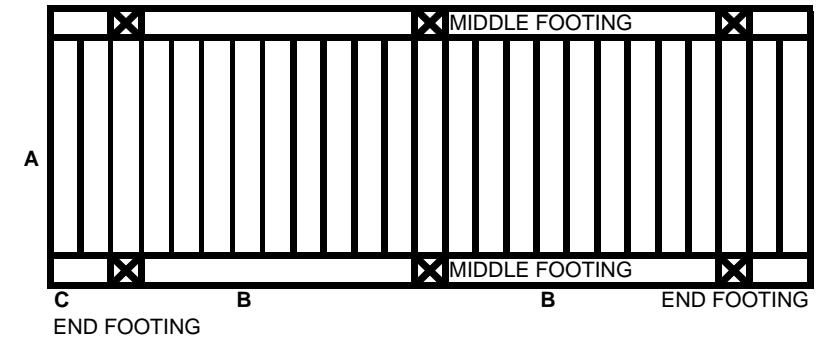
Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE B or 110 MPH EXPOSURE B		Uplift Only Middle d (in)    End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	20.0	6		3	21.7	23	19
20.0	8	4	19.8	24	20	1552 1925 2111	
20.0	10	5	18.4	25	21	1442 1788 1962	
20.0	12	6	17.3	26	22	1514 1878 2060	
20.0	13	6.5	16.9	27	23	1598 1982 2174	
20.0	14	7	16.4	27	23	1679 2082 2283	

**Ground Snow Load 10 psf** Table E2

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B		Uplift Only Middle d (in)    End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	10	6		3	24.0	25	21
10	8	4	24.0	28	23	2283 2831 3105	
10	10	5	23.0	29	25	2184 2709 2971	
10	12	6	21.7	31	26	2063 2558 2806	
10	13	6.5	21.1	31	26	2006 2488 2729	
10	14	7	20.6	32	27	2106 2611 2864	

**Ground Snow Load 20 psf** Table E4

Single 0.125"x2"x8" Aluminum Header Roof Design Load (psf)	110 MPH EXPOSURE C or 120 MPH EXPOSURE B		Uplift Only Middle d (in)    End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	20.0	6		3	21.7	24	20
20.0	8	4	19.8	26	22	1885 2338 2564	
20.0	10	5	18.4	27	23	1751 2172 2382	
20.0	12	6	17.3	28	24	1646 2042 2239	
20.0	13	6.5	16.9	29	25	1604 1989 2181	
20.0	14	7	16.4	29	25	1679 2082 2283	



- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a **SINGLE SPAN FREESTANDING** Equinox cover **WITH AT LEAST 6 POSTS**.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 24".
  - Choose height of Structure
  - Determine **Uplift Footing Size**.
  - Determine **Overturning Moment** by cross indexing "A" and structure height
  - Lateral Force Resisting System **DETAIL M**
    - Normal Knee Brace: Details R and Q IS NOT ALLOWED Moment.**
    - Strong Knee Brace: Details S and Q IS NOT ALLOWED Moment.**
    - Post embedded in footing: Detail M**
      - Determine "**Overturning Moment**" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from #5 (**Uplift Footing Size**) and **Overturning Moment to determine allowable footing sizes**

**USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)**

Post Height	8 ft								10 ft							
	B (ft)								B (ft)							
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
6	783	940	1097	1253	1410	1567	1723	1880	971	1166	1360	1554	1748	1943	2137	2331
8	783	940	1097	1253	1410	1567	1723	1880	971	1166	1360	1554	1748	1943	2137	2331
10	783	940	1097	1253	1410	1567	1723	1880	971	1166	1360	1554	1748	1943	2137	2331
12	940	1050	1225	1400	1575	1750	1925	2100	1166	1302	1519	1736	1953	2170	2387	2604
13	1018	1137	1327	1517	1706	1896	2085	2275	1263	1410	1645	1880	2116	2351	2586	2821
14	1097	1225	1429	1633	1837	2041	2246	2450	1360	1519	1772	2025	2278	2531	2785	3038

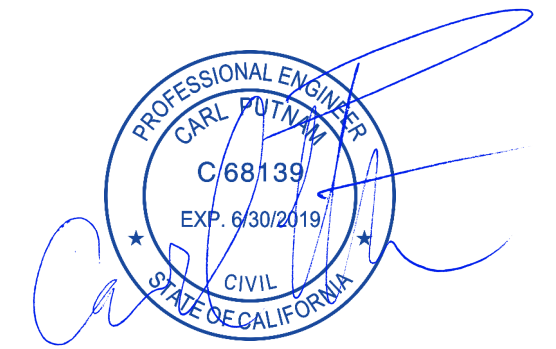
Post Height	8 ft								10 ft							
	B (ft)								B (ft)							
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
6	951	1141	1332	1522	1712	1902	2093	2283	1179	1415	1651	1887	2123	2359	2595	2831
8	951	1141	1332	1522	1712	1902	2093	2283	1179	1415	1651	1887	2123	2359	2595	2831
10	951	1141	1332	1522	1712	1902	2093	2283	1179	1415	1651	1887	2123	2359	2595	2831
12	1141	1141	1332	1522	1712	1902	2093	2283	1415	1415	1651	1887	2123	2359	2595	2831
13	1237	1237	1332	1522	1712	1902	2093	2283	1533	1533	1651	1887	2123	2359	2595	2831
14	1332	1332	1429	1633	1837	2041	2246	2450	1651	1651	1772	2025	2278	2531	2785	3038

**Table E7**

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	17	19	19	20	21	22	23	23
8	19	20	21	22	23	24	25	26
10	21	22	23	24	25	26	27	28
12	22	23	25	26	27	28	29	29
13	23	24	25	26	27	28	29	30
14	23	25	26	27	28	29	30	31

**Table E8**

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
6	19	20	21	22	23	24	24	25
8	21	22	23	24	25	26	27	28
10	22	24	25	26	27	28	29	30
12	24	25	27	28	29	30	31	32
13	24	26	27	29	30	31	32	33
14	25	27	28	29	30	31	32	33



JUN 14 2017

F. Tables for Freestanding Structures with Multi Span Louvers with 4 posts

max Ss= 150% Seismic Design Category D

**Ground Snow Load 10 psf Table F1**

Load (psf)	Roof Design 110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only Cube Footing Exterior d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	Return Beams	B		8	10	11
10	6	6	1	24.0	25	1050	1302	1428
10	8	8	1	24.0	27	1400	1736	1904
10	10	10	2	23.0	29	1674	2076	2277
10	12	12	3	21.7	30	1898	2353	2581
10	13	13	3	21.1	31	1999	2479	2719
10	14	14	4	20.6	31	2106	2611	2864

**Ground Snow Load 20 psf Table F3**

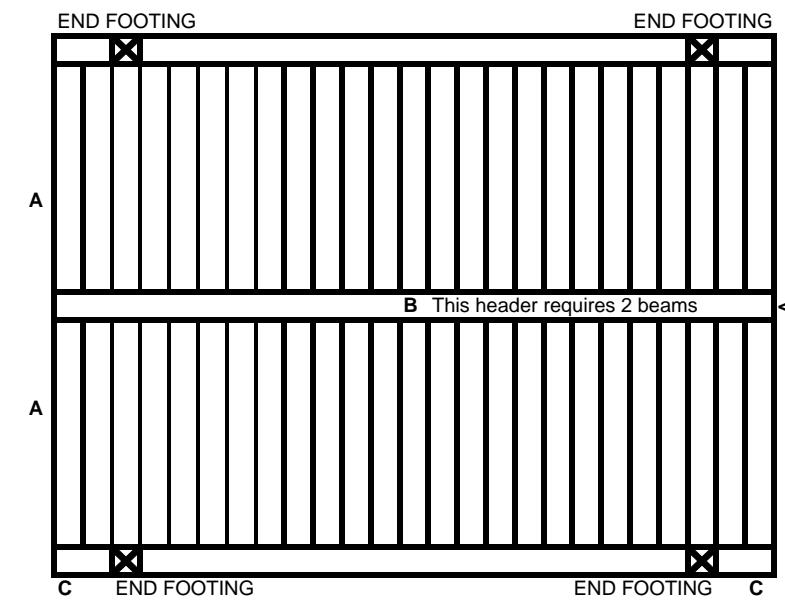
Load (psf)	Roof Design 110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only Cube Footing Exterior d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	Return Beams	B		8	10	11
20.0	6	6	1	21.7	24	949	1177	1290
20.0	8	8	2	19.8	26	1156	1433	1572
20.0	10	10	3	18.4	27	1343	1665	1826
20.0	12	12	4	17.3	28	1514	1878	2060
20.0	13	13	5	16.9	29	1598	1982	2174
20.0	14	14	6	16.4	29	1679	2082	2283

**Single 0.125"x2"x8" Aluminum Header Roof 110 MPH EXPOSURE C or 120 MPH EXPOSURE B Table F2**

Load (psf)	Roof Design 110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only Cube Footing Exterior d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	Return Beams	B		8	10	11
10	6	6	1	24.0	27	1141	1415	1552
10	8	8	1	24.0	29	1400	1736	1904
10	10	10	2	23.0	31	1674	2076	2277
10	12	12	3	21.7	32	1898	2353	2581
10	13	13	3	21.1	33	1999	2479	2719
10	14	14	4	20.6	34	2106	2611	2864

**Single 0.125"x2"x8" Aluminum Header Roof 110 MPH EXPOSURE C or 120 MPH EXPOSURE B Table F4**

Load (psf)	Roof Design 110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only Cube Footing Exterior d (in)	Post Height (ft) Overturning Moment (lbf *ft)		
	A	trib	Return Beams	B		8	10	11
20.0	6	6	1	21.7	26	1032	1279	1403
20.0	8	8	2	19.8	28	1156	1433	1572
20.0	10	10	3	18.4	29	1343	1665	1826
20.0	12	12	4	17.3	31	1514	1878	2060
20.0	13	13	5	16.9	31	1598	1982	2174
20.0	14	14	6	16.4	32	1679	2082	2283



USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)

**Table F5**

Post Height (ft)	8 ft								10 ft								
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)		
6	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	110 MPH EXPOSURE B
8	OVERTURNING MOMENT (LBF*FT)																110 MPH EXPOSURE B
10	470	525	612	700	787	875	962	1050	583	651	759	868	976	1085	1193	1302	110 MPH EXPOSURE B
12	627	700	817	933	1050	1167	1283	1400	777	868	1013	1157	1302	1447	1591	1736	110 MPH EXPOSURE B
13	783	875	1021	1167	1312	1458	1604	1750	971	1085	1266	1447	1627	1808	1989	2170	110 MPH EXPOSURE B
14	940	1050	1225	1400	1575	1750	1925	2100	1166	1302	1519	1736	1953	2170	2387	2604	110 MPH EXPOSURE B
	1018	1137	1327	1517	1706	1896	2085	2275	1263	1410	1645	1880	2116	2351	2586	2821	110 MPH EXPOSURE B
	1097	1225	1429	1633	1837	2041	2246	2450	1360	1519	1772	2025	2278	2531	2785	3038	110 MPH EXPOSURE B

