



JOB NUMBER: 6744
 JOB NAME: PATRIOTS PARK
 JOB LOCATION: CAMERON NC 28326

REVISION: A
 A - INITIAL SUBMITTAL REVISION (JMD 10/23/2020)

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- R1.0-R1.3 ROOF DETAILS

DESIGN LOADS

CODE: 2015 INTERNATIONAL BUILDING CODE
 TOTAL DEAD: 6.58 P.S.F.
 FRAME DEAD: 3.58 P.S.F.
 ROOF DEAD: 1.20 P.S.F.
 COLLATERAL DEAD: 1.80 P.S.F.
 ROOF LIVE LOAD: 20.00 P.S.F.
 GROUND SNOW LOAD: 20.00 P.S.F.
 ROOF SNOW LOAD: 20.00 P.S.F.
 WIND SPEED: 116.00 M.P.H.
 EXPOSURE: C
 SEISMIC USE GROUP: I
 SEISMIC SITE CLASS: D
 SEISMIC DESIGN CATEGORY: B
 SEISMIC ANALYSIS: SIMPLIFIED

NOTES

MATERIALS
 TUBE STEEL (HSS HOLLOW STRUCTURAL SECTION) (ASTM DESIGNATION)
 STRUCTURAL STEEL PLATE A-500 GRADE B
 A-992
 ROOF PANELS (STEEL) A-36
 ANCHOR BOLTS A-446
 CONNECTION BOLTS F1554 GRADE 55
 A-325

ALL WELDING CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED. ALL WELDING IS PERFORMED BY AWS CERTIFIED WELDERS.

IF THESE DRAWINGS ARE SEALED, THE SEAL APPLIES ONLY TO THE MATERIALS SUPPLIED BY ICON SHELTER SYSTEMS INC. AND IS NOT INTENDED AS THE SEAL OF THE ENGINEER OF RECORD FOR THE ENTIRE PROJECT.

DUE TO STANDARDIZED FABRICATION PARTS SHOWN MAY BE UPGRADED. REFER TO THE SHIPPING BILL OF MATERIALS FOR POSSIBLE SUBSTITUTIONS.

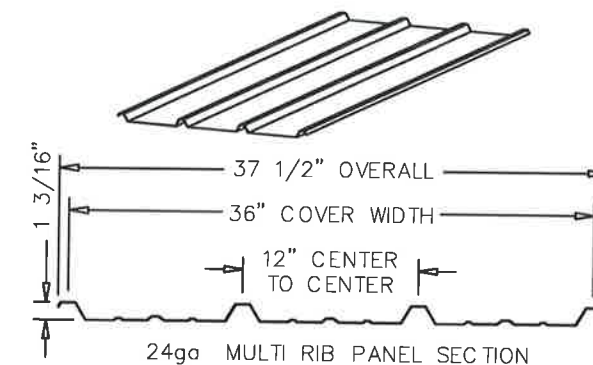
ICON SHELTER SYSTEMS INC. RECOMMENDS THAT THE PRIMARY FRAMING INSTALLER AND THE ROOF INSTALLER HAVE A MINIMUM OF FIVE (5) YEARS OF DOCUMENTED EXPERIENCE INSTALLING THIS TYPE OF PRODUCT.

HIGH STRENGTH BOLTING
 ALL HIGH STRENGTH BOLTS ARE A-325 BOLTS WITH HEAVY HEX NUTS. THE BOLTS ARE TO BE INSTALLED UTILIZING THE "SPECIFICATION FOR STRUCTURAL JOINTS ASTM A325 OR A490 BOLTS" (6/30/2004) AS PREPARED BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) FOR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION(AISC). THE BOLTS SHALL BE INSTALLED AS SNUG TIGHTENED WHICH IS DEFINED AS THE TIGHTNESS THAT IS ATTAINED WITH A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER USING AN ORDINARY SPUD WRENCH TO BRING THE PLIES INTO FIRM CONTACT, WHICH IS THE CONDITION WHEN THE PLANES OF CONTACT BETWEEN TWO PLIES ARE SOLIDLY SEATED AGAINST EACH OTHER, BUT NOT NECESSARILY IN CONTINUOUS CONTACT WITH UTILIZATION OF THE SNUG TIGHTENING METHOD, NO WASHERS ARE REQUIRED.
 ALL CONNECTIONS ARE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE.

IT IS THE RESPONSIBILITY OF THE INSTALLER TO INSURE PROPER TIGHTNESS.

PROPER ERECTION OF THE FRAMING MEMBERS REQUIRES THE MAIN COLUMNS TO BE PLUMB & SQUARE. COLUMNS, RAFTER, AND TIE BEAM CONNECTIONS MUST BE TIGHTENED BEFORE INSTALLING THE PURLINS. PURLINS MUST BE PARALLEL TO THE TIE BEAMS AND EAVE BEAMS.

ROOF



COVER SHEET

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SQ20M-P6

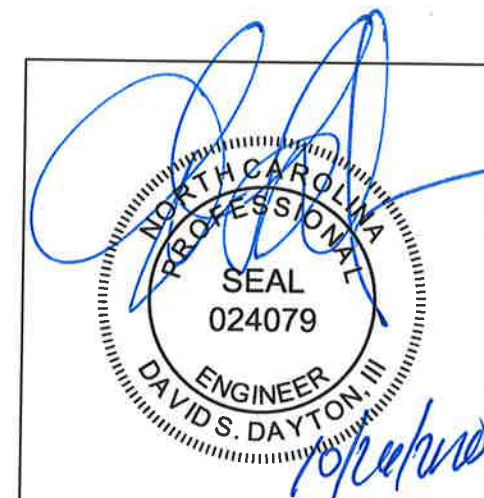
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CAMERON NC 28326

SHEET

1.0



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FABRICATOR APPROVALS

CLARK COUNTY STEEL FABRICATOR NUMBER: 707
 CITY OF LOS ANGES FABRICATOR NUMBER: FB03254

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ELEVATION

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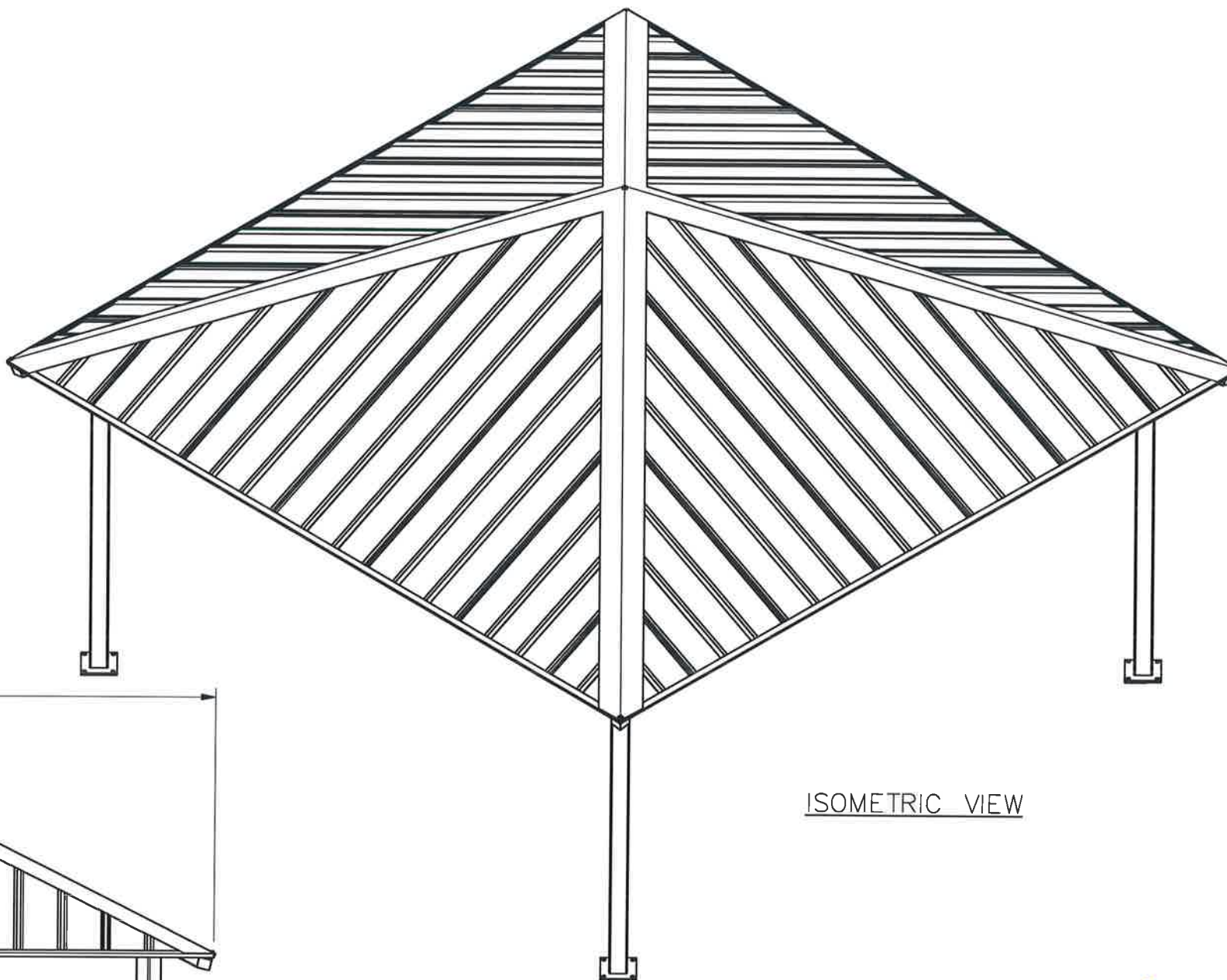
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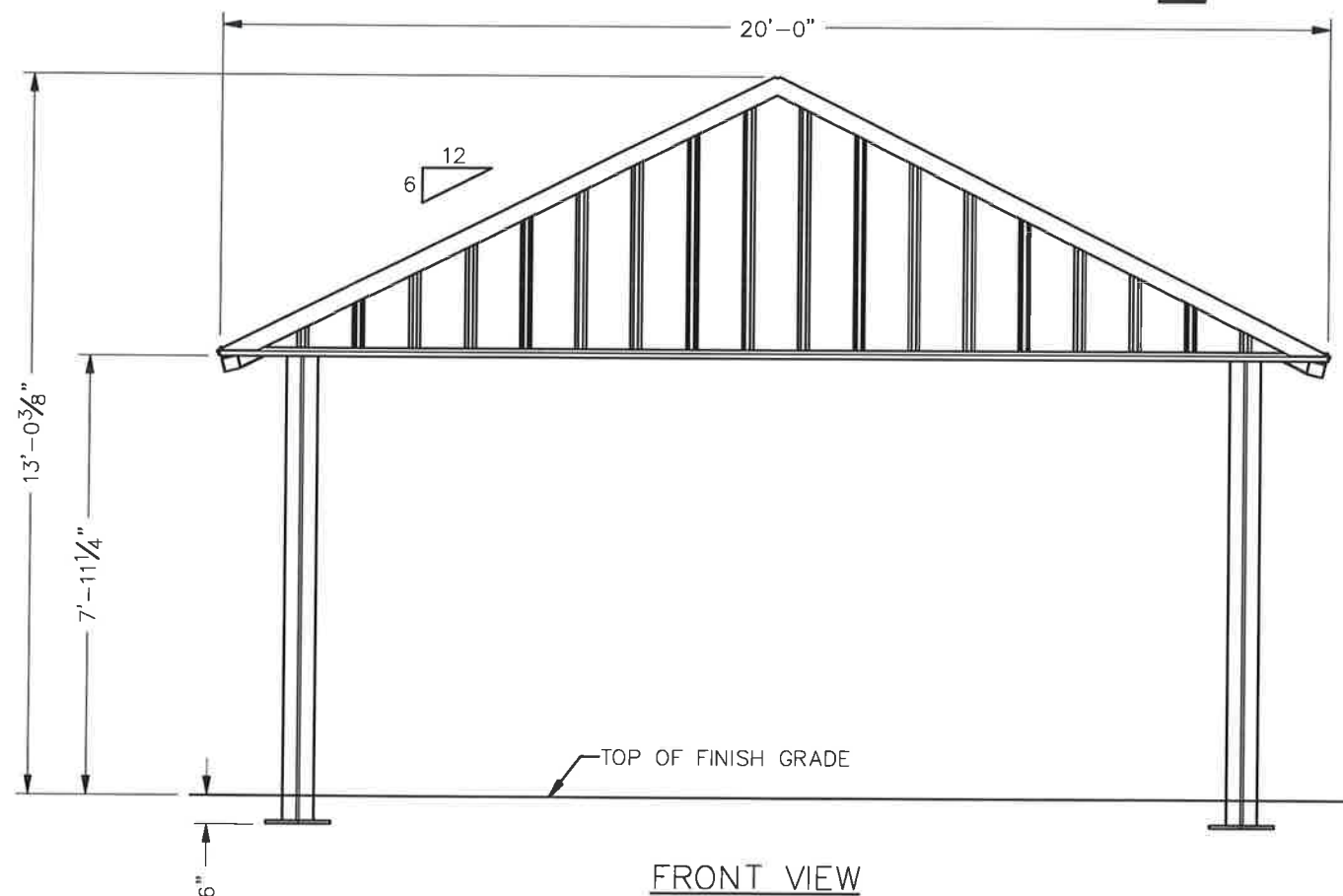
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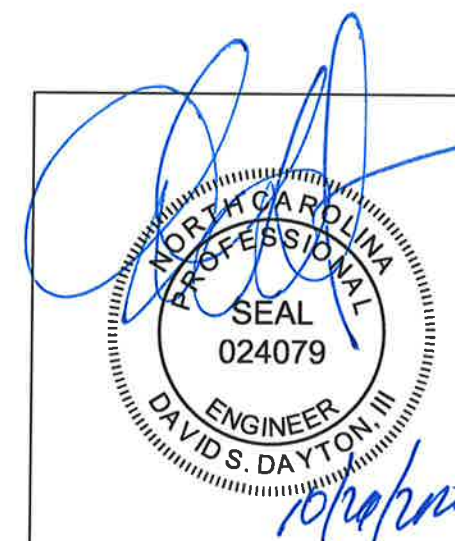
2.0



