

**CONTRACTOR: TIMBERLAKE ALUMINUM CONSTRUCTION**  
**DESIGN CRITERIA:**

**Applicable Codes, Regulations, and Standards**

- 1 The 2010 Florida Building Code specifically Chapter 16 Structural Design, Chapter 20 Aluminum, and Chapter 23 Wood.
- 2 AA ASM 35 and Specifications for Aluminum Structures, Part 1-A of the Aluminum Design Manual prepared by The Aluminum Association, Inc. Washington, D C , 2005 Edition
- 3 ASCE 7-10

**Wind Loads**

- 1 Building Occupancy Category, Paragraph 1604 5 and Table 1604 5 **Risk Category 1.**
- 2 Basic Wind Speed, Table 1609C, State of Florida Debris Region & Basic Wind Speed, Paragraph 1609 3 1 and Table 1609 3 1 Equivalent Basic Wind Speed  
VULT = **120 MPH**, VASD = **93 MPH**
- 3 Exposure Category, Paragraph 1609 4 3 **C**
- 4 Screen Roof Enclosure Table 2002.4

**Foundation Design**

**Existing concrete. No additional concrete footing or slab is required to resist the loads imposed by the proposed construction if the existing slab is a minimum 4" thick with an 8" x 8" thickened slab edge and in sound condition, free from structural cracking, spalling, or other deterioration.**

**Specifications**

The following specifications are applicable to this project

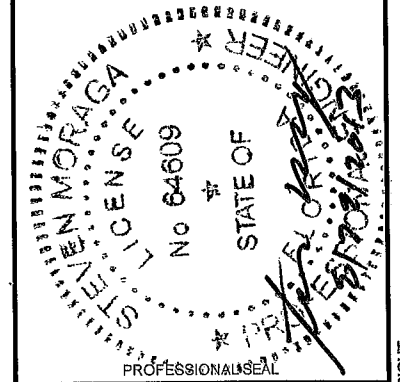
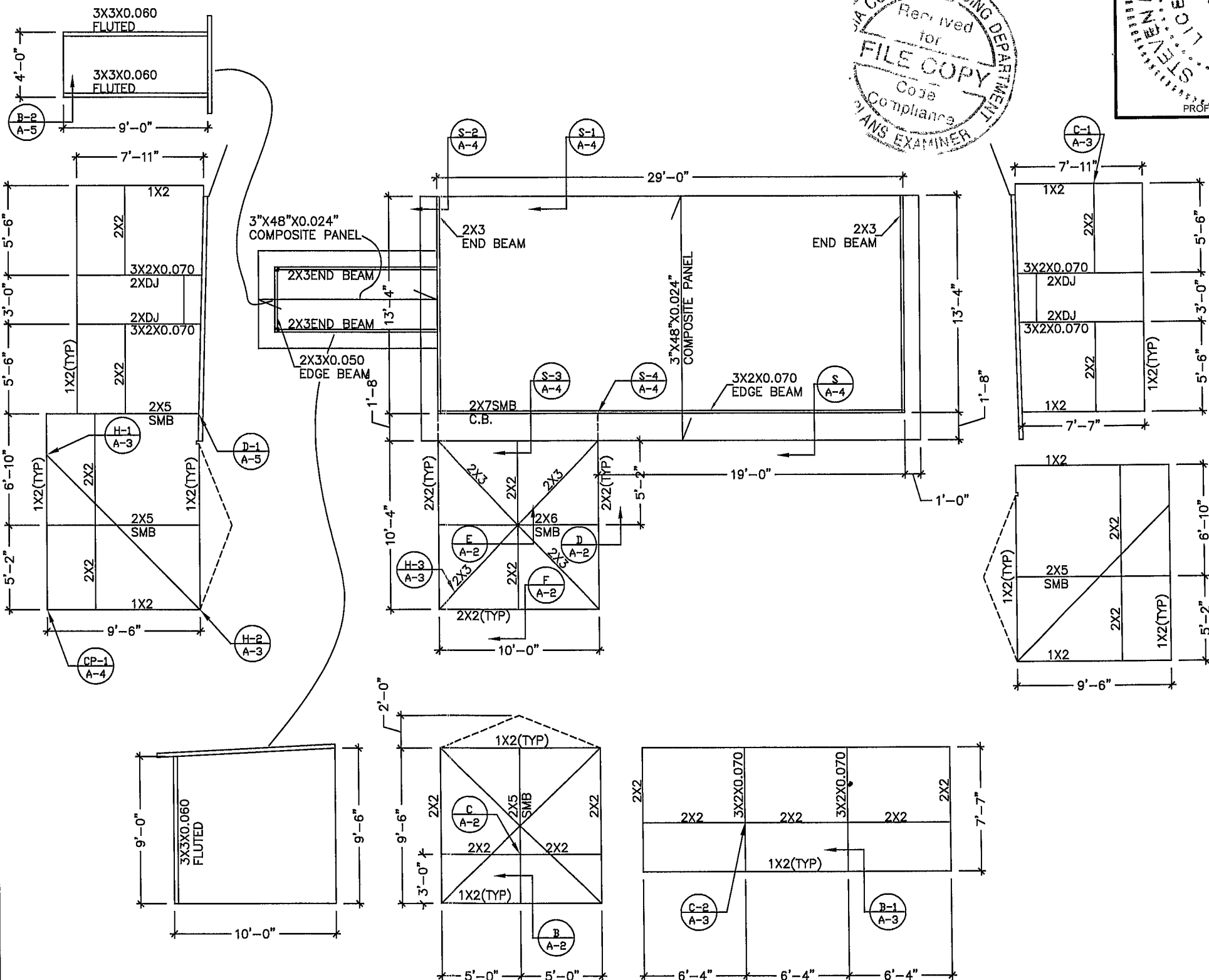
- 1 Where concrete specifications are required, whether in the screen enclosure scope or not, by one or more regulatory agency, the following specifications are applicable
  - a. Concrete shall conform to ASTM C94 for the following components
    - i Portland Cement Type 1,- ASTM C 150
    - ii Aggregates - Large Aggregate 3/4" max - ASTM C 33
    - iii Air entraining +/- 1% - ASTM C 260
    - iv Water reducing agent - ASTM C 494
    - v Clean Potable water
    - vi Other admixtures not permitted
  - b Metal accessories shall conform to
    - i. Reinforcing Bars - ASTM A615, grade 60
    - ii Welded wire fabric - ASTM A185
  - c. Concrete slump at discharge chute not less than 3" or more than 5" Water added after batching is not permitted.
  - d Prepare and place concrete per American Concrete Institute Manual of Standard Practice, Parts 1, 2, and 3 including hot weather recommendations
  - e Moist cure or polyethylene curing permitted.
  - f Prior to placing concrete, treat the entire subsurface area for termites in compliance with the FBC
  - g. Concrete shall be placed over a polyethylene vapor barrier
  - h. All aluminum components embedded within concrete shall be coated with a bituminous paint or epoxy
- 2 Aluminum extrusions shall be 6005 T5 Alloy
- 3 Fasteners are required to be SAE Grade 2 or better zinc plated
- 4 All Self Mating Beam Sections are to be stitched with either #14 screws 6" from ends and 24" center to center or #12 screws 6" from ends and 12" center to center
- 5 The minimum nominal thickness of protector panels (kickplates) shall be an industry standard of 0.024 inches
- 6 Screened enclosures containing swimming pools shall comply with the applicable requirements of FBC R4101.17 Residential Swimming Barrier requirements
- 7 Screen material shall be 18/14 screen unless approved by Suncoast Architecture & Engineering, LLC
- 8 Door location shall be determined by contractor in the field
- 9 When installing pavers over concrete slab or footing which are supporting aluminum members, such as continuous screen tracks or upright, the pavers must be bonded to the concrete with an epoxy, thinset, or 3,000 PSI grout to ensure full positive contact with concrete

