Florida Building Officials and/or Building Departments

HISTORICAL PERSPECTIVE: When the AAF Guide was initially published in 2003, it had not yet been implemented into the Florida Building Code. It was then utilized as a "Master File" engineering document with "Letters of Authorization" and registered users placed upon a lookup list on this page. The use of these letters was then a pre-requisite for the use of the document.

However, since the publication is now a code approved prescriptive document, per Florida Building Code, Building, 2010, Sec 2002.4.1; FBCR, 2007, Sec 301.2.1.1.1, these letters are no longer issued, nor is it necessary for anyone to be registered with the AAF to use the guide. While the AAF still encourages users to register with us, the registered user list is maintained solely for the purpose of providing update information to current guide users as a convenience. Neither Florida law nor the building code nor the AAF requires users to be registered. The AAF Guide is no longer "Master File" engineering, but is a prescriptive document that has been adopted by the Florida Building Commission.

The AAF offers training in the use of the Guide but the training is not a pre-requisite to use.

In accordance with the building code, there are no additional or supplemental requirements. The AAF Guide does not fall under FS 489.113(9)b, but it does however fall under FS 489.113(9)c.

APPLICABLE FLORIDA STATUTE:

FS 489.113 (9) Qualifications for practice; restrictions.—

(c) Notwithstanding anything in this chapter or any other provision of law, a licensed engineer or architect is not required for the preparation or use of any design guide adopted by the Florida Building Commission as part of the building code pursuant to s. 553.73.

CURRENTLY APPLICABLE FLORIDA BUILDING CODE PROVISIONS:

2010 FBC {BUILDING} 2002.4.1

The following design guides shall be accepted as conforming to accepted engineering practices:

AAF Guide to Aluminum Construction in High Wind Areas.

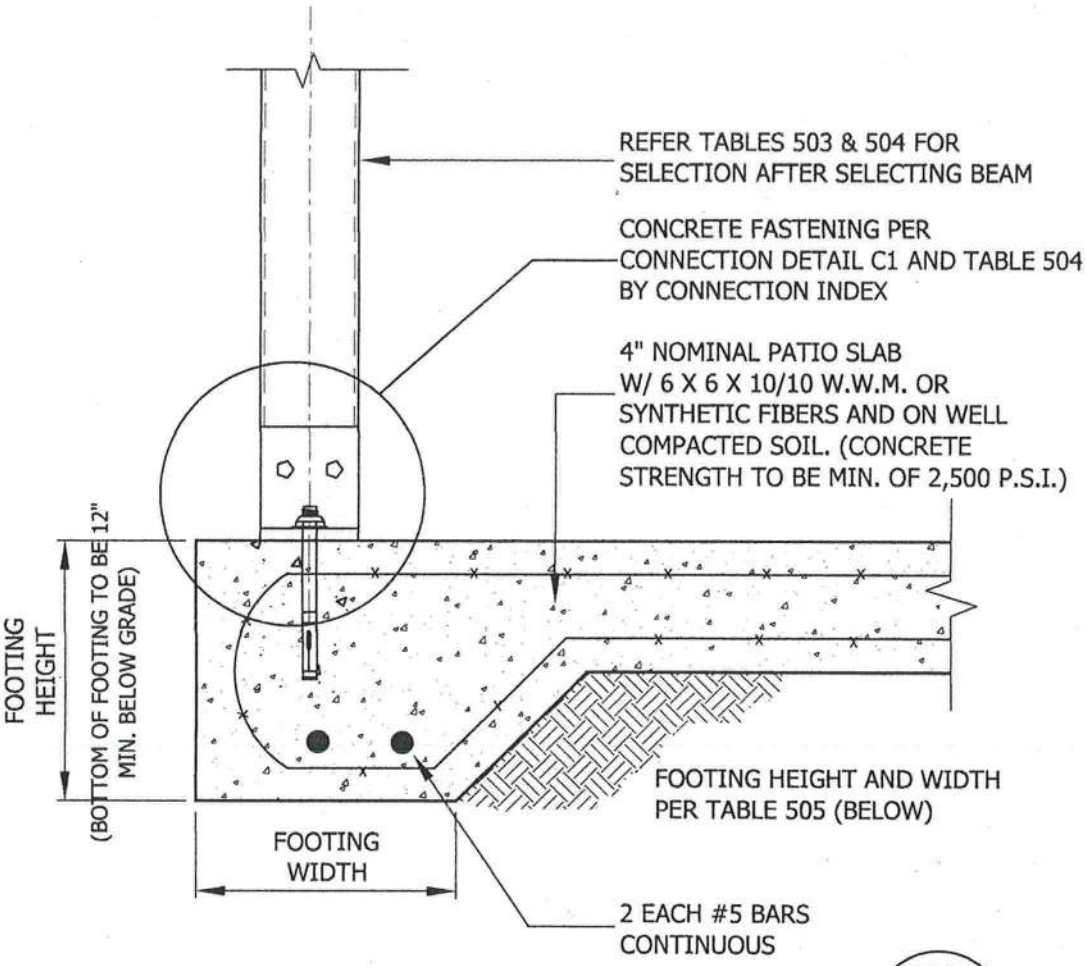
2010 FBC {RESIDENTIAL} R301.2.1.1.1 Design -

The following design guide shall be accepted as conforming to accepted engineering practices: AAF Guide to Aluminum Construction in High-Wind Areas.

2010 FBC {BUILDING} 1622.1.2

Design shall be based on such loads applied horizontally inward and outward to the walls with a shape factor of 1.3 and applied vertically upward and downward on the roof with a shape factor of 0.7.

