APEC
985 TECHNOLOGY DR.
DOTHAN, AL 36303

DATE: 4/30/20
OMAHA
JOB NO: 6415
BUILDING SIZE:
WIDTH : 40 ft.
LENGTH : 40 ft.
EAVE HT : 16 ft.
JOB SITE: OMAHA, GA 31821

To Whom It May Concern:

This Letter of Design Certification ensures that primary and secondary framing furnished by Metal Building Manufacturer are designed in accordance with information specified to Metal Building Manufacturer on the order documents and summarized by loading information below.

DESIGN LOAD CRITERIA:
Building Code:IBC 18/GSBC 20
Roof Dead Load(D): 2.000 psf plus wt. of metal bldg structure
Roof Live Load(Lr): 20.00 psf
Tributary Live Load Reduction:Yes

Collateral Load(C)	: 0.5 psf	Snow Thermal Coef. Ct	: 1.00
Building Risk Category	: II - Normal	Snow Imp. Fac.	: 1.0000
Wind Speed Ultimate	: 110 mph	Seismic Use Group (SUG)	: II - Normal
Nominal	: 85.21 mph	Seismic Site Class	: D
Wind Exp. Cat	: B	Mapped Response (Ss)	: 0.1077
Serviceability Wind	: 10 -year MRI	Mapped Response (S1)	: 0.0666
Enclosure Type	: Enclosed	Design Response (Sds)	: 0.1141
Internal Wind Coef.	: -0.18/0.18	Design Response (Sd1)	: 0.1056
		Rigid Frame (Cs)	: 0.0381
Ground Snow Load(Pg)	: 5.00 psf	Design Category (SDC)	: B
Roof Snow Load	: 3.5 psf	Seismic Importance	: 1.00
Snow Exp. Fac	: 1.0000	Res Mod Factor(OMF)R	: 3.0000*
		Res Mod Factor (Brc) R	: 3.0000*

*STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

COMPONENTS & CLADDING (unfactored)
Wall Field Values : 16.283 psf / -17.640 psf
Wall Edge Values : 16.283 psf / -21.711 psf

REFERENCE DESIGN STANDARDS:
*AISC Specification for Structural Steel Buildings-Allowable stress design, 360-16.
*AISI North-American Specification for the Design of Cold-Formed Steel Structural Members, 2016 Edition.
*MBMA Low Rise Building Systems Manual,Latest Edition.
*AISC Design Guide 3,"Serviceability Design Consideration for Steel Buildings,Second Edition"
*AWS Latest Edition of Structural Welding Code-Steel.
* IBC 18/GSBC 20 are using the ASCE7-16.

This certification is limited to the structural design of the frames, secondary, and roof/wall covering manufactured or supplied by Metal Building Manufacturer only and excludes Accessory items such as doors, windows,louvers, translucent panels, and ventilators. This certification specifically excludes any foundation, masonry, erection of building and general contract work.

The undersigned is not the engineer of record for the overall project.

Sincerely,

Wayne Brad Baker, P.E.

GEORGIA REGISTERED No 27591 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

BUILDING PROFILE

Width (ft)	= 40	Eave Height (ft)	= 16
Length (ft)	= 40	Roof Slope (Rise/12)	= 2.0:12

BUILDING LOADS

A) THIS IS TO CERTIFY THAT THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED AND APPLIED AS REQUIRED BY ASSC 20 / IBC 18

B) THIS CERTIFICATION IS LIMITED TO THE STRUCTURAL DESIGN OF THE FRAMING AND COVERING PARTS MANUFACTURED BY THE BUILDING MANUFACTURER AND AS SPECIFIED IN THE CONTRACT. ACCESSORY ITEMS SUCH AS DOORS, WINDOWS, LOUVERS, TRANSLUCENT PANELS, VENTILATORS ARE NOT INCLUDED. ALSO EXCLUDED ARE OTHER PARTS OF THE PROJECT NOT PROVIDED BY THE BUILDING MANUFACTURER SUCH AS FOUNDATIONS, MASONRY WALLS, MECHANICAL EQUIPMENT AND THE ERECTION AND INSPECTION OF THE BUILDING. THE BUILDING SHOULD BE ERECTED ON A PROPERLY DESIGNED FOUNDATION IN ACCORDANCE WITH THE BUILDING MANUFACTURER'S DESIGN MANUAL, THE ATTACHED DRAWINGS, AND GOOD ERECTION PRACTICES. THE END USER AND/OR ENGINEER OF RECORD IS TO CONFIRM THAT THESE LOADS COMPLY WITH REQUIREMENTS OF THE LOCAL BUILDING DEPT.

OCCUPANCY/RISK CATEGORY	II – Normal	Ia 1.0000	Ia 1.00
WIND LOAD	ULTIMATE 110 MPH	NOMINAL 85.21 MPH	WIND EXPOSURE B
CLOSURE TYPE	Enclosed	INTERNAL WIND COEF.	-0.18 / 0.18
GROUND SNOW LOAD	5.00 PSF	ROOF SNOW LOAD 3.5 PSF	Ce 1.0000 Ct 1.00
SNOW DRIFTING LOADS	PER CODE		
COLLATERAL DEAD LOAD	0.5 PSF		
ROOF LIVE LOAD	20.00 PSF (REDUCIBLE Yes)		
DEAD LOAD	2.000 PSF (FOR ROOF PANELS AND PURLINS)		

SEISMIC

SPECTRAL RESPONSE Ss 0.1077 S1 0.0666 Sds 0.1141 Sd1 0.1056

SITE CLASS D DESIGN RISK CATEGORY B Cs 0.0381

RESPONSE MODIFICATION FACTOR, R 3.0000* FRAMES 3.0000* BRACING

BASIC SEISMIC FORCE RESISTING SYSTEM (LATERAL DIRECTIONS) = ORDINARY STEEL MOMENT FRAMES

BASIC SEISMIC FORCE RESISTING SYSTEM (ENDWALLS) = ORDINARY STEEL CONCENTRICALLY BRACED FRAMES

BASIC SEISMIC FORCE RESISTING SYSTEM (LONGITUDINAL DIRECTIONS)= ORDINARY STEEL CONC. BRACED FRAMES

ANALYSIS PROCEDURE = EQUIVALENT LATERAL FORCE PROCEDURE

SERVICEABILITY CRITERIA

STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC RESISTANCE.

MINIMUM DESIGN DEFLECTIONS

Endwall Column	= 120	Roof Panel (Live)	= 60
Endwall Rafter (Live)	= 180	Roof Panel (Wind)	= 60
Endwall Rafter (Wind)	= 180	Rigid Frame (Horz)	= 60
Wall Girt	= 90	Rigid Frame (Vert)	= 180
Roof Purlin (Live)	= 180	Rigid Frame (Seismic)	= 50
Roof Purlin (Wind)	= 150		
Wall Panel	= 60		

GENERAL NOTES

A) THE STRUCTURE UNDER THIS CONTRACT HAS BEEN DESIGNED AND DETAILED FOR THE LOADS AND CONDITIONS STIPULATED IN THE CONTRACT AND SHOWN ON THESE DRAWINGS. ANY ALTERATIONS TO THE STRUCTURAL SYSTEM OR REMOVAL OF ANY COMPONENT PARTS, OR THE ADDITION OF OTHER CONSTRUCTION MATERIALS OR LOADS MUST BE DONE UNDER THE ADVICE AND DIRECTION OF A REGISTERED ARCHITECT, CIVIL OR STRUCTURAL ENGINEER. THE BUILDING MANUFACTURER WILL ASSUME NO RESPONSIBILITY FOR ANY LOADS NOT INDICATED.

B) THIS METAL BUILDING IS DESIGNED WITH THE BUILDING MANUFACTURER'S STANDARD PRACTICES WHICH ARE BASED ON PERTINENT PROCEDURES AND RECOMMENDATIONS OF THE FOLLOWING ORGANIZATIONS AND CODES.

1. AMERICAN INSTITUTE OF STEEL CONSTRUCTION: " AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS–ALLOWABLE STRESS DESIGN"
2. AMERICAN IRON AND STEEL INSTITUTE: "SPECIFICATION FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS"
3. AMERICAN WELDING SOCIETY: "STRUCTURAL WELDING CODE" AWS D1.1.
4. METAL BUILDING MANUFACTURER'S ASSOCIATION: "LOW RISE BUILDING SYSTEMS MANUAL"

C) 1) MATERIAL PROPERTIES OF STEEL PLATE USED IN THE FABRICATION OF PRIMARY RIGID FRAMES, AND OTHER PRIMARY STRUCTURAL EXCLUSIVE OF COLD-FORMED SECTIONS, CONFORM TO ASTM-A529 OR A572 . FLANGES WITH THICKNESS OF ONE INCH OR LESS AND WIDTH OF 12" OR LESS CONFORM TO A529 WITH A MINIMUM YIELD POINT OF 55,000 psi. FLANGES GREATER THAN 1" IN THICKNESS OR 12" IN WIDTH CONFORM TO A572 WITH A MINIMUM YIELD POINT OF 50,000 psi. WEB MATERIAL CONFORMS TO ASTM-A529 WITH A MINIMUM YIELD POINT OF 55,000 psi.

2) MATERIAL PROPERTIES OF PIPE SECTIONS CONFORM TO ASTM-A500, GRADE B WITH A MINIMUM YIELD POINT OF 42,000 psi.

3) MATERIAL PROPERTIES OF TUBE SECTIONS CONFORM TO ASTM-A500, GRADE B WITH A MINIMUM YIELD POINT OF 46,000 psi.

4) MATERIAL PROPERTIES OF HOT ROLLED CHANNEL AND ANGLE MEMBERS CONFORM TO THE REQUIREMENTS OF ASTM-A529 WITHMINIMUM YIELD POINT OF 50,000 PSI. HOT ROLLED W-SHAPED MEMBERS CONFORM TO THE REQUIREMENTS OF ASTM-A992WITH MINIMUM YIELD POINT OF 50,000 PSI.

5) MATERIAL PROPERTIES OF COLD FORMED LIGHT GAGE STEEL MEMBERS CONFORM TO EITHER ASTM A653-06 GR 55 OR A1011-04 HSLAS GRADE 55 WITH YIELD OF 55,000 psi.

6) MATERIAL PROPERTIES OF ROOF/WALL SHEETING, BASE METAL CONFORM TO ASTM-A792 GRADES D OR E WITH MINIMUM YIELD POINTS OF 50,000 psi AND 60,000 psi RESPECTIVELY, AS REQUIRED BY DESIGN. COATING OF BASE MATERIAL IS 55% ALUMINUM-ZINC ALLOY IN ACCORDANCE WITH AZ55 SPECIFICATIONS.

7) CABLE UTILIZED FOR BRACING CONFORMS TO ASTM A475. CABLE BRACING IS TO BE INSTALLED TO A TAUT CONDITION.

8) ROD UTILIZED FOR BRACING MEMBERS CONFORM TO ASTM-A36 WITH MINIMUM YIELD POINT OF 36,000 PSI.

9) IT IS THE RESPONSIBILITY OF ERECTOR TO ENSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE "RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A-325 OR A-490 BOLTS". ALL A-325 BOLTS IN PRIMARY FRAMING MUST BE "SNUG-TIGHT", EXCEPT AS FOLLOWS:
"FULLY-PRETENSION" A-325 BOLTS IF:
a) BUILDING LOCATED IN A HIGH SEISMIC AREA. FOR IBC-BASED CODE, "HIGH SEISMIC AREA" IS DEFINED AS "SEISMIC DESIGN CATEGORY" OF "D", "E" OR "F".
b) BUILDING SUPPORTS A CRANE SYSTEM WITH A CAPACITY GREATER THAN 5.00 TONS.
c) BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT OR STRESS – REVERSALS ON THE CONNECTIONS.
d) ANY CONNECTION DESIGNATED IN THESE DRAWINGS AS "A-325 – SC".

10) SECONDARY MEMBERS AND FLANGE BRACE CONNECTIONS SHALL ALWAYS BE SNUG TIGHT, UNO.

11) ANCHOR BOLTS 3/4" IN DIAMETER THRU 1 1/4" IN DIAMETER CONFORM TO A.S.T.M. F1554 GR. 36. ANCHOR BOLTS 1/2" IN DIAMETER CONFORM TO A.S.T.M. A-307.

D) UNLESS NOTED OTHERWISE ON FRAMING COLOR CHART: ALL STEEL MEMBERS EXCEPT BOLTS, FASTENERS, CABLE AND RODS SHALL RECEIVE ONE COAT OF STANDARD RED OXIDE SHOP PRIMER.

E) SHOP AND FIELD INSPECTIONS AND ASSOCIATED FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR, UNLESS STIPULATED OTHERWISE IN THE CONTRACT.

APPROVAL NOTES

THE FOLLOWING CONDITIONS APPLY IN THE EVENT THAT THESE DRAWINGS ARE USED AS APPROVAL DRAWINGS:

A) IT IS IMPERATIVE THAT ANY CHANGES TO THESE DRAWINGS:
1) BE MADE IN CONTRASTING INK.
2) HAVE ALL INSTANCES OF CHANGE CLEARLY INDICATED.
3) BE LEGIBLE AND UNAMBIGUOUS.

B) DATED SIGNATURE IS REQUIRED ON ALL PAGES.

C) MANUFACTURER RESERVES THE RIGHT TO RESUBMIT DRAWINGS WITH EXTENSIVE OR COMPLEX CHANGES REQUIRED TO AVOID MISFABRICATION. THIS MAY IMPACT THE DELIVERY SCHEDULE.

D) APPROVAL OF THESE DRAWINGS INDICATES CONCLUSIVELY THAT THE MANUFACTURER HAS CORRECTLY INTERPRETED THE CONTRACT REQUIREMENTS, AND FURTHER CONSTITUTES AGREEMENT THAT THE BUILDING AS DRAWN, OR AS DRAWN WITH INDICATED CHANGES REPRESENTS THE TOTAL OF THE MATERIALS TO BE SUPPLIED BY MANUFACTURER.

E) ANY CHANGES NOTED ON THE DRAWINGS NOT IN CONFORMANCE WITH THE TERMS AND REQUIREMENTS OF THE CONTRACT BETWEEN MANUFACTURER AND ITS CUSTOMER ARE NOT BINDING ON MANUFACTURER UNLESS SUBSEQUENTLY SPECIFICALLY ACKNOWLEDGED AND AGREED TO IN WRITING BY CHANGE ORDER OR SEPARATE DOCUMENTATION. MANUFACTURER RECOGNIZES THAT RUBBER STAMPS ARE ROUTINELY USED FOR INDICATING APPROVAL, DISAPPROVAL, REJECTION, OR MERE REVIEW OF THE DRAWINGS SUBMITTED. HOWEVER, MANUFACTURER DOES NOT ACCEPT CHANGES OR ADDITIONS TO CONTRACTUAL TERMS AND CONDITIONS THAT MAY APPEAR WITH USE OF A STAMP OR SIMILAR INDICATION OF APPROVAL, DISAPPROVAL, ETC. SUCH LANGUAGE APPLIED TO MANUFACTURER'S DRAWINGS BY THE CUSTOMER, ARCHITECT, ENGINEER, OR ANY OTHER PARTY WILL BE CONSIDERED AS UNACCEPTABLE ALTERATIONS TO THESE DRAWING NOTES, AND WILL NOT ALTER THE CONTRACTUAL RIGHTS AND OBLIGATIONS EXISTING BETWEEN MANUFACTURER AND ITS CUSTOMER.

SAFETY COMMITMENT

A) THE BUILDING MANUFACTURER HAS A COMMITMENT TO MANUFACTURE QUALITY BUILDING COMPONENTS THAT CAN BE SAFELY ERECTED. HOWEVER, THE SAFETY COMMITMENT AND JOB SITE PRACTICES OF THE ERECTOR ARE BEYOND THE CONTROL OF THE BUILDING MANUFACTURER.

