

DESIGN CRITERIA:

APPLICABLE CODES, REGULATIONS & STANDARDS

- 1. THE 2020 FLORIDA BUILDING CODE, SPECIFICALLY CHAPTER 16 STRUCTURAL DESIGN, CHAPTER 20 ALUMINUM & CH. 23 WOOD.
- 2. AA ASM 35 & SPECIFICATIONS FOR ALUMINUM STRUCTURES, PART 1-A OF THE ALUMINUM DESIGN MANUAL PREPARED BY THE ALUMINUM ASSOCIATION, INC. WASHINGTON D.C. 2005 ED.
- 3. ASCE 7-16 & SE17
- 4. NDS NATIONAL DESIGN SPECIFICATION FOR WOOD.
- 5. ACI318 CONCRETE REFERENCE MANUAL.

WIND LOADS

- 1. BUILDING OCCUPANCY CATEGORY, PARAGRAPH 1604.5 & TABLE 1604.5: RISK CATEGORY 1.
- 2. BASIC WIND SPEED, TABLE 1609C, STATE OF FLORIDA DEBRIS REGION & BASIC WIND SPEED, PARAGRAPH 1609.3.1 & TABLE 1609.3.1 EQUIVALENT BASIC WIND SPEED: 110
- 3. WIND EXPOSURE CATEGORY, PARAGRAPH 1609.4.3: C
- 3. WIND LOADS PER FBC TABLE 2002.4 (MWFRS)
VULT = 110 MPH & EXPOSURE = C

FOR 20 X 20 X 0.013" MESH SCREEN
HORIZONTAL PRESSURES ON WINDWARD SURFACES = 24 PSF
HORIZONTAL PRESSURES ON LEEWARD SURFACES = 18 PSF
VERTICAL PRESSURES ON SCREEN SURFACES = 7 PSF
VERTICAL PRESSURES ON SOLID SURFACES = 19 PSF

FOR 18 X 14 X 0.013" MESH SCREEN, APPLIED FACTOR = .88
FOR ALLOWABLE STRESS DESIGN, APPLIED FACTOR = .6

FOUNDATION DESIGN

EXISTING APPROVED 12" X 12" RIBBON FOOTER W/ (2) # 5 REBAR CONT.

MISCELLANEOUS

- 1. SCREENED ENCLOSURES CONTAINING SWIMMING POOLS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF FBC R4501.17 RESIDENTIAL SWIMMING BARRIER REQUIREMENTS.
- 2. 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 4TH WALL SUPPORT SYSTEM IS SO TO BE ENGINEERED SO THAT NO ADDITIONAL LOADING IS PLACED ON THE MANUFACTURED HOME.

