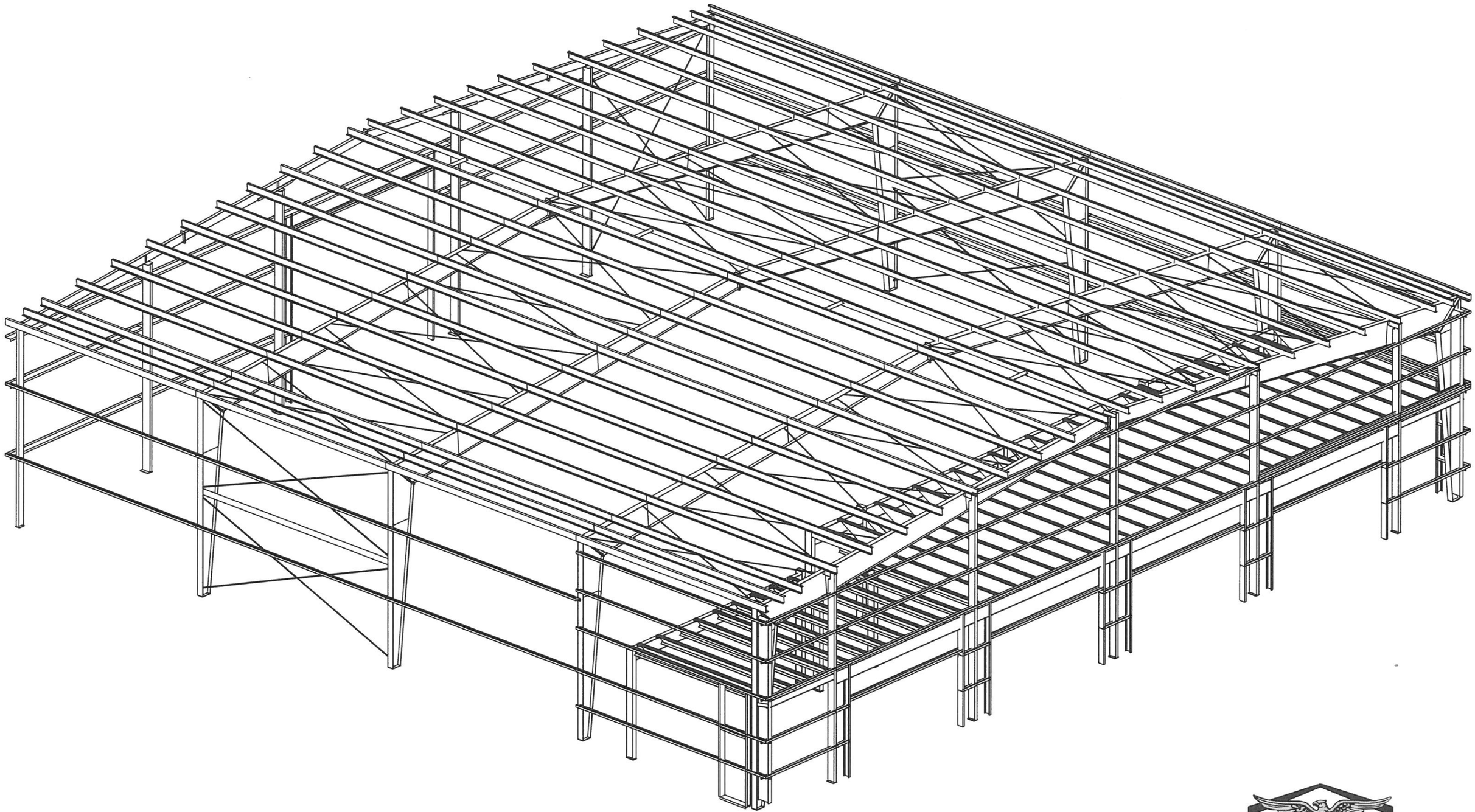


A17B0157A

CAROLINA DIESEL TRUCKS

AMERICAN BUILDINGS

A NUCOR COMPANY

BUILDING ERECTION NOTES

1. THE METAL BUILDING SUPPLIER ASSUMES NO RESPONSIBILITY OR LIABILITY FOR FOUNDATION, FLOOR OR SLAB DESIGN OR CONSTRUCTION.
2. THE FOUNDATION DESIGN SHOULD BE DONE WITH DUE REGARD TO THE SPECIFIC SOIL CONDITIONS PRESENT AT THE ACTUAL JOBSITE.
3. FOUNDATION MUST BE DESIGNED FOR THE APPLICABLE REACTIONS AS THEY APPLY TO A PARTICULAR BUILDING AND MUST BE ADEQUATE TO RESIST ALL OF THE CRITICAL COMBINATIONS FOR EACH OF THE VARIOUS LOADING CONDITIONS. THESE REACTIONS AND LOAD COMBINATIONS MUST BE USED TO DETERMINE THE DESIGN LOADS TO BE RESISTED BY THE FOUNDATIONS.
4. REINFORCING BARS, WIRE MESH, ANCHOR ROD SHEAR ANGLES, TIE RODS AND / OR HAIRPINS (HOOK BARS) SHOULD BE INCORPORATED AS REQUIRED INTO THE FOUNDATION DESIGN. THE HORIZONTAL THRUST AT THE COLUMN BASE ACTING IN CONJUNCTION WITH APPLICABLE VERTICAL REACTIONS, MUST BE SUSTAINED BY HAIRPINS, TIE RODS, BUTTRESSES, OR OTHER DEPENDABLE MEANS.
5. COLUMN FOOTING SHOULD EXTEND A MINIMUM OF 12 INCHES INTO NATURAL SOIL, OR WHERE FILL IS USED, THE FILL MUST BE PROPERLY COMPACTED OR THE FOOTING SHALL EXTEND TO THE NATURAL GRADE. IN ALL CASES THE FOOTING SHALL EXTEND AT LEAST 6 INCHES BELOW THE LOCAL FROST LINE.
6. EXPANSION OR CONSTRUCTION JOINTS SHALL BE LOCATED AS REQUIRED IN FOUNDATION WALLS AND SLAB, AS SPECIFIED BY THE FOUNDATION DESIGNER.
7. THE TOP OF THE FOUNDATION OR FLOOR SHALL BE SQUARE, LEVEL AND SMOOTH. ANCHOR RODS SHALL BE ACCURATELY SET TO A TOLERANCE +/- 1/16 INCH ON DIMENSIONS WITHIN THE GROUP SPACING FOR AN INDIVIDUAL COLUMN. ALL OTHER DIMENSIONS SHALL HAVE A +/- 1/8 INCH TOLERANCE.
8. COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED THE ALLOWABLE BEARING STRESS OF CONCRETE THAT HAS A MINIMUM COMPRESSIVE STRENGTH OF 2500 P.S.I. AT 28 DAYS.
9. UNLESS EXPLICITLY NOTED OTHERWISE, ALL EMBEDDED STRUCTURAL STEEL (INCLUDING ANCHOR RODS), OTHER MATERIALS, AND LABOR SHALL BE SUPPLIED BY THE FOUNDATION CONTRACTOR.
10. ANCHOR RODS SHOULD BE AS SHOWN AND CALLED FOR, INCLUDING PROJECTION FROM CONCRETE, DIAMETER AND QUANTITY.
11. THE EMBEDMENT OF THE ANCHOR RODS IN THE CONCRETE AND CONFIRMING ADEQUACY OF ANCHOR ROD EDGE DISTANCE IS THE RESPONSIBILITY OF THE FOUNDATION DESIGNER. THE FRAME REACTIONS ARE CONSIDERED THE MINIMUM LOADS TO BE DEVELOPED.
12. ALL ANCHOR RODS SHALL BE ASTM F1554 GRADE 36 OR EQUAL IN ORDER TO CONFORM TO THE METAL BUILDING SUPPLIER'S DESIGN ASSUMPTIONS BASED ON THE ALLOWABLE STRESSES GIVEN IN THE AISC MANUAL OF STEEL CONSTRUCTION.
13. ANCHOR ROD DIAMETERS FOR THE PRIMARY FRAMING AND ENDWALL FRAMING ARE DENOTED AT RESPECTIVE BASE PLATE DETAILS OR ON THE ANCHOR BOLT PLAN. ANCHOR RODS FOR FRAMED OPENINGS SHALL BE 1/2 INCH DIAMETER UNLESS OTHERWISE NOTED.

BASIC MATERIAL SPECIFICATIONS

PRIMARY FRAMING STEEL

STEEL FOR MILL-ROLLED STRUCTURAL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 36, ASTM A 572 GRADE 50 OR 55, OR ASTM A 992.

STEEL FOR ALL BUILT-UP SECTIONS SHALL CONFORM TO ONE OR MORE OF THE FOLLOWING:

A. ASTM A 1011 SS, GRADE 55
B. ASTM A 1011 HSLAS, GRADE 55, CLASS 1
C. ASTM A 572 GRADE 55
D. ASTM A 529 GRADE 55

STEEL FOR ENDWALL "C" SECTIONS SHALL CONFORM TO ASTM A 1011 SS, GRADE 55, OR HSLAS, GRADE 55, CLASS 1.

STEEL FOR ROUND PIPE SECTIONS SHALL CONFORM TO ASTM A 500 GRADE B, 42 KSI.

SECONDARY FRAMING STEEL

STEEL USED TO FORM PURLINS, GIRTS, EAVE STRUTS AND "C" SECTIONS SHALL CONFORM TO ASTM A1011 SS, GRADE 55, OR HSLAS GRADE 55, CLASS 1, OR IF GALVANIZED SHALL CONFORM TO ASTM A653 SS, GRADE 55, G90 OR HSLAS, GRADE 55, CLASS 1, G90.

ROOF AND WALL PANEL MATERIAL

EXTERIOR PANELS SHALL CONFORM TO ONE OF THE FOLLOWING:
PANEL MATERIAL SHALL BE ALUMINUM-ZINC ALLOY-COATED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A 792 SS, GRADE 80. MATERIAL MAY BE EITHER 26 OR 24 GAGE.
PANEL MATERIAL SHALL BE ALUMINUM-ZINC ALLOY-COATED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A 792 SS, GRADE 50, CLASS 1. MATERIAL MAY BE EITHER 24 OR 22 GAGE.
PANEL MATERIAL SHALL BE ZINC-COATED (GALVANIZED) STEEL, COATING DESIGNATION G90, CONFORMING TO THE REQUIREMENTS OF ASTM A 653 SS, GRADE 80, CLASS 1 OR CLASS 2, OR HSLAS, GRADE 80. MATERIAL MAY BE EITHER 26 OR 24 GAGE.
PANEL MATERIAL SHALL BE ZINC-COATED (GALVANIZED) STEEL, COATING DESIGNATION G90, CONFORMING TO THE REQUIREMENTS OF ASTM A 653 SS, GRADE 50, CLASS 1 OR CLASS 3, MATERIAL MAY BE EITHER 24 OR 22 GAGE.

BRACE MATERIALS:

BRACE CABLES:	ASTM A 475, 7-STRAND EHS WIRE CABLE	BC4 = 1/4" DIA.(7mm)	BC5 = 5/16" DIA.(8mm)	BC6 = 3/8" DIA.(10mm)	BC8 = 1/2" DIA.(13mm)	
BRACE RODS:	ASTM A 572, 50 KSI (UPSET THREADS)	BR5 = 5/8" DIA.(16mm)	BR6 = 3/4" DIA.(20mm)	BR7 = 7/8" DIA.(23mm)	BR8 = 1" DIA.(26mm)	
	OR ASTM A 529, 50 KSI (CUT THREADS)	BR9 = 1 1/8" DIA.(29mm)	BR10 = 1 1/4" DIA.(32mm)	BR11 = 1 3/8" DIA.(35mm)	BR12 = 1 1/2" DIA.(39mm)	

STRUCTURAL PRIMER NOTE:

"SHOP COAT PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING DURING TRANSPORTATION TO THE JOBSITE. 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 SUPPLIER. ABC IS NOT RESPONSIBLE FOR THE DETERIORATION OF THE PRIMER OR CORROSION THAT MAY RESULT FROM NEITHER ATMOSPHERIC AND ENVIRONMENTAL CONDITIONS NOR THE COMPATIBILITY OF THE PRIMER TO ANY FIELD APPLIED COATING."

"AS A MINIMUM AND SECONDARY TO MORE STRENUOUS JOB SPECIFIC REQUIREMENTS, PROJECTS LOCATED IN CANADA MUST BE ERECTED WITHIN TOLERANCES AS DEFINED IN SECTION 29.7 OF SPECIFICATION S16.01 AND PROJECTS IN OTHER LOCATIONS MUST BE ERECTED WITHIN TOLERANCES AS DEFINED IN THE LATEST EDITION OF THE METAL BUILDING SYSTEMS MANUAL, PUBLISHED BY THE MBMA."

CONSTRUCTION BRACING NOTE:

TEMPORARY SUPPORTS, SUCH AS TEMPORARY GUYS, BRACES, FALSEWORK, CRIBBING OR OTHER ELEMENTS REQUIRED FOR THE ERECTION OPERATION IS TO BE DETERMINED, FURNISHED AND INSTALLED BY THE ERECTOR. THESE SUPPORTS MUST SECURE THE STEEL FRAMING, OR ANY PARTLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED RESULTING FROM WIND AND OR SEISMIC ACTIVITY AND AGAINST THE LOADS RESULTING FROM THE ERECTION OPERATION.

ERECTOR NOTE

FIELD WORK (TRIMMING, DRILLING, WELDING, ETC.) MAY BE REQ'D FOR CERTAIN CONDITIONS. ABC WILL NOT BE LIABLE FOR ADDITIONAL ERECTION COSTS DUE TO THIS WORK. CONDITIONS EFFECTED MAY INCLUDE (BUT ARE NOT LIMITED TO): ALL SHEETING PANELS LESS THAN 3'0 IN LENGTH WILL HAVE TO BE FIELD CUT FROM PANELS PROVIDED AS NOTED ON ERECTION DWGS, SOME PORTAL FRAME KNEE BRACES REQUIRE FIELD WELDING OR DRILLING FOR CONNECTION AT RAFTER, FLUSH GIRT/PURLIN CONDITIONS MAY NEED TO BE SLOTTED TO ACCOMMODATE X-BRACING, "KICKER" BRACES AT OPEN ENDWALLS MAY REQUIRE FIELD DRILLED HOLES AT CONNECTION TO PURLINS, ANGLE X-BRACING MAY REQUIRE FIELD WELDING AT THE COLUMN BASE, ALL JOBS WITH JOISTS WILL LIKELY REQUIRE SOME FIELD WELDING (REGARDLESS OF BOLTED CONNECTIONS)

CANOPY BY OTHERS
VERTICAL SUPPORT FOR CANOPY BY OTHERS AT COLUMNS FRAME LINE 1, H~K, 1-2
PROVIDE EXTRA CEE SECTIONS PER CUSTOMER REQUEST. SEE E-09 AND E-23 FOR SIZES LOCATIONS.
MEZZANNINE DECKING BY OTHERS.

NOTE FOR CUSTOMER: DECK AT EACH SIDEWALL MUST BE CAPABLE OF TRANSFERRING 6.4 KIPS UNFACTORED SEISMIC LONGITUDINAL FORCE INTO JOISTS.
BUILDER ADVISE TO HAVE DECK WITHSTAND 2'-8" SPANS

ABC - *ATLANTIC DIVISION*
6115 COCA COLA BLVD.
COLUMBUS, GA 31909
PHONE: (706) 562-8020
FAX: (706)562-8017

ABC - *MIDWEST DIVISION*
2101 EAST MAIN STREET
EL PASO, IL 61738
PHONE: (309) 527-1500
FAX: (309) 527-1522

ABC - *SOUTH DIVISION*
1150 STATE DOCKS RD.
EUFAULA, AL 36027
PHONE: (334) 687-2032
FAX: (334) 688-2200

ABC - *WEST DIVISION*
2260 TENAYA DRIVE
MODESTO, CA 95354
PHONE: (209) 236-0580
FAX: (209) 236-0588

SHEET NUMBER	STATUS	DATE	REV. NO.
C-1 ~ C-2	FOR APPROVAL ONLY	08/03/17	2
AB-1 ~ AB-3	FOR APPROVAL ONLY	08/03/17	2
E-01 ~ E-15	FOR APPROVAL ONLY	08/03/17	2
SED-000 ~ SED-020	FOR APPROVAL ONLY	08/03/17	2

THE REGISTERED PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS EMPLOYED BY THE MANUFACTURER AND DOES NOT SERVE AS OR REPRESENT THE PROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSIDERED AS SUCH.

THIS IS TO CERTIFY THAT THE METAL BUILDING COMPONENTS FURNISHED BY AMERICAN BUILDINGS COMPANY FOR THE REFERENCED BUILDING HAVE BEEN DESIGNED IN OUR COLUMBUS, GA OFFICE FOR FABRICATION IN OUR LA CROSSE, VA PLANT.

IN ADDITION TO THE DEAD LOAD (D) OF THE BUILDING COMPONENTS, THE MEMBERS ARE DESIGNED ON THE FOLLOWING DESIGN BASIS:

COLLATERAL LOAD (C)
3 psf On Roof Members
3 psf On Supporting Frames

ROOF LIVE LOAD (Lr)
20 psf on Roof Members With Reduction On Supporting Frames As Permitted By Code

SNOW LOAD (S)
10.5 psf Roof Snow Load
Roof Exposure Condition = Partially Exposed
Thermal Condition = All structures that do not otherwise qualify as either "Structures kept just above freezing and others" or "Unheated structures and structures intentionally kept below freezing
15 psf Ground Snow Load
Thermal Factor = 1.0
Snow Exposure Factor = 1.0
Snow Importance Factor = 1.0

WIND LOAD (W)
Exposure (Surface Roughness) Category = B
95 mph Basic Wind Speed (3-second gust)
Enclosure Classification = Enclosed Buildings
Internal Pressure Coefficients = +0.18 and -0.18
Wind Importance Factor = 1.0
Design Pressure for Wall Components and Cladding = +14.86 psf and -19.81 psf

SEISMIC LOAD (E)
Equivalent Lateral Force Procedure
22.9 %g Seismic Mapped Short Period Acceleration
8.6 %g Seismic Mapped 1 Sec Period Acceleration
Site Classification = D
Seismic Importance Factor = 1.0
Seismic Design Category = C
Seismic Design Short Period Acceleration, Sds = 0.244g
Seismic Design 1 Sec Period Acceleration, Sd1 = 0.138g
Transverse Direction OCBF (X-Bracing)
Base Shear, V = pCsW p=1.00 Cs=Sds/ (R/I)=0.0814 R=3<3.25
Transverse Direction OMF (Rigid Frames)
Base Shear, V = pCsW p=1.00 Cs=Sds/ (R/I)=0.0814 R=3<3.5
Longitudinal Direction OCBF (X-Bracing)
Base Shear, V = pCsW p=1.00 Cs=Sds/ (R/I)=0.0814 R=3<3.25

Classification of Building = II. All buildings and other structures except those listed in Categories I, III, and IV

NOTES:
1. ROOF DESIGN IS BASED ON THE LARGER OF LIVE LOAD OR ROOF SNOW LOAD.
2. ALL WELDING MUST BE PERFORMED BY AWS QUALIFIED WELDERS FOR THE WELDING PROCESSES AND POSITIONS TO BE USED. ALL WELDING AND WELD PREP MUST BE COMPLETED AND VISUALLY INSPECTED TO AWS ACCEPTANCE CRITERIA (TABLE 6.1) IN ACCORDANCE WITH THE APPLICABLE AWS STANDARD. WELD ELECTRODES USED FOR ALL FIELD WELD PROCESSES MUST BE SELECTED FROM TABLE 3.1 IN AWS D1.1 FOR GROUP II MATERIAL GREATER THAN OR EQUAL 0.125" THICK OR TABLE 1.2 IN AWS D1.3 FOR MATERIAL LESS THAN 0.125" THICK AND ALL FILLER MATERIAL MUST HAVE A Fu OF 70 KSI.

AMERICAN BUILDINGS COMPANY SERVICEABILITY STANDARDS (2006 MBMA MANUAL CRITERIA) WILL BE USED FOR DESIGN AND FABRICATION OF YOUR ORDER.

THE ABOVE DESIGN LOADS ARE APPLIED IN ACCORDANCE WITH THE 2012 NORTH CAROLINA STATE BUILDING CODE. THE DESIGN IS IN GENERAL ACCORDANCE WITH 2005 AISC 360-05 SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND 2007 AISI NASPEC NORTH AMERICAN COLD-FORMED STEEL SPECIFICATION.

THIS CERTIFICATION IS LIMITED TO THE STRUCTURAL DESIGN OF THE FRAMING AND COVERING PARTS MANUFACTURED BY AMERICAN BUILDINGS COMPANY. ACCESSORY ITEMS SUCH AS DOORS, WINDOWS, LOUVERS, TRANSLUCENT PANELS AND VENTILATORS ARE NOT INCLUDED. ALSO EXCLUDED, ARE OTHER PARTS OF THE PROJECT NOT PROVIDED BY AMERICAN BUILDINGS COMPANY SUCH AS FOUNDATIONS, MASONRY WALLS, MECHANICAL EQUIPMENT AND THE ERECTION AND INSPECTION OF THE BUILDING. THE BUILDING SHALL BE ERECTED ON A PROPERLY DESIGNED FOUNDATION IN ACCORDANCE WITH AMERICAN BUILDINGS COMPANY'S "GENERAL ERECTION GUIDE" AND THE JOB ERECTION DRAWINGS. THE DRAWINGS LISTED ON THIS SHEET SHALL REMAIN WITH AND BECOME PART OF THIS CERTIFICATION.

MEZZANNINE DESIGN LOADS:

ASSUMED DEAD LOAD : 20 PSF
LIVE LOAD : 135 PSF (10 PSF PARTITION LOADS)
COLLATERAL LOAD: 3 PSF

USER REQUESTED DEFIECTION CRITERIA
RIGID FRAME - H/100 (HORIZONTAL)

THIS PROJECT IS DESIGNED AS AN ENCLOSED BUILDING. ACCESSORIES (DOORS, WINDOWS, ETC.) BY OTHERS MUST BE DESIGNED AS "COMPONENTS AND CLADDING" IN ACCORDANCE WITH THE SPECIFIC WIND PROVISIONS OF THE REFERENCED BUILDING CODE.

THE METAL BUILDING MANUFACTURER DOES NOT CONSIDER VIBRATION ANALYSIS OF MEZZANINE SYSTEMS UNLESS EXPLICITLY REQUESTED AND SPECIFIED IN THE METAL BUILDING MANUFACTURER QUOTE AND ORDER DOCUMENTS. ANY NEED FOR VIBRATION ANALYSIS SHOULD BE CONSIDERED AND SPECIFIED BY THE ENGINEER OF RECORD FOR THE PROJECT.

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

NOT FOR CONSTRUCTION

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: C-1

ROOF PANELS

TYPE: S3 GAGE: 24 COLOR: ALCT
PAINT WARRANTY: NO
WEATHERTIGHTNESS WARRANTY: NO
UL 90 CERTIFICATION: NO
FACTORY MUTUAL CERTIFICATION: NO

WALL PANELS

TYPE: A3P GAGE: 26 COLOR: FXGYSMP BASE: ANGLE W/
PAINT WARRANTY: YES

EAVE TREATMENT

STANDARD GUTTER WITH DOWNSPOUTS 46.33 FT O.C. (MAX)

TRIM COLORS

RAKE TRIM: POWHSMP GUTTER OR EAVE: POWHSMP
DOWNSPOUTS: POWHSMP FRAMED OPENINGS: POWHSMP
CORNER: FXGYSMP BASE TRIM: BRSLSMP
MISCELLANEOUS:

PRIMER COLORS

PRIMARY: RED SECONDARY: RED

ROOF FASTENERS

STANDING SEAM III
STRUCTURAL:
#14X1 SDRF
STITCH:
#14X1 SDRF

WALL FASTENERS

ARCHITECTUAL III
STRUCTURAL:
#12X1 1/4 SDHH
STITCH:
#14X3/4 SDHH

TRIM FASTENERS

#14X3/4 SDHH

INSULATION

ROOF: BY OTHERS
THICK: 4.0 WIDTH: NA FACE: NA COLOR: NA
WALLS: BY OTHERS
THICK: 4.0 WIDTH: NA FACE: NA COLOR: NA
THERMAL BLOCKS INCLUDED BY METAL BUILDING SUPPLIER (1" THICK ONLY)

WALK DOORS

QTY	SIZE	TYPE	SWING	LOCKSET	CLOSER	COLOR	LINER TRIM	LINER TRIM COLOR
1	6070	S	RHO	SRP	NO	WHITE	NO	
2	3070	S	RHO	SRP	NO	WHITE	NO	

FRAMED OPENINGS

QTY	WIDTH	HEIGHT	SILL HEIGHT	FR WRAP TRIM	LINER TRIM	LINER TRIM COLOR
4	16'	8'		YES	NO	
1	20'	18'		YES	NO	
1	12'	9'		YES	NO	

RECENT PRODUCT REVISIONS

THE FOLLOWING NOTES MAY OR MAY NOT PERTAIN TO THIS SPECIFIC JOB BUT ARE NOTEWORTHY PRODUCT CHANGES.
1. THINK SAFETY!

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

NOT FOR CONSTRUCTION

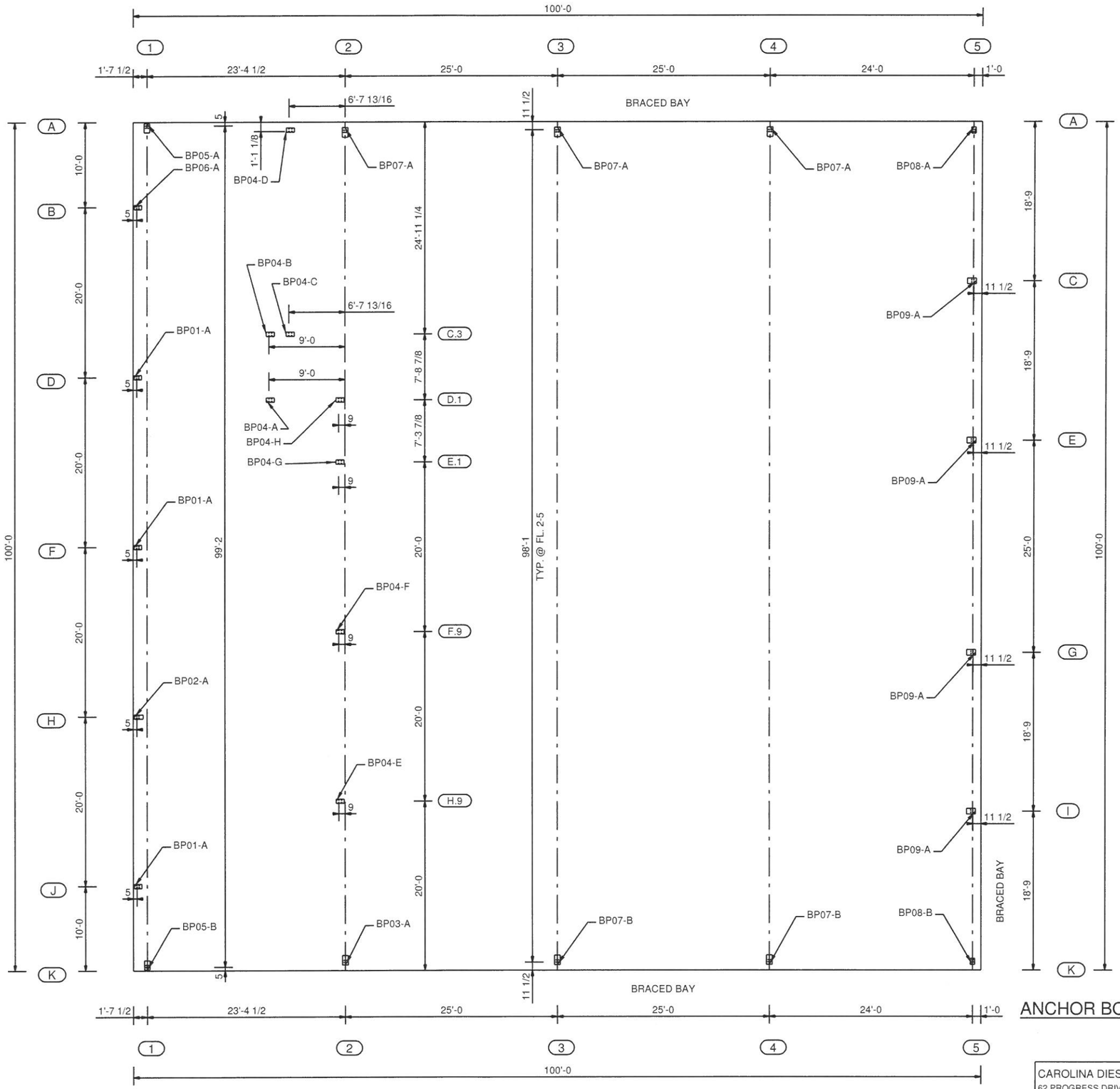
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: C-2

ANCHOR BOLT TABLE	
SIZE	QTY
3/4	108

ERECTION NOTE!!!
1. FINISHED FLOOR ELEVATION = 100'-0"
2. BOTTOM OF BASE PLATE (B.O.B.P.) = 100'-0" EXCEPT AS NOTED.



ANCHOR BOLT PLAN

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

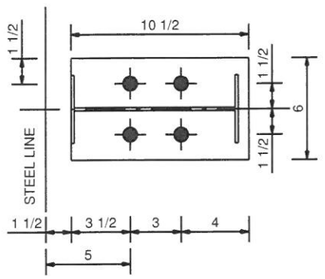
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

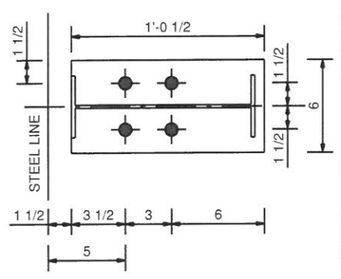
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: AB-1

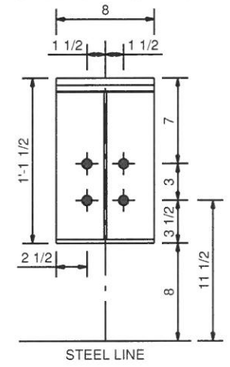
BP01-A
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



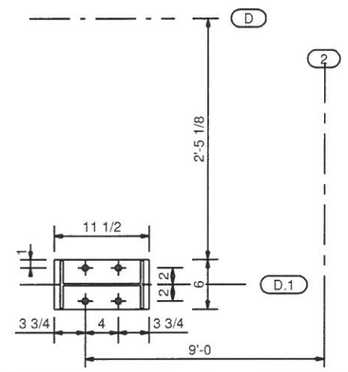
BP02-A
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



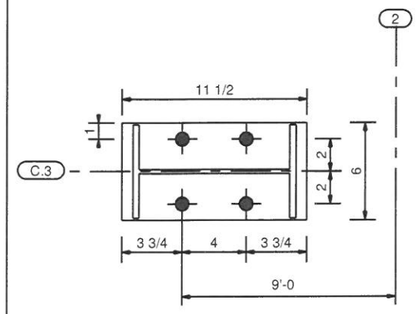
BP03-A
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



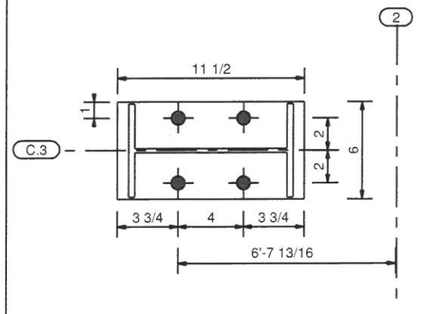
BP04-A
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



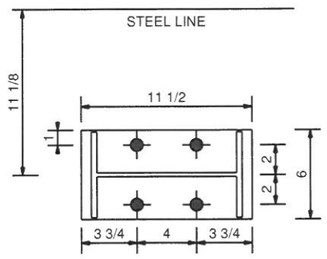
BP04-B
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



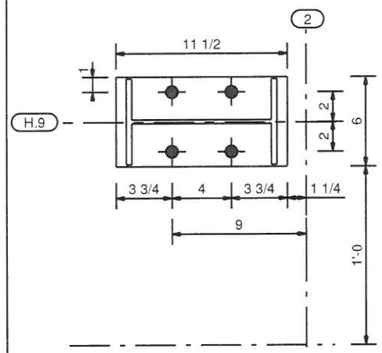
BP04-C
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



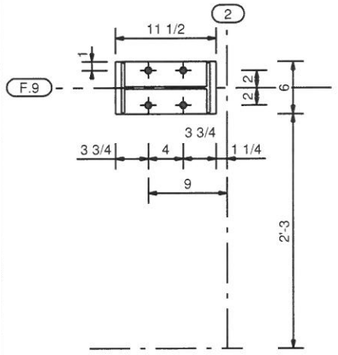
BP04-D
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



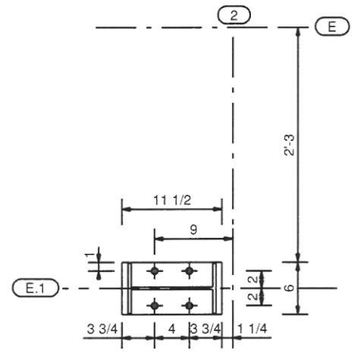
BP04-E
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



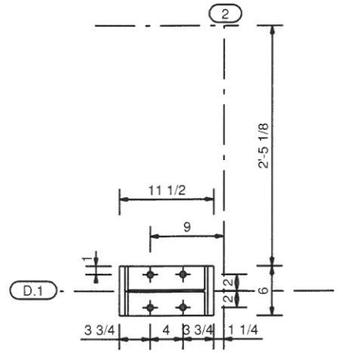
BP04-F
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



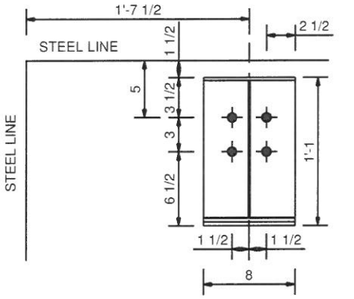
BP04-G
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



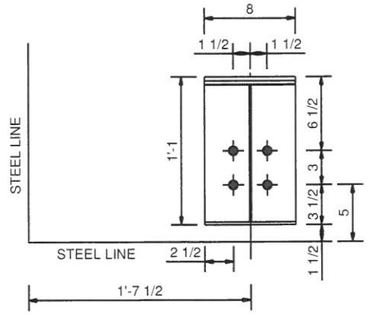
BP04-H
1/2 PLATE - 3/4 AB - 3" REQD. PROJECTION



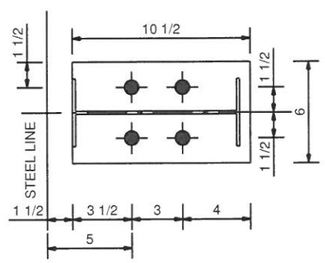
BP05-A
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



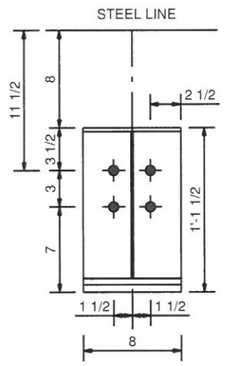
BP05-B
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



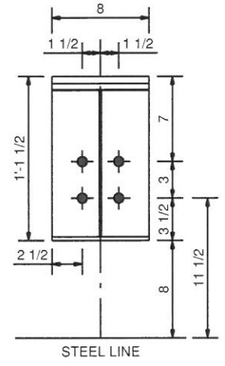
BP06-A
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



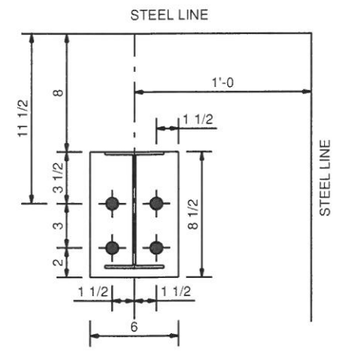
BP07-A
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



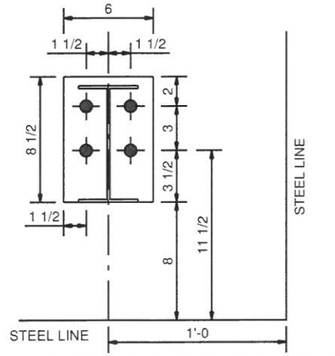
BP07-B
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



BP08-A
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



BP08-B
3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



ERECTION NOTE!!!
1. FINISHED FLOOR ELEVATION = 100'-0"
2. BOTTOM OF BASE PLATE (B.O.B.P.) = 100'-0" EXCEPT AS NOTED.

ERECTION NOTE!!!
ALL ANCHOR RODS SHALL HAVE A 3 INCH PROJECTION (UNLESS NOTED) ABOVE THE BOTTOM OF THE COLUMN BASE PLATES, EXCEPT 1/2 INCH DIAMETER ANCHOR RODS LOCATED AT DOORS WHICH SHALL HAVE PROJECTION OF 1 INCH.

ALL ANCHOR RODS SHALL HAVE A MINIMUM THREAD LENGTH OF 1/4 INCH LESS THAN THE PROJECTION. THE PROJECTIONS SPECIFIED PROVIDE FOR A SINGLE BASE PLATE THICKNESS, AND APPLICATION OF ONE 3/16 INCH WASHER, AND ONE HEAVY HEX NUT. IN THE INSTALLED POSITION, THE TOP OF THE ANCHOR BOLT MUST BE FLUSH WITH OR ABOVE THE TOP OF THE NUT.

ADDITIONAL PROJECTION LENGTH MUST BE CONSIDERED AND PROVIDED FOR ITEMS SUCH AS GROUT, DOUBLE NUTS, PLATE WASHERS, LEVELING PLATES, ETC., THAT MAY BE SPECIFIED BY OTHERS.

PROJECTING THREADS SHOULD BE GREASED OR OTHERWISE PROTECTED FROM CORROSION.

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

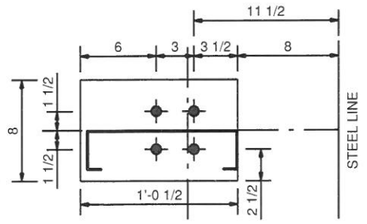
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: AB-2a

BP09-A

3/8 PLATE - 3/4 AB - 3" REQD. PROJECTION



ERECTION NOTE!!!
1. FINISHED FLOOR ELEVATION = 100'-0"
2. BOTTOM OF BASE PLATE (B.O.B.P.) = 100'-0" EXCEPT AS NOTED.

ERECTION NOTE!!!
ALL ANCHOR RODS SHALL HAVE A 3 INCH PROJECTION (UNLESS NOTED) ABOVE THE BOTTOM OF THE COLUMN BASE PLATES, EXCEPT 1/2 INCH DIAMETER ANCHOR RODS LOCATED AT DOORS WHICH SHALL HAVE PROJECTION OF 1 INCH.

ALL ANCHOR RODS SHALL HAVE A MINIMUM THREAD LENGTH OF 1/4 INCH LESS THAN THE PROJECTION. THE PROJECTIONS SPECIFIED PROVIDE FOR A SINGLE BASE PLATE THICKNESS, AND APPLICATION OF ONE 3/16 INCH WASHER, AND ONE HEAVY HEX NUT. IN THE INSTALLED POSITION, THE TOP OF THE ANCHOR BOLT MUST BE FLUSH WITH OR ABOVE THE TOP OF THE NUT.

ADDITIONAL PROJECTION LENGTH MUST BE CONSIDERED AND PROVIDED FOR ITEMS SUCH AS GROUT, DOUBLE NUTS, PLATE WASHERS, LEVELING PLATES, ETC., THAT MAY BE SPECIFIED BY OTHERS.

PROJECTING THREADS SHOULD BE GREASED OR OTHERWISE PROTECTED FROM CORROSION.