B) IT IS STRONGLY RECOMMENDED THAT SAFE WORKING CONDITIONS AND ACCIDENT PREVENTION PRACTICES BE THE TOP PRIORITY OF ANY JOB SITE.

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

D) MAKE CERTAIN ALL EMPLOYEES KNOW THE SAFEST AND MOST PRODUCTIVE WAY OF ERECTING A BUILDING. EMERGENCY PROCEDURES SHOULD BE KNOWN TO ALL EMPLOYEES.

E) DAILY MEETINGS HIGHLIGHTING SAFETY PROCEDURES ARE ALSO RECOMMENDED. THE USE OF HARD HATS, RUBBER SOLE SHOES FOR ROOF WORK, PROPER EQUIPMENT FOR HANDLING MATERIAL, AND SAFETY NETS WHERE APPLICABLE, ARE RECOMMENDED.

ERECTOR / CONTRACTOR RESPONSIBILITIES

A) IT IS THE RESPONSIBILITY OF THE ERECTOR/CONTRACTOR TO INSURE THAT ALL PROJECT PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF ANY GOVERNING BUILDING AUTHORITIES. THE SUPPLYING OF SEALED ENGINEERING DATA AND DRAWINGS FOR THE METAL BUILDING SYSTEM DOES NOT IMPLY OR CONSTITUTE AN AGREEMENT THAT THE BUILDING MANUFACTURER OR ITS DESIGN ENGINEER IS ACTING AS THE ENGINEER OF RECORD OR DESIGN PROFESSIONAL FOR A CONSTRUCTION PROJECT.

B) THE CONTRACTOR MUST SECURE ALL REQUIRED APPROVALS AND PERMITS FROM THE APPROPRIATE AGENCY AS REQUIRED.

C) APPROVAL OF THE MANUFACTURER'S DRAWINGS AND CALCULATIONS INDICATES THAT THE BUILDING MANUFACTURER CORRECTLY INTERPRETED AND APPLIED THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND SPECIFICATIONS. (SECT. 4.4.1 AISC CODE OF STANDARD PRACTICE, 13TH ED.)

D) WHERE DISCREPANCIES EXIST BETWEEN THE MANUFACTURER'S STRUCTURAL STEEL PLANS AND THE PLANS FOR OTHER TRADES, THE STRUCTURAL STEEL PLANS SHALL GOVERN. (SECT. 3.3 AISC CODE OF STANDARD PRACTICE 13TH ED.)

E) DESIGN CONSIDERATIONS OF ANY MATERIALS IN THE STRUCTURE WHICH ARE NOT FURNISHED BY THE BUILDING MANUFACTURER ARE THE RESPONSIBILITY OF THE CONTRACTORS AND ENGINEERS OTHER THAN THE BUILDING MANUFACTURER'S ENGINEERS UNLESS SPECIFICALLY INDICATED.

F) THE ERECTOR/CONTRACTOR IS RESPONSIBLE FOR ALL ERECTION OF STEEL AND ASSOCIATED WORK IN COMPLIANCE WITH THE BUILDING MANUFACTURER'S "FOR CONSTRUCTION" DRAWINGS.

G) PRODUCTS SHIPPED TO ERECTOR/CONTRACTOR OR HIS CUSTOMER SHALL BE INSPECTED BY ERECTOR/CONTRACTOR IMMEDIATELY UPON ARRIVAL. CLAIMS FOR SHORTAGES OR DEFECTIVE MATERIAL IF NOT PACKAGED MUST BE SENT TO THE MANUFACTURER IN WRITING WITHIN FIVE (5) DAYS AFTER RECEIPT OF THE SHIPMENT. HOWEVER, IF A DEFECT IS OF SUCH A NATURE THAT REASONABLE VISUAL INSPECTION WOULD FAIL TO DISCLOSE IT, THEN THE CLAIM MUST BE MADE WITHIN FIVE (5) DAYS AFTER THE ERECTOR/CONTRACTOR LEARNS OF THE DEFECT. THE MANUFACTURER WILL NOT BE LIABLE FOR ANY DEFECT UNLESS CLAIM IS MADE WITHIN ONE (1) YEAR AFTER DATE OF THE ORIGINAL SHIPMENT BY THE MANUFACTURER TO CONTRACTOR OR HIS CUSTOMER. THE MANUFACTURER WILL BE GIVEN A REASONABLE OPPORTUNITY TO INSPECT DEFECTIVE MATERIALS UPON RECEIPT OF CLAIM BY CONTRACTOR.
IF A DEFECT IS OF SUCH NATURE THAT IT CAN BE REMEDIED BY A FIELD OPERATION AT THE JOB SITE WITHOUT THE NECESSITY OF RETURNING THE MATERIAL TO THE MANUFACTURER, THEN UPON WRITTEN AUTHORIZATION OF THE MANUFACTURER THE CONTRACTOR MAY REPAIR OR CAUSE THE MATERIAL TO BE REPAIRED AND THE MANUFACTURER WILL REIMBURSE THE CONTRACTOR FOR THE COST OF THE REPAIR IN ACCORDANCE WITH THE WRITTEN AUTHORIZATION.

THE CORRECTION OF MINOR MISFITS BY THE USE OF DRIFT PINS TO DRAW THE COMPONENTS IN TO LINE, MODERATE AMOUNTS OF REAMING,CHIPPING AND CUTTING, AND THE REPLACEMENT OF MINOR SHORTAGES OF MATERIAL ARE A NORMAL PART OF ERECTION AND ARE NOT SUBJECT TO CLAIM.

H) ALL BRACING AS SHOWN AND PROVIDED BY THE MANUFACTURER FOR THIS BUILDING IS REQUIRED AND SHALL BE INSTALLED BY THE ERECTOR AS A PERMANENT PART OF THE STRUCTURE.

I) TEMPORARY SUPPORTS, SUCH AS TEMPORARY GUYS, BRACES, FALSE WORK, CRIBBING OR OTHER ELEMENTS REQUIRED FOR THE ERECTION OPERATION WILL BE DETERMINED AND FURNISHED AND INSTALLED BY THE ERECTOR. THESE TEMPORARY SUPPORTS WILL 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, SEISMIC FORCES AND ERECTION OPERATIONS, BUT NOT THE LOADS RESULTING FROM THE PERFORMANCE OF WORK BY OR THE ACTS OF OTHERS, NOR SUCH UNPREDICTABLE LOADS AS THOSE DUE TO TORNADO, EXPLOSION OR COLLISION. (SECT. 7.10.3 AISC CODE OF STANDARD PRACTICE, 13TH ED.)

J) METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR THE DESIGN,MATERIAL AND WORKMANSHIP OF FOUNDATION. ANCHOR BOLT PLANS PREPARED BY MBM ARE INTENDED TO SHOW ONLY LOCATION, DIAMETER AND PROJECTION OF THE ANCHOR RODS REQUIRED TO ATTACH THE METAL BUILDING SYSTEM TO FOUNDATION. IT IS RESPONSIBILITY OF THE END CUSTOMER TO ENSURE THAT ADEQUATE PROVISIONS ARE MADE FOR SPECIFYING ROD EMBEDMENT, BEARING VALUES, THE RODS AND OTHER ASSOCIATED ITEMS EMBEDDED IN THE CONCRETE FOUNDATION, AS WELL AS FOUNDATION DESIGN FOR THE LOADS IMPOSED BY MB SYSTEM, OTHER IMPOSED LOAD, AND THE BEARING CAPACITY OF THE SOIL AND OTHER CONDITIONS OF THE BUILDING SITE (MBMA 05 SECTIONS 3.2.2 AND A3)

K) METAL BUILDING MANUFACTURER DOES NOT PROVIDE ANY FIELD SUPERVISION FOR THE ERECTION, NOR DOES MBM PERFORM ANY INSPECTIONS DURING OR AFTER ERECTION.

COMPONENTS & CLADDING (unfactored)

Wall Field Values	=	16.283 psf	/	-17.640 psf
Wall Edge Values	=	16.283 psf	/	-21.711 psf

IT IS THE RESPONSIBILITY OF THE CUSTOMER TO PROVIDE ALL DOCUMENTATION REQUIRED FOR ANY ACCESSORIES NOT PROVIDED BY MBM TO THEIR LOCAL PERMITTING OFFICE. ALL ACCESSORIES MUST COMPLY AND MEET ALL DESIGN REQUIREMENTS PER LOCAL CODES.

ALL VEHICULAR FRAMED OPENINGS SUPPLIED ON THIS PROJECT HAVE BEEN DESIGNED TO SUPPORT WIND LOADS NORMAL TO A DOOR SYSTEM, BASED ON THE STANDARD BUILDING CODE CRITERIA. THE VEHICULAR FRAMED OPENING HAS NOT BEEN DESIGNED FOR ANY ADDITIONAL MOMENT OR CAUSALITY FORCE FROM THE DOOR SYSTEM. ANY CHANGES TO THE INFORMATION SHOWN HERE WOULD REQUIRE AN ENGINEERING INVESTIGATION AND POSSIBLE BUILDING REINFORCEMENT.

IAS ACCREDITED AC472

BUILDING DESIGNED & MANUFACTURED BY AN IAS ACCREDITED FACILITY.

FRAMING COLORS

Rigid Frame: RD – Red Oxide
Flange Brace: GP – Gray Primer
Angle: GZ – Galvanized

	Girt	Purl	Ev/Gt	Jmb	BB	Endwall Col	Endwall Rafr
U SECTION	RD	RD	RD	RD	RD	RD	RD
C SECTION	RD	RD	RD	RD	RD	RD	RD
D SECTION	RD	RD	RD	RD	RD	RD	RD
Z SECTION	RD	RD	RD	RD	RD	RD	RD
E SECTION	RD	RD	RD	RD	RD	RD	RD
N SECTION	RD	RD	RD	RD	RD	RD	RD
W SECTION	RD	RD	RD	RD	RD	RD	RD

WHEN GALVANIZED PROVIDED: ALL FINISHED PRIMARY BUILT-UP AND HOT ROLL MEMBERS ARE HOT DIPPED GALVANIZED. ALL SECONDARY COLD FORMED MEMBERS ARE PRE-GALVANIZED.

COLORS:

ROOF:	GALVALUME
WALLS:	COLOR
WAINSCOTE:	COLOR
GABLES:	COLOR
EAVE:	COLOR
CORNER:	COLOR
FRAMED OPENINGS:	COLOR
GUTTER:	COLOR
DOWNSPOUTS:	COLOR
BASE:	COLOR

DRAWING STATUS

☐ FOR APPROVAL: THESE DRAWINGS, BEING FOR APPROVAL, ARE BY DEFINITION NOT FINAL, AND ARE FOR CONCEPTUAL REPRESENTATION ONLY. THEIR PURPOSE IS TO CONFIRM PROPER INTERPRETATION OF THE PROJECT DOCUMENTS. ONLY DRAWINGS ISSUED "FOR CONSTRUCTION" CAN BE CONSIDERED AS COMPLETE.

☒ FOR PERMIT: THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL IN THAT, AS A MINIMUM, PIECE MARKINGS ARE NOT IDENTIFIED. ONLY DRAWINGS ISSUED " FOR CONSTRUCTION " CAN BE CONSIDERED AS COMPLETE.

☐ FOR CONSTRUCTION: THESE DRAWINGS ARE FINAL AND ISSUED FOR FIELD USE FOR BUILDING ERECTION

GEORGIA REGISTERED No 27891 PROFESSIONAL ENGINEER WAYNE BRAD BAKER
5-7-20

DRAWING INDEX

REV.	PAGE	DESCRIPTION
	0	COVER PAGE
	1	ANCHOR BOLT LAYOUT
	1.1	ANCHOR BOLT DETAILS
	1.2	ANCHOR BOLT REACTIONS
	2	ROOF FRAMING LAYOUT
	2.1	RIGID FRAME CROSS SECTION
	3	SIDEWALL FRAMING LAYOUT
	4	ENDWALL FRAMING LAYOUT
	5–5.4	FRAMING DETAILS
	6	ROOF PANELS & TRIM
	6.1	ROOF PANEL DETAILS
	7	SIDEWALL PANELS & TRIM
	7.1	SIDEWALL PANEL DETAILS
	8	ENDWALL PANELS & TRIM
	8.1	ENDWALL PANEL DETAILS
	9	SPECIAL DETAILS
	10–10.2	INSULATION LAYOUT & DETAILS
	11	PARTITION LAYOUT & DETAILS

DATE	CHK	DET	ISSUE

BUILDING CODE SPECIFICATIONS REQUIRE CONSIDERATION OF SNOW SURCHARGES FOR ANY LOWER ROOF OF A STRUCTURE LOCATED WITHIN 20ft. OF A HIGHER STRUCTURE. INFORMATION SUPPLIED TO THE METAL BUILDING SUPPLIER DOES NOT INDICATE PRESENCE OF A SHADOWING HIGHER STRUCTURE WITHIN THIS 20ft. ENVELOPE, AND AS SUCH, SNOW SURCHARGES HAVE NOT BEEN CONSIDERED IN THE DESIGN. 2

THIS PROJECT IS DESIGNED AS AN ENCLOSED BUILDING. ACCESSORIES (DOORS, WINDOWS, ETC.) BY OTHERS MUST BE DESIGNED AS "COMPONENTS AND CLADDING" IN ACCORDANCE TO SPECIFIC WIND PROVISIONS OF REFERENCED BUILDING CODE. 3

FOR OCCUPANCY (RISK), CATEGORY I OR II, IBC PROVISIONS INDICATE THAT SINGLE-STORY BUILDINGS SHALL HAVE "NO DRIFT LIMIT" PROVIDED THAT INTERIOR WALLS, PARTITIONS, CEILINGS AND EXTERIOR WALL SYSTEMS HAVE BEEN DESIGNED TO ACCOMODATE THE SEISMIC STORY DRIFTS. INTERIOR WALLS, PARTITIONS, CEILINGS OR EXTERIOR SYSTEMS NOT PROVIDED BY MBM SHALL BE DESIGNED AND DETAILED BY OTHERS TO ACCOMODATE THE SEISMIC STORY DRIFTS. 4

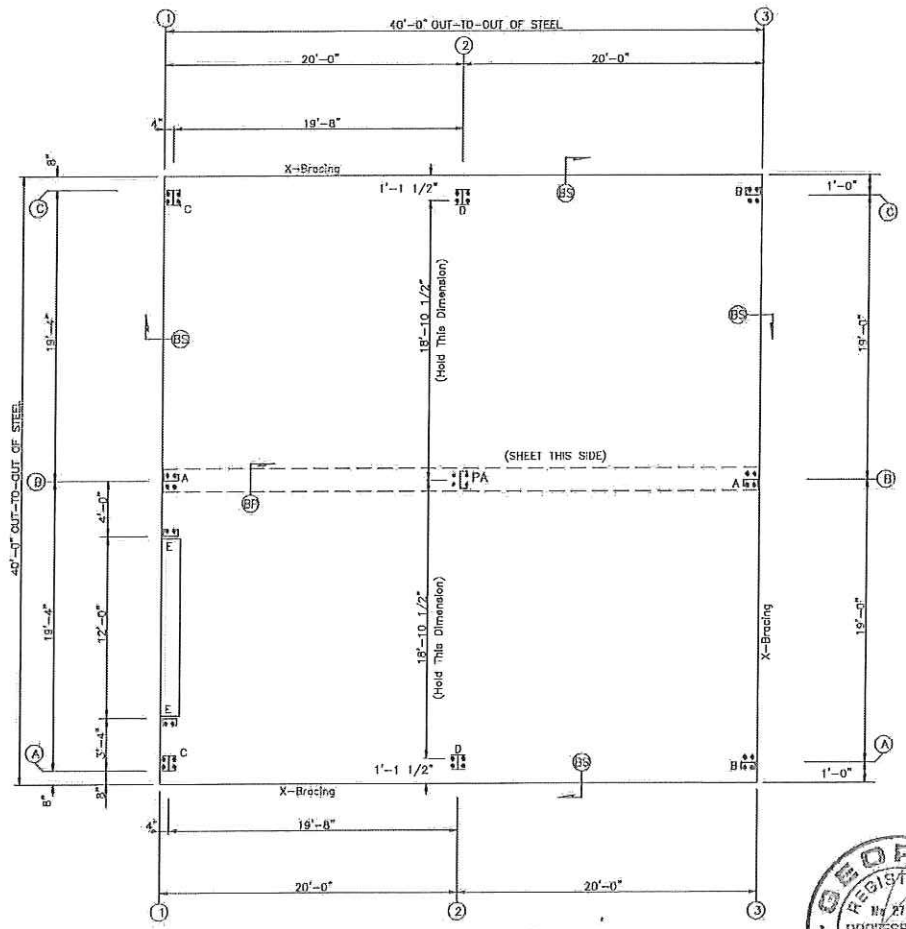
0.5 PSF COLL ONLY ALLOW LIGHTING TO HANG FROM ROOF SYSTEMS SUSPENSION OF ANY LOAD INDUCING SYSTEM IS EXPLICITLY PROHIBITED, UNLESS A CORRESPONDING REDUCTION IN CERTIFIED LIVE/SNOW LOADS CAN BE PERMITTED BY CODE. 6