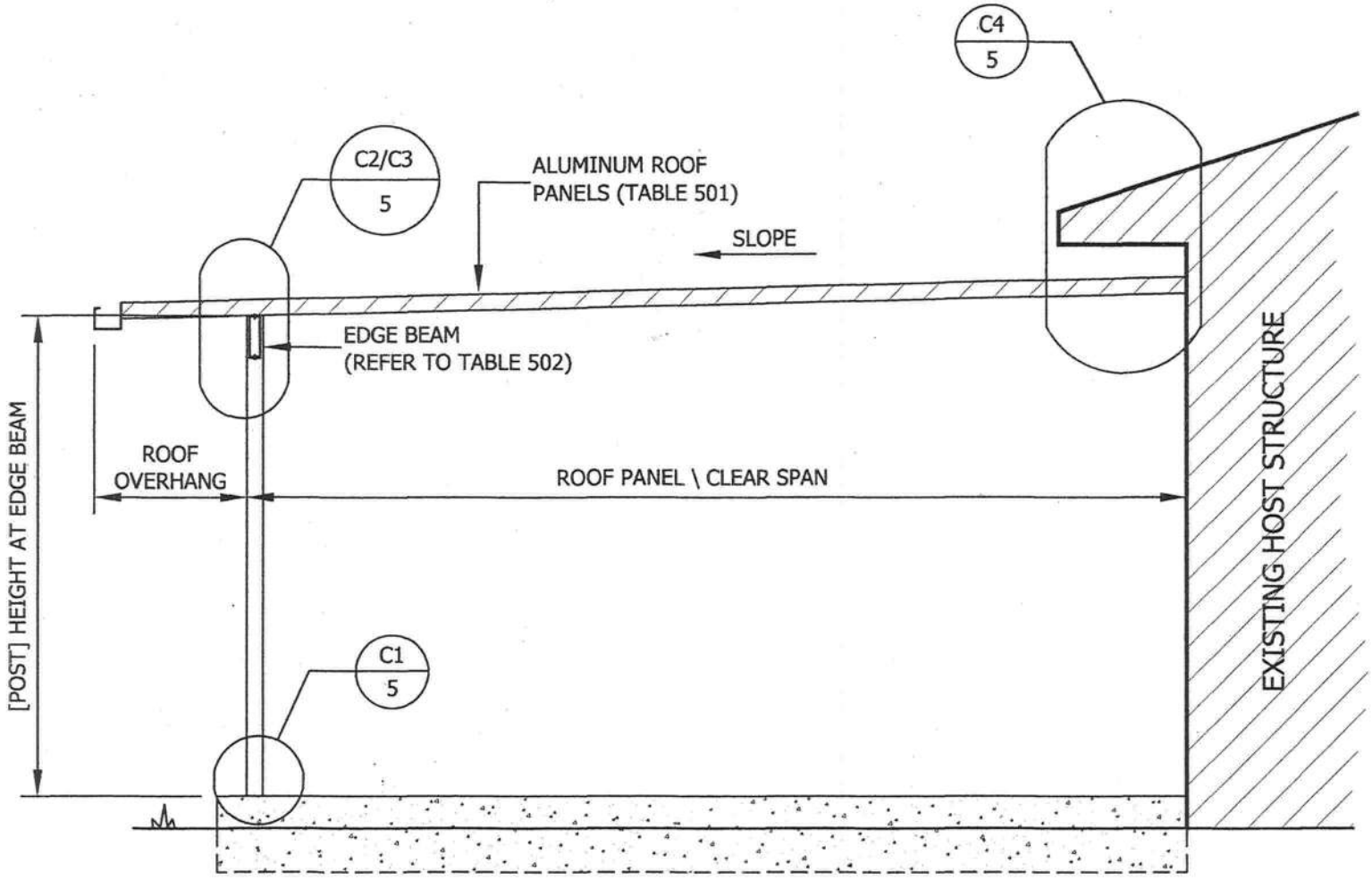
Exception: Screen enclosures shall be permitted to be designed in accordance with the



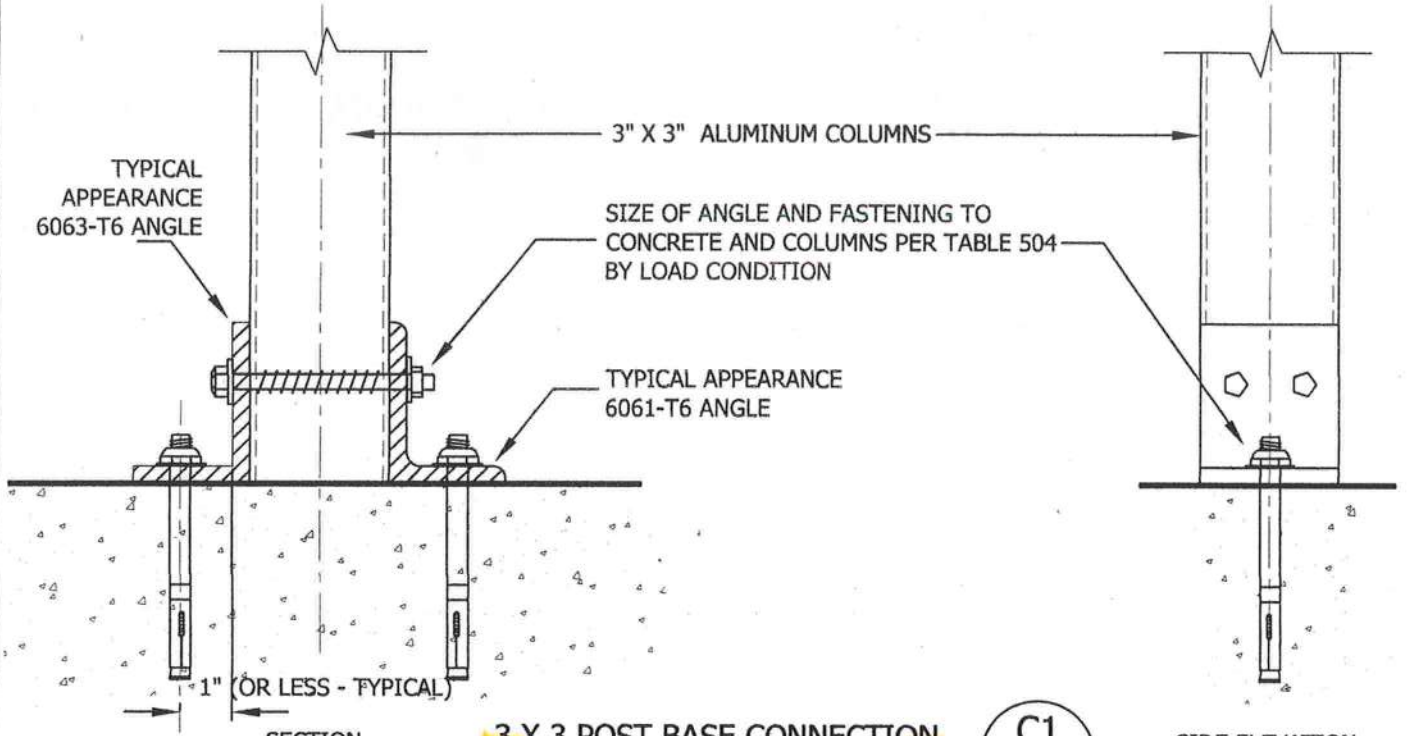
FOOTING DETAIL

(PATIO SLAB W/ MONOLITHIC EDGE FOOTING)