**Table F6**

Post Height (ft)	8 ft								10 ft								
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)		
6	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	110 MPH EXPOSURE C
8	OVERTURNING MOMENT (LBF*FT)																110 MPH EXPOSURE C
10	571	571	666	761	856	951	1046	1141	708	708	826	944	1061	1179	1297	1415	110 MPH EXPOSURE C
12	761	761	817	933	1050	1167	1283	1400	944	944	1013	1157	1302	1447	1591	1736	110 MPH EXPOSURE C
13	951	951	1021	1167	1312	1458	1604	1750	1179	1179	1266	1447	1627	1808	1989	2170	110 MPH EXPOSURE C
14	1141	1141	1225	1400	1575	1750	1925	2100	1415	1415	1519	1736	1953	2170	2387	2604	110 MPH EXPOSURE C
	1237	1237	1327	1517	1706	1896	2085	2275	1533	1533	1645	1880	2116	2351	2586	2821	110 MPH EXPOSURE C
	1332	1332	1429	1633	1837	2041	2246	2450	1651	1651	1772	2025	2278	2531	2785	3038	110 MPH EXPOSURE C

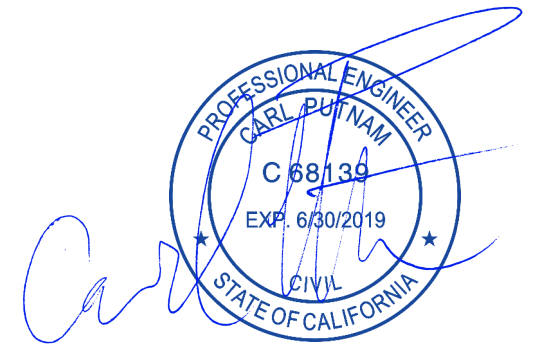
**Table F7**

max A (ft)	B (ft)								
	10	12	14	16	18	20	22	24	
6	UPLIFT ONLY CUBE FOOTING d (IN)								110 MPH EXPOSURE B
8	17	19	19	20	21	22	23	23	110 MPH EXPOSURE B
10	19	20	21	22	23	24	25	26	110 MPH EXPOSURE B
12	21	22	23	24	25	26	27	28	110 MPH EXPOSURE B
13	22	23	25	26	27	28	29	29	110 MPH EXPOSURE B
14	23	24	25	26	27	28	29	30	110 MPH EXPOSURE B
	23	25	26	27	28	29	30	31	110 MPH EXPOSURE B

**Table F8**

max A (ft)	B (ft)								
	10	12	14	16	18	20	22	24	
6	UPLIFT ONLY CUBE FOOTING d (IN)								110 MPH EXPOSURE C
8	19	20	21	22	23	24	24	25	110 MPH EXPOSURE C
10	21	22	23	24	25	26	27	28	110 MPH EXPOSURE C
12	22	24	25	26	27	28	29	30	110 MPH EXPOSURE C
13	24	25	27	28	29	30	31	32	110 MPH EXPOSURE C
14	24	26	27	29	30	31	32	33	110 MPH EXPOSURE C
	25	27	28	29	30	31	32	33	110 MPH EXPOSURE C

- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a **MULTI SPAN FREESTANDING** Equinox cover **WITH ONLY FOUR POSTS**.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 24".
  - Choose height of Structure
  - Determine **Uplift Footing Size**.
  - Determine **Overturning Moment** by cross indexing "A" and structure height
  - Lateral Force Resisting System **DETAIL M**
    - Normal Knee Brace: Details R and Q IS NOT ALLOWED Moment.**
    - Strong Knee Brace: Details S and Q IS NOT ALLOWED Moment.**
    - Post embedded in footing: Detail M**
      - Determine "**Overturning Moment**" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from **#5 (Uplift Footing Size)** and **Overturning Moment** to determine allowable footing sizes
  - Use mid post OR number of return beams indicated in tables (G1-G4).



JUN 14 2017

G. Tables for Attached Structures with Multi Span Louvers with at Least 3 Posts

max Ss= 150% Seismic Design Category D

**Ground Snow Load 10 psf** Table G1

Single 0.125"x2"x8" Aluminum Header Roof Design	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only		Post Height (ft)			
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
								Overturning Moment (lbf *ft)		
10	6	6	18.5	21.7	23	18	949	1177	1290	
10	8	8	13.9	19.8	24	19	1156	1433	1572	
10	10	10	11.1	18.4	25	20	1343	1665	1826	
10	12	12	9.3	17.3	26	21	1514	1878	2060	
10	13	13	8.5	16.9	27	21	1598	1982	2174	
10	14	14	7.9	16.4	27	22	1679	2082	2283	

**Ground Snow Load 20 psf** Table G3

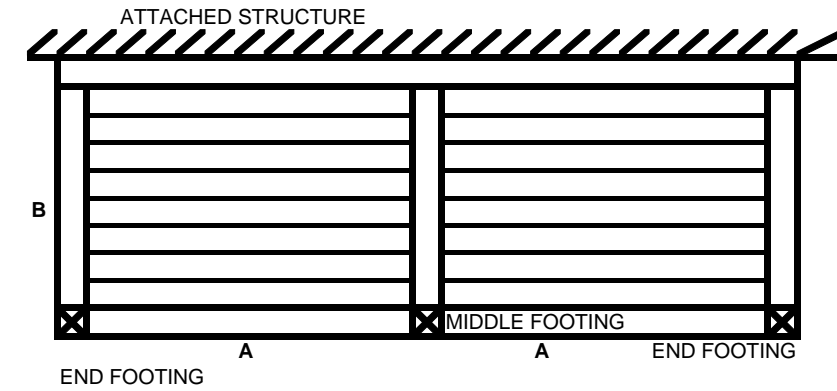
Single 0.125"x2"x8" Aluminum Header Roof Design	110 MPH EXPOSURE B or 110 MPH EXPOSURE B				Uplift Only		Post Height (ft)			
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
								Overturning Moment (lbf *ft)		
20.0	6	6	10.6	17.3	21	17	757	939	1030	
20.0	8	8	8.0	15.7	22	18	918	1138	1248	
20.0	10	10	6.4	14.6	23	19	1066	1322	1449	
20.0	12	12	5.3	13.7	24	19	1202	1491	1635	
20.0	13	13	4.9	13.4	25	20	1269	1573	1725	
20.0	14	14	4.6	13.1	25	20	1334	1654	1814	

**Ground Snow Load 10 psf** Table G2

Single 0.125"x2"x8" Aluminum Header Roof Design	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only		Post Height (ft)			
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
								Overturning Moment (lbf *ft)		
10	6	6	18.5	21.7	24	19	1032	1279	1403	
10	8	8	13.9	19.8	26	21	1156	1433	1572	
10	10	10	11.1	18.4	27	22	1343	1665	1826	
10	12	12	9.3	17.3	28	23	1514	1878	2060	
10	13	13	8.5	16.9	29	23	1598	1982	2174	
10	14	14	7.9	16.4	29	23	1679	2082	2283	

**Ground Snow Load 20 psf** Table G4

Single 0.125"x2"x8" Aluminum Header Roof Design	110 MPH EXPOSURE C or 120 MPH EXPOSURE B				Uplift Only		Post Height (ft)			
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	8	10	11
								Overturning Moment (lbf *ft)		
20.0	6	6	10.6	17.3	23	18	823	1021	1120	
20.0	8	8	8.0	15.7	24	19	918	1138	1248	
20.0	10	10	6.4	14.6	25	20	1066	1322	1449	
20.0	12	12	5.3	13.7	26	21	1202	1491	1635	
20.0	13	13	4.9	13.4	27	21	1269	1573	1725	
20.0	14	14	4.6	13.1	27	22	1334	1654	1814	



- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for a **SINGLE SPAN ATTACHED** Equinox cover **WITH AT LEAST 3 POSTS**.
  - Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf for patio covers and 20 psf for carports or commercial structures.
  - Choose "A". "A" will be limited by maximum louver panel span.
  - Determine maximum "B" from tables on this page
  - The maximum "C" is 0". (no overhangs)
  - Choose height of Structure
  - Determine **Uplift Footing Size**.
  - Determine **Overturning Moment** by cross indexing "A" and structure height
  - Choose Lateral Force Resisting System
    - Normal Knee Brace: Details R and Q**  
This knee brace is allowed if Moment Connection Value in Detail R is greater than **Overturning Moment**.
    - Strong Knee Brace: Details S and Q**  
This knee brace is allowed if Moment Connection Value in Detail S is greater than **Overturning Moment**.
    - Post embedded in footing: Detail M**
      - Determine "**Overturning Moment**" from tables on this page
      - Go to Tables F1 or F2. Cross index the required footing size from **#5 (Uplift Footing Size)** and **Overturning Moment** to determine allowable footing sizes.
  - Fasten to wall at every header per Detail J2

USE THE BELOW TABLES WHEN USING A "B" LESS THAN THE MAXIMUM ALLOWED (MAX ROOF SNOW LOAD FOR THIS TABLE IS 30 PSF)

Table G5

Post Height (ft)	8 ft								10 ft								
	B (ft)								B (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
6	OVERTURNING MOMENT (LBF*FT)																110 MPH EXPOSURE B
8	437	525	612	700	787	875	962	1050	542	651	759	868	976	1085	1193	1302	110 MPH EXPOSURE B
10	729	875	1021	1167	1312	1458	1604	1750	904	1085	1266	1447	1627	1808	1989	2170	110 MPH EXPOSURE B
12	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604	110 MPH EXPOSURE B
13	948	1137	1327	1517	1706	1896	2085	2275	1175	1410	1645	1880	2116	2351	2586	2821	110 MPH EXPOSURE B
14	1021	1225	1429	1633	1837	2041	2246	2450	1266	1519	1772	2025	2278	2531	2785	3038	110 MPH EXPOSURE B

Table G6

Post Height (ft)	8 ft								10 ft								
	B (ft)								B (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
6	OVERTURNING MOMENT (LBF*FT)																110 MPH EXPOSURE C
8	476	571	666	761	856	951	1046	1141	590	708	826	944	1061	1179	1297	1415	110 MPH EXPOSURE C
10	729	875	1021	1167	1312	1458	1604	1750	904	1085	1266	1447	1627	1808	1989	2170	110 MPH EXPOSURE C
12	875	1050	1225	1400	1575	1750	1925	2100	1085	1302	1519	1736	1953	2170	2387	2604	110 MPH EXPOSURE C
13	948	1137	1327	1517	1706	1896	2085	2275	1175	1410	1645	1880	2116	2351	2586	2821	110 MPH EXPOSURE C
14	1021	1225	1429	1633	1837	2041	2246	2450	1266	1519	1772	2025	2278	2531	2785	3038	110 MPH EXPOSURE C

Table G7

max A (ft)	B (ft)								
	10	12	14	16	18	20	22	24	
UPLIFT ONLY CUBE FOOTING d (IN)									
6	17	19	19	20	21	22	23	23	110 MPH EXPOSURE B
8	19	20	21	22	23	24	25	26	110 MPH EXPOSURE B
10	21	22	23	24	25	26	27	28	110 MPH EXPOSURE B
12	22	23	25	26	27	28	29	29	110 MPH EXPOSURE B
13	23	24	25	26	27	28	29	30	110 MPH EXPOSURE B
14	23	25	26	27	28	29	30	31	110 MPH EXPOSURE B

Table G8

max A (ft)	B (ft)								
	10	12	14	16	18	20	22	24	
UPLIFT ONLY CUBE FOOTING d (IN)									
6	19	20	21	22	23	24	24	25	110 MPH EXPOSURE C
8	21	22	23	24	25	26	27	28	110 MPH EXPOSURE C
10	22	24	25	26	27	28	29	30	110 MPH EXPOSURE C
12	24	25	27	28	29	30	31	32	110 MPH EXPOSURE C
13	24	26	27	29	30	31	32	33	110 MPH EXPOSURE C
14	25	27	28	29	30	31	32	33	110 MPH EXPOSURE C

- FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS**
- SLAB 1** Follow Instructions #1-3 above.
  - SLAB 2** Maximum post spacing is "B (on slab)"
  - SLAB 3** Follow Instructions #5-8 above.
  - SLAB 4** Follow #9 above, embedding into concrete is not an option.
  - SLAB 5** Fasten to wall at every header per Detail J2



JUN 14 2017

W. ATTACHMENT TO WALL

TABLE W1		#14 SCREW W/ 2.5" EMBEDMENT IN DOUGLAS FIR WOOD (DETAIL J)																	
		Live or Ground Snow Load																	
		10	20	25	30 psf	35.7 psf	43 psf												
Roof Design+ Dead Load		13.5 psf	23.5 psf	24.5 psf	28.7 psf	33.5 psf	39.6 psf												
Wind Speed and Exposure	Net Wind Uplift Load (psf)	Number of Fasteners per 16 in																	
		1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
		ALLOWABLE PROJECTION (FT)																	
110 MPH EXPOSURE B	9.2	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
115 MPH EXPOSURE B	10.2	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
120 MPH EXPOSURE B	11.3	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
130 MPH EXPOSURE B	13.7	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
140 MPH EXPOSURE B	16.2	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
150 MPH EXPOSURE B	18.9	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
160 MPH EXPOSURE B	21.8	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
170 MPH EXPOSURE B	24.8	14	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
180 MPH EXPOSURE B	28.1	12	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
110 MPH EXPOSURE C	11.6	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
115 MPH EXPOSURE C	12.9	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
120 MPH EXPOSURE C	14.2	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
130 MPH EXPOSURE C	17.0	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
140 MPH EXPOSURE C	20.1	16	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
150 MPH EXPOSURE C	23.4	15	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
160 MPH EXPOSURE C	26.9	13	24	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
170 MPH EXPOSURE C	30.6	11	23	24	9	19	24	10	21	24	9	18	24	7	15	23	6	13	19
180 MPH EXPOSURE C	34.6	10	20	24	9	19	24	10	20	24	9	18	24	7	15	23	6	13	19

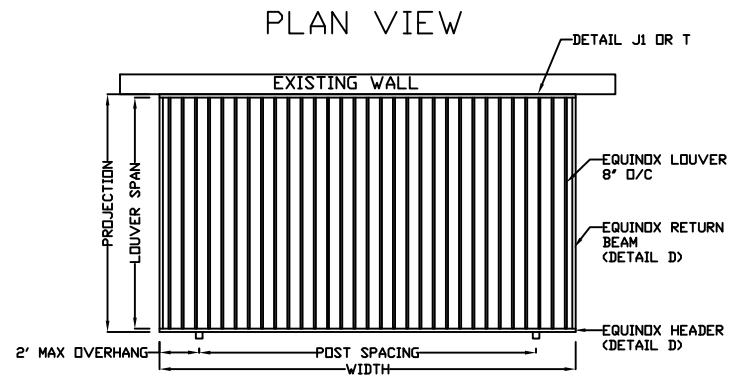
TABLE W2		#14 SCREW W/ 1.5" EMBEDMENT IN DOUGLAS FIR WOOD (DETAIL T)																	
		Live or Ground Snow Load																	
		10	20	25	30 psf	35.7 psf	43 psf												
Roof Design+ Dead Load		13.5 psf	23.5 psf	24.5 psf	28.7 psf	33.5 psf	39.6 psf												
Wind Speed and Exposure	Net Wind Uplift Load (psf)	Number of Fasteners per 24 in																	
		2	3	4	2	3	4	2	3	4	2	3	4	2	3	4	2	3	4
		ALLOWABLE PROJECTION (FT)																	
110 MPH EXPOSURE B	9.2	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
115 MPH EXPOSURE B	10.2	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
120 MPH EXPOSURE B	11.3	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
130 MPH EXPOSURE B	13.7	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
140 MPH EXPOSURE B	16.2	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
150 MPH EXPOSURE B	18.9	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
160 MPH EXPOSURE B	21.8	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
170 MPH EXPOSURE B	24.8	12	18	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
180 MPH EXPOSURE B	28.1	11	16	22	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
110 MPH EXPOSURE C	11.6	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
115 MPH EXPOSURE C	12.9	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
120 MPH EXPOSURE C	14.2	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
130 MPH EXPOSURE C	17.0	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
140 MPH EXPOSURE C	20.1	14	21	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
150 MPH EXPOSURE C	23.4	13	20	24	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
160 MPH EXPOSURE C	26.9	11	17	23	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
170 MPH EXPOSURE C	30.6	10	15	20	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11
180 MPH EXPOSURE C	34.6	9	13	18	8	12	16	9	13	18	7	11	15	6	10	13	5	8	11



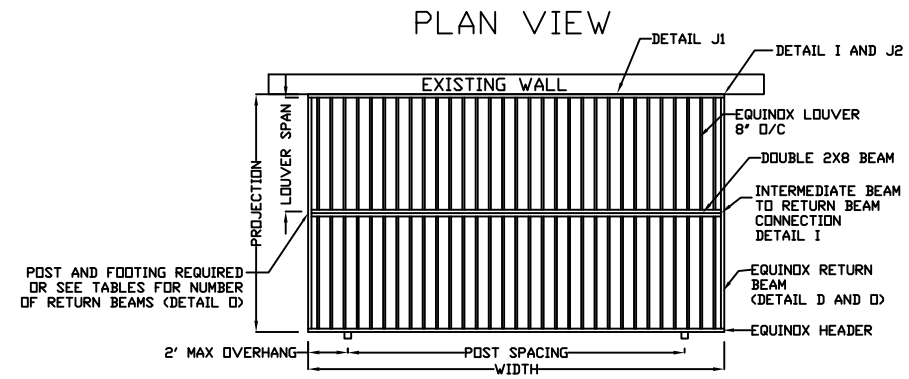
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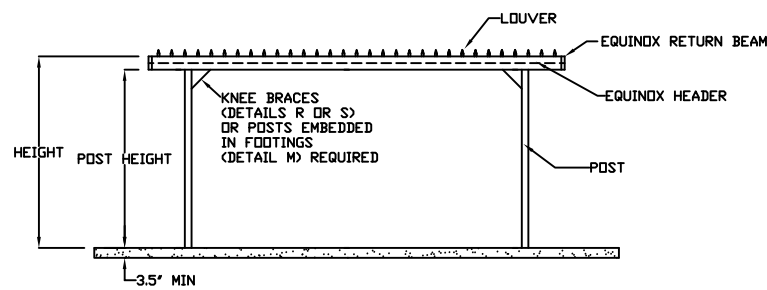


SINGLE SPAN LOUVER ATTACHED STRUCTURE (2 POST ONLY)

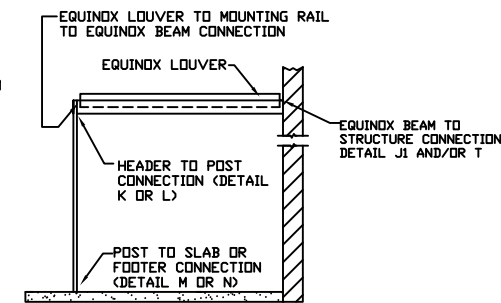


MULTI SPAN LOUVER ATTACHED STRUCTURE (2 POSTS ONLY)

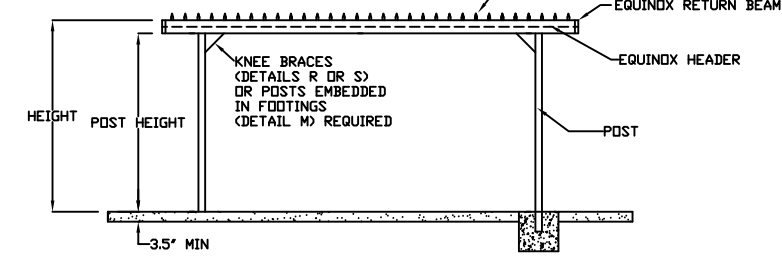
STRUCTURE TYPE A FRONT ELEVATION



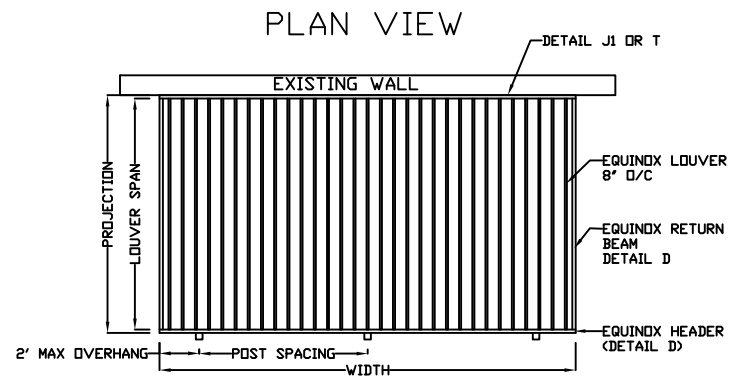
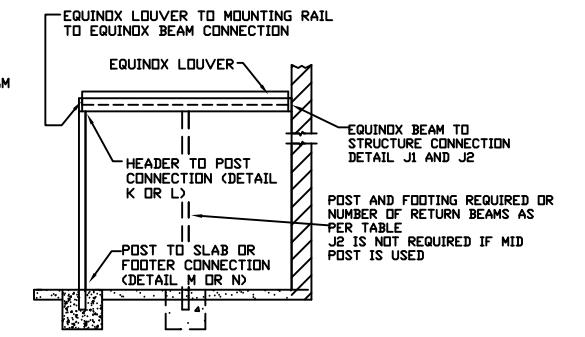
SIDE ELEVATION



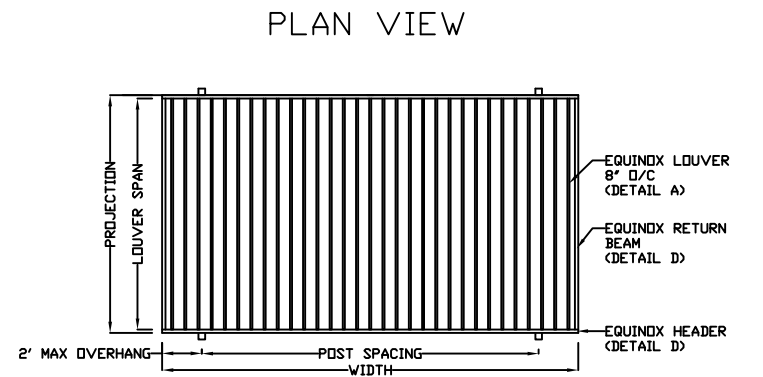
STRUCTURE TYPE C FRONT ELEVATION



SIDE ELEVATION

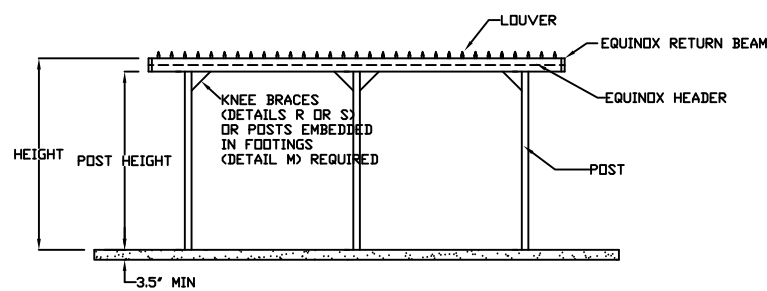


SINGLE SPAN LOUVER ATTACHED STRUCTURE (3 POST MINIMUM)

