Solara Adjustable Patio Cover, Carport and Commercial Structure Engineering 2009 IBC

This report covers these maximum conditions

Ground Snow Loads 10 psf 20 psf

Wind Speed 90 MPH EXPOSURE B

and Exposure 90 MPH EXPOSURE C or 95 MPH EXPOSURE B
100 MPH EXPOSURE C or 110 MPH EXPOSURE B

100 MPH EXPOSURE C or 110 MPH EXPOSURE B 110 MPH EXPOSURE C or 120 MPH EXPOSURE B

Maximum Ss = 150% Seismic Design Category D

2 PAGES GENERAL NOTES

GENERAL NOTES PROFESSIONAL ENGINEERING STAMPS PAGE

PAGES SECTION DESCRIPTION

1 PAGE A. Louver and Rafter Spans for Louver and Commercial Covers

1 PAGE

B. Tables for Attached Structures with Single Span Headers with Only 2 Posts

1 PAGE C. Tables for Attached Structures with Single Span Headers with 3 Posts Minimum

1 PAGE D. Tables for Attached Structures with Single Span Rafters with at Least 3 Posts

1 PAGE W. ATTACHMENT TO WALL and REQUIRED NUMBER OF RAFTER/HEADER CONNECTIONS

1 PAGE SOLARA STRUCTURAL CONFIGURATIONS

4 PAGES COMPONENT PARTS AND CONNECTION DETAILS

November 6, 2013

Solara Adjustable Patio Cover 602 N 24th Street Phoenix, AZ 85008 (602) 388-8429

NOV 06 2013

GENERAL NOTES:

- 1. DESIGNED IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE.
- ALUMINUM DESIGN IN ACCORDANCE WITH THE 2005 EDITION OF ALUMINUM ASSOCIATION'S SPECIFICATIONS AND CHAPTER
 OF THE INTERNATIONAL BUILDING CODE.
- 3. DESIGN LOADINGS: Ct = 1.2, I = 1.0, Ce = 1.0 (ALL EXPOSURES EXCEPT B AND C WHEN LOCATED TIGHT IN AMONG CONIFERS)
 GROUND SNOW LOAD DESIGN LOAD

 10 PS
 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

FOR 0.25/12 < SLOPE < 1/12

WIND SPEEDS IN THE 2009 IBC ARE "3 SECOND GUST WIND SPEED." ALL STRUCTURES DESCRIBED IN THIS REPORT ARE DESIGNED USING PRESSURES CALCULATED FROM "3 SECOND GUST 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 HIGHER A HIGHER Kzt VALUE (ISOLATED HILLS, RIDGES, ESCARPMENTS) WILL REQUIRE HIGHER WIND LOADS AS PER ASCE7-05 SECTION 6.5.7 AND ARE OUTSIDE THE SCOPE OF THIS REPORT.

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

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

SEISMIC LOADING

MAXIMUM Ss = 150% SHOWN IN 2009 IBC FIGURE 1613.5(1)

Ss > 150% ARE NOT REQUIRED AS PER ASCE7-05 12.8.1.3

S1 NOT APPLICABLE TO THESE STRUCTURES

SITE CLASS = D

BASIC SEISMIC FORCE RESISTING SYSTEM

POSTS EMBEDDED INTO FOOTINGS = ORDINARY STEEL MOMENT FRAME >> R = 1.25

POSTS SURFACE MOUNTED = GENERIC SYSTEM >> R= 1,25

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

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

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

- 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. IOUVER AND RAFTER SPAN TABLES
 - d. HEADER POST SPACING, FOOTING SIZE AND POST TABLE FOR LIVE/SNOW AND WIND LOAD
 - e. ALL APPROPRIATE DETAILS
 - f. OTHER DOCUMENTATION REQUIRED BY LOCAL BUILDING AUTHORITY.
- 5. CONCRETE MIX: F_{c} =2500, 3000 OR 3500 PSI FOR 28 DAYS IN NEGLIGIBLE, MODERATE, AND SEVERE CONDITIONS AS SHOWN IN FIGURE 1904.3 OF THE 2009 IBC. PATIO STRUCTURES MAY BE ATTACHED TO CONCRETE SLAB WITHOUT FOOTINGS (DETAILS 28, AQ AND AO) WHEN THE POST LOAD IS 750 LBF OR LESS AND THE FROST DEPTHE 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 FROM TABLE 1806.2 OF 2009 IBC. ALLOWABLE FOUNDATION PRESSURE IS 1500 POUNDS PER SQUARE FOOT. LATERAL BEARING PRESSURE IS 100 PSF/FT AND IS DOUBLED PER IBC SECTION 1806.3.4. THESE DESIGN VALUES DO NOT APPLY TO MUD, ORGANIC SILTS, ORGANIC CLAYS, PEAT OR UNPREPARED FILLS AND MAY REQUIRE FURTHER SOIL INVESTIGATION. THE BUILDING OFFICIAL MAY ASSIGN A LOAD BEARING CAPACITY. UNITS IN ROOF 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. WOOD USED IN CONNECTIONS SHALL BE PROTECTED FROM WEATHER (EXTERIOR EXPOSURE) AS PER IBC SECTION 1403.2 AND /OR 1503
- 9. ALL STEEL SHALL BE GALVANIZED PER ASTM A-653 G90, A123 G45 OR A153 B-3, PAINTED PER ASTM A755 OR PROTECTED WITH AN APPROVED COATING COMPLYING WITH IBC SECTION 2203.2.
- 10. ALTERNATE ALUMINUM ALLOYS OF EQUAL OR HIGHER STRENGTHS MAY BE USED. 3004H2x ALUMINUM MAY BE SUBSTITUTED FOR 3004H3x.
- 11. STEEL FASTENERS SHALL BE EITHER STAINLESS (3000 SERIES), GALVANIZED OR DOUBLE CADMIUM PLATED. BOLTS SHALL BE ASTM A-307 HOT DIPPED GLAVANIZED, MECHANICALLY GALVANIZED, ZINC ELECTROPLATED, ALUMINIZED OR 300 SERIES STAINLESS STEEL. CONCRETE ANCHOR BOLTS ARE SPECIFED IN THE DETAILS. ALL WOOD SCREWS MUST COMPLY WITH ANSI/ASME STANDARD B18.6.1 AHD AND AF&PA NDS-05 11.1.4. ALL LAG SCREWS ANSI/ASME B18.2.1 AND AF&PA NDS-05 11.1.3. ALL STEEL WASHERS TO BE ASTM F844 W/ DIMENSIONS IN ACCORDANCE WITH ASME B18.22.1, TYPE A. THE MINIMUM WASHER DIAMETER SHALL BE 1" FOR BOLTED CONNECTIONS. ALL STEEL NUTS TO BE ASTM A563. SCREWS AND BOLTS SHALL HAVE A MINIMUM EDGE DISTANCE OF 2X FASTENER DIAMETER.
- 12. EMBEDDED POST SURFACES SHALL BE CLEAN AND FREE FROM OILY SURFACES.
- 13. ALL SELF DRILLING AND SELF TAPPING SCREWS MUST COMPLY TO ICC- ESR 1730, 2196 OR EQUIVALENT AND USE HEADS W/ DIAMETERS EQUAL TO #8 = $\frac{5}{6}$ ", #10 = $\frac{3}{8}$ ", #12 = $\frac{13}{8}$ " AND #14 = $\frac{1}{7}$ " OR STEEL WASHERS OF SIMILAR DIAMTER AND AS PER GENERAL NOTE #11
- 14. STRUCTURES SHALL NOT BE ENCLOSED IN ANY MANNER WITHOUT APPROVAL OF THE CODE OFFICIAL.
- 15. AT LEAST ONE HORIZONTAL DIMENSION (PROJECTION OR WIDTH) OF COVER SHALL BE LESS THAN 30'.
- 16. WHERE ALUMINUM ALLOY PARTS ARE IN CONTACT WITH DISSIMILAR METALS (OTHER THAN 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 PART I-A SECTION 6.7.
- 17. All structures must comply with one of the following:
 - a. All structures with a roof snow load of 30 psf or less may be built in Seismic Design Category (SDC) A-D up to the maximum Ss noted in General Note
 - b. Structures with flat roof design snow loads over 30 psf complying with IBC Section 1613.1 Exception #1 do not require additional seismic analysis.
 - c. Structures not complying with (a) or (b) require additional engineering seismic analysis.
- 21. DRIFTING SNOW IS ADDRESSED IN DETAIL A4. SLIDING SNOW IS BEYOND THE SCOPE OF THIS REPORT.
- 22. ALL MULTISPAN TABLES AND DETAILS ASSUME EQUAL SPANS WITH A LONGEST SPAN TO SHORTEST SPAN RATIO OF 1.2. ALL SPECIFICATIONS MUST BE BASED ON LONGEST ACTUAL SPAN.



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Wind Speed and Exposure

8'-0"

8'-8"

9'-7"

10'-9"

12'-6"

13'-10'

6'-2"

6'-9"

6'-8"

7'-7"

8'-10"

10'-11'

5'-6"

5'-11"

6'-7"

7'-5"

8'-8"

10'-9"

5'-1"

5'-7"

6'-2"

7'-0"

8'-1"

10'-1"

100

7'-2"

7'-9"

8'-7"

9'-7"

11'-2"

13'-6"

6'-2"

6'-9"

6'-5"

7'-3"

8'-5"

10'-5"

5'-3"

5'-8"

6'-3"

7'-1"

8'-3"

10'-4"

4'-11"

5'-4"

5'-11"

6'-8"

7'-10"

9'-8"

105

6'-9'

7'-4"

8'-1"

9'-2"

10'-7"

13'-1"

6'-2"

6'-9"

6'-3"

7'-0"

8'-3"

10'-2"

5'-1"

5'-7"

6'-2"

6'-11'

8'-1"

10'-0"

4'-9"

5'-3"

5'-10"

6'-7"

7'-8"

9'-6"

Exposure B

85

8'-6"

9'-2"

10'-1"

11'-5"

13'-3"

13'-10"

6'-2"

6'-9"

6'-10"

7'-9"

9'-0"

11'-2"

5'-7'

6'-1"

6'-9"

7'-7"

8'-10"

10'-11

5'-3"

5'-8"

6'-4"

7'-1"

8'-4"

10'-4"

Solara RF and Extruded Louvers (Details S1, S2 and S3)

2"x3" ALUMINUM RAFTER (DETAIL S6)

Louver Spans "E"

6'

5'

4'

3'

2'

6'

5'

4'

3'

2'

6'

5'

4'

3'

2'

6'

5'

4'

3'

2'

Ground

Snow Load

(psf)

10 LIVE

20

LIVE

25

30

	na Extradoa		120000	· · · · · · ·							
Ground	Louver	Wind S	Speed ar	nd Expos	ure						
Snow Load	Gauge	Exposu	re B				Exposu	re C			
(psf)	(mm)	85	90	100	105	110	85	90	100	105	110
10	0.6 mm	5'-10"	5'-7"	5'-0"	4'-9"	4'-7"	5'-0"	4'-9"	4'-3"	4'-1''	3'-10"
LIVE	1.2 mm	8'-5"	8'-3"	7'-8"	7'-4''	7'-3"	7'-8''	7'-4''	6'-11"	6'-7''	6'-2"
20	0.6 mm	4'-10"	4'-10''	4'-10''	4'-9"	4'-7"	4'-10"	4'-9"	4'-3"	4'-1''	3'-10"
LIVE	1.2 mm	7'-0''	7'-0''	7'-0''	7'-0''	7'-0"	7'-0''	7'-0''	6'-11"	6'-7''	6'-2"
25	0.6 mm	4'-5"	4'-4''	4'-2"	4'-1"	4'-0"	4'-2"	4'-1"	3'-10"	3'-9"	3'-8"
	1.2 mm	6'-7''	6'-6"	6'-4"	6'-3"	6'-2"	6'-4''	6'-3"	5'-10"	5'-9"	5'-7"
30	0.6 mm	4'-2"	4'-1"	3'-11"	3'-11"	3'-10"	3'-11"	3'-10"	3'-8''	3'-7"	3'-6"
	1.2 mm	6'-4''	6'-3''	6'-1''	5'-11"	5'-10"	6'-1''	5'-10"	5'-7"	5'-7"	5'-5"

110

6'-5"

7'-0"

7'-9"

8'-8"

10'-1'

12'-6"

6'-2"

6'-9"

6'-1"

6'-10'

8'-0"

9'-11'

5'-0"

5'-5"

6'-0"

6'-9"

7'-11'

9'-10"

4'-8"

5'-2"

5'-8"

6'-5"

7'-6"

9'-4"

85

7'-1"

7'-8"

8'-6"

9'-7"

11'-1"

13'-6"

6'-2"

6'-9"

6'-5"

7'-2"

8'-5"

10'-5"

5'-2"

5'-8"

6'-3"

7'-1"

8'-3"

10'-2"

4'-11'

5'-4"

5'-11"

6'-8"

7'-9"

9'-8"

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Maximum Louver Overhang is 24"

(434) 384-2514 This table determines the maximum allowed "E"

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TABLE A.1

6'-8"

7'-3"

8'-0"

9'-0"

10'-6"

12'-10'

6'-2"

6'-9"

6'-2"

7'-0"

8'-2"

10'-1"

5'-1"

5'-6"

6'-1"

6'-11"

8'-1"

10'-0"

4'-9"

5'-2"

5'-9"

6'-6"

7'-7"

9'-5"

105

5'-7"

6'-2"

6'-9"

7'-8"

8'-11"

11'-1"

5'-7"

6'-2"

5'-8"

6'-5"

7'-6"

9'-4"

4'-7"

5'-1"

5'-7"

6'-4"

7'-5"

4'-5"

4'-10"

5'-4"

6'-0"

7'-1"

8'-10"

Exposure C

100

5'-11"

6'-6"

7'-2"

8'-0"

9'-4"

11'-7"

5'-11'

6'-6"

5'-10"

6'-7"

7'-9"

9'-7"

4'-9"

5'-2"

5'-9"

6'-6"

7'-7"

9'-5"

4'-6"

4'-11'

5'-6"

6'-2"

7'-3"

9'-0"

Tables A.2 and A.3 determine "A"

110

5'-4"

5'-10"

6'-5"

7'-3"

8'-6"

10'-6"

5'-4"

5'-10"

5'-6"

6'-3"

7'-3"

9'-1"

4'-6''

4'-11'

5'-5"

6'-2"

7'-3"

9'-0"

0'-0"

4'-8"

5'-2"

5'-11"

6'-11"

8'-7"

Ground	Louver	Wind S	Speed ar	nd Expos	ure						
Snow Load	Spans "E"	Exposur	re B						Exposur	e C	
(psf)		85	90	100	105	110	85	90	100	105	110
10	7'	10'-9"	10'-2"	9'-2"	8'-9''	8'-4''	9'-1"	8'-7"	7'-8''	7'-4''	7'-0''
LIVE	6'	11'-8"	11'-0''	9'-11"	9'-5"	9'-0''	9'-10"	9'-3"	8'-4''	7'-11"	7'-7''
	5'	12'-8"	12'-1"	10'-10"	10'-4"	9'-11"	10'-9"	10'-2"	9'-2''	8'-9''	8'-4''
	4'	13'-9"	13'-2"	12'-1"	11'-7"	11'-0"	12'-1"	11'-5"	10'-3"	9'-9''	9'-3''
	3'	15'-1"	14'-6''	13'-6"	13'-1"	12'-8"	13'-5"	13'-0''	11'-10"	11'-4"	10'-9"
	2'	15'-9"	15'-9"	15'-5"	14'-11"	14'-6"	15'-5"	14'-9"	13'-10"	13'-5"	13'-0"
20	7'	8'-0''	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	8'-0"	7'-8''	7'-4''	7'-0''
LIVE	6'	8'-8''	8'-8"	8'-8"	8'-8''	8'-8''	8'-8''	8'-8"	8'-4''	7'-11"	7'-7''
	5'	8'-10"	8'-7''	8'-3"	8'-1"	7'-11"	8'-3"	8'-0''	7'-7''	7'-5''	7'-3"
	4'	9'-11"	9'-8''	9'-3"	9'-0''	8'-10"	9'-2"	9'-0''	8'-6''	8'-4''	8'-1"
	3'	11'-5"	11'-2"	10'-9"	10'-5"	10'-3"	10'-8"	10'-5''	9'-11"	9'-7''	9'-4''
	2'	13'-6"	13'-4"	12'-11"	12'-9"	12'-6"	12'-11"	12'-8"	12'-1"	11'-10"	11'-6"
25	7'	7'-4''	7'-2"	6'-10"	6'-8''	6'-7"	6'-10"	6'-8''	6'-4''	6'-2"	6'-0''
	6'	7'-11"	7'-9''	7'-5''	7'-3"	7'-1"	7'-5''	7'-3"	6'-10"	6'-8''	6'-6''
	5'	8'-8''	8'-6"	8'-1"	8'-0''	7'-9''	8'-1''	7'-11''	7'-6''	7'-4''	7'-2"
	4'	9'-9''	9'-6"	9'-1''	8'-11"	8'-9"	9'-1''	8'-10''	8'-5''	8'-3"	8'-0''
	3'	11'-3"	11'-0''	10'-6"	10'-4"	10'-1"	10'-6"	10'-3"	9'-9''	9'-6''	9'-3"
	2'	13'-4"	13'-2"	12'-10"	12'-7"	12'-5"	12'-9"	12'-7''	11'-11"	11'-8"	11'-5"
30	7'	6'-10"	6'-9"	6'-6"	6'-4''	6'-3"	6'-6''	6'-4''	6'-0''	5'-11"	0'-0''
	6'	7'-5''	7'-3"	7'-0''	6'-11"	6'-9"	7'-0''	6'-10''	6'-6''	6'-4''	6'-3"
	5'	8'-2"	8'-0''	7'-8''	7'-7''	7'-5"	7'-8''	7'-6''	7'-2''	7'-0''	6'-10"
	4'	9'-1''	8'-11"	8'-7''	8'-6''	8'-4"	8'-7''	8'-5"	8'-0''	7'-10''	7'-8''
	3'	10'-7"	10'-4"	10'-0''	9'-9"	9'-7"	9'-11"	9'-9''	9'-3"	9'-1"	8'-10"
	2'	12'-10"	12'-8"	12'-2"	12'-0''	11'-10"	12'-2"	11'-11"	11'-5"	11'-2"	10'-10''
									TAI	BLE A.3	

TABLE A.2

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B. Tables for Attached Structures with Single Span Headers with Only 2 Posts

Gro	ound Sno	w Load	l 10	psf	•		Gro	und Sr	now Load	20
Single 0.071"	x2"x5" Alun	ninum Head	der Detail S5		Uplift Only	7 [Single 0.071	"x2"x5" A	Aluminum He	ader Detail S5
Roof	90 MPH EX	POSURE E	3 or		Cube Footing		Roof	90 MPH E	EXPOSURE E	3 or
Design	90 MPH EX	POSURE E	3		End		Design	90 MPH E	EXPOSURE E	3
Load (psf)	A (ft)	trib (ft)	B (on slab)	B (ft)	d (in)		Load (psf)	Α	trib (ft)	B (on slab)
10	4	5	13.3	13.3	22		20	4	5	8.0
10	5	5.5	12.8	12.8	22		20	5	5.5	6.7
10	6	6	12.4	12.4	23		20	6	6	5.6
10	7	6.5	12.1	12.1	23		20	7	6.5	4.7
10	8	7	11.8	11.8	23		20	8	7	4.0
10	9	7.5	11.4	11.5	23		20	9	7.5	3.3
10	10	8	10.3	11.3	23		20	10	8	2.7
10	11	8.5	9.3	10.8	23		20	11	8.5	2.2
10	12	9	8.5	10.5	23		20	12	9	1.8
			0.0		Table B	il l				
						J L				
•			der Detail S5		Uplift Only		Single 0.071			ader Detail S5
Roof	90 MPH EX	POSURE C	or				Roof	90 MPH E	EXPOSURE (or
Design	95 MPH EX	POSURE E	3		End		Design	95 MPH E	EXPOSURE E	3
Load (psf)	A (ft)	trib (ft)	B (on slab)	B (ft)	d (in)		Load (psf)	Α	trib (ft)	B (on slab)
10	4	5	12.4	12.4	24		20	4	5	8.0
10	5	5.5	12.1	12.1	24		20	5	5.5	6.7
10	6	6	11.7	11.7	24		20	6	6	5.6
10	7	6.5	11.4	11.4	24		20	7	6.5	4.7
10	8	7	10.9	10.9	24		20	8	7	4.0
10	9	7.5	10.5	10.5	24		20	9	7.5	3.3
10	10	8	10.1	10.1	24		20	10	8	2.7
10	11	8.5	9.3	9.7	24		20	11	8.5	2.2
10	12	9	8.5	9.3	25		20	12	9	1.8
					Table B	2				
Single 0.071"	'x2"x5" Alun	ninum Head	der Detail S5				Sinale 0.071	"x2"x5" A	Aluminum He	ader Detail S5
_			der Detail S5 C or		Uplift Only		•			ader Detail S5 C or
Roof	100 MPH E	XPOSURE	C or		Uplift Only Cube Footing		Design	100 MPH	EXPOSURE	C or
Roof Design	100 MPH E 110 MPH E	XPOSURE XPOSURE	C or B	B	Uplift Only Cube Footing End		Design Load (psf)	100 MPH 110 MPH	EXPOSURE EXPOSURE	C or B
Roof Design Load (psf)	100 MPH E 110 MPH E A	XPOSURE XPOSURE trib	C or B B (on slab)	B	Uplift Only Cube Footing End d (in)		Design Load (psf) 10	100 MPH 110 MPH A	EXPOSURE EXPOSURE 5	C or B B (on slab)
Roof Design Load (psf)	100 MPH E 110 MPH E A 4	XPOSURE XPOSURE trib 5	C or B B (on slab) 11.6	11.6	Uplift Only Cube Footing End d (in) 25		Design Load (psf) 10 20	100 MPH 110 MPH A 4	EXPOSURE EXPOSURE 5	C or B B (on slab) 8.0
Roof Design Load (psf) 10 10	100 MPH E 110 MPH E A 4 5	XPOSURE XPOSURE trib 5 5.5	C or B B (on slab) 11.6 11.2	11.6 11.2	Uplift Only Cube Footing End d (in) 25 25		Design Load (psf) 10 20 20	100 MPH 110 MPH A 4 5	EXPOSURE EXPOSURE 5 5 5.5	C or B B (on slab) 8.0 6.7
Roof Design Load (psf) 10 10	100 MPH E 110 MPH E A 4 5 6	XPOSURE XPOSURE trib 5 5.5 6	C or B B (on slab) 11.6 11.2 10.6	11.6 11.2 10.6	Uplift Only Cube Footing End d (in) 25 25 25		Design Load (psf) 10 20 20 20	100 MPH 110 MPH A 4 5 6	EXPOSURE EXPOSURE 5 5 5 6	C or B B (on slab) 8.0 6.7 5.6
Roof Design Load (psf) 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7	XPOSURE XPOSURE trib 5 5.5 6 6.5	C or B B (on slab) 11.6 11.2 10.6 10.1	11.6 11.2 10.6 10.1	Uplift Only Cube Footing End d (in) 25 25 25 25		Design Load (psf) 10 20 20 20 20	100 MPH 110 MPH A 4 5 6 7	EXPOSURE 5 5 5.5 6 6.5	C or B B (on slab) 8.0 6.7 5.6 4.7
Roof Design Load (psf) 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8	XPOSURE XPOSURE trib 5 5.5 6 6.5 7	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6	11.6 11.2 10.6 10.1 9.6	Uplift Only Cube Footing End d (in) 25 25 25 25 25		Design Load (psf) 10 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8	EXPOSURE 5 5 5.5 6 6.5 7	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0
Roof Design Load (psf) 10 10 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8 9	XPOSURE	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3	11.6 11.2 10.6 10.1 9.6 9.3	Uplift Only Cube Footing End d (in) 25 25 25 25 25 25		Design Load (psf) 10 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9	EXPOSURE 5 5 5 5 6 6 6 5 7 7 5 5	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10	XPOSURE XPOSURE trib 5 5.5 6 6.5 7 7.5 8	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9	11.6 11.2 10.6 10.1 9.6 9.3 8.9	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26		Design Load (psf) 10 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10	EXPOSURE 5 5 5 5 6 6 6 5 7 7 5 8	C or B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7
Roof Design Load (psf) 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11	XPOSURE XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26		Design Load (psf) 10 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10	EXPOSURE 5 5 5 5 5 6 6 6 5 7 7 5 8 8 8 5	C or B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2
Roof Design Load (psf) 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8 9 10	XPOSURE XPOSURE trib 5 5.5 6 6.5 7 7.5 8	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9	11.6 11.2 10.6 10.1 9.6 9.3 8.9	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26		Design Load (psf) 10 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10	EXPOSURE 5 5 5 5 6 6 6 5 7 7 5 8	C or B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7
Roof Design Load (psf) 10 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12	XPOSURE XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 Table B:	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12	EXPOSURE 5 5 5 5 5 5 6 6 6 5 7 7 5 8 8 8 5 9	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 10 Single 0.071	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12	XPOSURE	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 Uplift Only	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12	5 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Single 0.071	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 Uplift Only Cube Footing	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Roof	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH	5 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Single 0.071" Roof Design	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 2x2"x5" Alun 110 MPH E 120 MPH E	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 27 Table B: Uplift Only Cube Footing End	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Roof Design	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH	5 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Roof Design Load (psf)	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 x2"x5" Alun 110 MPH E 120 MPH E A	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab)	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 Table B3 Uplift Only Cube Footing End d (in)	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Design Single 0.071 Roof Design Load (psf)	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH A	EXPOSURE 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE EXPOSURE trib	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 x2"x5" Alun 110 MPH E 120 MPH E A 4	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9 ninum Head XPOSURE XPOSURE trib 5	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 Table B3 Uplift Only Cube Footing End d (in) 26	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 Design Roof Design Load (psf) 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4	EXPOSURE 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE EXPOSURE trib 5	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 adder Detail S5 C or B B (on slab) 8.0
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 x2"x5" Alun 110 MPH E 120 MPH E A 4 5	XPOSURE XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9 ninum Head XPOSURE XPOSURE trib 5 5.5	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 26 Table B: Uplift Only Cube Footing End d (in) 26 26 26	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH A 4 5	EXPOSURE	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 adder Detail S5 C or B B (on slab) 8.0 6.7
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 10 10 10 10	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6	XPOSURE	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4	Uplift Only Cube Footing End d (in) 25 25 25 25 25 26 26 26 26 26 26 26 Table B: Uplift Only Cube Footing End d (in) 26 26 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH A 4 5 6	EXPOSURE 5 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE EXPOSURE trib 5 5.5 6	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 adder Detail S5 C or B B (on slab) 8.0 6.7 5.6
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6 7	XPOSURE trib 5.5.6 6.5 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4 8.9	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4 8.9	Uplift Only Cube Footing End d (in) 25 25 25 25 26 26 26 26 26 26 26 26 26 27 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4 5 6 7	EXPOSURE 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE trib 5 5.5 6 6.5	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 ader Detail S5 C or B B (on slab) 8.0 6.7 5.6 4.7
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6 7 8	XPOSURE trib 5.5.6 6.5.9 9 minum Head XPOSURE XPOSURE trib 5.5.6 6.5.7	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4 8.9 8.6	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4 8.9 8.6	Uplift Only Cube Footing End d (in) 25 25 25 25 26 26 26 26 26 26 26 26 27 27 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4 5 6 7 8	EXPOSURE 5 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE trib 5 5.5 6 6.5 7	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 ader Detail S5 C or B B (on slab) 8.0 6.7 5.6 4.7 4.0
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6 7 8 9	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9 minum Head XPOSURE trib 5 5.5 6 6.5 7 7.5	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4 8.9 8.6 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4 8.9 8.6 8.2	Uplift Only Cube Footing End d (in) 25 25 25 25 26 26 26 26 26 26 26 26 27 27 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4 5 6 7 8 9	EXPOSURE 5 5 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE trib 5 5.5 6 6.5 7 7.5	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 ader Detail S5 C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6 7 8 9 10	XPOSURE trib 5.5.6 6.5.9 9 minum Head XPOSURE XPOSURE trib 5.5.6 6.5.7 7.5.8 8.5.9 8.5.9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4 8.9 8.6 8.2 7.9	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4 8.9 8.6 8.2 7.9	Uplift Only Cube Footing End d (in) 25 25 25 25 26 26 26 26 26 26 26 26 27 27 27 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4 5 6 7 8 9 10	EXPOSURE 5 5 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE trib 5 5.5 6 6.5 7 7.5 8	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 ader Detail S5 C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH E 110 MPH E A 4 5 6 7 8 9 10 11 12 X2"x5" Alun 110 MPH E 120 MPH E A 4 5 6 7 8 9	XPOSURE trib 5 5.5 6 6.5 7 7.5 8 8.5 9 minum Head XPOSURE trib 5 5.5 6 6.5 7 7.5	C or B B (on slab) 11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 der Detail S5 C or B B (on slab) 10.6 10.0 9.4 8.9 8.6 8.2	11.6 11.2 10.6 10.1 9.6 9.3 8.9 8.5 8.2 B 10.6 10.0 9.4 8.9 8.6 8.2	Uplift Only Cube Footing End d (in) 25 25 25 25 26 26 26 26 26 26 26 26 27 27 27	3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH 110 MPH A 4 5 6 7 8 9 10 11 12 "x2"x5" A 110 MPH 120 MPH A 4 5 6 7 8 9	EXPOSURE 5 5 5 5 5 6 6.5 7 7.5 8 8.5 9 Aluminum He EXPOSURE trib 5 5.5 6 6.5 7 7.5	C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3 2.7 2.2 1.8 ader Detail S5 C or B B (on slab) 8.0 6.7 5.6 4.7 4.0 3.3

Table B4

max Ss= 150% Seismic Design Category D

psf

В

11.2

10.5

10.0

9.5

9.0

8.7

8.3

8.0

7.7

В

11.2

10.5

10.0

9.5

9.0

8.7

8.3

8.0

7.7

В

11.2

10.5

10.0

9.5

9.0

8.7

8.3

8.0

7.7

В

10.6

10.5

10.0

9.5

9.0

8.7

8.3

8.0

7.7

Uplift Only

End

d (in)

21

21

21

22

22

22

22

22

22

End

d (in)

23

23

23

23

23

23

23

24

24

End

d (in)

25

25

25

25

25

25

25

25

26

End

d (in)

26

27

27

27

27

27 27

27

27

Table B5

Table B6

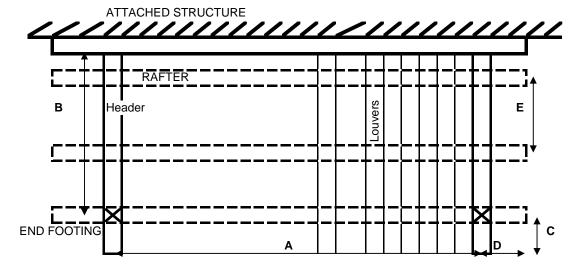
Table B7

Table B8

Uplift Only

Uplift Only

Uplift Only



INSTRUCTIONS FOR USING THESE TABLES

- 1. These instructions are for a SINGLE SPAN ATTACHED Solara cover with Louvers perpendicular to the house wall AND ONLY 2 POSTS
- 2. Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf patio covers and 20 psf for carports or commercial structures.

3 ft

- 3 Determine "E" from Table A.1
- 4 Choose "A" up to maximum value allowed in Tables A.2 or A.3
- 5 Determine maximum "B" from tables on this page
- 6 The maximum HEADER OVERHANG, "C", is
- 7 The maximum RAFTER OVERHANG, "D", is
- 8 Choose height of Structure, maximum height is 12'
- 9 Determine Uplift Footing Size.
- 10 Fasten to wall as per Details S15 or S17 Use (A/2 + D) x B for Trib Area for Tables W1 or W2

FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS

SLAB 1 Follow Instructions #1-4 above.

SLAB 2 Maximum post spacing is "B o(n slab)"

SLAB 3 Follow Instructions #6-8 above, skip #9, follow #10

Solara Adjustable Patio Cover 602 N 24th Street Phoenix, AZ 85008 (602) 388-8429

Carl Putnam, P. E. 3441 Ivylink Place Lynchburg, VA 24503 (434) 384-2514



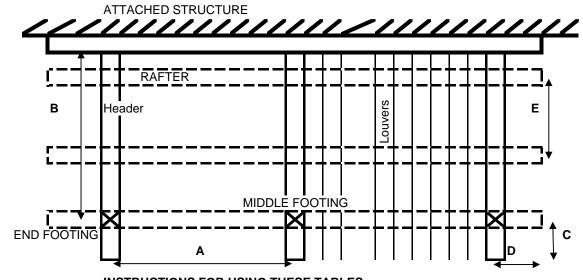
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C. Tables for Attached Structures with Single Span Headers with 3 Posts Minimum

Gre	ound Sno	w Load	10	psf			 Gro	ound Sn	ow Load	20	psf		
Single 0.071'	'x2"x5" Alum	inum Head	er Detail S5		Uplif	t Only	Single 0.071	l"x2"x5" Al	uminum Hea	der Detail S5		Uplif	t Only
Roof	90 MPH EX	POSURE B	or		Cube Fo	oting	Roof	90 MPH EX	XPOSURE B	or			
Design	90 MPH EX	POSURE B			End	Middle	Design	90 MPH EX	XPOSURE B			End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)	Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	5	5	13.0	13.3	22	22	20	5	5	7.0	11.2	21	21
10	6	6	10.9	12.4	22	23	20	6	6	5.8	10.0	21	21
10	7	7	9.3	11.8	22	23	20	7	7	5.0	9.0	21	22
10	8	8	8.2	11.3	23	24	20	8	8	4.4	8.3	21	23
10	9	9	7.2	10.5	23	25	20	9	9	3.9	7.7	21	23
10	10	10	6.5	9.9	23	25	20	10	10	3.5	7.2	22	24
10	11	11	5.9	9.3	23	26	20	11	11	3.2	6.7	22	24
10	12	12	5.4	8.7	23	26	20	12	12	2.9	6.3	22	25
10	14	14	4.7	7.9	24	27	20	14	14	2.5	5.7	23	26
						Table C1							Table C5
Single 0.071'	'x2"x5" Alum	inum Head	er Detail S5		Uplif	t Only	Single 0.071	"x2"x5" AI	uminum Hea	der Detail S5		Uplif	t Only
Roof	90 MPH EX				- p	•	Roof		XPOSURE C			-	'
Design	95 MPH EX		-		End	Middle	Design		XPOSURE B	-		End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)	Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	5	5	12.4	12.4	23	23	20	5	5	7.0	11.2	22	22
10	6	6	10.9	11.7	23	24	20	6	6	5.8	10.0	22	23
10	7	7	9.3	10.9	24	25	20	7	7	5.0	9.0	23	24
10	8	8	8.2	10.1	24	26	20	8	8	4.4	8.3	23	25
10	9	9	7.2	9.3	24	26	20	9	9	3.9	7.7	23	25
10	10	10	6.5	8.7	24	27	20	10	10	3.5	7.2	23	26
10	11	11	5.9	8.2	24	27	20	11	11	3.2	6.7	24	26
10	12	12	5.4	7.7	25	28	20	12	12	2.9	6.3	24	27
10	14	14	4.7	7.0	25	29	20	14	14	2.5	5.7	24	28
				_		Table C2	-			-			Table C6
Single 0.071'						t Only	•			der Detail S5		Uplif	t Only
Roof	100 MPH EX	XPOSURE (or		Cube Fo	oting	Design	100 MPH E	EXPOSURE C	or		-	
Roof Design	100 MPH EX	XPOSURE O	or B		Cube Fo	ooting Middle	Design Load (psf)	100 MPH E	EXPOSURE C	or B		End	Middle
Roof Design Load (psf)	100 MPH EX 110 MPH EX A	XPOSURE (XPOSURE E trib	or B B (on slab)	В	Cube Fo End d (in)	ooting Middle d (in)	Design Load (psf) 10	100 MPH E 110 MPH E A	EXPOSURE C EXPOSURE E 5	or B B (on slab)	В	End d (in)	Middle d (in)
Roof Design Load (psf)	100 MPH EX 110 MPH EX A 5	XPOSURE C XPOSURE E trib 5	3 B (on slab) 11.6	11.6	Cube Fo End d (in) 24	Middle d (in)	Design Load (psf) 10 20	100 MPH E 110 MPH E A 5	EXPOSURE OF EXPOSURE BE 5	or B (on slab) 7.0	11.2	End d (in) 24	Middle d (in) 24
Roof Design Load (psf) 10 10	100 MPH EX 110 MPH EX A 5 6	XPOSURE C XPOSURE E trib 5 6	B (on slab) 11.6 10.6	11.6 10.6	Cube Fo End d (in) 24 25	Middle d (in) 24 25	Design Load (psf) 10 20 20	100 MPH E 110 MPH E A 5 6	EXPOSURE OF STATES OF STAT	3 or B (on slab) 7.0 5.8	11.2 10.0	End d (in) 24 24	Middle d (in) 24 25
Roof Design Load (psf) 10 10 10	100 MPH EX 110 MPH EX A 5 6 7	XPOSURE C XPOSURE E trib 5 6 7	B (on slab) 11.6 10.6 9.3	11.6 10.6 9.6	Cube Fo End d (in) 24 25 25	ooting Middle d (in) 24 25 26	Design Load (psf) 10 20 20 20	100 MPH E 110 MPH E A 5 6 7	EXPOSURE C EXPOSURE E 5 5 6 7	B (on slab) 7.0 5.8 5.0	11.2 10.0 9.0	End d (in) 24 24 25	Middle d (in) 24 25 26
Roof Design Load (psf) 10 10 10 10	100 MPH EX 110 MPH EX A 5 6 7 8	XPOSURE C XPOSURE E trib 5 6 7 8	B (on slab) 11.6 10.6 9.3 8.2	11.6 10.6 9.6 8.9	Cube Fo End d (in) 24 25 25 25	Middle d (in) 24 25 26 27	Design Load (psf) 10 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8	EXPOSURE C EXPOSURE E 5 5 6 7 8	6 or B (on slab) 7.0 5.8 5.0 4.4	11.2 10.0 9.0 8.3	End d (in) 24 24 25 25	Middle d (in) 24 25 26 27
Roof Design Load (psf) 10 10 10 10 10 10	100 MPH EX 110 MPH EX A 5 6 7 8 9	XPOSURE C XPOSURE E trib 5 6 7 8 9	B (on slab) 11.6 10.6 9.3 8.2 7.2	11.6 10.6 9.6 8.9 8.2	Cube Fo End d (in) 24 25 25 25 25	ooting Middle d (in) 24 25 26 27 28	Design Load (psf) 10 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9	EXPOSURE C EXPOSURE E 5 5 6 7 8 9	B (on slab) 7.0 5.8 5.0 4.4 3.9	11.2 10.0 9.0 8.3 7.7	End d (in) 24 24 25 25 25	Middle d (in) 24 25 26 27 27
Roof Design Load (psf) 10 10 10 10 10 10 10	100 MPH EX 110 MPH EX A 5 6 7 8 9 10	XPOSURE C XPOSURE E trib 5 6 7 8 9 10	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5	11.6 10.6 9.6 8.9 8.2 7.6	Cube Fo End d (in) 24 25 25 25 25 25	ooting Middle d (in) 24 25 26 27 28 28	Design Load (psf) 10 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10	5 6 7 8 9	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5	11.2 10.0 9.0 8.3 7.7 7.2	End d (in) 24 24 25 25 25 25	Middle d (in) 24 25 26 27 27
Roof Design Load (psf) 10 10 10 10 10 10 10 10	100 MPH EX A 5 6 7 8 9 10	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9	11.6 10.6 9.6 8.9 8.2 7.6 7.2	Cube Fo End d (in) 24 25 25 25 25 26 26	ooting Middle d (in) 24 25 26 27 28 28 29	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11	5 5 6 7 8 9 10	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2	11.2 10.0 9.0 8.3 7.7 7.2 6.7	End d (in) 24 24 25 25 25 25 26	Middle d (in) 24 25 26 27 27 28 28
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 10	100 MPH EX 110 MPH EX A 5 6 7 8 9 10 11 12	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8	Cube Fo End d (in) 24 25 25 25 25 26 26 26	ooting Middle d (in) 24 25 26 27 28 28 29 29	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12	5 5 6 7 8 9 10 11	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3	End d (in) 24 24 25 25 25 25 26 26	Middle d (in) 24 25 26 27 27 28 28 29
Roof Design Load (psf) 10 10 10 10 10 10 10 10	100 MPH EX A 5 6 7 8 9 10	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9	11.6 10.6 9.6 8.9 8.2 7.6 7.2	Cube Fo End d (in) 24 25 25 25 25 26 26 26 26	ooting Middle d (in) 24 25 26 27 28 28 29 29 30	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11	5 5 6 7 8 9 10	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2	11.2 10.0 9.0 8.3 7.7 7.2 6.7	End d (in) 24 24 25 25 25 25 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 10	100 MPH EX 110 MPH EX 5 6 7 8 9 10 11 12 14	XPOSURE 6 XPOSURE 6 4 rib 5 6 7 8 9 10 11 12 14	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14	5 5 6 7 8 9 10 11 12 14	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3	End d (in) 24 25 25 25 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7
Roof Design Load (psf) 10 10 10 10 10 10 10 10 5ingle 0.071	100 MPH EX 110 MPH EX 5 6 7 8 9 10 11 12 14	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12 14	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 Single 0.071	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14	5 5 6 7 8 9 10 11 12 14 uminum Hea	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3	End d (in) 24 25 25 25 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Single 0.071'	100 MPH EX 110 MPH EX 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EX	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12 14	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27 Uplif Cube Fo	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 Single 0.071	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14	SEXPOSURE OF SEXPO	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3	End d (in) 24 24 25 25 25 25 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7
Roof Design Load (psf) 10 10 10 10 10 10 10 5ingle 0.071' Roof Design	100 MPH EX 110 MPH EX A 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EX 120 MPH EX	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12 14 Innum Head	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27 Uplif Cube Fo End	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting Middle	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Single 0.071 Roof Design	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14	SEXPOSURE OF SEXPOSURE BENEFITS SEXPOSURE BENEFITS SEXPOSURE CONTINUE BENEFITS SEXPOSURE	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7	End d (in) 24 24 25 25 25 25 26 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle
Roof Design Load (psf) 10 10 10 10 10 10 10 5ingle 0.071' Roof Design Load (psf)	100 MPH EX 110 MPH EX A 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EX A	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12 14 Ainum Head XPOSURE C XPOSURE E trib	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 or B (on slab)	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in)	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting Middle d (in)	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Single 0.071 Roof Design Load (psf)	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E	SXPOSURE CEXPOSURE BENEFIT STATEMENT OF STAT	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab)	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7	End d (in) 24 24 25 25 25 25 26 26 26 End d (in)	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in)
Roof Design Load (psf) 10 10 10 10 10 10 10 5ingle 0.071' Roof Design Load (psf) 10	100 MPH EX 110 MPH EX A 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EX A 5	XPOSURE C XPOSURE E trib 5 6 7 8 9 10 11 12 14 Innum Head XPOSURE C XPOSURE E trib 5	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 or B (on slab) 10.6	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting Middle d (in) 26	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 Load (psf) Roof Design Load (psf)	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E A 5	SXPOSURE DE S 5 6 7 8 9 10 11 12 14 Uminum Hea EXPOSURE DE S 10 EXPOSURE DE S 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7	End d (in) 24 24 25 25 25 25 26 26 26 End d (in) 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Single 0.071' Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EX 110 MPH EX A 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EX A	XPOSURE E trib 5 6 7 8 9 10 11 12 14 inum Head XPOSURE E trib 5 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 Per Detail S5 C or B (on slab) 10.6 9.4	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1	Cube Fo End d (in) 24 25 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 Single 0.071 Roof Design Load (psf) 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E	5 6 7 8 9 10 11 12 14 uminum Hea EXPOSURE C trib 5 6	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 c or B (on slab) 7.0 5.8	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7	End d (in) 24 24 25 25 25 25 26 26 26 End d (in) 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27
Roof Design Load (psf) 10 10 10 10 10 10 10 10 5ingle 0.071' Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXAMPLE 20 A 5 6 7 8 9 10 11 12 14 14 120 MPH EXAMPLE 20 A 5 6 7	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 or B (on slab) 10.6 9.4 8.6	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting Middle d (in) 26 27 27	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E A 5 6 7	5 6 7 8 9 10 11 12 14 uminum Hea EXPOSURE C EXPOSURE E trib 5 6 7	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0	End d (in) 24 24 25 25 25 25 26 26 26 26 End d (in) 26 26 26 26	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28
Roof Design Load (psf) 10 10 10 10 10 10 10 10 Single 0.071' Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXAMPH E	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 or B (on slab) 10.6 9.4 8.6 7.9	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 B 10.6 9.4 8.6 7.9	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 26 26 26 26 26	ooting Middle d (in) 24 25 26 27 28 28 29 29 30 Table C3 t Only ooting Middle d (in) 26 27 27 28	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E A 5 6 7 8	5 6 7 8 9 10 11 12 14 uminum Hea EXPOSURE B trib 5 6 7 8	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0 4.4	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3	End d (in) 24 25 25 25 26 26 26 26 26 26 26 27	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 30
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXA 110 MPH EXA 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EXA 5 6 7 8 9	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 or B (on slab) 10.6 9.4 8.6 7.9 7.2	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 B 10.6 9.4 8.6 7.9 7.2	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 26 26 27	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27 28 29 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 29 30 20 30 20 20 20 20 20 20 20 20 20 20 20 20 20	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 "x2"x5" AI 110 MPH E 120 MPH E A 5 6 7 8 9	\$ 5 6 7 8 9 10 11 12 14	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 c or B (on slab) 7.0 5.8 5.0 4.4 3.9	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3 7.7	End d (in) 24 25 25 25 26 26 26 26 26 26 27 27	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 29 20 21
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXA 110 MPH EXA 5 6 7 8 9 10 11 12 14 14 120 MPH EXA 5 6 7 8 9 10 10 10 MPH EXA 120 MPH EXA 5 6 7 8 9 10	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 Per Detail S5 or B (on slab) 10.6 9.4 8.6 7.9 7.2 6.5	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 8 10.6 9.4 8.6 7.9 7.2 6.7	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 26 27 27	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27 28 29 30 29 30 29 30	Design Load (psf) 10 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 110 MPH E 120 MPH E A 5 6 7 8 9 10	\$\frac{5}{6}\$ 10 11 12 14 uminum Hea EXPOSURE 6 \$\frac{5}{6}\$ 7 8 9 10 6 7 8 7 8 9 10 11 12 14	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3 7.7 7.2	End d (in) 24 25 25 25 26 26 26 26 26 26 27 27 27	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 30
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXAMPH E	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 c or B B (on slab) 10.6 9.4 8.6 7.9 7.2 6.5 5.9	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 8.6 7.9 7.2 6.7 6.3	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 27 27 27	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27 28 29 30 30 30 30 30 30 30 30 30 30 30 30 30	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 110 MPH E 120 MPH E A 5 6 7 8 9 10 11 11	5 6 7 8 9 10 11 12 14 uminum Hea EXPOSURE 6 trib 5 6 7 8 9	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3 7.7 7.2 6.7	End d (in) 24 24 25 25 25 25 26 26 26 26 27 27 27	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 30 30 30
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXA 110 MPH EXA 5 6 7 8 9 10 11 12 14 'x2"x5" Alum 110 MPH EXA 5 6 7 8 9 10 11 12 14 110 MPH EXA 5 6 7 8 9 10 11 12 11 12	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 Per Detail S5 or B B (on slab) 10.6 9.4 8.6 7.9 7.2 6.5 5.9 5.4	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 8.6 7.9 7.2 6.7 6.3 5.9	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 27 27 27 27	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27 28 29 30 31	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 110 MPH E 120 MPH E A 5 6 7 8 9 10 11 11 12 11 11 12	5 6 7 8 9 10 11 12 14 wminum Hea EXPOSURE 6 EXPOSURE 6 7 8 9 10 11 12	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3 7.7 7.2 6.7 6.3	End d (in) 24 24 25 25 25 25 26 26 26 26 27 27 27 27 28	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 30 30 30 31
Roof Design Load (psf) 10 10 10 10 10 10 10 10 10 1	100 MPH EXAMPH E	XPOSURE 6	B (on slab) 11.6 10.6 9.3 8.2 7.2 6.5 5.9 5.4 4.7 er Detail S5 c or B B (on slab) 10.6 9.4 8.6 7.9 7.2 6.5 5.9	11.6 10.6 9.6 8.9 8.2 7.6 7.2 6.8 6.1 8.6 7.9 7.2 6.7 6.3	Cube Fo End d (in) 24 25 25 25 26 26 26 27 Uplif Cube Fo End d (in) 26 26 26 27 27 27	ooting Middle d (in) 24 25 26 27 28 28 29 30 Table C3 t Only ooting Middle d (in) 26 27 28 29 30 30 30 30 30 30 30 30 30 30 30 30 30	Design Load (psf) 10 20 20 20 20 20 20 20 20 20 20 20 20 20	100 MPH E 110 MPH E A 5 6 7 8 9 10 11 12 14 110 MPH E 120 MPH E A 5 6 7 8 9 10 11 11	5 6 7 8 9 10 11 12 14 uminum Hea EXPOSURE 6 trib 5 6 7 8 9	B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2 2.9 2.5 der Detail S5 or B (on slab) 7.0 5.8 5.0 4.4 3.9 3.5 3.2	11.2 10.0 9.0 8.3 7.7 7.2 6.7 6.3 5.7 B 10.6 10.0 9.0 8.3 7.7 7.2 6.7	End d (in) 24 24 25 25 25 26 26 26 26 26 27 27 27 28 28 28	Middle d (in) 24 25 26 27 27 28 28 29 30 Table C7 t Only Middle d (in) 26 27 28 28 29 30 30 30

max Ss= 150% Seismic Design Category D



INSTRUCTIONS FOR USING THESE TABLES

- 1. These instructions are for a SINGLE SPAN ATTACHED Solara cover with Louvers perpendicular to the house wall
- 2. Determine wind and snow loads for structure site area. For zero snow load areas use 10 psf patio covers and 20 psf for carports or commercial structures.
- 3 Determine "E" from Table A.1
- 4 Choose "A" up to maximum value allowed in Tables A.2 or A.3
- 5 Determine maximum "B" from tables on this page
- 6 The maximum HEADER OVERHANG, "C", is
- 7 The maximum RAFTER OVERHANG, "D", is 2.5 ft
- 8 Choose height of Structure
- 9 Determine Uplift Footing Size.
- 10 Fasten to wall as per Details S15 or S17 Use A x B for Trib Area for Tables W1 or W2

FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS

SLAB 1 Follow Instructions #1-4 above.

SLAB 2 Maximum post spacing is "B o(n slab)"

SLAB 3 Follow Instructions #6-8 above, skip #9, follow #10

Solara Adjustable Patio Cover 602 N 24th Street Phoenix, AZ 85008 (602) 388-8429

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D. Tables for Attached Structures with Single Span Rafters with at Least 3 Posts

max Ss= 150% Seismic Design Category D

Gro	ound Sno	ow Load	10	psf	5 .	
Single 0.071	"x2"x5" Alu	ıminum Head	der Detail S5		Uplif	Only
Roof	90 MPH EX	POSURE B	or		Cube Fo	oting
Design	90 MPH EX	POSURE B			End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	10	9	10.5	10.5	25	27
10	11	9.5	10.2	10.2	25	27
10	12	10	9.9	9.9	25	27
10	14	11	9.3	9.3	26	28
						Table D1
Single 0.071	l"x2"x5" Alı	ıminum Head	der Detail S5		Uplif	Only
Roof	90 MPH EX	POSURE C	or		Cube Fo	oting
Design	95 MPH EX	POSURE B			End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	10	9	9.3	9.3	26	28
10	11	9.5	9.0	9.0	26	28
10	12	10	8.7	8.7	27	28
10	14	11	7.9	8.2	27	29
						Table D2
_		ıminum Head				Only
Roof		XPOSURE C			Cube Fo	
Design		XPOSURE B		_	End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	10	9	8.2	8.2	28	29
10	11	9.5	7.9	7.9	28	29
10	12	10	7.6	7.6	28	29
10	14	11	7.2	7.2	29	30
						Table D3
Single 0.071	"x2"x5" Alı	ıminum Head	der Detail S5		Uplif	Only
Roof	110 MPH E	XPOSURE C	or		Cube Fo	
Design	120 MPH E	XPOSURE B			End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
10	10	9	7.2	7.2	29	30
10	11	9.5	7.0	7.0	29	30
10	12	10	6.7	6.7	29	30
10	14	11	6.3	6.3	30	30
						Table D4

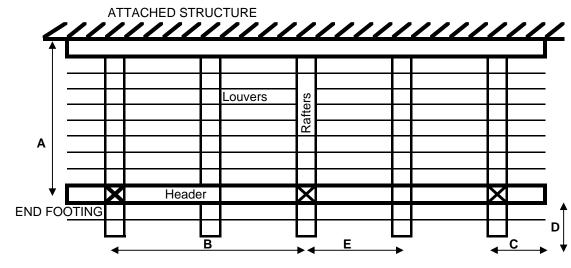
1 SINGIA (1 071	"v2"v5" Ali	ıminum Ha	ader Detail S5	-	Unlife	t Only
_					•	
Roof		POSURE B			Cube Fo	•
Design	90 MPH EX			_	End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
20	10	9	3.8	7.7	23	24
20	11	9.5	3.3	7.4	24	24
20	12	10	3.0	7.2	24	25
20	14	11	2.3	6.7	24	25
						Table D5
Single 0.071	l"x2"x5" Alι	ıminum Hea	ader Detail S5		Uplif	t Only
Roof	90 MPH EX	POSURE C	or		Cube Fo	oting
Design	95 MPH EX	POSURE B			End	Middle
Load (psf)	Α	trib	B (on slab)	В	d (in)	d (in)
20	10	9	3.8	7.7	25	26
20	11	9.5	3.3	7.4	25	26
20	12	10	3.0	7.2	26	26
20	14	11	2.3	6.7	26	27
						Table D6
Single 0.071	l"x2"x5" Alι	ıminum Hea	ader Detail S5		Uplif	t Only
Roof			_			
KOOI	100 MPH E	XPOSURE	C or		Cube Fo	oting
Design		XPOSURE XPOSURE			Cube Fo End	oting Middle
				В		_
Design	110 MPH E	XPOSURE	В	B 7.7	End	Middle
Design Load (psf)	110 MPH E A	XPOSURE trib	B B (on slab)		End d (in)	Middle d (in)
Design Load (psf)	110 MPH E A 10	XPOSURE trib 9	B (on slab) 3.8	7.7	End d (in) 27	Middle d (in) 28
Design Load (psf) 20 20	110 MPH E A 10 11	XPOSURE trib 9 9.5	B (on slab) 3.8 3.3	7.7 7.4	End d (in) 27 27	Middle d (in) 28 28
Design Load (psf) 20 20 20	110 MPH E A 10 11 12	XPOSURE trib 9 9.5 10	B (on slab) 3.8 3.3 3.0	7.7 7.4 7.2	End d (in) 27 27 28 28	Middle d (in) 28 28 29 29
Design Load (psf) 20 20 20 20	110 MPH E A 10 11 12 14	XPOSURE trib 9 9.5 10 11	B (on slab) 3.8 3.3 3.0 2.3	7.7 7.4 7.2	End d (in) 27 27 28 28	Middle d (in) 28 28 29 29 7 Table D7
Design Load (psf) 20 20 20 20	110 MPH E A 10 11 12 14	XPOSURE trib 9 9.5 10 11	B (on slab) 3.8 3.3 3.0	7.7 7.4 7.2	End d (in) 27 27 28 28	Middle d (in) 28 28 29 29
Design Load (psf) 20 20 20 20	110 MPH E A 10 11 12 14	XPOSURE trib 9 9.5 10 11	B (on slab) 3.8 3.3 3.0 2.3	7.7 7.4 7.2	End d (in) 27 27 28 28	Middle d (in) 28 28 29 29 Table D7
Design Load (psf) 20 20 20 20 20 Single 0.071 Roof Design	110 MPH E A 10 11 12 14 1"x2"x5" Alt 110 MPH E	XPOSURE trib 9 9.5 10 11	B (on slab) 3.8 3.3 3.0 2.3	7.7 7.4 7.2	End d (in) 27 27 28 28 28	Middle d (in) 28 28 29 29 Table D7
Design Load (psf) 20 20 20 20 20 Roof	110 MPH E A 10 11 12 14 1"x2"x5" Alt 110 MPH E	XPOSURE trib 9 9.5 10 11	B (on slab) 3.8 3.3 3.0 2.3	7.7 7.4 7.2	End d (in) 27 27 28 28 28 Uplift	Middle d (in) 28 28 29 29 Table D7 t Only oting
Design Load (psf) 20 20 20 20 20 Single 0.071 Roof Design	110 MPH E A 10 11 12 14 I"x2"x5" Alu 110 MPH E 120 MPH E	XPOSURE trib 9 9.5 10 11	B B (on slab) 3.8 3.3 3.0 2.3 adder Detail S5 C or B	7.7 7.4 7.2 6.7	End d (in) 27 27 28 28 28 Uplift Cube Fo End	Middle d (in) 28 28 29 29 Table D7 t Only oting Middle
Design Load (psf) 20 20 20 20 Single 0.071 Roof Design Load (psf)	110 MPH E A 10 11 12 14 I"x2"x5" Alu 110 MPH E 120 MPH E A	XPOSURE trib 9 9.5 10 11 Iminum Hea XPOSURE trib	B B (on slab) 3.8 3.3 3.0 2.3 ader Detail S5 C or B B (on slab)	7.7 7.4 7.2 6.7	End d (in) 27 27 28 28 28 Uplif Cube Fo End d (in)	Middle d (in) 28 28 29 29 Table D7 t Only oting Middle d (in)
Design Load (psf) 20 20 20 20 Single 0.07f Roof Design Load (psf) 20	110 MPH E A 10 11 12 14 1"x2"x5" Alu 110 MPH E 120 MPH E A 10	XPOSURE trib 9 9.5 10 11 minum Hea XPOSURE trib 9	B (on slab) 3.8 3.3 3.0 2.3 ader Detail S5 C or B B (on slab) 3.8	7.7 7.4 7.2 6.7 B 7.2	End d (in) 27 27 28 28 28 Uplif Cube Fo End d (in) 29	Middle d (in) 28 28 29 29 Table D7 t Only oting Middle d (in) 30

20

psf

Ground Snow Load

Table D8



INSTRUCTIONS FOR USING THESE TABLES

- 1. These instructions are for a **SINGLE SPAN ATTACHED** Solara cover with Louvers parallel to the house wall
- **2.** 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.
- 3 Determine "E" from Table A.1
- 4 Choose "A" up to maximum value allowed in Tables A.2 or A.3
- **5** Determine maximum **"B"** from tables on this page
- 6 The maximum HEADER OVERHANG, "C", is 3 ft
- 7 The maximum RAFTER OVERHANG, "D", is 4 ft
- 8 Choose height of Structure
- 9 Determine Uplift Footing Size.
- **10** Fasten to wall as per Details S16 or S18 Use A x E for Trib Area for Tables W1 or W2

FOR STRUCTURES ATTACHED TO 3.5" CONCRETE SLABS

SLAB 1 Follow Instructions #1-4 above.

SLAB 2 Maximum post spacing is "B o(n slab)"

SLAB 3 Follow Instructions #6-8 above, skip #9, follow #10

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W. ATTACHMENT TO WALL and REQUIRED NUMBER OF RAFTER/HEADER CONNECTIONS SEE INSTRUCTION #10 TO CALCULATE ALLOWABLE TRIB AREA FOR CONFIGURATIONS B, C AND C

SEE INSTRUCTION #10 TO CA																	
				W/ 2.5"		DMEN	T IN DO	DUGLA:	S FIR V	VOOD	(DETAI	L S15 (OR S16	5)			
	TABLE W1	Live o	r Groun	d Snow	Load												
		10	psf			20	psf			25	psf			30	psf		
Roof Design+	Dead Load	11.5	11.5	11.5	11.5	21.5	21.5	21.5	21.5	22.5	22.5	22.5	22.5	26.7	26.7	26.7	26.7
	Net Wind																
Wind Speed and Exposure	Uplift	2	3	4	5	3	4	5	6	3	4	5	6	3	4	5	6
·	Load (psf)	ALLO\	WABLE	TRIB A	REA (S	SQ FT)	(SEE I	NSTRU	CTION	#10)							
85 MPH EXPOSURE B	10.3	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
90 MPH EXPOSURE B	11.7	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
95 MPH EXPOSURE B	13.1	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
100 MPH EXPOSURE B	14.6	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
105 MPH EXPOSURE B	16.2	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
110 MPH EXPOSURE B	17.9	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
120 MPH EXPOSURE B	21.5	45	68	90	113	42	56	70	84	40	54	67	81	34	45	57	68
130 MPH EXPOSURE B	25.4	38	57	76	95	42	56	70	84	40	54	67	81	34	45	57	68
150 MPH EXPOSURE B	34.1	28	43	57	71	42	56	70	84	40	54	67	81	34	45	57	68
85 MPH EXPOSURE C	12.7	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
90 MPH EXPOSURE C	14.4	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
95 MPH EXPOSURE C	16.1	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
100 MPH EXPOSURE C	18.0	53	79	105	131	42	56	70	84	40	54	67	81	34	45	57	68
105 MPH EXPOSURE C	19.9	49	73	97	122	42	56	70	84	40	54	67	81	34	45	57	68
110 MPH EXPOSURE C	21.9	44	66	88	110	42	56	70	84	40	54	67	81	34	45	57	68
120 MPH EXPOSURE C	26.3	37	55	74	92	42	56	70	84	40	54	67	81	34	45	57	68
130 MPH EXPOSURE C	31.0	31	47	62	78	42	56	70	84	40	54	67	81	34	45	57	68
150 MPH EXPOSURE C	41.5	23	35	47	58	35	47	58	70	35	47	58	70	34	45	57	68

	TABLE WO	#440	ODEW.	A// A FII	EMDE	DMEN	TINIDO	NIOL A	C EID V	V000	/DETAI	. 047.	3D 040				
	TABLE W2					DINIEN	T IN DO	JUGLA	S FIR V	VOOD	(DE I AI	L 317 (JK 518)			
			Groun	d Snow	Load												
		10				20				25				30	psf		
Roof Design-	Dead Load	11.5	11.5	11.5	11.5	21.5	21.5	21.5	21.5	22.5	22.5	22.5	22.5	26.7	26.7	26.7	26.7
	Net Wind					_											
Wind Speed and Exposure	Uplift	2	3	4	5	3	4	5	6	3	4	5	6	3	4	5	6
	Load (psf)	ALLO\	WABLE	TRIB A	REA (S	SQ FT)	(SEE I	NSTRU	CTION	#10)							
85 MPH EXPOSURE B	10.3	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
90 MPH EXPOSURE B	11.7	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
95 MPH EXPOSURE B	13.1	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
100 MPH EXPOSURE B	14.6	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
105 MPH EXPOSURE B	16.2	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
110 MPH EXPOSURE B	17.9	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
120 MPH EXPOSURE B	21.5	28	42	56	70	26	35	44	52	25	33	42	50	21	28	35	42
130 MPH EXPOSURE B	25.4	24	35	47	59	26	35	44	52	25	33	42	50	21	28	35	42
150 MPH EXPOSURE B	34.1	18	26	35	44	26	35	44	52	25	33	42	50	21	28	35	42
85 MPH EXPOSURE C	12.7	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
90 MPH EXPOSURE C	14.4	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
95 MPH EXPOSURE C	16.1	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
100 MPH EXPOSURE C	18.0	33	49	65	82	26	35	44	52	25	33	42	50	21	28	35	42
105 MPH EXPOSURE C	19.9	30	45	60	75	26	35	44	52	25	33	42	50	21	28	35	42
110 MPH EXPOSURE C	21.9	27	41	55	68	26	35	44	52	25	33	42	50	21	28	35	42
120 MPH EXPOSURE C	26.3	23	34	46	57	26	35	44	52	25	33	42	50	21	28	35	42
130 MPH EXPOSURE C	31.0	19	29	39	48	26	35	44	52	25	33	42	50	21	28	35	42
150 MPH EXPOSURE C	41.5	14	22	29	36	22	29	36	43	22	29	36	43	21	28	35	42

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Table W3							Wind	Speed	d and	Expos	sure							
			Ехро	sure B	3			•		'			Expo	sure C				
Wind Speed	85	90	95	100	105	110	120	130	150	85	90	95	100	105	110	120	130	150 m
Lateral Wind Pressure	18	20	23	25	28	31	36	43	57	22	25	28	31	34	37	44	52	69 ps
Projection																		
(ft)			Requ	ired N	umbe	r of R	afters	/Head	ler Co	nnec	tions	(Deta	il S11))				
5	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	2	2	2
6	1	1	1	1	1	1	2	2	2	1	1	1	2	2	2	2	2	3
7	1	1	2	2	2	2	2	2	3	1	2	2	2	2	2	2	3	4
8	2	2	2	2	2	2	3	3	4	2	2	2	2	2	3	3	4	5
9	2	2	2	2	3	3	3	4	5	2	2	3	3	3	3	4	4	6
10	2	2	3	3	3	3	4	4	6	3	3	3	3	4	4	5	5	7
11	3	3	3	3	4	4	4	5	7	3	3	4	4	4	5	5	6	8
12	3	3	3	4	4	4	5	6	8	3	4	4	5	5	5	6	7	10
13	3	4	4	4	5	5	6	7	9	4	4	5	5	6	6	7	8	11
14	4	4	5	5	5	6	7	8	11	4	5	5	6	7	7	8	10	13
15	4	5	5	6	6	7	8	9	12	5	6	6	7	7	8	10	11	15
16	5	5	6	6	7	8	9	10	14	6	6	7	8	8	9	11	13	17
17	5	6	6	7	8	9	10	12	15	6	7	8	9	9	10	12	14	19
18	6	7	7	8	9	9	11	13	17	7	8	9	10	10	11	13	16	21

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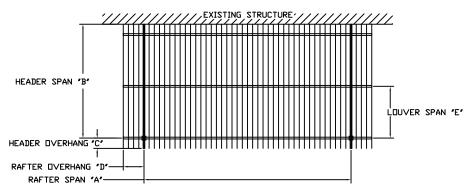
Carl Putnam, P. E. 3441 Ivylink Place Lynchburg, VA 24503 (434) 384-2514 carlputnam@comcast.net

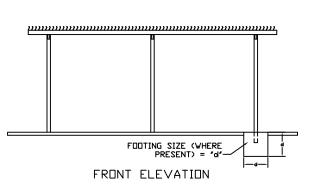


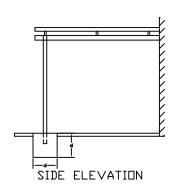
NOV 06 2013

CONFIGURATION B

PLAN VIEW

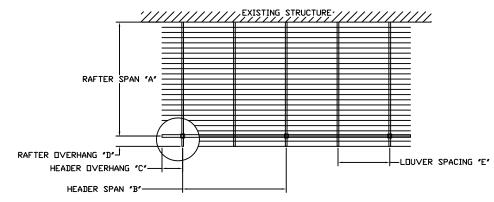


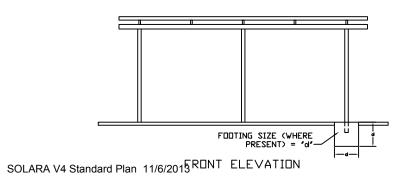


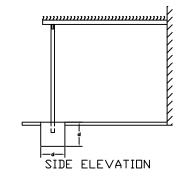


CONFIGURATION D

PLAN VIEW

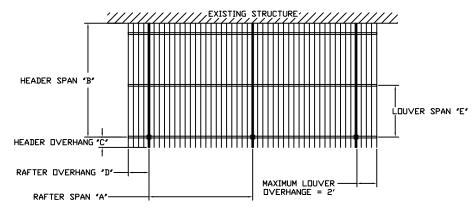


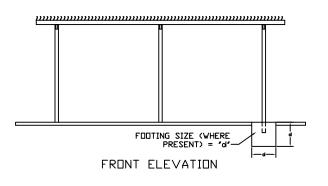


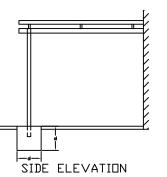


CONFIGURATION C

PLAN VIEW







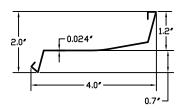


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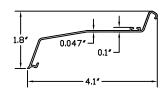
DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK F LYNCHBURG, VA	
07/02/12	FG	P.E.	(434) 384-2514 CARLPUTNAM@COM	CAST.NET
		CLIENT SOLARA		
		^{file} SOLARA,DWG		
		DESC STRUCTURE CONFIGURA	ATIONS	1 of 5

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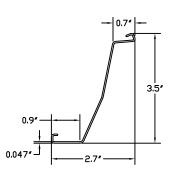
S1 ROLL-FORMED LOUVER (3105H24 ALUM ALLOY)



EXTRUDED LOUVER 1
(6063 T5 ALUM ALLOY)

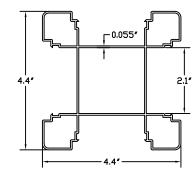


EXTRUDED LOUVER 2
(6063 T5 ALUM ALLOY)

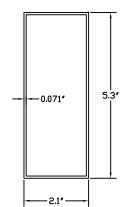


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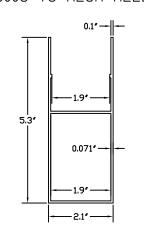
SULARA POST (6063 T5 ALUM ALLOY)



(S5) HEADER BEAM (6005 T5 ALUM ALLOY)

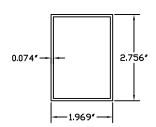


(S6) RAFTER (6005 T5 ALUM ALLOY)

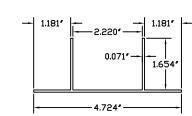


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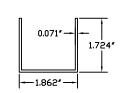
RAFTER INSERT (6005 T5 ALUM ALLOY)



S8 RAFTER MOUNTING BRACKET (6063 T6 ALUM ALLOY)

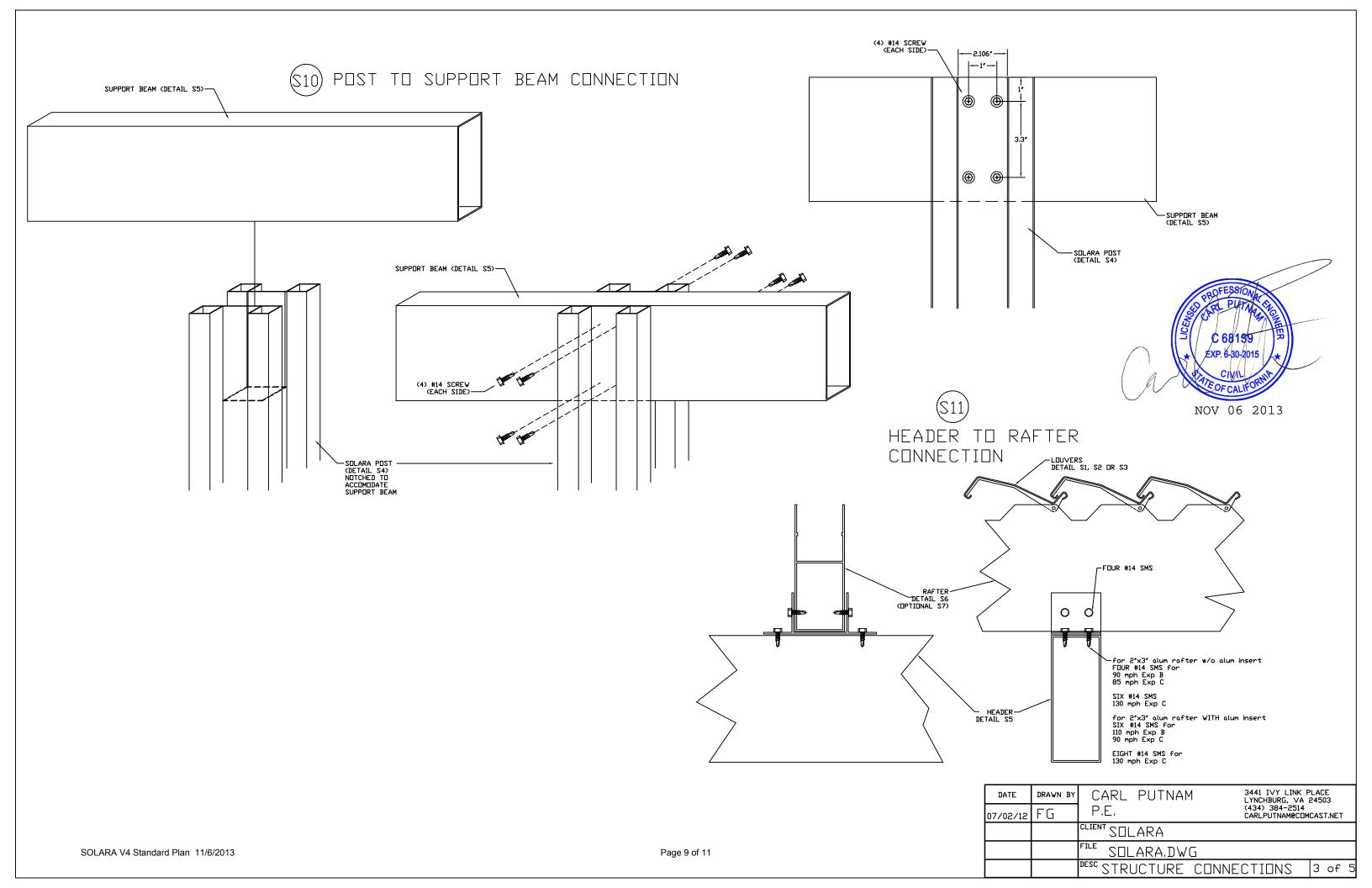


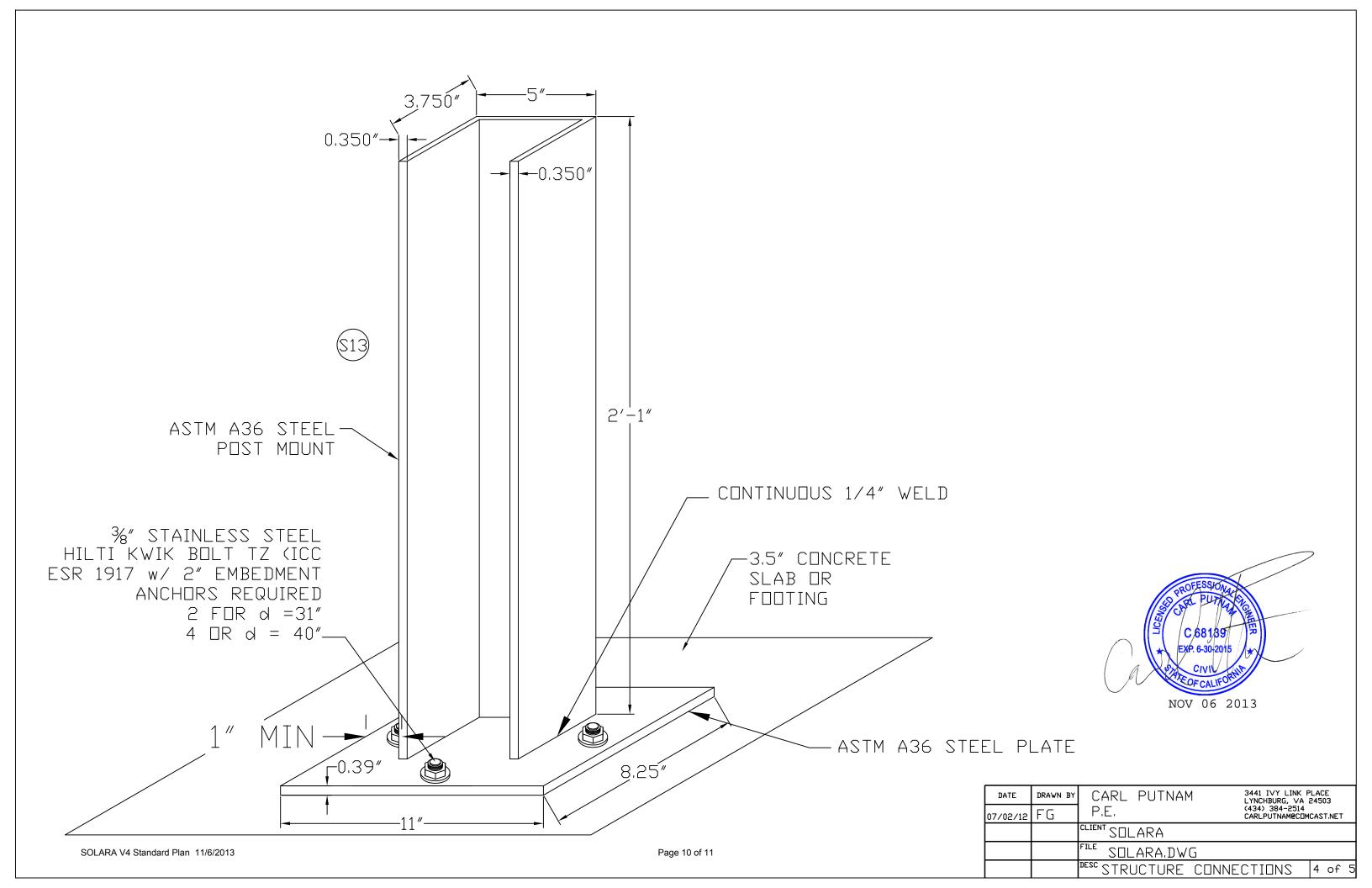
S9 RAFTER/HEADER WALL BRACKET (6063 T6 ALUM ALLOY)



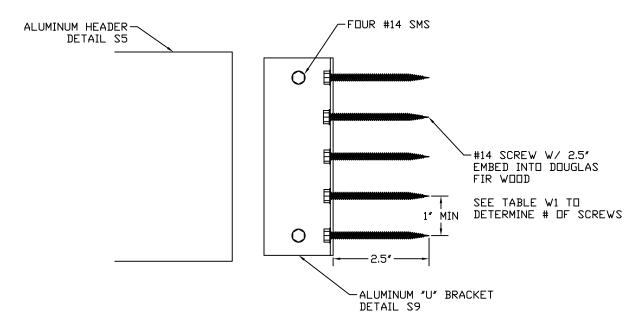


DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK PLACE LYNCHBURG, VA 24503
07/02/12	FG	P.E.	(434) 384-2514 CARLPUTNAM@C□MCAST.NET
		CLIENT SOLARA	
		FILE SOLARA, DWG	
		DESC STRUCTURE ELE	EMENTS 2 OF 5

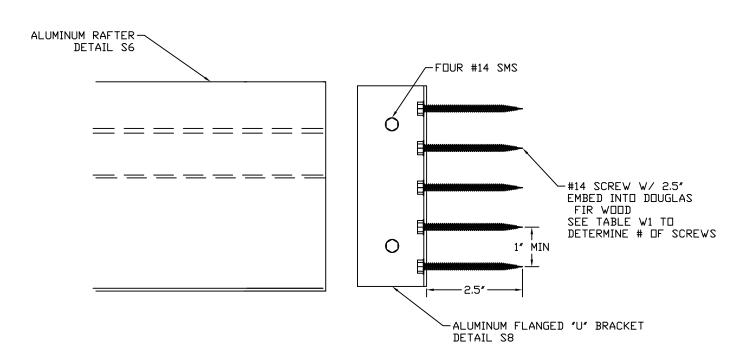




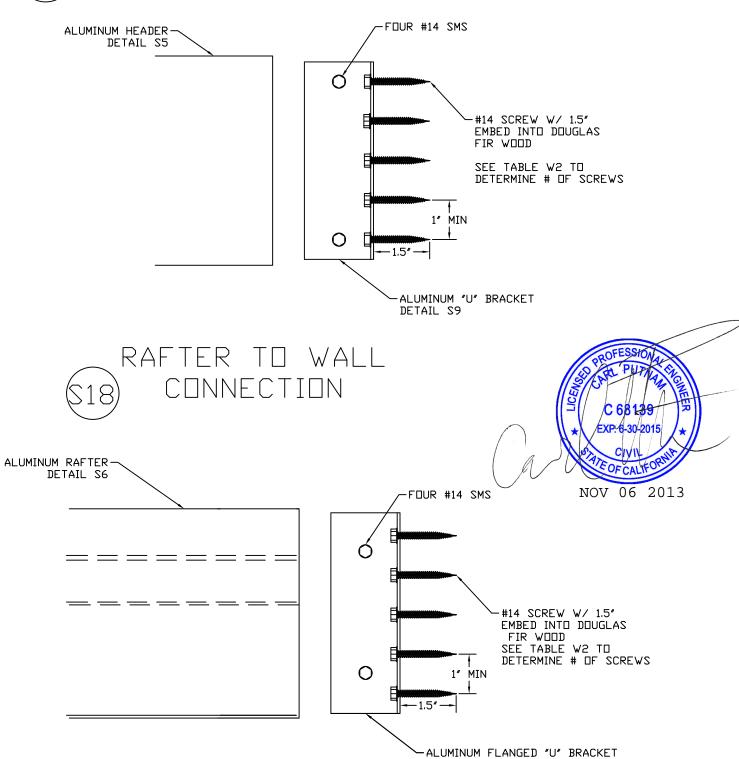
HEADER BEAM TO WALL ATTACHMENT



RAFTER TO WALL (S16) CONNECTION



S17 HEADER BEAM TO WALL ATTACHMENT



DATE	DRAWN BY	CARL PUTNAM	3441 IVY LINK PLACE LYNCHBURG, VA 24503
07/02/12	FG	P.E.	(434) 384-2514 CARLPUTNAM@COMCAST.NET
		CLIENT SOLARA	
		FILE SOLARA, DWG	
		DESC STRUCTURE CON	VECTIONS 5 of 5

DETAIL S8