

GENERAL NOTES:

1. MATERIALS

	ASTM DESCRIPTION
STRUCTURAL STEEL PLATE	A529 / A572 / A1011
HOT ROLLED MILL SHAPES	A36 / A529 / A500
HHS ROUND	A500
HHS RECTANGULAR	A500
COLD FORM SHAPES	A653 / A1011
ROOF AND WALL SHEETING	A653 / A792
BOLTS	A307 / A325 / A490
CABLE	A475
RODS	A529 / A572

2. STRUCTURAL PRIMER NOTE:

SHOP COAT PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR A SHORT PERIOD OF TIME. STORAGE IN EXTREME COLD TEMPERATURES OR WINTER SNOW CONDITIONS, INCLUDING TRANSPORTATION ON SALTED OR CHEMICALLY TREATED ROADS WILL ADVERSELY AFFECT THE DURABILITY AND LONGEVITY OF THE PRIMER. THE COAT OF SHOP PRIMER DOES NOT PROVIDE THE UNIFORMITY OF APPEARANCE, OR THE DURABILITY AND CORROSION RESISTANCE OF A FIELD APPLIED FINISH COAT OF PAINT OVER A SHOP PRIMER. MINOR ABRASIONS TO THE SHOP COAT PRIMER CAUSED BY HANDLING, LOADING, SHIPPING, UNLOADING AND ERECTION ARE UNAVOIDABLE AND ARE NOT THE RESPONSIBILITY OF THE METAL BUILDING MANUFACTURER. METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR THE DETERIORATION OF THE PRIMER OR CORROSION THAT MAY RESULT FROM ATMOSPHERIC AND ENVIRONMENTAL CONDITIONS NOR THE COMPATIBILITY OF THE PRIMER TO ANY FIELD APPLIED COATING.

3. BUILDING ERECTION NOTES:

THE GENERAL CONTRACTOR AND/OR ERECTOR IS RESPONSIBLE TO SAFELY AND PROPERLY ERECT THE METAL BUILDING SYSTEM IN CONFORMANCE WITH THESE DRAWINGS, OSHA REQUIREMENTS, AND EITHER MBMA OR CSA S16 STANDARDS PERTAINING TO PROPER ERECTION. TEMPORARY SUPPORTS SUCH AS GUYS, BRACES, FALSEWORK, CRIBBING OR OTHER ELEMENTS FOR ERECTION ARE TO BE DETERMINED, FURNISHED AND INSTALLED BY THE ERECTOR. THESE SUPPORTS MUST SECURE THE STEEL FRAMING, OR PARTLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED IN ADDITION TO LOADS RESULTING FROM THE ERECTION OPERATION. SECONDARY WALL AND ROOF FRAMING (PURLINS, GIRTS AND/OR JOIST) ARE NOT DESIGNED TO FUNCTION AS A WORKING PLATFORM OR TO PROVIDE AS AN ANCHORAGE POINT FOR A FALL ARREST /SAFETY TIE OFF.

4. SPECIAL INSPECTION:

SPECIAL INSPECTIONS AND TESTING THAT MAY BE REQUIRED BY GOVERNMENTAL OR OTHER AUTHORITY DURING CONSTRUCTION AND/OR STEEL FABRICATION (COLLECTIVELY, "INSPECTIONS") ARE NOT THE RESPONSIBILITY OF THE PEMB MANUFACTURER, AND TO THE EXTENT REQUIRED IT SHALL BE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE. IN THE EVENT INSPECTIONS ARE REQUIRED, THE OWNER AND/OR THE OWNER'S REPRESENTATIVE SHALL EMPLOY A THIRD PARTY QUALITY ASSURANCE TESTING AGENCY APPROVED BY THE RELEVANT AUTHORITY. IF SUCH REQUIREMENTS ARE NOT SPECIFICALLY INCLUDED IN THE PEMB MANUFACTURER'S SALES DOCUMENTS, NO INSPECTIONS BY THE PEMB MANUFACTURER OR AT THE PEMB MANUFACTURER'S FACILITY SHALL BE MADE. THE PEMB MANUFACTURER'S FACILITIES ARE ACCREDITED BY IAS AC472.

5. A325 & A490 BOLT TIGHTENING REQUIREMENTS:

IT IS THE RESPONSIBILITY OF THE ERECTOR TO ENSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE REGULATIONS. FOR PROJECTS IN THE UNITED STATES, SEE THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS OR FOR PROJECTS IN CANADA, SEE THE CAN/CSA S16 LIMIT STATES DESIGN OF STEEL STRUCTURES FOR MORE INFORMATION.

THE FOLLOWING CRITERIA MAY BE USED TO DETERMINE THE BOLT TIGHTNESS (I.E., "SNUG-TIGHT" OR "FULLY-PRETENSIONED"), UNLESS REQUIRED OTHERWISE BY LOCAL JURISDICTION OR CONTRACT REQUIREMENTS:

- A) ALL A490 BOLTS SHALL BE "FULLY-PRETENSIONED".
- B) ALL A325 BOLTS IN PRIMARY FRAMING (RIGID FRAMES AND BRACING) MAY BE "SNUG-TIGHT", EXCEPT AS FOLLOWS: "FULLY-PRETENSION" A325 BOLTS IF:
 - a) BUILDING SUPPORTS A CRANE SYSTEM WITH A CAPACITY GREATER THAN 5 TONS.
 - b) BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT, OR STRESS-REVERSALS ON THE CONNECTIONS. THE ENGINEER-OF-RECORD FOR THE PROJECT SHOULD BE CONSULTED TO EVALUATE FOR THIS CONDITION.
- c) THE PROJECT SITE IS LOCATED IN A HIGH SEISMIC AREA. FOR IBC-BASED CODES, "HIGH SEISMIC AREA" IS DEFINED AS "SEISMIC DESIGN CATEGORY" OF 'D', 'E', OR 'F'. SEE THE "BUILDING LOADS" SECTION ON THIS PAGE FOR THE DEFINED SEISMIC DESIGN CATEGORY FOR THIS PROJECT.
- d) ANY CONNECTION DESIGNATED IN THESE DRAWINGS AS "A325-SC", "SLIP-CRITICAL (SC)" CONNECTIONS MUST BE FREE OF PAINT, OIL, OR OTHER MATERIALS THAT REDUCE FRICTION AT CONTACT SURFACES. GALVANIZED OR LIGHTLY-RUSTED SURFACES ARE ACCEPTABLE.

C) IN CANADA, ALL A325 AND A490 BOLTS SHALL BE "FULLY-PRETENSIONED", EXCEPT FOR SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACES.

SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACE CONNECTIONS MAY ALWAYS BE "SNUG-TIGHT", UNLESS INDICATED OTHERWISE IN THESE DRAWINGS.

6. GENERAL DESIGN NOTES:

- 1) ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISC 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" OR THE CAN/CSA S16 "LIMIT STATES DESIGN OF STEEL STRUCTURES", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
- 2) ALL WELDING OF STRUCTURAL STEEL IS BASED ON EITHER AWS D1.1 "STRUCTURAL WELDING CODE - STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
- 3) ALL COLD FORMED MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISI S100 OR CAN/CSA S136 "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
- 4) ALL WELDING OF COLD FORMED STEEL IS BASED ON AWS D1.3 "STRUCTURAL WELDING CODE - SHEET STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
- 5) ALL NUCOR BUILDING GROUP FACILITIES ARE IAS AC-472 ACCREDITED FOR DESIGN AND FABRICATION OF METAL BUILDING SYSTEMS. FOR PROJECTS IN CANADA, DESIGN AND FABRICATION ARE DONE ONLY IN FACILITIES THAT ARE ALSO CAN/CSA A660 AND W47.1 CERTIFIED.
- 6) IF JOISTS ARE INCLUDED WITH THIS PROJECT, THEY ARE SUPPLIED AS A PART OF THE SYSTEMS ENGINEERED METAL BUILDING AND ARE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1926.758 OF THE OSHA SAFETY STANDARDS FOR STEEL ERECTION, DATED JANUARY 18, 2001.
- 7) COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED THE ALLOWABLE BEARING STRESS OF CONCRETE THAT HAS A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS.

BUILDING INFORMATION

PRIMER COLORS

PRIMARY PRIMER COLOR: RED SECONDARY PRIMER COLOR: RED

ROOF SHEETING

TYPE: Nucor CFR GAUGE: 24 FINISH: Midnight Black PVDF CLIP TYPE: Tall
THERMAL BLOCKS: Yes EPS FOAM SPACER: No ROOF LINE TRIM, PAINTED: Midnight Black PVDF

- NO DOWNSPOUTS PAINTED: Midnight Black PVDF GUTTERS PAINTED: Midnight Black PVDF
 NO INSULATION 6.38 INCH (NOT BY MBS)
 NO PIPE JACKS, SIZE: _____ QUANTITY: _____
 NO RIDGE VENTS, 10'-0" LONG X 9" THROAT QUANTITY: _____
 NO ROOF FRAMED OPENINGS, SEE ROOF FRAMING PLAN FOR SIZES
 NO COMPOSITE DECK, TYPE: _____ GAUGE: _____ FINISH: _____

WALL SHEETING

TYPE: A-Panel GAUGE: 26 FINISH: Dark Bronze PVDF
CORNER TRIM, PAINTED: Midnight Black PVDF BASE TRIM, PAINTED: Midnight Black PVDF

- NO WALKDOORS, QUANTITY: _____ PAINTED: _____
 NO WINDOWS, QUANTITY: _____ PAINTED: _____
 NO INSULATION 4.38 INCH (NOT BY MBS)

WALL FRAMED OPENINGS

NO FRAMED OPENING TRIM, PAINTED: Midnight Black PVDF

BUILDING OPTIONS

- NO LINER PANELS
 NO TRANSLUCENT PANELS
 NO EAVE EXTENSION PROJ: 2'-0" TYPE: A-Panel GAUGE: 26 FINISH: Midnight Black PVDF SOFFIT TRIM AT BUILDING LINE PAINTED: Midnight Black PVDF
 NO RAKE EXTENSION PROJ: 2'-0" TYPE: A-Panel GAUGE: 26 FINISH: Midnight Black PVDF SOFFIT TRIM AT BUILDING LINE PAINTED: Midnight Black PVDF

YES NO CANOPY

YES NO WAINTSCOT

WALL PANEL: TYPE: A-Panel 26 GAUGE, FINISH: Midnight Black PVDF
BASE TRIM PAINTED: Midnight Black PVDF JAMB TRIM PAINTED: Midnight Black PVDF TRANSITION TRIM PAINTED: Midnight Black PVDF

YES NO FASCIA

YES NO CRANES (SEE CRANE PLAN FOR ADDITIONAL INFORMATION)

YES NO MEZZANINE (SEE MEZZANINE PLAN FOR ADDITIONAL INFORMATION)

THE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER'S SEAL PERTAINS ONLY TO THE REQUIREMENTS LISTED HEREIN FOR THE MATERIALS DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS EMPLOYED OR ENGAGED BY THE METAL BUILDING MANUFACTURER AND DOES NOT SERVE AS OR REPRESENT THE PROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSTRUED AS SUCH.

7. GLOSSARY OF ABBREVIATIONS:

APL = A-PANEL FOR THE LINER	M.B. = MACHINE BOLTS	RPS = R-PANEL FOR THE SOFFIT
APS = A-PANEL FOR THE SOFFIT	MBS = METAL BUILDING SUPPLIER	RPW = R-PANEL FOR THE WALL
APW = A-PANEL FOR THE WALL	MIN = MINIMUM	RRL = REVERSE R-PANEL FOR THE LINER
A.R. = ANCHOR RODS	N/A = NOT APPLICABLE	RRS = REVERSE R-PANEL FOR THE SOFFIT
BS = BOTH SIDES	NIC = NOT IN CONTRACT	RRW = REVERSE R-PANEL FOR THE WALL
B.U. = BUILT-UP	N.S. = NEAR SIDE	SL = STEEL LINE
CFR = CONCEALED FASTENED ROOF PANEL	O.A.L. = OVERALL LENGTH	SLV = SHORT LEG VERTICAL
DIA = DIAMETER	O.C. = ON CENTER	SIM = SIMILAR
FLG = FLANGE	PL = PLATE	SS2 = STANDING SEAM II ROOF PANEL
F.S. = FAR SIDE	REQ'D = REQUIRED	SS3 = STANDING SEAM 360 ROOF PANEL
GA. = GAUGE	REV. = REVISION	TBD = TO BE DETERMINED
?? = PART MARK TO BE DETERMINED AND WILL BE UPDATED ON CONSTRUCTION DRAWINGS		TYP = TYPICAL
H.S.B. = HIGH STRENGTH BOLTS	RPL = R-PANEL FOR THE LINER	U.N.O. = UNLESS NOTED OTHERWISE
HT. = HEIGHT	RPR = R-PANEL FOR THE ROOF	
LLV = LONG LEG VERTICAL		
LSN = LOC SEAM NON-SWAGED ROOF PANELS		
LSS = LOC SEAM SWAGED ROOF PANELS		
MAX = MAXIMUM		

RPS = R-PANEL FOR THE SOFFIT
RPW = R-PANEL FOR THE WALL
RRL = REVERSE R-PANEL FOR THE LINER
RRS = REVERSE R-PANEL FOR THE SOFFIT
RRW = REVERSE R-PANEL FOR THE WALL
SL = STEEL LINE
SLV = SHORT LEG VERTICAL
SIM = SIMILAR
SS2 = STANDING SEAM II ROOF PANEL
SS3 = STANDING SEAM 360 ROOF PANEL
TBD = TO BE DETERMINED
TYP = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE

NOTES:
1) COLLATERAL DEAD LOADS, UNLESS OTHERWISE NOTED, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC., ARE SUSPENDED FROM ROOF MEMBERS, CONSULT THE M.B.S. IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL) OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL), OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.

2) THE DESIGN OF STRUCTURAL MEMBERS SUPPORTING GRAVITY LOADS IS CONTROLLED BY THE MORE CRITICAL EFFECT OF ROOF LIVE LOAD OR ROOF SNOW LOAD, AS DETERMINED BY THE APPLICABLE CODE.

3) Pm IS BASED ON THE MINIMUM ROOF SNOW LOAD CALCULATED PER BUILDING CODE OR THE CONTRACT SPECIFIED SNOW LOAD, WHICHEVER IS GREATER. THIS VALUE, Pm, IS ONLY APPLIED IN COMBINATION WITH THE DEAD AND COLLATERAL LOADS. ROOF SNOW IN OTHER LOADING CONDITIONS IS DETERMINED PER THE SPECIFIED BUILDING CODE.

ERECTOR NOTE:

ALTERNATE FASTENERS HAVE BEEN SUBSTITUTED ON THIS BUILDING. 1 1/2" ROOF FASTENERS HAVE BEEN SUPPLIED FOR ROOF PANEL TO PURFLIN ATTACHMENT. WHERE DRAWINGS INDICATE AN H1030 STRUCTURAL FASTENER, H1035 FASTENERS HAVE BEEN SUPPLIED.

BUILDING	
ROOF DEAD (PSF):	4.00
PRI. COL. (PSF):	3.00
SEC. COL. (PSF):	3.00
SNOW Ct: 1.00	
SNOW Cs: 1.00	
ROOF SNOW Ps (PSF):	30.10
WIND ENCLOSURE:	Enclosed
GCpi:	±0.18
SEISMIC R:	3.25
SEISMIC Cs:	0.290
BASE SHEAR (KIPS):	37.34

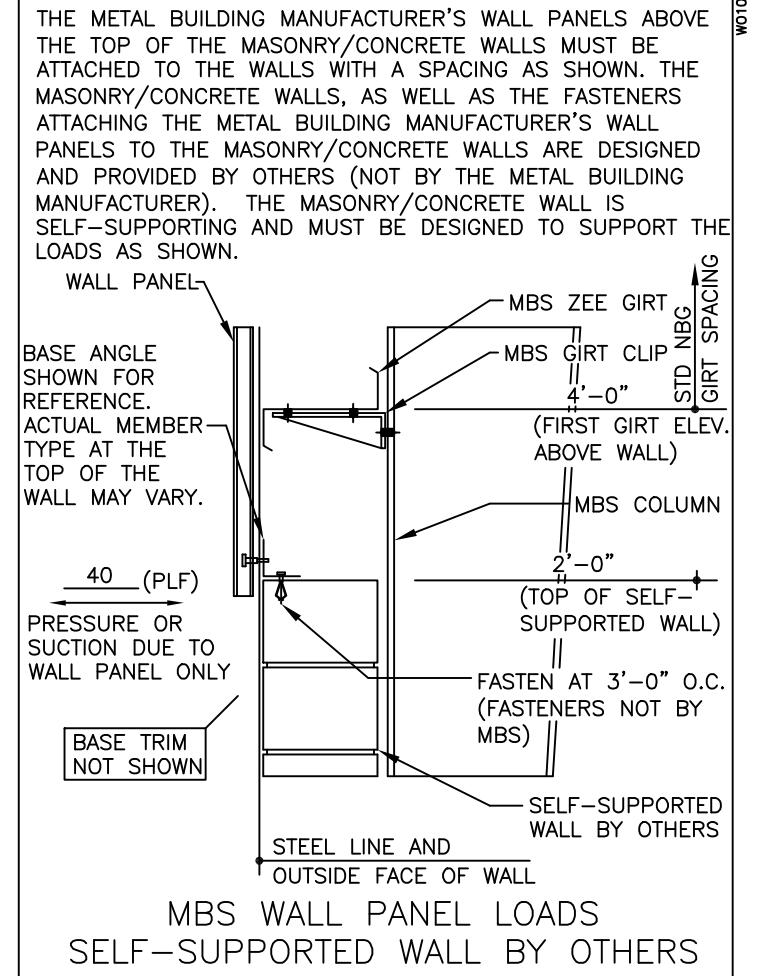
DRAWING INDEX

COVERSHEETS	C1, C2
ANCHOR BOLT DRAWINGS	F1, F2
STRUCTURAL/SHEETING DRAWINGS	E1 – E9
DETAILS	D1 – D12



BCL-2 IBC ALLOWS NO LIMIT FOR SEISMIC STORY DRIFT: FOR OCCUPANCY (RISK) CATEGORY I OR II, IBC PROVISIONS INDICATE THAT SINGLE-STORY BUILDINGS SHALL HAVE 'NO DRIFT LIMIT' PROVIDED THAT INTERIOR WALLS, PARTITIONS, CEILINGS AND EXTERIOR WALL SYSTEMS HAVE BEEN DESIGNED TO ACCOMMODATE THE SEISMIC STORY DRIFTS. INTERIOR WALLS, PARTITIONS, CEILINGS OR EXTERIOR WALL SYSTEMS NOT PROVIDED BY THE METAL BUILDING MANUFACTURER SHALL BE DESIGNED AND DETAILED BY OTHERS TO ACCOMMODATE THE SEISMIC STORY DRIFTS. SEISMIC DRIFT VALUES MAY BE OBTAINED FROM THE METAL BUILDING MANUFACTURER.

SPECIAL NOTE-1 MEZZANINE BY OTHERS
MEZZANINE MUST BE STRUCTURALLY INDEPENDENT OF THE METAL BUILDING AND MUST NOT ATTACH TO OR INFECT ANY LOADS ON THE NUCOR METAL BUILDING.



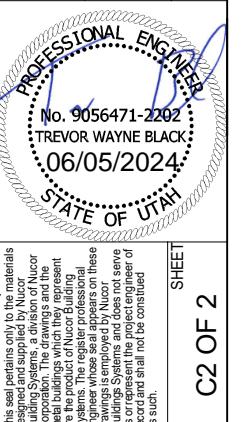
M01 - ACCESSORIES BY OTHERS:
ACCESSORIES (DOORS, WINDOWS, ETC.) NOT PROVIDED BY THE METAL BUILDING MANUFACTURER MUST BE DESIGNED AS "COMPONENTS AND CLADDING" IN ACCORDANCE WITH THE SPECIFIC WIND PROVISIONS OF THE REFERENCED BUILDING CODE DISPLAYED ON THE COVER PAGE OF THIS DRAWING PACKET.

M02 - DOOR FRAMED OPENING:
FRAMED OPENINGS HAVE BEEN DESIGNED TO SUPPORT WIND LOAD NORMAL TO THE WALL BASED ON THE STANDARD BUILDING CODE CRITERIA. FRAMED OPENINGS HAVE NOT BEEN DESIGNED FOR ANY ADDITIONAL MOMENT OR CATENARY FORCES FROM THE DOOR. ANY CHANGE TO THE INFORMATION SHOWN HERE WILL REQUIRE AN ENGINEERING INVESTIGATION AND POSSIBLE BUILDING REINFORCEMENT.

SPECIAL NOTE-3 CANOPY BY OTHERS
CANOPY IS TO BE INDEPENDENT OF STEEL BUILDING AND NOT ADD ANY LOADS TO THE NUCOR METAL BUILDING

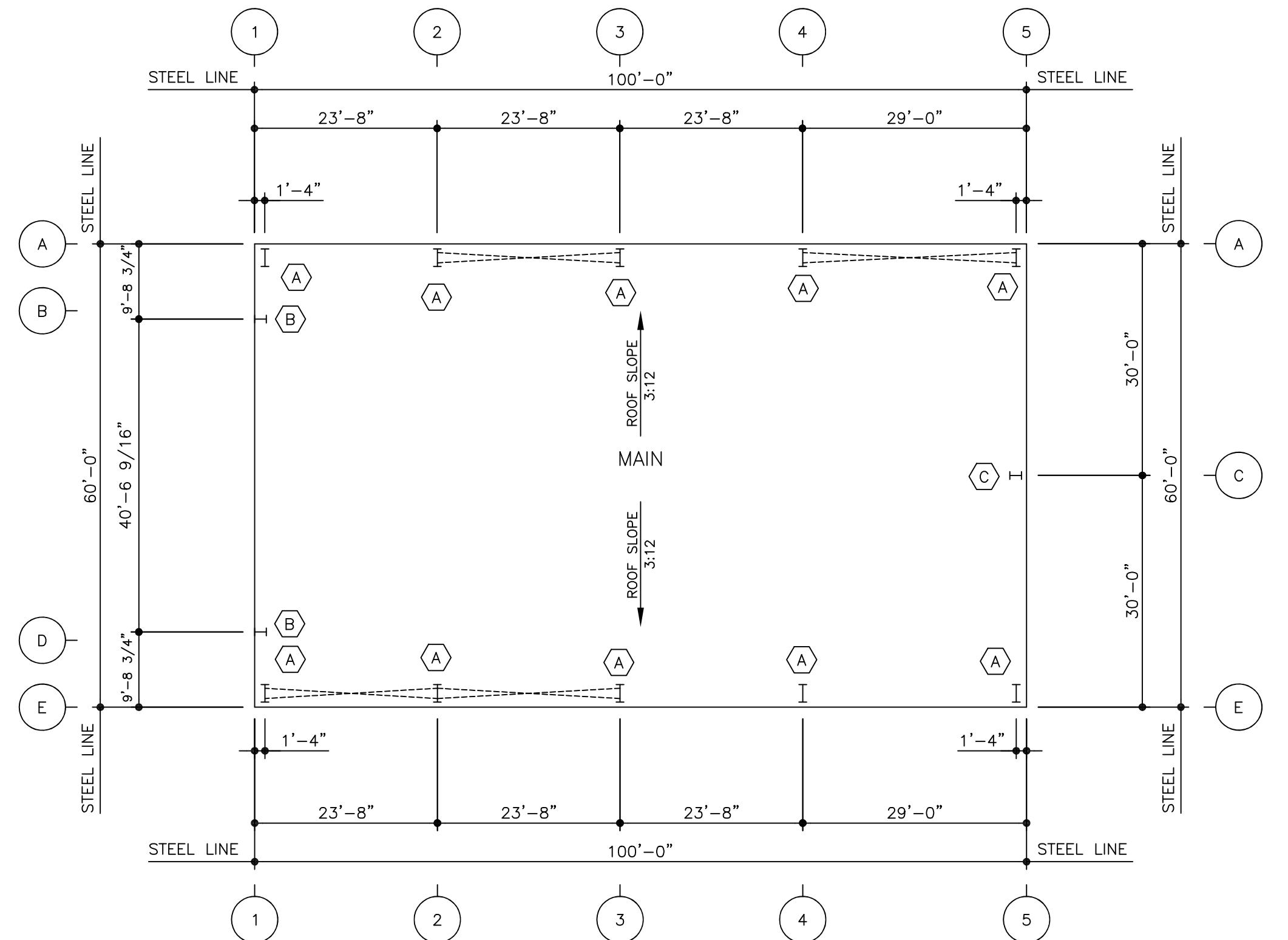
ANCHOR RODS	DRW	CHK	ENG	PE	DATE
BUILDING DEPT. REVIEW RD	MBS	TDO	ANS		5/31/2024

NUCOR	
BUILDING SYSTEMS	
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793 PHONE: (260) 837-7881 FAX: (260) 837-7384	PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417	1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 918-3100 FAX: (435) 918-3101
PROJECT NAME Zak Loosle Logan, UT	CUSTOMER NAME Zak Loosle - NS UT Employee Providence, UT
JOB NUMBER U24U0264A	SHEET TITLE



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ANCHOR BOLT SCHEDULE		
QTY	SIZE	PROJECTION
4	0.75"	3.00" FROM BOTTOM OF BPL F1554 Gr 55
48	1"	3.00" FROM BOTTOM OF BPL F1554 Gr 55



ANCHOR BOLT PLAN GENERAL NOTES

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES 1554 GRADE 55 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY METAL BUILDING MANUFACTURER.

AN4: THE ANCHOR ROD LOCATIONS PROVIDED BY METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN

AN5: DRAWINGS ARE NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY - BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

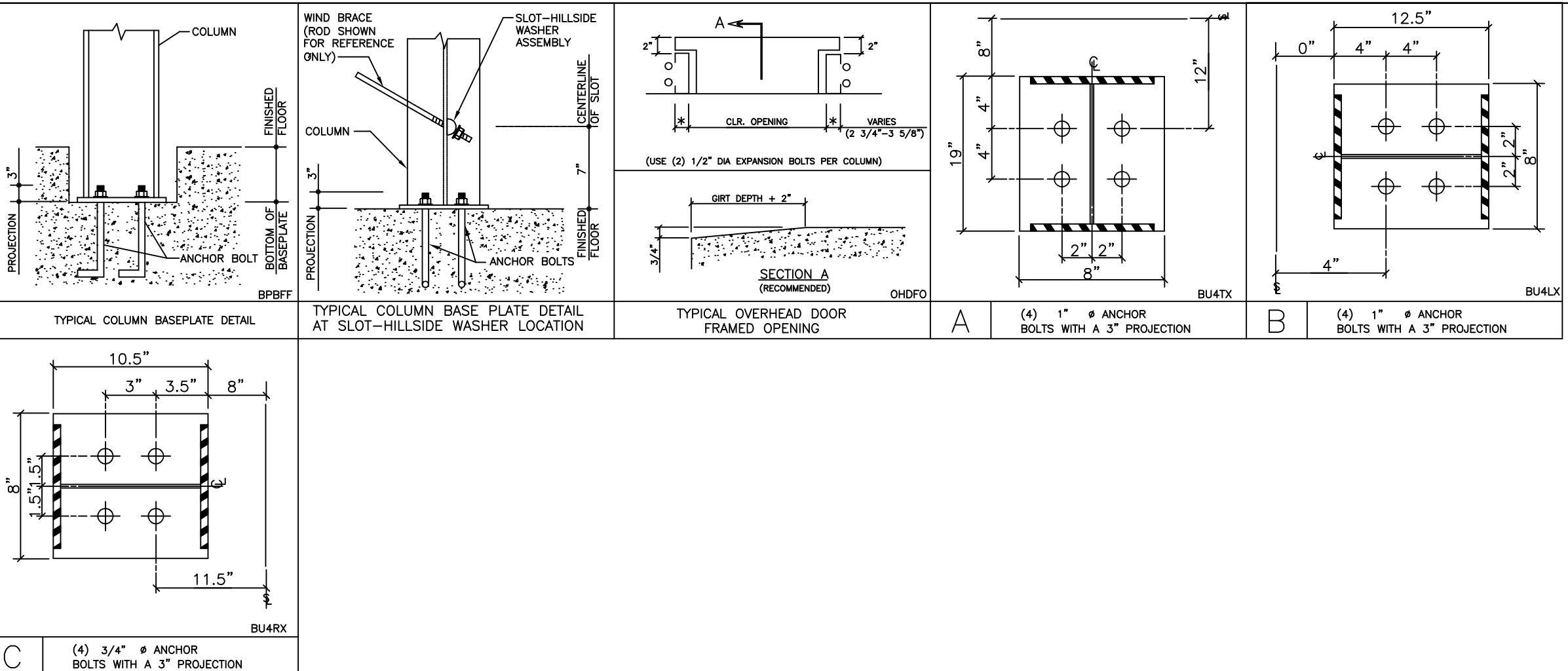
AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISH FLOOR ELEVATION = 100'-0" BOTTOM OF BASEPLATE = 99'-4" UNLESS NOTED OTHERWISE

ANCHOR BOLT SETTING NOTE

THE ANCHOR BOLT SETTINGS SHOWN ON THESE DRAWINGS NOT ONLY INDICATE WHERE THE ANCHOR BOLTS ARE TO BE PLACED, BUT ALSO THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE BOLT PATTERNS BE FOLLOWED. IN THE EVENT THAT THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY, BEFORE CONCRETE IS PLACED.

PROJECT NAME Zak Loosle Logan, UT	CUSTOMER NAME Zak Loosle - NS UT Employee Providence, UT	JOB NUMBER U24U0264A	SHEET TITLE
NUCOR BUILDING SYSTEMS 305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793 PHONE: (260) 457-7881 FAX: (260) 837-7384 PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29190 PHONE: (803) 568-2100 FAX: (803) 568-2121 600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417 1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 918-3100 FAX: (435) 919-3101		DATE 5/17/2024	
ANCHOR RODS BUILDING DEF. REVIEW RO	DOCS ANS	ENG ANS	PE
MBS TDO	MBS TDO	ANS	ANS
		DATE 5/31/2024	

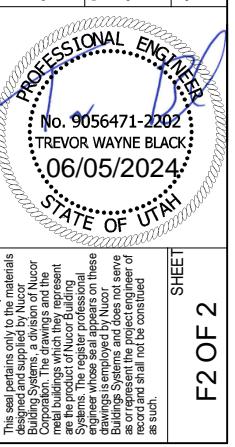


FOUNDATION DESIGN NOTE:
THE ORIENTATION OF THE ANCHOR BOLT DETAILS SHOWN ON THIS PAGE MAY NOT COINCIDE WITH THE ACTUAL COLUMN ORIENTATION SHOWN ON PAGE AB1. PLEASE REFERENCE THE STEEL LINES AND/OR CENTER LINE OF ADJACENT COLUMN SHOWN ON THE ANCHOR BOLT DETAILS WITH THE ANCHOR BOLT PLAN ON PAGE AB1 DURING LAYOUT OF COLUMN AND ANCHOR BOLT LOCATIONS.