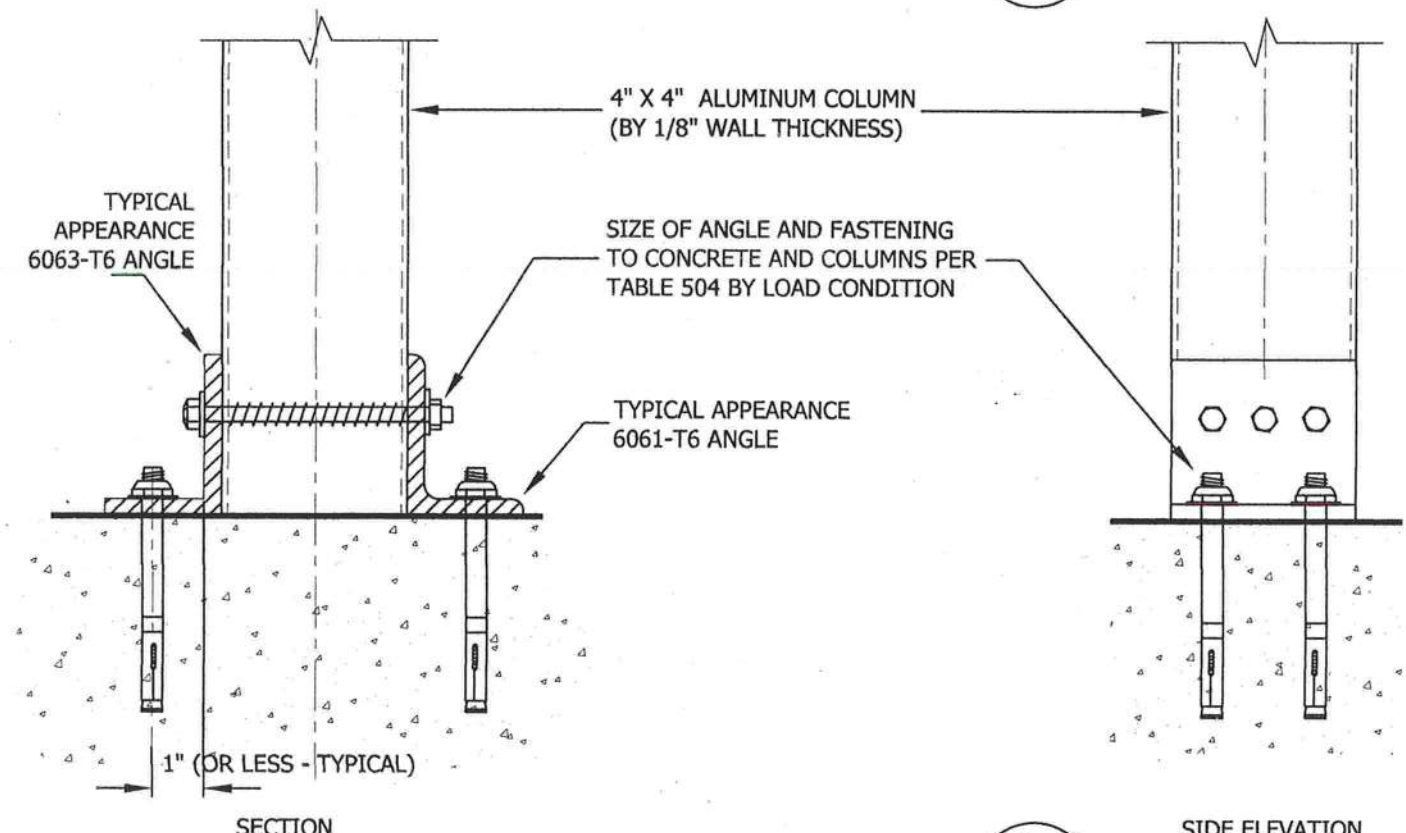
F1
5



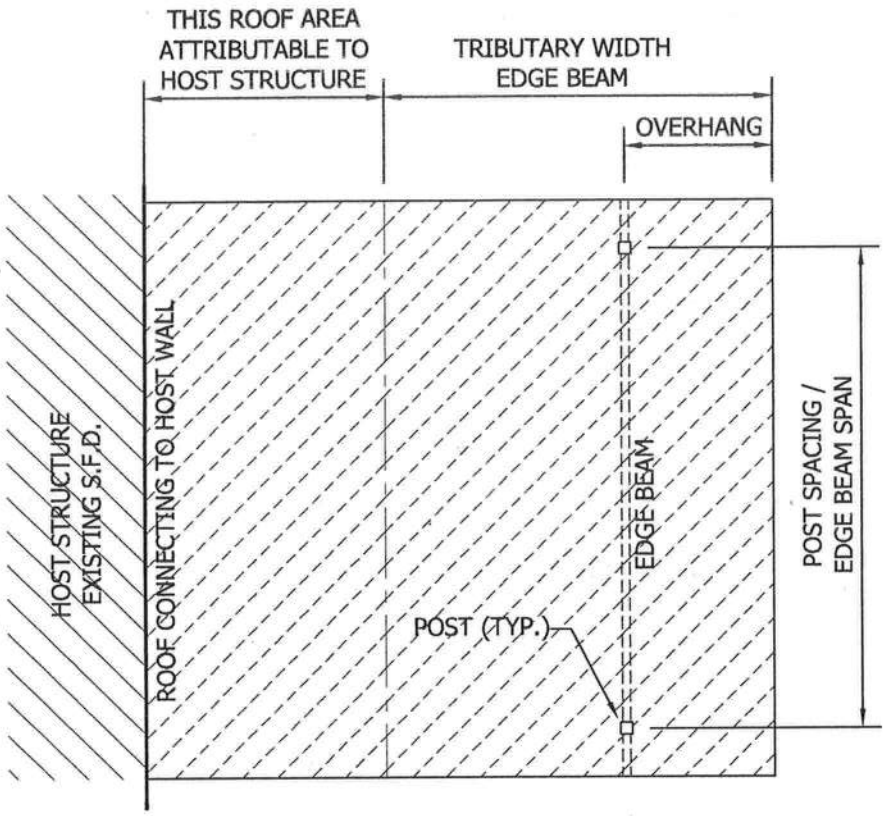
TYPICAL SECTION - ATTACHED COVER / CARPORT



