2018 APPENDIX B BUILDING CODE SUMMARY

Name of Project: Campbell University Baseball Open Shelter

Address: Buies Creek, North Carolina Zip Code: 27506

Proposed Use: Baseball Practice Open Shelter

Owner or Authorized Agent : Michael Weaver Phone # 919-282-2443 E-Mail: michael@si-nc.com

Owned By: ☐ City / County ☒ Private ☐ State

Code Enforcement Jurisdiction ☐ City ☒ County Harnett County ☐ State

LEAD DESIGN PROFESSIONAL : Joe T. Smith, Jr.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Building	Smith Engineering & Design	Joe T. Smith, Jr.	24916	(919)-736-2141	smithengineeringnc@hotmail.com
Civil					
Electrical	Smith Engineering & Design	Joe T. Smith, Jr.	24916	(919)-736-2141	smithengineeringnc@hotmail.com
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Standpipe					
Structural	Smith Engineering & Design	Joe T. Smith, Jr.	24916	(919)-736-2141	smithengineeringnc@hotmail.com
Retaining Walls >5' High					
Other					

2018 NC BUILDING CODE: ☒ New Construction ☐ Shell/Core ☐ 1st Time Interior Completion (Partial) ☐ Addition ☐ Phased Construction-Shell Core

2018 NC EXISTING CODE: (check all that apply) ☐ Prescriptive ☐ Alteration Level I ☐ Historic Property ☐ Repair ☐ Alteration Level II ☐ Change of Use ☐ Chapter 14 ☐ Alteration Level III

CONSTRUCTED: (date) _____ **CURRENT USE(s) (Ch. 3)** N/A

RENOVATED: (date) _____ **PROPOSED USE(s) (Ch. 3)** A-3 Assembly

BUILDING DATA

Construction Type : (check all that apply) ☐ I-A ☐ II-A ☐ III-A ☐ IV ☐ V-A ☐ I-B ☒ II-B ☐ III-B ☐ V-B

Sprinklers : ☒ NO ☐ Partial ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

Standpipes : ☒ NO Class: ☐ I ☐ II ☐ III ☐ Wet ☐ Dry

Primary Fire District : ☒ NO ☐ YES (Primary) **Flood Hazard Area:** ☒ No ☐ YES

Special Inpections Required: ☒ NO ☐ YES

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	SUB-TOTAL
3th Floor			
2nd Floor			
Mezzanine			
1stFloor (Upper Level)	0	6,400	6,400
Basement (Lower Level)			
TOTAL :	0	6,400	6,400

ALLOWABLE AREA

Primary Occupancy :

- Assembly ☐ A-1 ☐ A-2 ☒ A-3 ☐ A-4 ☐ A-5
- Business ☐
- Educational ☐
- Factory ☐ F-1 Moderate ☐ F-2 Low
- Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HMP
- Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
  - I-3 Condition ☐ 1 ☐ 2
  - I-2 Condition ☐ 1 ☐ 2
  - I-1 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
- Mercantile ☐
- Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
- Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-Piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
- Utility and Misc. ☐

Accessory Occupancy Classification(s) : _____

Incidental Uses: (Table 509)

This separation is not exempt as a Nonseparated Use (see exceptions).

Special Uses: (Chapter 4 - List Code Sections): _____

Special Provisions: (Chapter 5 - List Code Sections): _____

Mixed Occupancy: ☒ NO ☐ YES Secondary occupancy type(s): _____ Separation : _____ Hour Exception : _____

☐ Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (508.4) See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} = \leq 1.0$$

$$\frac{\text{N/A}}{\text{N/A}} \quad \text{N/A} + \frac{\text{N/A}}{\text{N/A}} \quad \text{N/A} = \text{N/A} \leq 1.0$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	A-3	6,400	9,500	Not Used	9,500

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = _____ (F)
b. Total Building Perimeter = _____ (P)
c. Ratio (F/P) = _____ (F/P)
d. W = Minimum width of public way = _____ (W)
e. Percent of frontage increase I_f = 100 [F/P - 0.25] x W/30 = _____ (%)

[2] Unlimited area applicable under conditions of Section 507.

[3] Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).

[4] The maximum area of parking garages must comply with 406.5.4. The maximum area of air traffic control towers must comply with Table 412.3.1.

[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55	18'-4"	
Building Height in Stories (Table 504.4)	2	1	

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQUIRED	RATING PROVIDED (W/ N/A * REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
Structural frame, including columns, girders, trusses		0 HOUR	0 HOUR				
Bearing walls							
Exterior							
North	N/A	0 HOUR	N/A				
East	N/A	0 HOUR	N/A				
West	N/A	0 HOUR	N/A				
South	N/A	0 HOUR	N/A				
Interior		0 HOUR	N/A				
Nonbearing walls and partitions							
Exterior							
North	>30'	0 HOUR	0 HOUR				
East	>30'	0 HOUR	0 HOUR				
West	>30'	0 HOUR	0 HOUR				
South	>30'	0 HOUR	0 HOUR				
Interior walls and partitions		0 HOUR	0 HOUR				
Floor Construction including supporting beams and joists		0 HOUR	0 HOUR				
Roof Construction including supporting beams and joists		0 HOUR	0 HOUR				
Roof Ceiling Assembly		N/A	N/A				
Columns Supporting Roof		N/A	N/A				
Shafts Enclosures - Exit		N/A	N/A				
Shafts Enclosures - Other		N/A	N/A				
Corridor Separation		N/A	N/A				
Occupancy/Fire Barrier Separation		N/A	N/A				
Party/Fire Wall Separation		N/A	N/A				
Smoke Barrier Separation		N/A	N/A				
Smoke Partition		N/A	N/A				
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A	N/A				
Incidental Use Separation		N/A	N/A				

*Indicates section number permitting reduction.

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (feet) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
>30'	Unprotected, Nonsprinklered	No Limit	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:	☐ No	☒ Yes	
Exit Signs:	☒ No	☐ Yes	
Fire Alarm:	☒ No	☐ Yes	☐ Partial
Smoke Detection Systems:	☒ No	☐ Yes	☐ Partial
Carbon Monoxide Detection:	☒ No	☐ Yes	

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: N/A (Open Shelter)

- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☐ Assumed and real property line locations
- ☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☐ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☐ Occupant loads for each area
- ☐ Exit access travel distances (1017)
- ☐ Common path of travel distances [Tables 1006.2.1 & 1006.3.2(1)]
- ☐ Dead end lengths (1020.4)
- ☐ Clear exit widths for each exit door
- ☐ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- ☐ Actual occupant load for each exit door
- ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- ☐ Location of doors with panic hardware (1010.1.10)
- ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
- ☐ Location of doors equipped with hold-open devices
- ☐ Location of emergency escape windows (1030)
- ☐ The square footage of each fire area (202)
- ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # PARKING SPACES		# ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE SPACES PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
Existing						
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATER CLOSETS MALE	WATER CLOSETS FEMALE	WATER CLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS & TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
Maximum Occ. Load 128 people	EXISTING	0	0	0	0	0	0	0	0	0	0
	NEW	0	0	0	0	0	0	0	0	0	0
	REQUIRED	1	1	0	0	1	1	0	0	1	1

**Note: Existing plumbing fixtures are provided within 500 feet.

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)

STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors:	Snow (I_s)	1.0
	Seismic (I_E)	1.0
Live Loads:	Roof	20 PSF
	Mezzanine	N/A
	Floor	100 PSF
Ground Snow Load:		15 PSF
Wind Loads:	Basic Wind Speed	117 MPH (ASCE 7-10)
	Exposure Category	B

Metal building portion to be supplied by metal building manufacturer

SEISMIC CATEGORY ☐ A ☐ B ☒ C ☐ D

Provide the following Seismic Design Parameters:

Occupancy Category (Table 1604.5) ☐ I ☒ II ☐ III ☐ IV

Spectral Response Acceleration S_s 17.9 %g S_1 8.5 %g

Site Classification (ASCE-7) ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F

Data source: ☐ Field Test ☒ Presumptive ☐ Historical Data

Basic Structural System: (check one)
☐ Bearing Wall ☐ Dual W/ Special Moment Frame
☒ Building Frame ☐ Dual W/ Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum

Analysis Procedure: ☐ Simplified ☒ Equivalent Lateral Force ☐ Dynamic

Architectural, Mechanical, Components Anchored? ☐ Yes ☒ No

LATERAL DESIGN CONTROL: ☐ Earthquake ☒ Wind

SOIL BEARING CAPACITIES:

Field Test (provide copy of test report) N/A psf

Presumptive Bearing Capacity 2000 psf

Pile Size, Type, and Capacity N/A

SPECIAL INSPECTIONS REQUIRED: ☐ Yes ☒ No

ENERGY SUMMARY

ENERGY REQUIREMENTS:

The following data shall be considered minimum and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)

Exempt Building: ☐ Provide code or statutory reference: Thermal envelope elements do not apply; This structure is an open shelter.

Climate Zone : ☐ 3 ☒ 4 ☐ 5

Method of Compliance :

Energy Code:	☐ Performance	☒ Prescriptive	☐ Trade-Off
ASHRAE 90.1:	☐ Performance	☐ Prescriptive	☐ Trade-Off
Other:	☐ Performance (specify source)		

THERMAL ENVELOPE :

Roof/Ceiling Assembly (each assembly)
- Description of Assembly N/A
- U-value of Total Assembly N/A
- R-value of Insulation N/A
- Skylights in each assembly N/A
- U-Value of skylight N/A
- Total square footage of skylights in each assembly N/A

Exterior Walls (each assembly)
- Description of Assembly N/A
- U-value of Total Assembly N/A
- R-value of Insulation N/A
- Openings (windows or doors with glazing) N/A
- U-Value of assembly N/A
- Solar heat gain coefficient: N/A
- Projection factor: N/A
- Door R-Values: N/A

Walls below grade (each assembly)
- Description of Assembly N/A
- U-value of Total Assembly N/A
- R-value of Insulation N/A

Floors over unconditioned space (each assembly)
- Description of Assembly N/A
- U-value of Total Assembly N/A
- R-value of Insulation N/A

Floors slab on grade
- Description of Assembly N/A
- U-value of Total Assembly N/A
- R-value of Insulation N/A
- Horizontal/vertical requirement N/A
- Slab heated N/A

INDEX TO DRAWINGS

NOTICE TO CONTRACTOR
All construction must comply with current NC Building Codes and is subject to field inspection and verification.
Reviewed for Code Compliance
11/06/2023
Harnett COUNTY NORTH CAROLINA

SMITH ENGINEERING AND DESIGN, P.A.
1103 Gracie Pl., Suite A
Goldsboro, N.C. 27534
Corporation License No. C-2241
Phone: 919.736.2141 Fax: 919.736.2142

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 024916 10-17-23 ENGINEER JOE T. SMITH JR.

REVISIONS

NO.	DATE	DESCRIPTION

New Facility for:
Campbell University
Baseball Open Shelter
Buies Creek, NC

DATE: 17 October 2023
DRAWN BY: T.B.
SCALE: NO SCALE

T-1

STRUCTURAL NOTES

GENERAL

1. THESE DRAWINGS ARE TO BE COORDINATED WITH THE PRE-ENGINEERED METAL BUILDING PLANS.
2. THIS STRUCTURE AND ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE NC BUILDING CODE AND ANY LOCAL LAWS WHERE THE STRUCTURE IS TO BE CONSTRUCTED.

MISCELLANEOUS

1. THE CONTRACTOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING, SHORING, AND GUYING OF FRAMING AND WALLS AGAINST WIND, CONSTRUCTION LOADS, AND OTHER TEMPORARY FORCES UNTIL SUCH PROTECTION IS NO LONGER REQUIRED FOR THE SAFE SUPPORT OF THE FRAMING.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE DIMENSIONS OF THE STRUCTURAL DRAWINGS AND ADVISING THE ENGINEER OF ANY DIFFERENCES IN DIMENSIONS BETWEEN THE METAL BUILDING PLANS AND SECTIONS PRIOR TO COMMENCING CONSTRUCTION.
3. CONSTRUCTION SAFETY: THESE STRUCTURAL DRAWINGS DO NOT CONTAIN NECESSARY COMPONENTS FOR SAFETY DURING CONSTRUCTION.

FOUNDATIONS

1. THE STRUCTURAL ENGINEER HAS NOT PERFORMED A SUBSURFACE INVESTIGATION. THE FOUNDATION IS BASED UPON AN ASSUMED SOIL BEARING CAPACITY OF 2000 PSF NET BEARING. VERIFICATION OF THIS ASSUMED VALUE IS THE RESPONSIBILITY OF THE OWNER OR CONTRACTOR. SHOULD ANY ADVERSE SOIL CONDITION BE ENCOUNTERED, THE STRUCTURAL ENGINEER MUST BE CONTACTED BEFORE PROCEEDING.
2. ANY FILL SHALL BE PLACED UNDER THE DIRECTION OR RECOMMENDATION OF A LICENSED PROFESSIONAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY.

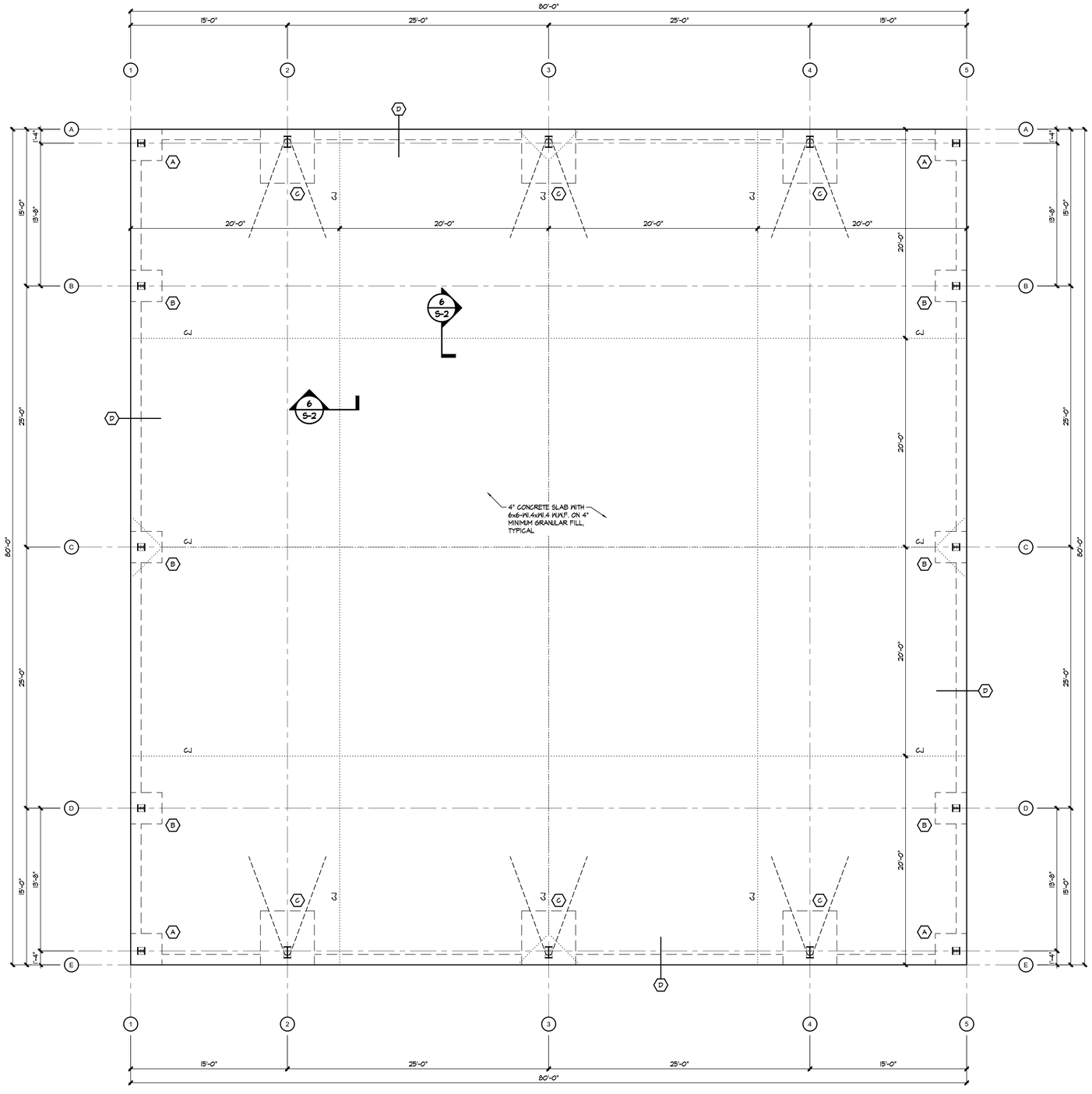
CONCRETE

1. REINFORCED CONCRETE WORK SHALL COMPLY WITH BOTH "SPECIFICATIONS FOR STRUCTURAL BUILDINGS" ACI 301 AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" ACI 318.
2. CONCRETE SHALL BE PLACED IN ACCORDANCE WITH ACI 304R.
3. DURING HOT WEATHER THE CONTROL OF CONCRETE PLACEMENT, PROTECTION AND CURING SHALL COMPLY WITH ACI 305R.
4. WHEN THE MEAN DAILY TEMPERATURE IS BELOW 40 DEGREES F THE CONTROL OF PLACEMENT, PROTECTION AND CURING SHALL COMPLY WITH ACI 306R.
5. CONCRETE SHALL HAVE NORMAL WEIGHT AGGREGATE AND A MINIMUM COMPRESSIVE STRENGTH (Fc) AT 28 DAYS AS LISTED BELOW.
   - 5.1 FOOTINGS 3000 PSI
   - 5.2 SLABS-ON-GRADE 3000 PSI
6. ENTRAINED AIR MUST BE USED IN ALL CONCRETE THAT WILL BE EXPOSED TO FREEZING AND THAWING AND DEICING CHEMICALS. AMOUNT OF AIR ENTRAINMENT (PERCENT) SHALL BE IN ACCORDANCE WITH THE FOLLOWING SCHEDULE WITH A RANGE OF -1 TO +2 PERCENTAGE POINTS OF THE TARGET VALUE:
   - 6.1 FOOTINGS 5%
   - 6.2 INTERIOR SLABS 0%, SEE NOTE BELOW
   - 6.3 EXTERIOR SLABS 5%

   NOTE: IT IS RECOMMENDED THAT INTERIOR SLABS TO BE GIVEN A SMOOTH, DENSE, HARD-TROWELED FINISH NOT TO CONTAIN ENTRAINED AIR SINCE BLISTERING OR DELAMINATION MAY OCCUR. IF SLAB WILL BE EXPOSED TO DEICING OR OTHER AGGRESSIVE CHEMICALS, CONTACT STRUCTURAL ENGINEER FOR PROPER AIR ENTRAINMENT REQUIREMENTS.
7. CONCRETE SLABS ON GRADE SHALL BE CONSTRUCTED IN ACCORDANCE WITH ACI 302.1R-96 "GUIDE FOR CONCRETE SLAB AND SLAB CONSTRUCTION".
8. CONTROL JOINTS SHALL BE SPACED IN SLABS ON GRADE AT A MAXIMUM OF 15'-0" O.C. UNLESS OTHERWISE NOTED.

REINFORCING STEEL

1. REINFORCING STEEL SHALL COMPLY WITH ASTM A615, GRADE 60. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A185. WELDABLE REINFORCING BARS SHALL COMPLY WITH ASTM A706, GRADE 60.
2. CLEAR CONCRETE COVER ON REINFORCING STEEL: BOTTOM OF FOOTINGS= 3", SIDE AND TOP SURFACE OF FOOTINGS= 2", BOTTOM OF SLAB ON GRADE = 2 1/2", WALL SURFACE = 2", TOP OR BOTTOM SURFACE OF FLOOR SLABS = 3/4".
3. PROVIDE CLASS 3 BAR AND MESH SUPPORTS.
4. DETAILING, FABRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 315 (LATEST EDITION) MANUAL OF STANDARD PRACTICE FOR DETAILING CONCRETE STRUCTURES.
5. HORIZONTAL FOOTING SHALL BE CONTINUOUS AND AND SHALL HAVE 90° BENDS OR CORNER BARS SHALL BE INSTALLED. THE CORNER BAR SHALL HAVE THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCEMENT WITH A CLASS B TENSION SPLICE.
6. LAP REINFORCEMENT AS REQUIRED A MINIMUM OF 40 BAR DIAMETERS FOR TENSION OR COMPRESSION UNLESS NOTED OTHERWISE. SPLICES IN MASONRY SHALL BE A MINIMUM OF 48 BAR DIAMETERS.



FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

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NORTH CAROLINA PROFESSIONAL SEAL 024916 ENGINEER JOE T. SMITH JR. 10-17-23

REVISIONS

REV	DATE	DESCRIPTION

New Facility for:
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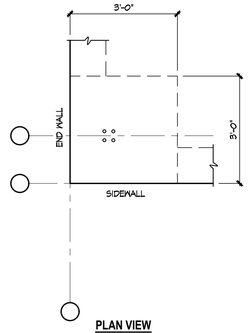
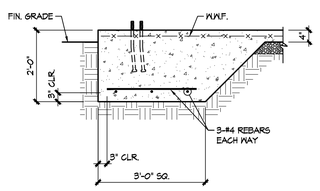
S-1



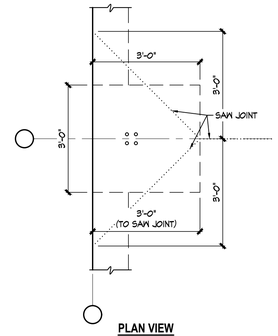
PLAN VIEW



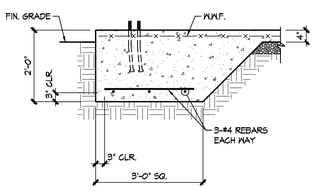
SECTION VIEW

1 S-2 COLUMN FOOTING "A"

SCALE: 1/2" = 1'-0"



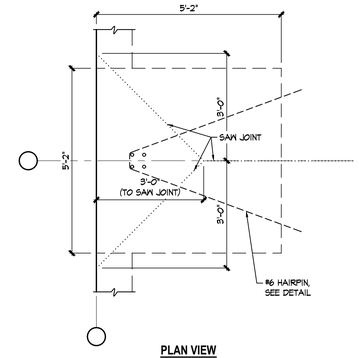
PLAN VIEW



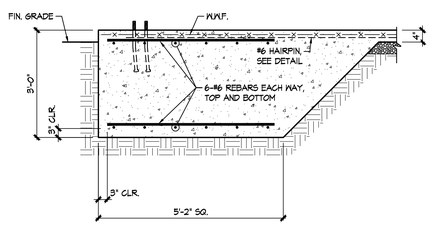
SECTION VIEW

2 S-2 COLUMN FOOTING "B"

SCALE: 1/2" = 1'-0"

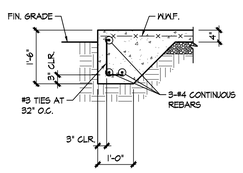


PLAN VIEW



3 S-2 COLUMN FOOTING "C"

SCALE: 1/2" = 1'-0"

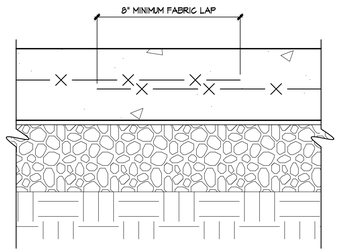


4 S-2 PERIMETER FOOTING "D"

SCALE: 1/2" = 1'-0"

TYPICAL SLAB EDGE FOOTING

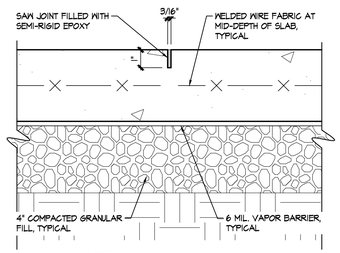
NOTE:
FABRIC SPLICES ARE NOT TO BE LOCATED NEAR CONSTRUCTION OR CONTROL JOINTS



5 S-2 DETAIL

SCALE: 3" = 1'-0"

TYPICAL WIRE FABRIC SPLICE

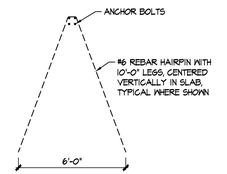


NOTE:
SAW JOINT SHALL BE MADE AS SOON AS CONCRETE HAS GAINED SUFFICIENT STRENGTH TO RETAIN AGGREGATE AGAINST THE SAWING ACTION OR AT 8 HOURS MAXIMUM AFTER PLACEMENT.

