

JOB NUMBER: 7976

JOB NAME: BENHAVEN COMMUNITY CENTER

JOB LOCATION: SANFORD, NC 27332

REVISION: C

Harnett

A - INITIAL SUBMITTAL REVISION (JMD 5/12/2023)

B - INSTALLATION DRAWINGS (TM 6/2/2023)

C - UPDATED JOB NAME AND LOCATION (JMD 7/26/2023)

Shelter Systems Inc

DISTINCTIVE STEEL SHELTERS
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1455 LINCOLN AVE. HOLLAND MI, 49423

> 616.396.0919 800.748.0985 616.396.0944 FX

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DESIGN LOADS

CODE: 2015 INTERNATIONAL BUILDING CODE

TOTAL DEAD: 6.42 P.S.F. FRAME DEAD: 3.42 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: 121.00 M.P.H. EXPOSURE: C

SEISMIC USE GROUP: I SEISMIC SITE CLASS: D SEISMIC DESIGN CATEGORY: B SEISMIC ANALYSIS: SIMPLIFIED

NOTES

(ASTM DESIGNATION) MATERIALS TUBE STEEL (HSS HOLLOW STRUCTURAL SECTION) A-500 GRADE B/C WIDE FLANGE SECTIONS A-992 STRUCTURAL STEEL PLATE A-36, A-572 GRADE 50 A - 792 **ROOF PANELS (STEEL)** ANCHOR BOLTS F1554 GRADE 55 F3125 GRADE A325 **CONNECTION BOLTS**

ALL WELDING CONFORMS TO THE LATEST EDITION OF AWS D1.1 OR D1.3 AS REQUIRED. ALL WELDING IS PERFORMED BY AWS CERTIFIED WELDERS. THERE IS NO FIELD WELDING REQUIRED, U.N.O.

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

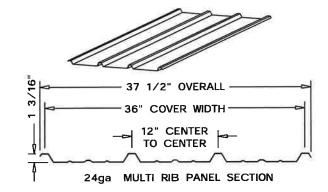
ALL HIGH STRENGTH BOLTS ARE F3125 GRADE A325 BOLTS WITH HEAVY HEX NUTS. THE BOLTS ARE TO BE INSTALLED UTILIZING THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS" (8/1/2014) AS PREPARED BY RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) FOR THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (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

08/21/2023



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THESE DRAWINGS. THIS SEAL DOES NOT SERVE AS - OR REPRESENT - TH ROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSTRUED AS SUC

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7976 **REVISION:**

BUILDING TYPE:

RH20X30M-P4 PROJECT NAME:

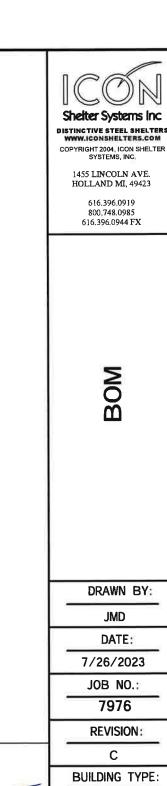
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FABRICATOR APPROVALS