ISSUE	DRAWN BY	CHK BY	ENG	PE	DATE
ANCHOR RODS	ANS	ANS	MBS	TDO	5/17/2024
BUILDING DEF. REVIEW RD					5/31/2024

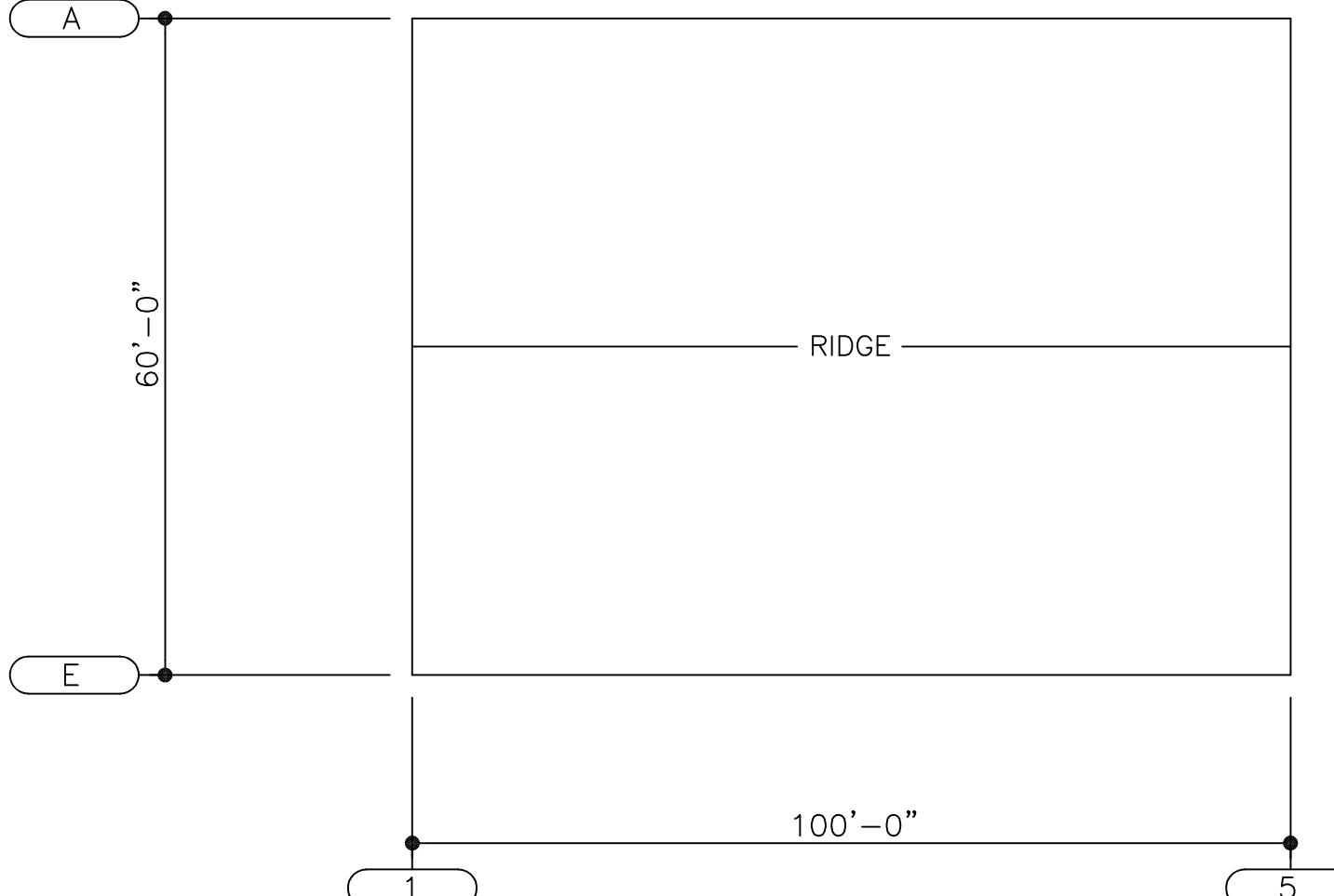
NUCOR SYSTEMS BUILDING SYSTEMS 305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793 PHONE: (260) 837-7781 FAX: (260) 837-7784 PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29190 PHONE: (803) 568-2100 FAX: (803) 568-2121 600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417 1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 919-3100 FAX: (435) 919-3101
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Zak Loosie Logan, UT	Zak Loosie - NS UT Employee Providence, UT	U24U0264A

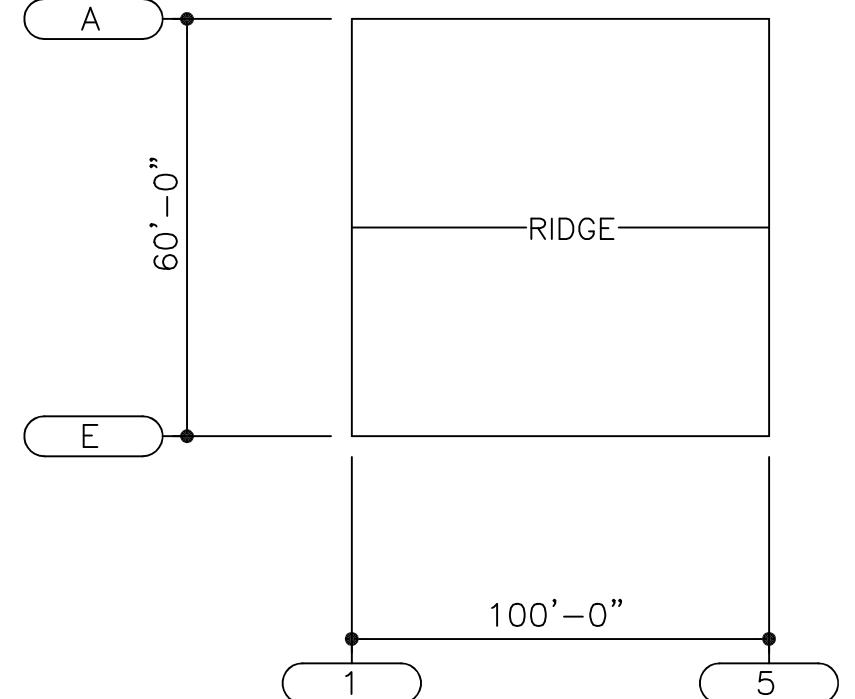


ERECTOR NOTE:

THIS BUILDING HAS SPECIFIC ROOF CLIP AND FASTENER REQUIREMENTS. PLEASE REVIEW THIS DETAIL PRIOR TO ERECTING THE ROOF PANEL. FAILURE TO FOLLOW THESE SPECIFIC REQUIREMENTS COULD RESULT IN LOSS OF ROOF PANEL(S).



STD 4" CFR CLIP PART NUMBERS	
MARK #	PART DESCRIPTION
H2500	SHORT FIXED CLIP
H2510	TALL FIXED CLIP
H2520	SHORT SLIDING CLIP
H2530	TALL SLIDING CLIP
H2540	SUPER TALL SLIDING CLIP

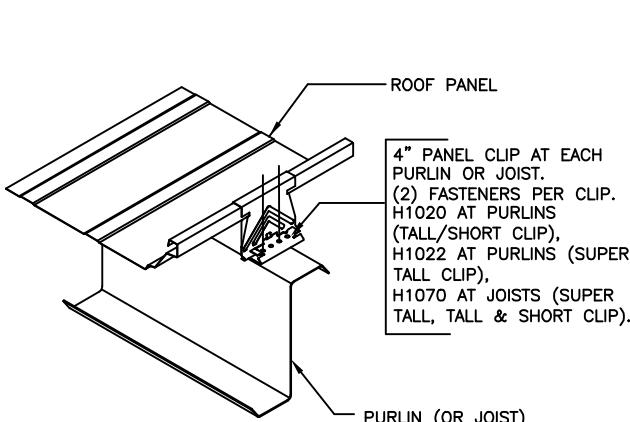


ROOF SEAMING PLAN

- 1) NUCOR ROLL LOCK™ U.N.O.
- 2) INDICATES NUCOR VISE LOCK®.
- 3) INDICATES NUCOR VISE LOCK 360®.

STD. 4" PANEL CLIP ATTACHMENT DETAIL

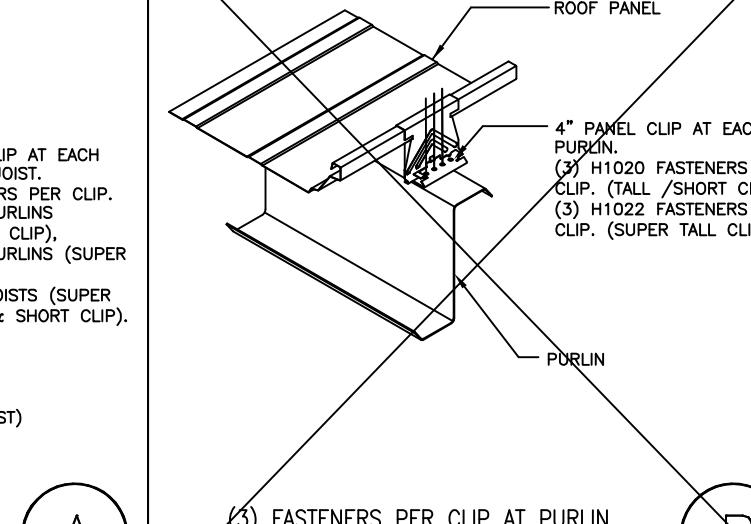
SEE CFR ROOF ERECTION NOTES FOR PANEL CLIP MARK NUMBER



EA6027
(2) FASTENERS PER CLIP AT PURFLIN/JOIST

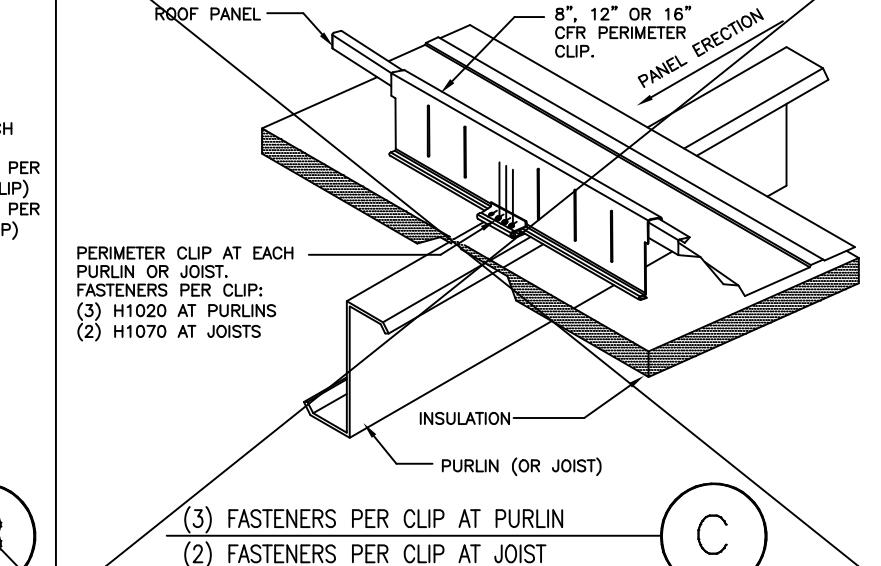
STD. 4" PANEL CLIP ATTACHMENT DETAIL

SEE CFR ROOF ERECTION NOTES FOR PANEL CLIP MARK NUMBER



PERIMETER PANEL CLIP ATTACHMENT DETAIL

SEE CFR ROOF ERECTION NOTES FOR PANEL CLIP MARK NUMBER



Critical Seamer Ordering Information

ROOF TYPE	Nucor CFR
PANEL GAGE	24 GA.
SQUARE FOOTAGE	6185 SQ. FEET
SEAM HEIGHT	<input checked="" type="checkbox"/> 3" <input type="checkbox"/> 2"
ROOF PITCH	3:12
ENDLAPS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
GALVALUME OR PAINTED ROOF	<input type="checkbox"/> GALVALUME <input checked="" type="checkbox"/> PAINTED
PERIMETER CLIPS REQUIRED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

NOTE: SEAM HEIGHT - CFR = 3", VR16-II & SR2 = 2"

PLEASE NOTE THAT ALL SEAMER ORDERS WILL TAKE APPROXIMATELY 5-7 WORKING DAYS FOR DELIVERY TO JOB SITE FROM DATE OF ORDER. VISE LOCK & VISE LOCK 360 CFR ROOFS REQUIRE (5) STATION SEAMERS.

NUCOR.DIROOFSEAMERS.COM

PHONE (888) 343-0456

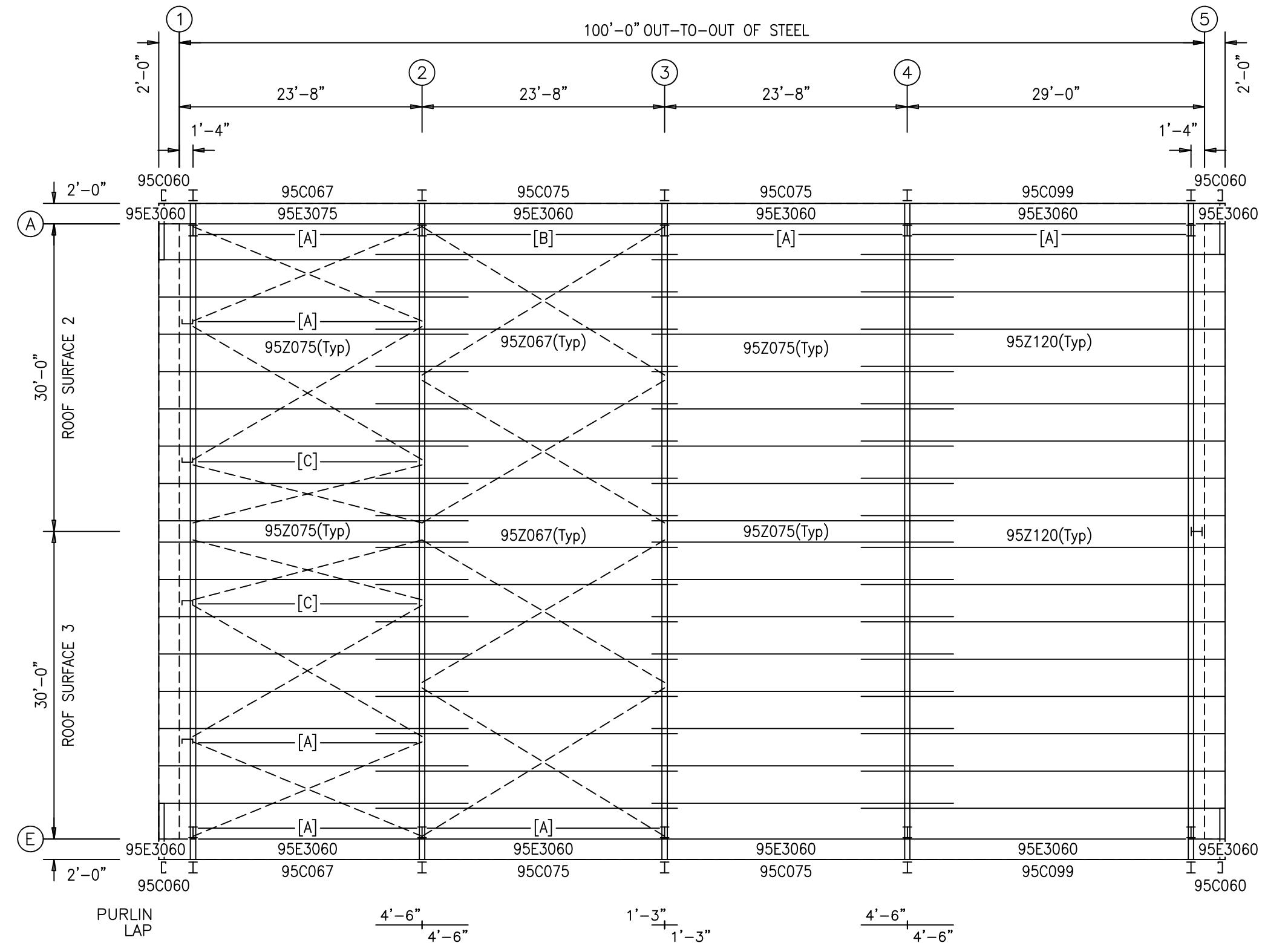
E1 OF 9

ANCHOR RODS	ANS	ANS	ENG	PE	DATE
BUILDING DEF. REVIEW RD	MBS	TDO			5/17/2024
					5/31/2024
NUCOR					
BUILDING SYSTEMS					
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793					
PHONE: (260) 457-7881 FAX: (260) 457-7384					
PO BOX 1006, 200 WHITSTONE RD, SWANSEA, SC 29190					
PHONE: (803) 568-2100 FAX: (803) 568-2121					
600 APACHE TRAIL, TERRELL, TX 75160					
PHONE: (972) 524-5407 FAX: (972) 524-5417					
1050 WATERY LANE, BRIGHAM CITY, UT 84302					
PHONE: (435) 918-3100 FAX: (435) 919-3101					

PROJECT NAME: Zak Loosie - NS UT Employee
CUSTOMER NAME: Zak Loosie - NS UT Employee
PROVIDENCE, UT
JOB NUMBER: U24U0264A
SHEET TITLE

PROFESSIONAL ENGINEER
No. 9056471-2202
TREVOR WAYNE BLACK
06/05/2024
STATE OF UTAH

This seal pertains only to the materials
designed and supplied by Nucor
Building Systems. The seal is valid for
metal buildings which they represent
as products of Nucor Building
Systems. The registered professional
engineer whose name appears on this
seal has been licensed by the State of
Utah and does not serve
as engineer or project engineer of
record and shall not be construed
as such.



ROOF FRAMING PLAN

GENERAL NOTES

- 1. PLACE TAGGED END OF RAFTERS TOWARDS THE LOW EAVE**

2. STD. ROD/CABLE SIZES PER PART PREFIX ARE

<u>ROD</u>	<u>CABLE</u>
RD05- = 5/8" ROD	CA02- = 1/4" CABLE
RD06- = 3/4" ROD	CA03- = 3/8" CABLE
RD07- = 7/8" ROD	CA04- = 1/2" CABLE
RD08- = 1" ROD	
RD09- = 1 1/8" ROD	
RD10- = 1 1/4" ROD	

3. PURFLIN AND EAVE STRUT CONNECTIONS UTILIZE BOTH A307 AND A325 BOLTS. REFER TO THE DETAILS FOR SPECIFIC USAGE REQUIREMENTS.

4. THIS DRAWING IS NOT TO SCALE.

ROOF FRAMING PLAN

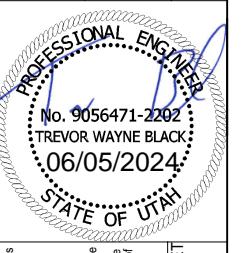
(2) ROWS PURLIN BRACING REQUIRED ALL BAYS

SEE SHEET D1 FOR PURFLIN BRACING DETAILS

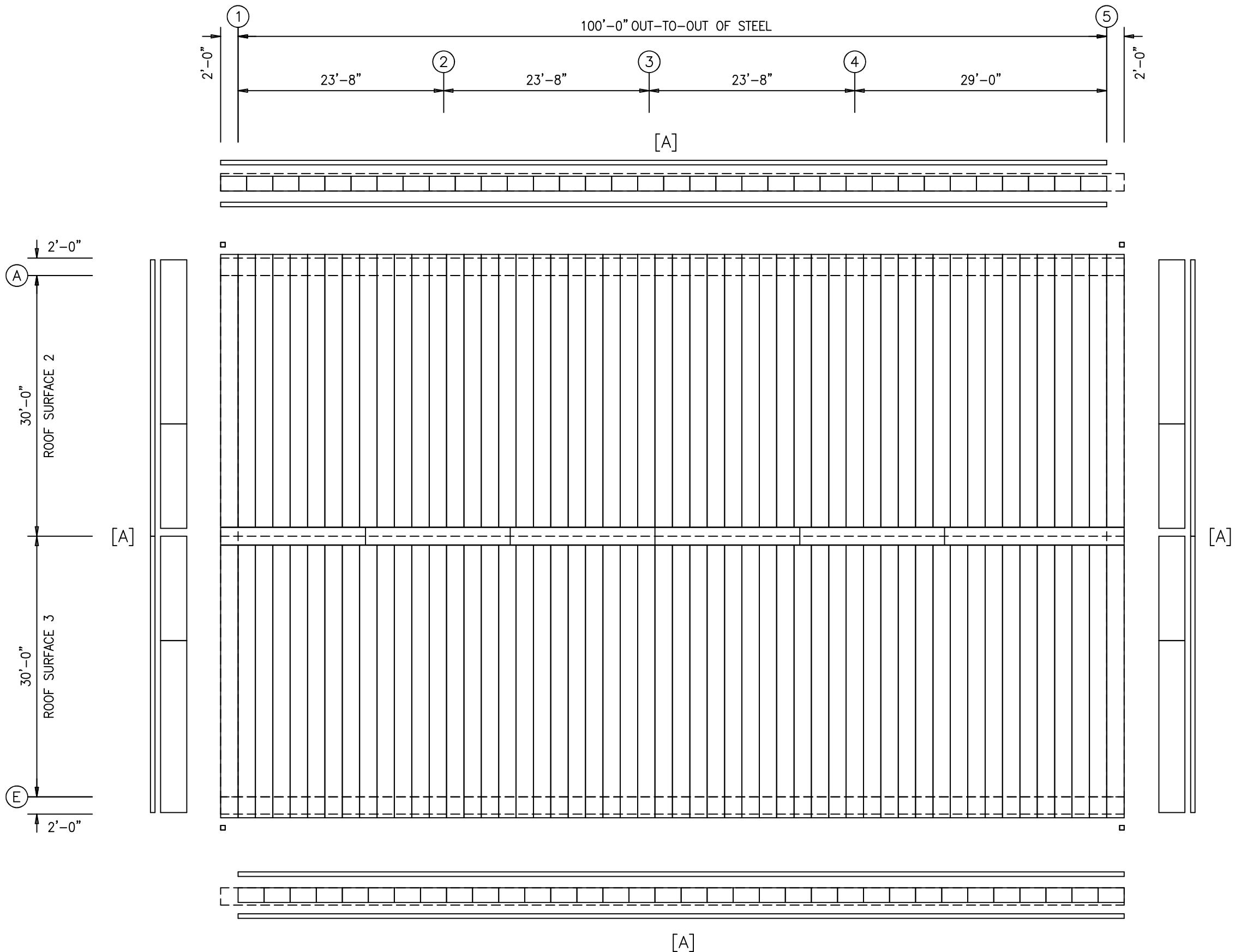
[A] INDICATES W08SB075(Strut)

[B] INDICATES P8.188(Strut)

[C] INDICATES W8x24



THE E2 OF 9
SHEET



ROOF SHEETING PLAN

PANEL: 24 Ga. Nucor 360 – Midnight Black PVDF

[A] SOFFIT PANEL: 26 Ga. A-Panel – Midnight Black PVDF

PROJECT NAME	Zak Loosle	ANCHOR RODS	DRW	DATE
	Logan, UT	ANS	ANS	5/17/2024
CUSTOMER NAME	Zak Loosle - NS UT Employee	BUILDING DEF.	REVIEW RD	MBS
	Providence, UT	TDO	ANS	5/31/2024
JOB NUMBER	U24U0264A	SHEET TITLE		
NUCOR BUILDING SYSTEMS 305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793 PHONE: (260) 837-7881 FAX: (260) 837-7384 PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29190 PHONE: (803) 568-2100 FAX: (803) 568-2121 600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417 1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 919-3100 FAX: (435) 919-3101				
<p>PROFESSIONAL ENGINEER TREVOR WAYNE BLACK No. 9056471-2202 06/05/2024 STATE OF UTAH</p>				
SHEET	E3 OF 9			

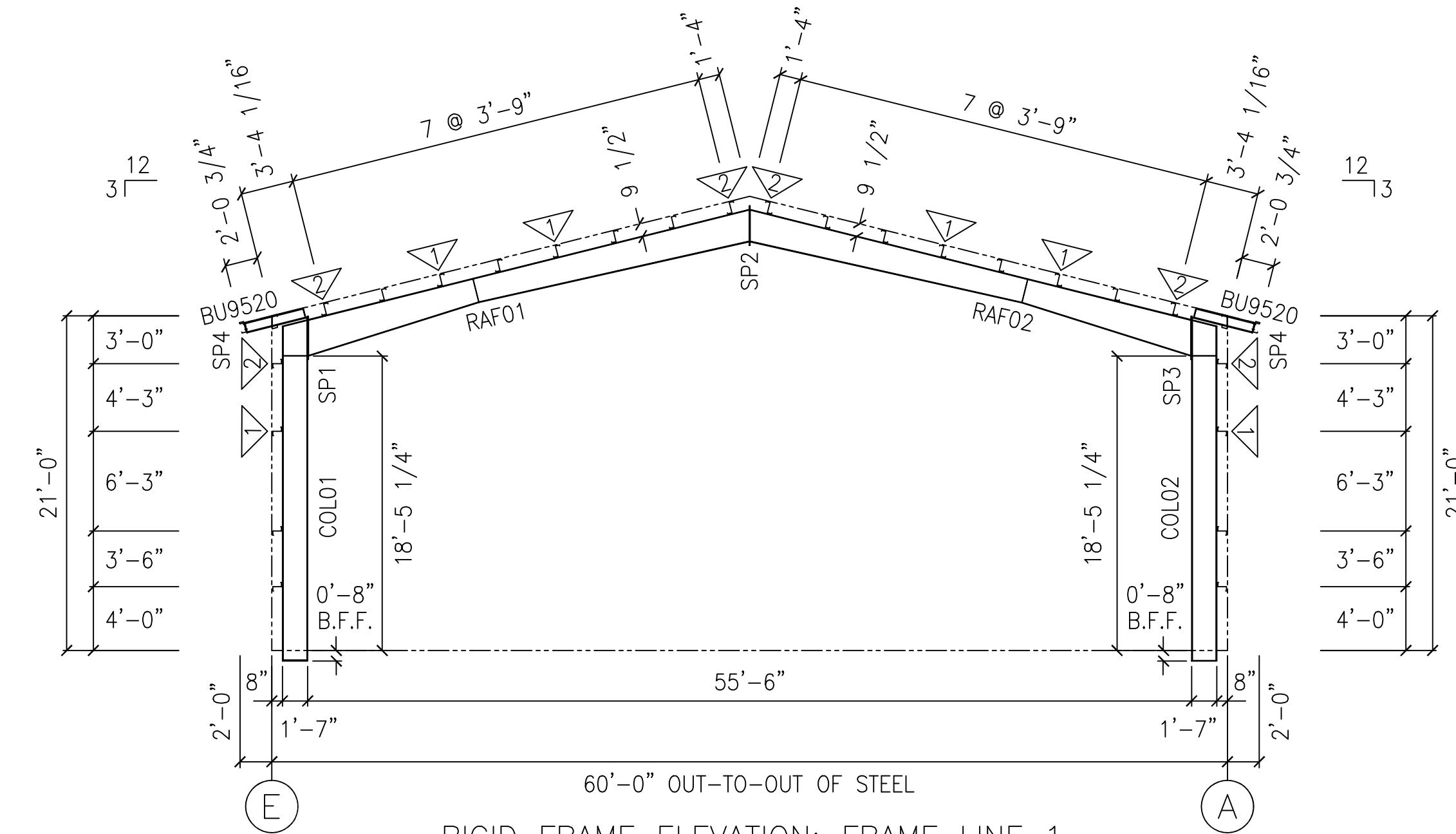
This seal pertains only to the materials designed and supplied by Nucor Building Systems. It is the property of Nucor Corporation. The owners and the metal buildings which they represent are the product of Nucor Building Systems. The registered professional engineer whose name appears on these drawings is employed by Nucor Building Systems and does not serve as or represent the project engineer of record and shall not be construed as such.