ISOMETRIC VIEW



FRONT VIEW



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ANCHOR BOLT LAYOUT

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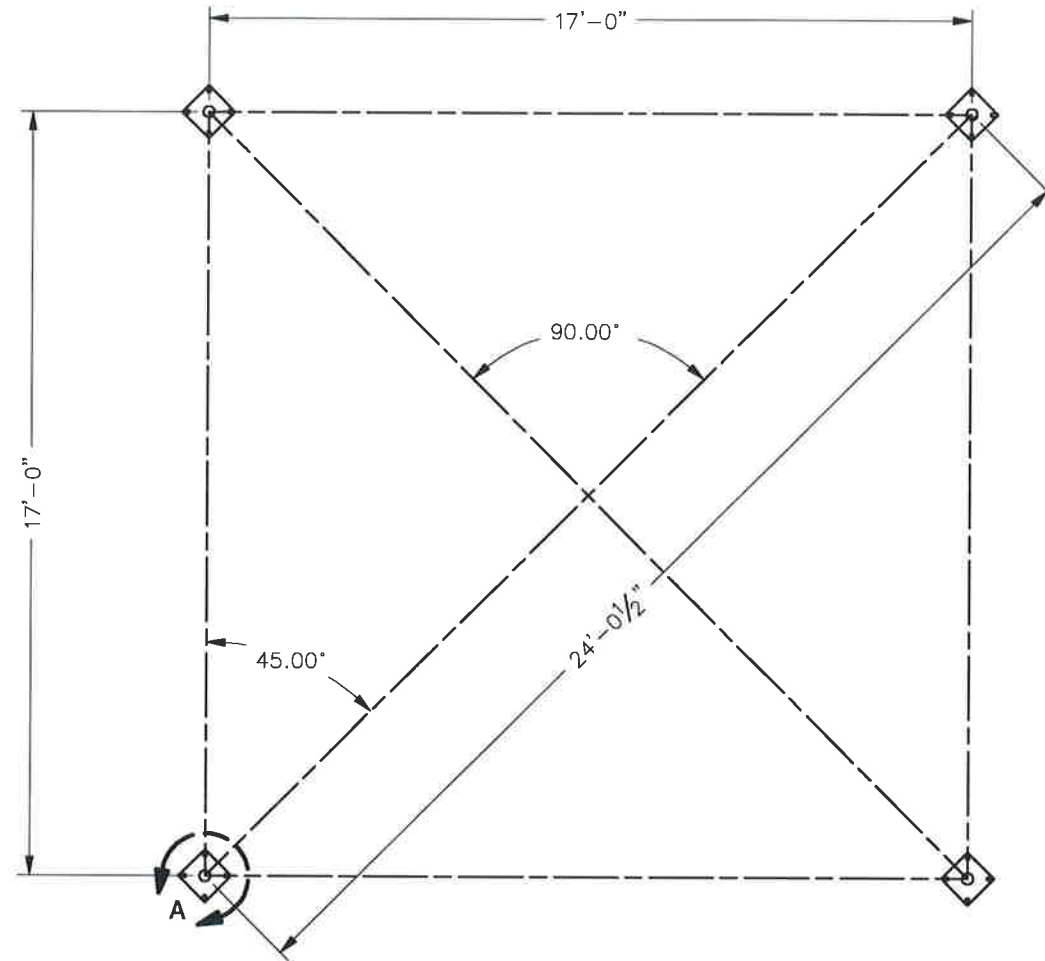
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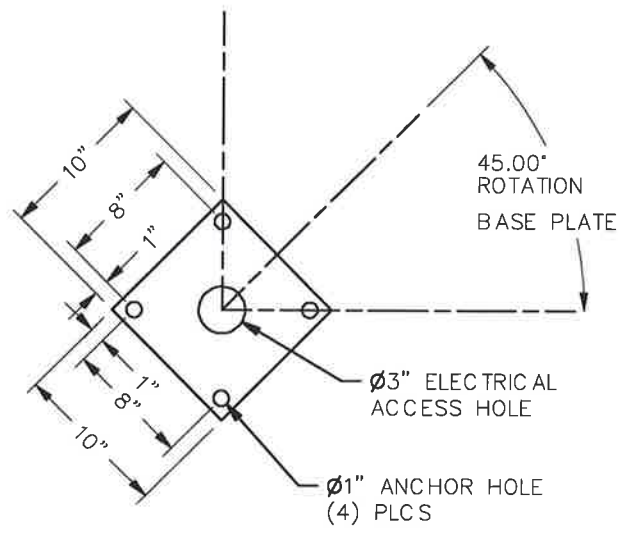
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3.0

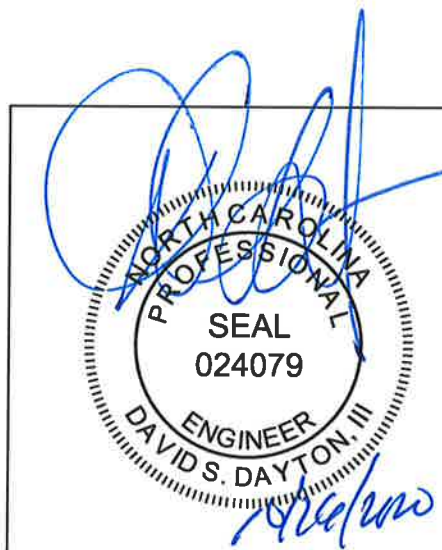
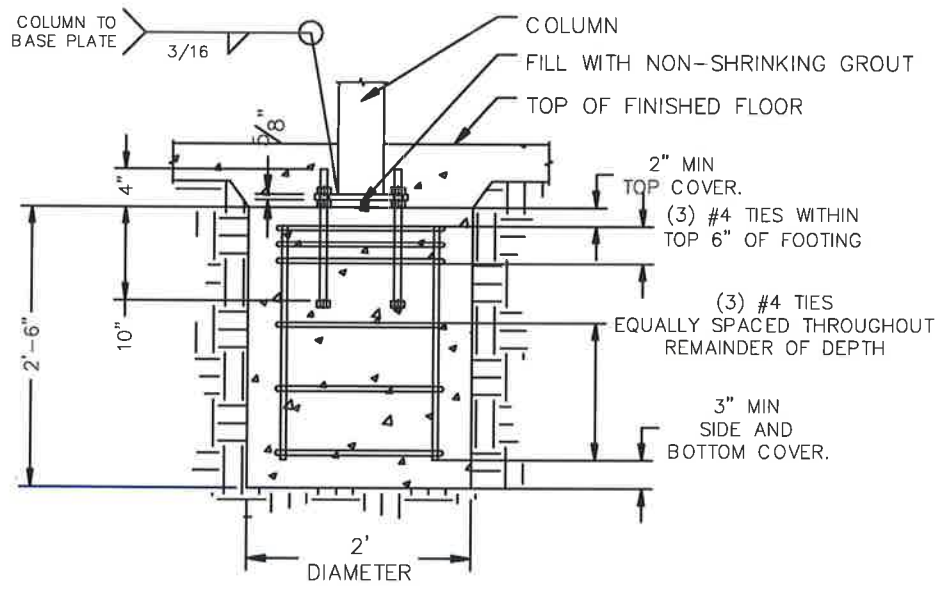
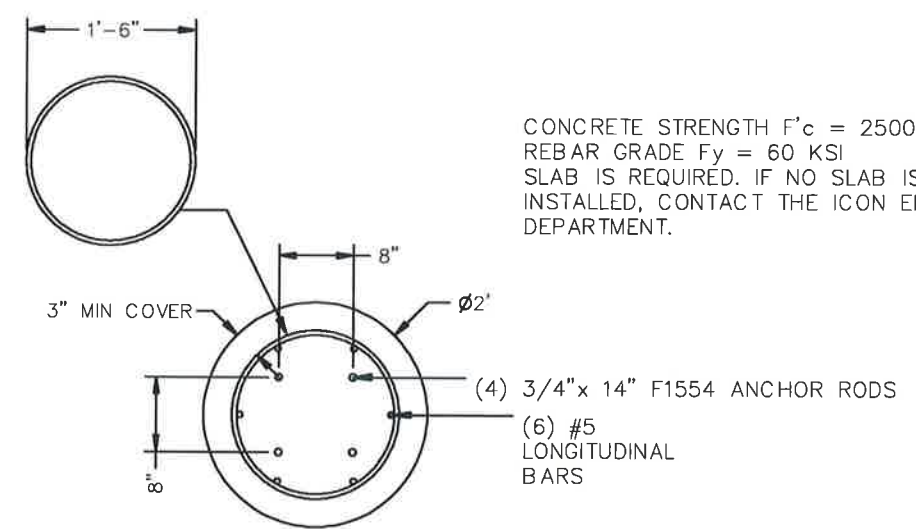


ANCHOR BOLT LAYOUT



DETAIL A
 BASE PLATE MATERIAL
 5/8" THICK GR50

CONCRETE STRENGTH $F'_c = 2500$ PSI
 REBAR GRADE $F_y = 60$ KSI
 SLAB IS REQUIRED. IF NO SLAB IS TO BE
 INSTALLED, CONTACT THE ICON ENGINEERING
 DEPARTMENT.