FASTENER SPECIFICATIONS

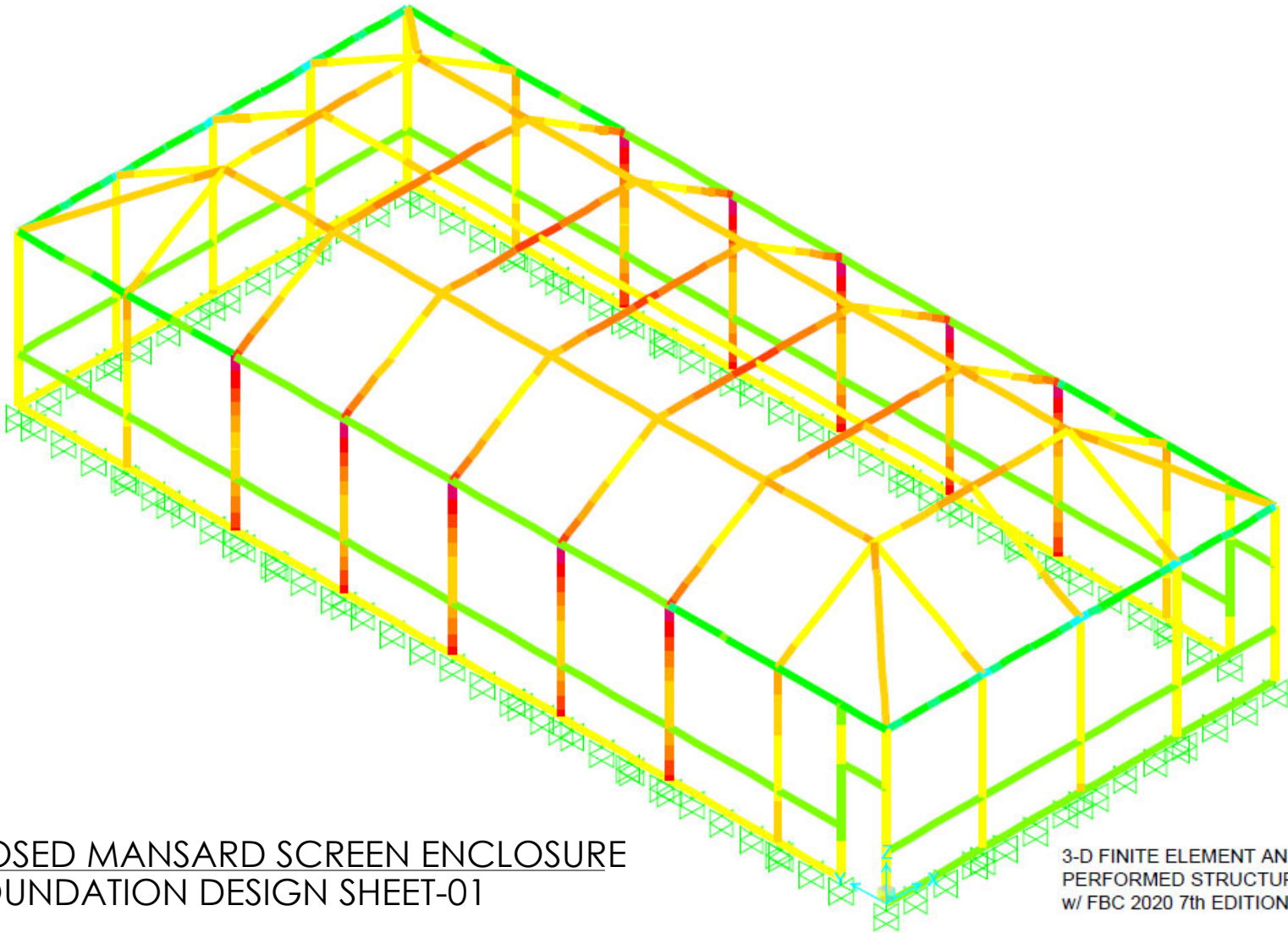
- 1. FASTENERS ARE REQUIRED TO BE SAE GRADE 2 OR BETTER ZINC PLATED. (CONCRETE ANCHORS ARE TO BE TAPCONS OR BETTER, INSTALLED TO MFG. SPECIFICATIONS)
- 2. IT IS THE OWNERS RESPONSIBILITY TO MAINTAIN THE SCREENS, FASTENERS AND SCREENS TO MANUFACTURING SPECIFICATIONS.
- 3. WHERE WOOD DECK IS PRESENT USE 1/4" X 3-1/2" GALV. LAG SCREWS IN LIEU OF MASONRY ANCHORS. UNLESS OTHERWISE SPECIFIED.
- 4. 1"X2" NON STRUCTURAL MEMBERS ATTACHED TO HOST
 - A. FOR MASONRY/CONCRETE APPLICATION USE GALVANIZED 1/4" X 2-3/4" TAPCONS OR EQUAL AT 24" O.C. AND 6" FROM ENDS
 - B. FOR WOOD APPLICATION USE #14 X 2-3/4" WOOD SCREW AT 24" O.C. AND 6" FROM ENDS.
 - C. FOR ALUMINUM APPLICATION USE #10 X 1-1/2" SMS OR TEK SCREW AT 24" O.C. AND 6" FROM ENDS
 - D. WHERE 1"X2" INSTALLED THROUGHOUT AN "OPEN VIEW" SPACING SHALL BE REDUCED TO 18" O.C. AND 6" FROM ENDS

RESPONSIBILITIES

- 1. ALL SITE WORK SHALL BE PERFORMED BY A LICENSED CONTRACTOR IN ACCORDANCE WITH APPLICABLE BUILDING CODES, LOCAL ORDANANCES, AND THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
- 2. FOR FASTENERS WHICH ARE NOT VISIBLE AFTER INSTALLATION, THE CONTRACTOR SHALL VERIFY AND ENSURE INSTALLATION HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND IN ACCORDANCE WITH THE ATTACHED DETAILS.
- 3. FOR "PICTURE WINDOW" MODIFICATION TO EXISTING SCREEN ENCLOSURES, ALL OTHER "EXISTING SCREEN ENCLOSURE" FEATURES ARE TO MEET THE TYPICAL DETAILS AS PROVIDED IN THESE DETAILS. CONTRACTOR IS TO VERIFY & ASSURE EXISTING SCREEN ENCLOSURE IS STRUCTURALLY SOUND.
- 4. CONTRACTOR TO PROVIDE NOA'S & INSTALL ALL MATERIALS AS PER MANUFACTURER'S SPECIFICATIONS.
- 5. INTEGRITY OF EXISTING/ HOST STRUCTURE SHALL NOT BE COMPROMISED WITH THE ATTACHMENT OF THE PROPOSED STRUCTURE.