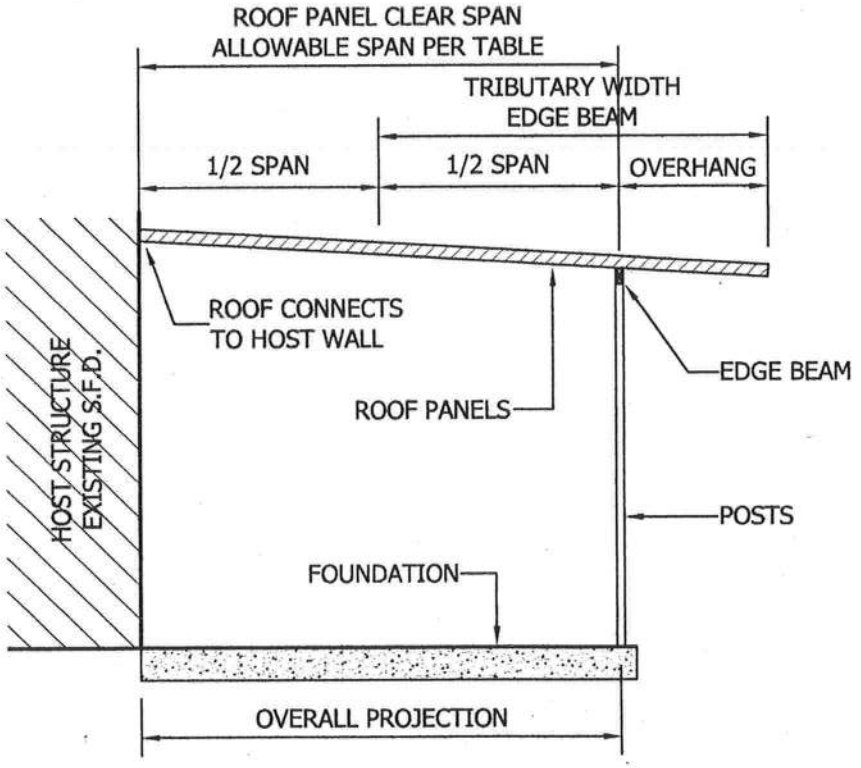
3 X 3 POST BASE CONNECTION C1/5



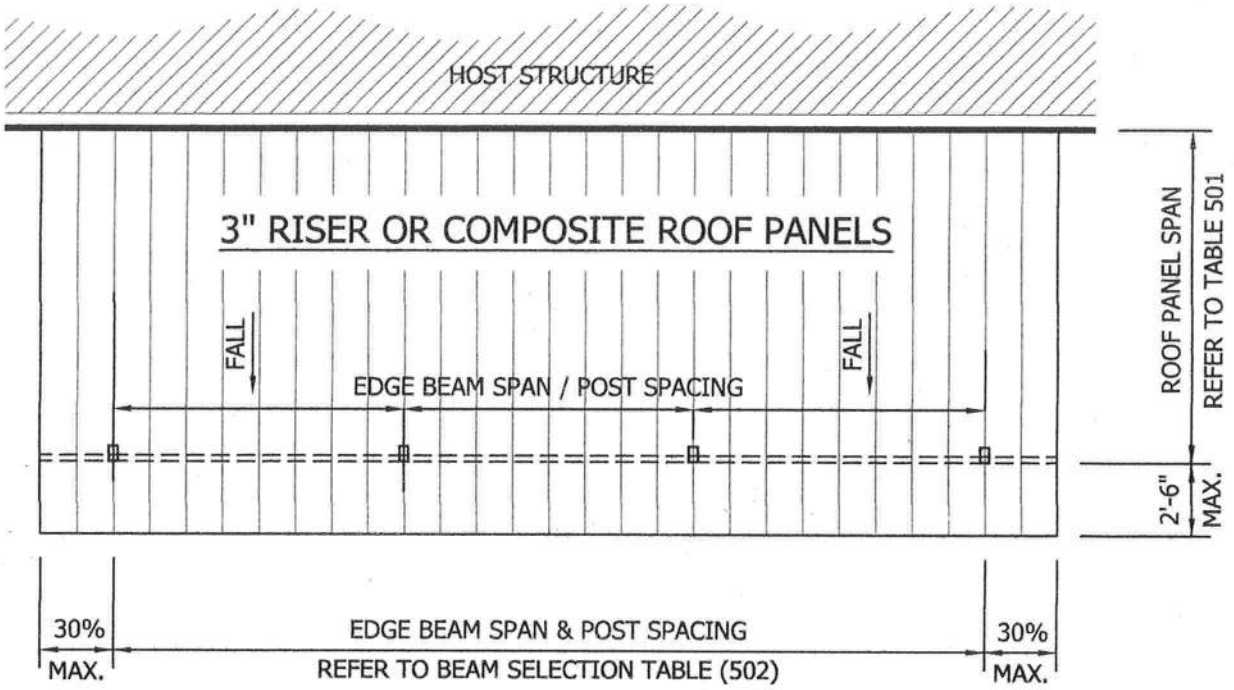
4 X 4 POST BASE CONNECTION C1/5



SCHEMATIC PARTIAL PLAN / TRIBUTARY LOAD WIDTHS



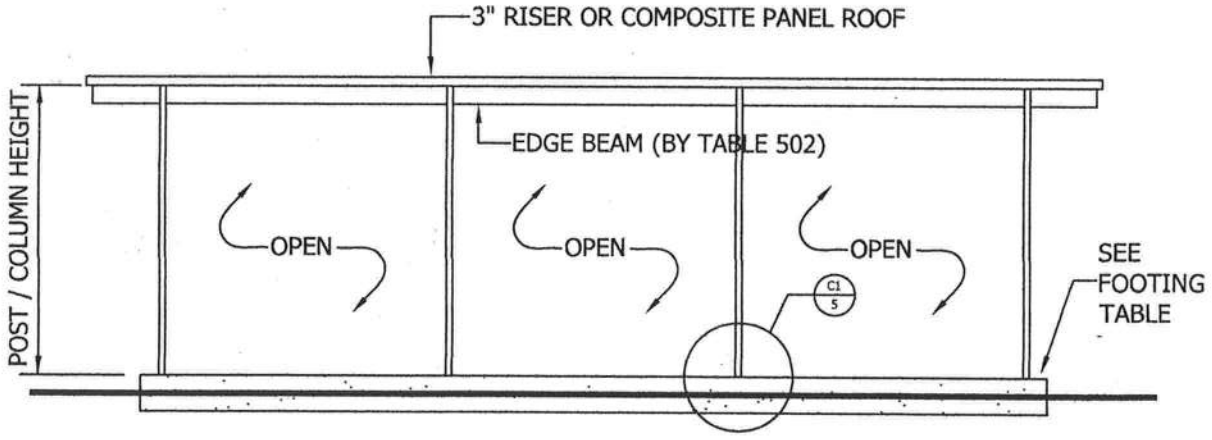
SCHEMATIC SECTION / TRIBUTARY LOAD WIDTHS



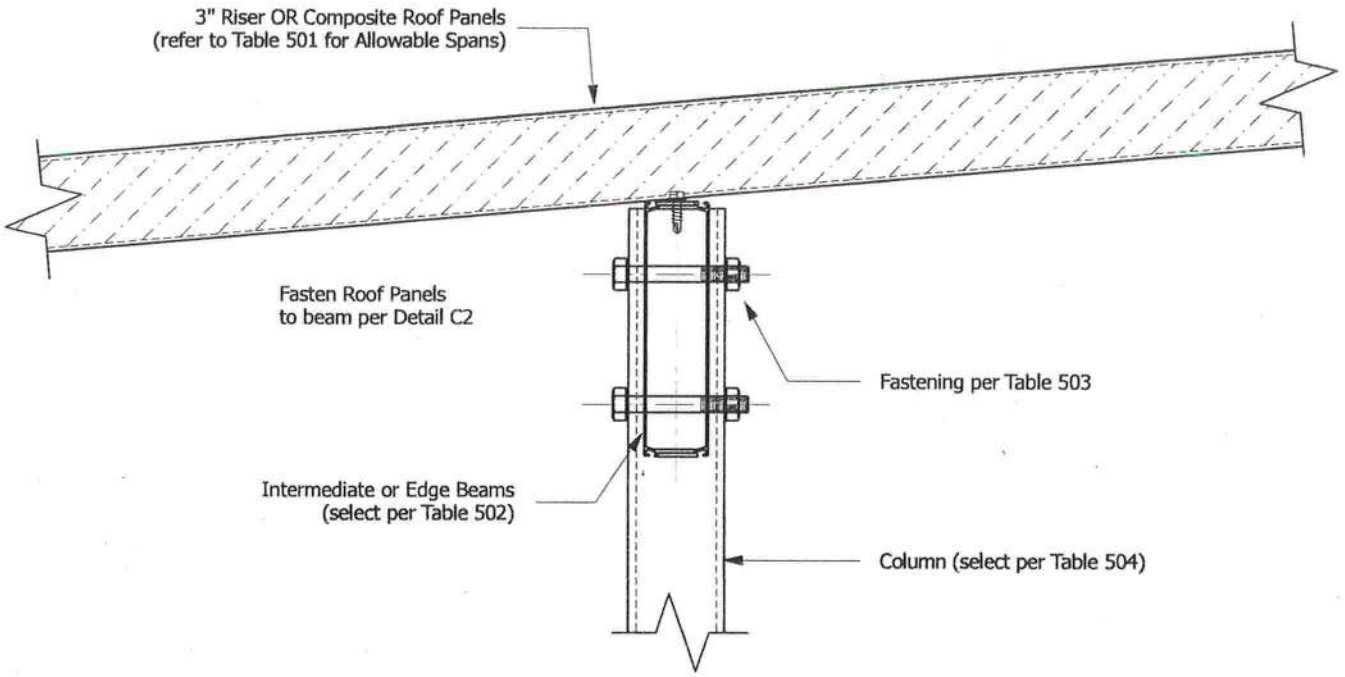
PLAN VIEW - ATTACHED COVER (SHED TYPE)