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY

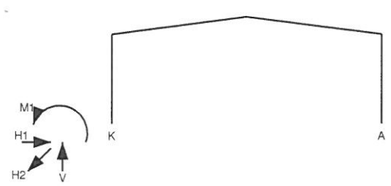
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6

JOB NUMBER: A17B0157A

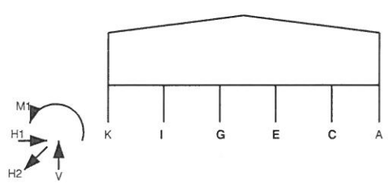
SHEET: AB-2b

REACTION SCHEMATICS

LOADING CONDITION	FRAME LINE 1			
	K		A	
	V (kips)	H1 (kips)	V (kips)	H1 (kips)
D	+5.4	+2.4	+5.2	-2.4
C	+2.2	+1.6	+2.2	-1.6
L	+9.4	+6.4	+7.9	-6.4
MEZZ LL	+8.4	+0.2	+8.4	-0.2
S	+11.1	+5.5	+7.1	-5.5
W	-12.6	-8.7	-11.4	+8.8
E*	-1.6 to +1.6	-6.9 to +6.9	-1.6 to +1.6	-6.9 to +6.9



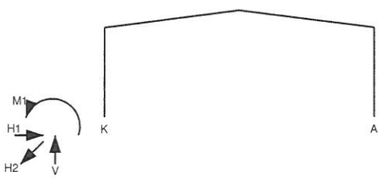
*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame



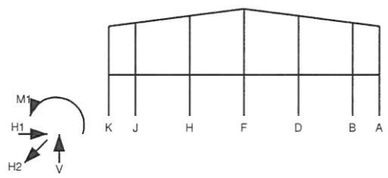
LOADING CONDITION	FRAME LINE 2							
	K		A			G,I	E	C
	V (kips)	H1 (kips)	V (kips)	H1 (kips)	H2 (kips)	V (kips)	V (kips)	V (kips)
D	+12.5	+3.8	+6.1	-3.8	NA	**+6.6**	**+6.9**	**+4.0**
C	+4.4	+2.8	+3.6	-2.8	NA	**+0.8**	**+0.8**	**+0.4**
L	+17.0	+11.1	+14.4	-11.1	NA	**NA**	**NA**	**NA**
MEZZ LL	+33.6	+0.5	+3.3	-0.5	NA	**+33.8**	**+35.1**	**+18.2**
S	+20.3	+9.4	+12.9	-9.4	NA	**NA**	**NA**	**NA**
W	-16.5 to +0.5	-10.5 to +1.8	-14.4 to +0.9	-1.9 to +10.7	NA	**NA**	**NA**	**NA**
W (at X braced bays)	NA	NA	-20.0 to +0.9	-1.9 to +10.7	-6.7 to +6.7	**NA**	**NA**	**NA**
E*	-1.8 to +1.8	-7.4 to +7.4	-1.8 to +1.8	-7.3 to +7.3	NA	**NA**	**NA**	**NA**
E* (at X braced bays)	NA	NA	-5.8 to +5.8	-7.3 to +7.3	-10.0 to +10.0	**NA**	**NA**	**NA**

*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame

LOADING CONDITION	FRAME LINES 3-4					
	K			A		
	V (kips)	H1 (kips)	H2 (kips)	V (kips)	H1 (kips)	H2 (kips)
D	+5.8	+3.8	NA	+5.8	-3.8	NA
C	+3.7	+3.0	NA	+3.8	-3.0	NA
L	+15.0	+12.0	NA	+15.0	-12.0	NA
S	+13.5	+10.5	NA	+13.5	-10.5	NA
W	-15.0 to +0.9	-11.4 to +1.8	NA	-15.0 to +0.9	-1.8 to +11.4	NA
W (at X braced bays)	-20.5 to +0.9	-11.4 to +1.8	-6.7 to +6.7	-20.5 to +0.9	-1.8 to +11.4	-6.7 to +6.7
E*	-0.4 to +0.4	-0.9 to +0.9	NA	-0.4 to +0.4	-0.9 to +0.9	NA
E* (at X braced bays)	-5.8 to +5.8	-0.9 to +0.9	-10.0 to +10.0	-5.8 to +5.8	-0.9 to +0.9	-10.0 to +10.0



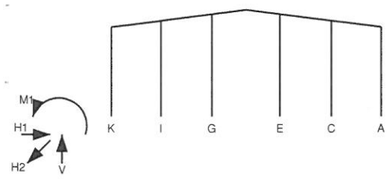
*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame



LOADING CONDITION	CURTAIN WALL AT FRAME LINE 1									
	J		H		F		D		B	
	V (kips)	H2 (kips)	V (kips)	H2 (kips)	V (kips)	H2 (kips)	V (kips)	H2 (kips)	V (kips)	H2 (kips)
D	+5.4	NA	+7.2	NA	+6.9	NA	+6.9	NA	+5.2	NA
W	-0.8 to +1.3	-2.2 to +2.0	-1.0 to +1.7	-3.2 to +2.9	+0.3	-3.2 to +2.9	+0.3	-3.0 to +2.7	+0.3	-2.1 to +1.9
L	+1.8	+0.2	+2.3	+0.3	+0.3	NA	+0.3	NA	+0.3	NA
S	+4.6	+0.5	+6.1	+0.6	+0.3	NA	+0.3	NA	+0.3	NA
C	+0.8	NA	+1.1	NA	+0.8	NA	+0.8	NA	+0.6	NA
MEZZ LL	+25.6	NA	+34.1	NA	+34.1	NA	+34.0	NA	+25.6	NA

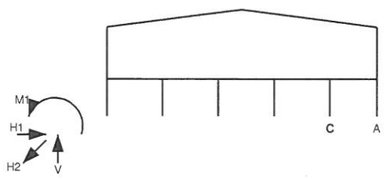
*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame

LOADING CONDITION	FRAME LINE 5									
	K		I			G,E		C		A
	V (kips)	H1 (kips)	V (kips)	H1 (kips)	H2 (kips)	V (kips)	H2 (kips)	V (kips)	H2 (kips)	V (kips)
D	+0.5	NA	+0.9	NA	NA	+1.1	NA	+0.9	NA	+0.5
C	+0.3	NA	+0.8	NA	NA	+0.9	NA	+0.8	NA	+0.3
L	+2.0	NA	-0.3 to +5.6	NA	NA	+6.5	NA	-0.3 to +5.6	NA	+2.0
S	+1.2	NA	+2.9	NA	NA	+5.0	NA	+2.9	NA	+1.2
W	-3.3 to +3.3	-2.3 to +2.3	-4.5 to +3.3	-2.3 to +2.3	-2.3 to +2.6	-4.8 to +0.2	-2.9 to +3.3	-4.5 to +0.1	-2.3 to +2.6	-1.4 to +0.2
E*	-1.8 to +1.8	-1.3 to +1.3	-1.8 to +1.8	-1.3 to +1.3	NA	+0.2	NA	+0.1	NA	+0.2



*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame

LOADING CONDITION	**FRAME LINE 1.8**	
	C	A
	V (kips)	V (kips)
D	**+2.9**	**+2.9**
C	**+0.3**	**+0.3**
MEZZ LL	**+12.5**	**+12.5**



*Earthquake reactions do not include any amplifications for overstrength which may or may not be required in the design of column anchorage and foundation by others.
H1 = horizontal force in the plane of frame
H2 = horizontal force perpendicular to the plane of frame

NOT FOR CONSTRUCTION

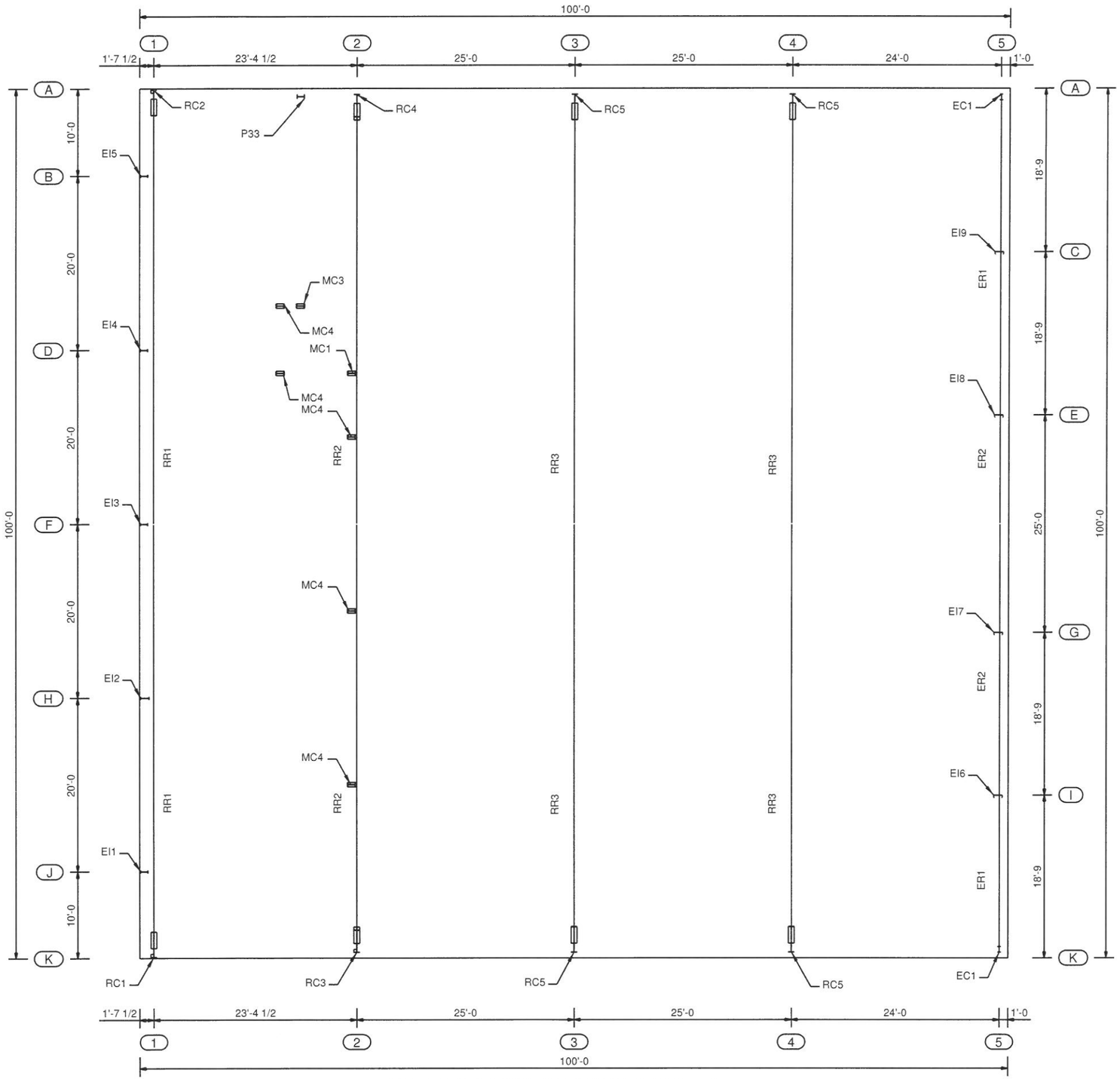
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: AB-3



PRIMARY FRAMING SHAKEOUT PLAN

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

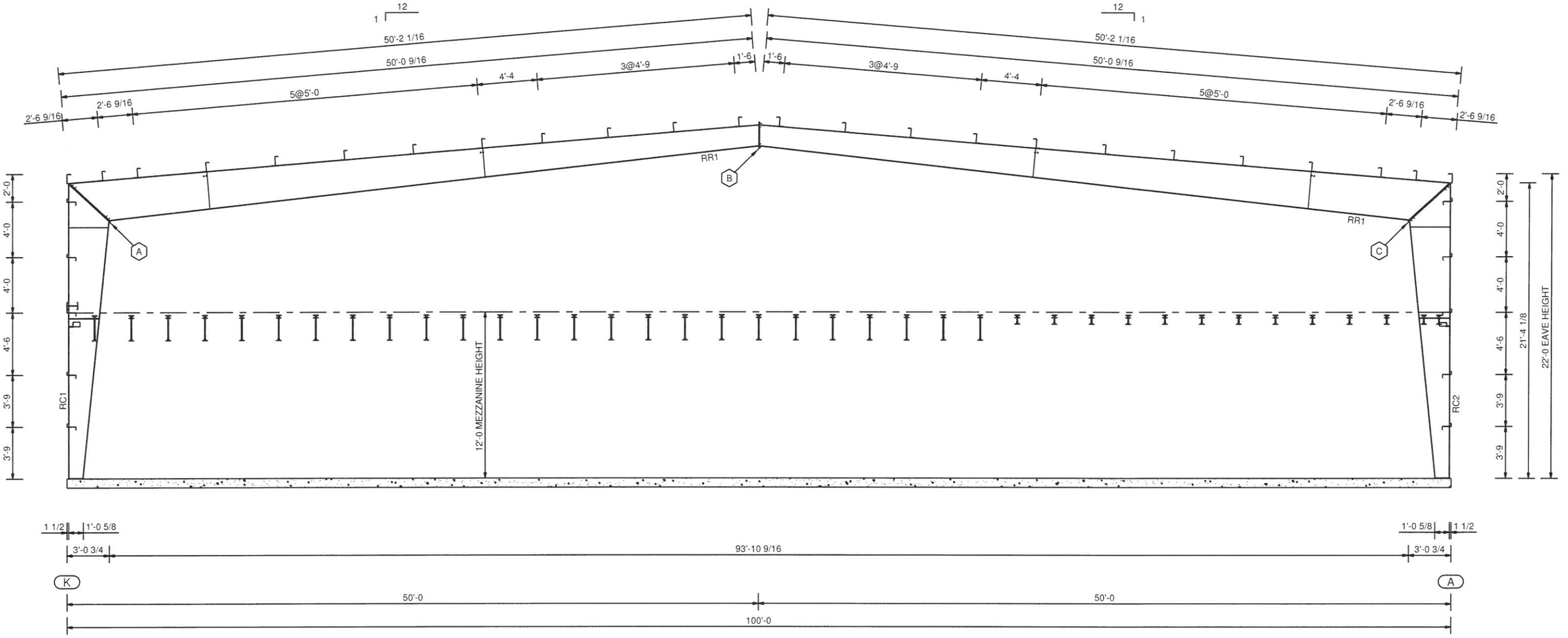
DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-01

MEMBER SIZE TABLE						
ASSEMBLY NAME	OUTSIDE FLANGE	WEB THICK	WEB LENGTH	STARTING WEB DEPTH	ENDING WEB DEPTH	INSIDE FLANGE
RC1	8" X 1/4 X 21'-2 13/16	8GA	18'-1 9/16	1'-0 1/16	2'-10 1/8	8" X 5/16 X 18'-7 13/16
		8GA	3'-1 5/16	2'-10 1/8	2'-10 11/16	
RR1	6" X 1/4 X 49'-11 1/4	8GA	9'-11 5/8	2'-10 3/4	2'-8 1/8	6" X 5/16 X 7'-3 7/16
		8GA	20'-0	2'-8 1/8	2'-0 7/8	6" X 1/4 X 39'-10 5/16
		10GA	19'-11 5/8	2'-0 7/8	1'-5 3/4	
RC2	8" X 1/4 X 21'-2 13/16	8GA	18'-1 9/16	1'-0 1/16	2'-10 1/8	8" X 5/16 X 18'-7 13/16
		8GA	3'-1 5/16	2'-10 1/8	2'-10 11/16	

NOTE: MEMBERS LIST FOR EACH ASSEMBLY ARE IN ORDER FROM LOWEST TO HIGHEST ELEVATION.

SPLICE BOLT TABLE				
SPLICE	BOLTS	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4 X 2 3/4 A325T	18'-6 1/2	8" X 1/2	8" X 1/2
B	(2) 3/4 X 2 3/4 A325T (6) 3/4 X 2 A325T	23'-9 3/16	6" X 3/8	6" X 3/8
C	(8) 3/4 X 2 3/4 A325T	18'-6 1/2	8" X 1/2	8" X 1/2

Purlin and Girt depth and spacing are subject to change upon final design.
Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



FRAME ID: A17B0157A.01A 06/03/17 12:43

RIGID FRAME CROSS SECTION AT FL. 1 BLDG 1

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

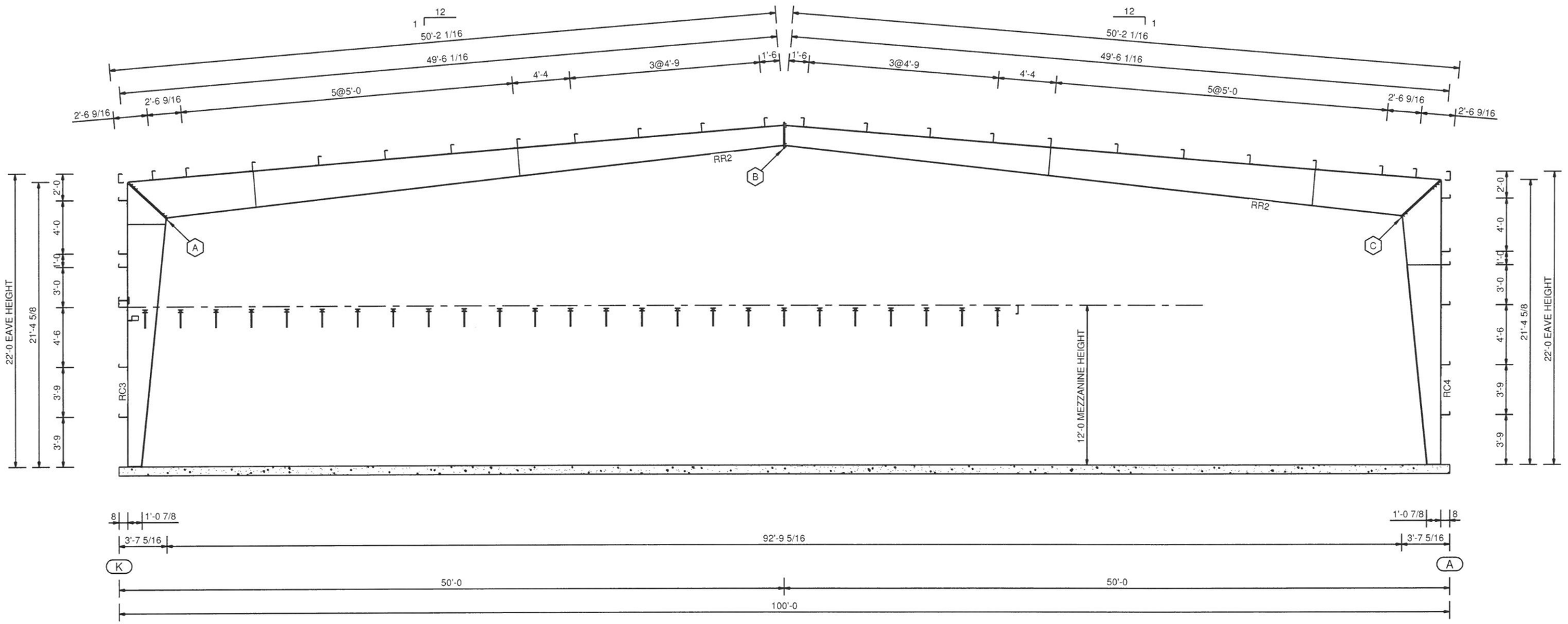
DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-02

MEMBER SIZE TABLE						
ASSEMBLY NAME	OUTSIDE FLANGE	WEB THICK	WEB LENGTH	STARTING WEB DEPTH	ENDING WEB DEPTH	INSIDE FLANGE
RC3	8" X 5/16 X 21'-3	7/32	18'-1 7/8	1'-0 1/16	2'-10 1/8	8" X 1/2 X 15'-0 3/8
		7/32	3'-1 1/8	2'-10 1/8	2'-10 11/16	8" X 3/8 X 3'-7 9/16
RR2	8" X 5/16 X 29'-4 7/8	7/32	9'-4 7/8	2'-10 3/4	2'-8 1/4	8" X 3/8 X 6'-8 5/8
	8" X 3/8 X 19'-11 1/2	3/16	19'-11 1/2	2'-8 1/4	2'-1	8" X 5/16 X 39'-10 3/16
		3/16	20'-0	2'-1	1'-5 3/4	
RC4	8" X 5/16 X 21'-3 1/8	8GA	14'-11 5/8	1'-0 1/16	2'-6 1/4	8" X 1/2 X 15'-0 1/2
		7/32	6'-3 1/2	2'-6 1/4	2'-10 11/16	8" X 3/8 X 3'-7 9/16

NOTE: MEMBERS LIST FOR EACH ASSEMBLY ARE IN ORDER FROM LOWEST TO HIGHEST ELEVATION.

SPLICE BOLT TABLE				
SPLICE	BOLTS	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(10) 3/4 X 2 3/4 A325T	18'-6 13/16	8" X 5/8	8" X 5/8
B	(8) 3/4 X 2 3/4 A325T	23'-9	8" X 1/2	8" X 1/2
C	(10) 3/4 X 2 3/4 A325T	18'-6 13/16	8" X 5/8	8" X 5/8

Purlin and Girt depth and spacing are subject to change upon final design.
Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



FRAME ID: A17B0157A.01B 06/03/17 12:57

RIGID FRAME CROSS SECTION AT FL. 2 BLDG 1

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

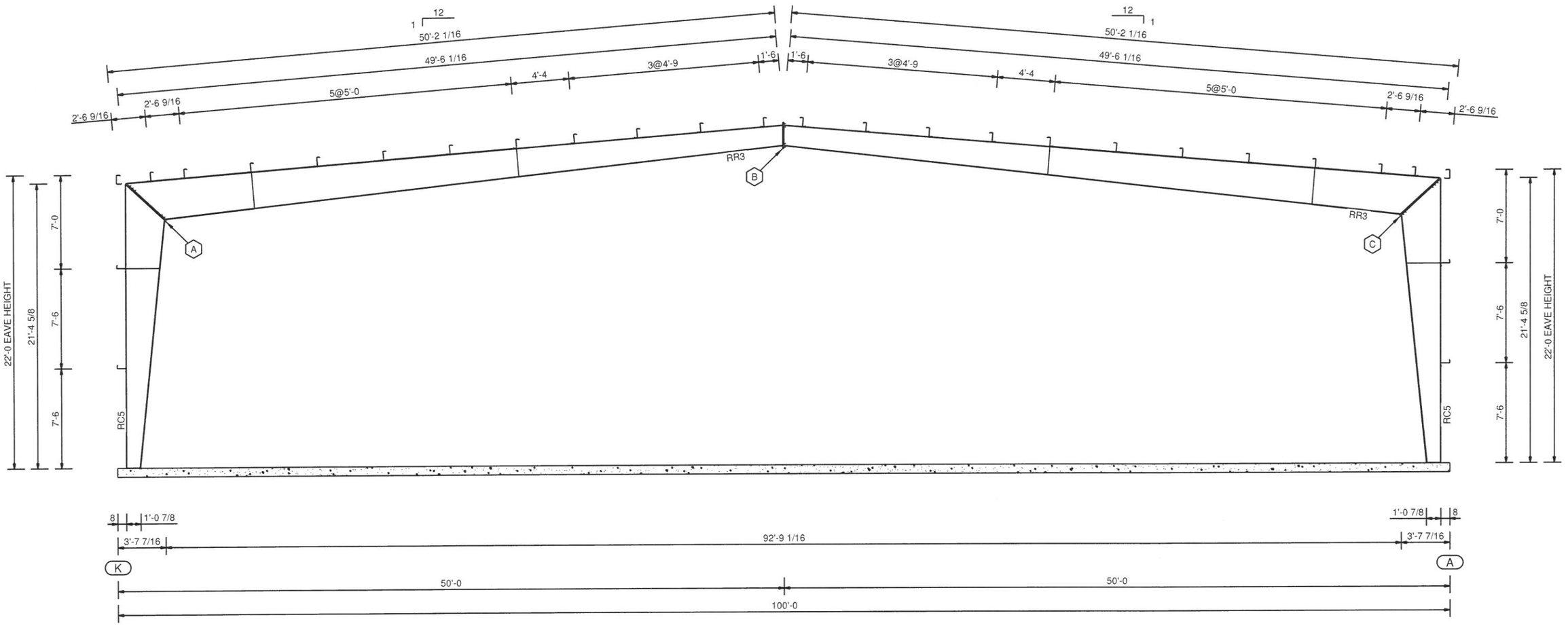
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-03

MEMBER SIZE TABLE						
ASSEMBLY NAME	OUTSIDE FLANGE	WEB THICK	WEB LENGTH	STARTING WEB DEPTH	ENDING WEB DEPTH	INSIDE FLANGE
RR3	6" X 1/2 X 29'-4 11/16	7/32	9'-4 11/16	2'-10 11/16	2'-8 1/4	6" X 1/2 X 6'-8 3/8
	6" X 3/8 X 19'-11 1/2	3/16	19'-11 1/2	2'-8 1/4	2'-1	6" X 3/8 X 39'-10 3/16
		3/16	20'-0	2'-1	1'-5 3/4	
RC5	8" X 5/16 X 21'-3 1/8	8GA	14'-11 5/8	1'-0 1/16	2'-6 1/4	8" X 1/2 X 18'-7 15/16
		7/32	6'-3 1/2	2'-6 1/4	2'-10 11/16	
NOTE: MEMBERS LIST FOR EACH ASSEMBLY ARE IN ORDER FROM LOWEST TO HIGHEST ELEVATION.						

SPLICE BOLT TABLE				
SPLICE	BOLTS	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(10) 3/4 X 2 3/4 A325T	18'-6 9/16	8" X 5/8	8" X 5/8
B	(8) 3/4 X 2 3/4 A325T	23'-8 13/16	6" X 1/2	6" X 1/2
C	(10) 3/4 X 2 3/4 A325T	18'-6 9/16	8" X 5/8	8" X 5/8

Purlin and Girt depth and spacing are subject to change upon final design. Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



FRAME ID: A17B0157A.01C 06/03/17 12:59

RIGID FRAME CROSS SECTION AT FL. 3-4 BLDG 1

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

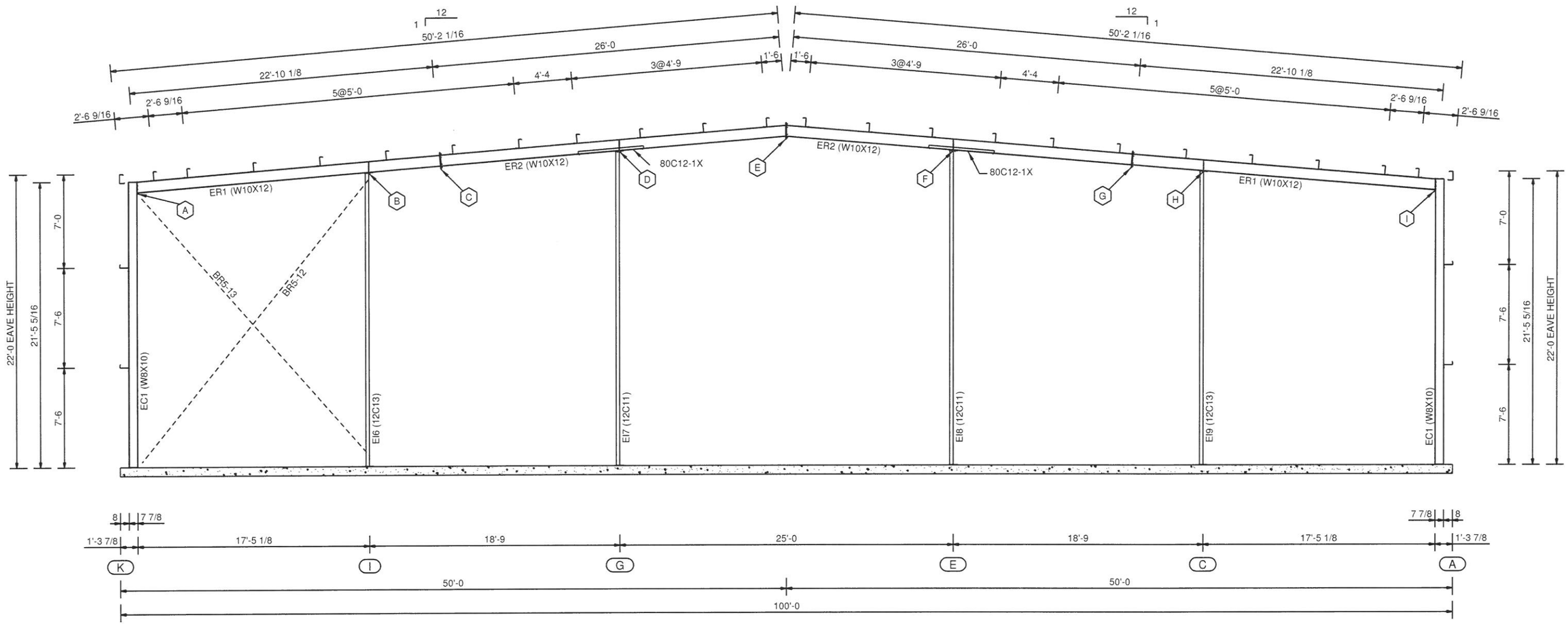
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-04

SPLICE BOLT TABLE				
SPLICE	BOLTS	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(4) 1/2 X 1 1/4 A325T	20'-6 13/16	5" X 1/4	N/A
B	(4) 1/2 X 1 1/4 A325T	22'-0 1/8	8" X 3/8	N/A
C	(8) 3/4 X 2 A325T	22'-3 11/16	6" X 3/8	6" X 3/8
D	(4) 1/2 X 2 A325T	23'-6 3/4	8" X 3/8	N/A
E	(8) 3/4 X 2 A325T	24'-5 9/16	6" X 3/8	6" X 3/8
F	(4) 1/2 X 2 A325T	23'-6 3/4	8" X 3/8	N/A
G	(8) 3/4 X 2 A325T	22'-3 11/16	6" X 3/8	6" X 3/8
H	(4) 1/2 X 1 1/4 A325T	22'-0 1/8	8" X 3/8	N/A
I	(4) 1/2 X 1 1/4 A325T	20'-6 13/16	5" X 1/4	N/A

THIS FRAME MUST NOT BE ERECTED WITHOUT THE PIPE AND/OR GIRT STRUT MEMBERS. REFER TO THE ENDWALL ELEVATION AT THIS FRAME LINE FOR ANY REQUIRED GIRTS.

Purlin and Girt depth and spacing are subject to change upon final design.
Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



COLUMN & BEAM CROSS SECTION AT FL. 5 BLDG 1

NOT FOR CONSTRUCTION

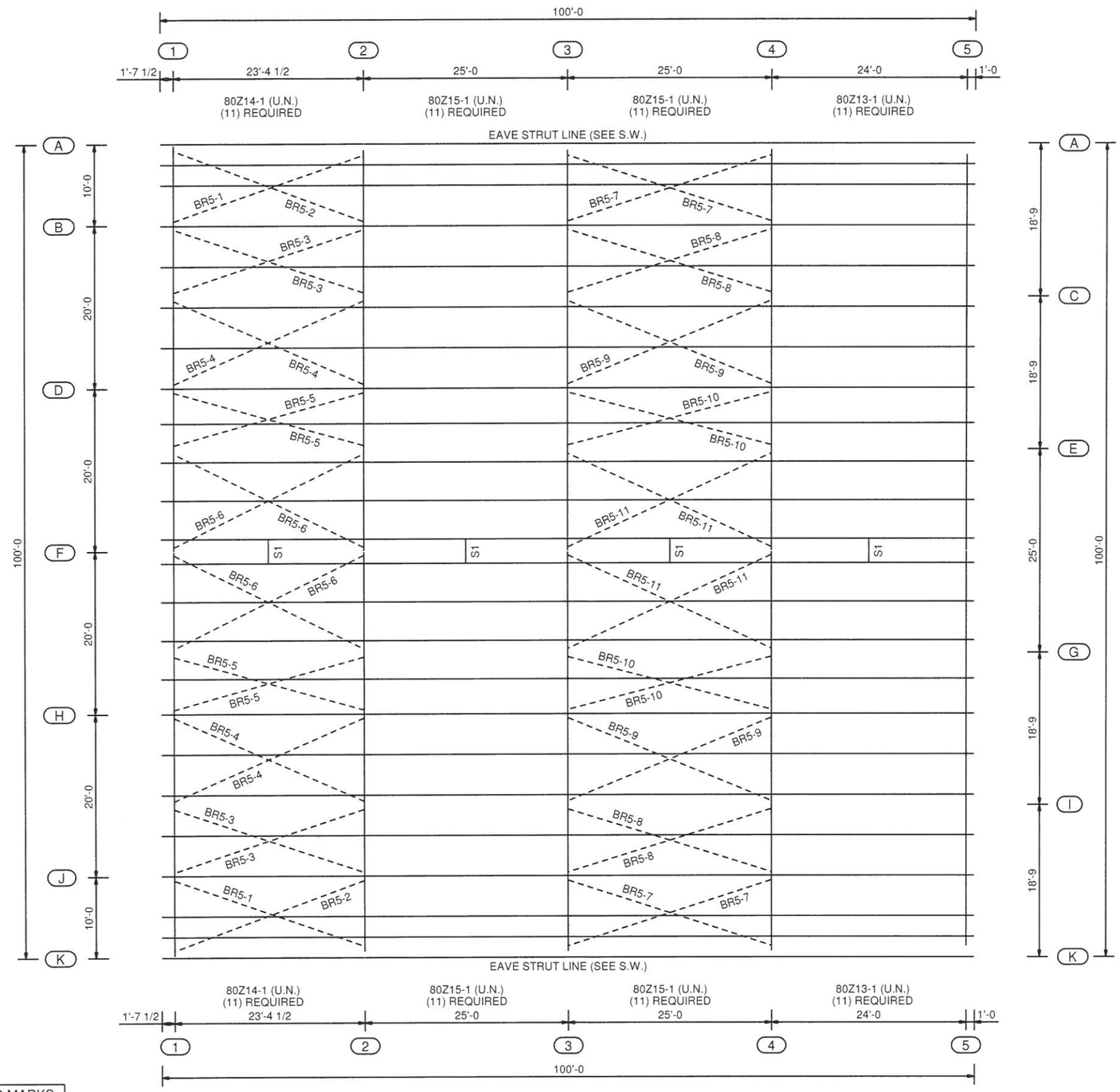
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-05



SHORTENED MARKS	
SHOWN	ACTUAL
S1	CLRB1

PLANE ID: 1004, 1005

ROOF FRAMING PLAN BLDG 1

NOT FOR CONSTRUCTION

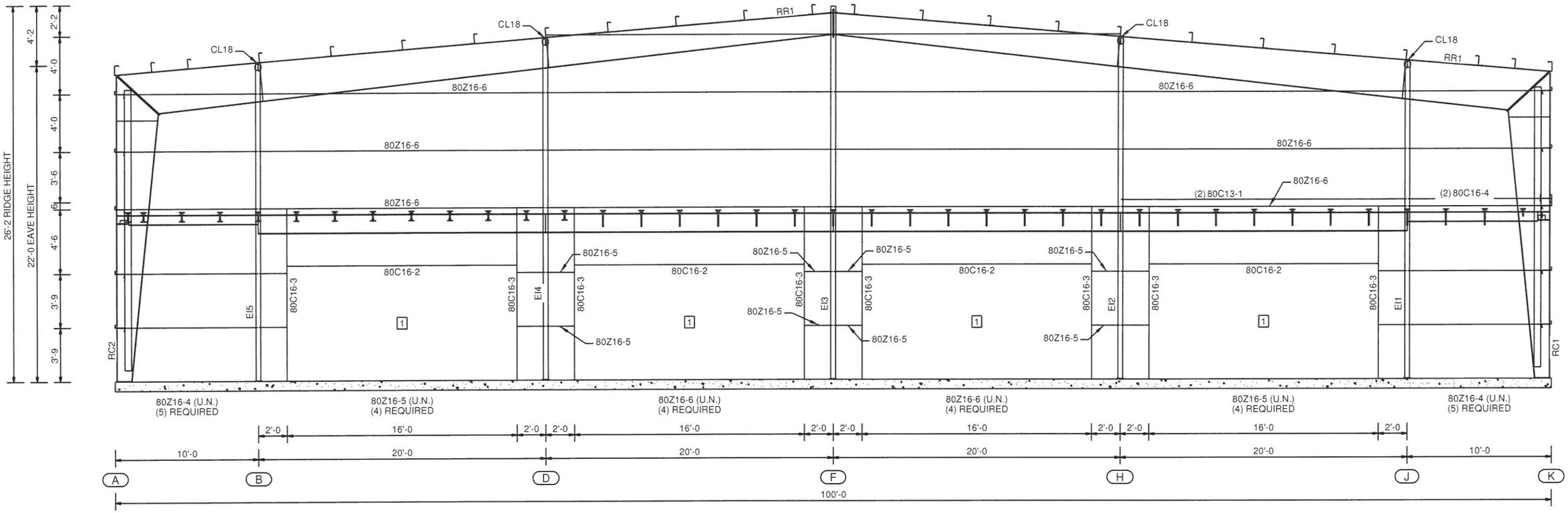
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-06

Purlin and Girt depth and spacing are subject to change upon final design.
Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	SILL HEIGHT	TYPE
1	16'-0	8'-0		

PLANE ID: 1001, 1002

ENDWALL FRAMING ELEVATION AT LINE 1 BLDG 1

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

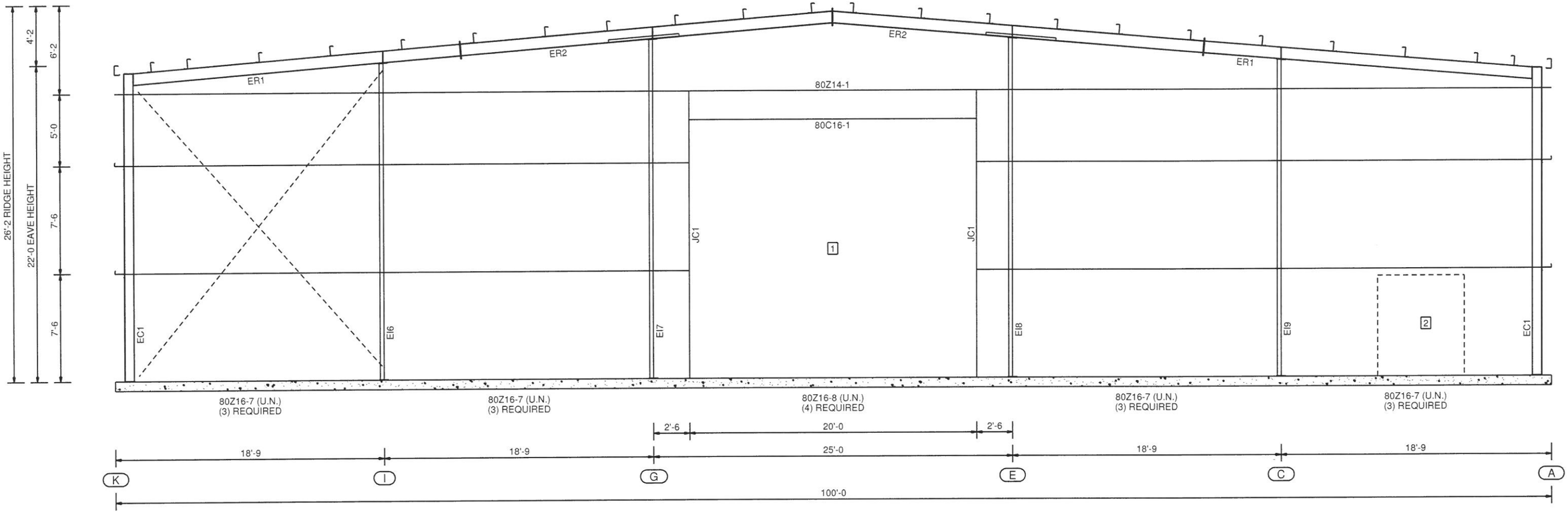
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-07

THIS ENDWALL FRAME MUST NOT BE ERECTED WITHOUT THE CROSS BRACING. REFER TO THE FRAME CROSS SECTION AT THIS FRAME LINE FOR THE REQUIRED CROSS BRACING.

Purlin and Girt depth and spacing are subject to change upon final design.
Flange braces from the girts and purlins to the columns and rafters are required for structural stability, but are not shown on this drawing for clarity. This drawing shall not be construed as allowing the structure to be erected without flange braces.