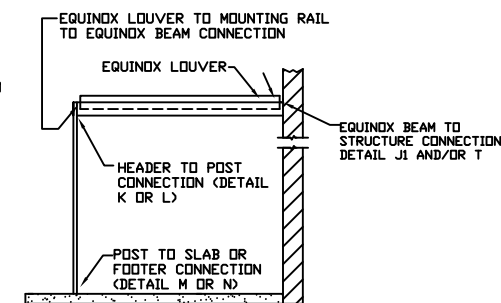


SINGLE SPAN LOUVER FREESTANDING STRUCTURE (4 POST ONLY)

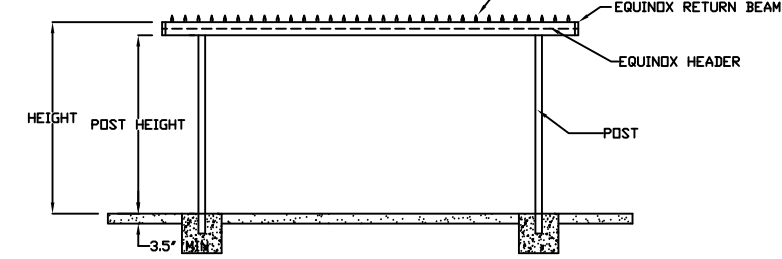
STRUCTURE TYPE B FRONT ELEVATION



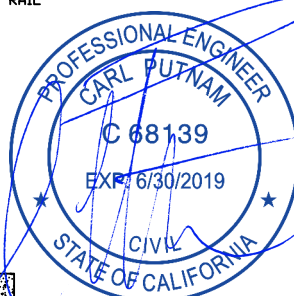
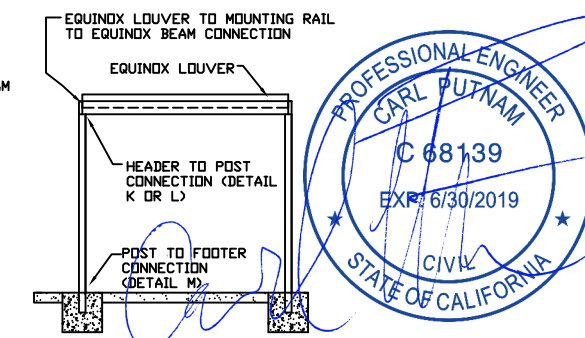
SIDE ELEVATION



STRUCTURE TYPE D FRONT ELEVATION



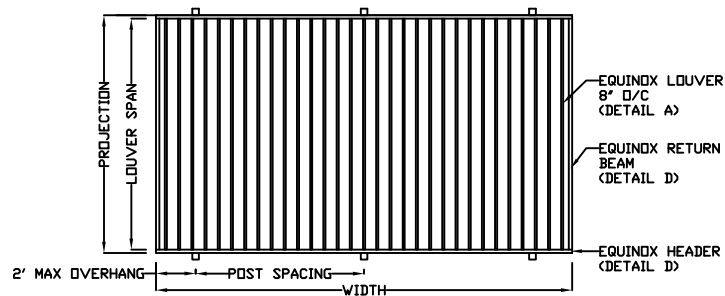
SIDE ELEVATION



JUN 14 2017

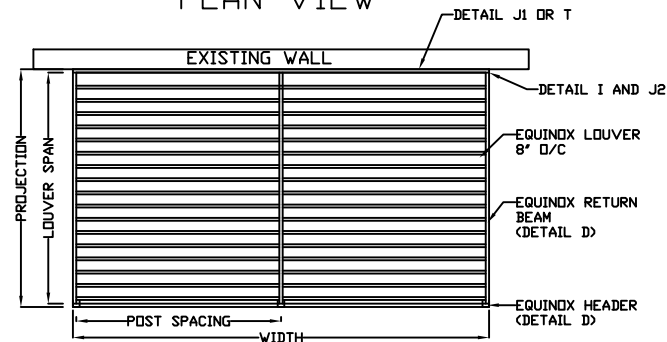
DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK PLACE LYNCHBURG, VA 24503 (434) 384-2514 CARLPUTNAM@COMCAST.NET
06/26/12	CMP	P.E.	
02/17/17	CMP	CLIENT	AMERIMAX BUILDING PRODUCTS
		FILE	EquinoxPlans.dwg
		DESC	configurations
			1 of 7

PLAN VIEW



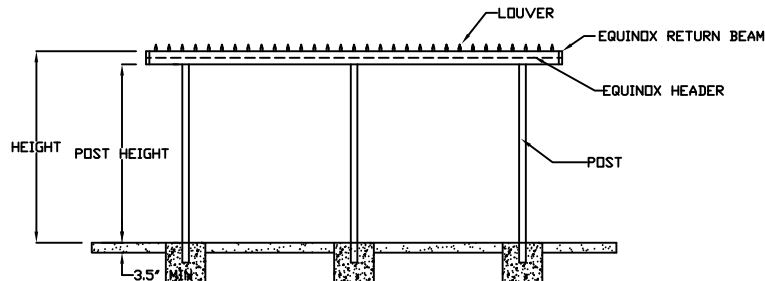
SINGLE SPAN LOUVER  
FREESTANDING STRUCTURE  
(6 POST MINIMUM)

PLAN VIEW

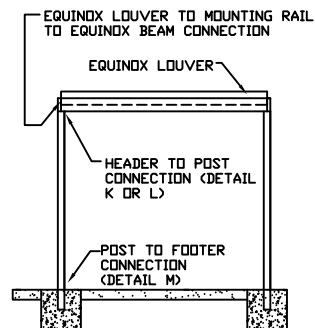


SINGLE SPAN LOUVER  
ATTACHED STRUCTURE (3  
POST MINIMUM)

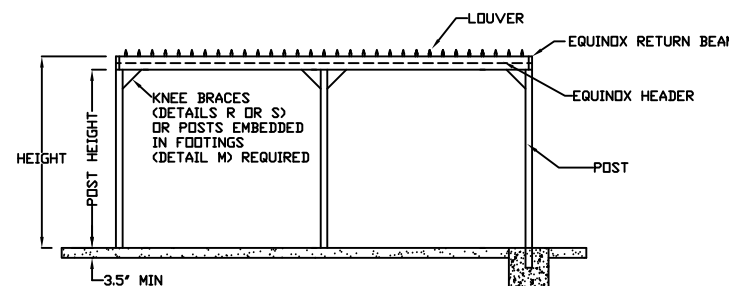
STRUCTURE TYPE E  
FRONT ELEVATION



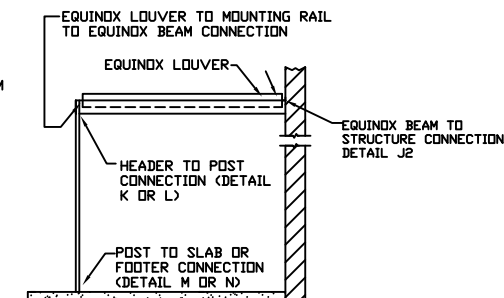
SIDE ELEVATION



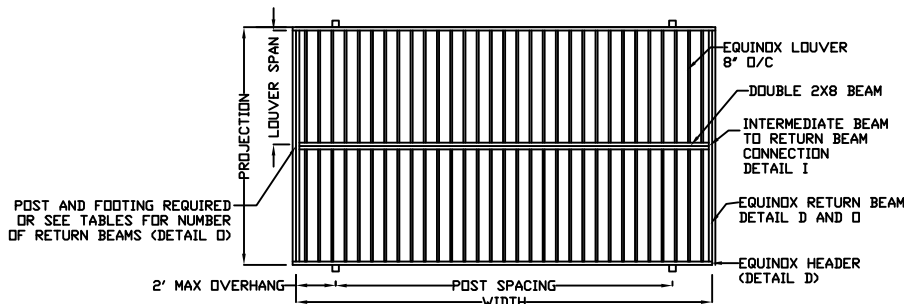
STRUCTURE TYPE G  
FRONT ELEVATION



SIDE ELEVATION

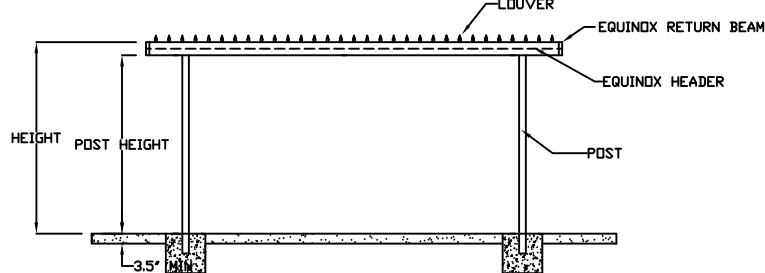


PLAN VIEW

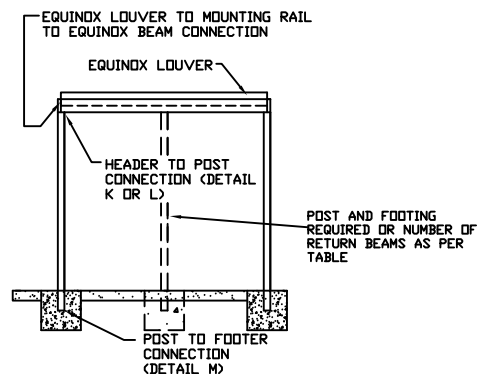


MULTI SPAN LOUVER  
FREESTANDING STRUCTURE  
(4 POST ONLY)

STRUCTURE TYPE F  
FRONT ELEVATION



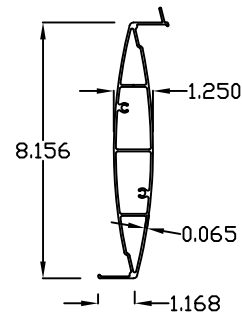
SIDE ELEVATION



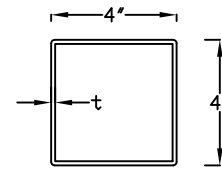
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06/26/12	CMP		
02/17/17	CMP	CLIENT	AMERIMAX BUILDING PRODUCTS
		FILE	EquinoxPlans.dwg
		DESC	configurations

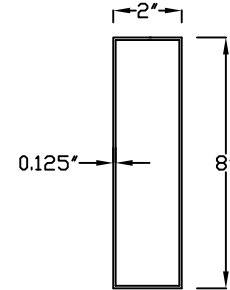
DETAIL B  
EXTRUDED 6063T6  
ALUMINUM LOUVER



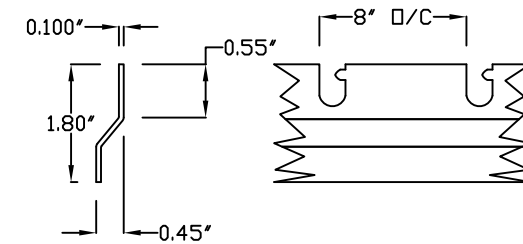
DETAIL C  
EQUINOX POST  
t=0.125" 6061-T6 ALUM. ALLOY  
OR  
t=0.188" ASTM A500 GRADE B STEEL



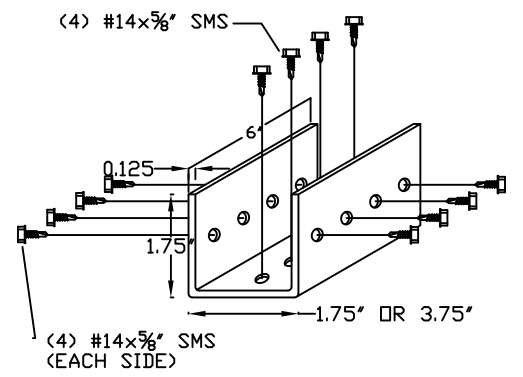
DETAIL D  
2"x8" EQUINOX HEADER AND  
RETURN BEAM  
(6061-T6 ALUM. ALLOY)