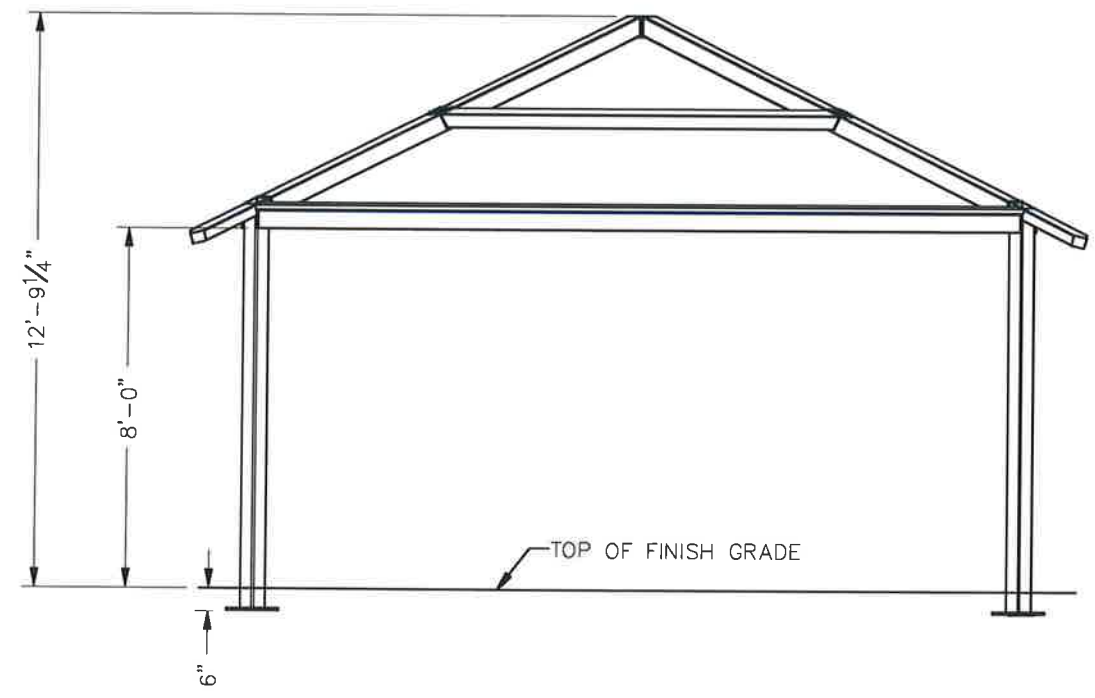
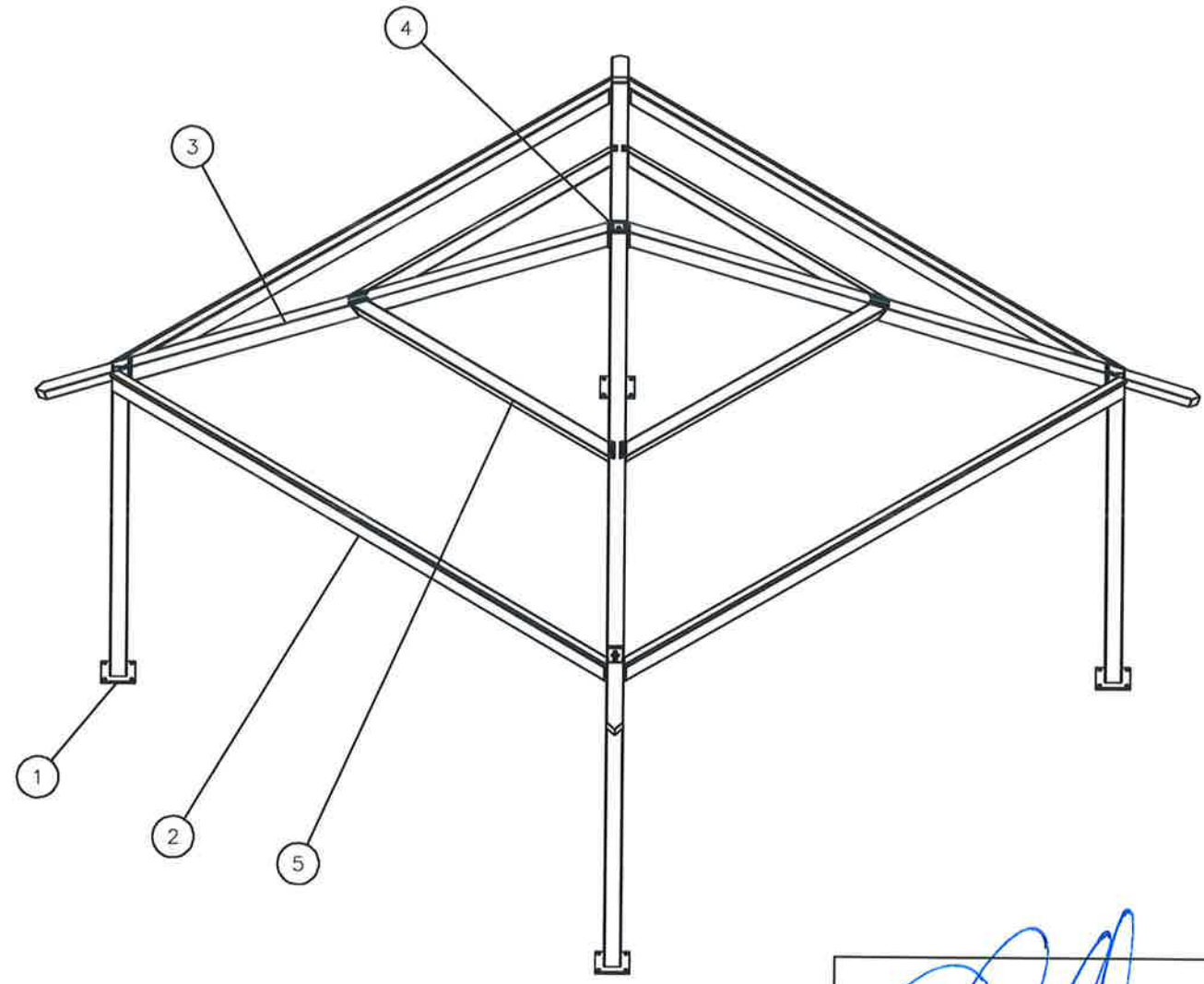
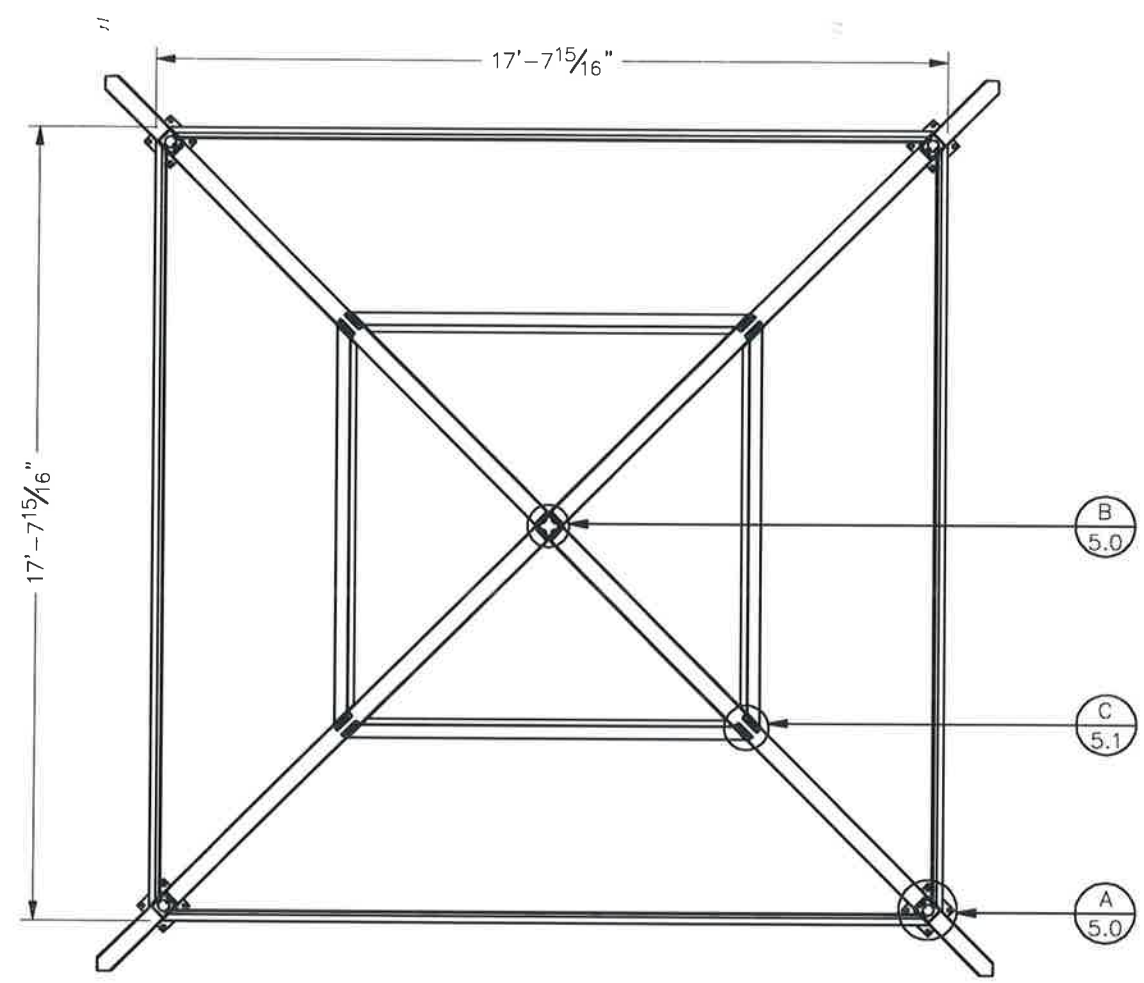
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ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	LENGTH	UNIT WEIGHT
1	4		COLUMN	HSS5X5X0.1875		125 lbmass
2	4		TIE BEAM	HSS5X3X0.125		141 lbmass
3	4		RAFTER	HSS5X5X0.125		109 lbmass
4	1		CONNECTOR	HSS5X5X0.500		13 lbmass
5	4		PURLIN	HSS4X4X0.125		56 lbmass

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FRAME LAYOUT

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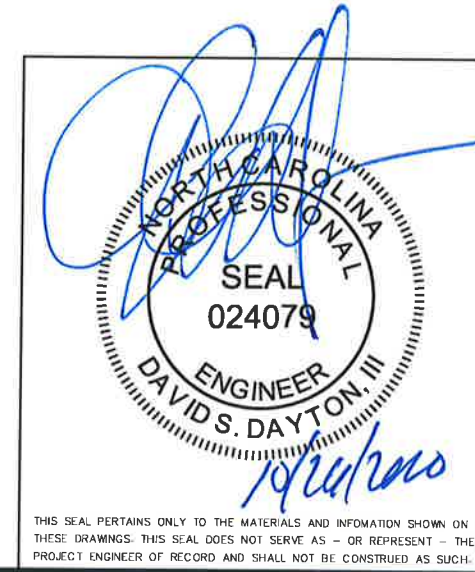
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FRAME CONNECTIONS

