

General Notes

A. CONCRETE & FOUNDATION DESIGN:

1. ALL CONCRETE GRADE BEAMS AND FOOTINGS SHALL BE 3000 PSI MINIMUM.
2. ALL CONCRETE FILLED SUPPORTED SLABS SHALL BE 2500 PSI MINIMUM, 3 1/2" NOMINAL THICKNESS.
3. FIBERMESH (3/4" PER CUBIC YARD MIN.) MEETING APPROPRIATE ACI AND ASTM REQUIREMENTS MAY BE USED IN LIEU OF WELDED WIRE MESH.
4. ALL SLABS ON GRADE SHALL BE 4" THICK WITH FIBERMESH.
5. ALL REINFORCING SHALL CONFORM TO ASTM A615, BE GRADE 60 (60 KSI MIN), DEFORMED BARS, #3 BARS MAY BE GRADE 40.
6. ALL OVER POUR CONCRETE FILLED SUPPORTED SLABS SHALL BE 3000 PSI MIN., 2" MINIMUM THICKNESS.
7. SOIL BEARING PRESSURE SHALL BE A MINIMUM OF 1500 PSF.
8. THE CONCRETE SHALL CONFORM TO ASTM C94 FOR THE FOLLOWING:  
OPC (PORTLAND CEMENT TYPE 1, ASTM C 150),  
AGGREGATES - #6 STONE, ASTM C 33 SIZE NO. 67 LESS THAN 3/4"
9. AIR ENTRAINING +/- 1% - ASTM C 260,  
WATER REDUCING AGENT - ASTM C 494,  
CLEAN POTABLE WATER.
10. OTHER ADMIXTURES SHALL NOT BE PERMITTED.
11. METAL WELDED WIRE SHALL CONFORM TO ASTM A 185.
12. PREPARE & PLACE CONCRETE ACCORDING TO AMERICAN CONCRETE INSTITUTE MANUAL STANDARD PRACTICE, PART 1, 2, & 3 ALONG WITH HOT WEATHER CONDITIONS RECOMMENDATIONS.
13. IF UTILIZING EXISTING CONCRETE FOR FOUNDATION, CONCRETE SHALL BE A MINIMUM OF 4" IN THICKNESS, VISIBLY FREE OF ANY STRUCTURAL EXCESSIVE CRACKING, SPALLING OR OTHER DETEIORATION.

B. MASONRY:

1. CONCRETE MASONRY UNITS (CMU) SHALL BE STANDARD HOLLOW UNITS AND SHALL BE 1900 PSI MINIMUM BASED ON TYPE M OR S MORTAR.
2. ALL MORTAR SHALL BE OF TYPE M OR S.
3. ALL GROUT SHALL BE 2000 PSI MINIMUM AND HAVE MAXIMUM COARSE AGGREGATE SIZE OF 3/8".
4. PROVIDE CLEAN-OUTS FOR REINFORCED CELLS CONTAINING REINFORCEMENT WHEN GROUT POUR EXCEEDS 5'-0" IN HEIGHT.

C. ALUMINUM:

1. ALL STRUCTURAL ALUMINUM SHALL CONFORM TO THE MINIMUM REQUIREMENTS OF 6005-T5 FOR ALLOY WITH A MINIMUM THICKNESS OF 0.040" FOR SUPPORTING MEMBERS.
2. WHERE KICK PLATES ARE USED A MINIMUM THICKNESS OF 0.024" SHALL APPLY.
3. STRUCTURAL ALUMINUM DESIGN CONFORMS TO "PART 1-A - SPECIFICATIONS FOR ALUMINUM STRUCTURES - ALLOWABLE STRESS DESIGN" OR "PART 1-B - SPECIFICATIONS FOR ALUMINUM STRUCTURES - BUILDING LOAD AND RESISTANCE FACTOR DESIGN" OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. THE *FLORIDA BUILDING CODE 7TH EDITION* (CHAPTER 16 STRUCTURAL DESIGN & CHAPTER 20 ALUMINUM).
4. WHERE ALUMINUM COMES INTO CONTACT WITH STEEL, OR PRESSURE TREATED LUMBER PROVIDE DIELECTRIC SEPARATION.
5. ALUMINUM MEMBERS SHALL BE STITCHED WITH NO LESS THAN #10 SMS 6" FROM THE ENDS AND 12" ON CENTER, IF USING #12 SPACING MAY BE 24" ON CENTER.
6. VINYL AND ACRYLIC PANELS SHALL BE REMOVABLE. THEY SHALL BE IDENTIFIED WITH A DECAL ESSENTIALLY STATING "REMOVABLE PANEL SHALL BE REMOVED WHEN WIND SPEEDS EXCEED 75 MPH". DECAL SHALL BE PLACED SO IT IS VISIBLE WHEN PANEL IS INSTALLED.
7. 1"x2"x0.045" NON-STRUCTURAL MEMBERS SHALL BE ATTACHED TO HOST WITH 1/4"x0 X 1-3/4" EMBEDMENT & 24" O.C. MASONRY SCREW FOR CONCRETE & EQUIVALENT SIZE WOOD SCREW WHEN IN WOOD & #10X 1/2" EMBEDMENT SMS OR TEK SCREWS IN ALUMINUM MEMBERS TYPICAL.