6 S-2 DETAIL

SCALE: 3" = 1'-0"

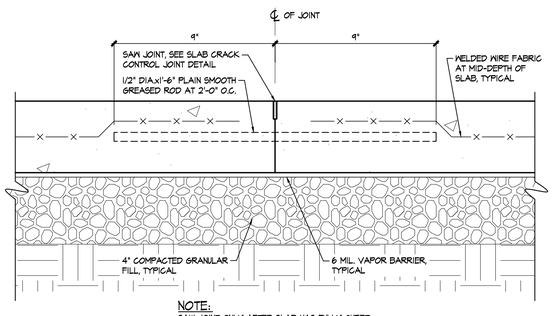
TYPICAL SLAB CRACK CONTROL JOINT



7 S-2 DETAIL

SCALE: 1/4" = 1'-0"

REBAR HAIRPIN CONSTRUCTION

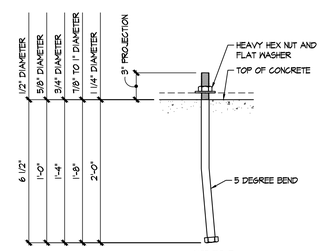


NOTE:
SAW JOINT ONLY AFTER SLAB HAS FULLY CURED.

8 S-2 DETAIL

SCALE: 3" = 1'-0"

TYPICAL SLAB CONSTRUCTION JOINT



NOTE:
STANDARD HOOKED ANCHOR BOLTS MAY BE USED AT CONTRACTOR'S DISCRETION. PROVIDE MINIMUM EMBEDMENT INDICATED AND PROVIDE MINIMUM 3" END HOOK.

9 S-2 DETAIL

SCALE: 1 1/2" = 1'-0"

ANCHOR BOLT INSTALLATION

SMITH ENGINEERING AND DESIGN, P.A.
1103 Gracie Pl., Suite A
Goldsboro, N.C. 27534
Corporation License No. C-2241
Phone: 919.736.2141 Fax: 919.736.2142

NORTH CAROLINA PROFESSIONAL SEAL 024916 ENGINEER JOE T. SMITH JR. 10-17-23

REVISIONS

NO	DATE	DESCRIPTION

New Facility for:
Campbell University
Baseball Open Shelter
Buies Creek, NC

DATE: 17 October 2023
DRAWN BY: T.B.
SCALE: AS NOTED

S-2

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	LAMP			BALLAST		FIXTURE	VOLTS	LUMENS	NOTES
		TYPE	NO.	WATTS	TYPE	NO.	INPUT WATTS			
H1	HIGH BAY LED	LED	–	112	–	–	112	120	12000	

NOTES:
1. PROVIDE ALL FIXTURES WITH LAMPS OF MODERATE TONE (3500K) AND GOOD CRI (COLOR RENDERING INDEX).
2. PROVIDE FIXTURES BY LITHONIA, COLUMBIA, HUBBLE, OR EQUAL PRODUCT.

ELECTRICAL LEGEND

SYM.	DESCRIPTION	REMARKS
J	JUNCTION BOX	DOUBLE GANG UNO
	NON–FUSED DISCONNECT	–
OS	OCCUPANCY SENSOR	–
$	SWITCH	MOUNT 48" TOD AFF
$3	3 WAY SWITCH	MOUNT 48" TOD AFF
	RECEPTACLE	MOUNT 16" BOD AFF
GFI	GROUND FAULT RECEPTACLE	MOUNT 6" ABV. COUNTER
WP GFI	GROUND FAULT, WEATHERPROOF RECEPT.	MOUNT 24" BOD AFG
	240V RECEPTACLE	–
	DOUBLE DUPLEX RECEPTACLE	–
CKT #	CIRCUIT IDENTIFIER	–
x	DATA OUTLET	NUM. OF PORTS AS INDICATED

NOTES:
1. STANDARD MOUNTING HEIGHTS OF DEVICES SHALL BE AS LISTED IN LEGEND. SPECIFIC MOUNTING HEIGHT OF A DEVICE MAY VARY AS NOTED ON PLANS.
2. E.C. SHALL COORDINATE COLOR SELECTION OF DEVICES AND COVERPLATES WITH ENGINEER, OWNER AND/OR G.C.
3. PROVIDE EQUIPMENT SHOWN BY HUBBELL, PASS & SEYMOUR, COOPER WIRING DEVICES, OR EQUAL PRODUCT.
4. OPERATING DEVICES AND OPERABLE PARTS OF OPERATING DEVICES SUCH AS LIGHT SWITCHES, RECEPTACLES, THERMOSTATS, ALARMS, ETC., SHALL BE LOCATED WITHIN REACH RANGES AS SPECIFIED PER ANSI A117.1–2009.

ABBREVIATIONS:

G.C.	GENERAL CONTRACTOR
P.C.	PLUMBING CONTRACTOR
M.C.	MECHANICAL CONTRACTOR
E.C.	ELECTRICAL CONTRACTOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
UNO	UNLESS NOTED OTHERWISE
℄	CENTERLINE OF DEVICE
BOD	BOTTOM OF DEVICE
TOD	TOP OF DEVICE

ELECTRICAL NOTES:

1. ELECTRICAL PLANS ARE INTENDED TO PROVIDE INFORMATION FOR INSTALLATION OF A COMPLETE ELECTRICAL SYSTEM. PROVIDE ALL ESSENTIAL LABOR, MATERIALS & DEVICES REQUIRED TO PRODUCE A QUALITY END PRODUCT.
2. CONTRACTOR SHALL REVIEW & BECOME FAMILIAR WITH THE WORK OF ALL TRADES FOR PURPOSES OF COORDINATION AND ROUTING. CONTRACTOR SHALL PROVIDE REQUIRED PLANNING, COORDINATION AND SEQUENCING OF ELECTRICAL INSTALLATION WITH BUILDING COMPONENTS AND OTHER TRADES.
3. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE (NEC). WORKMANSHIP SHALL MEET OR EXCEED INDUSTRY STANDARDS.
4. PROTECT ALL NEW MATERIALS FROM THE WEATHER IN STORAGE TRAILERS OR PROVIDE SUITABLE COVERING.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL DISCONNECTS, STARTERS, DEVICES AND ELECTRICAL COMPONENTS UNLESS SPECIFICALLY NOTED AS PROVIDED BY OTHERS.
6. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL LINE AND LOAD SIDE WIRING INCLUDING ALL TERMINATIONS TO EQUIPMENT PROVIDED UNDER OTHER TRADES. POWER WIRING TO CONTROL DEVICES SHALL BE PROVIDED BY E.C..
7. ALL WIRING, DEVICES AND OTHER LIKE MATERIALS SHALL BE UL LISTED & LABELED. ALL MATERIALS SHALL MEET THE NEC FOR THE INTENDED USE AND INSTALLED IN ACCORDANCE WITH THE NEC.
8. PROVIDE THHN/THWN COPPER WIRE. PROVIDE A MINIMUM WIRE SIZE OF #12. CONDUCTORS AND CONDUIT ON PLANS AND SCHEDULES REFLECT AMPACITIES PER NEC 310–16 75C RATING. CONTRACTOR SHALL VERIFY ALL TERMINATIONS, LUGS, ETC. ARE RATED FOR USE PER NEC 110–4C. OTHERWISE PROVIDE CONDUCTOR AND CONDUIT SIZED PER LOWEST TEMPERATURE RATING OF ANY TERMINATION WITHIN A CIRCUIT. A SEPARATE INSULATED EQUIPMENT GROUNDING CONDUCTOR SHALL BE PROVIDED FOR ALL CIRCUITS.
9. PROVIDE MC CABLE FOR ALL SINGLE PHASE BRANCH CIRCUITS 30 AMPS AND SMALLER.
10. PROVIDE TYPE WRITTEN PANEL SCHEDULES IN EACH PANEL INDICATING THE LOAD DESCRIPTION FOR EACH BREAKER. LABEL PANELS ON PANEL FACE WITH PHENOLIC LABELS INDICATING PANEL NUMBER OR LETTER DESIGNATION, VOLTAGE AND PHASE.
11. PROVIDE LIGHTING AS SCHEDULED IN THE FIXTURE SCHEDULE OR OTHERWISE NOTED ON PLANS.
12. WALL SWITCHES SHALL BE SINGLE POLE, 20 AMP, 120/277V.
13. PROVIDE STANDARD SIZE WALL PLATES FOR ALL DEVICES AND BLANK WALL PLATES FOR JUNCTION BOXES. WALL PLATES SHALL BE HIGH IMPACT, SMOOTH NYLON, COLOR TO MATCH DEVICE.
14. GUARANTEE ALL EQUIPMENT, MATERIALS AND INSTALLATION FREE OF DEFECTS FOR A PERIOD OF 1–YEAR AFTER DATE OF ACCEPTANCE.

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

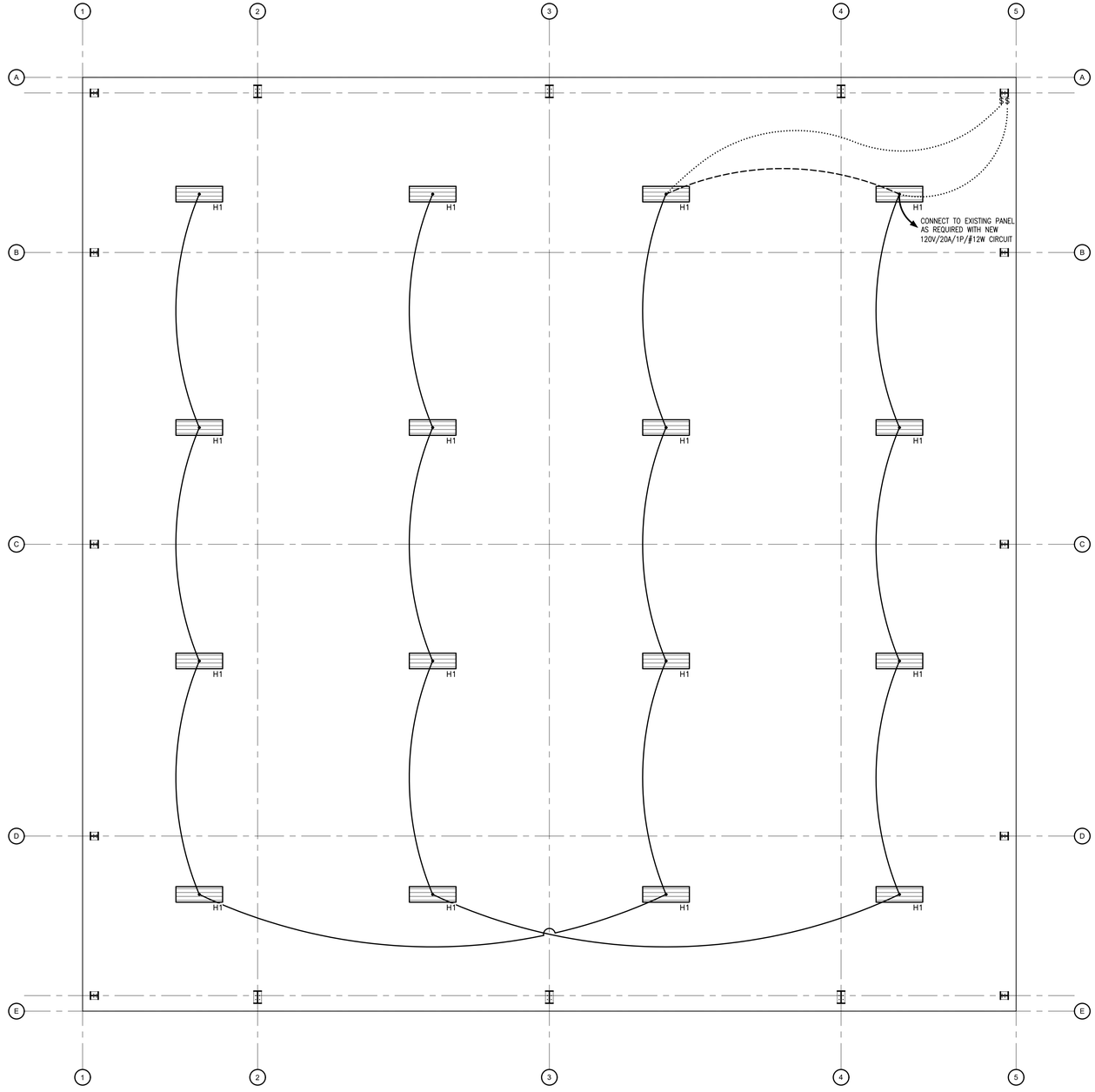
PRESCRIPTIVE ☒ PERFORMANCE ☐ TRADE–OFF ☐

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE	SEE LIGHTING SCHEDULE ON PLANS
NUMBER OF LAMPS IN FIXTURE	"
BALLAST TYPE USED IN THE FIXTURE	"
NUMBER OF BALLASTS IN THE FIXTURE	"
TOTAL WATTAGE PER FIXTURE	"

EQUIPMENT SCHEDULES WITH MOTORS (NOT USED FOR MECHANICAL SYSTEMS)

MOTOR HORSEPOWER	N/A – NO MOTORS LARGER THAN 1 HP SPECIFIED ON THESE PLANS
NUMBER OF PHASES	OTHER THAN AS LISTED IN MECHANICAL SCHEDULES
MINIMUM EFFICIENCY	
MOTOR TYPE	
# OF POLES	



ELECTRICAL LIGHTING PLAN

SCALE: 3/16" = 1'-0"

SMITH ENGINEERING AND DESIGN, P.A.
1103 Gracie Pl., Suite A
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Phone: 919.736.2141 Fax: 919.736.2142

NORTH CAROLINA PROFESSIONAL SEAL 024916 ENGINEER JOE T. SMITH JR. 10-17-23

REVISIONS

REV	DATE	DESCRIPTION

New Facility for:
Campbell University
Baseball Open Shelter
Buies Creek, NC

DATE: 17 October 2023
DRAWN BY: T.B.
SCALE: 3/16" = 1'-0"

E-1

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 REPRESENTITIVE. IN THE EVENT INSPECTIONS ARE REQUIRED, THE OWNER AND/OR THE OWNER'S REPRESENTITIVE 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: LC3 GAUGE: 24 FINISH: Dark Bronze CLIP TYPE: Tall
THERMAL BLOCKS: Yes EPS FOAM SPACER: No ROOF LINE TRIM, PAINTED: Dark Bronze
YES☒ NO☐ DOWNSPOUTS PAINTED: Dark Bronze GUTTERS PAINTED: Dark Bronze
YES☒ NO☐ INSULATION 5.25 INCH (NOT BY MBS)
YES☐ NO☒ PIPE JACKS, SIZE: QUANTITY:
YES☐ NO☒ RIDGE VENTS, 10'-0" LONG X 9" THROAT. QUANTITY:
YES☐ NO☒ ROOF FRAMED OPENINGS, SEE ROOF FRAMING PLAN FOR SIZES
YES☐ NO☒ COMPOSITE DECK, TYPE: GAUGE: FINISH:

WALL SHEETING

TYPE: APW GAUGE: 26 FINISH: Slate Gray
CORNER TRIM, PAINTED: Slate Gray BASE TRIM, PAINTED: Burnished Slate
YES☐ NO☒ WALKDOORS, QUANTITY: PAINTED:
YES☐ NO☒ WINDOWS, QUANTITY: PAINTED:
YES☒ NO☐ INSULATION 4.38 INCH (NOT BY MBS)

WALL FRAMED OPENINGS

YES☐ NO☒ FRAMED OPENING TRIM, PAINTED:

BUILDING OPTIONS

YES☐ NO☒ LINER PANELS
FRAMED OPENING TRIM, PAINTED:
WALL: TYPE: GAUGE: FINISH: WALL TRIM, PAINTED:
CEILING: TYPE: GAUGE: FINISH:

YES☐ NO☒ TRANSLUCENT PANELS
WALL:
ROOF:
INSULATED PANELS? YES☐ NO☐

YES☐ NO☒ EAVE EXTENSION
PROJ: TYPE: GAUGE: FINISH: SOFFIT TRIM AT BUILDING LINE PAINTED:

YES☐ NO☒ RAKE EXTENSION
PROJ: TYPE: GAUGE: FINISH: SOFFIT TRIM AT BUILDING LINE PAINTED:

YES☐ NO☒ CANOPY
AT EAVE LINE ☐ BELOW EAVE ☐ PROJECTION: CLEAR UNDER CANOPY BEAM:
ROOF PANEL: TYPE: GAUGE, FINISH:
SOFFIT PANEL: TYPE: GAUGE, FINISH: SOFFIT TRIM AT BUILDING LINE PAINTED:

YES☐ NO☒ PARTITION WALLS
WALL PANEL: TYPE: GAUGE, FINISH: TRIM PAINTED:

YES☐ NO☒ WAINSCOT
WALL PANEL: TYPE: GAUGE, FINISH:
BASE TRIM PAINTED: JAMB TRIM PAINTED: TRANSITION TRIM PAINTED:

YES☐ NO☒ FASCIA
PROJ: TOP OF FASCIA HEIGHT:
FACE PANEL, TYPE: GAUGE, FINISH: CAP TRIM PAINTED:
BACK PANEL, TYPE: GAUGE, FINISH: BASE TRIM PAINTED:
☐ CLOSED SYSTEM, CLEAR UNDER SOFFIT TRIM:
SOFFIT PANEL, TYPE: GAUGE, FINISH: SOFFIT TRIM AT BUILDING LINE PAINTED:
☐ OPEN SYSTEM, (NO SOFFIT PANEL PROVIDED) CLEAR UNDER SOFFIT TRIM:

YES☐ NO☒ PARAPET
☐ STRUCTURAL PARAPET ☐ NON-STRUCTURAL PARAPET TOP OF PARAPET HEIGHT:
BACK PANEL, TYPE: GAUGE, FINISH:

YES☐ NO☒ CRANES (SEE CRANE PLAN FOR ADDITIONAL INFORMATION)
YES☐ NO☒ MEZZANINE (SEE MEZZANINE PLAN FOR ADDITIONAL INFORMATION)

7. GLOSSARY OF ABBREVIATIONS:

A.B. = ANCHOR BOLTS	MAX = MAXIMUM	REQ'D = REQUIRED
BS = BOTH SIDES	M.B. = MACHINE BOLTS	REV. = REVISION
B.U. = BUILT-UP	MBS = METAL BUILDING SUPPLIER	SIM = SIMILAR
DIA = DIAMETER	TBD = TO BE DETERMINED	SL = STEEL LINE
FLG = FLANGE	N/A = NOT APPLICABLE	N.S. = NEAR SIDE
F.S = FAR SIDE	NIC = NOT IN CONTRACT	MIN = MINIMUM
GA. = GAUGE	SLV = SHORT LEG VERTICAL	TYP = TYPICAL
H.S.B. = HIGH STRENGTH BOLTS	O.A.L. = OVERALL LENGTH	PL = PLATE
HT. = HEIGHT	O.C. = ON CENTER	
LLV = LONG LEG VERTICAL	U.N.O. = UNLESS NOTED OTHERWISE	

PEMB = PRE-ENGINEERED METAL BUILDING MANUFACTURER
?? = PART MARK TO BE DETERMINED AND WILL BE UPDATED ON CONSTRUCTION DRAWINGS

AMERICAN BUILDINGS
a NUCOR brand
MBMA MEMBER
IAS ACCREDITED Metal Building Systems AC 472

BUILDING LOADS

DESIGN CODE: North Carolina (NCBC 2018)
ROOF LIVE LOAD: 20.00 PSF RISK CATEGORY: II
LIVE LOAD REDUCIBLE Yes
GROUND SNOW LOAD: 15.00 PSF SNOW EXP. FACTOR, Ce: 1.20
SNOW IMPORTANCE FACTOR, Is: 1.00

WIND: 115 / 89 MPH
(Vult) / (Vasd)

C & C PRESSURES (PSF): 19 / -26
EXPOSURE: B
UL 90 NO
R-PaneRoof-Const. No.161 ; R-Panel Roof w/ Translucent Panel-Const. No.167
SS3 Roof-Const. No.552 ; SS3 Roof w/ Translucent Panel-Const. No.590 ;
Composite CFR Roof-Const. No.552A ; LS9 Roof-Const. No.332 .
SEISMIC INFORMATION Ss: 0.132 S1: 0.065
Design Sds/Sd1: 0.141 / 0.104 Site Class: D
Seismic Imp. Factor: 1.00 Seismic Design Category: B
Analysis Procedure: Equivalent Lateral Force Method
Long. SFRS: Not Detailed for Seismic
Lat. SFRS: Not Detailed for Seismic

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.

	BUILDING		
ROOF DEAD (PSF):	3.00	ROOF SNOW Pm (PSF):	15.12
PRI. COL. (PSF):	1.00	WIND ENCLOSURE:	Open
SEC. COL. (PSF):	1.00	GCpi:	+/-0.00
SNOW Ct:	1.20	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.047
ROOF SNOW Ps (PSF):	15.12	BASE SHEAR (KIPS):	2.20

DRAWING INDEX

ISSUE	DWN	CHK	ENG	PE	DATE
ANCHOR RODS	MBS	BKK	RHB		07/21/2023
PERMITS	MBS		RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME: CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506
CUSTOMER NAME: SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506
JOB NUMBER: A23B0716A
SHEET TITLE: COVERSHEET

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVAT

SHEET C1 of 2

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.

BCL2

THIS BUILDING SYSTEM DESIGN IS BASED ON UNIFORMLY APPLYING THE CONTRACT-SPECIFIED LIVE LOAD AND ROOF SNOW LOAD. IN ADDITION, THE DESIGN IS BASED ON APPLYING A CODE-DEFINED LIVE LOAD (INCLUDING APPLICABLE REDUCTIONS) AND A CODE-DEFINED SNOW LOAD (BASED ON CONTRACT-SPECIFIED GROUND SNOW) FOR ALL PARTIAL LOADING AND UNBALANCED SNOW LOAD CONDITIONS.

BCL4

IF SNOW GUARDS OR OTHER DEVICES INTENDED TO HOLD SNOW AND/OR ICE ACCUMULATION ON THE ROOF SYSTEM ARE TO BE USED ON THIS PROJECT, THEY MUST BE INSTALLED UNDER THE GUIDANCE OF THE PROJECT "ENGINEER OF RECORD" (EOR), NOT THE METAL BUILDING MANUFACTURER, SO AS NOT TO EXCEED THE DESIGN ROOF SNOW LOAD ON THIS PROJECT.