SHEET NO.	DRAWING INDEX
S/01	GENERAL NOTES
S/02	PLAN/ ELEVATIONS
S/03	DETAILS
S/04	DETAILS

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PROPOSED MANSARD SCREEN ENCLOSURE
SEE FOUNDATION DESIGN SHEET-01



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PROJECT NO. 2219549

CA CERT. #30782

CONTRACTOR:
SCREENWORKS INC

PROJECT ADDRESS:
WILLIAMS
1999 S MARION AVE
LAKE CITY, FL 32025

DESIGN DATE: 07/16/2022

REVISION 1: DATE

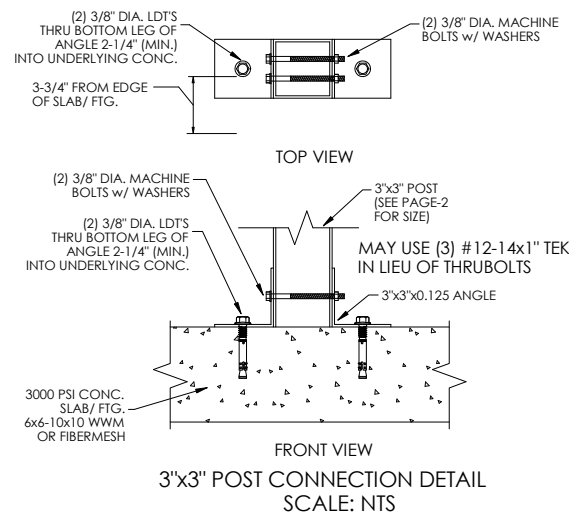
REVISION 2: DATE

DRAWN BY: MBG

SCALE: NTS

SHEET:

01



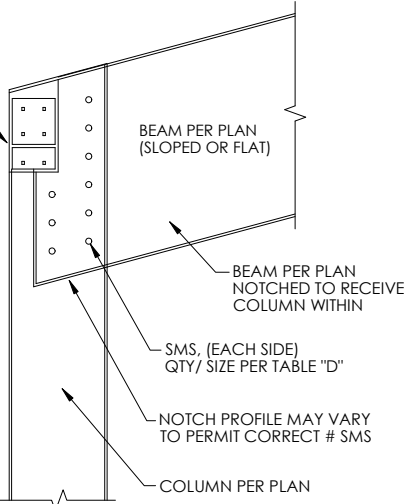
02

1"x2" FASTEN TO COL. (INTERNAL)
w/(2) #10x1-1/2" SMS, FASTEN TO
EAVE RAILS ABOVE w/#10 1-1/2" SMS
24" O.C. AND 6" WITHIN COL.

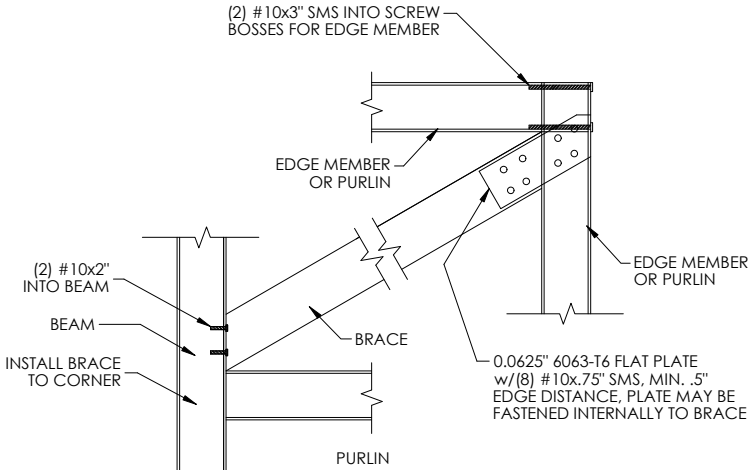
TABLE "D"

BEAM	QTY/ SIZE EACH SIDE
2 x 3	(4)/ #12
2 x 4	(5)/ #12
2 x 5	(5)/ #12
2 x 6	(6)/ #12
2 x 7	(7)/ #12
2 x 8	(8)/ #14
2 x 9	(9)/ #14
2 x 10	(9)/ #14

MAINTAIN MIN. OF 5/8" SEPERATION
FROM EDGE OF BEAM SMS O.C.