FOR:
OMAHA
215 SAVANNAH STREET
OMAHA, GA 31821
JOBSITE: OMAHA, GA 31821

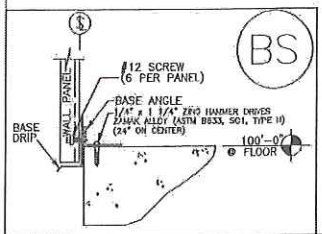
FROM:
APEC
985 TECHNOLOGY DR.
DOTHAN, AL 36303

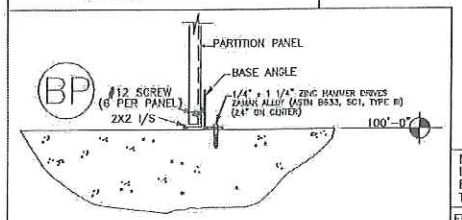
JOB NO : 6415
DATE : 4/30/20
BY : GTL
SCALE : NONE
TITLE : COVER PAGE
NUMBER : PAGE 0

⊕ Dia= 5/8"
⊕ Dia= 3/4"



ANCHOR BOLT PLAN
NOTE: All Base Plates @ 100'-0" (Unless Noted)





NOTE: ALL FIELD LOCATED FRAMED OPENING LOCATIONS SHALL BE AT THE DISCRETION OF THE ERECTOR/CUSTOMER. IT IS RECOMMENDED THAT THESE ANCHORS BE LOCATED AT TIME OF ERECTION.

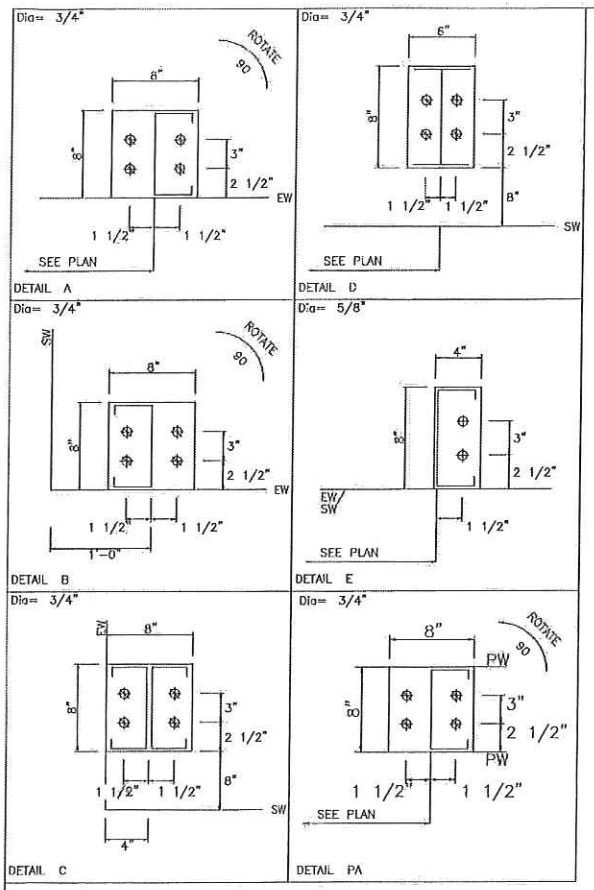
FIELD LOCATE:
(2) 3070 FRAMED OPENINGS & WALKDOORS
(1) 4070 FRAMED OPENING & WALKDOOR

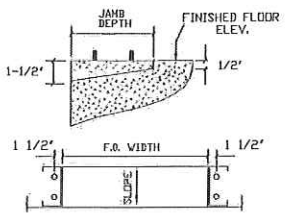
GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27831 WAYNE BRAD BAKER
5-7-20

ISSUE	DET	CHK	DATE

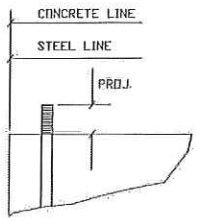
APEC

CUSTOMER: OMAHA			
JOB NO.: 6415		DATE: 4/30/20	
LOCATION: OMAHA, GA 31821			
DRAWING NAME: ANCHOR BOLT LAYOUT		SCALE: NONE	
DRAWING NO.: PAGE 1	DRAWN BY: GTL	CHECKED BY: SPW	DIV:





TYP. O.H. DOOR RECESS DETAIL



ANCHOR BOLT PROJECTION

GEORGIA REGISTERED No. 21631 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

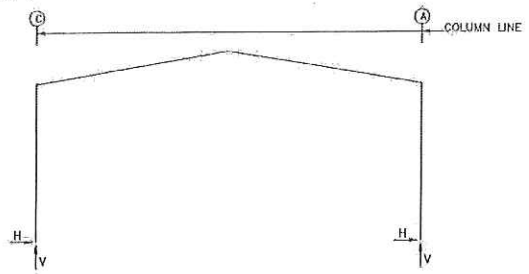
JOB NO.: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: ANCHOR BOLT DETAILS — SCALE: NONE

DRAWING NO.: PAGE 1.1 — DRAWN BY: GTL — CHECKED BY: SPW — ENG.

FRAME LINES: 2



RIGID FRAME: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Base Plate (in) Thick	Grout (in)
2	C	4	0.750	6.000	8.000	0.375	0.0
2	A	4	0.750	6.000	8.000	0.375	0.0

ENDWALL COLUMN: ANCHOR BOLTS & BASE PLATES

Frm Line	Col Line	Anc. Bolt Qty	Anc. Bolt Dia	Base Plate (in) Width	Base Plate (in) Length	Base Plate (in) Thick	Grout (in)
1	C	4	0.750	8.000	8.000	0.375	0.0
1	B	4	0.750	8.000	8.000	0.250	0.0
1	A	4	0.750	8.000	8.000	0.375	0.0
3	A	4	0.750	8.000	8.000	0.250	0.0
3	B	4	0.750	8.000	8.000	0.250	0.0
3	C	4	0.750	8.000	8.000	0.250	0.0

NOTES FOR REACTIONS

Building reactions are based on the following building data:

Width (ft)	=	40.0
Length (ft)	=	40.0
Eave Height (ft)	=	16.0/ 16.0
Roof Slope (Rise/12)	=	2.0/ 2.0
Dead Load (psf)	=	2.0
Collateral Load (psf)	=	0.5
Roof Live Load(psf)	=	20.0
Frame Live Load(psf)	=	12.0
Snow Load (psf)	=	3.5
Wind Speed (mph)	=	110.0
Wind Code	=	GSBC 20 (IBC 18)
Exposure	=	B
Enclosed/Open/Partial	=	ENCLOSED
Importance Wind	=	1.00
Importance Seismic	=	1.00
Seismic Zone	=	B
Seismic Coeff (Fa*Ss)	=	0.17

BUILDING BRACING REACTIONS

Wall Loc	Wall Line	Col Line	± Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel Shear (lb/ft) Wind	Seis	Note
L_EW	1								(1)
F_SW	A	1,2	2.6	1.8	0.2	0.1			
R_EW	3	A,B	1.6	1.5	0.1	0.1			
B_SW	C	2,1	2.6	1.8	0.2	0.1			

(1)Bracing in roof to rigid frame

RIGID FRAME: BASIC COLUMN REACTIONS (k)

Frame Line	Column Line	Dead Horiz	Dead Vert	Collateral Horiz	Collateral Vert	Live Horiz	Live Vert	Snow Horiz	Snow Vert	Wind_Left1 Horiz	Wind_Left1 Vert	Wind_Right1 Horiz	Wind_Right1 Vert
2	C	0.4	1.4	0.1	0.3	2.0	6.0	0.6	1.7	-5.9	-9.3	2.6	-3.9
2	A	-0.4	1.4	-0.1	0.3	-2.0	6.0	-0.6	1.8	-2.8	-3.9	5.9	-9.3

Frame Line	Column Line	Wind_Left2 Horiz	Wind_Left2 Vert	Wind_Right2 Horiz	Wind_Right2 Vert	Wind_Long1 Horiz	Wind_Long1 Vert	Wind_Long2 Horiz	Wind_Long2 Vert	Seismic_Left Horiz	Seismic_Left Vert	Seismic_Right Horiz	Seismic_Right Vert
2	C	-6.6	-6.0	2.1	-0.6	0.4	-7.0	-0.1	-5.9	-0.2	-0.1	0.2	0.1
2	A	-2.1	-0.6	6.6	-6.0	0.1	-5.9	-0.4	-7.0	-0.2	0.1	0.2	-0.1

Frame Line	Column Line	MIN_SNOW Horiz	MIN_SNOW Vert	F1UNB_SL_L Horiz	F1UNB_SL_L Vert	F1UNB_SL_R Horiz	F1UNB_SL_R Vert
2	C	0.8	2.5	0.5	1.8	0.5	1.1
2	A	-0.8	2.5	-0.5	1.1	-0.5	1.8

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
1	C	0.3	0.0	1.6	0.3	-1.3	-0.8	-0.8	-0.3	-1.2	1.2	-1.4	-0.7
1	B	0.8	0.1	5.0	0.9	-3.4	-3.4	-2.2	-2.2	-2.8	2.8	-3.3	-3.3
1	A	0.3	0.0	1.6	0.3	-0.8	-1.3	-0.3	-0.8	-1.2	1.2	-0.7	-1.4

Frm Line	Col Line	Seis Left Vert	Seis Right Vert	MIN_SNOW Horz	MIN_SNOW Vert	E1UNB_SL_L Horz	E1UNB_SL_L Vert	E1UNB_SL_R Horz	E1UNB_SL_R Vert
1	C	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0
1	B	0.0	0.0	0.0	1.2	0.0	0.8	0.0	0.8
1	A	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
3	A	0.3	0.0	1.6	0.3	-1.3	-0.7	-0.8	-0.2	-1.2	1.2	-1.4	-0.7
3	B	0.8	0.1	5.0	0.9	-3.2	-3.5	-2.1	-2.3	-2.8	2.8	-3.3	-3.2
3	C	0.3	0.0	1.6	0.3	-1.0	-1.3	-0.4	-0.8	-1.2	1.2	-0.7	-1.5

Frm Line	Col Line	Seis Left Vert	Seis Right Vert	MIN_SNOW Horz	MIN_SNOW Vert	E2UNB_SL_L Horz	E2UNB_SL_L Vert	E2UNB_SL_R Horz	E2UNB_SL_R Vert
3	A	0.0	0.0	0.0	0.4	0.0	0.3	0.0	0.0
3	B	0.0	0.0	0.0	1.2	0.0	0.8	0.0	0.8
3	C	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.3

ANCHOR BOLT SUMMARY

Qty	Locate	Dia (in)	Type	Projection (in)
4	Jamb	5/8"	A307	1.50
24	Endwall	3/4"	GR36	1.50
8	Frame	3/4"	GR36	2.50
4	PC	3/4"	GR36	1.50

GENERAL NOTES

1. FOUNDATION DESIGN AND CONSTRUCTION ARE NOT THE RESPONSIBILITY OF METAL BUILDING MANUFACTURER.
2. ALL REACTIONS ARE UNFACTORED.
3. ULTIMATE WIND LOADS ARE USED TO DERIVE THE WIND REACTION.
4. ANCHOR BOLTS SHALL BE ACCURATELY SET TO A TOLLERANCE OF +/- 1/8" IN BOTH ELEVATION AND LOCATION.
5. COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED A BEARING PRESSURE OF 1050 POUNDS PER SQUARE INCH.

GEORGIA REGISTERED No 21891 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5.7.20

NOTE: THE FRAMING AT BOTH ENDWALLS IS NOT DESIGNED TO ACCOMMODATE FUTURE ADDITIONS. REACTIONS CORRESPONDING TO THESE FRAME LINES REFLECT LOADINGS FOR ACTUAL TRIBUTARY AREA AND ARE NOT INTENDED TO INCLUDE ANY FUTURE MODIFICATIONS UNLESS NOTED OTHERWISE.

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

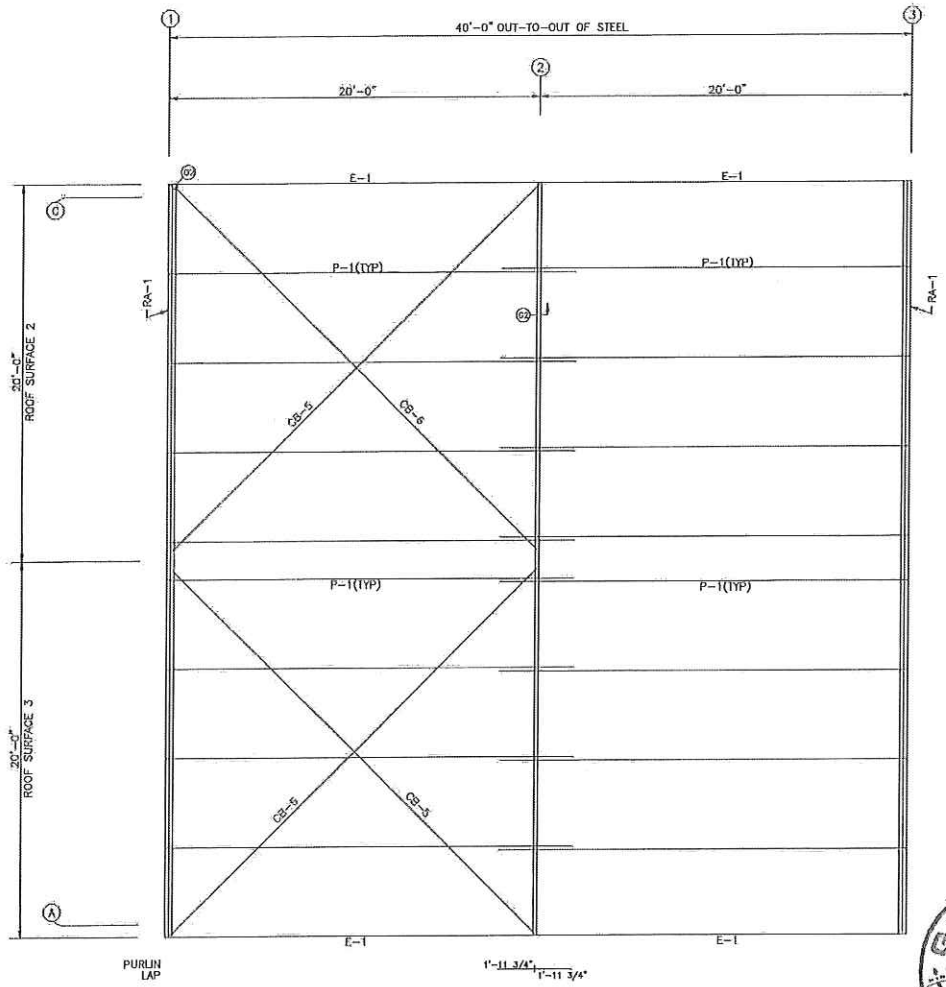
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: ANCHOR BOLT REACTIONS — SCALE: NONE