RA3

ISSUE	DWN	CHK	ENG	PE	DATE
ANCHOR RODS	MBS	BKK	RHB		07/21/2023
PERMITS	MBS		RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

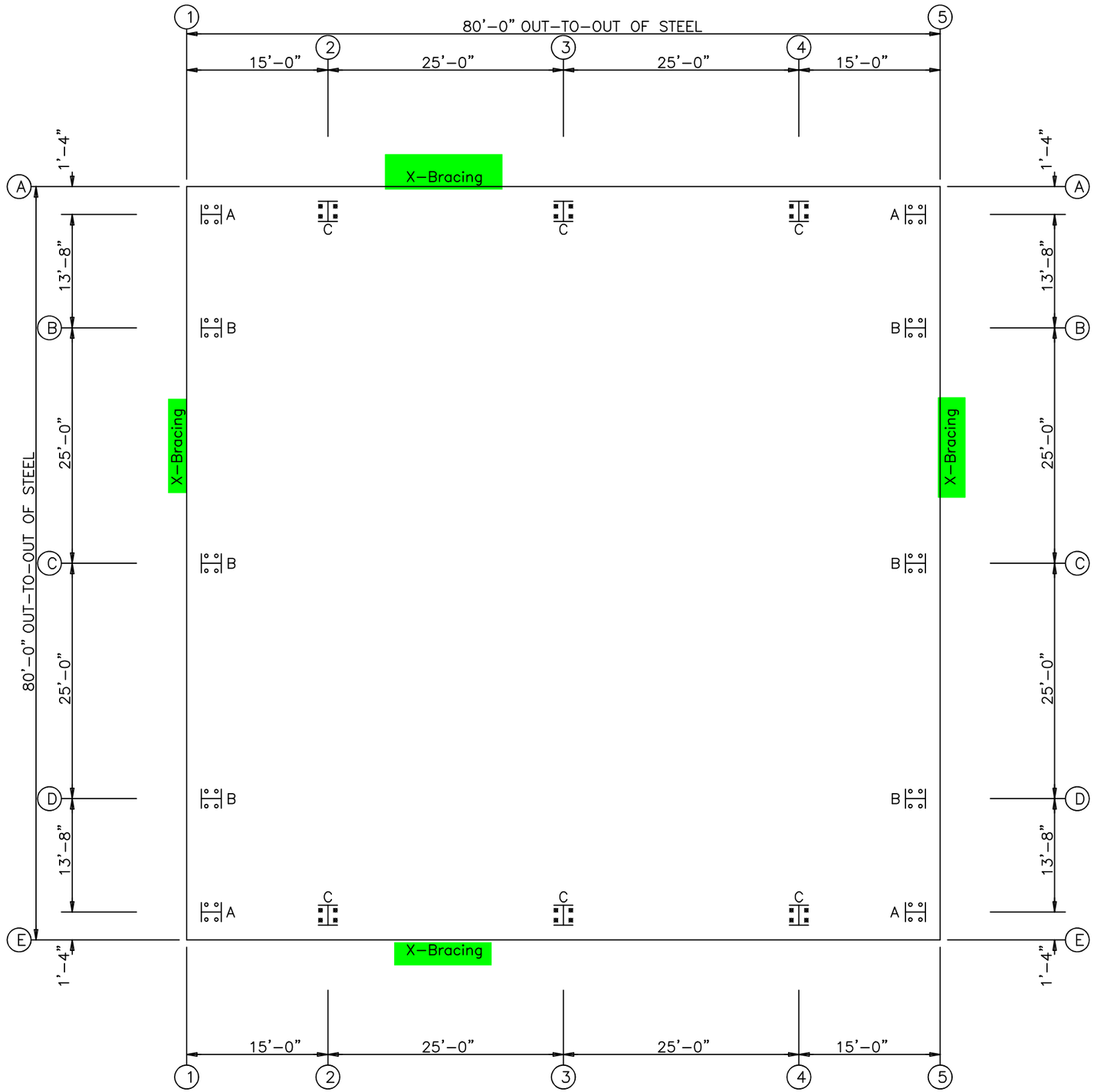
JOB NUMBER
A23B0716A

SHEET TITLE
ADDITIONAL NOTES

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

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

SHEET
C2 of 2



ANCHOR BOLT PLAN
NOTE: All Base Plates @ 100'–0" (U.N.)

ANCHOR BOLT SUMMARY					
	Qty	Locate	Dia (in)	Type	Proj (in)
O	40	Endwall	3/4"	F1554	3.00
⊠	24	Frame	1"	F1554	3.00

ANCHOR BOLT PLAN

GENERAL NOTES

1. THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 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 EMBED–MENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

2. 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.

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

4. 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.

5. DRAWINGS ARE NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

6. 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.

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

8. 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 CONTRETE DIMENSIONS.

9. FINISHED FLOOR ELEVATION = 100'–0" BOTTOM OF BASE PLATE = 100'–0" UNLESS NOTED OTHERWISE.

ISSUE	DWN	CHK	ENG	PE	DATE
ANCHOR RODS	MBS	BKK	RHB		07/21/2023
PERMITS	MBS		RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F–1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC

BUIES CREEK, NC 27506

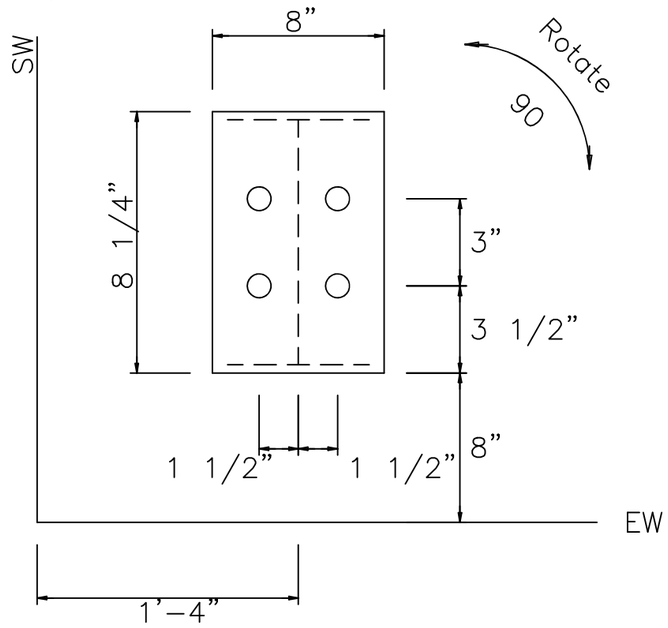
JOB NUMBER
A23B0716A

SHEET TITLE
ANCHOR BOLT PLAN

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

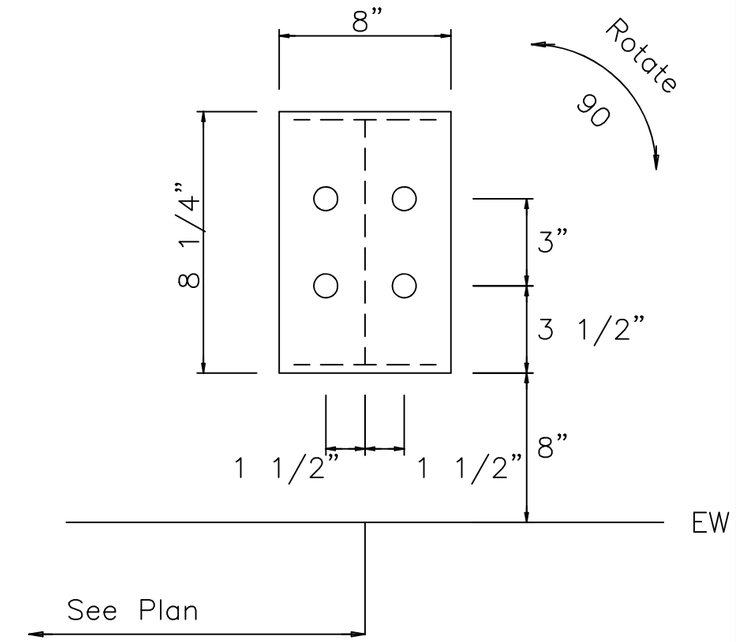
SHEET
F1 of 2

Dia= 3/4”



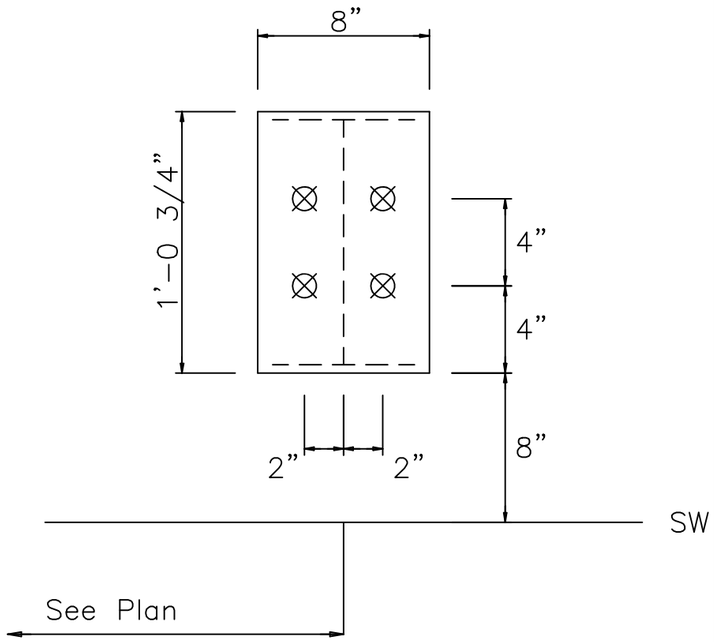
DETAIL A

Dia= 3/4”

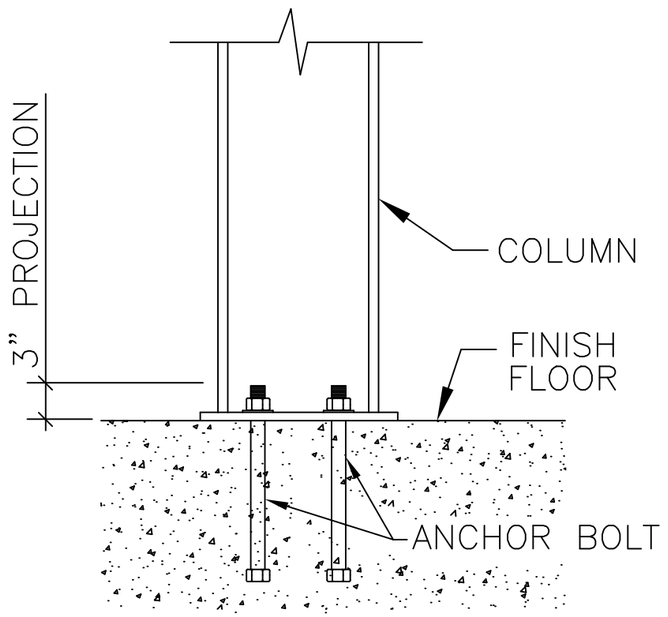


DETAIL B

Dia= 1”



DETAIL C



TYPICAL COLUMN BASE PLATE DETAIL

FOUNDATION DESIGN NOTES:

1. THE ORIENTATION OF THE ANCHOR BOLT DETAILS SHOWN ON THIS PAGE MAY NOT COINCIDE WITH THE ACTUAL COLUMN ORIENTATION SHOWN ON THE ANCHOR BOLT DRAWING. PLEASE REFERENCE THE SIDEWALL (SW) AND ENDWALL (EW) STEEL LINES SHOWN ON THE ANCHOR BOLT DETAILS WITH THE ANCHOR BOLT PLAN DURING LAYOUT OF COLUMN AND ANCHOR BOLT LOCATIONS.

2. COLUMN BASE PLATES MAY HAVE MORE HOLES THAN ARE REQUIRED DUE TO PRODUCTION LIMITATIONS. PLEASE FOLLOW ANCHOR BOLT DETAILS FOR QUANTITY OF ANCHOR BOLTS REQUIRED. EXTRA BASE PLATE HOLES DO NOT NEED INFILLED PER THE MBS DESIGN SPECIFICATIONS.

ISSUE	DWN	CHK	ENG	PE	DATE
ANCHOR RODS	MBS	BKK	RHB		07/21/2023
PERMITS	MBS		RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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COA# F-1470

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76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC

BUIES CREEK, NC 27506

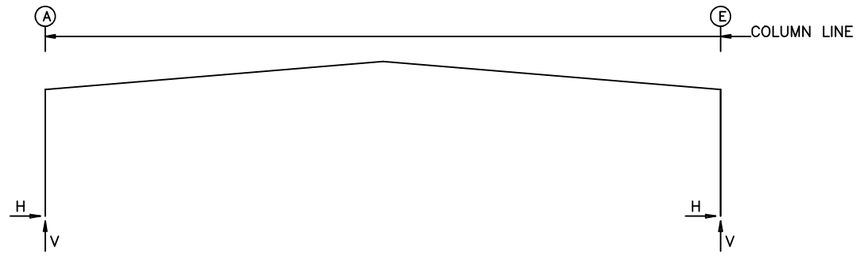
JOB NUMBER
A23B0716A

SHEET TITLE
BASE PLATE DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVATI

SHEET
F2 of 2

FRAME LINES: 2 3 4



RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Base Plate (in) Thick	Elev. (in)
2*	A	4	1.000	8.000	12.75	0.500	0.0
2*	E	4	1.000	8.000	12.75	0.500	0.0

2* Frame lines: 2 3 4

ENDWALL COLUMN: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Base Plate (in) Thick	Elev. (in)
1	A	4	0.750	8.000	8.250	0.375	0.0
1	B	4	0.750	8.000	8.250	0.375	0.0
1	C	4	0.750	8.000	8.250	0.375	0.0
1	D	4	0.750	8.000	8.250	0.375	0.0
1	E	4	0.750	8.000	8.250	0.375	0.0
5	E	4	0.750	8.000	8.250	0.375	0.0
5	D	4	0.750	8.000	8.250	0.375	0.0
5	C	4	0.750	8.000	8.250	0.375	0.0
5	B	4	0.750	8.000	8.250	0.375	0.0
5	A	4	0.750	8.000	8.250	0.375	0.0

GENERAL NOTES

1. ALL LOADING CONDITIONS ARE EXAMINED. THE MAXIMUM AND MINIMUM HORIZONTAL (H) AND VERTICAL (V) REACTIONS AND THE CORRESPONDING VERTICAL (V) OR HORIZONTAL (H) REACTIONS ARE REPORTED.
2. REACTIONS ARE PROVIDED BY LOAD CASE IN ORDER TO AID THE FOUNDATION ENGINEER IN DETERMINING THE APPROPRIATE LOAD FACTORS AND COMBINATIONS TO BE USED WTIH EITHER WORKING STRESS OR ULTIMATE STRENGTH DESIGN METHODS. WIND LOAD CASES ARE GIVEN FOR EACH PRIMARY WIND DIRECTION.
3. FOR ASCE7-10 AND LATER BASED BUILDING CODES, THE UNFACTORED LOAD CASE REACTIONS DUE TO WIND ARE GENERATED USING THE ULTIMATE DESIGN WIND SPEED (Vult).
4. POSITIVE (+) REACTIONS ARE AS SHOWN ABOVE. FOUNDATION LOADS ARE IN OPPOSITE DIRECTIONS.
5. BRACING REACTIONS ARE IN THE PLANE OF THE BRACE WITH THE HORIZONTAL REACTION (H) ACTING AWAY FROM THE BRACED BAY AND THE VERTICAL REACTION (V) ACTING DOWNWARD.

****** RIGID FRAME LOAD CASE ABBREVIATIONS: ******
Wind_L1/Wind_R1: LATERAL WIND FROM THE LEFT/RIGHT, CASE 1
Wind_L2/Wind_R2: LATERAL WIND FROM THE LEFT/RIGHT, CASE 2
Wind_Ln1/Wind_Ln2: LONGITUDINAL WIND, CASE 1/2
Seismic_L/Seismic_R: LATERAL SEISMIC LOAD FROM LEFT/RIGHT
LWIND#_L#E/LWIND#_R#E: LONGITUDINAL WIND EDGE ZONES
F#UNB_SL_L/F#UNB_SL_R: UNBALANCED ROOF SNOW WITH WIND FROM LEFT/RIGHT
F#PAT_LL #/F#PAT_SL #: PARTIAL LIVE/SNOW LOADING FOR CONTINUOUS BEAM SYSTEMS

****** ENDWALL COLUMN LOAD CASE ABBREVIATIONS: ******
Collat: COLLATERAL LOAD
Rafter Wind_L/Rafter Wind_R: LATERAL WIND FROM THE LEFT/RIGHT
Brace Wind_L/Brace Wind_R: LATERAL WIND FROM THE LEFT/RIGHT
Wind_P/Wind_S: LONGITUDINAL WIND PRESSURE/SUCTION ON COLUMNS
Wind_Ln: LONGITUDINAL WIND SUCTION ON ROOF
Seis_L/Seis_R: LATERAL SEISMIC LOAD FROM LEFT/RIGHT
E#UNB_SL_L/E#UNB_SL_R: UNBALANCED ROOF SNOW WITH WIND FROM LEFT/RIGHT
E#PAT_LL #/E#PAT_SL #: PARTIAL LIVE/SNOW LOADING FOR CONTINUOUS BEAM SYSTEMS

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2*	A	3.6	4.6	0.9	1.1	10.8	12.6	13.7	15.9	-9.1	-10.6	-9.1	-10.6
2*	E	-3.6	4.6	-0.9	1.1	-10.8	12.6	-13.7	15.9	9.1	-10.6	9.1	-10.6

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2*	A	-7.6	-6.4	-6.9	-10.5	-18.5	-21.6	12.3	14.4	-0.4	-0.1	0.4	0.1
2*	E	6.9	-10.5	7.6	-6.4	18.5	-21.6	-12.3	14.4	-0.4	0.1	0.4	-0.1

Frame Line	Column Line	MIN_SNOW Horiz	MIN_SNOW Vert	F1UNB_SL_L Horiz	F1UNB_SL_L Vert	F1UNB_SL_R Horiz	F1UNB_SL_R Vert
2*	A	13.6	15.9	11.1	15.3	11.1	8.9
2*	E	-13.6	15.9	-11.1	8.9	-11.1	15.3

2* Frame lines: 2 3 4

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long2 Vert	Seis Left Vert
1	A	0.3	0.0	0.6	0.4	-0.3	-0.3	-0.1	-0.4	-0.9	1.0	0.3	0.0
1	B	1.2	0.2	4.2	3.0	-2.1	-2.1	-0.9	-2.5	-2.5	2.5	1.8	0.0
1	C	1.1	0.2	3.3	2.5	-1.6	-1.6	-1.3	-1.3	-3.6	3.6	1.4	0.0
1	D	1.2	0.2	4.2	3.0	-2.1	-2.1	-2.6	-0.9	-2.5	2.5	1.8	0.0
1	E	0.3	0.0	0.6	0.4	-0.3	-0.3	-0.4	-0.1	-0.9	1.0	0.3	0.0

Frm Line	Col Line	Seis Right Vert	MIN_SNOW Horz	MIN_SNOW Vert	E1UNB_SL_L Horz	E1UNB_SL_L Vert	E1UNB_SL_R Horz	E1UNB_SL_R Vert
1	A	0.0	0.0	0.4	0.0	0.3	0.0	0.1
1	B	0.0	0.0	3.2	0.0	3.8	0.0	1.0
1	C	0.0	0.0	2.5	0.0	2.3	0.0	2.3
1	D	0.0	0.0	3.2	0.0	1.0	0.0	3.8
1	E	0.0	0.0	0.4	0.0	0.1	0.0	0.3

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long2 Vert	Seis Left Vert
5	E	0.3	0.0	0.6	0.4	-0.3	-0.3	-0.1	-0.4	-0.9	1.0	0.3	0.0
5	D	1.2	0.2	4.2	3.0	-2.1	-2.1	-0.9	-2.6	-2.5	2.5	1.8	0.0
5	C	1.1	0.2	3.3	2.5	-1.6	-1.6	-1.3	-1.3	-3.6	3.6	1.4	0.0
5	B	1.2	0.2	4.2	3.0	-2.1	-2.1	-2.5	-0.9	-2.5	2.5	1.8	0.0
5	A	0.3	0.0	0.6	0.4	-0.3	-0.3	-0.4	-0.1	-0.9	1.0	0.3	0.0

Frm Line	Col Line	Seis Right Vert	MIN_SNOW Horz	MIN_SNOW Vert	E2UNB_SL_L Horz	E2UNB_SL_L Vert	E2UNB_SL_R Horz	E2UNB_SL_R Vert
5	E	0.0	0.0	0.4	0.0	0.3	0.0	0.1
5	D	0.0	0.0	3.2	0.0	3.8	0.0	1.0
5	C	0.0	0.0	2.5	0.0	2.3	0.0	2.3
5	B	0.0	0.0	3.2	0.0	1.0	0.0	3.8
5	A	0.0	0.0	0.4	0.0	0.1	0.0	0.3

BUILDING BRACING REACTIONS

Wall Loc	Wall Line	Col Line	± Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel Shear (lb/ft) Wind	Panel Shear (lb/ft) Seis
L_EW	1	B,C	0.2	0.1	0.3	0.2		
F_SW	E	2,3	12.1	6.3	1.1	0.6		
R_EW	5	C,B	0.2	0.1	0.3	0.2		
B_SW	A	3,2	12.1	6.3	1.1	0.6		

ISSUE	DWN	CHK	ENG	PE	DATE
ANCHOR RODS	MBS	BKK	RHB		07/21/2023
PERMITS	MBS		RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC

BUIES CREEK, NC 27506

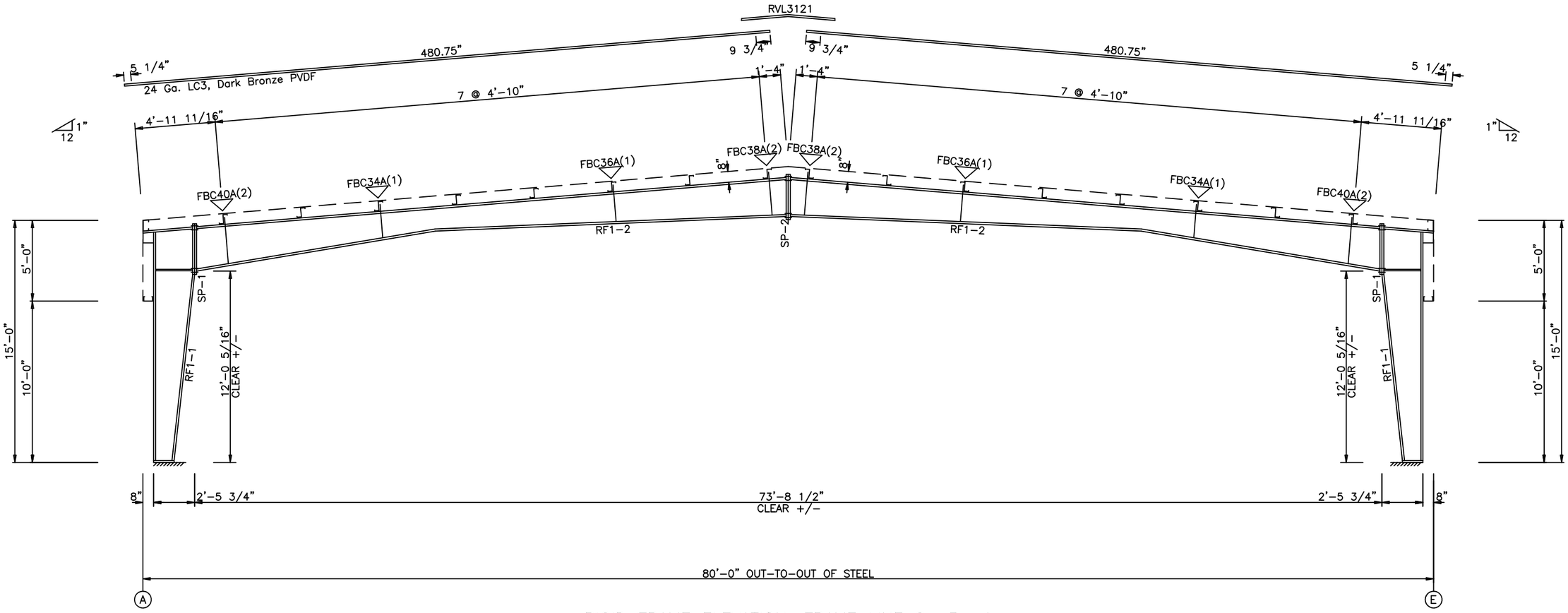
JOB NUMBER
A23B0716A

SHEET TITLE
REACTIONS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGWARI

SHEET
R1 of 1

SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	0.750	3.00	6"	3/4"	3'-1"
SP-2	4	4	0	A325	0.625	2.25	6"	1/2"	2'-8 1/4"



RIGID FRAME ELEVATION: FRAME LINE 2 3 4

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
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SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

SHEET TITLE
RIGID FRAME CROSS SECTION

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVAR

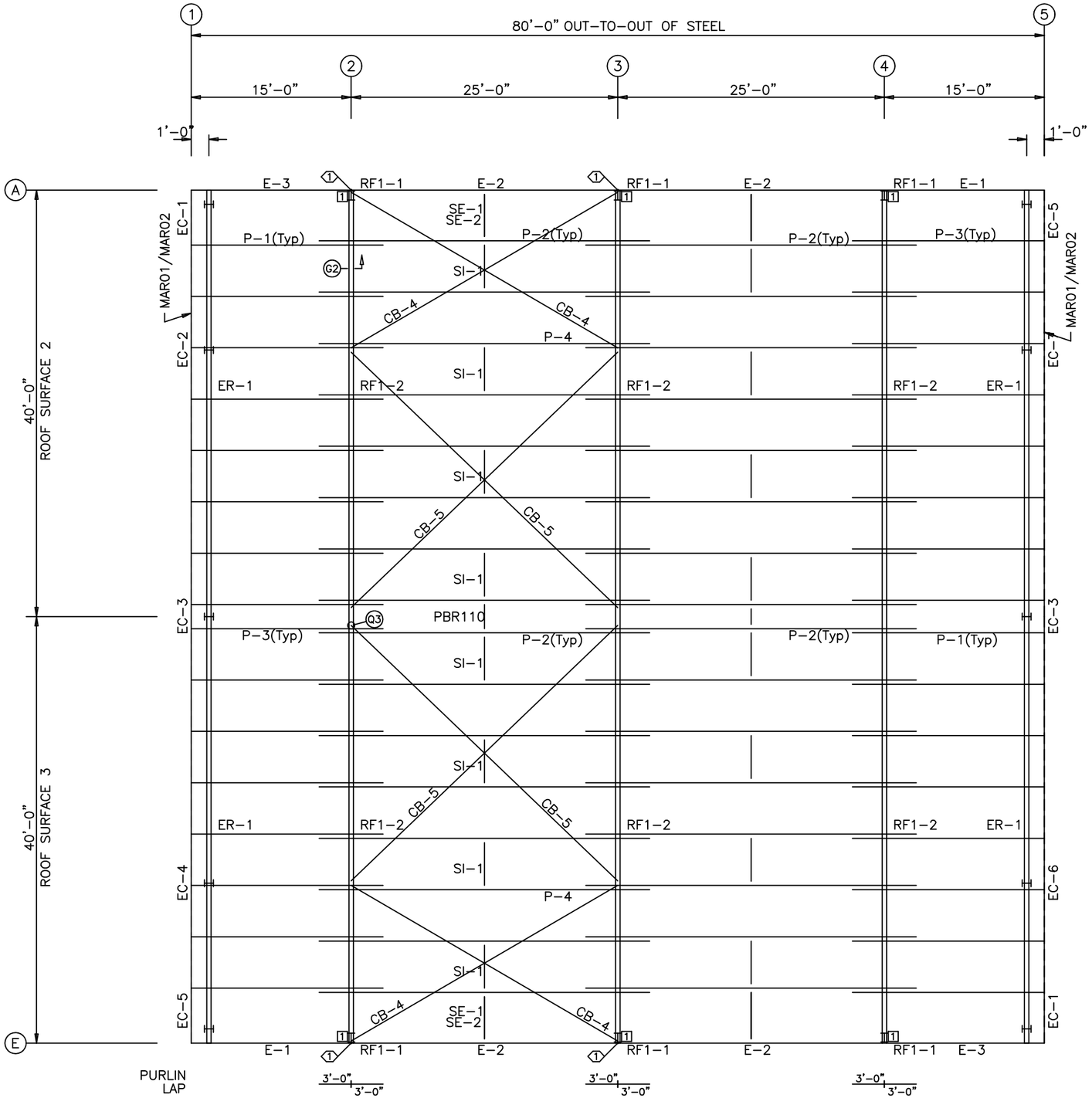
This seal pertains only to the materials designed and supplied by the Metal Building Manufacturer. The drawings and the metal buildings which they represent are the product of the Metal Building Manufacturer. The engineer of record for these drawings is employed by the Metal Building Manufacturer and does not serve as or represent the project engineer of record and shall not be construed as such.