SPLICE PLATE & BOLT TABLE

Mark	Qty	Type	Dia	Width	Thick
SP1	16	A325	0.625	8	0.625
SP2	16	A325	0.625	6	0.375
SP3	16	A325	0.625	8	0.625
SP4	6	A325	0.625	8	0.313

MEMBER TABLE

MARK	Web Depth	Web Plate	Top/Left Flange W x Thk	Bottom/Right Flange W x Thk
	Start/End	Thick		
COL01	18/18	0.3125	229.91	8 x 0.5
COL02	18/18	0.3125	229.91	8 x 0.5
RAF01	26/18	0.1644	128.28	6 x 0.3125
	18/23	0.1644	216.00	6 x 0.3125
RAF02	23/18	0.1644	216.00	6 x 0.3125
	18/26	0.1644	128.28	6 x 0.3125



IF (2) FB's REQUESTED BUT CAN NOT BE PROVIDED, USE (1) 3x3x1/4 HR ANGLE (NO SLOTS)

ANCHOR RODS	DOIN THK	ENG THK	PE DATE
BUILDING DEPT. REVIEW RD	ANS	ANS	5/17/2024

NUCOR BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PHONE: (260) 837-7881 FAX: (260) 837-7384
PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29190
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 919-3100 FAX: (435) 919-3101

PROJECT NAME	Zak Loosie Logan, UT
CUSTOMER NAME	Zak Loosie - NS UT Employee Providence, UT
JOB NUMBER	U24U0264A
SHEET TITLE	



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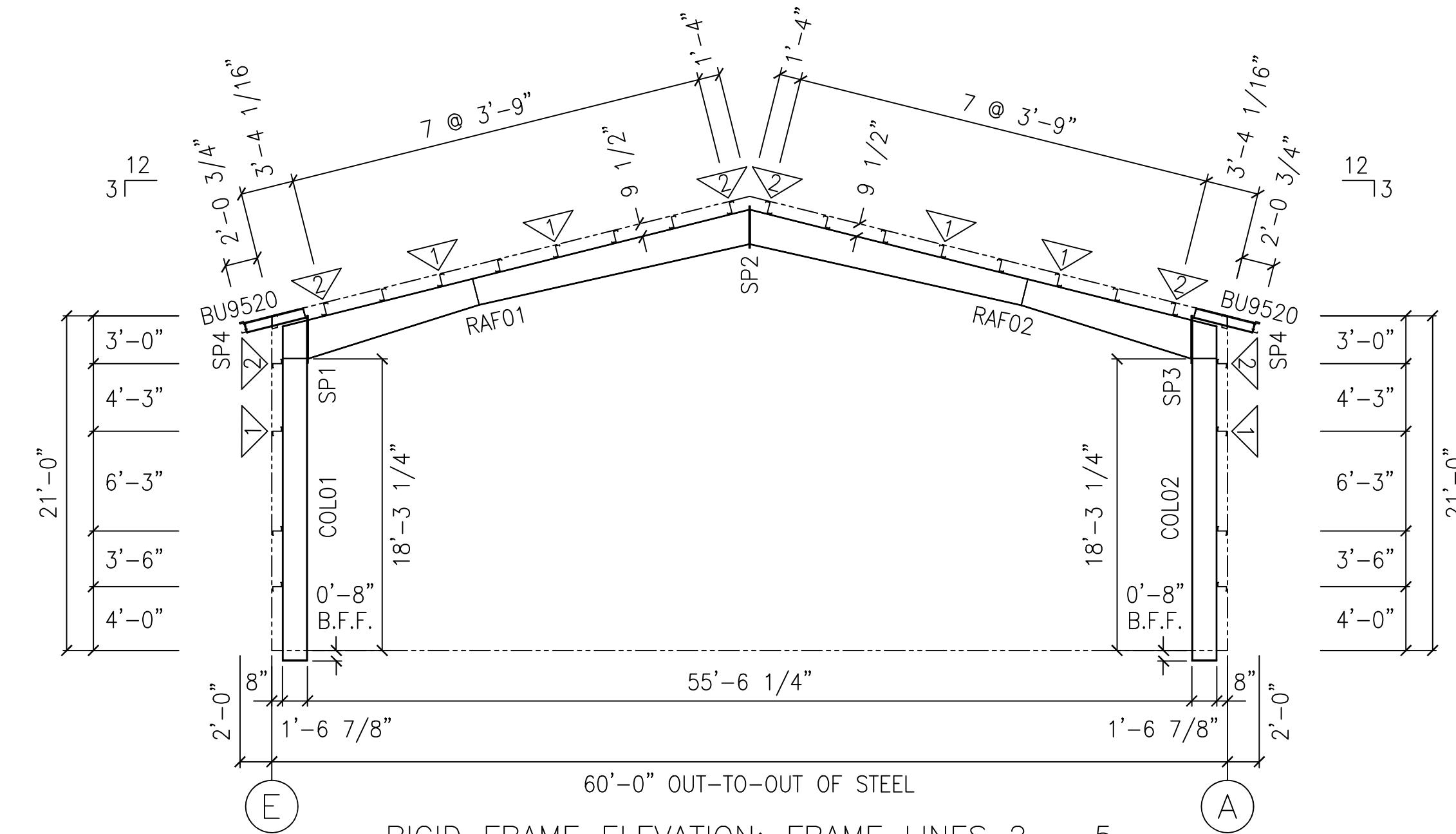
E4 OF 9

SPLICE PLATE & BOLT TABLE

Mark	Qty	Type	Dia	Width	Thick
SP1	16	A325	0.75	10	0.500
SP2	12	A325	0.625	8	0.500
SP3	16	A325	0.75	10	0.500
SP4	6	A325	0.625	10	0.375

MEMBER TABLE

MARK	Web Depth	Web Plate	Top/Left Flange W x Thk	Bottom/Right Flange W x Thk
	Start/End	Thick		
COL01	18/18	0.2500	227.85	8 x 0.375
COL02	18/18	0.2500	227.85	8 x 0.5
RAF01	28/20	0.1875	128.28	8 x 0.3125
	20/25	0.1875	216.00	8 x 0.3125
RAF02	25/20	0.1875	216.00	8 x 0.3125
	20/28	0.1875	128.28	8 x 0.3125



IF (2) FB's REQUESTED BUT CAN NOT BE PROVIDED, USE (1) 3x3x1/4 HR ANGLE (NO SLOTS)

ANCHOR RODS	DOIN TCHK	ENG TCHK	PE DATE
BUILDING DEPT. REVIEW RD	MBS	ANS	5/31/2024

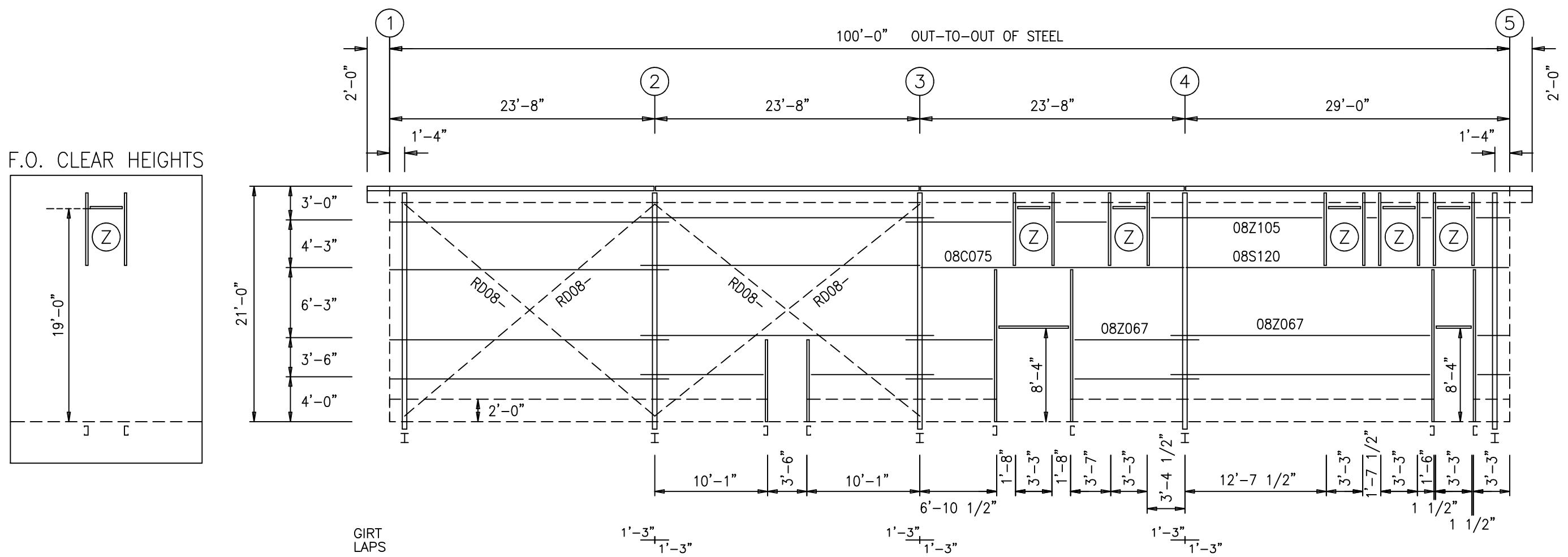
NUCOR SYSTEMS
BUILDING SYSTEMS, WATERLOO, IN 46793 305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793 PHONE: (260) 837-7381 FAX: (260) 837-7384
PO BOX 1006, 200 WHISTLE RD, SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 919-3100 FAX: (435) 919-3101

PROJECT NAME Zak Loosie Logan, UT	CUSTOMER NAME Zak Loosie - NS UT Employee Providence, UT	JOB NUMBER U24U0264A	SHEET TITLE
---	--	-------------------------	-------------



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Building Systems. The seal is the
property of Nucor Building Systems.
The seal is not valid if it is removed
from the material. It is a registered
trademark of Nucor Building Systems.
It is a registered trademark of Nucor
Building Systems and does not serve
as or represent the project engineer of
record and shall not be construed
as such.

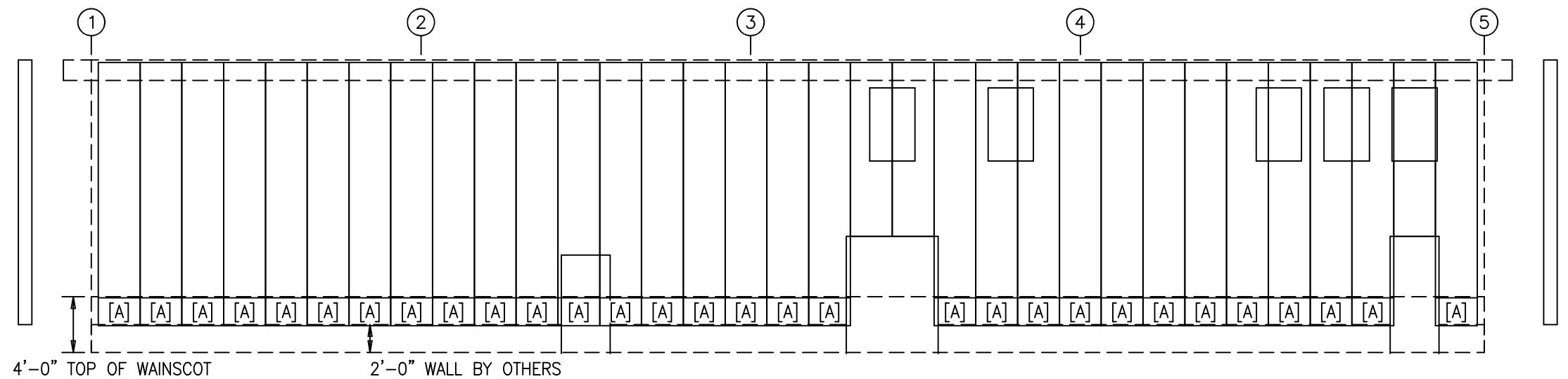
E5 OF 9



SIDEWALL FRAMING: FRAME LINE E

L GIRTS 08Z060 U.N.O.

ALL F.O. MATERIAL 08C060 U.N.O.



SIDEWALL SHEETING & TRIM: FRAME LINE E

PANELS: 26 Ga. A-Panel – Dark Bronze PVDF

[A] WAINSCOT PANELS: 26 Ga. A-Panel – Midnight Black PVDF

1. STD. ROD/CABLE SIZES PER PART PREFIX ARE:

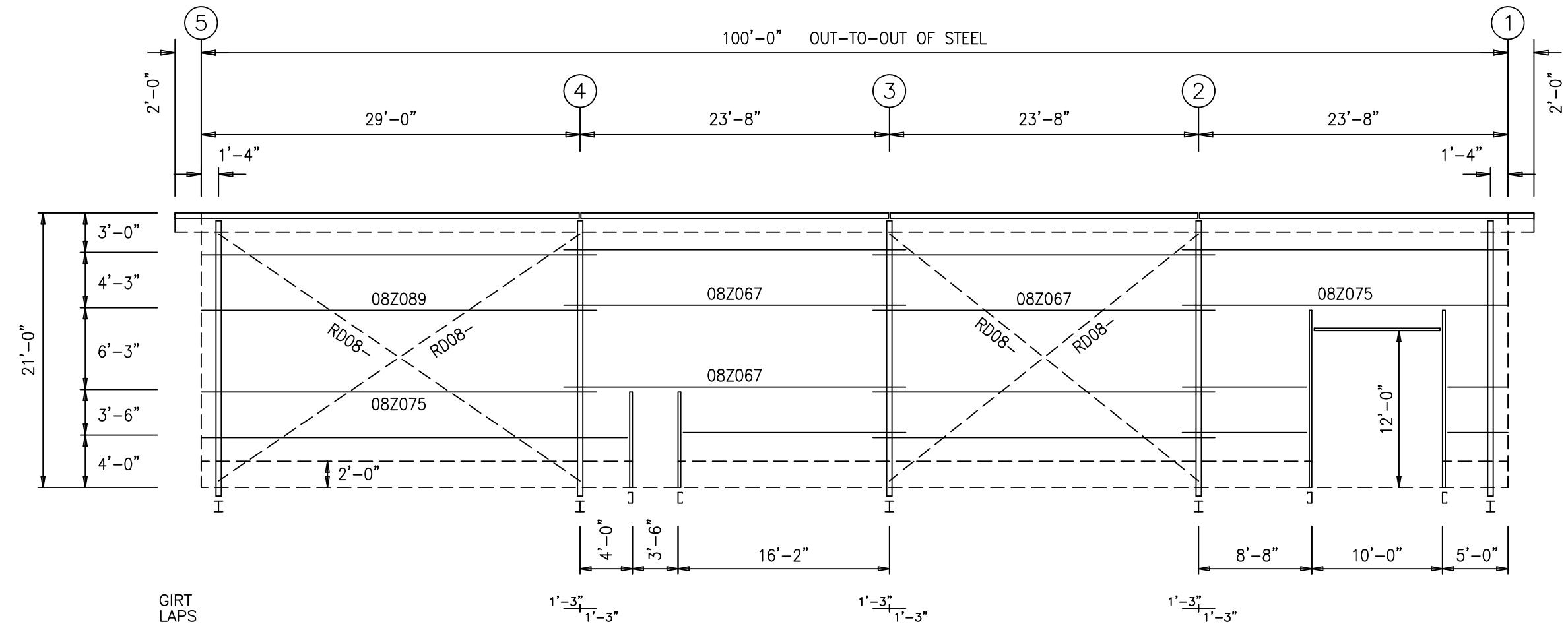
<u>ROD</u>	<u>CABLE</u>
RD05- = 5/8" ROD	CA02- = 1/4" CABLE
RD06- = 3/4" ROD	CA03- = 3/8" CABLE
RD07- = 7/8" ROD	CA04- = 1/2" CABLE
RD08- = 1" ROD	
RD09- = 1 1/8" ROD	
RD10- = 1 1/4" ROD	
 2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR
INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING
OF GIRT WEBS TO ALLOW FOR BRACING.
 3. FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL
REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
 4. FOR WALL PANEL, USE 0" START DIMENSION IF
NO START/FINISH DIMENSIONS ARE SHOWN.
 5. THIS DRAWING IS NOT TO SCALE.



ANCHOR RODS	ISSUE	DWN	CIRK	ENG	PE	DATE
BUILDING SYSTEMS						
505 INDUSTRIAL PARKWAY, WATERLOO, IA 46793 PHONE: (260) 537-7891 FAX: (260) 537-7384	BUILDING DEPT. REVIEW RO	MBS	ANS	ANS		5/17/2024
PO BOX 1006, 200 WHITSTONE RD., SWANSEA, SC 29160 PHONE: (803) 568-2100 FAX: (803) 568-2121						5/31/2024
600 APACHE TRAIL, TERRELL, TX 75160 PHONE: (972) 524-5407 FAX: (972) 524-5417						
1050 WATERY LANE, BRIGHAM CITY, UT 84302 PHONE: (435) 919-3100 FAX: (435) 919-3101						

PROJECT NAME Zak Loosie	CUSTOMER NAME Zak Loosie - NS UT Employee
LOGIC NUMBER U24U0264A	SHEET TITLE
JOE NUMBER Logan, UT	PROVIDENCE, UT

6 OF 6



SIDEWALL FRAMING: FRAME LINE A

ALL GIRTS 08Z060 U.N.O.

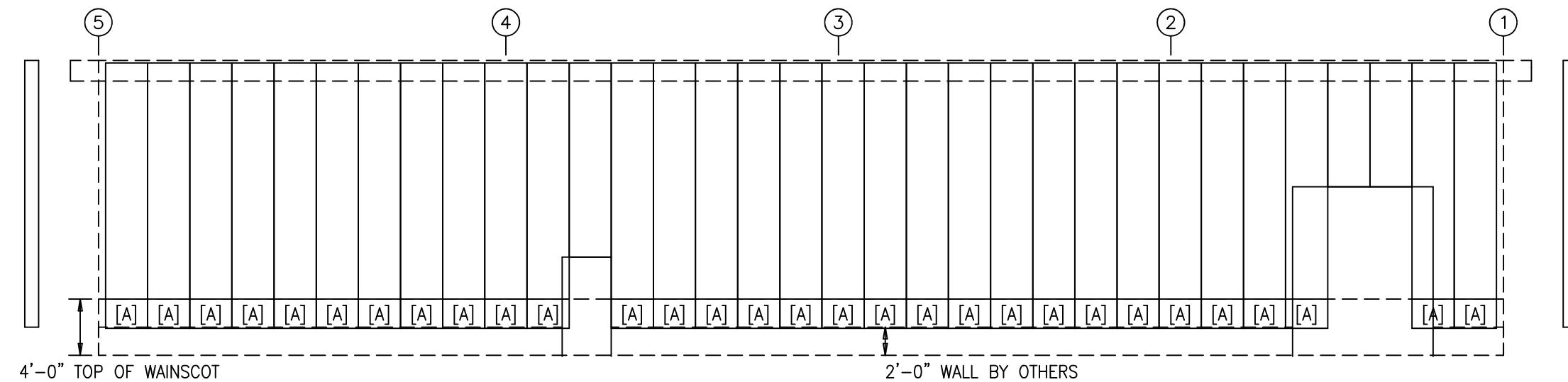
ALL F.O. MATERIAL 08C060 U.N.O.

SIDEWALL FRAMING PLAN

GENERAL NOTES

1. STD. ROD/CABLE SIZES PER PART PREFIX ARE:

ROD	CABLE
RD05- = 5/8" ROD	CA02- = 1/4" CABLE
RD06- = 3/4" ROD	CA03- = 3/8" CABLE
RD07- = 7/8" ROD	CA04- = 1/2" CABLE
RD08- = 1" ROD	
RD09- = 1 1/8" ROD	
RD10- = 1 1/4" ROD	
 2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR
INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING
OF GIRT WEBS TO ALLOW FOR BRACING.
 3. FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL
REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
 4. FOR WALL PANEL, USE 0" START DIMENSION IF
NO START/FINISH DIMENSIONS ARE SHOWN.
 5. THIS DRAWING IS NOT TO SCALE.



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. A-Panel – Dark Bronze PVDF

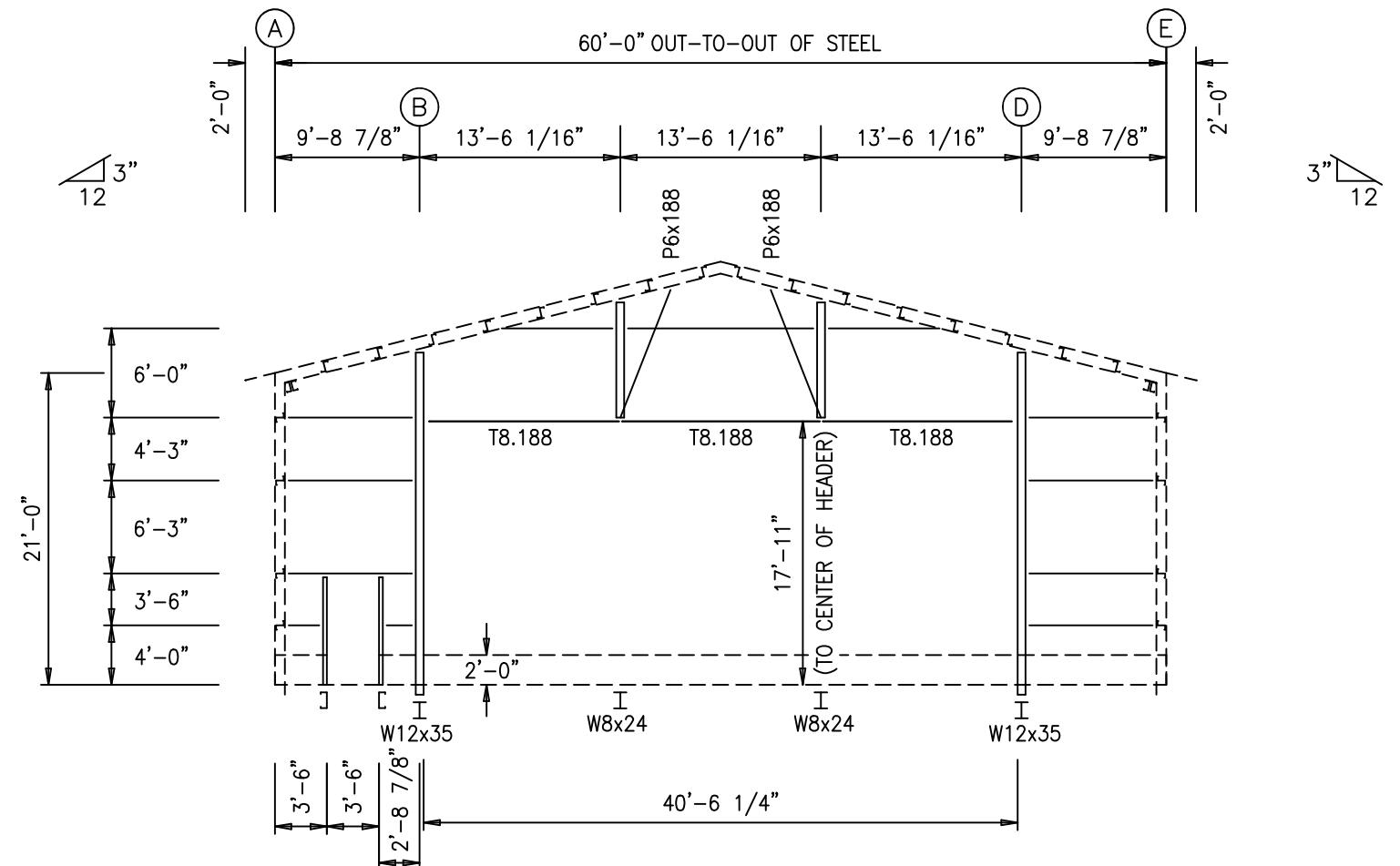
[A] WAINSCOT PANELS: 26 Ga. A-Panel – Midnight Black PVDF

ISSUE	UPRN	CIRK	ENG	PE	DATE
ANCHOR RODS	ANS	ANS	ANS	ANS	5/17/2024
BUILDING DEPT. REVIEW RO	MBS	TDO	ANS	ANS	5/31/2024

PROJECT NAME	Zak Loosle
CUSTOMER NAME	Zak Loosle - NS UT Employee
JOB NUMBER	U24U0264A
SHEET TITLE	Providence, UT
	Logan, UT

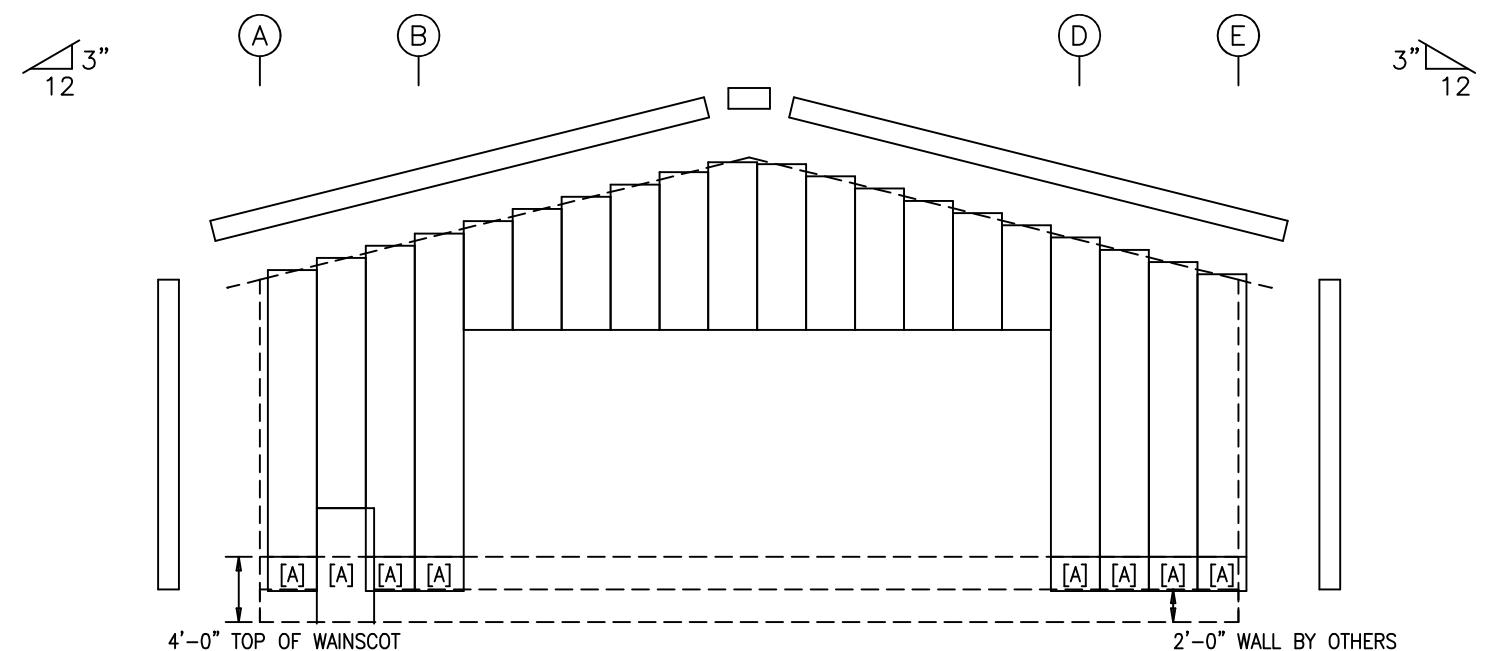
A circular professional engineer seal. The outer ring contains the words "PROFESSIONAL ENGINEER" at the top and "SOCIETY OF PROFESSIONAL ENGINEERS" at the bottom. Inside the ring, the text "No. 9056471-2202" is centered above "TREVOR WAYNE BLACK". At the bottom, the date "06/05/2024" is written.

STATE OF UTAH
SHEET 1
E7 OF 9



ENDWALL FRAMING: FRAME LINE 1

ALL GIRTS 08Z060 U.N.O.
ALL F.O. MATERIAL 08C060 U.N.O.



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. A-Panel – Dark Bronze PVDF
[A] WAINSCOT PANELS: 26 Ga. A-Panel – Midnight Black PVDF

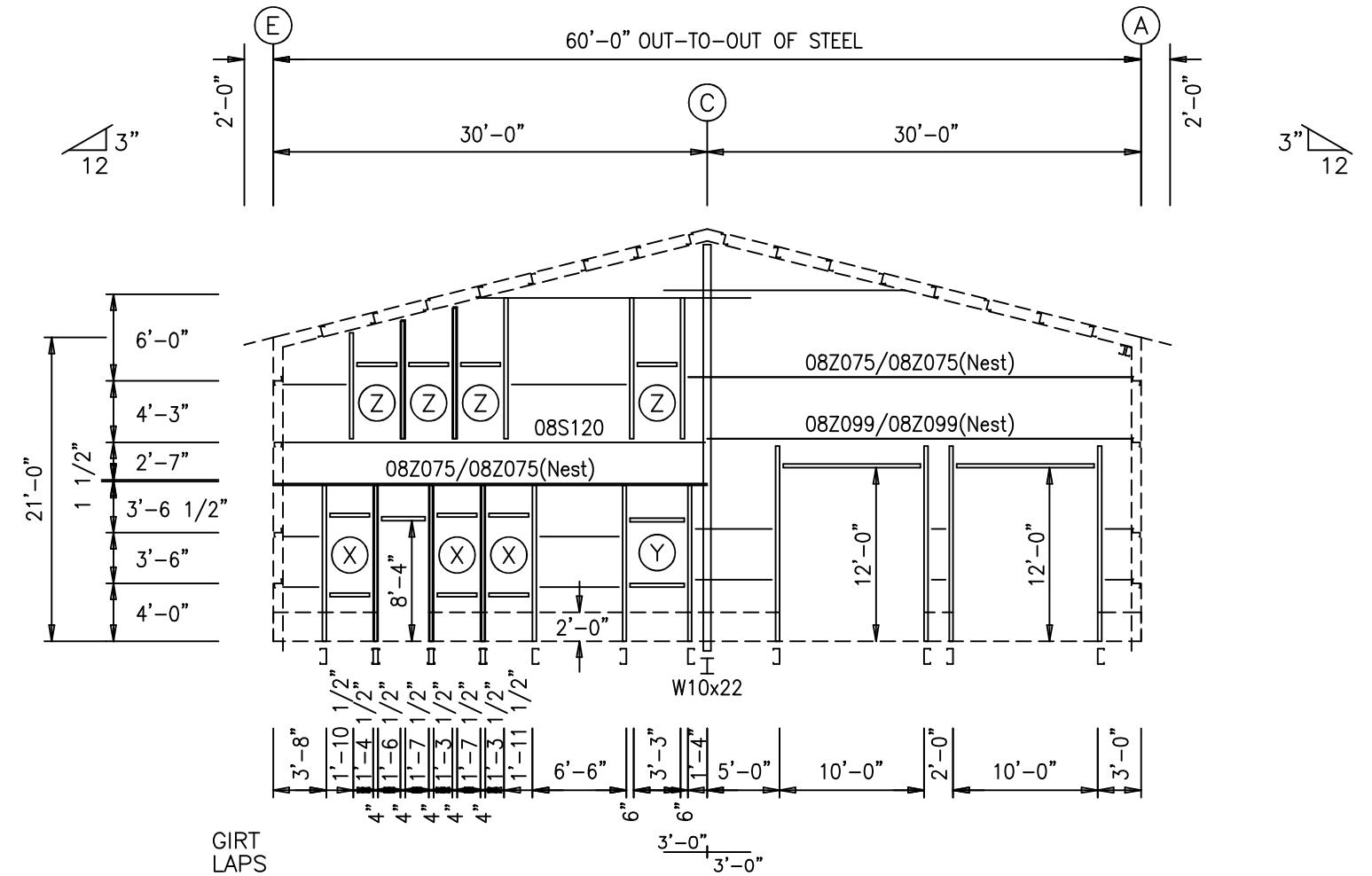
ENDWALL FRAMING PLAN

GENERAL NOTES

1. STD. ROD/CABLE SIZES PER PART PREFIX ARE:

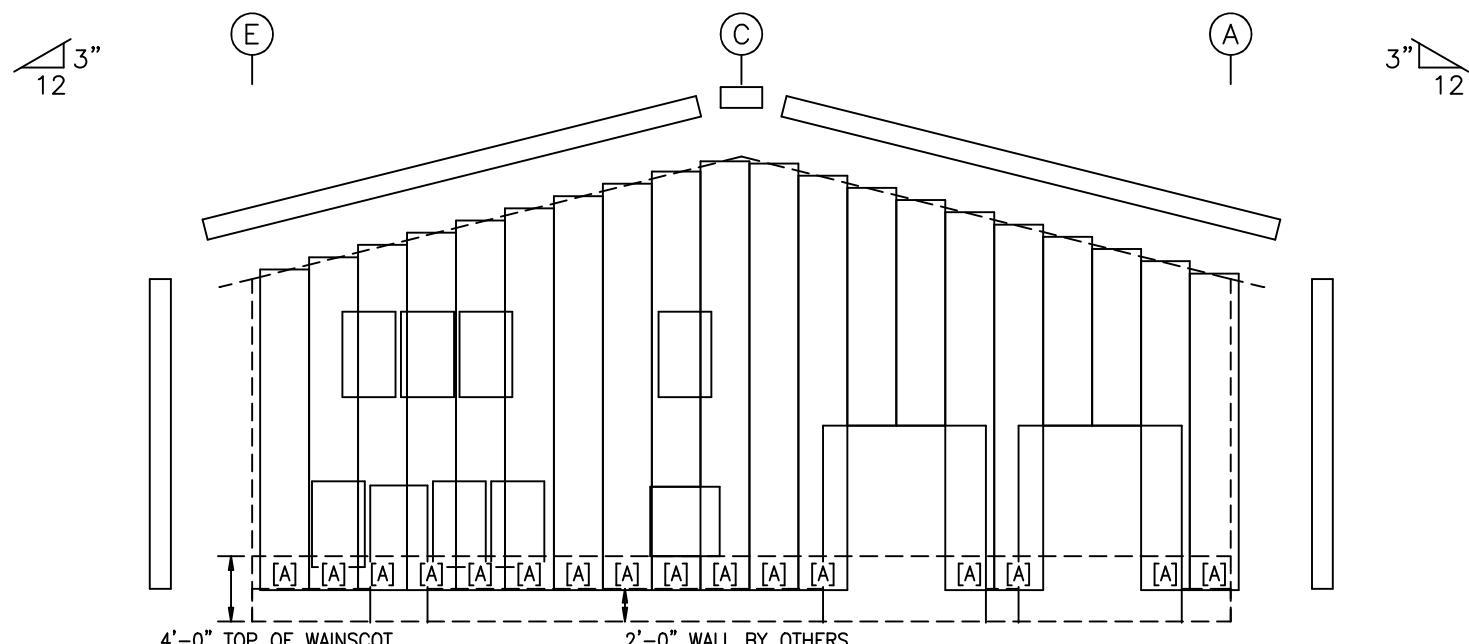
ROD	CABLE
RD05- = 5/8" ROD	CA02- = 1/4" CABLE
RD06- = 3/4" ROD	CA03- = 3/8" CABLE
RD07- = 7/8" ROD	CA04- = 1/2" CABLE
RD08- = 1" ROD	
RD09- = 1 1/8" ROD	
RD10- = 1 1/4" ROD	
2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING OF GIRT WEBS TO ALLOW FOR BRACING.
3. FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
4. FOR WALL PANEL, USE 0" START DIMENSION IF NO START/FINISH DIMENSIONS ARE SHOWN.
5. THIS DRAWING IS NOT TO SCALE.