DETAIL E - UPRIGHT TO BEAM
CONNECTION SCALE: NTS



DETAIL "D" - ROOF BRACING CONNECTION
SCALE: NTS

ALUMINUM MEMBERS DIMENSIONS

HOLLOW SECTIONS

2 x 2: 2" x 2" x 0.050"
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 0.044"
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)

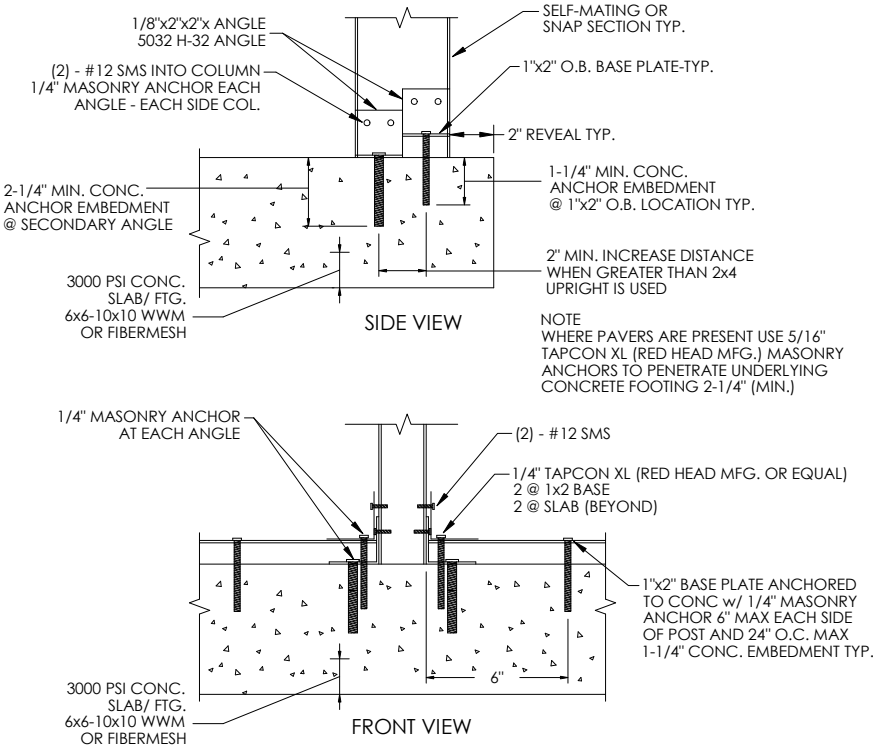
2 x 4 SMB: 2" x 4" x 0.046" x 0.100"
2 x 5 SMB: 2" x 5" x 0.050" x 0.116"
2 x 6 SMB: 2" x 6" x 0.050" x 0.120"
2 x 7 SMB: 2" x 7" x 0.055" x 0.120"
2 x 8 SMB: 2" x 8" x 0.072" x 0.224"
2 x 9 SMB: 2" x 9" x 0.072" x 0.224"
2 x 9(H) SMB: 2" x 9" x 0.082" x 0.306"
2 x 10 SMB: 2" x 10" x 0.092" x 0.374"