SHEET
E1 of 7

SPECIAL BOLTS ROOF PLAN					
◇ ID	QUAN	TYPE	DIA	LENGTH	WASH
1	4	A325	1/2"	2"	1

MEMBER TABLE ROOF PLAN		
MARK	PART	LENGTH
P-1	08Z060	215.750
P-2	08Z060	372.000
P-3	08Z060	215.750
P-4	08Z089	372.000
E-1	08E060	179.625
E-2	08E075	299.750
E-3	08E060	179.625
CB-4	RD05-	346.000
CB-5	RD05-	421.000
PBR110	PBR110	16.000
SI-1	PBX-	60.500
SE-1	PBX-	62.250
SE-2	PBX-	62.750

CONNECTION PLATES ROOF PLAN	
□ID	MARK/PART
1	ESC02



ROOF FRAMING PLAN

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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BUIES CREEK, NC 27506

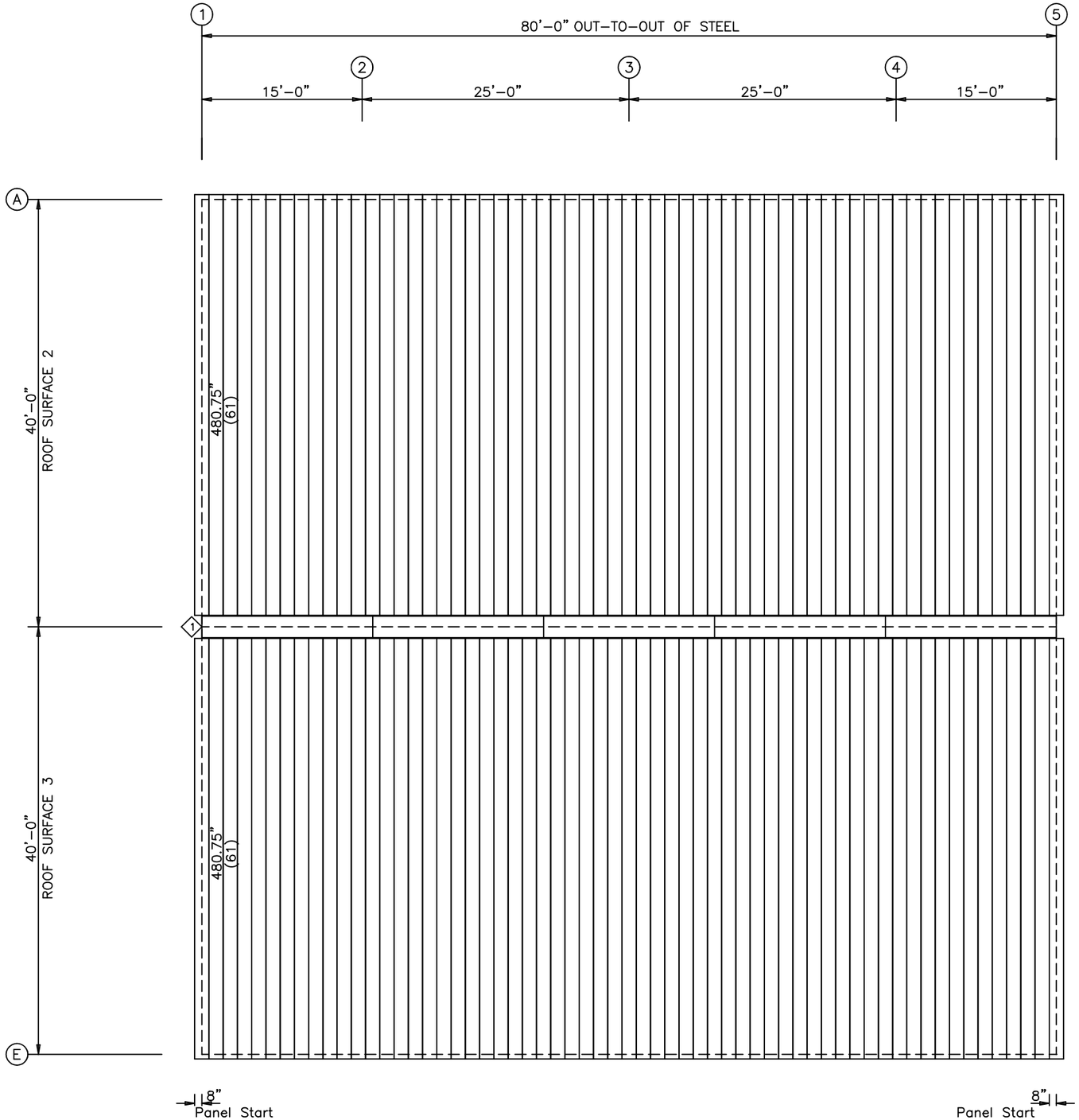
JOB NUMBER
A23B0716A

SHEET TITLE
ROOF FRAMING PLAN

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJNEESH H. BHAGVARI

SHEET
E2 of 7

TRIM TABLE ROOF PLAN			
◇ID	PART	LENGTH	DETAIL
1	RVL3121	121.000	EG3010



ROOF SHEETING PLAN

PANELS: 24 Ga. LC3 – Dark Bronze PVDF

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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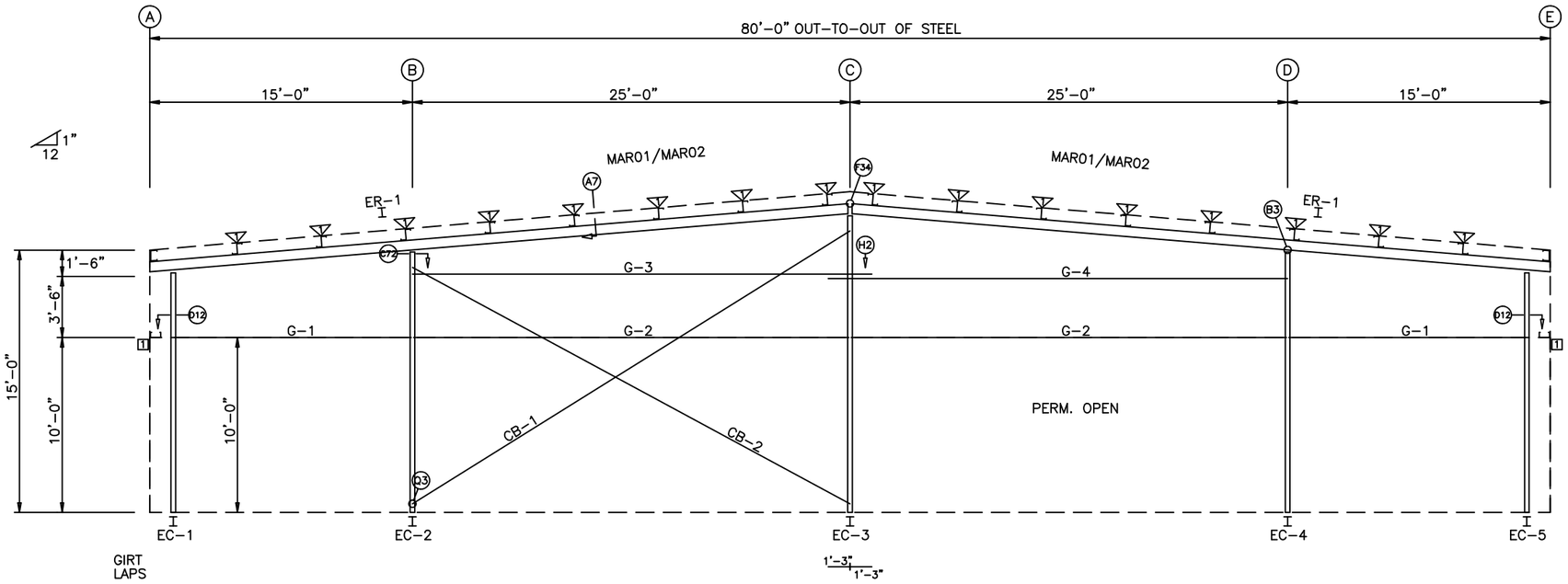
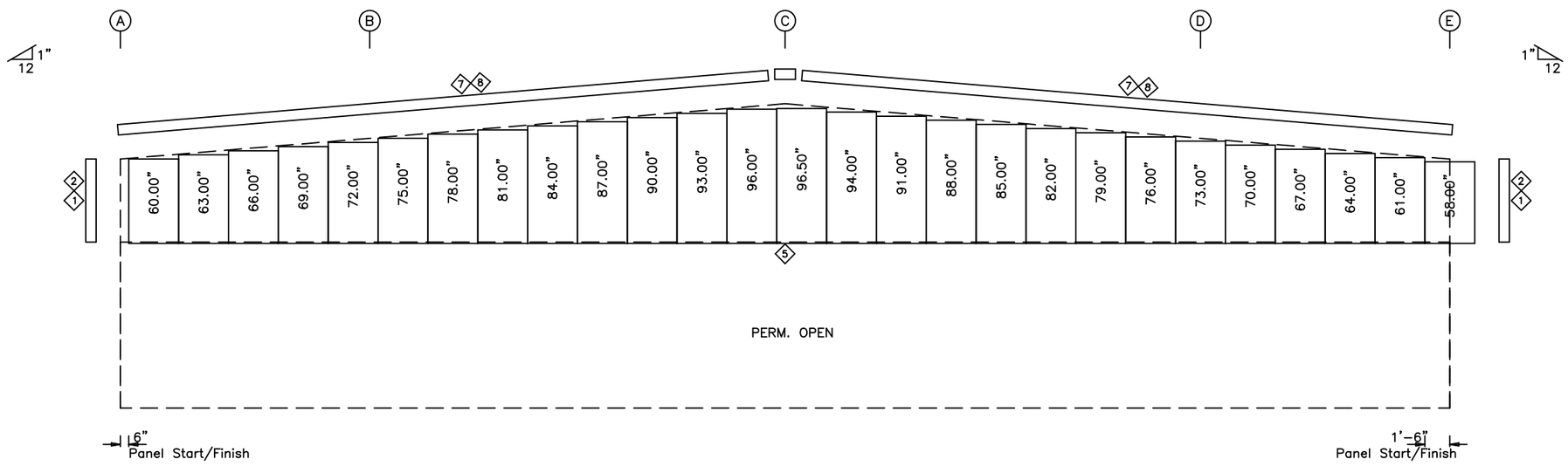
JOB NUMBER
A23B0716A

SHEET TITLE
ROOF SHEETING PLAN

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Ga. APW – Slate Gray PVDF

BOLT TABLE
FRAME LINE 1

LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-1 Columns/Raf	4	A325	1/2"	2"
	4	A325	1/2"	2"

TRIM TABLE
FRAME LINE 1

◇ID	PART	LENGTH	DETAIL
1	COB242	242.000	
2	MFA121	121.000	TRIM_352
5	BSE121	121.000	GB0140
7	RSA242	242.000	EE3010
8	RTR121	121.000	EE3010

MEMBER TABLE
FRAME LINE 1

MARK	PART	LENGTH
EC-1	W8x10	165.313
EC-2	W8x10	178.938
EC-3	W8x10	203.813
EC-4	W8x10	178.938
EC-5	W8x10	165.313
ER-1	W8x18	480.500
G-1	08C060	170.750
G-2	08C060	298.500
G-3	08Z060	317.250
G-4	08Z060	317.250
CB-1	RD05-	364.000
CB-2	RD05-	351.000

FLANGE BRACE TABLE
FRAME LINE 1

▽ ID	# SIDES	MARK	CLIP
1	1	FBC30	

CONNECTION PLATES
FRAME LINE 1

□ID	MARK/PART
1	GCC03&bt

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC

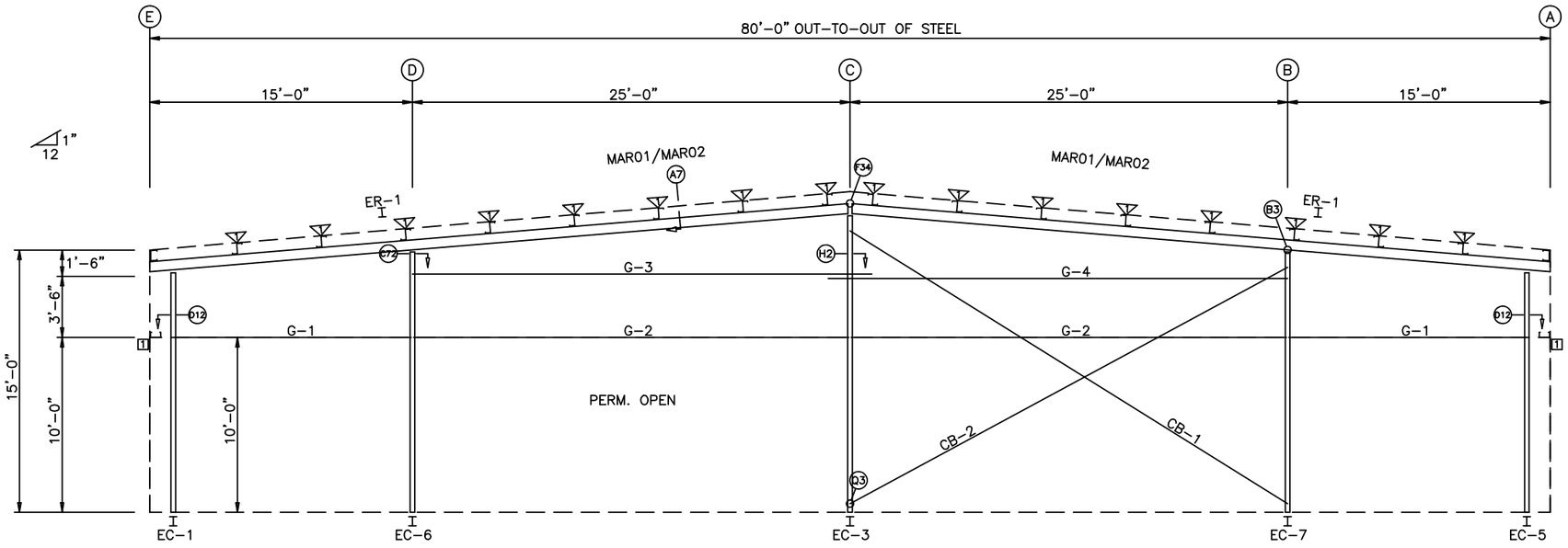
PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

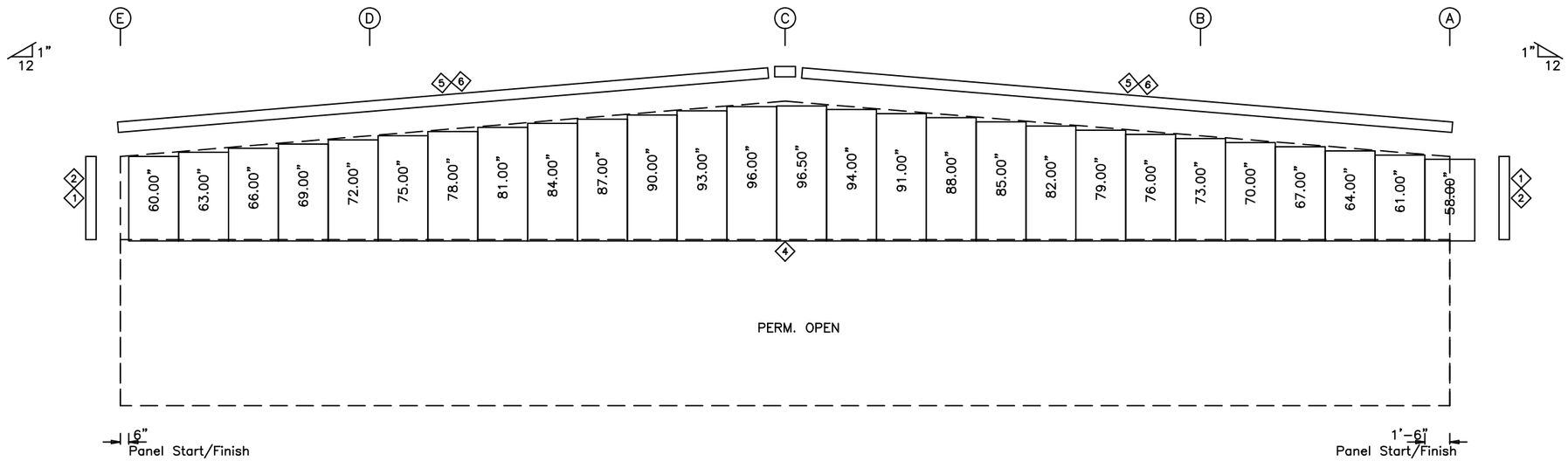
SHEET TITLE
LEFT ENDWALL ELEVATION

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVARI

SHEET
E4 of 7



ENDWALL FRAMING: FRAME LINE 5



ENDWALL SHEETING & TRIM: FRAME LINE 5

PANELS: 26 Ga. APW – Slate Gray PVDF

BOLT TABLE FRAME LINE 5				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-1 Columns/Raf	4	A325	1/2"	2"
	4	A325	1/2"	2"

TRIM TABLE FRAME LINE 5			
◇ID	PART	LENGTH	DETAIL
1	MFA121	121.000	TRIM_352
2	COB242	242.000	
4	BSE121	121.000	GB0140
5	RSA242	242.000	EE3010
6	RTR121	121.000	EE3010

MEMBER TABLE FRAME LINE 5		
MARK	PART	LENGTH
EC-1	W8x10	165.313
EC-3	W8x10	203.813
EC-5	W8x10	165.313
EC-6	W8x10	178.938
EC-7	W8x10	178.938
ER-1	W8x18	480.500
G-1	08C060	170.750
G-2	08C060	298.500
G-3	08Z060	317.250
G-4	08Z060	317.250
CB-1	RD05-	364.000
CB-2	RD05-	351.000

FLANGE BRACE TABLE FRAME LINE 5			
▽ ID	# SIDES	MARK	CLIP
1	1	FBC30	

CONNECTION PLATES FRAME LINE 5	
□ID	MARK/PART
1	GCC03&bt

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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Swansea, SC 29460
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76 UPCHURCH LANE, BUIES CREEK, NC 27506

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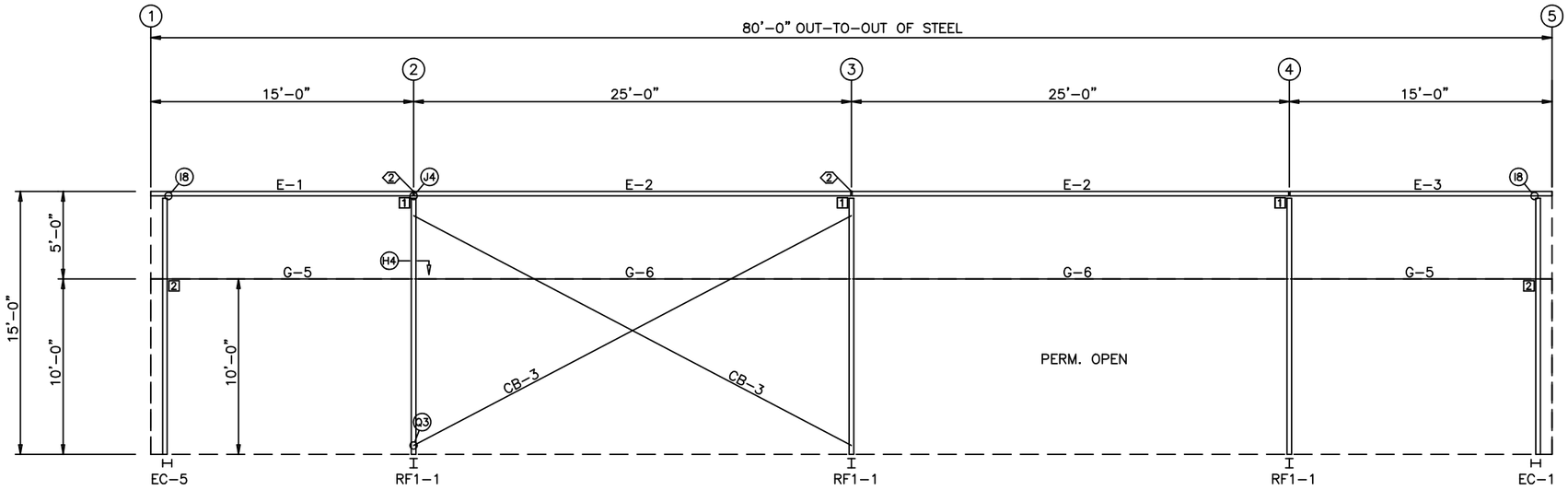
BUIES CREEK, NC 27506