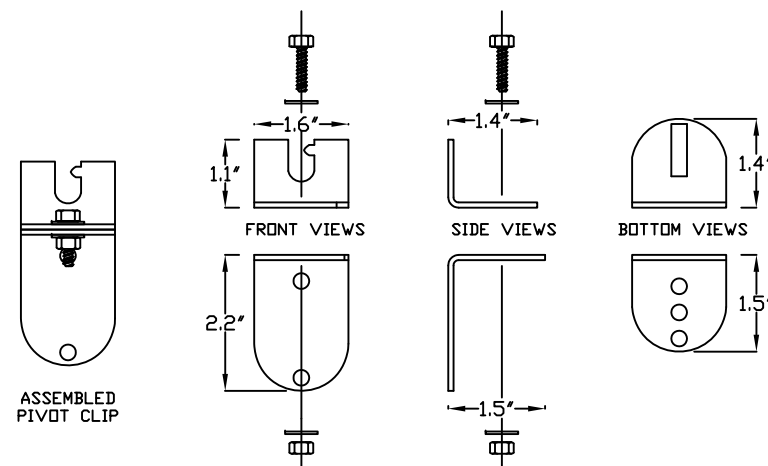
DETAIL E  
EQUINOX LOUVER  
MOUNTING RAIL  
0.100" 6061T6 ALUM



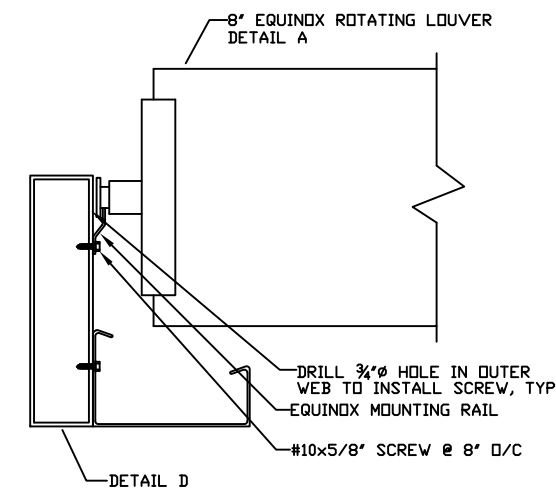
DETAIL F  
6063T6 ALUM. SLEEVE  
CLIP DETAILS



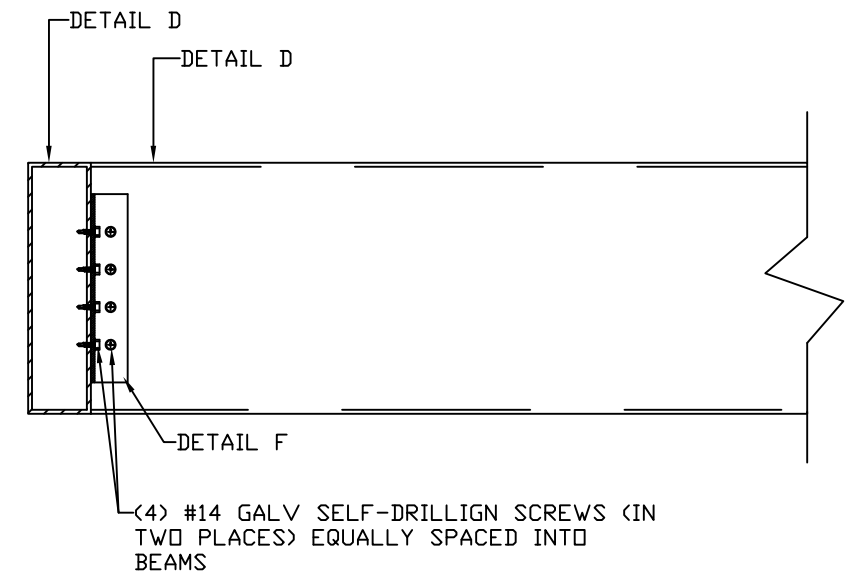
DETAIL G  
EQUINOX PIVOT CLIP



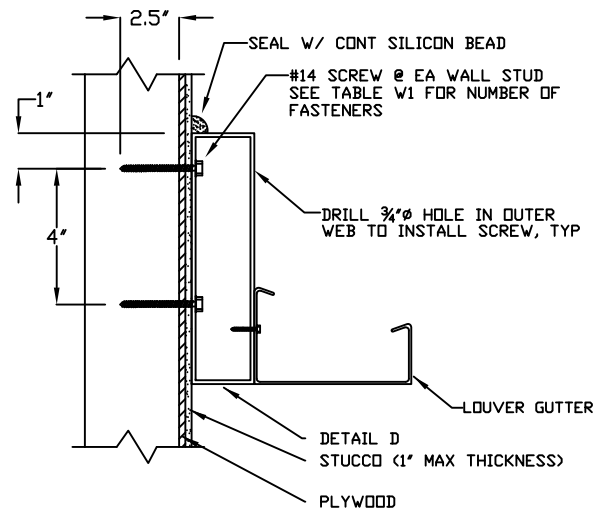
DETAIL H  
EQUINOX LOUVER TO MOUNTING  
RAIL TO HEADER CONNECTION



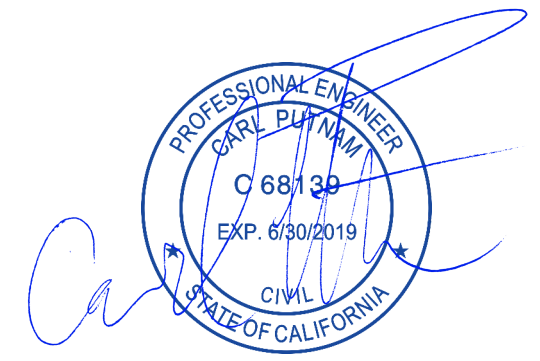
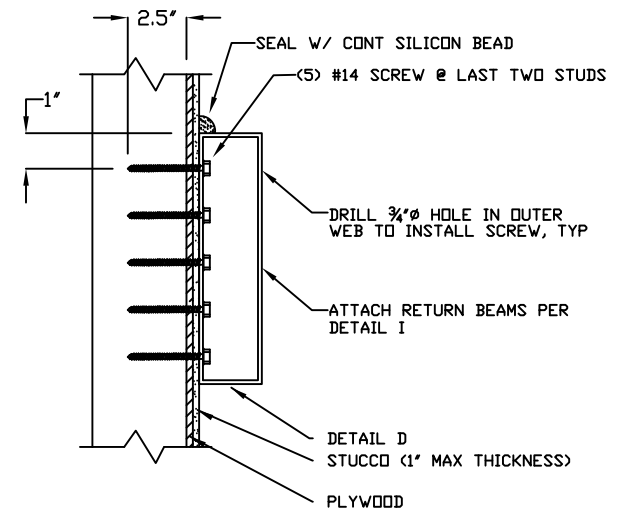
DETAIL I  
EQUINOX BEAM TO EQUINOX BEAM CONNECTION



DETAIL J1  
EQUINOX LEDGER TO STRUCTURE  
CONNECTION



DETAIL J2  
EQUINOX LEDGER TO STRUCTURE  
CONNECTION FOR TYPE "C" AND "G" ONLY

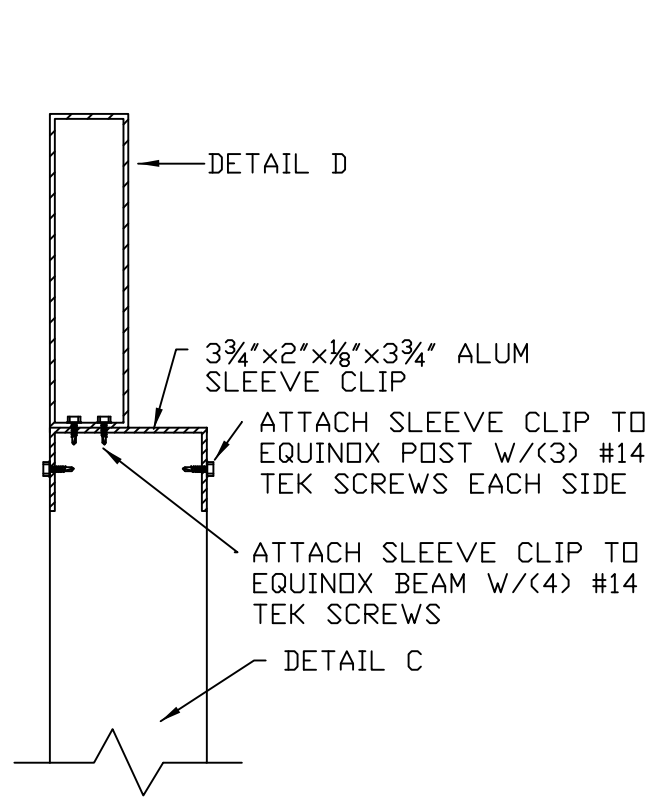


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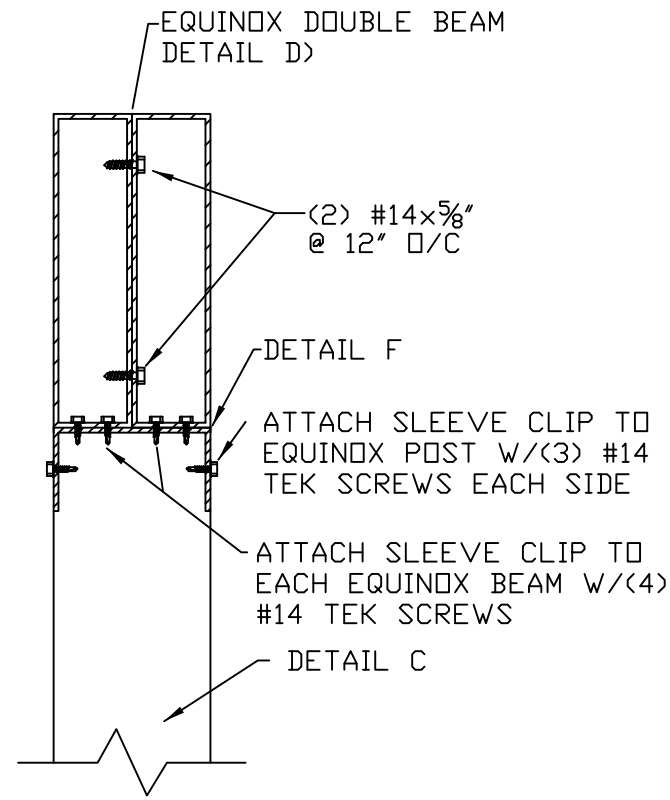
DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 (434) 384-2514 CARLPUTNAM@COMCAST.NET
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08/18/15	CMP	CLIENT	AMERIMAX BUILDING PRODUCTS
02/17/17	CMP	FILE	EquinoxPlans.dwg
		DESC	DETAILS



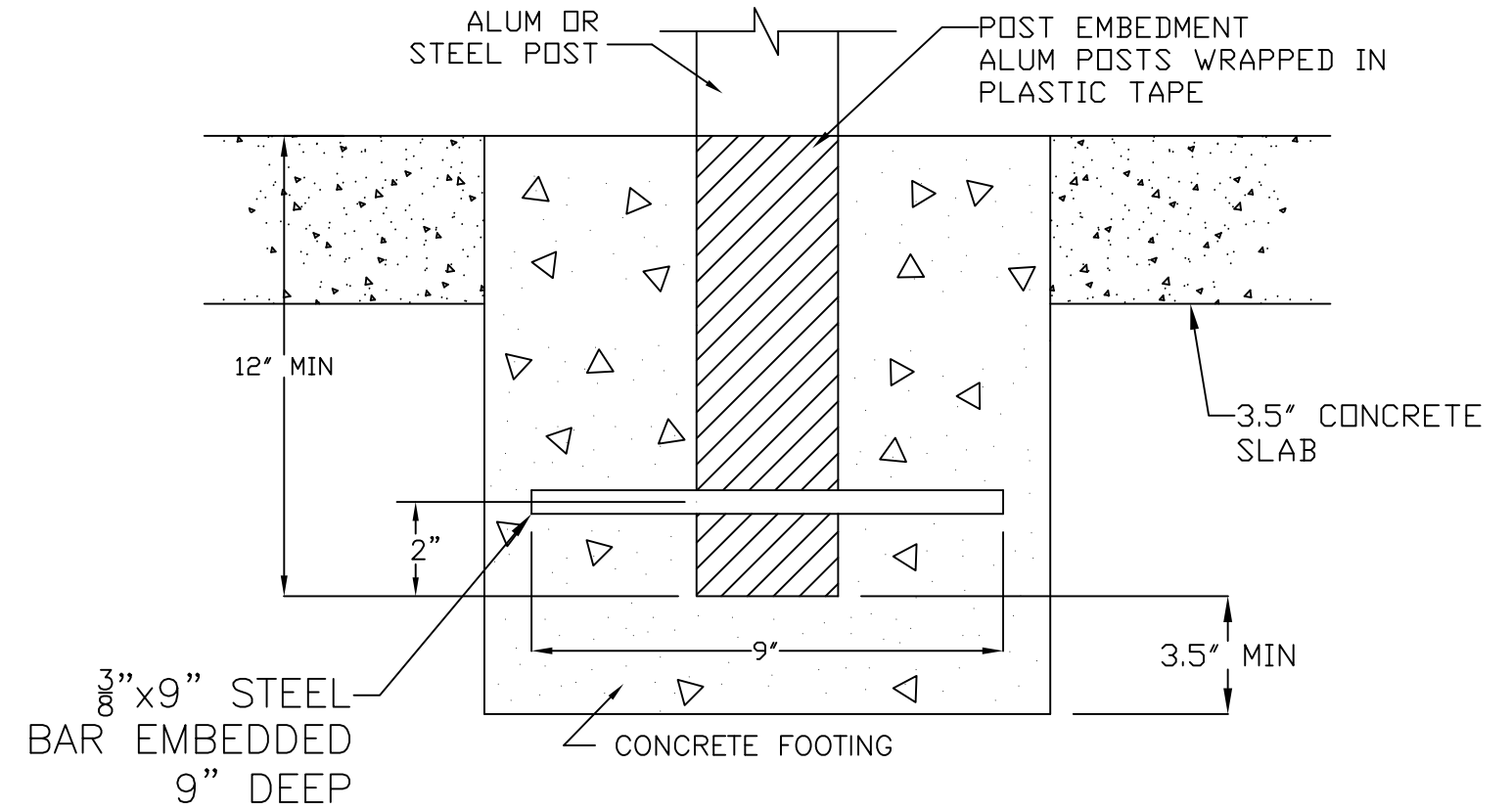
DETAIL K  
EQUINOX HEADER TO POST  
CONNECTION



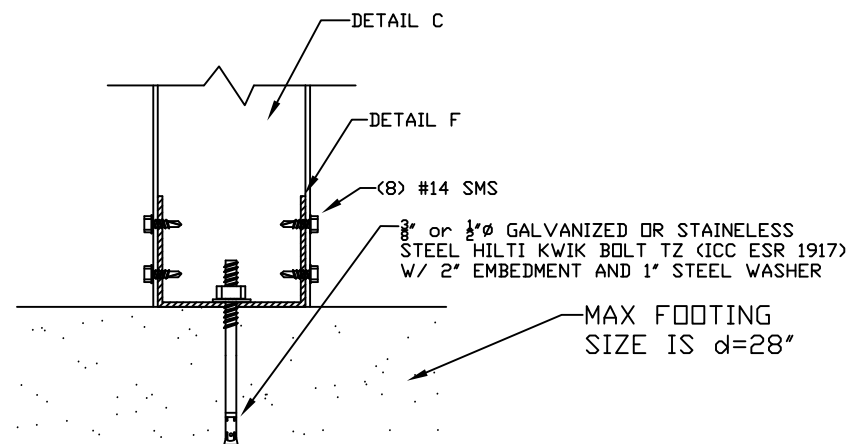
DETAIL L  
EQUINOX HEADER TO POST  
CONNECTION



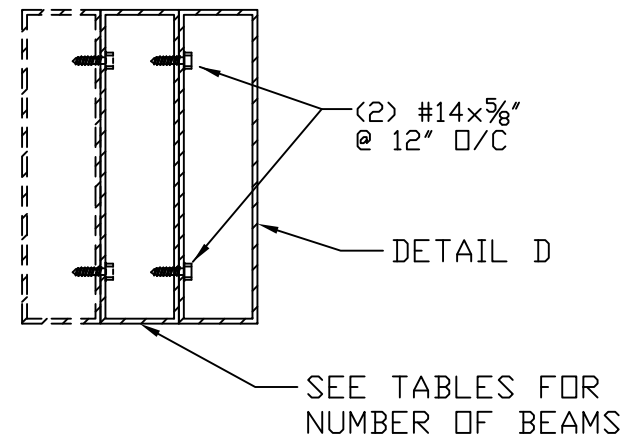
DETAIL M  
POST TO FOOTER CONNECTION



DETAIL N  
POST TO SLAB/FOOTING  
CONNECTION



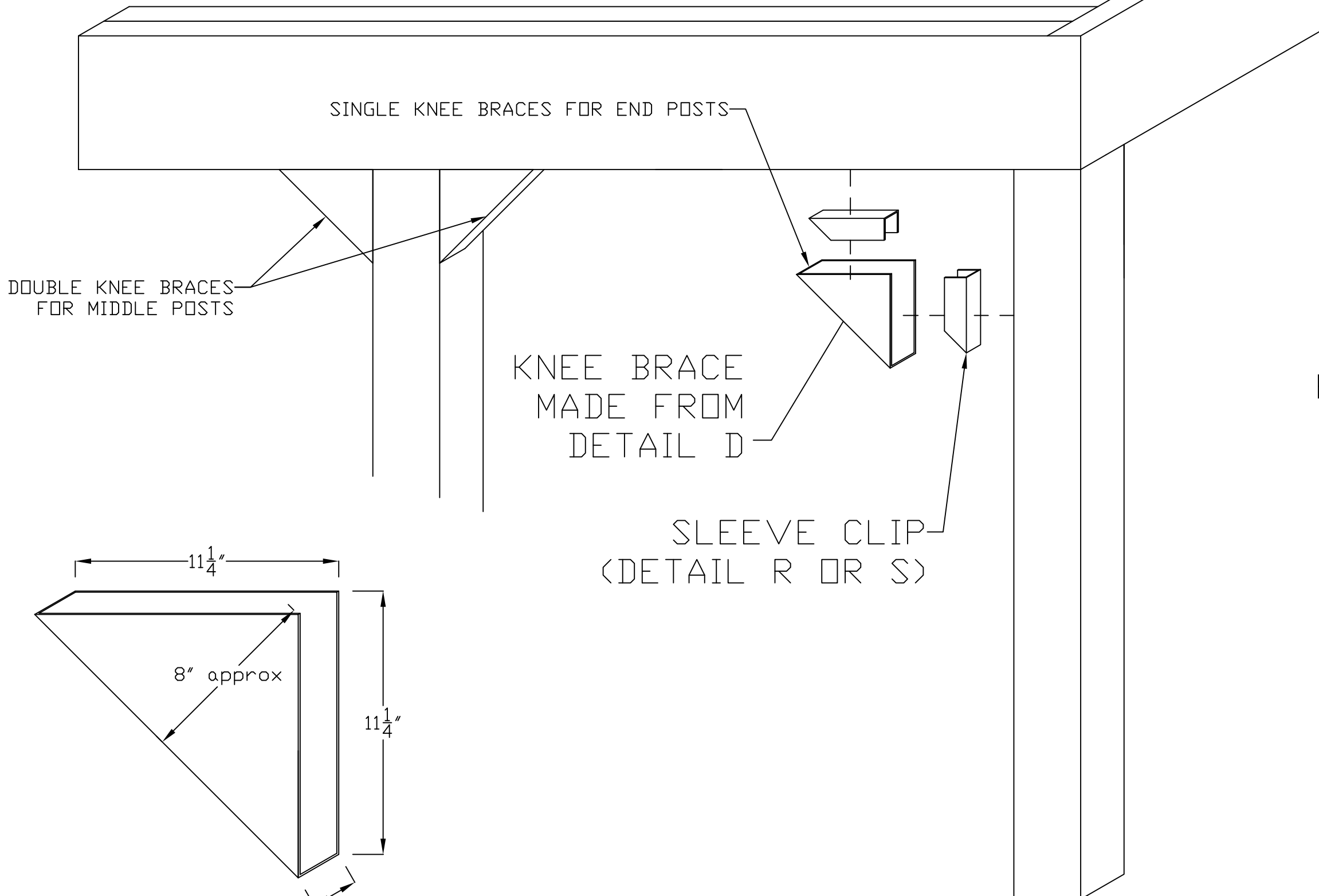
DETAIL O  
MULTIPLE RETURN BEAM



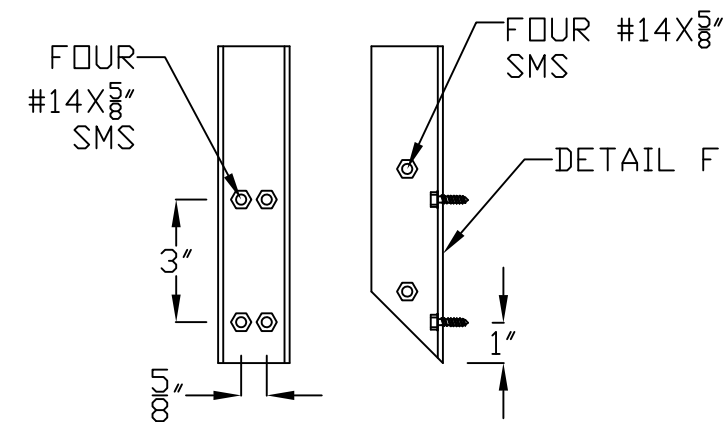
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08/18/15	CMP	CLIENT	AMERIMAX BUILDING PRODUCTS
02/17/17	CMP	FILE	EquinoxPlans.dwg
		DESC	DETAILS