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



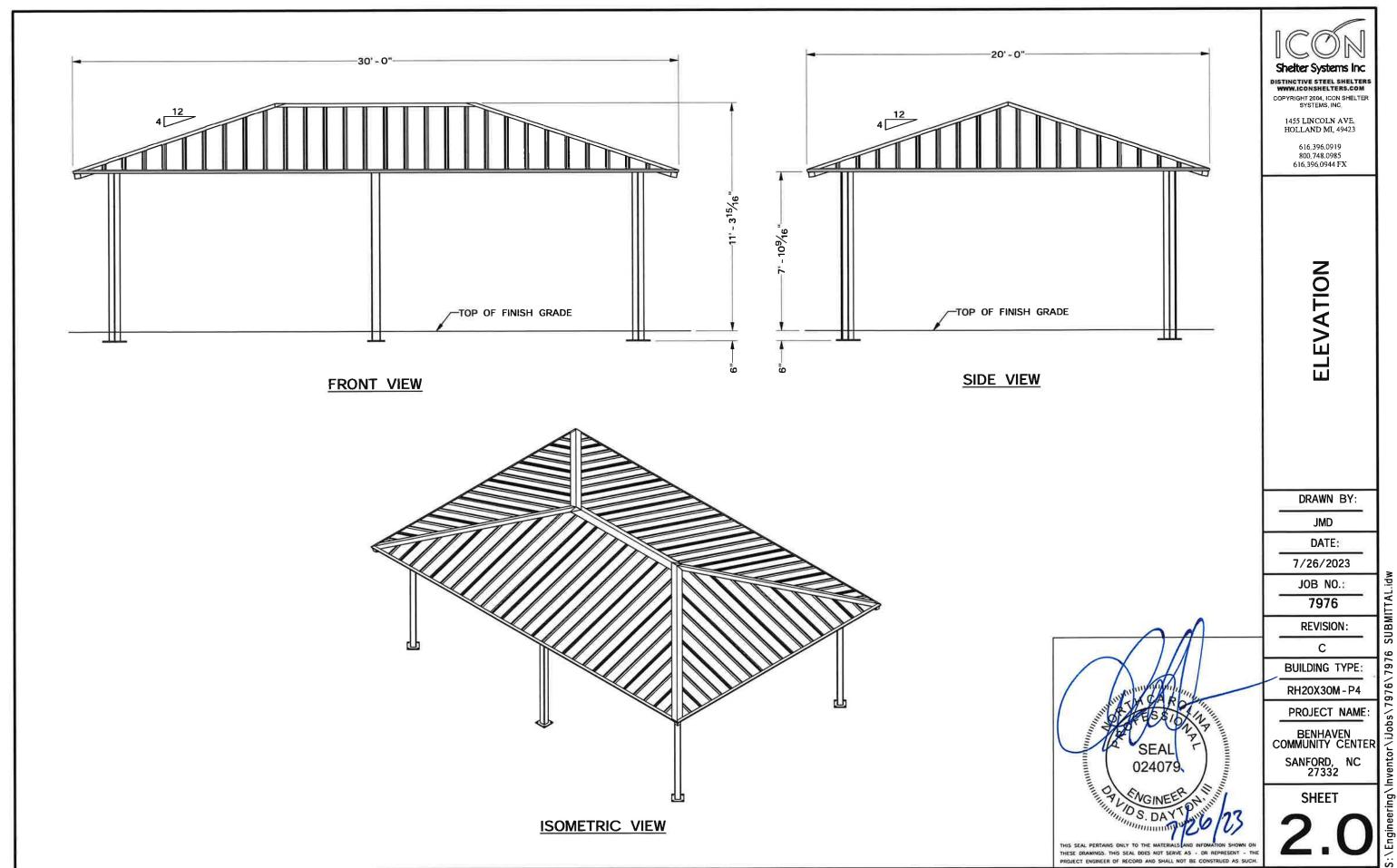
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ANGINEER ANGINEER