1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

PLANE ID: 1003

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	SILL HEIGHT	TYPE
1	20'-0	18'-0		OVERHEAD DOOR
2	6'-0	7'-0		PERSONNEL DOOR

ENDWALL FRAMING ELEVATION AT LINE 5 BLDG 1

NOT FOR CONSTRUCTION

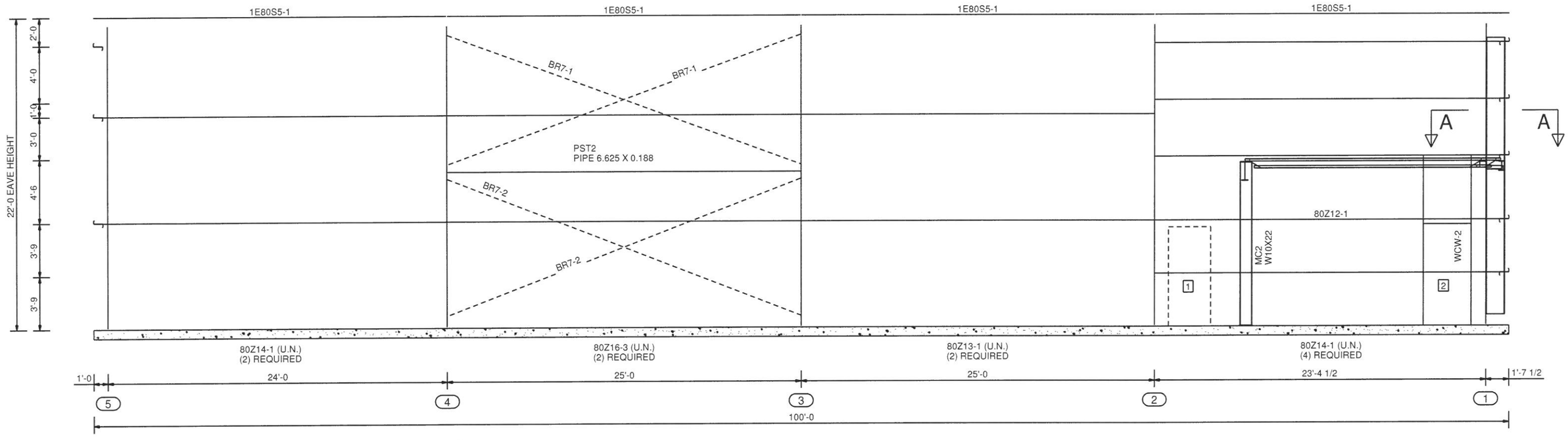
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-08

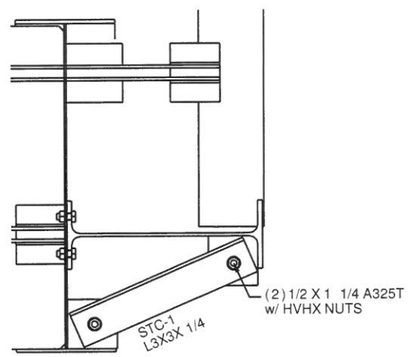


1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

PLANE ID: 1001

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	SILL HEIGHT	TYPE
1	3'-0	7'-0		PERSONNEL DOOR
2	3'-4	7'-2		PERSONNEL DOOR

SIDEWALL FRAMING ELEVATION AT LINE A BLDG 1



A-A

NOT FOR CONSTRUCTION

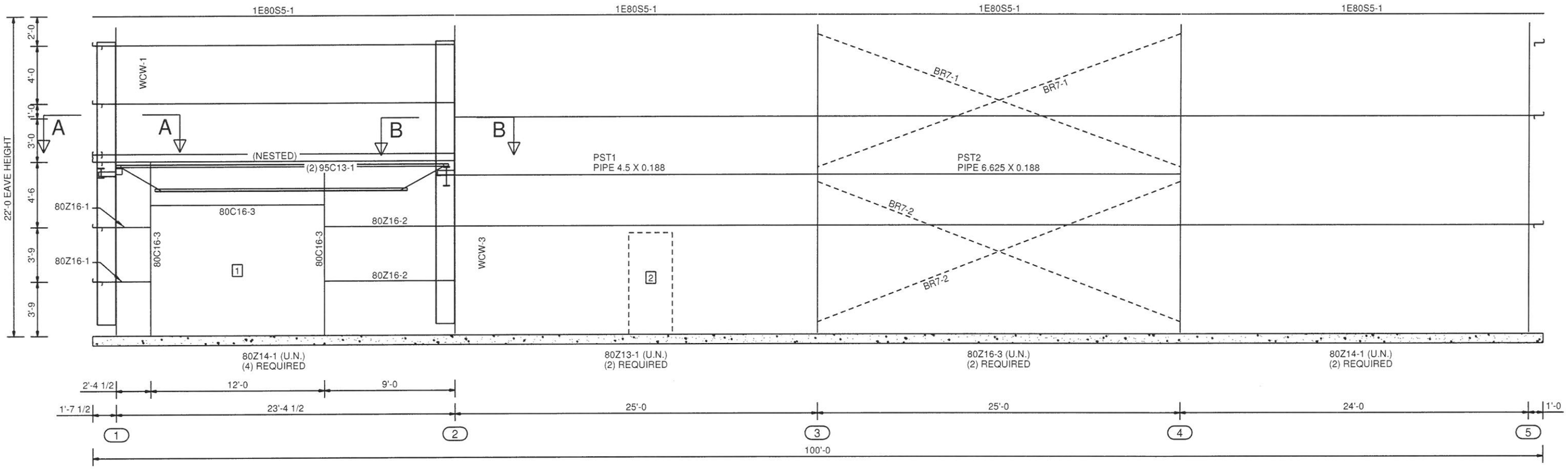
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-09

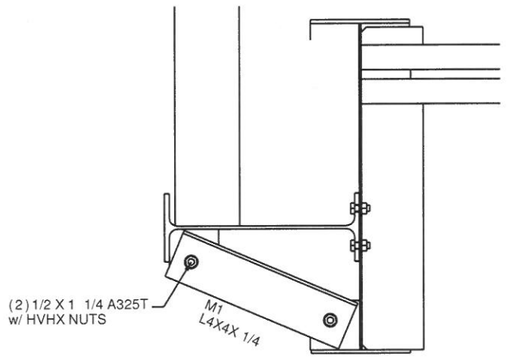


1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

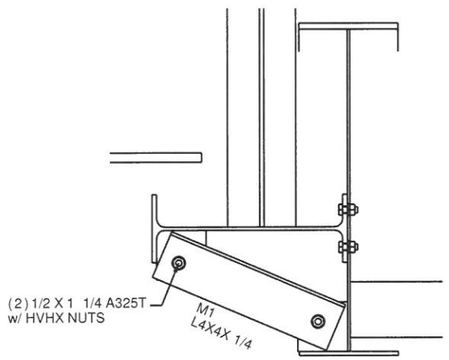
PLANE ID: 1000

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	SILL HEIGHT	TYPE
1	12'-0	9'-0		
2	3'-0	7'-0		PERSONNEL DOOR

SIDEWALL FRAMING ELEVATION AT LINE K BLDG 1



A-A



B-B

NOT FOR CONSTRUCTION

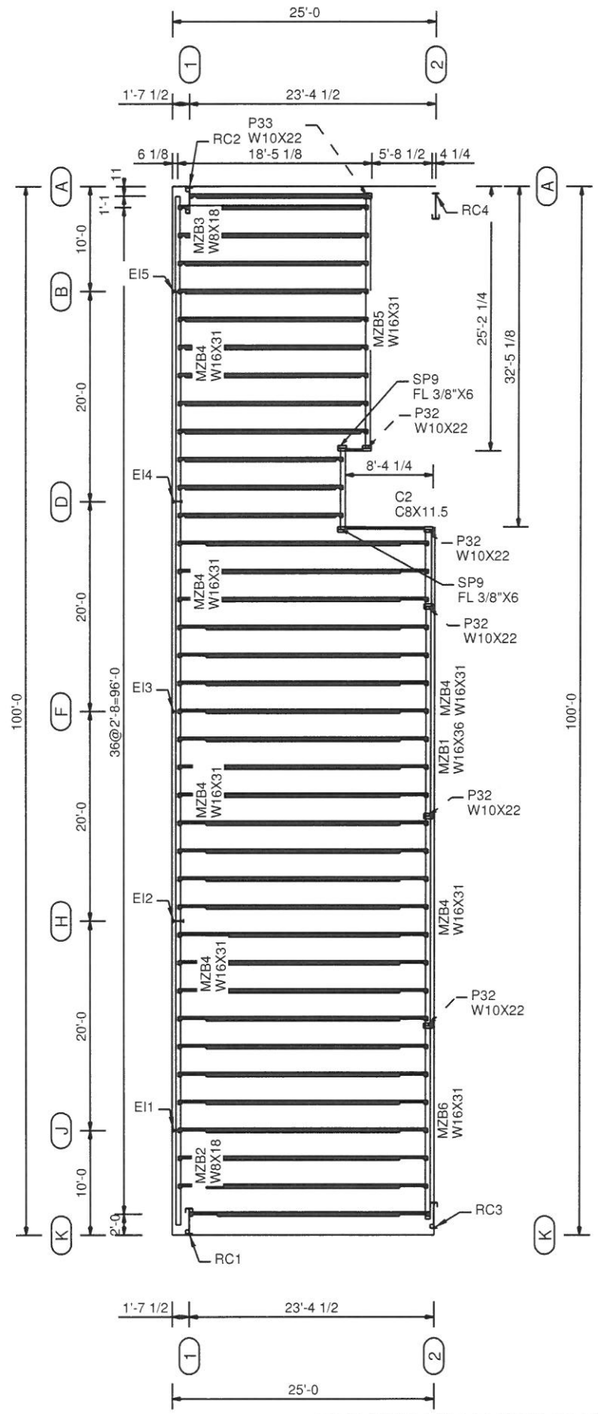
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-10



1 ALTERED SHAPE OF MEZZ. CUT OUT FOR STAIRCASE

PRIMARY FRAMING SHAKEOUT PLAN

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-11

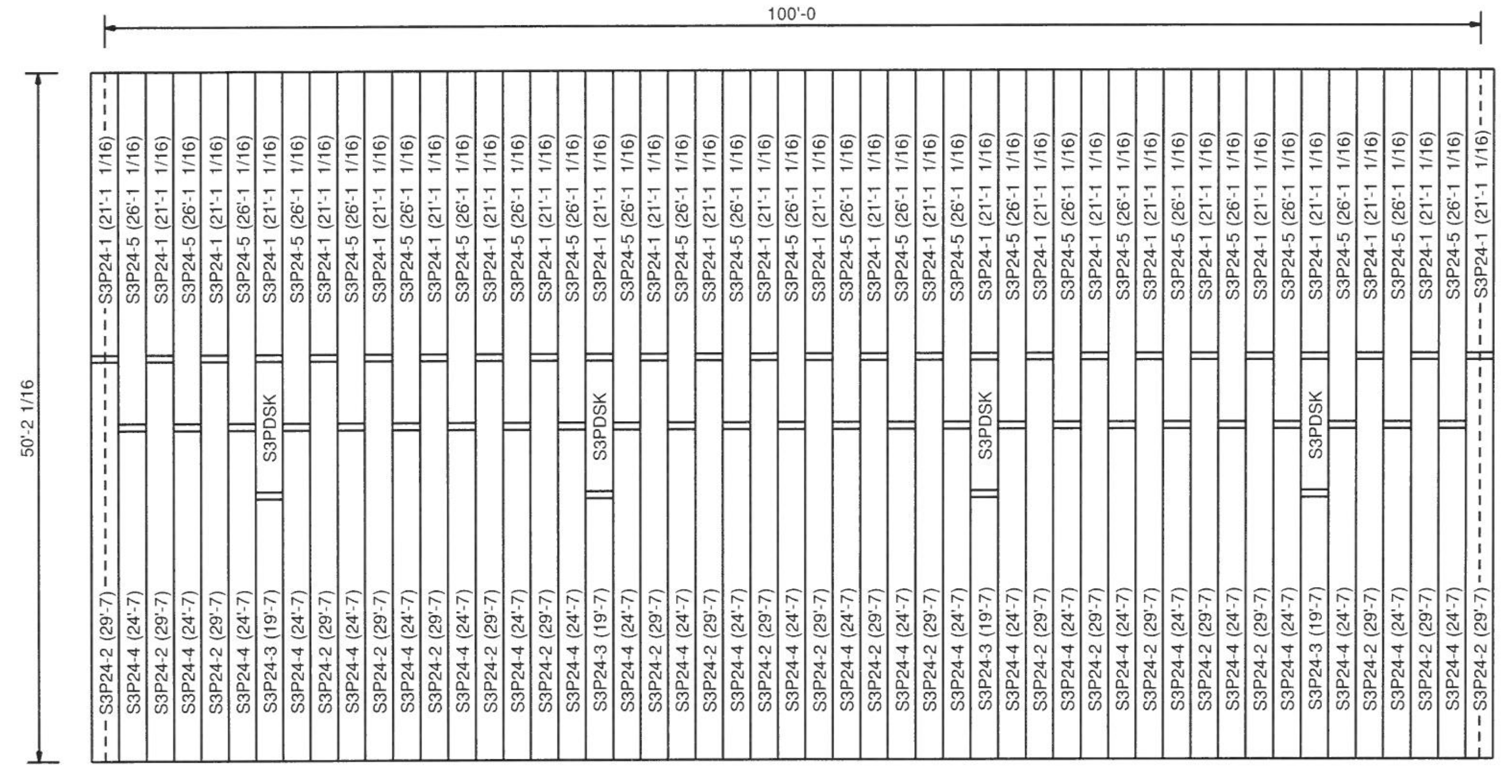
ERECTION NOTE!!!
ALL ROOF PANEL SIDELAP TO PURLIN INTERSECTIONS REQUIRE PANEL CLIPS.

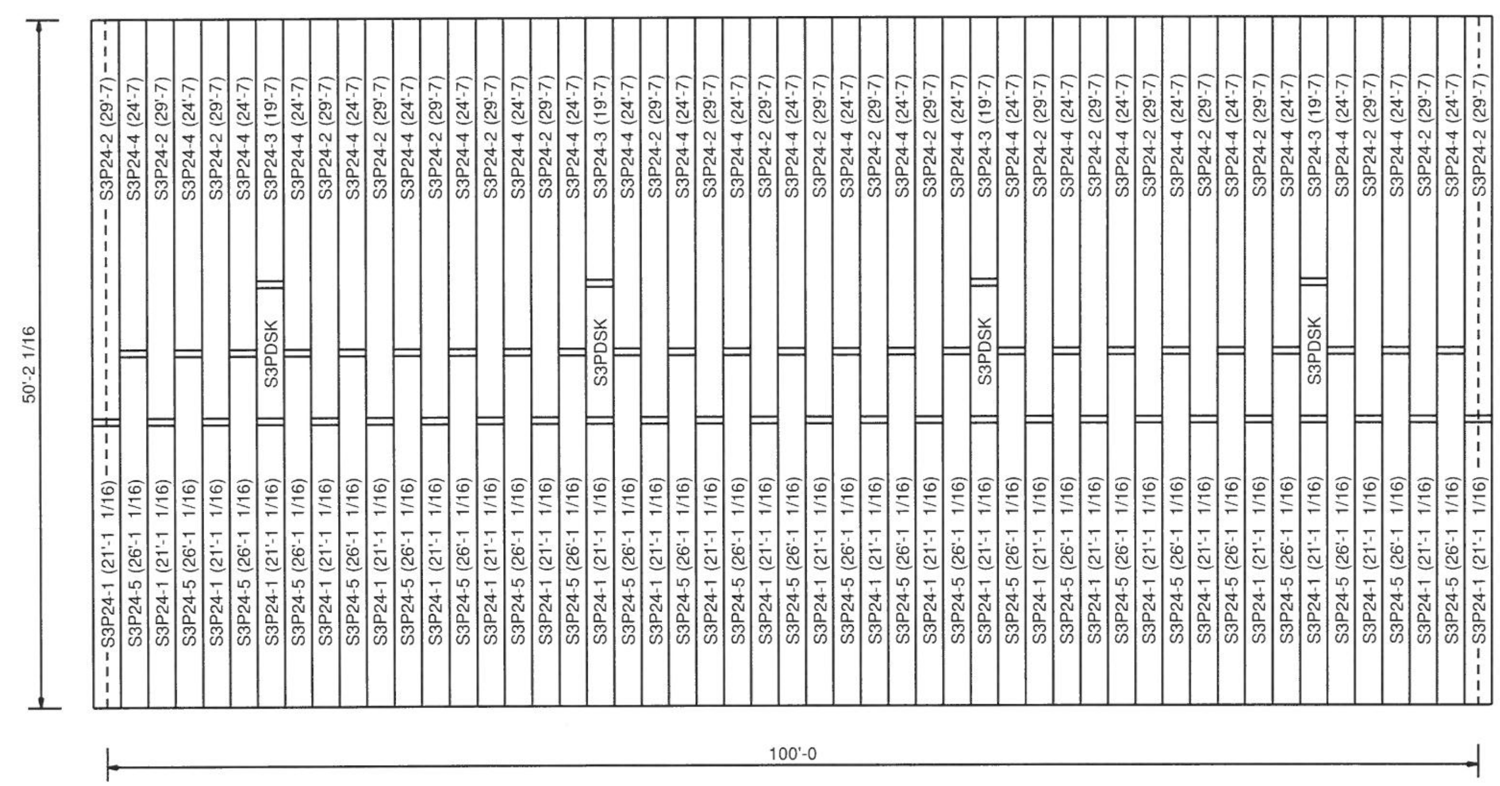
REAR ROOF SHEETING PLAN BLDG 1

ROOF SHEETING @ 1005: (TBD)

PLANE ID: 1005

Aluminum-Coated panels are subject to staining due to residue from bare hands. Aluminum-Coated panels that include an acrylic finish do have additional protection, but it is limited and deteriorates in a relatively short time making that panel also subject to staining from bare hands. It is recommended that gloves be used for all handling of both products and that application of these products be limited to areas not exposed to touch.





PLANE ID: 1004

ROOF SHEETING @ 1004: (TBD)

FRONT ROOF SHEETING PLAN BLDG 1

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

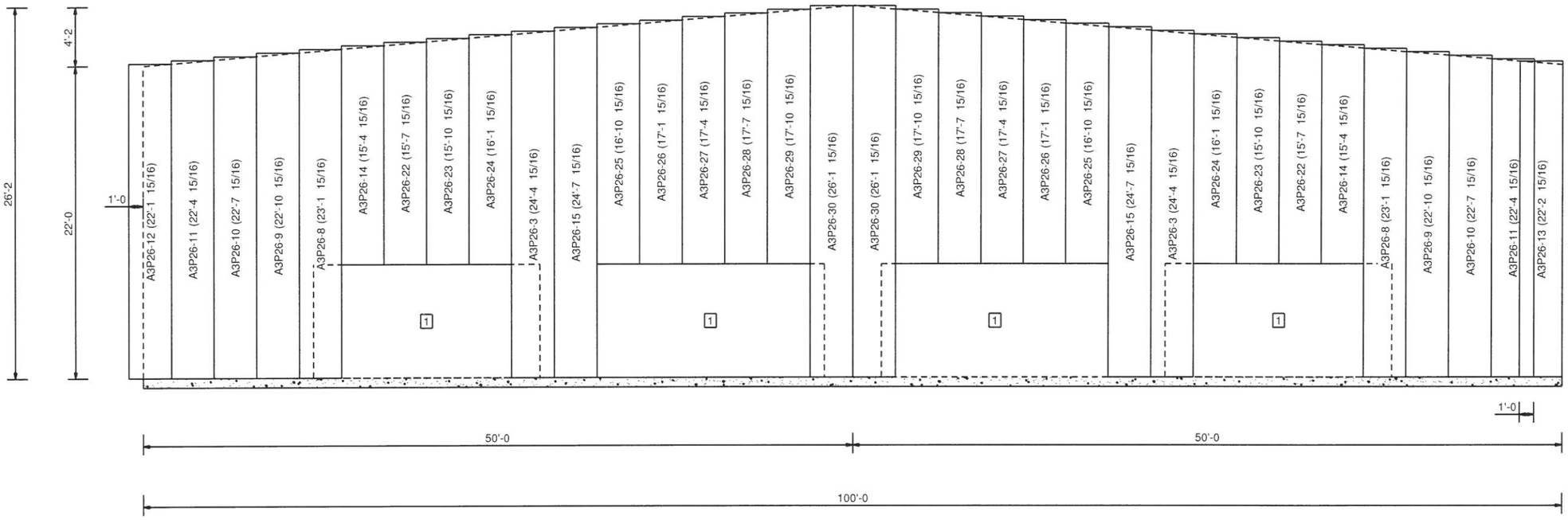
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
IAS ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY

SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6

JOB NUMBER:	SHEET:
A17B0157A	E-12

ERECTION NOTE!!!
ALL WALL PANELS MUST BE FASTENED TO ALL GIRTS (PARTIAL BAY OR FULL BAY) ACCORDING TO THE REQUIRED FASTENER LAYOUT DETAILS.



FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TYPE	TRIM
1	16'-0	8'-0		

PLANE ID: 1002

SHEETING PACKAGE: SP1014(FXGY)

ENDWALL SHEETING ELEVATION AT LINE 1 BLDG 1

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

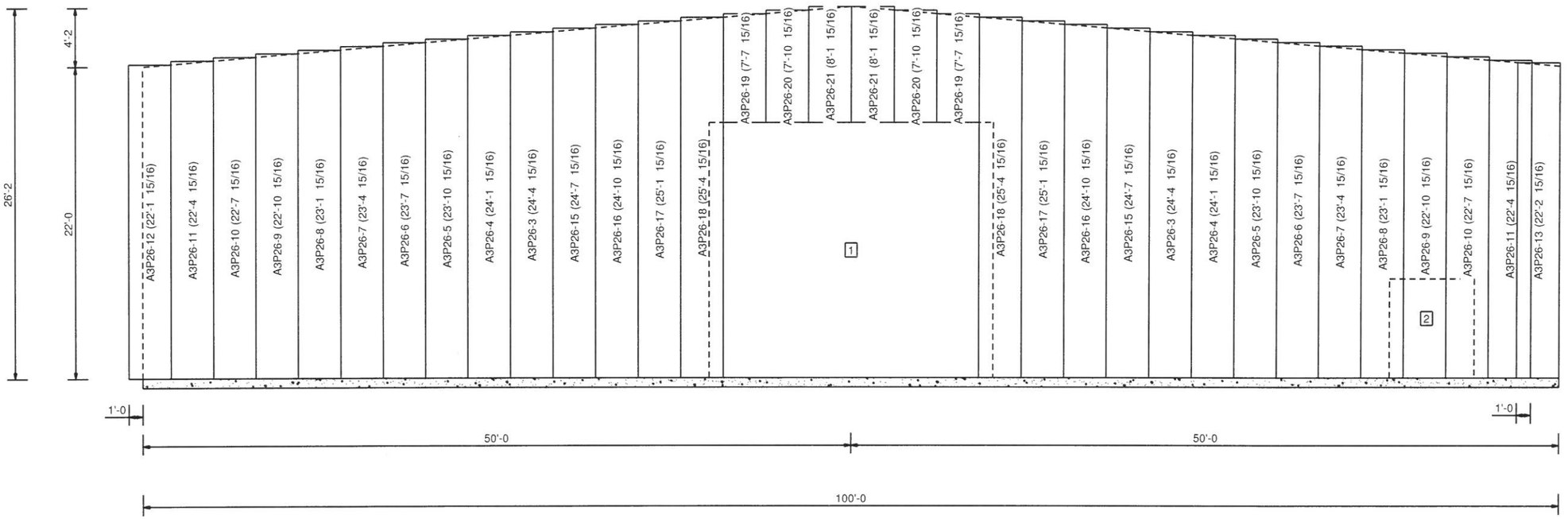
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-13

ERECTION NOTE!!!
ALL WALL PANELS MUST BE FASTENED TO ALL GIRTS (PARTIAL BAY OR FULL BAY) ACCORDING TO THE REQUIRED FASTENER LAYOUT DETAILS.



1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

PLANE ID: 1003

SHEETING PACKAGE: SP1015(FXGY)

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TYPE	TRIM
1	20'-0	18'-0	OVERHEAD DOOR	
2	6'-0	7'-0	PERSONNEL DOOR	

ENDWALL SHEETING ELEVATION AT LINE 5 BLDG 1

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

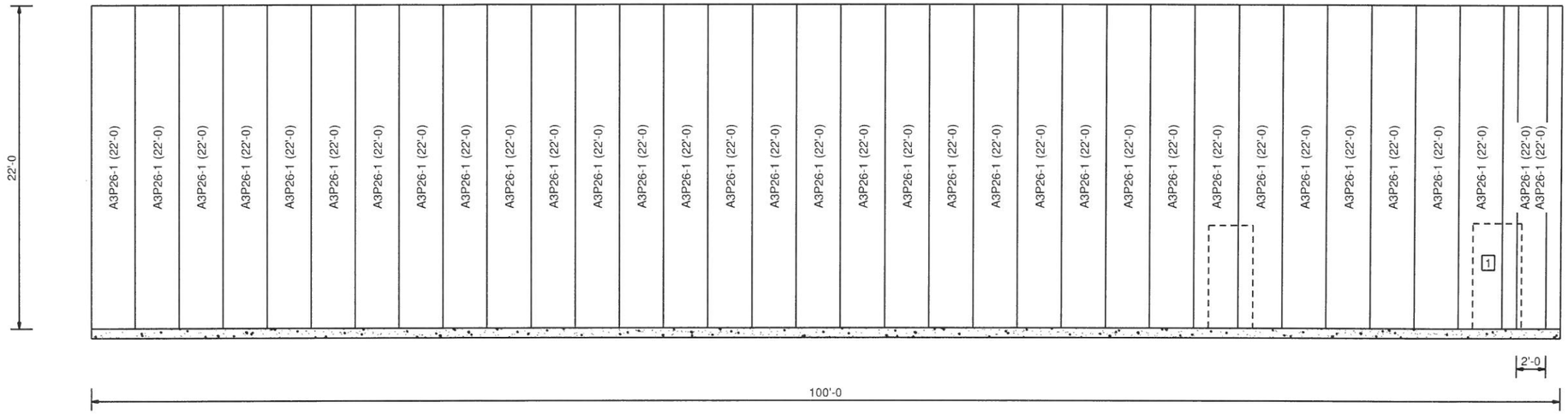
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-14

ERECTION NOTE!!!
ALL WALL PANELS MUST BE FASTENED TO ALL GIRTS (PARTIAL BAY OR FULL BAY) ACCORDING TO THE REQUIRED FASTENER LAYOUT DETAILS.



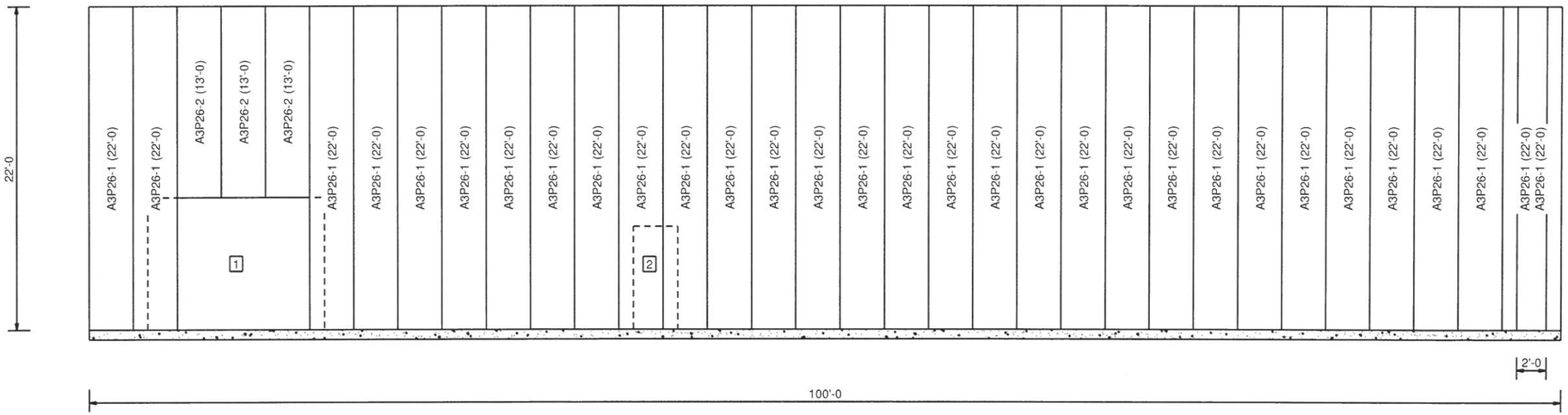
1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TYPE	TRIM
1	3'-0	7'-0	PERSONNEL DOOR	
2	3'-4	7'-2	PERSONNEL DOOR	

PLANE ID: 1001

SHEETING PACKAGE: SP1013(FXGY)

SIDEWALL SHEETING ELEVATION AT LINE A BLDG 1



1 ADDED FIELD LOCATED WALKDOOR6-14-17RCC

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TYPE	TRIM
1	12'-0	9'-0		
2	3'-0	7'-0	PERSONNEL DOOR	

PLANE ID: 1000

SHEETING PACKAGE: SP1012(FXGY)

SIDEWALL SHEETING ELEVATION AT LINE K BLDG 1

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

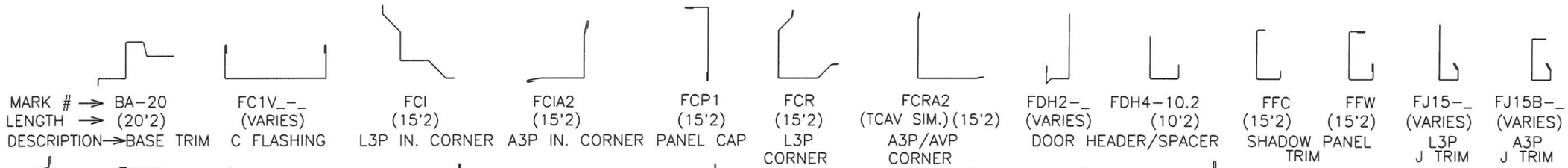
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

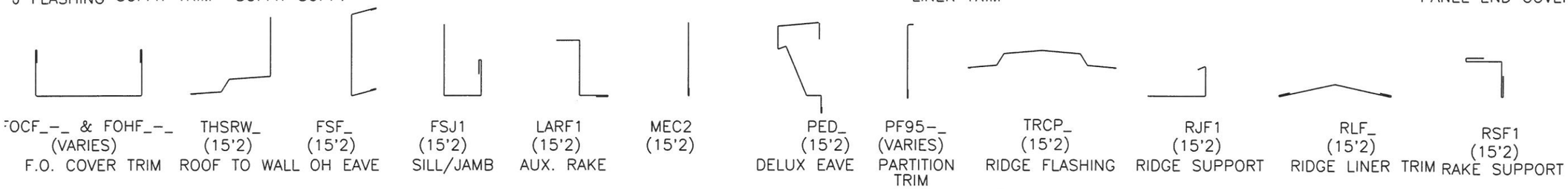
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

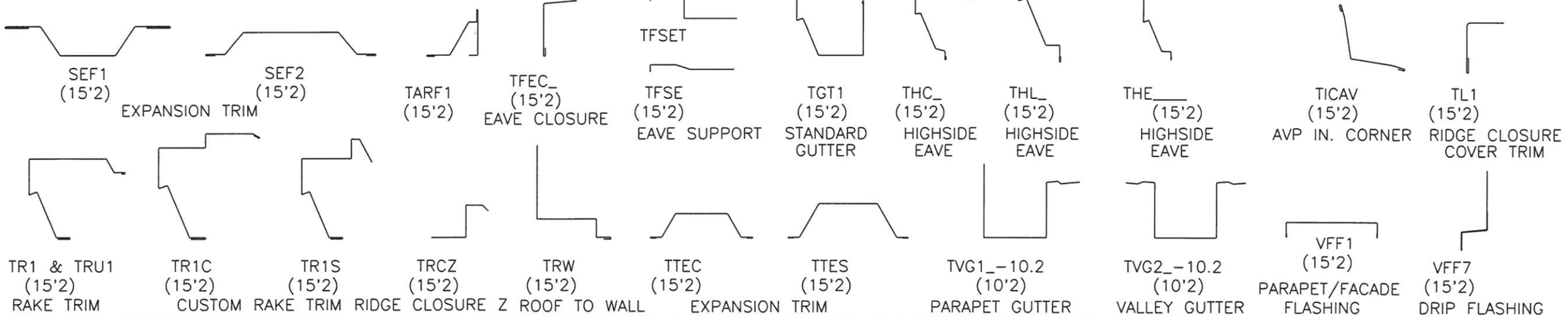
DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: E-15

STANDARD FLASHING PROFILES

NOTE: DRAWINGS NOT TO SCALE, DRAWINGS TO REPRESENT PROFILE ONLY

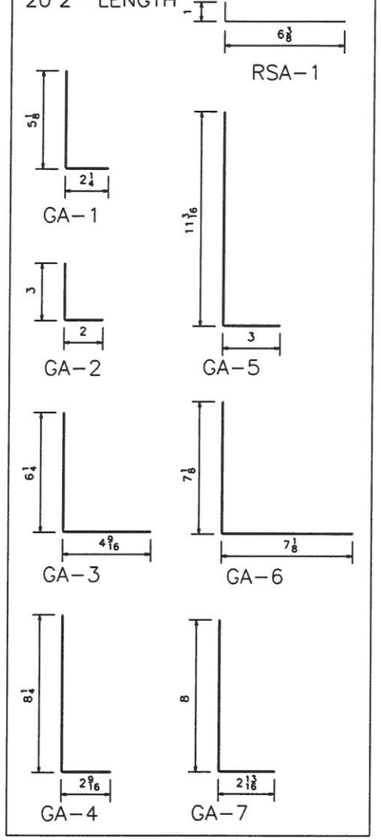






COLD FORMED ANGLES

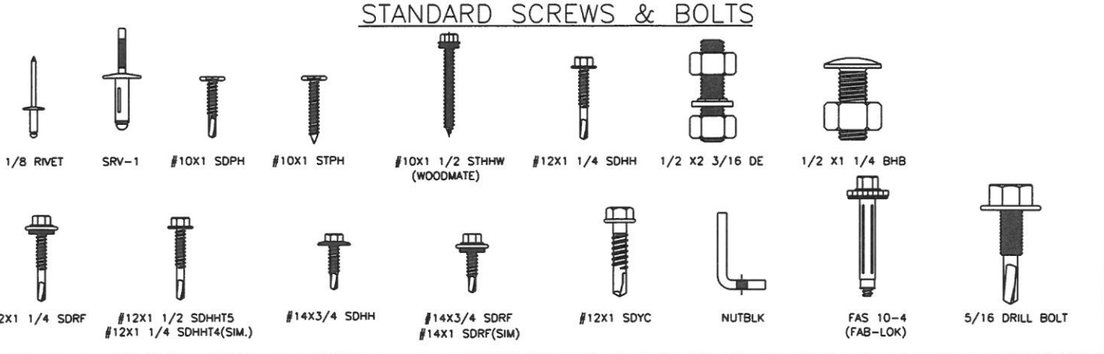
20'2" LENGTH



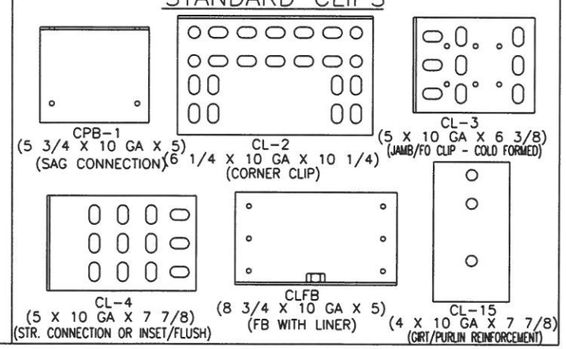
NOTE: DUE TO MATERIALIZATION USAGE FLASHING LENGTHS MAY BE SUBSTITUTED WITH LONGER LENGTHS THAN WHAT IS CALLED OUT ON THE BILL OF LADING.

NOTE: GALVANIZED PIECES SUCH AS TFSE/RJF-1/TRCZ MAY BE PLACED UNDERNEATH THE PLASTIC ON THE BOTTOM SIDE OF THE FLASHING CRATE.

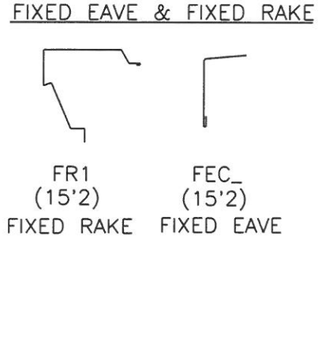
STANDARD SCREWS & BOLTS



STANDARD CLIPS



FIXED EAVE & FIXED RAKE



NOT FOR CONSTRUCTION

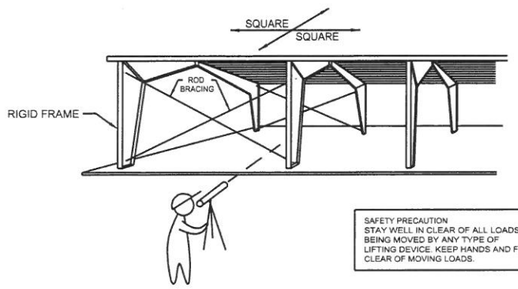
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-000



THE FIRST STEP IN THE SUCCESSFUL INSTALLATION OF THE ROOF OR WALLS 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.
BE SURE TO READ THE GENERAL ERECTION GUIDE PRIOR TO COMMENCING ERECTION.

BUILDING ALIGNMENT

GE01
AA

SAFETY NOTES:

THE METAL BUILDING SUPPLIER STRONGLY RECOMMENDS THAT SAFE WORKING CONDITIONS AND ACCIDENT PREVENTION PRACTICES BE THE TOP PRIORITY ON ANY JOB SITE.

LOCAL, STATE AND FEDERAL SAFETY AND HEALTH STANDARDS SHOULD ALWAYS BE FOLLOWED TO HELP ENSURE WORKER SAFETY.

MAKE CERTAIN ALL EMPLOYEES KNOW THE SAFEST AND MOST PRODUCTIVE WAY OF ERECTING A BUILDING. EMERGENCY TELEPHONE NUMBERS, LOCATIONS OF FIRST AID STATIONS AND EMERGENCY PROCEDURES SHOULD BE KNOWN TO ALL EMPLOYEES.

DAILY MEETINGS HIGHLIGHTING SAFETY PROCEDURES, THE USE OF HARD HATS, RUBBER SOLE SHOES FOR ROOF WORK, PROPER EQUIPMENT FOR HANDLING MATERIAL AND SAFETY NETS WHERE POSSIBLE ARE RECOMMENDED ERECTION PRACTICES.

THE METAL BUILDING SUPPLIER INTENDS THAT THESE DRAWINGS BE INTERPRETED AND ADMINISTERED WITH SOUND JUDGMENT CONSISTENT WITH GOOD SAFETY PRACTICES.

ALL SAFETY PRECAUTIONS, OSHA SAFETY REQUIREMENTS, OR ANY OTHER APPROPRIATE SAFETY REQUIREMENTS, CUSTOMARY OR STATUTORY, MUST BE ADHERED TO, TO ENSURE MAXIMUM WORKER SAFETY.

IF OIL OR OTHER SLIPPERY SUBSTANCES ARE SPILLED ON THE ROOF/DECK PANELS, WIPE THEM OFF IMMEDIATELY TO PREVENT SLIPPING OR FALLING.

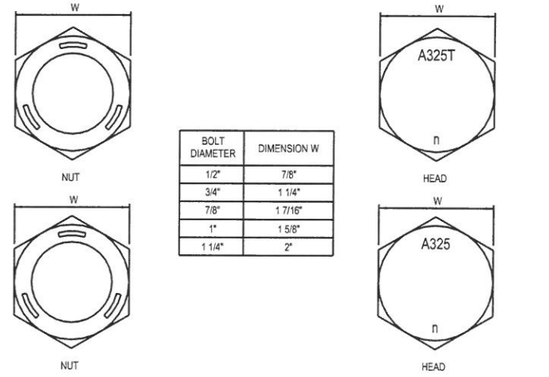
YOU SHOULD MAINTAIN A FIRM, SAFE POSITION WHEN USING ANY TOOL.

YOU SHOULD MAINTAIN A CONSTANT AWARENESS OF YOUR LOCATION IN RELATION TO THE ROOF EDGE WHEN USING TOOLS AND MACHINES OR PERFORMING ANY OTHER FUNCTION ON THE ROOF AREA.

DO NOT UNDER ANY CIRCUMSTANCES STEP OR WALK ON THE SURFACE OF ANY FIBERGLASS SKYLIGHT. IF FOOT TRAFFIC IS NECESSARY OVER SKYLIGHT, USE WALK BOARDS THAT ARE PROPERLY SUPPORTED BY THE BUILDING PURLINS.

SAFETY COMMITMENT

GE70
AA



BOLT DIAMETER	DIMENSION W
1/2"	7/8"
3/4"	1 1/4"
7/8"	1 7/16"
1"	1 5/8"
1 1/4"	2"

ASTM A325/A325T BOLT IDENTIFICATION

MF01
AA

BOLTED JOINTS
BOLTED JOINTS SHALL BE CONNECTED AND INSPECTED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", DECEMBER 31, 2009. APPROVED BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS COMMITTEE.