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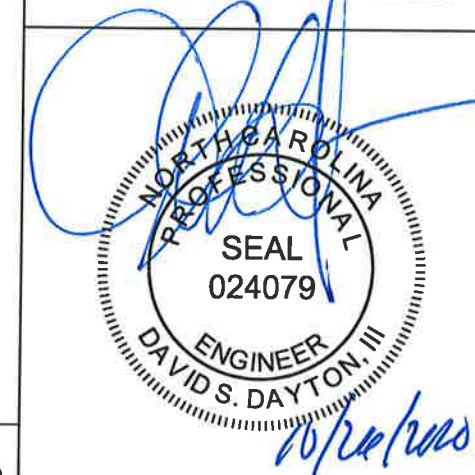
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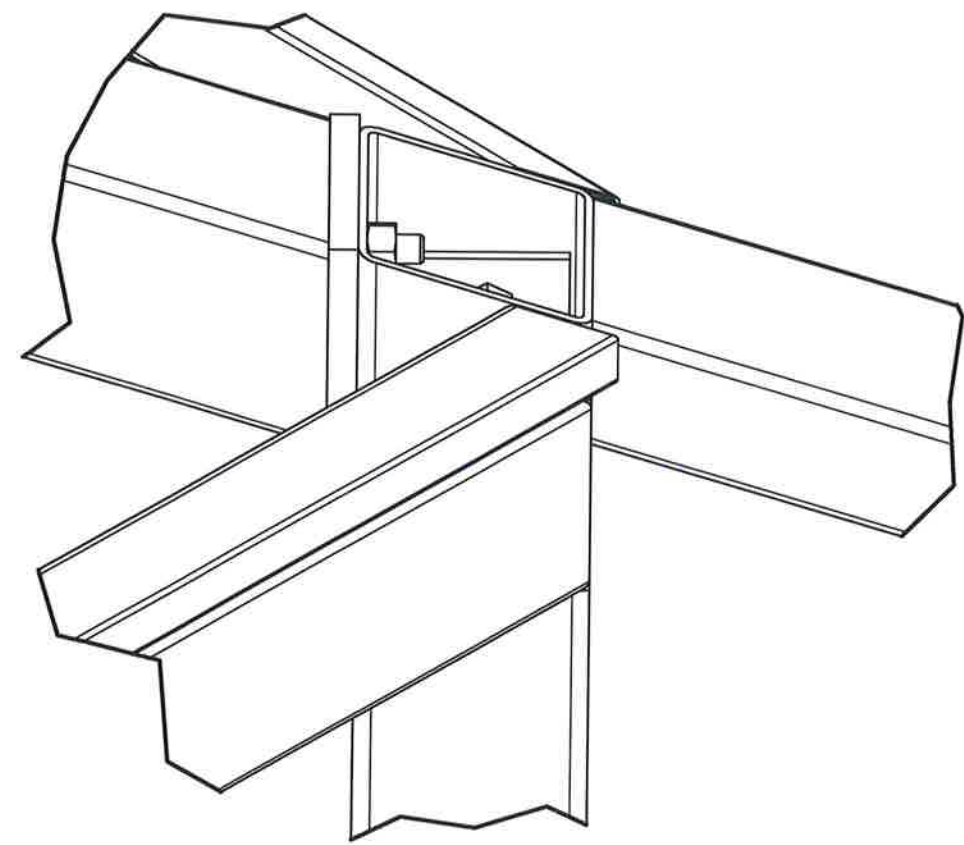
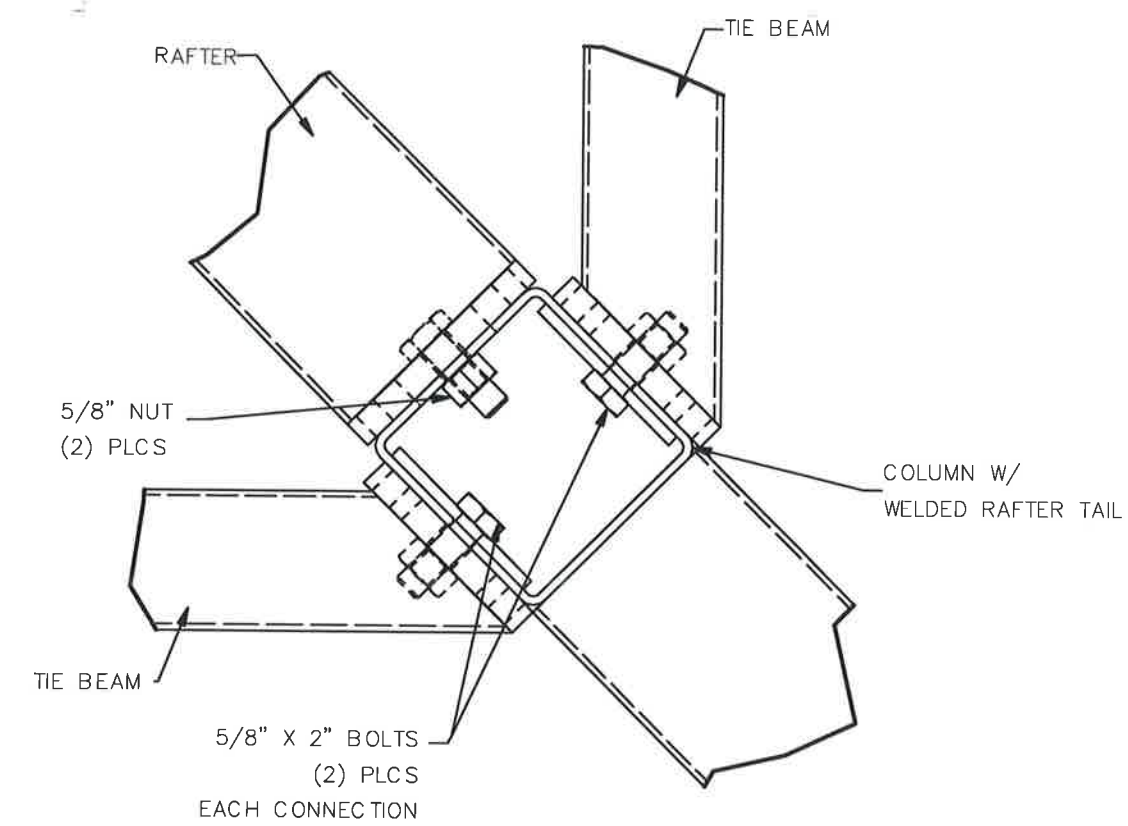
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NOTE TO INSTALLERS:
 WITH FACTORY POWDERCOATED SHELTERS, PAINT EXPOSED FASTENERS OF COMPRESSION RINGS, ORNAMENTATION, KNIFE PLATES, ETC. WITH PROVIDED TOUCH UP PAINT TO PREVENT RUSTING OF FASTENERS

PAINT EXPOSED FASTENERS

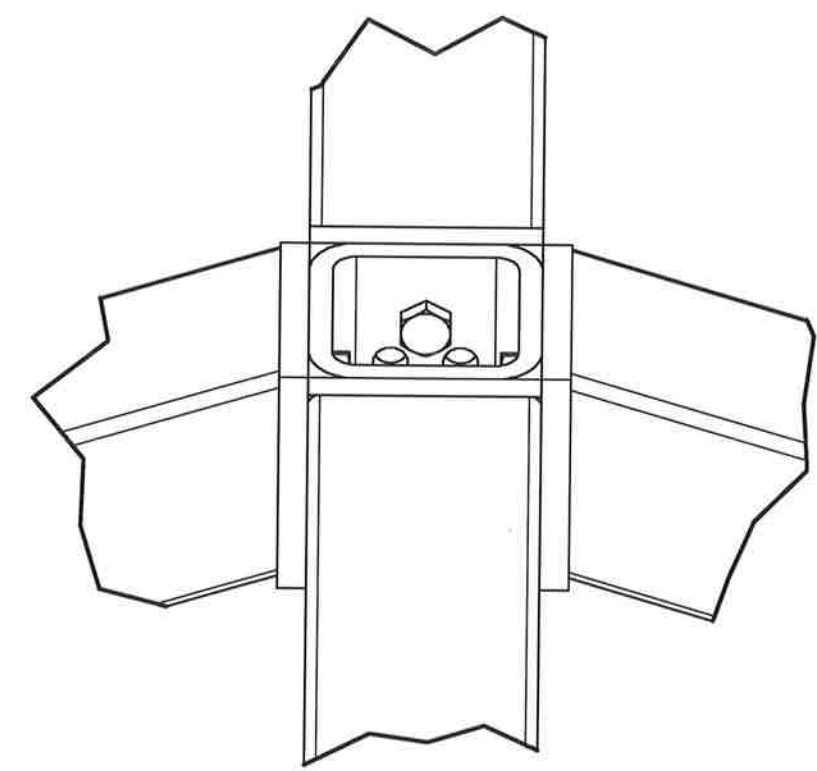
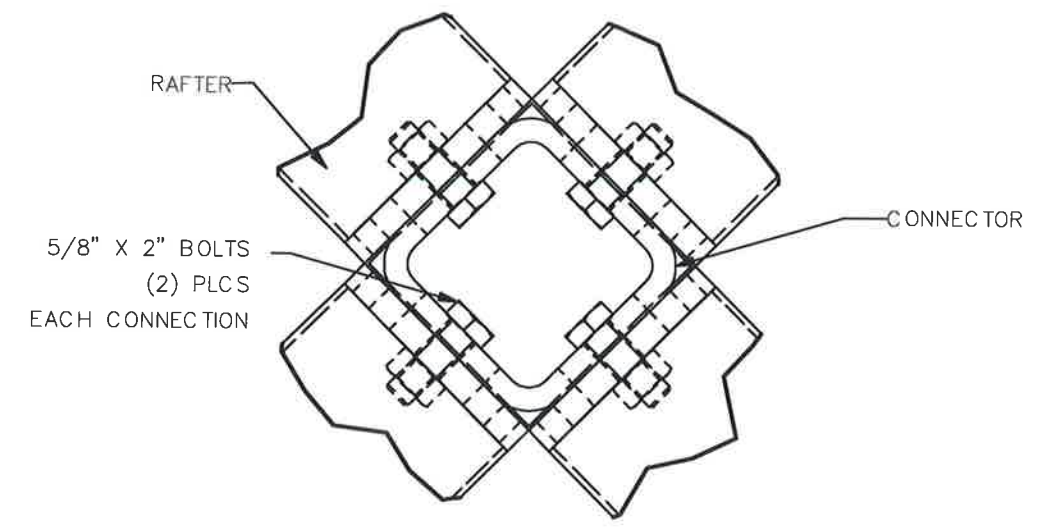


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RAFTER & TIE BEAM CONNECTION
 @ COLUMN

DETAIL A



INSTALL CONNECTOR W/
 OPEN SIDE UP

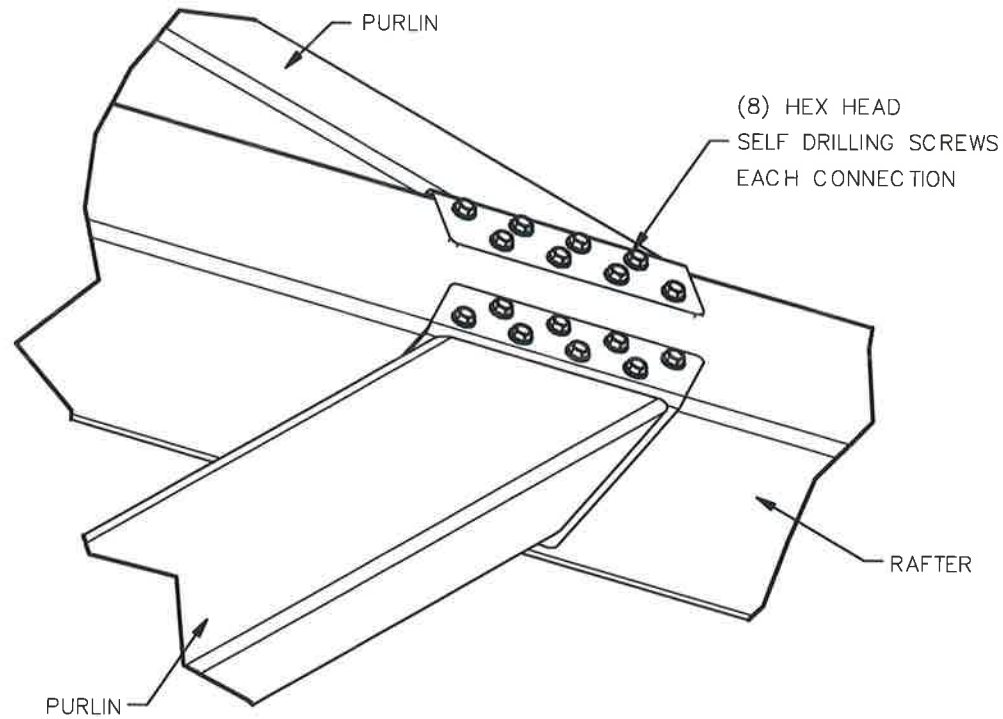
RAFTER CONNECTION
 @ CONNECTOR

DETAIL B

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HEX HEAD SELF DRILLING SCREW
1/4" - 14x1"



- 1). SLIDE PURLIN INTO PLACE BETWEEN THE RAFTERS
- 2). FASTEN PURLIN W/ (8) HEX HEAD SELF DRILLING ON EACH END

PURLIN CONNECTION
@ RAFTER

DETAIL C

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FRAME CONNECTIONS

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PAINT EXPOSED FASTENERS

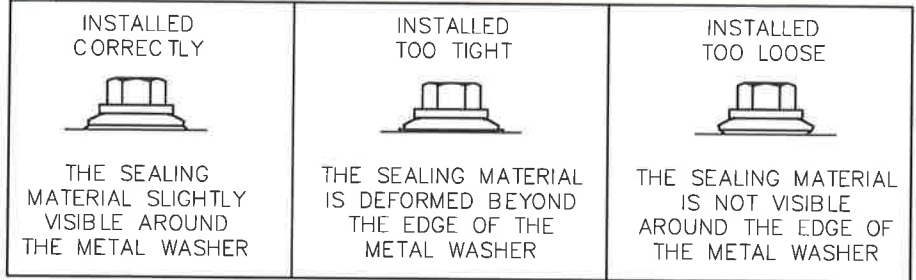


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THE DETAILS SHOWN ARE SUGGESTIONS OR GUIDELINES ON HOW TO ERECT THE METAL ROOFING SYSTEM. THE INFORMATION SHOWN IS ACCURATE, BUT IT IS NOT INTENDED TO COVER ALL INSTANCES, BUILDING REQUIREMENTS, DESIGNS OR CODES. CHANGES TO THE DETAILS MAY BE REQUIRED DUE TO FIELD CONDITIONS.