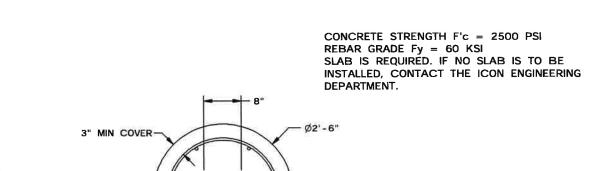
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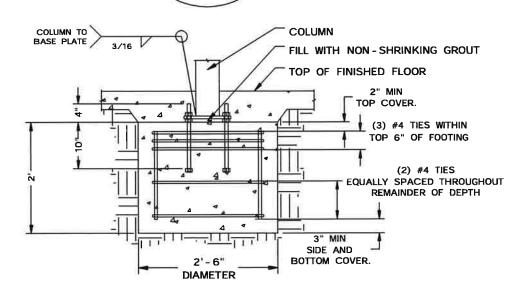
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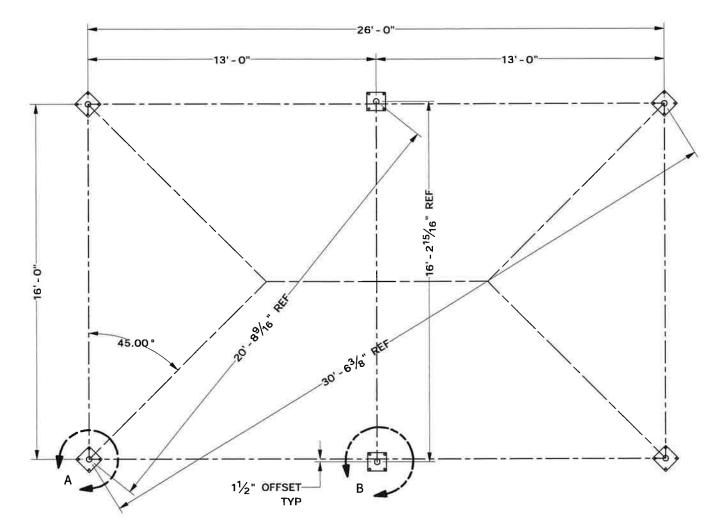


(4) 3/4"x 14" F1554 ANCHOR RODS

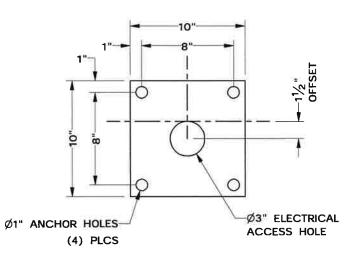
(6) #5 LONGITUDINAL

BARS







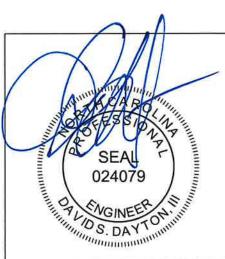


ANCHOR BOLT LAYOUT

DETAIL B

BASE PLATE MATERIAL

5/8" THICK GR50



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ANCHOR BOLT LAYOUT

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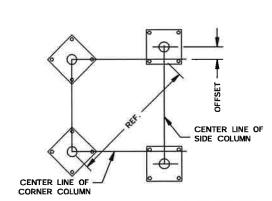
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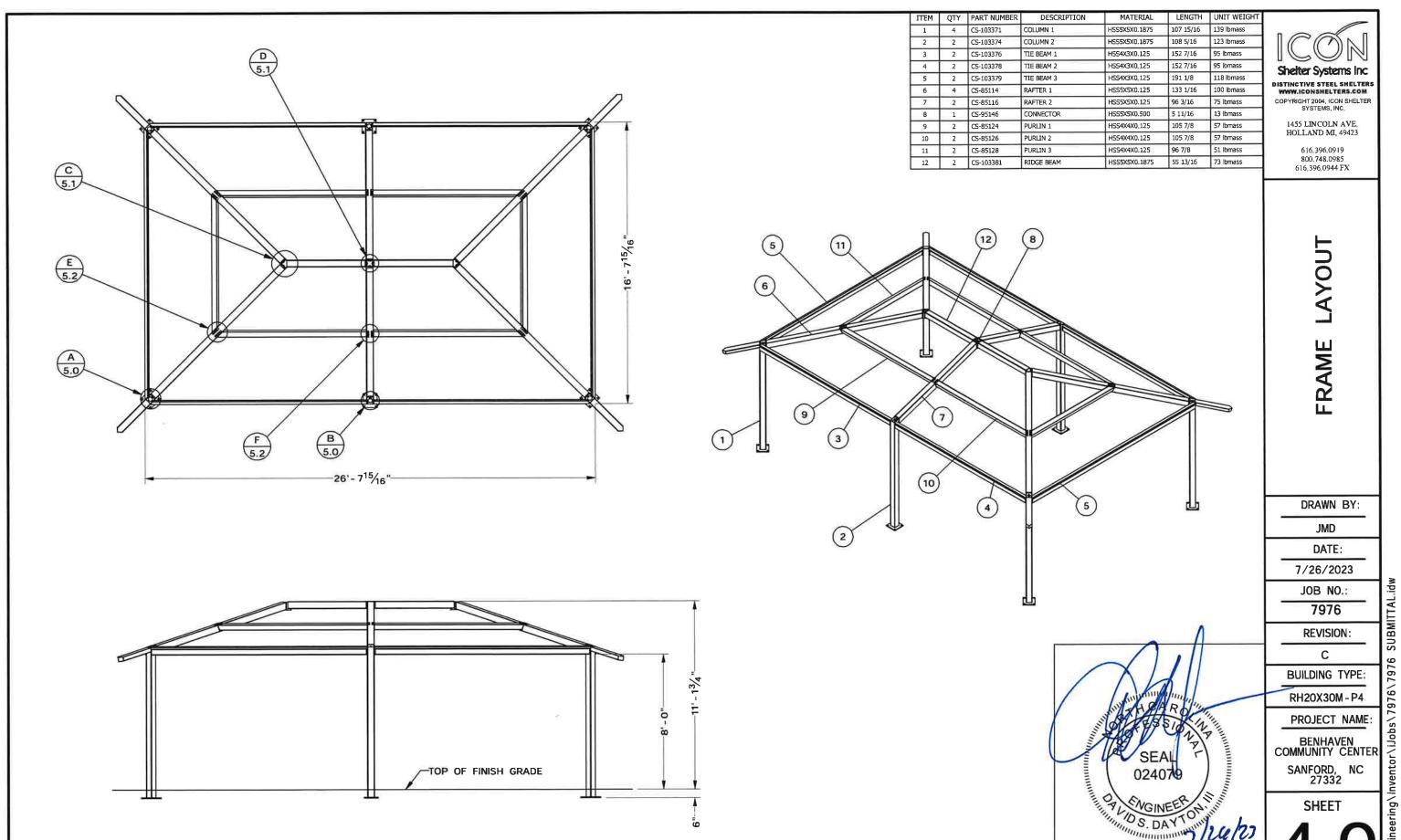
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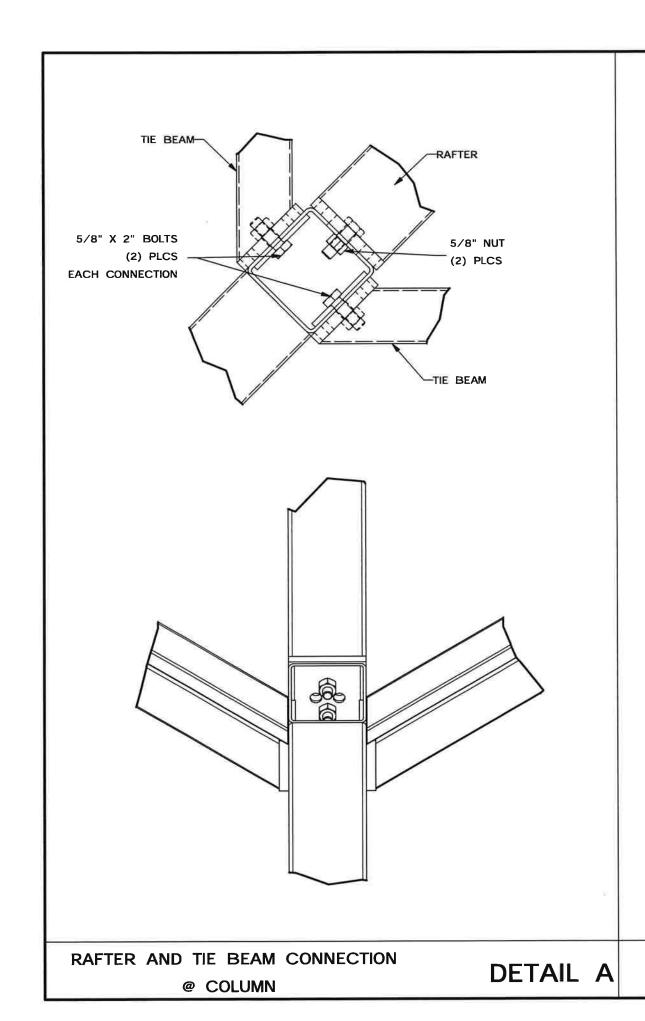
NOTE: SQUARENESS REFERENCE DIMENSION SHOWN ON THE ANCHOR BOLT LAYOUT IS MEASURED FROM THE CENTER OF THE CORNER COLUMN TO INTERSECTION OF THE SIDE & CORNER COLUMN CENTER LINES AS SHOWN ABOVE

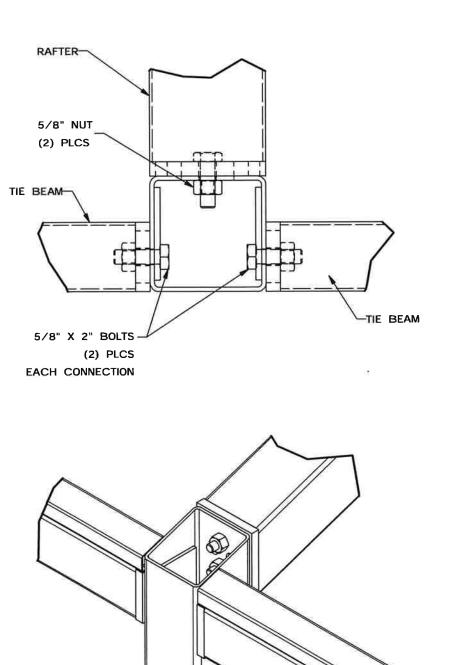
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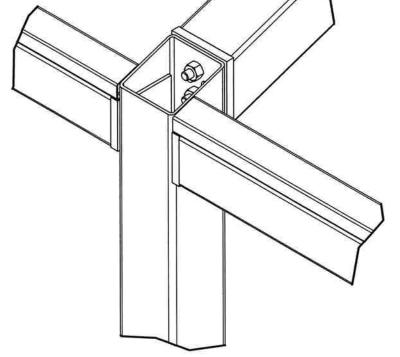
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RAFTER AND TIE BEAM CONNECTION @ MID COLUMN

DETAIL B

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CONNECTIONS **FRAME**

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

7/26/2023

PAINT EXPOSED FASTENERS



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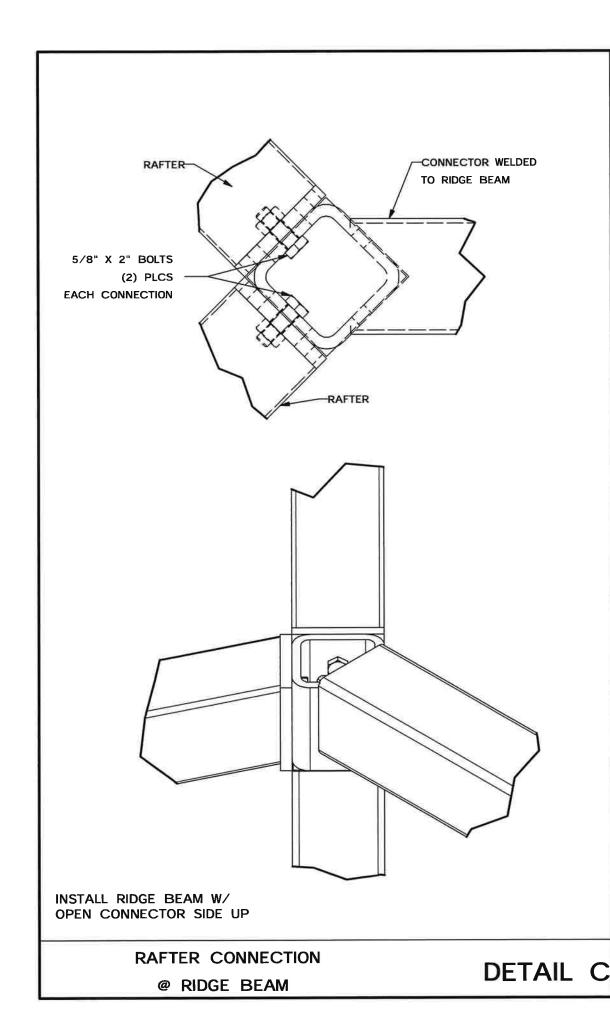
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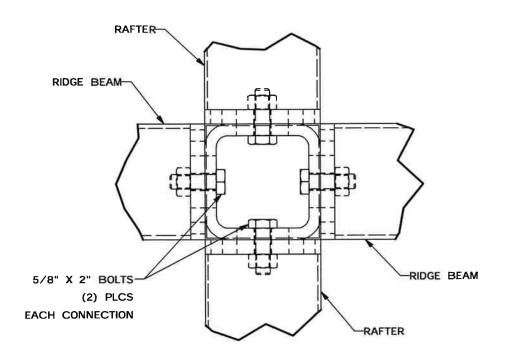
RH20X30M-P4 PROJECT NAME:

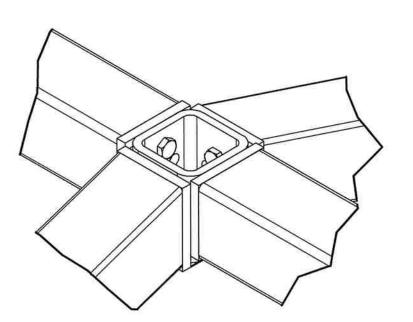
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NOTE: INSTALL CONNECTOR W/OPEN SIDE UP

> RAFTER & RIDGE BEAM CONNECTION @ CONNECTOR

DETAIL D



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CONNECTIONS FRAME

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DATE: WITH PROVIDED TOUCH UP PAINT TO 7/26/2023 PREVENT RUSTING OF FASTENERS

7976 PAINT EXPOSED FASTENERS

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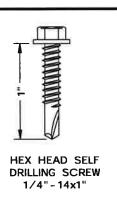
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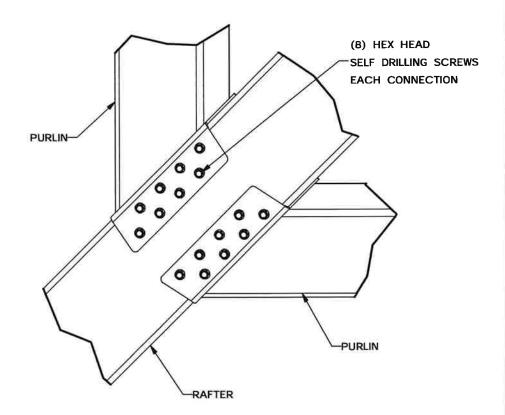
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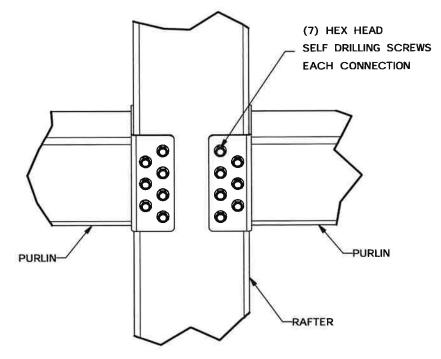
- 1). SLIDE PURLIN INTO PLACE BETWEEN THE RAFTERS
- 2). FASTEN PURLIN W/ (8) HEX HEAD SELF DRILLING ON EACH END

PURLIN CONNECTION @ RAFTER

DETAIL E



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



- 1). SLIDE PURLIN INTO PLACE **BETWEEN RAFTERS**
- 2). FASTEN PURLIN W/ (7) HEX HEAD SCREWS ON EACH **END**

PURLIN CONNECTION @ RAFTER

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THE SEALING MATERIAL SLIGHTLY VISIBLE AROUND THE METAL WASHER

INSTALLED TOO TIGHT

THE SEALING MATERIAL IS DEFORMED BEYOND THE EDGE OF THE METAL WASHER

INSTALLED TOO LOOSE



THE SEALING MATERIAL IS NOT VISIBLE AROUND THE EDGE OF THE METAL WASHER

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.

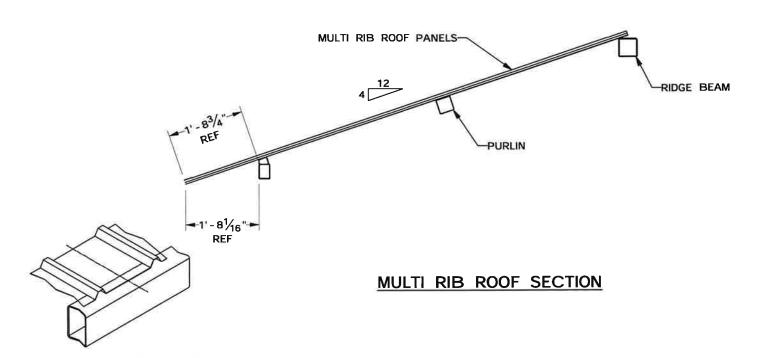
THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

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.

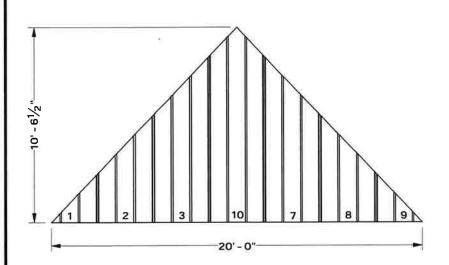
SOME FIELD CUTTING AND/OR FITTING OF PANELS, TRIM AND FLASHING IS TO BE EXPECTED BY THE ERECTOR, MINOR FIELD CORRECTIONS ARE PART OF NORMAL ERECTION WORK.

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

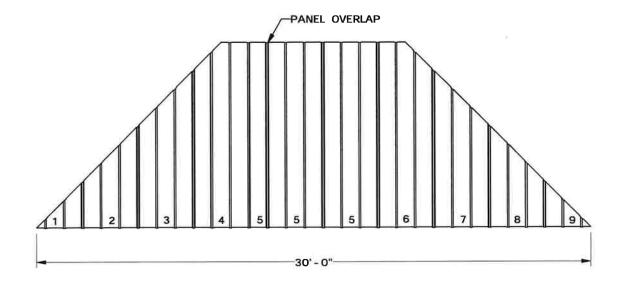


STEPS FOR PROPER PANEL INSTALLATION:

- 1. MARK THE CENTER OF THE TIE BEAM AND COMPRESSION RING (OR PURLIN ON MULTI TIER BUILDINGS).
- 2. FIND ONE OF THE LONGEST PANELS.
- 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.
- INSTALL ALL ROOF SECTIONS USING THIS METHOD.



MULTI RIB ROOF LAYOUT - END



MULTI RIB ROOF LAYOUT - SIDE

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.

024079 THESE DRAWINGS. THIS SEAL DOES NOT SERVE AS - OR REPRESENT

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> > LAYOUI ROOF

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