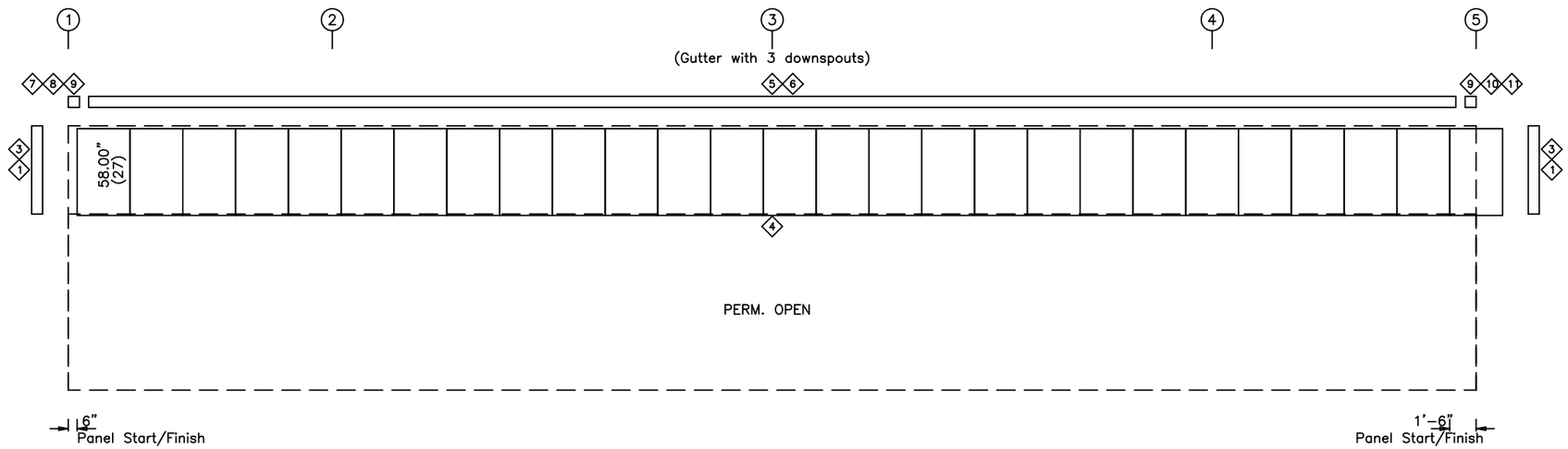
JOB NUMBER
A23B0716A

SHEET TITLE
RIGHT ENDWALL ELEVATION

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI



SIDEWALL FRAMING: FRAME LINE E



SIDEWALL SHEETING & TRIM: FRAME LINE E

PANELS: 26 Ga. APW – Slate Gray PVDF

TRIM TABLE
FRAME LINE E

◇ID	PART	LENGTH	DETAIL
1	COB242	242.000	
3	MFA121	121.000	TRIM_352
4	BSE121	121.000	GB0140
5	LBU121	121.000	ED3010
6	GSA242	242.000	ED3010
7	H4000AL	10.120	
8	RSCL	9.250	
9	RSCE	9.250	
10	H4000AR	10.120	
11	RSCR	9.250	

SPECIAL BOLTS

◇ ID	QUAN	TYPE	DIA	LENGTH	WASH
2	4	A325	1/2"	2"	1

MEMBER TABLE
FRAME LINE E

MARK	PART	LENGTH
E-1	08E060	179.625
E-2	08E075	299.750
E-3	08E060	179.625
G-5	08C060	179.000
G-6	08C060	298.500
CB-3	RD06-	350.000

CONNECTION PLATES
FRAME LINE E

□ID	MARK/PART
1	ESC02
2	GCC03&bt

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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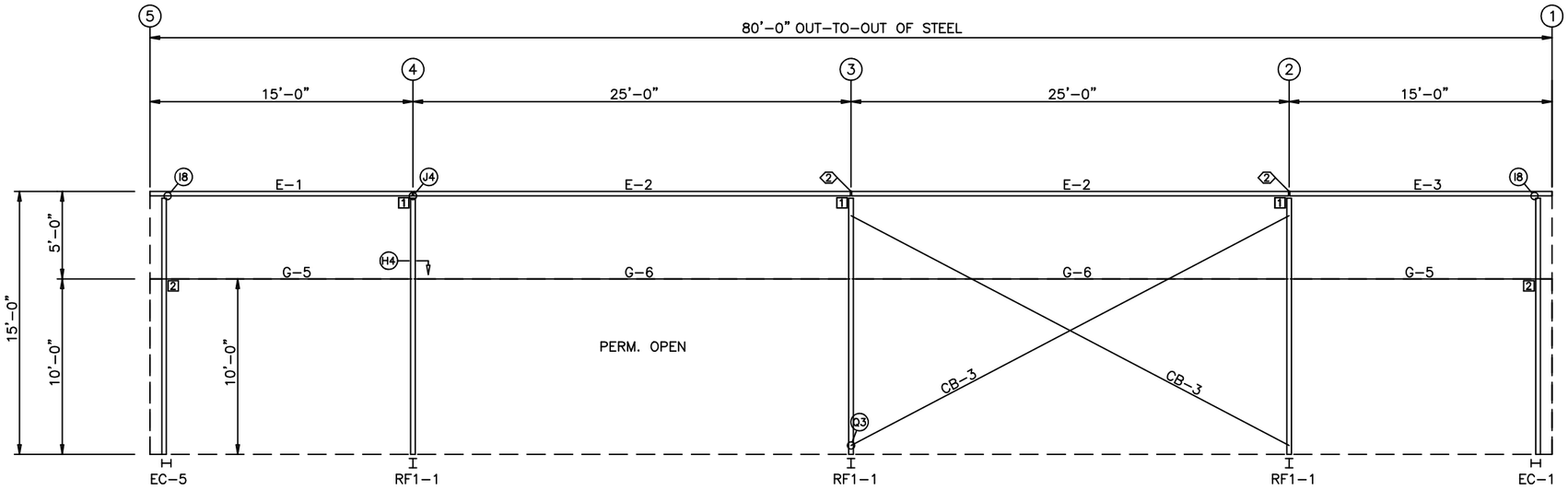
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

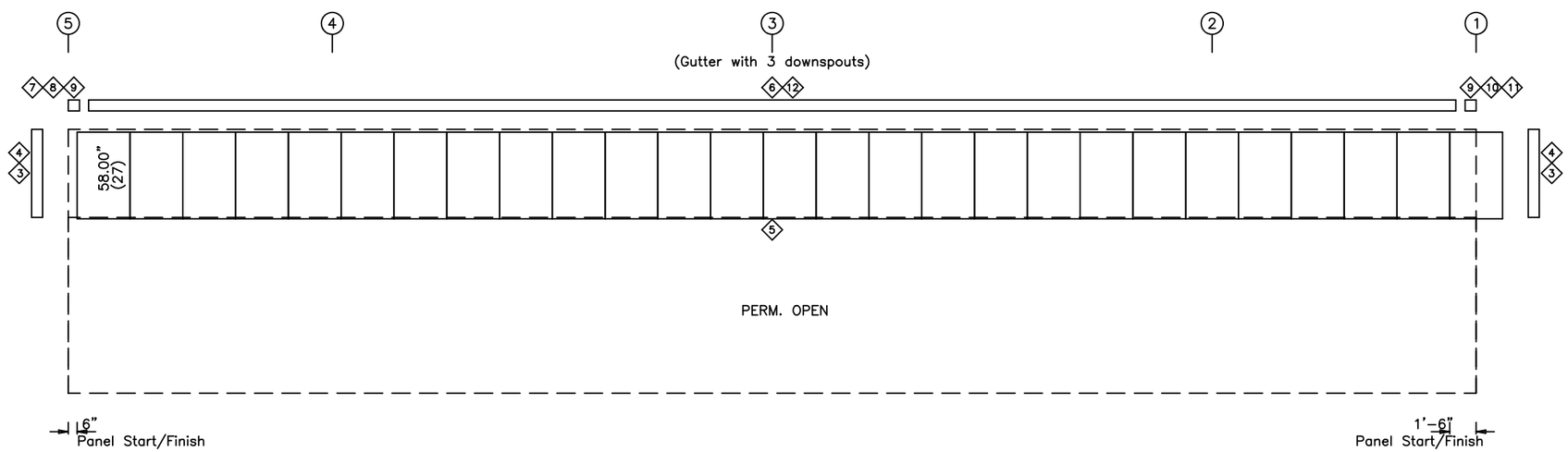
SHEET TITLE
FRONT SIDEWALL ELEVATION

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
E6 of 7



SIDEWALL FRAMING: FRAME LINE A



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 Ga. APW – Slate Gray PVDF

TRIM TABLE
FRAME LINE A

◇ID	PART	LENGTH	DETAIL
3	COB242	242.000	
4	MFA121	121.000	TRIM_352
5	BSE121	121.000	GB0140
6	GSA242	242.000	ED3010
7	H4000AL	10.120	
8	RSCL	9.250	
9	RSCE	9.250	
10	H4000AR	10.120	
11	RSCR	9.250	
12	LBU121	121.000	ED3010

SPECIAL BOLTS

◇ ID	QUAN	TYPE	DIA	LENGTH	WASH
2	4	A325	1/2"	2"	1

MEMBER TABLE
FRAME LINE A

MARK	PART	LENGTH
E-1	08E060	179.625
E-2	08E075	299.750
E-3	08E060	179.625
G-5	08C060	179.000
G-6	08C060	298.500
CB-3	RD06-	350.000

CONNECTION PLATES
FRAME LINE A

□ID	MARK/PART
1	ESC02
2	GCC03&bt

ISSUE	DWN	CHK	ENG	PE	DATE
PERMITS	MBS	BKK	RHB		07/21/2023
FINALS	MBS	BLS	RHB		08/12/2023

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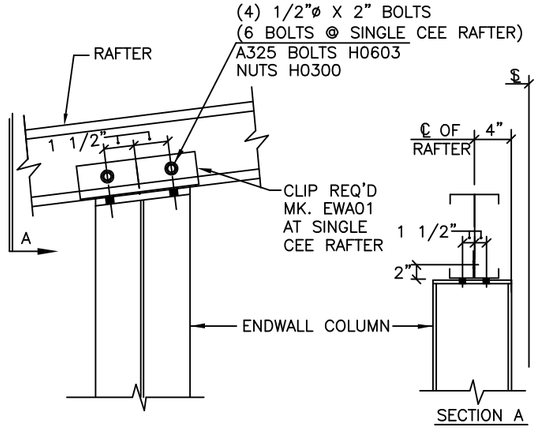
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

SHEET TITLE
BACK SIDEWALL ELEVATION

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
E7 of 7



EW COLUMN TO RAFTER CONNECTION

(CONTINUOUS RAFTER)

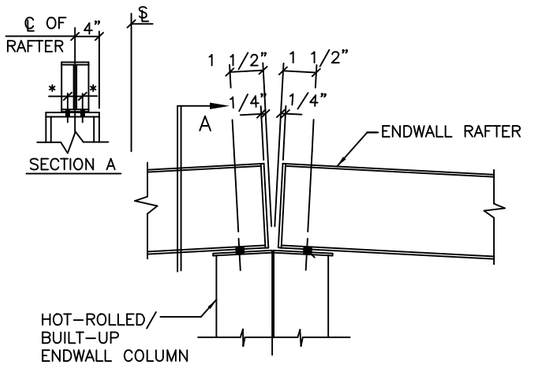
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

B3

AC0045

NOTE: RAFTER ENDPLATES MAY OR MAY NOT BE PRESENT.

* – 1 1/8" @ 4" RAFTER FLANGE
* – 1 1/2" @ GREATER THAN 4" RAFTER FLANGE

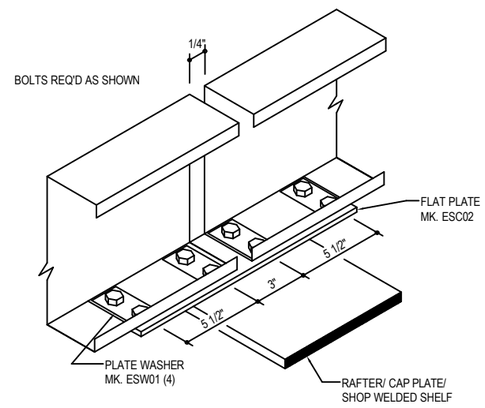


HR/BU ENDWALL COLUMN TO RAFTER

USE (4) 1/2" x 2" A325
BOLTS H0603 / NUTS H0300
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

F34

AC0140

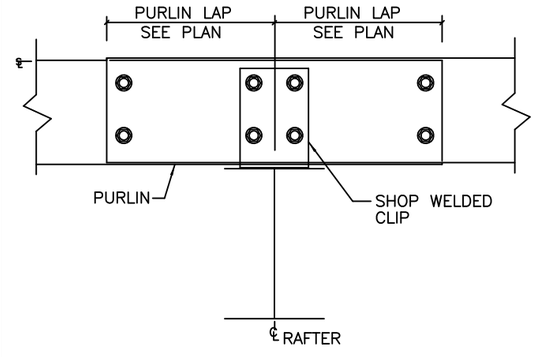


LOW EAVE EAVE STRUT AT BYPASS GIRTS

USE (8) 1/2" x 2" A325 BOLTS H0603 / NUTS H0300
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

J4

BA0070

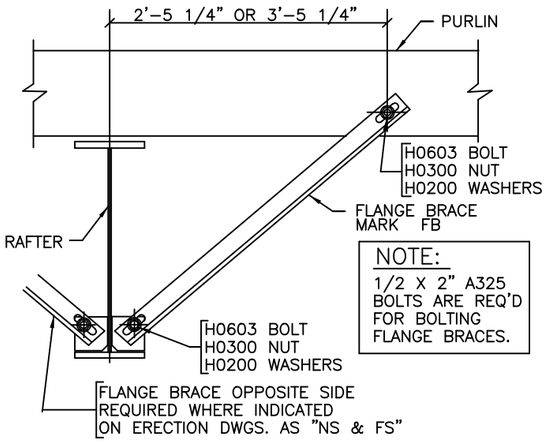


PURLIN TO INTERIOR FRAME RAFTER

USE (8) 1/2" x 1 1/4" A307
BOLTS H0500 / NUTS H0400
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

G2

BB0050

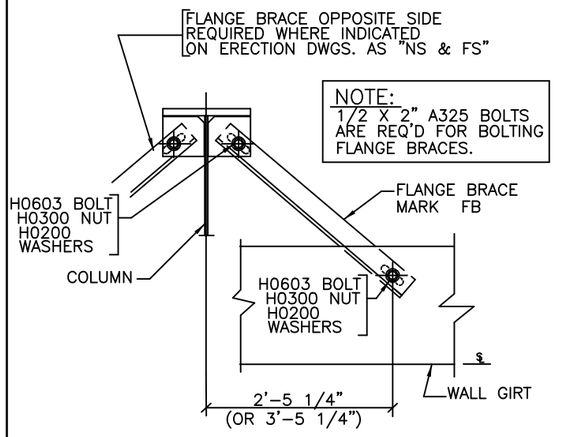


TYP FLANGE BRACE @ PURLIN & RAFTER

NOTE: SEE PLANS AND ELEVATIONS FOR FLANGE BRACE PART MARKS

NAG0010

AG0010



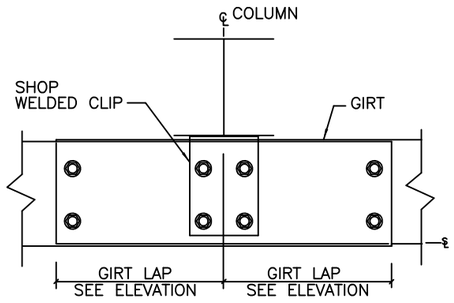
TYP FLANGE BRACE @ BU COL & GIRT

NOTE: SEE PLANS AND ELEVATIONS FOR FLANGE BRACE PART MARKS

NAG0030

AG0030

ERECTOR NOTE:
AT EACH LAPPED GIRT CONNECTION, (1) 1/2" X 1 1/4" THIN HEAD BOLT H0510/NUT H0400 MUST BE USED TO ATTACH THE FIRST GIRT TO THE GIRT CLIP. THE BOLT/NUT ASSEMBLY MUST BE WRENCH TIGHT PRIOR TO THE LAPPED GIRT BEING INSTALLED. REFERENCE THE STANDARD "LAPPED GIRT DETAIL" FOR MORE INFORMATION.

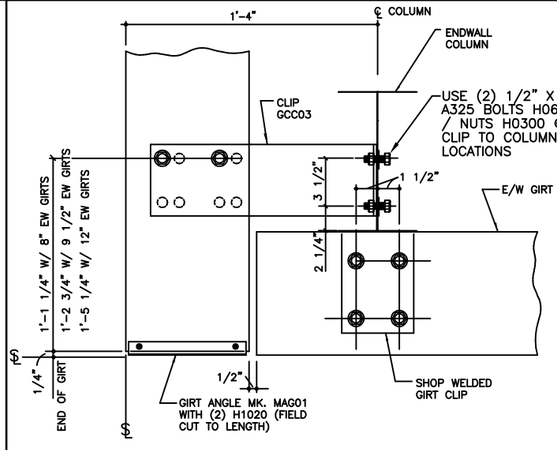


GIRT TO COLUMN

USE (7) 1/2" x 1 1/4" A307
BOLTS H0500 / NUTS H0400
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

H2

CI0020



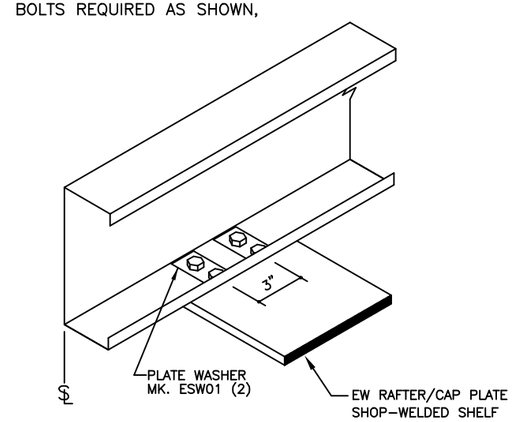
BYPASS ENDWALL GIRT AT CORNER

USE (6) 1/2" x 1 1/4" A307
BOLTS H0500 / NUTS H0400
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

D12

CF0010

BOLTS REQUIRED AS SHOWN,

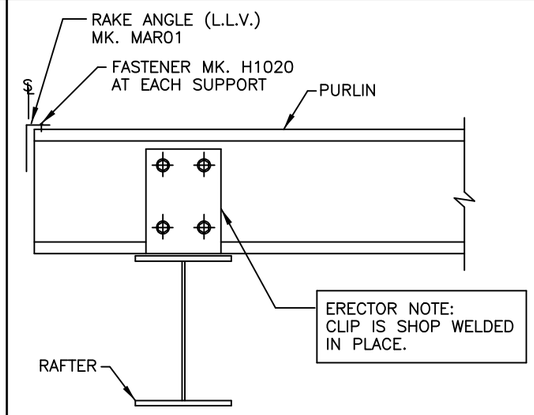


EAVE STRUT TO ENDWALL RAFTER

USE (4) 1/2" x 2" A325 BOLTS H0603 / NUTS H0300
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

I8

BA0080

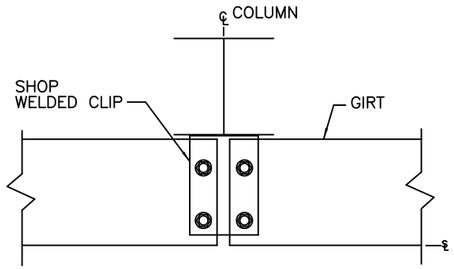


WELDED CLIP @ ENDWALL RAFTER

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

A7

BB0050



SIMPLE SPAN GIRT TO COLUMN

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

H4

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

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SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVARI

SHEET
CED1

TYPICAL FIELD WELD REQUIREMENTS ERECTOR NOTE:

(UNLESS NOTED OTHERWISE ON DRAWINGS)

ALL FIELD WELDING MUST BE PERFORMED BY AWS/CWB CERTIFIED WELDERS WHO ARE QUALIFIED FOR THE WELDING PROCESSES AND POSITIONS INDICATED.

ALL WORK MUST BE COMPLETED AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE AWS/CWB SPECIFICATIONS.

WELD ELECTRODES USED FOR THE SMAW (OR STICK) WELD PROCESS MUST BE 70 KSI/483 MPa MATERIAL AND LOW HYDROGEN CONTENT.

GALVANIZED STEEL FIELD WELDING RECOMMENDATIONS

PREPARATION OF WELD AREA

AWS D–19.0, WELDING ZINC COATED STEEL, CALLS FOR WELDS TO BE MADE ON STEEL THAT IS FREE OF ZINC IN THE AREA TO BE WELDED. FOR GALVANIZED STRUCTURAL COMPONENTS, THE ZINC COATING SHOULD BE REMOVED AT LEAST ONE TO FOUR INCHES (2.5–10 cm) FROM EITHER SIDE OF THE INTENDED WELD ZONE AND ON BOTH SIDES OF THE WORKPIECE. GRINDING BACK THE ZINC COATING IS THE PREFERRED AND MOST COMMON METHOD; BURNING THE ZINC AWAY OR PUSHING BACK THE MOLTEN ZINC FROM THE WELD AREA ARE ALSO EFFECTIVE.

TOUCH–UP OF WELD AREA

WELDING ON GALVANIZED SURFACES DESTROYS THE ZINC COATING ON AND AROUND THE WELD AREA. RESTORATION OF THE AREA WILL BE PERFORMED IN ACCORDANCE WITH ASTM A 780, STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT–DIP GALVANIZED COATINGS, WHICH SPECIFIES THE USE OF PAINTS CONTAINING ZINC DUST, ZINC–BASED SOLDERS OR SPRAYED ZINC. ALL TOUCHUP AND REPAIR METHODS ARE CAPABLE OF BUILDING A PROTECTIVE LAYER TO THE THICKNESS REQUIRED BY ASTM A 780.

SAFETY & HEALTH

WHEN WELDING DIRECTLY ON GALVANIZED STEEL IS UNAVOIDABLE, OSHA PERMISSIBLE EXPOSURE LIMITS (PELS) MAY BE EXCEEDED AND EVERY PRECAUTION, INCLUDING HIGH–VELOCITY CIRCULATING FANS WITH FILTERS, AIR RESPIRATORS AND FUME–EXTRACTION SYSTEMS SUGGESTED BY AWS, SHOULD BE EMPLOYED. FUMES FROM WELDING GALVANIZED STEEL CAN CONTAIN ZINC, IRON, AND LEAD. FUME COMPOSITION TYPICALLY DEPENDS ON THE COMPOSITION OF THE MATERIALS USED, AS WELL AS THE HEAT APPLIED BY THE PARTICULAR WELDING PROCESS. IN ANY EVENT, GOOD VENTILATION MINIMIZES THE AMOUNT OF EXPOSURE TO FUMES.

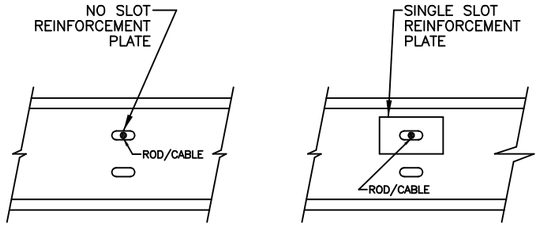
PRIOR TO WELDING ON ANY METAL, CONSULT ANSI/ASC Z–49.1, SAFETY IN WELDING, CUTTING AND ALLIED PROCESSES, WHICH CONTAINS INFORMATION ON THE PROTECTION OF PERSONNEL AND THE GENERAL AREA, VENTILATION AND FIRE PREVENTION.

INFORMATION COURTESY OF AMERICAN GALVANIZERS ASSOCIATION

TYPICAL FIELD WELD REQUIREMENTS

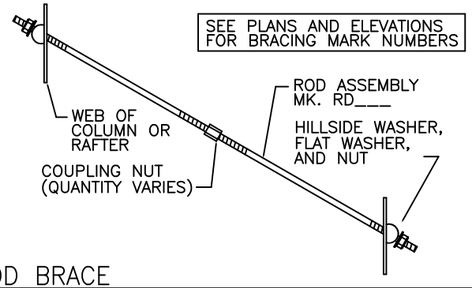
NAA0040

ERECTOR NOTE:
WHEN SLOT REINFORCEMENT PLATES ARE PRESENT IN 12" COLD–FORMED MEMBERS, ROD/CABLE BRACE MUST UTILIZE REINFORCED SLOT LOCATION.



12" COLD–FORMED MEMBER

ROD DIAMETER	MARK NUMBER	HILLSIDE WASHERS	FLAT WASHERS	A307/A325 NUTS	COUPLING NUTS
5/8" ø	RD05–__	(2) H0930	(2) H0210	(2) H0310	H0810
3/4" ø	RD06–__	(2) H0930	(2) H0220	(2) H0320	H0820
7/8" ø	RD07–__	(2) H0930	(2) H0230	(2) H0325	H0830
1" ø	RD08–__	(2) H0960	(2) H0240	(2) H0330	H0840
1 1/8" ø	RD09–__	(2) H0960	(2) H0250	(2) H0450	H0850
1 1/4" ø	RD10–__	(2) H0960	(2) H0260	(2) H0340	H0860



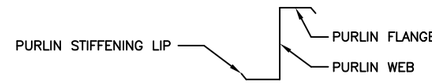
ROD BRACE

WEB TO WEB

AF0010

Q3

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 ENGINEER OF RECORD 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.