PROJECT NAME		Zak Loosie	
		Logan, UT	
CUSTOMER NAME		Zak Loosie - NS UT Employee	
ADDRESS		Providence, UT	
JOB NUMBER	U24U0264A		
SHEET TITLE			
<small>This seal pertains only to the materials designed and supplied by Nucor Building Systems. The seal is issued to the owners and the metal buildings which they represent. It is a product of Nucor Building Systems. The registered professional engineer whose name appears on this drawing is employed by Nucor Building Systems and does not serve as or represent the project engineer of record and shall not be construed as such.</small>			
SHEET			
E8 OF 9			



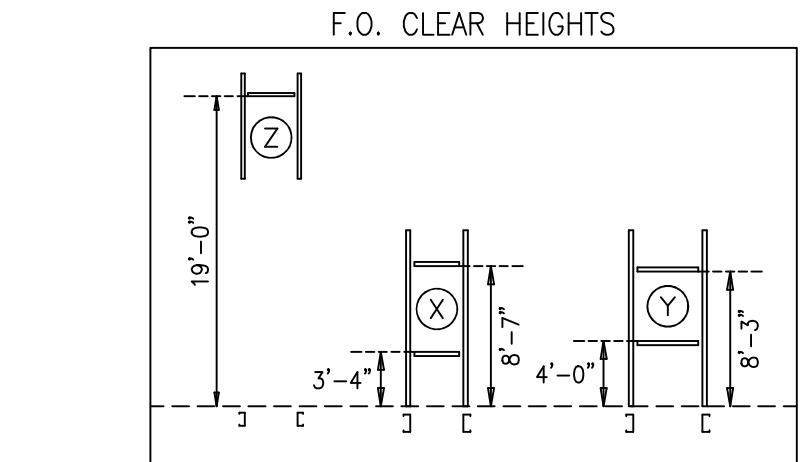
ENDWALL FRAMING: FRAME LINE 5

ALL GIRTS 08Z060 U.N.O.
ALL F.O. MATERIAL 08C060 U.N.O.



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Ga. A-Panel – Dark Bronze PVDF
[A] WAINSCOT PANELS: 26 Ga. A-Panel – Midnight Black PVDF



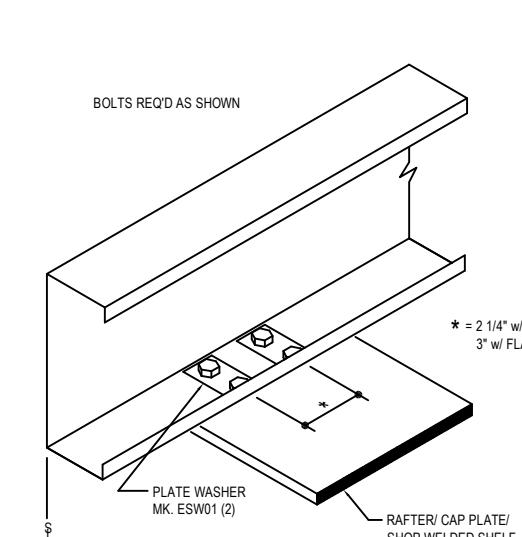
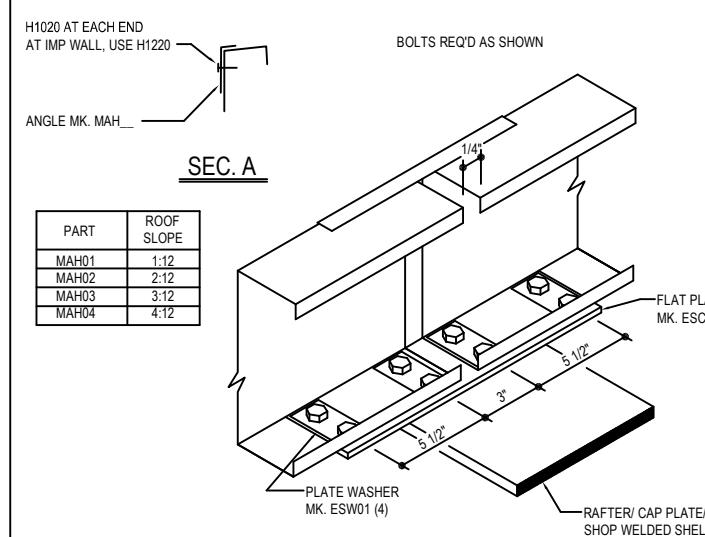
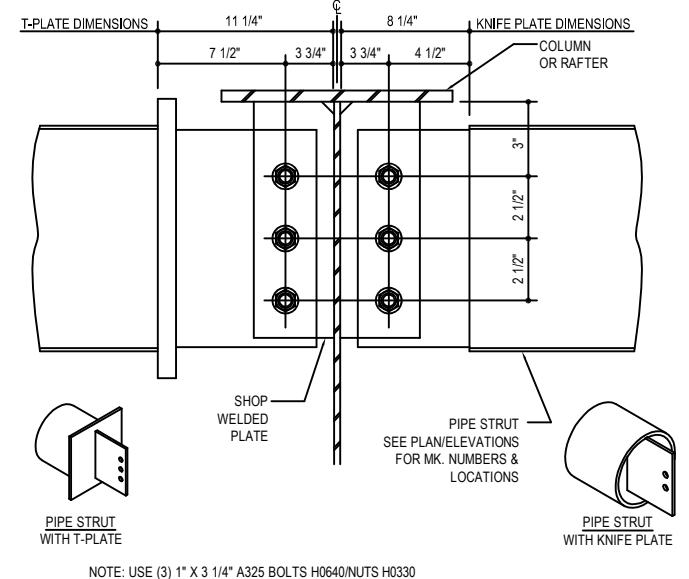
ENDWALL FRAMING PLAN

GENERAL NOTES

1. STD. ROD/CABLE SIZES PER PART PREFIX ARE:

ROD	CABLE
RD05- = 5/8" ROD	CA02- = 1/4" CABLE
RD06- = 3/4" ROD	CA03- = 3/8" CABLE
RD07- = 7/8" ROD	CA04- = 1/2" CABLE
RD08- = 1" ROD	
RD09- = 1 1/8" ROD	
RD10- = 1 1/4" ROD	
2. ROD/CABLE BRACING THAT OCCURS IN FLUSH OR INSET GIRT CONDITIONS WILL REQUIRE FIELD SLOTTING OF GIRT WEBS TO ALLOW FOR BRACING.
3. FRAMED OPENINGS WHICH ARE FIELD LOCATED WILL REQUIRE FIELD CUTTING OF GIRTS AND SHEETING.
4. FOR WALL PANEL, USE 0" START DIMENSION IF NO START/FINISH DIMENSIONS ARE SHOWN.
5. THIS DRAWING IS NOT TO SCALE.

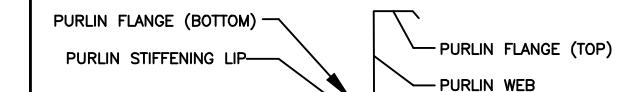
PROJECT NAME	Zak Loosle	SHEET TITLE
CUSTOMER NAME	Logan, UT	
JOB NUMBER	U24U0264A	
<small>This seal pertains only to the materials and design and supervision supplied by Nucor Building Systems, Inc. The engineers and the metal buildings which they represent are the products of Nucor Building Systems. The registered professional engineer whose name appears on these drawings is employed by Nucor Building Systems and does not serve as or represent the project engineer of record and shall not be construed as such.</small>		
E9 OF 9		



COLLATERAL DEAD LOADS, UNLESS NOTED OTHERWISE, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC. ARE SUSPENDED FROM ROOF MEMBERS, CONSULT M.B.S. ENGINEERING IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL) OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL) OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.

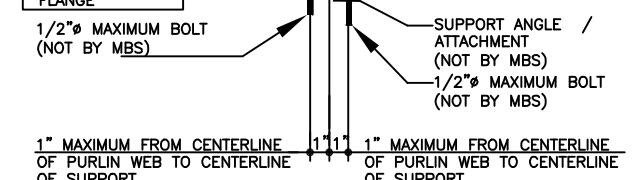
GENERAL RESTRICTION

UNDER NO CIRCUMSTANCES CAN THE PURLIN STIFFENING LIP BE FIELD MODIFIED FROM THE FACTORY SUPPLIED CONDITION. ALSO DO NOT HANG ANYTHING FROM PURLIN STIFFENING LIP.

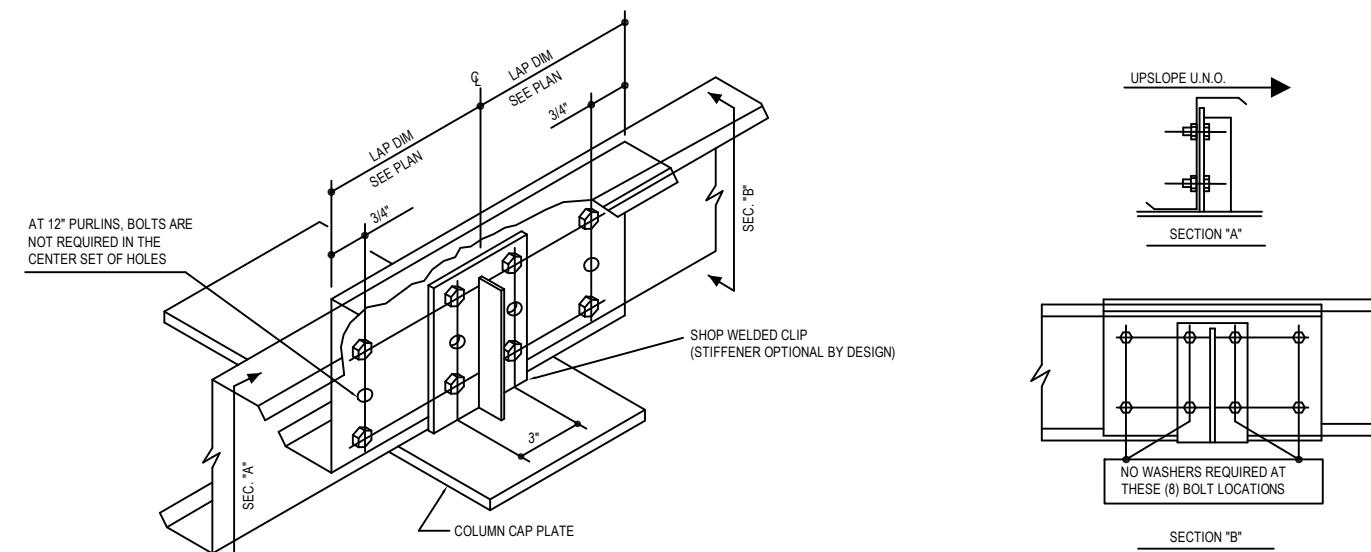
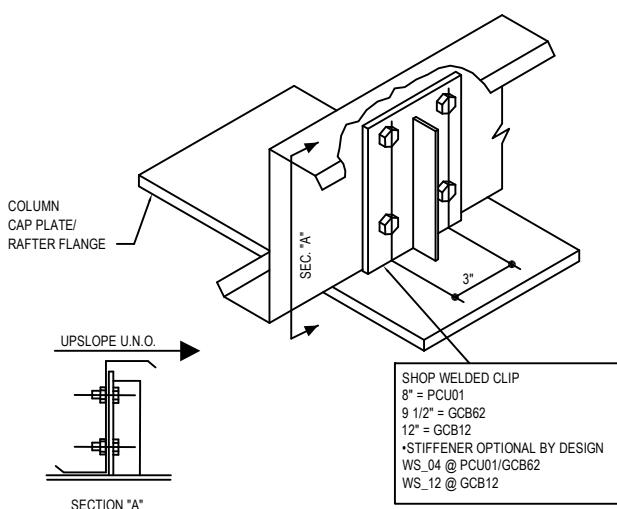
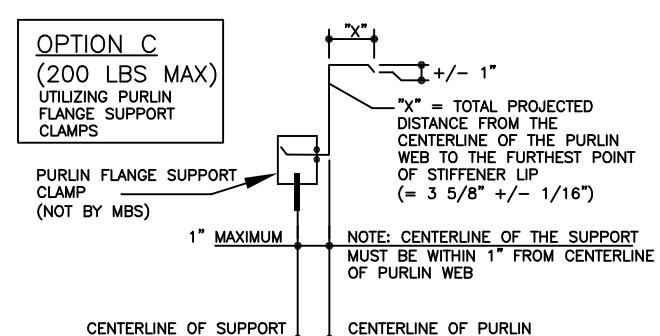


SUPPORT ATTACHMENT OPTIONS

OPTION A
(200 LBS MAX)
DRILL SUPPORT THROUGH THE BOTTOM PURLIN FLANGE



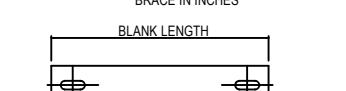
OPTION B
(500 LBS MAX)
SUPPORT ANGLE OR ANOTHER TYPE OF BRACKET SUPPORTED THROUGH PURLIN WEB



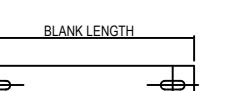
PURLIN SUPPORT METHODS

B00010

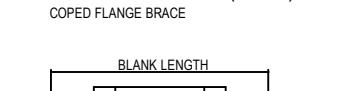
FBC
INDICATES LENGTH OF FLANGE BRACE IN INCHES
BLANK LENGTH



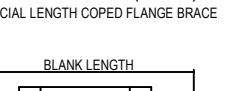
FBH-COUNTER (1-999)
SPECIAL LENGTH FLANGE BRACE



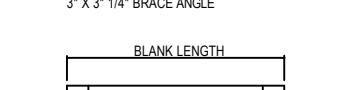
FBE_COUNTER (01-07)
COPED FLANGE BRACE



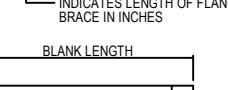
FBJ-COUNTER (1-999)
SPECIAL LENGTH COPED FLANGE BRACE



FBF-COUNTER (1-999)
3" X 3" 1/4" BRACE ANGLE



FBK
INDICATES LENGTH OF FLANGE BRACE IN INCHES

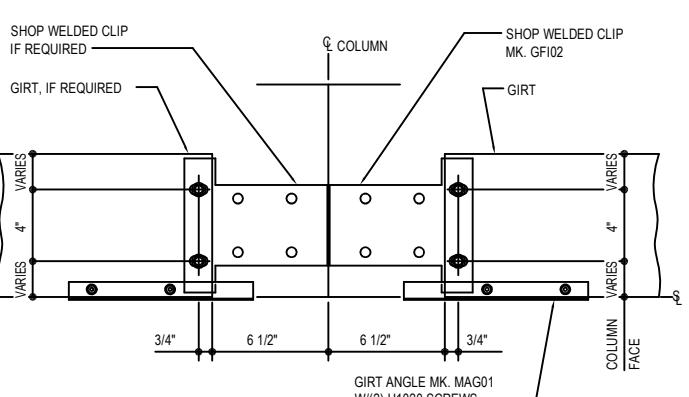


WELDED CLIP @ END FRAME

USE (4) 1/2" X 1 1/4" A307 BOLTS H0500/NUTS H0400 U.N.O.
REFERENCE ERECTOR NOTE FOR TYP. WASHER REQUIREMENTS

ERECTOR NOTE
GIRT CLIPS ARE FACTORY PUNCHED TO BE USED WITH MULTIPLE GIRT DEPTHS.
REFER TO THE STANDARD BOLT PLACEMENT DETAIL(S) FOR PROPER BOLT PLACEMENT.

RIGHT HAND DETAIL SHOWN, LEFT HAND OPPOSITE



WELDED CLIP @ INTERIOR FRAME

USE (8) 1/2" X 1 1/4" A307 BOLTS H0500/NUTS H0400 U.N.O.

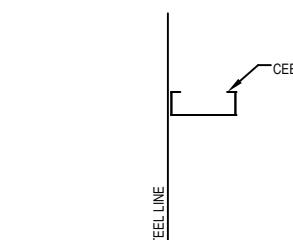
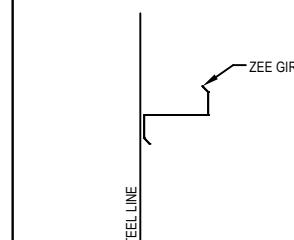
BB0055

ERECTOR NOTE:

UNLESS SPECIFICALLY NOTED OTHERWISE, STANDARD ZEE GIRT ORIENTATION IS TO HAVE THE GIRT TOED DOWN AT THE STEEL LINE AS SHOWN IN THE DETAIL BELOW.

UNLESS SPECIFICALLY NOTED OTHERWISE, STANDARD CEE GIRT ORIENTATION IS TO HAVE THE GIRT TOED UP AS SHOWN IN THE DETAIL BELOW. STANDARD CLIP ATTACHMENT IS BELOW THE GIRT, HOWEVER SOME DETAILS REQUIRE THAT THE CLIP BE ABOVE THE GIRT OR THAT THE GIRT BE TOED DOWN.

(REFER TO THE GIRT DETAILS FOR SPECIFIC CONNECTION REQUIREMENTS).



FLUSH GIRT DETAIL

FLUSH GIRTS AT INTERIOR BAY COLUMNS
NOTE: USE (4) 1/2" X 1 1/4" A307 BOLTS H0500/NUTS H0400

REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

SW OR EW GIRT DETAIL

LAPPED BYPASS GIRTS AT INTERIOR BAY COLUMNS

NOTE: USE (7) 1/2" X 1 1/4" A307 BOLTS H0500/NUTS H0400

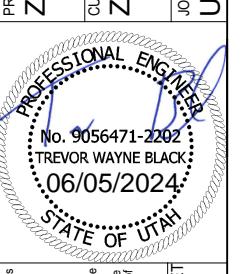
WASHERS ARE NOT REQUIRED AT LAPPED ZEE CONNECTION

REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

ITEM	DESCRIPTION	DIM.	CHK	ENG.	PE.
ANCHOR RODS	ANS	ANS	MBS	TDO	ANS
BUILDING DEPT. REVIEW RO	ANS	ANS	MBS	ANS	ANS

NUCOR
BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PHONE: (260) 837-7384
PO BOX 1006, 200 WHISTLE RD., SWANSEA, SC 29190
PHONE: (803) 568-2100, FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407, FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 919-3100, FAX: (435) 919-3101

PROJECT NAME: Zak Loosie - NS UT Employee
CUSTOMER NAME: Providence, UT
JOB NUMBER: U24U0264A
SHEET TITLE



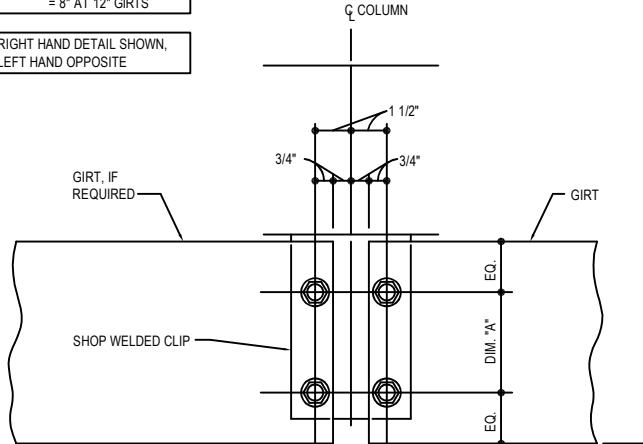
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SHEET
D2 OF 12

AG0003

DIM. "A" = 4" AT 8" & 9 1/2" GIRTS
= 8" AT 12" GIRTS

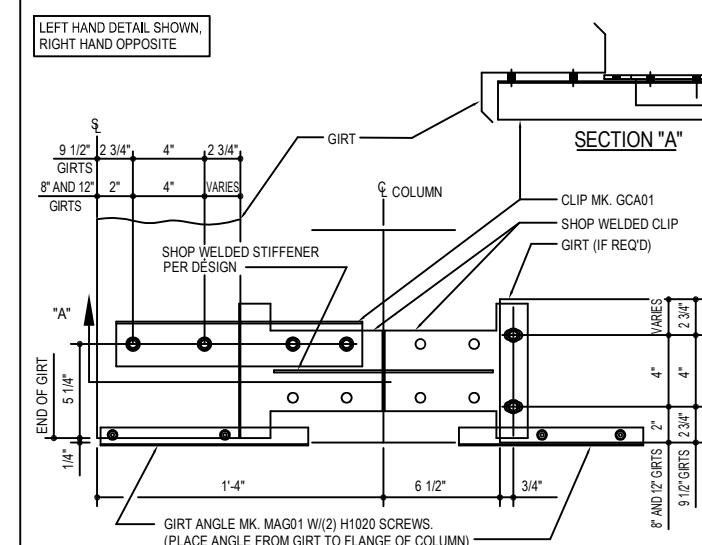
RIGHT HAND DETAIL SHOWN,
LEFT HAND OPPOSITE



SW OR EW GIRT DETAIL

SIMPLE-SPAN BYPASS GIRTS AT INTERIOR BAY COLUMNS
NOTE: USE (4) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

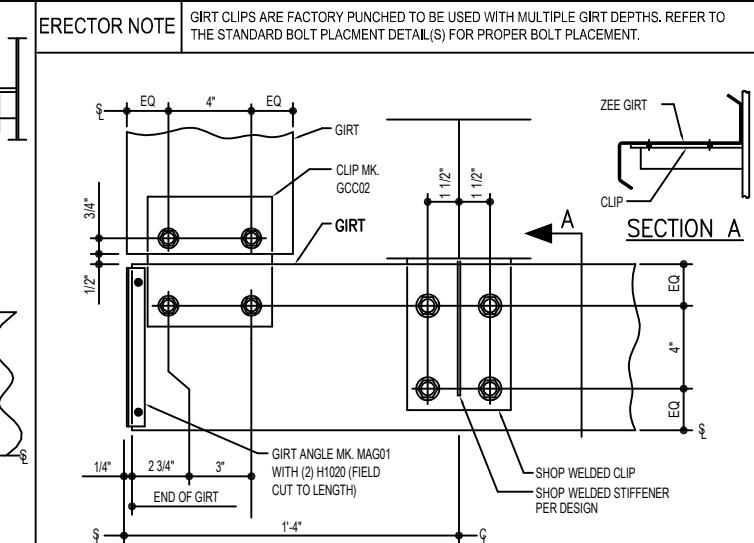
CC1020



CORNER GIRT DETAIL

CORNER FLUSH GIRT DETAIL WITH WELDED CLIPS
NOTE: USE (6) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

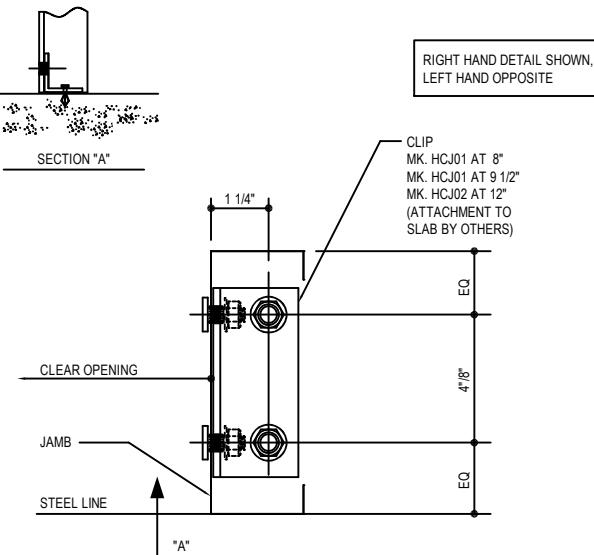
CD1010



BYPASS GIRT CORNER DETAIL

LEFT HAND DETAIL SHOWN, RIGHT HAND OPPOSITE
NOTE: USE (8) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

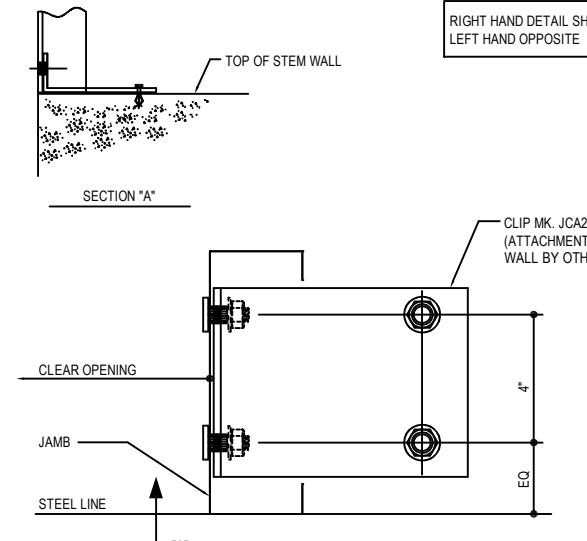
CF1010



JAMB TO FINISHED FLOOR CONNECTION

NOTE: USE (2) 1/2" x 1 1/4" A307 BUTTON HEAD BOLTS H0510/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

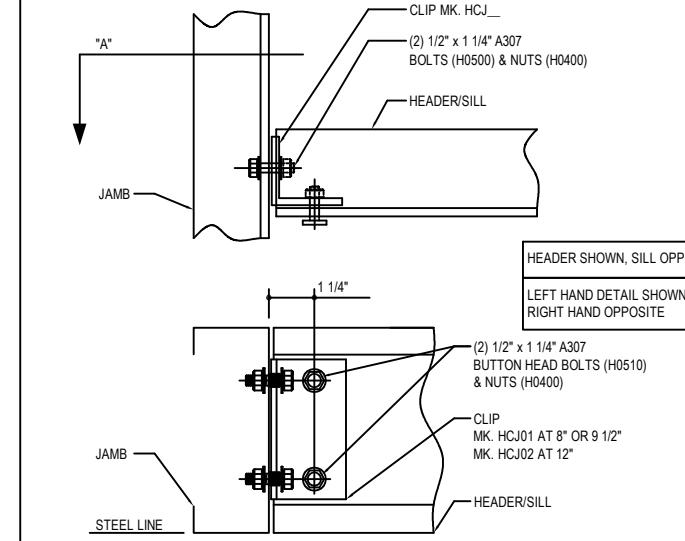
CG0030



JAMB TO STEM WALL CONNECTION

NOTE: USE (2) 1/2" x 1 1/4" A307 BUTTON HEAD BOLTS H0510/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

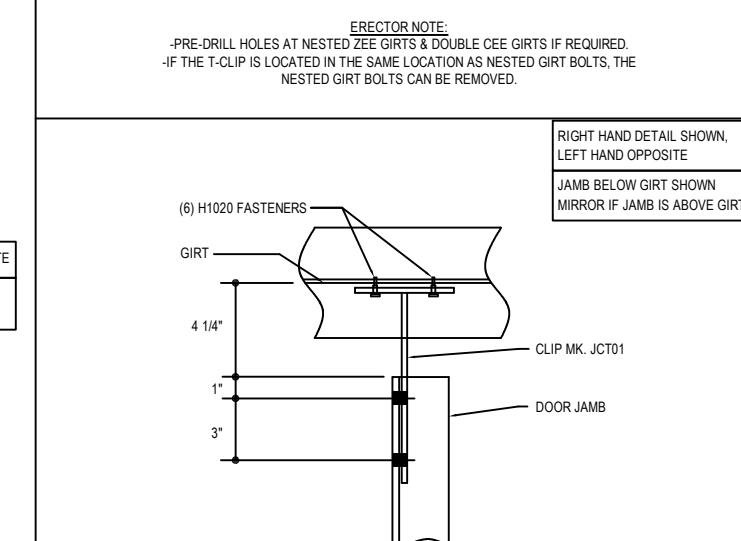
CG0039



HEADER/SILL TO JAMB CONNECTION

REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

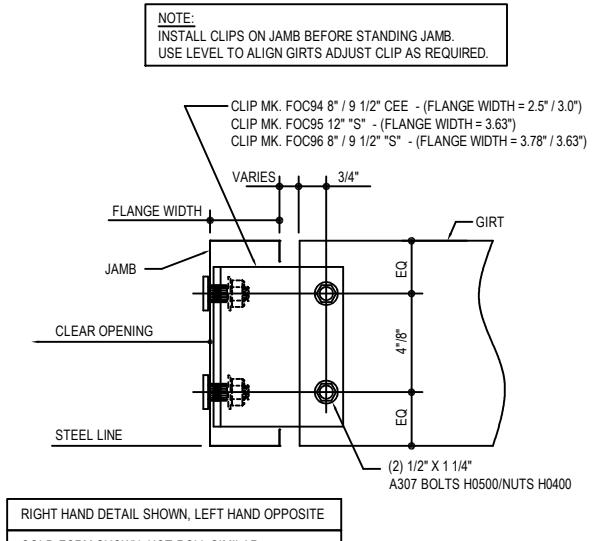
CG0050



JAMB TO ZEE GIRT w/INTERMEDIATE GIRT

NOTE: USE (4) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

CG0059



GIRT TO JAMB CONNECTION

NOTE: USE (2) 1/2" x 1 1/4" A307 BUTTON HEAD BOLTS H0510/NUTS H0400
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

CG0060

ANCHOR RODS	DIM. ANS	CHK ANS	ENG ANS	PE MBS	DATE 5/17/2024
BUILDING DEPT. REVIEW RO	TDO	ANS	ANS	ANS	5/31/2024

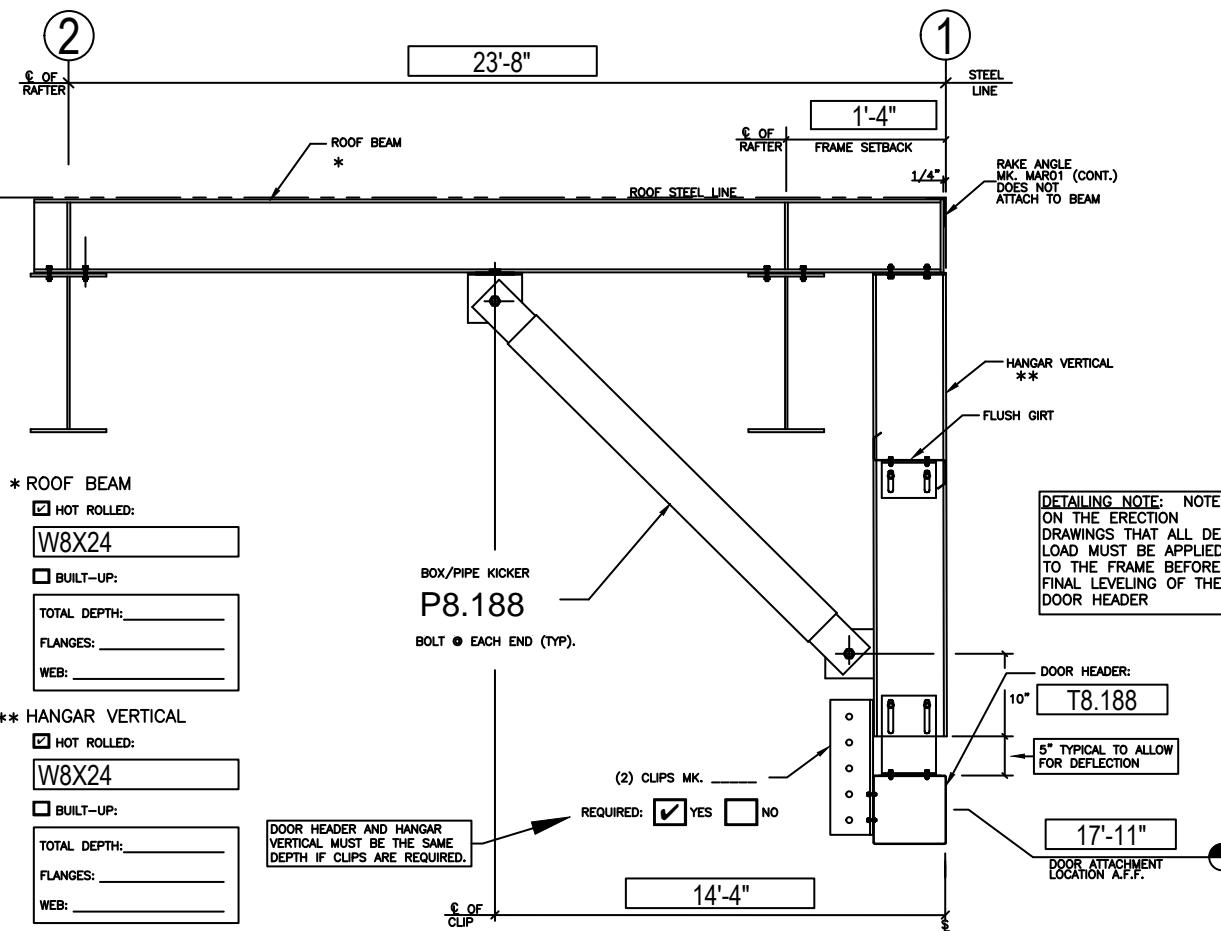


SHEET TITLE

U24U0264A



D4 OF 12



* ROOF BEAM
 HOT ROLLED:
 W8X24

BUILT-UP:
 TOTAL DEPTH:
 FLANGES:
 WEB:

** HANGAR VERTICAL

HOT ROLLED:
 W8X24

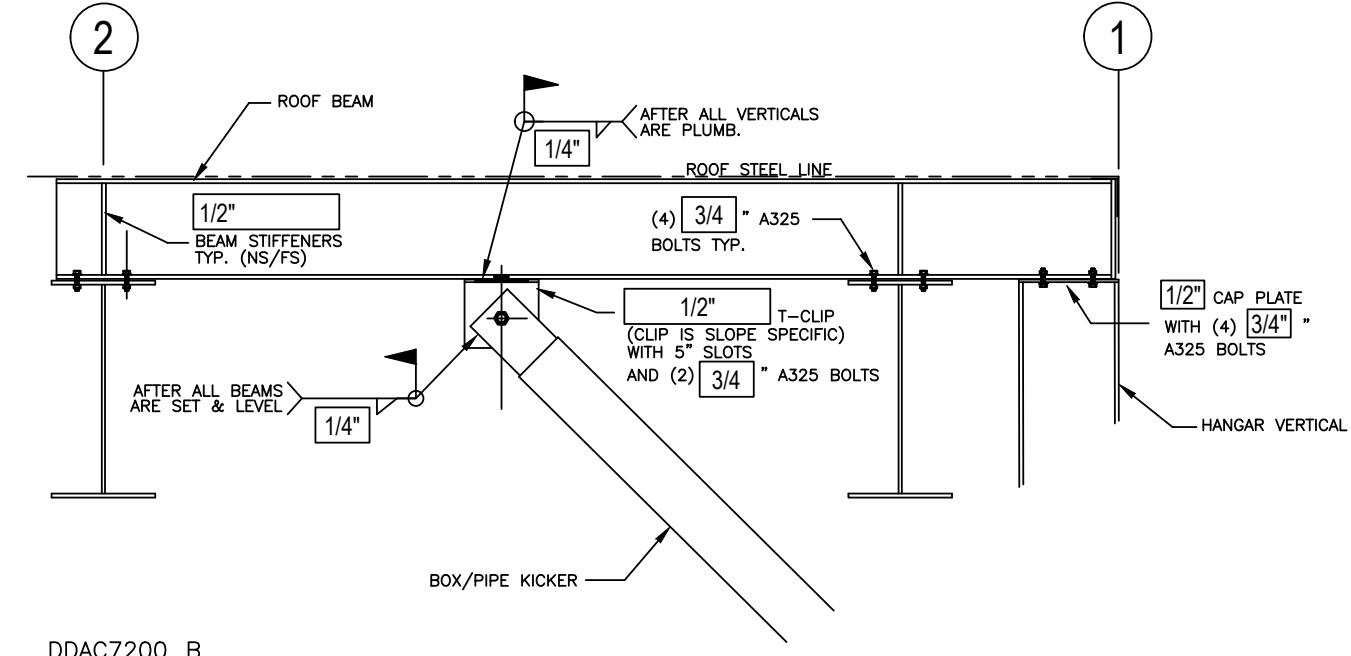
BUILT-UP:
 TOTAL DEPTH:
 FLANGES:
 WEB:

- MAX SPACING OF THIS ASSEMBLY IS 13'-6 3/16" O.C. SEE ROOF PLAN FOR LAYOUT.
- ALL THE MATERIAL SHOWN IS BY NBG UNLESS NOTED OTHERWISE
- ALL BOLTS TO BE DETAILED AT THE TOP OF SLOT, AS SHOWN

HANGAR FRAMING @ PARTIAL DEPTH STUB PARTIAL DEPTH VERTICAL STUBS w/ HEADER

DDAC7200

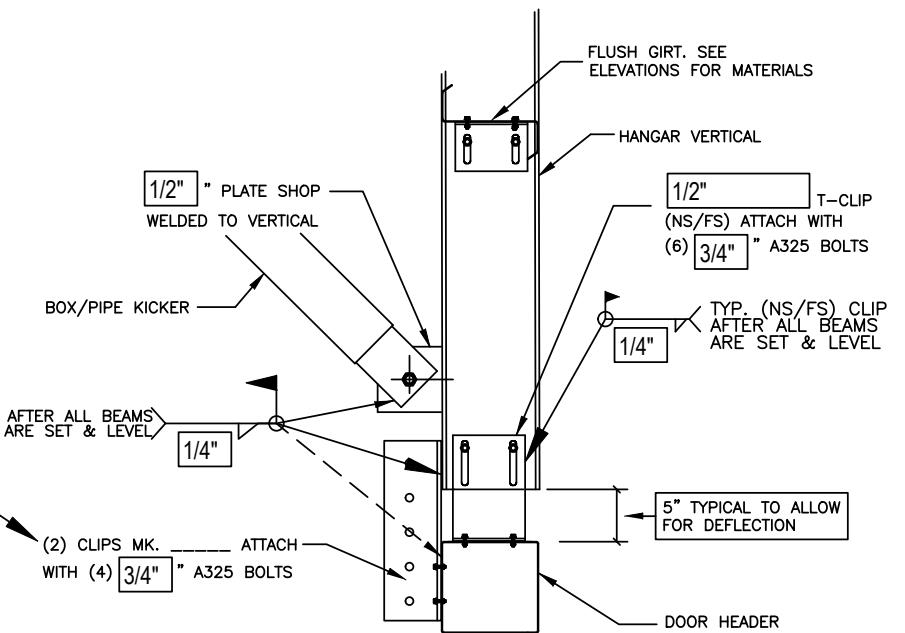
max vertical deflection under dead only = 0.65"
 max vertical total deflection (downward) = 2.13"
 max vertical total deflection (upward from wind) = 0.87"



DDAC7200_B

CLIPS CAN ONLY BE BOLTED AT HEADER SPLICES. MUST BE WELDED AT MID-SPAN HANGAR VERTICAL LOCATIONS.

DDAC7200_C



ISSUE	DRAW.	CHK	ENG	PE	DATE
ANCHOR RODS	ANS	ANS	MBS	TDO	ANS
BUILDING DEPT. REVIEW RO					5/31/2024

NUGOR
BUILDING SYSTEMS
 305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
 PHONE: (260) 837-7384
 PO BOX 1006, 200 WHISTLEBIRD RD., SWANSEA, SC 29190
 PHONE: (803) 568-2100 FAX: (803) 568-2121
 600 APACHE TRAIL, TERRELL, TX 75160
 PHONE: (972) 524-5407 FAX: (972) 524-5417
 1050 WATERY LANE, BRIGHAM CITY, UT 84302
 PHONE: (435) 918-3100 FAX: (435) 919-3101

PROJECT NAME: Zak Loosle - NS UT Employee
 CUSTOMER NAME: Zak Loosle - NS UT Employee
 PROVIDENCE, UT
 JOB NUMBER: U24U0264A
 SHEET TITLE

PROFESSIONAL ENGINEER
 No. 9056471-2202
 TREVOR WAYNE BLACK
 06/05/2024
 STATE OF UTAH

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SHEET

D5 OF 12

DESIGN AND PERFORMANCE CRITERIA

ROOF SYSTEM

THE ROOF SYSTEM CONSISTS OF 24 GAUGE PANELS WITH A NOMINAL COVERAGE OF 2'-0" AND A PANEL SEAM THAT IS 3 1/2", 4 1/2" OR 5 1/2" HIGH DEPENDING ON CLIP TYPE USED. REFER TO THE DETAILS AND SECTIONS FOR SPECIFIC PANEL CLIP TYPE.

PANEL CLIP SPACING

THE ROOF SYSTEM USES A CLIP TO ATTACH THE PANELS TO THE ROOF SECONDARY MEMBERS. PANEL CLIP SPACING REQUIREMENTS AS A STANDARD ARE REQUIRED AT EVERY PURLIN AND/OR ROOF JOIST. FOR STRUCTURES NOT SUPPLIED BY MBS: MAXIMUM CLIP SPACING IS TO BE 5'-0" FOR PURLIN ROOFS AND 5'-6" FOR JOIST ROOFS.

PANEL CLIP FASTENING REQUIREMENTS

STANDARD CLIP FASTENERS ARE DESIGNED TO FASTEN TO A STEEL STRUCTURAL MEMBER OF .060" MINIMUM THICKNESS (16 GA.). A MINIMUM OF TWO FASTENERS ARE REQUIRED TO ENGAGE THE STRUCTURAL MEMBER AT EVERY PANEL CLIP LOCATION. IN CERTAIN INSTANCES, THREE FASTENERS MAY BE REQUIRED PER CLIP. LOOK IN THE ERECTION DRAWINGS FOR YOUR SPECIFIC FASTENER REQUIREMENTS. FASTENER PULLOUT VALUES ARE DEPENDENT UPON PROJECT LOCATION, SIZE, BUILDING CODE AND LOADING.

ROOF TOP UNITS AND CURB SUPPORTS

THE ROOF SYSTEM IS ELEVATED ABOVE THE TOP OF THE ROOF SECONDARY STRUCTURAL MEMBERS. THE ROOF CURB SUB-FRAME IS LEVEL WITH THE SECONDARY STRUCTURAL MEMBERS. REFER TO THE DETAILS FOR PROPER JAMB LOCATIONS AND DIMENSIONS.

THE ROOF SYSTEM IS DESIGNED AS A FLOATING SYSTEM. CURB FRAMING AND FLASHING MUST BE DESIGNED ACCORDINGLY TO ALLOW THE CURB SYSTEM TO FLOAT WITH THE ROOF DURING THERMAL EXPANSION AND CONTRACTION. ROOF CURBS SHALL NOT SPAN THE RIDGE OF A BUILDING.

INSULATION REQUIREMENTS

INSULATION IS RECOMMENDED TO BE USED IN ALL ROOF APPLICATIONS TO AVOID PROBLEMS WITH CONDENSATION FORMING ON THE UNDERSIDE OF THE SHEETING. THIS ALSO PROVIDES A BUFFER BETWEEN THE PURLINS AND THE ROOF TO ELIMINATE NOISE AND POSSIBLE DAMAGE DUE TO METAL-TO-METAL CONTACT. NOISE REDUCING FOAM TAPE CAN BE SUPPLIED FOR USE IN LIMITED APPLICATIONS (CANOPIES, ETC.) WHEN INCLUDED AS PART OF THE ROOF ORDER. REFER TO THE DETAILS FOR FOAM TAPE REQUIREMENTS.

PAINTED ROOF

PAINTED STANDING SEAM ROOF PANELS ARE OFTEN PROVIDED BY MBS. IN THIS CASE, GUTTER BRACKETS AND OUTSIDE CLOSURES WILL BE PAINTED TO MATCH THE ROOF COLOR AS A STANDARD.

MASTIC APPLICATION

TEMPERATURE EXTREMES

TEMPERATURE EXTREMES MUST BE CONSIDERED DURING INSTALLATION OF THE ROOF DUE TO THE SENSITIVITY OF MASTICS. THE RECOMMENDED INSTALLATION TEMPERATURE RANGE IS 20-120 DEGREES FAHRENHEIT. AT COLDER TEMPERATURES, THE MASTIC STIFFENS RESULTING IN LOSS OF ADHESION AND COMPRESSIBILITY. AT HOTTER TEMPERATURES, THE MASTIC BECOMES TOO SOFT FOR PRACTICAL HANDLING. ON COLD BUT SUNNY DAYS, THE PANEL SURFACE MAY BECOME WARM ENOUGH TO ACCEPT THE APPLICATION OF HEATED MASTIC EVEN THOUGH THE AIR TEMPERATURE IS BELOW 20 DEGREES FAHRENHEIT.

WHEN OVERNIGHT TEMPERATURES FALL BELOW FREEZING, THE MASTIC SHOULD BE STORED IN A HEATED ROOM SO IT WILL BE WARM ENOUGH TO USE THE FOLLOWING DAY. ON HOT DAYS, THE MASTIC CARTONS SHOULD BE STORED OFF THE ROOF IN A COOL AND SHADED AREA. WHILE ON THE ROOF, MASTIC ROLLS SHOULD BE KEPT SHADED UNTIL ACTUAL USE.

IN VERY COLD WEATHER, IT IS RECOMMENDED THAT THE FASTENERS BE TIGHTENED SLOWLY AND ONLY TIGHT ENOUGH THAT THE MASTIC IS IN FULL CONTACT WITH THE PANEL OR FLASHING. THEN ON THE NEXT SUNNY DAY, COMPLETE THE TIGHTENING PROCESS AFTER THE SUN WARMS THE PANEL AND FLASHING SURFACES.

CONTAMINATION

TO ASSURE PROPER ADHESION AND SEALING, THE MASTIC MUST HAVE COMPLETE CONTACT WITH ADJOINING SURFACES. CONTAMINANTS SUCH AS WATER, OIL, DIRT AND DUST PREVENT SUCH CONTACT. THE PANEL AND FLASHING SURFACES MUST BE DRY AND THOROUGHLY CLEANED OF ALL CONTAMINANTS. BEFORE APPLYING TAPE MASTIC, THE MASTIC SHOULD BE CHECKED FOR CONTAMINANTS. IF THE MASTIC SURFACES ARE CONTAMINATED, IT MUST NOT BE USED.

DURING COOL WEATHER, CONDENSATION OR LIGHT MIST CAN ACCUMULATE ON THE PANEL AND FLASHING SURFACE AND NOT BE EASILY NOTICED. IT IS RECOMMENDED THAT THE MASTICS ALWAYS BE KEPT UNDER PROTECTIVE COVER AND THAT THE PANEL AND FLASHING SURFACES BE WIPE DRY IMMEDIATELY BEFORE INSTALLATION.

TAPE MASTIC IS PROVIDED WITH A PROTECTIVE PAPER TO REDUCE CONTAMINATION. INCOMPLETE REMOVAL OF THE PROTECTIVE PAPER WILL PREVENT THE MASTIC ADHESION TO THE PANEL OR FLASHING SURFACES. ALWAYS CHECK THAT THE PROTECTIVE PAPER IS COMPLETELY REMOVED. DO NOT REMOVE THE PROTECTIVE PAPER UNTIL IMMEDIATELY BEFORE THE PANEL OR FLASHING IS INSTALLED OVER THE MASTIC.

COMPRESSION

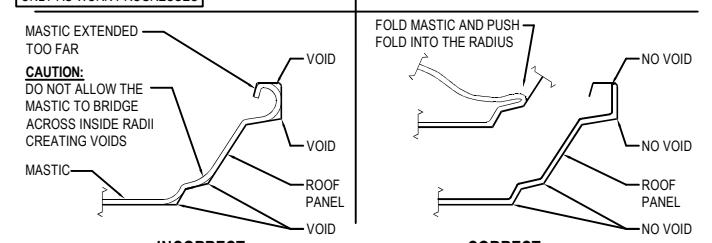
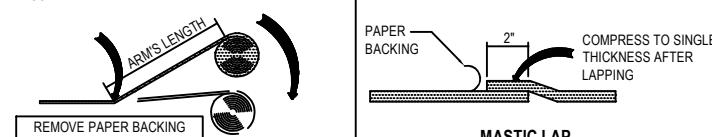
TO ASSURE PROPER COMPRESSION AND SEAL, THE TAPE MASTIC MUST BE COMPRESSED BETWEEN THE PANEL AND FLASHING SURFACES WITH FIRM AND UNIFORM PRESSURE. IN MOST CASES, THE REQUIRED PRESSURE IS APPLIED BY THE CLAMPING ACTION OF SCREWS PULLING THE ADJOINING SURFACES TOGETHER. HOWEVER, THE TAPE SEALANT'S RESISTANCE TO PRESSURE BECOMES GREATER IN COLD WEATHER.

DURING COLD WEATHER, THE FASTENERS MUST BE TIGHTENED SLOWLY TO ALLOW THE MASTIC TIME TO COMPRESS. IF THE FASTENERS ARE TIGHTENED TOO FAST, THE FASTENERS MAY STRIP OUT BEFORE THE MASTIC COMPRESSES ADEQUATELY, OR THE PANEL OR FLASHING MAY DEFORM IN THE IMMEDIATE AREA OF THE FASTENER, LEAVING THE REST OF THE MASTIC INSUFFICIENTLY COMPRESSED.

INSIDE CORNERS

AN INSIDE RADIUS, SUCH AS WHERE THE PANEL FLAT MEETS A RIB, IS USUALLY THE MOST CRITICAL AREA TO SEAL. A COMMON MISTAKE FOR THE INSTALLER IS TO BRIDGE THE MASTIC ACROSS THE INSIDE RADIUS.

WHEN THE LAPPING PANEL OR FLASHING IS PUSHED INTO PLACE, THE BRIDGED MASTIC IS STRETCHED AND THINNED. THE MASTIC MAY THEN BE TOO THIN TO ADEQUATELY SEAL THIS CRITICAL AREA. WHEN TAPE MASTIC IS APPLIED AT AN INSIDE RADIUS, IT IS RECOMMENDED THAT THE MASTIC BE FOLDED BACK, THEN PUSH THE MASTIC FOLD INTO THE RADIUS.



ERECTOR'S RESPONSIBILITY

REGULATIONS

REGULATIONS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ACT, LOCAL, STATE, AND/OR FEDERAL AGENCIES SHOULD BE ADHERED TO AT ALL TIMES. MBS IS NOT RESPONSIBLE FOR INJURY, DAMAGE, OR FAILURE, WHICH MAY BE THE RESULT FROM FAILING TO MEET ANY OF THESE REGULATIONS.

IN COMPLIANCE WITH THE HAZARD COMMUNICATION RULE 1910.1200, MATERIAL SAFETY DATA SHEETS (MSDS) HAVE BEEN PROVIDED FOR YOUR USE AND SAFETY. THESE DATA SHEETS SHOULD BE MADE AVAILABLE TO ALL PERSONNEL THAT COME IN CONTACT WITH THESE PRODUCTS. THESE DATA SHEETS WILL GIVE YOU THE NECESSARY INFORMATION TO PROPERLY HANDLE SUCH MATERIALS AND WHAT TO DO IN CASE OF AN EMERGENCY. (THE MSDS SHEETS ARE LOCATED ONLINE AND ARE AVAILABLE UPON REQUEST).

THE ERECTOR OF THE ROOF SYSTEM IS RESPONSIBLE FOR THE SAFE EXECUTION OF THIS DETAIL. THESE INSTRUCTIONS ARE INTENDED TO DESCRIBE THE SEQUENCE AND PROPER PLACEMENT OF PARTS. THEY ARE NOT INTENDED TO PRESCRIBE COMPREHENSIVE SAFETY PROCEDURES. THE PROCEDURES IN THIS DETAIL ARE BELIEVED TO BE RELIABLE. HOWEVER, MBS SHALL NOT BE RESPONSIBLE FOR INJURY, DAMAGE, OR FAILURE DUE TO THE MISAPPLICATION OF THESE PROCEDURES, IMPROPER ERECTION TECHNIQUES, OR NEGLIGENCE.

WALKING AND WORKING ON ROOF PANELS

DO NOT PLACE BUNDLES OF PANELS ON THE ROOF STRUCTURE WITHOUT FIRST VERIFYING THE STRUCTURE WILL SAFELY SUPPORT THE CONCENTRATED WEIGHT OF THE PANELS AND THE WEIGHT OF THE INSTALLATION CREW. SOME ROOF STRUCTURES MAY NOT BE DESIGNED TO SUPPORT THE WEIGHT OF A FULL PANEL BUNDLE WITHOUT ADDITIONAL STRUCTURE SUPPORT.

DO NOT USE A ROOF PANEL AS A WORKING PLATFORM. AN UNSECURED PANEL COULD COLLAPSE UNDER THE WEIGHT OF A PERSON STANDING BETWEEN PURLINS OR AT THE PANEL END.

DO NOT WALK ON THE LAST INSTALLED PANEL RUN, AS THE UNSECURED EDGE COULD COLLAPSE UNDER A PERSON'S WEIGHT. WHEN INSTALLING CLIPS OR MAKING END LAP CONNECTIONS, ETC., STAND WHERE THE ROOF STRUCTURAL WILL SUPPORT YOUR WEIGHT.

AN APPROVED AND SAFE WALKING PLATFORM SHOULD BE USED IN HIGH TRAFFIC AREAS TO PREVENT THE ROOF PANEL FROM BEING DEFORMED, SCRATCHED, OR SCUFFED.

SAFETY EQUIPMENT

THE USE OF SAFETY EQUIPMENT FOR THE ROOF PANEL INSTALLATION IS RECOMMENDED AT ALL TIMES DURING THE INSTALLATION PROCESS. HOWEVER, WHEN USING LANYARDS, ENSURE THAT THE CLASP, BELT HOOKS AND WIRE CABLES ARE COVERED IN SUCH A MANNER THAT THEY WILL NOT SCRATCH THE PANEL SURFACE IF ACCIDENTALLY DRAGGED ALONG THE PANEL.

CREW SIZE

THE LENGTH OF THE INDIVIDUAL ROOF PANELS SHOULD BE CONSIDERED WHEN DETERMINING CREW SIZE. IT IS RECOMMENDED THAT UNDER NORMAL CONDITIONS, THERE BE ONE PERSON FOR EVERY TEN FEET OF PANEL LENGTH, PLUS ONE.

PANEL OVERHANG

DO NOT STAND ON THE END OF UNSUPPORTED (CANTILEVERED) PANELS AT THE EAVE OR RIDGE. STANDING ON THE CANTILEVER PORTION MAY RESULT IN PANEL COLLAPSE.

POINT LOADS

WHEN PROPERLY SUPPORTED BY THE STRUCTURAL STEEL, PANELS ARE DESIGNED TO SUPPORT UNIFORM LOADS, WHICH ARE EVENLY DISTRIBUTED OVER THE PANEL SURFACES. POINT LOADS THAT OCCUR IN SMALL OR CONCENTRATED AREAS, SUCH AS HEAVY EQUIPMENT, LADDER, OR PLATFORM FEET, ETC., MAY CAUSE PANEL DEFORMATION OR EVEN PANEL COLLAPSE.

SLICK SURFACES

PANEL SURFACES AND STRUCTURAL STEEL SURFACES ARE HARD, SMOOTH, AND NONABSORBENT, WHICH CAUSES THESE SURFACES TO BE VERY SLICK WHEN WET OR COVERED WITH SNOW OR ICE. EVEN BLOWING SAND OR HEAVY DUST CAN MAKE THESE SURFACES DIFFICULT TO WALK ON WITHOUT SLIPPING.

UNPAINTED PANEL SURFACES ARE OFTEN COATED WITH OIL TO ACCOMMODATE THE PANEL-FABRICATION PROCESS. ALTHOUGH DESIGNED TO WASH AWAY OR EVAPORATE DURING NORMAL WEATHER, THE OIL ON NEW PANELS CAN BE EXTREMELY SLICK, ESPECIALLY DURING PERIODS OF LIGHT RAIN AND DEW.

CAUTION MUST BE EXERCISED TO PREVENT SLIPPING AND FALLING ONTO THE ROOF SURFACE OR EVEN SLIDING OFF THE ROOF. NON-SLIP FOOTWEAR IS A NECESSITY AND NON-SLIP WORKING PLATFORMS ARE RECOMMENDED.

ELECTRICAL CONDUCTANCE

METAL PANELS ARE EXCELLENT ELECTRICAL CONDUCTORS. A COMMON CAUSE OF INJURY IS THE CONTACT OF METAL PANELS WITH POWER LINES DURING HANDLING AND INSTALLATION. THE LOCATION OF ALL POWER LINES MUST BE NOTED AND, IF POSSIBLE, FLAGGED. THE INSTALLATION PROCESS MUST BE ROUTED TO AVOID ACCIDENTAL CONTACT WITH ALL POWER LINES AND HIGH VOLTAGE SERVICES AND EQUIPMENT. ALL TOOLS AND POWER CORDS MUST BE PROPERLY INSULATED AND GROUNDED AND THE USE OF APPROVED GROUND FAULT CIRCUIT BREAKERS IS RECOMMENDED.

FALSE SECURITY OF INSULATION

BLANKET AND RIGID BOARD INSULATION BLOCK THE INSTALLER'S VIEW OF THE GROUND BELOW THE ROOF. SERIOUS INJURY CAN OCCUR WHEN THE INSTALLER GETS A FALSE SENSE OF SECURITY BECAUSE HE CANNOT SEE THE GROUND AND STEPS THROUGH THE INSULATION.

SHARP EDGES

SOME EDGES OR PANELS AND FLASHING ARE RAZOR SHARP AND CAN CAUSE SEVERE CUTS IF PROPER PROTECTIVE HAND GEAR IS NOT WORN. BE CAREFUL NOT TO INJURE OTHERS WHILE MOVING PANELS AND FLASHING.

COORDINATION WITH OTHER TRADES

SUPPORTS FOR THE ROOF SYSTEM SHALL BE PROVIDED AND ARE REQUIRED AS SHOWN IN THE SECTIONS AND AS NOTED IN THESE SPECIFICATIONS. ALL NECESSARY CLEARANCE DIMENSIONS FOR PROPER ELEVATIONS RELATIVE TO THE ROOF PANELS HAVE BEEN SHOWN. THE ERECTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE DIMENSIONAL REQUIREMENTS WITH OTHER TRADES ASSOCIATED WITH THE BUILDING ROOF SYSTEM.

ERECTION CARE

THE ERECTOR MUST BE SKILLED IN THE ERECTION OF METAL BUILDING SYSTEMS AND IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, FEDERAL AND STATE CONSTRUCTION AND SAFETY REGULATIONS INCLUDING OSHA REGULATIONS AS WELL AS ANY APPLICABLE REQUIREMENTS OF LOCAL, NATIONAL OR INTERNATIONAL UNION RULES OR PRACTICES. THE ERECTOR REMAINS SOLELY RESPONSIBLE FOR THE SAFETY AND APPROPRIATENESS OF ALL TECHNIQUES AND METHODS UTILIZED BY ITS CREWS IN THE ERECTION OF THE METAL BUILDING SYSTEM AND/OR THE ROOF SYSTEM. THE ERECTOR IS ALSO RESPONSIBLE FOR SUPPLYING ANY SAFETY DEVICES SUCH AS SCAFFOLDS, RUNWAYS, NETS, ETC. WHICH MAY BE REQUIRED TO SAFELY ERECT THE METAL BUILDING SYSTEM AND/OR ROOF SYSTEM.

THE ERECTOR OF THE ROOF SYSTEM SHALL EXERCISE GREAT CARE AND ATTENTION TO THE DETAILS AS SHOWN ON THESE DRAWINGS TO INSURE A SECURE AND PROPER FIT OF ALL COMPONENTS. MBS SHALL NOT BE RESPONSIBLE FOR SUPERVISING AND/OR COORDINATING THE ERECTION OF THE ROOF SYSTEM WITH OTHER TRADES.

DOE CONSIDERATION MUST BE GIVEN BY THE ERECTOR TO THE EFFECTS OF THERMAL EXPANSION AND CONTRACTION WHEN ERECTING A ROOF TIE-IN TO AN EXISTING STRUCTURE TO INSURE A SAFE, SECURE, WEATHER TIGHT CONDITION. FLASHING FOR TIE-INS TO EXISTING BUILDINGS IS TYPICALLY NOT INCLUDED AS PART OF THE MATERIAL PROVIDED BY MBS. REFER TO THE SECTIONS/DETAILS FOR SPECIFIC MATERIALS PROVIDED BY MBS.

THERMAL BLOCKS

PURPOSE

THERMAL BLOCKS ARE USED IN BOTH INSULATED AND UN-INSULATED CONDITIONS. THEY PROVIDE IMPROVED THERMAL PERFORMANCE WHERE INSULATION HAS BEEN COMPRESSED AT THE SECONDARY MEMBERS UNDER THE PANEL. THEY ALSO PROVIDE SUPPORT TO THE PANEL AND REDUCE PANEL FLUTTERING AND RUMBLE IN UN-INSULATED CONDITIONS. UN-INSULATED CONDITIONS UTILIZE THERMAL BLOCKS OR FOAM SPACERS THAT HAVE ADHESIVE TO ADHERE TO THE SECONDARY MEMBER TO PREVENT THEM FROM FALLING OUT OF PLACE.

LOCATIONS

THERMAL BLOCKS OR FOAM SPACERS ARE TO BE USED OVER ANY SECONDARY MEMBER WITH THE EXCEPTION OF THE EAVE MEMBER WHERE THE EAVE PLATE IS LOCATED.

INSULATED ROOF

INSULATION	BLOCK	CLIP		
R	THICK	MK #	THICK	CLIP
R7	2"	N/A	N/A	SHORT
R10	3 3/8"	N/A	N/A	SHORT
R11	3 3/4"	N/A	N/A	SHORT
R13	4 3/8"	H3301	1"	TALL
R16	5 1/4"	H3301	1"	TALL
R19	6 3/8"	H3301	1"	TALL
R25	8"	H3301	1"	TALL
R30	9 1/4"	H3301	1"	SUPER TALL
R32	10"	H3301	1"	SUPER TALL
R35	11 1/2"	H3301	1"	SUPER TALL
R38	12"	H3301	1"	SUPER TALL

UN-INSULATED ROOF

BLOCK	CLIP
H3310	1/2" SHORT
H3305	1 1/2" TALL
H3307	2 1/2" SUPER TALL

NOTE:
PANEL CLIPS NOT SHOWN FOR CLARITY

ROOF SYSTEM COMPONENT WITH DETAILING

DEFINITION

COMPONENTS WITH DETAILING DEFINITION IS A CASE WHERE MBS IS PROVIDING THE ROOF SYSTEM TO BE USED IN CONJUNCTION WITH ANOTHER STRUCTURE. MBS REFERS TO THAT AS A "COMPONENTS WITH DETAILING." THIS SIMPLY MEANS THAT MBS SHALL CALCULATE THE QUANTITIES AND LENGTHS FOR THE MATERIAL REQUIRED. MBS IS PERFORMING NO ENGINEERING STUDY OF THE EXISTING STRUCTURE. THE ENGINEER OF RECORD ON THE PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE ROOF SYSTEM WITH THE OTHER TRADES OF THE PROJECT TO INSURE A SAFE, QUALITY AND PROPER APPLICATION OF THE ROOF SYSTEM.

DIAPHRAGM

BASIC INSTALLATION SEQUENCE

THE FOLLOWING STEPS OUTLINE THE BASIC INSTALLATION OF THE ROOF SYSTEM. REFERENCE THE SPECIFIC DETAILS WITHIN THIS ERECTION DRAWING SET FOR CONDITIONS SPECIFIC TO THIS PROJECT.

START PANEL PREPARATION

THE ROOF SYSTEM IS DESIGNED TO BE ELEVATED AND FLOAT ABOVE THE ROOF SUPPORT MEMBERS. BEGIN AT THE LOWER RAKE CORNER BY INSTALLING THE EAVE PLATE. (REFERENCE EAVE PLATE INSTALLATION BELOW)

AFTER EAVE PLATE HAS BEEN INSTALLED, STITCH THE FIRST ROLL OF ROOF INSULATION FROM RIDGE / HIGH EAVE TO LOW EAVE.

INSTALL THE RAKE CLIPS AND RAKE ANGLE TO SUPPORT / SECURE THE START PANEL. (REFERENCE RAKE ANGLE / RAKE CLIP PREPARATION TO THE RIGHT)

FIELD CUT AND INSTALL START PANEL

THE START PANEL IS SUPPLIED AS A FULL SHEET AND WILL NEED TO BE CUT. REFER TO THE ROOF SHEETING PLAN FOR START / FINISH DIMENSIONS AND RAKE DETAILS TO DETERMINE PROPER PANEL CUT. INSTALL THE START PANEL (LOW EAVE PANEL FIRST IF PANEL RUN IS LONG ENOUGH TO REQUIRE ENDLAPS) BY SECURING THE PANEL TO THE EAVE PLATE AND RAKE ANGLE. (REFERENCE LOW EAVE AND RAKE DETAILS). INSTALL PANEL CLIPS ON LEADING EDGE OF PANEL AS SHOWN IN THE PANEL CLIP DETAIL. CONTINUE TO INSTALL UPSLOPE START PANEL IF ENDLAPS ARE REQUIRED. REFERENCE THE BACKUP PLATE DETAIL AND ENDLAP DETAIL FOR ATTACHMENT OF START PANEL(S) AT RAKE ANGLE.

INTERMEDIATE PANEL & MODULARITY

THE INTERMEDIATE PANELS (FULL PANELS) SHOULD BE INSTALLED BY ROLLING THE PANEL INTO PLACE ENSURING THE SEAM IS FULLY ENGAGED. SECURE THE PANELS WITH PANEL CLIPS AND THE LOW EAVE ACROSS THE ROOF. IT IS RECOMMENDED TO INSTALL THE OUTSIDE CLOSURE AT THE HIGH EAVE / RIDGE AS THE ROOF PROGRESSES. THIS WILL HELP MAINTAIN MODULARITY. (REFERENCE HIGH EAVE / RIDGE DETAILS)

FINISH PANEL

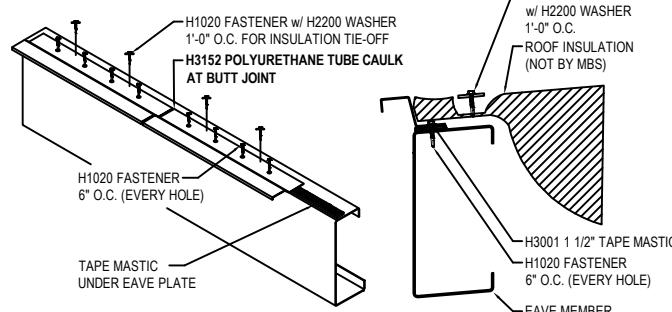
THE FINISH PANEL IS SIMILAR TO THE START PANEL INSTALLATION. THE RAKE ANGLE CLIPS AND RAKE ANGLE NEEDS TO BE INSTALLED ON TOP OF THE INSULATION PRIOR TO INSTALLING THE FINISH PANEL. THE FINISH PANEL SHOULD BE FIELD CUT AND ROLLED INTO PLACE AND SECURED TO THE RAKE ANGLE SIMILAR TO THE START PANEL.

TRIM INSTALLATION

TRIM INSTALLATION CAN BE DONE AFTER THE ROOF PANELS ALL HAVE BEEN INSTALLED OR CAN BE INSTALLED AS ENOUGH PANELS HAVE BEEN INSTALLED FOR ATTACHMENT OF TRIMS. (REFERENCE TRIM DETAILS)

EAVE PLATE INSTALLATION

PLACE TAPE MASTIC ON TOP OF EAVE MEMBER PRIOR TO INSTALLING EAVE PLATE. INSTALL EAVE PLATE BY FASTENING EVERY HOLE TO EAVE MEMBER (6" O.C.) PRIOR TO INSULATION BEING INSTALLED. SECURE INSULATION WITH FASTENER & INSULATION RETAINER WASHER. NOTE: IF NO ROOF INSULATION IS USED SECURE EAVE PLATE IN EVERY HOLE (6" O.C.)

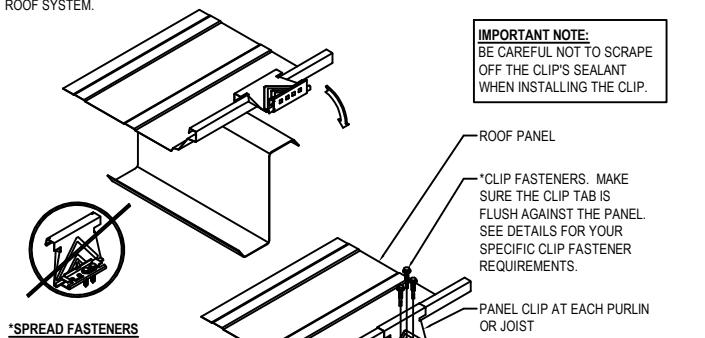


NOTE: H1020/H1070 (PURLIN/JOIST) FASTENER w/ H2200 WASHER
1"-0" O.C. FOR INSULATION TIE-OFF PROVIDED AT HIGH SIDE / RIDGE

SHORT EAVE PLATE	TALL EAVE PLATE	SUPER TALL EAVE PLATE
EPS108	BASIC EAVE / GUTTER	EPT108

PANEL CLIP INSTALLATION

BEFORE INSTALLING THE PANEL CLIP, FEEL FOR THE SUPPORT MEMBER BELOW THE INSULATION. ALIGN CLIP CENTERED OVER THE SUPPORT MEMBER AND ROLL CLIP OVER THE MALE HOOK OF THE PANEL. FASTEN CLIP WITH FASTENERS AS SPECIFIED IN THE DETAILS BASED ON THE SUPPORT MEMBER AND INSULATION UTILIZED FOR THE ROOF SYSTEM.



*SPREAD FASTENERS APART AS FAR AS POSSIBLE. AVOID PLACING FASTENERS SIDE BY SIDE.

**THERMAL BLOCKS AND INSULATION NOT SHOWN FOR CLARITY

CLIP FASTENER SELECTION

R-Boost™ APPLICATION SEE DETAIL FA2010

PURLIN APPLICATION
H1020 FOR INSULATION ≤R-19 (6 3/8")
H1025 FOR INSULATION >R-19 (6 3/8") AND ≤R-38 (12")

JOIST APPLICATION
H1070 FOR INSULATION ≤R-19 (6 3/8")
H1075 FOR INSULATION >R-19 (6 3/8") AND ≤R-38 (12")

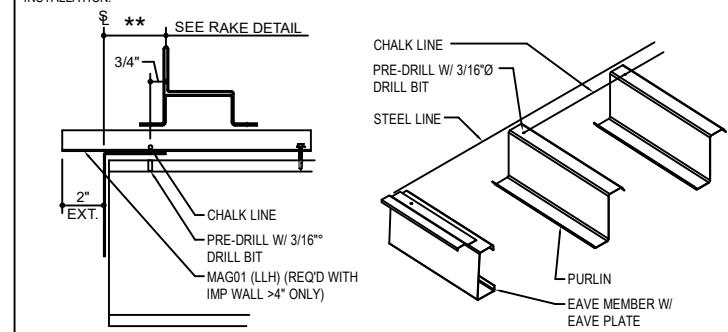
STANDARD CLIPS	PERIMETER CLIPS
PART #	PART DESCRIPTION
H2500	SHORT FIXED CLIP
H2510	TALL FIXED CLIP
H2520	SHORT SLIDING CLIP
H2530	TALL SLIDING CLIP
H2540	SUPER TALL SLIDING CLIP
	H2700

RAKE ANGLE / RAKE CLIP PREPARATION

PRIOR TO INSTALLING THE ROOF INSULATION THE SECONDARY MEMBER WILL NEED TO BE PRE-DRILLED FOR THE RAKE CLIPS. PRE-DRILLING WILL MAKE INSTALLATION OF THE RAKE AND CLIPS MUCH EASIER AFTER INSULATION IS IN PLACE. DO NOT INSTALL RAKE CLIPS UNTIL INSULATION (IF REQUIRED) IS INSTALLED. **RAKE CLIP IS INSTALLED ON TOP OF THE INSULATION.**

SNAP A CHALK LINE AS SHOWN BELOW FROM HIGH EAVE / RIDGE TO LOW EAVE. DRILL 3/16" Ø HOLE CENTERED ON SECONDARY MEMBER. THIS HELPS TO ALIGN THE START PANEL.

NOTE: IMP WALL PANEL >4" THICK REQUIRE ANGLES ON TOP OF SECONDARY MEMBER EXTENDED BEYOND STEEL LINE TO ALLOW FOR RAKE CLIP ATTACHMENT. ATTACH WITH (1) H1020 / H1070 TO PURLIN / JOIST PRIOR TO RAKE CLIP INSTALLATION.

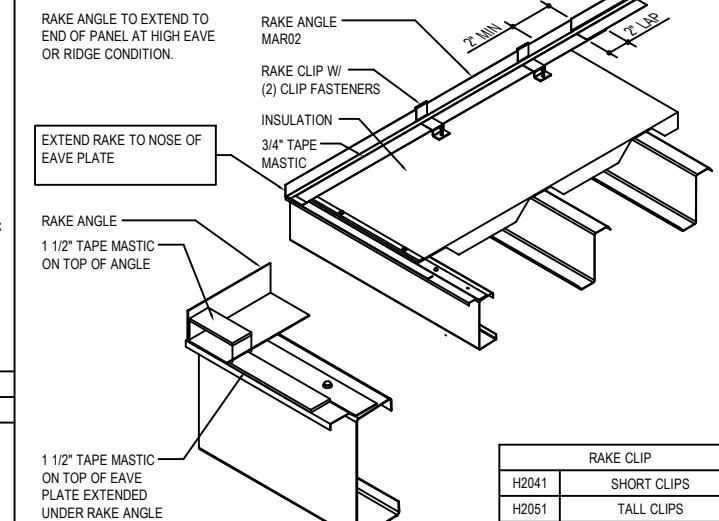


RAKE ANGLE / RAKE CLIP INSTALLATION

AFTER INSULATION IS IN PLACE AND PRIOR TO INSTALLING THE RAKE CLIPS AND RAKE ANGLE APPLY 1 1/2" TAPE MASTIC ON TOP OF THE EAVE PLATE BUT ONLY REMOVE PAPER BACKING WHERE THE RAKE ANGLE WILL REST. THIS WILL SEAL BETWEEN THE EAVE PLATE AND THE RAKE ANGLE.

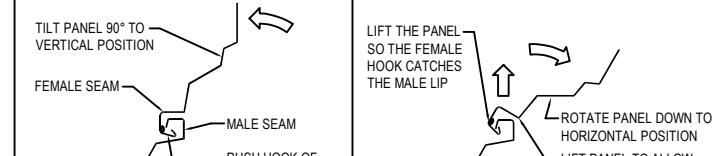
SLIDE RAKE CLIPS ONTO RAKE ANGLE PRIOR TO SECURING THE CLIPS TO THE SECONDARY MEMBERS. PLACE THE RAKE CLIPS AND ANGLE OVER THE INSULATION USING A SMALL DRIFT PIN TO LOCATE THE PRE-DRILLED HOLE. INSTALL FASTENER THROUGH OPPOSITE CLIP HOLE INTO SECONDARY MEMBER. REMOVE DRIFT PIN AND INSTALL SECOND FASTENER TO SECURE CLIP. NOTE: (2) SCREWS ARE REQUIRED IN EVERY CLIP. DO NOT CUT INSULATION OUT FROM AROUND THE CLIP.

PLACE ADDITIONAL PIECE OF 1 1/2" TAPE MASTIC ON TOP OF RAKE ANGLE AND MARRY INTO EAVE PLATE MASTIC. NEXT RUN 3/4" TAPE MASTIC ALONG BEND OF RAKE ANGLE.



PANEL INSTALLATION

THE PANEL IS DESIGNED TO INTERLOCK AND HOOK TOGETHER AT THE SEAM. IN ORDER TO HOOK THE PANEL, LAY PANEL WITH FEMALE RIB OVER TOP OF THE MALE RIB. TILT THE LEADING PANEL UP UNTIL THE HOOK CATCHES THE LIP OF THE MALE RIB. ROTATE THE PANEL DOWN WHILE ENSURING THE PANEL HOOKS ENGAGED COMPLETELY UP THE RIB OF THE PANEL.

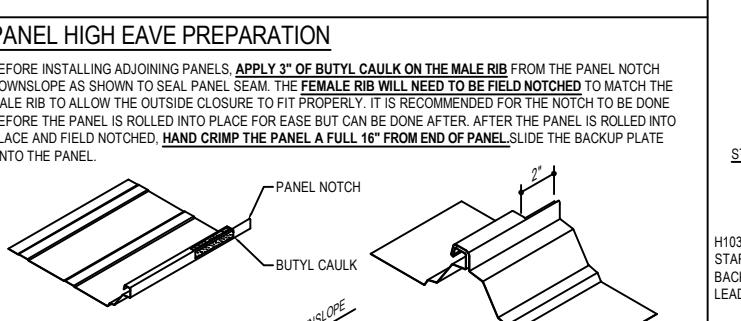
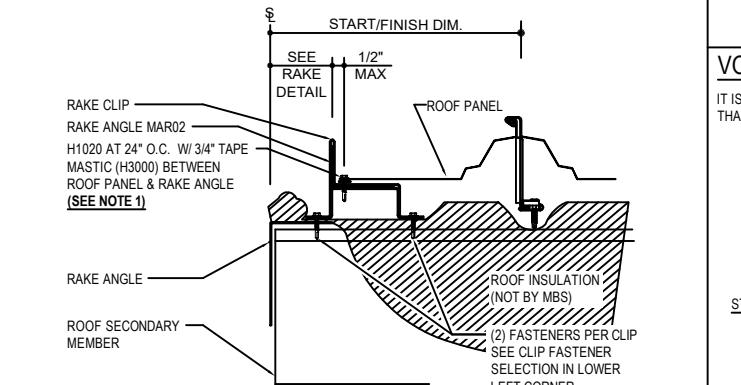
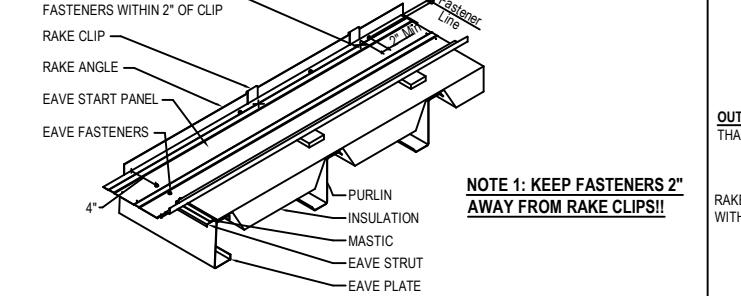
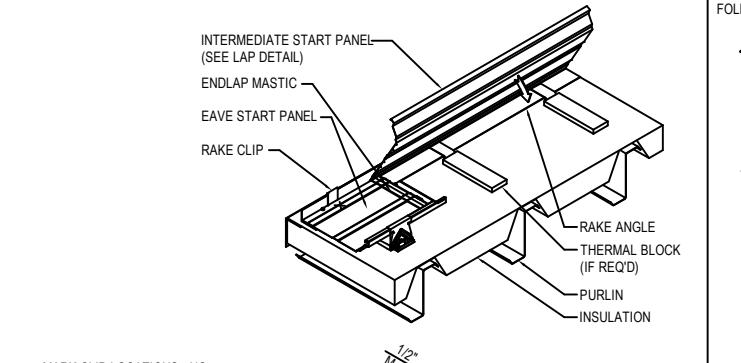
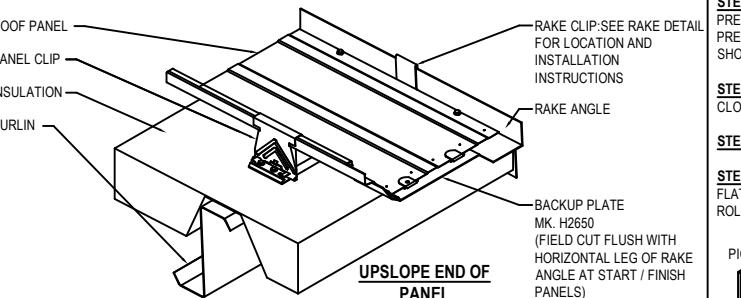


CHECK THAT MALE LIP IS FULLY ENCLOSED BY THE FEMALE HOOK.



BACKUP PLATE INSTALLATION

THE BACKUP PLATE PROVIDES SUPPORT AT THE ENDLAP AND HIGH SIDE OF THE PANEL TO ALLOW FOR COMPRESSION OF SEALANTS. THE BACK UP PLATE HAS NOTCHES THAT SLIDE ONTO THE PANEL TO LOCATE AND HOLD THE BACKUP PLATE IN PLACE. AT THE RAKE CONDITION, THE BACKUP PLATE IS TO BE FIELD CUT FLUSH WITH THE HORIZONTAL LEG OF THE RAKE ANGLE. DO NOT EXTEND BACKUP PLATE ON TOP OF RAKE ANGLE.



INSTALLATION VIDEO

SCAN THE QR CODE BELOW TO ACCESS THE INSTALLATION VIDEO THAT WILL GUIDE YOU STEP BY STEP THROUGH ROOF SYSTEM INSTALLATION. FOR FURTHER GUIDANCE CONTACT YOUR LOCAL DIVISION.



OUTSIDE CLOSURE MASTIC INSTALLATION

START & FINISH PANEL NOTE: OUTSIDE CLOSURE CANNOT BE INSTALLED IN THE START / FINISH PANEL UNTIL THE RAKE TRIM IS INSTALLED.

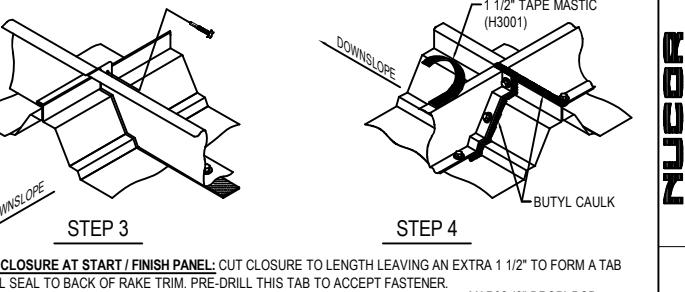
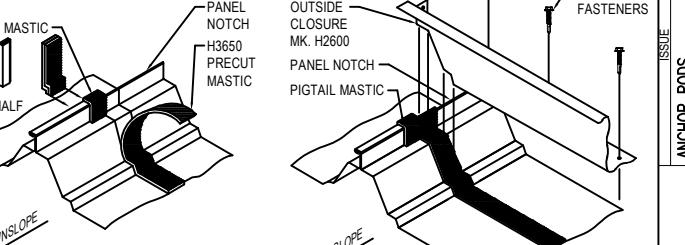
MODULARITY NOTE: OUTSIDE CLOSURE MUST BE INSTALLED AS ROOF PROGRESSES. AS NEXT PANEL IS INSTALLED, CLOSURE MUST BE INSTALLED IN THE PREVIOUS PANEL RUN.

STEP 1: APPLY THE PRECUT MASTIC ACROSS THE PANEL WITH THE BOTTOM OF THE MASTIC IN LINE WITH THE NOTCH. PRESS THE MASTIC INTO THE CORNERS OF THE TRAPEZOID TO ENSURE THERE ARE NO GAPS. CUT A 3" PIECE OF THE PRECUT MASTIC TO PLACE A PIGTAIL AROUND THE PANEL RIB WHERE THE NOTCH IS LOCATED. FOLD PIGTAIL AS SHOWN AND PRESS INTO VOID UNDER SEAM. MARRY PIGTAIL TO PRECUT AND SEAL END OF PANEL SEAM.

STEP 2: ALIGN THE OUTSIDE CLOSURE WITH THE NOTCH AND SEAT INTO THE PRECUT MASTIC. ATTACH THE OUTSIDE CLOSURE THROUGH THE PREPUNCHED HOLES THROUGH THE PANEL AND INTO THE BACKUP PLATE.

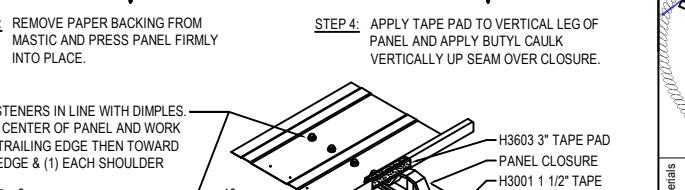
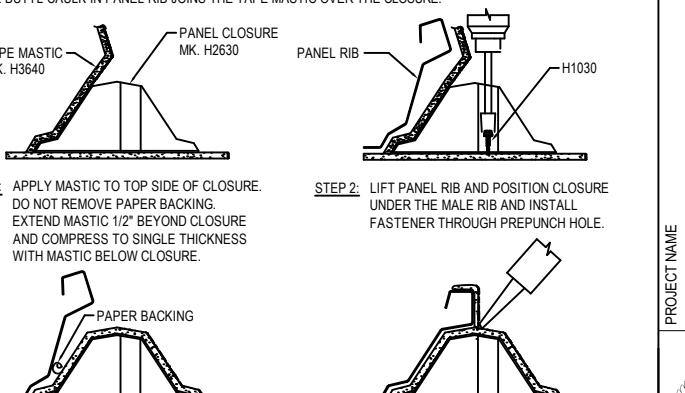
STEP 3: INSTALL FASTENER THROUGH RIB INTO ADJACENT OUTSIDE CLOSURE TO DRAW THEM TOGETHER.

STEP 4: PRIOR TO INSTALLING TRIM, APPLY BUTYL CAULK DOWN PROFILE OF TRAPEZOID AND 1" MIN ONTO PANEL FLAT. ALSO APPLY BUTYL CAULK FULL LENGTH OF NOTCH AND ACROSS JOINT OF ADJACENT OUTSIDE CLOSURES. ROLL OUT TAPE MASTIC ACROSS TOP OF OUTSIDE CLOSURES FOR TRIM SEALANT.



VOID CLOSURE INSTALLATION

IT IS CRITICAL TO ENSURE THAT THE TAPE MASTIC OVER THE CLOSURE DOES NOT LEAVE GAPS AT THE CORNERS AND THAT THE BUTYL CAULK IN PANEL RIB JOINS THE TAPE MASTIC OVER THE CLOSURE.



CFR BASIC INSTALLATION DETAIL

BASIC PANEL INSTALLATION INSTRUCTIONS
SEE ROOFLINE TRIM DETAILS FOR FURTHER INFORMATION

DATE ISSUED	5/17/2024
DEPT.	ANS
ISSUE	ANS
ANCHOR RODS	ANS
BUILDING DEPT.	ANS
REVIEW RO	MBS
DATE RECEIVED	5/31/2024

NUCOR
BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PO BOX 1006, 200 WHISTLE RD., SWANSEA, SC 29190
PHONE: (260) 837-7384
FAX: (260) 837-7881
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407
FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 910-3100
FAX: (435) 910-3101

PROJECT NAME: Zak Loosie - NS UT Employee
CUSTOMER NAME: Providence, UT
JOB NUMBER: U24U0264A
SHEET TITLE: SHEET 1

PROFESSIONAL ENGINEER
No. 9056471-2202
TREVOR WAYNE BLACK
06/05/2024
STATE OF UTAH
SHEET D7 OF 12

EA6011

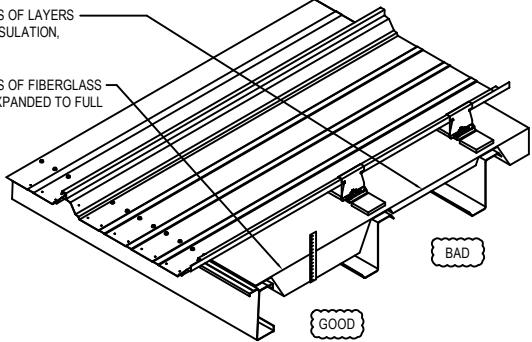
SPECIAL ATTENTION MUST BE GIVEN TO INSULATION SAG AND RECOMMEND PRE-DRILLING TO LOCATE CLIPS. MODULARITY TOOLS ARE AVAILABLE TO AID IN MODULARITY.

ENSURE THE INSULATION IS PERMITTED TO SAG AT MID-SPAN BETWEEN ROOF SECONDARY MEMBERS AND EXPANDED TO THE FULL THICKNESS WHILE STILL KEEPING CONTACT WITH BOTTOM OF PANEL.

DO NOT PULL THE INSULATION TAUT AS THIS WILL SIGNIFICANTLY REDUCE THE THERMAL PERFORMANCE OF THE ROOF SYSTEM AND COULD CAUSE ROOF PANEL MODULARITY ISSUES.

SINGLE OR MULTI LAYERS OF LAYERS FIBERGLASS BLANKET INSULATION, PULLED TOO TIGHT

SINGLE OR MULTI LAYERS OF LAYERS FIBERGLASS BLANKET INSULATION, EXPANDED TO FULL THICKNESS



PRE-DRILL ONE PILOT HOLE FOR ROOF PANEL CLIPS AT MID-SPANS, HIGH SIDE OR RIDGE AND PANEL END LAPS, IF ANY.

INSTALL NEXT VOID CLOSURE AT BUILDING EAVE.

PURLINS SHOWN, JOIST SIMILAR

ROOF PANEL CLIP

RAKE ANGLE

START PANEL

VOID CLOSURE

LOW EAVE

LOW EAVE NOTE:
TO AID IN LOW EAVE PANEL
MODULARITY, PRE-INSTALL PANEL
VOID CLOSURES AT 24" O.C.

2'-0"

FROM INSTALLED
CLIP FASTENER

2'-0"

& TO & OF
VOID CLOSURE

MEASURE OVER 2'-0" FROM
INSTALLED CLIP FASTENER.
PRE-DRILL (1) 3/16" Ø PILOT HOLE.
BE SURE TO LOCATE HOLE NEAR
EDGE OF PURLIN FLANGE, THIS
WILL ENSURE THAT UP TO (3)
FASTENERS CAN BE INSTALLED IN
CLIP BASE (IF REQ'D BY DESIGN
REF. ERECTION DRAWINGS FOR
FASTENER REQUIREMENTS).

USE MODULARITY CLAMP(S) TO HOLD PANEL TRAPEZOID AT 5 1/16" WIDE ALONG FULL LENGTH OF PANEL SEAM, SEE SECTION A.

USE MODULARITY TOOL(S) TO HOLD PANEL CLIPS IN PLACE, PRIOR TO FASTENING, TO
MAINTAIN A CONSTANT 24" WIDE PANEL COVERAGE.

DO NOT ADJUST THE PANEL WIDTH BY MORE THAN ± 1/8" ON ANY PANEL.

ADJUSTABLE MODULARITY TOOL
(BUYOUT) MK. H9510

CFR MODULARITY TOOL
(SUPPLIED) MK. MTB01

SECTION A

5 1/16"

24"

COVERAGE

MAX

-1/16"

MAX

STRETCHING PANEL
COVERAGE

SHRINKING PANEL
COVERAGE

CORRECT PANEL MODULARITY

ADJUSTING PANEL MODULARITY

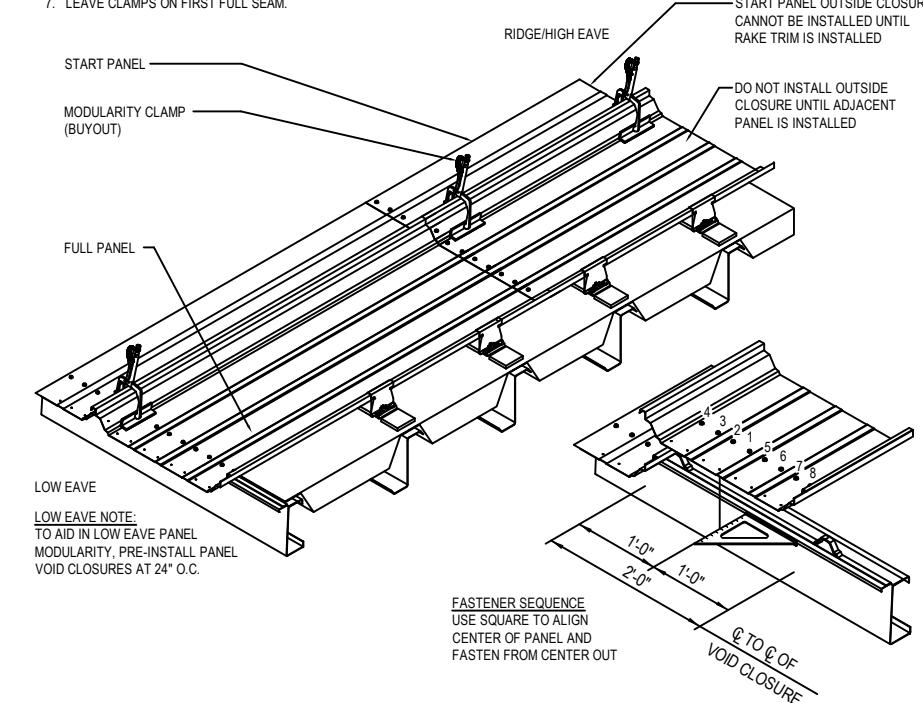
PANEL MODULARITY SEQUENCE

THE PROCEDURES AND SEQUENCE SHOWN ARE RECOMMENDED TO AID IN MAINTAINING PANEL MODULARITY.

THE TOOLS SHOWN ARE NOT REQUIRED BUT RECOMMENDED TO AID INSTALLATION.

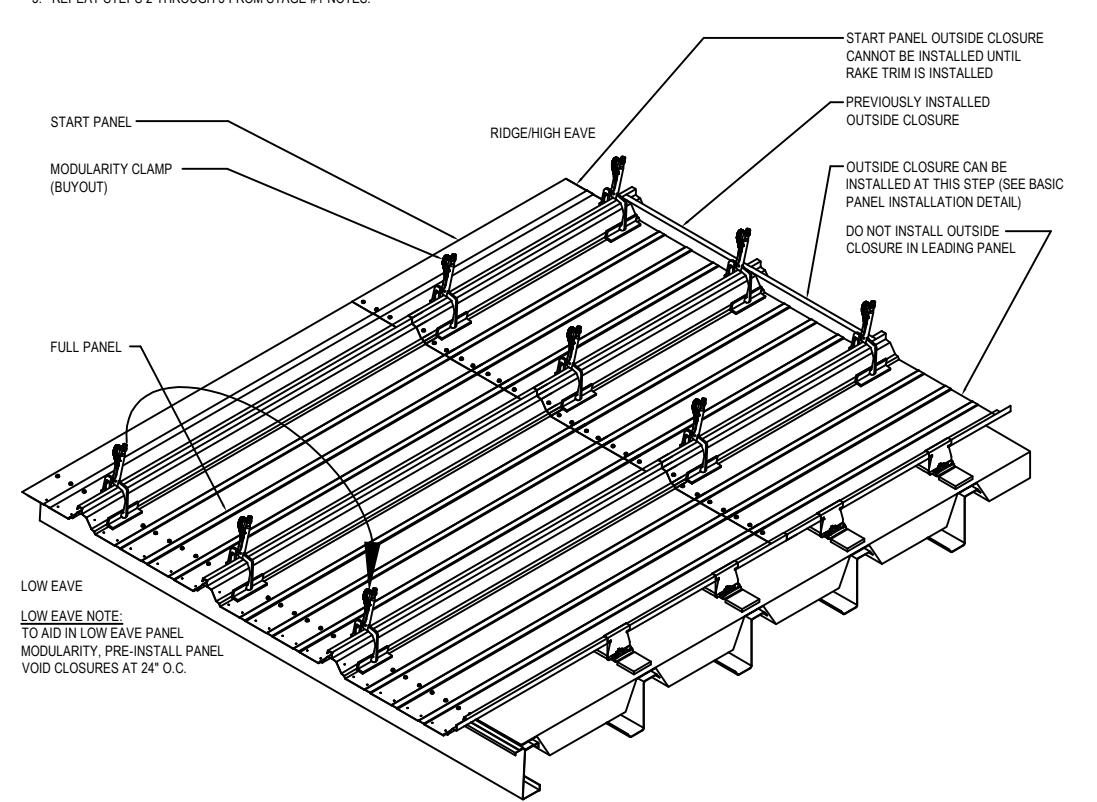
STAGE #1

- AFTER INSTALLING START PANEL PRE-DRILL CLIP HOLES 2'-0" O.C. AND MARK EAVE PLATE 1'-0" O.C. TO LOCATE CENTER OF VOID CLOSURES AND CENTER OF PANEL FLAT.
- ROLL FIRST FULL PANEL IN PLACE AND ALIGN CENTER OF PANEL FLAT TO SQUARE AS SHOWN BELOW.
- APPLY THE LOW EAVE CLAMP AS SHOWN TO DRAW PANEL TIGHT TO CLOSURE.
- INSTALL THE EAVE FASTENERS STARTING AT CENTER OF PANEL AND WORK BACK TO TRAILING RIB. THEN FROM CENTER OF PANEL TOWARD LEADING RIB.
- AS PANEL INSTALLATION PROGRESSES, INSTALL MORE CLAMPS UPSLOPE AS SHOWN.
- ADD, ADJUST OR LEAVE CLAMPS OFF TO MAINTAIN PANEL MODULARITY AS NECESSARY.
- LEAVE CLAMPS ON FIRST FULL SEAM.



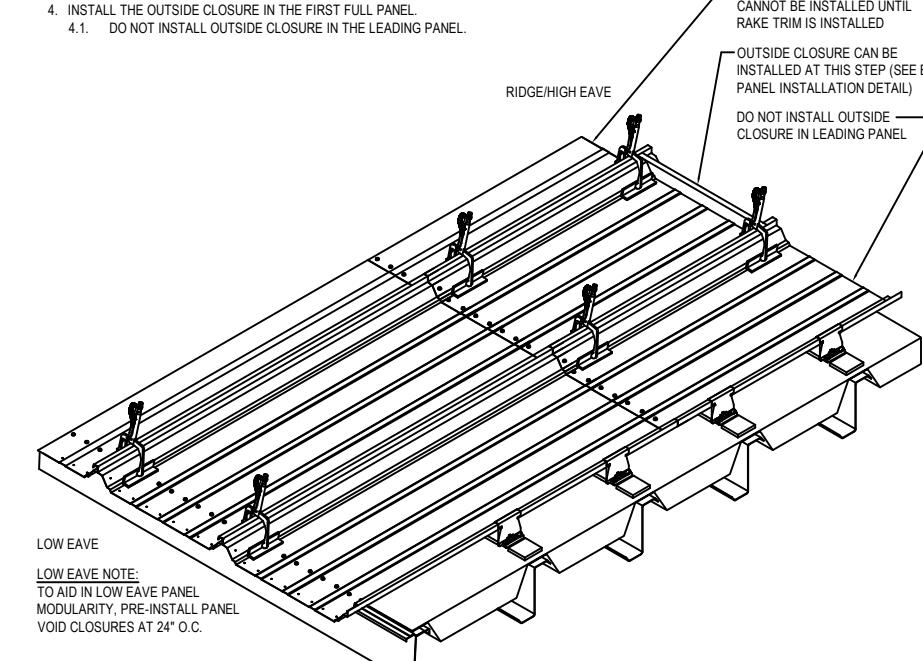
STAGE #3

- KEEP CLAMPS IN PLACE ON THE FIRST TWO SEAMS WITH THE EXCEPTION OF THE LOW EAVE CLAMP.
- INSTALL THE NEXT LOW EAVE PANEL AND LEAP FROG CLAMP AS SHOWN.
- REPEAT STEPS 2 THROUGH 5 FROM STAGE #1 NOTES.



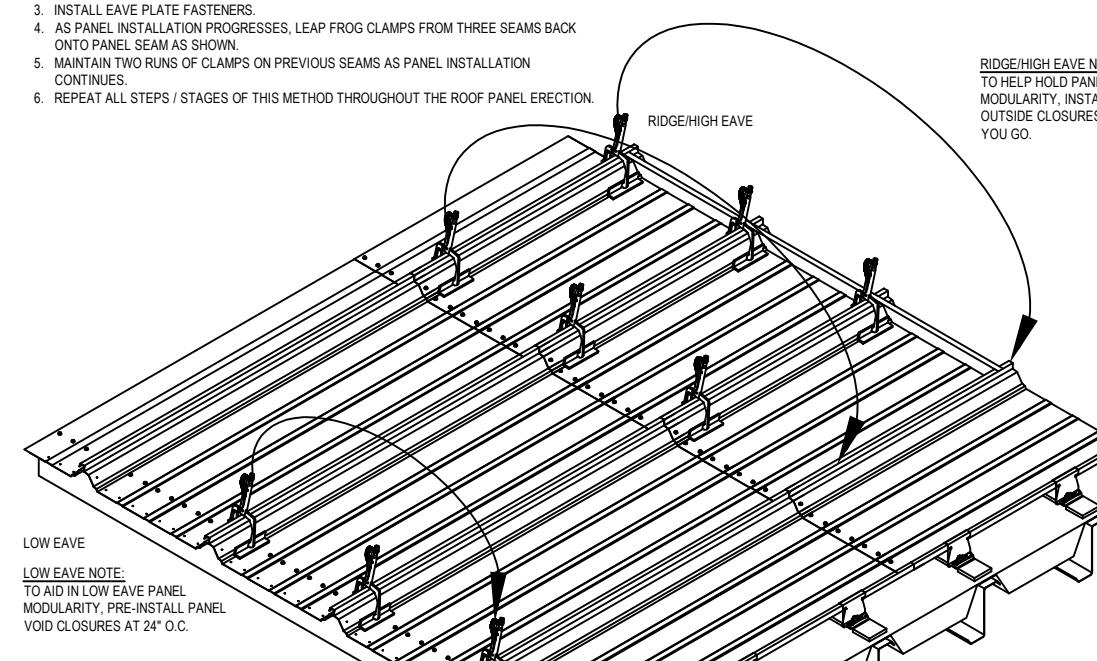
STAGE #2

- INSTALL THE NEXT LOW EAVE PANEL AND ADD CLAMP.
- REPEAT STEPS 2 THROUGH 6 FROM STAGE #1 NOTES.
- LEAVE CLAMPS ON FIRST AND SECOND FULL SEAM.
- INSTALL THE OUTSIDE CLOSURE IN THE FIRST FULL PANEL.
 - DO NOT INSTALL OUTSIDE CLOSURE IN THE LEADING PANEL.



STAGE #4

- KEEP CLAMPS IN PLACE ON THE FIRST TWO SEAMS WITH THE EXCEPTION OF THE LOW EAVE CLAMP.
- INSTALL THE NEXT LOW EAVE PANEL AND LEAP FROG THE CLAMP AS SHOWN.
- INSTALL EAVE PLATE FASTENERS.
- AS PANEL INSTALLATION PROGRESSES, LEAP FROG CLAMPS FROM THREE SEAMS BACK ONTO PANEL SEAM AS SHOWN.
- MAINTAIN TWO RUNS OF CLAMPS ON PREVIOUS SEAMS AS PANEL INSTALLATION CONTINUES.
- REPEAT ALL STEPS / STAGES OF THIS METHOD THROUGHOUT THE ROOF PANEL ERECTION.



MODULARITY GUIDANCE

SPECIAL ATTENTION TO ABOVE STEPS TO MAINTAIN PROPER PANEL MODULARITY AND THERMAL PERFORMANCE IS CRITICAL, FAILURE TO DO SO WILL RESULT IN UNSIGHTLY PANEL APPEARANCE.

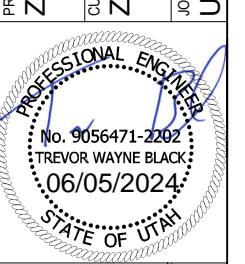
ISSUE DATE	DIV	CHK	ENG	PE	DATE
ANCHOR RODS	ANS	ANS	ANS	ANS	5/17/2024
BUILDING DEPT. REVIEW RO	MBS	TDO	ANS	ANS	5/31/2024

NUCOR

BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PHONE: (260) 537-7384
PO BOX 1006, 200 WHITSTONE RD., SWANSEA, SC 29160
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 919-3100 FAX: (435) 919-3101

PROJECT NAME
Zak Loosie - NS UT Employee
CUSTOMER NAME
Logan, UT
Providence, UT

JOB NUMBER
U24U0264A
SHEET TITLE



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SHEET
D8 OF 12
EA6012

IMPORTANT NOTE:

THE INSTRUCTIONS ON THIS PAGE ONLY ADDRESS THE USE OF THE HAND CRIMPING TOOLS. INSTRUCTIONS FOR MECHANICAL SEAMING, IF REQUIRED, ARE OUTLINED IN THE SEAMING MANUAL, WHICH IS INCLUDED WITH THE MECHANICAL SEAMER KIT PROVIDED BY D.I. ROOF SEAMERS.

SPECIALIZED SEAMING AND HAND CRIMPING TOOLS

THE FINISHED SEAM OF THE ROOF PANELS REQUIRES SPECIAL SEAMING TOOLS THAT ARE AVAILABLE ONLY THROUGH D.I. ROOF SEAMERS. CAUTION: THE USE OF OTHER SEAMING / CRIMPING EQUIPMENT WILL LIKELY RESULT IN FAULTY AND / OR DAMAGED SEAMS AND SHALL INVALIDATE ANY OF THE ROOF SYSTEM'S MATERIAL AND WEATHER TIGHTNESS WARRANTIES.

SEAMING TOOL SOURCE

CONTACT D.I. ROOF SEAMERS TO PURCHASE ANY NECESSARY CRIMPING TOOLS AND FOR RENTAL INFORMATION OF THE MECHANICAL SEAMER IF REQUIRED.

CRIMPING & SEAMING REQUIREMENTS

THE DESIGN OF THIS STRUCTURE REQUIRES SEAMING TO MEET DESIGN AND CODE REQUIREMENTS. SEE THE SEAMING PLAN FOR ROOF PLANE SPECIFIC SEAMING REQUIREMENTS.

THERE ARE THREE SEAM TYPES POSSIBLE WITH THE NUCOR CFR ROOF AS NOTED BELOW. ALL OF THESE SEAM TYPES CAN BE ACHIEVED WITH THE AVAILABLE CRIMPERS. WHEN VISE LOCK AND VISE LOCK 360 SEAMS ARE REQUIRED, IT IS RECOMMENDED TO RENT A MECHANICAL SEAMER TO AID IN THE SEAMING PROCESS.

1. NUCOR ROLL LOCK™ (SEE NOTES 1 AND 2 BELOW)
2. NUCOR VISE LOCK® (SEE NOTES 1, 2 AND 3 BELOW)
3. NUCOR VISE LOCK 360® (SEE NOTES 2 AND 3 BELOW)

NOTE 1
NUCOR ROLL LOCK SEAM IS THE MINIMUM REQUIRED BY DESIGN FOR ANY ROOF PLANE. ADDITIONAL SEAMING MAY BE REQUIRED BY THE BUILDER OR ARCHITECT. IT IS THE ERECTORS RESPONSIBILITY TO PERFORM ANY ADDITIONAL CRIMPING / SEAMING REQUIRED BY THE BUILDER, ARCHITECT, ETC. ABOVE AND BEYOND THE DESIGN REQUIREMENT OF THE MBS.

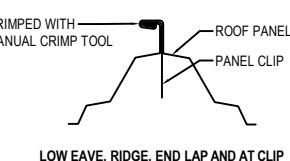
NOTE 2
MULTIPLE SEAM TYPES MAY BE REQUIRED BY DESIGN IN DIFFERENT ZONES OF THE ROOF PLANE. REVIEW THE ROOF SEAMING PLAN CAREFULLY FOR ROOF PLANE SPECIFIC SEAMING REQUIREMENTS.

NOTE 3
NOT ALL ROOF SYSTEMS REQUIRE MECHANICAL SEAMING. THE BUYER, ARCHITECT, OWNER, ETC. MAY ELECT TO SPECIFY A MECHANICALLY SEAMED ROOF. OFTEN, FACTORY MUTUAL RATINGS ALSO REQUIRE A VISE LOCK 360 MECHANICAL SEAM.

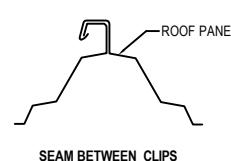
SEE THE SEAMING MANUAL FOR IMPORTANT ERECTOR INFORMATION ABOUT THE VISE LOCK 360 SEAMER REQUIREMENTS.

WHEN TO CRIMP
AS WORK PROGRESSES, IT SHALL BE THE ERECTORS RESPONSIBILITY TO APPLY THE NUCOR ROLL LOCK HAND CRIMPING REQUIREMENTS IN SUCH A WAY AS TO ENSURE THAT THE PANELS HAVE BEEN ADEQUATELY SECURED AT THE COMPLETION OF EACH DAY'S WORK.

NUCOR ROLL LOCK SEAM™



LOW EAVE, RIDGE, END LAP AND AT CLIP



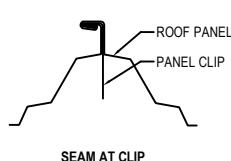
SEAM BETWEEN CLIPS

THE ROLL LOCK SEAM™ ROLL LOCK SEAM REQUIRES THE ROOF PANELS TO BE CRIMPED WITH A MANUAL CRIMPING TOOL BY THE COMPLETION OF EACH DAY'S WORK. THIS DOES NOT REQUIRE THE USE OF A MOTORIZED SEAMER.

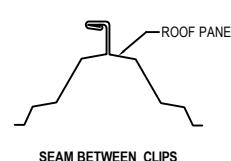
CRIMPING IS REQUIRED AT THE FOLLOWING LOCATIONS

1. LOW EAVE 16"
2. RIDGE / HIGH SIDE 16"
3. ENDLAP 16"
4. AT CLIPS SINGLE CRIMP

NUCOR VISE LOCK SEAM®



SEAM AT CLIP

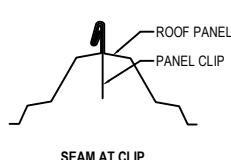


SEAM BETWEEN CLIPS

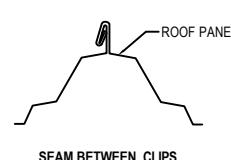
THE VISE LOCK SEAM® IS CONTINUOUS FULL LENGTH OF THE PANEL. THE VISE LOCK SEAM CAN BE ACHIEVED BY TWO DIFFERENT METHODS.

1. CONTINUALLY HAND CRIMPING THE SEAM WITH THE VISE LOCK HAND CRIMPER.
2. MECHANICALLY SEAMING WITH A VISE LOCK MOTORIZED SEAMER.

NUCOR VISE LOCK 360 SEAM®



SEAM AT CLIP

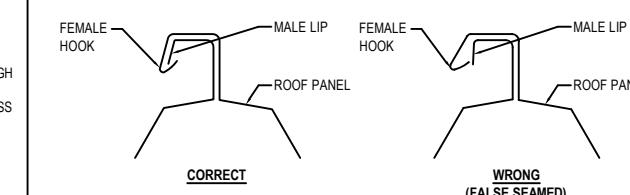


SEAM BETWEEN CLIPS

THE VISE LOCK 360 SEAM® IS CONTINUOUS FULL LENGTH OF THE PANEL. THE VISE LOCK 360® SEAM CAN BE ACHIEVED BY TWO DIFFERENT METHODS.

1. CONTINUALLY HAND CRIMPING THE SEAM WITH THE VISE LOCK 360 HAND CRIMPER. THE SEAM NEEDS TO BE HAND CRIMPED INTO A VISE LOCK SEAM PRIOR TO USING THE VISE LOCK 360 CRIMPER.
2. MECHANICALLY SEAMING WITH A MOTORIZED SEAMER.

CHECK PANEL ASSEMBLY



SIDE LAP FIT-UP

BEFORE CRIMPING AND / OR SEAMING, INSPECT THE FULL LENGTH OF EACH PANEL SIDE LAP. CHECK THAT THE LIP AT THE MALE EDGE OF THE PANEL IS ENCLOSED BY THE HOOK OF THE ADJACENT PANEL'S FEMALE EDGE AS SHOWN IN THE DETAIL ABOVE. ANY CONDITIONS WHERE THE SEAM IS NOT ENGAGED PROPERLY MUST BE CORRECTED BEFORE ATTEMPTING TO CRIMP OR SEAM THE PANEL. FALSE SEAMING OCCURS WHEN THE PANELS ARE NOT PROPERLY ENGAGED. FALSE SEADED PANELS CANNOT PROVIDE THE REQUIRED WIND LOAD AND WEATHER RESISTANCE THEY WERE DESIGNED TO WITHSTAND. FALSE SEAMING CAN ALSO LEAD TO PANEL DAMAGE AND THE MBS NOR D.I. ROOF SEAMERS CAN BE HELD RESPONSIBLE FOR ANY CONCERN RELATED TO FALSE SEAMING.

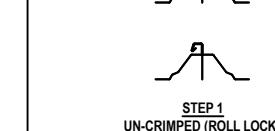
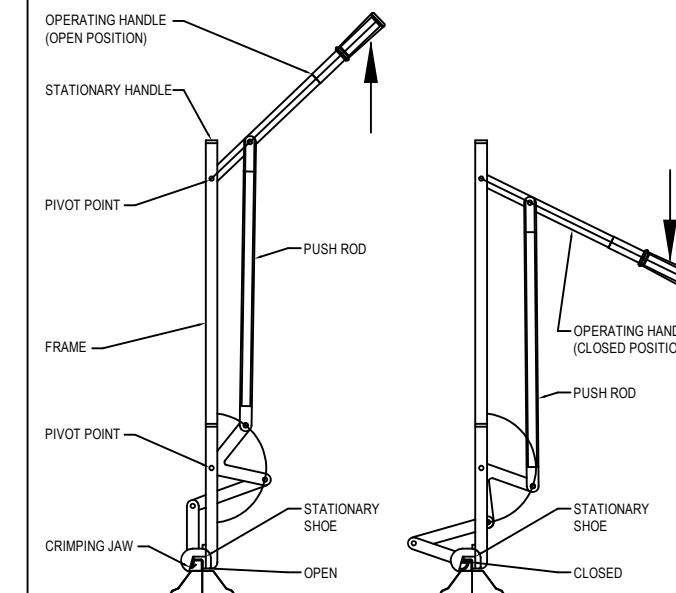
CLIP ALIGNMENT

BEFORE CRIMPING AND / OR SEAMING, INSPECT THAT EACH ROOF PANEL CLIP IS PROPERLY ENGAGED IN THE SIDE LAP ASSEMBLY. ANY DISPLACED CLIPS MUST BE CORRECTED BEFORE ATTEMPTING TO CRIMP / SEAM THE ROOF PANELS. PANEL CLIPS THAT ARE NOT PROPERLY ENGAGED AND ALIGNED CAN CAUSE FAULTY CRIMP / SEAM AND OBJECTIONABLE SEAM APPEARANCE. THE MBS NOR D.I. ROOF SEAMERS CAN BE HELD RESPONSIBLE FOR ANY CONCERN RELATED TO IMPROPERLY ALIGNED CLIPS.

SEAM DAMAGE

BEFORE CRIMPING AND / OR SEAMING, INSPECT THAT EACH ROOF PANEL MALE AND FEMALE ARE FREE FROM DISTORTION AND KINKS WHICH CAN LEAD TO DIFFICULTY AND / OR DAMAGE TO THE PANEL WHILE ATTEMPTING TO CRIMP / SEAM THE PANEL. ANY DISTORTIONS / KINKS MUST BE CORRECTED BEFORE ATTEMPTING TO CRIMP / SEAM THE PANELS. THE MBS NOR D.I. ROOF SEAMERS CAN BE HELD RESPONSIBLE FOR ANY CONCERN RELATED TO DAMAGE CAUSED IN THE FIELD.

MANUAL CRIMPING STAND-UP VISE LOCK CRIMPER



STEP 1
UN-CRIMPED (VISE LOCK)

THE MANUAL CRIMPING PROCEDURE FOR THE STAND-UP VISE LOCK CRIMPER IS THE SAME PROCEDURE AS THE SMALL VISE LOCK 360 HAND CRIMPER. THE STAND-UP AND SMALL HAND VISE LOCK 360 CRIMPERS ARE DESIGNED TO BE USED IN CONJUNCTION WITH VISE LOCK CRIMPERS OR SEAMER. THE PANEL RIB MUST BE IN THE VISE LOCK SEAM PRIOR TO OPERATING THE VISE LOCK 360 CRIMPERS. THE MANUAL CRIMPERS CAN BE UTILIZED TO CREATE A CONTINUOUS SEAM BY MAKING ADJACENT CRIMPS WITH SLIGHT OVERLAP.

TOOL OPERATION

STEP 1
WITH THE HANDLE IN THE UPWARD (OPEN) POSITION, PLACE THE CRIMPER ON THE PANEL RIB. MAKE SURE THE CRIMPER HEAD IS COMPLETELY SEATED ON THE TOP OF THE PANEL RIB BEFORE CRIMPING. IT IS CRITICAL THAT THE OPERATING JAW IS TOWARD THE HOOK SIDE OF THE PANEL AS SHOWN ABOVE. OPERATING THE CRIMPER BACKWARDS ON THE PANEL WILL RESULT IN DAMAGE TO THE PANEL.

STEP 2
PUSH DOWN ON THE HANDLE UNTIL IT STOPS. RAISE HANDLE TO RELEASE CRIMPER. REPOSITION CRIMPER AS NECESSARY AND REPEAT TO EXTEND THE LENGTH OF THE CRIMP.

TOOL OPERATION

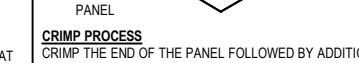
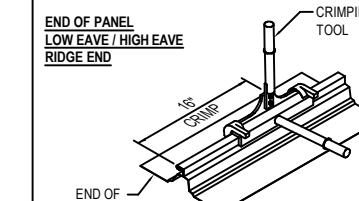
STEP 1
AFTER THE AREA HAS BEEN SEADED TO THE VISE LOCK SEAM, PLACE THE VISE LOCK 360 CRIMPER ON THE PANEL RIB WITH THE HANDLE IN THE UPWARD (OPEN) POSITION. MAKE SURE THE CRIMPER HEAD IS COMPLETELY SEATED ON THE TOP OF THE PANEL RIB BEFORE CRIMPING. IT IS CRITICAL THAT THE OPERATING JAW IS TOWARD THE HOOK SIDE OF THE PANEL AS SHOWN ABOVE OPERATING THE CRIMPER BACKWARDS ON THE PANEL WILL RESULT IN DAMAGE TO THE PANEL.

STEP 2
PUSH DOWN ON THE HANDLE UNTIL IT STOPS. RAISE HANDLE TO RELEASE CRIMPER. REPOSITION CRIMPER AS NECESSARY AND REPEAT TO EXTEND THE LENGTH OF THE CRIMP.

IMPORTANT

IF THE 360 TOOL DOES NOT FORM THE VISE LOCK 360 SEAM CORRECTLY, STOP AND CHECK THE SEAM TO ENSURE A PROPER AND CONTINUOUS VISE LOCK SEAM HAS BEEN COMPLETED. IF NOT, RE-CRIMP / SEAM TO A PROPER VISE LOCK SEAM BEFORE ATTEMPTING TO SEAM TO THE VISE LOCK 360.

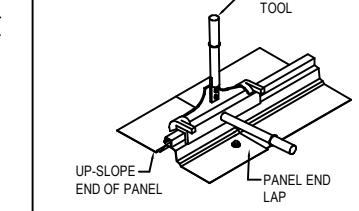
MANUAL CRIMPING - EAVE / END LAP / RIDGE / PANEL CLIP



CRIMP PROCESS

CRIMP THE END OF THE PANEL FOLLOWED BY ADDITIONAL CRIMPS TO EXTEND 16" FROM END OF PANEL.

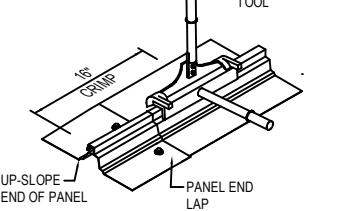
PANEL END LAPS



STEP 1

CRIMP PROCESS

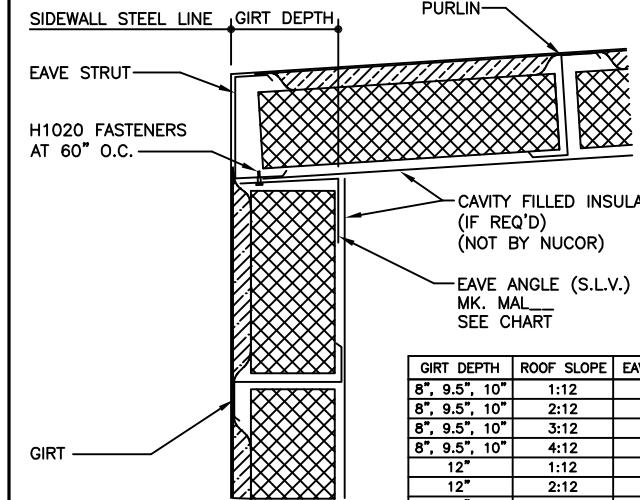
THE PANEL CLIP REQUIRES A SINGLE CRIMP CENTERED OVER THE PANEL CLIP.



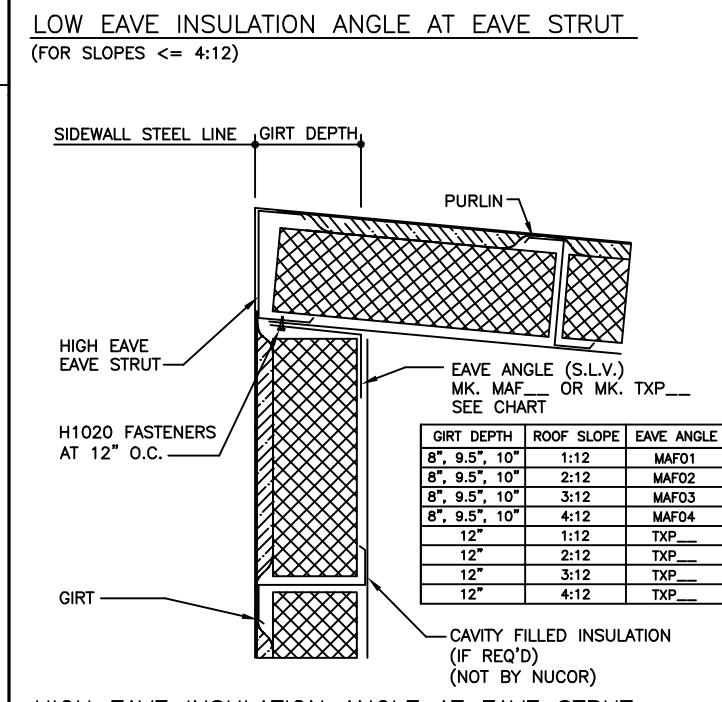
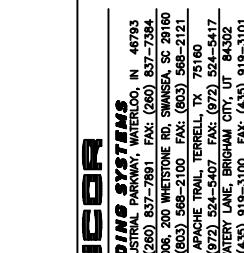
STEP 2

END LAP CRIMP IS TWO STEP PROCESS

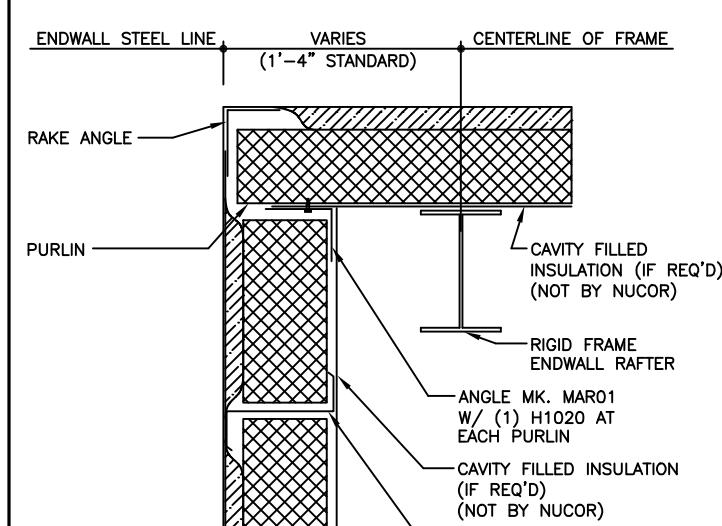
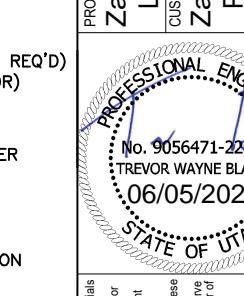
STEP 1: CENTER THE CRIMP TOOL OVER THE PANEL END LAP FOR THE FIRST CRIMP.
STEP 2: THE SECOND CRIMP MUST OVERLAP THE FIRST CRIMP AND EXTEND TO ENSURE THE CRIMP REACHES THE DOWNSLOPE PANEL CLIP. THIS MAY REQUIRE A THIRD CRIMP DEPENDING HOW MUCH OVERLAP WAS DONE.



ANCHOR RODS	DIN T 87	ENG. ANS	PE. MBS	DATE 5/17/2024
BUILDING DEF. REVIEW RO				



PROJECT NAME	Zak Loosie - NS UT Employee	SHEET TITLE
CUSTOMER NAME		



JOHN D. LOOSIE	PROFESSIONAL ENGINEER	NO. 9056471-2202	STATE OF UTAH
John D. Loosie	Professional Engineer	No. 9056471-2202	State of Utah
Project Name	Zak Loosie - NS UT Employee	Sheet Number	U24U0264A

CFR HAND CRIMPING NOTES

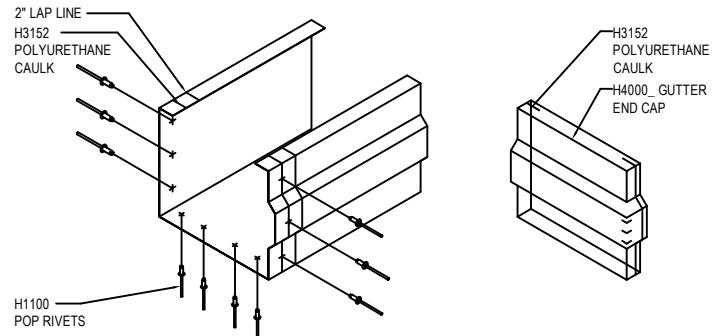
HAND CRIMPING TOOLS AND PROCEDURES

EA6015

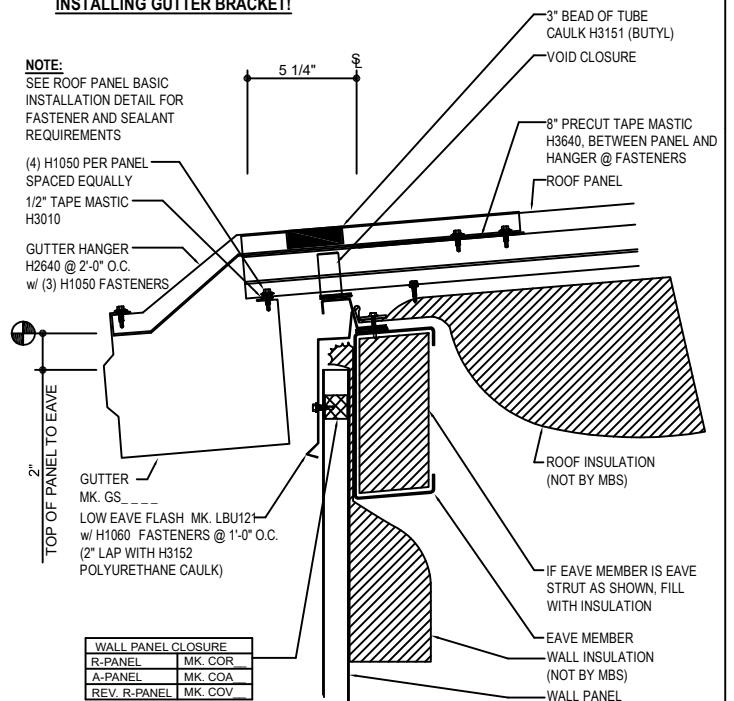
INSULATION ANGLE AT RAKE DETAIL

GUTTER LAP & END CAP

APPLY BEAD OF POLYURETHANE CAULK 1" FROM END OF TRIM AND LAP SECTIONS 2" AND FASTEN AS SHOWN. TO TERMINATE THE GUTTER APPLY POLYURETHANE CAULK TO THREE SIDES OF END CAP AND TOP RETURN AREA AS SHOWN AND INSERT 1/2" INTO END OF GUTTER. ATTACH WITH RIVETS SAME AS END LAP.



**NOTE 1: PANEL RIB MUST BE
HAND CRIMPED PRIOR TO
INSTALLING GUTTER BRACKET!**



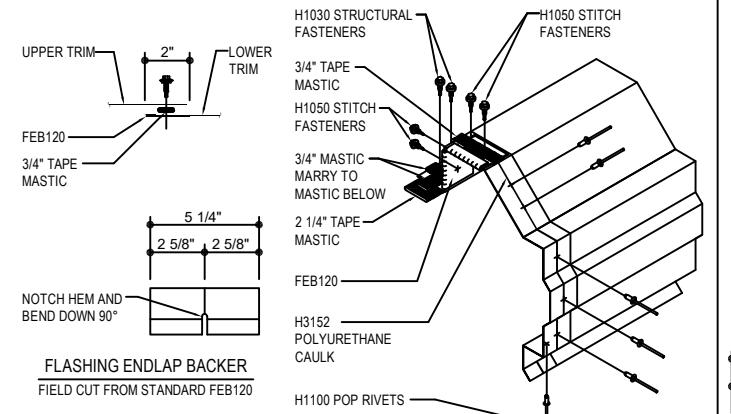
ON-SLOPE GUTTER DETAIL

EAVE GUTTER DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

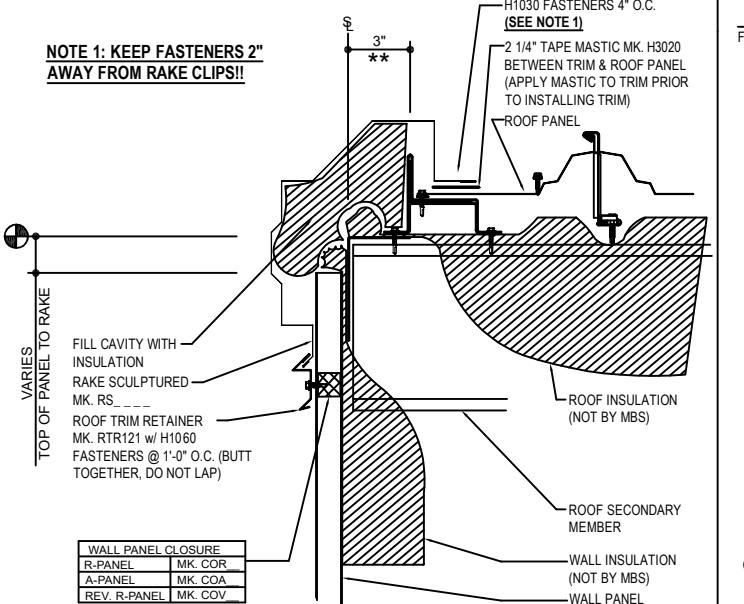
ED6010

RAKE LAP & FLASHING BACKER

SLIDE FIELD CUT SECTION OF FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE AS SHOWN BELOW. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). APPLY CONTINUOUS BEAD OF CAULK 1" FROM END OF TRIM DOWN PROFILE OF TRIM. FASTEN LAP WITH STITCH FASTENERS AND POP RIVETS AS SHOWN. ROOF STRUCTURAL FASTENERS SHOULD BE USED TO FASTEN THROUGH PANEL FLAT INTO RAKE ANGLE.



**NOTE 1: KEEP FASTENERS 2"
AWAY FROM RAKE CLIPS!!**



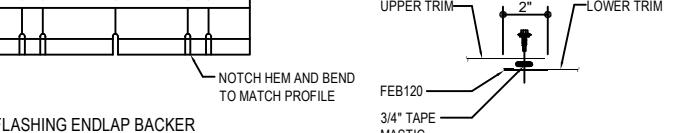
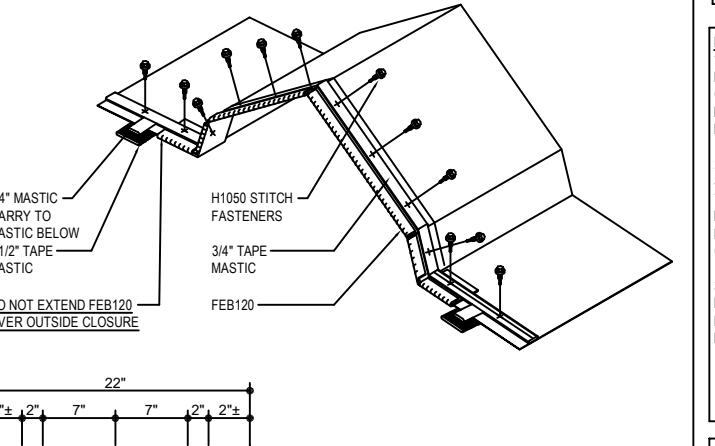
RAKE SCULPTURED DETAIL

RAKE SCULPTURED DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

EE6010

RIDGE CAP LAP & FLASHING BACKER

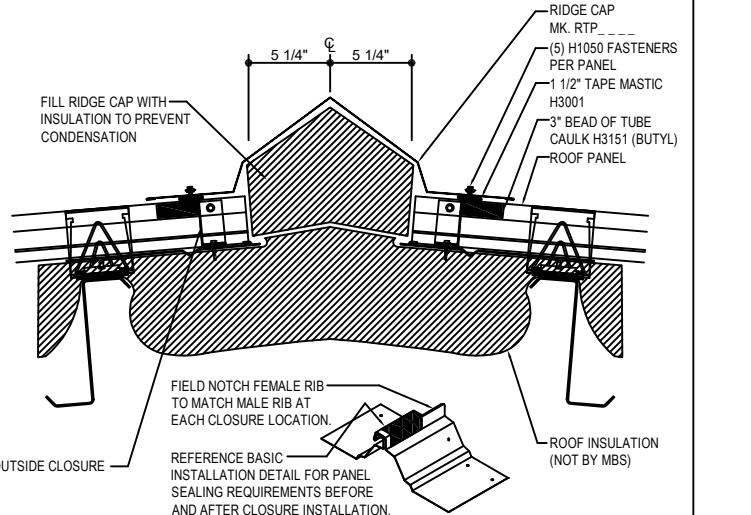
SLIDE FIELD CUT SECTION FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). MARRY LAP MASTIC WITH MASTIC BETWEEN RIDGE CAP AND OUTSIDE CLOSURES.



NOTCH HEM AND BEND TO MATCH PROFILE

FEB120
3/4" TAPE MASTIC

FLASHING ENDLAP BACKER
FIELD CUT FROM STANDARD FEB120



RIDGE TRIM DETAIL

RIDGE TRIM DETAIL

USE (4) POP RIVETS MK. H1100 AT ALL ELBOW, "S", AND DOWNSPOUT CONNECTIONS U.N.O.

ERECTOR NOTES:

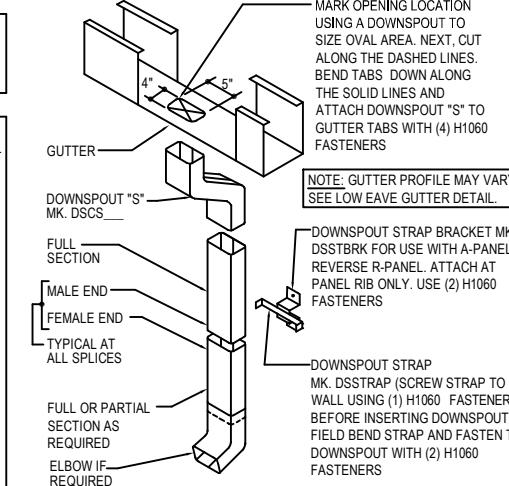
1. MITERING OF THE "S" WILL BE REQUIRED AT SLOPES OVER 4:12 FOR PROPER LINE UP WITH THE DOWNSPOUT.
2. IF PROJECT CONTRACT SPECIFIES "S" SHAPES AT THE BOTTOM OF THE DOWNSPOUT IN LIEU OF ELBOWS, SEE DETAIL GA0105.
3. LOCATE ONE DOWNSPOUT STRAP AT EVERY "S", ELBOW AND DOWNSPOUT SPLICE.

DOWNSPOUT STRAP (MK. DSSTRAP) AND STRAP BRACKETS (MK. DSSTBRK) ARE ALSO PROVIDED FOR MASONRY WALL APPLICATIONS AS WELL AS FOR ATTACHMENT TO COLUMNS. FASTENERS TO MASONRY ARE NOT PROVIDED. H1060 FASTENERS ARE PROVIDED FOR COLUMN ATTACHMENT APPLICATIONS. PRE-DRILLING WILL BE REQUIRED.

CORRUGATED DOWNSPOUT

REFERENCE DOWNSPOUT SCHEDULE FOR DOWNSPOUT MARK NUMBERS

GA0130



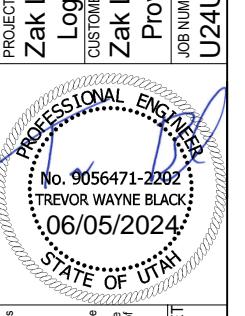
DATE	CHK	ENG	PE
5/17/2024	ANS	ANS	
5/31/2024	TDO	ANS	

NUCOR

BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PHONE: (260) 457-7881 FAX: (260) 837-7384
PO BOX 1006, 200 WHISTLE RD., SWANSEA, SC 29190
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 918-3100 FAX: (435) 919-3101

PROJECT NAME: Zak Loosie - NS UT Employee
CUSTOMER NAME: Providence, UT
JOB NUMBER: U24U0264A

SHEET TITLE



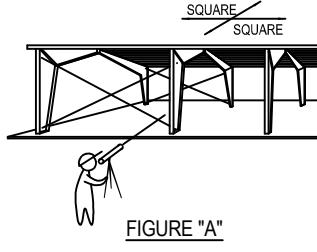
SHEET

D10 OF 12

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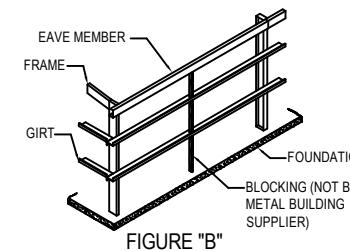
BUILDING & PANEL PREPARATION

STEP 1: PLUMB AND SQUARE
THE FIRST STEP IN THE SUCCESSFUL INSTALLATION OF WALL PANELS IS TO HAVE THE PRIMARY FRAMING PLUMB AND SQUARE. FOR BEST RESULTS, IT IS RECOMMENDED THAT A TRANSIT BE USED WHEN ERECTING THE STRUCTURAL STEEL. MAKE SURE THAT THE FOUNDATION AND BUILDING STRUCTURE IS SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
SEE FIGURE "A"

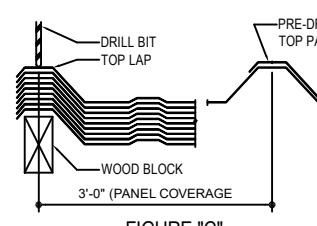


STEP 2: GIRT BLOCKING
BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING THE WALL SHEETING OR INSULATION. CHECK TO BE SURE THAT THE EAVE STRUT AND GIRTS ARE STRAIGHT AND PLUMB. TO ALIGN THE GIRTS, CUT TEMPORARY WOOD BLOCKING TO THE PROPER LENGTH AND INSTALL BETWEEN THE LINES OF GIRTS. THIS BLOCKING CAN BE MOVED FROM BAY TO BAY WHICH WILL REDUCE THE NUMBER OF PIECES REQUIRED. NORMALLY, ONE LINE OF BLOCKING PER BAY WILL BE SUFFICIENT BUT WIDER BAYS MAY REQUIRE MORE. IT IS RECOMMENDED TO BLOCK AT LEAST TWO BAYS AND LEAP FROG THE BLOCKING AS A BAY IS SHEETED. BLOCKING SHOULD NOT BE REMOVED UNTIL THE FULL BAY HAS BEEN SHEEDED.

SEE FIGURE "B"



STEP 3: PRE-DRILL PANEL LAP
STACK PANELS WITH ENDS FLUSH ON A LEVEL PLACE ON THE GROUND IN PILES NOT EXCEEDING 10 PANELS. THEN PLACE SMALL WOODEN BLOCKS UNDER SIDE-LAPPING EDGE OF STACK OF PANELS TO HOLD THEM AT CORRECT HEIGHT AND POSITION WHILE DRILLING FASTENER HOLES. HOLD PANELS TIGHTLY TOGETHER AT EACH END WITH CLAMPING PIERS. CAREFULLY MARK POSITIONS FOR SIDE-LAP FASTENERS ON TOP OF HIGH RIB. FASTENERS SHOULD BE LOCATED 'ON CENTER' OF HIGH RIB. DRILL HOLES FOR "STITCH" FASTENER (USE #1-7/32" - 15/64" DRILL-BIT) ON TOP SHEET OF SIDE-LAP. BE SURE PANELS ARE WELL NESTED BEFORE DRILLING.
SEE FIGURE "C"



FIELD CUTTING PANELS

WHEN FIELD CUTTING OR MITERING WALL PANELS, NON-ABRASIVE CUTTING TOOLS SUCH AS NIBBLERS OR TIN-SNIPS SHALL BE USED. ABRASIVE CUTTING TOOLS SUCH AS MECHANICAL GRINDERS OR POWER SAWS CAN DAMAGE THE MATERIAL FINISH AND CREATE EXCESS METAL SHAVINGS THAT CAN CORRODE THE PANELS. THE USE OF NON-APPROVED CUTTING DEVICES MAY VOID THE FACTORY WARRANTY.

ANY METAL SHAVINGS THAT ARE CREATED NEED TO BE CLEANED FROM THE PANEL TO PREVENT SCRATCHING AND/OR CORROSION. THE MANUFACTURER WILL NOT ACCEPT CLAIMS FOR DAMAGE/DETERIORATION DUE TO USE OF UNAPPROVED TOOLS.

FASTENER INSTALLATION

RECOMMENDED TOOL TYPES: SEE ALSO FASTENER SCHEDULE
4 AMP OR HIGHER RATED TOOLS (DO NOT USE IMPACTING TOOLS)
2000 - 2500 RPM SCREW GUN WITH TORQUE ADJUSTABLE CLUTCH
MANUAL OR ELECTRIC RIVET TOOL

DO NOT USE IMPACTING TOOLS
TO ASSURE PROPER VOLTAGE TO THE TOOL, EXTENSION CORDS SHOULD BE CHECKED FOR PROPER WIRE SIZE/CHORD LENGTH.

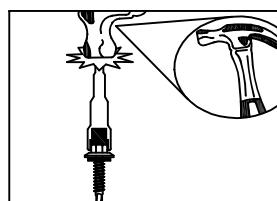
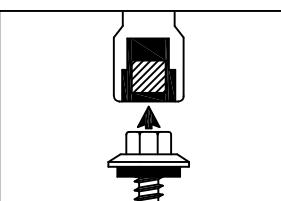
16 GAGE WIRE, MAXIMUM CHORD LENGTH = 100'
14 GAGE WIRE, MAXIMUM CHORD LENGTH = 200'
12 GAGE WIRE, MAXIMUM CHORD LENGTH = 300'

DRIVING TIPS:
SET THE NUT DRIVER AS DESCRIBED BELOW PRIOR TO INSTALLING FASTENERS TO PREVENT FASTENER Wobble...

COMPRESS THE INSULATION AT FASTENER LOCATION WITH ONE HAND WHILE DRIVING THE FASTENER WITH THE OTHER. THIS WILL HELP KEEP THE PANEL FLAT AND PREVENT THE FASTENER FROM "WALKING". DRIVE FASTENERS PERPENDICULAR TO PANEL SURFACE.

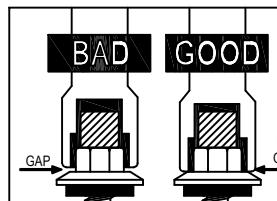
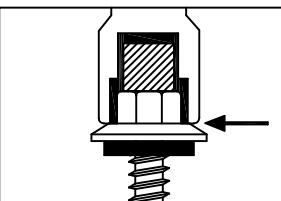
EXCESSIVE PRESSURE CAN CAUSE DRILL POINT FAILURE. LET THE FASTENER DO THE WORK.

DO NOT OVER TIGHTEN FASTENERS AS THIS WILL LEAD TO PANEL DIMPLING AND DISTORTION.



1. PUT THE TOP OF THE FASTENER INTO THE NUT DRIVER. NOTE: FOR PAINTED FASTENERS, PLACE A SINGLE OR DOUBLED LAYER OF PLASTIC BETWEEN THE FASTENER HEAD AND THE NUT DRIVER.

2. PLACE THE POINT OF THE FASTENER ONTO A HARD SURFACE AND FIRMLY HIT THE TOP OF THE NUT DRIVER 2-3 TIMES.



3. THE BASE OF THE NUT DRIVER SHOULD NOW BE CONTACTING THE TOP OF THE HEAD OF THE FASTENER WITH NO GAPS.

4. BAD SET VS. GOOD SET.

PANEL INSTALLATION & FASTENER SEQUENCE

STEP 1: INSTALL FIRST PANEL

INSTALL THE FIRST WALL PANEL AT THE BUILDING CORNER AND ALIGN THE PANEL RIB WITH THE STEEL LINE AS SHOWN IN THE CORNER DETAILS USING THE START/FINISH DIMENSION SHOWN ON THE PLAN. IT IS EXTREMELY IMPORTANT THAT THE FIRST WALL PANEL IS INSTALLED PLUMB AND SQUARE. USE A LEVEL OR A TRANSIT TO AID IN THIS PROCESS.

PLACE A 1/8" SHIM ON THE BASE TRIM UNDER THE PANEL TO HOLD THE PANEL OFF THE BASE TRIM. ENSURE THAT THE WEIGHT OF THE PANEL DOES NOT FORCE BASE TRIM TO EXCESSIVELY BEND DOWN. BASE TRIM SHOULD HAVE A SLIGHT SLOPE TO ALLOW WATER TO RUN OUT AND NOT SIT ON BASE TRIM.

SEE FIGURE "D" - TO RIGHT

WHEN INSTALLING THE PANEL, APPLY PRESSURE EVENLY TO AVOID DISTORTING THE PANEL AND CAUSING OIL CANNING.

SEE FIGURE "E" - ABOVE

RECOMMENDED PANEL FASTENING SEQUENCE IS SHOWN TO THE RIGHT. THIS PATTERN AIDS IN PLUMBING AS WELL AS MAINTAINING PANEL COVERAGE / MODULARITY. SOME APPLICATIONS MAY REQUIRE MODIFIED SEQUENCE AND WILL BE BEST DETERMINED IN THE FIELD. DO NOT ATTACH PANEL AT BASE AND TOP AND WORK TOWARD THE MIDDLE OF THE PANEL. THIS CREATES OIL CANNING. MANUFACTURER IS NOT RESPONSIBLE FOR FINAL APPEARANCE OF INSTALLED PANEL.

STEP 2: INSTALL SUBSEQUENT PANELS

INSTALL THE SECOND PANEL BY LAYING THE LAP EDGE OVER THE BEARING RIB OF THE FIRST PANEL. SEE BELOW FOR PROPER ALIGNMENT AT SIDE-LAP. CHECK PANEL PLUMBNESS AND FASTEN PANEL IN THE SAME SEQUENCE STARTING WITH THE STRUCTURAL FASTENERS ALONG THE LAP TO ENSURE A TIGHT SIDE-LAP. CONTINUE FOR THE REMAINDER OF THE WALL, CUTTING PANELS AROUND FRAMED OPENINGS AS REQUIRED. (TRIM SHOULD BE INSTALLED AROUND OPENINGS PRIOR TO INSTALLING PANEL)

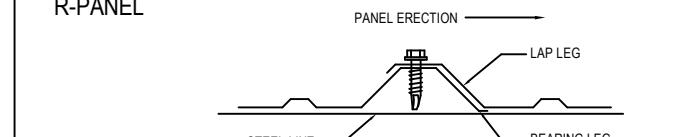
RECOMMENDED TIPS:

WALL PANELS CAN BE INSTALLED LEFT TO RIGHT OR RIGHT TO LEFT. IT IS RECOMMENDED TO INSTALL SHEETS STARTING OPPOSITE THE PREVAILING VIEW / WIND SO THAT THE SIDE-LAP SEAM IS AWAY AND LESS NOTICEABLE.

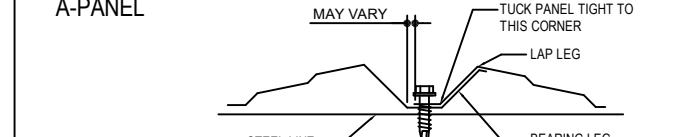
PANEL ORIENTATION AND ALIGNMENT

NOTE THE ORIENTATION OF THE PROFILE AND BEARING LEG FOR THE LEADING EDGE OF THE PANEL. PANELS SHOULD BE INSTALLED AS SHOWN BELOW TO HELP MAINTAIN PANEL MODULARITY / COVERAGE FOR THE LENGTH OF THE WALL.

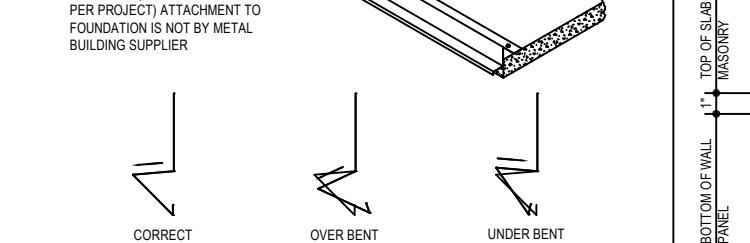
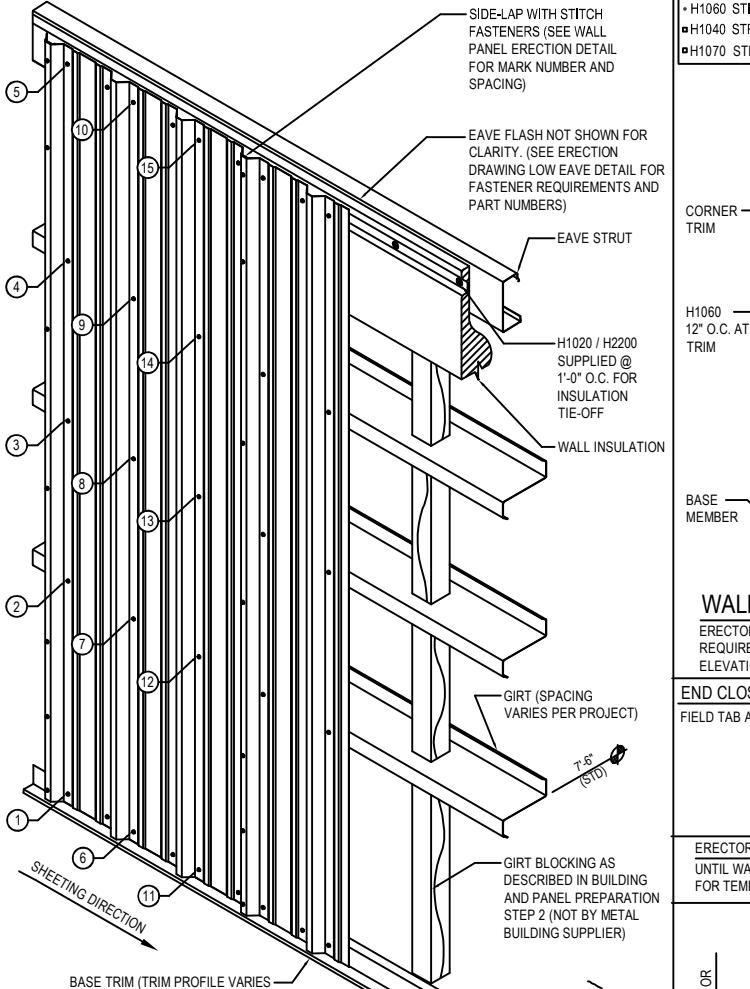
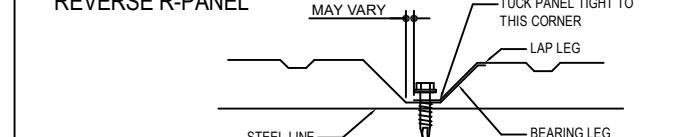
R-PANEL



A-PANEL



REVERSE R-PANEL



NOTE: BASE TRIM PROFILES ARE MANUFACTURED WITH A 5° SLOPE TO PROMOTE WATER SHED. ENSURE SLOPE IS PRESENT TO PREVENT HOLDING WATER. DO NOT ALLOW WEIGHT OF PANEL TO OVER BEND TRIM CREATING LARGER GAP AT RIB OF PANEL.

FIGURE "D"

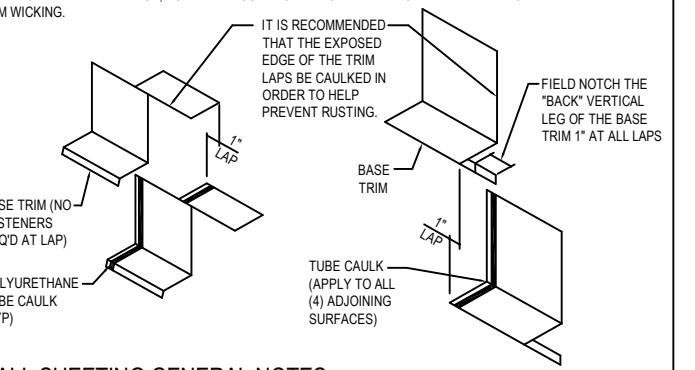
BASE TRIM LAP SEALANT

AT BASE TRIM LAPS, APPLY A BEAD OF POLYURETHANE TUBE CAULK (H3152) TO ALL ADJOINING SURFACES AND LAP 1". SEE BASE TRIM DETAIL FOR THE SPECIFIC TRIM FOR YOUR PROJECT.

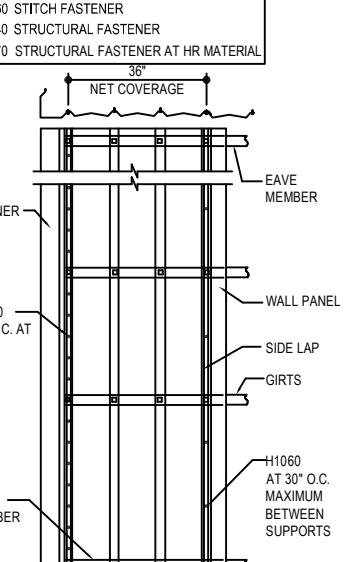
IF JOB HAS OPTIONAL FOAM PANEL CLOSURES ORDERED AT BASE, ATTACH TO INSIDE OF WALL PANEL AT BASE AND FASTEN THROUGH PANEL AND CLOSURE, INTO BASE TRIM. FASTENING PATTERN WILL VARY PER WALL PANEL TYPE. REFER TO THE WALL PANEL ERECTION DETAIL FOR MORE FASTENING INFO.

USE SUPPLIED BASE CORNER PIECES OR FIELD MITER BASE TRIM AT CORNERS.

INSULATION HINT: AT THE BASE, FOLD THE INSULATION VAPOR BARRIER OVER THE FIBER TO HELP PREVENT WATER FROM WICKING.



WALL SHEETING GENERAL NOTES



- BLOCK GIRTS TO "LEVEL" POSITION BEFORE STARTING PANEL ERECTION. MAINTAIN WOOD BLOCKING (NOT BY METAL BUILDING SUPPLIER) UNTIL PANEL TO STRUCTURAL FASTENERS ARE INSTALLED.
- ALIGN AND PLUMB FIRST WALL PANEL.
- TO PREVENT "OIL-CANNING", ALL PANEL FASTENERS SHOULD START FROM BASE MEMBER AND THEN BE SECURED TO EACH STRUCTURAL GIRT TOWARD THE EAVE.
- FOUNDATION MUST BE SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
- ERECTION CREW IS TO CLEAN ALL WALL PANELS BEFORE LEAVING JOB SITE.
- ERECTOR IS TO ERECT PANELS SO THAT SIDE-LAPS ARE AWAY FROM THE MAIN TRAFFIC AREA'S LINE OF SIGHT.
- STORE PANELS PROPERLY TO PREVENT MOISTURE.
- AT FLUSH GIRT CONDITIONS, PRE-DRILL COLUMNS (& STUBS IF REQ'D) FOR EASE OF PANEL ATTACHMENT AT THESE AREAS.
- INSTALL BASE PANEL CLOSURES (IF JOB REQUIRES THEM). SEE BASE TRIM DETAILS.

ISSUE	DRAW	CHK	DATE
ANCHOR RODS		ANS	5/17/2024
BUILDING DEFT.	REVIEW RO	MBS	5/31/2024

NUCOR

BUILDING SYSTEMS
305 INDUSTRIAL PARKWAY, WATERLOO, IN 46793
PHONE: (260) 837-7384
PO BOX 1006, 200 WHISTLE RD., SWANSEA, SC 29190
PHONE: (803) 568-2100 FAX: (803) 568-2121
600 APACHE TRAIL, TERRELL, TX 75160
PHONE: (972) 524-5407 FAX: (972) 524-5417
1050 WATERY LANE, BRIGHAM CITY, UT 84302
PHONE: (435) 918-3100 FAX: (435) 918-3101

PROJECT NAME	Zak Loosie
CUSTOMER NAME	Logan, UT
JOB NUMBER	GB0020
SHEET TITLE	

PROFESSIONAL ENGINEER
NO. 9056471-2202
TREVOR WAYNE BLACK
06/05/2024
STATE OF UTAH
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