DRAWING NO: PAGE 1.2 — DRAWN BY: GTL — CHECKED BY: SPW — DWG:

MEMBER TABLE ROOF PLAN		
MARK	PART	LENGTH
P-1	8x25Z16	21'-11 1/2"
E-1	8LE14@2	19'-11 1/2"
CB-5	1/4 CBL	27'-1"
CB-6	1/4 CBL	27'-3"



ROOF FRAMING PLAN

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27691 WAYNE BRAD BAKER

5.7.20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: ROOF FRAMING LAYOUT — SCALE: NONE

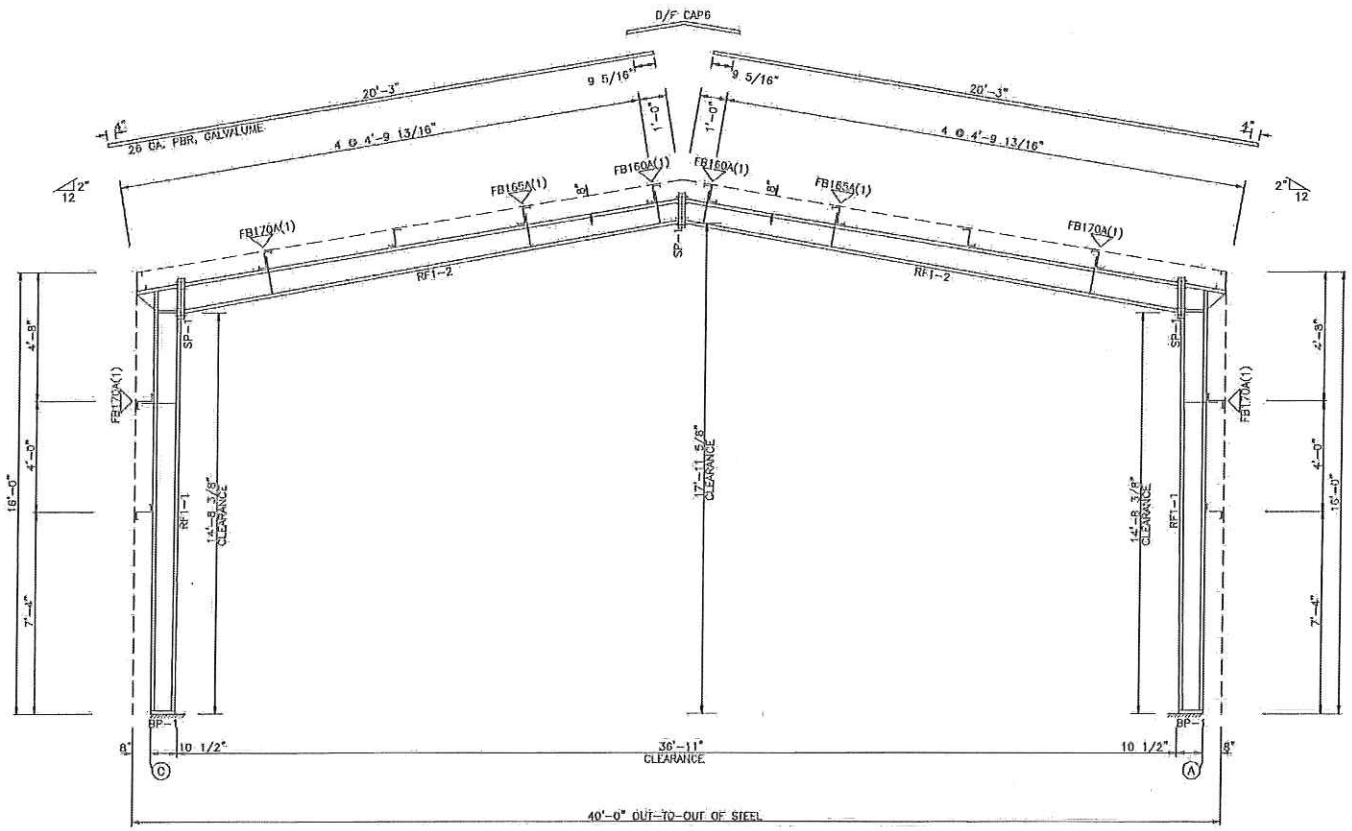
DRAWING NO: PAGE 2 — DRAWN BY: GTL — CHECKED BY: SPW — DWG:

SPLICE BOLT TABLE						
MARK	Qty Top	Bot	Int	TYPE	DIA	Length
SP-1	4	4	0	A325	5/8"	2"

BASE PLATE TABLE			
COL MARK	PLATE SIZE Width	THICK	Length
BP-1	6"	3/8"	8"

MEMBER TABLE						
MARK	Weight	Web Depth Start/End	Web PLATE THICK	Length	Outside Flange W x Thk x Length	Inside Flange W x Thk x Length
RF1-1	231	7.5/10.0	0.135	14'-4 1/4"	5 x 1/4" x 15'-4 1/2"	5 x 1/4" x 14'-4 1/4"
		10.0/10.0	0.250	1'-2"	5 x 5/16" x 1'-6 7/16"	
RF1-2	271	10.0/ 0.0	0.135	14'-11"	5 x 1/4" x 18'-7 1/4"	5 x 1/4" x 18'-7 11/16"
		8.0/ 7.5	0.135	3'-9 15/16"		

▽FLANGE BRACES: (1) One Side; (2) Two Sides
FBxxA(1): xx=length(in)
A - L2x2x14



RIGID FRAME ELEVATION: FRAME LINE 2

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27891 WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

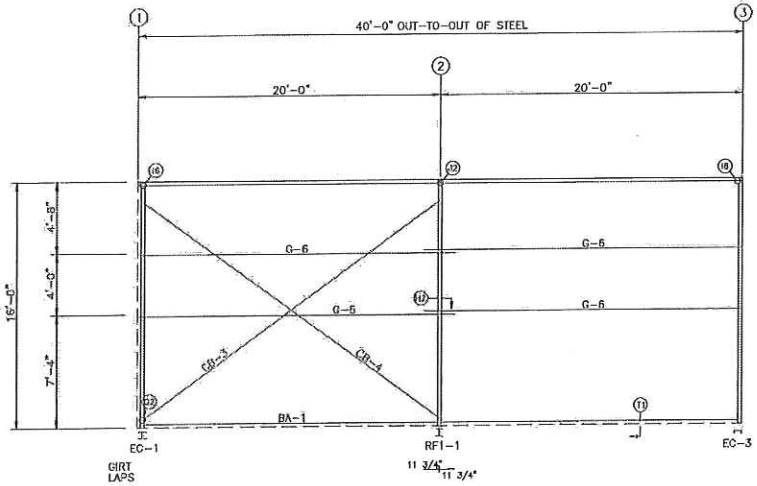
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

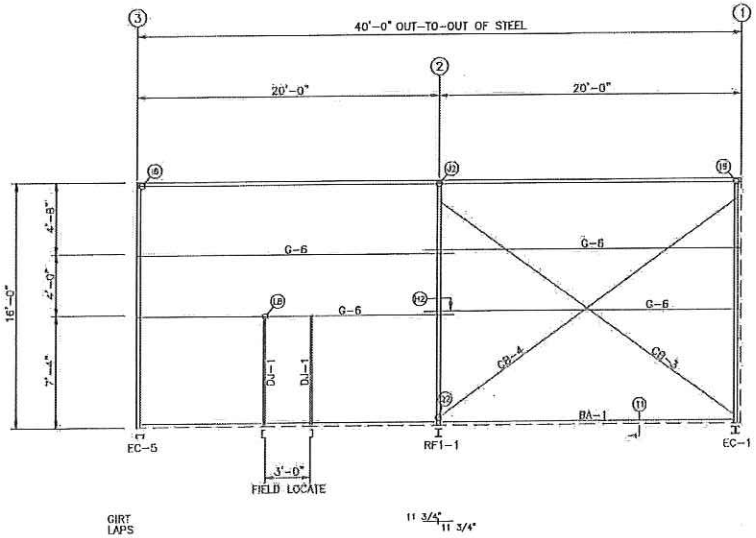
DRAWING TITLE: RIGID FRAME CROSS SECTION — SCALE: NONE

DRAWING NO: PAGE 2.1 — DRAWN BY: GTL — CHECKED BY: SPW — REV:

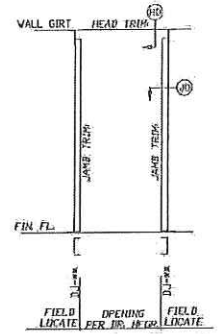
MEMBER TABLE FRAME LINE A & C		
MARK	PART	LENGTH
DJ-1	8X2CH16	7'-4"
G-6	8x25Z16	20'-11 1/2"
CB-3	1/4 CBL	25'-2"
CB-4	1/4 CBL	25'-0"



SIDEWALL FRAMING: FRAME LINE A

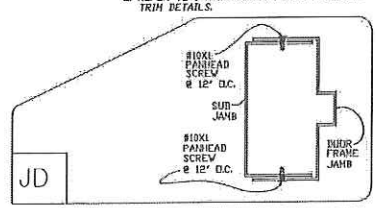


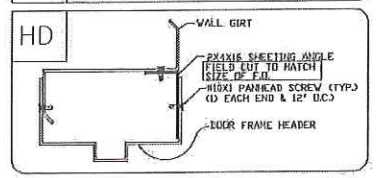
SIDEWALL FRAMING: FRAME LINE C



FIELD LOCATED 3' x 7' F.O./
FIELD LOCATED 4' x 7' F.O.

1. FIELD CUT AND WORK GIRTS, PANELS, AND TRIM AS REQUIRED.
2. REFER TO DETAIL PAGES FOR APPLICABLE TRIM DETAILS.





GEORGIA REGISTERED No 27991 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5.7.20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

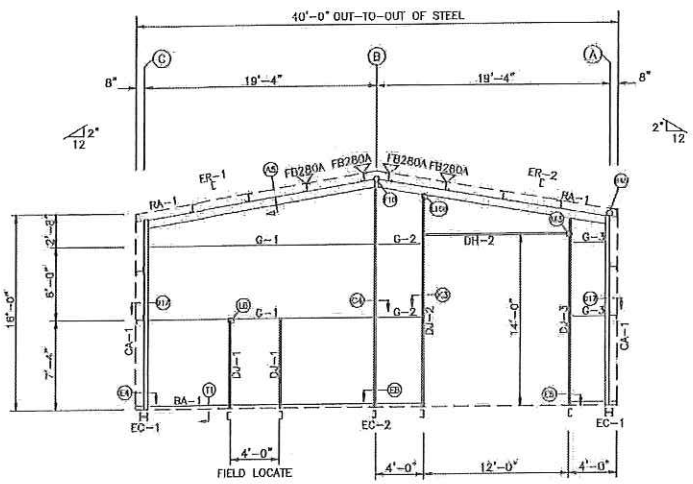
LOCATION: OMAHA, GA 31821

DRAWING NAME: SIDEWALL FRAMING LAYOUT — SCALE: NONE

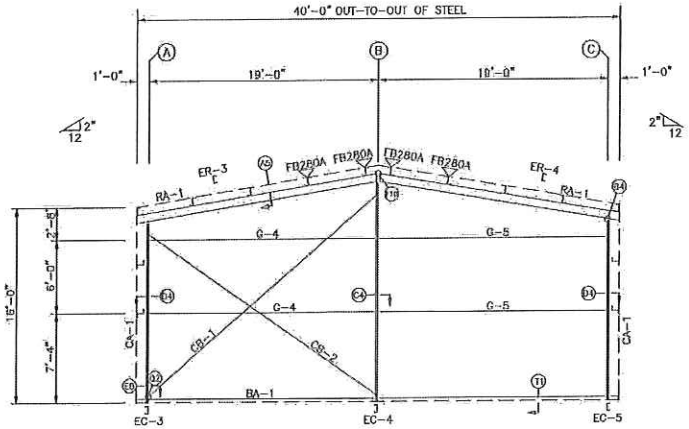
DRAWING NO: PAGE 3 — DRAWN BY: GTL — CHECKED BY: SPW — DATE:

BOLT TABLE FRAME LINE 1 & 3				
LOCATION	QUAN	TYPE	DIA	LENGTH
Cor_Column/Raf	4	A325	5/8"	2"
ER-1/ER-2	4	A325	5/8"	2"
ER-3/ER-4	4	A325	5/8"	2"
EC-2/ER-2	2	A325	5/8"	2"
Columns/Raf	2	A325	5/8"	2"
Jamb/Raf	2	A325	5/8"	2"

MEMBER TABLE FRAME LINE 1 & 3		
MARK	PART	LENGTH
EC-1	8X7DC16	15'-6 9/16"
EC-2	8X35C12	17'-4 11/16"
EC-3	8X35C16	14'-5 3/4"
EC-4	8X35C12	17'-4 11/16"
EC-5	8X35C16	14'-5 3/4"
ER-1	10X35C12	19'-0 3/4"
ER-2	10X35C12	19'-0 3/4"
ER-3	10X35C12	20'-3 1/16"
ER-4	10X35C12	20'-3 1/16"
DJ-1	8X2CH16	7'-4"
DJ-2	8X35C16	16'-11 3/4"
DJ-3	8X35C16	14'-11 3/4"
DH-2	8X35C16	12'-0"
G-1	8x25Z16	18'-3 1/2"
G-2	8x25Z16	3'-7 1/2"
G-3	8x25Z16	2'-3 1/2"
G-4	8x25Z16	18'-7 1/2"
G-5	8x25Z16	18'-11 1/2"
CB-1	1/4 CBL	25'-9"
CB-2	1/4 CBL	23'-11"



ENDWALL FRAMING: FRAME LINE 1



ENDWALL FRAMING: FRAME LINE 3

GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27631 WAYNE BRAD BAKER

5-7-20

NOTE: FIELD SLOT GIRTS FOR CABLE PASSAGE

NOTE: THE FRAMING AS DEPICTED ABOVE IS NOT DESIGNED TO ACCOMMODATE ANY FUTURE EXPANSION.

6

ISSUE	DET	CHK	DATE

APEC

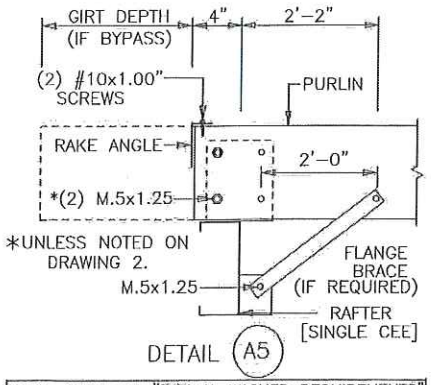
CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: ENDWALL FRAMING LAYOUT — SCALE: NONE

DRAWING NO: PAGE 4 — DRAWN BY: GTL — CHECKED BY: SPW — DATE:

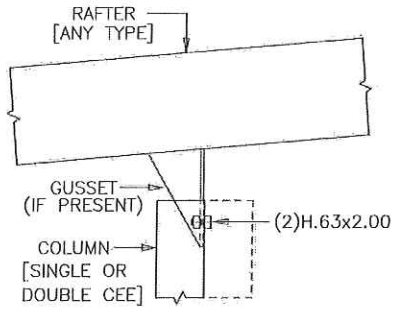


DETAIL A5

NOTE: REFER TO "TYPICAL WASHER REQUIREMENTS" DETAIL

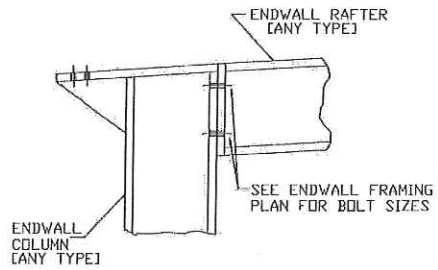
PURLIN TO ENDWALL RAFTER

DETAIL B4



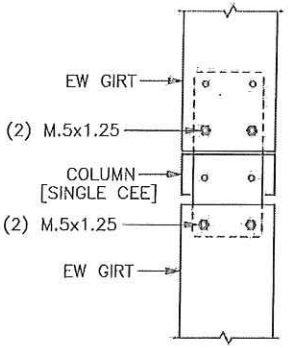
* UNLESS NOTED ON DRAWING 4.