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL INSTALLATION INSTRUCTION MATERIAL BEFORE STARTING WORK.

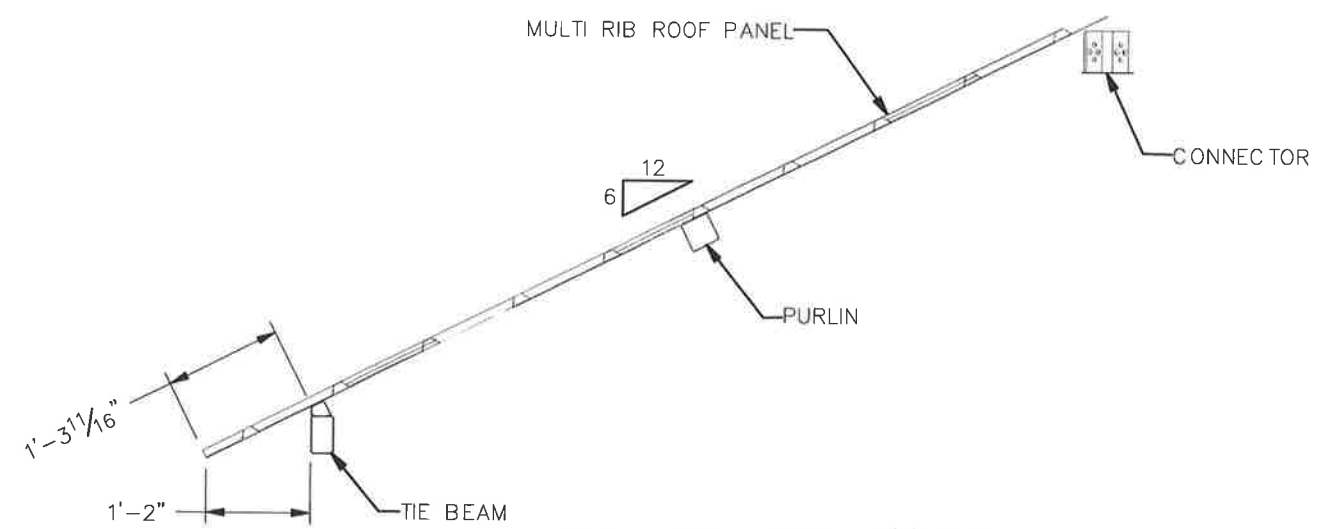
THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

ERECTORS SHALL BE RESPONSIBLE TO ENSURE THAT THE DETAILS MEET PARTICULAR BUILDING REQUIREMENTS AND TO ASSURE ADEQUATE WATER TIGHTNESS.

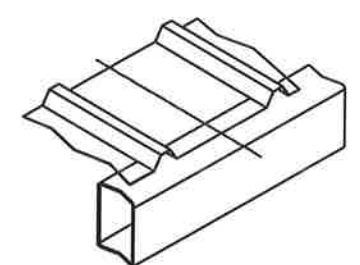
FOR THE BEST APPEARANCE ALL TRIM AND FLASHING SHALL BE INSTALLED TRUE, AND IN PROPER ALIGNMENT, WITH ALL EXPOSED FASTENERS EQUALLY SPACED.

SOME FIELD CUTTING AND/OR FITTING OF PANELS, TRIM AND FLASHING IS TO BE EXPECTED BY THE ERECTOR. MINOR FIELD CORRECTIONS ARE PART OF NORMAL ERECTION WORK.

THE INSTALLATION SHALL BE PERFORMED BY EXPERIENCED METAL CRAFTSMEN AND WORKMANSHIP SHALL MEET THE BEST INDUSTRY STANDARDS.



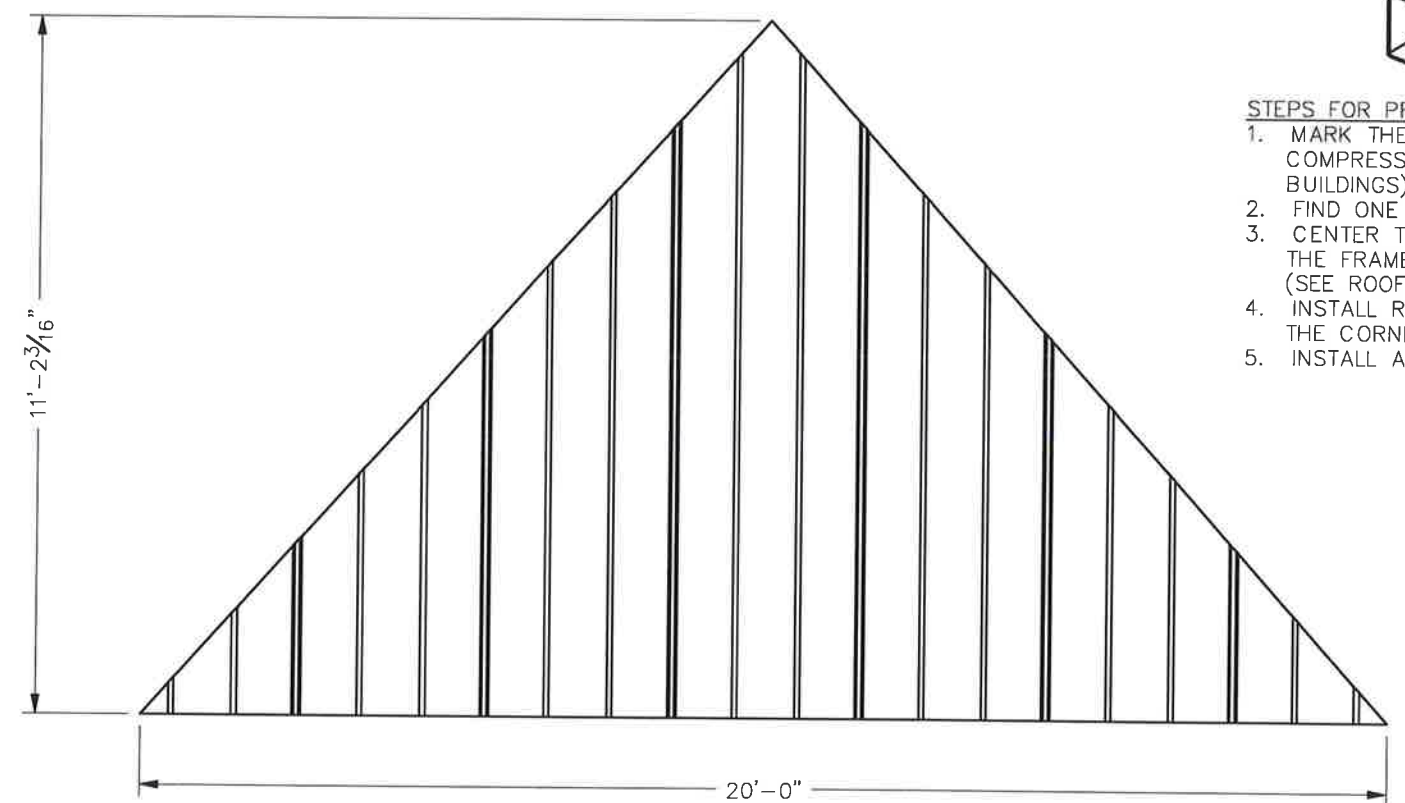
MULTI RIB ROOF SECTION




- STEPS FOR PROPER PANEL INSTALLATION:**
1. MARK THE CENTER OF THE TIE BEAM AND COMPRESSION RING (OR PURLIN ON MULTI TIER BUILDINGS).
 2. FIND ONE OF THE LONGEST PANELS.
 3. CENTER THAT PANEL ALONG THE CENTER LINE OF THE FRAME. (SEE ROOF LAYOUT FOR THE CORRECT RIB TO CENTER)
 4. INSTALL REMAINING PANELS WORKING OUT TOWARDS THE CORNERS.
 5. INSTALL ALL ROOF SECTIONS USING THIS METHOD.

ATTENTION INSTALLERS:
METAL SHAVINGS LEFT ON ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH!

DRILLING OR INSTALLING ROOF FASTENERS WILL CAUSE METAL SHAVINGS. THESE SHAVINGS MUST BE CAREFULLY REMOVED AT THE END OF EACH DAY BY EITHER SWEEPING OR BRUSHING THE INSTALLED ROOF.



MULTI RIB ROOF LAYOUT



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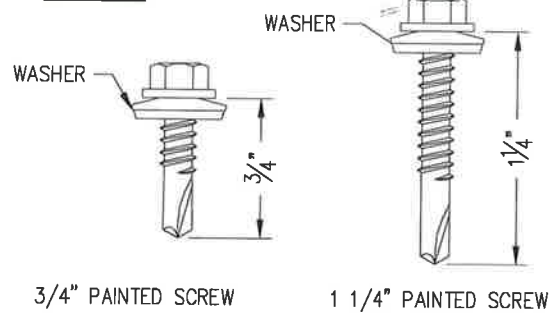
ROOF LAYOUT

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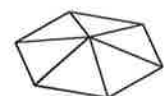

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EASTENERS

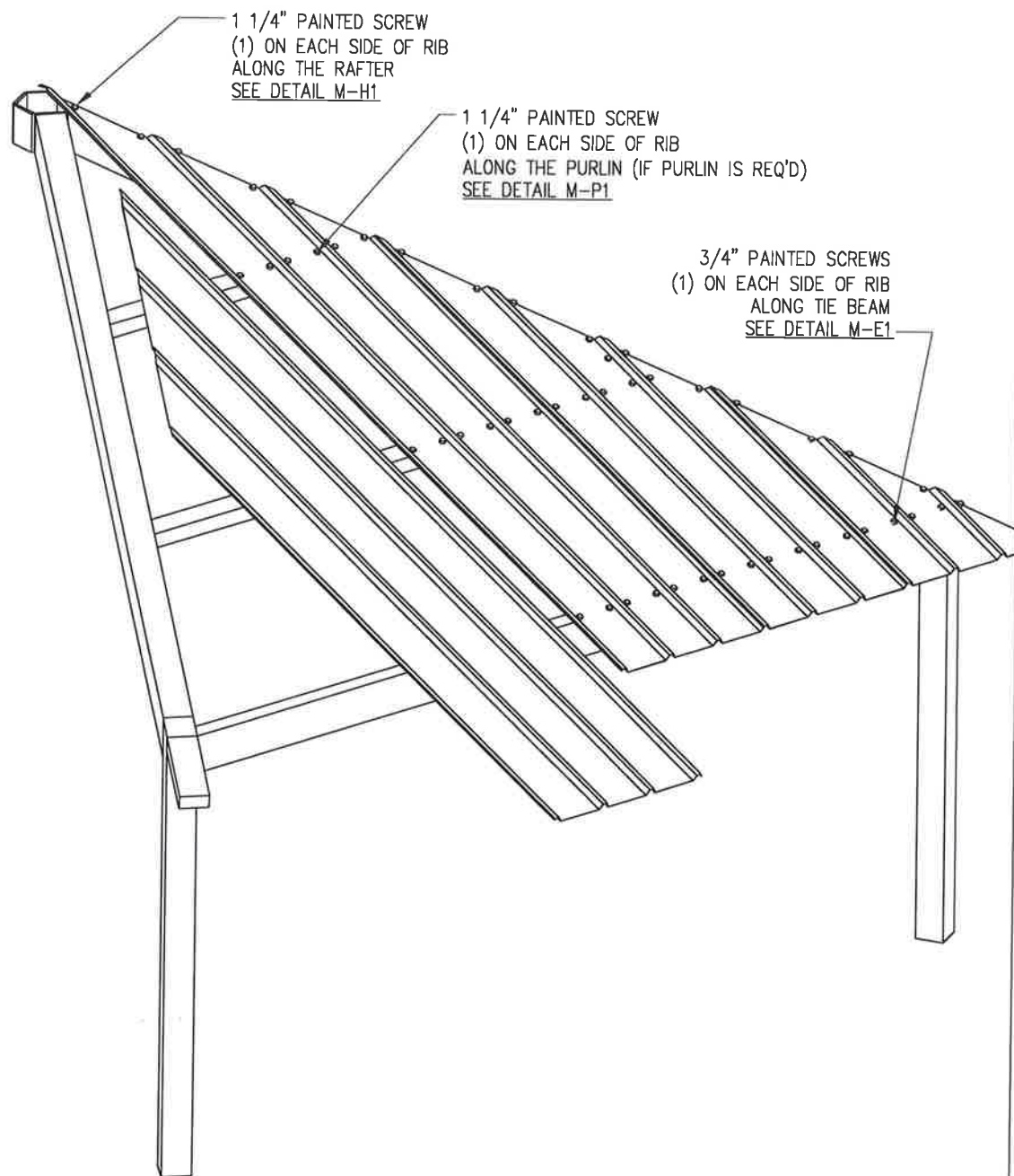
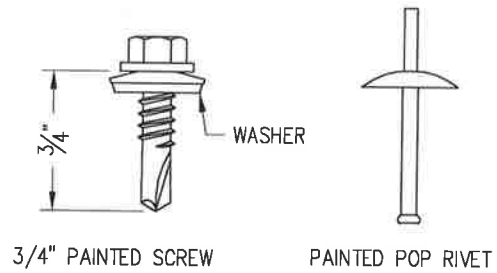