**Roof Type**

Roof Type **MONOSLOPE/GABLE**

**3" x 48" x 0.024" composite panel Elite 2000, 1.0 density foam, Florida Product Approval Number FL 7561-R2.**

**WIND SPEED AND EXPOSURE HAVE BEEN DETERMINED USING THE ADVANCED TECHNOLOGY COUNCIL'S WEBSITE AND GOOGLE EARTH.**



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LAKE CITY, FL 32055

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EL

DATE DRAWN  
08/28/13

REVISION

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B -

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A-1

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# ALUMINUM MEMBERS DIMENSIONS

## HOLLOW SECTIONS

2 x 2 2" x 2" x 0.046"  
2 x 3 2" x 3" x 0.050"  
2 x 4 2" x 4" x 0.050"  
2 x 5 2" x 5" x 0.050"

## OPEN BACK SECTIONS

1 x 2 1" x 2" x 0.040"  
1 x 3 1" x 3" x 0.045"

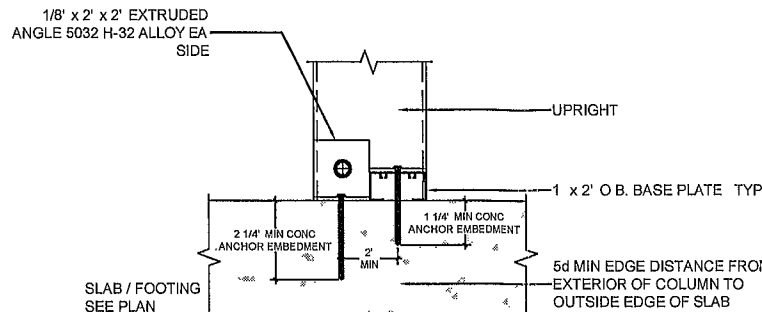
## SNAP SECTIONS

2 x 2 Snap 2" x 2" x 0.045"  
2 x 3 Snap 2" x 3" x 0.050"  
2 x 4 Snap 2" x 4" x 0.045"