FOR ALLOWABLE SPANS, DETERMINE ROOF TYPE, THEN REFER TO:
TABLE 501 FOR ROOF PANEL SPANS
TABLE 502 FOR EDGE BEAMS

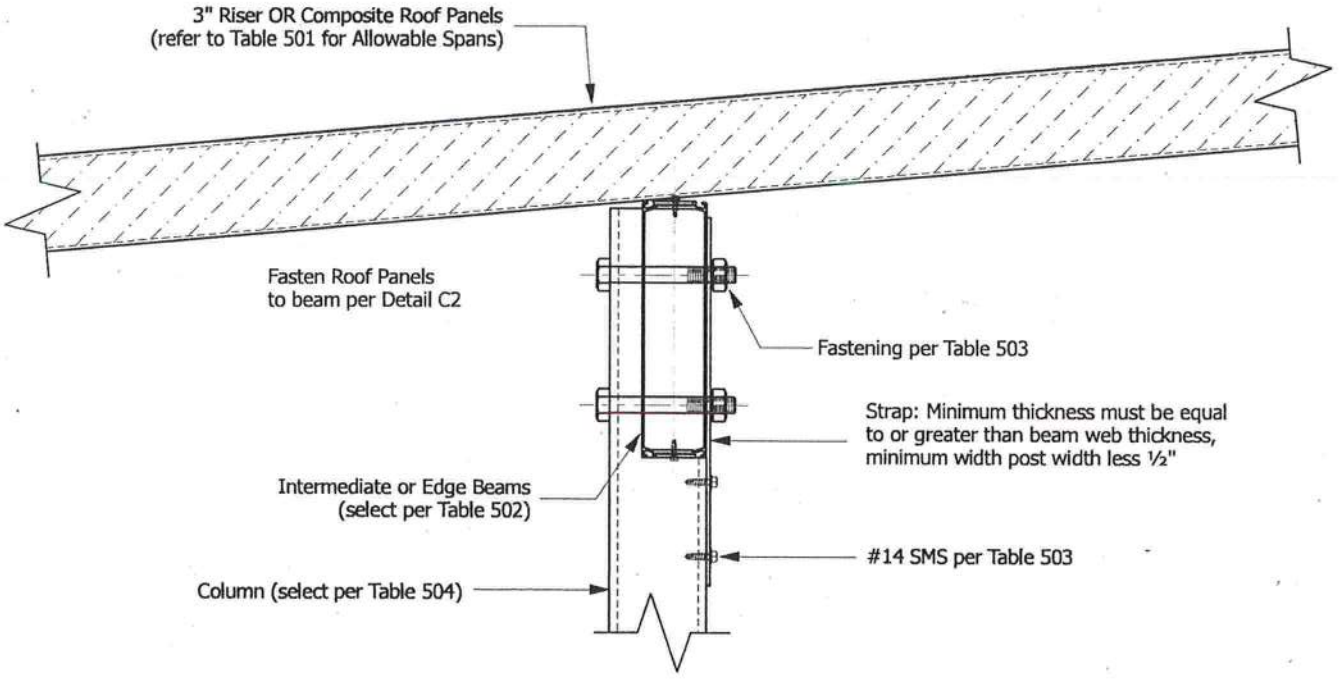
NOTES:
1) MAXIMUM EDGE BEAM CANTILEVER IS 30% OF ALLOWABLE SPAN FOR SELECTED EDGE BEAM
2) MAXIMUM ROOF PANEL CANTILEVER IS 2' - 6"



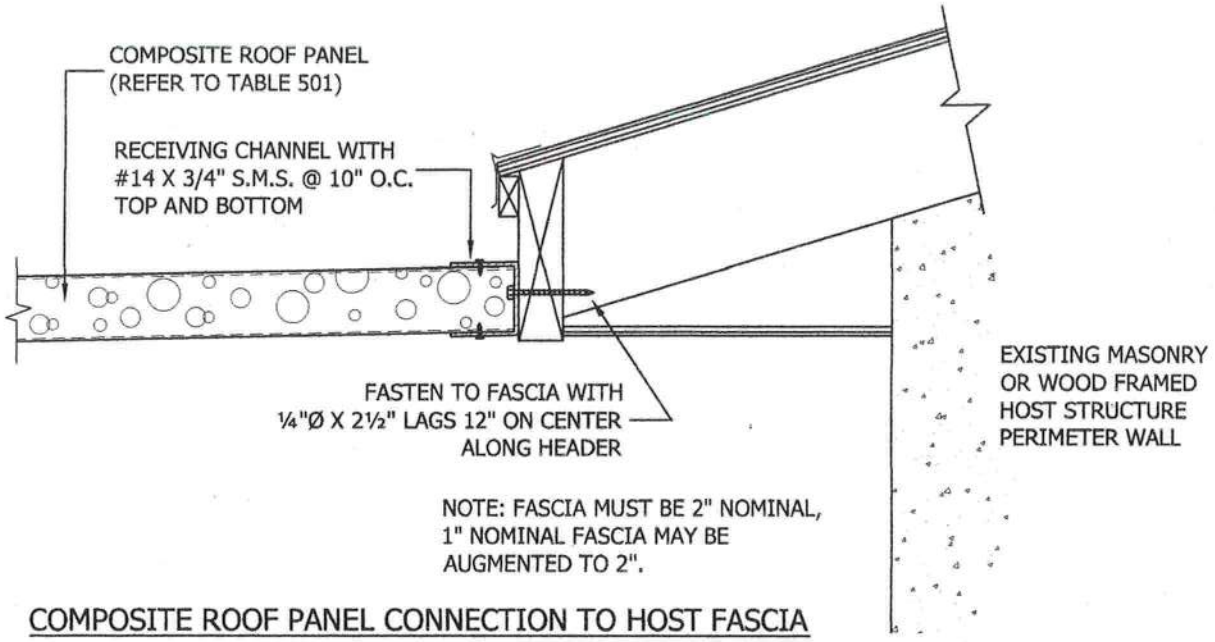
FRONT ELEVATION - SHED TYPE ATTACHED COVER