DETAIL A

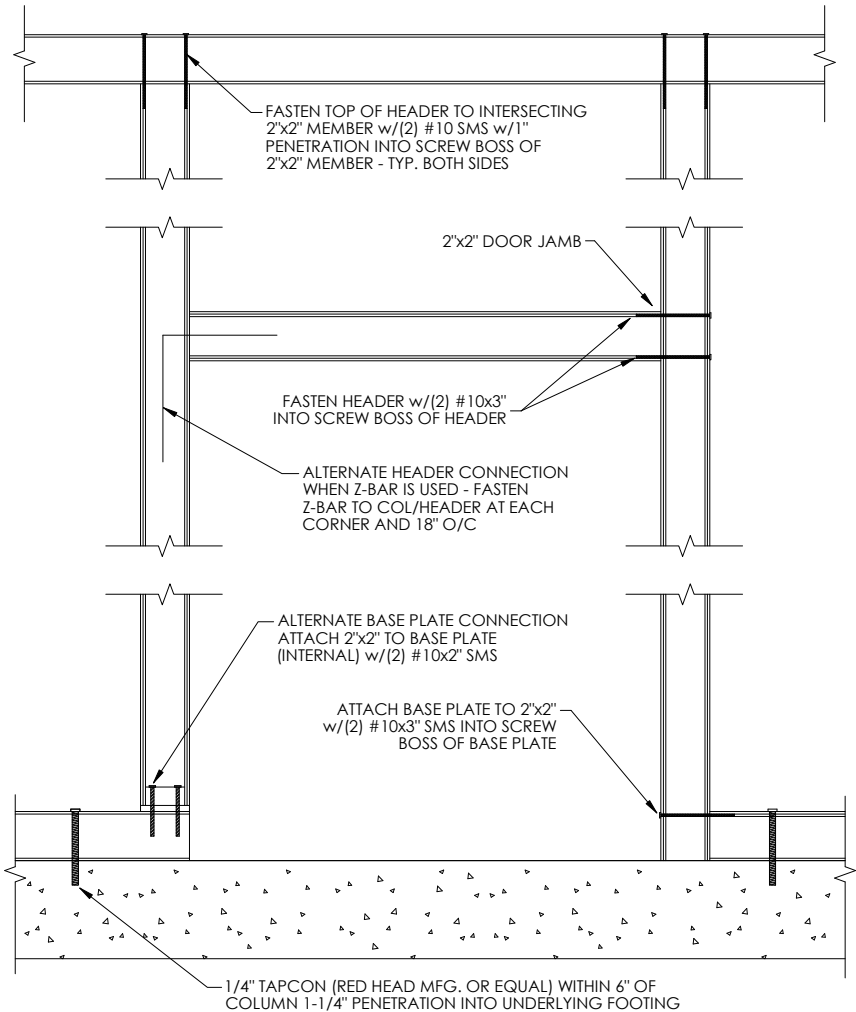
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MINIMUM NUMBER OF TAPCONS INTO CONCRETE &
12 X 3/4" S.M.S. INTO UPRIGHT / EACH SIDE OF BEAM
THROUGH SECONDARY 2" X 2" X 0.125" ANGLES
(SEE BELOW)

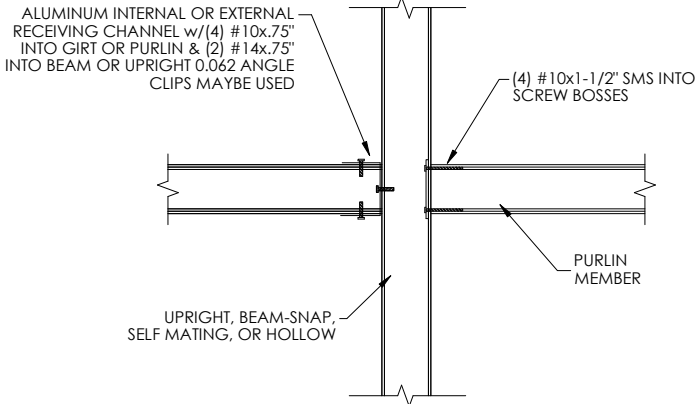
2X4 S.M.B. (1) 1/4" X 2-1/4" S.S. TAPCON & (2) # 12 X 3/4" S.M.S.
2X5 S.M.B. (1) 1/4" X 2-1/4" S.S. TAPCON & (2) # 12 X 3/4" S.M.S.
2X6 S.M.B. (2) 1/4" X 2-1/4" S.S. TAPCON & (3) # 12 X 3/4" S.M.S.
2X7 S.M.B. (2) 1/4" X 2-1/4" S.S. TAPCON & (4) # 12 X 3/4" S.M.S.
2X8 S.M.B. (3) 1/4" X 2-1/4" S.S. TAPCON & (5) # 12 X 3/4" S.M.S.
2X9 S.M.B. (4) 1/4" X 2-1/4" S.S. TAPCON & (6) # 12 X 3/4" S.M.S.
2X10 S.M.B. (5) 1/4" X 2-1/4" S.S. TAPCON & (7) # 12 X 3/4" S.M.S.