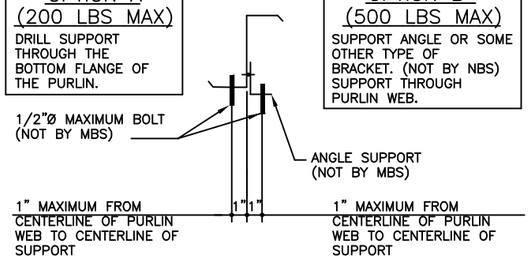
GENERAL RESTRICTION:

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.

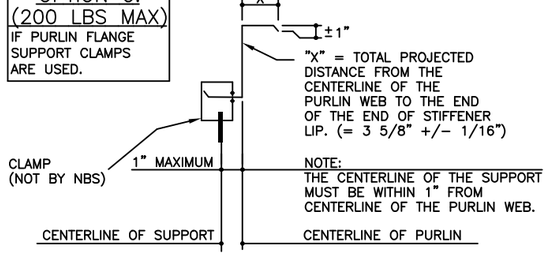
OPTIONS FOR SUPPORT ATTACHMENTS

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

OPTION B (500 LBS MAX)
SUPPORT ANGLE OR SOME OTHER TYPE OF BRACKET. (NOT BY NBS) SUPPORT THROUGH PURLIN WEB.



OPTION C: (200 LBS MAX)
IF PURLIN FLANGE SUPPORT CLAMPS ARE USED.



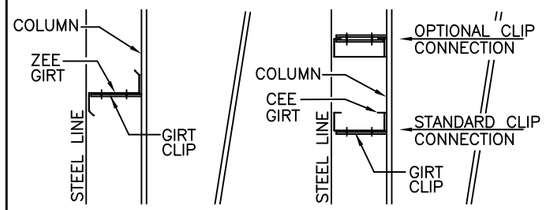
B00010

PURLIN SUPPORT METHODS

NBD0130

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.

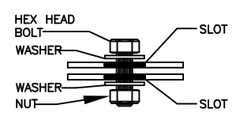
UNLESS SPECIFICALLY NOTED OTHERWISE, STANDARD CEE GIRT ORIENTATION IS TO HAVE THE GIRT TOED UP AS SHOWN IN THE DETAIL BELOW. STANDARD CLIP ATTACHMENT IS BELOW THE GIRT, HOWEVER SOME DETAILS REQUIRE THAT THE CLIP BE ABOVE THE GIRT. (REFER TO THE GIRT DETAILS ON THE ERECTION DRAWINGS FOR REQUIREMENTS) BOTH CLIP ATTACHMENTS ARE SHOWN IN THE DETAIL BELOW.



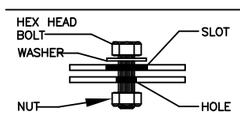
STANDARD GIRT ORIENTATION DETAIL

NOTE: BYPASS GIRT CONDITION IS SHOWN FOR REFERENCE ONLY. YOUR PROJECT MAY HAVE FLUSH OR INSET GIRTS.

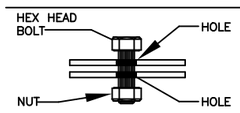
CC0005



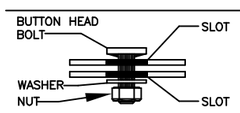
SLOT TO SLOT CONNECTIONS
WASHERS REQUIRED ON BOTH SIDES OF MATERIAL IF SLOTS ARE ON BOTH SIDES. (EXCEPTION: SEE DETAIL AT RIGHT FOR LAPPED ZEE MEMBERS)



SLOT TO HOLE CONNECTIONS
ONE WASHER REQUIRED ON SLOTTED SIDE ONLY.



HOLE TO HOLE CONNECTIONS
NO WASHERS REQUIRED WHEN SLOTS ARE NOT USED.



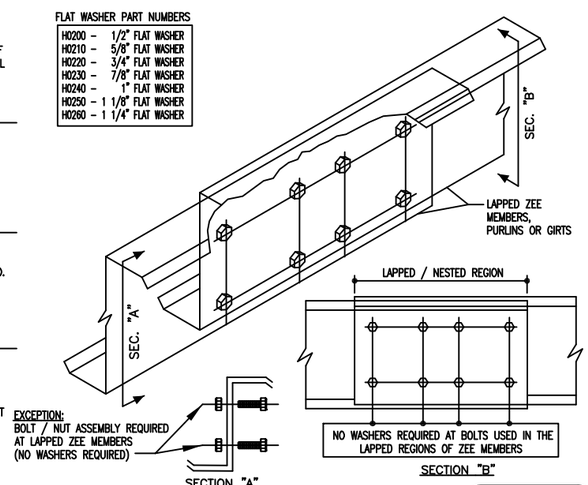
SLOT TO SLOT CONNECTIONS
WASHER REQUIRED AT NUT SIDE ONLY FOR BUTTON HEAD BOLTS. (BUTTON HEAD BOLTS HAVE MATERIAL GRABBING FINS UNDER THE HEAD, A WASHER IS NOT NEEDED ON BOLT HEAD SIDE).

WASHER REQUIREMENTS ERECTOR NOTE

(UNLESS NOTED OTHERWISE ON DRAWINGS)

FLAT WASHER PART NUMBERS

H0200 –	1/2" FLAT WASHER
H0210 –	5/8" FLAT WASHER
H0220 –	3/4" FLAT WASHER
H0230 –	7/8" FLAT WASHER
H0240 –	1" FLAT WASHER
H0250 –	1 1/8" FLAT WASHER
H0260 –	1 1/4" FLAT WASHER



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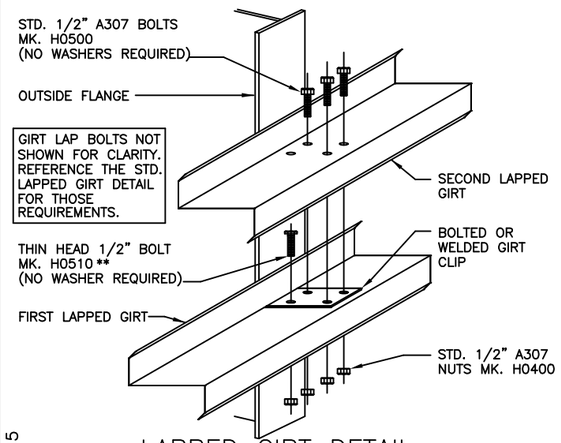


LAPPED GIRT DETAIL

LAPPED GIRTS @ INTERIOR BAY COLUMNS

** THE THIN HEAD 1/2" A307 BOLT MUST BE INSTALLED INTO THE FIRST GIRT AND CLIP OF A LAPPED CONDITION. THE BOLT/NUT ASSEMBLY MUST BE WRENCH TIGHT PRIOR TO THE SECOND LAPPED GIRT BEING INSTALLED.

CC0015

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F–1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
CED2

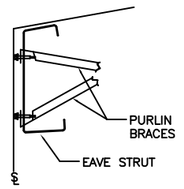
INSTALLATION INSTRUCTIONS

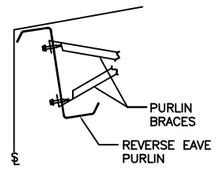
1) FOR PURLIN BRACE "X", INSERT ANGLES "BACK-TO-BACK" INTO THE FACTORY PUNCHED SLOTS. BEND TABS AS SHOWN AND FASTEN THROUGH TAB WITH (1) H1020 FASTENER PER END.

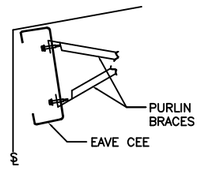
2) CONNECT PURLIN BRACE "X" AT THE ANGLE INTERSECTION WITH (1) H1020 FASTENER.

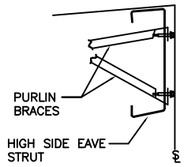
3) PURLIN BRACING IS NOT TO DISTORT OR ALTER PURLINS FROM THEIR INTENDED SHAPE OR LOCATION.

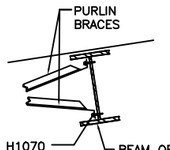
4) SEE DETAILS BELOW FOR ADDITIONAL INFORMATION WHEN ATTACHING TO ALTERNATE FRAMING MEMBERS.



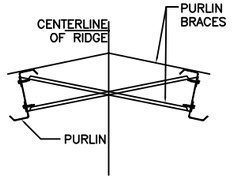








NOTE: IF CHANNEL, IT MAY BE TOED UP OR DOWN.



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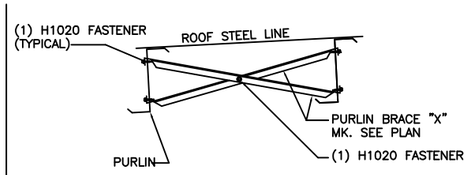
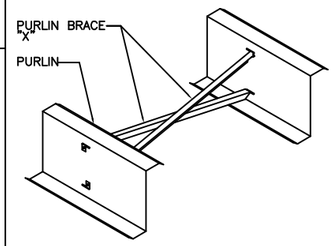


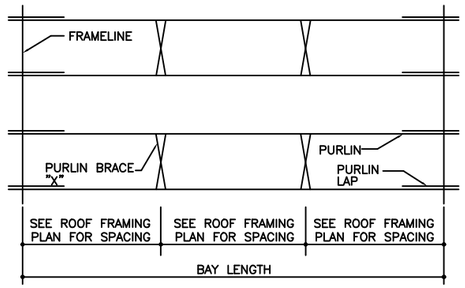


NOTE: PURLIN BRACING ATTACHMENT METHOD IS THE SAME REGARDLESS OF THE SECONDARY MEMBER TYPE (ZEE, CEE, EAVE STRUT, BEAM, ETC.)

PLAN VIEW OF PURLIN BRACING LOCATIONS PER BAY

1) SEE ROOF FRAMING PLAN(S) FOR PURLIN BRACE MARK NUMBERS, QUANTITIES AND LOCATIONS.

2) (2) ROWS OF PURLIN BRACING IS SHOWN BELOW FOR REFERENCE ONLY, ACTUAL NUMBER OF ROWS MAY VARY PER BAY AND PER PROJECT, SEE ROOF FRAMING PLAN(S) FOR SPACING.



PURLIN BRACING ATTACHMENT METHODS

ANGLE_130

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
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A23B0716A

SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGVATI

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

SHEET
CED3

DESIGN AND PERFORMANCE CRITERIA

ROOF SYSTEM
THE ROOF SYSTEM CONSISTS OF 24 GAUGE PANELS WITH A NOMINAL COVERAGE OF 1'-4" AND A PANEL SEAM THAT IS 2 1/2" OR 3 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.

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 REQUIRED. LOOK ON CHART AT RIGHT AND 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-FRAMING 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 Loc 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 WIPED DRY IMMEDIATELY BEFORE INSTALLATION.

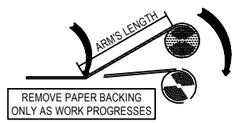
TAPE MASTIC IS PROVIDED WITH A PROTECTIVE PAPER TO REDUCE CONTAMINATION. INCOMPLETE REMOVAL OF THE PROTECTIVE PAPER WILL PREVENT THE MASTIC ADHESION TO THE PANEL OR FLASHING SURFACES. ALWAYS CHECK THAT THE PROTECTIVE PAPER IS COMPLETELY REMOVED. DO NOT REMOVE THE PROTECTIVE PAPER UNTIL IMMEDIATELY BEFORE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

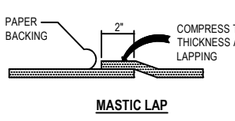
COMPRESSION
TO ASSURE PROPER COMPRESSION AND SEAL, THE TAPE MASTIC MUST BE COMPRESSED BETWEEN THE PANEL AND FLASHING SURFACES WITH FIRM AND UNIFORM PRESSURE. IN MOST CASES, THE REQUIRED PRESSURE IS APPLIED BY THE CLAMPING ACTION OF SCREWS PULLING THE ADJOINING SURFACES TOGETHER. HOWEVER, THE TAPE SEALANT'S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





MASTIC LAP

ERECTORS 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.

DUE 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 WERE 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.

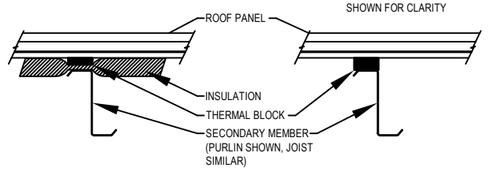
LOCATIONS
THERMAL BLOCKS OR FOAM SPACERS ARE TO BE USED OVER ANY SECONDARY MEMBER WITH THE EXCEPTION OF THE EAVE MEMBER WHERE THE EAVE PLATE IS LOCATED.

INSULATED ROOF

INSULATION		BLOCK		
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"	N/A	N/A	SHORT
R13	4 3/8"	H4400	13/16"	TALL
R16	5 1/4"	H4400	13/16"	TALL
R19	6 3/8"	H4400	13/16"	TALL
R25	8"	H4400	13/16"	TALL

UN-INSULATED ROOF

BLOCK		
MK #	THICK	CLIP
H3310	1/2"	SHORT
H3305	1 1/2"	TALL
FIELD CUT H3305 TO LENGTH FOR PROPER FITTING BETWEEN PANEL CLIPS		



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
THE ROOF IS DESIGNED TO ACCOMMODATE THERMAL EXPANSION AND CONTRACTION AND WILL NOT ACT AS A DIAPHRAGM FOR RESISTING LATERAL LOAD FORCES OR PROVIDING LATERAL STABILITY TO THE ROOF STRUCTURAL MEMBERS. DUE CONSIDERATION FOR THIS MUST BE ADDRESSED BY THE PROJECT ENGINEER OF RECORD. IN addition, THE ROOF SYSTEM, BECAUSE IT IS DESIGNED TO FLOAT, WILL NOT SUPPORT STRUCTURAL MEMBERS LATERALLY. WHEN REPLACING AN EXISTING SCREW DOWN ROOF, ADDITIONAL BRACING MAY BE REQUIRED TO LATERALLY SUPPORT THE MEMBERS. ENGINEERING AND MATERIAL FOR THESE USES SHALL NOT BE PROVIDED BY MBS.

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"

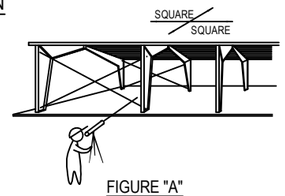


FIGURE "A"

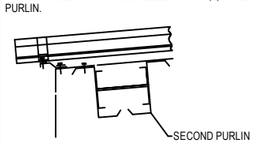
FIELD CUTTING PANELS

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.

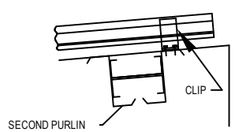
ANY METAL SHAVINGS THAT ARE CREATED NEED TO BE CLEANED FROM THE PANEL TO PREVENT SCRATCHING AND/OR CORROSION. THE MANUFACTURER WILL NOT ACCEPT CLAIMS FOR DAMAGE/DETERIORATION DUE TO USE OF UNAPPROVED TOOLS.

SPECIAL CONDITION AT A STRONG-BACK EAVE BEAM

IF THIS PROJECT HAS AN EAVE BEAM WITH (2) PURLINS, AS SHOWN, DO NOT ATTACH ROOF CLIPS TO THE "SECOND" PURLIN.



EAVE BEAM AT LOW EAVE



EAVE BEAM AT HIGH EAVE

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

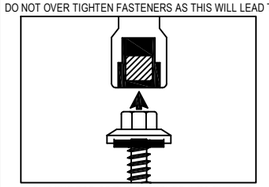
DO NOT USE IMPACTING TOOLS
TO ASSURE PROPER VOLTAGE TO THE TOOL, EXTENSION CORDS SHOULD BE CHECKED FOR PROPER WIRE SIZE/CHORD LENGTH.
16 GAGE WIRE, MAXIMUM CHORD LENGTH = 100'
14 GAGE WIRE, MAXIMUM CHORD LENGTH = 200'
12 GAGE WIRE, MAXIMUM CHORD LENGTH = 300'

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

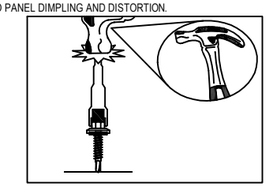
SOCKET EXTENSIONS (4" OR 6") ARE RECOMMENDED TO BE USED FOR INSTALLING PANEL CLIP FASTENERS TO MAINTAIN VERTICAL FASTENER INSTALLATION.

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

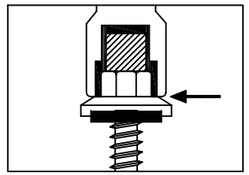
DO NOT OVER TIGHTEN FASTENERS AS THIS WILL LEAD TO PANEL DIMPLING AND DISTORTION.



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.

CORRECT

SEALING MATERIAL COMPRESSED UNDER CAP OF FASTENER.

TOO LOOSE

SEALING MATERIAL VISIBLE UNDER CAP OF FASTENER.

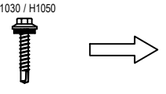
TOO TIGHT

SEALING MATERIAL COMPRESSED BUT DIMPLED THE PANEL / TRIM.

STRIP A FASTENER?

IF YOU STRIP H1030 OR H1050 REPLACE IT WITH H1000

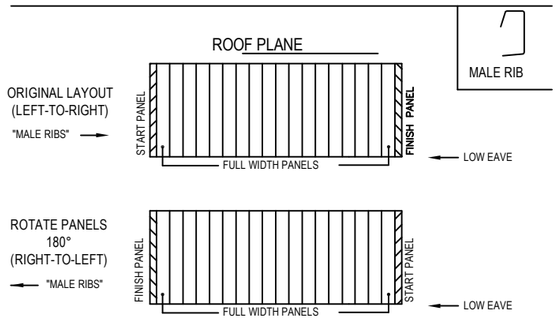
IF YOU STRIP H1000 IN ENDLAP YOU MUST REBUILD THE ENDLAP



ROOF SHEETING DIRECTION

1.) THE ROOF SHEETING PLAN IS SHOWN WITH THE ROOF PANELS BEING ERECTED FROM "LEFT-TO-RIGHT". IF THE DESIRE IS TO ERECT THE ROOF PANELS FROM "LEFT-TO-RIGHT", FOLLOW THE ROOF SHEETING PLAN AS SHOWN. IF THE DESIRE IS TO ERECT THE ROOF PANELS FROM "RIGHT-TO-LEFT", FOLLOW THE INSTRUCTIONS SHOWN BELOW.

2.) WHEN SETTING BUNDLES OF PANELS ON THE ROOF, THE "MALE RIB" MUST ALWAYS BE AWAY FROM THE END OF THE BUILDING WHERE THE SHEETING WILL BEGIN.



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

EA3010

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
CED4

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.

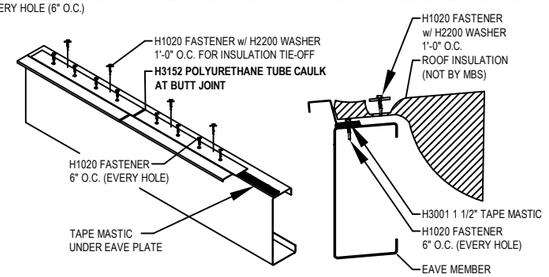
INTERMEDIATE PANEL & MODULARITY
THE INTERMEDIATE PANELS (FULL PANELS) SHOULD BE INSTALLED BY ROLLING THE PANEL INTO PLACE ENSURING THE SEAM IS FULLY ENGAGED. SECURE THE PANELS WITH PANEL CLIPS AND THE LOW EAVE ACROSS THE ROOF. IT IS RECOMMENDED TO INSTALL THE OUTSIDE CLOSURE AT THE HIGH EAVE / RIDGE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

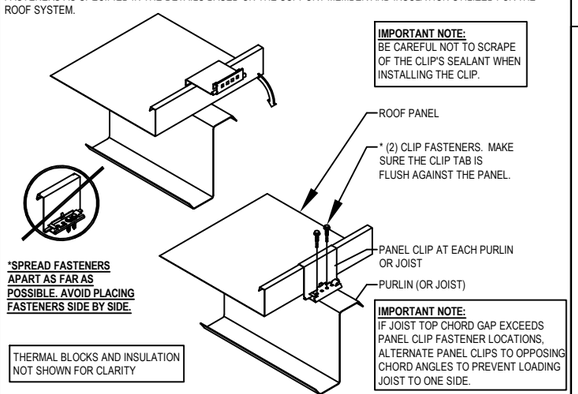


NOTE: H1020/H1070 (PURLIN/JOIST) FASTENER w/ H2200 WASHER
1'-0" O.C. FOR INSULATION TIE-OFF PROVIDED AT HIGH SIDE / RIDGE

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

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

STANDARD CLIPS	
PART #	PART DESCRIPTION
H4550	UTILITY FIXED CLIP
LSBC-1	SHORT BEARING CLIP (USED WITH RIGID BOARD)
LSEC-1	SHORT SLIDING CLIP
LSEC-2T	TALL SLIDING CLIP

CLIP FASTENER SELECTION

PURLIN APPLICATION
H1020 FOR INSULATION ≤ R-19 (6 3/8")
H1025 FOR INSULATION = R-25 (8")
H1220 FOR UTILITY CLIP

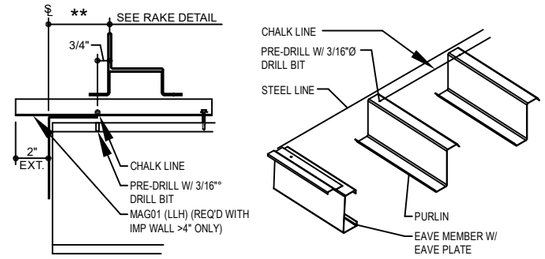
JOIST APPLICATION
H1070 FOR INSULATION ≤ R-19 (6 3/8")
H1075 FOR INSULATION = R-25 (8")

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 IS 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.

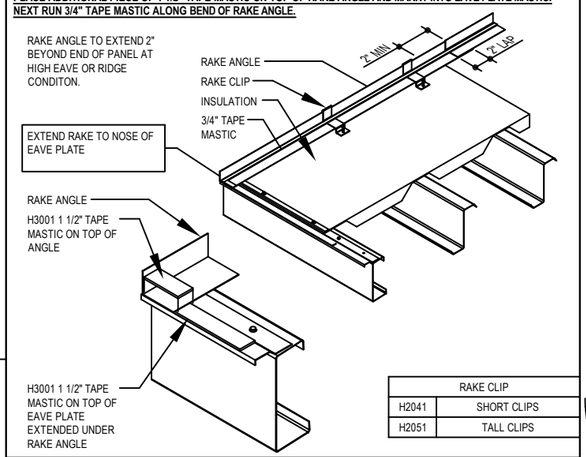


RAKE ANGLE / RAKE CLIP INSTALLATION

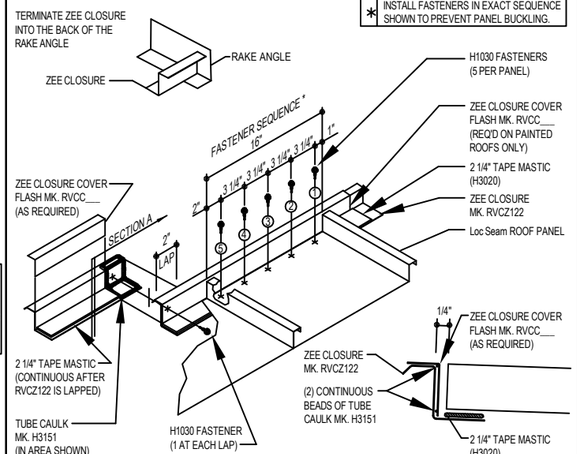
AFTER INSULATION IS IN PLACE AND PRIOR TO INSTALLING THE RAKE CLIPS AND RAKE ANGLE APPLY 1 1/2" TAPE MASTIC ON TOP OF THE EAVE PLATE BUT ONLY REMOVE PAPER BACKING WHERE THE RAKE ANGLE WILL REST. THIS WILL SEAL BETWEEN THE EAVE PLATE AND THE RAKE ANGLE.