CEE COLUMN / RAFTER CONNECTION



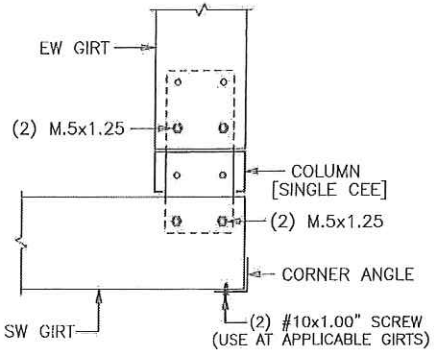
B45 ROTATED CORNER COLUMN TO ENDWALL RAFTER

DETAIL C4



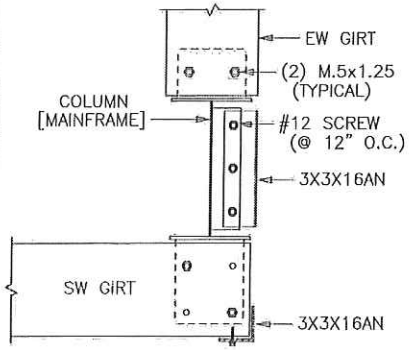
ENDWALL GIRTS TO INTERIOR COLUMN

DETAIL D4



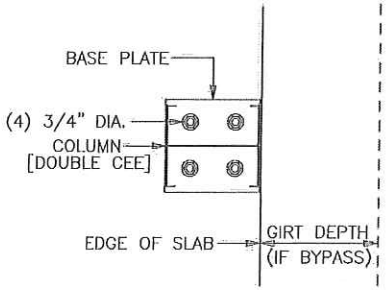
GIRTS TO CORNER COLUMN

DETAIL D17



GIRT CONNECTIONS AT ENDWALL

DETAIL E4



ENDWALL COLUMN BASE DETAIL

GEORGIA REGISTERED No 27851 PROFESSIONAL ENGINEER MAINE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

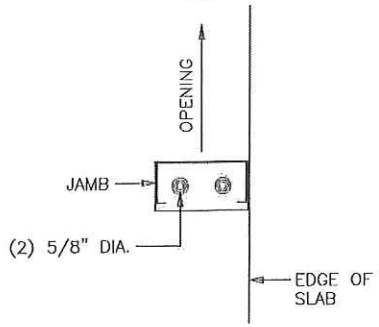
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: FRAMING DETAILS — SCALE: NONE

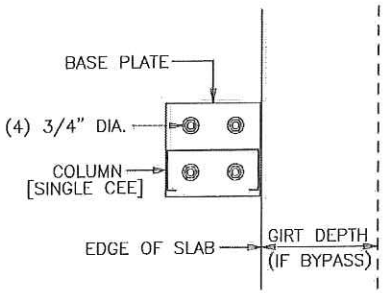
DRAWING NO: PAGE 5 — DRAWN BY: GIL — CHECKED BY: SPW — REV:

DETAIL E5



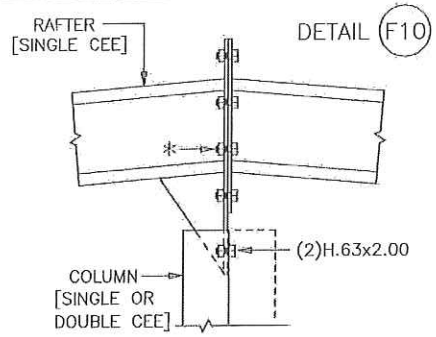
FRAMED OPENING JAMB BASE DETAIL

DETAIL E8



ENDWALL COLUMN BASE DETAIL

DETAIL F10

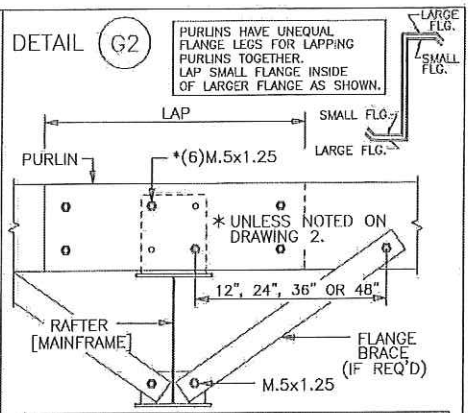


* SEE DRAWING 4 FOR SIZE AND QUANTITY OF BOLTS.

RAFTER DETAIL AT RIDGE

DETAIL G2

PURLINS HAVE UNEQUAL FLANGE LEGS FOR LAPPING PURLINS TOGETHER. LAP SMALL FLANGE INSIDE OF LARGER FLANGE AS SHOWN.

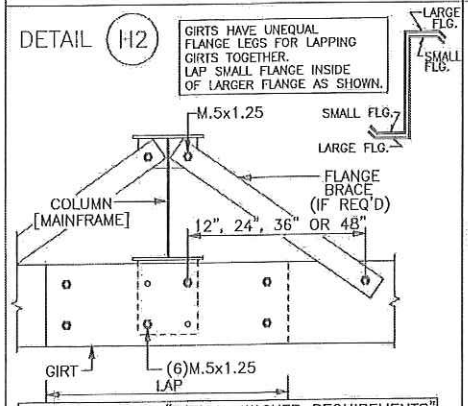


NOTE: REFER TO "TYPICAL WASHER REQUIREMENTS" DETAIL

PURLIN TO MAINFRAME RAFTER

DETAIL H2

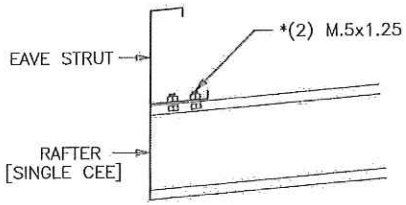
GIRTS HAVE UNEQUAL FLANGE LEGS FOR LAPPING GIRTS TOGETHER. LAP SMALL FLANGE INSIDE OF LARGER FLANGE AS SHOWN.



NOTE: REFER TO "TYPICAL WASHER REQUIREMENTS" DETAIL

GIRT TO MAINFRAME COLUMN

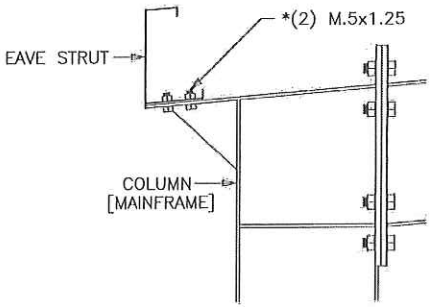
DETAIL I6



*UNLESS NOTED ON DRAWING 2.

EAVE STRUT CONNECTION AT ENDWALL

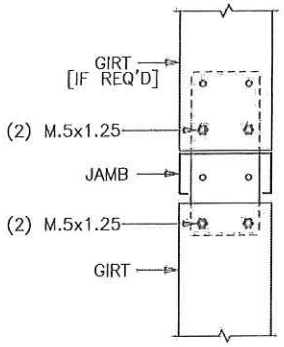
DETAIL J2



*UNLESS NOTED ON DRAWING 2.

EAVE STRUT CONNECTION AT MAINFRAME

DETAIL K3



GIRTS TO JAMB

GEORGIA REGISTERED No. 31831 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

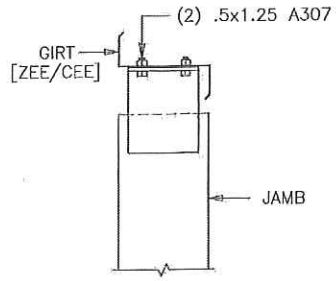
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING TITLE: FRAMING DETAILS — SCALE: NONE

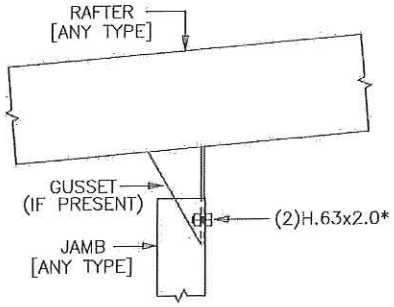
DRAWING NO: PAGE 5.1 — DRAWN BY: GTL — CHECKED BY: SPW — ENG:

DETAIL L8



FRAMED OPENING JAMB TO GIRT

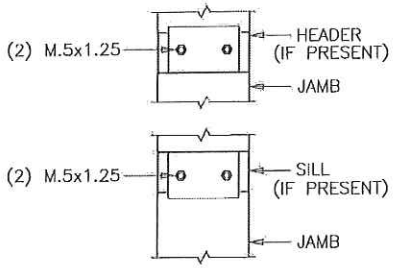
DETAIL L108



* UNLESS NOTED ON DRAWING 4.

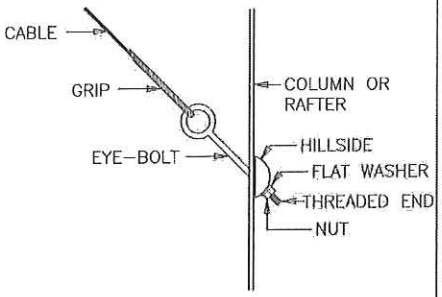
JAMB / RAFTER CONNECTION

DETAIL M3



FRAMED OPENING HEADER/SILL TO JAMB

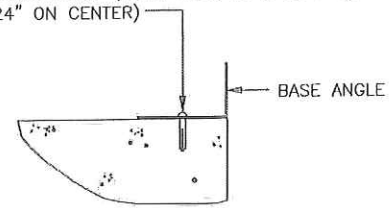
DETAIL Q2



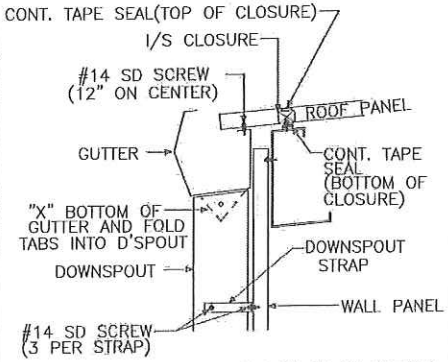
CABLE INSTALLATION DETAIL

DETAIL T1

1/4" x 1 1/4" ZINC HAMMER DRIVES
ZAMAK ALLOY (ASTM B633, SC1, TYPE III)
(24" ON CENTER)



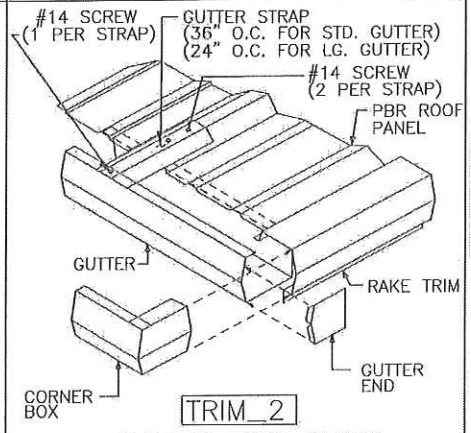
BASE ANGLE DETAIL



NOTE: INSTALL GUTTER STRAPS 3'-0" ON CENTER.
NOTE: INSTALL D'SPOUT STRAPS 5'-0" ON CENTER.

TRIM_1

GUTTER DETAIL



TRIM_2

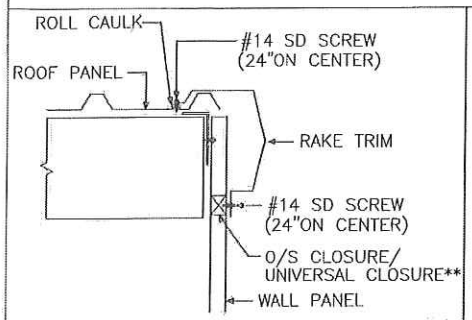
GUTTER END DETAIL

GEORGIA REGISTERED PROFESSIONAL ENGINEER WAYNE BRAD BAKER
5-7-20

ISSUE	DET	CHK	DATE

APEC

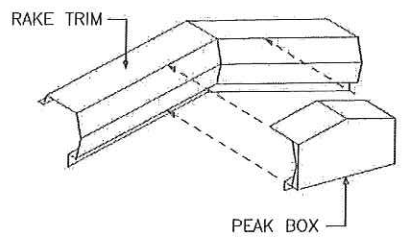
CUSTOMER: OMAHA
JOB NO.: 6415
DATE: 4/30/20
LOCATION: OMAHA, GA 31821
DRAWING NAME: FRAMING DETAILS
SCALE: NONE
DRAWING NO.: PAGE 5.2
DRAWN BY: GTL
DESIGNED BY: SPW
REV:



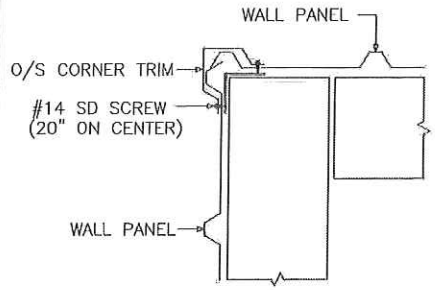
** – O/S CLOSURE FOR ROOF PITCHES UP TO 2:12"
UNIVERSAL CLOSURE FOR ROOF PITCHES ABOVE 2:12"

NOTE: FIELD CUT UNIVERSAL CLOSURES TO MATCH WALL PANEL PROFILE (ON PITCH).

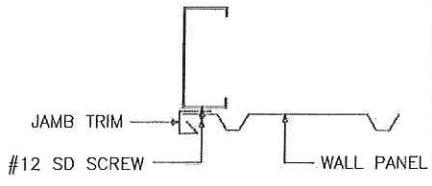
TRIM_3
RAKE TRIM DETAIL



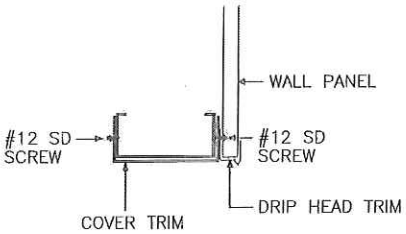
TRIM_4
PEAK BOX DETAIL



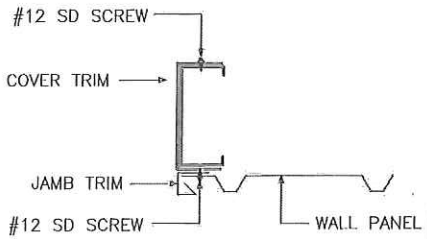
TRIM_5
O/S CORNER DETAIL



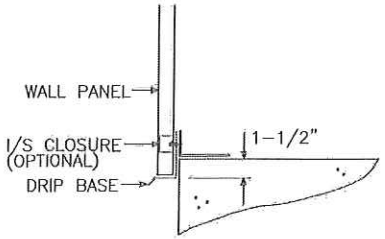
TRIM_8
JAMB TRIM DETAIL AT JAMB



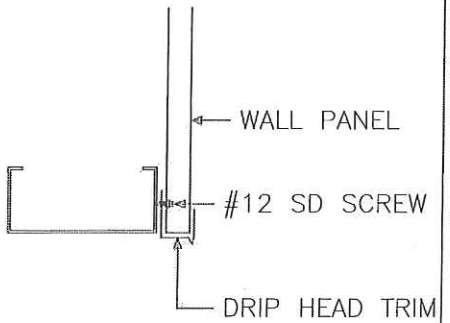
TRIM_10
COVER TRIM DETAIL AT HEADER



TRIM_11
COVER TRIM DETAIL AT JAMB



TRIM_16
BASE TRIM DETAIL



TRIM_61
HEAD TRIM DETAIL AT HEADER

GEORGIA REGISTERED PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

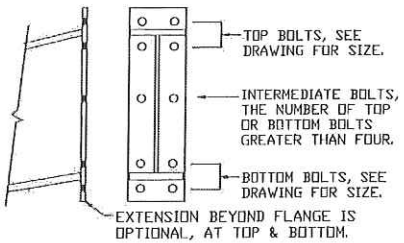
CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: FRAMING DETAILS — SCALE: NONE

DRAWING NO: PAGE 5.3 — DRAWN BY: GTL — CHECKED BY: SPW — REV:



BOLTED END PLATE CONNECTION

STRUCTURAL BOLTED CONNNECTIONS

REFER TO COVER PAGE "GENERAL NOTES" PARAGRAPH "C", SECTION "9" FOR INSTRUCTIONS ON TIGHTENING ALL A325 AND A490 CONNECTION BOLTS.