SNUG-TIGHT JOINTS
UNLESS NOTED OTHERWISE ON THE METAL BUILDING SUPPLIERS ERECTION DRAWINGS, ALL A325 BOLTS ARE USED IN CONNECTIONS DEFINED AS SNUG-TIGHT JOINTS (ST). FOR INSTALLATION IN SNUG-TIGHT JOINTS, ALL BOLT HOLES SHALL BE ALIGNED TO PERMIT BOLT INSERTION WITHOUT UNDUE DAMAGE TO THE THREADS. BOLTS SHALL BE PLACED IN ALL HOLES WITH NUTS THREADED TO COMPLETE THE ASSEMBLY BEFORE COMPACTING THE JOINT TO THE SNUG-TIGHT POSITION, PROGESSING SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. SNUG TIGHT IS THE CONDITION THAT EXISTS WHEN ALL HAVE BEEN PULLED INTO FIRM CONTACT BY THE BOLTS IN THE JOINT AND ALL BOLTS IN THE JOINT HAVE BEEN TIGHTENED SUFFICIENTLY TO PREVENT THE REMOVAL OF THE NUTS WITHOUT THE USE OF A WRENCH. MORE THAN ONE CYCLE THROUGH THE BOLT PATTERN MAY BE REQUIRED.

PRETENSIONED AND SLIP-CRITICAL JOINTS
CONNECTIONS WHICH ARE DEFINED AS PRETENSIONED (PT) OR SLIP-CRITICAL (SC) JOINTS WILL BE AS NOTED ON THE ERECTION DRAWINGS BY THE METAL BUILDING MANUFACTURER OR BY THE ENGINEER OF RECORD. ALL CONNECTIONS WITH A490 BOLTS ARE EITHER PRETENSIONED (PT) OR SLIP-CRITICAL (SC) JOINTS. PRETENSIONED JOINTS ARE TYPICALLY REQUIRED WHEN THE JOINT IS SUBJECT TO SIGNIFICANT LOAD REVERSAL. THE JOINT IS SUBJECT TO FATIGUE LOAD WITH NO LOAD REVERSAL, THE BOLTS ARE SUBJECT TO TENSILE FATIGUE, THE BUILDING SUPPORTS A CRANE OF OVER 5-TON CAPACITY, OR THE CONNECTION IS PART OF THE SEISMIC LOAD RESISTING SYSTEM AND AISC SEISMIC PROVISIONS (AISC 341) ARE APPLICABLE. THE SEISMIC PROVISIONS ARE APPLICABLE WHEN THE SEISMIC RESPONSE MODIFICATION COEFFICIENT, R, IS TAKEN GREATER THAN 3. LOADINGS FROM WIND OR SNOW ARE NOT CONSIDERED SIGNIFICANT LOAD REVERSAL OR FATIGUE LOADINGS. SLIP CRITICAL JOINTS ARE REQUIRED WHEN SLIP IS DETERMINED TO BE DETRIMENTAL TO THE PERFORMANCE OF THE STRUCTURE. INSTALLATION METHODS PERMITTED FOR PRETENSIONED JOINTS INCLUDE TURN-OF-NUT PRETENSIONING, CALIBRATED WRENCH PRETENSIONING, TWIST-OFF-TYPE TENSION CONTROL BOLT PRETENSIONING, AND DIRECT-TENSION-INDICATOR PRETENSIONING. HOT DIP GALVANIZED CONNECTIONS MAY REQUIRE RE-PRETENSIONING AFTER 5 DAYS OF SETTLING.

TURN-OF-NUT PRETENSIONING
FIRST TIGHTEN ALL BOLTS IN ACCORDANCE WITH THE ABOVE SNUG-TIGHT PROCEDURE, THEN ROTATE THE NUT OR HEAD BY THE AMOUNT SPECIFIED IN THE BOLT PRETENSION SCHEDULE, PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID PART OF THE JOINT. THE PART NOT TURNED BY THE WRENCH SHALL BE PREVENTED FROM ROTATING DURING THIS OPERATION. IF THE NUT IS TURNED IN THE LOOSENING POSITION THE BOLT MUST BE REMOVED AND REPLACED. PRETENSION VALUES EQUAL TO OR GREATER THAN THE MINIMUM VALUES LISTED IN THE BOLT PRETENSION SCHEDULE ARE REQUIRED.

ASTM MINIMUM BOLT PRETENSION SCHEDULE

NOMINAL BOLT DIAMETER, d_b	SPECIFIED MINIMUM BOLT PRETENSION, T_m KIPS		NUT OR HEAD ROTATION FROM SNUG-TIGHT CONDITION	
	ASTM A325 AND F1852	ASTM A490 AND F2280	$L_b \leq 4d_b$	$4d_b < L_b \leq 8d_b$
1/2"	13 KIPS	16 KIPS	1/3 TURN	1/2 TURN
3/4"	29 KIPS	37 KIPS		
7/8"	41 KIPS	51 KIPS		
1"	54 KIPS	67 KIPS		
1 1/4"	75 KIPS	107 KIPS		

(L_b = LENGTH OF BOLT)

INSPECTION REQUIREMENTS PRIOR TO START OF WORK:
VERIFY ALL FASTENER COMPONENTS CONFORM TO REQUIREMENTS.

INSPECTION REQUIREMENTS FOR SNUG-TIGHT JOINTS:
VERIFY THAT THE PROPER FASTENER COMPONENTS WERE USED AND THAT THE CONNECTED ELEMENTS WERE FABRICATED PROPERLY. AFTER ASSEMBLY, IT SHALL BE VISUALLY ENSURED THAT THE PLIES ARE SOLIDLY SEATED AGAINST EACH OTHER, BUT NOT NECESSARILY IN CONTINUOUS CONTACT, THAT WASHERS, IF REQUIRED, HAVE BEEN USED, AND THAT ALL BOLTS IN THE JOINT HAVE BEEN TIGHTENED SUFFICIENTLY TO PREVENT THE TURNING OF THE NUTS WITHOUT THE USE OF A WRENCH. NO FURTHER EVIDENCE OF CONFORMITY IS REQUIRED.

INSPECTION REQUIREMENTS FOR TURN-OF-NUT PRETENSIONING:
FOR TURN-OF-NUT PRETENSIONING, IN ADDITION TO THE INSPECTION REQUIREMENTS FOR SNUG-TIGHT JOINTS, THE INSPECTOR SHALL OBSERVE THE PRE-INSTALLATION VERIFICATION TESTING AND MONITOR THE WORK IN PROGRESS TO ENSURE THAT THE BOLTING CREW PROPERLY ROTATES THE TURNED ELEMENT BY THE AMOUNT SPECIFIED IN THE SCHEDULE. ALTERNATIVELY, WHEN THE FASTENERS ARE MATCH-MARKED AFTER INITIAL FIT-UP (SNUG-TIGHT CONDITION), VISUAL INSPECTION IS PERMITTED. THE SIDE OF NUTS AND BOLTS THAT HAVE BEEN IMPACTED SUFFICIENTLY TO INDUCE THE MINIMUM PRETENSION LOADS WILL APPEAR SLIGHTLY PEENED. NO FURTHER EVIDENCE OF CONFORMITY IS REQUIRED.

BOLT INSTALLATION & INSPECTION NOTES

MF91
AA

1/2"Ø, 3/4"Ø, 7/8"Ø, 1"Ø & 1 1/4"Ø STRUCTURAL BOLTS (A325)

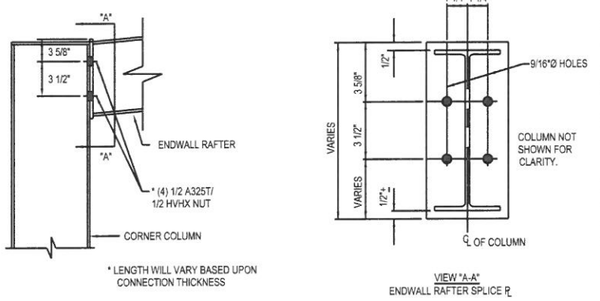
NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

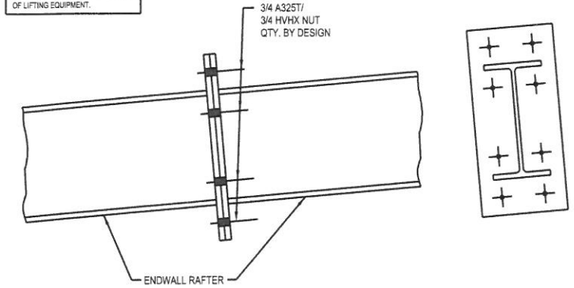
DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-001



SAFETY PRECAUTION:
STAY WELL IN THE CLEAR OF LOADS BEING MOVED BY ANY TYPE LIFTING DEVICE. BE SURE TO KEEP HANDS AND FEET CLEAR OF MOVING LOADS.

CORNER COLUMN CONNECTION DETAIL AT BLDG. EAVE — EF12 AA

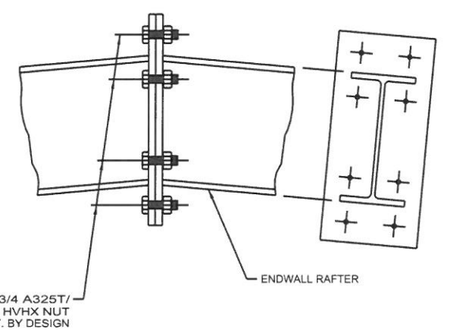
COLUMN TO RAFTER CONNECTION



SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE CORRECT AND SAFE OPERATION OF LIFTING EQUIPMENT.

ENDWALL RAFTER SPLICE DETAIL — EF22 AA

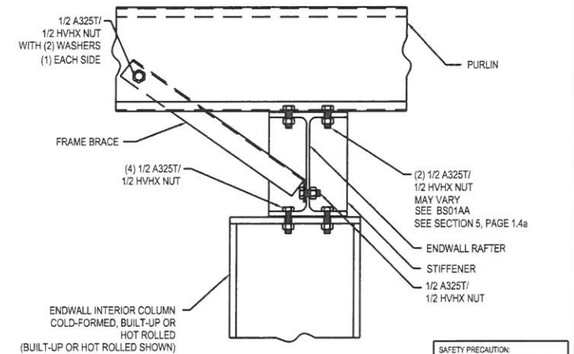
RAFTER TO RAFTER CONNECTION



SAFETY PRECAUTION:
EACH WORKER SHOULD BE TRAINED TO USE THE SAFEST AND MOST PRODUCTIVE ERECTION TECHNIQUES.

ENDWALL RAFTER RIDGE DETAIL (HOT ROLLED AND BUILT-UP) — EF23 AA

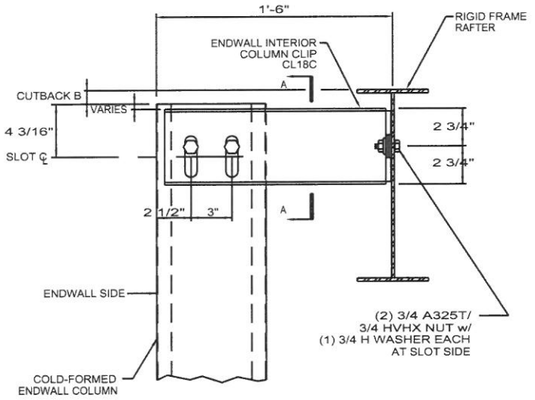
RAFTER W/RIDGE SPLICE PLATE



SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE PROPER ERECTION PROCEDURES FOR ALL JOBS.

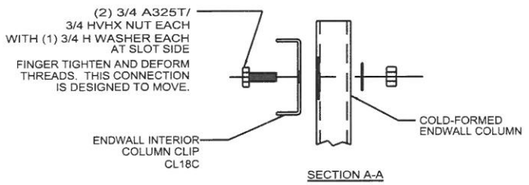
ENDWALL INTERIOR COLUMN CONNECTION DETAIL — EF26W AA

COLUMN TO RAFTER CONNECTION



CLIP CONNECTION TO COLUMN

SAFETY PRECAUTION:
EACH WORKER SHOULD BE TRAINED TO USE THE SAFEST AND MOST PRODUCTIVE ERECTION TECHNIQUES.

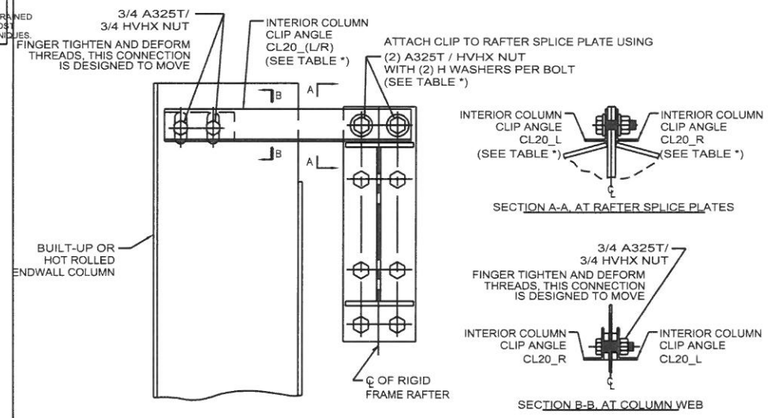


SECTION A-A

INTERIOR COLUMN CONNECTION — EF28 AA

RIGID FRAME ENDWALL

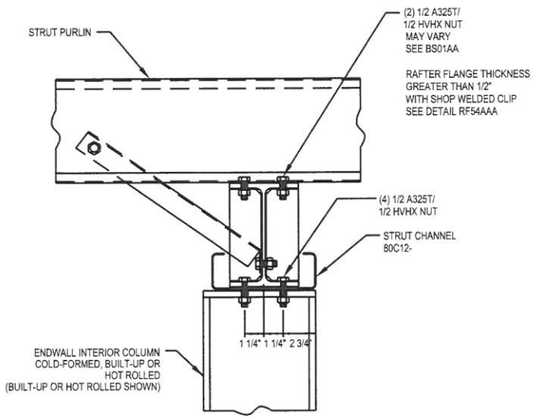
SAFETY PRECAUTION:
EACH WORKER SHOULD BE TRAINED TO USE THE SAFEST AND MOST PRODUCTIVE ERECTION TECHNIQUES.



* ATTACHMENT MEMBERS AT RAFTER SPLICE PLATE			
CLIP ANGLE	A325T BOLTS	HVHX NUT	WASHER
(1) EACH L/20	PER SPLICE PLATE	(1) PER BOLT	(2) PER BOLT
CL20AL CL20AR	3/4 A325T	3/4 HVHX NUT	3/4 WASHERS
CL20BL CL20BR	7/8 A325T	7/8 HVHX NUT	7/8 WASHERS
CL20CL CL20CR	1 A325T	1 HVHX NUT	1 WASHERS

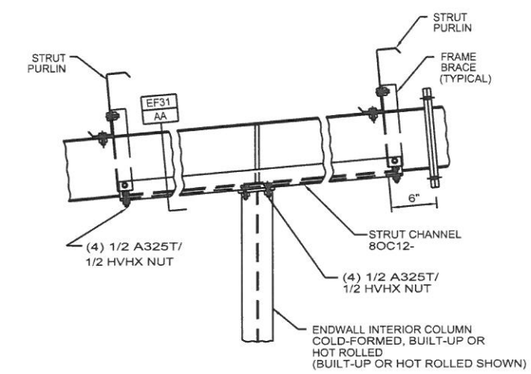
RIGID FRAME ENDWALL WITH CENTER COLUMN — EF29 AA

COLUMN TO RAFTER CONNECTION USING CL20_ (L/R)



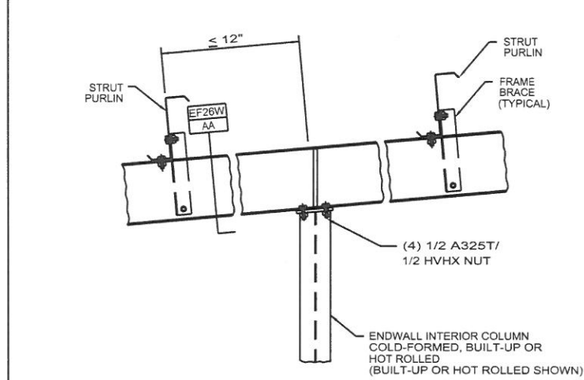
SECTION AT COLUMN w/ STRUT CHANNEL — EF31 AA

ENDWALL RAFTER



TYPE 'C' — EF33 AA

ENDWALL RAFTER



TYPE 'N' — EF34 AA

ENDWALL RAFTER

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

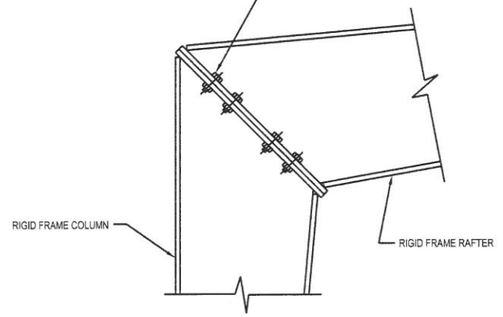
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-002

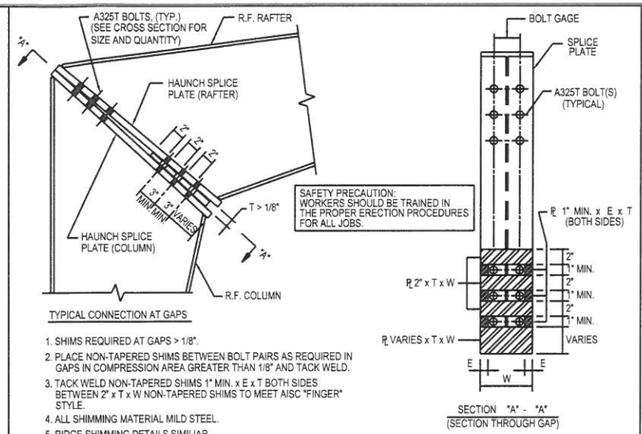
SAFETY PRECAUTION:
STAY WELL IN THE CLEAR OF LOADS BEING MOVED BY ANY TYPE LIFTING DEVICE. BE SURE TO KEEP HANDS AND FEET CLEAR OF MOVING LOADS.



DIAGONAL HAUNCH CONNECTION AT BLDG. EAVE

RIGID FRAME

MF11
AA



SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE PROPER ERECTION PROCEDURES FOR ALL JOBS.

TYPICAL CONNECTION AT GAPS

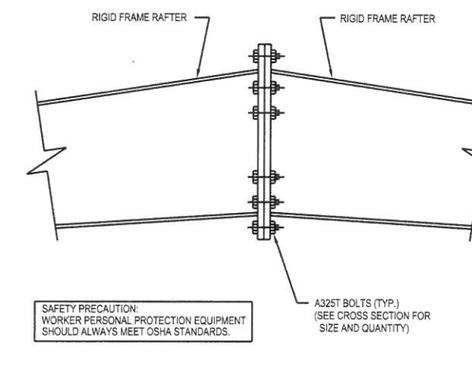
1. SHIMS REQUIRED AT GAPS > 1/8".
2. PLACE NON-TAPERED SHIMS BETWEEN BOLT PAIRS AS REQUIRED IN GAPS IN COMPRESSION AREA GREATER THAN 1/8" AND TACK WELD.
3. TACK WELD NON-TAPERED SHIMS 1" MIN. x E x T BOTH SIDES BETWEEN 2" x T x W NON-TAPERED SHIMS TO MEET AISC "FINGER" STYLE.
4. ALL SHIMMING MATERIAL MILD STEEL.
5. RIDGE SHIMMING DETAILS SIMILIAR.

SECTION "A" - "A"
(SECTION THROUGH GAP)

TYPICAL DIAGONAL HAUNCH SHIMMING

RIGID FRAME

MF19
AA

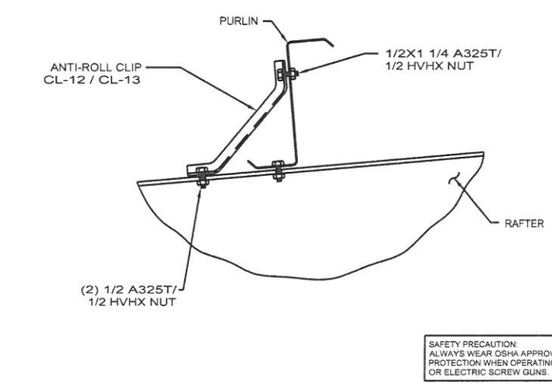


SAFETY PRECAUTION:
WORKER PERSONAL PROTECTION EQUIPMENT SHOULD ALWAYS MEET OSHA STANDARDS.

RIDGE RAFTER CONNECTION DETAIL

RIGID FRAME RAFTER

MF22
AA

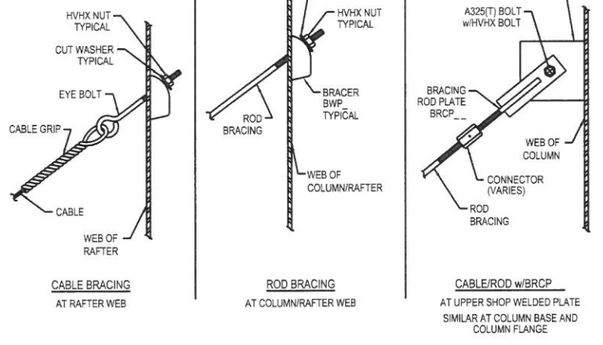


SAFETY PRECAUTION:
ALWAYS WEAR OSHA APPROVED EYE PROTECTION WHEN OPERATING DRILLS OR ELECTRIC SCREW GUNS.

ANTI-ROLL DETAIL DOWNHILL

RIGID FRAME RAFTER

RF50A
AA



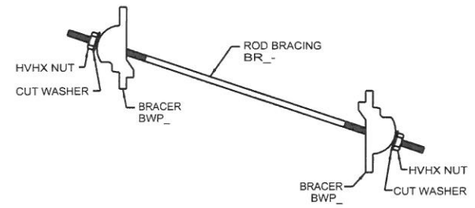
CABLE BRACING
AT RAFTER WEB

ROD BRACING
AT COLUMN/RAFTER WEB

CABLE/ROD w/BRCP
AT UPPER SHOP WELDED PLATE
SIMILAR AT COLUMN BASE AND COLUMN FLANGE

CABLE/ROD BRACING TYPICAL END CONNECTIONS

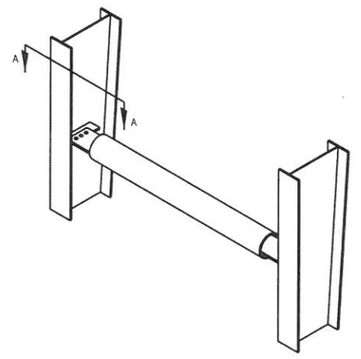
BR01
AA

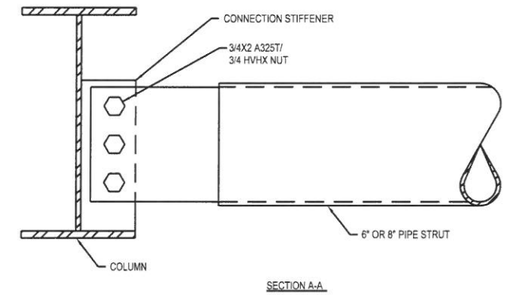


ROD Ø	REQUIRED FOR ROD ASSEMBLY			
	ROD BRACING	BRACER	CUT WASHER	HVHX NUT
5/8"	BR5-	BWP1	5/8 CUT WASHER	5/8 HVHX NUT
3/4"	BR6-	BWP2	3/4 CUT WASHER	3/4 HVHX NUT
7/8"	BR7-	BWP2	7/8 CUT WASHER	7/8 HVHX NUT
1"	BR8-	BWP3	1 CUT WASHER	1 HVHX NUT
1 1/8"	BR9-	BWP3	1 1/8 CUT WASHER	1 1/8 HVHX NUT
1 1/4"	BR10-	BWP3	1 1/4 CUT WASHER	1 1/4 HVHX NUT
1 3/8"	BR11-	BWP4	1 3/8 CUT WASHER	1 3/8 HVHX NUT
1 1/2"	BR12-	BWP4	1 1/2 CUT WASHER	1 1/2 HVHX NUT

ROD BRACING ASSEMBLY

BR01W
AA





SECTION A-A

STIFFENER MOUNTED 6" OR 8" PIPE STRUT AT COLUMN

BR15W
AA

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY

SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6

JOB NUMBER: A17B0157A

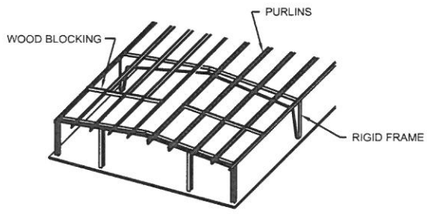
SHEET: SED-003

RAFTER/COLUMN FLANGE THICKNESS	SECONDARY MEMBER GAUGE	DOUBLE ENDED BOLT 1/2" X 2 3/16" A449 (NUTS INCLUDED) REQUIRED AT GIRTS OPTIONAL AT PURLINS	1/2" A325T BOLT REQUIRED FOR LAPPED MEMBERS (REQUIRES 1/2 HVHX NUT)	1/2" A325T BOLT REQUIRED FOR NON LAPPED MEMBERS (REQUIRES 1/2 HVHX NUT)
< 3/8"	11 - 16	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
3/8"	16	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	15	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	14	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	13	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	12	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
	11	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
1/2"	16	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
	15	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	14	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	13	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	12	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T

THE FOLLOWING FLANGE THICKNESS CONNECTIONS REQUIRE THE USE OF SHOP WELDED CLIPS. (SEE CONNECTION DETAILS.)

RAFTER/COLUMN FLANGE THICKNESS	SECONDARY MEMBER GAUGE	BUTTON HEAD BOLT AT WALL ZEE GIRTS ONLY 1/2" BUTTON HEAD BOLT (NUT INCLUDED) FIRST GIRT TO SHOP WELDED CLIP (UP THROUGH 1ST GIRT AND SHOP WELDED CLIP)	1/2" A325T BOLT REQUIRED FOR LAPPED AND NON LAPPED MEMBERS (REQUIRES 1/2 HVHX NUT)
1/2"	11	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
> 1/2"	16	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
	15	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
	14	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
	13	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
	12	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325
	11	1/2 X 1 1/4 A307 BHB	1/2 X 1 1/4 A325

BYPASS SECONDARY FRAMING CONNECTION, BOLT REQUIREMENTS — BS01 AA

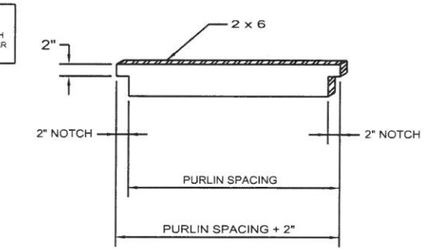


Straight purlins are a necessity. Zee sections have a natural tendency to roll out of plane and deflect horizontally. This must be corrected by forcing the purlins into proper plane and spacing. Wood blocking is recommended as one method to accomplish this.

Purlin Blocking

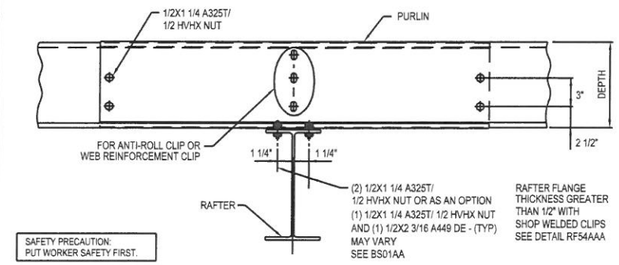
Before installing the roof panels and insulation, be certain that the purlins are straight and at 90° to the slope of the roof. Use wood blocking to assist with purlin alignment if adjustment is needed. Start with one row of temporary blocking in the center of the bay. Use additional rows of blocking if needed to maintain straight purlins. As sheeting progresses to within one panel width of the blocking it should hold the purlins in alignment allowing the blocking to be removed. Move blocking to next bay as the erection progresses.

SAFETY PRECAUTION
DON'T ALLOW BLOCKING TO BE A FALLING HAZARD TO THOSE BENEATH THE ROOF. WORKERS SHOULD WEAR OSHA APPROVED HARD HATS.



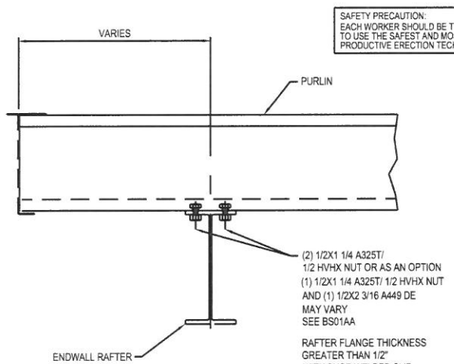
Typical construction of wood blocking is shown above. A 2 x 6 minimum board size should be used. Refer to the cross section framing drawings that accompanied the building to determine the purlin size and spacing. Measure the purlin flange and cut notch in board accordingly.

PURLIN BLOCKING — GE02 AA



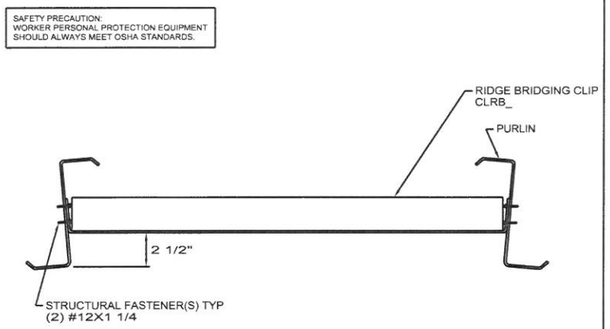
SAFETY PRECAUTION:
PUT WORKER SAFETY FIRST.

STANDARD PURLIN LAP — RF01 AA
BYPASS CONDITION



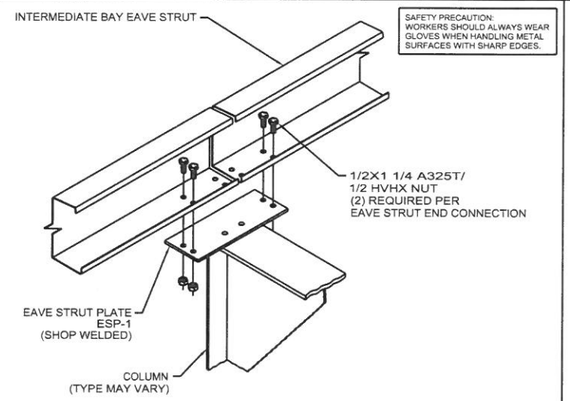
SAFETY PRECAUTION:
EACH WORKER SHOULD BE TRAINED TO USE THE SAFEST AND MOST PRODUCTIVE ERECTION TECHNIQUES.

PURLIN CONNECTION DETAIL AT ENDWALL FRAME — RF03R AA
BYPASS, INSET & FLUSH CONDITION



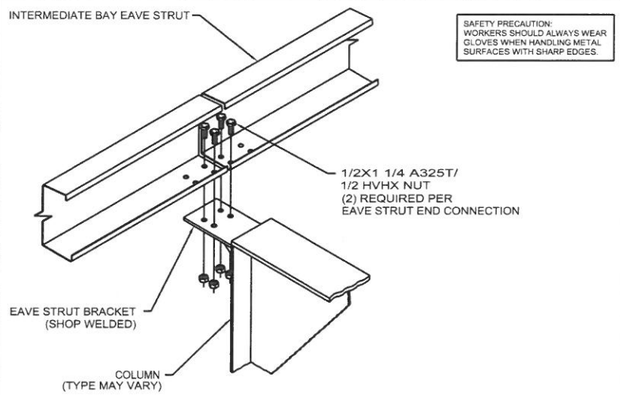
SAFETY PRECAUTION:
WORKER PERSONAL PROTECTION EQUIPMENT SHOULD ALWAYS MEET OSHA STANDARDS.

RIDGE BRIDGING CLIP CONNECTION DETAIL — RF05 AA



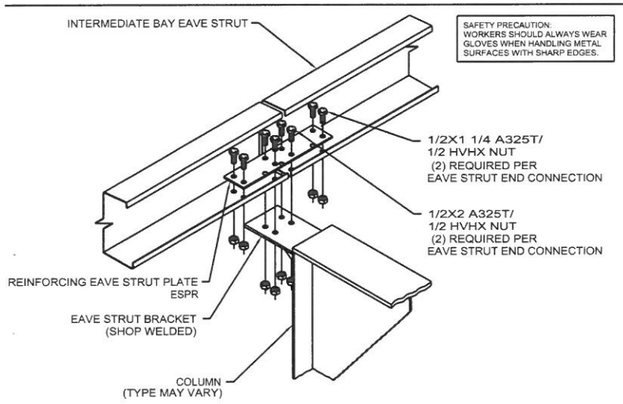
SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

LOW/HIGH SIDE EAVE STRUT CONNECTION (INSET GIRTS) — RF31Q AA
AT RAFTER/COLUMN FLANGE WIDTHS ≤ 10"



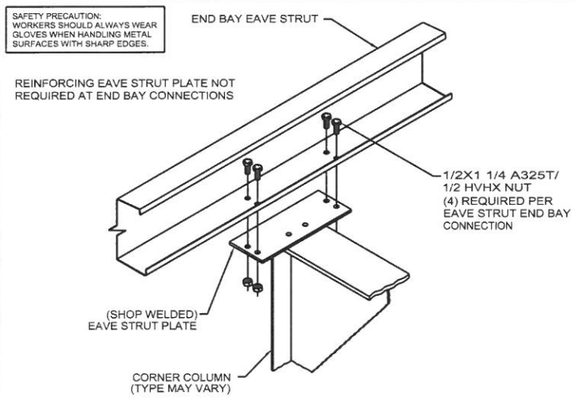
SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

LOW/HIGH SIDE EAVE STRUT CONNECTION (BYPASS GIRTS) — RF31R AA
ALL RAFTER/COLUMN FLANGE WIDTHS



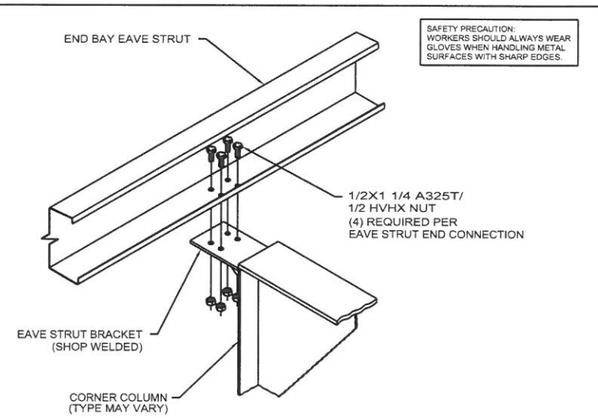
SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

LOW/HIGH SIDE EAVE STRUT CONNECTION (BYPASS GIRTS) — RF31RB AA
ALL RAFTER/COLUMN FLANGE WIDTHS WITH REINFORCING PLATE



SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

LOW/HIGH SIDE EAVE STRUT CONNECTION (INSET GIRTS) — RF32Q AA
ALL RAFTER/COLUMN FLANGE WIDTHS



SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

LOW/HIGH SIDE EAVE STRUT CONNECTION (BYPASS GIRTS) — RF32R AA
ALL RAFTER/COLUMN FLANGE WIDTHS

NOT FOR CONSTRUCTION

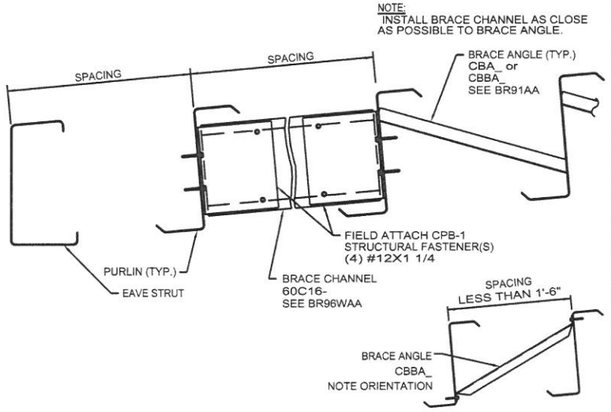
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

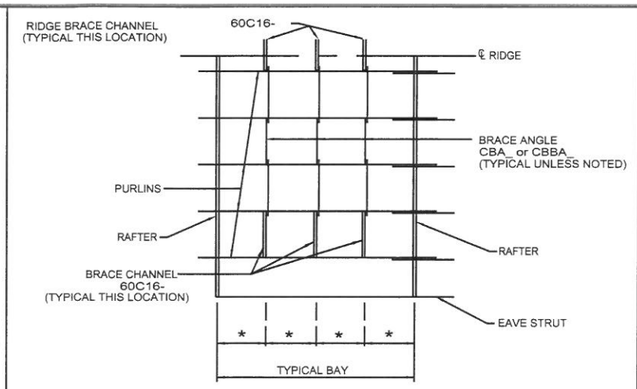
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-004



BRACING DETAIL-ROOF SLOPE LESS THAN OR EQUAL TO 1:12 — BR51 AA

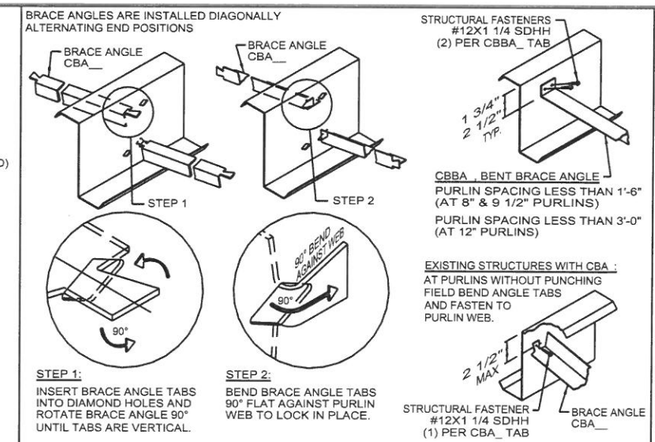
8" & 9 1/2" ZEE PURLINS w/CLIP-FASTENED ROOF - HIGH SIDE SIMILAR



* NOTE:
SPACING AS REQUIRED BY DESIGN.

PURLIN BRACING KEY PLAN — BR90 AA

8" & 9 1/2" ZEE PURLINS w/CLIP-FASTENED ROOF

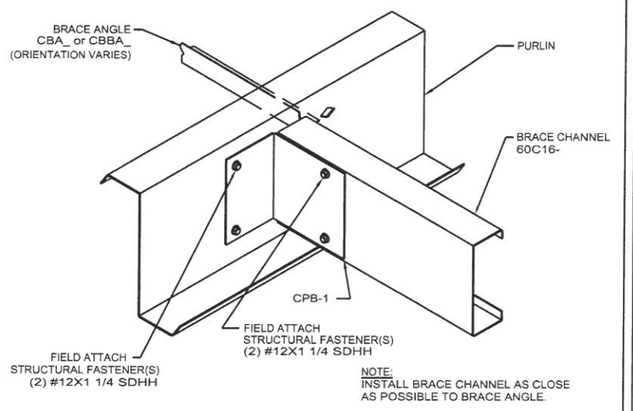


STEP 1:
INSERT BRACE ANGLE TABS INTO DIAMOND HOLES AND ROTATE BRACE ANGLE 90° UNTIL TABS ARE VERTICAL.

STEP 2:
BEND BRACE ANGLE TABS 90° FLAT AGAINST PURLIN WEB TO LOCK IN PLACE.

BRACE ANGLE INSTALLATION — BR91 AA

CLIP-FASTENED ROOF



NOTE:
INSTALL BRACE CHANNEL AS CLOSE AS POSSIBLE TO BRACE ANGLE.

BRACE CHANNEL INSTALLATION — BR92 AA

8" & 9 1/2" ZEE PURLIN

PURLIN BRACING CROSS SECTION-ROOF SLOPES LESS THAN OR EQUAL TO 1:12 — BR93 AA

8" OR 9 1/2" ZEE PURLIN w/CLIP-FASTENED ROOF - RIDGE BUILDING SHOWN, SINGLE SLOPE SIMILAR

DETAIL AT RIDGE PURLIN — BR94 AA

8" OR 9 1/2" PURLIN BRACING

1. APPLICABLE TO ROOFS WITH STANDING SEAM II, STANDING SEAM 360, LOC-SEAM, LOC-SEAM 360 AND SEAM-LOC PANELS.
2. PURLINS ARE TO BE INSTALLED WITH PURLIN WEBS 90° TO RAFTERS.
3. PURLIN BRACING IS NOT TO DISTORT OR ALTER PURLINS FROM THEIR INTENDED SHAPE AND LOCATION.
4. SPACING AS REQUIRED BY DESIGN.
5. FOR FACTORY MUTUAL REQUIREMENTS, PURLIN BRACING IS NOT TO EXCEED 80" O.C. AND IS REQUIRED ONLY IN THE END BAYS OF THE BUILDING.

(BRACING NOT APPLICABLE WITH SCREW DOWN ROOF SYSTEMS)

PURLIN BRACING NOTES — BROA AA

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

NOT FOR CONSTRUCTION

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

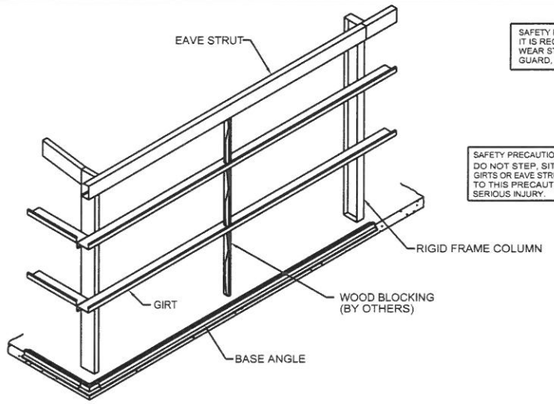
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-005

COLUMN FLANGE THICKNESS	SECONDARY FRAMING GAUGE	DOUBLE ENDED BOLT REQUIRED (SUPPLIED WITH (2) 1/2 HVHX NUT)	1/2" A325T BOLT REQUIRED FOR LAPPED MEMBERS (REQUIRES 1/2 HVHX NUT)	1/2" A325T BOLT REQUIRED FOR NON LAPPED MEMBERS (REQUIRES 1/2 HVHX NUT)
< 3/8"	11 - 16	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
3/8"	16	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	15	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	14	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	13	1/2X2 3/16 A449 DE	1/2X1 1/4 A325T	1/2X1 1/4 A325T
	12	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
	11	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
1/2"	16	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X1 1/4 A325T
	15	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	14	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	13	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	12	1/2X2 3/16 A449 DE	1/2X2 A325T	1/2X2 A325T
	11	1/2X3 5/8 A307 DE	1/2X2 A325T	1/2X2 A325T
5/8"	11 - 16	1/2X3 5/8 A307 DE	1/2X2 A325T	1/2X2 A325T
3/4"	11 - 16	1/2X3 5/8 A307 DE	1/2X2 A325T	1/2X2 A325T
1"	11 - 16	1/2X3 5/8 A307 DE	1/2X2 A325T	1/2X2 A325T
1 1/2"	11 - 16	1/2X3 5/8 A307 DE	SPECIAL ORDER	SPECIAL ORDER

BOLT REQUIREMENTS FOR SECONDARY FRAMING CONNECTIONS — BS02 AA

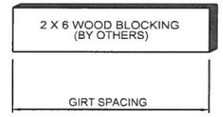
AT COLUMNS



SAFETY PRECAUTION:
IT IS RECOMMENDED THAT ALL WORKERS WEAR STEEL TOE SHOES WITH METOTARSAL GUARD, EYE PROTECTION, AND HARD HATS.

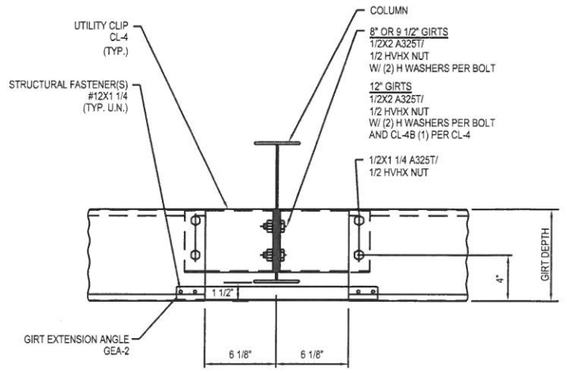
SAFETY PRECAUTION:
DO NOT STEP, SIT OR CLIMB ON WALL GIRTS OR EAVE STRUTS. FAILURE TO ADHERE TO THIS PRECAUTION MAY RESULT IN A SERIOUS INJURY.

INSTALLATION OF THE BUILDING WALLS IS GENERALLY DONE BEFORE THE ROOF. 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.

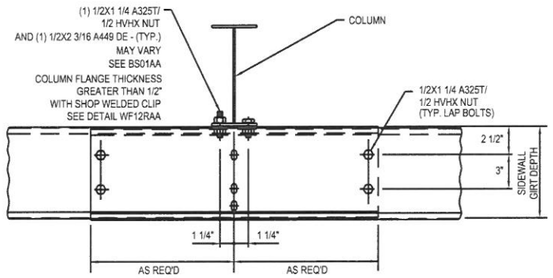


TYPICAL CONSTRUCTION OF THE WOOD BLOCKING IS SHOWN ABOVE. A 2 X 6 MINIMUM BOARD SIZE SHOULD BE USED. REFER TO THE CROSS SECTION FRAMING DRAWINGS TO DETERMINE THE GIRT SIZE AND SPACINGS.

GIRT BLOCKING — GEO3 AA

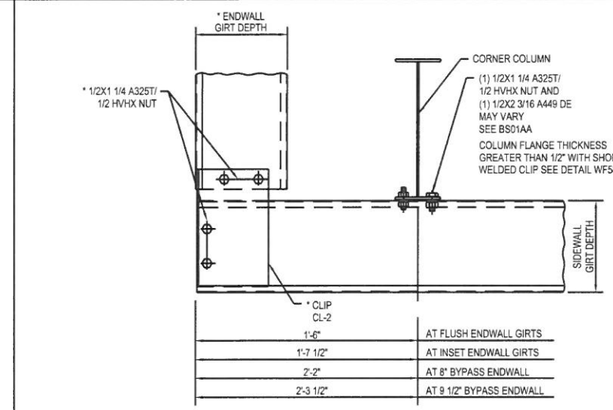


INSET GIRT CONNECTION TO COLUMN — WF01Q AA



BYPASS LAPPED ZEE GIRT CONNECTION — WF02R AA

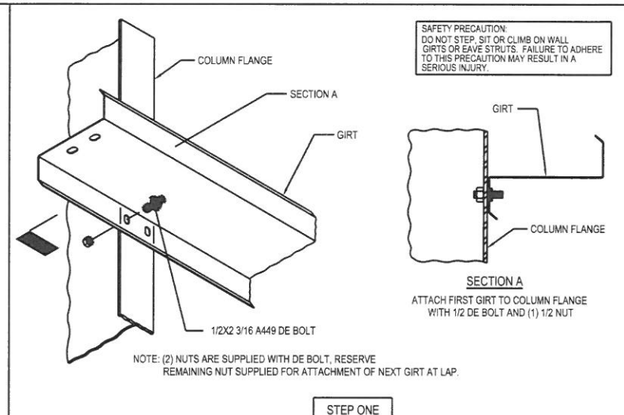
COLUMN FLANGE THICKNESS LESS THAN OR EQUAL TO 1/2"



* NOT REQUIRED IF OPEN ENDWALL

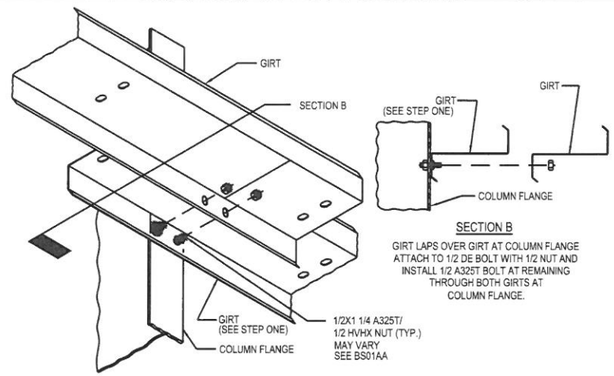
CORNER GIRT CONNECTION (RIGID FRAME CORNER COLUMN) — WF04 AA

BYPASS SIDEWALL / BYPASS, INSET OR FLUSH ENDWALL



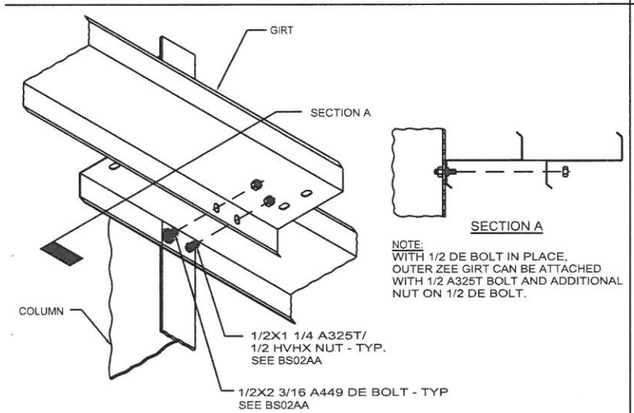
SAFETY PRECAUTION:
DO NOT STEP, SIT OR CLIMB ON WALL GIRTS OR EAVE STRUTS. FAILURE TO ADHERE TO THIS PRECAUTION MAY RESULT IN A SERIOUS INJURY.

ATTACH FIRST GIRT TO COLUMN FLANGE WITH 1/2 DE BOLT AND (1) 1/2 NUT



BYPASS ZEE GIRT CONNECTION TO COLUMN AT INTERIOR COLUMN — WF10R AA

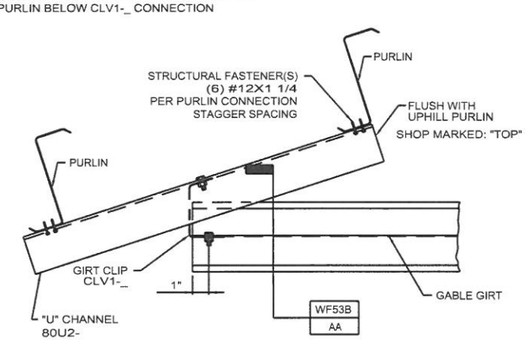
COLUMN FLANGE THICKNESS LESS THAN OR EQUAL TO 1/2"



BYPASS GIRT TO COLUMN CONNECTION (LAPPED GIRTS ONLY) — WF10RA AA

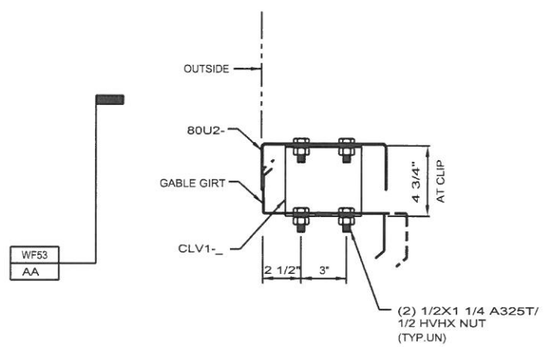
STEP TWO

NOTE:
FRAME BRACES ARE REQUIRED AT FIRST PURLIN ABOVE AND FIRST PURLIN BELOW CLV1-_ CONNECTION



GABLE GIRT OFF PURLIN CONNECTION — WF53 AA

BYPASS GIRTS



GABLE GIRT CONNECTION AT CLV1-_ — WF53B AA

NOT FOR CONSTRUCTION

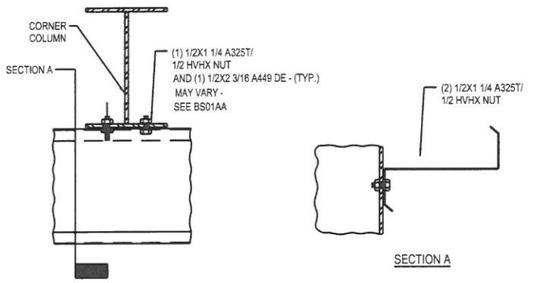
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

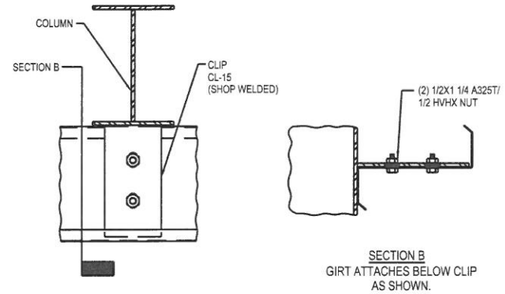
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-006



GIRT CONNECTION TO COLUMN FLANGE

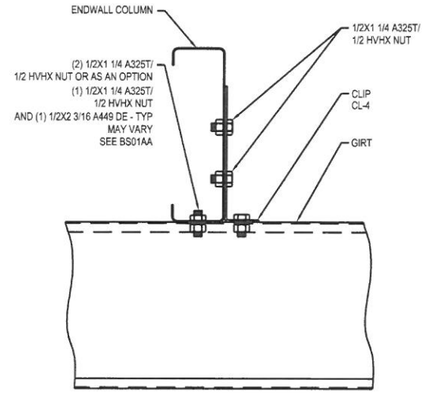


GIRT CONNECTION TO CLIP SHOP WELDED TO COLUMN FLANGE

NON-LAPPED BYPASS GIRT

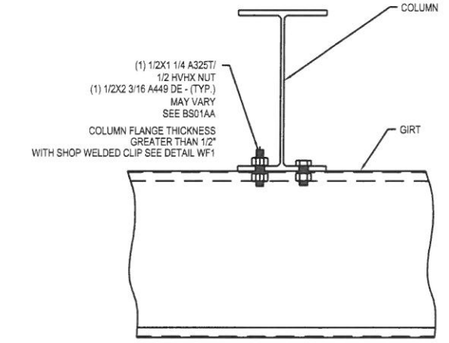
TYP. AT CORNER COLUMN OR ANY SINGLE BYPASS ZEE TO COLUMN

WF58R | AA



BYPASS CHANNEL ENDWALL INTERIOR COLUMN

WF60R | AA

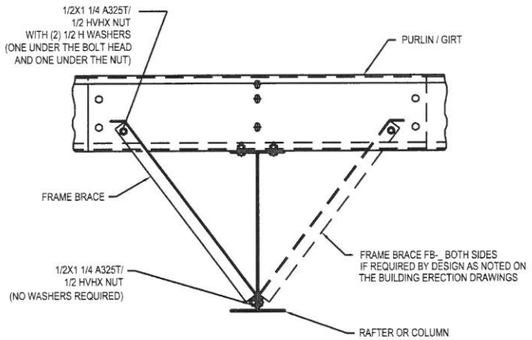


BYPASS NON-LAPPED GIRT CONNECTION TO COLUMN

AT COLUMN FLANGE THICKNESS LESS THAN OR EQUAL TO 1/2"

WF61R | AA

SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE PROPER ERECTION PROCEDURES FOR ALL JOBS.

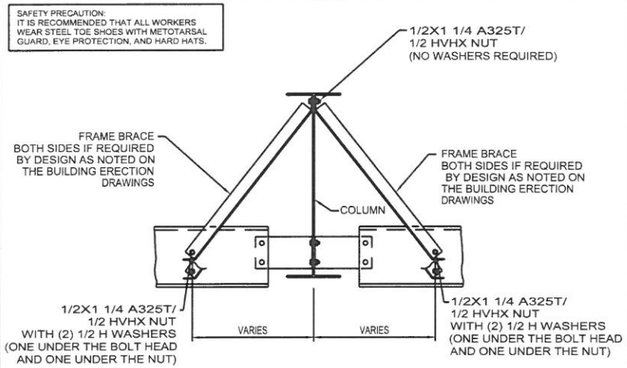


FRAME BRACE

FOR BYPASS PURLINS / GIRTS

BR17 | AA

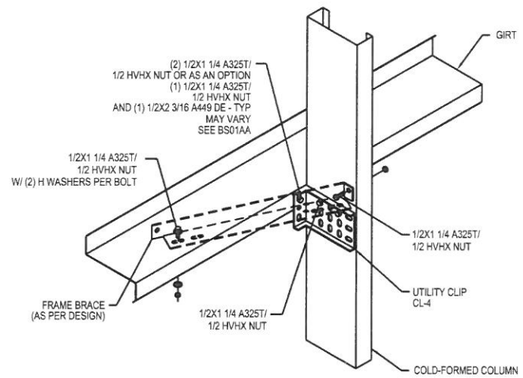
SAFETY PRECAUTION:
IT IS RECOMMENDED THAT ALL WORKERS WEAR STEEL TOE SHOES WITH METOTARSAL GUARD, EYE PROTECTION, AND HARD HATS.



FRAME BRACE

INSET

BR17A | AA



COLD-FORMED INTERIOR COLUMN FRAME BRACE

FOR BYPASS GIRTS

BR17B | AA

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

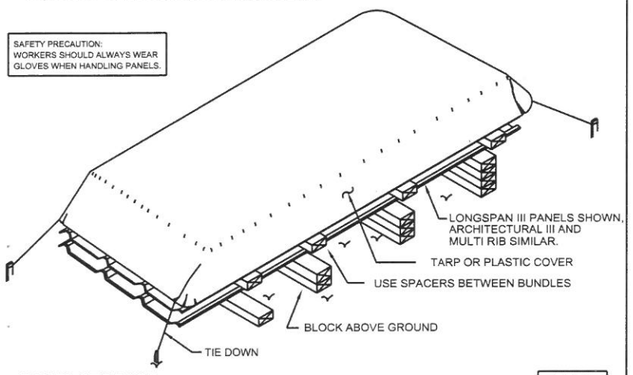
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-007

USE WOOD BLOCKING TO ELEVATE AND SLOPE THE PANELS IN A MANNER THAT WILL ALLOW MOISTURE TO DRAIN. WOOD BLOCKING PLACED BETWEEN PANEL BUNDLES WILL PROVIDE ADDITIONAL AIR CIRCULATION. COVER THE STACKED BUNDLES WITH A TARP OR PLASTIC COVER LEAVING ENOUGH OPENING AT THE BOTTOM FOR AIR TO CIRCULATE.

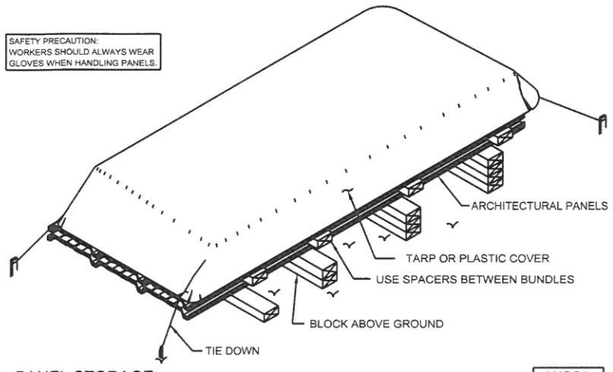
SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING PANELS.



PANEL STORAGE — GE51
LONG SPAN III, ARCHITECTURAL III, AND MULTI-RIB PANELS — AA

USE WOOD BLOCKING TO ELEVATE AND SLOPE THE PANELS IN A MANNER THAT WILL ALLOW MOISTURE TO DRAIN. WOOD BLOCKING PLACED BETWEEN PANEL BUNDLES WILL PROVIDE ADDITIONAL AIR CIRCULATION. COVER THE STACKED BUNDLES WITH A TARP OR PLASTIC COVER LEAVING ENOUGH OPENING AT THE BOTTOM FOR AIR TO CIRCULATE.

SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING PANELS.

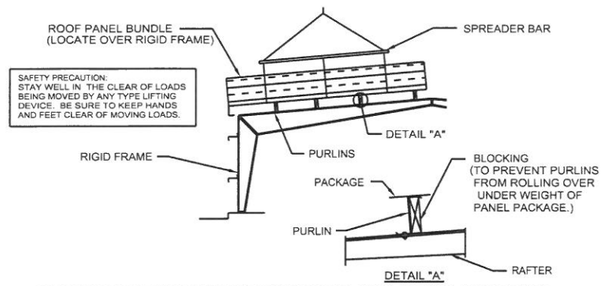


PANEL STORAGE — WC51
ARCHITECTURAL III — AC

USE WOOD BLOCKING TO ELEVATE AND SLOPE THE PANELS IN A MANNER THAT WILL ALLOW MOISTURE TO DRAIN. WOOD BLOCKING PLACED BETWEEN PANEL BUNDLES WILL PROVIDE ADDITIONAL AIR CIRCULATION. COVER THE AREA BENEATH PANELS WITH POLYETHYLENE OR A TARPAULIN TO PREVENT DIRT AND DEBRIS FROM ENTERING FEMALE SEAM.

SAFETY PRECAUTION
MAINTAIN A CLEAN AND ORDERLY WORK AREA.

PANEL STORAGE — RC51
STANDING SEAM — SA



SAFETY PRECAUTION:
STAY WELL IN THE CLEAR OF LOADS BEING MOVED BY ANY TYPE LIFTING DEVICE. BE SURE TO KEEP HANDS AND FEET CLEAR OF MOVING LOADS.

TO FACILITATE THE HANDLING OF THE ROOF PANELS, PANEL BUNDLES CAN BE LIFTED AND PLACED ON THE ROOF IF LOCATED AT A RIGID FRAME AND WITH BLOCKING IN PLACE TO PREVENT THE PURLINS FROM ROLLING OVER. DO NOT SLIDE BUNDLED PANELS ALONG ROOF FRAMING. WHEN LIFTING BUNDLED SHEETS, MAKE CERTAIN THAT THE BUNDLE IS ADEQUATELY SUPPORTED. AS A RULE WHEN LIFTING, NO MORE THAN 1/3 OF THE LENGTH OF THE PANEL SHOULD BE LEFT UNSUPPORTED.
REFER TO ERECTION DRAWINGS FOR THE ROOF PANEL MARKINGS AND STAGE BUNDLES ACCORDINGLY. THIS WILL MINIMIZE PANEL HANDLING AND SPEED THE ERECTION PROCEDURE.

PANEL STORAGE ON ROOF — RC54
AA

ROOF AND WALL PANELS

ROOF AND WALL PANELS INCLUDING COLOR COATED, ALUMINUM COATED AND GALVANIZED, PROVIDE EXCELLENT SERVICE UNDER WIDELY VARIED CONDITIONS. ALL UNLOADING AND ERECTION PERSONNEL SHOULD FULLY UNDERSTAND THAT THESE PANELS ARE QUALITY MERCHANDISE WHICH MERIT CAUTIOUS CARE IN HANDLING.

UNDER NO CIRCUMSTANCES SHOULD PANELS BE HANDLED ROUGHLY. PACKAGES OF SHEETS SHOULD BE LIFTED OFF THE TRUCK WITH EXTREME CARE TAKEN TO INSURE THAT NO DAMAGE OCCURS TO ENDS OF THE SHEETS OR TO SIDE RIBS. THE PACKAGES SHOULD BE STORED OFF THE GROUND SUFFICIENTLY HIGH ENOUGH TO ALLOW AIR CIRCULATION UNDERNEATH THE PACKAGES. THIS AVOIDS GROUND MOISTURE AND DETERS PEOPLE FROM WALKING ON THE PACKAGES. ONE END OF THE PACKAGE SHOULD ALWAYS BE ELEVATED ABOVE THE LOWER END TO ENCOURAGE DRAINAGE IN CASE OF RAIN.

ALL METAL PANELS ARE SUBJECT TO SOME DEGREE TO LOCALIZED DISCOLORATION OR STAIN WHEN WATER IS TRAPPED BETWEEN THEIR CLOSELY FITTED SURFACES. PANEL MANUFACTURER EXERCISES EXTREME CAUTION DURING FABRICATING AND SHIPPING OPERATIONS TO INSURE THAT ALL PANEL STOCK IS KEPT DRY. HOWEVER, DUE TO CLIMATIC CONDITIONS, WATER FORMED BY CONDENSATION OF HUMID AIR CAN BECOME TRAPPED BETWEEN STACKED SHEETS. WATER CAN ALSO BE TRAPPED BETWEEN THE STACKED SHEETS WHEN EXPOSED TO RAIN. THIS DISCOLORATION CAUSED BY TRAPPED MOISTURE IS OFTEN CALLED WET STORAGE STAIN.

THE STAIN IS USUALLY SUPERFICIAL AND HAS LITTLE EFFECT ON THE APPEARANCE OR SERVICE LIFE OF THE PANELS AS LONG AS IT IS NOT PERMITTED TO REMAIN ON THE PANELS. HOWEVER, MOISTURE IN CONTACT WITH THE SURFACE OF THE PANELS OVER AN EXTENDED PERIOD CAN SEVERELY ATTACK THEIR FINISH AND REDUCE THEIR EFFECTIVE SERVICE LIFE. THEREFORE, IT IS IMPERATIVE THAT ALL PANELS BE INSPECTED FOR MOISTURE UPON RECEIPT OF THE ORDER. IF MOISTURE IS PRESENT, DRY THE PANELS AT ONCE AND STORE IN A DRY, WARM PLACE, IF POSSIBLE.

WHEN HANDLING OR UNCRATING THE PANELS, LIFT, RATHER THAN SLIDE, THEM APART. BURRING EDGES MAY SCRATCH THE COATED SURFACES WHEN SHEETS ARE SLID OVER ONE ANOTHER. NEVER ALLOW PANELS TO BE WALKED ON WHILE ON THE GROUND.

ROUGH AND IMPROPER HANDLING OF PANELS IS INEXCUSABLE AND A PRIME EXAMPLE OF POOR JOB SUPERVISION.

CAUTION: PANELS ARE SLIPPERY. OIL OR WAX THAT HAS BEEN USED ON THE ROOF AND WALL PANELS FOR PROTECTION AGAINST WEATHER DAMAGE WILL MAKE THEM A VERY SLIPPERY WALKING SURFACE. WIPE DRY ANY OIL THAT HAS PUDDLED FROM BUNDLES STORED ON A SLOPE. DEW, FROST OR OTHER FORMS OF MOISTURE GREATLY INCREASE THE SLIPPERINESS OF THE PANELS.

PANEL STORAGE NOTES — RC95
AA

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

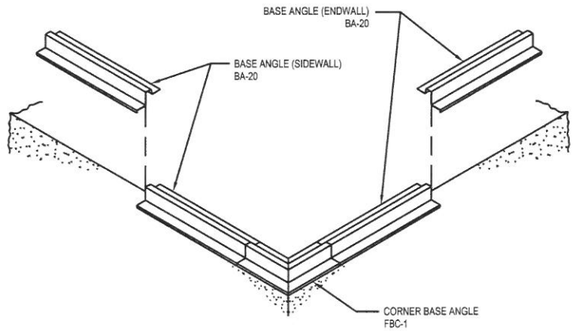
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

NOT FOR CONSTRUCTION

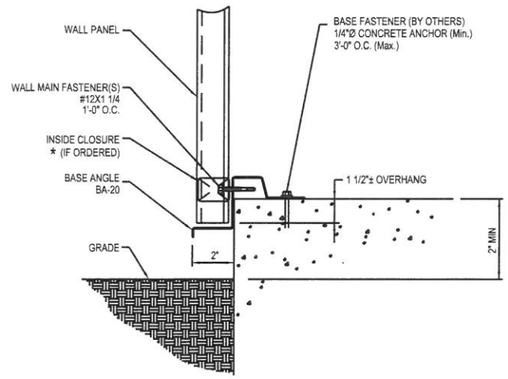
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-008

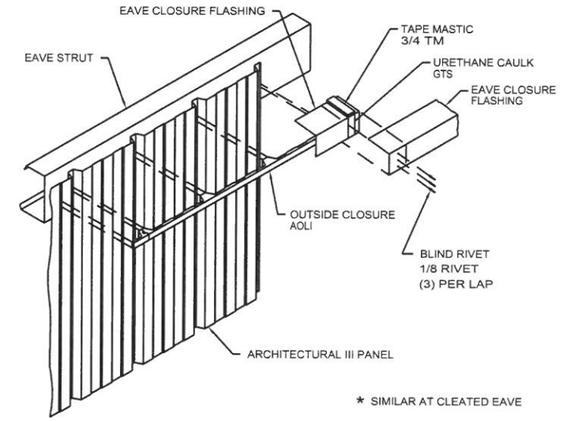


BASE ANGLE DETAIL — BA01 / AB



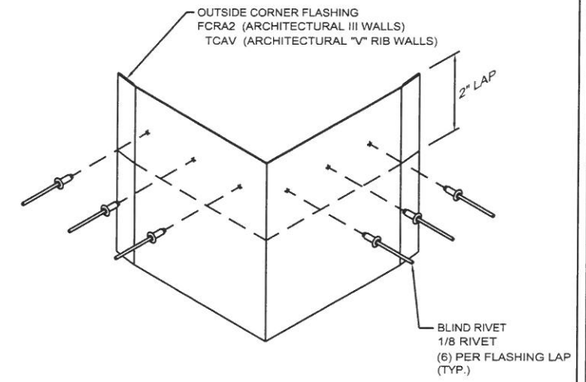
* CLOSURES AT BASE ARE NON-STANDARD UNLESS SPECIFICALLY ORDERED.

SECTION AT BASE ANGLE — BA02 / AB
ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALLS



* SIMILAR AT CLEATED EAVE

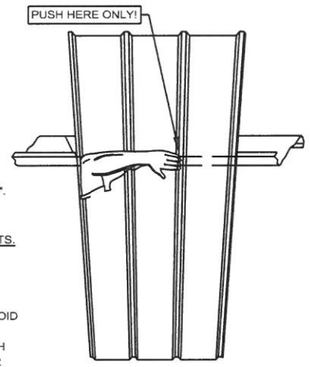
OUTSIDE CLOSURE INSTALLATION AT EAVE — EA37 / AC
ARCHITECTURAL III WALLS



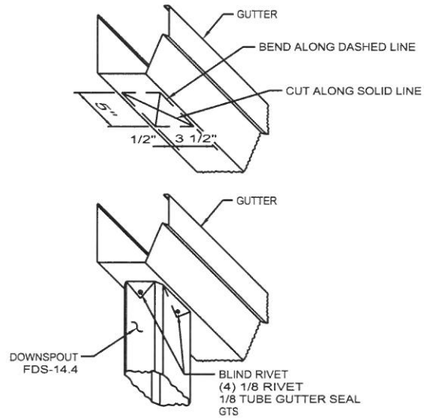
OUTSIDE CORNER FLASHING — FL08 / AC
ARCHITECTURAL III OR ARCHITECTURAL "V" RIB WALLS

THINGS TO REMEMBER

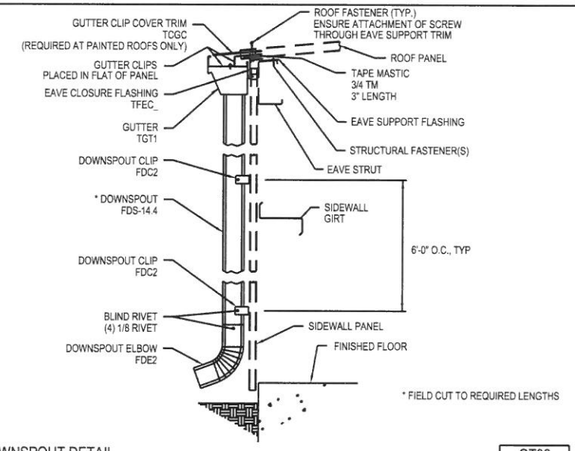
1. THINK SAFETY.
2. CARE FOR PANELS IN ACCORDANCE WITH ERECTION GUIDE.
3. ALIGN GIRT.
4. PLUMB FIRST AND EVERY PANEL.
5. CHECK COVERAGE ON EVERY PANEL.
6. FOLLOW SCREW ATTACHMENT SEQUENCE: TRAILING TO LEADING. TOP TO BOTTOM.
7. DO NOT EXCEED INSULATION THICKNESS (6" MAX.).
8. DO NOT "RATCHET" OR OVERTIGHTEN WALL PANEL SCREWS. THIS WILL CAUSE "DIMPLING".
9. USE THE RIB OF THE ARCHITECTURAL PANEL TO APPLY PRESSURE WHEN INSTALLING. (SEE EXAMPLE) DO NOT DISTORT PANEL FLATS.
10. DO NOT USE ABRASIVE SAWS OR OTHER CUTTING TOOLS WHICH PRODUCE HOT METAL PARTICLES OR BURNED EDGES. THESE METHODS WILL DAMAGE THE PAINTED AND GALVALUME FINISH AND WILL VOID ANY WARRANTIES. USE DOUBLE CUT SHEARS, NIBBLERS OR OTHER CUTTING DEVICES WHICH DO NOT PRODUCE HOT METAL PARTICLES OR BURNED EDGES.



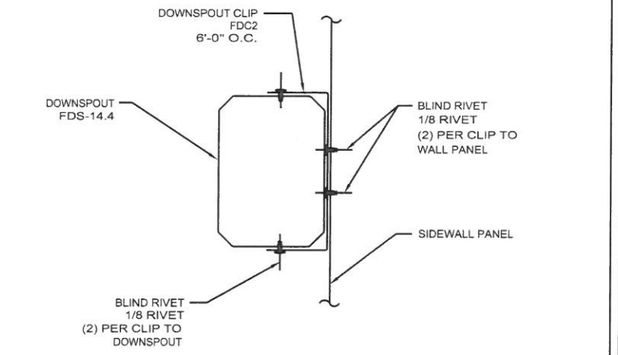
PANEL INSTALLATION NOTES — GE04 / AC
ARCHITECTURAL III WALL PANELS



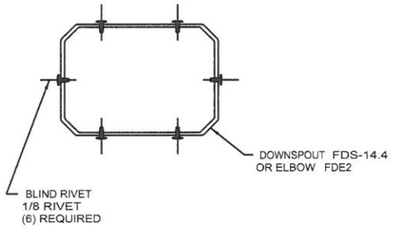
DOWNSPOUT OUTLET DETAIL — GT01 / AA



DOWNSPOUT DETAIL — GT02 / AA



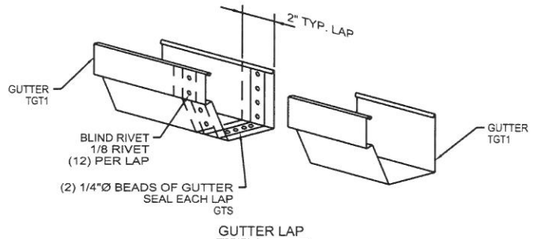
SECTION THROUGH DOWNSPOUT — GT03 / AA



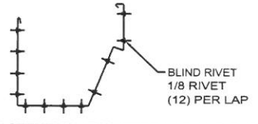
RIVET LOCATIONS AT DOWNSPOUT LAP OR ELBOW — GT04 / AA

EAVE	DOWNSPOUTS	DOWNSPOUT CLIPS (FDC2)
10'	1 PC. FDS-14.4 & 1 PC. FDE2	2
12'	1 PC. FDS-14.4 & 1 PC. FDE2	2
14'	1 PC. FDS-14.4 & 1 PC. FDE2	3
16'	1 1/2 PC. FDS-14.4 & 1 PC. FDE2	3
18'	1 1/2 PC. FDS-14.4 & 1 PC. FDE2	4
20'	1 1/2 PC. FDS-14.4 & 1 PC. FDE2	4
22'	1 1/2 PC. FDS-14.4 & 1 PC. FDE2	4
24'	2 PC. FDS-14.4 & 1 PC. FDE2	5
26'	2 PC. FDS-14.4 & 1 PC. FDE2	5
28'	2 PC. FDS-14.4 & 1 PC. FDE2	6
30'	2 1/2 PC. FDS-14.4 & 1 PC. FDE2	6
32'	2 1/2 PC. FDS-14.4 & 1 PC. FDE2	6
34'	2 1/2 PC. FDS-14.4 & 1 PC. FDE2	7
36'	2 1/2 PC. FDS-14.4 & 1 PC. FDE2	7
38'	3 PC. FDS-14.4 & 1 PC. FDE2	8
40'	3 PC. FDS-14.4 & 1 PC. FDE2	8

DOWNSPOUT SCHEDULE — GT06 / AA



GUTTER LAP



FASTENERS AT GUTTER LAP AND ENDCAP

GUTTER LAP AND GUTTER ENDCAP FASTENER DETAIL — GT07 / AA

NOT FOR CONSTRUCTION

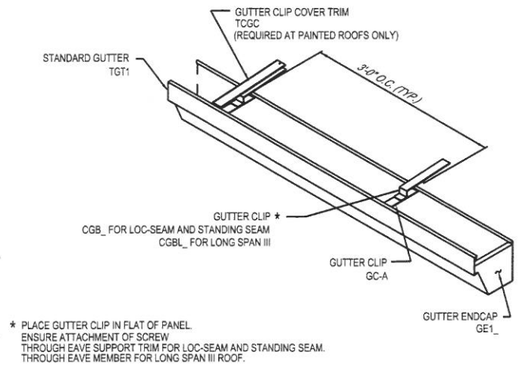
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-009

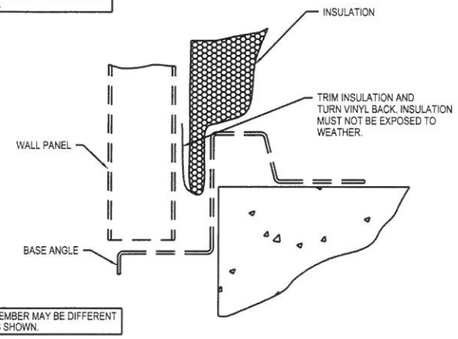


* PLACE GUTTER CLIP IN FLAT OF PANEL.
ENSURE ATTACHMENT OF SCREW
THROUGH EAVE SUPPORT TRIM FOR LOC-SEAM AND STANDING SEAM.
THROUGH EAVE MEMBER FOR LONG SPAN III ROOF.

GUTTER CLIP PLACEMENT DETAIL

GT18A
AA

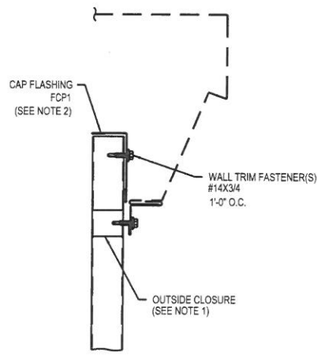
SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE PROPER ERECTION PROCEDURES FOR ALL JOBS.



NOTE: BASE MEMBER MAY BE DIFFERENT FROM WHAT IS SHOWN.

SUGGESTED INSULATION DETAIL AT WALL PANEL BASE

IN02
AA



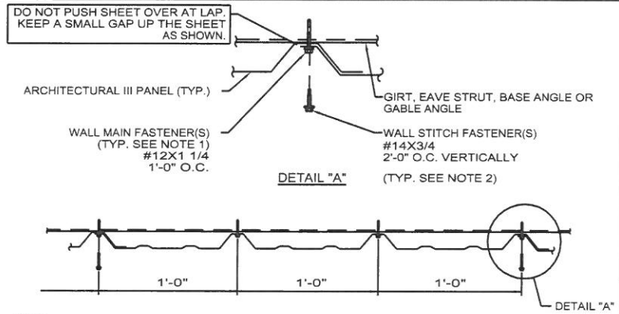
NOTE:
1. OUTSIDE CLOSURE, AOLI/AVPO/LOAI REQUIRED FOR BUILDING SLOPES 1 1/2 : 12 OR LESS
2. CAP FLASHING, FCP1 REQUIRED FOR BUILDING SLOPES GREATER THAN 1 1/2 : 12

PANEL CLOSURE DETAIL AT RAKE

ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALLS

RA01
AB

DO NOT PUSH SHEET OVER AT LAP. KEEP A SMALL GAP UP THE SHEET AS SHOWN.



NOTE:
1. WALL FASTENER(S) REQUIRED AT SIDEWALL AND ENDWALL GIRTS, BASE ANGLE, EAVE STRUT AND GABLE ANGLE. FASTENER LAYOUT SHOWN ALSO APPLIES FOR LINER AND PARTITION PANELS.
2. PANEL STITCH FASTENER(S) AS SHOWN REQ'D. ONLY AT PANEL SIDELAPS OR AT FLASHING LAPS AND FLASHING TO PANEL CONNECTIONS.

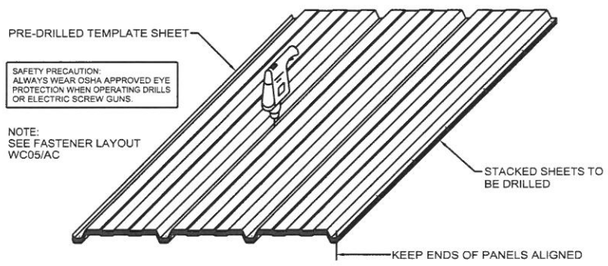
FASTENER LAYOUT

ARCHITECTURAL III WALLS

WC05
AC

GOOD ALIGNMENT OF THE FASTENERS WILL GIVE A PROFESSIONAL APPEARANCE OF SHEET INSTALLATION. THIS CAN BE ACCOMPLISHED BY PRE-DRILLING HOLES IN THE SHEETS AT IDENTICAL LOCATIONS. UP TO 15 SHEETS CAN BE STACKED TOGETHER AND DRILLED USING A TEMPLATE SHEET. USE 1/8" OR 5/32" DIAMETER DRILL BIT FOR SHEET TO STRUCTURAL FASTENERS. AND A 1/4" DIAMETER BIT FOR THE SIDELAP CLEARANCE HOLES. CLEAN METAL FILINGS OFF PANEL SURFACES AFTER DRILLING TO AVOID RUST STAINS.