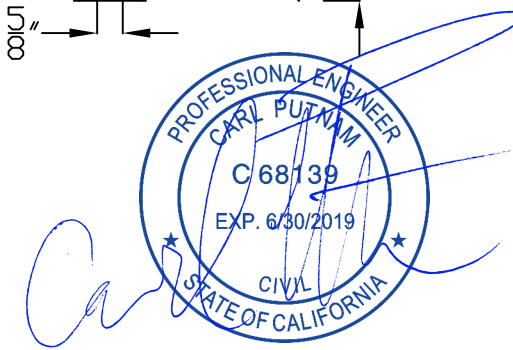
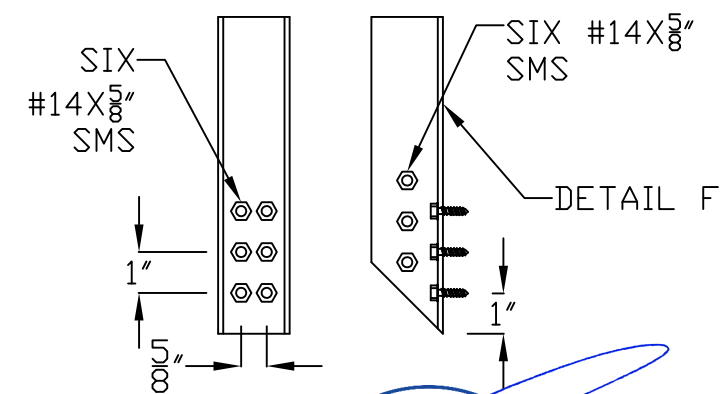
DETAIL Q  
KNEE BRACE CONNECTION



DETAIL R  
LOW MOMENT CONNECTION  
1064 FOOT-POUNDS



DETAIL S  
HIGH MOMENT CONNECTION  
1749 FOOT-POUNDS

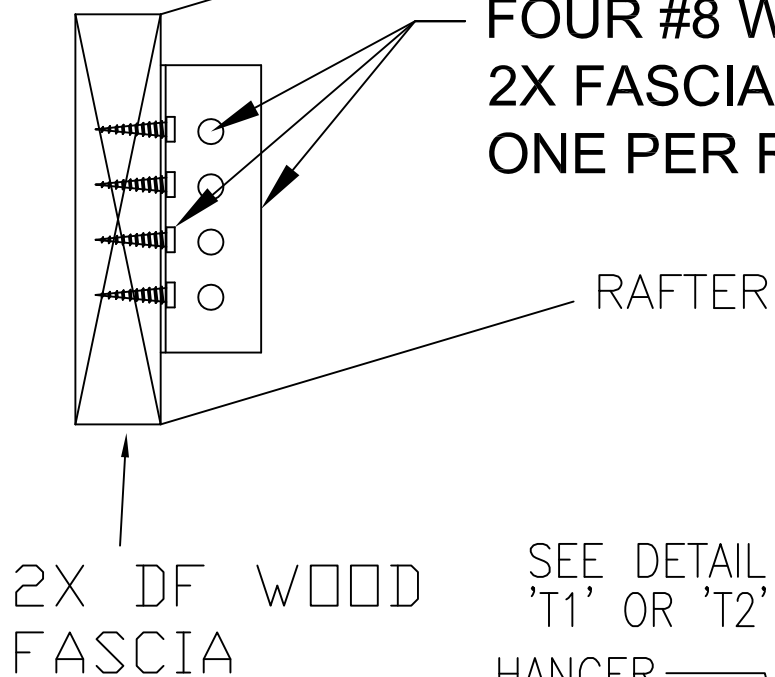


JUN 14 2017

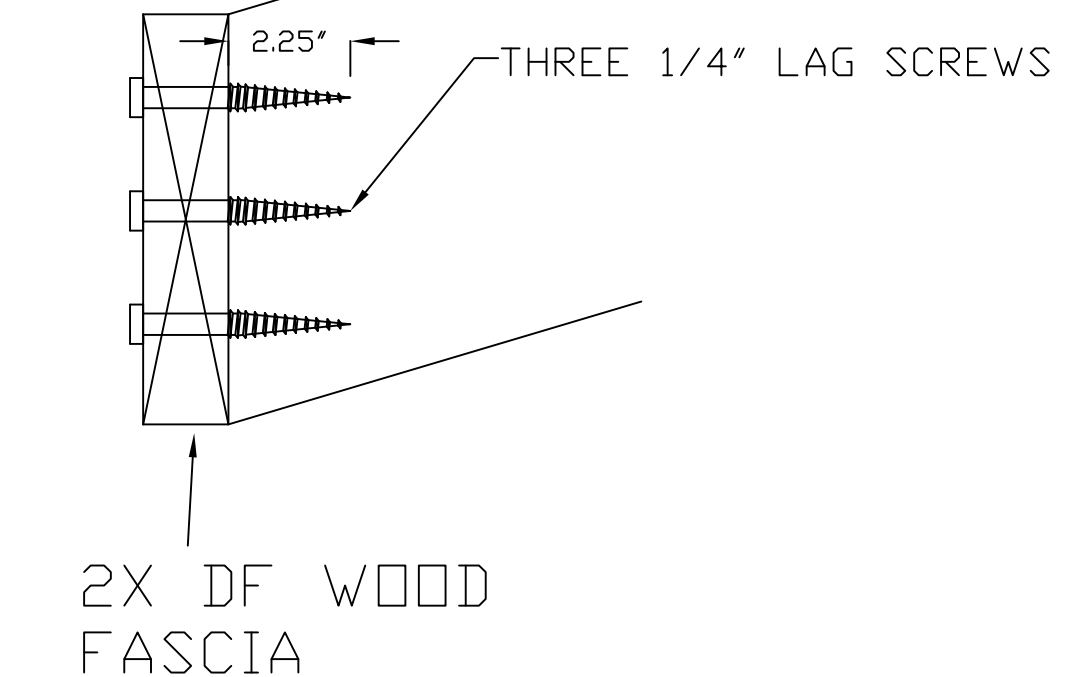
DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK PLACE LYNCHBURG, VA 24503 (434) 384-2514 CARLPUTNAM@COMCAST.NET
05/09/12	CMP	P.E.	
	CLIENT	AMERIMAX BUILDING PRODUCTS	
	FILE	EquinoxPlans.dwg	
	DESC	DETAILS	5 of 7

DETAIL "T1"

**20 GA ASTM A653 GRADE 33 STEEL BRACKET**  
**(Simpson StrongTie A34 or equivalent)**  
**FOUR #8 WOOD SCREWS INTO RAFTER AND**  
**2X FASCIA**  
**ONE PER RAFTER**

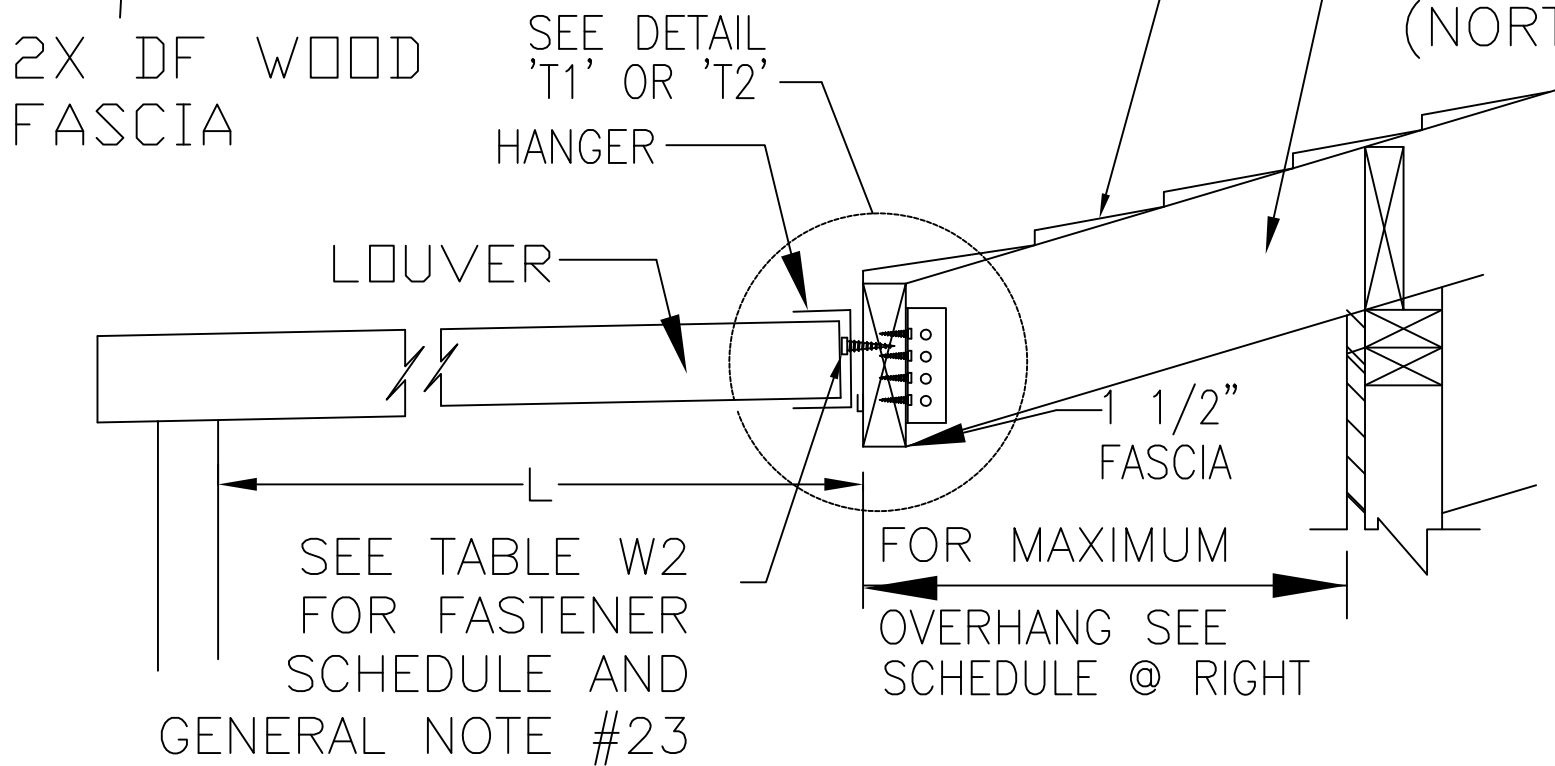


DETAIL "T2"