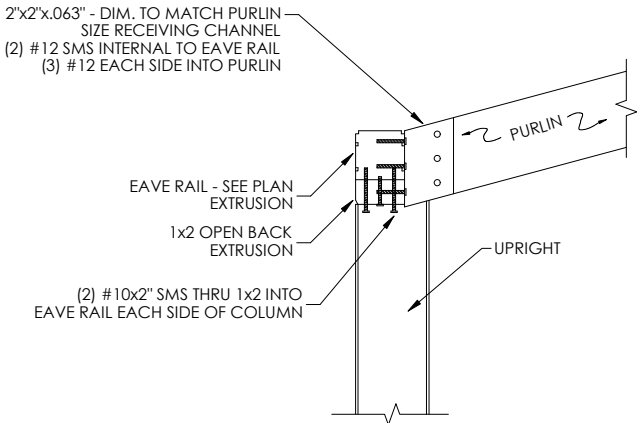
DETAIL "B" - 2"x4" OR LARGER SELF MATING
UPRIGHT TO DECK DETAILS SCALE: NTS



DETAIL "F" - DOOR JAMB & HEADER
CONNECTION SCALE: NTS

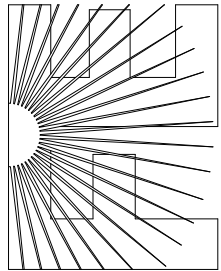


DETAIL "C" - GIRT OR PURLIN TO BEAM
OR POST DETAIL SCALE: NTS



DETAIL "G" - SLOPED PURLIN
CONNECTION SCALE: NTS

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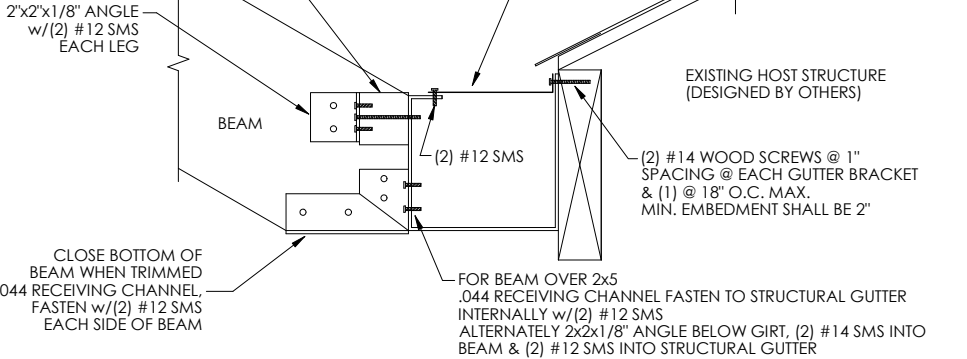
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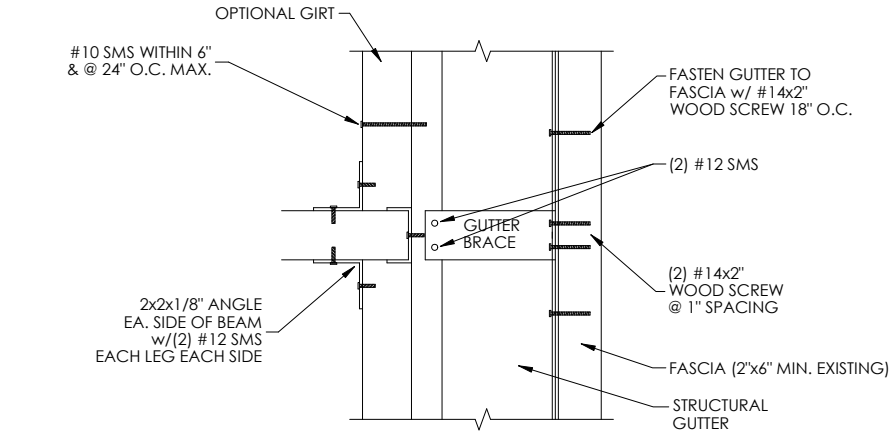
SHEET:

03

GIRT FASTENED INTERNALLY AT EACH END w/ #10x1.5" EACH SCREW GROOVE. FASTEN TO BEAM w/ 2"x2"x1/8" ANGLE (2) #12 SMS INTO BEAM & (2) #10x1.5 THRU ANGLE INTO GUTTER WHERE NO GIRT IS PRESENT, ATTACH ANGLE DIRECTLY TO GUTTER