THE TEMPLATE SHEET SHOULD BE LAID OUT IN ACCORDANCE WITH THE BUILDING ERECTION DRAWINGS. SINCE PRE-DRILLING WILL "HAND" THE SHEETS IT IS NECESSARY TO SELECT THE END OF THE BUILDING FROM WHICH THE SHEETING IS TO BEGIN. PRIOR TO DRILLING THE TEMPLATE SHEET IT SHOULD BE CHECKED FOR PROPER HOLE LOCATIONS AGAINST THE BUILDING FRAMEWORK. BE SURE THERE IS NO SAG IN THE PURLINS OR GIRTS.

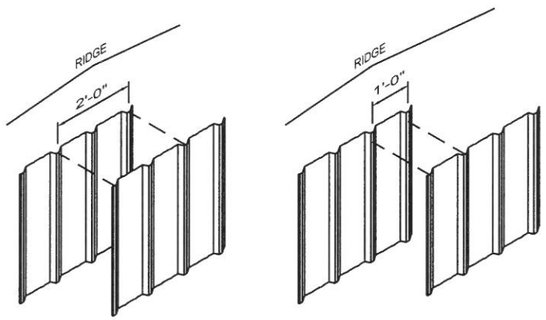


PRE-DRILLING FOR FASTENER LOCATIONS

ARCHITECTURAL III WALL PANELS

WC08
AC

BACKLAPPING THE PANELS 1' OR 2' IS ROUTINELY DONE TO MATCH PANEL COVERAGE WITH THE BUILDING WIDTH AND LENGTH. ON THE SIDEWALL THIS IS DONE WITH THE LAST PANEL INSTALLED. ON THE ENDWALL THIS IS DONE AT THE RIDGE AND WILL BE MARKED ON THE ERECTION DRAWINGS.

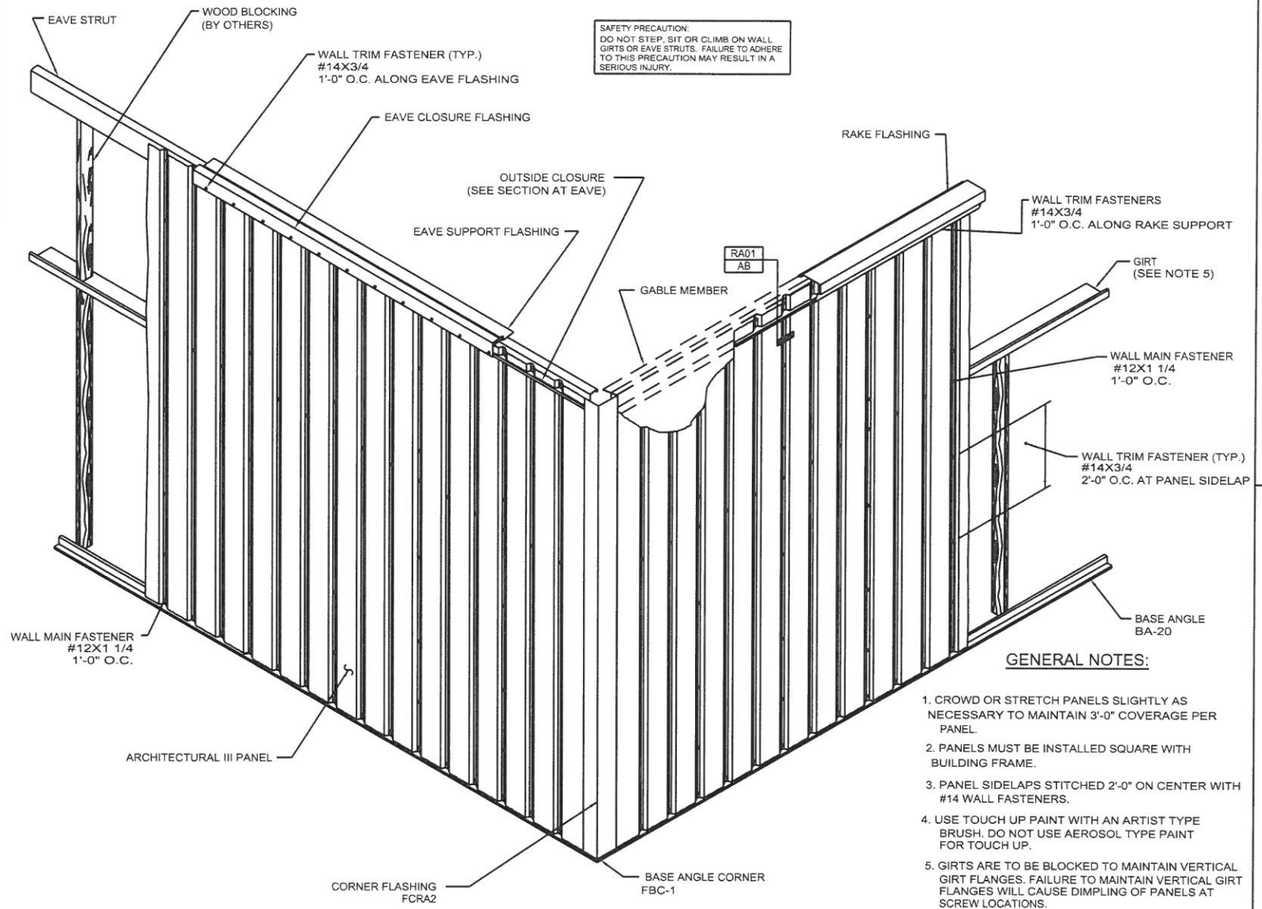


NOTE:
ENDWALL PANELS SHOWN, SIDEWALLS PANELS SIMILAR
LONG SPAN III SHOWN, ARHITECTURAL III & ARCHITECTURAL "V" RIB SIMILAR.

PANEL BACKLAPPING

ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALLS

WC75
AB



SAFETY PRECAUTION:
DO NOT STEP, SIT OR CLIMB ON WALL GIRTS OR EAVE STRUTS. FAILURE TO ADHERE TO THIS PRECAUTION MAY RESULT IN A SERIOUS INJURY.

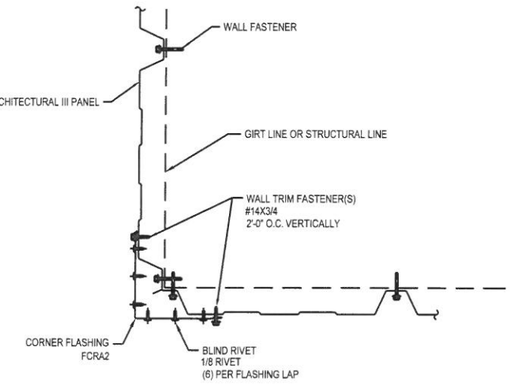
GENERAL NOTES:

1. CROWD OR STRETCH PANELS SLIGHTLY AS NECESSARY TO MAINTAIN 3'-0" COVERAGE PER PANEL.
2. PANELS MUST BE INSTALLED SQUARE WITH BUILDING FRAME.
3. PANEL SIDELAPS STITCHED 2'-0" ON CENTER WITH #14 WALL FASTENERS.
4. USE TOUCH UP PAINT WITH AN ARTIST TYPE BRUSH. DO NOT USE AEROSOL TYPE PAINT FOR TOUCH UP.
5. GIRTS ARE TO BE BLOCKED TO MAINTAIN VERTICAL GIRT FLANGES. FAILURE TO MAINTAIN VERTICAL GIRT FLANGES WILL CAUSE DIMPLING OF PANELS AT SCREW LOCATIONS.

TYPICAL CORNER DETAIL AT PANELS

ARCHITECTURAL III WALLS

WC20
AC



CORNER TRIM DETAIL (OUTSIDE)

ARCHITECTURAL III WALLS

WC21
AC

NOT FOR CONSTRUCTION

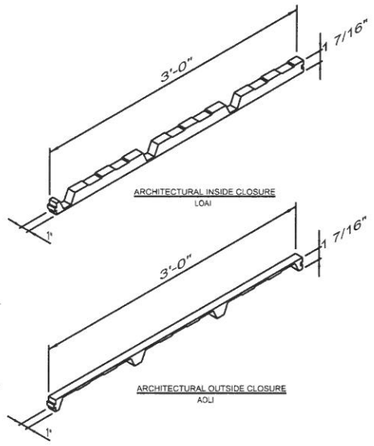
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-010



WALL FASTENERS

DESCRIPTION
#12 X 1 1/4
SELF DRILLING CARBON STEEL,
HEX HEAD FASTENER WITHOUT WASHER
MARK NO. #12X1 1/4 SDHH

APPLICATION
UNEXPOSED FASTENER CONNECTIONS.
CLIPS AT OVERHEAD DOORS,
WALK DOORS, ETC.

DESCRIPTION
#12 X 1 1/4
SELF DRILLING (COLOR MATCHING),
HEX HEAD FASTENER WITHOUT WASHER
MARK NO. #12X1 1/4 SDHH

APPLICATION
SHEET TO STRUCTURAL CONNECTIONS
(BASE & GABLE ANGLE, GIRTS, EAVE
STRUTS, ETC.)

DESCRIPTION
#14 X 3/4
SELF DRILLING (COLOR MATCHING),
HEX HEAD FASTENER WITHOUT WASHER
MARK NO. #14X3/4 SDHH

APPLICATION
PANEL SIDELAP CONNECTIONS,
FLASHING TO PANEL CONNECTIONS AND
OTHER SHEET TO SHEET CONNECTIONS

MISCELLANEOUS FASTENERS

DESCRIPTION
1/8 BLIND RIVET
MARK NO. 1/8 RIVET

APPLICATION
(COLOR MATCHING)
FLASHING LAPS AND FLASHING
TO PANEL CONNECTIONS

DESCRIPTION
3/16 DIAMETER RIVET WITH WASHER
MARK NO. SRV-1

APPLICATION
SIDELIGHT SIDELAP CONNECTIONS

SPECIAL CONDITION FASTENERS

DESCRIPTION
#12 X 1 1/4 TEK4
SELF DRILLING CARBON STEEL,
HEX HEAD FASTENER WITHOUT WASHER
MARK NO. #12X1 1/4 SDHHT4

APPLICATION
STEEL THICKNESS GREATER THAN 12 GA.
AND UP TO AND INCLUDING 1/4".
FIELD STRUCTURAL ATTACHMENTS

DESCRIPTION
#12 X 1 1/2 TEK5
SELF DRILLING CARBON STEEL,
HEX HEAD FASTENER WITHOUT WASHER
MARK NO. #12X1 1/2 SDHHT5

APPLICATION
STEEL THICKNESS GREATER THAN 1/4"
AND UP TO AND INCLUDING 1/2"
FIELD STRUCTURAL ATTACHMENTS

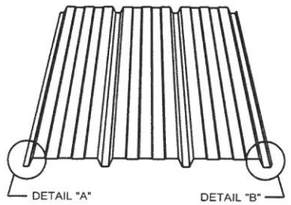
DESCRIPTION
#10 X 1 1/2
SELF TAPPING CARBON STEEL,
HEX HEAD FASTENER WITH WASHER
MARK NO. #10X1 1/2 STHHW

APPLICATION
PANELS TO WOOD STRUCTURE AT
UNEXPOSED FASTENER CONNECTIONS
(1/4" HEX HEAD SOCKET REQUIRED)

NOTE: ALL HEX HEAD SIZES SHALL REQUIRE A 5/16" HEX SOCKET UNLESS NOTED.

BASIC PARTS AND PIECES
ARCHITECTURAL III WALL PANELS

WC61
AC

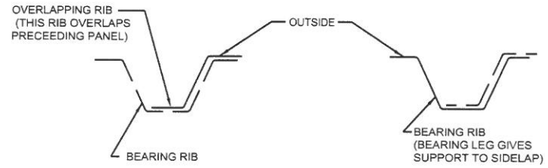


ARCHITECTURAL WALL PANEL

SAFETY PRECAUTION:
PANELS ARE SLIPPERY DUE TO OIL OR WAX APPLIED DURING MANUFACTURING FOR PROTECTION AGAINST WEATHER DAMAGE.

ARCHITECTURAL PANEL IDENTIFICATION MARK NUMBER

EXAMPLE A3P 24 – 30.0
- 30'-0" IN LENGTH
- 24 GAGE (22, 24, 26, & 29 GAGE AVAILABLE)
- ARCHITECTURAL

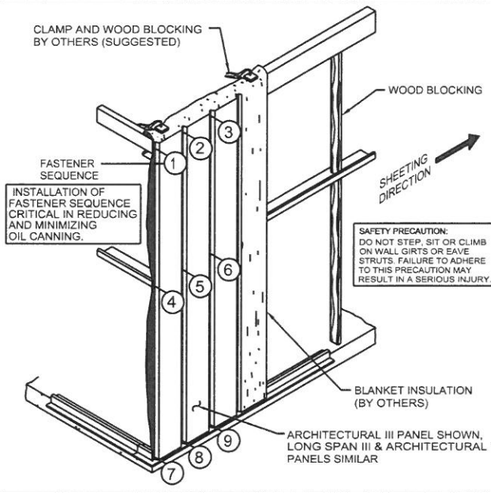


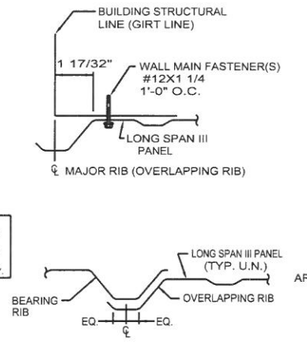
ERECTION OF THE ARCHITECTURAL PANEL REQUIRES THAT THE PROPER DIRECTION OF ITS APPLICATION BE MADE. THE DESIGN OF THE PANEL INCORPORATES A BEARING LEG INTO ITS LEADING EDGE WHICH PROVIDES SUPPORT FOR PROPER NESTING OF THE OVERLAPPING RIB OF THE NEXT PANEL. THE INSTALLATION OF THE PANELS (SHOWN AT LEFT) PROCEEDS FROM LEFT TO RIGHT. HOWEVER, UNLESS FIELD CIRCUMSTANCES DICTATE OTHERWISE, INSTALLATION OF PANELS CAN PROCEED FROM EITHER LEFT TO RIGHT OR RIGHT TO LEFT AS LONG AS THE OVERLAPPING RIB IS LAPPED OVER THE BEARING RIB.

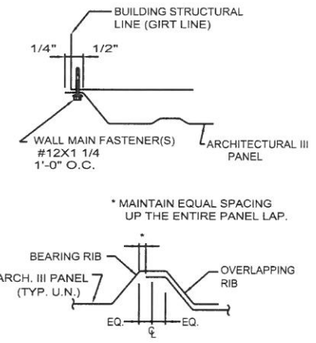
NOTE:
ALUMINUM-COATED PANELS ARE SUBJECT TO STAINING DUE TO RESIDUE FROM BARE HANDS. ALUMINUM-COATED LINER PANELS THAT INCLUDE AN ACRYLIC FINISH DO HAVE ADDITIONAL PROTECTION BUT IT IS LIMITED AND DETERIORATES IN A RELATIVELY SHORT TIME MAKING THAT PANEL ALSO SUBJECT TO STAINING FROM BARE HANDS. IT IS RECOMMENDED THAT GLOVES BE USED FOR ALL HANDLING OF BOTH PRODUCTS AND THAT APPLICATION OF THESE PRODUCTS BE LIMITED TO AREAS NOT EXPOSED TO TOUCH.

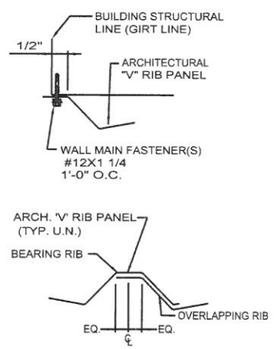
PANEL MARKING AND SIDELAP DETAILS
ARCHITECTURAL WALLS

WC63
AC









1/8"Ø HOLE

LONG SPAN III PANEL LAP AND PRE-DRILLED HOLE DETAIL

LONG SPAN III PANEL SHOWN, MULTI RIB SIMILAR

1/8"Ø HOLE

ARCHITECTURAL III PANEL LAP AND PRE-DRILLED HOLE DETAIL

PRE-DRILLING OVERLAPPING RIB FOR STITCH SCREWS. AS SHOWN WILL INSURE ALL SCREWS ARE ALIGNED. NOTE! TO AVOID DIMPLING DO NOT OVER TORQUE SCREWS.

1/8"Ø HOLE

ARCHITECTURAL "V" RIB PANEL LAP AND PRE-DRILLED HOLE DETAIL

PRIOR TO WALL SHEETING ALIGN WALL GIRTS AS SHOWN IN GE03/AA.

INSULATION (BY OTHERS) IF REQUIRED, SHOULD BE INSTALLED PRIOR TO THE PANEL INSTALLATION AND CONTINUED IN THE SAME MANNER AS SHEETING PROGRESSES ALONG THE WALL.

INSTALL THE FIRST WALL PANEL AT THE BUILDING CORNER AND ALIGN THE PANEL RIB WITH THE STRUCTURAL OR GIRT LINE AS SHOWN. IT IS EXTREMELY IMPORTANT THAT THE FIRST WALL PANEL BE INSTALLED PLUMB. USE A SPIRIT LEVEL OR TRANSIT ON EACH PANEL. IT IS RECOMMENDED THAT A SMALL WEDGE/SPACER BE PLACED UNDER THE PANEL AT THE BASE ANGLE. APPLY THE WALL PANEL OVER THE INSULATION AND INSTALL WALL FASTENERS AT ALL STRUCTURAL WALL MEMBERS BEGINNING WITH THE TOP MOST ATTACHMENT AND PROCEEDING DOWNWARD (SEE SUGGESTED NUMERICAL FASTENER SEQUENCE). REMOVE THE WEDGE/SPACER BEFORE ATTACHING PANEL AT BASE ANGLE. DO NOT ERECT PANEL BY ATTACHING AT BOTH ENDS WORKING TO THE MIDDLE OF THE PANEL. THIS PROCEDURE PROMOTES "OIL CANNING."

INSTALL THE NEXT PANEL BY SIDELAPPING THE RIB WITH THE FIRST PANEL (AS SHOWN). CHECK FOR PLUMBNESS AND FASTEN THIS PANEL IN THE SAME MANNER AS THE FIRST PANEL. CONTINUE TO SHEET THE WALL USING THIS PROCEDURE. CUT PANELS AT DOORS, WINDOWS, LOUVERS AND OTHER WALL OPENINGS AS REQUIRED.

SHEETING CAN USUALLY BE STARTED FROM EITHER END OF THE BUILDING AND CONTINUED EITHER IN THE DIRECTION OF LEFT TO RIGHT OR RIGHT TO LEFT AS SHOWN. HOWEVER BY APPLYING THE SHEETS TOWARD THE DIRECTION OF THE PREVAILING VIEW, THE OVERLAP LINE AT THE SIDELAP OF EVERY PANEL WILL BE LESS VISIBLE. THE SAME PRINCIPLE CAN BE APPLIED WHERE HEAVY PREVAILING WINDS OCCUR BY PLACING THE LAPPED EDGE ON THE LEEWARD SIDE (DOWNWARD SIDE) OF THE PANEL RIB.

WALL PANEL INSTALLATION
LONG SPAN III, ARCHITECTURAL III OR ARCHITECTURAL "V" RIB WALL PANELS

WC64
AB

ERECTION NOTES:

1. ALL AREAS WHERE MASTIC IS TO BE APPLIED SHOULD BE WIPED CLEAN WITH A MILD DETERGENT OR AN ALL PURPOSE CLEANER BEFORE MASTIC APPLICATION. THIS WILL INSURE A GOOD SEALING SURFACE AND IMPROVE WEATHER TIGHTNESS.
2. THE BLANKET INSULATION MANUFACTURER RECOMMENDS THAT DOUBLE SIDED TAPE BE USED TO SECURE THE INSULATION TO THE EAVE. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE INSTALLATION OR ATTACHMENT OF THE INSULATION. ADDITIONAL ATTACHMENTS (BY OTHERS) MAY BE REQUIRED.
3. ALL EXPOSED FASTENERS SHOULD PENETRATE THE SEALANT FOR THE MOST WEATHER TIGHT CONNECTION IN WALL AREAS WHERE APPLICABLE.
4. THE ARCHITECTURAL III PANEL IS DESIGNED FOR WALL APPLICATIONS ONLY AND SHOULD NEVER BE UTILIZED IN THE ROOF FOR PURPOSES OF PROVIDING A ROOF SYSTEM FOR BUILDINGS. THE INVERTED RIBS INCORPORATED INTO ITS DESIGN PRODUCE SMOOTH SHADOW LINES AND SEMI-CONCEALED FASTENERS. ALTHOUGH SHEETING CAN USUALLY BEGIN FROM EITHER END OF THE BUILDING, APPLICATION OF THIS PANEL IS DIRECTIONAL. PROPERLY INSTALLED, THE LAP EDGES OF THE ARCHITECTURAL III PANEL HAVE MINIMUM VISIBILITY.
5. WHEN FIELD CUTTING PANELS OR TRIM DO NOT USE ABRASIVE SAWS OR OTHER CUTTING METHODS WHICH PRODUCE HOT METAL PARTICLES OR BURN THE CUT EDGES. THESE METHODS WILL DAMAGE THE PAINTED AND GALVALUME FINISH AND VOID ANY WARRANTIES. USE DOUBLE CUT SHEARS, NIBBLERS OR OTHER CUTTING DEVICES WICH DO NOT PRODUCE HOT METAL PARTICLES OR BURNED EDGES.

ERECTION NOTES
ARCHITECTURAL III WALLS

WC91
AC

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

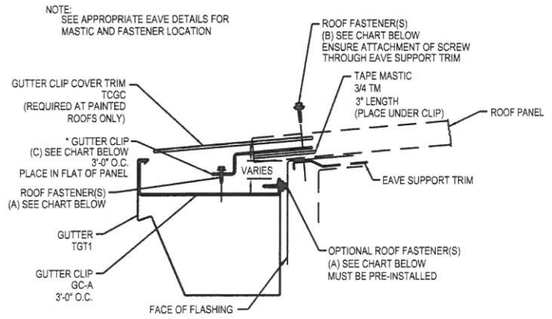
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

NOT FOR CONSTRUCTION

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

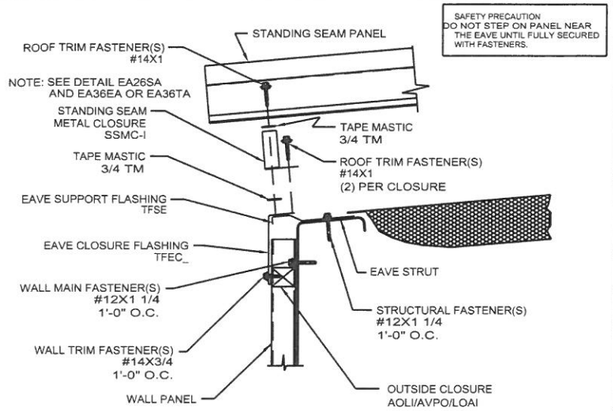
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-011



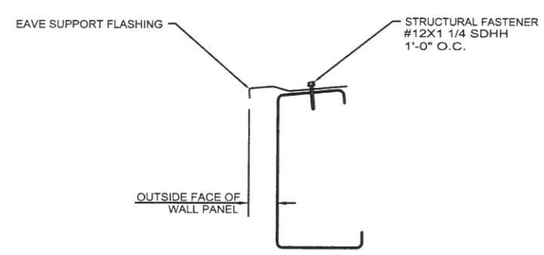
ROOF PANEL	ROOF FASTENER (A) (1) PER CLIP	ROOF FASTENER (B) (1) PER CLIP	GUTTER CLIP (C)
LOC SEAM (LOC)	#14X1	#14X1	CGB_
STANDING SEAM (S2P, S3P)	#14X1	#14X1	CGB_

STANDARD GUTTER DETAIL — EA01 AA



SECTION AT EAVE WITHOUT THERMAL BLOCKS — EA04 SB

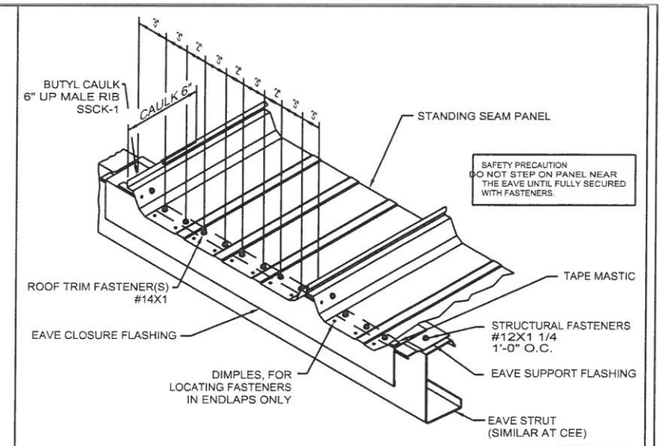
STANDING SEAM ROOF / ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALLS



NOTE:
EAVE SUPPORT FLASHING NOT REQUIRE AT LONG SPAN III ROOFS.

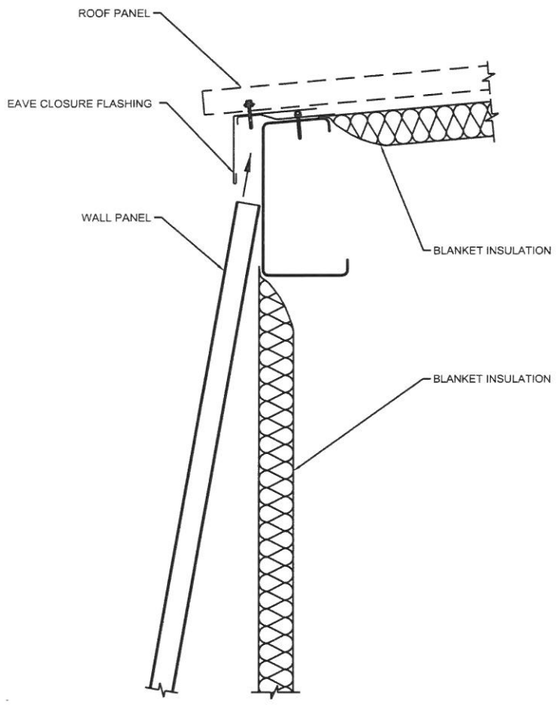
EAVE SUPPORT FLASHING ATTACHMENT — EA10 AA

ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALL PANELS
ALL ROOF PANELS

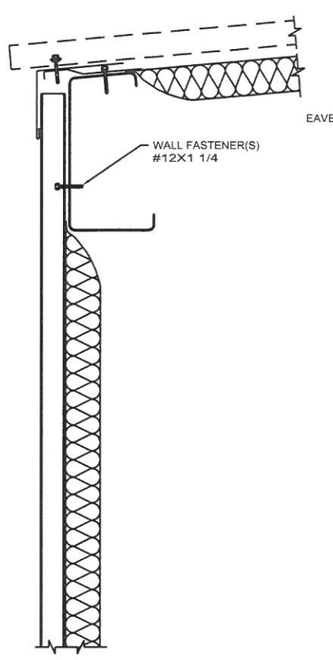


FASTENER INSTALLATION AT EAVE STRUT — EA26 SA

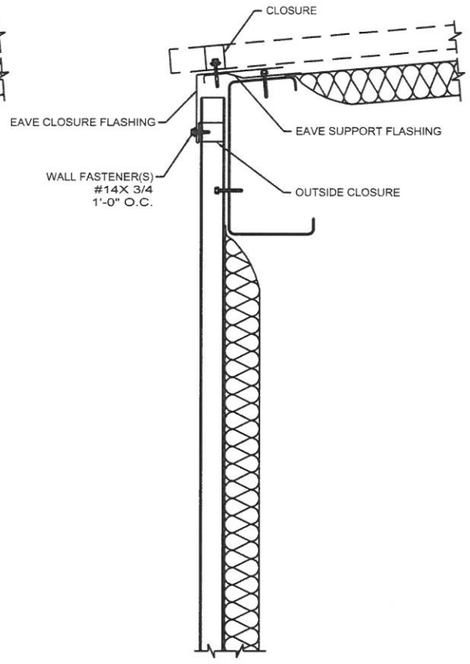
STANDING SEAM ROOF



STEP 1, SEE INSTRUCTION NO. 5
SEE NOTE



STEP 2, SEE INSTRUCTION NO. 5
SEE NOTE



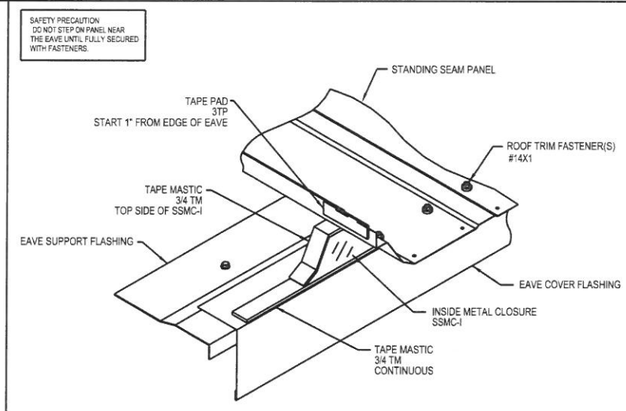
STEP 3, SEE INSTRUCTION NO. 6
SEE NOTE

INSTRUCTIONS

1. PRIOR TO SHEETING THE ROOF OR WALL, THE STRUCTURAL FRAMING MUST BE SQUARE AND PLUMB.
2. BLOCK OR SUPPORT THE GIRTS AND EAVE STRUT TO PREVENT THE SUB FRAMING FROM SAGGING. BLOCKING MUST BE USED BETWEEN ENDWALL COLUMNS AND SIDEWALL COLUMNS AND SHOULD REMAIN IN PLACE UNTIL ALL WALL SHEETS ARE INSTALLED.
3. PLACE THE EAVE SUPPORT FLASHING ON THE EAVE STRUT, LEAVING AN 1 1/2" OPENING BETWEEN THE OUTSIDE FACE OF THE EAVE STRUT AND THE INSIDE OF THE EAVE SUPPORT FLASHING. (A 2 X 4 WORKS WELL TO OBTAIN THIS SPACE). THE 1 1/2" OPENING WILL ACCOMMODATE THE ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALL PANELS. AN OPENING OF 3 1/8" MUST BE MAINTAINED FOR SHADOW PANELS. SECURE THE EAVE SUPPORT FLASHING WITH #12 X 1 1/4" SELF DRILL FASTENERS LOCATED 1'-0" O.C. THESE ARE PERMANENT FASTENERS AND MUST BE INSTALLED. REMOVE ANY SPACERS USED FROM BEHIND THE EAVE SUPPORT FLASHING. INSTALL EAVE CLOSURE FLASHING (TFEC_). EAVE CLOSURE IS HELD INPLACE BY ROOF FASTENERS AT EAVE AND MUST BE INSTALLED WITH ROOF PANEL.
4. INSTALL THE ROOF PANELS ACCORDING TO THE APPROPRIATE MANUAL AND/OR ERECTION DRAWINGS. REMEMBER THE PANEL OVERHANG DIMENSION IS USUALLY FROM THE FACE OF THE EAVE STRUT AND SHOULD BE MEASURED AS REQUIRED BY THE ERECTION DRAWINGS.
5. WALL PANELS AND INSULATION MAY NOW BE INSTALLED. SECURE THE INSULATION TO THE FACE OF THE EAVE STRUT AND BASE ANGLE ACCORDING TO MANUFACTURERS RECOMMENDATIONS. SLIDE THE WALL PANEL BETWEEN THE EAVE STRUT AND EAVE CLOSURE FLASHING, PLUMB THE PANEL AND SECURE WITH THE WALL FASTENERS. FASTENERS MUST BE INSTALLED BELOW THE EAVE TRIM.
6. INSTALL THE PANEL CLOSURES AND SECURE THE EAVE CLOSURE FLASHING TO THE WALL PANELS.

NOTE:
SHADOW PANEL INSTALLATION SHALL VARY FROM THE DETAILS SHOWN. SEE THE SHADOW PANEL ERECTION DRAWINGS FOR FASTENER AND FLASHING DETAILS.

ROOF SHEETING PRIOR TO WALL SHEETING INSTRUCTIONS — EA11 AA



LOW EAVE CAULK DETAIL — EA27 SA

STANDING SEAM ROOF

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

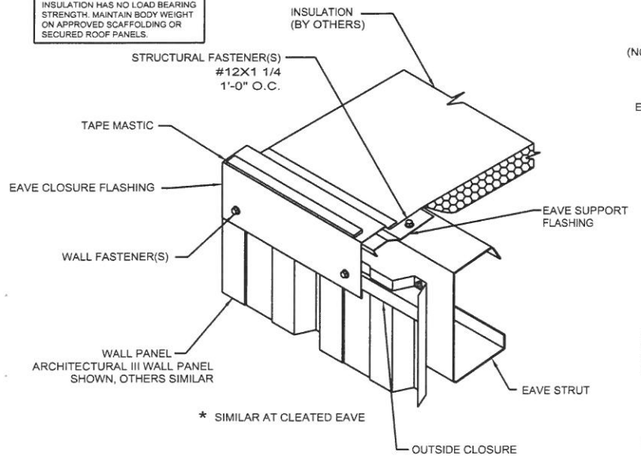
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

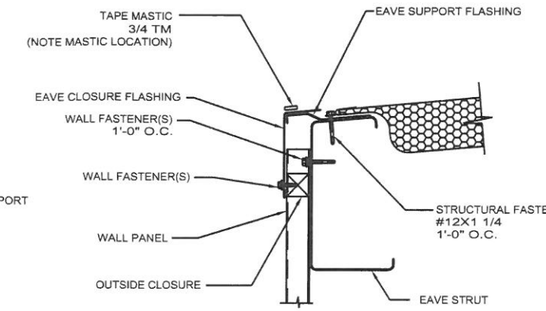
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-012

SAFETY PRECAUTION
INSULATION HAS NO LOAD BEARING STRENGTH. MAINTAIN BODY WEIGHT ON APPROVED SCAFFOLDING OR SECURED ROOF PANELS.

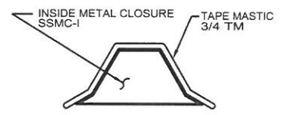




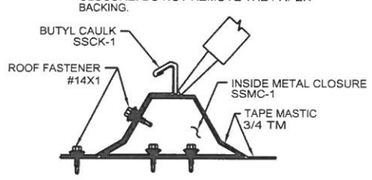
PRIOR TO THE INSTALLATION OF THE FIRST ROOF PANEL, THE SIDEWALL AND ENDWALL SHEETING SHOULD HAVE BEEN COMPLETED AND THE ROOF INSULATION STARTED. START A LINE OF 3/4"X3/16" TAPE MASTIC DOWN THE EAVES AS SHOWN ABOVE. LEAVE THE PAPER BACKING ON THE TAPE UNTIL THE ROOF PANEL IS READY TO BE SECURED.

MASTIC AND INSULATION APPLICATION AT EAVE — EA28
WITHOUT THERMAL SPACERS — AB

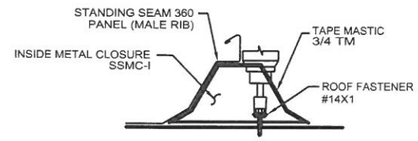
AS YOU ARE SETTING EACH PANEL, INSTALL THE EAVE CLOSURE AS PER THE FOLLOWING INSTRUCTIONS



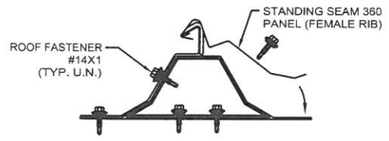
STEP 1. APPLY TAPE MASTIC TO TOP SIDE OF METAL CLOSURE. DO NOT REMOVE THE PAPER BACKING.



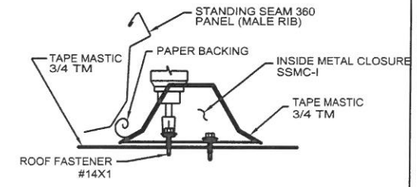
STEP 4. INSTALL EAVE FASTENERS IN THE FLAT OF THE PANEL IN THE CORRECT PATTERN. INSTALL A FASTENER THROUGH THE SIDE OF THE CLOSURE AS SHOWN ABOVE. APPLY CAULKING TO THE INSIDE FACE OF THE SEAM OVER THE CLOSURE.



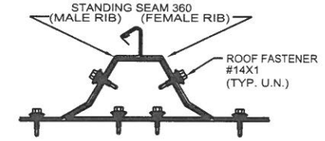
STEP 2. POSITION CLOSURE UNDER MALE RIB AND INSTALL THE OUTSIDE FASTENER THROUGH THE PRE-PUNCHED HOLES.



STEP 5. INSTALL THE NEXT PANEL RUN AND REPEAT STEPS 1 - 4. BE SURE TO INSTALL A ROOF FASTENER INTO THE SIDE OF THE NEXT PANEL AS SHOWN ABOVE.

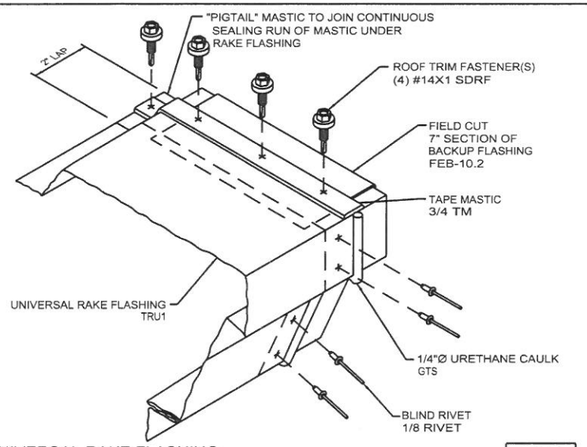


STEP 3. LIFT PANEL AND INSTALL THE INSIDE FASTENER. REMOVE THE PAPER FROM THE MASTIC AND PRESS THE PANEL FIRMLY IN PLACE.



A PROPERLY COMPLETED RIB CLOSURE

INSIDE METAL CLOSURE INSTALLATION — EA36
STANDING SEAM 360 — TA



UNIVERSAL RAKE FLASHING — FL02
ALL ROOF PANELS — AA

REF. DETAILS FL06AA, RC35AAA & RC35WAA

ROOF FLASHING LAPS AND END TRANSITIONS EXPOSED TO ROOF CONDITIONS

1. ROOF FLASHING LAPS SHALL BE SEALED WITH 3/4 X 3/16 TAPE MASTIC (3/4 TM).
2. FIELD CUT FEB-10.2 BACKUP FLASHING TO REINFORCE FLASHING ENDLAPS AND TERMINATIONS. INSTALL FEB AS SHOWN IN CONNECTION DETAILS (INBOARD) OF MASTIC, CLOSURES AND SUPPORT MEMBERS.

> EXTRA CARE SHOULD BE TAKEN:
> DO NOT EXTEND FEB INTO THE MASTIC
> DO NOT EXTEND FEB BEYOND THE BUILDING ENVELOPE
>
> FEB EXTENDED BEYOND THE BUILDING ENVELOPE INTERUPTS THE GASKET CREATED BY THE CONTINUOUS MASTIC APPLICATION.
>
> ADJUST FIELD CUT FEB LENGTHS AS REQUIRED.

3. STANDARD FASTENER SPACING AS SHOWN ON CONNECTION DETAILS WILL NEED TO VARY TO ENSURE A COMPLETE GASKET SEAL AT SOME LOCATIONS. INCLUDING (BUT NOT LIMITED TO) THE FOLLOWING.
   - DECREASE STITCH FASTENER SPACING FROM 6" O.C. TO 3" O.C. AT FLASHING LAPS AND TRANSITIONS.
     EXAMPLES: RIDGE FLASHING TO RAKE CAP
     HIP FLASHING TO TRCZ AT EAVE
     RIDGE CAP TO PEAK BOX
   - AT ALL EXPOSED ROOF FLASHINGS ENDLAPS INSTALL A STITCH FASTENER THROUGH THE UPPER FLASHING 2 1/2" FROM THE ENDLAP. (SEE DETAIL RC35WAA)
4. VALLEY GUTTER LAPS SHALL BE SEALED WITH 2 X 3/16 TAPE MASTIC (2 TM) AND SHALL BE STITCHED WITH #14 ROOF FASTENERS 2" ON CENTER. QUANTITY WILL VARY WITH GUTTER SIZE.
5. PREDRILL 1/4"Ø HOLES AT UPPER AND LOWER FLASHING FOR #14 FASTENERS. DO NOT PREDRILL FEB BACKUP FLASHING.
6. FOR ROOF FLASHING LAPS NOT SHOWN IN DETAILS, THAT ARE EXPOSED TO ROOF CONDITIONS, USE THE FOLLOWING AS A GUIDE;
   - REINFORCE THE TOP SIDE OF ALL FLASHING END TRANSITIONS EXPOSED TO ROOF CONDITIONS USING #14 ROOF FASTENERS, 3" ON CENTER THROUGH MASTIC AND FIELD CUT FEB-10.2 (AS SPACE ALLOWS)

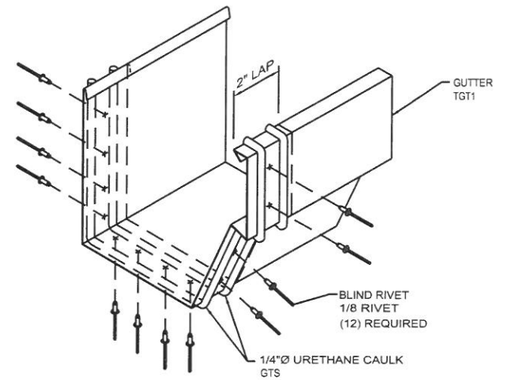
FLASHING LAPS NOT SHOWN AND NOT EXPOSED TO ROOF CONDITIONS

7. FOR FLASHING LAPS NOT SHOWN AND NOT EXPOSED TO ROOF CONDITIONS, USE THE FOLLOWING AS A GUIDE;
   - USE I/8 INCH BLIND RIVETS 3" ON CENTER.