TRIM NOTES:

[1] SEAL TRIM SPLICES WITH TUBE CAULK.
[2] SECURE GUTTER SPLICES AND END PLUGS WITH RIVETS.
[3] SECURE ALL OTHER ROOF TRIM SPLICES WITH TRIM SCREWS UNLESS NOTED OTHERWISE.
[4] TRIM SCREWS ARE LOCATED 24" ON CENTER UNLESS NOTED OTHERWISE.
[5] STD. TRIM SPLICES ARE 3" TOTAL UNLESS NOTED OTHERWISE.

MORTISE PREPPED PERSONNEL DOORS

ALL MORTISE PREPPED PERSONNEL DOORS COME AS RIGHTHAND REVERSED SWING.

(i.e. STANDING ON THE OUTSIDE OF THE BUILDING FACING THE DOOR, THE LOCK WILL BE ON THE LEFTHAND SIDE OF THE DOOR AND THE DOOR WILL SWING OUTWARD FROM THE BUILDING.)

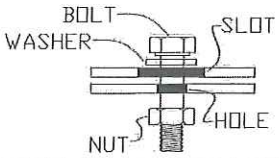
ANY FIELD MODIFICATIONS ARE THE RE-SPONSIBILITY OF THE ERECTOR AND MBM IS NOT LIABLE FOR LABOR CHARGES NOR DAMAGES DUE TO ERROR.

TYPICAL WASHER REQUIREMENTS

(UNLESS NOTED OTHERWISE ON DRAWINGS

SLOT TO HOLE CONN.

WASHER REQUIRED ON SLOTTED SIDE

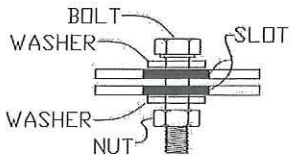


HOLE TO HOLE CONN.

NO WASHERS REQ'D.

SLOT TO SLOT CONN.

WASHERS ARE REQUIRED ON EACH SLOTTED SIDE.
(**WASHER(S) NOT REQ'D WITHIN LAPPED ZEE PURLIN/GIRT AREAS**)

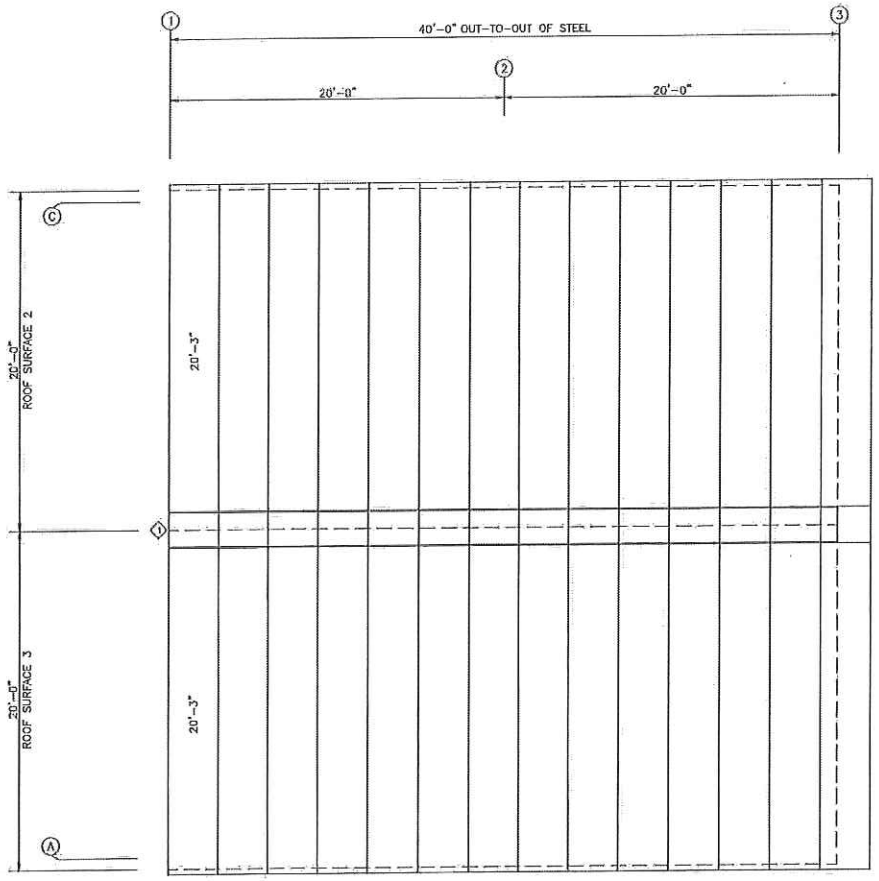


GEORGIA REGISTERED PROFESSIONAL ENGINEER No. 27831 WAYNE BRAD BAKER
5.7.20

ISSUE	DET	CHK	DATE

APEC
CUSTOMER: OMAHA
JOB NO: 6415 DATE: 4/30/20
LOCATION: OMAHA, GA 31821
DRAWING NAME: FRAMING DETAILS SCALE: NONE
DRAWING NO: PAGE 5.4 DRAWN BY: GTL CHECKED BY: SPW REV:

TRIM TABLE ROOF PLAN		
◇ID	PART	LENGTH
1	D/F CAP6	3'-0"



ROOF SHEETING PLAN

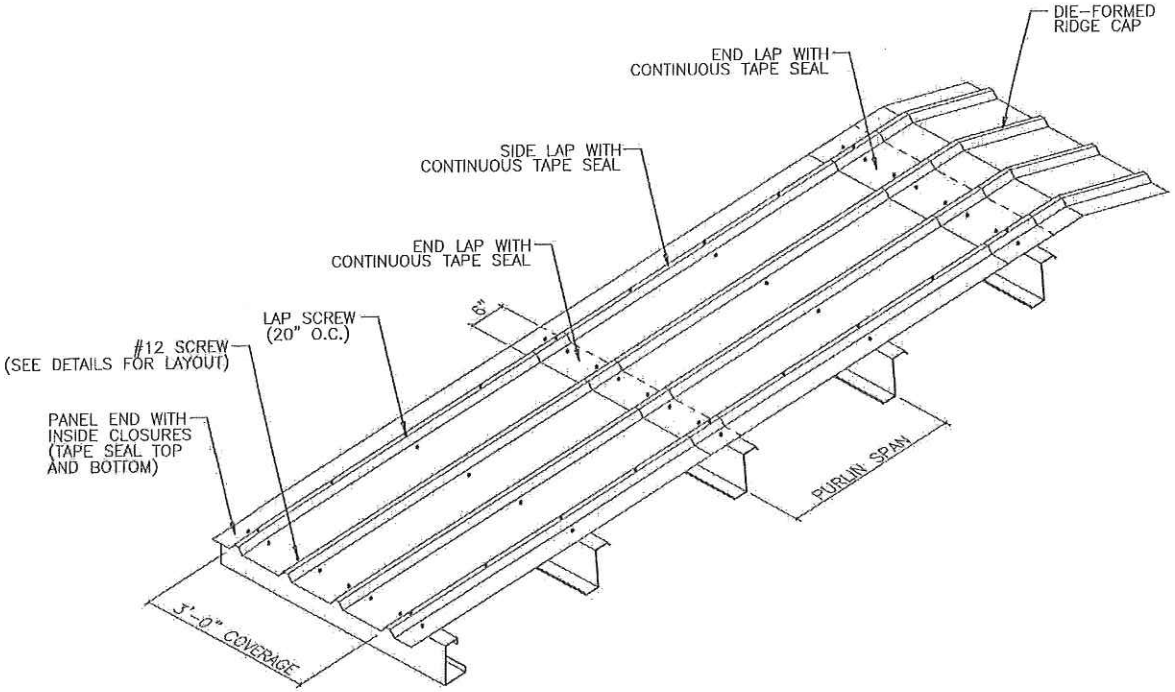
PANELS: 26 GA. PBR – GALVALUME

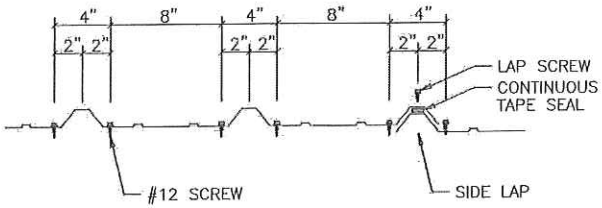
GEORGIA REGISTERED No. 27881 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5.7.20

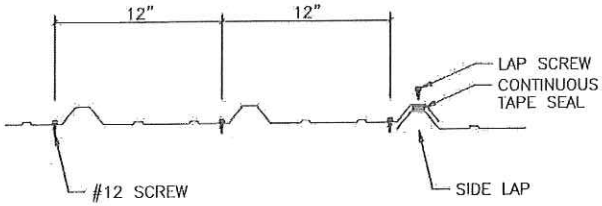
ISSUE	DET	CHK	DATE

APEC			
CUSTOMER: OMAHA			
JOB NO.: 6415		DATE: 4/30/20	
LOCATION: OMAHA, GA 31821			
DRAWING TITLE: ROOF PANELS & TRIM			SCALE: NONE
DRAWING NO.: PAGE 6	DRAWN BY: GTL	CHECKED BY: SPW	DATE:





PANEL ATTACHMENT AT PANEL END
(PEAK PURLIN, EAVE STRUT, AND PANEL END LAPS)



PANEL ATTACHMENT AT INTERMEDIATE MEMBERS

NOTES:

[1] ALL END LAPS MUST BE A MINIMUM OF 6".

[2] METAL SHAVINGS MUST BE SWEPT FROM THE ROOF EACH DAY DURING ERECTION TO PREVENT SURFACE RUSTING.

[3] TAPE SEAL MUST BE APPLIED WITH NO GAPS OR BREAKS.

[4] #12 SCREWS ARE USED TO ATTACH THE PANEL TO THE PURLINS. #14 LAP SCREWS ARE USED AT THE PANEL-TO-PANEL ATTACHMENTS. ALL FASTENERS ARE SELF-DRILLING.

GEORGIA REGISTERED No. 27031 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

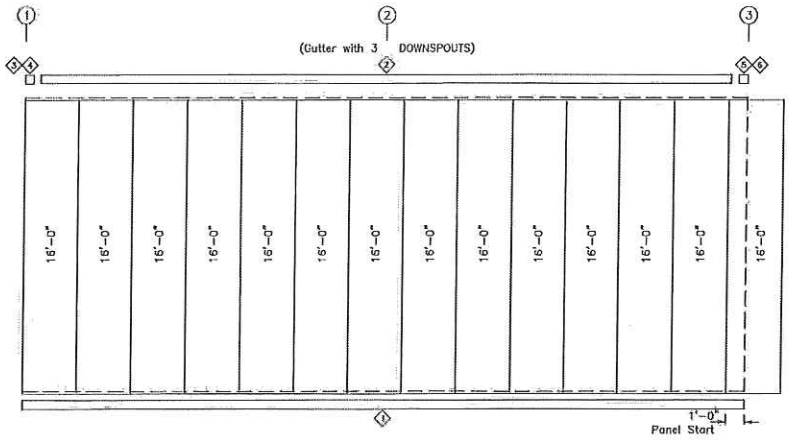
CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

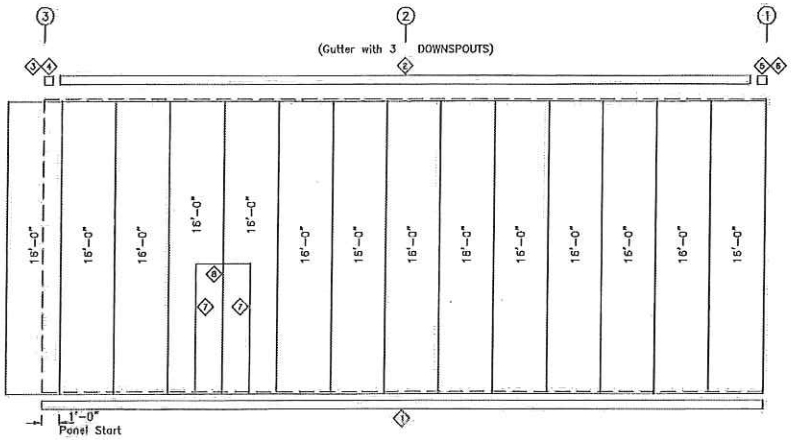
DRAWING NAME: ROOF PANEL DETAILS — SCALE: NONE

DRAWING NO: PAGE 6.1 — DRAWN BY: GTL — CHECKED BY: SPW — REV:



SIDEWALL SHEETING & TRIM: FRAME LINE A

PANELS: 26 GA. PBR – COLOR



SIDEWALL SHEETING & TRIM: FRAME LINE C

PANELS: 26 GA. PBR – COLOR

TRIM TABLE
FRAME LINE A & C

◇ID	PART	LENGTH	DETAIL
1	DRIP BASE	20'-3"	TRIM_16
2	GUTTER	20'-3"	TRIM_1
3	GUTEND L	1"	TRIM_2
4	CORBOX L	1'-0"	TRIM_2
5	GUTEND R	1"	TRIM_2
6	CORBOX R	1'-0"	TRIM_2
7	R JAMB	7'-3"	TRIM_8
8	R DRIPHD	3'-3"	TRIM_61