SLIDE RAKE CLIPS ONTO RAKE ANGLE PRIOR TO SECURING THE RAKE 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.



RAKE CLIP	
H2041	SHORT CLIPS
H2051	TALL CLIPS

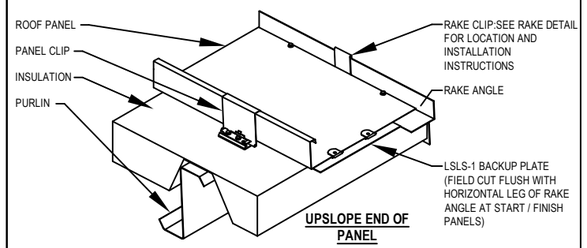


SECTION "A"

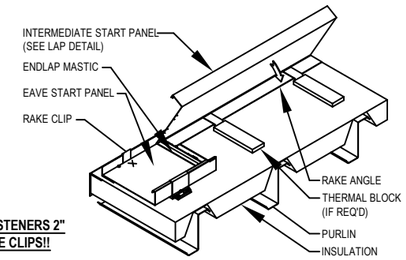
RIDGE/HIGHSIDE ZEE CLOSURE DETAIL

BACKUP PLATE INSTALLATION

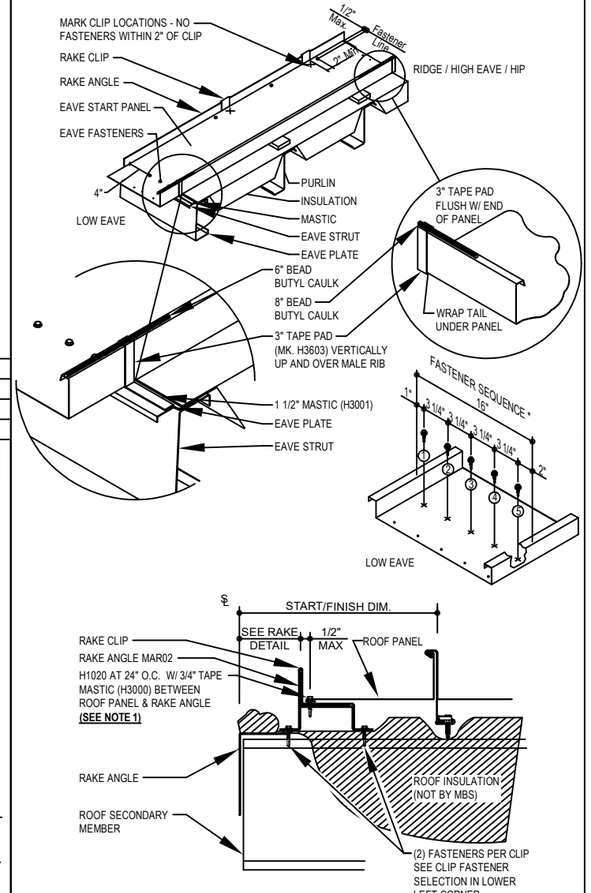
THE BACKUP PLATE PROVIDES SUPPORT AT THE ENDLAP OF THE PANEL TO ALLOW FOR COMPRESSION OF SEALANTS. THE BACK UP PLATE HAS NOTCHES THAT SLIDE ONTO THE PANEL TO LOCATE AND HOLD THE BACKUP PLATE IN PLACE. AT THE RAKE CONDITION, THE BACKUP PLATE IS TO BE FIELD CUT FLUSH WITH THE HORIZONTAL LEG OF THE RAKE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



UPSLOPE END OF PANEL



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



LOC SEAM BASIC INSTALLATION DETAIL

BASIC PANEL INSTALLATION INSTRUCTIONS
SEE ROOFLINE TRIM DETAILS FOR FURTHER INFORMATION

EA3011

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGWAT

SHEET
CED5

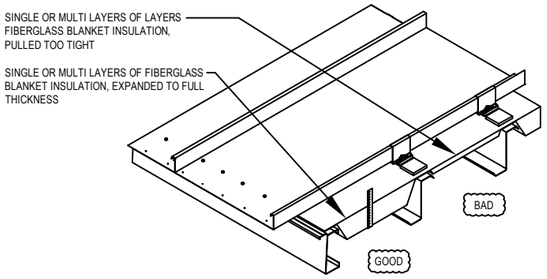
PANEL MODULARITY SEQUENCE

THE PROCEDURES AND SEQUENCE SHOWN ARE RECOMMENDED TO AID IN MAINTAINING PANEL MODULARITY.
THE TOOLS SHOWN ARE NOT REQUIRED BUT RECOMMENDED TO AID INSTALLATION.

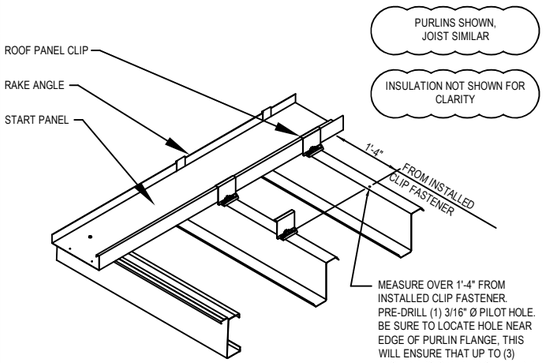
SPECIAL ATTENTION MUST BE GIVEN TO INSULATION SAG AND RECOMMEND PRE-DRILLING TO LOCATE CLIPS. MODULARITY TOOLS ARE AVAILABLE TO AID IN MODULARITY.

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.

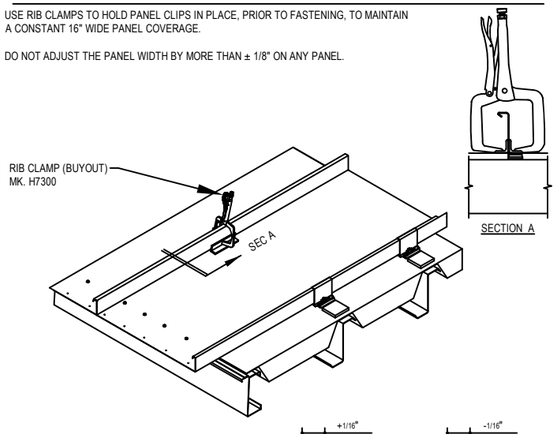


PRE-DRILL ONE PILOT HOLE FOR ROOF PANEL CLIPS AT MID-SPANS, HIGH SIDE OR RIDGE AND PANEL END LAPS, IF ANY.



USE RIB CLAMPS TO HOLD PANEL CLIPS IN PLACE, PRIOR TO FASTENING, TO MAINTAIN A CONSTANT 16" WIDE PANEL COVERAGE.

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

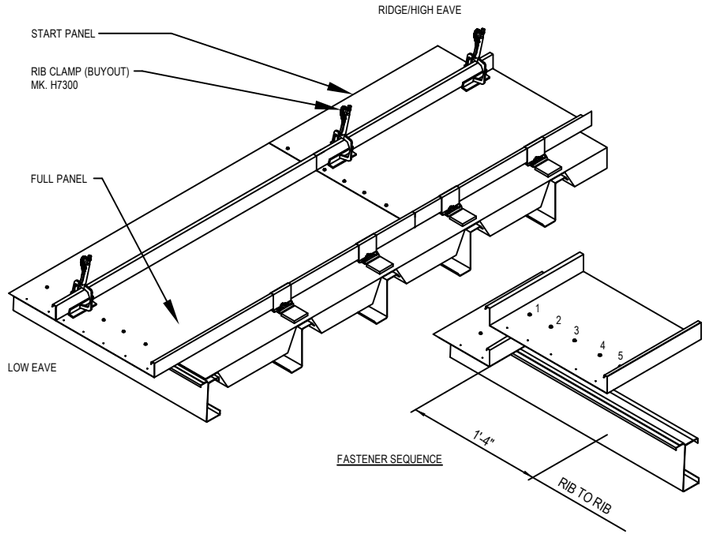


CORRECT PANEL MODULARITY

ADJUSTING PANEL MODULARITY

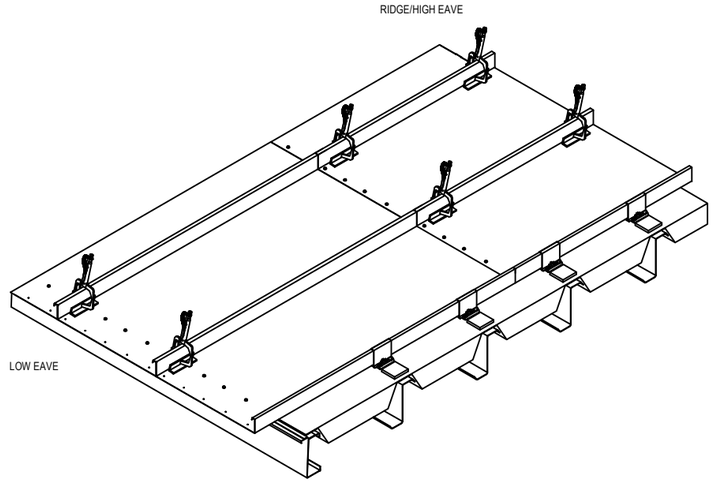
STAGE #1

1. ROLL FIRST FULL PANEL IN PLACE AND ALIGN CENTER OF PANEL FLAT TO SQUARE AS SHOWN BELOW.
2. APPLY THE LOW EAVE CLAMP AS SHOWN TO DRAW PANEL TIGHT TO CLOSURE.
3. INSTALL THE EAVE FASTENERS STARTING AT LEADING RIB.
4. AS PANEL INSTALLATION PROGRESSES, INSTALL MORE CLAMPS UPSLOPE AS SHOWN.
5. ADD, ADJUST OR LEAVE CLAMPS OFF TO MAINTAIN PANEL MODULARITY AS NECESSARY.
6. LEAVE CLAMPS ON FIRST FULL SEAM.



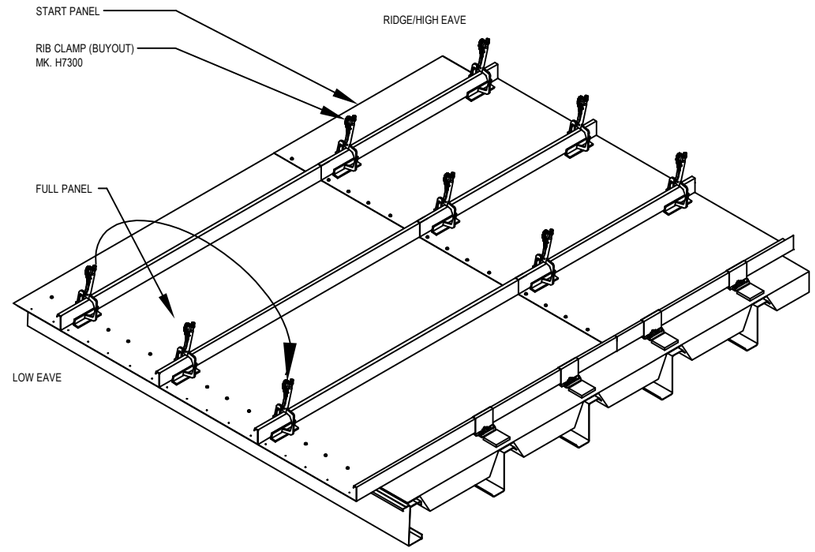
STAGE #2

1. INSTALL THE NEXT LOW EAVE PANEL AND ADD CLAMP.
2. REPEAT STEPS 2 THROUGH 6 FROM STAGE #1 NOTES.
3. LEAVE CLAMPS ON FIRST AND SECOND FULL SEAM.
4. INSTALL THE OUTSIDE CLOSURE IN THE FIRST FULL PANEL.



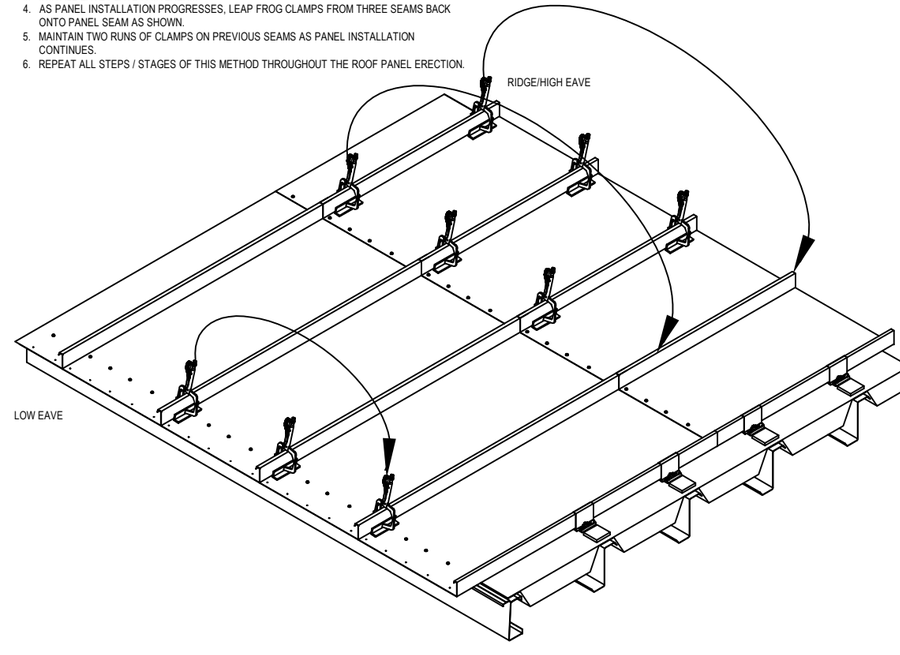
STAGE #3

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



STAGE #4

1. KEEP CLAMPS IN PLACE ON THE FIRST TWO SEAMS WITH THE EXCEPTION OF THE LOW EAVE CLAMP.
2. INSTALL THE NEXT LOW EAVE PANEL AND LEAP FROG THE CLAMP AS SHOWN.
3. INSTALL EAVE PLATE FASTENERS.
4. AS PANEL INSTALLATION PROGRESSES, LEAP FROG CLAMPS FROM THREE SEAMS BACK ONTO PANEL SEAM AS SHOWN.
5. MAINTAIN TWO RUNS OF CLAMPS ON PREVIOUS SEAMS AS PANEL INSTALLATION CONTINUES.
6. 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.

EA3012

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

JOB NUMBER
A23B0716A

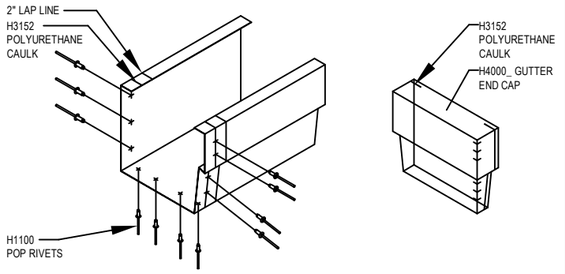
SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

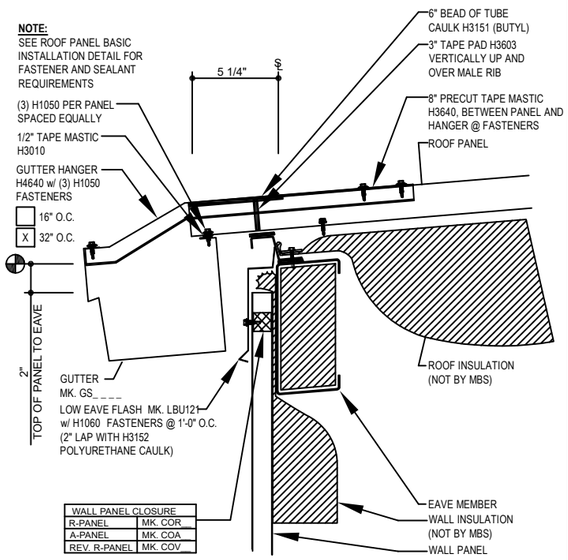
SHEET
CED6

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 INTO THE GUTTER LEAVING 1/2" EXPOSED. ATTACH WITH RIVETS SAME AS END LAP.



NOTE 1: PANEL RIB MUST BE HAND CRIMPED 90° (NOT 360°) 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

ED3010

STEP 1

GUTTER END CAPS
APPLY A CONTINUOUS BEAD OF POLYURETHANE TUBE CAULK (H3152) AROUND THREE SIDES OF THE GUTTER END CAP (H4000_).

INSERT THE GUTTER CAP 1/2" (H4000_) INTO THE END OF THE GUTTER.

FASTEN WITH **POP RIVETS (H1100)** AS SHOWN IN GUTTER DETAIL. APPLY **POLYURETHANE TUBE CAULK (H3152)** AROUND PERIMETER INSIDE GUTER TO SEAL CAP.

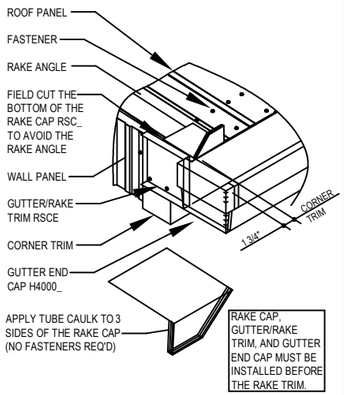
EXTEND GUTTER BEYOND FACE OF WALL CORNER TRIM AS SHOWN.

RAKE CAP END INSTALLATION
HOLD THE RAKE CAP END **(RSCE)** TIGHT TO THE BACK OF AND FLUSH WITH THE BOTTOM OF THE GUTTER. FASTEN TO THE WALL CORNER TRIM WITH (2) TRIM-COLORED SELF-DRILLING **SCREWS (H1050).**

RAKE CAP INSTALLATION
BEFORE INSTALLING THE RAKE TRIM, THE RAKE CAP MUST BE INSTALLED.

APPLY **POLYURETHANE TUBE CAULK (H3152)** TO (3) SIDES OF THE **RAKE CAP** AND PLACE IT ON THE END OF THE PANEL 1½" FROM THE EDGE OF THE GUTTER END CAP (FLUSH WITH FACE OF CORNER TRIM.) NO FASTENERS ARE REQUIRED FOR THE RAKE CAP. FIELD COPE FLAT OF RAKE CAP AS REQUIRED.

RAKE CAP PART NUMBERS
- RSCL (LEFT)
- RSCR (RIGHT)



STEP 2

RAKE TRIM INSTALLATION AT BUILDING WITH GUTTER

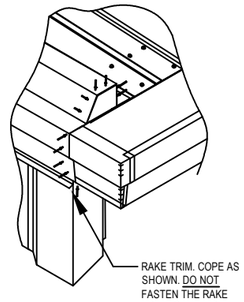
RAKE TRIM PART NUMBERS
- RS_121 X 10'-1"
- RS_242 X 20'-2"

ALL PARTS MUST BE POSITIONED PROPERLY BEFORE TOUCHING THE MASTIC TO THE ROOF PANEL. MASTIC CANNOT BE REUSED.

ALIGN THE END OF THE RAKE TRIM WITH THE END OF THE ROOF PANEL. THIS WILL LAP ONTO THE GUTTER END CAP.

ALWAYS START THE RAKE TRIM INSTALLATION AT THE LOW EAVE WORKING TOWARD THE HIGH EAVE OR RIDGE. INSTALL RAKE TRIM ACCORDING RAKE TRIM DETAIL

COPE THE BOTTOM VERTICAL LEG OF THE RAKE TRIM FLUSH WITH THE OUTSIDE EDGE OF THE WALL CORNER TRIM. FASTEN THE RAKE TRIM TO THE END CAPS USING POP RIVETS (H1100)



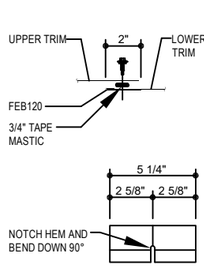
SCULPTURED RAKE TO ON SLOPE GUTTER

ED7000 DETAIL SHOWN WITH WALL PANEL AND CORNER TRIM. MASONRY AND INSULATED WALL PANEL CONDITIONS SIMILAR.

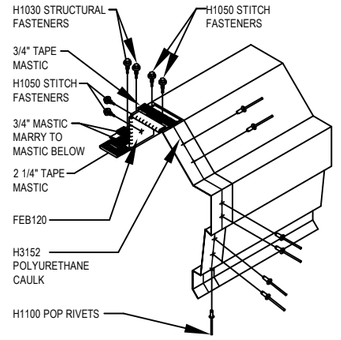
TRIM_522

RAKE LAP & FLASHING BACKER

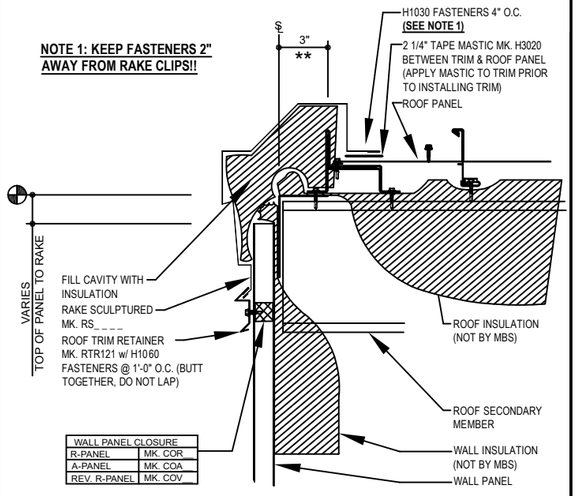
SLIDE FIELD CUT SECTION OF FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE AS SHOWN BELOW. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). APPLY CONTINUOUS BEAD OF CAULK 1" FROM END OF TRIM DOWN PROFILE OF TRIM. FASTEN LAP WITH STITCH FASTENERS AND POP RIVETS AS SHOWN. ROOF STRUCTURAL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



FLASHING ENDLAP BACKER
FIELD CUT FROM STANDARD FEB120



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



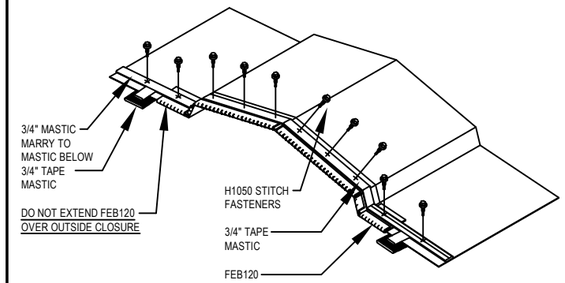
RAKE SCULPTURED DETAIL

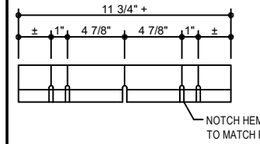
RAKE SCULPTURED DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

EE3010

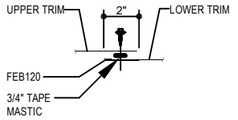
RIDGE CAP LAP & FLASHING BACKER

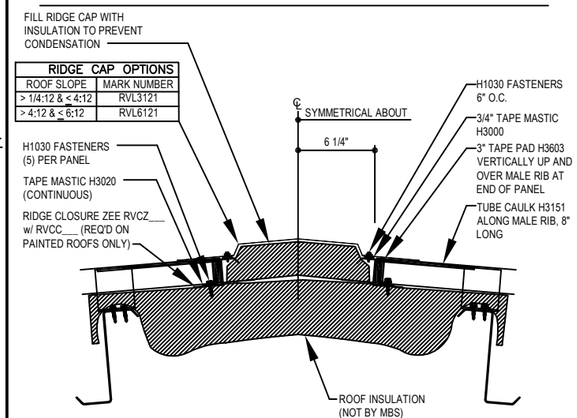
SLIDE FIELD CUT SECTION FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE. PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM). MARRY LAP MASTIC WITH MASTIC BETWEEN RIDGE CAP AND RIDGE CLOSURE ZEE.





FLASHING ENDLAP BACKER
FIELD CUT FROM STANDARD FEB120





RIDGE TRIM DETAIL

RIDGE TRIM DETAIL

EG3010

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
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JOB NUMBER
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SHEET TITLE
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NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

This seal pertains only to the metal buildings designed and supplied by the Metal Building Manufacturer. The drawings and the metal buildings which they represent are the product of the Metal Building Manufacturer. The registered professional engineer whose seal is affixed to these drawings is employed by the Metal Building Manufacturer and does not serve as or represent the project engineer of record and shall not be construed as such.