ROOF COVERING IS MAX 3 PSF.  
 HEAVIER ROOF COVERING SHALL  
 REQUIRE ADDITIONAL ENGINEERING  
 ANALYSIS

2"x WOOD FRAMING  
 DOUGLAS FIR-LARCH  
 (NORTH) #2 OR BTR



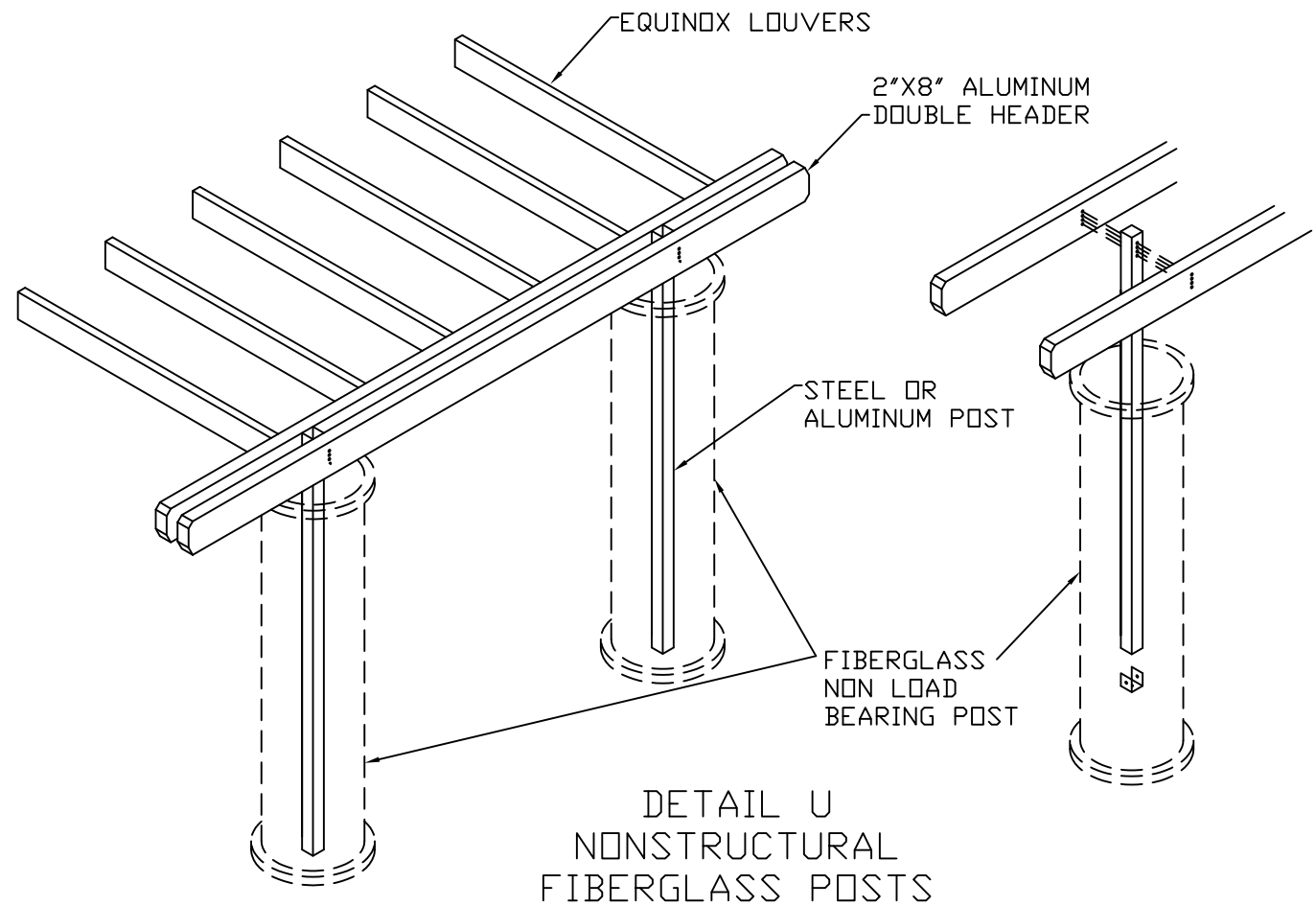
DETAIL T  
 EAVE ATTACHMENT USE  
 WITH STRUCTURE TYPE "A"  
 AND "B" ONLY

Live Load Ground Snow Load	RAFTER SIZE (24" O/C)	MAX DISTANCE TO FIRST ROW OF POSTS "L"				
		EAVE OVERHANG				
		6"	9"	12"	18"	24"
10 psf 130 MPH Exp C 140 MPH Exp B	2x4	14'-0"	14'-0"	14'-0"	11'-7"	6'-6"
	2x6	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
20 psf 170 MPH Exp C	2x4	14'-0"	14'-0"	10'-2"	5'-9"	3'-3"
	2x6	14'-0"	14'-0"	14'-0"	14'-0"	11'-8"
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
25 psf 170 MPH Exp C	2x4	14'-0"	14'-0"	11'-2"	6'-3"	3'-6"
	2x6	14'-0"	14'-0"	14'-0"	14'-0"	12'-8"
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"
30 psf 170 MPH Exp C	2x4	13'-9"	12'-10"	9'-1"	4'-10"	2'-6"
	2x6	13'-9"	13'-9"	13'-9"	13'-9"	10'-2"
	2x8	13'-9"	13'-9"	13'-9"	13'-9"	13'-9"
36 psf 170 MPH Exp C	2x4	11'-7"	10'-8"	7'-6"	3'-10"	1'-8"
	2x6	11'-7"	11'-7"	11'-7"	11'-7"	8'-2"
	2x8	11'-7"	11'-7"	11'-7"	11'-7"	11'-7"
43 psf 170 MPH Exp C	2x4	9'-7"	8'-9"	6'-0"	2'-10"	1'-0"
	2x6	9'-7"	9'-7"	9'-7"	9'-7"	6'-4"
	2x8	9'-7"	9'-7"	9'-7"	9'-7"	9'-7"

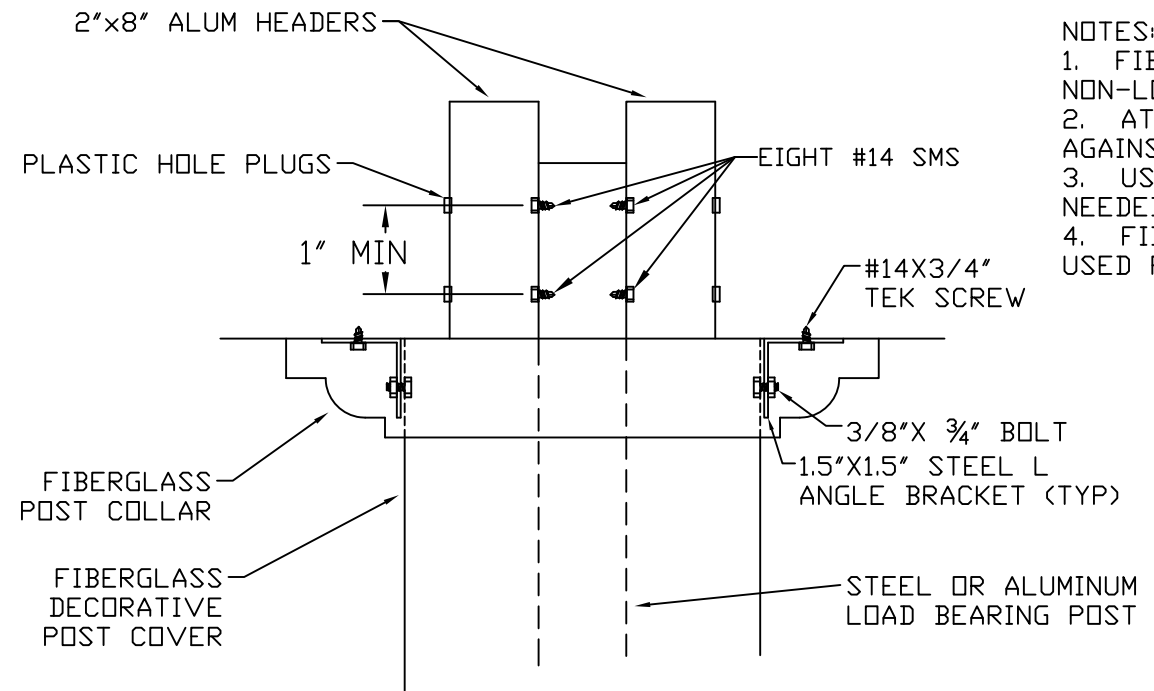


JUN 14 2017

DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK PLACE LYNCHBURG, VA 24503 (434) 384-2514 CARLPUTNAM@COMCAST.NET
05/09/12	CMP	P.E.	
		CLIENT	AMERIMAX BUILDING PRODUCTS
		FILE	EquinoxPlans.dwg
		DESC	DETAILS

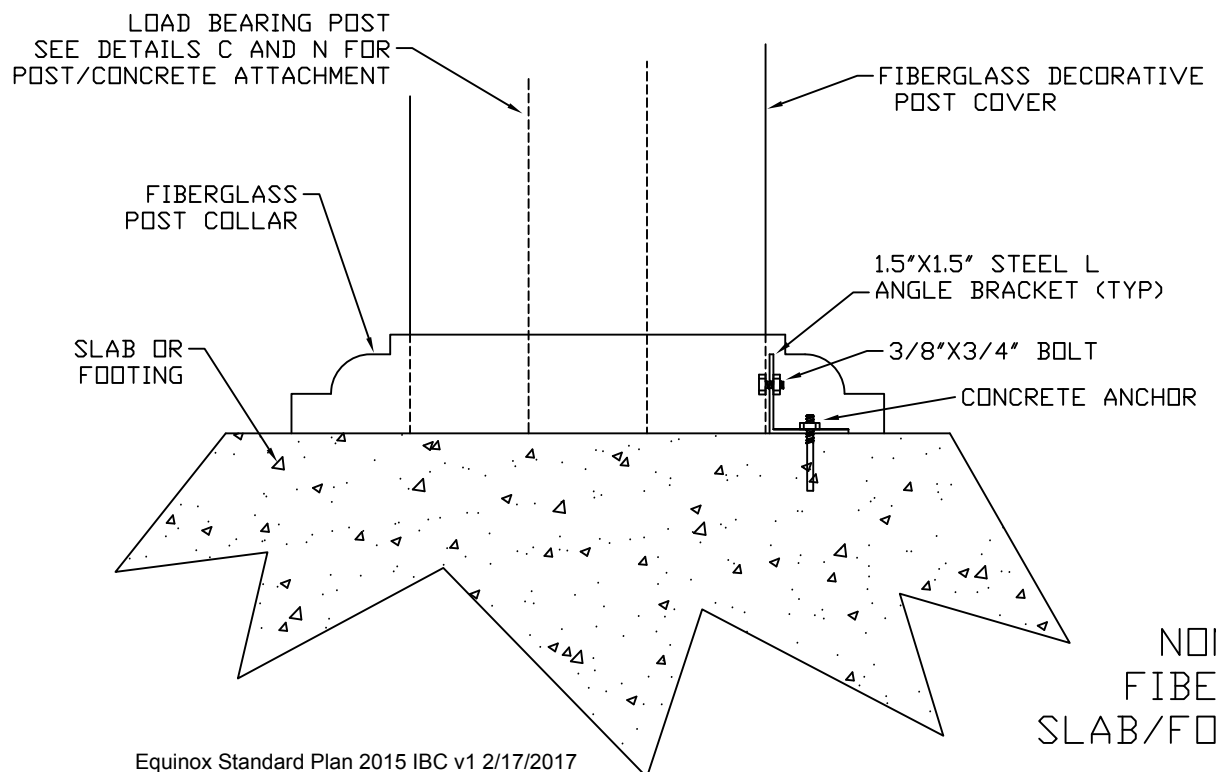


DETAIL U  
NONSTRUCTURAL  
FIBERGLASS POSTS

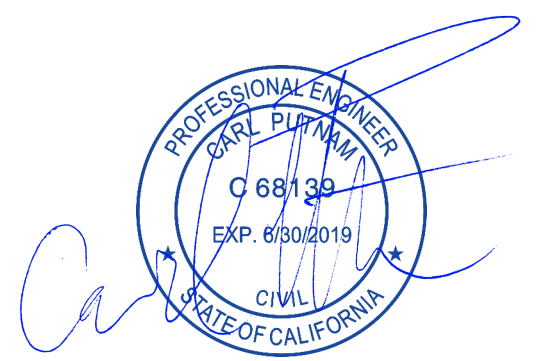


DETAIL V  
NONSTRUCTURAL  
FIBERGLASS POST TO  
HEADER CONNECTION

- NOTES:
1. FIBERGLASS POSTS ARE NON-LOAD BEARING.
  2. ATTACHMENT TO HOLD COVERING AGAINST MINOR LATERAL FORCES.
  3. USE MULTIPLE BRACKETS AS NEEDED.
  4. FIBERGLASS POSTS MAY BE USED FOR ANY STRUCTURE.



DETAIL W  
NONSTRUCTURAL  
FIBERGLASS POSTS  
SLAB/FOOTING CONNECTION



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05/09/12	CMP	P.E.	
	CLIENT	AMERIMAX BUILDING PRODUCTS	
	FILE	EquinoxPlans.dwg	
	DESC	DETAILS	7 of 7