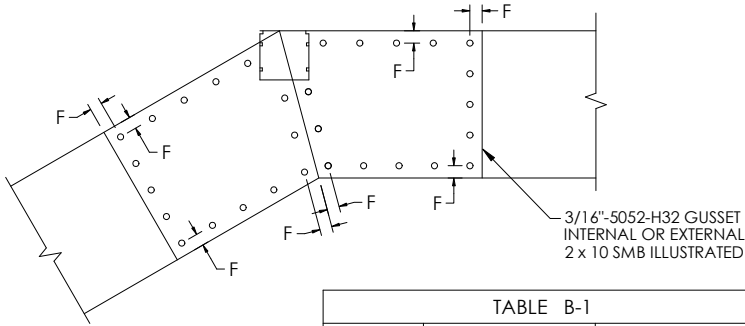


SIDE VIEW



TOP VIEW

DETAIL "H" BEAM TO GUTTER CONNECTION SCALE: NTS

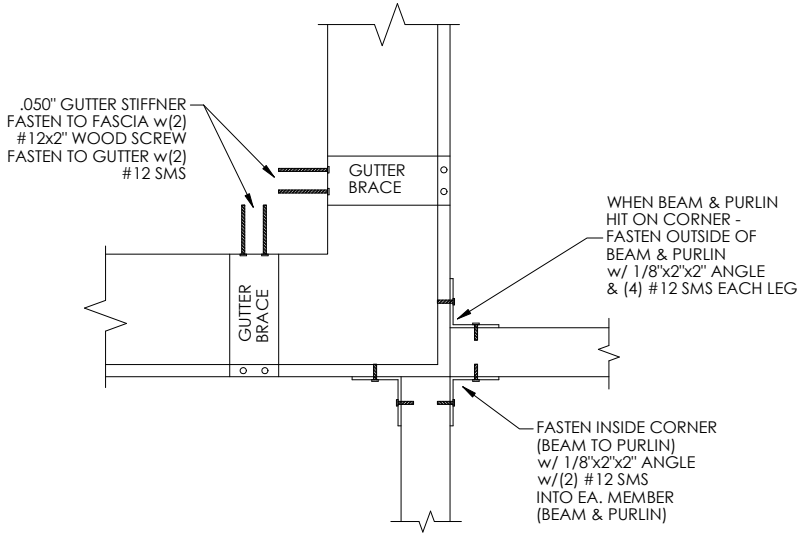


NOTE F
INSTALL FASTENERS ALONG PERIMETER OF GUSSET -BEAM JOINT 3/8" MIN. FROM EDGE. FASTENERS MAY BE STAGGERED TO INSURE PROPER QUANTITY PER TABLE B-1

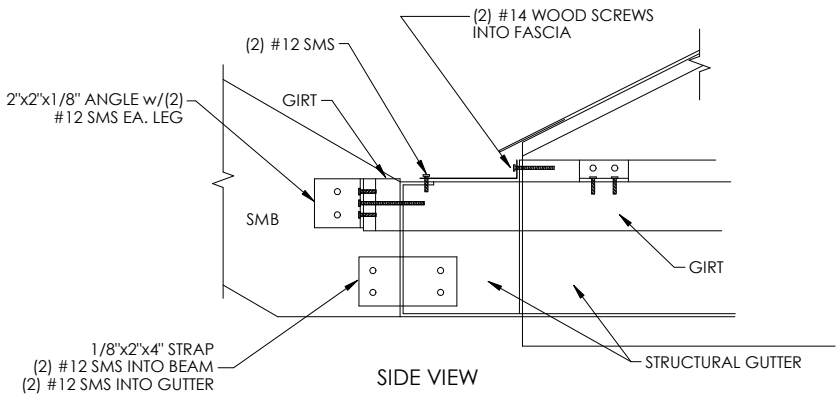
FASTENER PATTERN MAY APPEAR DIFFERENT FROM ILLUSTRATION. MAINTAIN 1/2" SEPARATION BETWEEN FASTENERS. MAINTAIN 3/8" MIN. FASTENER SEPARATION FROM BEAM JOINT OR EDGE OF BEAM LAP. FASTENERS MAY BE EVENLY SPACED AROUND EDGE OF GUSSET WITHIN 3/8" OF BEAM JOINT. FASTENERS MAY BE STAGGERED TO INSURE PROPER QUANTITY PER TABLE B-1

DETAIL "K" GUSSET CONNECTION SCALE: NTS

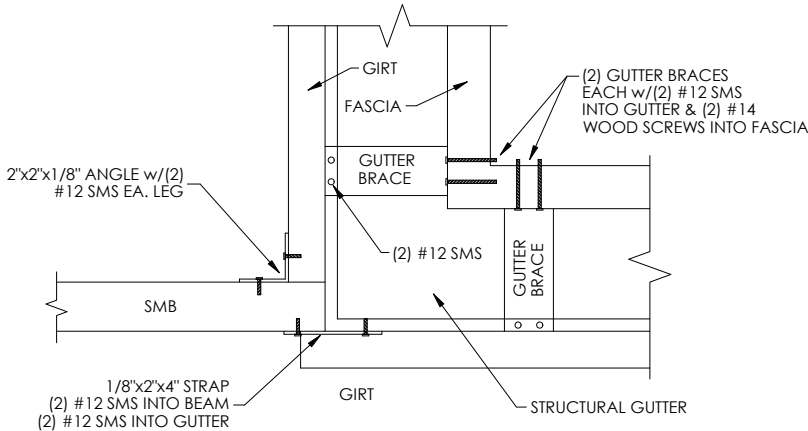
TABLE B-1		
BEAM SIZE	COL. TO BEAM QTY SMS/ SIDE OF COL.	BEAM TO BEAM QTY SMS/ EA. FACE/SIDE
2 x 4	(5) #12	(9) #12
2 x 5	(5) #12	(9) #12
2 x 6	(7) #12	(9) #12
2 x 7	(10) #12	(10) #12
2 x 8	(12) #12	(14) #12
2 x 9	(14) #14	(14) #14
2 x 10	(16) #14	(15) #14