D. FASTENERS:

1. ALL LAG BOLTS SHALL CONFORM TO STAINLESS STEEL TYPE 300 18-8, WITH STANDARD FLAT WASHER UNLESS MANUFACTURER GALVANIZES BOLTS SPECIFIC FOR USE WITH ACQ PRESURE TREATED WOOD.

2. HEX BOLTS HAS TO BE ASTM A 325, PLATED WITH STANDARD FLAT WASHERS AND NUTS.

3. ALL CONCRETE SCREWS SHALL BE, SIMPSON, HILTI, RAWL, TAPCON, REDHEAD, DYNABOLT, PORTCO OR APPROVED EQUAL.
4. ALL METAL TIES AND ASSOCIATED ACCESSORIES SHALL BE HOT DIPPED GALVANIZED.
5. ALL LAG BOLTS SHALL HAVE A MINIMUM EMBEDMENT OF 8X BOLT DIAMETER INTO STRUCTURAL FRAMING (G=42 MIN.).
6. LAG BOLTS AND SCREWS INTO WOOD FRAMING SHALL BE PROVIDED WITH PILOT HOLES HAVING A DIAMETER NOT GREATER THAN 70 PERCENT OF THE THREAD DIAMETER OF THE BOLT OR SCREW. ALL LAG BOLTS AND SCREWS SHALL BE INSERTED IN PILOT HOLES BY TURNING AND UNDER NO CIRCUMSTANCES BY DRIVING WITH A HAMMER.
7. ALL EXPANSION ANCHORS SHALL BE DESIGNED IN ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S REQUIREMENTS AND ALLOWABLE LOADS AND SHALL ONLY BE APPLIED IN CONDITIONS ACCEPTABLE TO MANUFACTURER. FASTENERS SHALL BE A MINIMUM OF SAE GRADE #9 OR BETTER ZINC PLATED.
8. ALL FASTENERS CONNECTING ALUMINUM COMPONENTS OR PRESSURE TREATED LUMBER ARE STAINLESS STEEL TYPE 300 18-8, UNLESS MANUFACTURER GALVANIZED BOLTS SPECIFICS FOR USE WITH ACQ PRESURE TREATED WOOD, OR OTHERWISE NOTED ON PLANS.
9. ALL FASTENERS SHALL COMPLY WITH ASTM A153.
10. ALL CONNECTORS SHALL COMPLY WITH ASTM A653 CLASS G-185.
11. FOR SMS, THE MINIMUM CENTER-TO-CENTER SPACING SHALL BE 3/4" AND MINIMUM CENTER-TO-EDGE SHALL BE 1/2" UNLESS NOTED OTHERWISE.

E. REFERENCE STANDARDS:

- ASTM E 119  
ASTM E 1300  
CURRENT ASCE 7  
FOR ALUMINUM PART 1-A, & 1-B  
ASTM C94  
ASTM C150  
ASTM C33  
ASTM C260  
ASTM C494  
ASTM A615  
ASTM A185  
*FLORIDA BUILDING CODE 7TH EDITION* (CHAPTERS 16, 20 & 23).