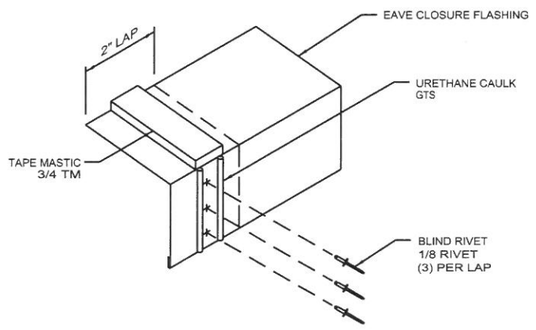
GENERAL REQUIREMENTS

8. ALL FLASHING LAPS SHALL BE TWO INCHES.

FLASHING LAPS AND TRANSITIONS - GENERAL REQUIREMENTS — FL06
AA

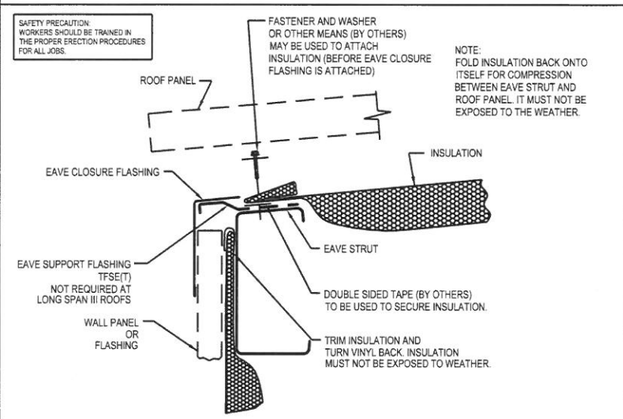


STANDARD GUTTER — FL09
AA

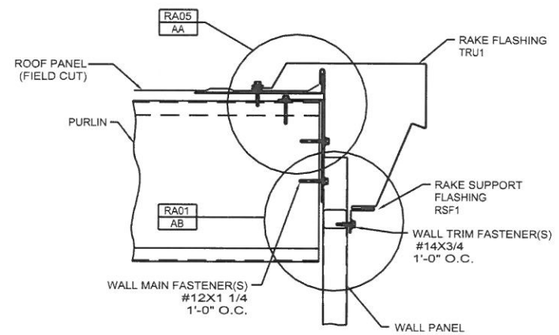


EAVE CLOSURE FLASHING — FL14
STANDARD FLASHING LAP — AA

SAFETY PRECAUTION:
WORKERS SHOULD BE TRAINED IN THE PROPER ERECTION PROCEDURES FOR ALL JOBS.



SUGGESTED INSULATION ATTACHMENTS AT EAVE — IN01
AA



UNIVERSAL RAKE DETAIL — RA02
LOC SEAM AND STANDING SEAM ROOF / ARCHITECTURAL III, ARCHITECTURAL "V" RIB OR LONG SPAN III WALLS — AA

NOT FOR CONSTRUCTION

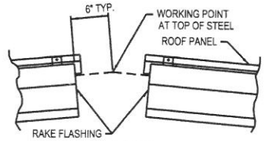
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

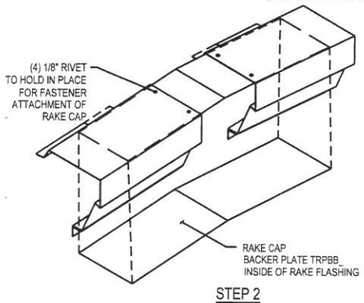
CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

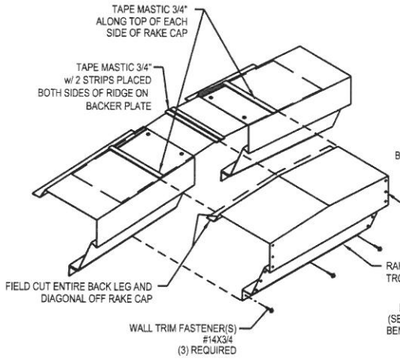
DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-013



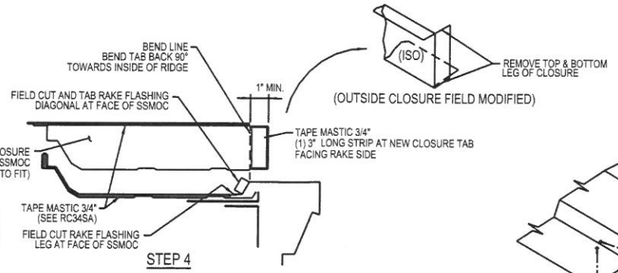
STEP 1



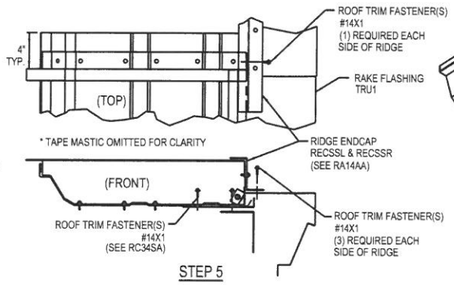
STEP 2



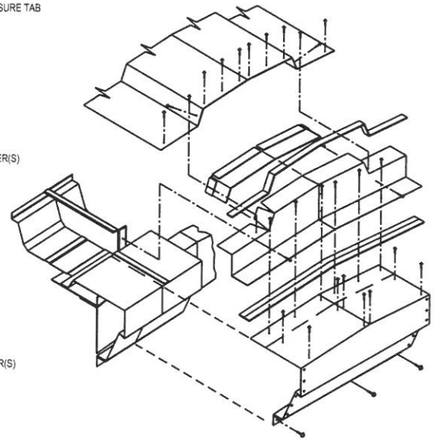
STEP 3

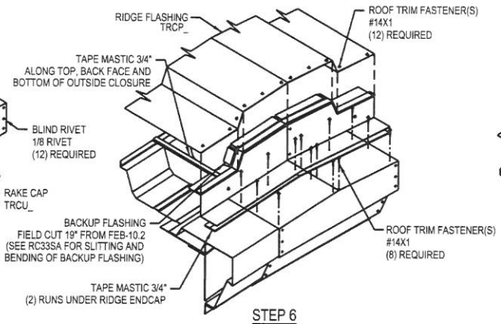


STEP 4

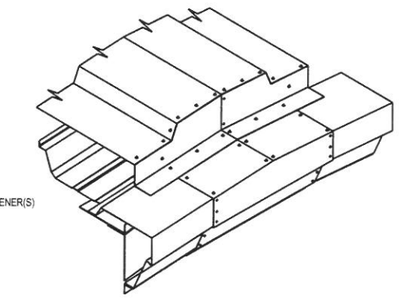


STEP 5



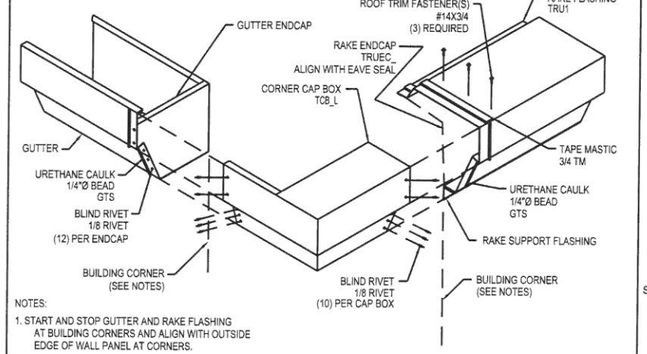


STEP 6



UNIVERSAL RAKE CAP INSTALLATION
STANDING SEAM ROOF

RA03 | SA



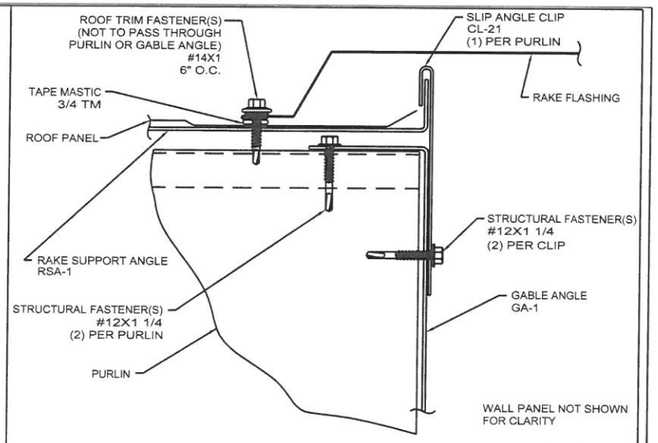
NOTES:

1. START AND STOP GUTTER AND RAKE FLASHING AT BUILDING CORNERS AND ALIGN WITH OUTSIDE EDGE OF WALL PANEL AT CORNERS.
2. THE FIRST 10 FEET OF THE RAKE FROM THE CORNER SHOULD BE TEMPORARILY ATTACHED TO ALLOW ADJUSTMENT WHEN INSTALLING THE CORNER BOXES. PERMANENTLY ATTACH THE RAKE AFTER CORNER BOXES ARE INSTALLED.

SAFETY PRECAUTION: WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.

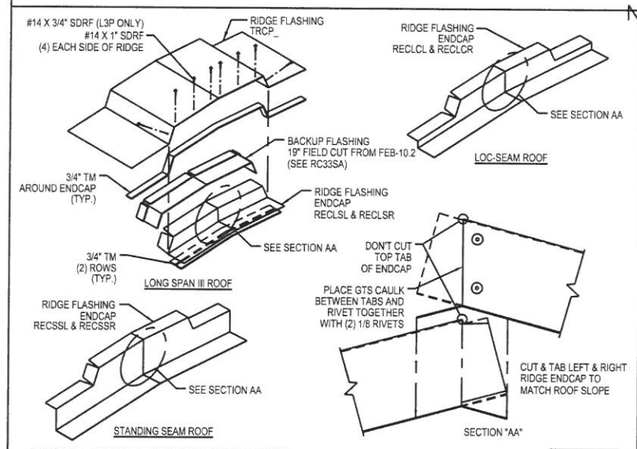
CORNER CAP BOX INSTALLATION
TYPICAL, ALL ROOF PANEL TYPES

RA04 | AA



UNIVERSAL RAKE DETAIL
EXPANDED VIEW OF RAKE CONNECTION

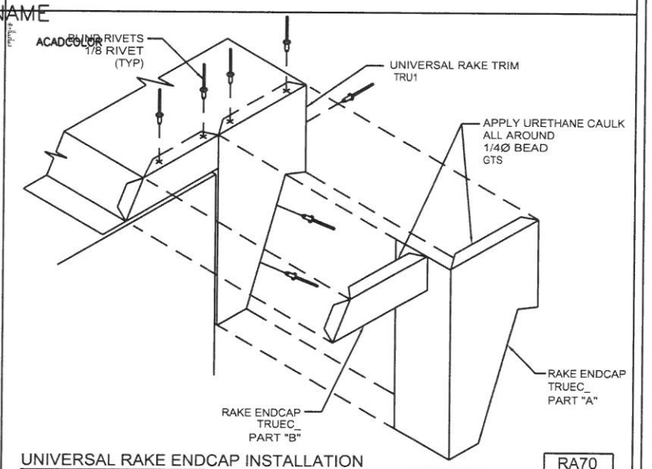
RA05 | AA



RIDGE FLASHING ENDCAP INSTALLATION
STANDING SEAM ROOF, LONG SPAN III & LOC SEAM

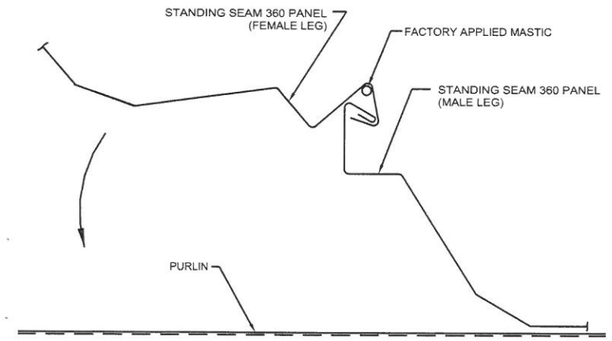
RA14 | AA

NAME



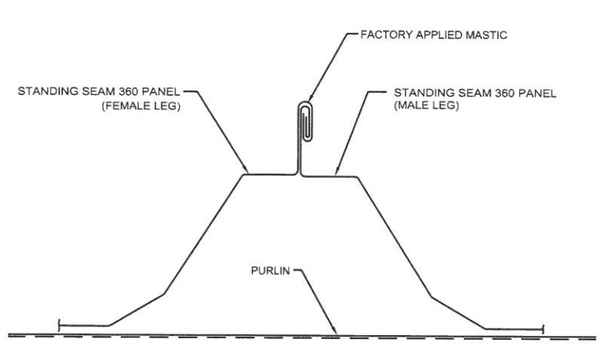
UNIVERSAL RAKE ENDCAP INSTALLATION
LEFT HAND SHOWN

RA70 | AA



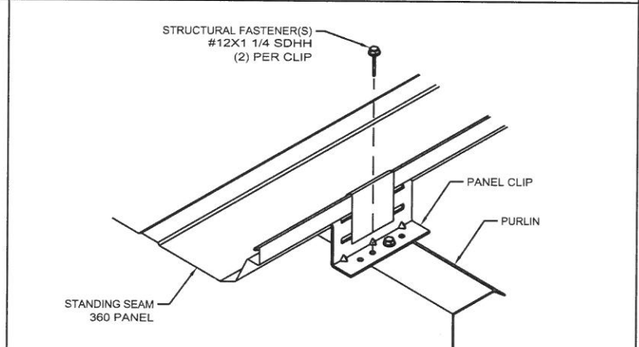
DETAIL AT SIDELAP
STANDING SEAM 360

RC01 | TA



DETAIL AT FINISHED SEAM
STANDING SEAM 360

RC05 | TA



HOOK TAB OF CLIP OVER MALE LEG OF PANEL AND ROTATE DOWN INTO POSITION. SECURE THE CLIP TO THE PURLIN WITH TWO #12X1 1/4 SDHH FASTENERS. A GAUGE SHOULD BE USED TO MAINTAIN PANEL MODULE.

TYPICAL CLIP ATTACHMENT TO PURLIN
STANDING SEAM 360

RC17 | TA

NOT FOR CONSTRUCTION

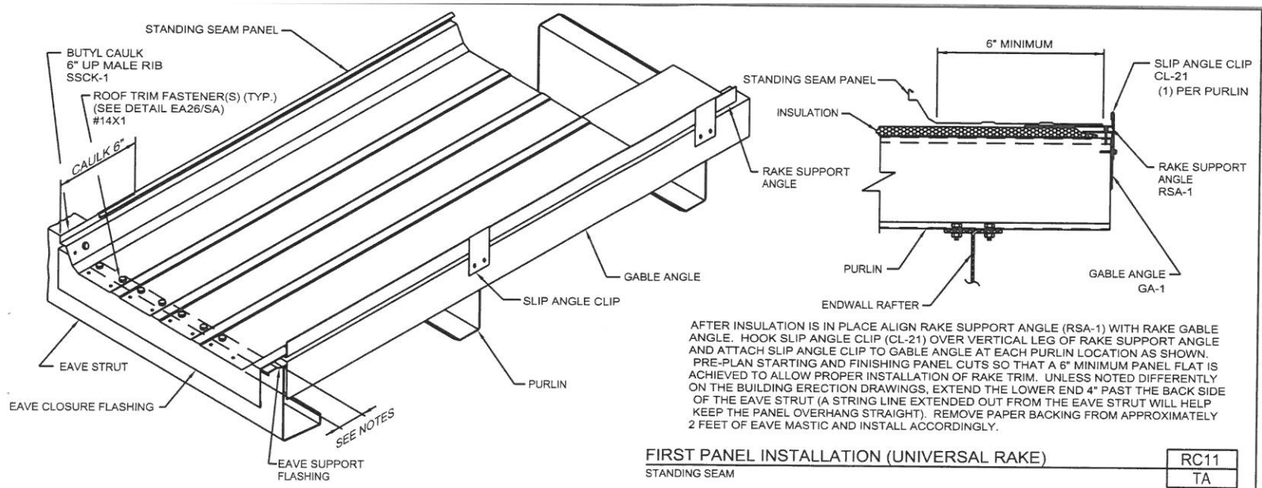
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA EXPRESS
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-014

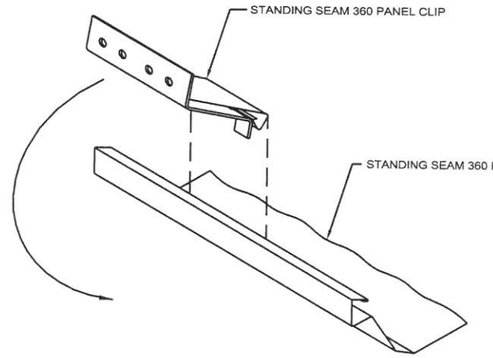


AFTER INSULATION IS IN PLACE ALIGN RAKE SUPPORT ANGLE (RSA-1) WITH RAKE GABLE ANGLE. HOOK SLIP ANGLE CLIP (CL-21) OVER VERTICAL LEG OF RAKE SUPPORT ANGLE AND ATTACH SLIP ANGLE CLIP TO GABLE ANGLE AT EACH PURLIN LOCATION AS SHOWN. PRE-PLAN STARTING AND FINISHING PANEL CUTS SO THAT A 6" MINIMUM PANEL FLAT IS ACHIEVED TO ALLOW PROPER INSTALLATION OF RAKE TRIM. UNLESS NOTED DIFFERENTLY ON THE BUILDING ERECTION DRAWINGS, EXTEND THE LOWER END 4" PAST THE BACK SIDE OF THE EAVE STRUT (A STRING LINE EXTENDED OUT FROM THE EAVE STRUT WILL HELP KEEP THE PANEL OVERHANG STRAIGHT). REMOVE PAPER BACKING FROM APPROXIMATELY 2 FEET OF EAVE MASTIC AND INSTALL ACCORDINGLY.

FIRST PANEL INSTALLATION (UNIVERSAL RAKE)

STANDING SEAM

RC11 TA

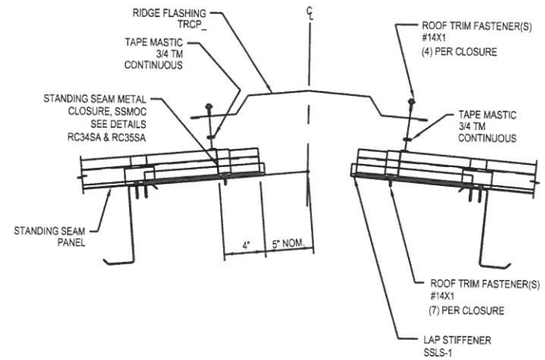


INSTALL CLIP MAKING CERTAIN THE SLIDING TAB IS CENTERED BEFORE ATTACHING CLIP TO THE PURLIN.

PANEL CLIP INSTALLATION

STANDING SEAM 360 PANEL

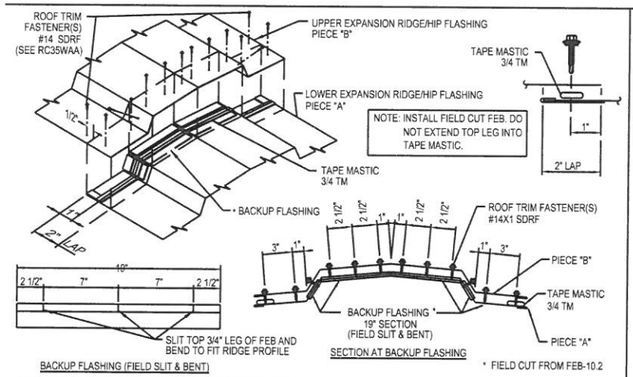
RC18 TA



RIDGE DETAIL

STANDING SEAM

RC32 SA



BACKUP FLASHING (FIELD SLIT & BENT)

SECTION AT BACKUP FLASHING

* FIELD CUT FROM FEB-10.2

HOLES MUST BE PRE-DRILLED AT RIDGE FLASHING PRIOR TO APPLYING MASTIC. TEMPORARILY LAP PIECE "B" OVER PIECE "A" AND PRE-DRILL THE REQUIRED NUMBER OF 1/4"Ø HOLES THROUGH BOTH PIECES OF RIDGE FLASHING BUT NOT FEB BACKUP FLASHING. SLIDE PIECE "B" BACK AND APPLY TAPE MASTIC AND BACKUP FLASHING ON PIECE "A" AS SHOWN. LAP PIECE "B" OVER PIECE "A" BEING CAREFUL TO ALIGN HOLES. INSTALL ROOF FASTENERS AS SHOWN. CONTINUE PROCESS AT EACH RIDGE FLASHING END LAP ALONG THE RIDGE.

EXPANSION RIDGE/HIP FLASHING LAP

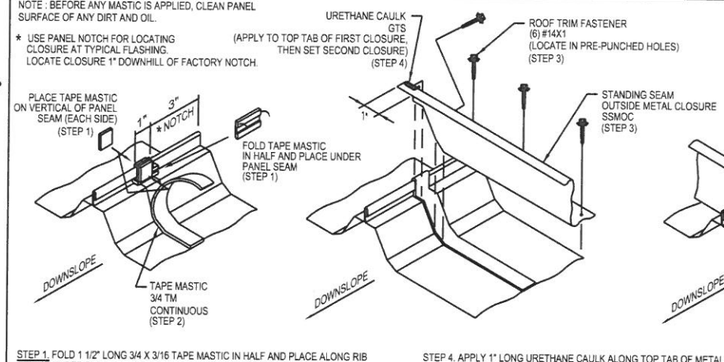
ROOF

RC33 SA

REF. DETAILS FL06AA, RC35AAA & RC35WAA

NOTE : BEFORE ANY MASTIC IS APPLIED, CLEAN PANEL SURFACE OF ANY DIRT AND OIL.

★ USE PANEL NOTCH FOR LOCATING CLOSURE AT TYPICAL FLASHING. LOCATE CLOSURE 1" DOWNHILL OF FACTORY NOTCH.



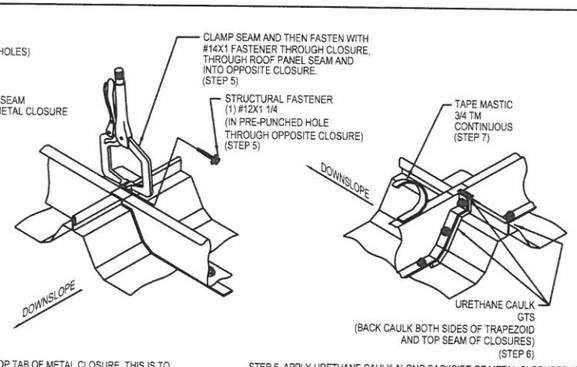
STEP 1. FOLD 1 1/2" LONG 3/4 X 3/16 TAPE MASTIC IN HALF AND PLACE ALONG RIB UNDER PANEL SEAM (AS SHOWN). PLACE TWO MORE PIECES OF MASTIC ALONG VERTICAL OF PANEL SEAM.

STEP 2. INSTALL 3/4 X 3/16 TAPE MASTIC ACROSS PANEL FLAT AND OVER PANEL RIB AND PREVIOUS MASTIC, LOCATED 1" DOWNHILL OF THE FACTORY NOTCH. KEEP RUN OF MASTIC INTACT FOR PLACEMENT ON NEXT PANEL.

STEP 3. INSTALL METAL CLOSURE FLUSH WITH EDGE OF MASTIC (LOCATED AT EDGE OF FACTORY NOTCH). SECURE IN PLACE WITH (6) #14X1 ROOF FASTENERS IN PRE-PUNCHED HOLES.

STEP 4. APPLY 1" LONG URETHANE CAULK ALONG TOP TAB OF METAL CLOSURE. THIS IS TO ENSURE SEAL OF THE NEXT LAPPING METAL CLOSURE.

STEP 5. INSTALL NEXT METAL CLOSURE SAME AS THE FIRST. CLAMP THE TWO METAL CLOSURES TOGETHER AT SEAM AND INSTALL (1) #12X1 1/4 FASTENER THROUGH HOLE AT TOP OF CLOSURE, THROUGH ROOF PANEL SEAM AND INTO OPPOSITE CLOSURE. DO NOT OVERTIGHTEN FASTENER TO EFFECT PANEL COVERAGE WIDTH.



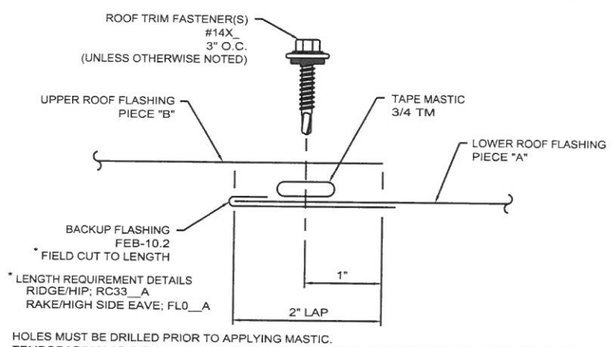
STEP 6. APPLY URETHANE CAULK ALONG BACKSIDE OF METAL CLOSURES AT TRAPEZOIDAL LOCATION. NEXT, RUN A BEAD OF URETHANE CAULK ALONG TOP SEAM OF METAL CLOSURES AND AND PANEL SEAM.

STEP 7. AFTER CLOSURE FASTENING IS COMPLETE, ADD A CONTINUOUS RUN OF 3/4 X 3/16 TAPE MASTIC ALONG TOP EDGE OF CLOSURE FLANGE FOR SEAL OF RIDGE FLASHING.

SEAM CLOSURE AND OUTSIDE METAL CLOSURE INSTALLATION

STANDING SEAM

RC34 SA



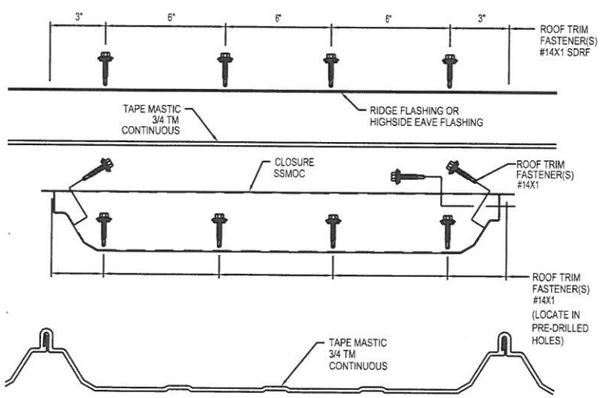
* LENGTH REQUIREMENT DETAILS
RIDGE/HIP; RC33__A
RAKE/HIGH SIDE EAVE; FL0__A

HOLES MUST BE DRILLED PRIOR TO APPLYING MASTIC. TEMPORARILY LAP PIECE "B" OVER PIECE "A". PRE-DRILL THE REQUIRED NUMBER OF 1/4"Ø HOLES THROUGH BOTH "A" & "B" PIECES OF ROOF FLASHING BUT NOT BACKUP FLASHING.

SLIDE PIECE "B" BACK AND APPLY TAPE MASTIC AND BACKUP FLASHING ON PIECE "A" AS SHOWN. LAP PIECE "B" OVER PIECE "A" BEING CAREFUL TO ALIGN HOLES. INSTALL ROOF FASTENERS AS SHOWN. CONTINUE PROCESS ALONG ROOF CONDITION.

SECTION THROUGH ROOF FLASHING LAP

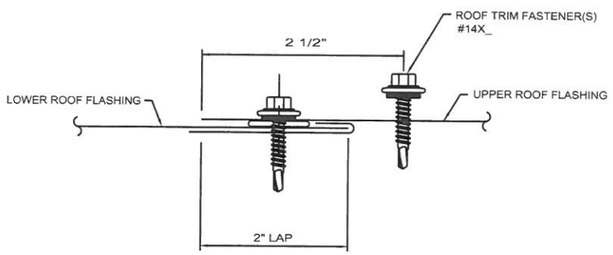
RC35A AA



RIDGE FLASHING OR HIGH SIDE EAVE ATTACHMENT

STANDING SEAM

RC35 SA



ALL FLASHING EXPOSED TO ROOF CONDITIONS REQUIRE A FASTENER LOCATED 2 1/2" FROM THE EDGE OF THE UPPER FLASHING, AS SHOWN ABOVE, TO ENSURE A POSITIVE SEAL AT ENDLAPS.

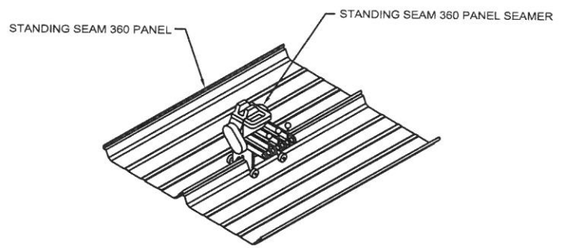
STANDARD FASTENER SPACING FOR FLASHING CONNECTION, TYPICALLY 6" O.C., MAY RESULT IN FASTENER SPACING AT ENDLAPS EXCEEDING THE 2 1/2".

ADD FASTENERS OR REDUCE SPACING AS REQUIRED AT ENDLAPS.

EXPOSED ROOF FLASHING FASTENER REQUIREMENT

RC35W AA

SAFETY PRECAUTION:
USE EXTREME CAUTION WHEN WORKING AT THE EAVE OF ROOF



In preparation of the seaming operation, all construction debris should be removed from the roof to prevent machine damage and/or roof damage.

Refer to the owner's manual included with the Standing Seam 360 panel seamer for safe and practical seaming operations.

STANDING SEAM 360 PANEL SEAMING DETAIL

RC36 TA

NOT FOR CONSTRUCTION

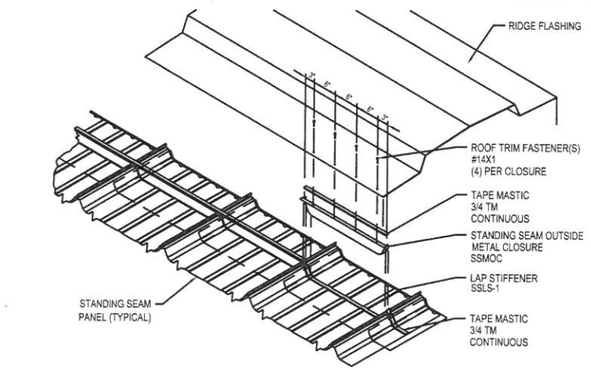
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ISO 9001 ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-015



AFTER THE INSTALLATION OF THE ROOF PANELS HAS BEEN COMPLETED, PROCEED WITH THE RIDGE CLOSURE AS SHOWN ABOVE.
BEFORE ANY MASTIC IS APPLIED, CLEAN PANELS OF ANY OIL AND DIRT. POSITION LAP STIFFENER, SSLS-1, AT THE ENDS OF THE PANELS. INSTALL 3/4" X 3/16" MASTIC, SEAM CLOSURE (SSMOC) AS PER DETAIL RC34SA. REPEAT UNTIL A SUFFICIENT NUMBER OF CLOSURES HAVE BEEN INSTALLED (BOTH SIDES OF RIDGE) TO EQUAL A LENGTH OF RIDGE FLASHING. RUN A CONTINUOUS STRIP OF 3/4" X 3/16" MASTIC OVER THE TOP OF THE CLOSURES AND APPLY THE RIDGE FLASHING.

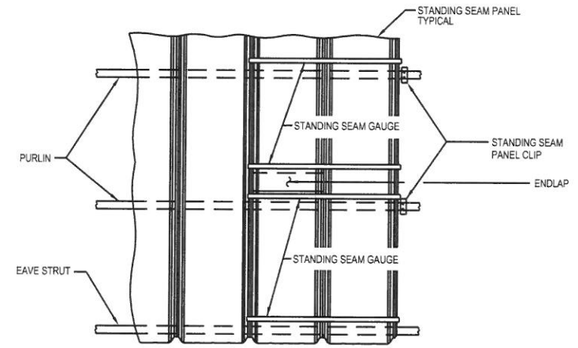
RIDGE FLASHING ATTACHMENT

STANDING SEAM

RC37 SA

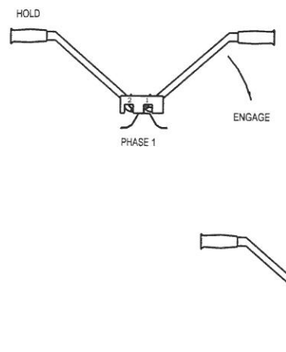
REF. DETAILS RC34SA, RC33SA & RC35WAA

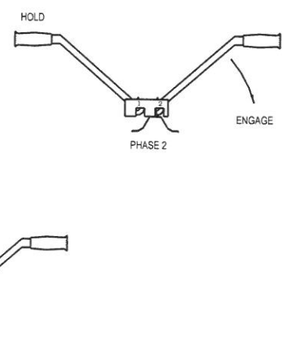
THE STANDING SEAM GAUGE BAR CAN BE USED IN ADDITION TO THE PANEL MODULARITY INSTALLATION DETAILS (RC71SA/RC72SA/RC73SA).

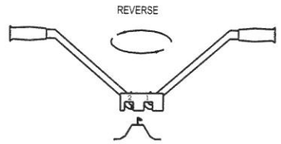


STANDING SEAM PANEL GAUGE LOCATIONS

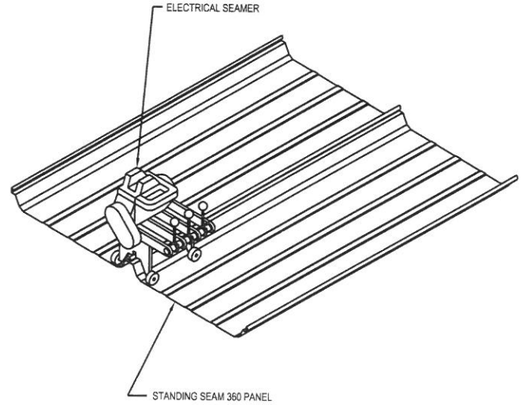
RC42 SA







HAND/EAVE SEAMING PROCESS



THE METAL BUILDING SUPPLIER FURNISHES THE STANDING SEAM 360 ROOF SYSTEM IN NON-HANDED PANELS. GABLE, SINGLE SLOPE OR UNSYMMETRICAL BUILDINGS CAN BE SHEETED SIMULTANEOUSLY FROM EITHER END OF THE BUILDING.

THE SEAMING PROCESS INVOLVES TWO DIFFERENT TOOLS, THE STANDING SEAM 360 ELECTRIC ROOF SEAMER AND THE HAND/EAVE SEAMER. THE STANDING SEAM 360 HAND/EAVE SEAMER IS A TWO STAGE TOOL USED AT THE STARTING END OF EACH PANEL (EAVE OR RIDGE) PRIOR TO SEAMING WITH THE ELECTRIC SEAMER.

- IN THE FIRST STAGE PLACE PHASE 1 SIDE OF THE SEAMER ONTO THE OPEN SIDE OF THE SEAM AT THE END OF THE PANEL AND ENGAGE THE TOOL TO A FULLY CLOSED POSITION. REMOVE THE SEAMER AND MOVE UP THE SLOPE THE WIDTH OF THE SEAMER JAWS (APPROXIMATELY FOUR INCHES) AND ENGAGE THE TOOL TO A FULLY CLOSED POSITION. THIS SHOULD COMPLETE THE FIRST STAGE OF HAND/EAVE SEAMING.
- REMOVE THE SEAMER AND REVERSE THE DIRECTION SO THAT PHASE 2 SIDE OF THE SEAMER IS PRESSED ONTO THE OPEN SIDE OF THE SEAM, STARTING AT THE PANEL END ENGAGE THE TOOL TO A FULLY CLOSED POSITION TO COMPLETE THE SEAM. DO THIS STEP ONLY ONCE FOR THE SEAM IS NOW READY FOR THE ELECTRIC SEAMER.

THE STANDING SEAM 360 ELECTRIC ROOF SEAMER IS A SINGLE DIRECTION MACHINE USED FOR SEAMING THE PANELS TOGETHER AT THE SIDELAPS. GABLE BUILDINGS WILL REQUIRE THE SEAMER TO START AT THE EAVE ON ONE SIDE OF THE BUILDING AND TRAVEL UP THE SLOPE TO THE RIDGE AND THEN TRAVEL DOWN THE SLOPE TO THE EAVE ON THE OPPOSITE SIDE OF THE BUILDING. SINGLE SLOPE BUILDINGS WILL REQUIRE THE SEAMER TO START AT EITHER THE HIGH OR LOW SIDE OF THE BUILDING DEPENDING UPON THE SHEETING DIRECTION.

- TO START THE SEAMING PROCESS, PLACE THE ELECTRIC SEAMER IN POSITION WITH THE THREE HANDLES IN THE UNLOCKED POSITIONS. THE SEAM ROLLERS SHOULD BE ON THE OPEN SIDE OF THE SEAM AND THE BACK OF THE SEAMER SHOULD BE ALIGNED WITH THE END OF PANEL (THE HAND/EAVE SEAMING OPERATION AT THE STARTING END OF THE PANEL SHOULD HAVE ALREADY BEEN COMPLETED). LOCK THE THREE HANDLES INTO POSITION AND START THE SEAMER. ALLOW THE SEAMER TO COMPLETE ITS RUN TO THE OPPOSITE END OF THE PANEL. SHOULD FURTHER SEAMING BE REQUIRED AFTER COMPLETING THE RUN WITH THE ELECTRICAL SEAMER, FINISH WITH THE TWO STAGE HAND/EAVE SEAMING PROCESS. DO NOT RUN THE ELECTRIC SEAMER THROUGH ANY SECTION OF THE PANEL THAT HAS BEEN HAND/EAVE SEAMED.

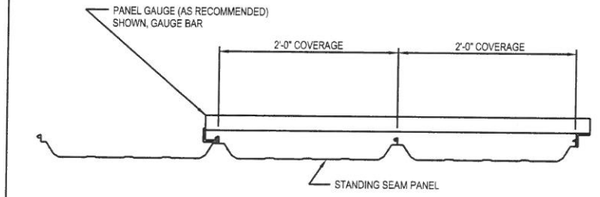
THE SEAMER SHOULD NEVER BE ALLOWED TO BECOME A FALLING HAZARD TO ANYONE BENEATH THE ROOF. ALL SAFETY PRECAUTIONS AND OSHA SAFETY REGULATIONS SHOULD ALWAYS BE FOLLOWED FOR MAXIMUM WORKER SAFETY.

PANEL SEAMING PROCESS

STANDING SEAM 360

RC38 TA

THE STANDING SEAM GAUGE BAR CAN BE USED IN ADDITION TO THE PANEL MODULARITY INSTALLATION DETAILS (RC71SA/RC72SA/RC73SA).



SAFETY PRECAUTION:
WIPE OIL AND OTHER SLIPPERY SUBSTANCES FROM ROOF PANELS.
DO NOT STEP ON RIB OF PANEL OR WITHIN 5 FEET OF UNSECURED PANEL END. USE OSHA APPROVED TIE OFFS, NETTINGS OR RAILS WHEN WORKING ON ROOF.

PANEL COVERAGE GAUGES SUCH AS SHOWN ABOVE WILL HELP TO MAINTAIN CORRECT COVERAGE. PLACE ONE AT EACH END OF THE PANEL. GAUGE EACH PURLIN RUN AND ABOVE OR BELOW THE ENDLAP.