NOTE: STITCH OR LAP SCREWS ARE NOT REQUIRED ALONG THE RIB

ORDER OF INSTALLATION

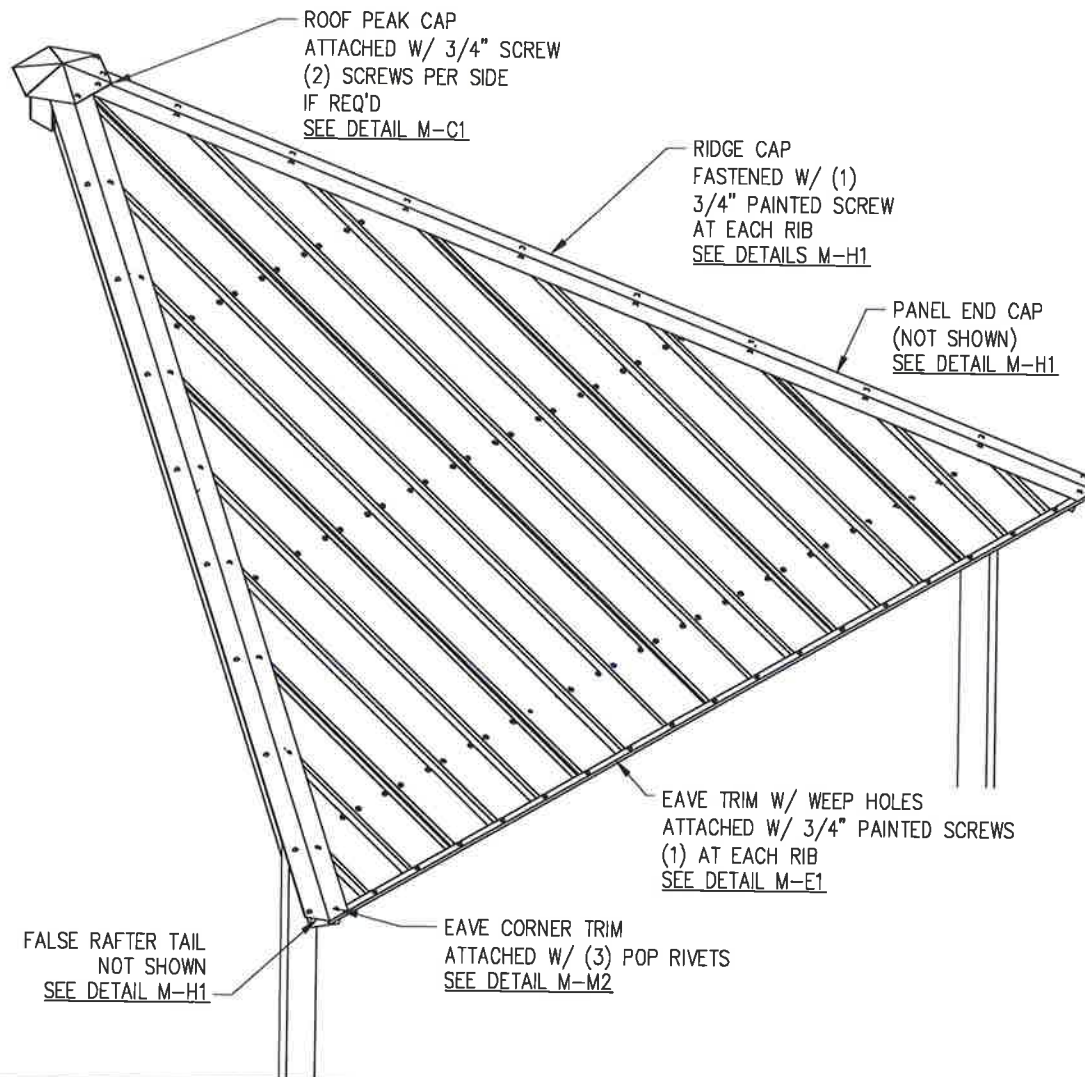
-  PANEL END CAP 10' LONG
SEE DETAIL M-H1
-  FALSE RAFTER 41" LONG
SEE DETAIL M-H1
-  EAVE TRIM 10' LONG
W/ WEEP HOLES
SEE DETAIL M-E1
-  RIDGE CAP 10' LONG
SEE DETAIL M-H1
-  ROOF PEAK CAP
SEE DETAIL M-C1
-  EAVE CORNER TRIM 8" LONG
(2) PER CORNER
SEE DETAIL M-M2

EASTENERS



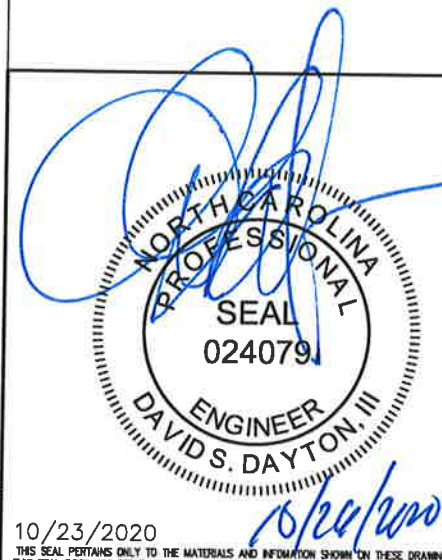
METAL ROOF PANEL INSTALLATION

ROOF



TRIM INSTALLATION

TRIM



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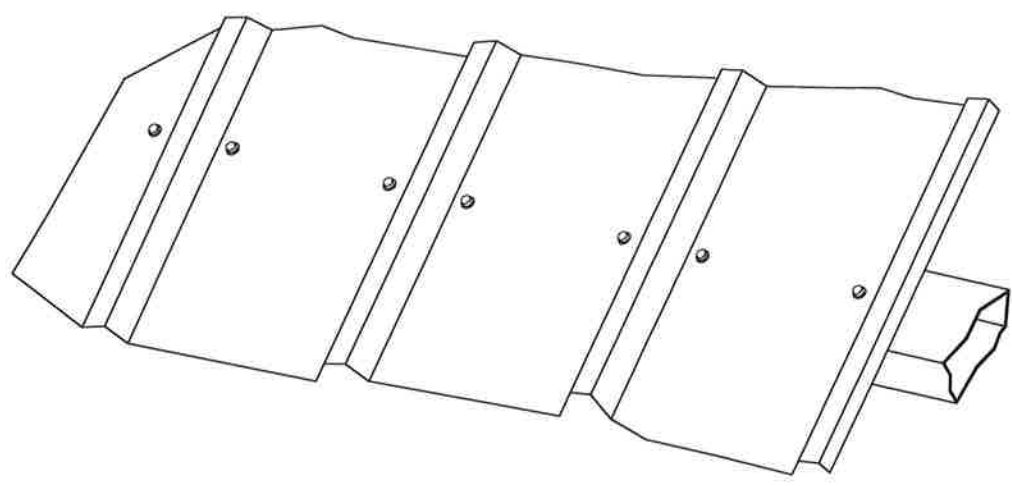
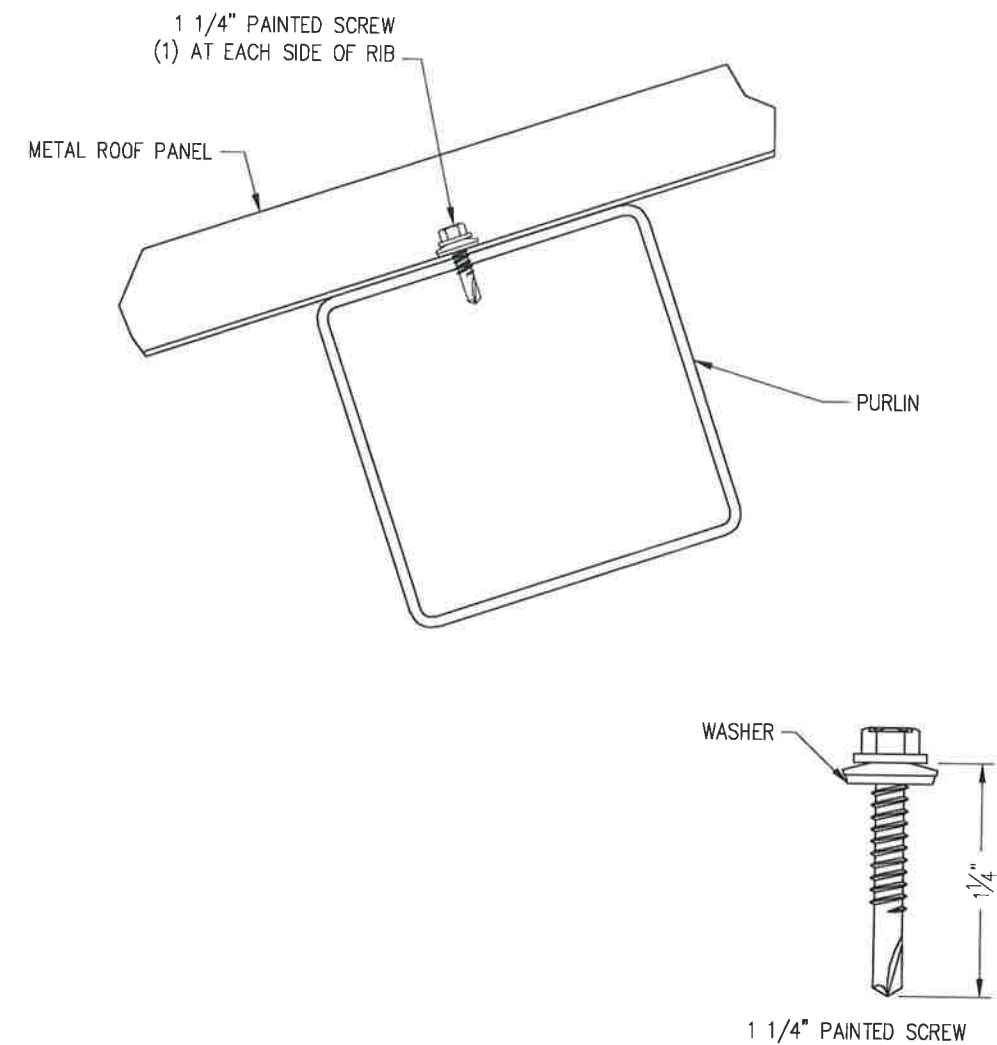
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David S. Dayton

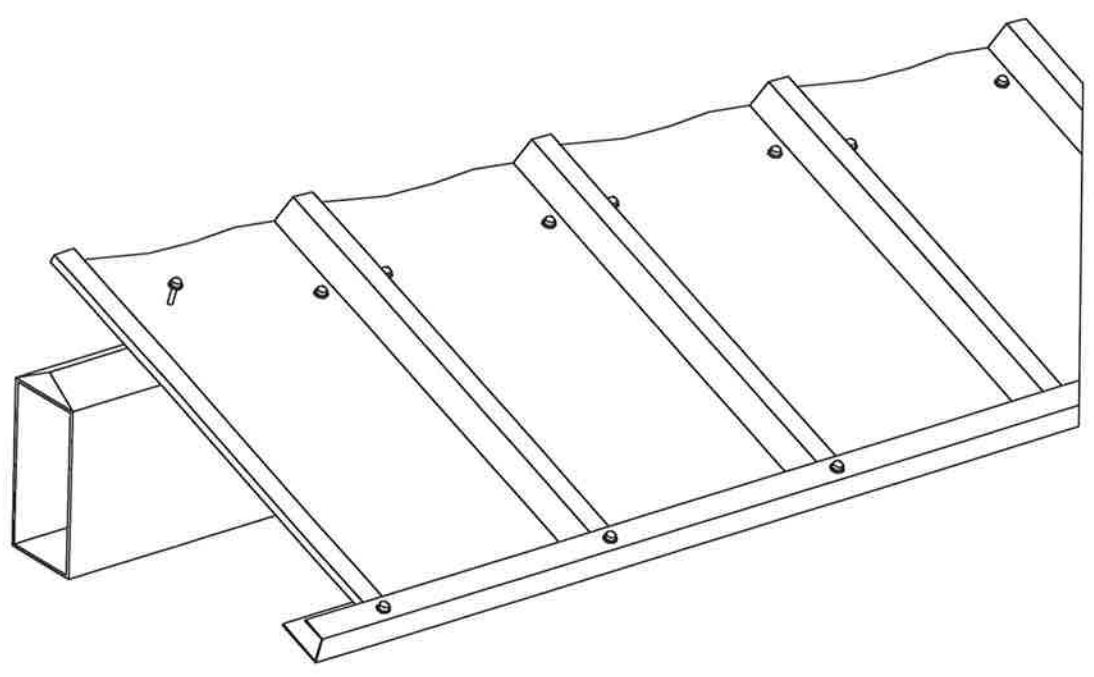
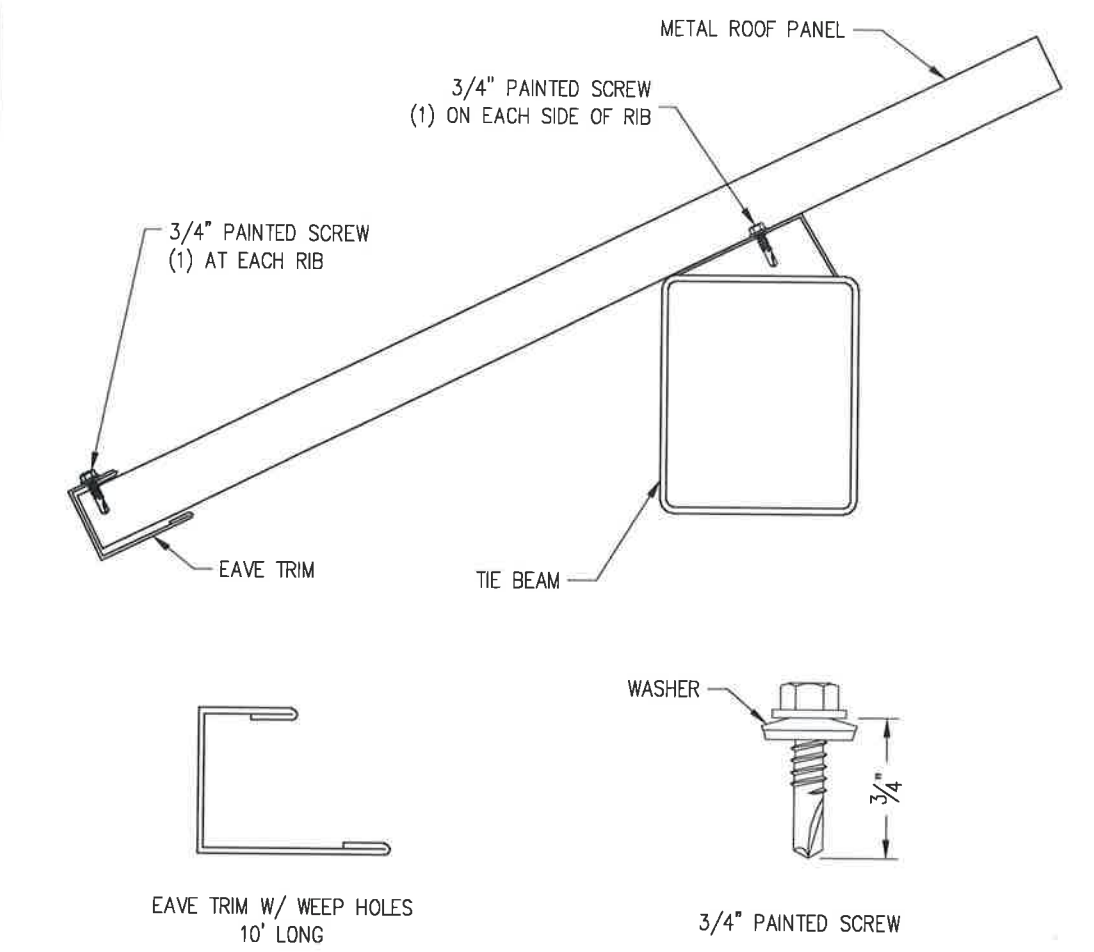


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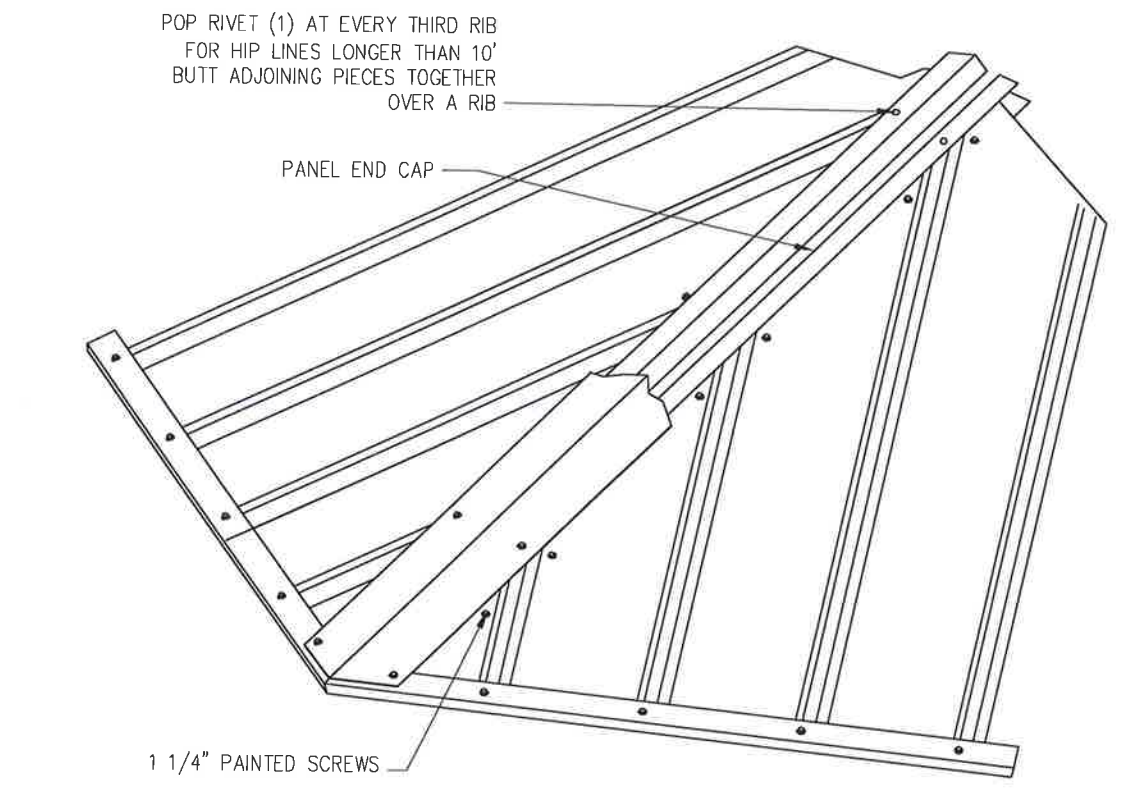
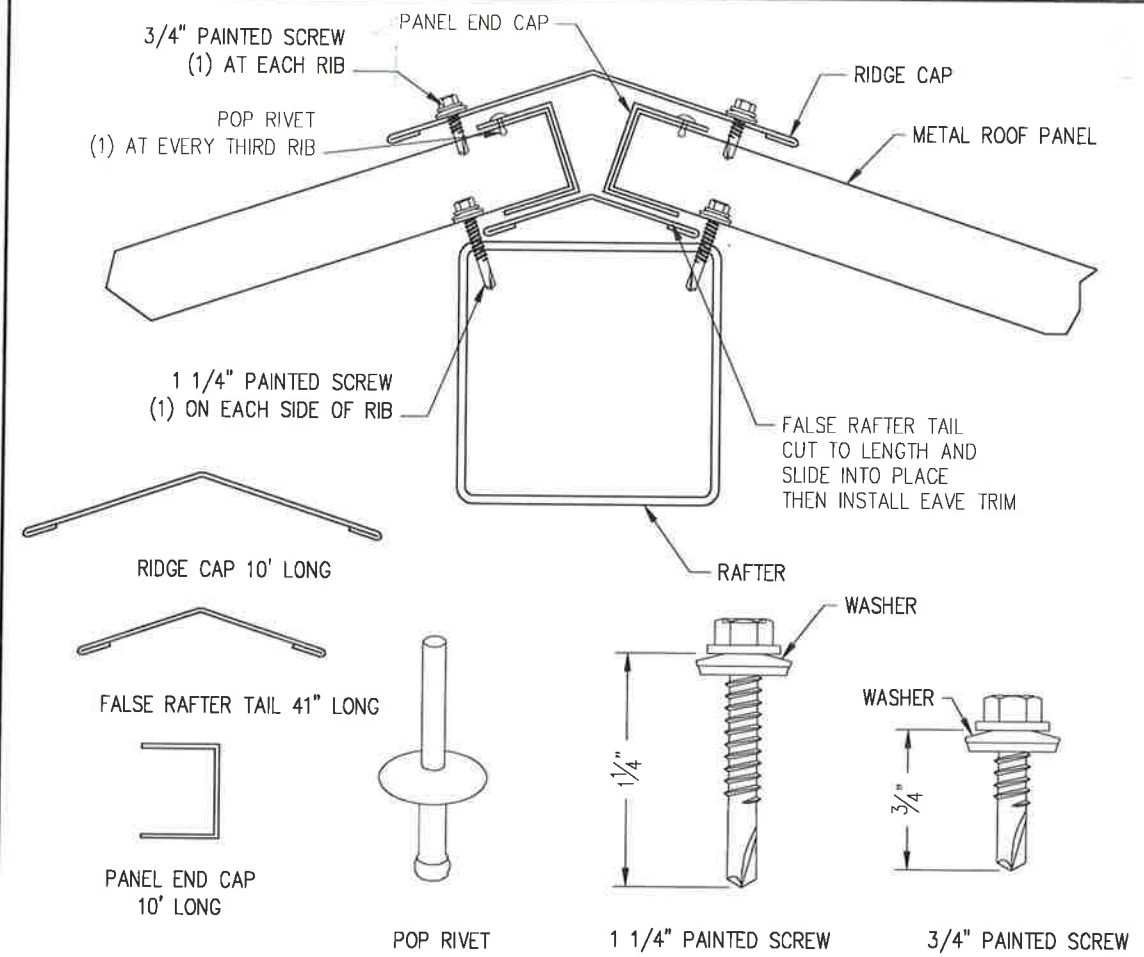
METAL ROOF PURLIN CONNECTION DETAIL