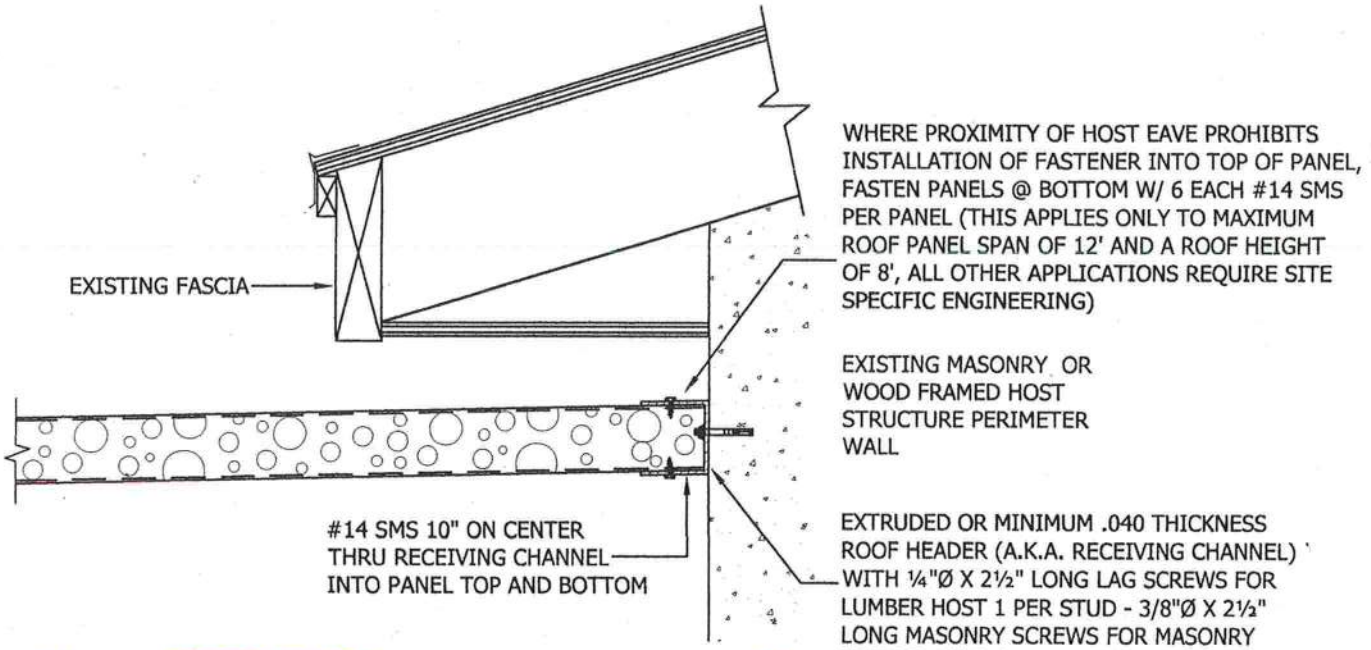
Beam/Column Connection [w/ Center Notch] C3/5



Beam/Column Connection [w/ Side Notch & Strap] C3/5



COMPOSITE ROOF PANEL CONNECTION TO HOST FASCIA



COMPOSITE ROOF PANEL CONNECTION TO HOST WALL

ROOF TO HOST CONNECTION DETAILS

C4
5

BEAM SELECTION TABLE - ATTACHED COVERS (TYPE II)
TABLE 502ab **100 and 110 MPH WIND ZONES - EXPOSURE B**
Occupancy Importance Factor = .77 Component & Cladding Design Pressures Vary by Effective Wind Area

Post Spacing and/or Beam Span (ft) / Tributary Load Width for Roof Panels

	4	5	6	7	8	9	10	11	12	13	14	15	16
6	3T/A	3T/A	3H/A	5S/A	5S/A	5S/A	5S/A	5S/A	6S/A	6S/A	6S/A	6S/A	6S/B
7	3H/A	5S/A	5S/A	5S/A	5S/A	6S/A	6S/A	6S/A	6S/A	7S/B	7S/B	7S/B	7S/C
8	5S/A	5S/A	5S/A	6S/A	6S/A	6S/A	7S/A	7S/A	7S/B	8S/B	8S/C	8S/C	8S/C
9	5S/A	6S/A	6S/A	6S/A	7S/A	7S/A	8S/A	8S/B	8S/B	8S/C	8S/C	8S/C	8S/D
10	6S/A	6S/A	7S/A	7S/A	8S/A	8S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D
11	6S/A	7S/A	7S/A	8S/A	8S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D
12	7S/A	7S/A	8S/A	8S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	8S/D
13	7S/A	8S/A	8S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	9S/E	9S/E
14	8S/A	8S/A	8S/A	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	9S/D	9S/E	9S/E	9S/E
15	8S/A	8S/A	8S/A	8S/B	8S/C	8S/C	8S/D	9S/D	9S/D	9S/E	9S/E	9S/E	9S/E
16	8S/A	8S/A	8S/B	8S/C	8S/C	8S/D	9S/D	9S/D	9S/D	9S/E	9S/E	10S/E	10S/E
17	8S/A	8S/A	8S/B	8S/C	8S/D	9S/D	9S/D	9S/D	9S/E	9S/E	10S/E	10S/E	10S/F
18	8S/A	8S/A	8S/B	8S/C	9S/D	9S/D	9S/D	9S/E	10S/E	10S/E	10S/E	10S/F	10S/F
19	8S/A	8S/B	8S/C	9S/C	9S/D	9S/D	9S/D	10S/E	10S/E	10S/E	10S/F	10S/F	2-9/F
20	8S/A	8S/B	8S/C	9S/D	9S/D	9S/D	10S/E	10S/E	10S/E	10S/E	2-9/F	2-9/F	2-9/G
21	8S/A	8S/B	9S/C	9S/D	9S/D	10S/D	10S/E	10S/E	10S/E	2-9/F	2-9/F	2-9/G	2-9/G
22	8S/A	9S/B	9S/C	9S/D	10S/D	10S/E	10S/E	10S/E	2-9/E	2-9/F	2-9/G	2-9/G	2-10/G

Abbreviation Key: Numeric value indicates beam depth (inches) A prefix of 2 indicates a double beam is required.
H = Hollow, S=Self-Mating, T=Hollow Tilt An entry of "na" indicates site specific design required.

BEAM SELECTION TABLE - ATTACHED COVERS (TYPE II)
TABLE 502c **120 MPH WIND ZONE - EXPOSURE B**
Occupancy Importance Factor = .77 Component & Cladding Design Pressures Vary by Effective Wind Area

Post Spacing and/or Beam Span (ft) / Tributary Load Width for Roof Panels

	4	5	6	7	8	9	10	11	12	13	14	15	16
6	3T/A	3H/A	5S/A	5S/A	5S/A	5S/A	6S/A	6S/A	6S/B	6S/B	6S/C	7S/C	7S/C
7	5S/A	5S/A	5S/A	6S/A	6S/A	6S/A	7S/B	7S/B	7S/C	7S/C	8S/C	8S/D	8S/D
8	5S/A	5S/A	6S/A	6S/A	7S/A	7S/B	7S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D
9	6S/A	6S/A	7S/A	7S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	8S/D
10	6S/A	7S/A	7S/A	8S/B	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	8S/E	8S/E
11	7S/A	8S/A	8S/A	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	8S/E	8S/E	8S/E
12	7S/A	8S/A	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	8S/D	8S/E	8S/E	9S/E	9S/E
13	8S/A	8S/A	8S/B	8S/C	8S/D	8S/D	8S/D	8S/D	9S/E	9S/E	9S/E	9S/E	9S/F
14	8S/A	8S/B	8S/C	8S/C	8S/D	8S/D	8S/D	9S/E	9S/E	9S/E	9S/E	9S/F	9S/F
15	8S/A	8S/B	8S/C	8S/D	8S/D	9S/D	9S/E	9S/E	9S/E	9S/E	9S/F	10S/F	10S/G
16	8S/A	8S/B	8S/C	8S/D	9S/D	9S/D	9S/E	9S/E	9S/E	10S/F	10S/F	10S/G	10S/G
17	8S/A	8S/C	8S/D	8S/D	9S/D	9S/E	9S/E	9S/E	10S/F	10S/F	10S/G	10S/G	na
18	8S/B	8S/C	8S/D	9S/D	9S/D	9S/E	10S/E	10S/E	10S/F	10S/G	10S/G	na	na
19	8S/B	8S/C	9S/D	9S/D	9S/E	10S/E	10S/E	10S/F	10S/F	2-9/G	na	na	na
20	8S/B	8S/C	9S/D	9S/D	10S/E	10S/E	10S/F	10S/F	2-9/G	2-9/G	na	na	na
21	8S/C	9S/D	9S/D	9S/E	10S/E	10S/E	10S/F	2-9/G	2-9/G	na	na	na	na
22	8S/C	9S/D	9S/D	10S/E	10S/E	10S/E	2-9/F	2-9/G	2-9/G	na	na	na	na

Abbreviation Key: Numeric value indicates beam depth (inches) A prefix of 2 indicates a double beam is required.
H = Hollow, S=Self-Mating, T=Hollow Tilt An entry of "na" indicates site specific design required.