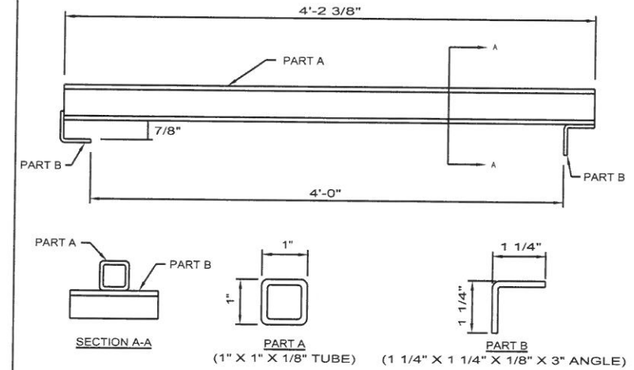
A STRING LINE SET AT THE NEXT RAFTER IS RECOMMENDED FOR TAKING MEASUREMENTS BACK TO THE PANELS TO ENSURE THAT THEY ARE RUNNING STRAIGHT AND SQUARE.

PANEL GAUGING

STANDING SEAM PANEL

RC41 SA

THE STANDING SEAM GAUGE BAR CAN BE USED IN ADDITION TO THE PANEL MODULARITY INSTALLATION DETAILS (RC71SA/RC72SA/RC73SA).

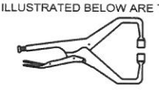


STANDING SEAM GAUGE BAR ASSEMBLY DETAIL

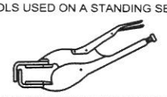
RC43 SA

STANDING SEAM 360 PANEL ROOF SYSTEM HAS UNIQUE SIDELAP SEAMS WHICH ENGAGE THE ADJACENT PANEL TO FORM A TIGHT PENETRATION FREE CONNECTION. THE PANEL IS ATTACHED TO THE SUPPORT FRAMING BY A SPECIAL STANDING SEAM 360 PANEL CLIP WHICH IS INTERLOCKED WITHIN THE SEAM AND FASTENED TO THE PURLIN WITH SELF-DRILLING FASTENERS. THE PROPER INSTALLATION OF THE PANEL WILL REQUIRE TOOLS SPECIALLY DESIGNED FOR THIS PURPOSE.

ILLUSTRATED BELOW ARE THE TOOLS USED ON A STANDING SEAM 360 ROOF PANEL SYSTEM.



LOCKING CLAMP
ET-SSPLC
DETAIL RC66TA

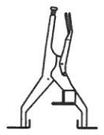


STANDING SEAM 360 DUCKBILL VISE GRIPS
ET-S3PVG
DETAIL RD11ATA

SAFTEY PRECAUTION:
USE THE CORRECT TOOL FOR EACH JOB.

* PANEL ELECTRIC SEAMER
DETAILS RC36TA & RC38TA

* HAND SEAMER/SEAM STARTER
DETAIL RC68ATA



STANDING SEAM INSTALLATION CLAMP
ET-SSPIC
DETAIL RC70SA

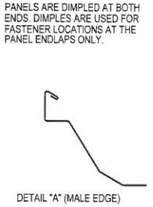
* AVAILABLE FOR PURCHASE OR RENTAL THROUGH;

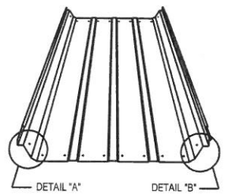
D.I. ROOF SEAMERS
915 HIGHWAY 45
CORINTH, MS 38834
888.343.0456
WWW.EAGLESEAMERS.COM

STANDING SEAM 360 ERECTION TOOLS

RC62 TA

NOTE:
PANELS ARE DIMPLED AT BOTH ENDS. DIMPLES ARE USED FOR FASTENER LOCATIONS AT THE PANEL ENDLAPS ONLY.

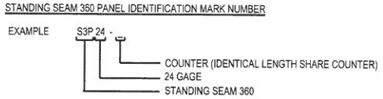




STANDING SEAM 360 ROOF PANEL

SAFETY PRECAUTION
DO NOT STEP ON RIB OF PANEL. ALWAYS STEP ON FLAT SURFACE.

STANDING SEAM 360 PANEL IDENTIFICATION MARK NUMBER



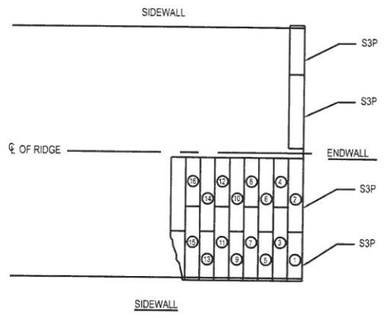
NOTE:
ALUMINUM-COATED PANELS ARE SUBJECT TO STAINING DUE TO RESIDUE FROM BARE HANDS. ALUMINUM-COATED LINER PANELS THAT INCLUDE AN ACRYLIC FINISH DO HAVE ADDITIONAL PROTECTION. BUT IT IS LIMITED AND DETERIORATES IN A RELATIVELY SHORT TIME MAKING THAT PANEL ALSO SUBJECT TO STAINING FROM BARE HANDS. IT IS RECOMMENDED THAT GLOVES BE USED FOR ALL HANDLING OF BOTH PRODUCTS AND THAT APPLICATION OF THESE PRODUCTS BE LIMITED TO AREAS NOT EXPOSED TO TOUCH.

PANEL MARKING AND NOTCHING

STANDING SEAM 360

RC63 TA

THE STANDING SEAM ROOF PANELS HAVE BEEN DESIGNED SO THAT BOTH SIDES OF A GABLED BUILDING CAN BE SHEETED SIMULTANEOUSLY.



PANEL STAGGER LAYOUT -
TO ASSURE A WATER TIGHT CONNECTION, STANDING SEAM ENDLAPS ARE DESIGNED TO BE STAGGERED FROM ONE PANEL RUN TO THE NEXT. SEE ERECTION DRAWING FOR PROPER ENDLAP LOCATIONS.

DIRECTION OF ROOF PANEL ERECTION

STANDING SEAM 360

RC64 TA

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

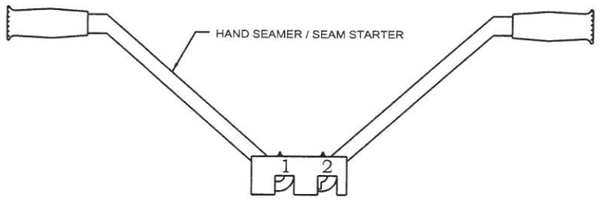
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY

SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6

JOB NUMBER:
A17B0157A

SHEET:
SED-016

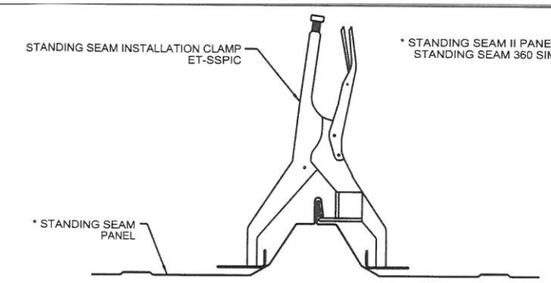


Shown above is the Hand Seamer tool. This tool is used at different locations prior to electrically seaming the roof.

PHASE 1 - 90° BEND
PHASE 2 - 360° BEND

REFER TO THE OWNER'S MANUAL INCLUDED WITH THE STANDING SEAM PANEL HAND SEAMER / SEAM STARTER FOR SAFE AND PRACTICAL SEAMING INSTRUCTIONS

STANDING SEAM 360 PANEL HAND SEAMER TOOL — RC68A / TA



The standing seam installation clamp will help keep roof runs on module and clamp will remain out of the work area when in use. This will not need to be used on every panel run but only when required to help modify sheets to stay within tolerance. They are also adjustable to allow for broader ranges of corrections.

By slipping the flat tab (located below the hinge point of the clamp) under the seam of the roof panels and then squeezing the handles closed, the two base angles grip the lower trapezoid of the panels and shorten the distance between the vertical legs of the roof sheets. When used at end laps and ridge/high eave locations of the roof, you can manipulate the growth of the sheets caused by the increasing amount of insulation being laid under roof systems.

STANDING SEAM INSTALLATION CLAMP — RC70 / SA
STANDING SEAM II/360

First Panel Installation – (RC10SA) then (RC12SA at Custom Rake/RC11SA at Universal Rake)

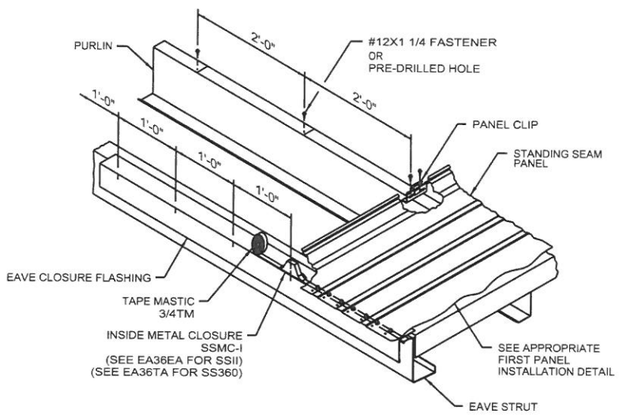
1) Install panel/panels from eave to ridge/high eave, straight and square with the building. Be sure to overhang the panel at eave the correct amount. Install all panel clips (RC67EA/RC18TA). If there are endlaps, complete the endlaps (RC06SA/RC07SA).
2) Determine where the center line of the panel rib will fall, based upon the width of the starter panel. Mark a line on the vertical part of the eave flashing at this point.
3) From the first vertical mark on the eave flashing, lay out the entire length of the building, putting a mark on the vertical leg of the flashing at 1'–0" O.C.. These marks will be used as the roof progresses to position the panel and to position the SSMC–I closure.
4) Mark the center line of all SSMC–I closures with a vertical mark. Install the first closure (EA36EA/EA36TA), with the mark on the eave flashing and the mark on the closure aligned.
5) Installed eave fasteners will pass through the panel, tape mastic, eave flashing and TFSE(T). Fastener locationis upslope from dimples at the end of the panel.
6) After the clips are installed on this first panel run, measure from the center of the fasteners which hold the panel clips to the purlins, at each panel endlap location and at the ridge/high eave purlin, and put a mark on the top of the purlin at 2'–0" O.C.. Then put in one #12X1 1/4" clip fastener or drill a small hole at each 2'–0" mark. These holes or fasteners will be used as the roof progresses to position the panel clips in these locations at a perfect 2'–0" coverage, thus maintaining module and panel straightness/alignment.

PANEL MODULARITY AT CONNECTING PANEL — RC71 / SA
STANDING SEAM II/360

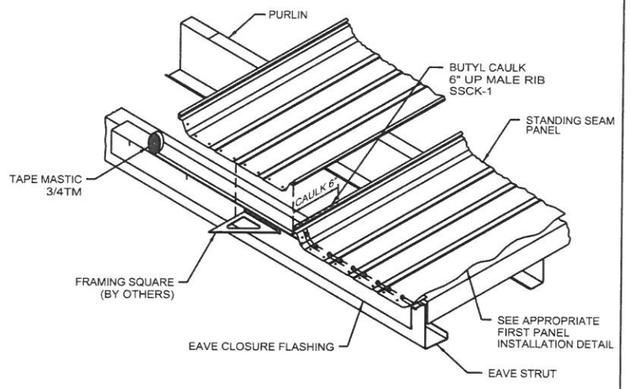
All Subsequent Panel Runs

7) Caulk the first 6" of the top of male rib of the panel (RC11_A).
8) Lay panel in position next to previous panel.
9) Position a small framing square at the 1'-0" mark on the eave. Align the center of the (middle minor rib) of the panel with the edge of the square positioned at the 1'-0" mark, if this is a Standing Seam 360 panel, hook the female leg to the male leg of the preceding panel the entire length (RC01TA), then align center of panel with edge of square.
10) Holding the middle of the rib at the edge of the square, push the panel uphill or downhill to get the proper overhang amount (See Erection Drawings). This can be read right off the markings on the square. Note, the dimension shown is typically from face of eave strut. Subtract wall panel depth for correct overhang from eave flashing.
11) Once in position, install one fastener through the flat of the panel at the center of the flat.
12) If Standing Seam II panel, the panel can now be seamed at this time (RC36EA).
13) Install fasteners in panel flat from the center to completed seam and into the SSMC-I closure.
14) Using another SSMC-I, install closure by aligning the mark in the center of the closure, with the next 1'-0" mark on the eave trim (EA36EA/EA36TA).
15) Install remainder of fasteners in panel flat towards newly installed SSMC-I, then install fastener from trapezoid into closure.
16) Install panel clip at endlap or ridge/high eave location by either removing fastener or finding the pre-drilled hole at 2'-0" increments and then installing the fastener through the panel clip base into the pre-drilled hole. Then add the second fastener to the clip.
17) Panel should now be straight and on module, and the balance of the clips can be installed.
18) If there is a panel endlap, you would next lay the overlapping panel, make up the endlap utilizing the suggested clamps (RC66EA/RC66TA), and put on the panel clip at the next uphill pre-drilled location. Then fill in the balance of the clips (RC67EA/RC18TA).
19) Depending on insulation thickness and other job site variables, you may choose to lay out one or more additional purlins at panel midspans on these 2'-0" centers for proper clip/panel modularity.

PANEL MODULARITY-ALL SUBSEQUENT PANEL RUNS — RC72 / SA
STANDING SEAM II/360

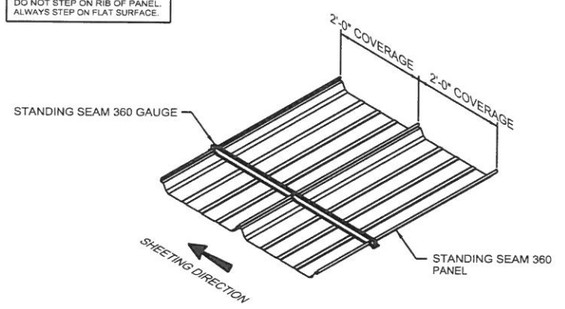


STEP 1



STEP 2

SAFETY PRECAUTION:
DO NOT STEP ON RIB OF PANEL.
ALWAYS STEP ON FLAT SURFACE.



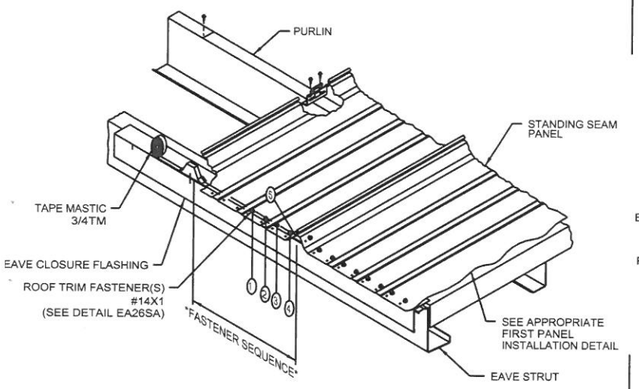
Panel coverage gauges such as shown above will help to maintain correct coverage. Place one at each end of the panel, one at midspan, and if applicable, one above or below the lap.

STANDING SEAM 360 GAUGE — RC77 / TA

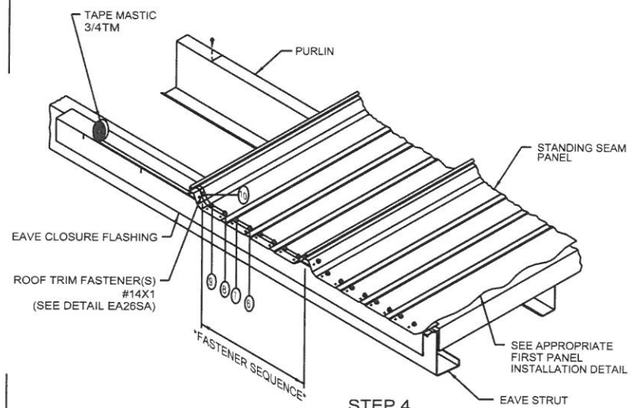
ERECTION NOTES:

1. ALL AREAS WHERE MASTIC IS TO BE APPLIED SHOULD BE WIPED CLEAN WITH A MILD DETERGENT OR AN ALL PURPOSE CLEANER BEFORE MASTIC APPLICATION. THIS WILL ENSURE A GOOD SEALING SURFACE AND IMPROVE WEATHER TIGHTNESS.
2. THE BLANKET INSULATION MANUFACTURER RECOMMENDS THAT DOUBLE SIDED TAPE BE USED TO SECURE THE INSULATION TO THE EAVE. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE INSTALLATION OR ATTACHMENT OF THE INSULATION.
3. DO NOT USE THE DIMPLES IN THE END OF THE PANELS TO LOCATE FASTENERS AT THE EAVE. DIMPLES ARE FOR THE FASTENERS AT THE PANEL ENDLAPS ONLY.
4. ALL EXPOSED FASTENERS SHOULD PENETRATE THE SEALANT FOR THE MOST WEATHER TIGHT CONNECTION.
5. WHEN FIELD CUTTING PANELS OR TRIM DO NOT USE ABRASIVE SAWS OR OTHER CUTTING METHODS WHICH PRODUCE HOT METAL PARTICLES OR BURN THE CUT EDGES. THESE METHODS WILL DAMAGE THE PAINTED AND GALVALUME FINISH AND VOID ANY WARRANTIES. USE DOUBLE CUT SHEARS, NIBBLERS OR OTHER CUTTING DEVICES WHICH DO NOT PRODUCE HOT METAL PARTICLES OR BURNED EDGES.

ERECTION NOTES - STANDING SEAM — RC91 / SA



STEP 3



STEP 4

PANEL MODULARITY INSTALLATION — RC73 / SA
STANDING SEAM II/360

NOT FOR CONSTRUCTION

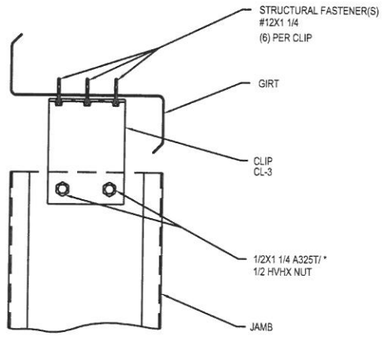
NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

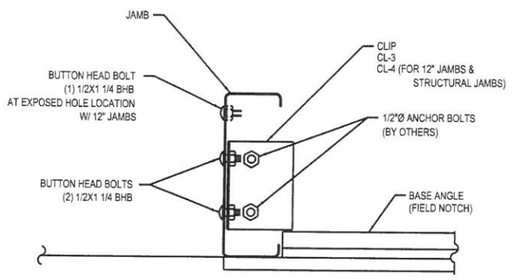
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-017



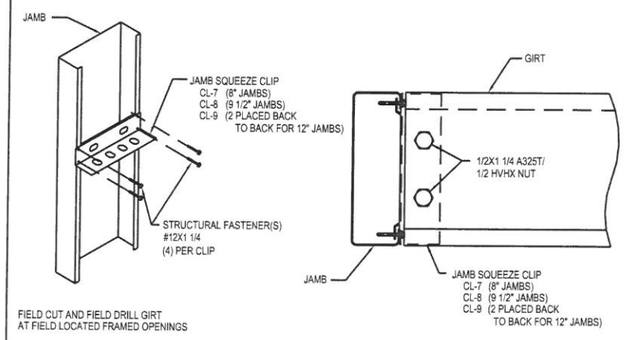
* BUTTON HEAD BOLTS REQUIRED AT STRIP WINDOW

JAMB TO GIRT CONNECTION — OF01 AA



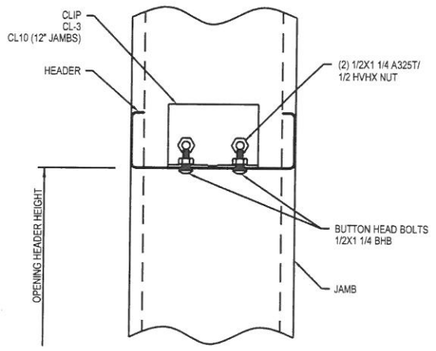
JAMB BASE CONNECTION — OF11 AA

SAFETY PRECAUTION:
DO NOT STEP, SIT OR CLIMB ON WALL GIRTS OR EAVE STRUTS. FAILURE TO ADHERE TO THIS PRECAUTION MAY RESULT IN A SERIOUS INJURY.

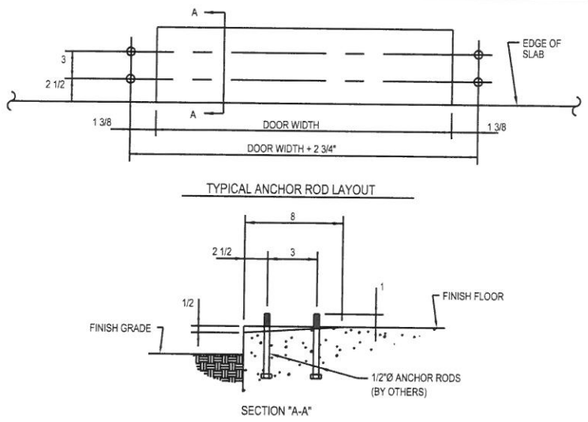


FIELD CUT AND FIELD DRILL GIRT AT FIELD LOCATED FRAMED OPENINGS

GIRT TO JAMB CONNECTION — OF16 AA



HEADER TO JAMB CONNECTION — OF21 AA
SIMILAR AT SILL



TYPICAL ANCHOR ROD LAYOUT

SECTION "A-A"

FRAMED OPENING ANCHOR ROD DETAIL — OF61 AA

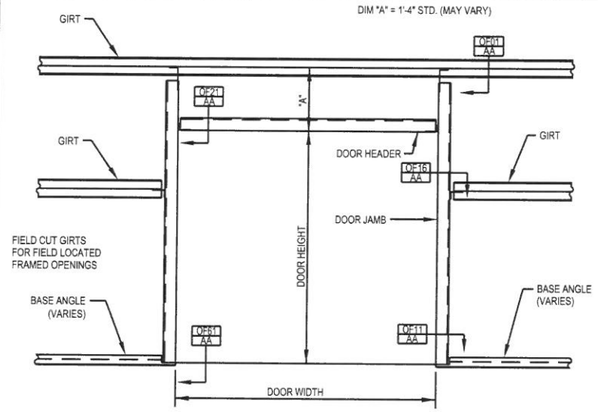
GENERAL NOTES FOR FIELD LOCATED FRAMED OPENINGS :

1. OVERHEAD DOORS ARE FIELD LOCATED. CUT STANDARD PANELS AND GIRTS AS REQUIRED.
2. MAXIMUM HEIGHT OF DOOR IS 2'-0" LESS THAN EAVE HEIGHT.
3. ALL STRUCTURAL CONNECTIONS TO BE MADE AS SHOWN ON APPROPRIATE DETAILS.
4. JAMBS MUST BE LOCATED A MINIMUM OF 1'-0" FROM CENTER LINE OF COLUMNS.

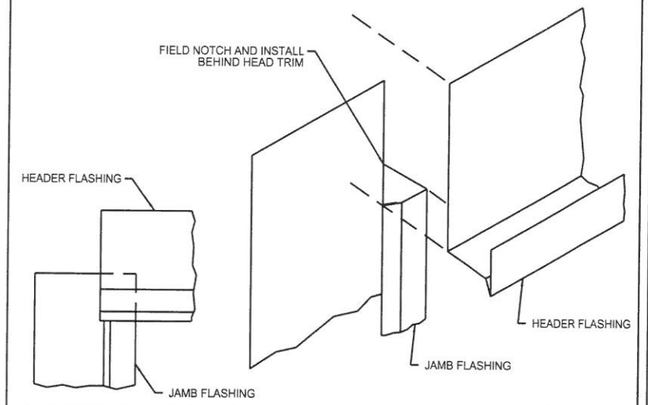
GENERAL NOTES FOR SHOP LOCATED FRAMED OPENINGS :

1. OVERHEAD DOORS ARE SHOP LOCATED. SOME PANELS MAY REQUIRE FIELD CUTTING.
2. ALL STRUCTURAL CONNECTIONS TO BE MADE AS SHOWN ON APPROPRIATE DETAILS.

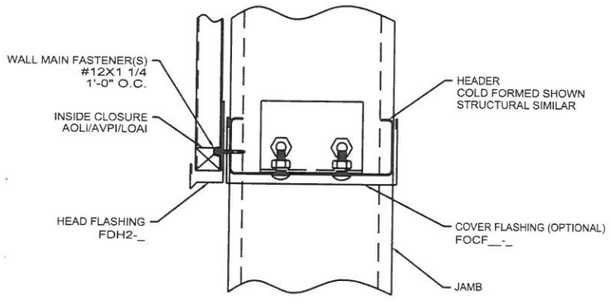
FIELD AND SHOP LOCATED FRAMED OPENING NOTES — OF91 AA



FRAMED OPENING KEY
JAMB TO GIRT CONDITION — OFOA AA

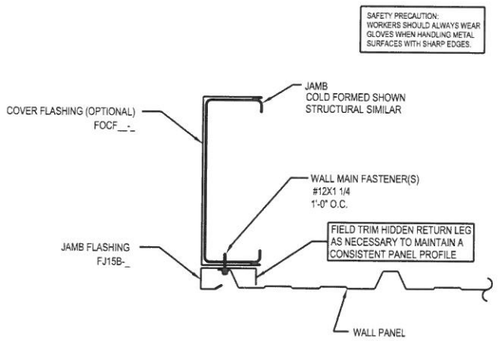


SECTION AT HEADER AND JAMB TRIM
ARCHITECTURAL III, ARCHITECTURAL "V" RIB and LONG SPAN III WALLS — OT01 AA

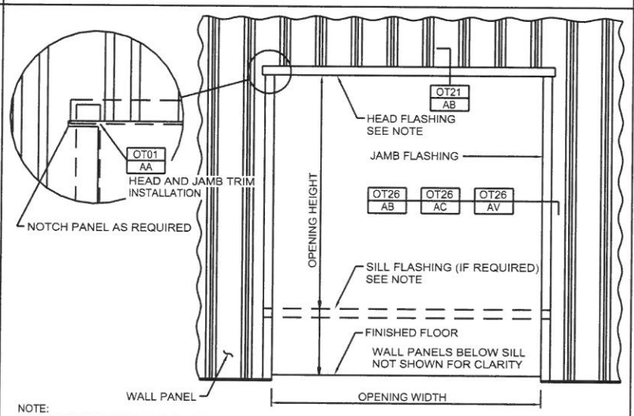


SECTION AT HEADER AND COVER FLASHING — OT21 AB

SAFETY PRECAUTION:
WORKERS SHOULD ALWAYS WEAR GLOVES WHEN HANDLING METAL SURFACES WITH SHARP EDGES.



SECTION AT FRAMED OPENING JAMB
ARCHITECTURAL III PANEL WALLS — OT26 AC



NOTE:
FIELD SLIT PANELS AND SLIDE HEAD OR SILL FLASHING BEHIND PANELS

SHEETING AND FLASHING ELEVATION
ARCHITECTURAL III, ARCHITECTURAL "V" RIB, LONG SPAN III AND MULTI-RIB PANEL WALLS — OTOA AB

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

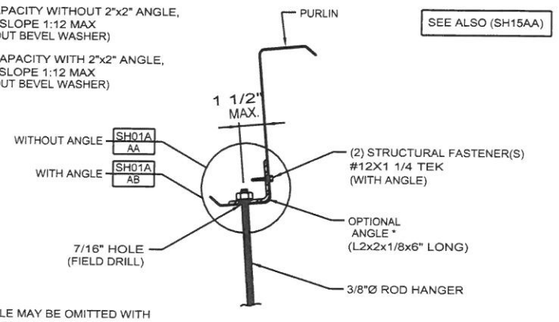
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-018

50# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)

200# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)

SEE ALSO (SH15AA)



* ANGLE MAY BE OMITTED WITH HANGER LOADS 50 LBS. OR LESS.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

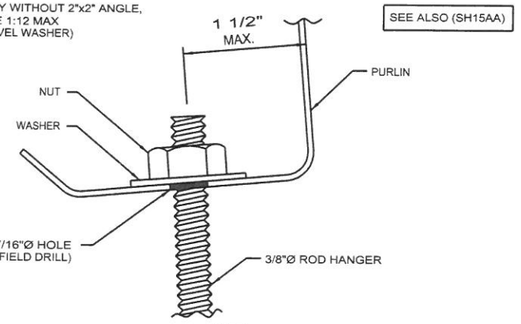
NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL AT PURLINS

SH01 AA

50# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)

SEE ALSO (SH15AA)



NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

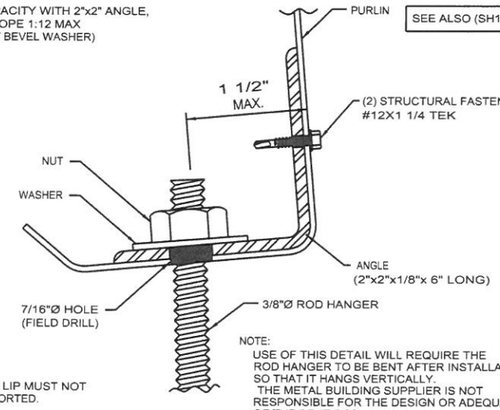
HANGER DETAIL AT PURLINS

ROD HANGER WITHOUT REINFORCING ANGLE

SH01A AA

200# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE 1:12 MAX
(WITHOUT BEVEL WASHER)

SEE ALSO (SH15AA)



NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL AT PURLINS

ROD HANGER WITH REINFORCING ANGLE

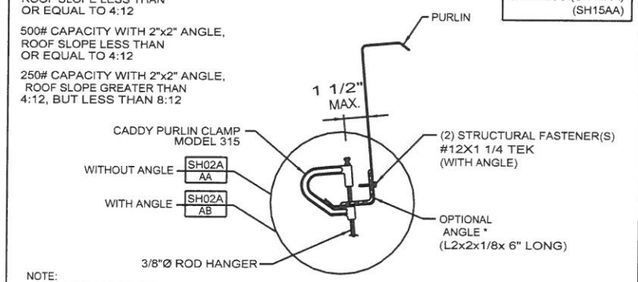
SH01B AA

250# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

500# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

250# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12

SEE ALSO (SH14AA) (SH15AA)



NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

* ANGLE MAY BE OMITTED WITH HANGER LOADS 250 LBS. OR LESS EXCEPT THAT ANGLE IS REQUIRED WITH SLOPE GREATER THAN 4:12, BUT LESS THAN 8:12.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

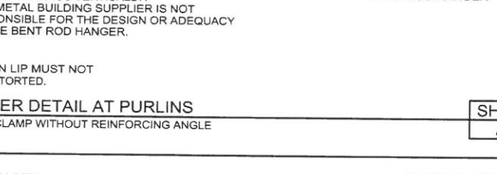
HANGER DETAIL AT PURLINS

PURLIN CLAMP

SH02 AA

250# CAPACITY WITHOUT 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

SEE ALSO (SH14AA) (SH15AA)



NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

HANGER DETAIL AT PURLINS

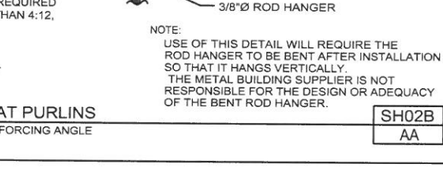
PURLIN CLAMP WITHOUT REINFORCING ANGLE

SH02A AA

500# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

250# CAPACITY WITH 2"x2" ANGLE,
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12

SEE ALSO (SH14AA) (SH15AA)



* ANGLE MAY BE OMITTED WITH HANGER LOADS 250 LBS. OR LESS EXCEPT THAT ANGLE IS REQUIRED WITH SLOPE GREATER THAN 4:12, BUT LESS THAN 8:12.

NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

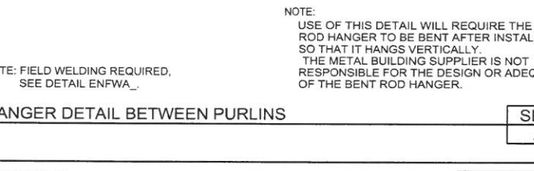
HANGER DETAIL AT PURLINS

PURLIN CLAMP WITH REINFORCING ANGLE

SH02B AA

400# CAPACITY PROVIDED ROD HANGER IS WITHIN
CENTER ONE-THIRD OF 3"x3"ANGLE SPAN
(200# CAPACITY OTHERWISE)

SEE ALSO (SH15AA)



NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

NOTE: FIELD WELDING REQUIRED, SEE DETAIL ENFWA_.

HANGER DETAIL BETWEEN PURLINS

SH03 AA

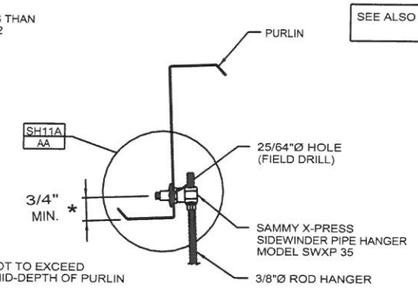
CLAMP INSTALLATION "NOT ALLOWED"

CLAMP CAUSING BENT PURLIN LIP

SH06 AA

500# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 1:12

SEE ALSO (SH14AA) (SH15AA)



NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

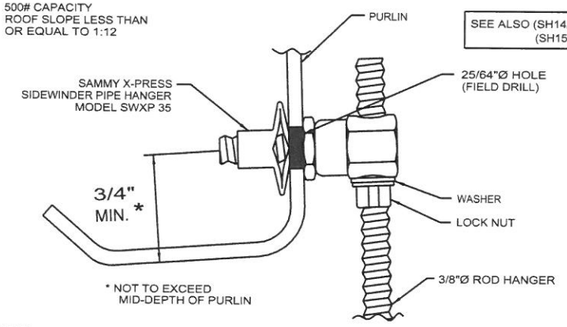
HANGER DETAIL AT PURLINS

ROOF SLOPES LESS THAN OR EQUAL TO 1:12

SH11 AA

500# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 1:12

SEE ALSO (SH14AA) (SH15AA)



NOTE:
USE OF THIS DETAIL WILL REQUIRE THE ROD HANGER TO BE BENT AFTER INSTALLATION SO THAT IT HANGS VERTICALLY. THE METAL BUILDING SUPPLIER IS NOT RESPONSIBLE FOR THE DESIGN OR ADEQUACY OF THE BENT ROD HANGER.

HANGER DETAIL AT PURLINS

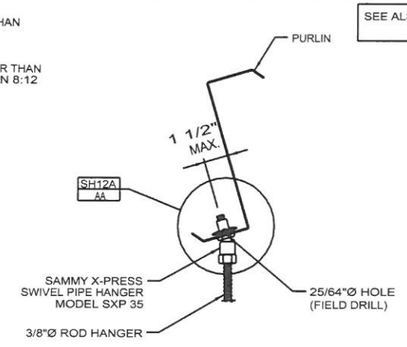
SIDEWINDER PIPE HANGER FOR SLOPES LESS THAN OR EQUAL TO 1:12

SH11A AA

375# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

250# CAPACITY
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12

SEE ALSO (SH14AA) (SH15AA)



NOTE:
PURLIN LIP MUST NOT BE DISTORTED.

HANGER DETAIL AT PURLINS

ROOF SLOPES LESS THAN 8:12

SH12 AA

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

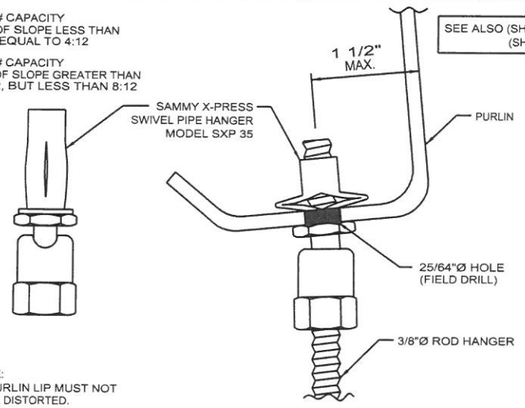
AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS: FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-019

375# CAPACITY
ROOF SLOPE LESS THAN
OR EQUAL TO 4:12

250# CAPACITY
ROOF SLOPE GREATER THAN
4:12, BUT LESS THAN 8:12

SEE ALSO (SH14AA)
(SH15AA)

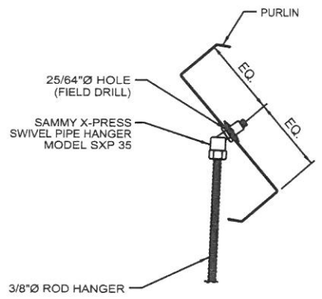


NOTE:
PURLIN LIP MUST NOT
BE DISTORTED.

HANGER DETAIL AT PURLINS — SH12A
SWIVEL PIPE HANGER FOR SLOPES LESS THAN 8:12 — AA

250# CAPACITY
ROOF SLOPE GREATER THAN
OR EQUAL TO 8:12

SEE ALSO (SH14AA)
(SH15AA)



HANGER DETAIL AT PURLINS — SH13
ROOF SLOPES GREATER THAN OR EQUAL TO 8:12 — AA

CADDY PURLIN CLAMP MODEL 315 IS AVAILABLE VIA THE MANUFACTURER'S WEBSITE:

www.erico.com

SAMMY X-PRESS SWIVEL PIPE HANGER MODEL SXP 35
SAMMY X-PRESS SIDEWINDER PIPE HANGER MODEL SWXP 35
AND INSTALLATION TOOLS ARE AVAILABLE VIA THE MANUFACTURER'S WEB SITE:

www.sammysuperscrew.com/sammyxpress.htm

WEBSITES FOR PREAPPROVED HANGER DEVICES — SH14 — AA

WARNING

THE HANGER CAPACITIES SHOWN ON THE AMERICAN BUILDINGS COMPANY DETAILS REPRESENT THE MAXIMUM ALLOWABLE SINGLE HANGING LOAD THAT A TYPICAL PURLIN CAN SAFELY SUPPORT UNDER THE BEST OF CIRCUMSTANCES USING THE PARTICULAR HANGER DEVICE SHOWN IN THE DETAIL.

MANY FACTORS BEYOND THE CONTROL OF THE METAL BUILDING SUPPLIER AFFECT THE ABILITY OF A PURLIN TO SAFELY SUPPORT HANGING LOADS COMBINED WITH OTHER REQUIRED ROOF LOADS. DUE TO THE VARIABLES INVOLVED IN HANGING LOADS AND THEIR ATTACHMENTS TO THE PURLINS, THE METAL BUILDING SUPPLIER CANNOT ASSURE THAT THE PURLINS FOR A PARTICULAR BUILDING PROJECT CAN SAFELY SUPPORT THE MAXIMUM ALLOWABLE HANGING LOADS IN COMBINATION WITH OTHER ROOF LOADS.

IT IS THE RESPONSIBILITY OF THE HANGER SYSTEM INSTALLER TO COORDINATE WITH THE ENGINEER OF RECORD FOR THE OVERALL PROJECT TO ENSURE A SAFE HANGING LOAD INSTALLATION. THE METAL BUILDING ENGINEER IS NOT THE ENGINEER OF RECORD FOR THE OVERALL PROJECT. WITHOUT SPECIFIC CERTIFICATION FOR INDIVIDUAL HANGING LOADS, THE NET EFFECTS OF APPLIED HANGER LOADS INSTALLED ON A PARTICULAR PURLIN SHALL NOT EXCEED THE NET EFFECTS OF THE CERTIFIED UNIFORMLY APPLIED DESIGN COLLATERAL LOAD. SEE SHEET ABC-1.

HANGER CAPACITIES WARNING — SH16 — AA

NOTE:

OTHER METHODS OF ATTACHING HANGING LOADS, NOT DEPICTED ON DETAILS SH01, SH02, SH03, SH11, SH12, AND SH13, ARE GENERALLY PERMITTED.

HOWEVER, THE HANGER LOAD MUST NOT EXCEED 50 POUNDS PER HANGER LOCATION (WITHOUT SPECIFIC PRIOR APPROVAL FROM A QUALIFIED DESIGN PROFESSIONAL FOR A PARTICULAR LOAD).

GENERAL HANGER NOTES — SH15 — AA

NOT FOR CONSTRUCTION

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
2	REVISED APPROVALS	HRH /	JV	08/03/2017
0	FOR APPROVAL ONLY	RCC / RCC	JV	06/12/2017

NO	RELEASE / REVISION	DWN: / CKD:	ENGR	DATE
1	REVISED APPROVAL	RCC / RCC	JV	06/14/2017

CAROLINA DIESEL TRUCKS
62 PROGRESS DRIVE
FUQUAY VARINA, NC 27526
THOMAS ANDREWS

AMERICAN BUILDINGS
A NUCOR COMPANY
MBMA MEMBER
ACCREDITED AC472

DRAWING STATUS:
FOR APPROVAL ONLY
SOFTWARE VERSIONS DESIGN: MSA 47.3 BIM: v20.6
JOB NUMBER: A17B0157A
SHEET: SED-020