M-P1



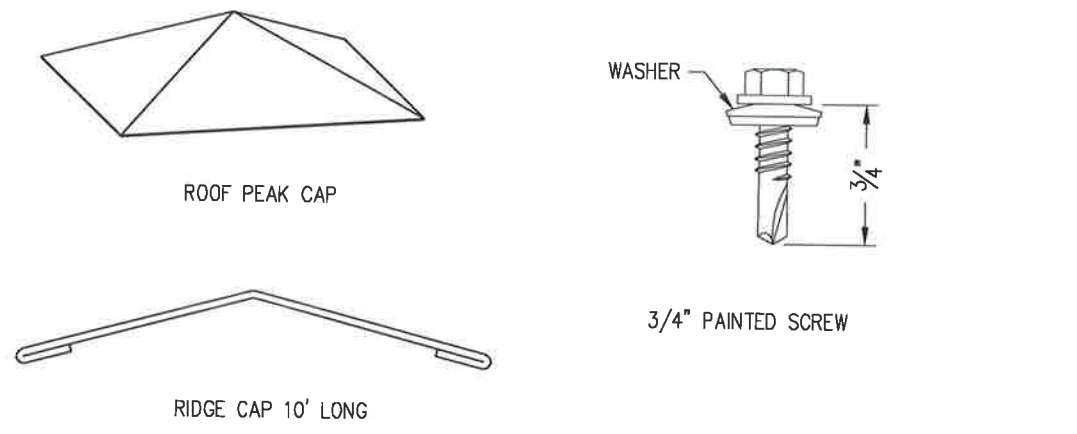
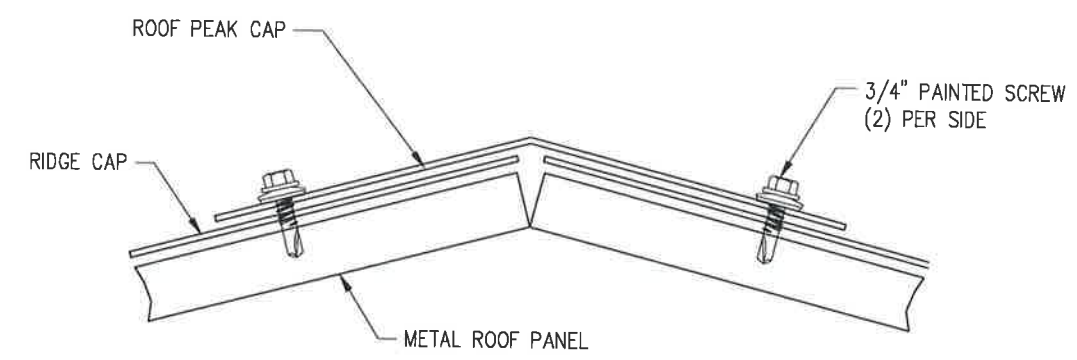
METAL ROOF EAVE CONNECTION DETAIL

M-E1



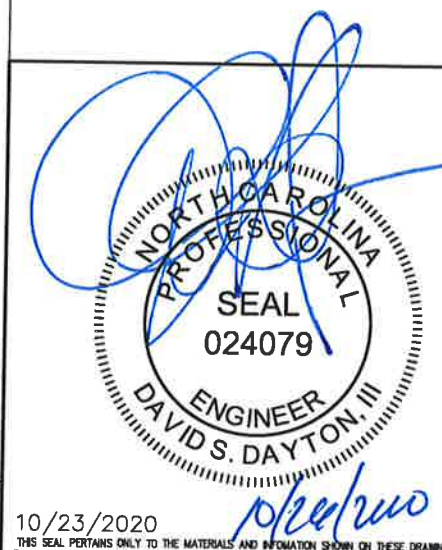
METAL ROOF HIP CONNECTION DETAIL

M-H1



PEAK CAP CONNECTION DETAIL

M-C1



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 1455 LINCOLN AVE.
 HOLLAND MI, 49423
 616.396.0919
 800.748.0985
 616.396.0944 FX

ROOF DETAILS

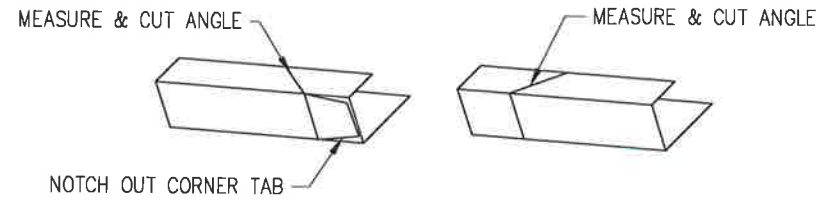
DRAWN BY:	JMD
DATE:	10/23/2020
JOB NO.:	6744
REVISION:	A
BUILDING TYPE:	SQ20M-P6
PROJECT NAME:	PATRIOTS PARK CAMERON NC 28326

SHEET
R1.2

DWG: Jobs\6744\RI~000002 - 6744.dwg

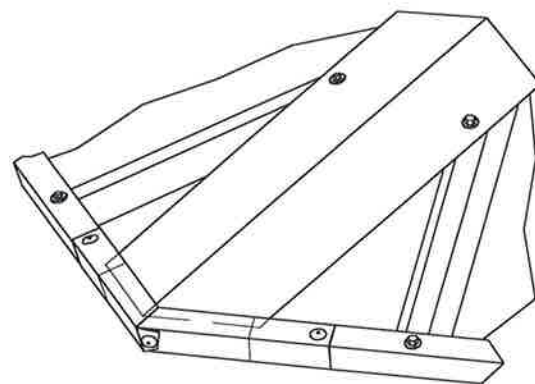
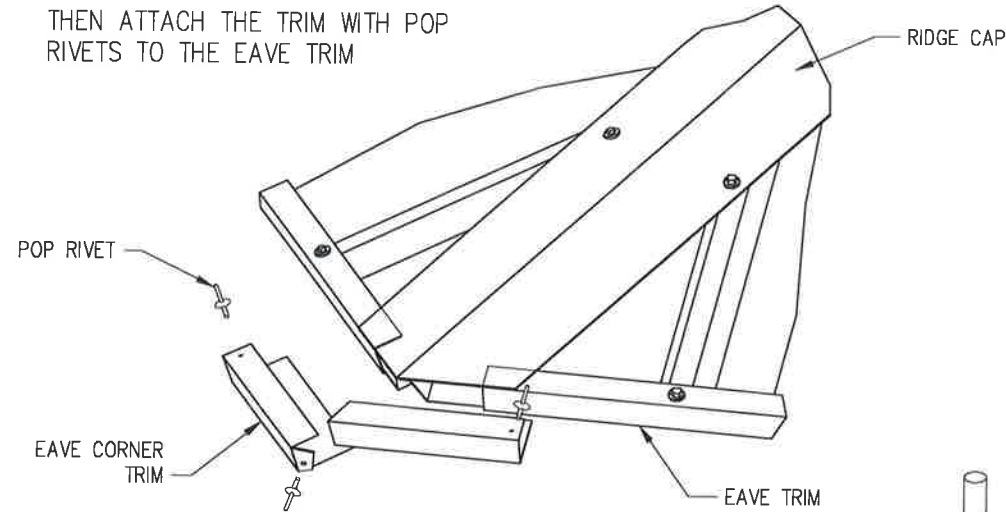
CUT A MITER AND CORNER TAB ON
(1) OF THE EAVE CORNER PEICES

CUT AN OPPTIONAL MITER ON THE
SECOND EAVE CORNER



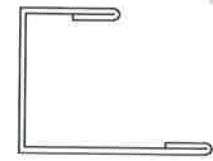
SLIDE THE EAVE CORNER TRIM OVER
THE EAVE TRIM AND RIDGE CAP

THEN ATTACH THE TRIM WITH POP
RIVETS TO THE EAVE TRIM

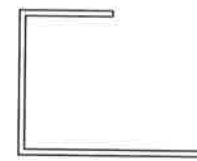


METAL ROOF EAVE CORNER CONNECTION DETAIL

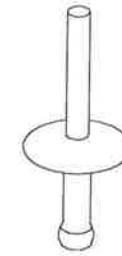
M-M2



EAVE TRIM W/ WEEP HOLES
10' LONG



SPLICE CHANNEL
5 1/2" LONG



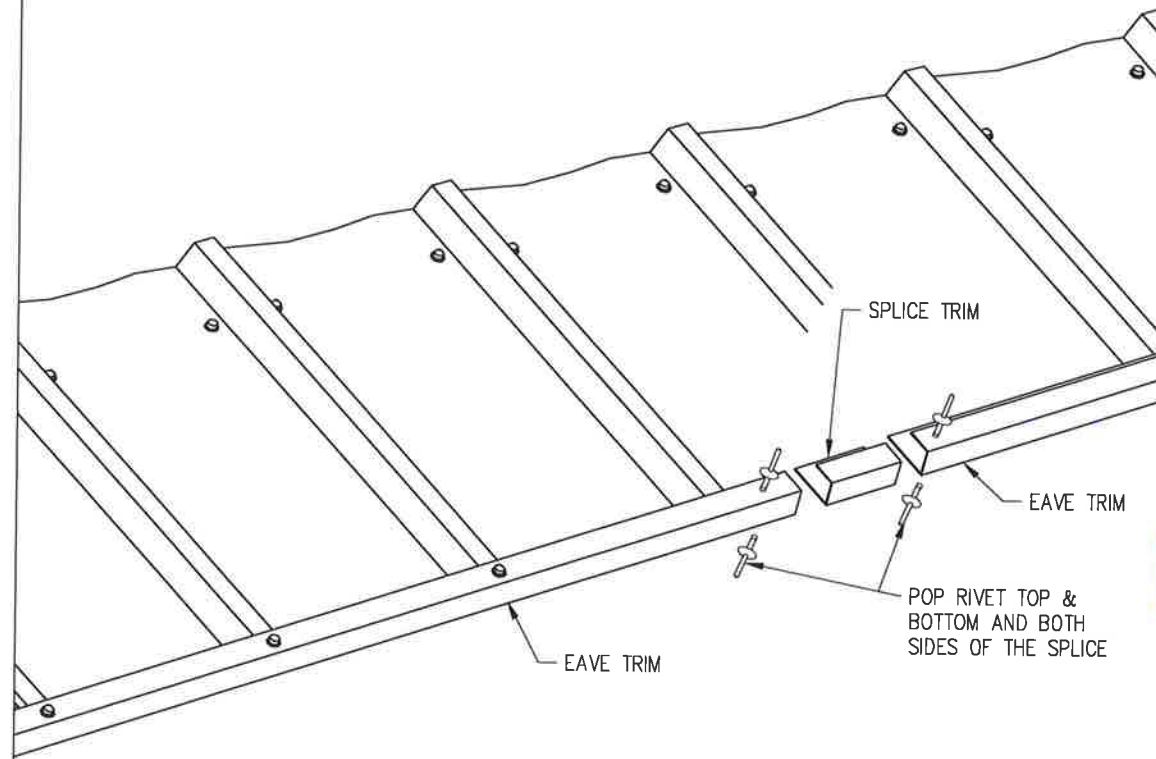
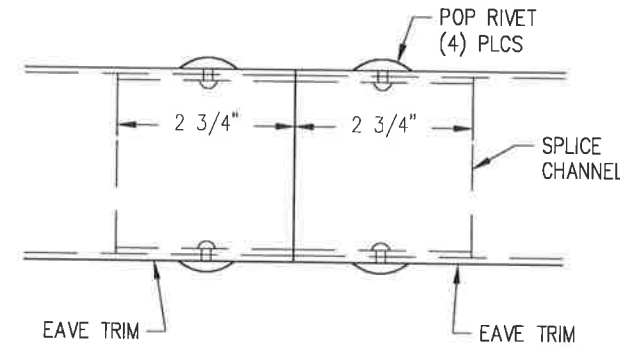
PAINTED POP RIVET

THIS CONNECTION IS ONLY REQUIRED ON
SHELTERS WITH EAVES LONGER THAN 10'

SLIDE THE SPLICE TRIM INTO THE EAVE TRIM
APPROXIMATELY 2 3/4"

POP RIVET TOP & BOTTOM
AND BOTH SIDES OF THE SPLICE

SPLICES ARE NOT GUARANTEED TO FALL IN
THE CENTER OF THE EAVE



METAL ROOF EAVE SPLICE CONNECTION DETAIL

M-S1

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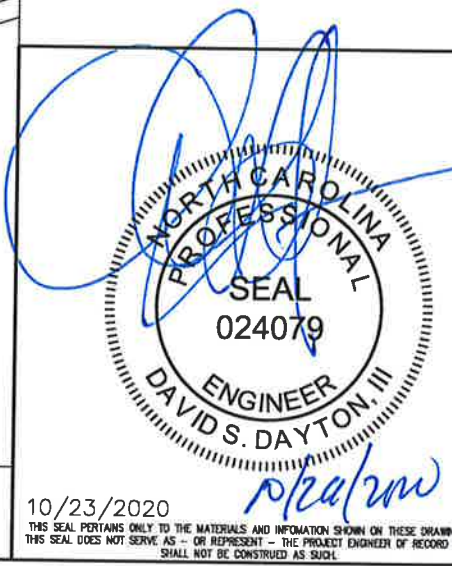
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SHEET

R1.3



10/23/2020

THIS SEAL PERTAINS ONLY TO THE MATERIALS AND INFORMATION SHOWN ON THESE DRAWINGS.
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