DETAIL "M" BEAM & PURLIN TO GUTTER CONNECTION SCALE: NTS

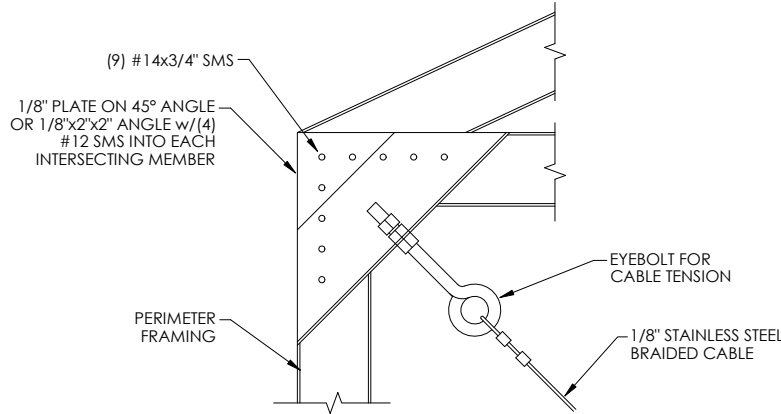


SIDE VIEW

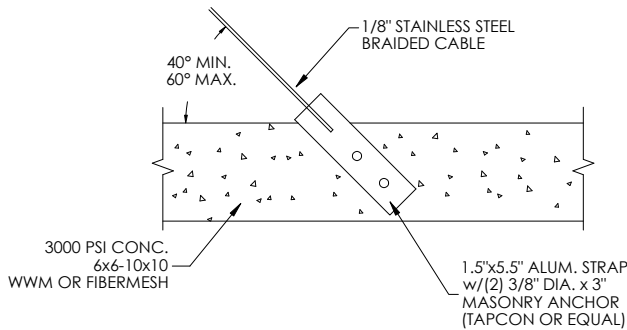
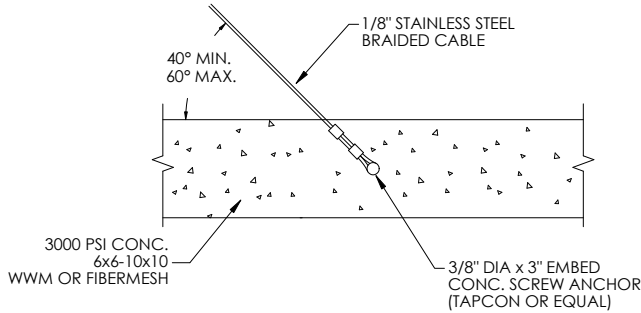
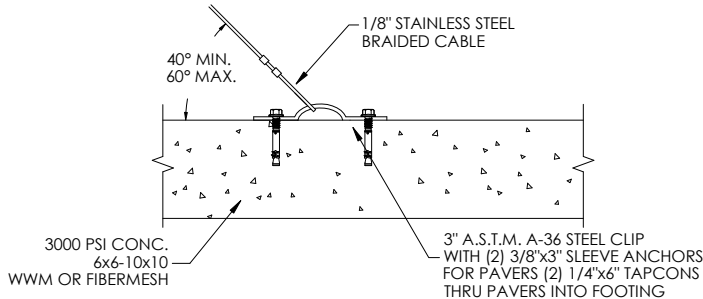


TOP VIEW

DETAIL "L" CORNER CONNECTION SCALE: NTS



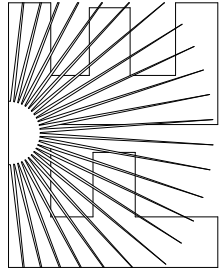
DETAIL "I-2" CABLE CONNECTION AT CORNER SCALE: NTS



DETAIL "I-1" CABLE CONNECTION AT FOUNDATION SCALE: NTS

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04