GEORGIA REGISTERED PROFESSIONAL ENGINEER BRAD BAKER WAYNE

5.7.20

ISSUE	DET	CHK	DATE

APEC

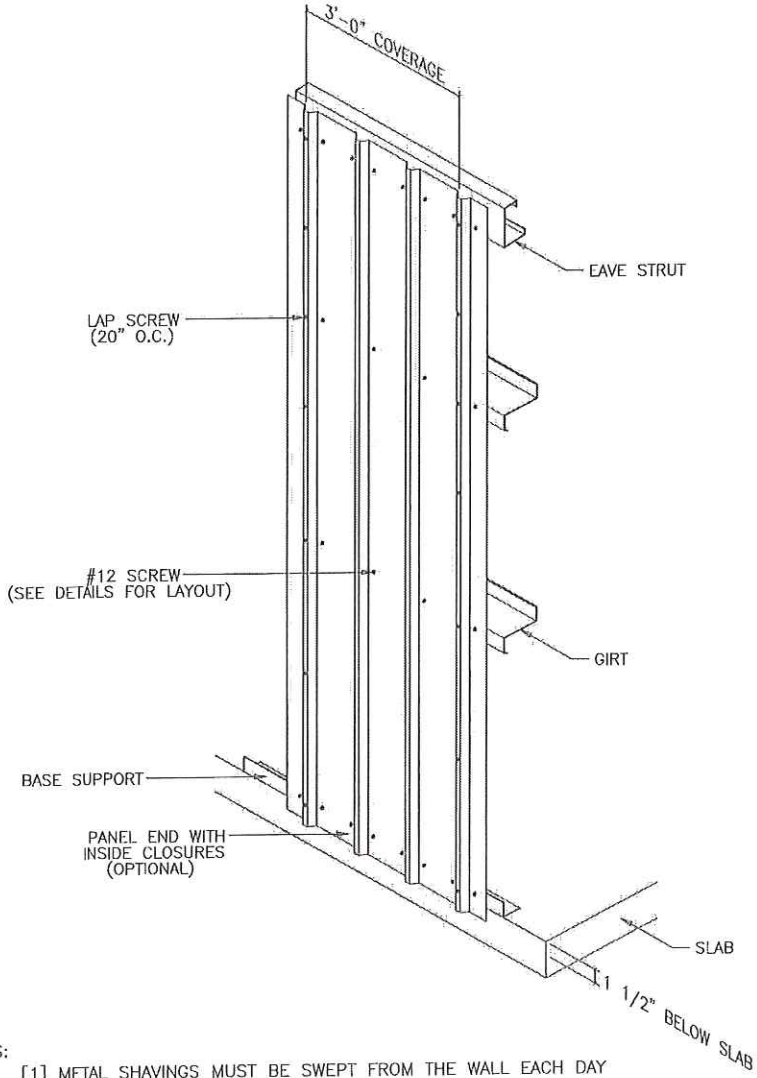
CUSTOMER: OMAHA

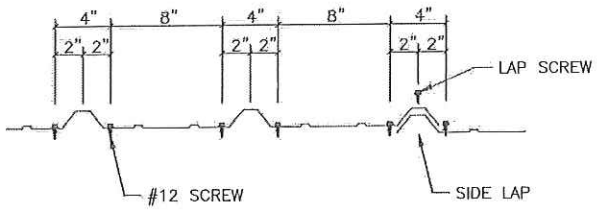
JOB No: 6415 DATE: 4/30/20

LOCATION: OMAHA, GA 31821

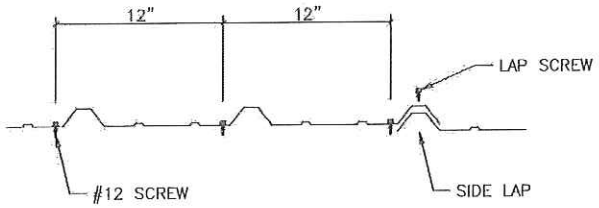
DRAWING NAME: SIDEWALL PANELS & TRIM SCALE: NONE

DRAWING No: PAGE 7 DRAWN BY: CTL CHECKED BY: SPW DATE:





PANEL ATTACHMENT AT PANEL END
(BASE, EAVE STRUT, HEADER, SILL, AND PANEL END LAPS)

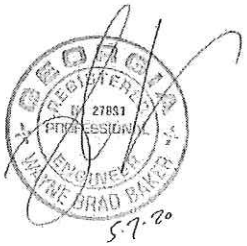


PANEL ATTACHMENT AT INTERMEDIATE MEMBERS

NOTES:

[1] METAL SHAVINGS MUST BE SWEPT FROM THE WALL EACH DAY DURING ERECTION TO PREVENT SURFACE RUSTING.

[2] #12 SCREWS ARE USED TO ATTACH THE PANEL TO THE GIRTS. #14 LAP SCREWS ARE USED AT THE PANEL–TO–PANEL ATTACHMENTS. ALL FASTENERS ARE SELF–DRILLING.



ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

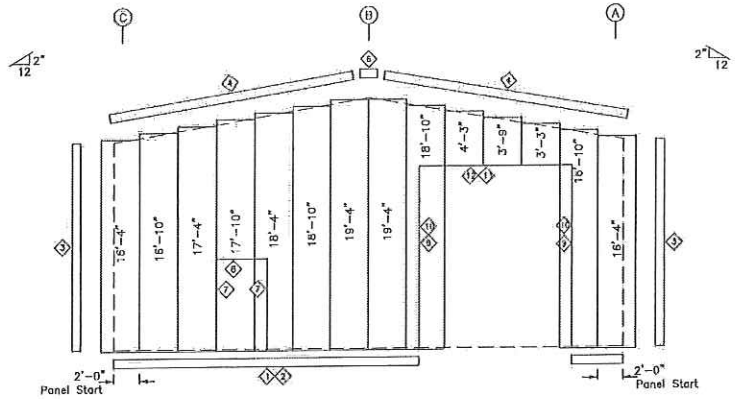
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: SIDEWALL PANEL DETAILS — SCALE: NONE

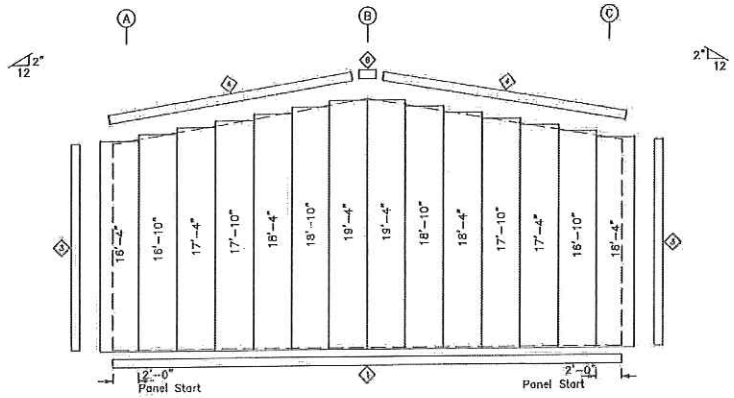
DRAWING NO: PAGE 7.1 — DRAWN BY: GTL — CHECKED BY: SPW — ENG:

TRIM TABLE FRAME LINE 1 & 3			
◇ID	PART	LENGTH	DETAIL
1	DRIP BASE	20'-3"	TRIM_16
2	DRIP BASE	4'-3"	TRIM_16
3	O/S CORN	16'-2"	TRIM_5
4	RAKE TRM	10'-5"	TRIM_3
6	PEAK BOX	1'-4"	TRIM_4
7	R JAMB	7'-3"	TRIM_8
8	R DRIPHD	4'-3"	TRIM_61
9	CT8	14'-1"	TRIM_11
10	R JAMB	14'-3"	TRIM_8
11	CT8	12'-0"	TRIM_10
12	R DRIPHD	12'-3"	TRIM_61



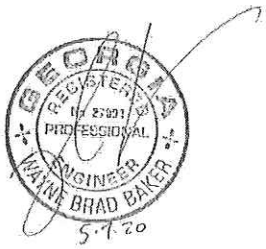
ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 GA. PBR – COLOR



ENDWALL SHEETING & TRIM: FRAME LINE 3

PANELS: 26 GA. PBR – COLOR



ISSUE	DET	CHK	DATE

APEC

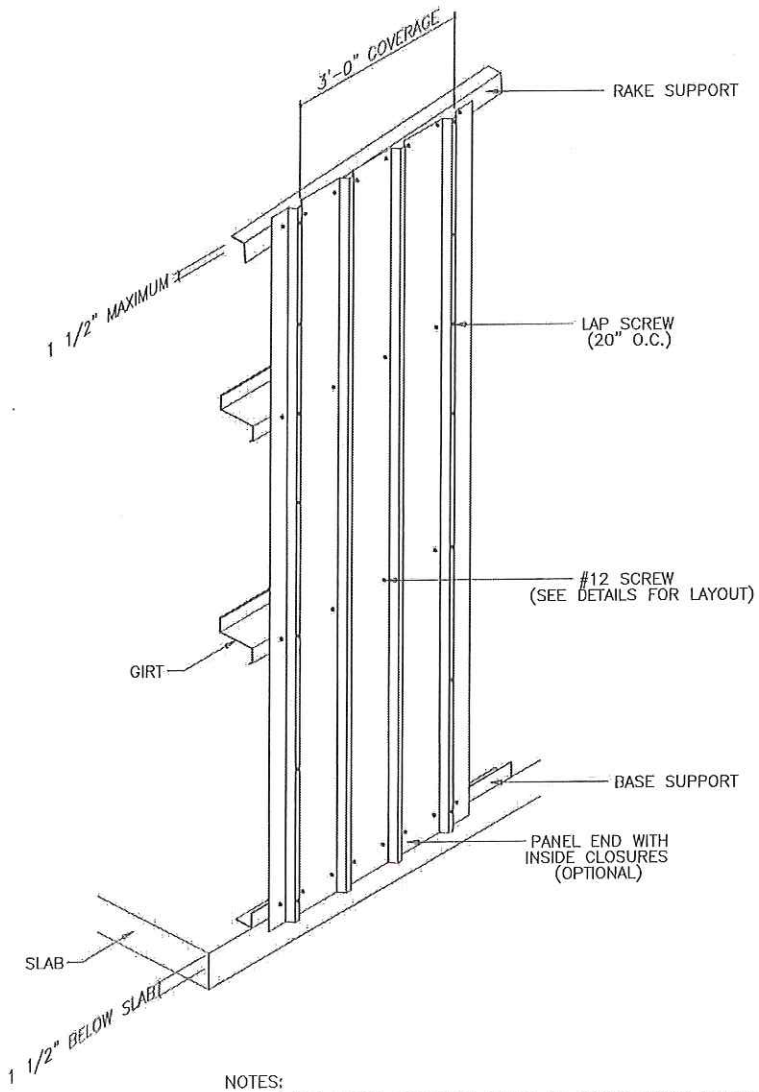
CUSTOMER: OMAHA

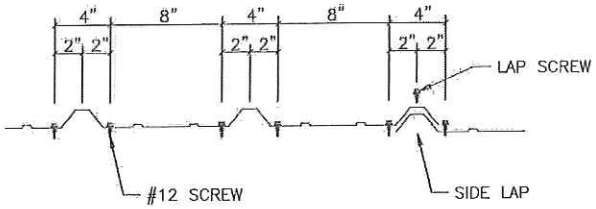
JOB NO.: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

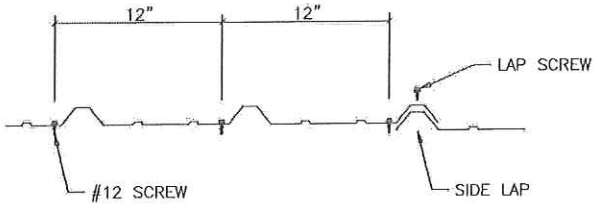
DRAWING NAME: ENDWALL PANELS & TRIM — SCALE: NONE

DRAWING NO.: PAGE 8 — DRAWN BY: GTL — REVIEWED BY: SPW — DATE:

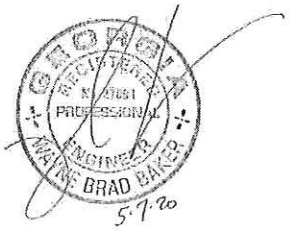




PANEL ATTACHMENT AT PANEL END
(BASE, EAVE STRUT, HEADER, SILL, AND PANEL END LAPS)



PANEL ATTACHMENT AT INTERMEDIATE MEMBERS



NOTES:

[1] METAL SHAVINGS MUST BE SWEPT FROM THE WALL EACH DAY DURING ERECTION TO PREVENT SURFACE RUSTING.

[2] #12 SCREWS ARE USED TO ATTACH THE PANEL TO THE GIRTS. #14 LAP SCREWS ARE USED AT THE PANEL-TO-PANEL ATTACHMENTS. ALL FASTENERS ARE SELF-DRILLING.

ISSUE	DET	CHK	DATE

APEC

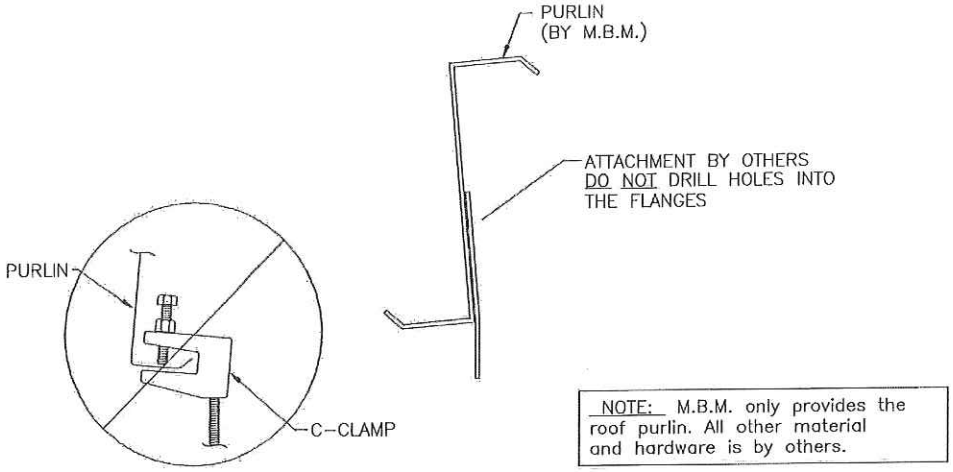
CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: ENDWALL PANEL DETAILS — SCALE: NONE

DRAWING NO: PAGE 8.1 — DRAWN BY: GTL — CHECKED BY: SPW — DATE:



NOTE: M.B.M. only provides the roof purlin. All other material and hardware is by others.

Flange C-Clamp is not an acceptable connection

Recommended Connection Detail

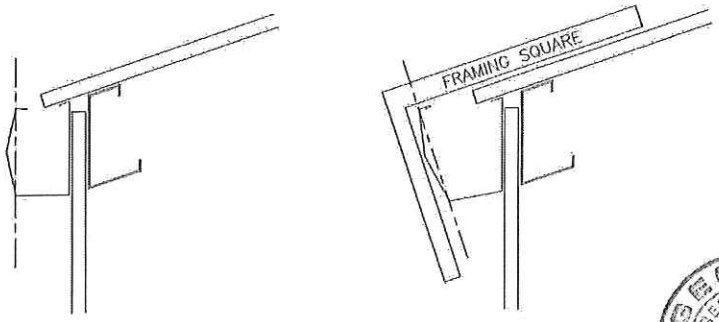
NOTE

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.

HANGING LOADS SHOULD NOT BE APPLIED TO THE PURLIN LIP. WHERE PERMISSIBLE, THE BEST PRACTICE FOR HANGING LOADS IS TO ATTACH TO THE PURLIN WEB USING A BOLT AND NUT, OR SELF-DRILLING SCREWS.

HANGING UNIFORM LOADS SUCH AS SPRINKLER MAINS OR HVAC EQUIPMENT SHOULD BE DISTRIBUTED OVER SEVERAL PURLINS, AND SHOULD NEVER EXCEED THE COLLATERAL LOAD ALLOWANCE FOR THE ROOF SYSTEM. FOR UNIFORM LOADS THAT RUN PARALLEL TO THE PURLINS, IT MAY BE NECESSARY TO USE TRANSVERSE SUPPORT CHANNELS(A.KA. TRAPEZE BEAMS) ATTACHED TO THE WEBS OR FLANGES OF ADJACENT PURLINS TO SPREAD THE LOAD BETWEEN TWO OR MORE PURLINS. IN SUCH CASES, CONTACT THE BUILDING MANUFACTURER OR A LOCAL PROFESSIONAL ENGINEER PRIOR TO ATTEMPTING TO HANG LOADS FROM THE PURLINS



DO NOT INSTALL GUTTER WITH OUTSIDE FACE PERPENDICULAR TO THE GROUND.