Table 503 - Post to Beam Fastening		Minimum	Bolts Required	
Beam / Section	(Abbr)	Post Size	# of Bolts	Diameter
2" X 3 or 4 Hollow or Snap	Varies	3"X3"X.060	2	3/8"
2"X4" Self-Mating Beam	2X4 SMB	3"X3"X.060	3	3/8"
2"X5" Self-Mating Beam	2X5 SMB	3"X3"X.060	3	1/2"
2"X6" Self-Mating Beam	2X6 SMB	3"X3"X.060	3	5/8"
2"X7" Self-Mating Beam	2X7 SMB	3"X3"X.060	4	5/8"
2"X8" Self-Mating Beam	2X8 SMB	3"X3"X.093	3	5/8"
2"X9" Self-Mating Beam	2X9L SMB	3"X3"X.093	3	5/8"
2"X9" Self-Mating Beam	2X9H SMB	3"X3"X.093	4	1/2"
2"X10" Self-Mating Beam	2X10 SMB	3"X3"X.093	4	5/8"
Double 2"X9"(H) SMB	2-2X9	4"X4"X.125	2	3/4"
Double 2"X10" SMB	2-2X10	4"X4"X.125	3	5/8"

POST FASTENINGS TO CONCRETE AND ISOLATED FOOTING SIZES — Table 504

LOAD INDEX #	Isolated Footing Size	Minimum Post	Size of Double 6063-T6 Angles Required (Note #1)	Size of Double 6061-T6 Angles Required (Note #1)	Angle to Column Bolts	Concrete Anchors	Assembly Capacity
A	2' - 0" X 2' - 0" X 2' - 0"	3X3X.06 Fluted	2" X 3" X 5/16"	2" X 3" X 1/4"	2 Each 3/8" Dia	2 Each 5/16" Dia X 2" Embedment	1,200
B	2' - 4" X 2' - 4" X 2' - 0"	3X3X.06 Fluted	2-1/2" X 2-1/2" X 3/8"	2" X 3" X 1/4"	2 Each 1/2" Dia	2 Each 3/8" Dia X 2" Embedment	1,629
C	2' - 8" X 2' - 8" X 2' - 8"	3"X3"X.093"	2-1/2" X 2-1/2" X 1/2"	2-1/2" X 2-1/2" X 3/8"	2 Each 1/2" Dia	2 Each 1/2" Dia X 3" Embedment	2,855
D	3' - 0" X 3' - 0" X 3' - 0"	3"X3"X.125"	2-1/2" X 2-1/2" X 1/2"	2-1/2" X 2-1/2" X 3/8"	2 Each 5/8" Dia	2 Each 5/8" Dia X 6" Embedment	4,050
E	3' - 4" X 3' - 4" X 3' - 2"	4"X 4"X.125"	2-1/2" X 2-1/2" X 5/8"	2-1/2" X 2-1/2" X 1/2"	3 Each 1/2" Dia	2 Each 3/4" Dia X 7" Embedment	5,272
F	3' - 8" X 3' - 8" X 3' - 8"	4"X4"X.125"	Bury Column into Concrete per detail or Site Specific Engineering				7,394
G	4' - 0" X 4' - 0" X 4' - 0"	4"X4"X.125"	Bury Column into Concrete per detail or Site Specific Engineering				9,600

Note #1: Size of angle legs may vary, so long as, concrete anchors are within 1" of outside face of vertical angle leg and vertical leg can accomodate bolts specified. Length of angle is considered to be equal to the size of the column specified.
Isolated Concrete Footing Note: Footings of 3' - 0" and above require reinforcement in top (and bottom).

Allowable Roof Panel Spans for Attached Covers (Type II) **Table 501**

Table 501b **110 MPH Wind Zone Exposure B**

Industry Standard Products	Design Load (psf)	Panel/Skin Thickness 0.024	0.032
3" Standing Seam (Riser) by 5 Rib	22.9	7'-0"	10'-0"
3" Composite (1 lb EPS Core X Skin Thickness)	22.1	10'-9"	12'-8"
4" Composite (1 lb EPS Core X Skin Thickness)	22.1	11'-11"	14'-1"
5" Composite (1 lb EPS Core X Skin Thickness)	22.1	13'-0"	14'-8"
6" Composite (1 lb EPS Core X Skin Thickness)	22.1	14'-1"	15'-4"
3" Composite (2 lb EPS Core X Skin Thickness)	22.1	12'-8"	13'-9"
4" Composite (2 lb EPS Core X Skin Thickness)	22.1	14'-1"	15'-1"
5" Composite (2 lb EPS Core X Skin Thickness)	22.1	14'-8"	16'-2"
6" Composite (2 lb EPS Core X Skin Thickness)	22.1	15'-4"	17'-3"

Table 501c **120 MPH Wind Zone Exposure B**

Industry Standard Products	Design Load (psf)	Panel/Skin Thickness 0.024	0.032
3" Standing Seam (Riser) by 5 Rib	27.3	6'-5"	9'-2"
3" Composite (1 lb EPS Core X Skin Thickness)	26.3	10'-2"	11'-11"
4" Composite (1 lb EPS Core X Skin Thickness)	26.3	11'-3"	13'-3"
5" Composite (1 lb EPS Core X Skin Thickness)	26.3	12'-3"	13'-10"
6" Composite (1 lb EPS Core X Skin Thickness)	26.3	13'-4"	14'-5"
3" Composite (2 lb EPS Core X Skin Thickness)	26.3	11'-11"	12'-11"
4" Composite (2 lb EPS Core X Skin Thickness)	26.3	13'-3"	14'-3"
5" Composite (2 lb EPS Core X Skin Thickness)	26.3	13'-10"	15'-3"
6" Composite (2 lb EPS Core X Skin Thickness)	26.3	14'-5"	16'-4"

Concrete Slab Foundations & Monolithic Footings (Detail F1)							Table 505 (Type I)
Exposure B			Allowable Tributary Load Widths for Solid Roofs				
Total Height (In)	Bottom Width (In)	Reinforcement*	Solid Roofs / Partially Enclosed				
			110 mph	120 mph	130 mph	140 mph	146 mph
4" Nominal Patio Slab			2'- 11"	2'-5½"	2'-1¼"	1'-9¾"	1'- 8"
16	12	2 Each #5	7'-3¼"	6'-1¼"	5'-2½"	4'- 6"	4'-1½"
16	16	2 Each #5	8'-8¾"	7'- 4"	6'- 3"	5'-4½"	4'-11½"
20	16	2 Each #5	10'-7¾"	8'-11½"	7'-7½"	6'- 7"	6'-0½"
24	16	2 Each #5	12'- 7"	10'- 7"	9'-0¼"	7'-9¼"	7'-1¾"
24	20	3 Each #5	15'- 0"	12'-7¼"	10'- 9"	9'-3¼"	8'-6¼"

Note: Maximum Post Spacing 10' - 0" for Concrete Slab with Monolithic Footings.
* (B) indicates bottom only, (T&B) indicate top and bottom

Concrete Slab Foundations & Monolithic Footings (Detail F1)							Table 505 (Type II)
Exposure B			Allowable Tributary Load Widths for Solid Roofs				
Total Height (In)	Bottom Width (In)	Reinforcement*	Solid Roofs / Partially Enclosed				
			110 mph	120 mph	130 mph	140 mph	146 mph
4" Nominal Patio Slab			3'-9½"	3'-2¼"	2'-8½"	2'- 4"	2'-1¾"
16	12	2 Each #5	9'- 5"	7'- 11"	6'- 9"	5'-9¾"	5'-4¼"
16	16	2 Each #5	11'-3¾"	9'- 6"	8'- 1"	6'-11¾"	6'- 5"
20	16	2 Each #5	13'-9¾"	11'-7¼"	9'-10¾"	8'-6¼"	7'- 10"
24	20	2 Each #5	16'-3¾"	13'-8½"	11'-8¼"	10'-0¾"	9'- 3"
24	20	3 Each #5	19'-5¼"	16'- 4"	13'- 11"	12'- 0"	11'-0½"

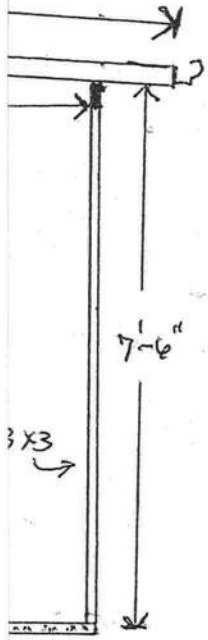
Note: Maximum Post Spacing 10' - 0" for Concrete Slab with Monolithic Footings.
* (B) indicates bottom only, (T&B) indicate top and bottom

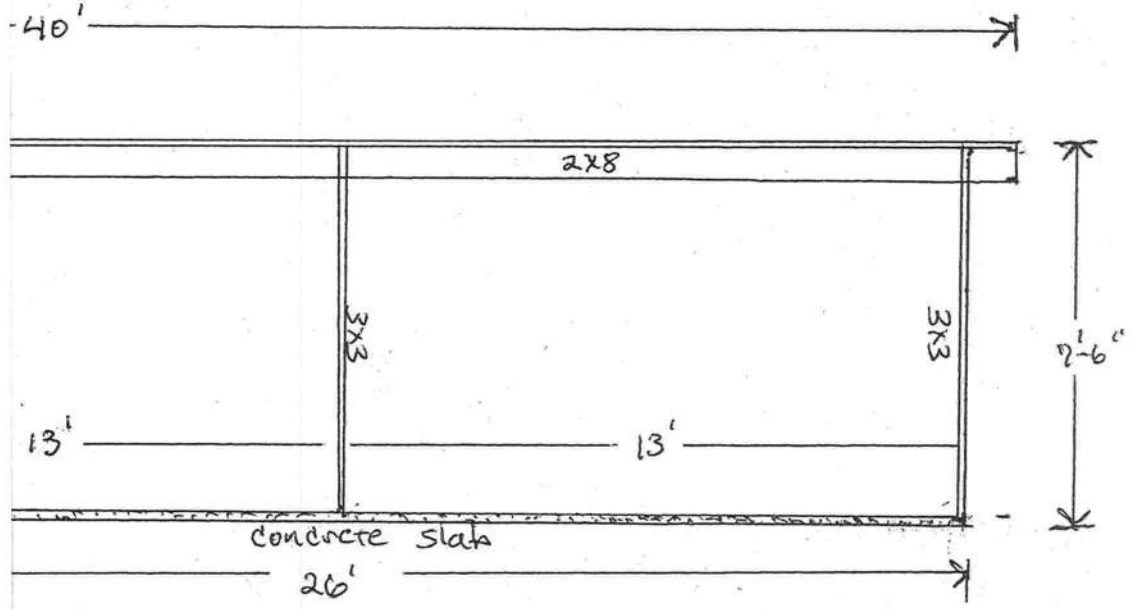
Continuous Perimeter Concrete Footings (Detal F2)							Table 506 (TypeI)
Exposure B			Allowable Solid Roof Tributary Load Widths				
Height (In)	Width (In)	Reinforcement*	110 mph	120 mph	130 mph	140 mph	146 mph
16	12	2 Each #5 (B)	5'- 6"	4'-7½"	3'-11¼"	3'-4¾"	3'-1½"
16	16	2 Each #5 (B)	7'- 4"	6'- 2"	5'- 3"	4'-6½"	4'- 2"
20	16	2 Each #5 (B)	9'-2¼"	7'-8½"	6'-6¾"	5'- 8"	5'-2½"
20	20	3 Each #5 (B)	11'-5¾"	9'-7¾"	8'-2½"	7'- 1"	6'-6¼"
24	20	2 Each #5 (T&B)	13'-9¼"	11'-6¾"	9'-10¼"	8'- 6"	7'-9¾"
24	24	2 Each #5 (T&B)	16'-6¼"	13'-10½"	11'- 10"	10'-2½"	9'-4½"
30	24	2 Each #5 (T&B)	20'-7¾"	17'-4¼"	14'-9½"	12'- 9"	11'-8¾"

* (B) indicates bottom only, (T&B) indicate top and bottom

Continuous Perimeter Concrete Footings (Detal F2)							Table 506 (TypeII)
Exposure B			Allowable Solid Roof Tributary Load Widths				
Height (In)	Width (In)	Reinforcement*	110 mph	120 mph	130 mph	140 mph	146 mph
16	12	2 Each #5 (B)	7'-1¾"	5'-11¾"	5'-1¼"	4'-4¾"	4'-0½"
16	16	2 Each #5 (B)	9'-6¼"	7'-11¾"	6'-9¾"	5'-10½"	5'-4¾"
20	16	2 Each #5 (B)	11'-10¾"	9'-11¾"	8'-6¼"	7'- 4"	6'- 9"
20	20	3 Each #5 (B)	14'-10½"	12'- 6"	10'-7¾"	9'-2¼"	8'-5¼"
24	20	2 Each #5 (T&B)	17'- 10"	14'-11¾"	12'-9¼"	11'-0¼"	10'-1½"
24	24	2 Each #5 (T&B)	21'- 5"	17'-11¾"	15'- 4"	13'-2½"	12'-1¾"
30	24	2 Each #5 (T&B)	26'-9¼"	22'- 6"	19'- 2"	16'-6¼"	15'-2¼"

* (B) indicates bottom only, (T&B) indicate top and bottom


7'-6"
3X3


40'
2X8
3X3
3X3
7'-6"
13'
13'
concrete slab
26'