F. ABBREVIATIONS:

- THE FOLLOWING LIST OF ABBREVIATIONS IS NOT INTENDED TO REPRESENT ALL THOSE USED ON THESE DRAWINGS, BUT TO SUPPLEMENT THE MORE COMMON ABBREVIATIONS.
1. TYP -- TYPICAL
  2. SIM -- SIMILAR
  3. UN -- UNLESS OTHERWISE NOTED
  4. CONT -- CONTINUOUS
  5. VIF -- VERIFY IN FIELD

G. RESPONSIBILITY:

1. ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDINANCES, ETC.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND DETAILS, NOTIFYING ENGINEER OF ANY DISCREPANCIES BETWEEN DRAWINGS, FABRICATED ITEMS, OR ACTUAL FIELD CONDITIONS.
3. THESE DRAWINGS REPRESENT THE ACCEPTABILITY OF THE SUNROOM ROOM ADDITION ELEMENTS AS PROVIDED BY THE CONTRACTOR.
4. ALL DETAILS ON THESE DRAWINGS ARE ENGINEERED BASED ON INFORMATION PROVIDED BY THE CONTRACTOR AND MANUFACTURER.
5. ANY DETAILS NOT SHOWN ARE TO BE ENGINEERED BY A LICENSED P.E. IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICES.

H. MISCELLANEOUS:

1. ALUMINUM ADDITIONS ARE NOT TO BE INSTALLED ON A MANUFACTURED HOME, TRAILER HOME, OR PRE-FAB HOME. IF THE EXISTING STRUCTURE IS ONE OF THESE, A SEPARATE WITH WALL SUPPORT SYSTEM MUST BE ENGINEERED SO THAT NO

- ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME.
2. IF ENCLOSURE CONTAINS A SWIMMING POOL OR SPA, THE ENCLOSURE SHALL COMPLY WITH RESIDENTIAL SWIMMING BARRIER REQUIREMENTS OF *THE IRC 7TH EDITION* R 4501.17 IN ITS ENTIRETY.
  3. DOOR LOCATIONS MAY BE DETERMINED IN THE FIELD BY CONTRACTOR.
  4. IF PAVERS ARE UNDER ALUMINUM MEMBERS THEY SHALL HAVE EPOXY ADHESIVE TO CONCRETE OR IF USING GROUT, ENSURE BONDING AGENT IS USED FIRST AND ADHERED WITH MINIMUM 3000 PSI GROUT.
  5. SCREENING MATERIAL SHALL BE 18X14X0.013 OR EQUIVALENT DENSITY SCREEN MESH ONLY UNLESS NOTED ON DRAWING S-2.

DESIGN DATA:

1. ULTIMATE DESIGN WIND SPEED V<sub>ult</sub>, (3 SECOND GUST): 130 MPH
2. NOMINAL DESIGN WIND SPEED V<sub>sd</sub>: 101 MPH
3. RISK CATEGORY: 1
4. WIND EXPOSURE: B
5. WIND LOADS:  
SCREEN ROOF: N/A  
SCREEN WALLS: 23 PSF  
SOLID ROOF (SCREEN WALL): 20 PSF
6. FACTOR APPLIED TO SCREEN WIND LOADS FOR 18X14X0.013 OR EQUIVALENT DENSITY SCREEN MESH: 0.88
7. FACTOR APPLIED TO SCREEN WIND LOADS FOR ALLOWABLE STRESS DESIGN: 0.6
8. LIVE LOAD:  
300 lb. VERTICAL DOWNLOAD ON PRIMARY SCREEN ENCLOSURE MEMBERS.  
200 lb. VERTICAL DOWNLOAD ON SCREEN ENCLOSURE PURLINS.  
10 PSF VERTICAL DOWNLOAD ON SOLID ROOF.
9. EXISTING SLAB AND OR FOOTING (MIN. 8"X8" FOOTING WITH 4" SLAB) MEETS THE REQUIREMENTS TO RESIST THE UPLIFTS FOR THE PROPOSED STRUCTURE.
10. SCREEN ROOF TYPE: N/A
11. SOLID ROOF TYPE: 3"X48"X0.024" ELITE EPS COMPOSITE PANEL ROOF 11B FOAM DENSITY, FLORIDA PRODUCT APPROVAL, FL 7561-R5.

ALUMINUM STRUCTURAL MEMBERS

HOLLOW SECTIONS

- 2 x 2: 2" x 2" x 0.044"  
3 x 2: 3" x 2" x 0.070"  
2 x 4: 2" x 4" x 0.050"  
2 x 5: 2" x 5" x 0.050"  
3 x 3: 3" x 3" x 0.125"

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 SMS: 2" x 2" x 0.045"  
2 x 3 SMS: 2" x 3" x 0.072"  
2 x 4 SMS: 2" x 4" x 0.045"  
3 x 3 SMS: 3" x 3" x 0.090"

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 0.118"  
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 0.224"  
2 x 9 SMB: 2" x 9" x 0.072" x 0.224"  
2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

TUBE SECTIONS

- 2 x 2: 2" x 2" x 0.090"

INDEX:

- S-1 GENERAL NOTES  
S-2 DRAWING  
S-3 DETAILS  
S-4 DETAILS



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DRAWN BY: ST

REVISION: DATE:

RO 1

RO 2

RO 3

RO 4

Job# 21\_0416\_324

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CONTRACTOR:

RICHARDSON ALUMINUM

NOTES

S-1



DOOR LOCATION MAY BE DETERMINED  
IN THE FIELD BY THE CONTRACTOR.



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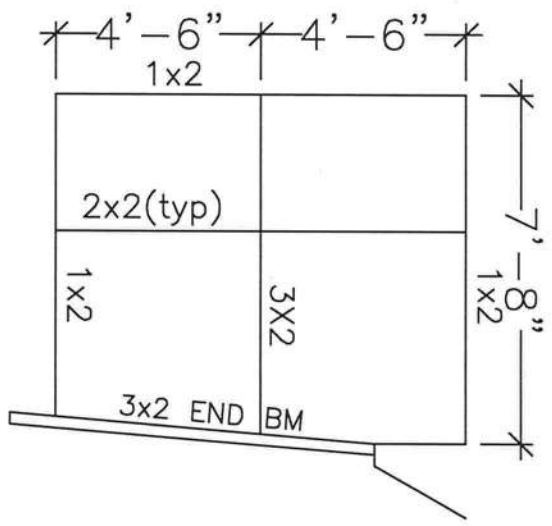
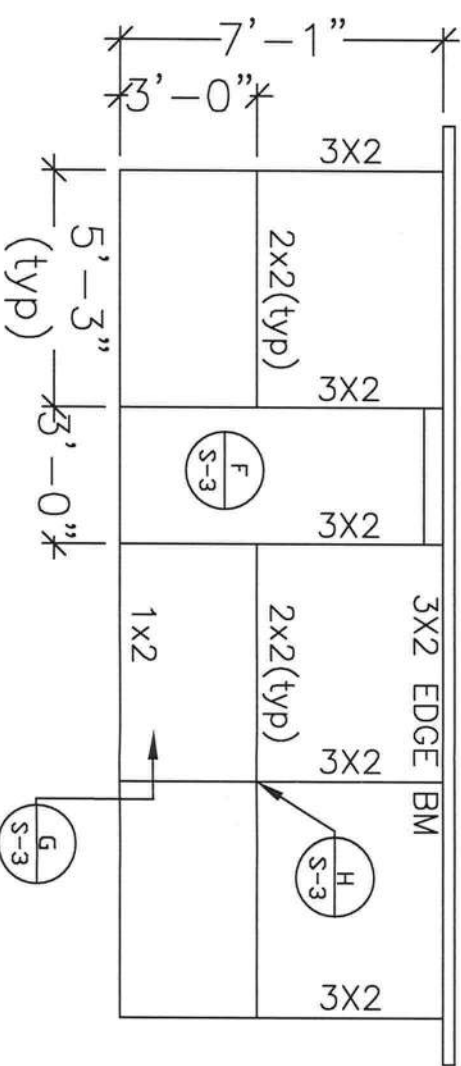
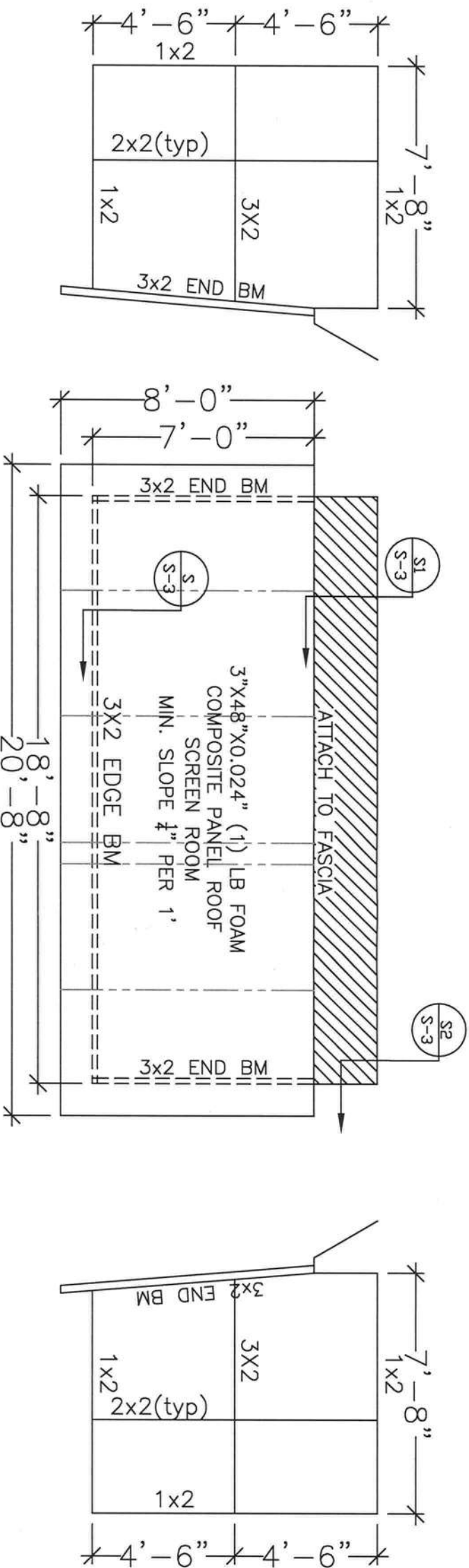
LAKE CITY, FL 32025

CONTRACTOR:

RICHARDSON ALUMINUM

FLOOR PLAN

**S-2**







SEE DETAIL C2 FOR ALUMINUM RISER PANS

Detail C2

ALUMINUM RISER PAN

(4) #10 SMS W/ 3/4" WASHERS PER 12" PANEL THICKNESS PLUS (1) INCH

#10 SMS W/ 1" NEO-WASHERS @ 8" O.C. (USE SCREW LENGTH EQUAL TO COMPOSITE PANEL THICKNESS PLUS (1) INCH)

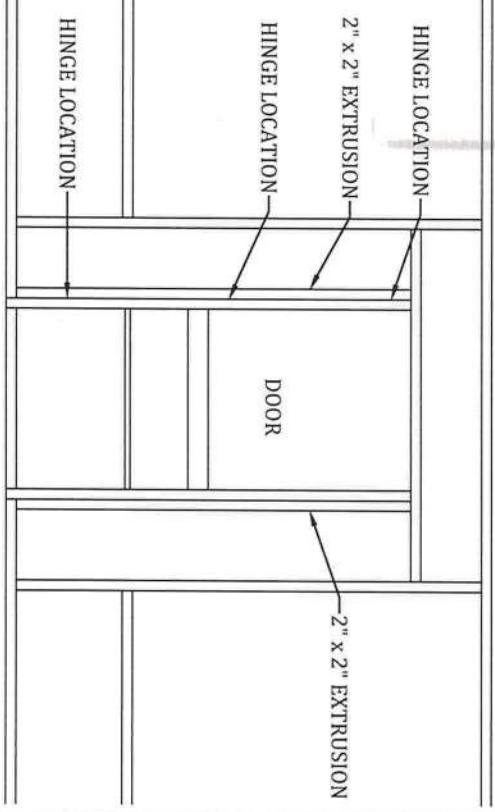
(2) - 1/4" Ø MACHINE BOLTS WITH 3/4" WASHERS THROUGH POST AND EDGE BEAM

OPTIONAL 1" X 2" FASTENED TO COLUMN WITH (2) #10 X 2" SMS INTO SCREW BOSSES AND FASTENED TO EDGE BEAM WITH (1) #10 X 1-1/2" SMS WITHIN 6" OF COLUMN AND @ 12" O.C. MAX

CONTINUOUS EDGE BEAM

NOTE: EDGE BEAM (SEE SHEET S-2 FOR SIZE) SHALL BE ORIENTED IN DIRECTION SHOWN.

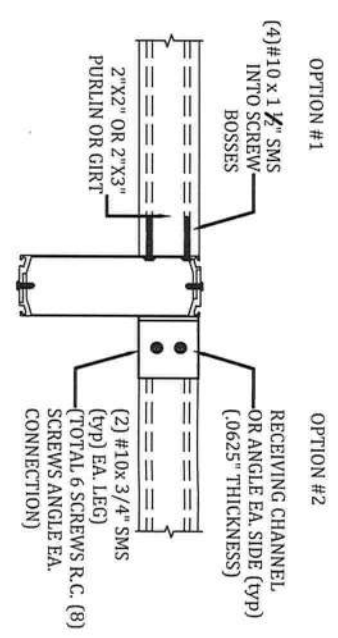
**S** ROOF PANEL TO EDGE BEAM CONNECTION DETAIL  
SCALE: NTS



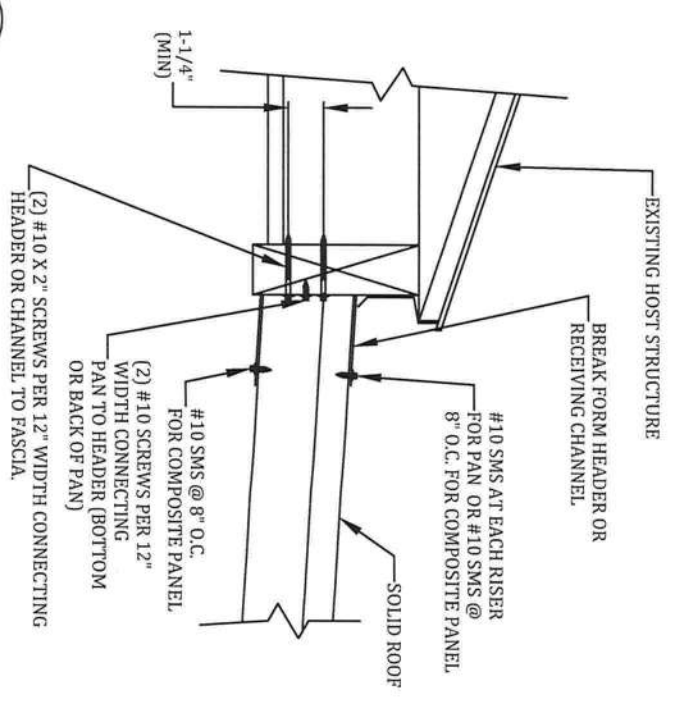
NOTES:

- HINGES SHALL BE ATTACHED TO STRUCTURE W/ (4) #10 X 5/8" SMS MINIMUM.
- DOOR SHALL BE ATTACHED TO ENCLOSURE W/ (2) HINGES MINIMUM.
- HINGES SHALL BE ATTACHED TO DOOR WITH (3) #10 X 5/8" SMS. FASTEN A 1" X 2" X 0.044" TO UPRIGHT W/ #12 X 1" SMS @ 12" O.C. AND WITHIN 3" FROM END OF THE UPRIGHT.

**F** TYPICAL SCREEN DOOR CONNECTION DETAIL  
SCALE: NTS



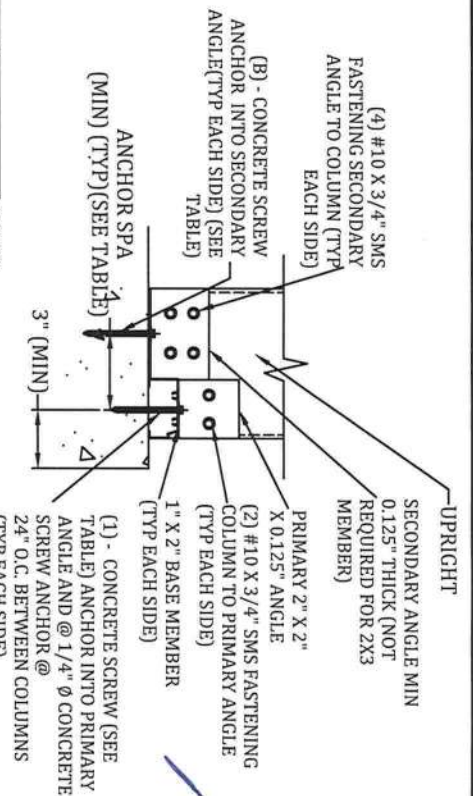
**H** PURLIN OR GIRT TO BEAM OR POST DETAIL  
SCALE: NTS



