

Omnimax Equinox™ Patio Cover, Carport and Commercial Structure Engineering 2022 CBC

This report covers these maximum conditions

Ground Snow Loads	10	psf
	20	psf
Wind Speed (Ultimate) and Exposure	95 mph Exposure C 110 mph Exposure C	or 110 mph Exp. B or 130 mph Exp. B
Maximum Ss =	150%	Seismic Design Category D (up to Ss= 214%)

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Page 51 of 51	Y. REQUIRED FASTENERS FOR POST CONNECTIONS AND RETURN BEAM ALTERNATIVES

September 13, 2022



GENERAL NOTES:

1. DESIGNED IN ACCORDANCE WITH THE 2022 CALIFORNIA BUILDING CODE.
2. ALUMINUM DESIGN IN ACCORDANCE WITH THE 2020 EDITION OF ALUMINUM ASSOCIATION'S SPECIFICATIONS AND CHAPTER 20 OF THE CALIFORNIA BUILDING CODE.
3. DESIGN LOADINGS: Ct = 1.2, I = 1.0, Ce = 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
50 PSF	42 PSF DESIGN ROOF SNOW LOAD
60 PSF	50.4 PSF DESIGN ROOF SNOW LOAD

FOR 0.25/12 < SLOPE < 1/12

WIND SPEEDS IN THE 2022 CBC ARE "BASIC DESIGN WIND SPEED." ALL STRUCTURES DESCRIBED IN THIS REPORT ARE DESIGNED USING PRESSURES CALCULATED FROM "BASIC DESIGN WIND SPEEDS". 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 ASCE7-16 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

- Ss FOR STRUCTURE AS PER 2022 CBC FIGURE 1613.2.1(1)
- Ss > 150% ARE NOT REQUIRED PER ASCE7-16 12.8.1.3 for Ss<215%
- Ss USED FOR TABLES SHOWN ON TABLES SHEET
- S1 NOT APPLICABLE TO THESE STRUCTURES
- SITE CLASS = D
- BASIC SEISMIC FORCE RESISTING SYSTEM
- GENERIC SYSTEM >> 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 CBC SECTION 1605.1 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: Fc=2500 PSI FOR 28 DAYS AND THE DURABILTY REQUIREMENTS OF CHAPTER 19 OF ACI318-19. 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 CBC 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 FREESTANDING COVERS 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 CBC SECTION 2203.2.

10. ALTERNATE ALUMINUM ALLOYS OF EQUAL OR HIGHER STRENGTHS MAY BE USED. 6105T5 or 6005AT61 ALUMINUM MAY BE SUBSTITUTED FOR 6061T6.



DEC 29 2022
ENGINEERS STAMP

OMNIMAX 30 Technology Pkwy
Suite #400
Peachtree Corners, GA

DRAWN BY: CMP	EQUINOX GENERAL NOTES	
SCALE: NONE	DRAWING OR PART NAME	SHEET 1 OF 2
DATE:	DRAWING OR PART NUMBER GN01-2022CBC	

GENERAL NOTES:
 (CONTINUED FROM SHEET NO. 1)

11. STEEL FASTENERS SHALL BE EITHER STAINLESS (300 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-2018 12.1.5. ALL LAG SCREWS MUST COMPLY WITH ANSI/ASME B18.2.1 AND AWC NDS-2018 12.1.4. 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 2020 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. ALUMINUM LOUVERS ARE CLASS A FIRE RATED AS INDICATED BY THE EXCEPTION #2 IN CBC SECTION 1505.2.

17. STRUCTURE TYPES A AND B MAY BE ATTACHED TO EAVE OVERHANGS PER DETAIL W7.

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. This note is intentionally not used.

21. DRIFTING SNOW IS ADDRESSED IN DETAIL W8. 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.

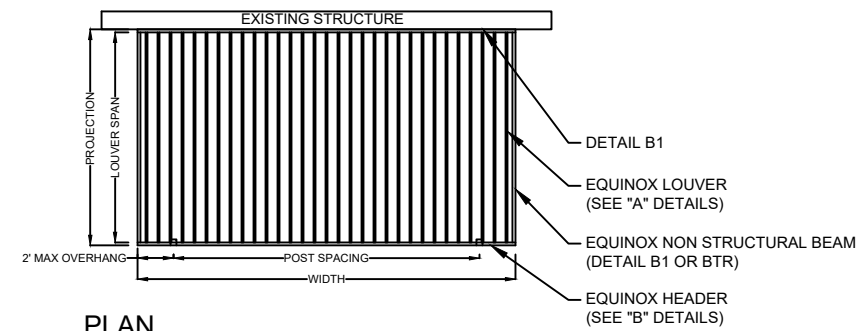
23. WOOD USED IN CONNECTIONS SHALL BE PROTECTED FROM WEATHER AS PER CBC SECTION 1404.2 (WALLS) AND/OR 1503 (ROOFS), WHICHEVER IS MORE APPROPRIATE.

24. FREESTANDING STRUCTURES MUST USE A MOMENT RESISTING POST TO FOOTING CONNECTION LIKE F3-F6. ATTACHED STRUCTURES MAY USE F3-F6 DETAILS OR M DETAILS IF USING DETAILS F1-F2 .

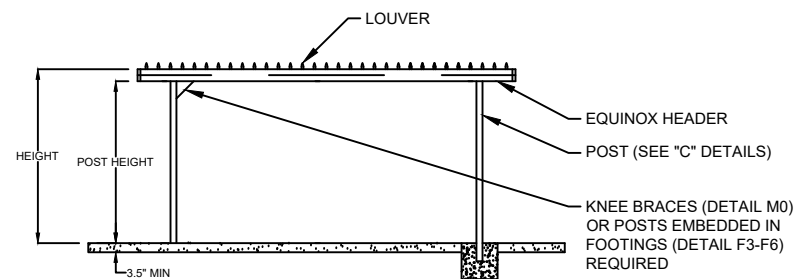


DEC 29 2022
 ENGINEERS STAMP

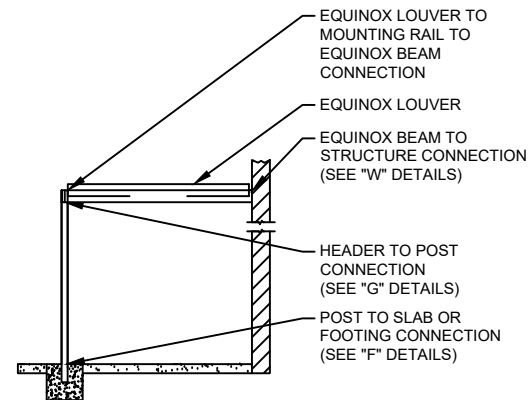
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DRAWN BY:	CMP	DRAWING OR PART NAME	EQUINOX GENERAL NOTES
SCALE:	NONE	DRAWING OR PART NUMBER	GN02-2022CBC
DATE:			SHEET 2 OF 2



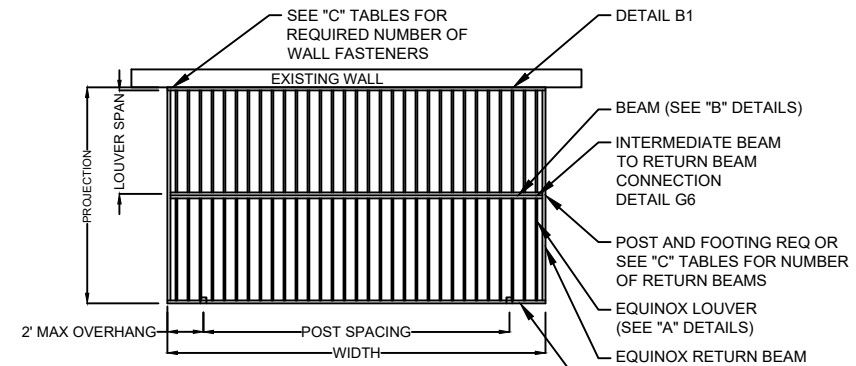
PLAN



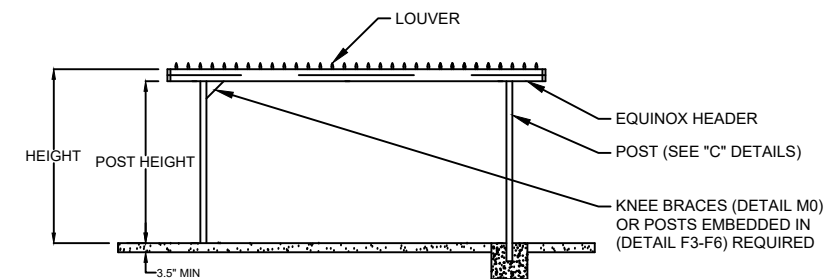
FRONT ELEVATION



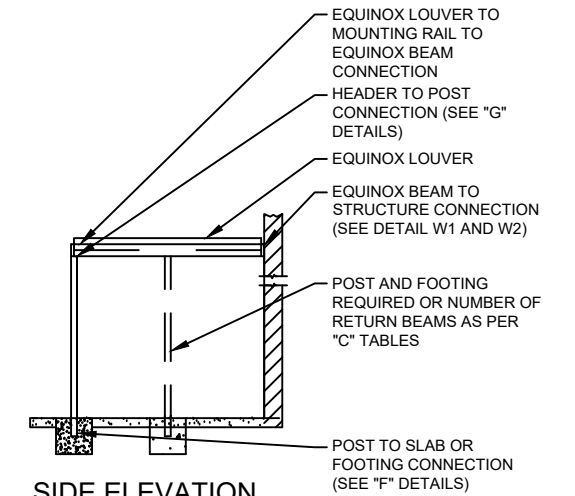
SIDE ELEVATION



PLAN



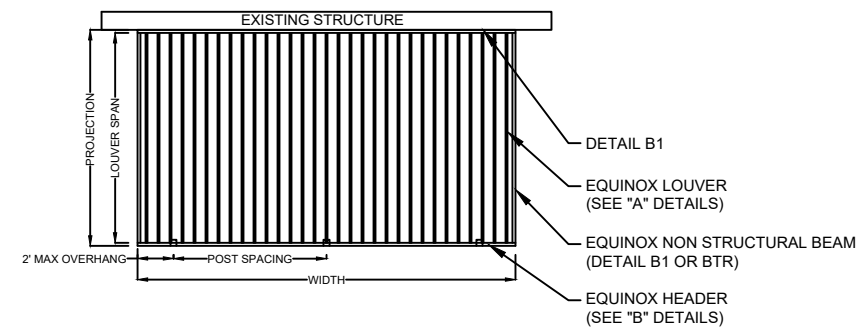
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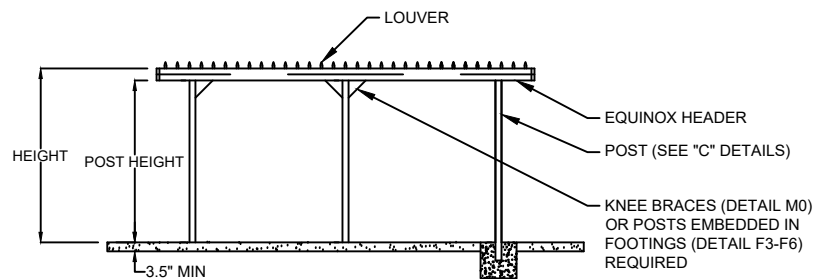
SIDE ELEVATION

STRUCTURE TYPE A - ATTACHED STRUCTURES WITH SINGLE SPAN LOUVERS (2 POST ONLY)

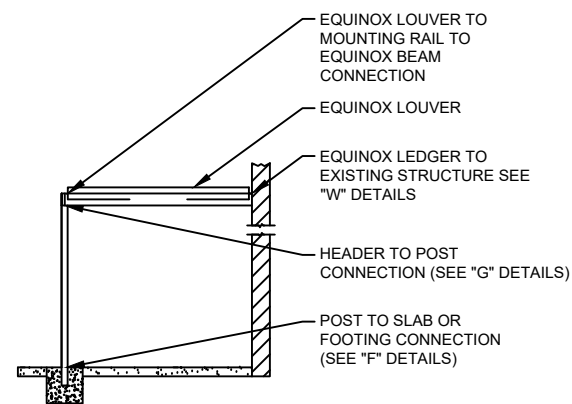
STRUCTURE TYPE C - ATTACHED MULTI SPAN LOUVERS AND SINGLE SPAN HEADERS



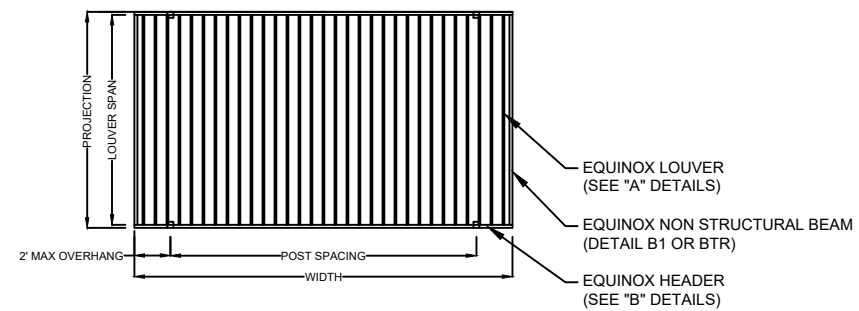
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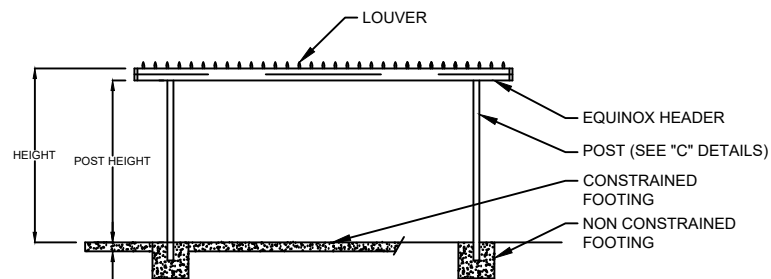
FRONT ELEVATION



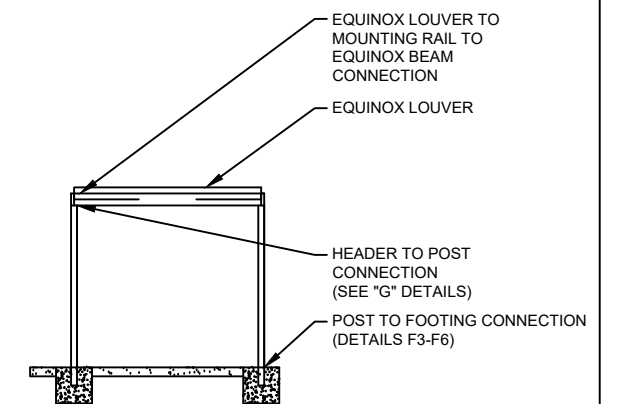
SIDE ELEVATION



PLAN



FRONT ELEVATION



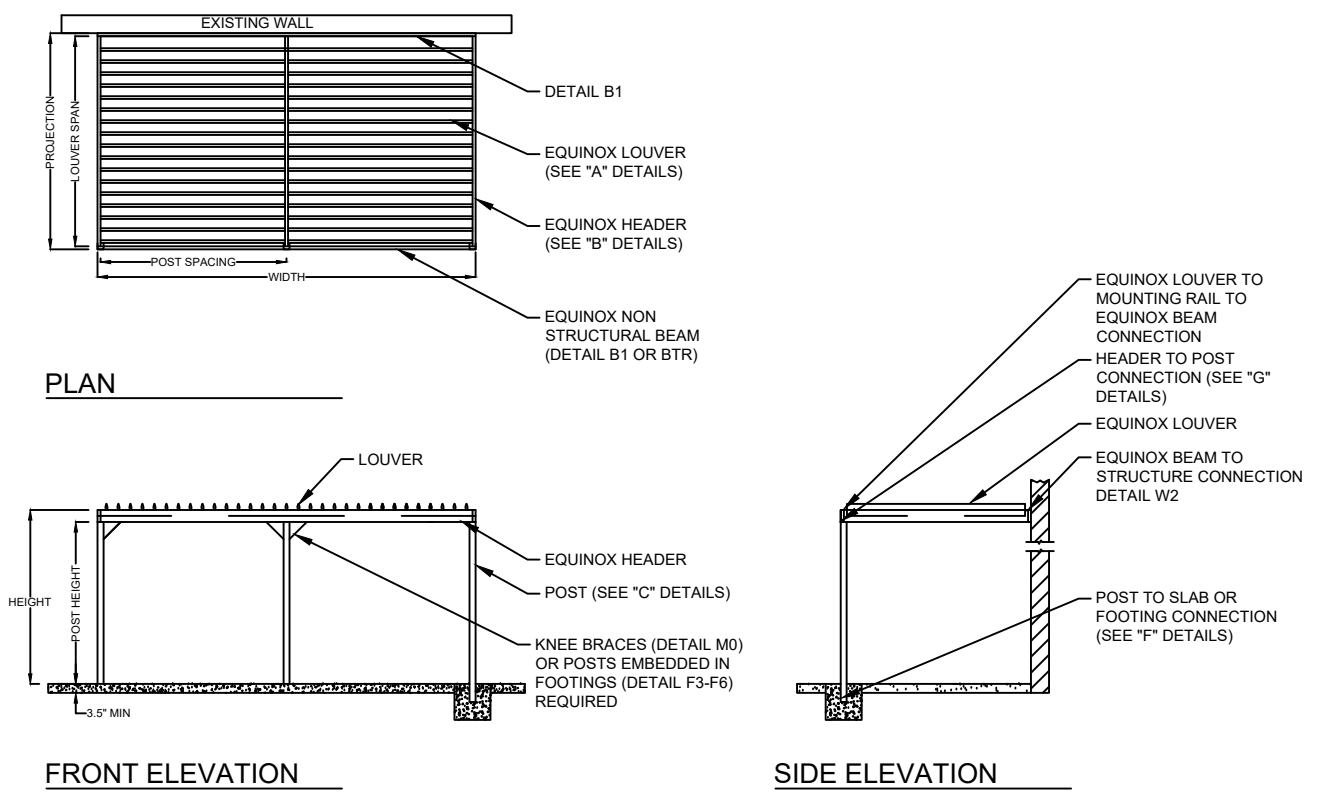
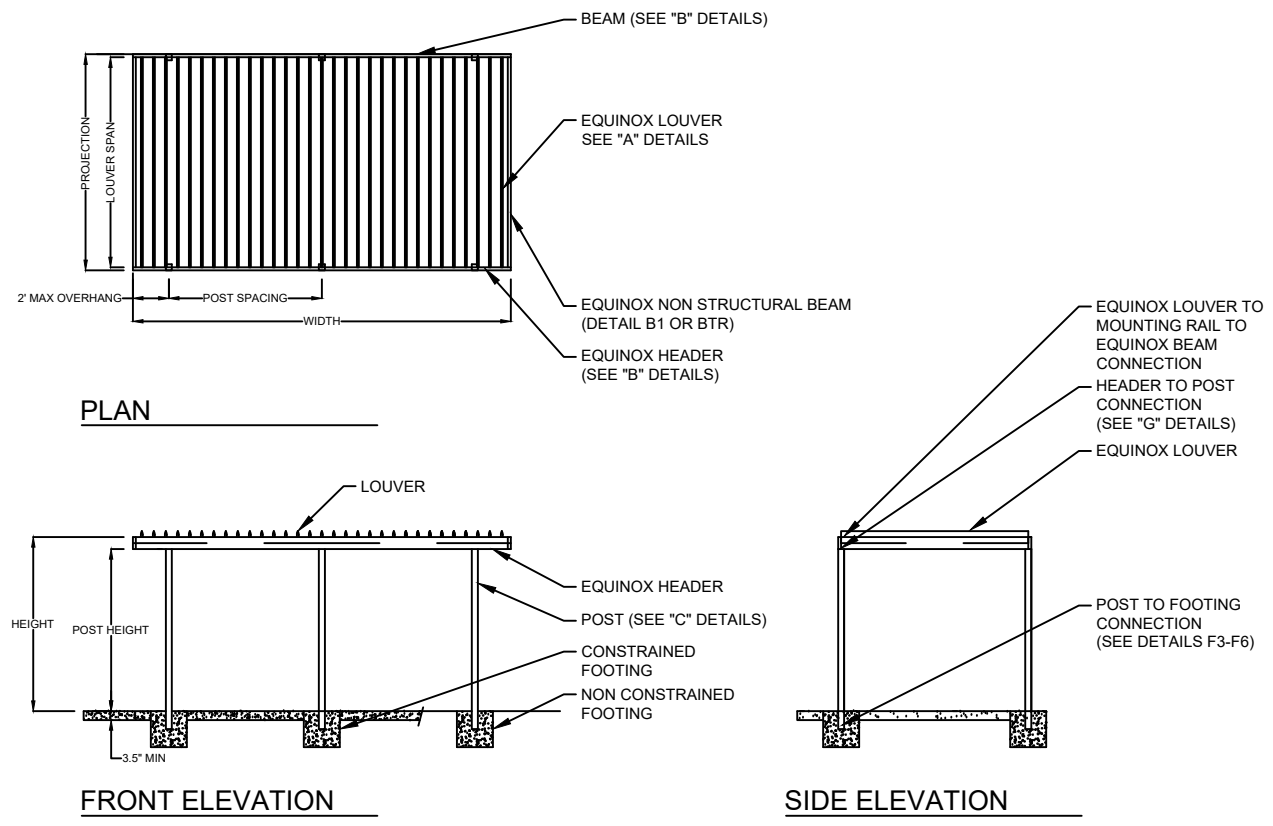
SIDE ELEVATION



STRUCTURE TYPE B - ATTACHED STRUCTURES WITH SINGLE SPAN LOUVERS (3 POST MINIMUM)

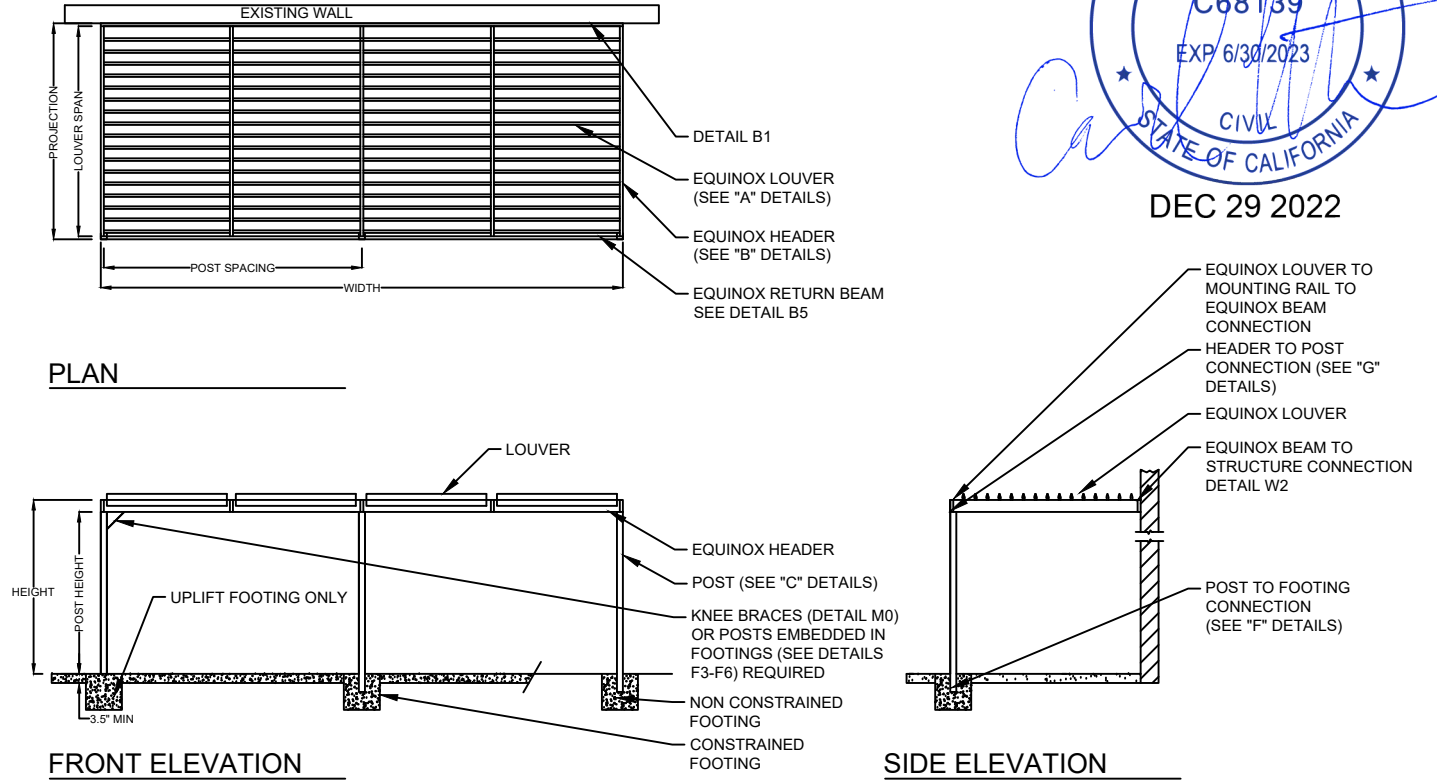
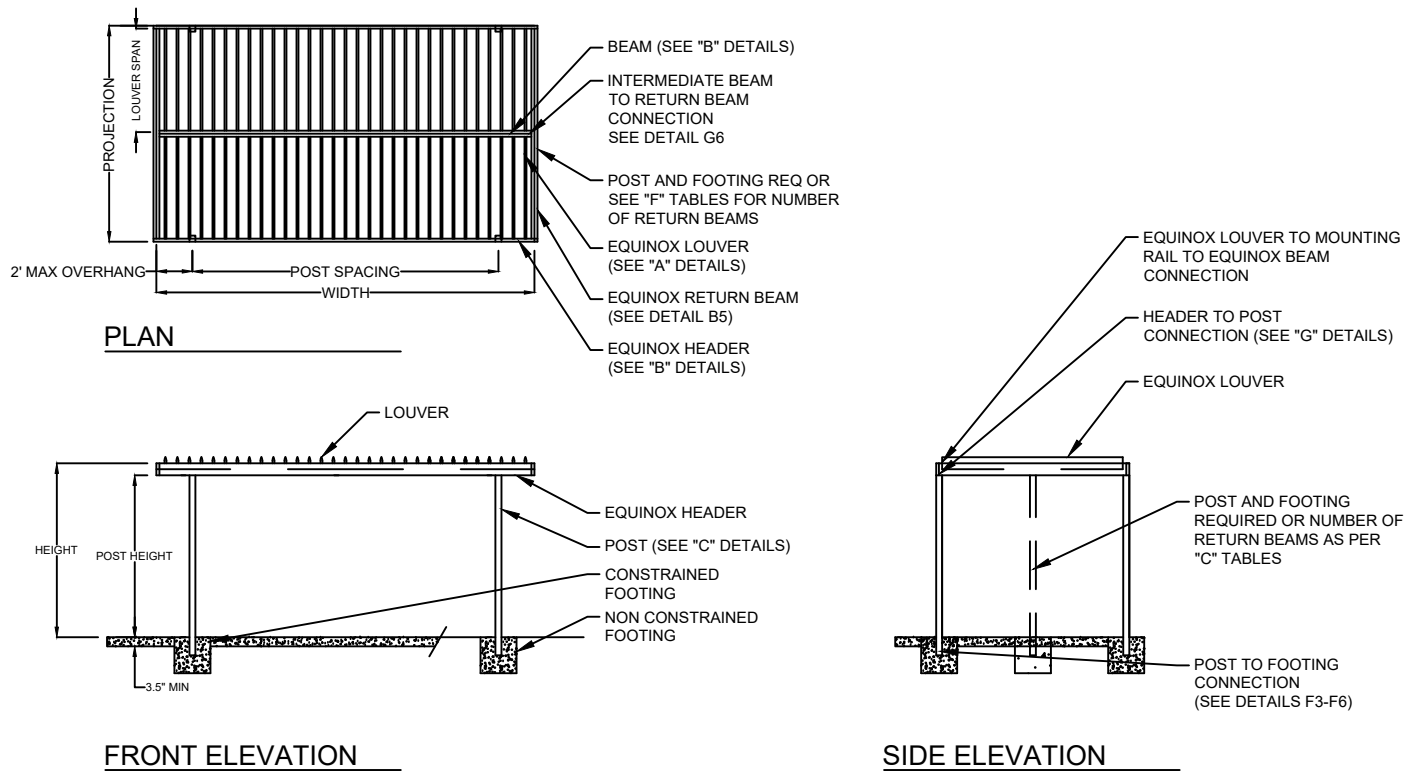
STRUCTURE TYPE D - FREESTANDING STRUCTURE W/ SINGLE SPAN LOUVERS (4 POST ONLY)

DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP		
		OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC STANDARD PLANS	3



STRUCTURE TYPE E - FREESTANDING STRUCTURE SINGLE SPAN LOUVERS (6 POST MIN)

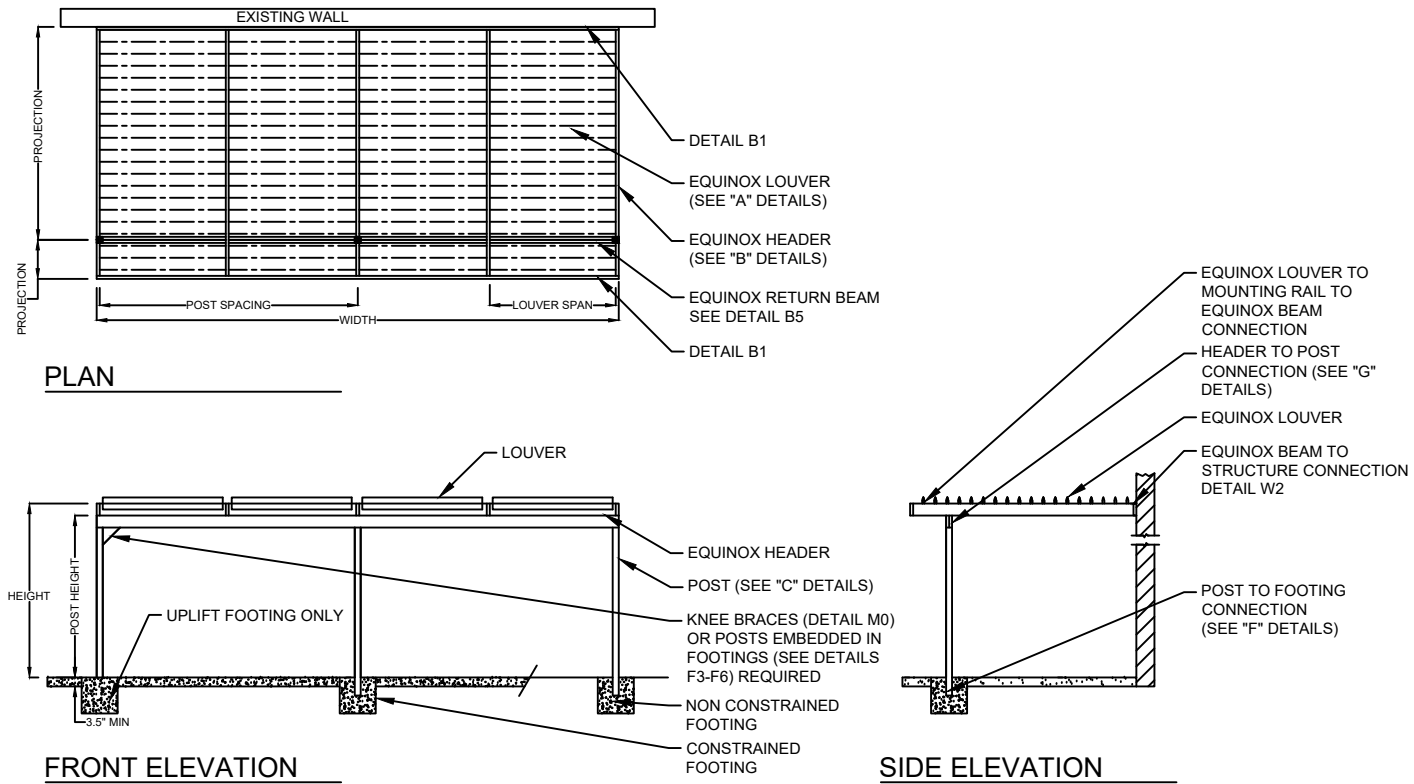
STRUCTURE TYPE G - ATTACHED STRUCTURE W/ LOUVERS PARALLEL W/ BUILDING WALL



STRUCTURE TYPE F - FREESTANDING STRUCTURE W/ MULTI SPAN LOUVERS (4-6 POSTS ONLY)

STRUCTURE TYPE H - ATTACHED STRUCTURE W/ LOUVERS PARALLEL W/ BUILDING WALL AND RETURN BEAMS

DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP		
		OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC STANDARD PLANS	4



STRUCTURE TYPE I - ATTACHED STRUCTURE W/ LOUVERS
 PARALLEL W/ BUILDING WALL AND RETURN BEAMS

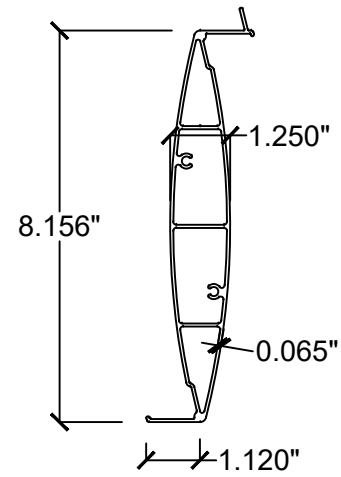


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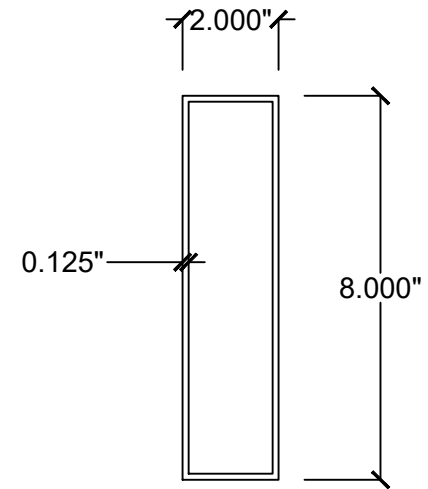
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06-02-22	CMP	CARL PUTNAM P.E.	
		OMNIMAX	
		DESC STANDARD PLANS	5

3441 IVY LINK PLACE
 LYNCHBURG, VA 24503
 CARLPUTNAM@COMCAST.NET

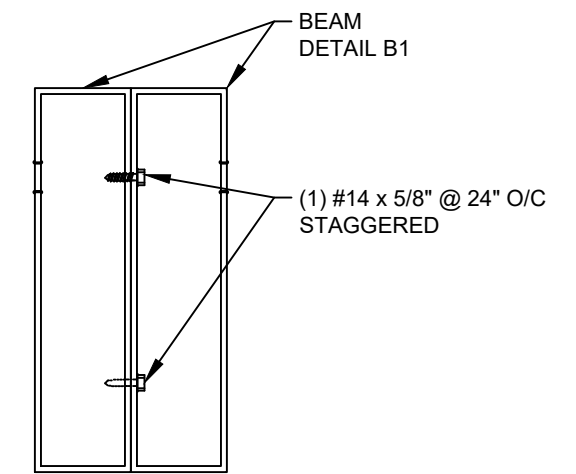
30 TECHNOLOGY PARK S. #400
 PEACHTREE CORNERS, GA



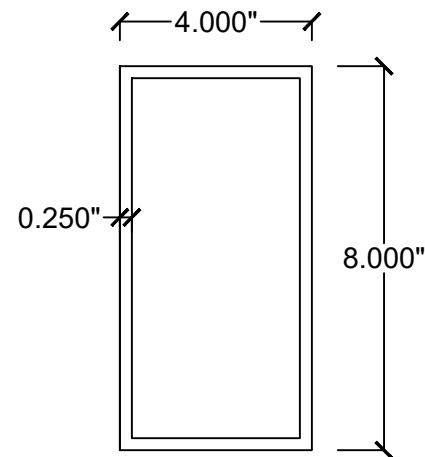
A1 EXTRUDED 6063-T6 ALUMINUM LOUVER



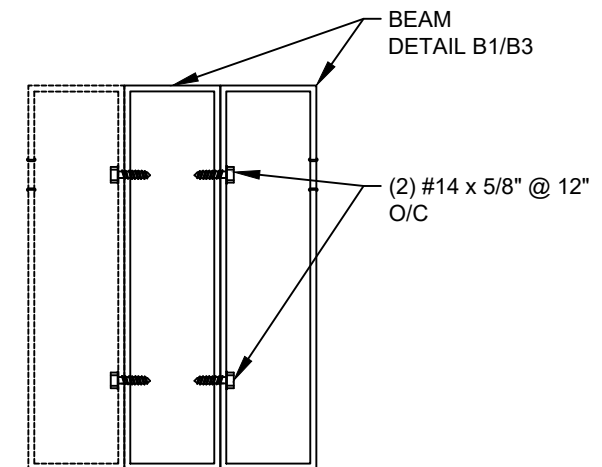
B1 EQUINOX 2x8 BEAM 6061-T6 ALUM ALLOY



B2 DOUBLE EQUINOX BEAM 6061-T6 ALUM ALLOY



B3 EQUINOX 4x8 BEAM 6061-T6 ALUM ALLOY

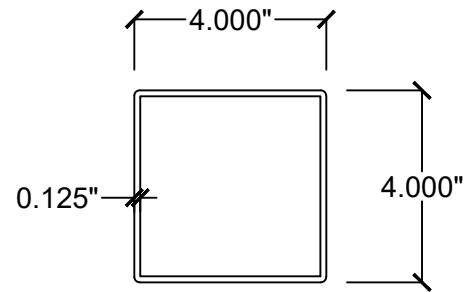


B5 MULTIPLE RETURN BEAM 6061-T6 ALUM ALLOY

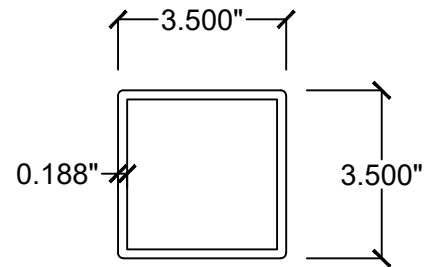


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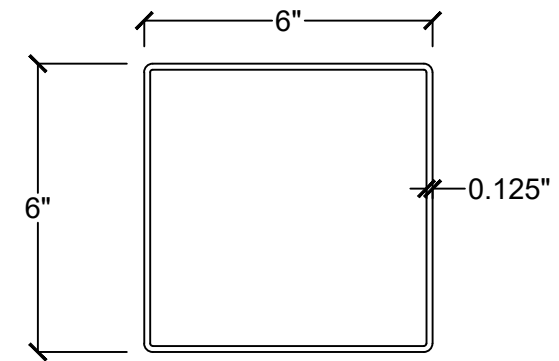
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06-02-22	CMP	OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC COMPONENTS	6



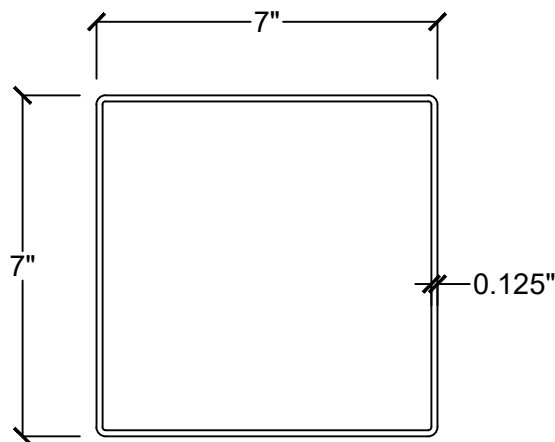
C1 EQUINOX POST
6061-T6 ALUM ALLOY
MAX MOMENT = 4048 lb*ft



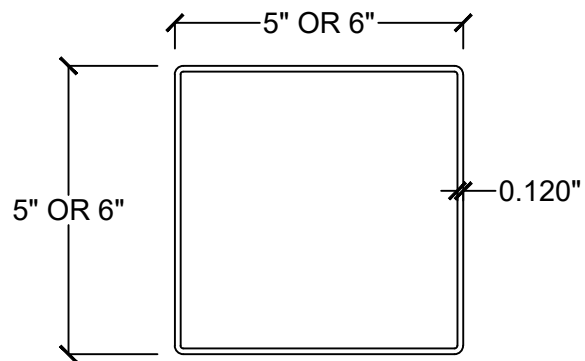
C2 ASTM A500 GRADE B
STEEL INSERT
MAX MOMENT = 5978 lb*ft
(PAINTED/GALVANIZED FOR EXTERIOR
EXPOSURE)
*AVAILABLE FROM THIRD PARTY



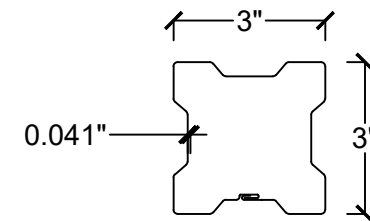
C3 0.125"x6"x6" 6061-T6 ALUM ALLOY
MAX MOMENT = 7070 lb*ft



C4 EQUINOX POST
6061-T6 ALUM ALLOY
MAX MOMENT = 6706 lb*ft



C5 ASTM A 500 GRADE B STEEL
INSERT
MAX MOMENT = PER DETAIL C3 OR C4
(PAINTED/GALVANIZED FOR EXTERIOR EXPOSURE)
*AVAILABLE FROM THIRD PARTY

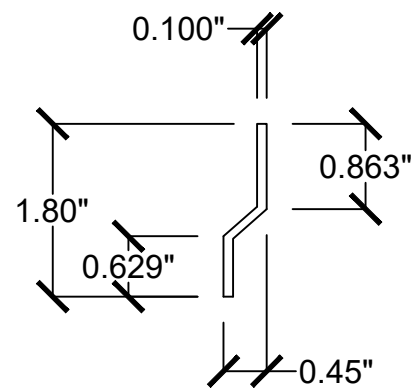


C6 ASTM A653 GRADE 40
STEEL CLOVER LEAF
(PAINTED/GALVANIZED FOR EXTERIOR
EXPOSURE)

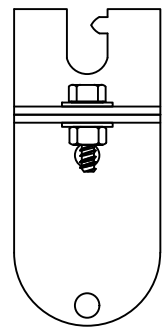
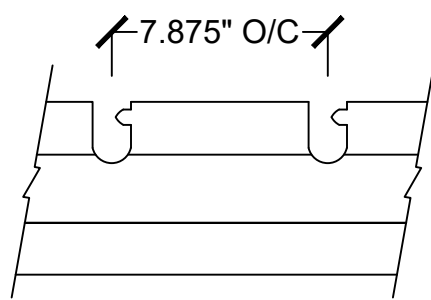


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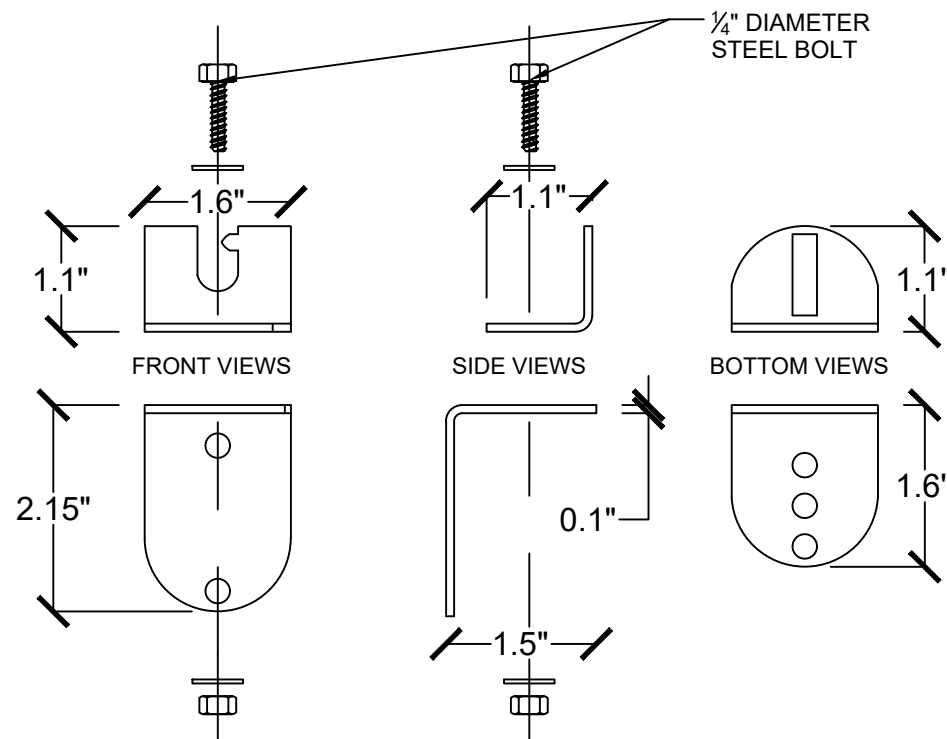
DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP		30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		OMNIMAX	
		DESC COMPONENTS	7



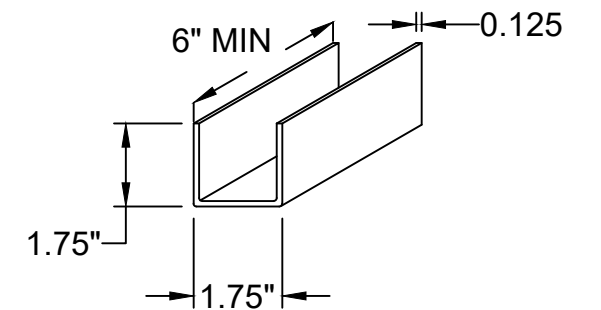
D1 EQUINOX LOUVER MOUNTING RAIL
6061-T6 ALUMINUM



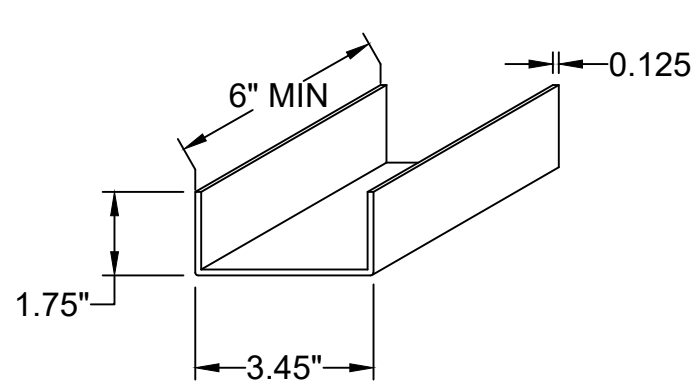
ASSEMBLED
PIVOT CLIP



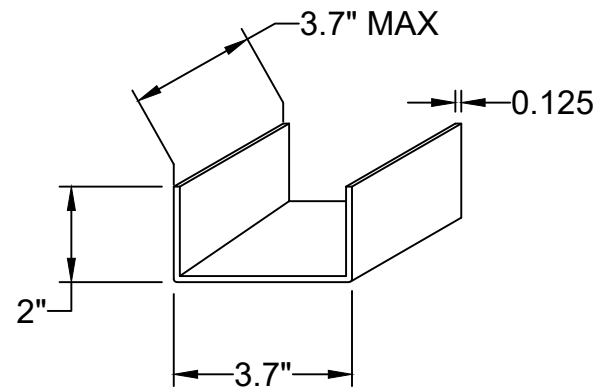
D2 EQUINOX PIVOT CLIP
ASTM A36 STEEL OR
6063T6 ALUM OR BTR



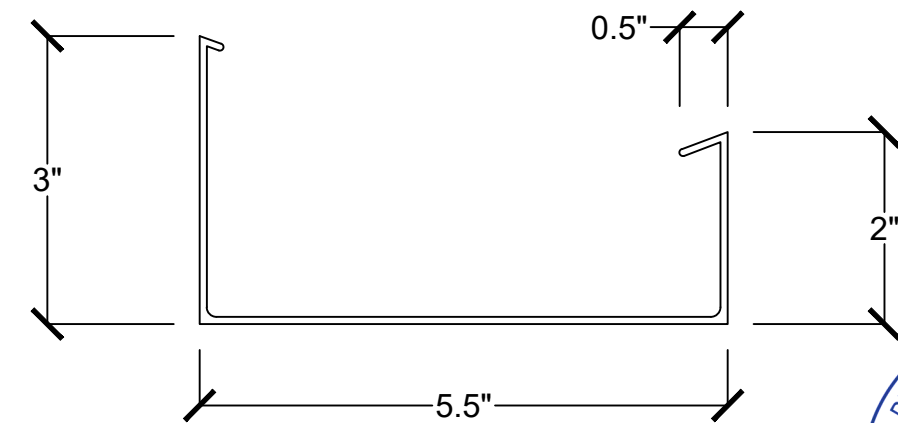
D3 2X8 INSIDE BEAM BRACKET
6063-T5 ALUM ALLOY



D4 4X8 INSIDE BEAM BRACKET
6063-T5 ALUM ALLOY
*AVAILABLE FROM THIRD PARTY



D5 4X4 INSIDE POST BRACKET
6063-T5 ALUM ALLOY

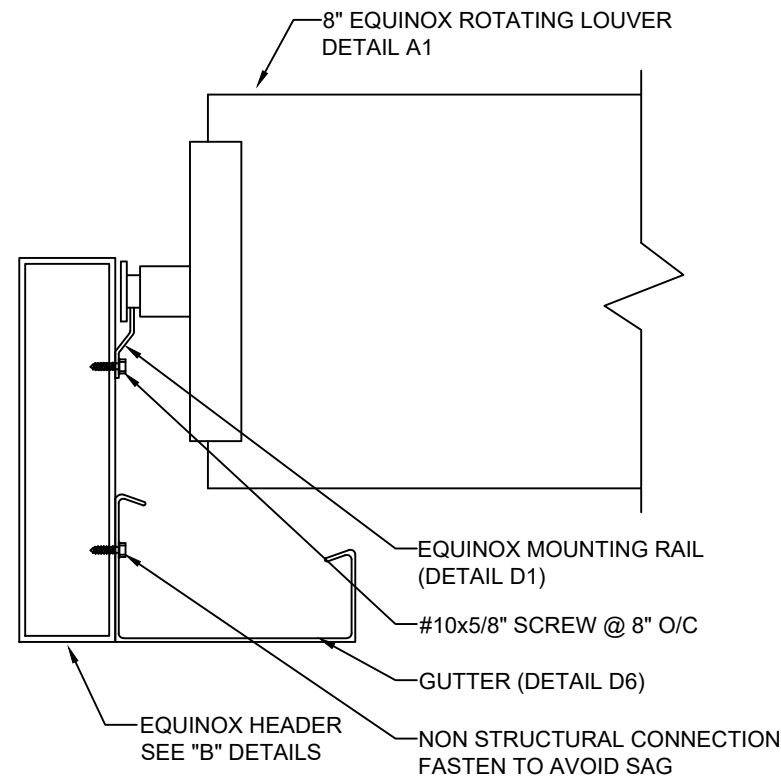


D6 GUTTER
6063-T5 ALUM ALLOY

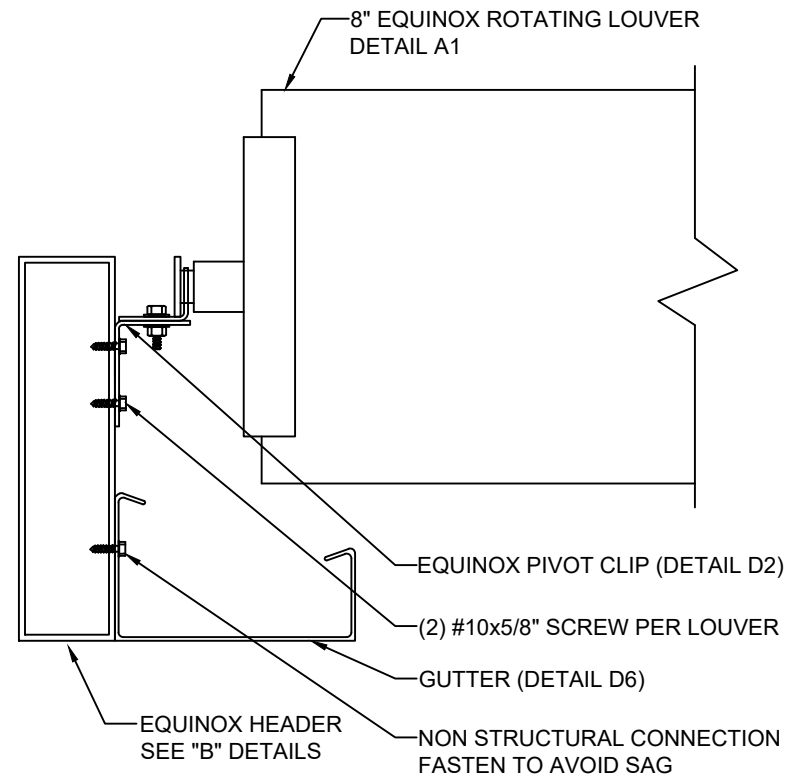


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06-02-22	CMP		30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		OMNIMAX	
		DESC COMPONENTS	8



E1 EQUINOX HEADER TO LOUVER CONNECTION

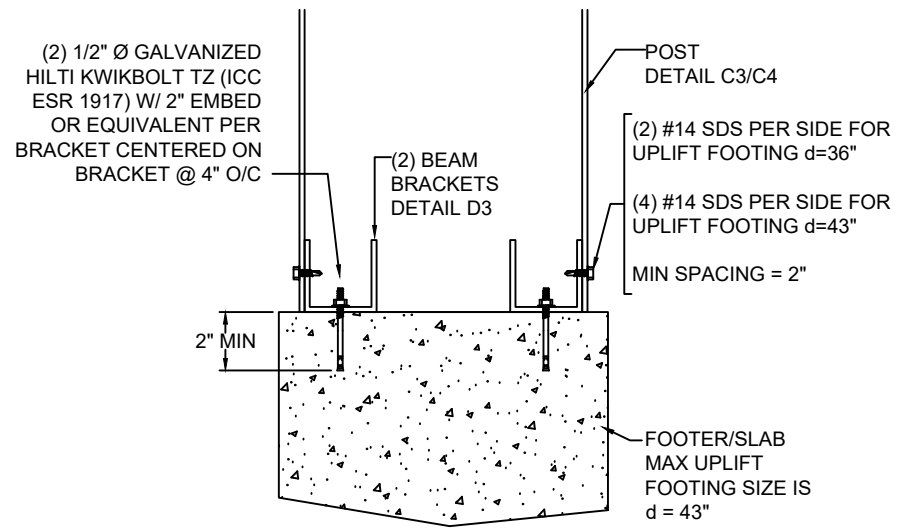


E2 ANGLED EQUINOX HEADER TO PIVOT CLIP CONNECTION

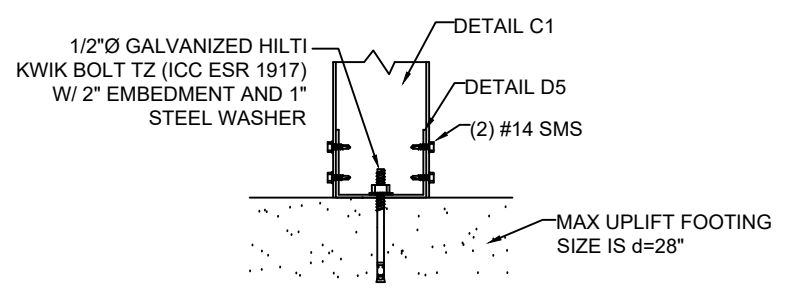


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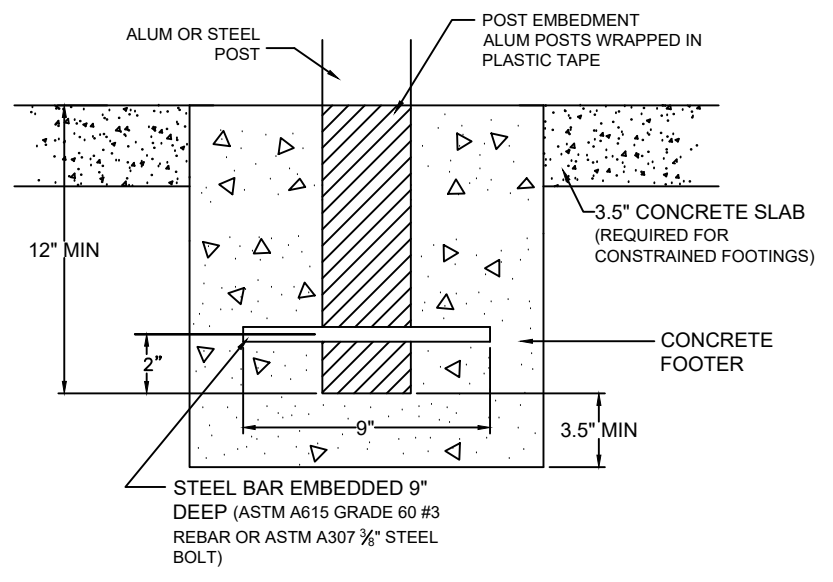
DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP		
		OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC COMPONENTS	09



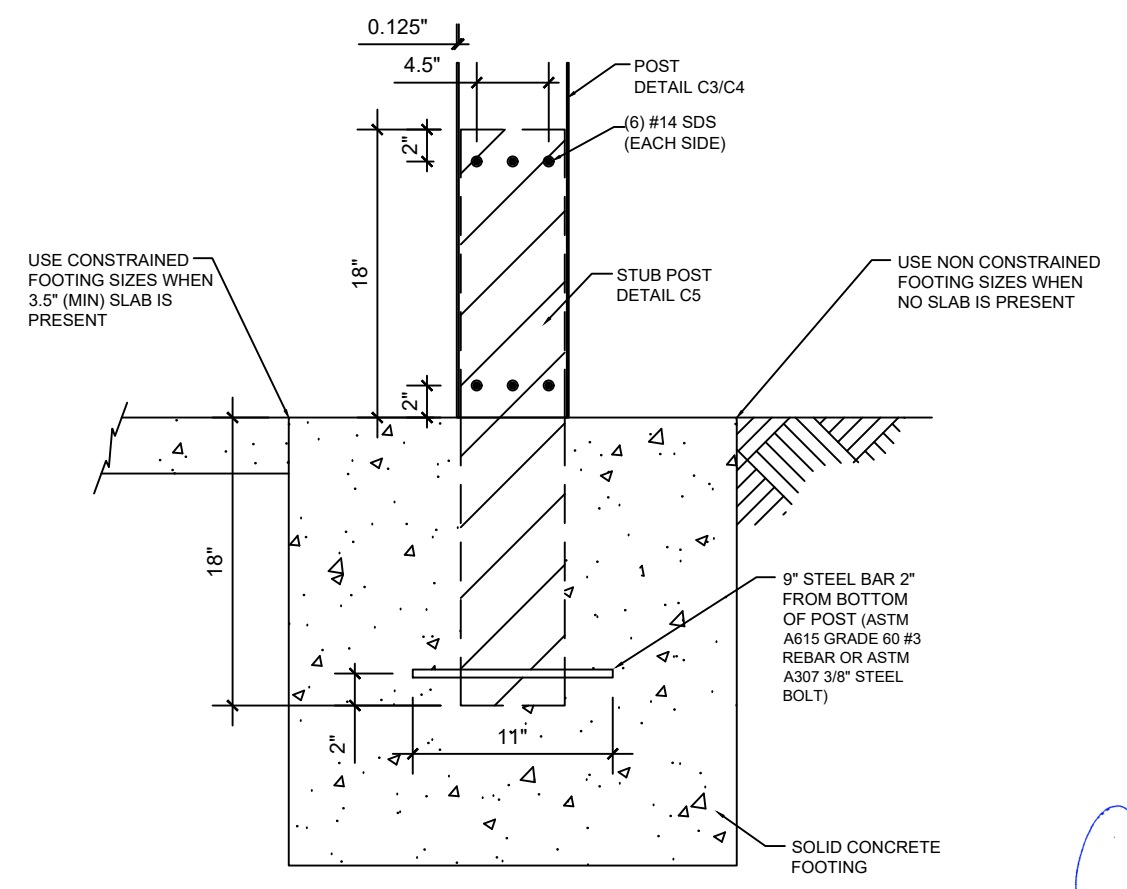
F1 6" AND 7" POST TO FOOTING/SLAB CONNECTION
DETAIL
UPLIFT ONLY



F2 POST TO FOOTING/SLAB CONNECTION DETAIL
UPLIFT ONLY



F3 POST TO FOOTING DETAIL
MOMENT RESISTING

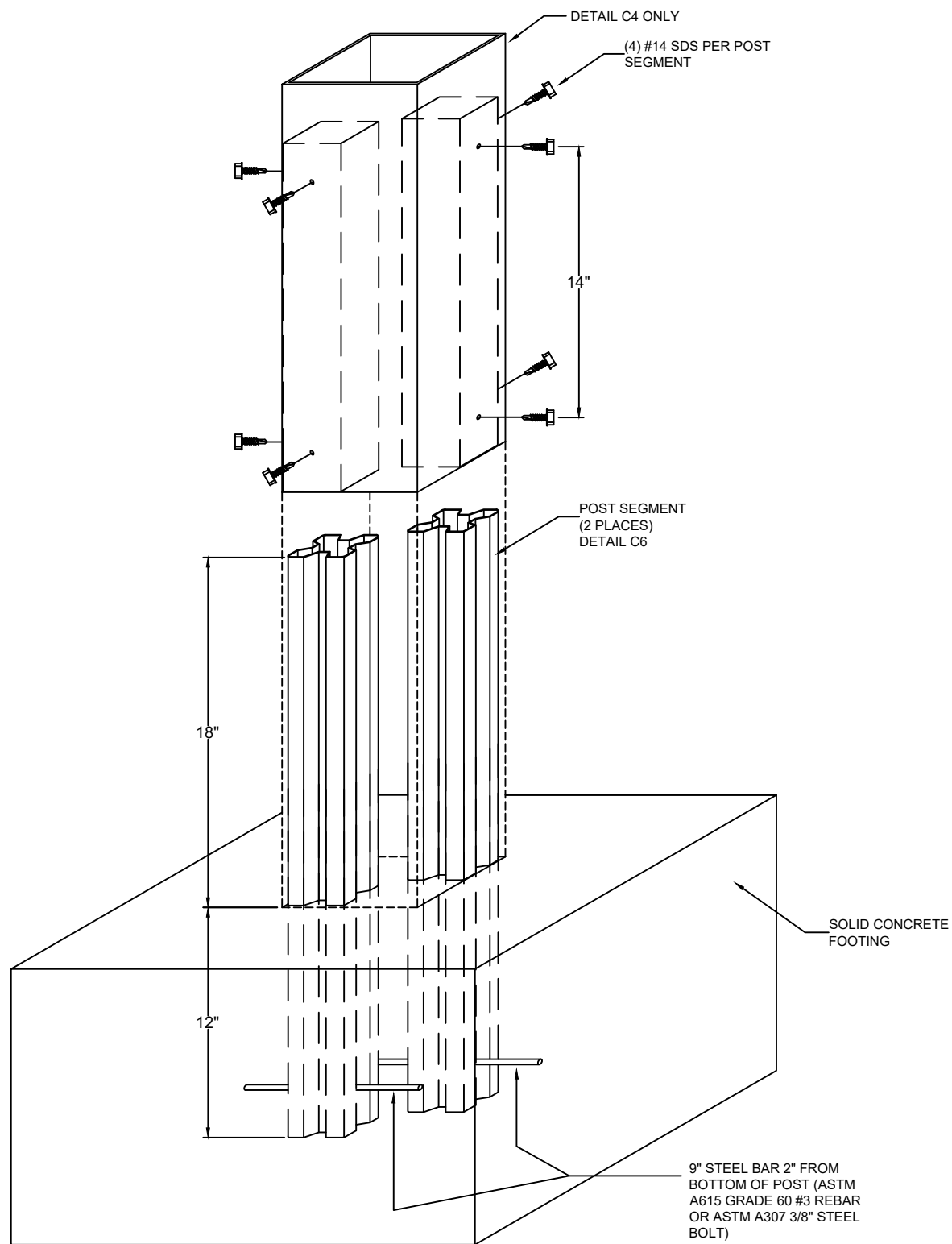


F4 7x7 OR 6x6 POST W/ STEEL INSERT TO
FOOTING CONNECTION
MOMENT RESISTING

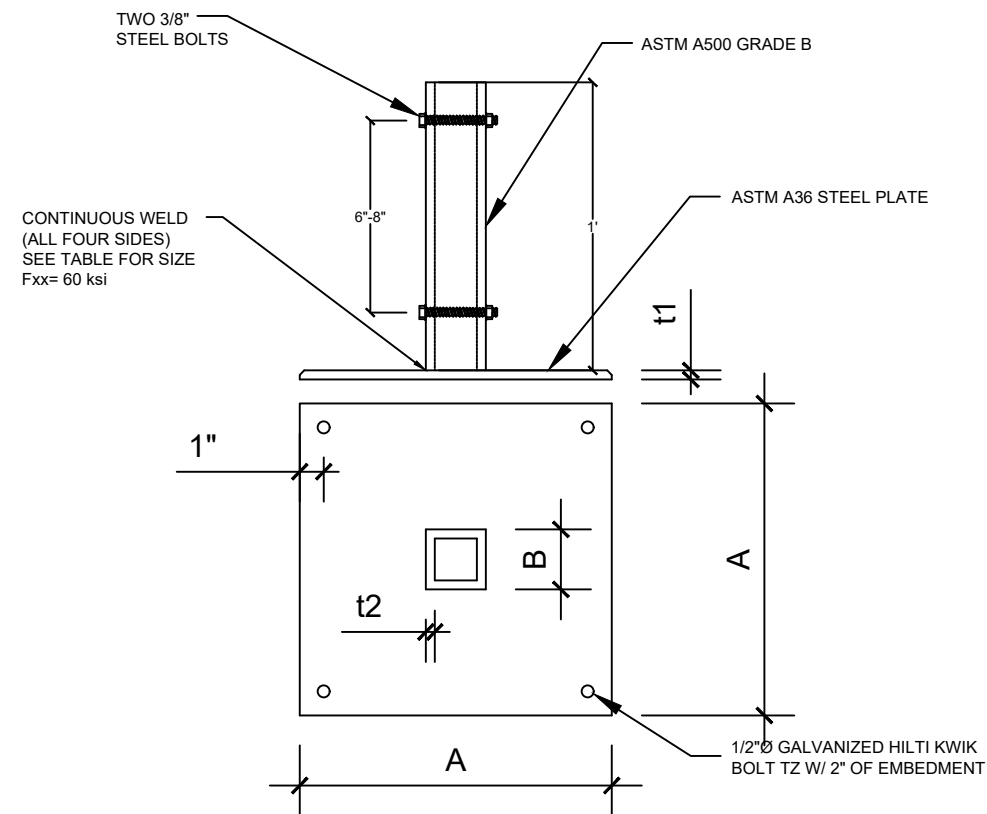


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		OMNIMAX	
		DESC DETAILS	10



F5 POST TO FOOTING FOR OVERTURNING MOMENT ≤ 2056 LBFxFT



THE WELDED POST BRACKET MUST BE VERIFIED TO COMPLY WITH THE REQUIREMENTS IN THIS DETAIL AND FABRICATED IN ACCORDANCE W/ 2021 IBC SECTION 1704.2.5.1 BY AN APPROVED FABRICATOR TO THE SATISFACTION OF THE CODE OFFICIAL

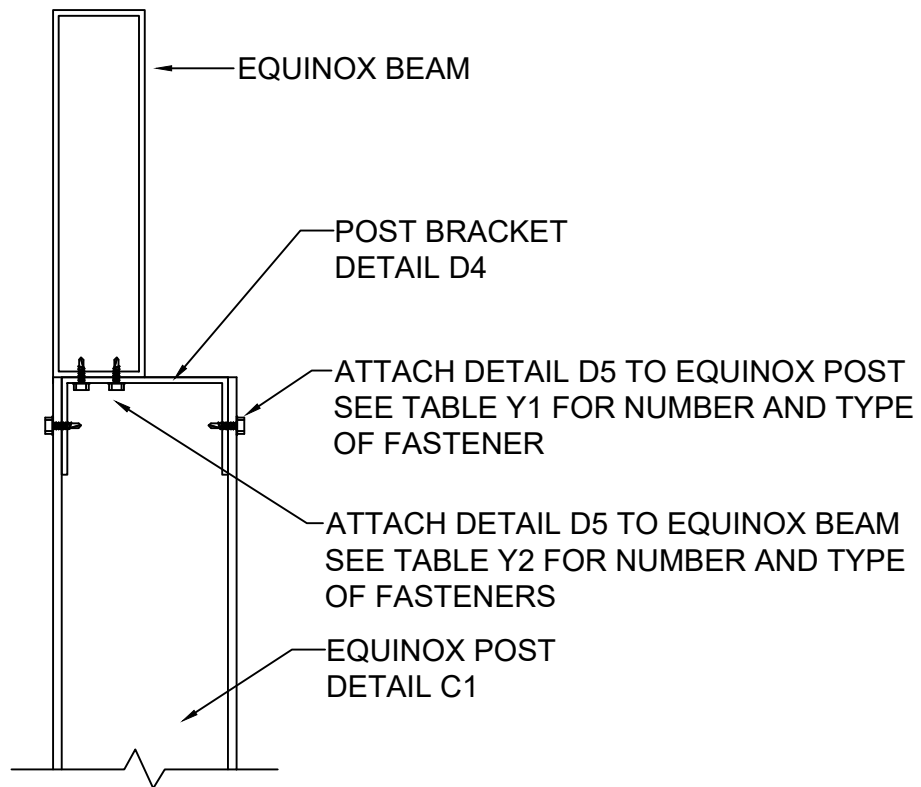
MOMENT CAPACITY (lb-ft)	PLATE SIZE A (in)	PLATE THICKNESS t1 (in)	STUB POST SIZE B (in)	STUB POST THICKNESS t2 (in)	MINIMUM WELD SIZE (in)
960	8	0.375	3.5	0.1875	0.125
1250	12	0.375	3.5	0.1875	0.125
2200	12	0.5	3.5	0.1875	0.125
3450	12	0.625	3.5	0.1875	0.125
5000	12	0.75	3.5	0.25	0.1875
BASE PLATE AND STUB POST SPECIFICATIONS					



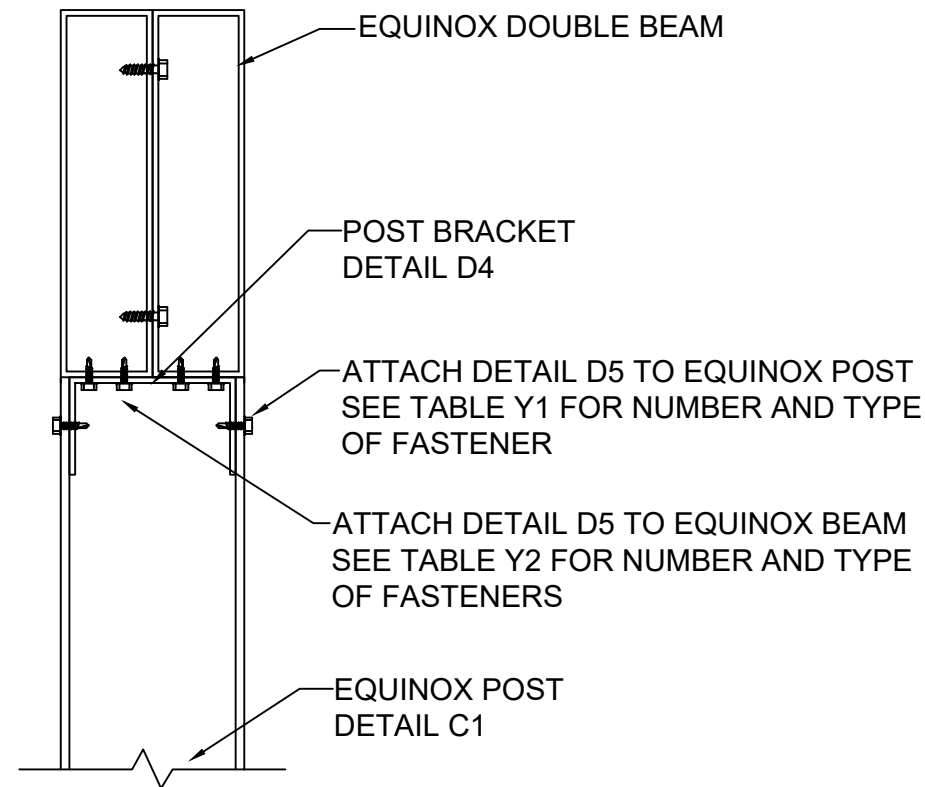
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F6 WELDED STEEL BASE PLATE
MUST BE MOUNTED TO TOP OF FOOTING PER TABLES
PAINTED/ GALVANIZED FOR EXTERIOR EXPOSURE
*AVAILABLE FROM THIRD PARTY

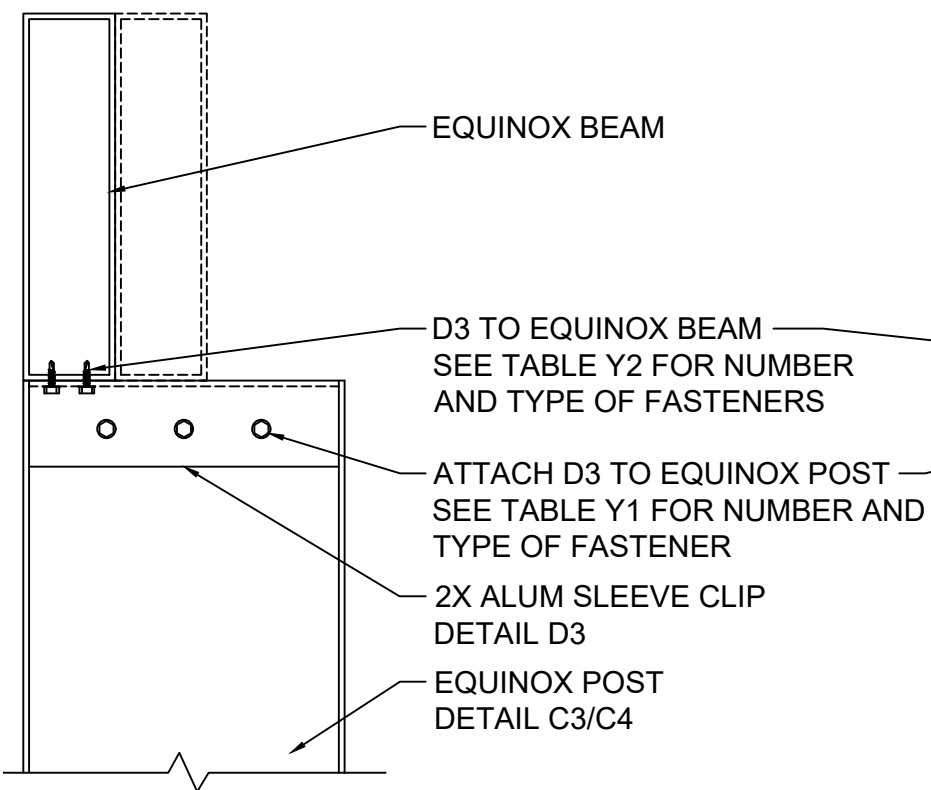
DATE	DRAWN BY	DESCRIPTION	PROJECT
06-02-22	CMP	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
09-09-22	TJP	OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC DETAILS	



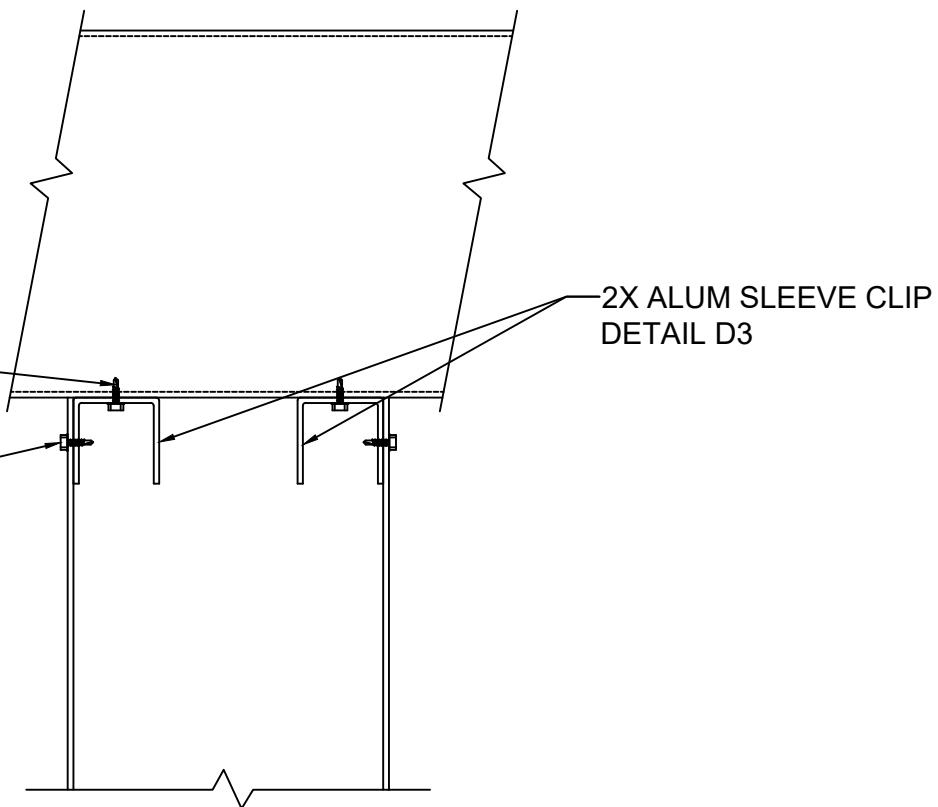
G1 EQUINOX HEADER TO 4" POST CONNECTION



G2 EQUINOX DOUBLE HEADER TO 4" POST CONNECTION



G3 EQUINOX HEADER TO 6" AND 7" POST CONNECTION

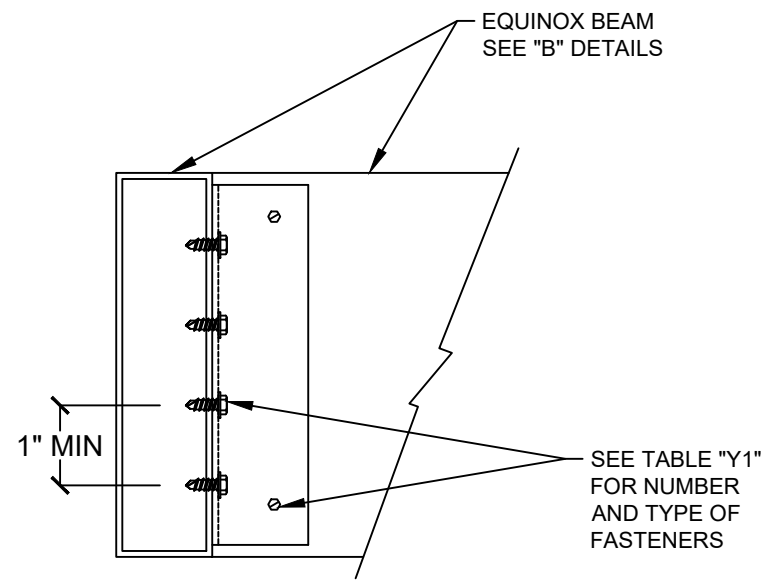


G3 SIDE VIEW

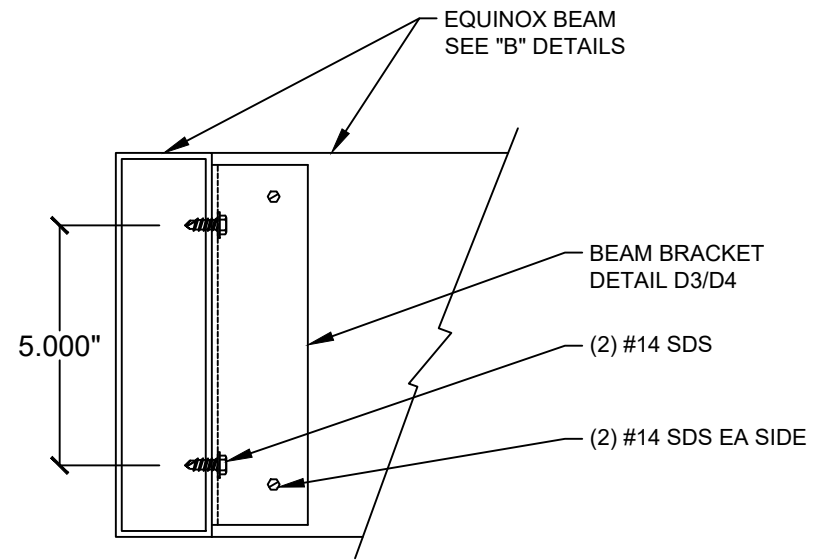


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		DESC	DETAILS
			12



G6 BEAM TO BEAM CONNECTION

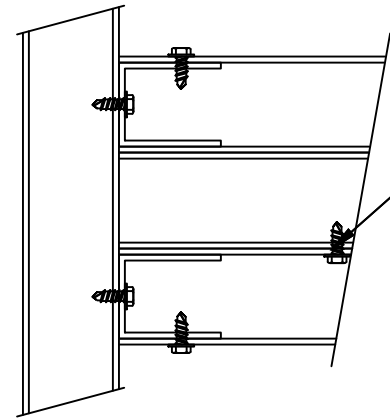
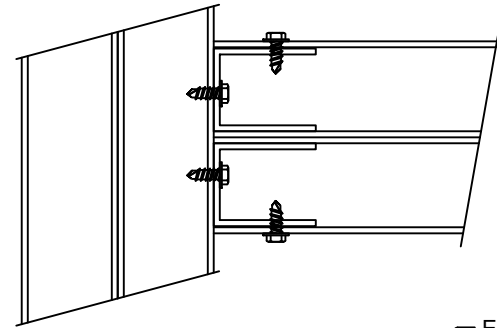


G7 NON STRUCTURAL BEAM TO BEAM CONNECTION

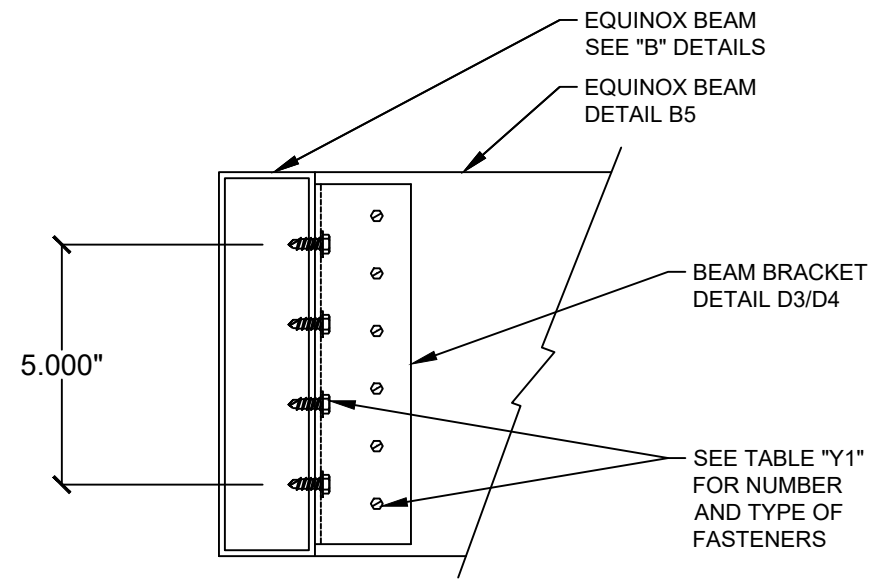
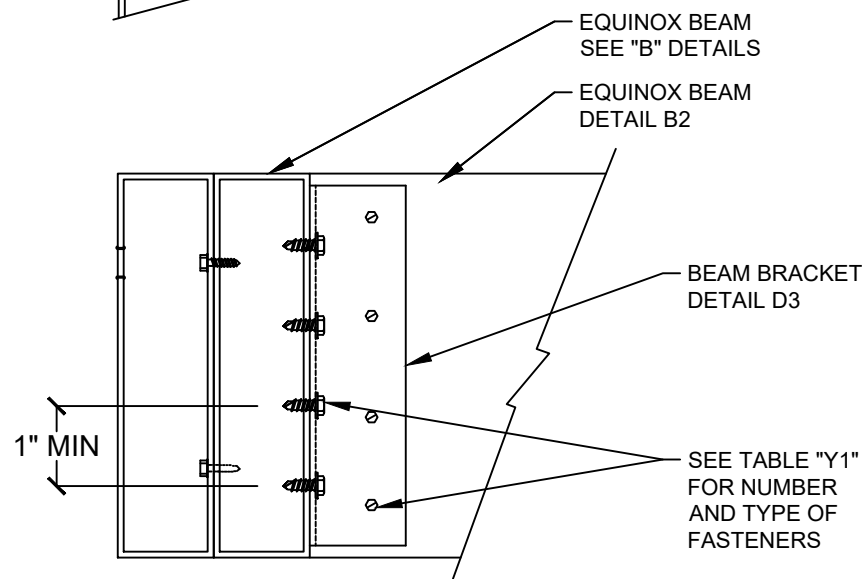


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DATE	DRAWN BY	DESCRIPTION	PROJECT
06-02-22	CMP	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
			30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC	OMNIMAX
			DETAILS
			13



CONNECT PER DETAIL B5



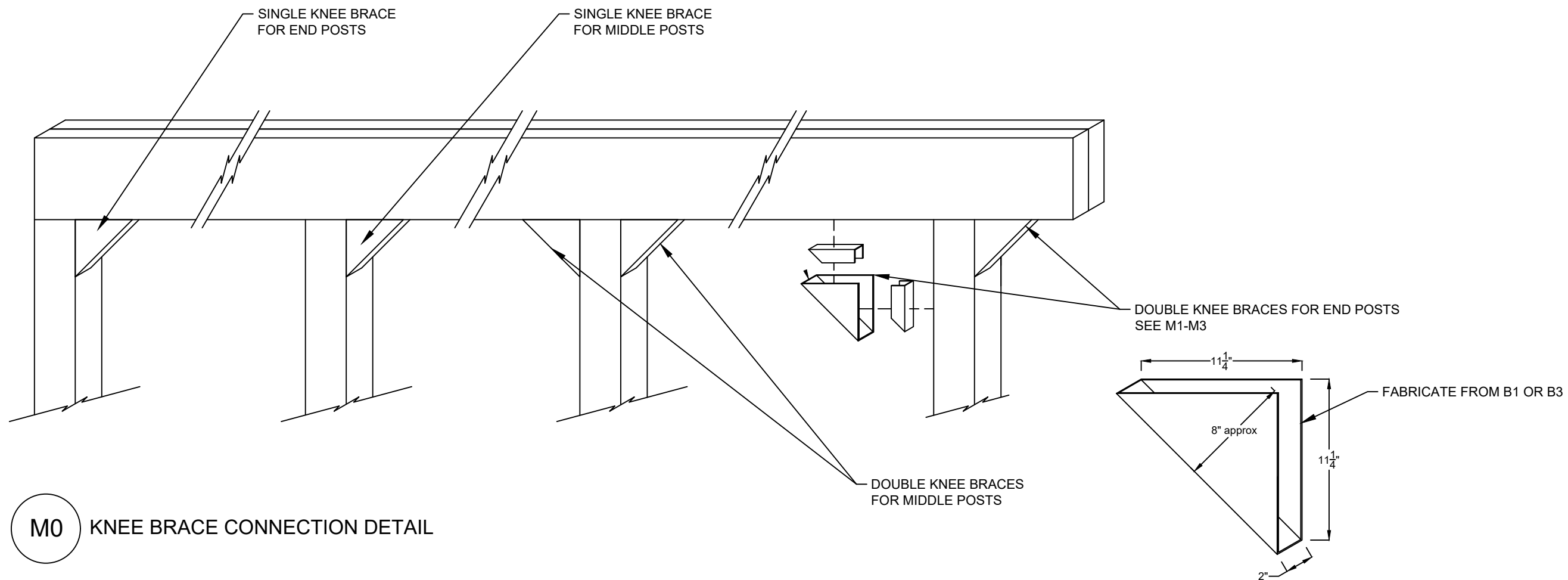
G8 BEAM TO BEAM CONNECTION

G9 MULTI BEAM TO BEAM CONNECTION

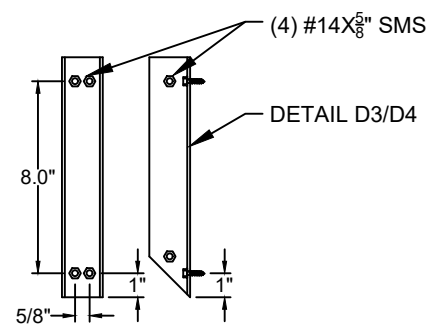


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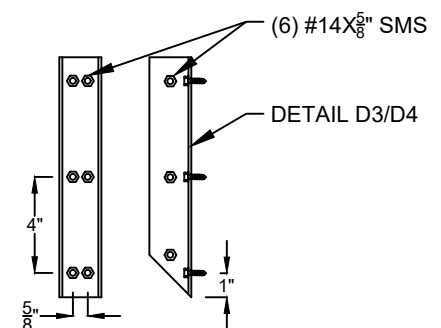
DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP	OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC DETAILS	14



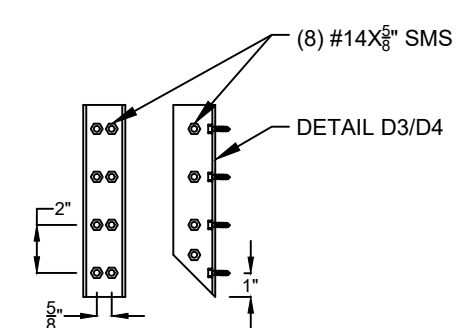
M0 KNEE BRACE CONNECTION DETAIL



M1 MOMENT CONNECTION #1
743 FOOT-POUNDS



M2 MOMENT CONNECTION #2
1004 FOOT-POUNDS



M3 MOMENT CONNECTION #3
1549 FOOT-POUNDS

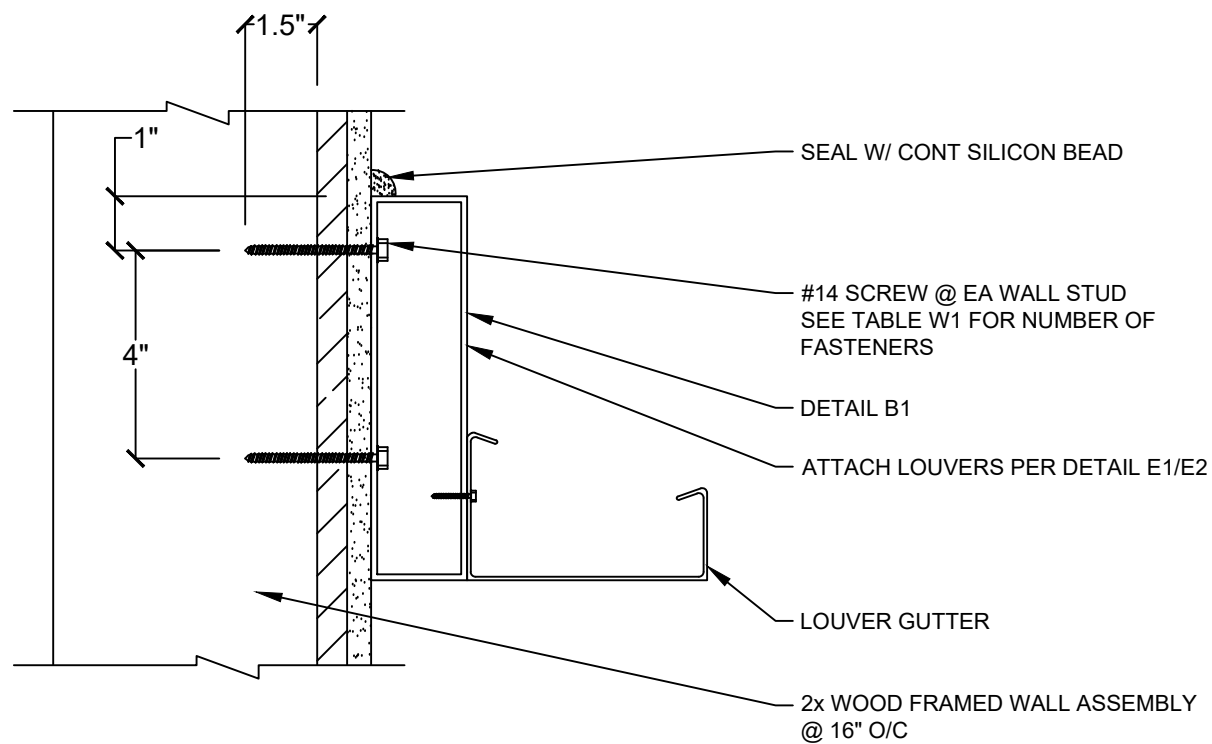
DETERMINE MOMENT CAPACITY FOR ALL POSTS

1. SINGLE KNEE BRACES ON ALL POSTS- USE MOMENT LISTED IN DETAILS.
2. TWO POST STRUCTURE W/ DOUBLE KNEE BRACES- DOUBLE MOMENT LISTED IN DETAILS
3. THREE OR MORE POST STRUCTURE W/ DOUBLE KNEE BRACES ON INTERIOR POSTS AND SINGLE KNEE BRACES ON END POSTS- DOUBLE MOMENT LISTED IN DETAILS

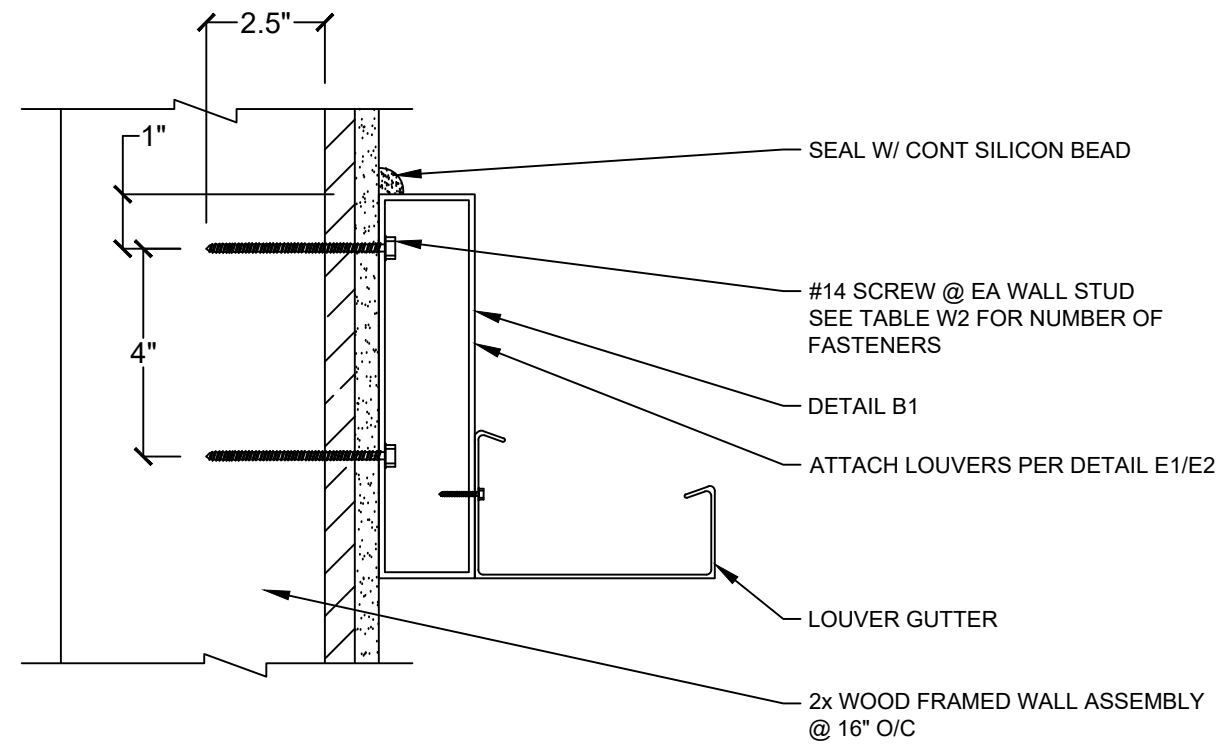


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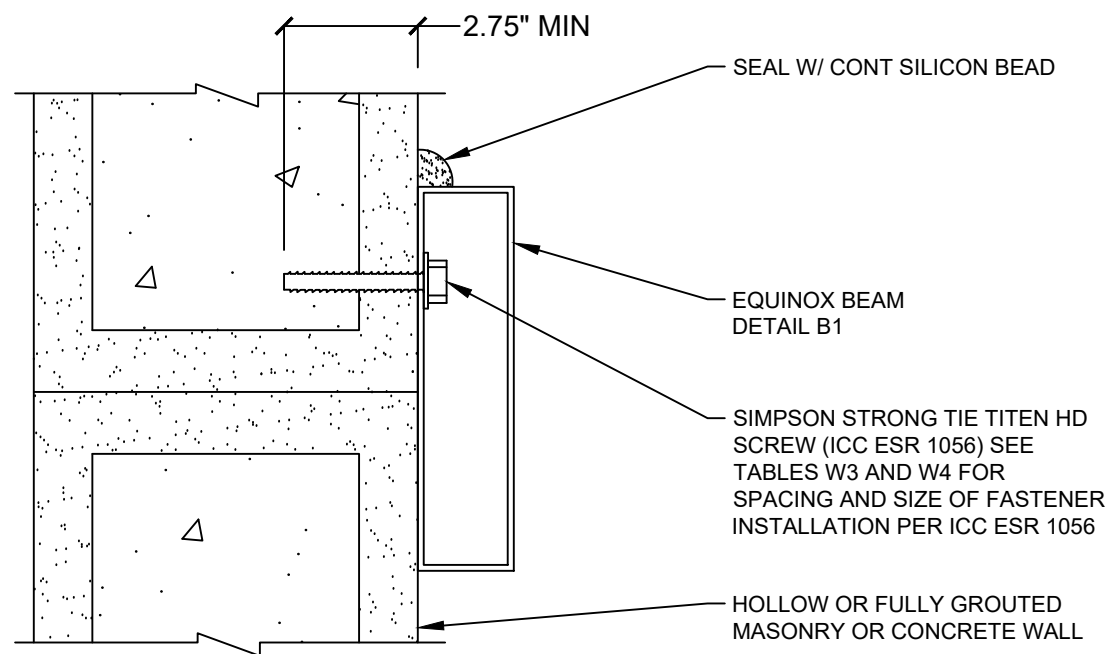
DATE	DRAWN BY	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
06-02-22	CMP	OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC DETAILS	15



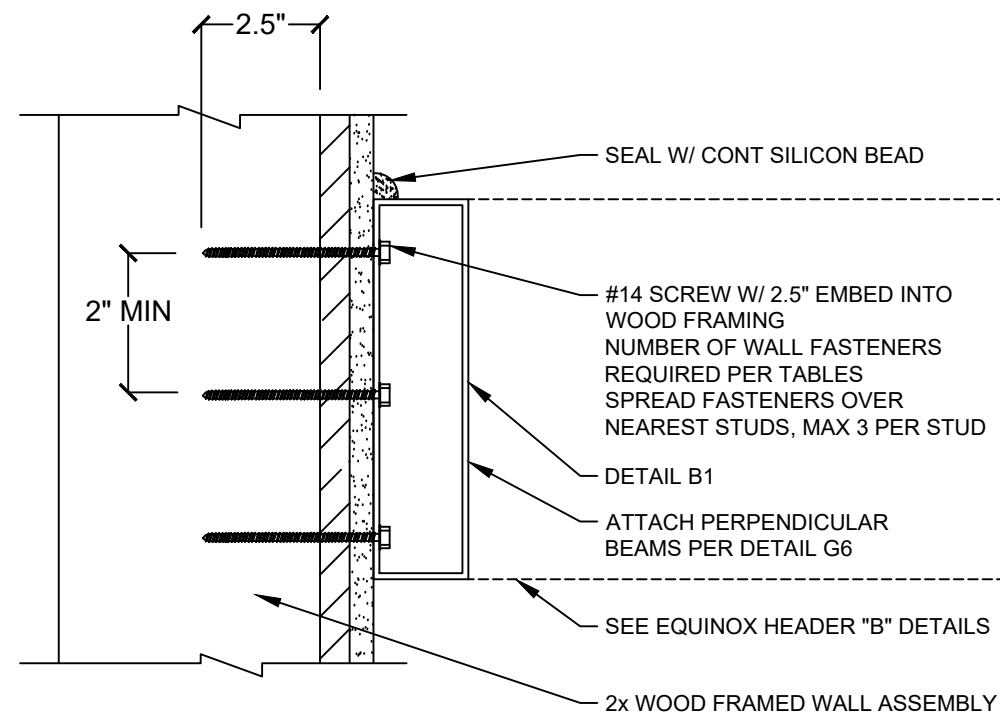
W1 EQUINOX LEDGER TO STRUCTURE CONNECTION



W2 EQUINOX LEDGER TO STRUCTURE CONNECTION



W3 EQUINOX LEDGER TO STRUCTURE CONNECTION



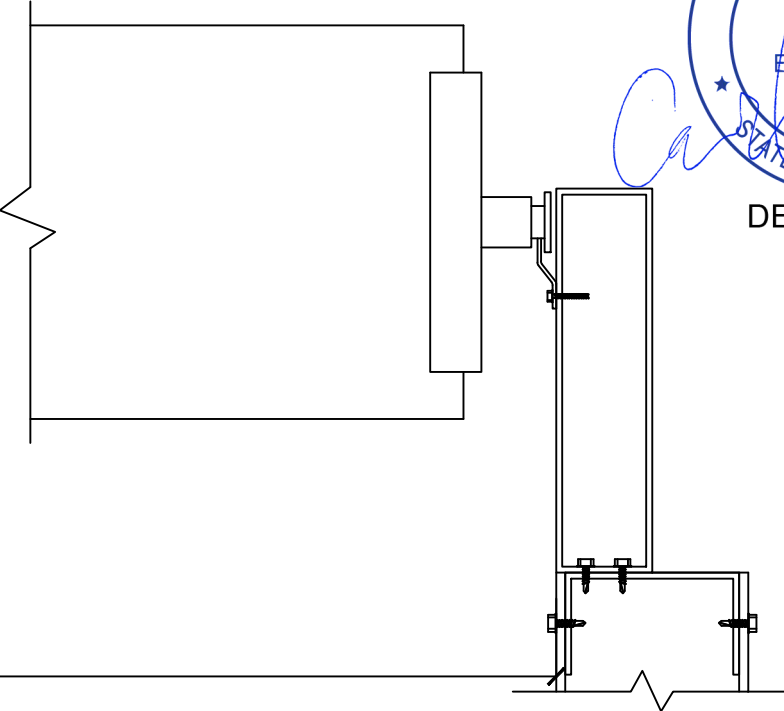
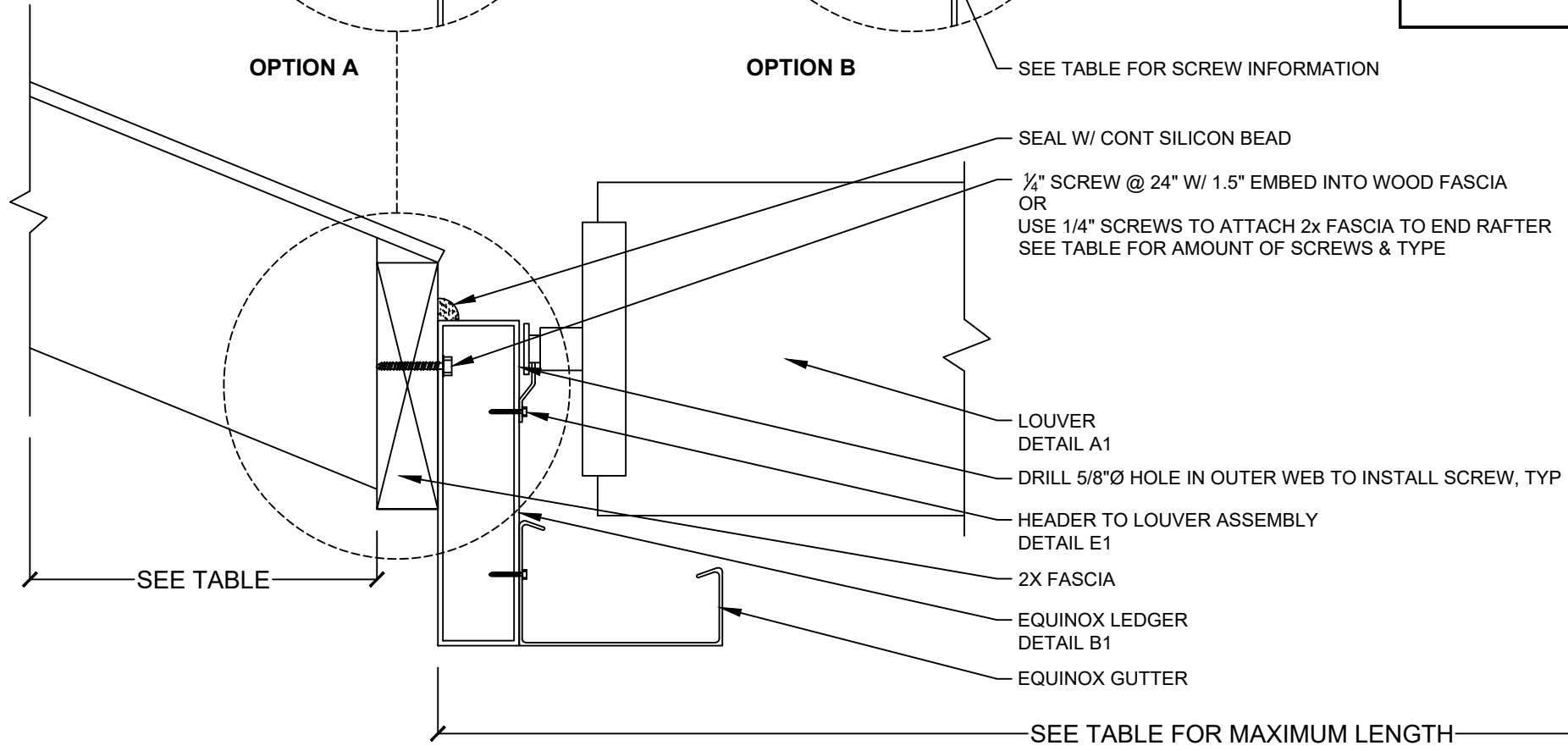
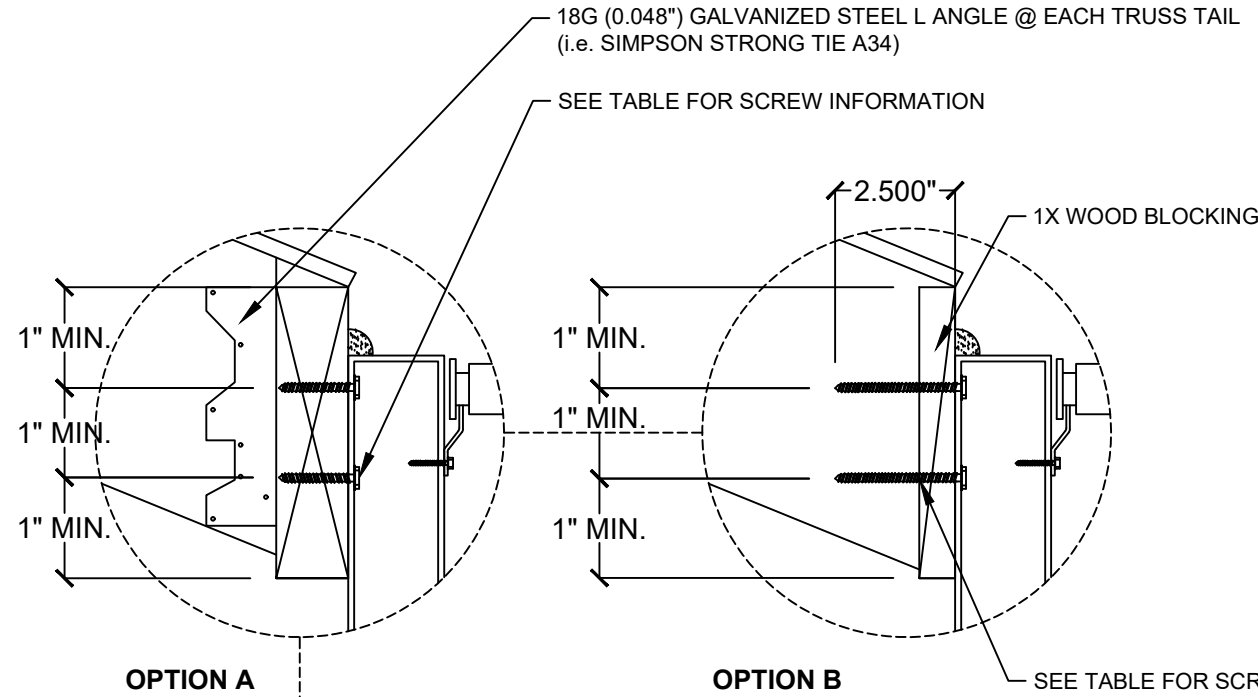
W4 EQUINOX LEDGER TO STRUCTURE CONNECTION TYPE "C", "G", "H" AND "I" ONLY



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DATE	DRAWN BY		
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			DESC DETAILS

Live Load Ground Snow Load	RAFTER SIZE (24" O/C)	MAX LOUVER SPAN ("L")					Number of Eave Fasteners (1/4" Lag screw)
		EAVE OVERHANG					
		6"	9"	12"	18"	24"	
10 psf 130 mph Exp B 105 mph Exp C	2x4	14'-0"	14'-0"	14'-0"	11'-2"	6'-6"	3
	2x6	14'-0"	14'-0"	14'-0"	14'-0"	10'-10"	
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	14'-0"	
20 psf 140 mph Exp B 115 mph Exp C	2x4	14'-0"	14'-0"	10'-2"	5'-9"	3'-3"	4
	2x6	14'-0"	14'-0"	14'-0"	8'-9"	5'-5"	
	2x8	14'-0"	14'-0"	14'-0"	14'-0"	11'-4"	
25 psf 130 mph Exp C	2x4	13'-0"	13'-0"	11'-1"	6'-3"	3'-5"	4
	2x6	13'-0"	13'-0"	13'-0"	9'-6"	5'-10"	
	2x8	13'-0"	13'-0"	13'-0"	13'-0"	12'-3"	
30 psf 140 mph Exp C	2x4	12'-0"	12'-0"	9'-1"	4'-11"	2'-5"	4
	2x6	12'-0"	12'-0"	12'-0"	7'-7"	4'-6"	
	2x8	12'-0"	12'-0"	12'-0"	12'-0"	9'-10"	
36 psf 150 mph Exp C	2x4	12'-0"	10'-8"	7'-5"	3'-10"	1'-8"	5
	2x6	12'-0"	12'-0"	10'-10"	6'-1"	3'-5"	
	2x8	12'-0"	12'-0"	12'-0"	12'-0"	7'-11"	
43 psf 150 mph Exp C	2x4	11'-0"	8'-9"	6'-0"	2'-11"	1'-0"	5
	2x6	11'-0"	11'-0"	8'-10"	4'-9"	2'-5"	
	2x8	11'-0"	11'-0"	11'-0"	9'-9"	6'-2"	
50 psf 160 mph Exp C	2x4	11'-0"	7'-5"	5'-0"	2'-3"	0'-6"	6
	2x6	11'-0"	10'-8"	7'-5"	3'-10"	1'-9"	
	2x8	11'-0"	11'-0"	11'-0"	8'-2"	5'-0"	
62 psf 160 mph Exp C	2x4	9'-6"	5'-9"	3'-9"	1'-5"	0'-0"	6
	2x6	10'-0"	8'-5"	5'-9"	2'-9"	1'-0"	
	2x8	10'-0"	10'-0"	10'-0"	6'-3"	3'-7"	



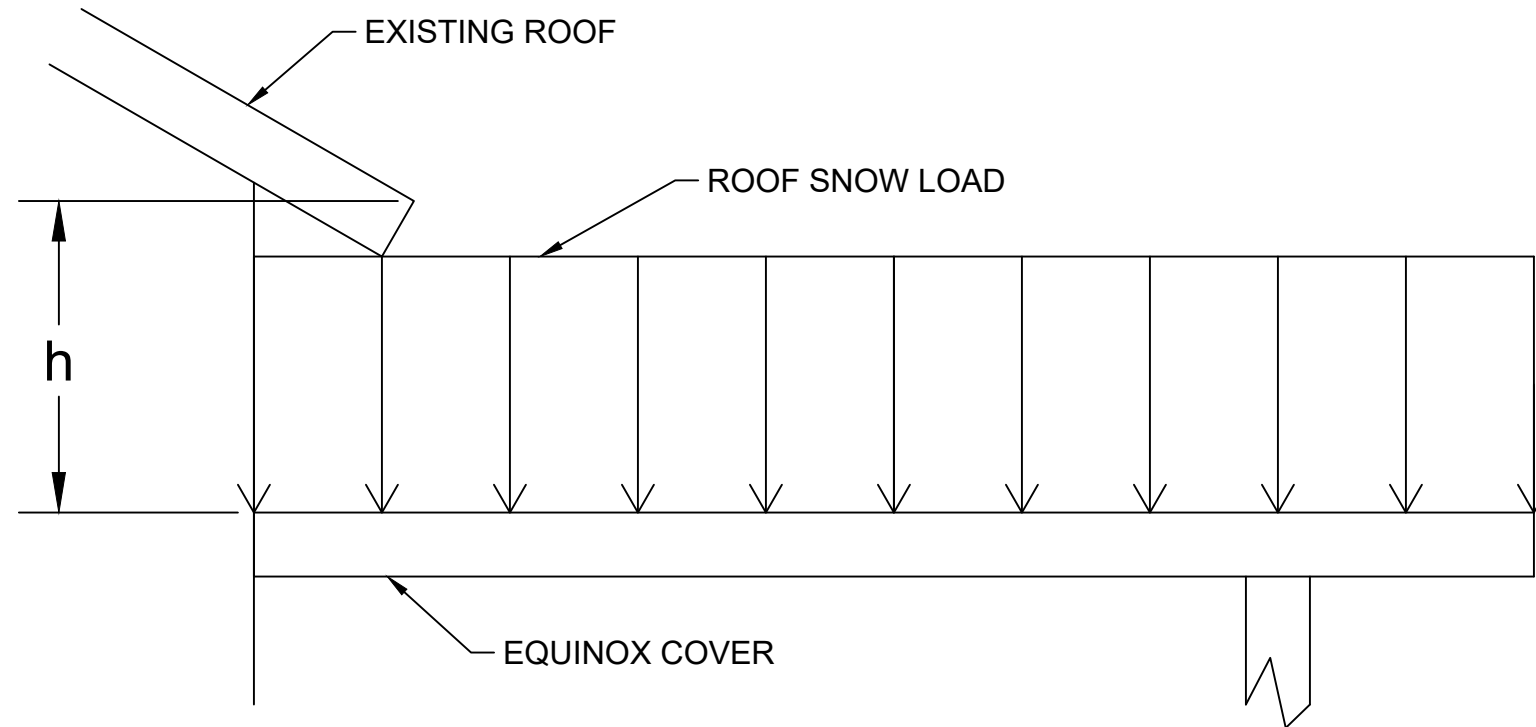
PROFESSIONAL ENGINEER
 CARL PUTNAM
 C68139
 EXP 6/30/2023
 CIVIL
 STATE OF CALIFORNIA

DEC 29 2022

W7 EQUINOX HEADER TO RAFTER CONNECTION
 Equinox Standard Plan v1 (2022 CBC) 9/13/2022

NOTE: THIS ATTACHMENT ONLY ALLOWED FOR STRUCTURE TYPES A AND B. STRUCTURE TYPE C IS ALLOWED IF MID SPAN POSTS ARE USED ON RETURN BEAMS.

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06-02-22	CMP		
09-09-22	TJP		30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		OMNIMAX	
		DESC DETAILS	17



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

GROUND SNOW LOAD (PSF)	MAXIMUM "h" (IN)
25	18
30	20
35.7	23
40	25
42	27
50	30

W8 ALLOWABLE DRIFTING
SNOW CONDITIONS



DEC 29 2022

DATE	DRAWN BY	DESCRIPTION	CONTACT
06-02-21	CMP	CARL PUTNAM P.E.	3441 IVY LINK PLACE LYNCHBURG, VA 24503 CARLPUTNAM@COMCAST.NET
		OMNIMAX	30 TECHNOLOGY PARK S. #400 PEACHTREE CORNERS, GA
		DESC DETAILS	18

LOUVER SPANS FOR COMMERCIAL AND PATIO STRUCTURES

Attached Structures

Ground Snow Load (psf)	Design Roof Load (psf)		Exposure B (mph)										Exposure C (mph)										
			95	100	105	110	115	120	130	140	150	160	95	100	105	110	115	120	130	140	150	160	
10	10	Live/Snow	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-4"	12'-0"	11'-1"	
20	20	Live/Snow	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-4"	12'-0"	11'-1"
25	21		13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-1"	12'-8"	12'-0"	11'-1"
30	25.2		13'-3"	13'-3"	13'-3"	13'-3"	13'-3"	13'-3"	13'-2"	12'-11"	12'-0"	12'-0"	13'-3"	13'-3"	13'-3"	13'-2"	13'-0"	12'-11"	12'-6"	12'-2"	11'-5"	11'-1"	
35.71	30.00		12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-4"	12'-0"	11'-6"	12'-7"	12'-7"	12'-7"	12'-7"	12'-5"	12'-3"	11'-8"	11'-4"	11'-0"	10'-8"	
43	36.12		11'-9"	11'-9"	11'-9"	11'-9"	11'-9"	11'-9"	11'-8"	11'-5"	11'-2"	10'-11"	11'-9"	11'-9"	11'-9"	11'-8"	11'-6"	11'-4"	11'-1"	10'-9"	10'-6"	10'-3"	
50	42		11'-2"	11'-2"	11'-2"	11'-2"	11'-2"	11'-2"	11'-1"	10'-11"	10'-8"	10'-5"	11'-2"	11'-2"	11'-2"	11'-1"	11'-0"	10'-10"	10'-7"	10'-4"	10'-1"	9'-10"	
60	50.4		10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-3"	10'-1"	9'-10"	10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-3"	10'-0"	9'-9"	9'-7"	9'-4"	

Freestanding Structures

Ground Snow Load (psf)	Design Roof Load (psf)		Exposure B (mph)										Exposure C (mph)										
			95	100	105	110	115	120	130	140	150	160	95	100	105	110	115	120	130	140	150	160	
10	10	Live/Snow	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"
20	20	Live/Snow	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"
25	21		13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	12'-0"	12'-0"	13'-7"	13'-7"	13'-7"	13'-7"	13'-7"	13'-6"	13'-0"	12'-8"	12'-0"	11'-10"
30	25.2		13'-3"	13'-3"	13'-3"	13'-3"	13'-3"	13'-3"	13'-3"	13'-0"	12'-0"	12'-0"	13'-3"	13'-3"	13'-3"	13'-2"	13'-0"	12'-10"	12'-6"	12'-1"	11'-8"	11'-4"	
35.71	30.00		12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-7"	12'-5"	12'-0"	11'-10"	12'-7"	12'-7"	12'-7"	12'-7"	12'-5"	12'-3"	11'-11"	11'-7"	11'-3"	10'-11"	
43	36.12		11'-9"	11'-9"	11'-9"	11'-9"	11'-9"	11'-9"	11'-9"	11'-8"	11'-6"	11'-3"	11'-9"	11'-9"	11'-9"	11'-9"	11'-8"	11'-7"	11'-4"	11'-0"	10'-9"	10'-5"	
50	42		11'-2"	11'-2"	11'-2"	11'-2"	11'-2"	11'-2"	11'-2"	11'-1"	10'-11"	10'-9"	11'-2"	11'-2"	11'-2"	11'-2"	11'-1"	11'-0"	10'-9"	10'-6"	9'-6"	9'-2"	
60	50.4		10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-4"	10'-1"	9'-11"	9'-8"	9'-6"	10'-4"	10'-3"	10'-2"	10'-0"	9'-11"	9'-9"	9'-6"	9'-3"	9'-1"	8'-9"	

**Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA**

**Carl Putnam, PE
3441 Ivylink Place
Lynchburg, VA 24503
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Louver Spans are measured inside to inside of the attaching header



DEC 29 2022

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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

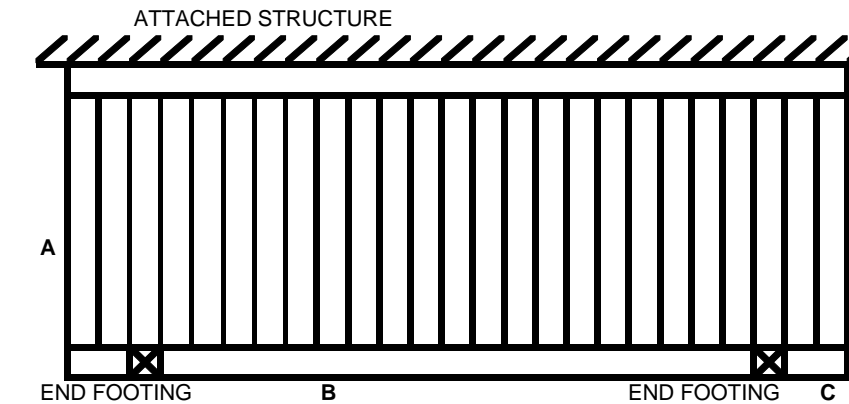
Table A1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	Cube Footing End d (in)	8	10	11
10.0	8	4	25.7	23	818	1014	1113
10.0	10	5	22.2	25	966	1197	1313
10.0	11	5.5	20.2	25	1038	1287	1411
10.0	12	6	18.5	26	1109	1375	1508
10.0	13	6.5	17.1	26	1176	1458	1599
10.0	14	7	15.9	27	1239	1537	1686

Ground Snow Load 20 psf

Table A3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
20.0	8	4	16.0	22	737	913	1002
20.0	10	5	12.8	24	867	1075	1179
20.0	11	5.5	11.6	24	928	1151	1262
20.0	12	6	10.6	25	991	1229	1348
20.0	13	6.5	9.8	25	1051	1303	1429
20.0	14	7	9.1	26	1108	1374	1507



Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
10.0	8	4	25.0	26	796	987	1083
10.0	10	5	22.2	27	939	1164	1276
10.0	11	5.5	20.2	28	1005	1247	1367
10.0	12	6	18.5	28	1070	1327	1456
10.0	13	6.5	17.1	29	1135	1407	1543
10.0	14	7	15.9	29	1197	1485	1629

Table A2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
20.0	8	4	16.0	25	721	895	981
20.0	10	5	12.8	27	848	1052	1154
20.0	11	5.5	11.6	28	909	1127	1236
20.0	12	6	10.6	28	970	1203	1319
20.0	13	6.5	9.8	29	1029	1276	1399
20.0	14	7	9.1	30	1085	1345	1476

Table A4a

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+2C (ft)							B+2C (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
10	321	382	446	510	573	637	701	764	398	474	553	632	711	790	869	948
11	401	478	557	637	717	796	876	955	497	592	691	790	889	987	1086	1185
12	441	525	613	701	788	876	963	1051	547	652	760	869	977	1086	1195	1303
13	481	573	669	764	860	955	1051	1146	597	711	829	948	1066	1185	1303	1422
14	521	621	725	828	932	1035	1139	1242	646	770	898	1027	1155	1283	1412	1540
14	561	669	780	892	1003	1115	1226	1338	696	829	968	1106	1244	1382	1520	1659

Table A5

Post Height (ft)	8 ft							10 ft								
	B+2C (ft)							B+2C (ft)								
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
10	430	430	446	510	573	637	701	764	533	533	553	632	711	790	869	948
11	538	538	557	637	717	796	876	955	667	667	691	790	889	987	1086	1185
12	591	591	613	701	788	876	963	1051	733	733	760	869	977	1086	1195	1303
13	645	645	669	764	860	955	1051	1146	800	800	829	948	1066	1185	1303	1422
14	699	699	725	828	932	1035	1139	1242	867	867	898	1027	1155	1283	1412	1540
14	753	753	780	892	1003	1115	1226	1338	933	933	968	1106	1244	1382	1520	1659

Table A6

max A (ft)	B+2C (ft)							
	10	12	14	16	18	20	22	24
8	UPLIFT ONLY CUBE FOOTING d (IN)							
10	17	18	19	20	21	21	22	23
11	18	19	20	21	22	23	24	24
12	19	20	21	22	23	24	25	25
13	19	21	22	23	24	24	25	26
14	20	21	22	23	24	25	26	27
14	20	22	23	24	25	26	27	27

Table A7

max A (ft)	B+2C (ft)							
	10	12	14	16	18	20	22	24
8	UPLIFT ONLY CUBE FOOTING d (IN)							
10	18	20	21	22	22	23	24	25
11	20	21	22	23	24	25	26	27
12	20	22	23	24	25	26	27	27
13	21	22	24	25	26	27	27	28
14	22	23	24	25	26	27	28	29
14	22	24	25	26	27	28	29	30

Table A8

**Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA**

**Carl Putnam, PE
3441 Ivylink Place
Lynchburg, VA 24503
carlputnam@comcast.net**



DEC 29 2022

- 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 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 Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - Fasten to wall as per "W" Details

- FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS**
- SLAB 1** Follow Instructions #1-3 above.
 - SLAB 2** Maximum structure width is "**B +2C**"
 - SLAB 3** Follow Instructions #5-8 above.
 - SLAB 4** Follow #9a above, embedding into concrete is not an option.
 - SLAB 5** Fasten to wall as per "W" Details

- For Structures using a "B" less than the maximum allowed**
- Follow instructions #1-3 above
 - Choose a "B" less than the maximum allowed
 - The maximum "C" is 24"
 - Choose Post Height
 - Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table A5 or Table A6
 - Determine Uplift Footing from Table A7 or Table A8
 - Follow Instruction #9-10 above

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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

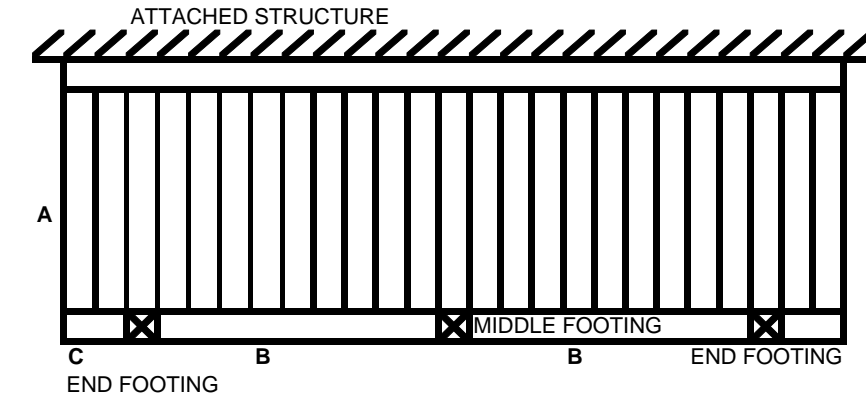
Table B1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 110 mph Exp. B				Cube Footing		8	10	11
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	Overturning Moment (lbf *ft)	
10.0	8	4	13.9	21.7	28	22	1381	1713	1879
10.0	10	5	11.1	20.3	29	24	1613	2000	2193
10.0	11	5.5	10.1	19.7	30	24	1725	2139	2346
10.0	12	6	9.3	19.2	30	25	1836	2276	2496
10.0	13	6.5	8.5	18.7	31	25	1937	2402	2635
10.0	14	7	7.9	18.2	31	26	2033	2521	2765

Ground Snow Load 20 psf

Table B3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 110 mph Exp. B				Middle	End	8	10	11
	Load (psf)	A	trib	B (on slab)	B	d (in)	d (in)	Overturning Moment (lbf *ft)	
20.0	8	4	8.0	19.1	26	22	1219	1511	1657
20.0	10	5	6.4	17.8	28	24	1415	1755	1924
20.0	11	5.5	5.8	17.2	28	24	1506	1867	2048
20.0	12	6	5.3	16.8	29	25	1601	1985	2177
20.0	13	6.5	4.9	16.3	30	25	1688	2093	2295
20.0	14	7	4.6	15.9	30	26	1770	2195	2407



Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 130 mph Exp. B				Middle	End	8	10	11
	Load (psf)	A	trib	B (on slab)	B	d (in)	d (in)	Overturning Moment (lbf *ft)	
10.0	8	4	13.9	21.0	31	26	1338	1659	1820
10.0	10	5	11.1	19.6	32	27	1559	1933	2120
10.0	11	5.5	10.1	19.0	33	28	1661	2059	2258
10.0	12	6	9.3	18.4	33	28	1759	2181	2392
10.0	13	6.5	8.5	17.9	34	29	1856	2301	2524
10.0	14	7	7.9	17.5	35	29	1949	2417	2651

Table B2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 130 mph Exp. B				Middle	End	8	10	11
	Load (psf)	A	trib	B (on slab)	B	d (in)	d (in)	Overturning Moment (lbf *ft)	
20.0	8	4	8.0	18.7	29	25	1188	1473	1616
20.0	10	5	6.4	17.3	31	26	1378	1709	1874
20.0	11	5.5	5.8	16.8	31	27	1467	1820	1996
20.0	12	6	5.3	16.3	32	27	1558	1932	2119
20.0	13	6.5	4.9	15.9	33	28	1644	2038	2236
20.0	14	7	4.6	15.5	33	28	1724	2138	2345

Table B4a

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
8	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

Table B5

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
8	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

Table B6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	21	23	24	25	26	27	28	29
10	23	24	26	27	28	29	30	31
11	24	25	27	28	29	30	31	32
12	24	26	27	29	30	31	32	33
13	25	27	28	29	31	32	33	34
14	26	27	29	30	31	32	33	34

Table B7

95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	23	25	26	27	28	29	30	31
10	25	27	28	29	30	32	33	33
11	26	27	29	30	31	33	34	35
12	27	28	30	31	32	33	35	36
13	27	29	31	32	33	34	36	37
14	28	30	31	33	34	35	36	37

Table B8

110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C

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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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
- Fasten to wall as per "W" Details

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 #9a above, embedding into concrete is not an option.
- SLAB 5** Fasten to wall as per "W" Details

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table B5 or Table B6
- Determine Uplift Footing from Table B7 or Table B8
- Follow Instructions #9-10 above



Ca. Tables for Attached Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

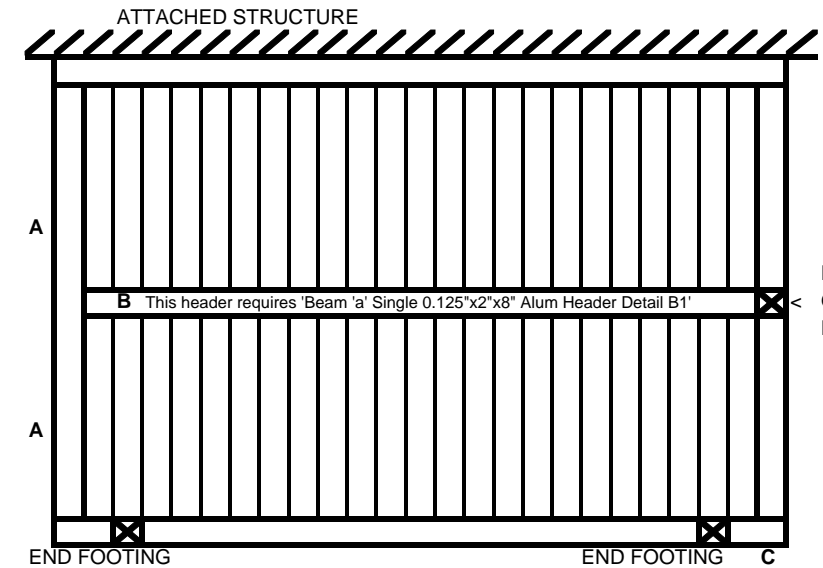
Table C1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1					Uplift Only Cube Footing	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11
10.0	8	8	1	4	26	1110	1376	1509
10.0	10	10	2	5	27	1287	1596	1751
10.0	11	11	2	5	28	1375	1705	1870
10.0	12	12	2	5	28	1456	1805	1979
10.0	13	13	3	5	29	1536	1904	2088
10.0	14	14	3	6	29	1613	2000	2194

Ground Snow Load 20 psf

Table C3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1					Uplift Only Cube Footing	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11
20.0	8	8	1	6	25	969	1201	1317
20.0	10	10	2	7	26	1125	1395	1530
20.0	11	11	3	7	26	1197	1485	1628
20.0	12	12	3	8	27	1268	1573	1725
20.0	13	13	4	8	27	1339	1660	1821
20.0	14	14	5	8	28	1407	1745	1914



Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1					Uplift Only Cube Footing	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11
10.0	8	8	1	4	28	1067	1323	1451
10.0	10	10	2	4	30	1238	1535	1684
10.0	11	11	2	5	30	1317	1633	1791
10.0	12	12	3	5	31	1395	1730	1898
10.0	13	13	3	5	32	1472	1825	2002
10.0	14	14	4	5	32	1548	1919	2105

Table C2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1					Uplift Only Cube Footing	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11
20.0	8	8	1	6	27	943	1170	1283
20.0	10	10	2	7	29	1094	1357	1488
20.0	11	11	2	7	29	1183	1466	1608
20.0	12	12	2	7	30	1290	1600	1755
20.0	13	13	3	8	30	1398	1733	1901
20.0	14	14	3	8	31	1505	1866	2047

Table C4a

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)								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)															
8	642	764	892	1019	1146	1274	1401	1529	795	948	1106	1264	1422	1580	1738	1896
10	802	955	1115	1274	1433	1592	1752	1911	994	1185	1382	1580	1777	1975	2172	2369
11	882	1051	1226	1401	1576	1752	1927	2102	1094	1303	1520	1738	1955	2172	2389	2606
12	962	1146	1338	1529	1720	1911	2102	2293	1193	1422	1659	1896	2132	2369	2606	2843
13	1042	1242	1449	1656	1863	2070	2277	2484	1293	1540	1797	2053	2310	2567	2824	3080
14	1123	1338	1560	1783	2006	2229	2452	2675	1392	1659	1935	2211	2488	2764	3041	3317

Table C5

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
	OVERTURNING MOMENT (LBF*FT)															
8	860	860	892	1019	1146	1274	1401	1529	1067	1067	1106	1264	1422	1580	1738	1896
10	1075	1075	1115	1274	1433	1592	1752	1911	1333	1333	1382	1580	1777	1975	2172	2369
11	1183	1183	1226	1401	1576	1752	1927	2102	1466	1466	1520	1738	1955	2172	2389	2606
12	1290	1290	1338	1529	1720	1911	2102	2293	1600	1600	1659	1896	2132	2369	2606	2843
13	1398	1398	1449	1656	1863	2070	2277	2484	1733	1733	1797	2053	2310	2567	2824	3080
14	1505	1505	1560	1783	2006	2229	2452	2675	1866	1866	1935	2211	2488	2764	3041	3317

Table C6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	21	23	24	25	26	27	28	29
10	23	24	26	27	28	29	30	31
11	24	25	27	28	29	30	31	32
12	24	26	27	29	30	31	32	33
13	25	27	28	29	31	32	33	34
14	26	27	29	30	31	32	33	34

Table C7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	23	25	26	27	28	29	30	31
10	25	27	28	29	30	32	33	33
11	26	27	29	30	31	33	34	35
12	27	28	30	31	32	33	35	36
13	27	29	31	32	33	34	36	37
14	28	30	31	33	34	35	36	37

Table C8

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a **MULTI SPAN ATTACHED** Equinox cover and **SINGLE SPAN HEADERS**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
- Use mid span post with footing OR go to Instruction #11
- If there is no mid span post, use **Required # of Return Beams AND Required # of Wall Fasteners** and see **Detail G6** for additional connection requirements
- Fasten to wall as per Detail W2 using **Required Number of Fasteners** if there is not a midspan post.
- Front header may be the same as the "B" header, a single if B is a double or can meet the requirements of any Section "A" using the same "A" and loads.

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table C5 or Table C6
- Determine Uplift Footing from Table C7 or Table C8
- Follow Instructions #9-13 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

Table D1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B		Uplift Only Cube Footing End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	10.0	8		4	20	893	1108
10.0	10	5	21	959	1189	1305	
10.0	11	5.5	22	1033	1281	1405	
10.0	12	6	22	1098	1361	1493	
10.0	13	6.5	22	1163	1442	1582	
10.0	14	7	23	1230	1525	1672	

Ground Snow Load 20 psf

Table D3a

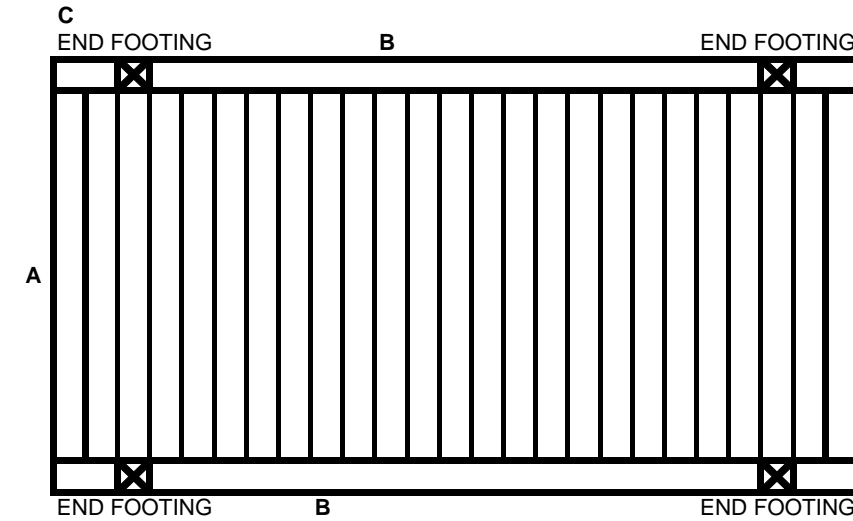
Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B		Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	20.0	8		4	19	799	991
20.0	10	5	20	862	1069	1172	
20.0	11	5.5	21	923	1145	1256	
20.0	12	6	21	984	1220	1338	
20.0	13	6.5	22	1044	1294	1420	
20.0	14	7	22	1104	1369	1501	

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B		Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	10.0	8		4	22	1148	1424
10.0	10	5	23	1079	1337	1467	
10.0	11	5.5	24	1051	1303	1429	
10.0	12	6	24	1051	1304	1430	
10.0	13	6.5	25	1115	1382	1516	
10.0	14	7	25	1178	1461	1602	

Table D2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B		Uplift Only End d (in)	Post Height (ft) Overturning Moment (lbf *ft)			
	A	trib		B	8	10	11
	20.0	8		4	21	1042	1292
20.0	10	5	23	980	1216	1333	
20.0	11	5.5	23	956	1185	1300	
20.0	12	6	24	957	1187	1302	
20.0	13	6.5	24	1014	1257	1379	
20.0	14	7	25	1072	1329	1458	

Table D4a



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 Post Height
- Determine Uplift Footing Size.
- Determine Overturning Moment by cross indexing "A" and Post Height
- Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the Overturning Moment.
 - For CONSTRAINED FOOTINGS go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For NON CONSTRAINED FOOTINGS go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate 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 max A (ft)	8 ft								10 ft							
	B+2C (ft)								B+2C (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	348	417	487	556	626	696	765	835	431	517	604	690	776	862	949	1035
10	398	478	557	637	717	796	876	955	494	592	691	790	889	987	1086	1185
11	438	525	613	701	788	876	963	1051	543	652	760	869	977	1086	1195	1303
12	478	573	669	764	860	955	1051	1146	592	711	829	948	1066	1185	1303	1422
13	518	621	725	828	932	1035	1139	1242	642	770	898	1027	1155	1283	1412	1540
14	557	669	780	892	1003	1115	1226	1338	691	829	968	1106	1244	1382	1520	1659

Table D5

Post Height max A (ft)	8 ft								10 ft							
	B+2C (ft)								B+2C (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
10	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
11	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
12	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
13	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
14	653	746	839	933	1026	1119	1226	1338	809	925	1041	1156	1272	1388	1520	1659

Table D6

max A (ft)	B+2C (ft)								Table D7
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
8	15	16	16	17	18	18	19	20	95 mph Exposure C
10	16	17	18	18	19	20	20	21	95 mph Exposure C
11	16	17	18	19	20	20	21	22	95 mph Exposure C
12	17	18	19	20	20	21	22	22	95 mph Exposure C
13	17	18	19	20	21	22	22	23	95 mph Exposure C
14	18	19	20	21	21	22	23	24	95 mph Exposure C

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max A (ft)	B+2C (ft)								Table D8
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
8	16	17	18	18	19	20	20	21	110 mph Exposure C
10	17	18	19	20	21	21	22	23	110 mph Exposure C
11	18	19	20	20	21	22	23	23	110 mph Exposure C
12	18	19	20	21	22	23	23	24	110 mph Exposure C
13	19	20	21	22	23	23	24	25	110 mph Exposure C
14	19	20	21	22	23	24	25	25	110 mph Exposure C

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For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table D5 or Table D6
- Determine Uplift Footing from Table D7 or Table D8
- Follow Instruction #9 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table E1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
10.0	8	4	21.7	24	20	1509	1871	2052
10.0	10	5	20.1	25	21	1600	1984	2176
10.0	11	5.5	19.6	26	22	1715	2127	2333
10.0	12	6	19.0	26	22	1814	2249	2467
10.0	13	6.5	18.5	27	22	1912	2371	2600
10.0	14	7	18.1	27	23	2013	2497	2738

Ground Snow Load 20 psf Table E3a

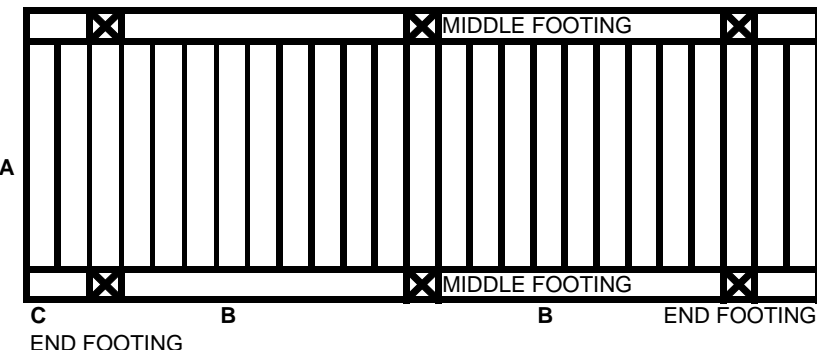
Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
20.0	8	4	19.0	23	19	1320	1637	1796
20.0	10	5	17.7	24	20	1406	1743	1912
20.0	11	5.5	17.1	24	21	1496	1855	2035
20.0	12	6	16.6	25	21	1586	1966	2157
20.0	13	6.5	16.2	25	22	1674	2075	2276
20.0	14	7	15.8	26	22	1762	2185	2396

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
10.0	8	4	20.6	26	22	1924	2385	2616
10.0	10	5	19.1	28	23	1784	2212	2426
10.0	11	5.5	18.5	28	24	1728	2143	2350
10.0	12	6	18.0	29	24	1720	2133	2340
10.0	13	6.5	17.5	29	25	1815	2251	2469
10.0	14	7	17.1	30	25	1910	2369	2598

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
20.0	8	4	18.4	25	21	1712	2122	2328
20.0	10	5	17.0	27	23	1588	1969	2159
20.0	11	5.5	16.5	27	23	1538	1908	2092
20.0	12	6	16.0	28	24	1533	1901	2084
20.0	13	6.5	15.6	28	24	1614	2002	2195
20.0	14	7	15.2	29	25	1698	2106	2309



- 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 Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate 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)															
8	696	835	974	1113	1252	1391	1530	1669	862	1035	1207	1380	1552	1725	1897	2070
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

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)															
8	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775
10	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775
11	1026	1119	1306	1492	1679	1865	2052	2238	1272	1388	1619	1850	2081	2313	2544	2775
12	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843
13	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080
14	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	18	20	21	22	22	23	24	25
10	20	21	22	23	24	25	26	27
11	20	22	23	24	25	26	27	27
12	21	22	24	25	26	27	27	28
13	22	23	24	25	26	27	28	29
14	22	24	25	26	27	28	29	30

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	20	21	22	23	24	25	26	27
10	21	23	24	25	26	27	28	29
11	22	23	25	26	27	28	29	30
12	23	24	25	27	28	29	30	30
13	23	25	26	27	28	29	30	31
14	24	25	27	28	29	30	31	32

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Fa. Tables for Freestanding Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table F1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing			Overturning Moment				
					A	B	B	8	10	11		
10.0	8	8	1	16.1	23	1027	1274	1397	23	1027	1274	1397
10.0	10	10	1	15.0	25	1192	1478	1621	25	1192	1478	1621
10.0	11	11	2	14.5	25	1270	1575	1727	25	1270	1575	1727
10.0	12	12	2	14.1	26	1343	1665	1827	26	1343	1665	1827
10.0	13	13	2	13.7	26	1419	1759	1930	26	1419	1759	1930
10.0	14	14	3	13.4	27	1492	1850	2029	27	1492	1850	2029

Ground Snow Load 20 psf Table F3a

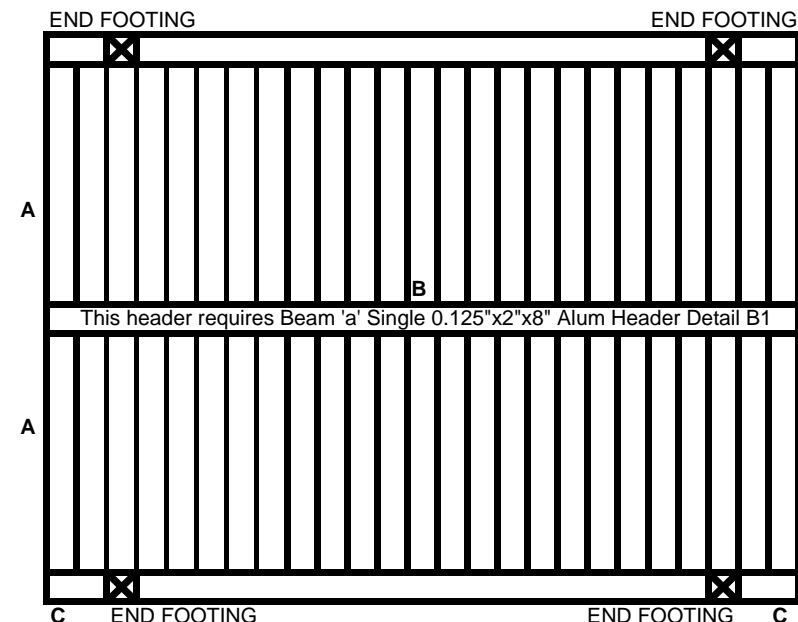
Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing			Overturning Moment				
					A	B	B	8	10	11		
20.0	8	8	1	14.4	23	918	1138	1248	23	918	1138	1248
20.0	10	10	2	13.3	24	1063	1318	1445	24	1063	1318	1445
20.0	11	11	3	12.9	24	1133	1405	1540	24	1133	1405	1540
20.0	12	12	3	12.6	25	1201	1489	1633	25	1201	1489	1633
20.0	13	13	4	12.2	25	1267	1571	1723	25	1267	1571	1723
20.0	14	14	5	11.9	26	1332	1652	1811	26	1332	1652	1811

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 130 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing			Overturning Moment				
					A	B	B	8	10	11		
10.0	8	8	1	15.4	26	983	1219	1337	26	983	1219	1337
10.0	10	10	1	14.3	27	1140	1414	1551	27	1140	1414	1551
10.0	11	11	2	13.9	28	1216	1508	1654	28	1216	1508	1654
10.0	12	12	2	13.5	29	1286	1594	1748	29	1286	1594	1748
10.0	13	13	2	13.1	29	1356	1682	1844	29	1356	1682	1844
10.0	14	14	3	12.8	30	1427	1770	1941	30	1427	1770	1941

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 130 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing			Overturning Moment				
					A	B	B	8	10	11		
20.0	8	8	1	14.0	25	889	1102	1209	25	889	1102	1209
20.0	10	10	2	12.9	27	1030	1277	1400	27	1030	1277	1400
20.0	11	11	3	12.5	27	1098	1362	1494	27	1098	1362	1494
20.0	12	12	3	12.2	28	1165	1445	1585	28	1165	1445	1585
20.0	13	13	4	11.9	28	1227	1521	1668	28	1227	1521	1668
20.0	14	14	4	11.5	29	1306	1619	1775	29	1306	1619	1775



Post at mid span OR use required number of Return Beams See Table Y3 for alternates

Table F2a

Table F4a

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	8 ft								10 ft							
	max A (ft)	B (ft)							B (ft)							
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C

INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a **MULTI SPAN FREESTANDING** Equinox cover and **Single Span Headers**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Lateral Force Resisting System requires F3-F6
 - Moment Frame (M Details) are not allowed**
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.

Table F6

Post Height	8 ft								10 ft							
	max A (ft)	B (ft)							B (ft)							
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	746	764	892	1019	1146	1274	1401	1529	925	948	1106	1264	1422	1580	1738	1896
10	933	955	1115	1274	1433	1592	1752	1911	1156	1185	1382	1580	1777	1975	2172	2369
11	1026	1051	1226	1401	1576	1752	1927	2102	1272	1303	1520	1738	1955	2172	2389	2606
12	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843
13	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080
14	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317

110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C

Table F7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	20	21	22	23	24	25	26	27
10	21	23	24	25	26	27	28	29
11	22	23	25	26	27	28	29	30
12	23	24	25	27	28	29	30	30
13	23	25	26	27	28	29	30	31
14	24	25	27	28	29	30	31	32

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Suite #400
Peachtree Corners, GA

Table F8

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	22	23	25	26	27	28	28	29
10	24	25	26	28	29	30	31	32
11	24	26	27	28	30	31	32	33
12	25	27	28	29	31	32	33	34
13	26	27	29	30	31	32	34	34
14	26	28	30	31	32	33	34	35

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- For **Structur Moment** to determine alternate footing sizes.
- Follow instructions #1-3 above
 - Choose a "B" less than the maximum allowed
 - The maximum "C" is 24"
 - Choose Post Height
 - Determine **Overturning Moment** by cross indexing "A" and "B" with the correct height from **Table F5 or Table F6**
 - Determine Uplift Footing from **Table F7 or Table F8**
 - Follow Instruction #9 above



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Ga. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ Post at Every Span

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

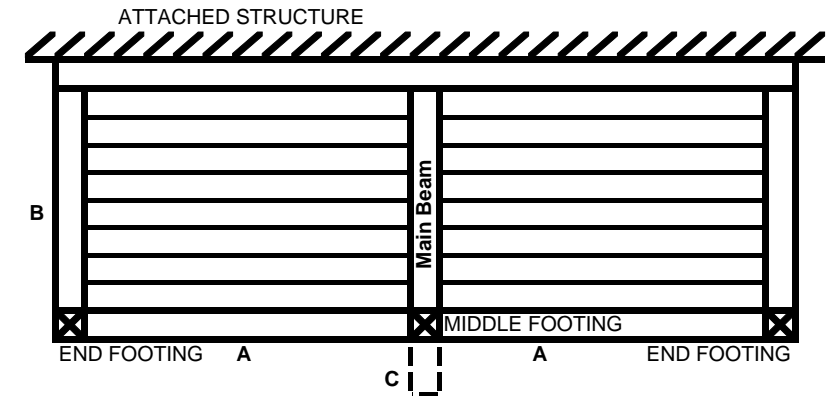
Table G1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	13.9	7	16.3	27	21	1290	1600	1755
10.0	10	10	11.1	8	15.1	29	23	1521	1886	2068
10.0	11	11	10.1	9	14.6	29	23	1630	2022	2217
10.0	12	12	9.3	9	14.2	30	24	1738	2155	2364
10.0	13	13	8.5	10	13.8	30	24	1844	2286	2508
10.0	14	14	7.9	10	13.5	31	25	1950	2418	2652

Ground Snow Load 20 psf

Table G3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	8.0	11	14.5	26	21	1177	1459	1600
20.0	10	10	6.4	12	13.5	28	22	1390	1723	1890
20.0	11	11	5.8	13	13.0	28	22	1492	1850	2029
20.0	12	12	5.3	14	12.7	29	23	1591	1973	2164
20.0	13	13	4.9	15	12.3	30	23	1688	2093	2296
20.0	14	14	4.6	15	12.0	30	24	1785	2214	2428



Main Beam is 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	13.9	7	15.7	30	24	1257	1559	1709
10.0	10	10	11.1	8	14.6	29	23	1482	1838	2016
10.0	11	11	10.1	8	14.2	30	24	1590	1972	2163
10.0	12	12	9.3	9	13.7	30	24	1695	2102	2306
10.0	13	13	8.5	9	13.4	31	25	1799	2231	2447
10.0	14	14	7.9	10	13.1	31	25	1902	2359	2587

Table G2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	8.0	11	14.2	29	23	1157	1434	1573
20.0	10	10	6.4	12	13.1	31	24	1364	1692	1856
20.0	11	11	5.8	13	12.7	31	25	1464	1815	1991
20.0	12	12	5.3	14	12.4	32	26	1563	1938	2126
20.0	13	13	4.9	14	12.0	33	26	1660	2059	2258
20.0	14	14	4.6	15	11.7	33	27	1755	2176	2386

Table G4a

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)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

Table G5

INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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" IF Detail F3-F6 is used, if Details F1-F2 are used the Max "C" is 0"
- Choose Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W4 and **Required Number of Wall Fasteners** per these tables

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)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

Table G6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	24	25	26	27	28	29	29	30
10	26	27	28	29	30	31	32	32
11	27	28	29	30	31	32	33	33
12	27	29	30	31	32	33	34	34
13	28	29	31	32	33	34	35	35
14	29	30	31	32	33	34	35	36

Table G7

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max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	27	28	29	30	31	32	33	34
10	29	30	31	32	33	34	35	36
11	30	31	32	33	35	36	37	37
12	31	32	33	34	36	37	38	39
13	31	33	34	35	37	38	39	40
14	32	34	35	36	37	39	40	41

Table G8

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Ha. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

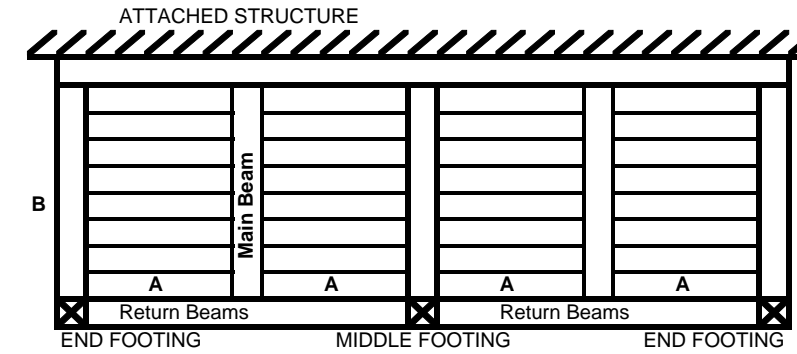
Table H1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	7	16.3	32	25	2071	2568	2817
10.0	10	10	1	8	15.1	33	26	2404	2981	3270
10.0	11	11	2	9	14.6	34	27	2560	3175	3482
10.0	12	12	2	9	14.2	35	27	2712	3363	3688
10.0	13	13	2	10	13.8	35	28	2860	3546	3889
10.0	14	14	3	10	13.5	36	28	3008	3730	4090

Ground Snow Load 20 psf

Table H3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	1	11	14.5	30	24	1844	2286	2507
20.0	10	10	2	12	13.5	32	25	2143	2657	2914
20.0	11	11	3	13	13.0	33	26	2283	2831	3105
20.0	12	12	3	14	12.7	33	26	2418	2998	3288
20.0	13	13	4	15	12.3	34	27	2548	3160	3466
20.0	14	14	5	15	12.0	34	27	2679	3322	3644



Main Beam is 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	7	15.7	35	28	2004	2485	2726
10.0	10	10	2	8	14.6	37	29	2328	2886	3165
10.0	11	11	2	8	14.2	38	30	2480	3075	3373
10.0	12	12	3	9	13.7	38	30	2626	3256	3572
10.0	13	13	3	9	13.4	39	31	2771	3435	3768
10.0	14	14	4	10	13.1	40	31	2913	3612	3962

Table H2a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	1	11	14.2	34	27	1804	2237	2453
20.0	10	10	2	12	13.1	35	28	2092	2594	2845
20.0	11	11	3	13	12.7	36	29	2227	2761	3028
20.0	12	12	3	14	12.4	37	29	2362	2928	3212
20.0	13	13	4	14	12.0	38	30	2492	3091	3390
20.0	14	14	4	15	11.7	38	30	2617	3246	3560

Table H4a

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H5

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	27	29	30	31	33	34	35	36
10	29	31	32	34	35	37	38	39
11	30	32	33	35	36	38	39	40
12	31	33	34	36	37	39	40	41
13	32	34	35	37	38	40	41	42
14	32	34	36	38	39	41	42	43

Table H7

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	30	32	34	35	37	38	39	40
10	32	34	36	38	39	41	42	43
11	33	36	37	39	41	42	44	45
12	34	37	39	40	42	43	45	46
13	35	38	40	41	43	45	46	47
14	36	39	41	42	44	46	47	49

Table H8

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 "
- Choose Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 0 "
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table H5 or Table H6
- Determine Uplift Footing from Table H7 or Table H8
- Follow Instructions #9-11 above



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Ia. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts and Overhang

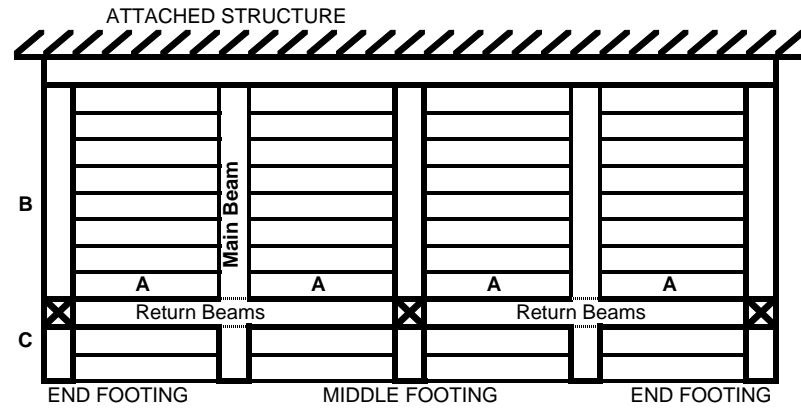
max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table I1a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	7	16.3	10.0	34	27	2581	3200	3510
10.0	10	10	8	15.1	10.0	36	29	3041	3771	4136
10.0	11	11	9	14.6	10.0	37	29	3261	4044	4435
10.0	12	12	9	14.2	10.0	38	30	3476	4310	4727
10.0	13	13	10	13.8	10.0	38	30	3688	4573	5015
10.0	14	14	10	13.5	10.0	39	31	3899	4835	5303

Ground Snow Load 20 psf Table I3a

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	11	14.5	20.0	33	26	2353	2918	3200
20.0	10	10	12	13.5	20.0	35	28	2780	3447	3780
20.0	11	11	13	13.0	20.0	36	28	2984	3700	4058
20.0	12	12	14	12.7	20.0	36	29	3182	3946	4328
20.0	13	13	15	12.3	20.0	37	30	3376	4187	4592
20.0	14	14	15	12.0	20.0	38	30	3571	4428	4856



Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	7	15.7	10.0	38	30	2514	3117	3419
10.0	10	10	8	14.6	10.0	40	32	2964	3676	4032
10.0	11	11	8	14.2	10.0	41	32	3181	3944	4326
10.0	12	12	9	13.7	10.0	42	33	3391	4204	4611
10.0	13	13	9	13.4	10.0	42	34	3599	4462	4894
10.0	14	14	10	13.1	10.0	43	34	3805	4718	5175

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1

Beam 'a' Single 0.125"x2"x8" Alum Header Detail B1						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	11	14.2	20.0	37	29	2313	2868	3146
20.0	10	10	12	13.1	20.0	39	31	2729	3384	3711
20.0	11	11	13	12.7	20.0	40	31	2927	3630	3981
20.0	12	12	14	12.4	20.0	41	32	3126	3876	4251
20.0	13	13	14	12.0	20.0	41	33	3320	4117	4516
20.0	14	14	15	11.7	20.0	42	33	3509	4351	4773

Main Beam is 'a' Single 0.125"x2"x8" Alum Header Detail B1

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

Table I5

Post Height	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)	
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
OVERTURNING MOMENT (LBF*FT)																
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I6

Post Height	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)	
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
OVERTURNING MOMENT (LBF*FT)																
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	30	31	33	34	35	36	37	38
10	32	34	35	37	38	39	40	41
11	33	35	36	38	39	40	41	42
12	34	36	37	39	40	41	42	43
13	35	37	38	40	41	42	43	45
14	36	38	39	41	42	43	45	46

Table I8

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	34	35	37	38	39	40	41	42
10	36	38	39	41	42	43	45	46
11	37	39	41	42	44	45	46	47
12	39	40	42	43	45	46	47	49
13	40	41	43	45	46	47	49	50
14	41	42	44	46	47	49	50	51

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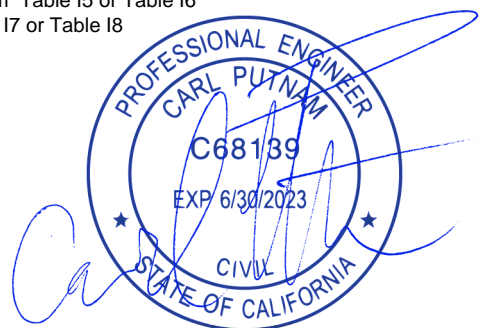
Carl Putnam, PE
3441 Ivylink Place
Lynchburg, VA 24503
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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overtuning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details are not allowed.**
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "Overtuning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overtuning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overtuning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overtuning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 a 24
- Choose a "B" less than the maximum allowed
- The maximum "C" is "
- Choose Post Height
- Determine Overtuning Moment by cross indexing "A" and "B" with the correct height from Table I5 or Table I6
- Determine Uplift Footing from Table I7 or Table I8
- Follow Instructions #9-11 above



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

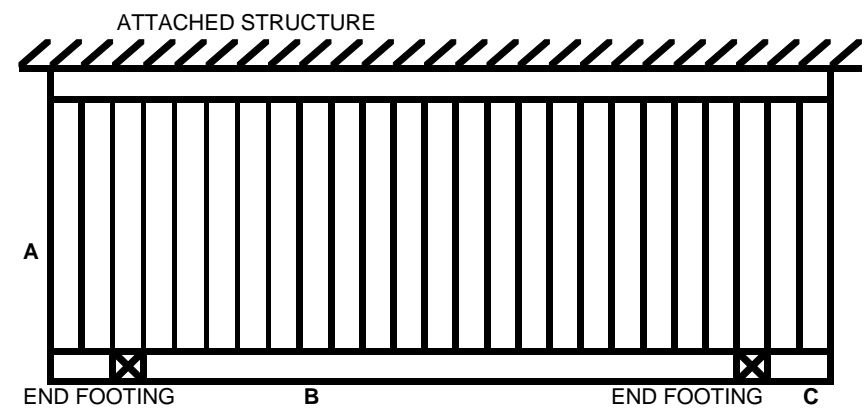
max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table A1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design Load (psf)	or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	Cube Footing	Overturning Moment (lbf *ft)		
							8	10	11
10.0	8	4	27.8	27.3	25	998	1237	1357	
10.0	10	5	22.2	25.5	26	1175	1457	1598	
10.0	11	5.5	20.2	24.8	27	1262	1565	1716	
10.0	12	6	18.5	24.2	27	1347	1671	1832	
10.0	13	6.5	17.1	23.6	28	1427	1770	1941	
10.0	14	7	15.9	23.0	28	1504	1864	2045	

Ground Snow Load 20 psf Table A3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design Load (psf)	or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	Cube Footing	Overturning Moment (lbf *ft)		
							8	10	11
20.0	8	4	16.0	24.1	24	895	1110	1217	
20.0	10	5	12.8	22.4	25	1051	1303	1429	
20.0	11	5.5	11.6	21.7	26	1124	1394	1528	
20.0	12	6	10.6	21.1	26	1199	1487	1631	
20.0	13	6.5	9.8	20.5	27	1270	1575	1728	
20.0	14	7	9.1	20.0	27	1338	1659	1820	



Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Table A2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design Load (psf)	or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	Cube Footing	Overturning Moment (lbf *ft)		
							8	10	11
10.0	8	4	27.8	26.5	27	970	1203	1319	
10.0	10	5	22.2	24.7	29	1141	1415	1552	
10.0	11	5.5	20.2	23.9	30	1221	1514	1661	
10.0	12	6	18.5	23.2	30	1299	1611	1766	
10.0	13	6.5	17.1	22.6	31	1376	1706	1871	
10.0	14	7	15.9	22.0	31	1451	1799	1973	

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Table A4b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design Load (psf)	or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	Cube Footing	Overturning Moment (lbf *ft)		
							8	10	11
20.0	8	4	16.0	23.5	27	876	1086	1191	
20.0	10	5	12.8	21.8	29	1027	1274	1397	
20.0	11	5.5	11.6	21.1	30	1100	1363	1495	
20.0	12	6	10.6	20.5	30	1173	1454	1595	
20.0	13	6.5	9.8	20.0	31	1243	1541	1690	
20.0	14	7	9.1	19.5	31	1309	1623	1780	

- 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 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 Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - Fasten to wall as per "W" Details

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							Table A5		
	B+2C (ft)							B+2C (ft)									
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	95 mph Exposure C
8	OVERTURNING MOMENT (LBF*FT)														95 mph Exposure C		
10	321	382	446	510	573	637	701	764	398	474	553	632	711	790	869	948	95 mph Exposure C
11	401	478	557	637	717	796	876	955	497	592	691	790	889	987	1086	1185	95 mph Exposure C
12	441	525	613	701	788	876	963	1051	547	652	760	869	977	1086	1195	1303	95 mph Exposure C
13	481	573	669	764	860	955	1051	1146	597	711	829	948	1066	1185	1303	1422	95 mph Exposure C
14	521	621	725	828	932	1035	1139	1242	646	770	898	1027	1155	1283	1412	1540	95 mph Exposure C
14	561	669	780	892	1003	1115	1226	1338	696	829	968	1106	1244	1382	1520	1659	95 mph Exposure C

Post Height	8 ft							10 ft							Table A6		
	B+2C (ft)							B+2C (ft)									
max A (ft)	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	430	430	446	510	573	637	701	764	533	533	553	632	711	790	869	948	110 mph Exposure C
11	538	538	557	637	717	796	876	955	667	667	691	790	889	987	1086	1185	110 mph Exposure C
12	591	591	613	701	788	876	963	1051	733	733	760	869	977	1086	1195	1303	110 mph Exposure C
13	645	645	669	764	860	955	1051	1146	800	800	829	948	1066	1185	1303	1422	110 mph Exposure C
14	699	699	725	828	932	1035	1139	1242	867	867	898	1027	1155	1283	1412	1540	110 mph Exposure C
14	753	753	780	892	1003	1115	1226	1338	933	933	968	1106	1244	1382	1520	1659	110 mph Exposure C

max A (ft)	B+2C (ft)							Table A7	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							95 mph Exposure C	
10	17	18	19	20	21	21	22	23	95 mph Exposure C
11	18	19	20	21	22	23	24	24	95 mph Exposure C
12	19	20	21	22	23	24	25	25	95 mph Exposure C
13	19	21	22	23	24	24	25	26	95 mph Exposure C
14	20	21	22	23	24	25	26	27	95 mph Exposure C
14	20	22	23	24	25	26	27	27	95 mph Exposure C

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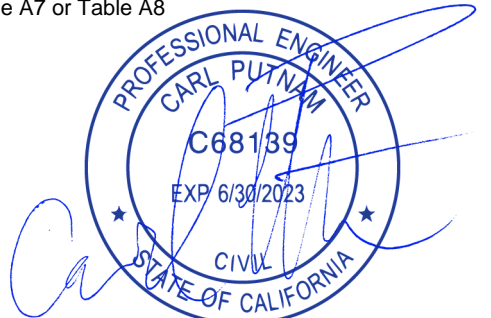
max A (ft)	B+2C (ft)							Table A8	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							110 mph Exposure C	
10	18	20	21	22	22	23	24	25	110 mph Exposure C
11	20	21	22	23	24	25	26	27	110 mph Exposure C
12	20	22	23	24	25	26	27	27	110 mph Exposure C
13	21	22	24	25	26	27	27	28	110 mph Exposure C
14	22	23	24	25	26	27	28	29	110 mph Exposure C
14	22	24	25	26	27	28	29	30	110 mph Exposure C

FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS

- SLAB 1** Follow Instructions #1-3 above.
- SLAB 2** Maximum structure width is "B +2C"
- SLAB 3** Follow Instructions #5-8 above.
- SLAB 4** Follow #9a above, embedding into concrete is not an option.
- SLAB 5** Fasten to wall as per "W" Details

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table A5 or Table A6
- Determine Uplift Footing from Table A7 or Table A8
- Follow Instruction #9-10 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

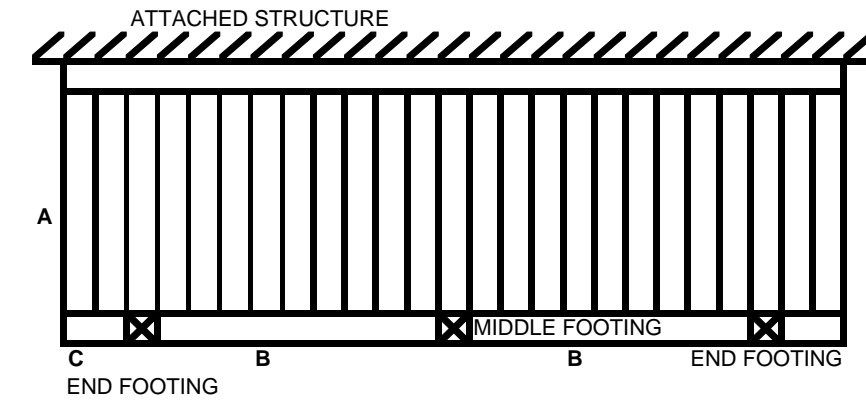
Table B1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B				Cube Footing		8	10	11
Load (psf)	A	trib	B (on slab)		Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	4	13.9		30	24	1741	2158	2367
10.0	10	5	11.1		31	25	2032	2520	2763
10.0	11	5.5	10.1		32	26	2174	2695	2956
10.0	12	6	9.3		33	26	2313	2868	3145
10.0	13	6.5	8.5		33	27	2441	3026	3319
10.0	14	7	7.9		34	27	2561	3176	3483

Ground Snow Load 20 psf

Table B3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only		Post Height (ft)			
Roof Design	95 mph Exposure C or 110 mph Exp. B				Middle d (in)	End d (in)	8	10	11	
Load (psf)	A	trib	B (on slab)		B	B	Overturning Moment (lbf *ft)			
20.0	8	4	8.0		24.1	29	24	1535	1904	2088
20.0	10	5	6.4		22.4	30	25	1783	2211	2425
20.0	11	5.5	5.8		21.7	31	26	1897	2353	2580
20.0	12	6	5.3		21.1	31	26	2017	2501	2743
20.0	13	6.5	4.9		20.5	32	27	2126	2637	2892
20.0	14	7	4.6		20.0	32	27	2230	2766	3033



Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only		Post Height (ft)			
Roof Design	110 mph Exposure C or 130 mph Exp. B				Middle d (in)	End d (in)	8	10	11	
Load (psf)	A	trib	B (on slab)		B	B	Overturning Moment (lbf *ft)			
10.0	8	4	13.9		26.5	33	27	1686	2090	2293
10.0	10	5	11.1		24.7	35	29	1964	2435	2671
10.0	11	5.5	10.1		23.9	35	30	2092	2594	2845
10.0	12	6	9.3		23.2	36	30	2216	2747	3013
10.0	13	6.5	8.5		22.6	37	31	2338	2899	3180
10.0	14	7	7.9		22.0	37	31	2456	3045	3340

Table B2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only		Post Height (ft)			
Roof Design	110 mph Exposure C or 130 mph Exp. B				Middle d (in)	End d (in)	8	10	11	
Load (psf)	A	trib	B (on slab)		B	B	Overturning Moment (lbf *ft)			
20.0	8	4	8.0		23.5	32	27	1497	1856	2036
20.0	10	5	6.4		21.8	33	28	1736	2153	2361
20.0	11	5.5	5.8		21.1	34	29	1849	2292	2514
20.0	12	6	5.3		20.5	35	29	1963	2434	2669
20.0	13	6.5	4.9		20.0	35	30	2071	2568	2817
20.0	14	7	4.6		19.5	36	30	2172	2694	2954

Table B4b

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
8	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

Table B5

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
8	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

Table B6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	21	23	24	25	26	27	28	29
10	23	24	26	27	28	29	30	31
11	24	25	27	28	29	30	31	32
12	24	26	27	29	30	31	32	33
13	25	27	28	29	31	32	33	34
14	26	27	29	30	31	32	33	34

Table B7

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
8	23	25	26	27	28	29	30	31
10	25	27	28	29	30	32	33	33
11	26	27	29	30	31	33	34	35
12	27	28	30	31	32	33	35	36
13	27	29	31	32	33	34	36	37
14	28	30	31	33	34	35	36	37

Table B8

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DEC 29 2022

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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
- Fasten to wall as per "W" Details

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 #9a above, embedding into concrete is not an option.
- SLAB 5** Fasten to wall as per "W" Details

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table B5 or Table B6
- Determine Uplift Footing from Table B7 or Table B8
- Follow Instructions #9-10 above

Cb. Tables for Attached Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

Table C1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
10.0	8	8	1	5	22.0	28	1398	1734	1902
10.0	10	10	2	6	20.4	29	1622	2011	2206
10.0	11	11	2	6	19.8	30	1732	2148	2356
10.0	12	12	3	6	19.2	30	1834	2274	2494
10.0	13	13	3	7	18.7	31	1935	2399	2631
10.0	14	14	4	7	18.2	31	2032	2520	2764

Ground Snow Load 20 psf

Table C3b

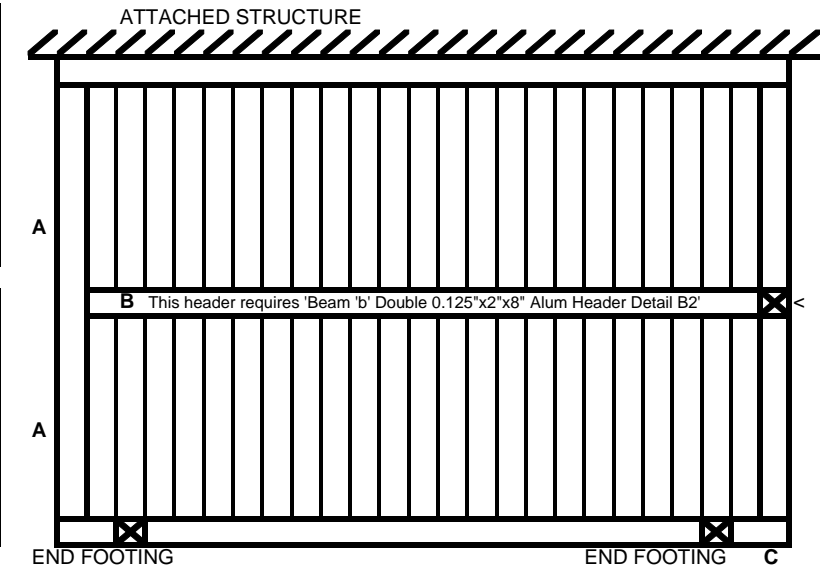
Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
20.0	8	8	2	7	19.2	27	1220	1513	1660
20.0	10	10	3	8	17.8	28	1417	1757	1927
20.0	11	11	3	9	17.2	28	1509	1871	2052
20.0	12	12	4	9	16.7	29	1598	1982	2174
20.0	13	13	5	10	16.3	30	1687	2091	2294
20.0	14	14	6	10	15.9	30	1773	2199	2411

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
10.0	8	8	1	5	21.1	31	1344	1667	1828
10.0	10	10	2	6	19.6	32	1560	1934	2122
10.0	11	11	3	6	19.0	33	1660	2058	2257
10.0	12	12	3	6	18.4	33	1758	2180	2391
10.0	13	13	4	6	17.9	34	1855	2300	2522
10.0	14	14	5	7	17.5	35	1950	2418	2652

Table C2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
20.0	8	8	1	7	18.7	29	1188	1474	1616
20.0	10	10	2	8	17.3	31	1379	1710	1875
20.0	11	11	2	9	16.8	32	1469	1821	1998
20.0	12	12	3	9	16.3	32	1557	1930	2117
20.0	13	13	3	10	15.9	33	1643	2037	2234
20.0	14	14	4	10	15.5	33	1726	2140	2347

Table C4b



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)								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)															
8	642	764	892	1019	1146	1274	1401	1529	795	948	1106	1264	1422	1580	1738	1896
10	802	955	1115	1274	1433	1592	1752	1911	994	1185	1382	1580	1777	1975	2172	2369
11	882	1051	1226	1401	1576	1752	1927	2102	1094	1303	1520	1738	1955	2172	2389	2606
12	962	1146	1338	1529	1720	1911	2102	2293	1193	1422	1659	1896	2132	2369	2606	2843
13	1042	1242	1449	1656	1863	2070	2277	2484	1293	1540	1797	2053	2310	2567	2824	3080
14	1123	1338	1560	1783	2006	2229	2452	2675	1392	1659	1935	2211	2488	2764	3041	3317

Table C5

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
	OVERTURNING MOMENT (LBF*FT)															
8	860	860	892	1019	1146	1274	1401	1529	1067	1067	1106	1264	1422	1580	1738	1896
10	1075	1075	1115	1274	1433	1592	1752	1911	1333	1333	1382	1580	1777	1975	2172	2369
11	1183	1183	1226	1401	1576	1752	1927	2102	1466	1466	1520	1738	1955	2172	2389	2606
12	1290	1290	1338	1529	1720	1911	2102	2293	1600	1600	1659	1896	2132	2369	2606	2843
13	1398	1398	1449	1656	1863	2070	2277	2484	1733	1733	1797	2053	2310	2567	2824	3080
14	1505	1505	1560	1783	2006	2229	2452	2675	1866	1866	1935	2211	2488	2764	3041	3317

Table C6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	21	23	24	25	26	27	28	29
10	23	24	26	27	28	29	30	31
11	24	25	27	28	29	30	31	32
12	24	26	27	29	30	31	32	33
13	25	27	28	29	31	32	33	34
14	26	27	29	30	31	32	33	34

Table C7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	23	25	26	27	28	29	30	31
10	25	27	28	29	30	32	33	33
11	26	27	29	30	31	33	34	35
12	27	28	30	31	32	33	35	36
13	27	29	31	32	33	34	36	37
14	28	30	31	33	34	35	36	37

Table C8

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a **MULTI SPAN ATTACHED** Equinox cover and **SINGLE SPAN HEADERS**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
- Use mid span post with footing OR go to Instruction #11
- If there is no mid span post, use **Required # of Return Beams AND Required # of Wall Fasteners** and see **Detail G6** for additional connection requirements
- Fasten to wall as per Detail W2 using **Required Number of Fasteners** if there is not a midspan post.
- Front header may be the same as the "B" header, a single if B is a double or can meet the requirements of any Section "A" using the same "A" and loads.

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table C5 or Table C6
- Determine Uplift Footing from Table C7 or Table C8
- Follow Instructions #9-13 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

Table D1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2				Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B			End d (in)	Overturning Moment (lbf *ft)			
Load (psf)	A	trib	B		8	10	11	
10.0	8	4	27.3	21	1089	1351	1482	
10.0	10	5	25.3	23	1167	1447	1587	
10.0	11	5.5	24.7	23	1256	1557	1708	
10.0	12	6	23.9	24	1334	1654	1814	
10.0	13	6.5	23.3	24	1411	1750	1920	
10.0	14	7	22.8	24	1491	1849	2028	

Ground Snow Load 20 psf

Table D3b

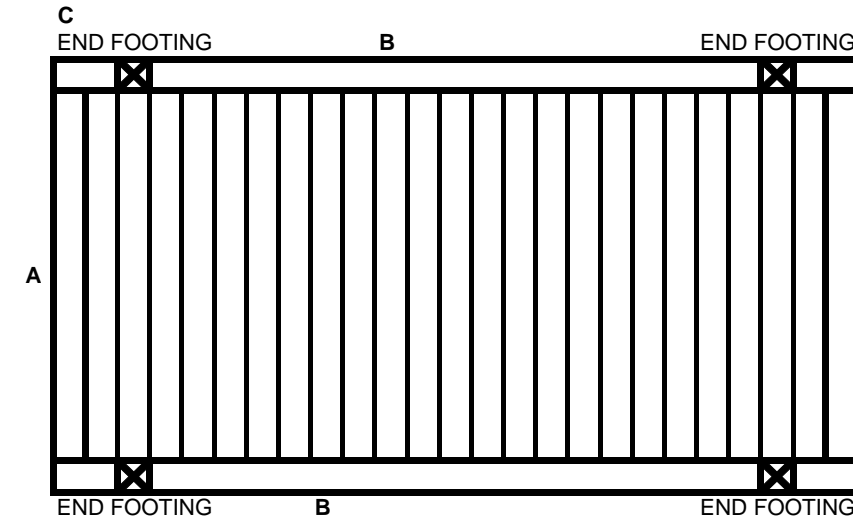
Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2				Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B			End d (in)	Overturning Moment (lbf *ft)			
Load (psf)	A	trib	B		8	10	11	
20.0	8	4	23.9	21	971	1204	1320	
20.0	10	5	22.2	22	1045	1296	1421	
20.0	11	5.5	21.5	22	1118	1386	1520	
20.0	12	6	20.9	23	1190	1476	1619	
20.0	13	6.5	20.4	23	1261	1564	1715	
20.0	14	7	19.9	24	1333	1653	1813	

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2				Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B			End d (in)	Overturning Moment (lbf *ft)			
Load (psf)	A	trib	B		8	10	11	
10.0	8	4	26.0	24	1398	1734	1902	
10.0	10	5	24.1	25	1310	1625	1782	
10.0	11	5.5	23.3	26	1275	1581	1734	
10.0	12	6	22.7	26	1275	1581	1734	
10.0	13	6.5	22.1	27	1351	1675	1837	
10.0	14	7	21.6	27	1426	1769	1940	

Table D2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2				Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B			End d (in)	Overturning Moment (lbf *ft)			
Load (psf)	A	trib	B		8	10	11	
20.0	8	4	23.1	23	1265	1568	1720	
20.0	10	5	21.5	24	1187	1472	1614	
20.0	11	5.5	20.8	25	1156	1433	1572	
20.0	12	6	20.2	25	1157	1434	1573	
20.0	13	6.5	19.6	26	1224	1518	1664	
20.0	14	7	19.2	26	1293	1603	1758	

Table D4b



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 Post Height
- Determine Uplift Footing Size.
- Determine Overturning Moment by cross indexing "A" and Post Height
- Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the Overturning Moment.
 - For CONSTRAINED FOOTINGS go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For NON CONSTRAINED FOOTINGS go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate 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 (ft)	8 ft								10 ft							
	B+2C (ft)								B+2C (ft)							
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	348	417	487	556	626	696	765	835	431	517	604	690	776	862	949	1035
10	398	478	557	637	717	796	876	955	494	592	691	790	889	987	1086	1185
11	438	525	613	701	788	876	963	1051	543	652	760	869	977	1086	1195	1303
12	478	573	669	764	860	955	1051	1146	592	711	829	948	1066	1185	1303	1422
13	518	621	725	828	932	1035	1139	1242	642	770	898	1027	1155	1283	1412	1540
14	557	669	780	892	1003	1115	1226	1338	691	829	968	1106	1244	1382	1520	1659

Table D5

Post Height (ft)	8 ft								10 ft							
	B+2C (ft)								B+2C (ft)							
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
	OVERTURNING MOMENT (LBF*FT)															
8	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
10	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
11	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
12	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
13	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
14	653	746	839	933	1026	1119	1226	1338	809	925	1041	1156	1272	1388	1520	1659

Table D6

max A (ft)	B+2C (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	15	16	16	17	18	18	19	20
10	16	17	18	18	19	20	20	21
11	16	17	18	19	20	20	21	22
12	17	18	19	20	20	21	22	22
13	17	18	19	20	21	22	22	23
14	18	19	20	21	21	22	23	24

Table D7

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

max A (ft)	B+2C (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	16	17	18	18	19	20	20	21
10	17	18	19	20	21	21	22	23
11	18	19	20	20	21	22	23	23
12	18	19	20	21	22	23	23	24
13	19	20	21	22	23	23	24	25
14	19	20	21	22	23	24	25	25

Table D8

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For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table D5 or Table D6
- Determine Uplift Footing from Table D7 or Table D8
- Follow Instruction #9 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

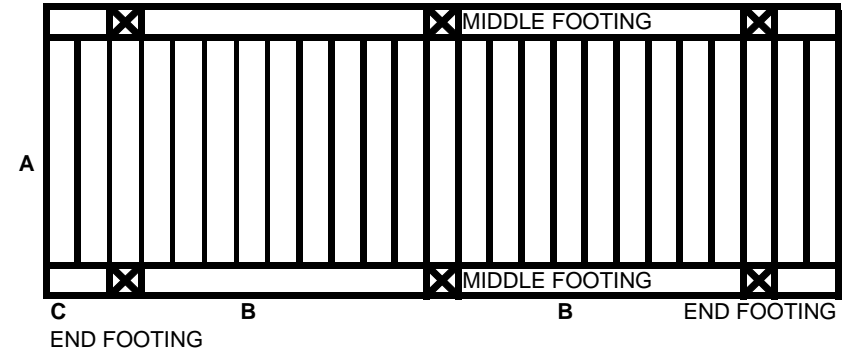
Table E1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
10.0	8	4	27.3	26	21	1901	2357	2585
10.0	10	5	25.3	27	23	2016	2500	2742
10.0	11	5.5	24.7	28	23	2161	2680	2939
10.0	12	6	23.9	28	24	2285	2833	3108
10.0	13	6.5	23.3	29	24	2409	2987	3276
10.0	14	7	22.8	29	24	2537	3146	3450

Ground Snow Load 20 psf

Table E3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
20.0	8	4	23.9	25	21	1663	2063	2262
20.0	10	5	22.2	26	22	1771	2196	2409
20.0	11	5.5	21.5	26	22	1885	2337	2563
20.0	12	6	20.9	27	23	1998	2478	2717
20.0	13	6.5	20.4	27	23	2109	2615	2868
20.0	14	7	19.9	28	24	2220	2752	3019



Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
10.0	8	4	26.0	28	24	2424	3005	3296
10.0	10	5	24.1	30	25	2248	2787	3057
10.0	11	5.5	23.3	31	26	2177	2700	2961
10.0	12	6	22.7	31	26	2167	2688	2948
10.0	13	6.5	22.1	32	27	2287	2836	3111
10.0	14	7	21.6	32	27	2407	2984	3273

Table E2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2 Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)					
	Cube Footing		8	10	11			
	Middle	End	Overturning Moment (lbf *ft)					
	A	trib	B	d (in)	d (in)			
20.0	8	4	23.1	27	23	2156	2674	2933
20.0	10	5	21.5	29	24	2000	2480	2721
20.0	11	5.5	20.8	29	25	1938	2404	2636
20.0	12	6	20.2	30	25	1931	2394	2626
20.0	13	6.5	19.6	30	26	2034	2522	2766
20.0	14	7	19.2	31	26	2139	2653	2910

Table E4b

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								Table E5
	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)																
8	696	835	974	1113	1252	1391	1530	1669	862	1035	1207	1380	1552	1725	1897	2070	95 mph Exposure C
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369	95 mph Exposure C
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606	95 mph Exposure C
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843	95 mph Exposure C
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080	95 mph Exposure C
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317	95 mph Exposure C

Post Height	8 ft								10 ft								Table E6
	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)																
8	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775	110 mph Exposure C
10	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775	110 mph Exposure C
11	1026	1119	1306	1492	1679	1865	2052	2238	1272	1388	1619	1850	2081	2313	2544	2775	110 mph Exposure C
12	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843	110 mph Exposure C
13	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080	110 mph Exposure C
14	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317	110 mph Exposure C

max A (ft)	B (ft)								Table E7
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
8	18	20	21	22	22	23	24	25	95 mph Exposure C
10	20	21	22	23	24	25	26	27	95 mph Exposure C
11	20	22	23	24	25	26	27	27	95 mph Exposure C
12	21	22	24	25	26	27	27	28	95 mph Exposure C
13	22	23	24	25	26	27	28	29	95 mph Exposure C
14	22	24	25	26	27	28	29	30	95 mph Exposure C

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max A (ft)	B (ft)								Table E8
	10	12	14	16	18	20	22	24	
	UPLIFT ONLY CUBE FOOTING d (IN)								
8	20	21	22	23	24	25	26	27	110 mph Exposure C
10	21	23	24	25	26	27	28	29	110 mph Exposure C
11	22	23	25	26	27	28	29	30	110 mph Exposure C
12	23	24	25	27	28	29	30	30	110 mph Exposure C
13	23	25	26	27	28	29	30	31	110 mph Exposure C
14	24	25	27	28	29	30	31	32	110 mph Exposure C

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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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 at 24"
- Choose a "B" less than the maximum allowed
- The maximum "C" is
- Choose Post Height
- Determine **Overturning Moment** by cross indexing "A" and "B" with the correct height from Table E5 or Table E6
- Determine **Uplift Footing** from Table E7 or Table E8
- Follow Instruction #9 above



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Fb. Tables for Freestanding Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table F1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)		
	Design Load (psf)	95 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing		Overturning Moment			
					Exterior d (in)	8	10	11		
10.0	8	8		1	25	1294	1605	1760		
10.0	10	10		2	26	1501	1862	2042		
10.0	11	11		2	27	1600	1984	2176		
10.0	12	12		2	27	1692	2098	2301		
10.0	13	13		3	28	1788	2217	2431		
10.0	14	14		3	28	1880	2331	2556		

Ground Snow Load 20 psf Table F3b

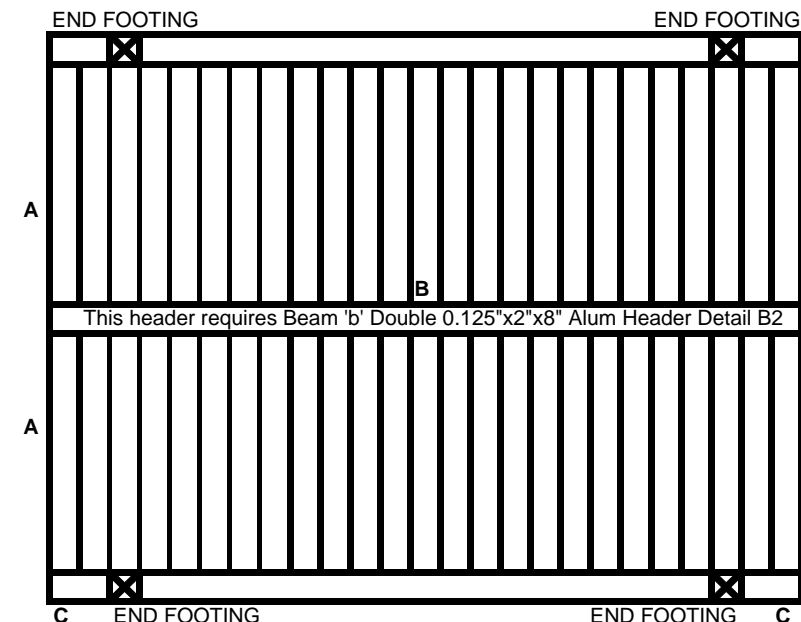
Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)		
	Design Load (psf)	95 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing		Overturning Moment			
					Exterior d (in)	8	10	11		
20.0	8	8		2	24	1157	1434	1573		
20.0	10	10		3	25	1339	1660	1821		
20.0	11	11		3	26	1427	1770	1941		
20.0	12	12		4	26	1513	1876	2058		
20.0	13	13		5	27	1596	1979	2171		
20.0	14	14		6	27	1678	2081	2282		

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)		
	Design Load (psf)	110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing		Overturning Moment			
					Exterior d (in)	8	10	11		
10.0	8	8		1	28	1239	1536	1685		
10.0	10	10		2	29	1436	1781	1954		
10.0	11	11		2	30	1532	1900	2084		
10.0	12	12		2	30	1620	2008	2203		
10.0	13	13		3	31	1709	2119	2324		
10.0	14	14		3	32	1798	2230	2446		

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)		
	Design Load (psf)	110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing		Overturning Moment			
					Exterior d (in)	8	10	11		
20.0	8	8		2	27	1120	1389	1523		
20.0	10	10		2	28	1297	1609	1764		
20.0	11	11		3	29	1384	1716	1882		
20.0	12	12		4	30	1468	1820	1997		
20.0	13	13		5	30	1546	1916	2102		
20.0	14	14		5	31	1626	2016	2211		



Post at mid span OR use required number of Return Beams See Table Y3 for alternates

Table F2b

Table F4b

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	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)	
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
8	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C

Table F6

Post Height	8 ft								10 ft							
	max A (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)		B (ft)	
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
8	746	764	892	1019	1146	1274	1401	1529	925	948	1106	1264	1422	1580	1738	1896
10	933	955	1115	1274	1433	1592	1752	1911	1156	1185	1382	1580	1777	1975	2172	2369
11	1026	1051	1226	1401	1576	1752	1927	2102	1272	1303	1520	1738	1955	2172	2389	2606
12	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843
13	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080
14	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317

110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C

Table F7

max A (ft)	B (ft)								Table F7
	10	12	14	16	18	20	22	24	
UPLIFT ONLY CUBE FOOTING d (IN)									
8	20	21	22	23	24	25	26	27	95 mph Exposure C
10	21	23	24	25	26	27	28	29	95 mph Exposure C
11	22	23	25	26	27	28	29	30	95 mph Exposure C
12	23	24	25	27	28	29	30	30	95 mph Exposure C
13	23	25	26	27	28	29	30	31	95 mph Exposure C
14	24	25	27	28	29	30	31	32	95 mph Exposure C

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Table F8

max A (ft)	B (ft)								Table F8
	10	12	14	16	18	20	22	24	
UPLIFT ONLY CUBE FOOTING d (IN)									
8	22	23	25	26	27	28	28	29	110 mph Exposure C
10	24	25	26	28	29	30	31	32	110 mph Exposure C
11	24	26	27	28	30	31	32	33	110 mph Exposure C
12	25	27	28	29	31	32	33	34	110 mph Exposure C
13	26	27	29	30	31	32	34	34	110 mph Exposure C
14	26	28	30	31	32	33	34	35	110 mph Exposure C

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a **MULTI SPAN FREESTANDING** Equinox cover and **Single Span Headers**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Lateral Force Resisting System requires F3-F6
 - Moment Frame (M Details) are not allowed**
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.

For **Structur Moment** to determine alternate footing sizes.

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine **Overturning Moment** by cross indexing "A" and "B" with the correct height from **Table F5 or Table F6**
- Determine Uplift Footing from **Table F7 or Table F8**
- Follow Instruction #9 above



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Gb. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ Post at Every Span

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

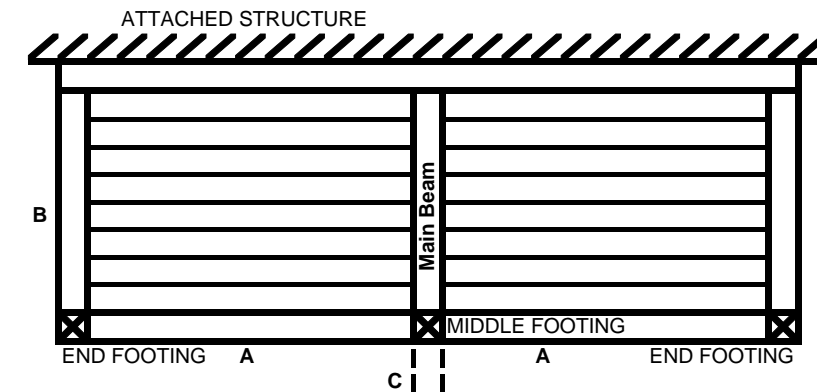
Table G1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	13.9	9	20.5	29	23	1560	1934	2121
10.0	10	10	11.1	10	19.0	30	24	1833	2273	2493
10.0	11	11	10.1	11	18.4	31	25	1963	2434	2670
10.0	12	12	9.3	11	17.9	32	25	2090	2592	2843
10.0	13	13	8.5	12	17.4	32	26	2216	2747	3013
10.0	14	14	7.9	13	17.0	33	26	2341	2902	3183

Ground Snow Load 20 psf

Table G3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	8.0	13	18.2	28	22	1416	1756	1926
20.0	10	10	6.4	16	17.0	29	23	1668	2069	2269
20.0	11	11	5.8	17	16.4	30	24	1788	2218	2432
20.0	12	12	5.3	18	15.9	31	24	1905	2363	2591
20.0	13	13	4.9	18	15.5	31	25	2019	2504	2746
20.0	14	14	4.6	19	15.1	32	25	2134	2646	2902



Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	13.9	9	19.8	32	25	1517	1881	2064
10.0	10	10	11.1	10	18.4	31	25	1785	2213	2427
10.0	11	11	10.1	11	17.8	32	26	1913	2372	2601
10.0	12	12	9.3	11	17.3	33	26	2037	2525	2770
10.0	13	13	8.5	12	16.9	33	26	2159	2678	2937
10.0	14	14	7.9	12	16.5	34	27	2281	2828	3102

Table G2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	8.0	13	17.8	31	25	1391	1725	1892
20.0	10	10	6.4	15	16.6	33	26	1636	2029	2225
20.0	11	11	5.8	16	16.0	33	27	1753	2174	2384
20.0	12	12	5.3	17	15.6	34	27	1870	2319	2543
20.0	13	13	4.9	18	15.2	35	28	1984	2460	2698
20.0	14	14	4.6	19	14.8	35	28	2095	2598	2849

Table G4b

Main Beam is 'b' Double 0.125"x2"x8" Alum Header Detail B2

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)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

Table G5

INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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" IF Detail F3-F6 is used, if Details F1-F2 are used the Max "C" is 0"
- Choose Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W4 and **Required Number of Wall Fasteners** per these tables

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)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

Table G6

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
	UPLIFT ONLY CUBE FOOTING d (IN)															
8	24	25	26	27	28	29	29	30	95 mph Exposure C							
10	26	27	28	29	30	31	32	32	95 mph Exposure C							
11	27	28	29	30	31	32	33	33	95 mph Exposure C							
12	27	29	30	31	32	33	34	34	95 mph Exposure C							
13	28	29	31	32	33	34	35	35	95 mph Exposure C							
14	29	30	31	32	33	34	35	36	95 mph Exposure C							

Table G7

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

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
	UPLIFT ONLY CUBE FOOTING d (IN)															
8	27	28	29	30	31	32	33	34	110 mph Exposure C							
10	29	30	31	32	33	34	35	36	110 mph Exposure C							
11	30	31	32	33	35	36	37	37	110 mph Exposure C							
12	31	32	33	34	36	37	38	39	110 mph Exposure C							
13	31	33	34	35	37	38	39	40	110 mph Exposure C							
14	32	34	35	36	37	39	40	41	110 mph Exposure C							

Table G8

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DEC 29 2022

Hb. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

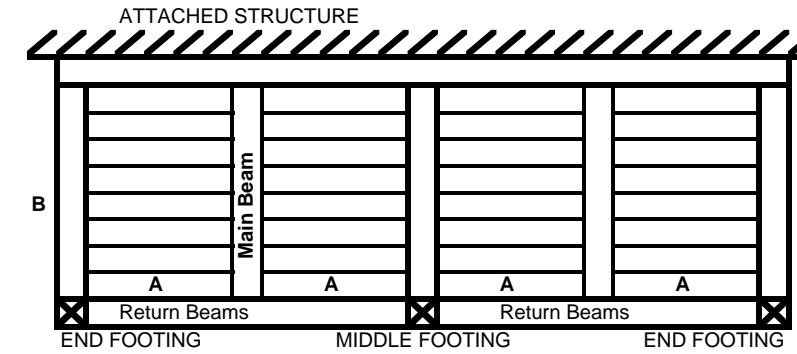
Table H1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	9	20.5	34	27	2610	3236	3549
10.0	10	10	2	10	19.0	36	28	3029	3756	4120
10.0	11	11	2	11	18.4	37	29	3226	4000	4387
10.0	12	12	2	11	17.9	37	30	3417	4237	4647
10.0	13	13	3	12	17.4	38	30	3603	4468	4900
10.0	14	14	3	13	17.0	39	31	3789	4699	5154

Ground Snow Load 20 psf

Table H3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	2	13	18.2	33	26	2323	2880	3159
20.0	10	10	3	16	17.0	35	27	2700	3347	3671
20.0	11	11	3	17	16.4	35	28	2876	3567	3912
20.0	12	12	4	18	15.9	36	29	3046	3778	4143
20.0	13	13	5	18	15.5	37	29	3211	3981	4367
20.0	14	14	6	19	15.1	37	30	3376	4186	4591



Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	9	19.8	38	30	2525	3131	3434
10.0	10	10	2	10	18.4	40	31	2933	3636	3988
10.0	11	11	3	11	17.8	41	32	3125	3875	4249
10.0	12	12	3	11	17.3	41	33	3309	4103	4500
10.0	13	13	4	12	16.9	42	33	3491	4328	4747
10.0	14	14	4	12	16.5	43	34	3670	4551	4992

Table H2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	2	13	17.8	36	29	2272	2818	3091
20.0	10	10	3	15	16.6	38	30	2635	3268	3584
20.0	11	11	3	16	16.0	39	31	2806	3479	3816
20.0	12	12	4	17	15.6	40	32	2975	3690	4047
20.0	13	13	5	18	15.2	41	32	3140	3894	4271
20.0	14	14	5	19	14.8	41	33	3298	4089	4485

Table H4b

Main Beam is 'b' Double 0.125"x2"x8" Alum Header Detail B2

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H5

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	27	29	30	31	33	34	35	36
10	29	31	32	34	35	37	38	39
11	30	32	33	35	36	38	39	40
12	31	33	34	36	37	39	40	41
13	32	34	35	37	38	40	41	42
14	32	34	36	38	39	41	42	43

Table H7

Omnimax
30 Technology Pkwy
Suite #400
Peachtree Corners, GA

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	30	32	34	35	37	38	39	40
10	32	34	36	38	39	41	42	43
11	33	36	37	39	41	42	44	45
12	34	37	39	40	42	43	45	46
13	35	38	40	41	43	45	46	47
14	36	39	41	42	44	46	47	49

Table H8

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 "
- Choose Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 0 "
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table H5 or Table H6
- Determine Uplift Footing from Table H7 or Table H8
- Follow Instructions #9-11 above



Ib. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts and Overhang

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

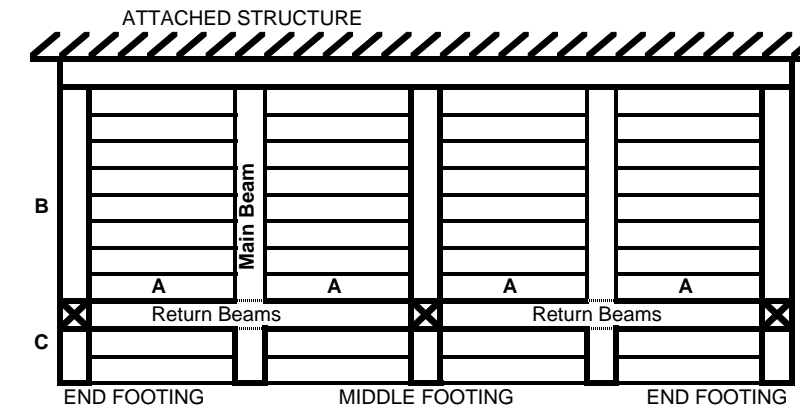
Table I1b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Uplift Only	Cube Footing	8	10	11	
Load (psf)	A	trib			Middle d (in)	End d (in)	Overturning Moment (lbf *ft)			
10.0	8	8	1	9	36	29	3119	3868	4242	
10.0	10	10	2	10	38	30	3666	4546	4986	
10.0	11	11	2	11	39	31	3926	4869	5340	
10.0	12	12	2	11	40	32	4181	5184	5686	
10.0	13	13	3	12	41	32	4431	5495	6026	
10.0	14	14	3	13	41	33	4681	5805	6366	

Ground Snow Load 20 psf

Table I3b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Uplift Only	Cube Footing	8	10	11	
Load (psf)	A	trib			Middle d (in)	End d (in)	Overturning Moment (lbf *ft)			
20.0	8	8	2	13	35	28	2832	3512	3852	
20.0	10	10	3	16	37	29	3336	4137	4538	
20.0	11	11	3	17	38	30	3577	4435	4865	
20.0	12	12	4	18	39	31	3811	4725	5183	
20.0	13	13	5	18	39	31	4039	5008	5493	
20.0	14	14	6	19	40	32	4267	5291	5804	



Main Beam is 'b' Double 0.125"x2"x8" Alum Header Detail B2

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Uplift Only	Cube Footing	8	10	11	
Load (psf)	A	trib			Middle d (in)	End d (in)	Overturning Moment (lbf *ft)			
10.0	8	8	1	9	40	32	3035	3763	4127	
10.0	10	10	2	10	42	34	3569	4426	4854	
10.0	11	11	3	11	43	34	3825	4743	5202	
10.0	12	12	3	11	44	35	4073	5051	5539	
10.0	13	13	4	12	45	36	4319	5355	5873	
10.0	14	14	4	12	46	36	4562	5657	6204	

Table I2b

Beam 'b' Double 0.125"x2"x8" Alum Header Detail B2						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Uplift Only	Cube Footing	8	10	11	
Load (psf)	A	trib			Middle d (in)	End d (in)	Overturning Moment (lbf *ft)			
20.0	8	8	2	13	39	31	2782	3450	3784	
20.0	10	10	3	15	41	33	3272	4058	4450	
20.0	11	11	3	16	42	33	3506	4348	4768	
20.0	12	12	4	17	43	34	3740	4637	5086	
20.0	13	13	5	18	44	35	3968	4921	5397	
20.0	14	14	5	19	45	35	4190	5195	5698	

Table I4b

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)															
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I5

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)															
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	30	31	33	34	35	36	37	38
10	32	34	35	37	38	39	40	41
11	33	35	36	38	39	40	41	42
12	34	36	37	39	40	41	42	43
13	35	37	38	40	41	42	43	45
14	36	38	39	41	42	43	45	46

Table I7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	34	35	37	38	39	40	41	42
10	36	38	39	41	42	43	45	46
11	37	39	41	42	44	45	46	47
12	39	40	42	43	45	46	47	49
13	40	41	43	45	46	47	49	50
14	41	42	44	46	47	49	50	51

Table I8

Omnimax
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Suite #400
Peachtree Corners, GA

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details are not allowed.**
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 a 24
- Choose a "B" less than the maximum allowed
- The maximum "C" is "
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table I5 or Table I6
- Determine Uplift Footing from Table I7 or Table I8
- Follow Instructions #9-11 above



DEC 29 2022

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

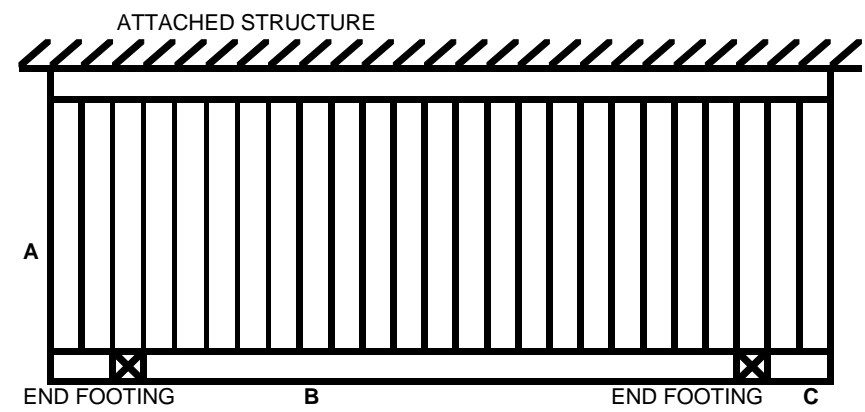
max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table A1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	Cube Footing End d (in)	8	10	11
10.0	8	4	30.3	26	1093	1355	1486
10.0	10	5	28.3	27	1286	1595	1749
10.0	11	5.5	27.5	28	1380	1712	1877
10.0	12	6	26.8	28	1474	1827	2004
10.0	13	6.5	26.2	29	1560	1935	2122
10.0	14	7	25.5	29	1643	2038	2235

Ground Snow Load 20 psf Table A3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
20.0	8	4	26.7	25	979	1214	1331
20.0	10	5	24.8	26	1148	1423	1561
20.0	11	5.5	24.0	27	1227	1522	1669
20.0	12	6	23.4	27	1309	1624	1781
20.0	13	6.5	22.8	28	1386	1719	1885
20.0	14	7	22.2	28	1460	1810	1985



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Table A2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
10.0	8	4	29.4	28	1062	1317	1445
10.0	10	5	27.4	30	1248	1548	1698
10.0	11	5.5	26.5	31	1335	1656	1816
10.0	12	6	25.7	31	1420	1760	1931
10.0	13	6.5	25.1	32	1503	1864	2045
10.0	14	7	24.4	32	1585	1965	2155

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Table A4c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3				Uplift Only	Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Max Width on slab (B+2C)	Max B	End d (in)	8	10	11
20.0	8	4	26.1	27	957	1187	1302
20.0	10	5	24.2	30	1122	1391	1526
20.0	11	5.5	23.4	31	1200	1488	1632
20.0	12	6	22.8	31	1280	1587	1740
20.0	13	6.5	22.2	32	1355	1681	1843
20.0	14	7	21.6	32	1427	1770	1941

- 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 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 Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing size.
 - Fasten to wall as per "W" Details

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+2C (ft)							B+2C (ft)									
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
8	OVERTURNING MOMENT (LBF*FT)																95 mph Exposure C
10	321	382	446	510	573	637	701	764	398	474	553	632	711	790	869	948	95 mph Exposure C
11	401	478	557	637	717	796	876	955	497	592	691	790	889	987	1086	1185	95 mph Exposure C
12	441	525	613	701	788	876	963	1051	547	652	760	869	977	1086	1195	1303	95 mph Exposure C
13	481	573	669	764	860	955	1051	1146	597	711	829	948	1066	1185	1303	1422	95 mph Exposure C
14	521	621	725	828	932	1035	1139	1242	646	770	898	1027	1155	1283	1412	1540	95 mph Exposure C
14	561	669	780	892	1003	1115	1226	1338	696	829	968	1106	1244	1382	1520	1659	95 mph Exposure C

Post Height (ft)	8 ft							10 ft							Table A6		
	B+2C (ft)							B+2C (ft)									
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
8	OVERTURNING MOMENT (LBF*FT)																110 mph Exposure C
10	430	430	446	510	573	637	701	764	533	533	553	632	711	790	869	948	110 mph Exposure C
11	538	538	557	637	717	796	876	955	667	667	691	790	889	987	1086	1185	110 mph Exposure C
12	591	591	613	701	788	876	963	1051	733	733	760	869	977	1086	1195	1303	110 mph Exposure C
13	645	645	669	764	860	955	1051	1146	800	800	829	948	1066	1185	1303	1422	110 mph Exposure C
14	699	699	725	828	932	1035	1139	1242	867	867	898	1027	1155	1283	1412	1540	110 mph Exposure C
14	753	753	780	892	1003	1115	1226	1338	933	933	968	1106	1244	1382	1520	1659	110 mph Exposure C

max A (ft)	B+2C (ft)							Table A7	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							95 mph Exposure C	
10	17	18	19	20	21	21	22	23	95 mph Exposure C
11	18	19	20	21	22	23	24	24	95 mph Exposure C
12	19	20	21	22	23	24	25	25	95 mph Exposure C
13	19	21	22	23	24	24	25	26	95 mph Exposure C
14	20	21	22	23	24	25	26	27	95 mph Exposure C
14	20	22	23	24	25	26	27	27	95 mph Exposure C

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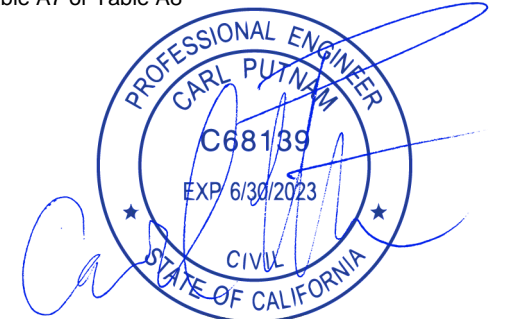
max A (ft)	B+2C (ft)							Table A8	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							110 mph Exposure C	
10	18	20	21	22	22	23	24	25	110 mph Exposure C
11	20	21	22	23	24	25	26	27	110 mph Exposure C
12	20	22	23	24	25	26	27	27	110 mph Exposure C
13	21	22	24	25	26	27	27	28	110 mph Exposure C
14	22	23	24	25	26	27	28	29	110 mph Exposure C
14	22	24	25	26	27	28	29	30	110 mph Exposure C

FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS

- SLAB 1** Follow Instructions #1-3 above.
- SLAB 2** Maximum structure width is "B +2C"
- SLAB 3** Follow Instructions #5-8 above.
- SLAB 4** Follow #9a above, embedding into concrete is not an option.
- SLAB 5** Fasten to wall as per "W" Details

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table A5 or Table A6
- Determine Uplift Footing from Table A7 or Table A8
- Follow Instruction #9-10 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table B1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 110 mph Exp. B				Cube Footing		8	10	11
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	Overturning Moment (lbf *ft)	
10.0	8	4	13.9	30.3	31	25	1930	2394	2625
10.0	10	5	11.1	28.3	33	26	2253	2794	3065
10.0	11	5.5	10.1	27.5	33	27	2411	2989	3278
10.0	12	6	9.3	26.8	34	27	2565	3180	3488
10.0	13	6.5	8.5	26.2	35	28	2707	3356	3681
10.0	14	7	7.9	25.5	35	28	2841	3522	3863

Ground Snow Load 20 psf Table B3c

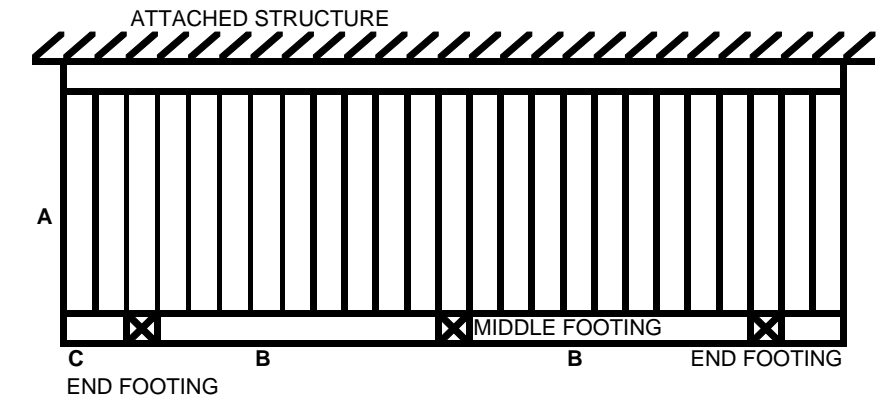
Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 95 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 110 mph Exp. B				Cube Footing		8	10	11
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	Overturning Moment (lbf *ft)	
20.0	8	4	8.0	26.7	30	25	1703	2111	2316
20.0	10	5	6.4	24.8	31	26	1977	2452	2689
20.0	11	5.5	5.8	24.0	32	27	2104	2609	2862
20.0	12	6	5.3	23.4	32	27	2237	2774	3042
20.0	13	6.5	4.9	22.8	33	28	2358	2924	3207
20.0	14	7	4.6	22.2	34	28	2474	3067	3364

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Table B2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 130 mph Exp. B				Cube Footing		8	10	11
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	Overturning Moment (lbf *ft)	
10.0	8	4	13.9	29.4	34	28	1870	2318	2543
10.0	10	5	11.1	27.4	36	30	2178	2701	2962
10.0	11	5.5	10.1	26.5	37	31	2320	2877	3156
10.0	12	6	9.3	25.7	37	31	2457	3047	3342
10.0	13	6.5	8.5	25.1	38	32	2593	3215	3526
10.0	14	7	7.9	24.4	39	32	2723	3377	3704

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Table B4c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 110 mph Exposure C				Uplift Only		Post Height (ft)		
	Design or 130 mph Exp. B				Cube Footing		8	10	11
	Load (psf)	A	trib	B (on slab)	B	Middle d (in)	End d (in)	Overturning Moment (lbf *ft)	
20.0	8	4	8.0	26.1	33	27	1660	2059	2258
20.0	10	5	6.4	24.2	34	29	1926	2388	2619
20.0	11	5.5	5.8	23.4	35	29	2050	2542	2789
20.0	12	6	5.3	22.8	36	30	2177	2699	2961
20.0	13	6.5	4.9	22.2	37	31	2297	2848	3124
20.0	14	7	4.6	21.6	37	31	2409	2987	3276



- 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 Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - Fasten to wall as per "W" Details

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							Table B5		
	B (ft)							B (ft)									
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
8	OVERTURNING MOMENT (LBF*FT)														95 mph Exposure C		
10	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896	95 mph Exposure C
11	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369	95 mph Exposure C
12	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606	95 mph Exposure C
13	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843	95 mph Exposure C
14	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080	95 mph Exposure C
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317	95 mph Exposure C

Post Height	8 ft							10 ft							Table B6		
	B (ft)							B (ft)									
max A (ft)	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	
8	OVERTURNING MOMENT (LBF*FT)														110 mph Exposure C		
10	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896	110 mph Exposure C
11	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369	110 mph Exposure C
12	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606	110 mph Exposure C
13	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843	110 mph Exposure C
14	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080	110 mph Exposure C
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317	110 mph Exposure C

max A (ft)	B (ft)							Table B7	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							95 mph Exposure C	
10	21	23	24	25	26	27	28	29	95 mph Exposure C
11	23	24	26	27	28	29	30	31	95 mph Exposure C
12	24	25	27	28	29	30	31	32	95 mph Exposure C
13	24	26	27	29	30	31	32	33	95 mph Exposure C
14	25	27	28	29	31	32	33	34	95 mph Exposure C
14	26	27	29	30	31	32	33	34	95 mph Exposure C

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max A (ft)	B (ft)							Table B8	
	10	12	14	16	18	20	22		24
8	UPLIFT ONLY CUBE FOOTING d (IN)							110 mph Exposure C	
10	23	25	26	27	28	29	30	31	110 mph Exposure C
11	25	27	28	29	30	32	33	33	110 mph Exposure C
12	26	27	29	30	31	33	34	35	110 mph Exposure C
13	27	28	30	31	32	33	35	36	110 mph Exposure C
14	27	29	31	32	33	34	36	37	110 mph Exposure C
14	28	30	31	33	34	35	36	37	110 mph Exposure C



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Cc. Tables for Attached Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

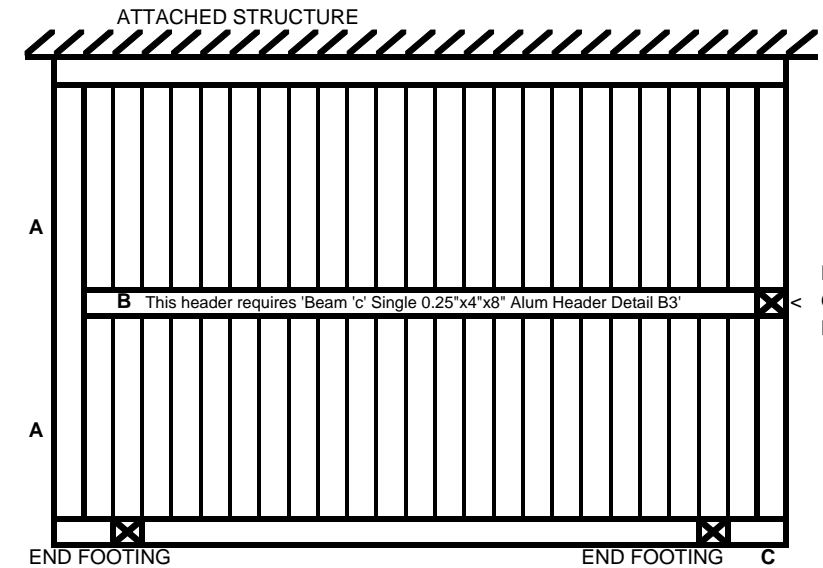
Table C1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
10.0	8	8	1	5	24.3	29	1551	1923	2109
10.0	10	10	2	6	22.6	30	1799	2231	2447
10.0	11	11	2	7	21.9	31	1921	2382	2613
10.0	12	12	3	7	21.3	31	2034	2522	2766
10.0	13	13	3	7	20.7	32	2146	2661	2918
10.0	14	14	4	8	20.2	33	2254	2795	3066

Ground Snow Load 20 psf

Table C3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
20.0	8	8	2	8	21.2	27	1353	1678	1841
20.0	10	10	3	9	19.7	29	1572	1949	2137
20.0	11	11	4	10	19.1	29	1673	2075	2276
20.0	12	12	4	10	18.6	30	1772	2198	2411
20.0	13	13	5	11	18.1	31	1871	2319	2544
20.0	14	14	6	11	17.6	31	1966	2438	2674



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
10.0	8	8	2	5	23.4	32	1491	1849	2028
10.0	10	10	2	6	21.7	33	1730	2145	2353
10.0	11	11	3	6	21.0	34	1841	2282	2503
10.0	12	12	3	7	20.4	35	1950	2418	2652
10.0	13	13	4	7	19.9	35	2057	2551	2798
10.0	14	14	5	7	19.4	36	2163	2682	2941

Table C2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3					Uplift Only Cube Footing	Post Height (ft)			
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	B		8	10	11	
20.0	8	8	1	8	20.7	30	1318	1634	1793
20.0	10	10	2	9	19.2	32	1529	1896	2080
20.0	11	11	3	10	18.6	33	1629	2020	2216
20.0	12	12	3	10	18.1	33	1727	2141	2348
20.0	13	13	4	11	17.6	34	1822	2259	2478
20.0	14	14	5	11	17.2	34	1914	2373	2603

Table C4c

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)								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)															
8	642	764	892	1019	1146	1274	1401	1529	795	948	1106	1264	1422	1580	1738	1896
10	802	955	1115	1274	1433	1592	1752	1911	994	1185	1382	1580	1777	1975	2172	2369
11	882	1051	1226	1401	1576	1752	1927	2102	1094	1303	1520	1738	1955	2172	2389	2606
12	962	1146	1338	1529	1720	1911	2102	2293	1193	1422	1659	1896	2132	2369	2606	2843
13	1042	1242	1449	1656	1863	2070	2277	2484	1293	1540	1797	2053	2310	2567	2824	3080
14	1123	1338	1560	1783	2006	2229	2452	2675	1392	1659	1935	2211	2488	2764	3041	3317

Table C5

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
	OVERTURNING MOMENT (LBF*FT)															
8	860	860	892	1019	1146	1274	1401	1529	1067	1067	1106	1264	1422	1580	1738	1896
10	1075	1075	1115	1274	1433	1592	1752	1911	1333	1333	1382	1580	1777	1975	2172	2369
11	1183	1183	1226	1401	1576	1752	1927	2102	1466	1466	1520	1738	1955	2172	2389	2606
12	1290	1290	1338	1529	1720	1911	2102	2293	1600	1600	1659	1896	2132	2369	2606	2843
13	1398	1398	1449	1656	1863	2070	2277	2484	1733	1733	1797	2053	2310	2567	2824	3080
14	1505	1505	1560	1783	2006	2229	2452	2675	1866	1866	1935	2211	2488	2764	3041	3317

Table C6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	21	23	24	25	26	27	28	29
10	23	24	26	27	28	29	30	31
11	24	25	27	28	29	30	31	32
12	24	26	27	29	30	31	32	33
13	25	27	28	29	31	32	33	34
14	26	27	29	30	31	32	33	34

Table C7

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max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	23	25	26	27	28	29	30	31
10	25	27	28	29	30	32	33	33
11	26	27	29	30	31	33	34	35
12	27	28	30	31	32	33	35	36
13	27	29	31	32	33	34	36	37
14	28	30	31	33	34	35	36	37

Table C8

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a MULTI SPAN ATTACHED Equinox cover and SINGLE SPAN HEADERS
- 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 Post Height
- Determine Uplift Footing Size.
- Determine Overturning Moment by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details
These details are allowed if the moment value shown in the detail is higher than the Overturning Moment.
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the Overturning Moment.
 - For CONSTRAINED FOOTINGS go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
 - For NON CONSTRAINED FOOTINGS go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing size.
- Use mid span post with footing OR go to Instruction #11
- If there is no mid span post, use Required # of Return Beams AND Required # of Wall Fasteners and see Detail G6 for additional connection requirements
- Fasten to wall as per Detail W2 using Required Number of Fasteners if there is not a midspan post.
- Front header may be the same as the "B" header, a single if B is a double or can meet the requirements of any Section "A" using the same "A" and loads.

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table C5 or Table C6
- Determine Uplift Footing from Table C7 or Table C8
- Follow Instructions #9-13 above



DEC 29 2022

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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

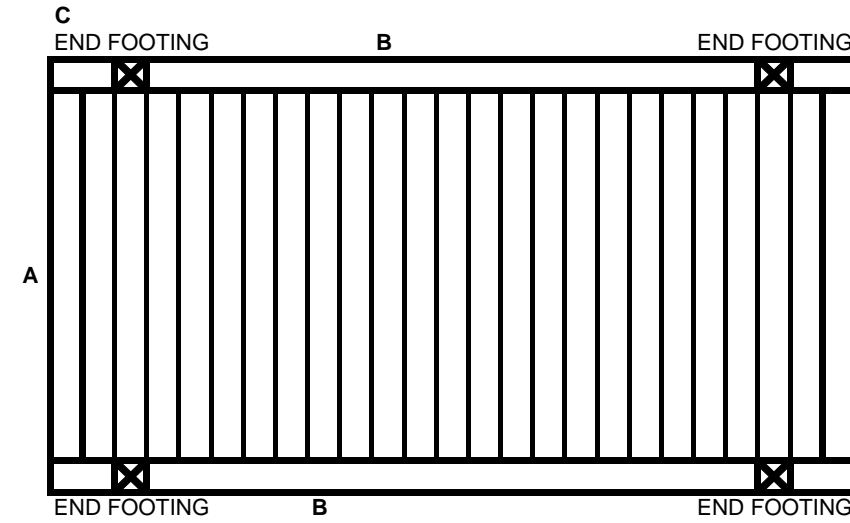
Table D1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof Design 95 mph Exposure C or 110 mph Exp. B	Uplift Only		Post Height (ft)			
	Cube Footing		8	10	11	
	Load (psf)	trib	Overturning Moment (lbf *ft)			
10.0	8	4	22	1193	1479	1623
10.0	10	5	23	1277	1584	1737
10.0	11	5.5	24	1374	1703	1868
10.0	12	6	24	1458	1808	1983
10.0	13	6.5	25	1543	1913	2098
10.0	14	7	25	1630	2021	2216

Ground Snow Load 20 psf

Table D3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof Design 95 mph Exposure C or 110 mph Exp. B	Uplift Only		Post Height (ft)			
	Cube Footing		8	10	11	
	Load (psf)	trib	Overturning Moment (lbf *ft)			
20.0	8	4	21	1062	1316	1444
20.0	10	5	22	1141	1415	1552
20.0	11	5.5	23	1220	1513	1660
20.0	12	6	23	1299	1611	1767
20.0	13	6.5	24	1376	1707	1872
20.0	14	7	24	1454	1803	1977



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof Design 110 mph Exposure C or 130 mph Exp. B	Uplift Only		Post Height (ft)			
	Cube Footing		8	10	11	
	Load (psf)	trib	Overturning Moment (lbf *ft)			
10.0	8	4	24	1530	1898	2081
10.0	10	5	26	1433	1777	1949
10.0	11	5.5	26	1394	1728	1896
10.0	12	6	27	1393	1727	1894
10.0	13	6.5	27	1475	1830	2007
10.0	14	7	28	1558	1931	2118

Table D2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof Design 110 mph Exposure C or 130 mph Exp. B	Uplift Only		Post Height (ft)			
	Cube Footing		8	10	11	
	Load (psf)	trib	Overturning Moment (lbf *ft)			
20.0	8	4	24	1382	1714	1880
20.0	10	5	25	1296	1607	1762
20.0	11	5.5	25	1261	1564	1715
20.0	12	6	26	1262	1565	1716
20.0	13	6.5	27	1335	1655	1815
20.0	14	7	27	1409	1748	1917

Table D4c

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+2C (ft)								B+2C (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
8	348	417	487	556	626	696	765	835	431	517	604	690	776	862	949	1035
10	398	478	557	637	717	796	876	955	494	592	691	790	889	987	1086	1185
11	438	525	613	701	788	876	963	1051	543	652	760	869	977	1086	1195	1303
12	478	573	669	764	860	955	1051	1146	592	711	829	948	1066	1185	1303	1422
13	518	621	725	828	932	1035	1139	1242	642	770	898	1027	1155	1283	1412	1540
14	557	669	780	892	1003	1115	1226	1338	691	829	968	1106	1244	1382	1520	1659

Table D5

Post Height (ft)	8 ft								10 ft							
	B+2C (ft)								B+2C (ft)							
	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24
8	OVERTURNING MOMENT (LBF*FT)															
8	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
10	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
11	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
12	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
13	653	746	839	933	1026	1119	1212	1306	809	925	1041	1156	1272	1388	1503	1619
14	653	746	839	933	1026	1119	1226	1338	809	925	1041	1156	1272	1388	1520	1659

Table D6

max A (ft)	B+2C (ft)								Table D7
	10	12	14	16	18	20	22	24	
8	UPLIFT ONLY CUBE FOOTING d (IN)								95 mph Exposure C
8	15	16	16	17	18	18	19	20	95 mph Exposure C
10	16	17	18	18	19	20	20	21	95 mph Exposure C
11	16	17	18	19	20	20	21	22	95 mph Exposure C
12	17	18	19	20	20	21	22	22	95 mph Exposure C
13	17	18	19	20	21	22	22	23	95 mph Exposure C
14	18	19	20	21	21	22	23	24	95 mph Exposure C

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max A (ft)	B+2C (ft)								Table D8
	10	12	14	16	18	20	22	24	
8	UPLIFT ONLY CUBE FOOTING d (IN)								110 mph Exposure C
8	16	17	18	18	19	20	20	21	110 mph Exposure C
10	17	18	19	20	21	21	22	23	110 mph Exposure C
11	18	19	20	20	21	22	23	23	110 mph Exposure C
12	18	19	20	21	22	23	23	24	110 mph Exposure C
13	19	20	21	22	23	23	24	25	110 mph Exposure C
14	19	20	21	22	23	24	25	25	110 mph Exposure C

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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 Post Height
- Determine Uplift Footing Size.
- Determine Overturning Moment by cross indexing "A" and Post Height
- Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the Overturning Moment.
 - For CONSTRAINED FOOTINGS go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For NON CONSTRAINED FOOTINGS go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 24"
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table D5 or Table D6
- Determine Uplift Footing from Table D7 or Table D8
- Follow Instruction #9 above



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

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

Table E1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)	8			10			11		
	Cube Footing			Overturning Moment			Overturning Moment			Overturning Moment		
	Middle	End										
	A	trib	B	d (in)	d (in)	(lbf *ft)						
10.0	8	4	30.3	27	22	2108	2614	2867				
10.0	10	5	28.1	28	23	2236	2772	3041				
10.0	11	5.5	27.4	29	24	2397	2972	3260				
10.0	12	6	26.5	29	24	2534	3142	3447				
10.0	13	6.5	25.8	30	25	2672	3313	3633				
10.0	14	7	25.2	30	25	2814	3489	3826				

Ground Snow Load 20 psf

Table E3c

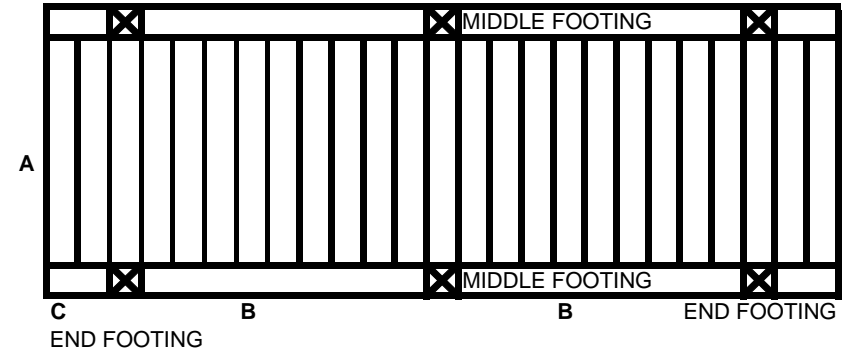
Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof 95 mph Exposure C Design or 110 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)	8			10			11		
	Cube Footing			Overturning Moment			Overturning Moment			Overturning Moment		
	Middle	End										
	A	trib	B	d (in)	d (in)	(lbf *ft)						
20.0	8	4	26.5	25	21	1845	2288	2509				
20.0	10	5	24.7	27	22	1964	2436	2672				
20.0	11	5.5	23.9	27	23	2090	2592	2843				
20.0	12	6	23.2	28	23	2216	2748	3014				
20.0	13	6.5	22.6	28	24	2339	2900	3181				
20.0	14	7	22.1	29	24	2462	3053	3348				

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)	8			10			11		
	Cube Footing			Overturning Moment			Overturning Moment			Overturning Moment		
	Middle	End										
	A	trib	B	d (in)	d (in)	(lbf *ft)						
10.0	8	4	28.8	29	24	2688	3333	3656				
10.0	10	5	26.7	31	26	2493	3091	3390				
10.0	11	5.5	25.9	32	26	2415	2994	3284				
10.0	12	6	25.2	32	27	2404	2981	3269				
10.0	13	6.5	24.5	33	27	2537	3146	3450				
10.0	14	7	23.9	33	28	2669	3310	3630				

Table E2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3 Roof 110 mph Exposure C Design or 130 mph Exp. B Load (psf)	Uplift Only		Post Height (ft)	8			10			11		
	Cube Footing			Overturning Moment			Overturning Moment			Overturning Moment		
	Middle	End										
	A	trib	B	d (in)	d (in)	(lbf *ft)						
20.0	8	4	25.6	28	24	2392	2966	3253				
20.0	10	5	23.8	30	25	2219	2751	3017				
20.0	11	5.5	23.1	30	25	2150	2666	2924				
20.0	12	6	22.4	31	26	2142	2656	2913				
20.0	13	6.5	21.8	32	27	2256	2797	3068				
20.0	14	7	21.3	32	27	2373	2942	3227				

Table E4c



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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Lateral Force Resisting System requires Details F3-F6
 - Moment Frame ("M" Details) are not allowed
 - Moment Resisting Post Connection to Footing: Detail F3-F6
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" and "F" Detail w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to Tables X1 or X2. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to Table X3 or X4. Cross index the required footing size from #7 (Uplift Footing Size) and Overturning Moment to determine alternate 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)															
8	696	835	974	1113	1252	1391	1530	1669	862	1035	1207	1380	1552	1725	1897	2070
10	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369
11	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606
12	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843
13	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080
14	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317

Table E5

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)															
8	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775
10	933	1119	1306	1492	1679	1865	2052	2238	1156	1388	1619	1850	2081	2313	2544	2775
11	1026	1119	1306	1492	1679	1865	2052	2238	1272	1388	1619	1850	2081	2313	2544	2775
12	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843
13	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080
14	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317

Table E6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	18	20	21	22	22	23	24	25
10	20	21	22	23	24	25	26	27
11	20	22	23	24	25	26	27	27
12	21	22	24	25	26	27	27	28
13	22	23	24	25	26	27	28	29
14	22	24	25	26	27	28	29	30

Table E7

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max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	20	21	22	23	24	25	26	27
10	21	23	24	25	26	27	28	29
11	22	23	25	26	27	28	29	30
12	23	24	25	27	28	29	30	30
13	23	25	26	27	28	29	30	31
14	24	25	27	28	29	30	31	32

Table E8

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Fc. Tables for Freestanding Structures with Multi Span Louvers and Single Span Headers

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table F1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing	Exterior			Overturning Moment			
						A	B	d (in)	8	10	11	
10.0	8	8	1	22.5	25	1435	1780	1952	27	1665	2065	2265
10.0	10	10	2	20.9	27	1775	2201	2414	27	1775	2201	2414
10.0	11	11	2	20.3	27	1877	2327	2552	28	1877	2327	2552
10.0	12	12	3	19.6	28	1983	2458	2696	29	1983	2458	2696
10.0	13	13	3	19.2	29	2085	2585	2835	29	2085	2585	2835
10.0	14	14	4	18.7	29							

Ground Snow Load 20 psf Table F3c

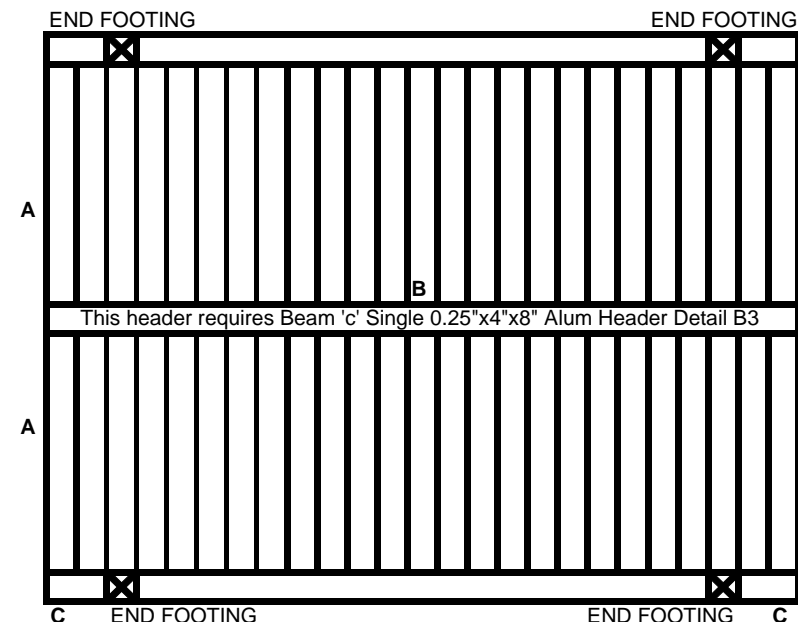
Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 95 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 110 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing	Exterior			Overturning Moment			
						A	B	d (in)	8	10	11	
20.0	8	8	2	20.1	25	1283	1591	1745	26	1485	1841	2020
20.0	10	10	3	18.7	26	1583	1963	2153	27	1583	1963	2153
20.0	11	11	3	18.1	27	1678	2081	2282	27	1678	2081	2282
20.0	12	12	4	17.6	27	1770	2195	2408	28	1770	2195	2408
20.0	13	13	5	17.1	28	1861	2308	2531	28	1861	2308	2531
20.0	14	14	6	16.7	28							

Ground Snow Load 10 psf Table F2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 130 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing	Exterior			Overturning Moment			
						A	B	d (in)	8	10	11	
10.0	8	8	1	21.6	28	1374	1704	1869	30	1593	1975	2167
10.0	10	10	2	20.0	30	1699	2107	2311	31	1796	2228	2443
10.0	11	11	2	19.4	31	1895	2350	2577	31	1895	2350	2577
10.0	12	12	2	18.8	31	1994	2473	2712	32	1994	2473	2712
10.0	13	13	3	18.3	32							
10.0	14	14	4	17.9	32							

Ground Snow Load 20 psf Table F4c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3	Roof 110 mph Exposure C		Required		Uplift Only			Post Height (ft)				
	Design Load (psf)	or 130 mph Exp. B	trib	# of 2x8 Return Beams	Cube Footing	Exterior			Overturning Moment			
						A	B	d (in)	8	10	11	
20.0	8	8	2	19.5	28	1242	1540	1689	29	1439	1784	1957
20.0	10	10	3	18.1	29	1535	1903	2087	30	1628	2019	2214
20.0	11	11	3	17.5	30	1714	2125	2331	30	1714	2125	2331
20.0	12	12	4	17.0	30	1803	2236	2452	31	1803	2236	2452
20.0	13	13	5	16.6	31							
20.0	14	14	6	16.2	32							



Post at mid span OR use required number of Return Beams See Table Y3 for alternates

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	8 ft								10 ft								
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)		
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	95 mph Exposure C
10	OVERTURNING MOMENT (LBF*FT)																95 mph Exposure C
11	637	764	892	1019	1146	1274	1401	1529	790	948	1106	1264	1422	1580	1738	1896	95 mph Exposure C
12	796	955	1115	1274	1433	1592	1752	1911	987	1185	1382	1580	1777	1975	2172	2369	95 mph Exposure C
13	876	1051	1226	1401	1576	1752	1927	2102	1086	1303	1520	1738	1955	2172	2389	2606	95 mph Exposure C
14	955	1146	1338	1529	1720	1911	2102	2293	1185	1422	1659	1896	2132	2369	2606	2843	95 mph Exposure C
	1035	1242	1449	1656	1863	2070	2277	2484	1283	1540	1797	2053	2310	2567	2824	3080	95 mph Exposure C
	1115	1338	1560	1783	2006	2229	2452	2675	1382	1659	1935	2211	2488	2764	3041	3317	95 mph Exposure C

INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for a **MULTI SPAN FREESTANDING** Equinox cover and **Single Span Headers**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overtuning Moment** by cross indexing "A" and Post Height
- Lateral Force Resisting System requires F3-F6
 - Moment Frame (M Details) are not allowed**
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "Overtuning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overtuning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overtuning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overtuning Moment** to determine alternate footing sizes.

Table F6

Post Height	8 ft								10 ft								
	max A (ft)		B (ft)		B (ft)		B (ft)		max A (ft)		B (ft)		B (ft)		B (ft)		
8	10	12	14	16	18	20	22	24	10	12	14	16	18	20	22	24	110 mph Exposure C
10	OVERTURNING MOMENT (LBF*FT)																110 mph Exposure C
11	746	764	892	1019	1146	1274	1401	1529	925	948	1106	1264	1422	1580	1738	1896	110 mph Exposure C
12	933	955	1115	1274	1433	1592	1752	1911	1156	1185	1382	1580	1777	1975	2172	2369	110 mph Exposure C
13	1026	1051	1226	1401	1576	1752	1927	2102	1272	1303	1520	1738	1955	2172	2389	2606	110 mph Exposure C
14	1119	1146	1338	1529	1720	1911	2102	2293	1388	1422	1659	1896	2132	2369	2606	2843	110 mph Exposure C
	1212	1242	1449	1656	1863	2070	2277	2484	1503	1540	1797	2053	2310	2567	2824	3080	110 mph Exposure C
	1306	1338	1560	1783	2006	2229	2452	2675	1619	1659	1935	2211	2488	2764	3041	3317	110 mph Exposure C

Table F7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
UPLIFT ONLY CUBE FOOTING d (IN)								
8	20	21	22	23	24	25	26	27
10	21	23	24	25	26	27	28	29
11	22	23	25	26	27	28	29	30
12	23	24	25	27	28	29	30	31
13	23	25	26	27	28	29	30	31
14	24	25	27	28	29	30	31	32

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Table F8

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
UPLIFT ONLY CUBE FOOTING d (IN)								
8	22	23	25	26	27	28	28	29
10	24	25	26	28	29	30	31	32
11	24	26	27	28	30	31	32	33
12	25	27	28	29	31	32	33	34
13	26	27	29	30	31	32	34	34
14	26	28	30	31	32	33	34	35

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- For Structur Moment to determine alternate footing sizes.
- Follow instructions #1-3 above
 - Choose a "B" less than the maximum allowed
 - The maximum "C" is 24"
 - Choose Post Height
 - Determine Overtuning Moment by cross indexing "A" and "B" with the correct height from Table F5 or Table F6
 - Determine Uplift Footing from Table F7 or Table F8
 - Follow Instruction #9 above



DEC 29 2022

Gc. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ Post at Every Span

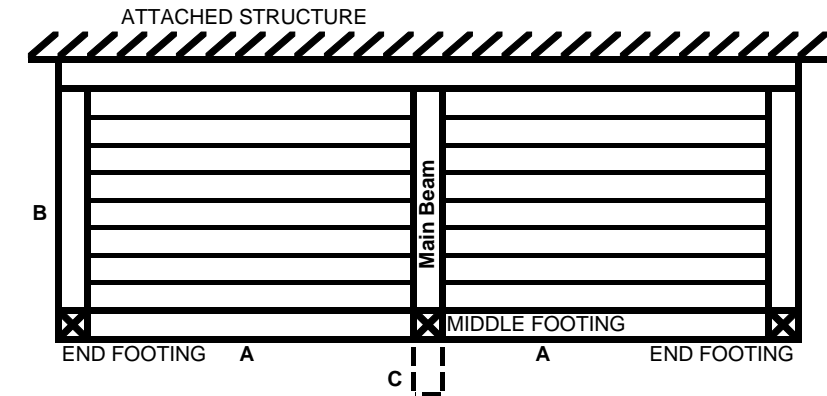
max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table G1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	13.9	10	22.7	30	24	1702	2110	2315
10.0	10	10	11.1	11	21.1	31	25	1998	2478	2718
10.0	11	11	10.1	12	20.4	32	25	2139	2653	2909
10.0	12	12	9.3	13	19.8	33	26	2277	2823	3096
10.0	13	13	8.5	13	19.3	33	26	2412	2991	3280
10.0	14	14	7.9	14	18.9	34	27	2547	3159	3464

Ground Snow Load 20 psf Table G3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	95 mph Exposure C or 110 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	8.0	15	20.2	29	23	1543	1913	2098
20.0	10	10	6.4	17	18.8	30	24	1815	2251	2469
20.0	11	11	5.8	18	18.2	31	25	1945	2412	2646
20.0	12	12	5.3	19	17.7	32	25	2071	2569	2817
20.0	13	13	4.9	20	17.2	32	26	2195	2721	2985
20.0	14	14	4.6	21	16.8	33	26	2318	2874	3152



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	13.9	9	22.0	33	26	1655	2052	2251
10.0	10	10	11.1	11	20.4	33	26	1945	2411	2645
10.0	11	11	10.1	12	19.8	33	26	2083	2583	2833
10.0	12	12	9.3	12	19.2	34	27	2217	2749	3015
10.0	13	13	8.5	13	18.7	35	27	2350	2914	3196
10.0	14	14	7.9	14	18.3	35	28	2481	3077	3374

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design Load (psf)	110 mph Exposure C or 130 mph Exp. B	trib	Max B (ft) (on slab)	Required # of Wall Fasteners	Max B (ft)	Cube Footing		8	10	11
	A					Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	8.0	15	19.8	32	25	1515	1879	2060
20.0	10	10	6.4	17	18.4	34	27	1780	2207	2421
20.0	11	11	5.8	18	17.8	34	27	1906	2364	2592
20.0	12	12	5.3	19	17.3	35	28	2032	2520	2764
20.0	13	13	4.9	20	16.8	36	28	2155	2673	2931
20.0	14	14	4.6	21	16.4	36	29	2275	2821	3093

Main Beam is 'c' Single 0.25"x4"x8" Alum Header Detail B3

Table G2c

Table G4c

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
	OVERTURNING MOMENT (LBF*FT)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C
95 mph Exposure C

- INSTRUCTIONS FOR USING THESE TABLES**
- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
 - 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" IF Detail F3-F6 is used, if Details F1-F2 are used the Max "C" is 0"
 - Choose Post Height
 - Determine **Uplift Footing Size**.
 - Determine **Overturning Moment** by cross indexing "A" and Post Height
 - Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post Connection to Footing: Detail F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - Fasten to wall at every header per Detail W4 and **Required Number of Wall Fasteners** per these tables

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
	OVERTURNING MOMENT (LBF*FT)															
8	892	1019	1146	1274	1401	1529	1656	1783	1106	1264	1422	1580	1738	1896	2053	2211
10	1115	1274	1433	1592	1752	1911	2070	2229	1382	1580	1777	1975	2172	2369	2567	2764
11	1226	1401	1576	1752	1927	2102	2277	2452	1520	1738	1955	2172	2389	2606	2824	3041
12	1338	1529	1720	1911	2102	2293	2484	2675	1659	1896	2132	2369	2606	2843	3080	3317
13	1449	1656	1863	2070	2277	2484	2691	2898	1797	2053	2310	2567	2824	3080	3337	3594
14	1560	1783	2006	2229	2452	2675	2898	3121	1935	2211	2488	2764	3041	3317	3594	3870

110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
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)							
8	24	25	26	27	28	29	29	30
10	26	27	28	29	30	31	32	32
11	27	28	29	30	31	32	33	33
12	27	29	30	31	32	33	34	34
13	28	29	31	32	33	34	35	35
14	29	30	31	32	33	34	35	36

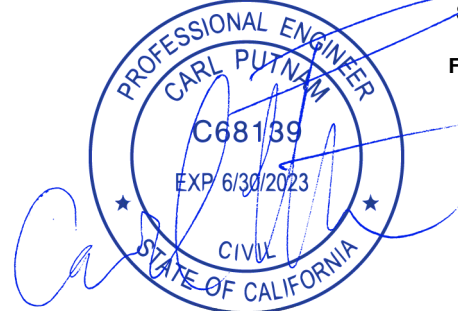
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Table G8

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	27	28	29	30	31	32	33	34
10	29	30	31	32	33	34	35	36
11	30	31	32	33	35	36	37	37
12	31	32	33	34	36	37	38	39
13	31	33	34	35	37	38	39	40
14	32	34	35	36	37	39	40	41

110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C
110 mph Exposure C



DEC 29 2022

Hc. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts

max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf

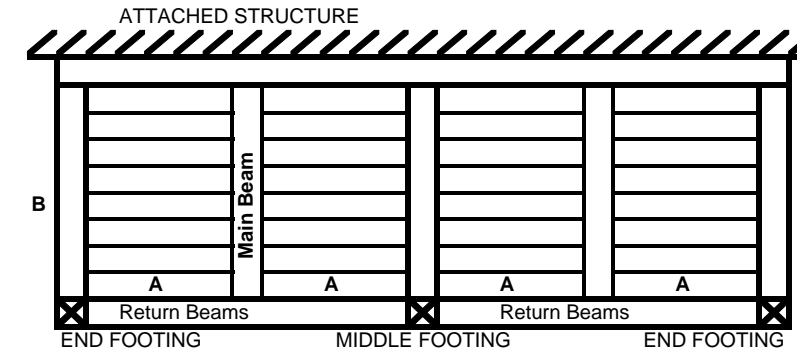
Table H1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	1	10	22.7	35	28	2894	3589	3936
10.0	10	10	2	11	21.1	37	29	3360	4166	4569
10.0	11	11	2	12	20.4	38	30	3578	4436	4866
10.0	12	12	3	13	19.8	39	31	3789	4699	5153
10.0	13	13	3	13	19.3	39	31	3996	4955	5435
10.0	14	14	4	14	18.9	40	32	4203	5211	5716

Ground Snow Load 20 psf

Table H3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	2	15	20.2	34	27	2576	3194	3504
20.0	10	10	3	17	18.8	36	28	2994	3713	4072
20.0	11	11	3	18	18.2	36	29	3190	3956	4338
20.0	12	12	4	19	17.7	37	30	3379	4190	4595
20.0	13	13	5	20	17.2	38	30	3561	4416	4843
20.0	14	14	6	21	16.8	38	31	3744	4642	5092



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
10.0	8	8	1	9	22.0	39	31	2801	3473	3809
10.0	10	10	2	11	20.4	41	33	3252	4033	4423
10.0	11	11	3	12	19.8	42	33	3465	4297	4713
10.0	12	12	3	12	19.2	43	34	3670	4550	4991
10.0	13	13	4	13	18.7	44	35	3871	4800	5265
10.0	14	14	5	14	18.3	44	35	4071	5048	5536

Table H2c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)	Load (psf)	Middle d (in)	End d (in)	8	10	11
20.0	8	8	2	15	19.8	38	30	2520	3125	3428
20.0	10	10	3	17	18.4	40	31	2923	3624	3975
20.0	11	11	3	18	17.8	40	32	3112	3858	4232
20.0	12	12	4	19	17.3	41	33	3300	4092	4488
20.0	13	13	5	20	16.8	42	33	3483	4319	4737
20.0	14	14	6	21	16.4	43	34	3658	4535	4974

Table H4c

Main Beam is 'c' Single 0.25"x4"x8" Alum Header Detail B3

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H5

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)															
8	1274	1529	1783	2038	2293	2548	2803	3057	1580	1896	2211	2527	2843	3159	3475	3791
10	1592	1911	2229	2548	2866	3185	3503	3822	1975	2369	2764	3159	3554	3949	4344	4739
11	1752	2102	2452	2803	3153	3503	3853	4204	2172	2606	3041	3475	3910	4344	4778	5213
12	1911	2293	2675	3057	3439	3822	4204	4586	2369	2843	3317	3791	4265	4739	5213	5687
13	2070	2484	2898	3312	3726	4140	4554	4968	2567	3080	3594	4107	4620	5134	5647	6160
14	2229	2675	3121	3567	4013	4459	4904	5350	2764	3317	3870	4423	4976	5529	6081	6634

Table H6

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	27	29	30	31	33	34	35	36
10	29	31	32	34	35	37	38	39
11	30	32	33	35	36	38	39	40
12	31	33	34	36	37	39	40	41
13	32	34	35	37	38	40	41	42
14	32	34	36	38	39	41	42	43

Table H7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	30	32	34	35	37	38	39	40
10	32	34	36	38	39	41	42	43
11	33	36	37	39	41	42	44	45
12	34	37	39	40	42	43	45	46
13	35	38	40	41	43	45	46	47
14	36	39	41	42	44	46	47	49

Table H8

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 "
- Choose Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details**
These details are allowed if the moment value shown in the detail is higher than the **Overturning Moment**.
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "**Overturning Moment**" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 above
- Choose a "B" less than the maximum allowed
- The maximum "C" is 0 "
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table H5 or Table H6
- Determine Uplift Footing from Table H7 or Table H8
- Follow Instructions #9-11 above



Ic. Tables for Attached Structures with Louvers Parallel w/ Building Wall w/ fewer Posts and Overhang

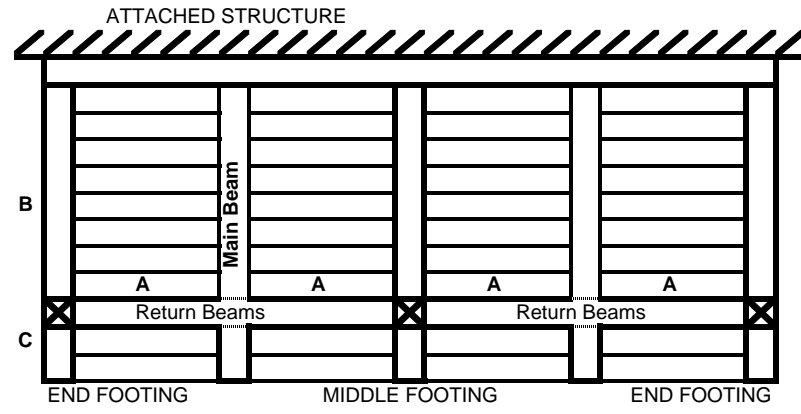
max Ss= 150% Seismic Design Category D (up to Ss= 214%)

Ground Snow Load 10 psf Table I1c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	10	22.7	37	30	3404	4221	4629
10.0	10	10	2	11	21.1	39	31	3997	4956	5435
10.0	11	11	2	12	20.4	40	32	4278	5305	5818
10.0	12	12	3	13	19.8	41	33	4554	5646	6193
10.0	13	13	3	13	19.3	42	33	4824	5982	6561
10.0	14	14	4	14	18.9	43	34	5095	6317	6929

Ground Snow Load 20 psf Table I3c

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	95 mph Exposure C or 110 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	2	15	20.2	36	29	3086	3826	4197
20.0	10	10	3	17	18.8	38	30	3631	4502	4938
20.0	11	11	3	18	18.2	39	31	3891	4824	5291
20.0	12	12	4	19	17.7	40	32	4143	5137	5634
20.0	13	13	5	20	17.2	41	32	4389	5442	5969
20.0	14	14	6	21	16.8	41	33	4635	5748	6304



Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
10.0	8	8	1	9	22.0	41	33	3310	4104	4502
10.0	10	10	2	11	20.4	44	35	3889	4823	5289
10.0	11	11	3	12	19.8	45	35	4166	5166	5666
10.0	12	12	3	12	19.2	46	36	4434	5498	6030
10.0	13	13	4	13	18.7	46	37	4699	5827	6391
10.0	14	14	5	14	18.3	47	38	4962	6153	6749

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3

Beam 'c' Single 0.25"x4"x8" Alum Header Detail B3						Uplift Only		Post Height (ft)		
Roof Design	110 mph Exposure C or 130 mph Exp. B	Required # of 2x8 Return Beams	Required # of Wall Fasteners	Max B (ft)		Cube Footing		8	10	11
Load (psf)	A	trib				Middle d (in)	End d (in)	Overturning Moment (lbf *ft)		
20.0	8	8	2	15	19.8	40	32	3030	3757	4121
20.0	10	10	3	17	18.4	42	34	3560	4414	4841
20.0	11	11	3	18	17.8	43	34	3812	4727	5185
20.0	12	12	4	19	17.3	44	35	4064	5040	5528
20.0	13	13	5	20	16.8	45	36	4311	5345	5863
20.0	14	14	6	21	16.4	46	36	4549	5641	6187

Main Beam is 'c' Single 0.25"x4"x8" Alum Header Detail B3

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

Table I5

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)															
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I6

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)															
8	1783	2038	2293	2548	2803	3057	3312	3567	2211	2527	2843	3159	3475	3791	4107	4423
10	2229	2548	2866	3185	3503	3822	4140	4459	2764	3159	3554	3949	4344	4739	5134	5529
11	2452	2803	3153	3503	3853	4204	4554	4904	3041	3475	3910	4344	4778	5213	5647	6081
12	2675	3057	3439	3822	4204	4586	4968	5350	3317	3791	4265	4739	5213	5687	6160	6634
13	2898	3312	3726	4140	4554	4968	5382	5796	3594	4107	4620	5134	5647	6160	6674	7187
14	3121	3567	4013	4459	4904	5350	5796	6242	3870	4423	4976	5529	6081	6634	7187	7740

Table I7

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	30	31	33	34	35	36	37	38
10	32	34	35	37	38	39	40	41
11	33	35	36	38	39	40	41	42
12	34	36	37	39	40	41	42	43
13	35	37	38	40	41	42	43	45
14	36	38	39	41	42	43	45	46

Table I8

max A (ft)	B (ft)							
	10	12	14	16	18	20	22	24
	UPLIFT ONLY CUBE FOOTING d (IN)							
8	34	35	37	38	39	40	41	42
10	36	38	39	41	42	43	45	46
11	37	39	41	42	44	45	46	47
12	39	40	42	43	45	46	47	49
13	40	41	43	45	46	47	49	50
14	41	42	44	46	47	49	50	51

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INSTRUCTIONS FOR USING THESE TABLES

- These instructions are for an Attached Equinox Cover with **WITH LOUVERS PARALLEL TO EXISTING WALL**
- 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 Post Height
- Determine **Uplift Footing Size**.
- Determine **Overturning Moment** by cross indexing "A" and Post Height
- Choose Lateral Force Resisting System
 - Moment Frame: "M" Details are not allowed.**
 - Moment Resisting Post/Footing Connection: Details F3-F6**
 - Determine "Overturning Moment" from tables on this page
 - Choose a "C" (Post) and "F" (Footing) Details w/ a Moment rating larger than the **Overturning Moment**.
 - For **CONSTRAINED FOOTINGS** go to **Tables X1 or X2**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
 - For **NON CONSTRAINED FOOTINGS** go to **Table X3 or X4**. Cross index the required footing size from #7 (**Uplift Footing Size**) and **Overturning Moment** to determine alternate footing sizes.
- Fasten to wall at every header per Detail W2 and **Required Number of Wall Fasteners** per these tables
- Use number of 2x8 (Detail B1) Return Beams per tables on this page. Table Y3 gives an alternative number of 4x8's (Detail B3, i.e. five 2x8's = two 4x8's)

For Structures using a "B" less than the maximum allowed

- Follow instructions #1-3 a 24
- Choose a "B" less than the maximum allowed
- The maximum "C" is "
- Choose Post Height
- Determine Overturning Moment by cross indexing "A" and "B" with the correct height from Table I5 or Table I6
- Determine Uplift Footing from Table I7 or Table I8
- Follow Instructions #9-11 above



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Wa. ATTACHMENT TO WOOD FRAMED WALL

TABLE W1		#14 Screw w/ 1.5" EMBED in SG=0.5 WOOD (Doug Fir/So Yellow Pine) (DETAIL W1)																						
		Live Load						Ground Snow Loads																
		10 psf		20 psf		25 psf		30 psf		35.7 psf		43 psf		50 psf		60 psf								
Roof Design+ Dead Load		13.5 psf		23.5 psf		24.5 psf		28.7 psf		33.5 psf		39.6 psf		45.5 psf		53.9 psf								
Wind Speed and Exposure	Wind Uplift Load (psf)	Fastener Spacing						Fastener Spacing						Fastener Spacing										
		8"	16"	24"	8"	12"	16"	8"	12"	16"	8"	12"	16"	8"	12"	16"	6"	8"	12"	6"	8"	12"	4"	8"
ALLOWABLE Louver Span (ft)												ALLOWABLE Louver Span (ft)												
95 mph Exposure B	10.6	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
100 mph Exposure B	11.7	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
105 mph Exposure B	12.9	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
110 mph Exposure B	14.2	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
115 mph Exposure B	15.5	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
120 mph Exposure B	16.8	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
130 mph Exposure B	19.8	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
140 mph Exposure B	22.9	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
95 mph Exposure C	14.8	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
100 mph Exposure C	16.4	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
105 mph Exposure C	18.1	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
110 mph Exposure C	19.8	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
115 mph Exposure C	21.7	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
120 mph Exposure C	23.6	14	14	9	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
130 mph Exposure C	27.7	14	12	8	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
140 mph Exposure C	32.1	14	10	7	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
150 mph Exposure C	36.8	14	9	6	14	11	8	14	12	9	14	10	7	13	9	6	12	11	7	12	10	6	11	8
160 mph Exposure C	41.9	14	7	5	14	10	7	14	10	7	14	10	7	13	9	6	12	11	7	12	10	6	11	8

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- Instructions
- Determine o/c spacing of the wood framing.
 - Pick a detail (W1 or W2) appropriate for the project appropriate for the project
 - Cross index on Table W1 or W2 the wind speed, exposure and snow load for your area.
 - Choose a fastener spacing that allows the louver span for your project and is consistent with your wall.

- Ex1. The table requires 8" spacing and your studs are 16" o/c, use two screws per stud.
- Ex2. The table requires 16" spacing and your studs are 24" o/c, use 2 screws at every framing member. (24" /2 = 12" < 16" OK!)
- 5 Follow all manufacturer's instructions

TABLE W2		#14 Screw w/ 2.5" EMBED in SG=0.5 WOOD (Doug Fir/So Yellow Pine) (DETAIL W2)																						
		Live Load						Ground Snow Loads																
		10 psf		20 psf		25 psf		30 psf		35.7 psf		43 psf		50 psf		60 psf								
Roof Design+ Dead Load		13.5 psf		23.5 psf		24.5 psf		28.7 psf		33.5 psf		39.6 psf		45.5 psf		53.9 psf								
Wind Speed and Exposure	Wind Uplift Load (psf)	Fastener Spacing						Fastener Spacing						Fastener Spacing										
		12"	16"	24"	12"	16"	24"	12"	16"	24"	12"	16"	24"	12"	16"	24"	8"	12"	16"	8"	12"			
ALLOWABLE Louver Span (ft)												ALLOWABLE Louver Span (ft)												
95 mph Exposure B	10.6	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
100 mph Exposure B	11.7	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
105 mph Exposure B	12.9	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
110 mph Exposure B	14.2	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
115 mph Exposure B	15.5	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
120 mph Exposure B	16.8	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
130 mph Exposure B	19.8	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
140 mph Exposure B	22.9	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
95 mph Exposure C	14.8	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
100 mph Exposure C	16.4	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
105 mph Exposure C	18.1	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
110 mph Exposure C	19.8	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
115 mph Exposure C	21.7	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
120 mph Exposure C	23.6	14	14	14	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
130 mph Exposure C	27.7	14	14	13	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
140 mph Exposure C	32.1	14	14	11	14	13	9	14	14	10	14	12	8	13	10	7	12	9	6	12	10	8	11	9
150 mph Exposure C	36.8	14	14	9	14	13	9	14	14	9	14	12	8	13	10	7	12	9	6	12	10	8	11	9
160 mph Exposure C	41.9	14	12	8	14	12	8	14	12	8	14	12	8	13	10	7	12	9	6	12	10	8	11	9



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Wb. ATTACHMENT TO MASONRY or CONCRETE WALL

		3/8" Diameter Simpson Strong Tie Titen HD Masonry Ancor w/ 1.75" embed into 8"Hollow CMU (Detail W3)																							
		Live Load						Ground Snow Loads																	
		10 psf		20 psf		25 psf		30 psf		35.7 psf		43 psf		50 psf		60 psf									
Roof Design+ Dead Load		13.5 psf		23.5 psf		24.5 psf		28.7 psf		33.5 psf		39.6 psf		45.5 psf		53.9 psf									
Wind Speed and Exposure	Wind Down (psf)	Wind Uplift Load (psf)	Fastener Spacing						Fastener Spacing						Fastener Spacing										
			16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"						
ALLOWABLE Louver Span (ft)																									
95 mph Exposure B	9.6	10.6	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
100 mph Exposure B	9.6	11.7	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
105 mph Exposure B	9.6	12.9	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
110 mph Exposure B	9.6	14.2	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
115 mph Exposure B	9.6	15.5	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
120 mph Exposure B	10.3	16.8	14	10	6	14	7	4	13	6	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
130 mph Exposure B	12.0	19.8	14	9	6	13	6	4	13	6	4	11	5	3	10	5	3	9	4	3	8	4	2	6	3
140 mph Exposure B	14.0	22.9	14	8	5	12	6	4	12	6	4	11	5	3	10	5	3	9	4	3	8	4	2	6	3
95 mph Exposure C	9.6	14.8	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
100 mph Exposure C	10.0	16.4	14	10	6	14	7	4	14	7	4	12	6	4	11	5	3	9	4	3	8	4	2	6	3
105 mph Exposure C	11.0	18.1	14	9	6	14	7	4	13	6	4	12	6	4	10	5	3	9	4	3	8	4	2	6	3
110 mph Exposure C	12.1	19.8	14	9	6	13	6	4	13	6	4	11	5	3	10	5	3	9	4	3	8	4	2	6	3
115 mph Exposure C	13.2	21.7	14	8	5	13	6	4	12	6	4	11	5	3	10	5	3	9	4	3	8	4	2	6	3
120 mph Exposure C	14.4	23.6	14	7	5	12	6	4	12	6	4	11	5	3	10	5	3	9	4	3	8	4	2	6	3
130 mph Exposure C	16.9	27.7	13	6	4	12	6	4	11	5	3	10	5	3	9	4	3	8	4	2	7	3	2	6	3
140 mph Exposure C	19.6	32.1	11	5	3	11	5	3	11	5	3	10	5	3	9	4	3	8	4	2	7	3	2	6	3
150 mph Exposure C	22.5	36.8	10	5	3	10	5	3	10	5	3	9	4	3	8	4	2	7	3	2	7	3	2	6	3
160 mph Exposure C	25.5	41.9	8	4	2	8	4	2	8	4	2	8	4	2	8	4	2	7	3	2	6	3	2	6	3

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Instructions

- 1 Determine if masonry wall is grouted or ungrouted.
- 2 Cross index on Table W3 or W4 the wind speed, exposure and snow load for your area.
- 3 Choose a fastener spacing that allows the louver span for your project.
- 4 Follow all manufacturer's instructions.

		1/4" Diameter Simpson Strong-Tie Titen HD Screw Anchors (ICC ESR 1056) w/ 2.5" embed in FULLY GROUDED MASONRY (DETAIL W3)																							
		Live Load						Ground Snow Loads																	
		10 psf		20 psf		25 psf		30 psf		35.7 psf		43 psf		50 psf		60 psf									
Roof Design+ Dead Load		13.5 psf		23.5 psf		24.5 psf		28.7 psf		33.5 psf		39.6 psf		45.5 psf		53.9 psf									
Wind Speed and Exposure	Wind Down (psf)	Wind Uplift Load (psf)	Fastener Spacing						Fastener Spacing						Fastener Spacing										
			16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"	48"	16"	32"						
ALLOWABLE Louver Span (ft)																									
95 mph Exposure B	9.6	10.6	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
100 mph Exposure B	9.6	11.7	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
105 mph Exposure B	9.6	12.9	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
110 mph Exposure B	9.6	14.2	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
115 mph Exposure B	9.6	15.5	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
120 mph Exposure B	10.3	16.8	14	14	13	14	14	9	14	13	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
130 mph Exposure B	12.0	19.8	14	14	12	14	13	9	14	13	8	14	11	7	13	10	7	12	9	6	12	8	5	11	6
160 mph Exposure B	18.2	29.9	14	12	8	14	11	7	14	11	7	14	10	6	13	9	6	12	8	5	12	7	5	11	6
95 mph Exposure C	9.6	14.8	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
100 mph Exposure C	10.0	16.4	14	14	13	14	14	9	14	14	9	14	12	8	13	11	7	12	9	6	12	8	5	11	6
105 mph Exposure C	11.0	18.1	14	14	12	14	14	9	14	13	9	14	12	8	13	10	7	12	9	6	12	8	5	11	6
110 mph Exposure C	12.1	19.8	14	14	12	14	13	9	14	13	8	14	11	7	13	10	7	12	9	6	12	8	5	11	6
115 mph Exposure C	13.2	21.7	14	14	11	14	13	8	14	12	8	14	11	7	13	10	6	12	9	6	12	8	5	11	6
120 mph Exposure C	14.4	23.6	14	14	10	14	12	8	14	12	8	14	11	7	13	10	6	12	9	6	12	8	5	11	6
130 mph Exposure C	16.9	27.7	14	13	9	14	12	8	14	11	7	14	10	7	13	9	6	12	8	5	12	7	5	11	6
140 mph Exposure C	19.6	32.1	14	11	7	14	11	7	14	11	7	14	10	6	13	9	6	12	8	5	12	7	5	11	6
150 mph Exposure C	22.5	36.8	14	10	6	14	10	6	14	10	6	14	9	6	13	8	5	12	7	5	12	7	4	11	6
160 mph Exposure C	25.5	41.9	14	8	5	14	8	5	14	8	5	14	8	5	13	8	5	12	7	5	12	6	4	11	6



DEC 29 2022

Xa. MOMENT RESISTING FOOTING SIZE for Constrained Footings

Limit for Detail F5>> Limit for Detail C1>>

Table X1

Uplift Footing (in)	Overturning Moment (lb*ft)			CONSTRAINED CUBE FOOTING (in) d x d x d																					
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2500	3000	3500	4000	4500	5000	6000	7000
18	19	20	21	22	22	23	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
20	20	20	21	22	22	23	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
21	21	21	21	22	22	23	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
22	22	22	22	22	22	23	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
23	23	23	23	23	23	23	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
24	24	24	24	24	24	24	24	24	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
25	25	25	25	25	25	25	25	25	25	25	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
26	26	26	26	26	26	26	26	26	26	26	26	26	27	27	27	28	28	30	31	32	33	34	35	37	38
27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	28	28	30	31	32	33	34	35	37	38
28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	30	31	32	33	34	35	37	38
29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	30	31	32	33	34	35	37	38
30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	31	32	33	34	35	37	38
31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	32	33	34	35	37	38
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	34	35	37	38
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34	35	37	38
34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	35	37	38
35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	37	38
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	38
37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38
38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40

Table X2

Uplift Footing (in)	Overturning Moment (lb*ft)			CONSTRAINED SMALLEST FOOTING WIDTH x WIDTH x DEPTH																					
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2500	3000	3500	4000	4500	5000	6000	7000
18	17x17x19	17x17x21	16x16x23	16x16x24	15x15x25	15x15x27	14x14x28	14x14x29	14x14x30	14x14x31	14x14x32	13x13x33	13x13x34	13x13x34	13x13x35	13x13x36	13x13x37	12x12x40	12x12x43	11x11x46	11x11x48	11x11x51	10x10x53	10x10x57	10x10x61
20	21x21x18	20x20x20	19x19x21	19x19x23	18x18x24	18x18x25	18x18x26	17x17x27	17x17x28	17x17x29	16x16x30	16x16x31	16x16x32	16x16x32	16x16x33	15x15x34	15x15x34	15x15x38	14x14x41	14x14x43	13x13x45	13x13x48	13x13x50	12x12x53	12x12x57
21	23x23x18	22x22x19	21x21x21	21x21x22	20x20x23	20x20x24	19x19x25	19x19x26	18x18x27	18x18x28	18x18x29	18x18x30	17x17x31	17x17x31	17x17x32	17x17x33	17x17x33	16x16x37	15x15x39	15x15x42	14x14x44	14x14x46	14x14x48	13x13x52	13x13x55
22	25x25x17	24x24x19	23x23x20	22x22x21	22x22x23	21x21x24	21x21x25	20x20x26	20x20x27	20x20x27	19x19x28	19x19x29	19x19x30	19x19x30	18x18x31	18x18x32	18x18x33	17x17x36	17x17x38	16x16x41	16x16x43	15x15x45	15x15x47	15x15x50	14x14x54
23	27x27x17	26x26x18	25x25x20	24x24x21	24x24x22	23x23x23	23x23x24	22x22x25	22x22x26	21x21x27	21x21x27	21x21x28	20x20x29	20x20x30	20x20x30	20x20x31	20x20x32	19x19x35	18x18x37	18x18x40	17x17x42	17x17x44	16x16x46	16x16x49	15x15x52
24	29x29x16	28x28x18	27x27x19	26x26x20	25x25x21	25x25x22	24x24x23	24x24x24	23x23x25	23x23x26	23x23x27	22x22x28	22x22x28	22x22x29	22x22x30	21x21x30	21x21x31	20x20x34	20x20x36	19x19x39	18x18x41	18x18x43	18x18x45	17x17x48	16x16x51
25	31x31x16	30x30x17	29x29x18	28x28x19	27x27x20	27x27x21	26x26x22	26x26x23	25x25x24	25x25x25	24x24x26	24x24x27	24x24x28	24x24x28	23x23x29	23x23x30	23x23x30	22x22x33	21x21x35	20x20x38	20x20x40	19x19x42	19x19x44	18x18x47	18x18x50
26	34x34x15	32x32x17	31x31x18	30x30x19	29x29x20	29x29x21	28x28x22	28x28x23	27x27x24	27x27x25	26x26x26	26x26x27	25x25x28	25x25x28	25x25x29	24x24x30	24x24x30	23x23x32	23x23x35	22x22x37	21x21x39	21x21x41	20x20x42	20x20x46	19x19x49
27	36x36x15	35x35x17	33x33x18	32x32x19	31x31x20	31x31x21	30x30x22	29x29x23	29x29x23	29x29x24	28x28x25	28x28x26	27x27x27	27x27x27	27x27x28	26x26x29	26x26x29	25x25x31	24x24x34	23x23x36	23x23x38	22x22x40	22x22x42	21x21x45	20x20x47
28	39x39x15	37x37x16	36x36x17	34x34x19	34x34x20	33x33x20	32x32x21	31x31x22	31x31x23	30x30x24	30x30x24	30x30x25	29x29x26	29x29x26	29x29x27	28x28x28	28x28x28	27x27x31	26x26x33	25x25x35	24x24x37	24x24x39	23x23x41	22x22x44	22x22x46
29	41x41x14	39x39x16	38x38x17	37x37x18	36x36x19	35x35x20	34x34x21	34x34x22	33x33x22	32x32x23	32x32x24	32x32x25	31x31x25	31x31x26	30x30x26	30x30x27	30x30x28	28x28x30	27x27x32	27x27x34	26x26x36	25x25x38	25x25x40	24x24x43	23x23x46
30	44x44x14	42x42x16	40x40x17	39x39x18	38x38x19	37x37x20	36x36x20	36x36x21	35x35x22	34x34x23	34x34x23	33x33x24	33x33x25	33x33x25	32x32x26	32x32x26	32x32x27	30x30x30	29x29x32	28x28x34	28x28x36	27x27x37	26x26x39	25x25x42	25x25x45
31	46x46x14	44x44x15	43x43x16	41x41x17	40x40x18	39x39x19	39x39x20	38x38x21	37x37x22	37x37x22	36x36x23	36x36x24	35x35x24	35x35x25	34x34x25	34x34x26	34x34x26	32x32x29	31x31x31	30x30x33	29x29x35	29x29x37	28x28x38	27x27x41	26x26x44
32	49x49x14	47x47x15	45x45x16	44x44x17	43x43x18	42x42x19	41x41x20	40x40x20	39x39x21	39x39x22	38x38x23	38x38x23	37x37x24	37x37x24	36x36x25	36x36x25	36x36x26	34x34x28	33x33x31	32x32x33	31x31x34	30x30x36	30x30x37	29x29x40	28x28x43
33	52x52x13	50x50x15	48x48x16	46x46x17	45x45x18	44x44x19	43x43x19	42x42x20	42x42x21	41x41x21	40x40x22	40x40x23	39x39x23	39x39x24	38x38x24	38x38x25	38x38x26	36x36x28	35x35x30	34x34x32	33x33x34	32x32x35	31x31x37	30x30x40	29x29x42
34	55x55x13	52x52x14	50x50x15	49x49x16	48x48x17	46x46x18	45x45x19	45x45x20	44x44x20	43x43x21	43x43x22	42x42x22	41x41x23	41x41x23	40x40x24	40x40x25	40x40x25	38x38x27	37x37x29	35x35x31	34x34x33	34x34x35	33x33x36	32x32x39	31x31x41
35	58x58x13	55x55x14	53x53x15	51x51x16	50x50x17	49x49x18	48x48x19	47x47x19	46x46x20	45x45x21	45x45x21	44x44x22	44x44x23	43x43x23	43x43x24	42x42x24	42x42x25	40x40x27	38x38x29	37x37x31	36x36x32	35x35x34	35x35x36	33x33x38	32x32x41
36	61x61x13	58x58x14	56x56x15	54x54x16	53x53x17	51x51x18	50x50x18	49x49x19	49x49x20	48x48x20	47x47x21	46x46x22	46x46x22	45x45x23	45x45x23	44x44x24	44x44x24	42x42x26	40x40x28	39x39x30	38x38x32	37x37x33	37x37x35	35x35x38	34x34x40
37	64x64x13	61x61x14	59x59x15	57x57x16	55x55x17	54x54x17	53x53x18	52x52x19	51x51x19	50x50x20	50x50x21	49x49x21	48x48x22	48x48x22	47x47x23	47x47x23	46x46x24	44x44x26	43x43x28	41x41x30	40x40x31	39x39x33	38x38x34	37x37x37	36x36x39
38	67x67x12	64x64x13	62x62x14	60x60x15	58x58x16	57x57x17	56x56x18	55x55x18	54x54x19	53x53x20	52x52x20	51x51x21	51x51x21	50x50x22	49x49x22	49x49x23	48x48x23	46x46x26	45x45x28	43x43x29	42x42x31	41x41x32	40x40x34	39x39x36	38x38x39
39	70x70x12	67x67x13	65x65x14	63x63x15	61x61x16	59x59x17	58x58x17	57x57x18	56x56x19	55x55x19	54x54x20	54x54x21	53x53x21	52x52x22	52x52x22	51x51x23	51x51x23	48x48x25	47x47x27	45x45x29	44x44x30	43x43x32	42x42x33	41x41x36	39x39x38
40	73x73x12	70x70x13	68x68x14	65x65x15	64x64x16	62x62x17	61x61x17	60x60x18	59x59x19	58x58x19	57x57x20	56x56x20	55x55x21	55x55x21	54x54x22	54x54x22	53x53x23	51x51x25	49x49x27	47x47x28	46x46x30	45x45x31	44x44x33	43x43x35	41x41x38

Xb. MOMENT RESISTING FOOTING SIZE for Non Constrained Footings

Table X3

Uplift Footing (in)	NON CONSTRAINED CUBE FOOTING SIZE																								
	Overturning Moment (lb*ft)																								
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2500	3000	3500	4000	4500	5000	6000	7000
18	22	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
20	22	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
21	22	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
22	22	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
23	23	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
24	24	24	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
25	25	25	25	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
26	26	26	26	26	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
27	27	27	27	27	27	27	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
28	28	28	28	28	28	28	28	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
29	29	29	29	29	29	29	29	29	29	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
30	30	30	30	30	30	30	30	30	30	30	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
31	31	31	31	31	31	31	31	31	31	31	31	31	32	32	33	33	33	35	37	38	40	41	42	44	46
32	32	32	32	32	32	32	32	32	32	32	32	32	32	32	33	33	33	35	37	38	40	41	42	44	46
33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	35	37	38	40	41	42	44	46
34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	35	37	38	40	41	42	44	46
35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	37	38	40	41	42	44	46
36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	37	38	40	41	42	44	46
37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37	38	40	41	42	44	46
38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	40	41	42	44	46
39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	40	41	42	44	46
40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	41	42	44	46

Table X4

Uplift Footing (in)	NON CONSTRAINED SMALLEST FOOTING WIDTH x WIDTH x DEPTH																								
	Overturning Moment (lb*ft)																								
	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2500	3000	3500	4000	4500	5000	6000	7000
18	15x15x27	14x14x30	13x13x32	13x13x35	13x13x37	12x12x39	12x12x41	12x12x43	11x11x44	11x11x46	11x11x48	11x11x49	11x11x51	11x11x52	10x10x54	10x10x55	10x10x56	10x10x63	9x9x68	9x9x74	9x9x78	8x8x83	8x8x88	8x8x96	7x7x104
20	16x16x26	15x15x29	15x15x31	14x14x33	14x14x36	14x14x37	13x13x39	13x13x41	13x13x43	12x12x44	12x12x46	12x12x47	12x12x49	12x12x50	12x12x52	11x11x53	11x11x54	11x11x60	10x10x66	10x10x71	10x10x75	9x9x80	9x9x84	9x9x92	8x8x100
21	18x18x25	17x17x28	16x16x30	16x16x32	15x15x34	15x15x36	15x15x38	14x14x40	14x14x41	14x14x43	13x13x44	13x13x46	13x13x47	13x13x48	13x13x50	13x13x51	12x12x52	12x12x58	11x11x63	11x11x68	10x10x73	10x10x77	10x10x81	9x9x89	9x9x96
22	19x19x24	19x19x27	18x18x29	17x17x31	17x17x33	16x16x35	16x16x37	16x16x38	15x15x40	15x15x41	15x15x43	14x14x44	14x14x45	14x14x47	14x14x48	14x14x49	14x14x50	13x13x56	12x12x61	12x12x66	11x11x70	11x11x74	11x11x78	10x10x86	10x10x92
23	21x21x24	20x20x26	19x19x28	19x19x30	18x18x32	18x18x34	17x17x36	17x17x37	17x17x39	16x16x40	16x16x41	16x16x43	16x16x44	15x15x45	15x15x47	15x15x48	15x15x49	14x14x54	13x13x59	13x13x64	13x13x68	12x12x72	12x12x76	11x11x83	11x11x89
24	23x23x23	22x22x25	21x21x28	20x20x29	20x20x31	19x19x33	19x19x35	18x18x36	18x18x37	18x18x39	17x17x40	17x17x41	17x17x43	17x17x44	16x16x45	16x16x46	16x16x47	15x15x53	15x15x57	14x14x62	14x14x66	13x13x69	13x13x73	12x12x80	12x12x86
25	25x25x22	24x24x25	23x23x27	22x22x29	21x21x30	21x21x32	20x20x34	20x20x35	19x19x36	19x19x38	19x19x39	19x19x40	18x18x41	18x18x43	18x18x44	18x18x45	17x17x46	16x16x51	16x16x56	15x15x60	15x15x64	14x14x67	14x14x71	13x13x77	13x13x84
26	27x27x22	25x25x24	24x24x26	24x24x28	23x23x30	22x22x31	22x22x33	21x21x34	21x21x35	21x21x37	20x20x38	20x20x39	20x20x40	19x19x41	19x19x43	19x19x44	19x19x45	18x18x50	17x17x54	16x16x58	16x16x62	15x15x65	15x15x69	14x14x75	14x14x81
27	29x29x21	27x27x23	26x26x25	25x25x27	25x25x29	24x24x30	24x24x32	23x23x33	23x23x34	22x22x36	22x22x37	21x21x38	21x21x39	21x21x40	21x21x41	20x20x42	20x20x44	19x19x48	18x18x53	18x18x56	17x17x60	17x17x64	16x16x67	16x16x73	15x15x79
28	31x31x21	29x29x23	28x28x25	27x27x26	26x26x28	26x26x30	25x25x31	25x25x32	24x24x34	24x24x35	23x23x36	23x23x37	23x23x38	22x22x39	22x22x40	22x22x41	22x22x42	20x20x47	20x20x51	19x19x55	18x18x59	18x18x62	17x17x65	17x17x71	16x16x77
29	33x33x20	31x31x22	30x30x24	29x29x26	28x28x27	28x28x29	27x27x30	26x26x32	26x26x33	25x25x34	25x25x35	25x25x36	24x24x37	24x24x38	24x24x39	23x23x40	23x23x41	22x22x46	21x21x50	20x20x54	20x20x57	19x19x60	19x19x63	18x18x69	17x17x75
30	35x35x20	33x33x22	32x32x24	31x31x25	30x30x27	29x29x28	29x29x30	28x28x31	28x28x32	27x27x33	27x27x34	26x26x35	26x26x36	26x26x37	25x25x38	25x25x39	25x25x40	23x23x45	22x22x49	22x22x52	21x21x56	20x20x59	20x20x62	19x19x68	18x18x73
31	37x37x19	36x36x21	34x34x23	33x33x25	32x32x26	31x31x28	30x30x30	29x29x31	29x29x32	28x28x34	28x28x35	28x28x36	27x27x37	27x27x38	26x26x39	26x26x40	26x26x41	25x25x44	24x24x48	23x23x51	22x22x54	22x22x57	21x21x60	20x20x66	20x20x71
32	40x40x19	38x38x21	36x36x23	35x35x24	34x34x26	33x33x27	32x32x28	32x32x30	31x31x31	31x31x32	30x30x33	30x30x34	29x29x35	29x29x36	28x28x37	28x28x38	28x28x39	26x26x43	25x25x46	24x24x50	24x24x53	23x23x56	22x22x59	22x22x64	21x21x69
33	42x42x19	40x40x20	38x38x22	37x37x24	36x36x25	35x35x26	34x34x28	34x34x29	33x33x30	32x32x31	32x32x32	31x31x33	31x31x34	31x31x35	30x30x36	30x30x37	29x29x38	28x28x42	27x27x45	26x26x49	25x25x52	24x24x55	24x24x58	23x23x63	22x22x68
34	44x44x18	42x42x20	41x41x22	39x39x23	38x38x25	37x37x26	36x36x27	36x36x28	35x35x29	34x34x30	34x34x31	33x33x32	33x33x33	32x32x34	32x32x35	32x32x36	31x31x37	30x30x41	28x28x44	27x27x48	27x27x51	26x26x54	25x25x56	24x24x62	23x23x66
35	47x47x18	45x45x20	43x43x21	42x42x23	40x40x24	39x39x25	38x38x27	38x38x28	37x37x29	36x36x30	36x36x31	35x35x32	35x35x33	34x34x34	34x34x35	33x33x35	33x33x36	31x31x40	30x30x44	29x29x47	28x28x50	27x27x53	27x27x55	26x26x60	25x25x65
36	49x49x18	47x47x19	45x45x21	44x44x22	43x43x24	41x41x25	41x41x26	40x40x27	39x39x28	38x38x29	38x38x30	37x37x31	37x37x32	36x36x33	36x36x34	35x35x35	35x35x36	33x33x39	32x32x43	31x31x46	30x30x49	29x29x52	28x28x54	27x27x59	26x26x63
37	52x52x17	50x50x19	48x48x21	46x46x22	45x45x23	44x44x24	43x43x26	42x42x27	41x41x28	40x40x29	40x40x30	39x39x31	38x38x32	38x38x32	37x37x33	37x37x34	37x37x35	35x35x39	33x33x42	32x32x45	31x31x48	30x30x51	30x30x53	28x28x58	27x27x62
38	55x55x17	52x52x19	50x50x20	48x48x22	47x47x23	46x46x24	45x45x25	44x44x26	43x43x27	42x42x28	42x42x29	41x41x30	40x40x31	40x40x32	39x39x33	39x39x33	38x38x34	37x37x38	35x35x41	34x34x44	33x33x47	32x32x50	31x31x52	30x30x57	29x29x61
39	57x57x17	55x55x18	53x53x20	51x51x21	49x49x22	48x48x24	47x47x25	46x46x26	45x45x27	44x44x28	44x44x29	43x43x30	42x42x30	42x42x31	41x41x32	41x41x33	40x40x34	38x38x37	37x37x40	36x36x43	35x35x46	34x34x49	33x33x51	31x31x56	30x30x60
40	60x60x16	57x57x18	55x55x19	53x53x21	52x52x22	51x51x23	49x49x24	48x48x25	47x47x26	47x47x27	46x46x28	45x45x29	45x45x30	44x44x31	43x43x32	43x43x32	42x42x33	40x40x37	39x39x40	37x37x43	36x36x45	35x35x48	34x34x50	33x33x55	32x32x59

Y. REQUIRED FASTENERS FOR POST CONNECTIONS AND RETURN BEAM ALTERNATIVES

TABLE Y1		Required Number of Fasteners for Shearing Loads			
min t (in) >>>>>		0.125	0.125	0.125	0.1875
Uplift Footing d (in)	Net Uplift (lbf)	V1 625 #14 SDS	V2 1442 3/8" Bolt	V3 1923 1/2" Bolt	V4 2651 1/2" Bolt
20	417	1	1	1	1
21	482	1	1	1	1
22	555	1	1	1	1
23	634	2	1	1	1
24	720	2	1	1	1
25	814	2	1	1	1
26	915	2	1	1	1
27	1025	2	1	1	1
28	1143	2	1	1	1
29	1270	3	1	1	1
30	1406	3	1	1	1
31	1552	3	2	1	1
32	1707	3	2	1	1
33	1872	3	2	1	1
34	2047	4	2	2	1
35	2233	4	2	2	1
36	2430	4	2	2	1
37	2638	5	2	2	1
38	2858	5	2	2	2
39	3090	5	3	2	2
40	3333	6	3	2	2
41	3590	6	3	2	2
42	3859	7	3	3	2
43	4141	7	3	3	2
44	4437	8	4	3	2
45	4746	8	4	3	2
46	5070	9	4	3	2
47	5407	9	4	3	3
48	5760	10	4	3	3
49	6128	10	5	4	3
50	6510	11	5	4	3

TABLE Y2		Required Number of Fasteners for Tensile Loads				
min t (in) >>>>>		0.125	0.125	0.125	0.1875	0.1875
Uplift Footing d (in)	Net Uplift (lbf)	T1 266 #14 SDS	T2 721 3/8" Bolt	T3 962 1/2" Bolt	T4 1082 3/8" Bolt	T5 1442 1/2" Bolt
20	417	2	1	1	1	1
21	482	2	1	1	1	1
22	555	3	1	1	1	1
23	634	3	1	1	1	1
24	720	3	1	1	1	1
25	814	4	2	1	1	1
26	915	4	2	1	1	1
27	1025	4	2	2	1	1
28	1143	5	2	2	2	1
29	1270	5	2	2	2	1
30	1406	6	2	2	2	1
31	1552	6	3	2	2	2
32	1707	7	3	2	2	2
33	1872	8	3	2	2	2
34	2047	8	3	3	2	2
35	2233	9	4	3	3	2
36	2430	10	4	3	3	2
37	2638	10	4	3	3	2
38	2858	11	4	3	3	2
39	3090	12	5	4	3	3
40	3333	13	5	4	4	3
41	3590	14	5	4	4	3
42	3859	15	6	5	4	3
43	4141	16	6	5	4	3
44	4437	17	7	5	5	4
45	4746	18	7	5	5	4
46	5070	20	8	6	5	4
47	5407	21	8	6	5	4
48	5760	22	8	6	6	4
49	6128	24	9	7	6	5
50	6510	25	10	7	7	5

Nomenclature

SDS= SELF DRILLING SCREW

BOLT= ASTM A307 STEEL BOLT

ALL BOLTS REQUIRE A STEEL WASHER

EQUAL TO TWICE THE BOLT DIAMETER

min t = minimum thickness metal in the connection

for tensile connections look at bracket and header

for shear connections look at post and bracket

Shearing Load = load is transverse to the fastener axis

Tensile Load = load is parallel to the fastener axis

INSTRUCTIONS

- 1 Know the required UPLIFT footing, "d", from the tables in sections A-I
- 2 Determine the minimum metal thickness, "min t", of the connection
- 3 Cross index the "d" and the desired fastener with the correct "min t"
- 4 Choose a fastener pattern that is symmetric. If double beam (Detail B2) then split the fasteners evenly among them
- 5 You may need to add a fastener to ensure they are evenly divided.
- 6 The minimum spacing between fasteners is 4x the root diameter (#14 SDS = 0.25" >> 4D = 1") of the fastener
- 7 Minimum edge distance is 2x the root diameter of the fastener
- 8 All horizontal fasteners in post connections must comply only with Table Y1
- 9 For posts using Details F3-F6 (moment resisting post/footing connection) all vertical fasteners must comply with Table Y2
- 10 For posts NOT using Detail F3-F6 then all vertical fasteners must comply with Table Y2 AND the appropriate Detail of M1-M3

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Table Y3 Allowed Substitution for Multiple Return Beams							
0.125"x2x8's required (Detail B1)	2	3	4	5	6	7	8
0.25"x4x8's required (Detail B3)	1	2	2	2	3	3	3



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