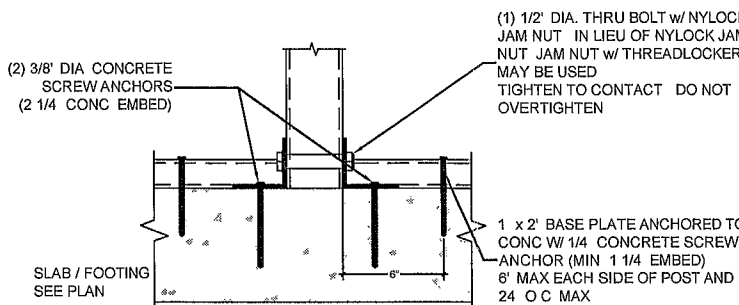
## SELF MATING (SMB)

2 x 4 SMB 2" x 4" x 0.044" x 0.100"  
2 x 5 SMB 2" x 5" x 0.050" x 0.100"  
2 x 6 SMB 2" x 6" x 0.050" x 0.120"  
2 x 7 SMB 2" x 7" x 0.057" x 0.120"  
2 x 8 SMB 2" x 8" x 0.072" x 0.124"  
2 x 9 SMB 2" x 9" x 0.072" x 0.124"  
2 x 10 SMB 2" x 10" x 0.092" x 0.398"

MINIMUM FASTENER EDGE DISTANCE, 1/2"  
MINIMUM FASTENER SPACING 3/4"

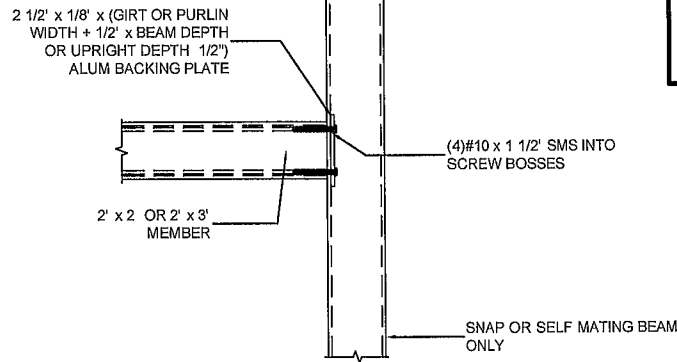


SIDE VIEW

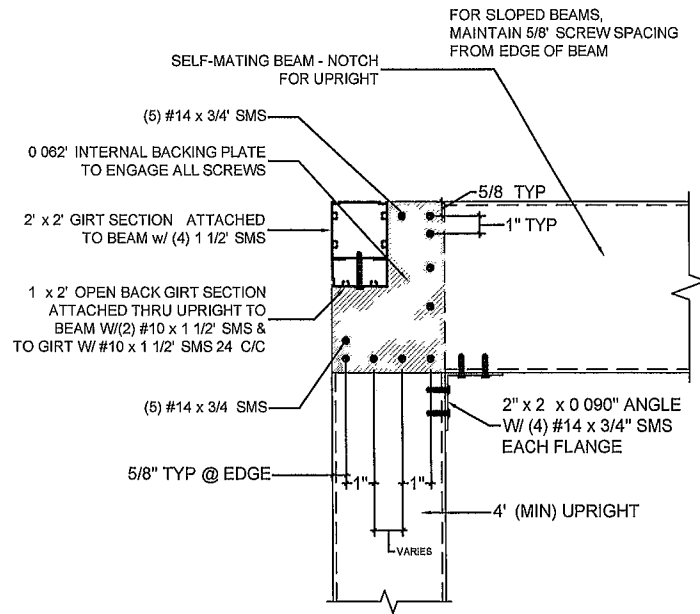


FRONT VIEW

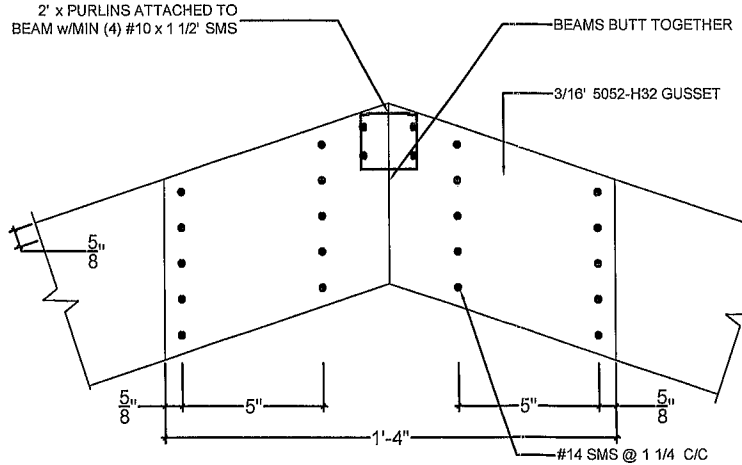
**B**  
A-2 2" x 4" OR LARGER UPRIGHT TO CONCRETE DETAIL  
SCALE NTS



**C**  
A-2 PURLIN OR GIRT TO BEAM OR POST DETAIL  
SCALE NTS

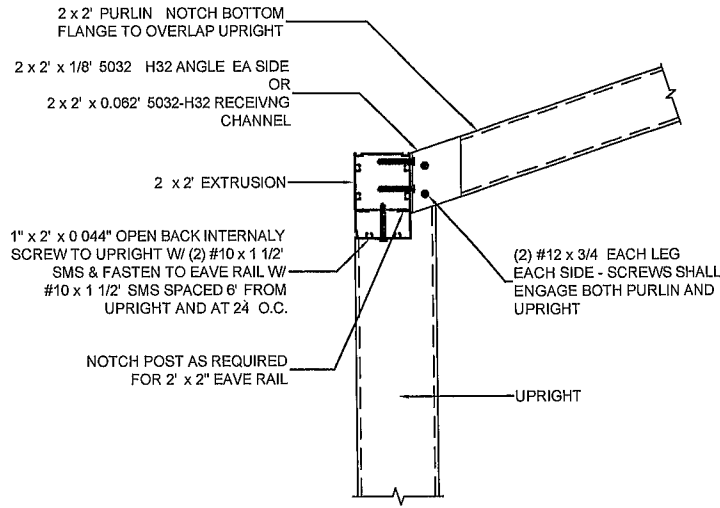


**D**  
A-2 UPRIGHT TO BEAM CONNECTION  
SCALE NTS

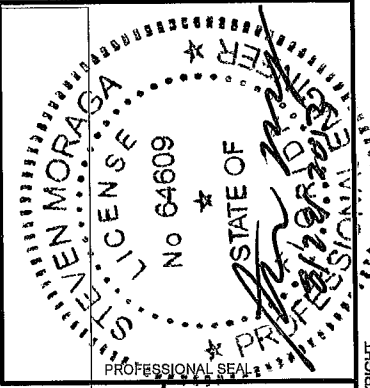


- NOTES:
- GUSSET DIMENSIONS ARE MINIMUM (2) REQ'D (1) EA SIDE OF BEAM - MAY BE INTERNAL OR EXTERNAL.
  - AS BEAM SIZE CHANGES, ADD OR SUBTRACT SCREWS TO MAINTAIN 1 1/4 C/C SPACING
  - GUSSET LENGTHS REMAIN CONSTANT WIDTHS CHANGE TO MATCH BEAM SIZE.

**E**  
A-2 TYPICAL INTERNAL OR EXTERNAL GUSSET DETAIL - RIGID MEDIUM  
SCALE NTS



**F**  
A-2 SLOPED PURLIN CONNECTION DETAIL  
SCALE NTS



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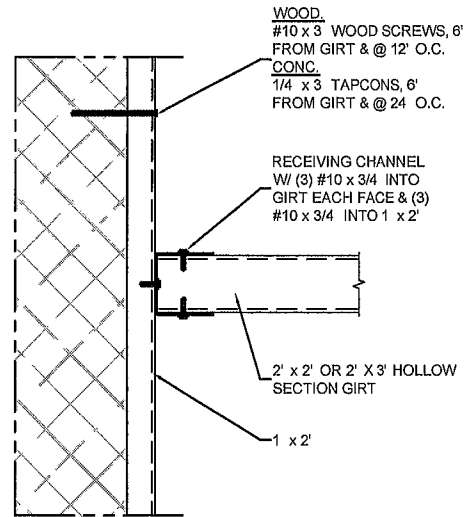
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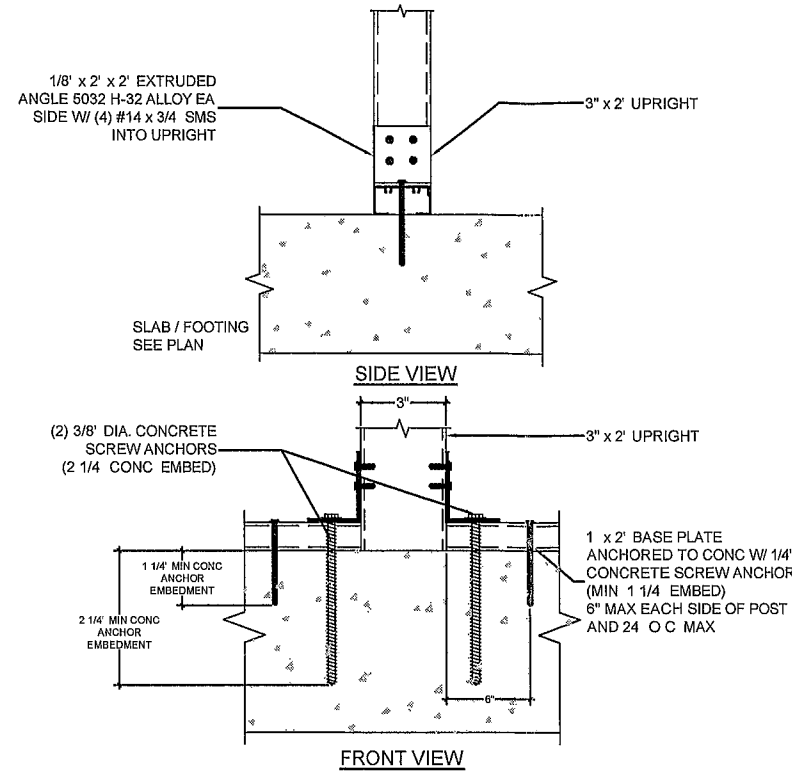
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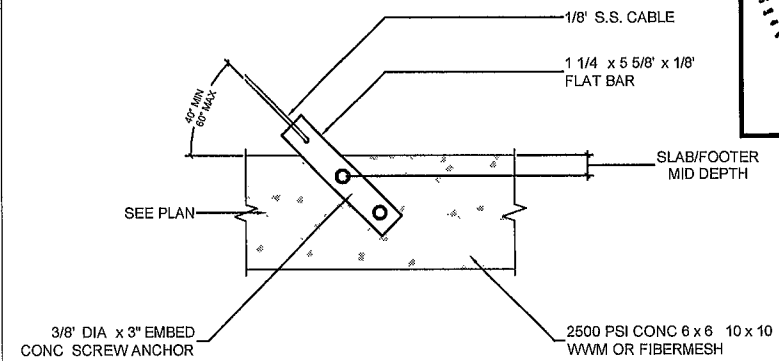
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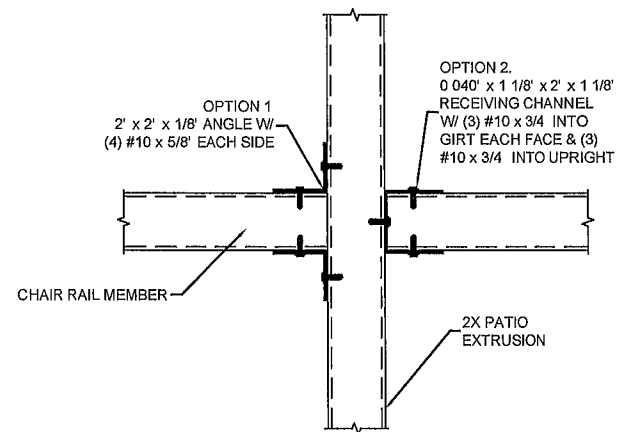
**C-1**  
**A-3** 1X2 TO HOST STRUCTURE DETAIL  
SCALE: NTS



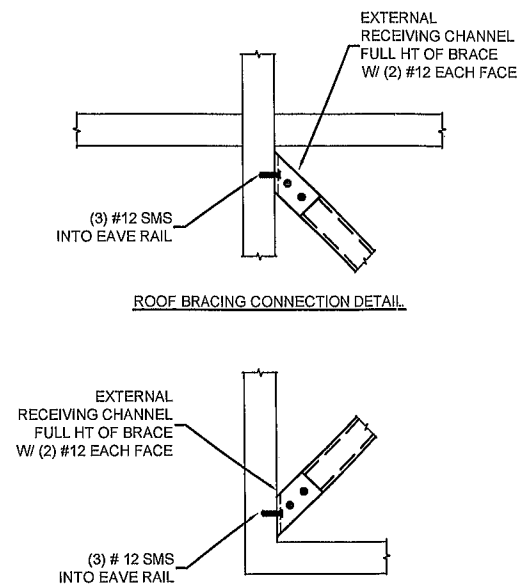
**B-1**  
**A-3** 3" x 2" POST TO CONCRETE DETAIL  
SCALE: NTS



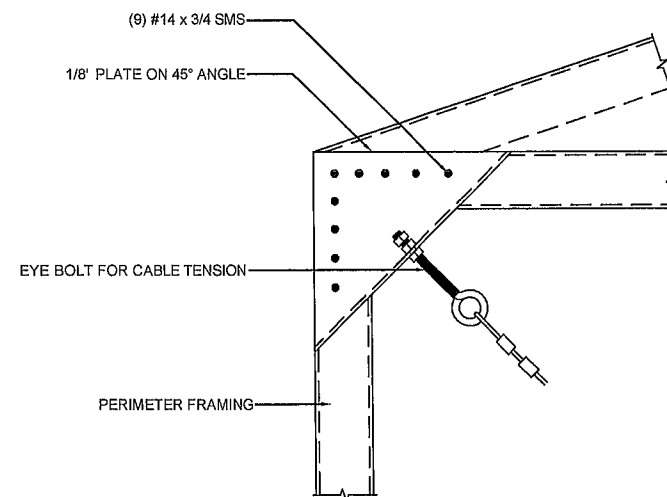
**H-1**  
**A-3** CABLE CONNECTIONS AT FOUNDATION  
SCALE: NTS



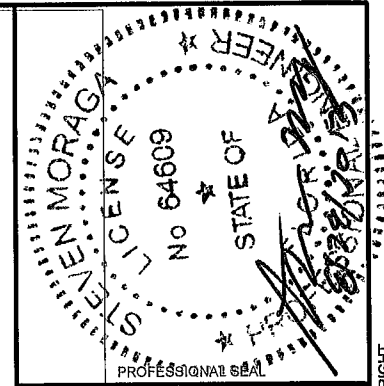
**C-2**  
**A-3** PURLIN OR GIRT TO BEAM OR POST DETAIL  
SCALE: NTS



**H-3**  
**A-3** ROOF BRACING DETAIL  
SCALE: NTS



**H-2**  
**A-3** CABLE CONNECTION AT CORNER  
SCALE: NTS



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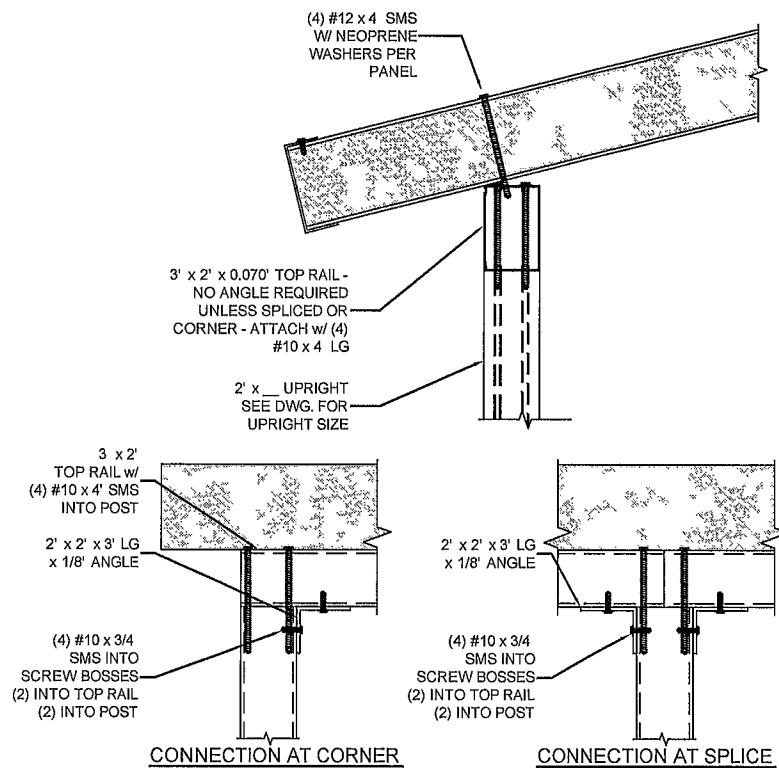
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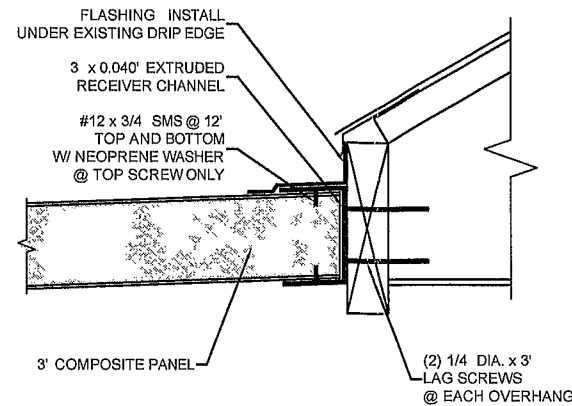
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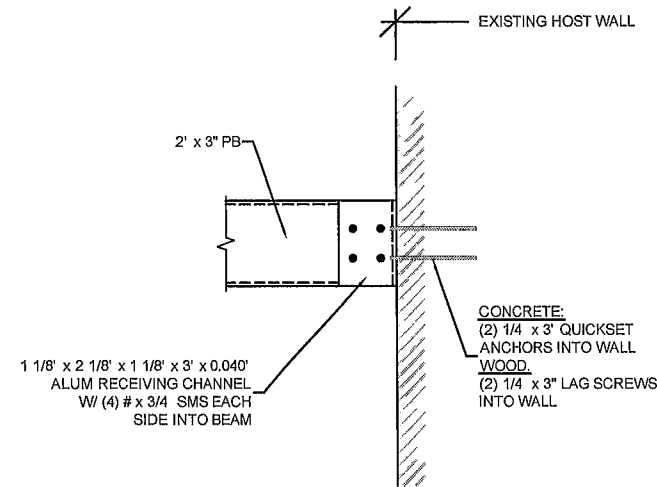
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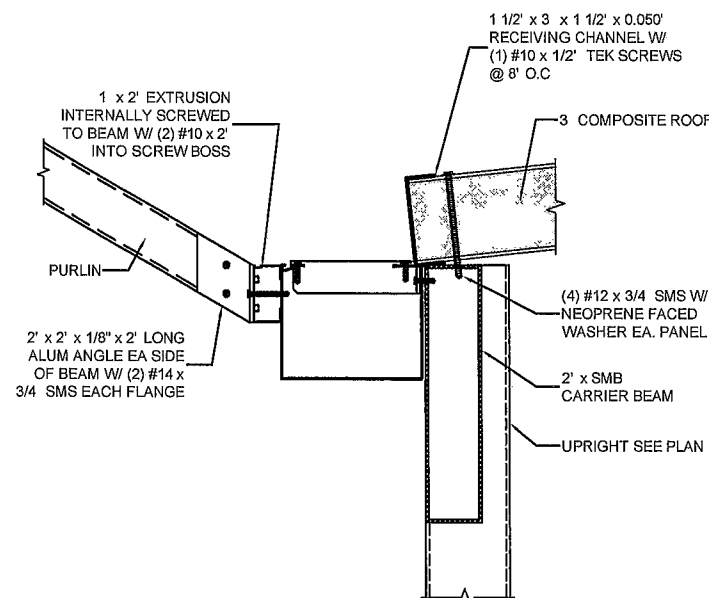
**S-1**  
**A-4** 3 X 2 TOP RAIL CONNECTION TO 3 X 2 UPRIGHT  
SCALE NTS



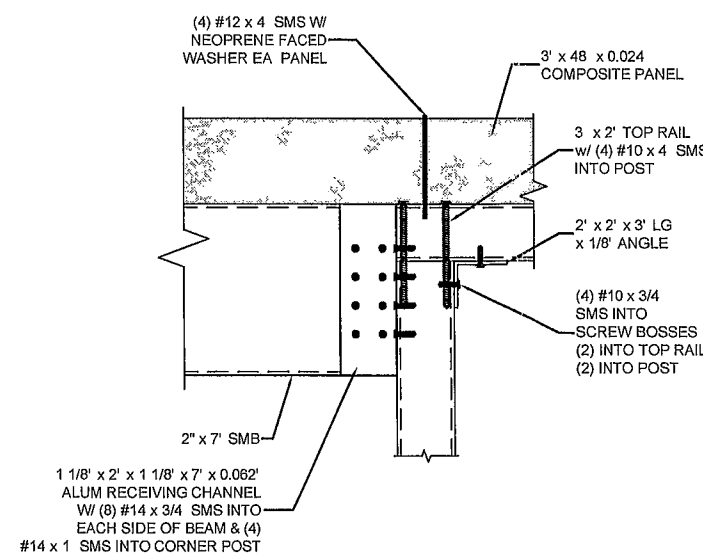
**S-2**  
**A-4** COMPOSITE PANEL TO FASCIA DETAIL  
SCALE NTS



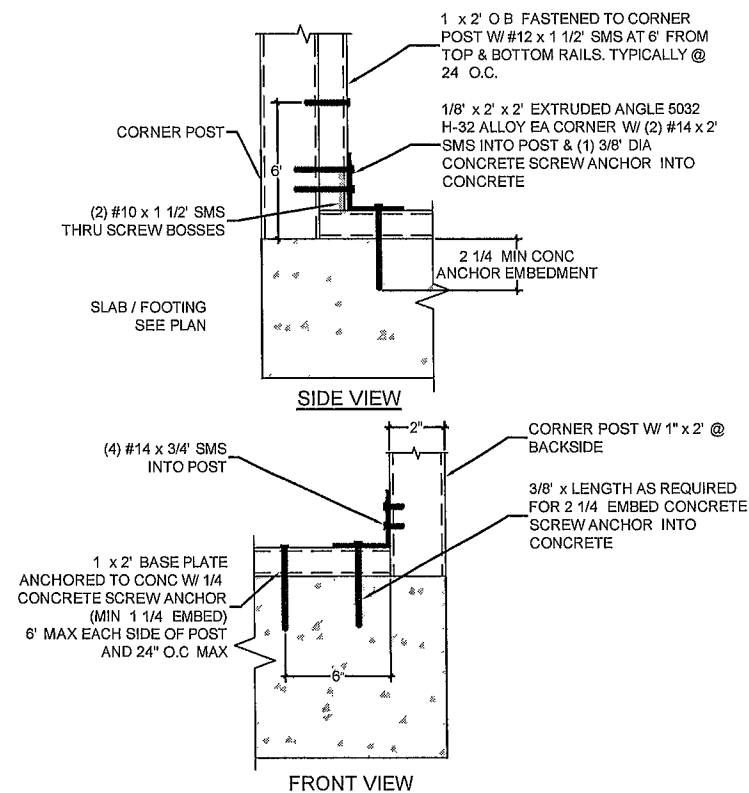
**S-3**  
**A-4** BEAM TO HOST STRUCTURE ATTACHMENT DETAIL  
SCALE NTS



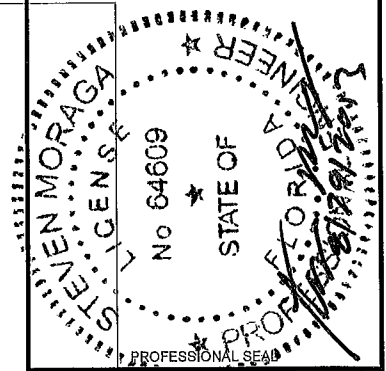
**S-4**  
**A-4** GUTTER BRACE TO POST TO ROOF PANEL ATTACHMENT DETAIL  
SCALE NTS



**S-5**  
**A-4** COMPOSITE ROOF TO POST CONNECTION  
SCALE NTS



**CP-1**  
**A-4** CORNER POST TO CONCRETE DETAIL  
SCALE NTS



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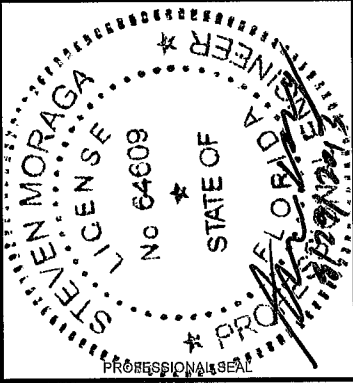
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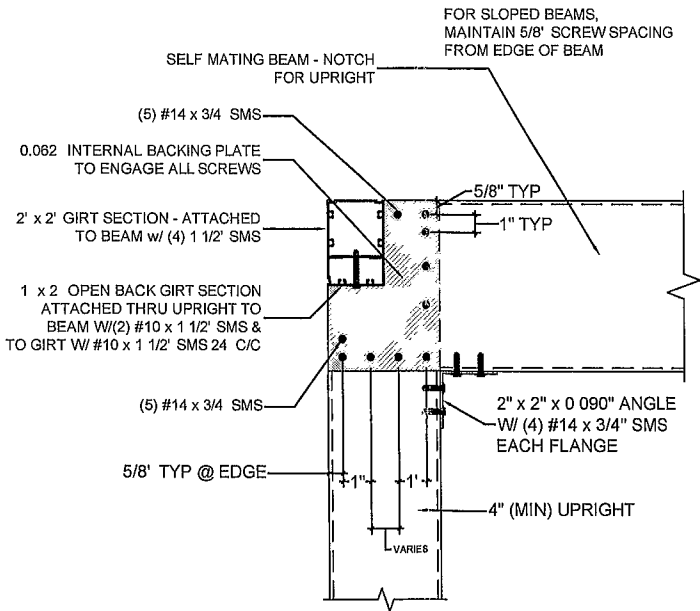
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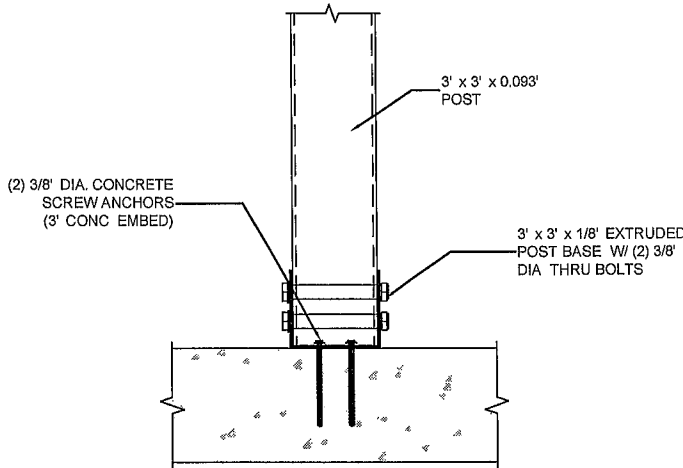
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D-1 UPRIGHT TO BEAM CONNECTION  
A-5 SCALE: NTS



B-2 3" x 3" POST TO CONCRETE CONNECTION DETAIL  
A-5 SCALE: NTS

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