**S1** ROOF PANEL TO FASCIA CONNECTION DETAILS  
SCALE: NTS

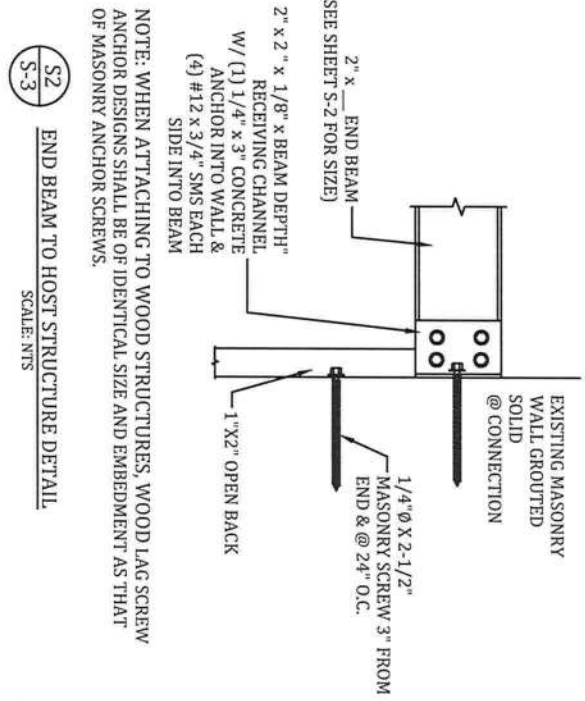
Column Size	1/4" & 3/8" Ø Concrete Screw Anchor	B	Min. Spa
2x3-1/4"	0	0"	0"
2x4-1/4"	1	1"	3"
2x5-1/4"	1	1"	3"
2x6-3/8"	1	1"	4"
2x7-3/8"	1	1"	5"
2x8-3/8"	2	2"	3"
2x9-3/8"	2	2"	4"
2x10-3/8"	2	2"	4.5"

**G** 2" X 3" OR LARGER UPRIGHT TO CONCRETE W/ TWO PAYER DETAILS  
SCALE: NTS



NOTES:

- NUMBER OF ANCHORS "B" IS EACH SIDE INTO THE SECONDARY ANGLE AND DOES NOT INCLUDE THE ANCHOR INTO THE 1X2.
- MINIMUM EMBEDMENT OF ANCHORS INTO CONCRETE FOOTING SHALL BE 2-3/4" AT ALL UPRIGHT LOCATIONS. ALL SCREW LENGTHS AT UPRIGHT CONNECTIONS SHALL BE OF SUFFICIENT LENGTH FOR REQUIRED EMBEDMENT INTO CONCRETE FOOTING WHEN A PAYER DECK IS PRESENT.
- CONCRETE SCREW ANCHOR DESIGNS ARE BASED ON THOSE LISTED ON S-1, D. FASTENERS, OTHER BRAND & TYPE SHALL BE APPROVED BY ENGINEER.
- 2X3W/1X2 CORNER POST SHALL REQUIRE SAME BASE CONNECTIONS AS 2X4 SHOWN IN TABLE.
- IF FOR AN IN-FILL, TOP OF COLUMN CONNECTION SIMILAR IF CONCRETE LINTEL. IF WOOD LINTEL, SUBSTITUTE 1/4" Ø X 3" LAG SCREW FOR 3/8" Ø LDT FOR BOTH PRIMARY & SECONDARY ANGLES.
- 2X2X.045 DOOR JAMB MEMBER SHALL CONNECT SIMILAR TO 2X3 MEMBER.



**S2** END BEAM TO HOST STRUCTURE DETAIL  
SCALE: NTS



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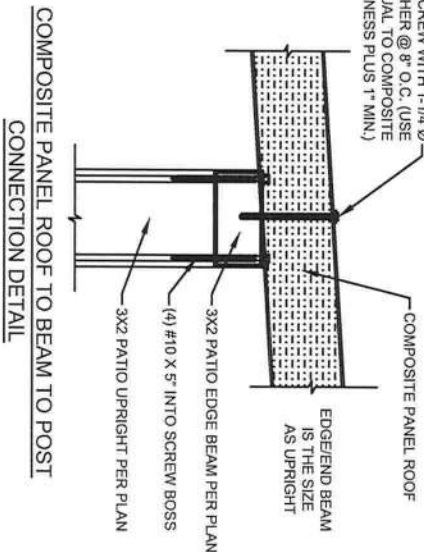
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**CONTRACTOR:**

RICHARDSON ALUMINUM



#10 TEK SCREW WITH 1-1/4" O.D.  
NEO-PRENE WASHER @ 8" O.C. (USE  
SCREW LENGTH EQUAL TO COMPOSITE  
PANEL THICKNESS PLUS 1" MIN.)



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DETAILS

S-4