SHEET
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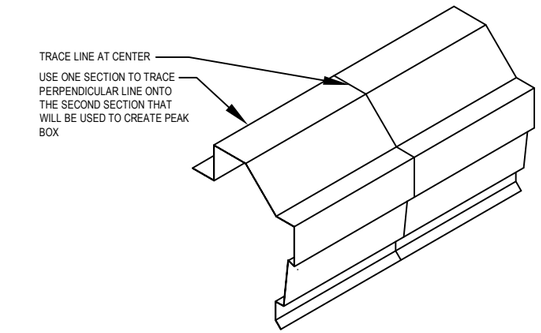
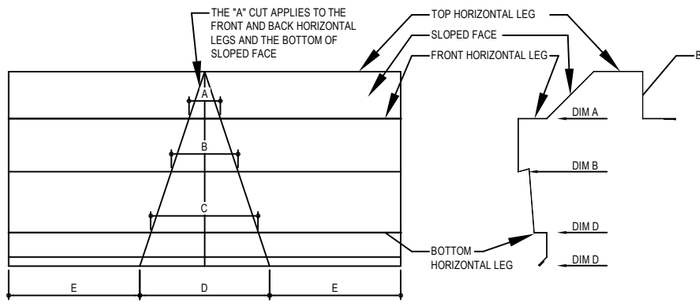


ROOF SLOPE	LAYOUT DIMENSION (INCHES				
	A	B	C	D	E
0.25:12	1/8	1/4	7/16	1/2	11 3/4
0.50:12	1/4	1/2	13/16	1	11 1/2
1:12	1/2	1	1 5/8	2	11
2:12	15/16	2 1/16	3 5/16	3 15/16	10
3:12	1 7/16	3 1/16	4 15/16	6	9
4:12	1 7/8	4 1/16	6 5/8	7 7/8	8 1/16
5:12	2 3/8	5 1/8	8 1/4	9 7/8	7 1/16
6:12	2 7/8	6 1/8	9 7/8	11 7/8	6 1/16
7:12	3 3/8	7 1/8	11 1/2	13 7/8	5 1/16
8:12	3 7/8	8 3/16	13 1/8	15 7/8	4 1/16
9:12	4 5/16	9 1/8	14 7/8	17 7/8	3 1/8
10:12	4 3/4	10 3/16	16 1/2	19 3/4	2 1/8
11:12	5 1/4	11 1/4	18 1/8	21 3/4	7 1/8
12:12	5 3/4	12 1/4	19 3/4	23 3/4	6 1/8



STEP BY STEP INSTRUCTIONS

1. CUT THE TRIM INTO (2) 2'-0" ± LENGTHS
   1.1. (2) 3'-0" ± LENGTHS AT 11:12 SLOPE AND GREATER
2. LAYOUT THE WORK LINES AS SHOWN
3. OFFSET ONE OF THE WORK LINES FOR TABS LAYOUT
4. MAKE CUTS AS SHOWN
5. BEND AT THE TOP HORIZONTAL LEG OF THE TRIM
6. POP RIVET THE TWO SIDES TOGETHER WITH **H1100 RIVETS**
7. CAULK ANY GAPS AS REQUIRED ON INSIDE WITH **H3152 POLYURETHANE TUBE CAULK**
8. **CREATE FIELD FAB PEAK PLATE FROM SUPPLIED FS6- FLAT STOCK. (NOT REQUIRED W/ LOC SEAM PANEL)**
   8.1. **PLACE RIDGE CAP TEMPORARILY ON PEAK BOX AND TRACE PATTERN TO TRANSFER TO FLAT STOCK. CUT OUT AS SHOWN AND BEND TABS.**

PEAK PLATE LAYOUT

FIELD FABRICATED PEAK BOX INSTRUCTIONS

REFERENCE PEAK BOX DETAIL FOR INSTALLATION

TRIM_525

EG7000

METAL PEAK BOX AND PEAK PLATE PREPERATION

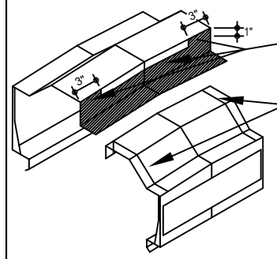
PEAK BOX PREPARATION
STEP 1

ERECTOR NOTE:

PRIOR TO INSTALLING THE FIRST OR LAST PIECE OF RIDGE CAP, THE PEAK BOX AND PEAK PLATE NEED TO BE INSTALLED.

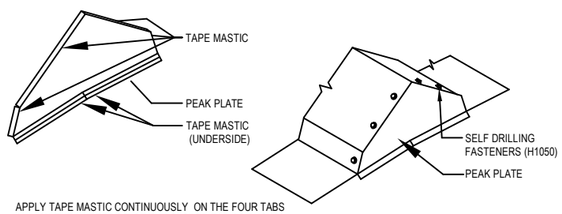
PEAK BOX

START BY FIELD CUTTING THE BACK LEG OF THE PEAK BOX OFF AS SHOWN BELOW. NEXT APPLY A CONTINUOUS BEAD OF **POLYURETHANE TUBE CAULK (H3152)** ON THE UNDERSIDE OF THE PEAK BOX WHERE IT COMES IN CONTACT WITH THE RAKE TRIMS. APPLY **POLYURETHANE TUBE CAULK (H3152)** TO ANY GAPS ON THE UNDERSIDE OF THE PEAK BOX IN THE MITERED AREA.



PEAK PLATE WITH RIDGE CAP PREPARATION
STEP 2

START BY APPLYING A CONTINUOUS STRIP OF **1 ½" TAPE MASTIC (H3001)** TO THE TOP OF THE FOUR TABS AND THE UNDERSIDE OF THE SLOPED TAB AS SHOWN. NEXT PLACE THE PEAK PLATE INSIDE OF THE RIDGE CAP AND FASTEN WITH **(6)** TRIM COLORED **(H1050)** FASTENERS.



RIDGE CAP WITH METAL PEAK BOX INSTALLATION

DETAIL SHOWN WITH ROOF AND WALL PANEL.

EG7630

METAL PEAK BOX & PEAK PLATE INSTALLATION AT STANDARD RAKE TRIM
STEP 3

CENTER THE PREPARED PEAK BOX OVER THE RIDGE. ONCE CENTERED, PUSH THE PEAK BOX DOWN AND OVER THE RAKE TRIMS. MAKE SURE THE BACK LIP OF THE PEAK BOX IS BETWEEN THE OUTSIDE PANEL CLOSURE AND THE RAKE TRIM. TO ACHIEVE THIS YOU MAY NEED TO BACK OUT THE FASTENER ON THE OUTSIDE PANEL CLOSURE TAB AND THEN RE-INSTALL.FINISH INSTALLING THE RAKE RETAINER TRIM OVER THE PEAK BOX.

INSTALL CONTINUOUS **1 1/2" TAPE MASTIC (H3001)** ALONG THE TOP OF THE OUTSIDE PANEL CLOSURE ON BOTH SIDES OF THE RIDGE. REMOVE THE PAPER BACKING ONLY AS WORK PROGRESSES.

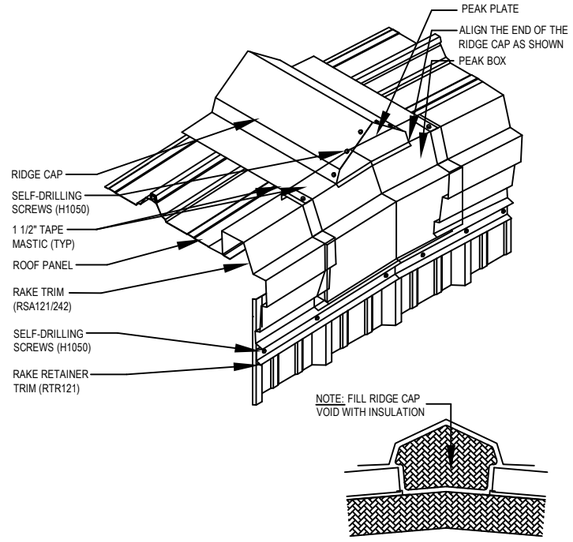
AFTER THE PEAK BOX IS IN PLACE, EXTEND THE **1 1/2" TAPE MASTIC (H3001)** FROM THE OUTSIDE PANEL CLOSURE TO THE SLOPED FACE TO THE PEAK BOX. NEXT, INSTALL SHORT PIECES OF **1 1/2" TAPE MASTIC (H3001)** TO THE FLAT PORTION OF THE RIDGE CAP (AS SHOWN).

CENTER THE PREPARED SECTION OF RIDGE CAP OVER THE OUTSIDE PANEL CLOSURE AND FASTEN WITH (5) RIDGE CAP COLORED SELF-DRILLING SCREWS **(H1050)** PER PANEL WIDTH. (2" FROM EACH RIB AND 5" O/C IN BETWEEN). BE SURE THAT THE EDGE OF THE RIDGE CAP IS FLUSH WITH THE SLOPED FACE.

START THE RIDGE CAP FLUSH WITH THE SLOPED EDGE OF THE RAKE TRIM AS SHOWN IN THE DETAIL BELOW.

RIDGE CAP MUST BE PROPERLY POSITIONED BEFORE TOUCHING THE MASTIC. **MASTIC CANNOT BE REUSED.**

FASTEN THE RIDGE CAP TO THE RAKE TRIM USING SELF-DRILLING **H1050** SCREWS. **DO NOT PLACE ANY FASTENERS IN THE PEAK BOX.** DOING SO WILL NOT ALLOW THE RAKE TRIM TO "FLOAT" WITH THE EXPANSION AND CONTRACTION OF THE ROOF SYSTEM



TRIM_400

ISSUE	DWN	CHK	ENG	PE	DATE
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Engineering Performed By:
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200 Whetstone Rd.
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NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
CED8

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"

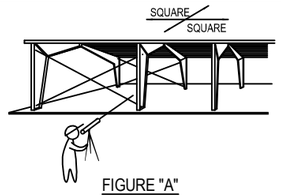


FIGURE "A"

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 SHEETED.

SEE FIGURE "B"

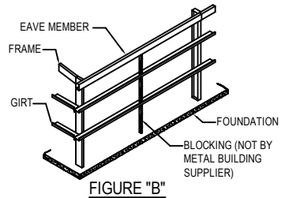


FIGURE "B"

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 PLIERS. 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"

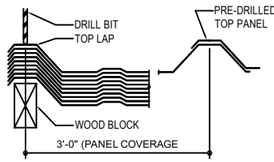


FIGURE "C"

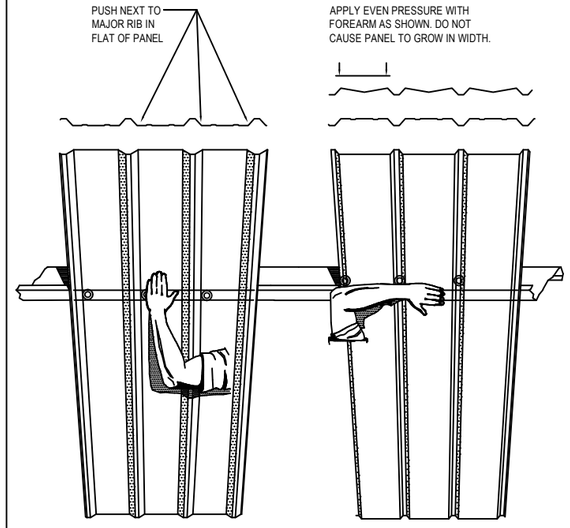
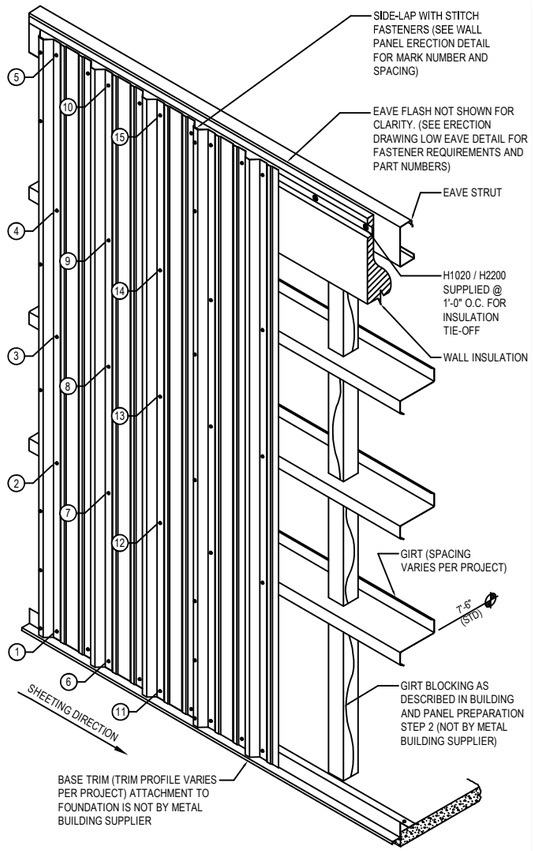


FIGURE "E"



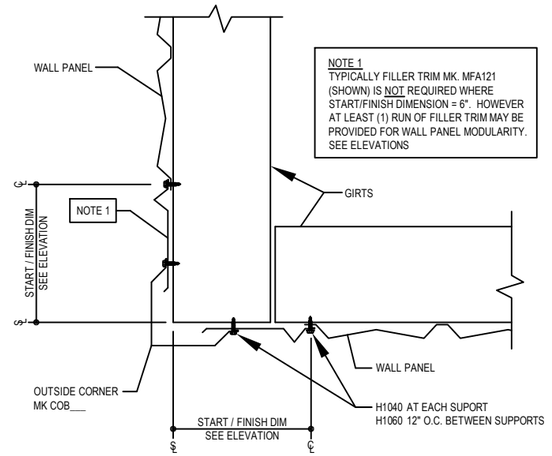
NOTE: BASE TRIM PROFILES ARE MANUFACTURED WITH A 5°D SLOPE TO PROMOTE WATER SHED. ENSURE SLOPE IS PRESENT TO PREVENT HOLDING WATER. DO NOT ALLOW WEIGHT OF PANEL TO OVER BEND TRIM CREATING LARGER GAP AT RIB OF PANEL.

FIGURE "D"

STANDARD FASTENER SCHEDULE

H1000 SELF-TAPPING SCREW (GOOF SCREW) 17-14 x 1" WITH WASHER LONG LIFE FASTENER 3/8" HEAD	H1042 SELF-DRILLING SCREW 12-14 x 7/8" TCP3 W/O WASHER 5/16" HEAD	H1070 SELF-DRILLING SCREW 12-24 x 1 1/2" TCP5 W/O WASHER 5/16" HEAD 1/2" THK MAX DRILLING CAPACITY
H1020 SELF-DRILLING SCREW 1/4-14 x 1 1/4" TCP3 W/O WASHER 5/16" HEAD 3/16" THK MAX DRILLING CAPACITY	H1045 SELF-DRILLING SCREW 12-14 x 2" TCP3 W/O WASHER 5/16" HEAD	H1100 1/8" x 3/16" STAINLESS STEEL BLIND POP RIVET
H1030 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP3 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1047 SELF-DRILLING SCREW 12-14 x 2" TCP3 FLAT TOP WITH WASHER 5/16"ø HEAD	H1110 3/8"ø STAINLESS GROMMET FASTENER
H1035 SELF-DRILLING SCREW 12-14 x 1 1/2" TCP3 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1050 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 WITH WASHER LONG LIFE FASTENER 5/16" HEAD	H1220 SELF-DRILLING SCREW 12-14 x 1" TCP3 W/O WASHER PHILLIPS HEAD
H1040 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP3 W/O WASHER 5/16"ø HEAD	H1060 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 W/O WASHER 5/16" HEAD	PRE-DRILL DIAMETERS 3/16"ø FOR: H1020, H1070 5/32"ø FOR: H1030, H1035, H1040, H1041, H1042, H1045, H1047, H1220 1/8"ø FOR: H1050, H1060, H1061
H1041 SELF-DRILLING SCREW 12-14 x 1 1/4" TCP3 FLAT TOP WITH WASHER 5/16" HEAD	H1061 SELF-DRILLING SCREW 1/4-14 x 7/8" TCP1 FLAT TOP WITH WASHER 5/16"ø HEAD	

DA0080



OUTSIDE CORNER DETAIL

GC0011

TRIM_352

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'

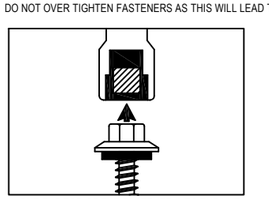
DRIVING TIPS:

SET THE NUT DRIVER AS DESCRIBED BELOW PRIOR TO INSTALLING FASTENERS TO PREVENT FASTENER WOBBLE...

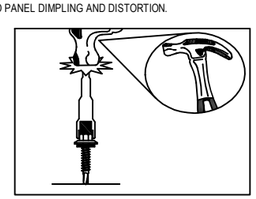
COMPRESS THE INSULATION AT FASTENER LOCATION WITH ONE HAND WHILE DRIVING THE FASTENER WITH THE OTHER. THIS WILL HELP KEEP THE PANEL FLAT AND PREVENT THE FASTENER FROM "WALKING". DRIVE FASTENERS PERPENDICULAR TO PANEL SURFACE.

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

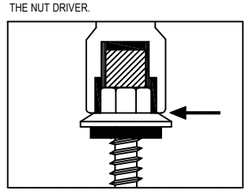
DO NOT OVER TIGHTEN FASTENERS AS THIS WILL LEAD TO PANEL DIMPLING AND DISTORTION.



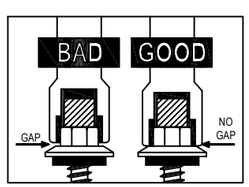
1. PUT THE TOP OF THE FASTENER INTO THE NUT DRIVER. NOTE: FOR PAINTED FASTENERS, PLACE A SINGLE OR DOUBLED LAYER OF PLASTIC BETWEEN THE FASTENER HEAD AND THE NUT DRIVER.



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)

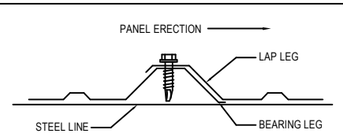
RECOMMENDED TIPS:

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.

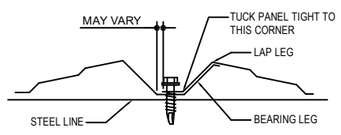
PANEL ORIENTATION AND ALIGNMENT

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.

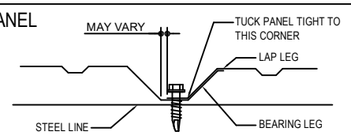
R-PANEL



A-PANEL



REVERSE R-PANEL



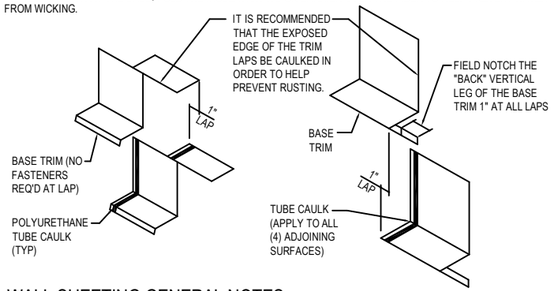
BASE TRIM LAP SEALANT

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

GA0000

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

ISSUE	DWN	CHK	ENG	DATE
FINALS	MBS	BLS	RHB	08/12/2023

PROJECT NAME
CAMPBELL BASEBALL OPEN SHELTER
76 UPCHURCH LANE, BUIES CREEK, NC 27506

CUSTOMER NAME
SOUTHEASTERN CONSTRUCTION OF BUIES CREEK, LLC
BUIES CREEK, NC 27506

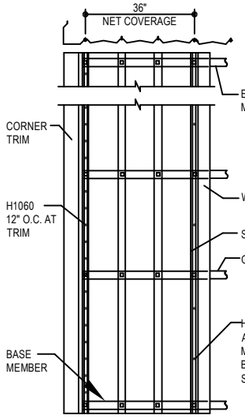
JOB NUMBER
A23B0716A

SHEET TITLE
CERTIFIED ERECTION DETAILS

NORTH CAROLINA PROFESSIONAL SEAL 24064 ENGINEER RAJESH H. BHAGNARI

SHEET
CED9

▪ H1060 STITCH FASTENER
▫ H1040 STRUCTURAL FASTENER



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

WALL PANEL ERECTION

GA0040 ERECTOR NOTE: 1/2" SIDELAP MASTIC (H3010) IS REQUIRED IN SNOWDRIFT CONDITIONS. REFER TO THE ELEVATIONS FOR LOCATION REQUIREMENTS.

TRIM_534

ERECTOR NOTE:
1. MITERING OF THE "S" WILL BE REQUIRED AT SLOPES OVER 4:12 FOR PROPER LINE UP WITH THE DOWNSPOUT.

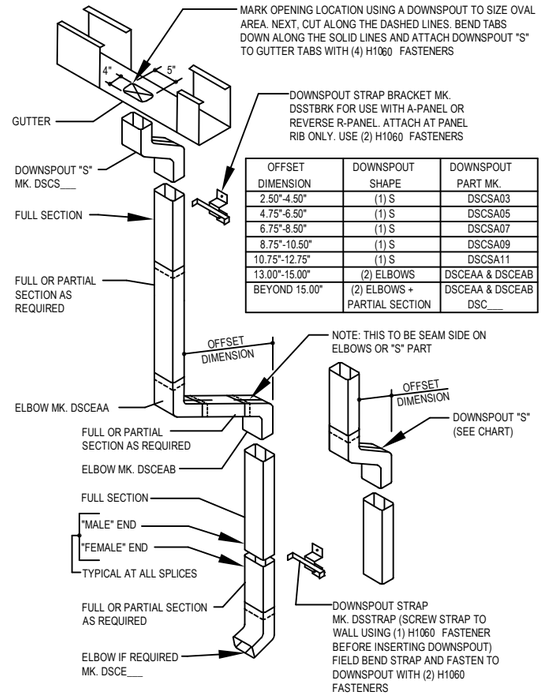
2. IF PROJECT CONTRACT SPECIFIES "S" SHAPES AT THE BOTTOM OF THE DOWNSPOUT IN LIEU OF ELBOWS, SEE DETAIL GA0105.

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

USE DOWNSPOUT STRAPS MK. DSSTRAP AS FOLLOWS:
(1) AT DOWNSPOUT "S"
(1) AT THE ELBOW(S) OR "S" AT OFFSET
(1) AT EACH 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.

NOTE: GUTTER PROFILE MAY VARY. SEE LOW EAVE GUTTER DETAIL.



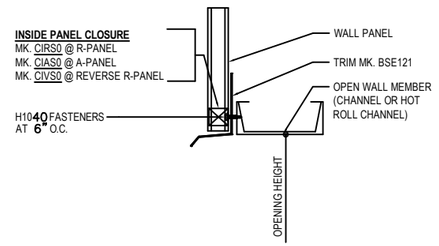
OFFSET DIMENSION	DOWNSPOUT SHAPE	DOWNSPOUT PART MK.
2.50"-4.50"	(1) S	DSCSA03
4.75"-6.50"	(1) S	DSCSA05
6.75"-8.50"	(1) S	DSCSA07
8.75"-10.50"	(1) S	DSCSA09
10.75"-12.75"	(1) S	DSCSA11
13.00"-15.00"	(2) ELBOWS	DSCEAA & DSCEAB
BEYOND 15.00"	(2) ELBOWS + PARTIAL SECTION	DSCEAA & DSCEAB DSC___

CORRUGATED DOWNSPOUT AT INSET WALL

REFERENCE DOWNSPOUT SCHEDULE FOR DOWNSPOUT MARK NUMBERS

GA0230

ERECTOR NOTE:
UNTIL WALL PANELS ARE INSTALLED, (3) H1040 SCREWS ARE TO BE USED FOR TEMPORARY INSTALLATION OF THE BASE TRIM.
FIELD MITER BASE TRIM AT CORNERS.



DRIP BASE TRIM DETAIL AT OPEN WALL

SEE WALL SHEETING ERECTION DETAIL FOR WALL PANEL FASTENER LOCATIONS

GB0140

ISSUE	DWN	CHK	ENG	PE	DATE
FINALS	MBS	BLS	RHB		08/12/2023

Engineering Performed By:
Nucor Corporation
200 Whetstone Rd.
Swansea, SC 29460
COA# F-1470

CUSTOMER NAME
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SHEET
CED10