INSTALL GUTTER WITH OUTSIDE FACE PERPENDICULAR TO THE ROOF.

GEORGIA REGISTERED No. 27651 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

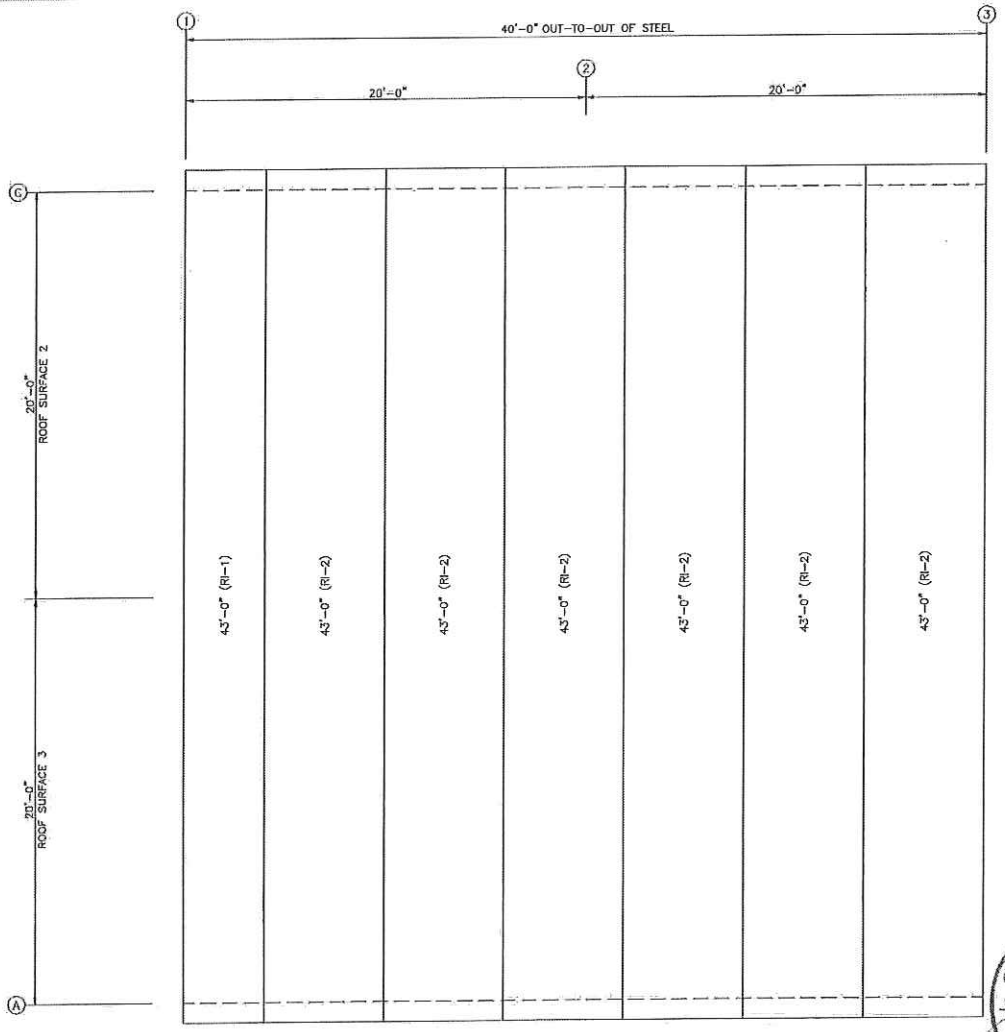
5-7-20

GUTTER INSTALLATION DETAIL
(ONLY IF PROVIDED)

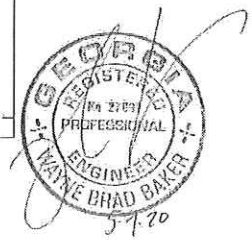
ISSUE	DET	CHK	DATE

APEC			
CUSTOMER: OMAHA			
JOB NO.: 6415			DATE: 4/30/20
LOCATION: OMAHA, GA 31821			
DRAWING NAME: SPECIAL DETAILS			SCALE: NONE
DRAWING NO.: PAGE 9	DRAWN BY: GTL	CHECKED BY: SPW	DWG:

INSULATION TABLE ROOF PLAN			
QUAN	MARK	WIDTH	LENGTH
1	RI-1	4'-0"	43'-0"
6	RI-2	6'-0"	43'-0"



ROOF INSULATION
INSULATION: 3.00" Thick RE



ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

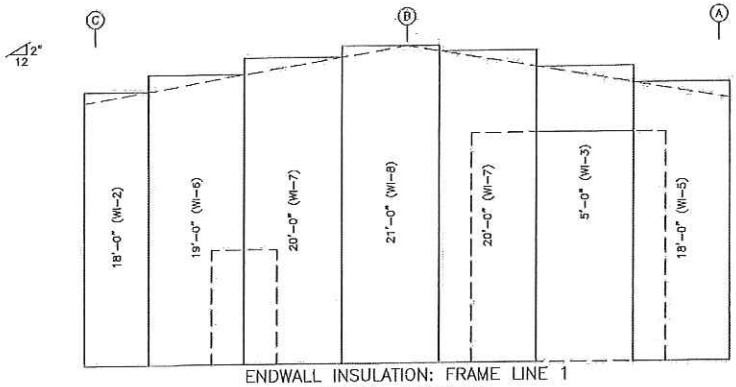
JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: INSULATION LAYOUT — SCALE: NONE

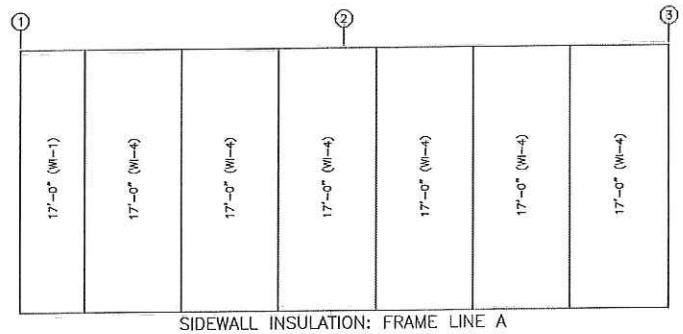
DRAWING NO: PAGE 10 — DRAWN BY: GTL — CHECKED BY: SPW — DATE:

INSULATION TABLE FRAME LINE 1 A 3 C			
QUAN	MARK	WIDTH	LENGTH
2	WI-1	4'-0"	17'-0"
2	WI-2	4'-0"	18'-0"
1	WI-3	6'-0"	5'-0"
12	WI-4	6'-0"	17'-0"
2	WI-5	6'-0"	18'-0"
3	WI-6	6'-0"	19'-0"
4	WI-7	6'-0"	20'-0"
2	WI-8	6'-0"	21'-0"



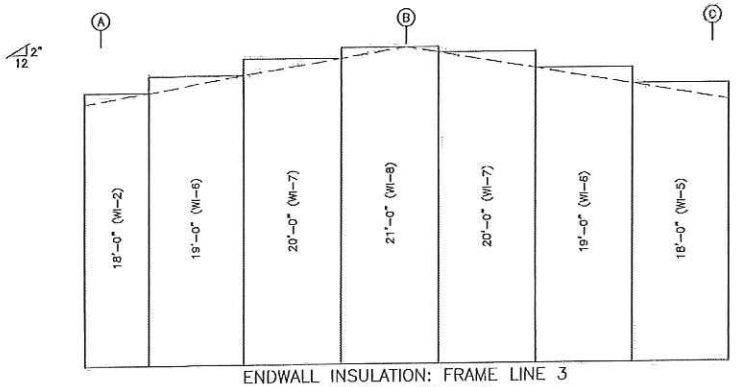
ENDWALL INSULATION: FRAME LINE 1

INSULATION: 3.00" Thick RE



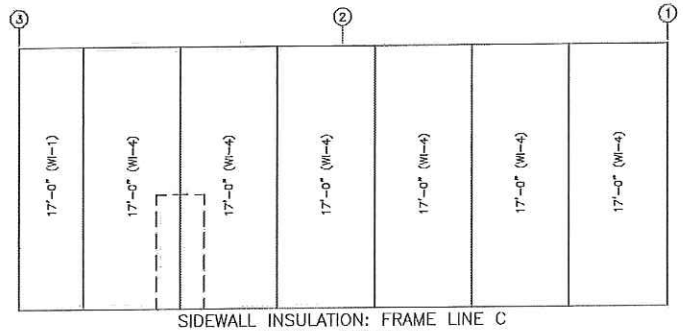
SIDEWALL INSULATION: FRAME LINE A

INSULATION: 3.00" Thick RE



ENDWALL INSULATION: FRAME LINE 3

INSULATION: 3.00" Thick RE



SIDEWALL INSULATION: FRAME LINE C

INSULATION: 3.00" Thick RE

GEORGIA REGISTERED PROFESSIONAL ENGINEER WAYNE BRAD BAKER 27897

5.7.20

ISSUE	DET	CHK	DATE

APEC

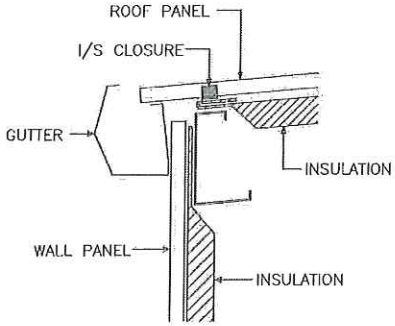
CUSTOMER: OMAHA

JOB NO.: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

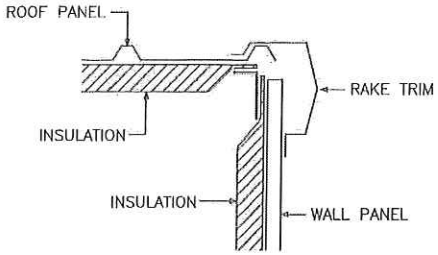
DRAWING TITLE: INSULATION LAYOUT — SCALE: NONE

DRAWING NO.: PAGE 10.1 — DRAWN BY: GTL — CHECKED BY: SPW — DATE:

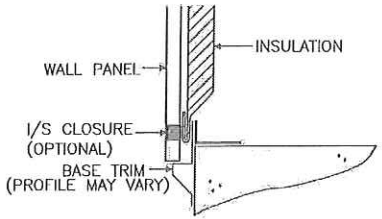


EAVE DETAIL

NOTE: FOLD ROOF INSULATION BACK 3" TO 6".

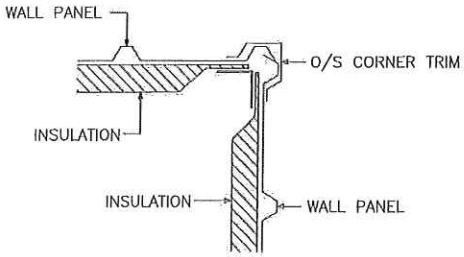


RAKE DETAIL



BASE DETAIL

NOTE: FOLD INSULATION BACK 3" TO 6".



CORNER DETAIL

CAUTION: FAILURE TO FOLD FACING OF INSULATION BACK FROM THE PANEL EDGE AT THE BASE AND EAVE COULD RESULT IN PANEL DAMAGE AND WILL VOID THE PANEL WARRANTY.

GEORGIA REGISTERED No. 27891 PROFESSIONAL ENGINEER WAYNE BRAD BAKER

5-7-20

ISSUE	DET	CHK	DATE

APEC

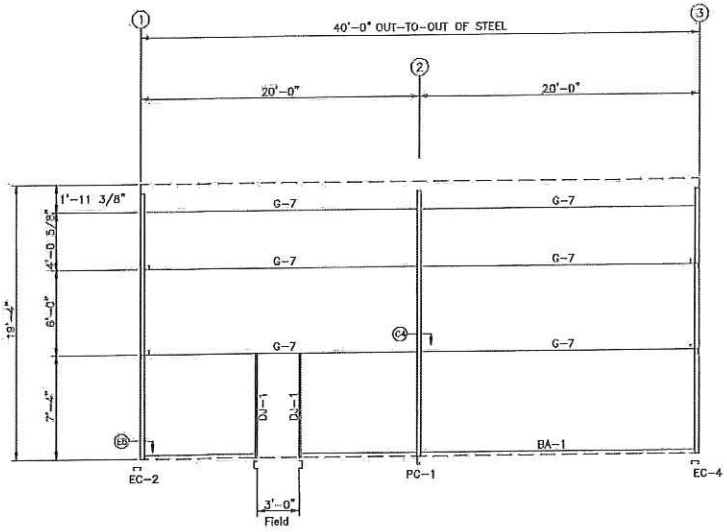
CUSTOMER: OMAHA

JOB NO.: 6415 | DATE: 4/30/20

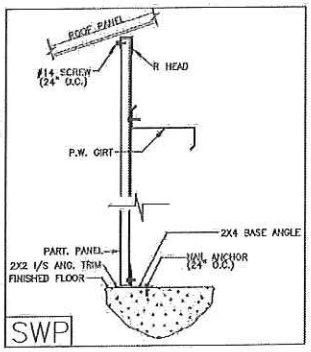
LOCATION: OMAHA, GA 31821

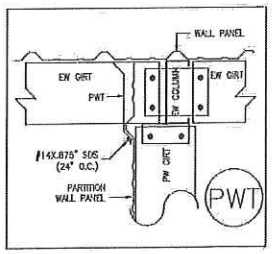
DRAWING NAME: INSULATION DETAILS | SCALE: NONE

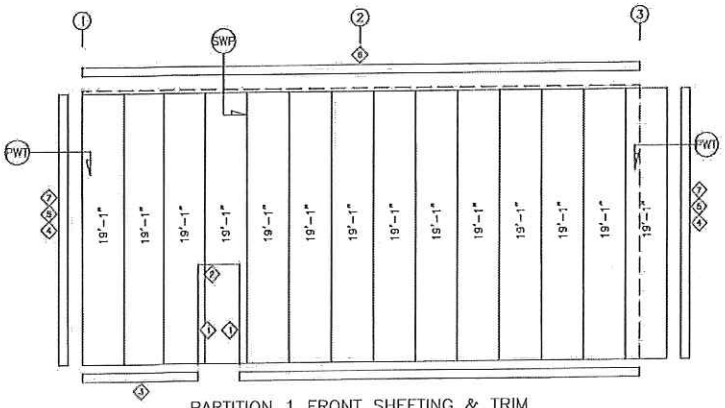
DRAWING NO.: PAGE 10.2 | DRAWN BY: GTL | CHECKED BY: SPW | ENG:



PARTITION 1 FRAMING







PARTITION 1 FRONT SHEETING & TRIM
PANELS: 26 Ga. R – NEED COLOR

TRIM TABLE PARTITION 1			
◇ID	PART	LENGTH	DETAIL
1	R JAMB	7'-3"	TRIM_8
2	R DRIPHD	3'-3"	TRIM_61
3	2X2 I/S	20'-3"	SWP
4	PWT	7'-4"	PWT
5	PWT	6'-0"	PWT
6	R HEAD	20'-3"	SWP
7	PWT	4'-1"	PWT

MEMBER TABLE PARTITION 1		
MARK	PART	LENGTH
PC-1	8X40C14	17'-7 1/2"
DJ-1	8X2CH16	7'-4"
DH-3	8X2CH16	3'-0"
G-7	8x25Z16	18'-11 1/2"

GEORGIA REGISTERED No. 27687 PROFESSIONAL ENGINEER WANWA BRAD BAKER 5-7-20

ISSUE	DET	CHK	DATE

APEC

CUSTOMER: OMAHA

JOB NO: 6415 — DATE: 4/30/20

LOCATION: OMAHA, GA 31821

DRAWING NAME: PARTITION FRAMING, SHEETING & TRIM — SCALE: NONE

DRAWING NO: PAGE 11 — DRAWN BY: GIL — CHECKED BY: SPW — REV: