

BUILDER/CONTRACTOR RESPONSIBILITIES

**Drawing Validity** – These drawings, supporting structural calculations and design certification are based on the order documents as of the date of these drawings. These documents describe the material supplied by the manufacturer as of the date of these drawings. Any changes to the order documents after the date on these drawings may void these drawings, supporting structural calculations and design certification. The Builder/Contractor is responsible for notifying the building authority of all changes to the order documents which result in changes to the drawings, supporting structural calculations and design certification.

**Builder Acceptance of Drawings** – Approval of the manufacturer's drawings and design data affirms that the manufacturer has correctly interpreted and applied the requirements of the order documents and constitutes Builder/Contractor acceptance of the manufacturer's interpretations of the order documents and standard product specifications, including its design, fabrication and quality criteria standards and tolerances. (AISC code of standard practice Sept 86 Section 4.2.1) (Mar 05 Section 4.4.1)

**Code Official Approval** – It is the responsibility of the Builder/Contractor to ensure that all project plans and specifications comply with the applicable requirements of any governing building authority. The Builder/Contractor is responsible for securing all required approvals and permits from the appropriate agency as required.

**Builder is responsible for State, Federal and OSHA safety compliance** – The Builder/Contractor is responsible for applying and observing all pertinent safety rules and regulations and OSHA standards as applicable.

**Building Erection** – The Builder/Contractor is responsible for all erection of the steel and associated work in compliance with the Metal Building Manufacturers drawings. Temporary supports, such as temporary guys, braces, false work or other elements required for erection will be determined, furnished and installed by the erector. (AISC Code of Standard Practice Sept 86 Section 7.9.1) (Mar 05 Section 7.10.3)

**Discrepancies** – Where discrepancies exist between the Metal Building plans and plans for other trades, the Metal Building plans will govern. (AISC Code of Standard Practice Sept 86 Section 3.3) (Mar 05 Section 3.3)

**Materials by Others** – All interface and compatibility of any materials not furnished by the manufacturer are the responsibility of and to be coordinated by the Builder/Contractor or A/E firm. Unless specific design criteria concerning any interface between materials if furnished as a part of the order documents, the manufacturers assumptions will govern.

**Modification of the Metal Building from Plans** – The Metal Building supplied by the manufacturer has been designed according to the Building Code and specifications and the loads shown on this drawing. Modification of the building configuration, such as removing wall panels or braces, from that shown on these plans could affect the structural integrity of the building. The Metal Building Manufacturer, or a Licensed Structural Engineer, should be consulted prior to making any changes to the building configuration shown on these drawings. The Metal Building Manufacturer will assume no responsibility for any loads applied to the building not indicated on these drawings.

**Foundation Design** – The Metal Building Manufacturer is not responsible for the design, materials and workmanship of the foundation. Anchor rod plans prepared by the manufacturer are intended to show only location, diameter and projection of the anchor rods required to attach the Metal Building System to the foundation. It is the responsibility of the end customer to ensure that adequate provisions are made for specifying rod embedment, bearing values, tie rods and or other associated items embedded in the concrete foundation, as well as foundation design for the loads imposed by the Metal Building System, other imposed loads, and the bearing capacity of the soil and other conditions of the building site. (MBMA 06 Sections 3.2.2 and A3)

PROJECT NOTES

Material properties of steel bar, plate, and sheet used in the fabrication of built-up structural framing members conform to ASTM A529, ASTM A572, ASTM A1011 SS, or ASTM A1011 HSLAS with a minimum yield point of 50 ksi. Material properties of hot rolled structural shapes conform to ASTM A992, ASTM A529, or ASTM A572 with a minimum specified yield point of 50 ksi. Hot rolled angles, or other than flange braces, conform to ASTM 36 minimum. Hollow structural shaped conform to ASTM A500 grade b, minimum yield point is 42 ksi for round HSS and 46 ksi for rectangular HSS. Material properties of cold form light gage steel members conform to the requirements of ASTM A1011 SS Grade 55 or ASTM A1011 HSLAS Class 1 Grade 55, with a minimum yield point of 55 ksi.

The manufacturer does not assume any responsibility for the erection nor field supervision of the structure and or any special inspections that may be required by the local building authority during erection (including inspection of the high strength bolts or field welds) as required during erection. The coordination and the costs associated for setting up and Special Inspections are the responsibility of the Erector, Owner, Architect, or Engineer of Record.

Design is based upon the more severe loading of either the roof snow load or the roof live load.

Loads, as noted, are given within order documents and are applied in general accordance with the applicable provisions of the model code and/or specification indicated. Neither the manufacturer nor the certifying engineer declares or attests that the loads as designated are proper for the local provisions that may apply or for site specific parameters. The manufacturer's Engineer's certification is limited to design loads supplied by an Architect and/or engineer of record for the overall construction project.

This project is designed using manufacture's standard serviceability standards. Generally this means that all stresses and deflections are within typical performance limits for normal occupancy and standard metal building products. If special requirements for deflections and vibrations must be adhered to, then they must be clearly stated in the contract documents.

This metal building system is designed as enclosed. All exterior components (i.e. doors, windows, vents, etc.) must be designed to withstand the specified wind loading for the design of components and cladding in accordance with the specified building code. Doors are to be closed when a maximum of 50% of design wind velocity is reached.

Using 7x7 Northern eave gutter with 4 x 5 downspouts, the roof drainage system has been designed using the method outlined in the MBMA Metal Building Systems Manual. Downspout locations have not been located on these drawings. The downspouts are to be placed on the building sidewalls at a spacing not to exceed 40 feet with the first downspout from both ends of the gutter run within 23 feet of the end. Downspout spacing that does not exceed the maximum spacing will be in compliance with the building code. The gutter and downspout system as provided by the manufacturer is designed to accommodate 10 in/hr rainfall intensity.

Roof and wall panels have been designed in accordance with section 2222.4 of the Florida Building Code, Sixth Edition (2017). Product approval numbers for the State of Florida, Department of Community Affairs per Product Rule 9B-72:

FLORIDA APPROVAL #	
FL11868.1	PER ROOF PANEL
FL11917.5	PBR WALL PANEL
FL17900.2	WALK DOORS
FL6964.3	DECI DOOR 5000 SERIES

DESIGN LOADING

THIS STRUCTURE IS DESIGNED UTILIZING THE LOADS INDICATED AND APPLIED AS REQUIRED BY:

FBC 17

THE BUILDER IS TO CONFIRM THAT THESE LOADS COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING DEPARTMENT.

ROOF DEAD LOAD		1.790 PSF
SUPERIMPOSED COLLATERAL		0.5 PSF
ROOF LIVE LOAD		20.00 PSF (REDUCIBLE)
RISK CATEGORY		II – Normal
SNOW LOAD		
GROUND SNOW LOAD (Pg)		0.0000 PSF
SNOW LOAD IMPORTANCE FACTOR (I <sub>s</sub> )		1.0000
FLAT ROOF SNOW LOAD (P <sub>f</sub> )		0 PSF
SNOW EXPOSURE FACTOR (C <sub>e</sub> )		1.0
THERMAL FACTOR (C <sub>t</sub> )		1.00
WIND LOAD		
ULTIMATE WIND SPEED		120 MPH
NOMINAL WIND SPEED (V <sub>nom</sub> )		93 MPH (IBC SECTION 1609.3.1)
SERVICEABILITY WIND SPEED		76 MPH
WIND EXPOSURE CATEGORY		B
TOPOGRAPHICAL FACTOR		1.0
INTERNAL PRESSURE COEFFICIENT (C <sub>gp</sub> )		0.18 / -0.18
ZONE 4, COMPONENT WIND LOAD ≤ 10 FT <sup>2</sup>		
23.689 PSF PRESSURE -25.663 PSF SUCTION		
ZONE 5, COMPONENT WIND LOAD < 10 FT <sup>2</sup>		
23.689 PSF PRESSURE -31.526 PSF SUCTION		
ZONES PER ASCE 7-10, FIG. 30.4-1		
ZONES PRESSURES SHOWN ARE UN-FACTORED		
RAIN INTENSITY		
5-MINUTE DURATION, 5-YEAR RECURRENT (I <sub>1</sub> )		10.0000 IN/HOUR

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 ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☐ FOR CONSTRUCTION PERMIT  
THESE DRAWINGS, BEING FOR PERMIT, ARE BY DEFINITION NOT FINAL. ONLY DRAWINGS ISSUED "FOR ERECTOR INSTALLATION" CAN BE CONSIDERED AS COMPLETE.

☒ FOR ERECTOR INSTALLATION  
FINAL DRAWINGS FOR CONSTRUCTION.

FOR QUESTIONS OR ASSISTANCE CONCERNING ERECTION CALL:  
**800-556-3726**  
MONDAY – FRIDAY 7:30AM TO 5:00PM

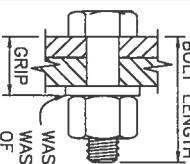
ENGINEERING SEAL

THIS CERTIFICATION COVERS PARTS MANUFACTURED AND DELIVERED BY THE MANUFACTURER ONLY, AND EXCLUDES PARTS SUCH AS DOORS, WINDOWS, FOUNDATION DESIGN AND ERECTION OF THE BUILDING.

THESE DRAWINGS ARE THE PRODUCT OF AN AFFILIATE OF NCI GROUP, INC. – 10943 N. SAM HOUSTON PARKWAY W., HOUSTON, TX 77064. THE PROFESSIONAL ENGINEER WHOSE SEAL APPEARS HEREON IS EMPLOYED AS AN AFFILIATE OF NCI GROUP, INC. AND IS NOT THE ENGINEER-OF-RECORD FOR THE OVERALL PROJECT.

THE ENGINEER WHOSE SEAL APPEARS HEREON IS AN EMPLOYEE FOR THE MANUFACTURER. FOR THE MATERIALS DESCRIBED HEREIN, SAID SEAL OR CERTIFICATION IS LIMITED TO THE PRODUCTS DESIGNED AND MANUFACTURED BY THE MANUFACTURER. THE UNDERSIGNED ENGINEER IS NOT THE OVERALL ENGINEER OF RECORD FOR THIS PROJECT.

1/2"Ø A325 BOLT GRIP TABLE	
GRIP	LENGTH
0 TO 9/16"	1 1/4" F.T.
9/16" TO 1 1/16"	1 3/4" F.T.
Over 1 1/16" TO 1 5/16"	2"
Over 1 5/16" TO 1 9/16"	2 1/4"
Over 1 9/16" TO 1 13/16"	2 1/2"
Over 1 13/16" TO 2 1/16"	2 3/4"



NOTE: FULL THREAD ENGAGEMENT IS DEEMED TO HAVE BEEN MET WHEN THE END OF THE BOLT IS FLUSH WITH THE FACE OF THE NUT.

WASHER REQUIRED ONLY WHEN SPECIFIED. OF BOLT, UNDER NUT, OR AT BOTH AT LOCATIONS NOTED ON ERECTION DRAWINGS. ADD 5/32" FOR EACH WASHER TO MATERIAL THICKNESS TO DETERMINE GRIP.

ISSUE	DATE	DESCRIPTION	BY	CHK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



**MESCO Building Solutions**

5244 Bear Creek Court  
Voice 214-687-9999

PROJECT: SIMQUE – NICKELSON 52X40X16

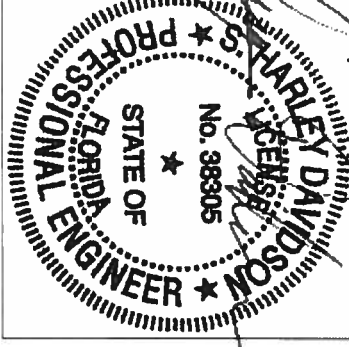
CUSTOMER: SIMQUE CONSTRUCTION LLC

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO. INC

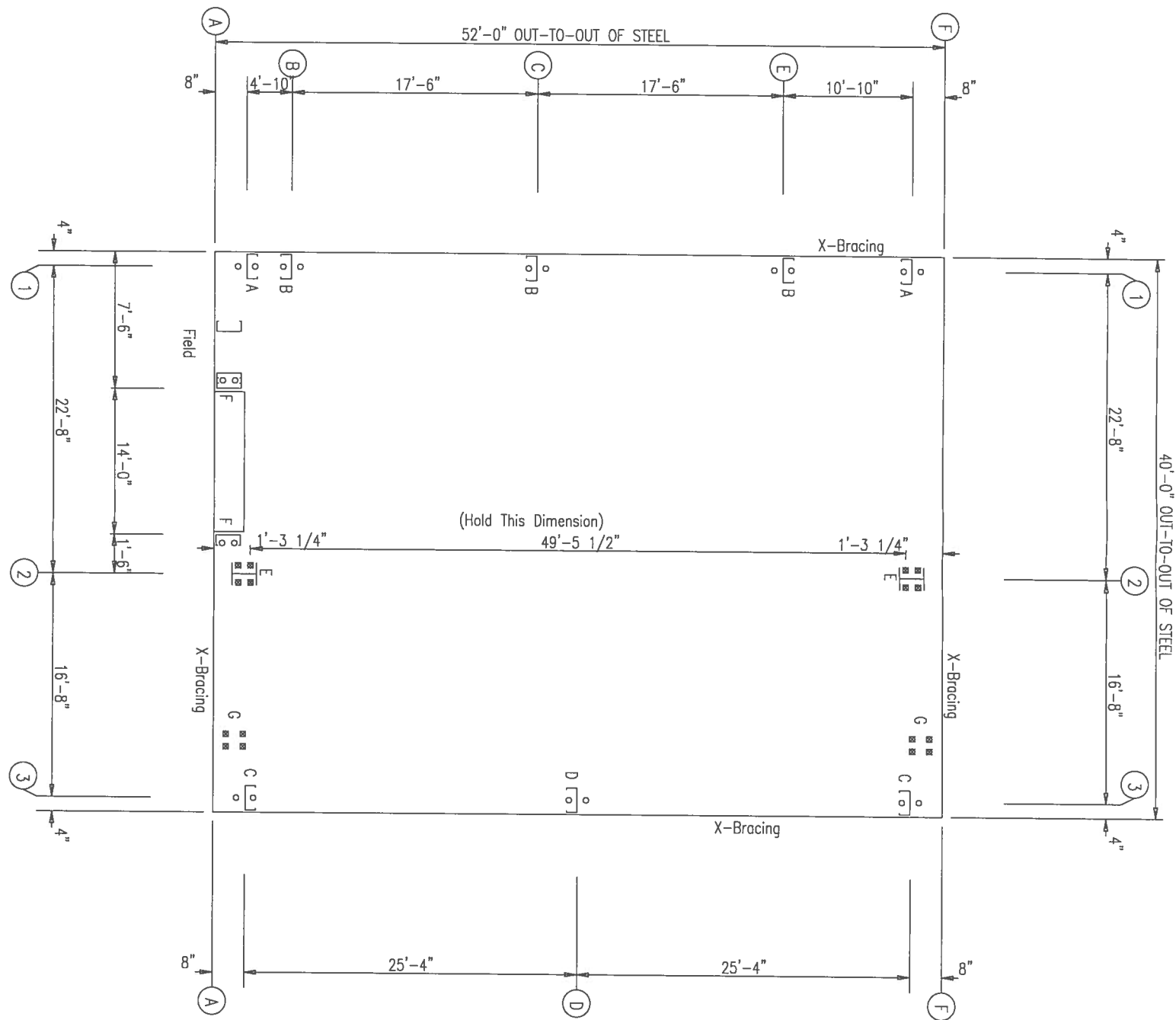
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/27/18	N.T.S.	1	A	16-B-81820	C1	0

Nov 29, 2018



Drawing has been digitally signed

○ Dia = 5/8"  
⊗ Dia = 3/4"



ANCHOR BOLT PLAN

NOTE: ALL BASE PLATES @ 100.0' (U.N.)  
ASSUMED FINISH FLOOR @ 100.0' (U.N.)



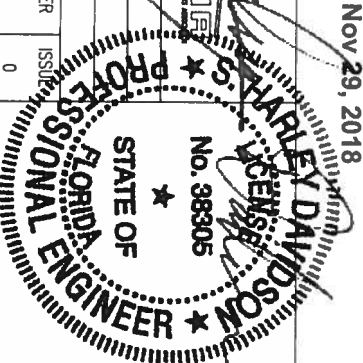
MESCO Building Solutions

5244 Bear Creek Court  
Irving, TX 75061  
Voice 214-687-9999  
Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16  
CUSTOMER: SIMQUE CONSTRUCTION LLC  
LOCATION: LAKE CITY, FL 32055  
OWNER: D.R. NICKELSON & CO., INC.

ISSUE	DATE	DESCRIPTION	BY	CHK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM

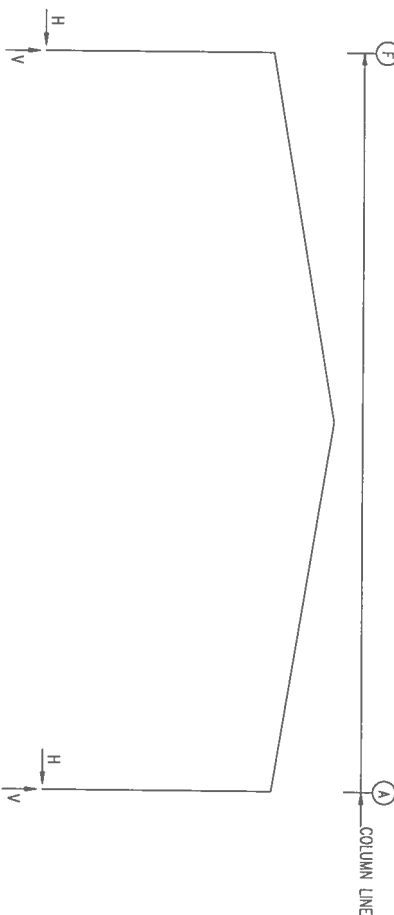
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/27/18	N.T.S.	1	A	16-B-81820	F1	0



FRAME LINES: 2

- | ENDWALL COLUMN: |          | ANCHOR BOLTS & BASE PLATES |                       |        |       |           |     |
|-----------------|----------|----------------------------|-----------------------|--------|-------|-----------|-----|
| Frm Line        | Col Line | Anchor Bolt Qty            | Base Plate (in) Width | Length | Thick | Gout (in) |     |
| 1               | F        | 2                          | 0.625                 | 7.000  | 8.000 | 0.250     | 0.0 |
| 1               | E        | 2                          | 0.625                 | 7.000  | 8.000 | 0.250     | 0.0 |
| 1               | C        | 2                          | 0.625                 | 7.000  | 8.000 | 0.250     | 0.0 |
| 1               | B        | 2                          | 0.625                 | 7.000  | 8.000 | 0.250     | 0.0 |
| 1               | A        | 2                          | 0.625                 | 7.000  | 8.000 | 0.250     | 0.0 |
| 3               | A        | 2                          | 0.625                 | 7.000  | 12.00 | 0.250     | 0.0 |
| 3               | D        | 2                          | 0.625                 | 7.000  | 12.00 | 0.250     | 0.0 |
| 3               | F        | 2                          | 0.625                 | 7.000  | 12.00 | 0.250     | 0.0 |

FRAME LINES: 2



---

---

RIGID FRAME:										ANCHOR BOLTS & BASE PLATES			
BASIC COLUMN REACTIONS (k)													
Frm Line		Col Line		Anc-Bolt Qty		Base-Plate (in)		Groat (in)					
				Dia		Width Length		Thick					
2	F	4	4	0.750	6.000	9.500	0.375	0.0					
2	A	4	4	0.750	6.000	9.500	0.375	0.0					

Line	Line	Vert
1	1	0.0

Firm	Col	Dead	Colort	Live	Wind_Left1	Wind_Right1	Wind_Left2	Wind_Right2	Wind	Wind
Line	Line	Vert	Vert	Vert	Horz	Vert	Horz	Vert	Press	Suict
1	F	0.2	0.0	1.0	1.9	0.0	2.2	0.0	0.0	0.0
1	E	0.6	0.1	3.6	-1.9	1.9	-2.9	2.2	0.0	0.0
1	C	0.7	0.1	4.4	-3.3	-5.6	-0.9	-3.6	-2.2	2.5
1	B	0.5	0.1	3.4	-2.5	-4.5	-2.0	-3.1	-3.1	3.4
1	A	0.0	0.0	-0.2	-2.5	-4.4	-1.1	-3.0	-1.7	1.8
					0.0	0.6	0.0	0.5	-0.4	0.5

0.5  
0.0  
-0.5

[illegible]

From	Col	Wind_Suc
Line	Line	Heat

FRAME LINES: 2

- | ENDWALL COLUMN: |          |                 |                       | ANCHOR BOLTS & BASE PLATES |       |           |
|-----------------|----------|-----------------|-----------------------|----------------------------|-------|-----------|
| Frm Line        | Col Line | Anchor Bolt Qty | Base Plate (in) Width | Length                     | Thick | Gout (in) |
| 1               | F        | 2               | 7.000                 | 8.000                      | 0.250 | 0.0       |
| 1               | E        | 2               | 0.625                 | 7.000                      | 8.000 | 0.250     |
| 1               | C        | 2               | 0.625                 | 7.000                      | 8.000 | 0.250     |
| 1               | B        | 2               | 0.625                 | 7.000                      | 8.000 | 0.250     |
| 1               | A        | 2               | 0.625                 | 7.000                      | 8.000 | 0.250     |
| 3               | A        | 2               | 0.625                 | 7.000                      | 12.00 | 0.250     |
| 3               | D        | 2               | 0.625                 | 7.000                      | 12.00 | 0.0       |
| 3               | F        | 2               | 0.625                 | 7.000                      | 12.00 | 0.250     |

---

---

RIGID FRAME:										ANCHOR BOLTS & BASE PLATES			
BASIC COLUMN REACTIONS (k)													
Frm Line		Col Line		Anc-Bolt Qty		Base-Plate (in)		Groat (in)					
				Dia		Width Length		Thick					
2	F	4	4	0.750	6.000	9.500	0.375	0.0					
2	A	4	4	0.750	6.000	9.500	0.375	0.0					

Line	Line	Vert
1	1	02


Firm	Col	Dead	Colort	Live	Wind_Left1	Wind_Right1	Wind_Left2	Wind_Right2	Wind	Wind
Line	Line	Vert	Vert	Vert	Horz	Vert	Horz	Vert	Press	Suict
1	F	0.2	0.0	1.0	1.9	0.0	2.2	0.0	0.0	0.0
1	E	0.6	0.1	3.6	-1.9	1.9	-2.9	2.2	0.0	0.0
1	C	0.7	0.1	4.4	-3.3	-5.6	-0.9	-3.6	-2.2	2.5
1	B	0.5	0.1	3.4	-2.5	-4.5	-2.0	-3.1	-3.1	3.4
1	A	0.0	0.0	-0.2	-2.5	-4.4	-1.1	-3.0	-1.7	1.8
					0.0	0.6	0.0	0.5	-0.4	0.5

0.5  
0.0  
-0.5

[illegible]

From	Col	Wind_Suc
Line	Line	Heat

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



## MESCO Building Solutions

5244 Bear Creek Court  
Voice 214-687-9999 Fax 214-687-9737

Irving, TX 75061


**PROJECT:** SIMQUE - NICKELSON 52X40XI6

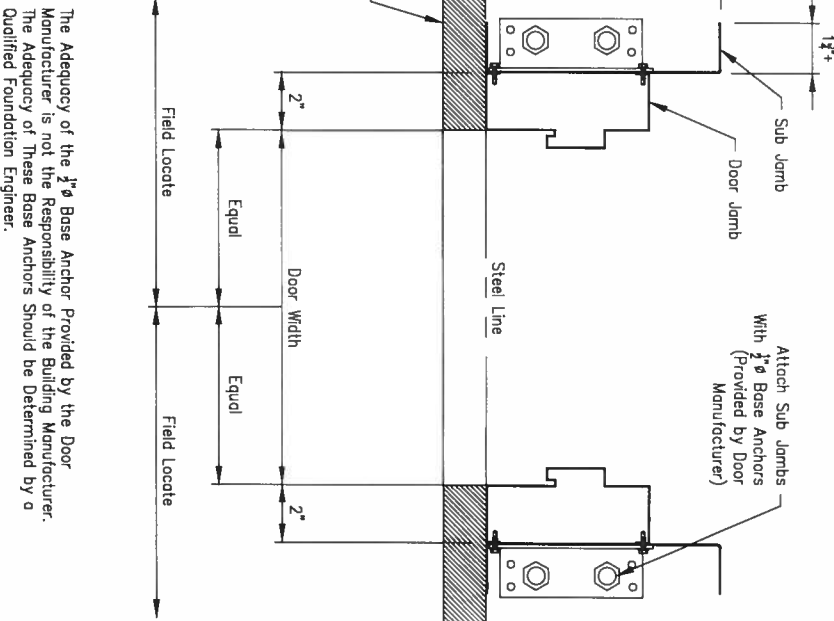
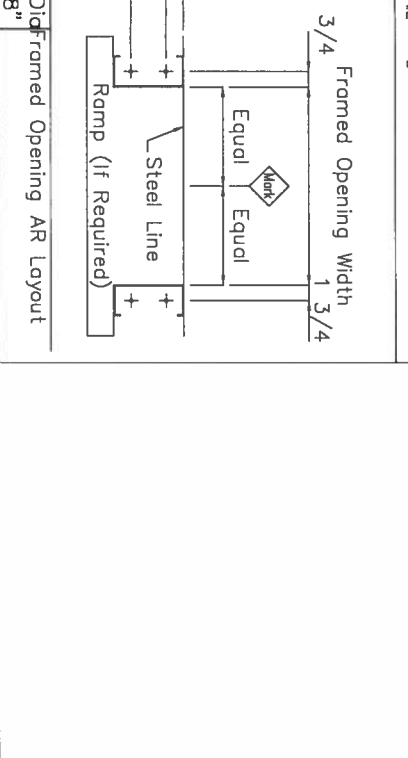
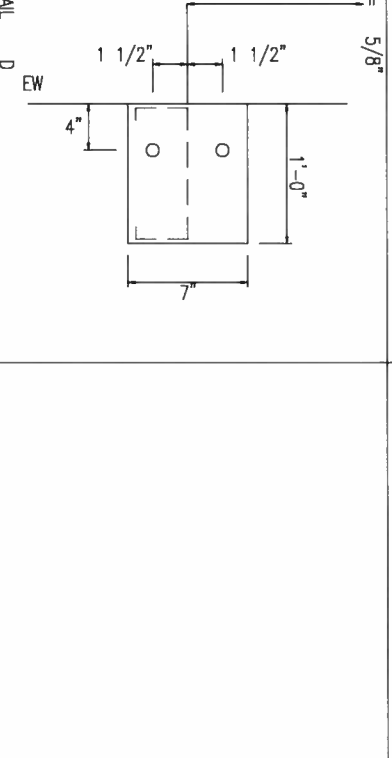
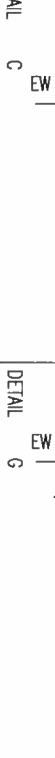
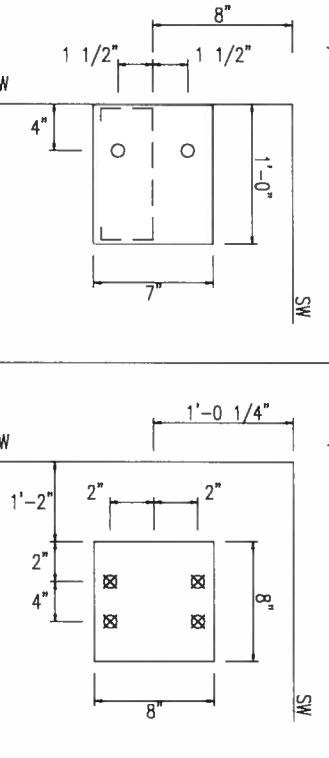
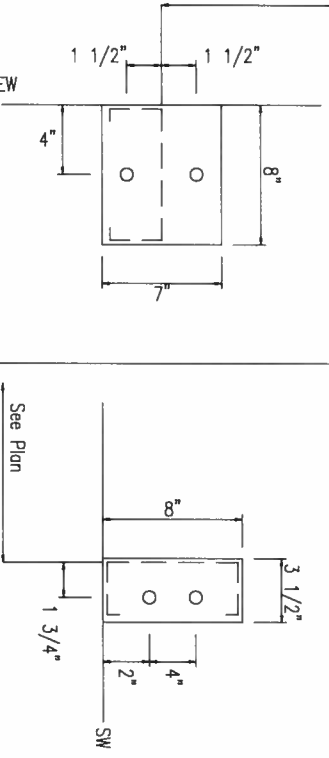
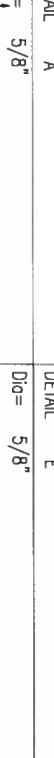
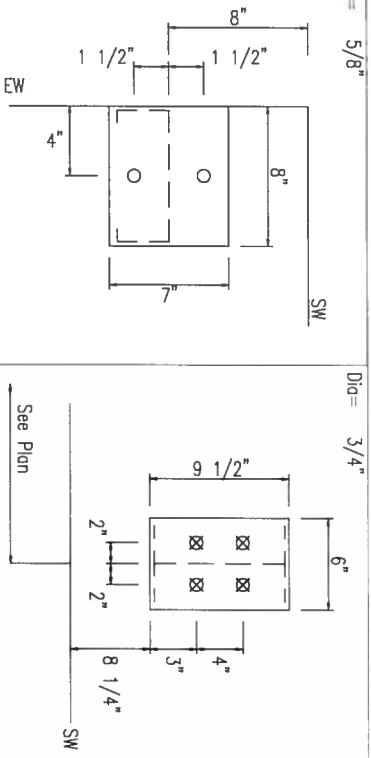
**CUSTOMER:** SIMQUE CONSTRUCTION LLC

**LOCATION:** LAKE CITY, FL 32055


**OWNER:** D.R. NICKELSON & CO., INC

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUED
	11/27/18	N.T.S.	1	A	16-B-81820	F2	0





ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



**MESCO Building Solutions**

5244 Bear Creek Court Irving, TX 75061  
Voice 214-687-9999 Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16

CUSTOMER: SIMQUE CONSTRUCTION LLC

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO., INC.

DATE: 11/27/18

SCALE: N.T.S.

PHASE: 1

BUILDING ID: A

JOB NUMBER: 16-B-81820

SHEET NUMBER: F3

ISSUE: 0

Nov 29, 2018

Drawing has been digitally signed

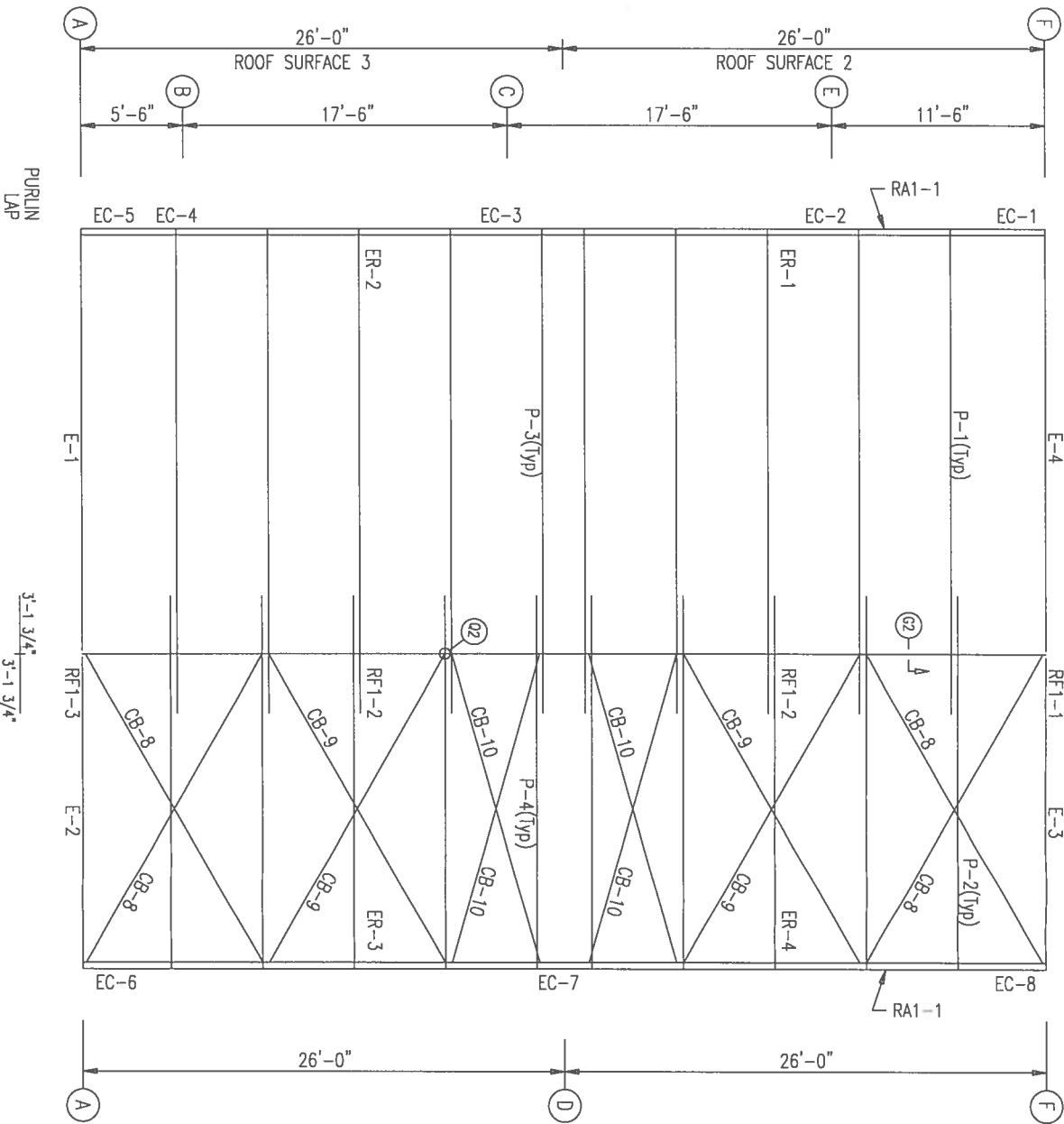
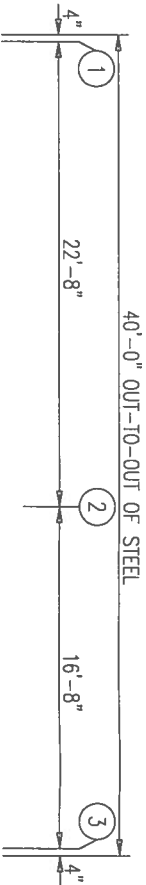
STATE OF FLORIDA

PROFESSIONAL ENGINEER

No. 38305


HARLEY DAVIDSON

MEMBER TABLE		
ROOF PLAN		
MARK	PART	LENGTH
P-1	8X25Z16	26'-1 1/2"
P-2	8X25Z16	20'-1 1/2"
P-3	8X25Z16	26'-1 1/2"
P-4	8X25Z16	20'-1 1/2"
E-1	8ES2L14	22'-11 1/2"
E-2	8ES2L14	16'-11 1/2"
E-3	8ES2L14	16'-11 1/2"
E-4	8ES2L14	22'-11 1/2"
CB-8	1/4" CABLE	19'-3"
CB-9	1/4" CABLE	19'-7"
CB-10	1/4" CABLE	17'-11"



ROOF FRAMING PLAN

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



MESCO Building Solutions

5244 Bear Creek Court Irving, TX 75061

Voice 214-687-9999 Fax 214-687-9737

CUSTOMER: SIMQUE CONSTRUCTION LLC

PROJECT: SIMQUE - NICKELSON 52X40X16

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO., INC

DATE: 11/27/18

SCALE: N.T.S.

PHASE: 1

BUILDING ID: A

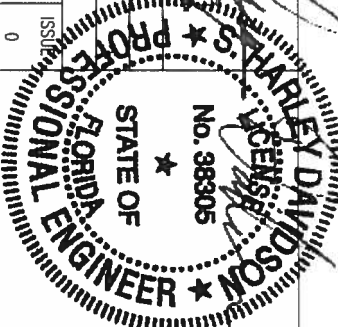
JOB NUMBER: 16-B-81820

SHEET NUMBER: E1

- GENERAL NOTES:
1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
  2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
  3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
  4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
  5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
  6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

Nov 29, 2018

Drawing has been digitally signed.

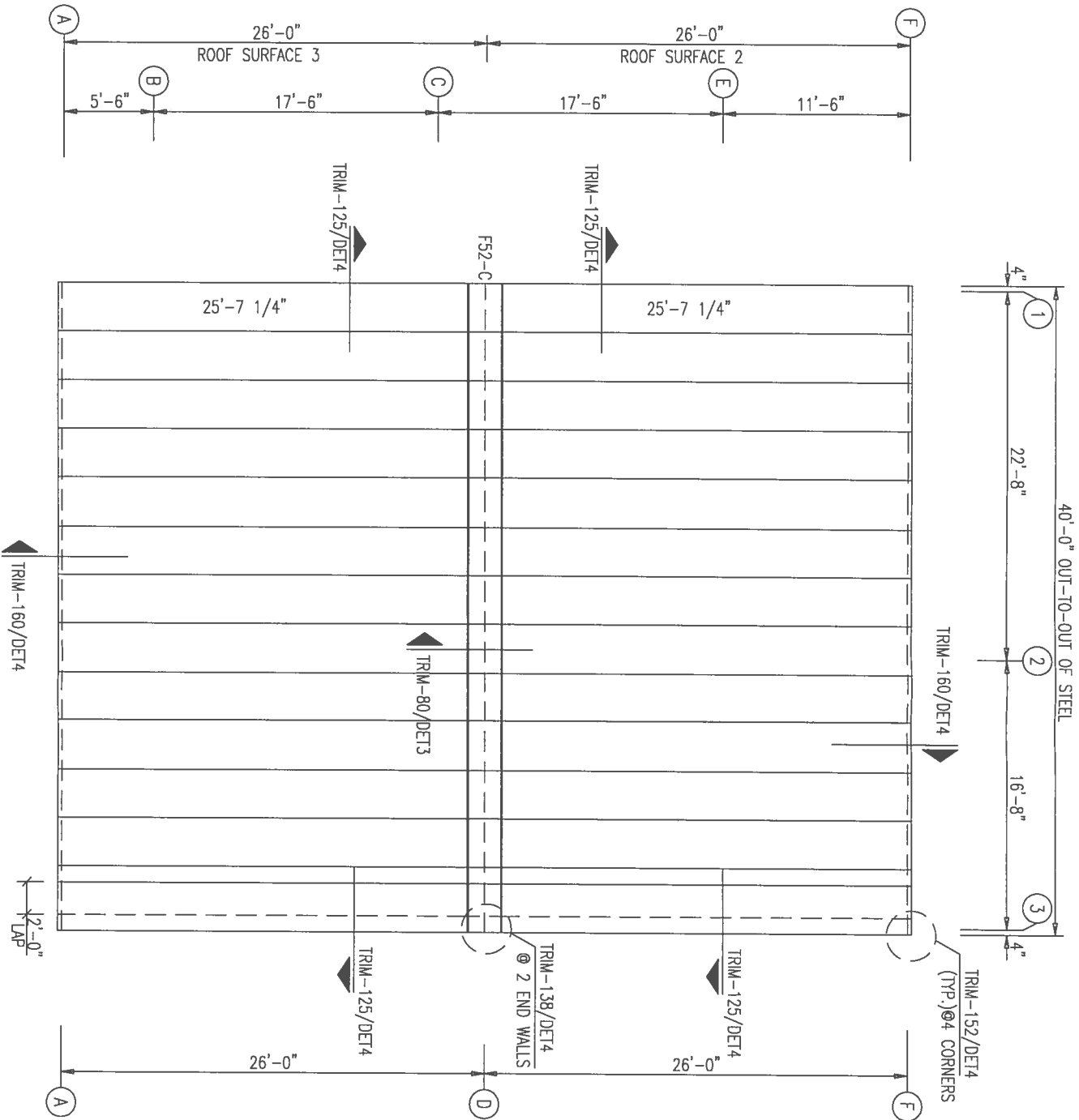


CHARLES DAVIDSON

PROFESSIONAL ENGINEER

No. 36305

STATE OF FLORIDA



ROOF SHEETING PLAN  
PANELS: 26 Gauge PBR – Solar White

GENERAL NOTES:

1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING MANUFACTURER APPROVAL OR PROFESSIONAL ENGINEER APPROVAL.
5. DO NOT STACK SHEET BUNDLES ON ROOF. ONLY RAISE INDIVIDUAL SHEETS AS NEEDED.
6. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHW

**MESCO Building Solutions**  
5244 Bear Creek Court Irving, TX 75061  
Voice 214-687-9999 Fax 214-687-9737

PROJECT: SIMQUE – NICKELSON 52X40X16  
CUSTOMER: SIMQUE CONSTRUCTION LLC  
LOCATION: LAKE CITY, FL 32055

CAD DATE SCALE PHASE BUILDING ID JOB NUMBER SHEET NUMBER  
11/27/18 N.T.S. 1 A 16-B-81820 E2

OWNER: D.R. NICKELSON & CO., INC.

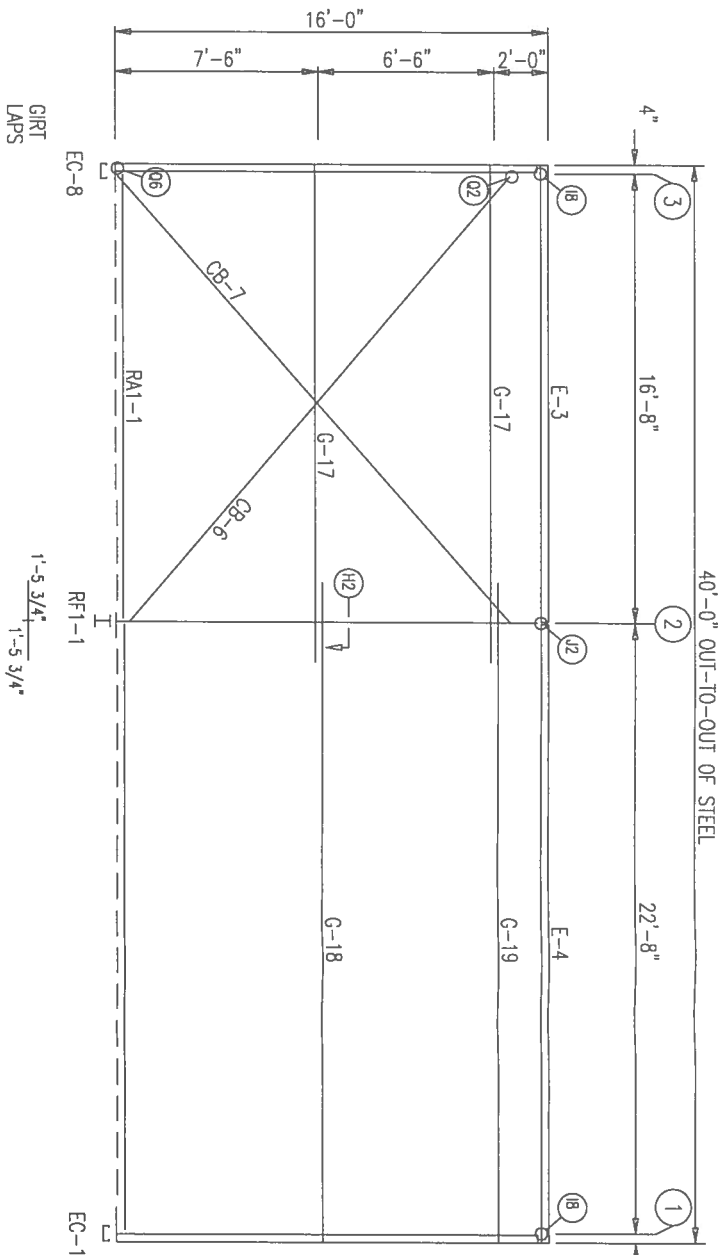
Nov 29, 2018

Drawing has been digitally signed

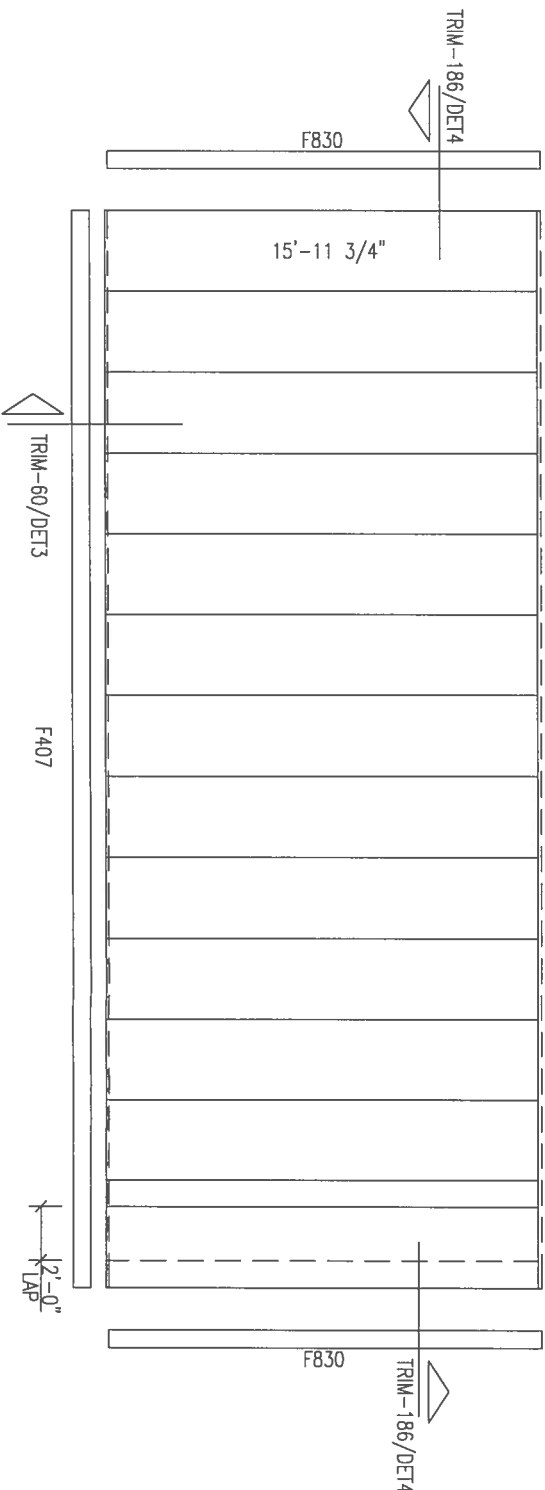
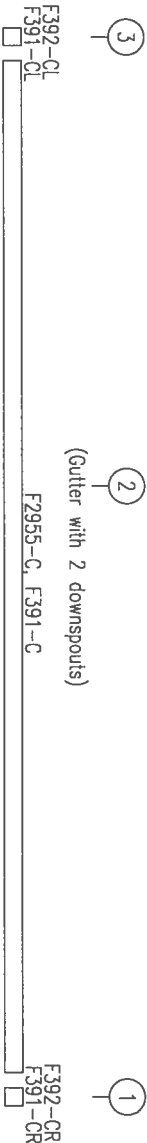
STATE OF FLORIDA  
No. 36305  
PROFESSIONAL ENGINEER



MEMBER TABLE			
FRAME LINE F			
MARK	PART	LENGTH	
E-3	BES2L14	16'-11 1/2"	
E-4	BES2L14	22'-11 1/2"	
G-17	8X25Z16	18'-5 1/2"	
G-18	8X25Z16	24'-5 1/2"	
G-19	8X25Z16	24'-5 1/2"	
CB-6	1/4" CABLE	22'-10"	
CB-7	1/4" CABLE	21'-6"	



SIDEWALL FRAMING: FRAME LINE F



SIDEWALL SHEETING & TRIM: FRAME LINE F


PANELS: 26 Gauge PBR - Ash Gray

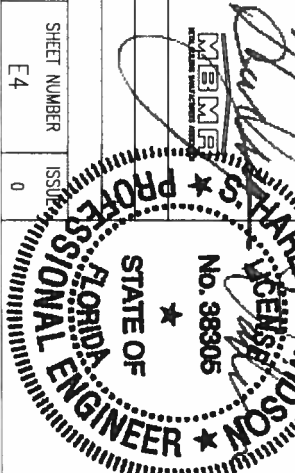
DOWNSPOUT SPACING LOCATIONS  
DOWNSPOUTS ARE TO BE PLACED AT A SPACING NOT TO EXCEED 40 FT. WITH A DOWNSPOUT WITHIN 23 FT. OF EACH END OF THE GUTTER RUN.

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM

		<b>MESCO Building Solutions</b>	
PROJECT: SIMQUE - NICKELSON 52X40X16		5244 Bear Creek Court Irving, TX 75061	
CUSTOMER: SIMQUE CONSTRUCTION LLC		Voice 214-687-9999 Fax 214-687-9737	
LOCATION: LAKE CITY, FL 32055		OWNER: D.R. NICKELSON & CO, INC	
CAO	DATE	SCALE	PHASE
	11/27/18	N.T.S.	1
			A
			16-B-81820



Nov 29, 2018

Drawing has been digitally signed.



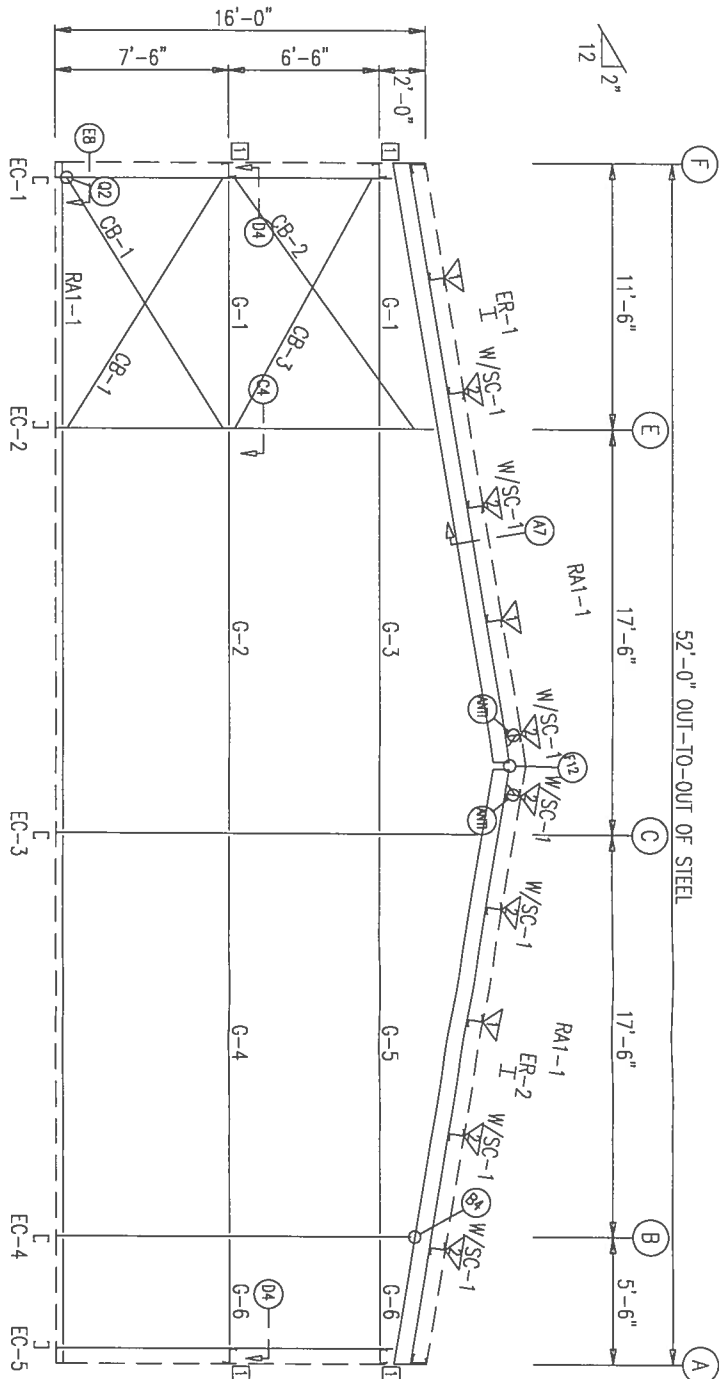
BEARING FRAME ONLY!  
WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL  
RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE.  
WASHER NOT NEEDED ON CLIP SIDE.

BOLT TABLE			
FRAME LINE 1	QUAN	TYPE	DIA
ER-1/ER-2	8	A325	5/8"
Columns/Rd	4	A325	1/2"

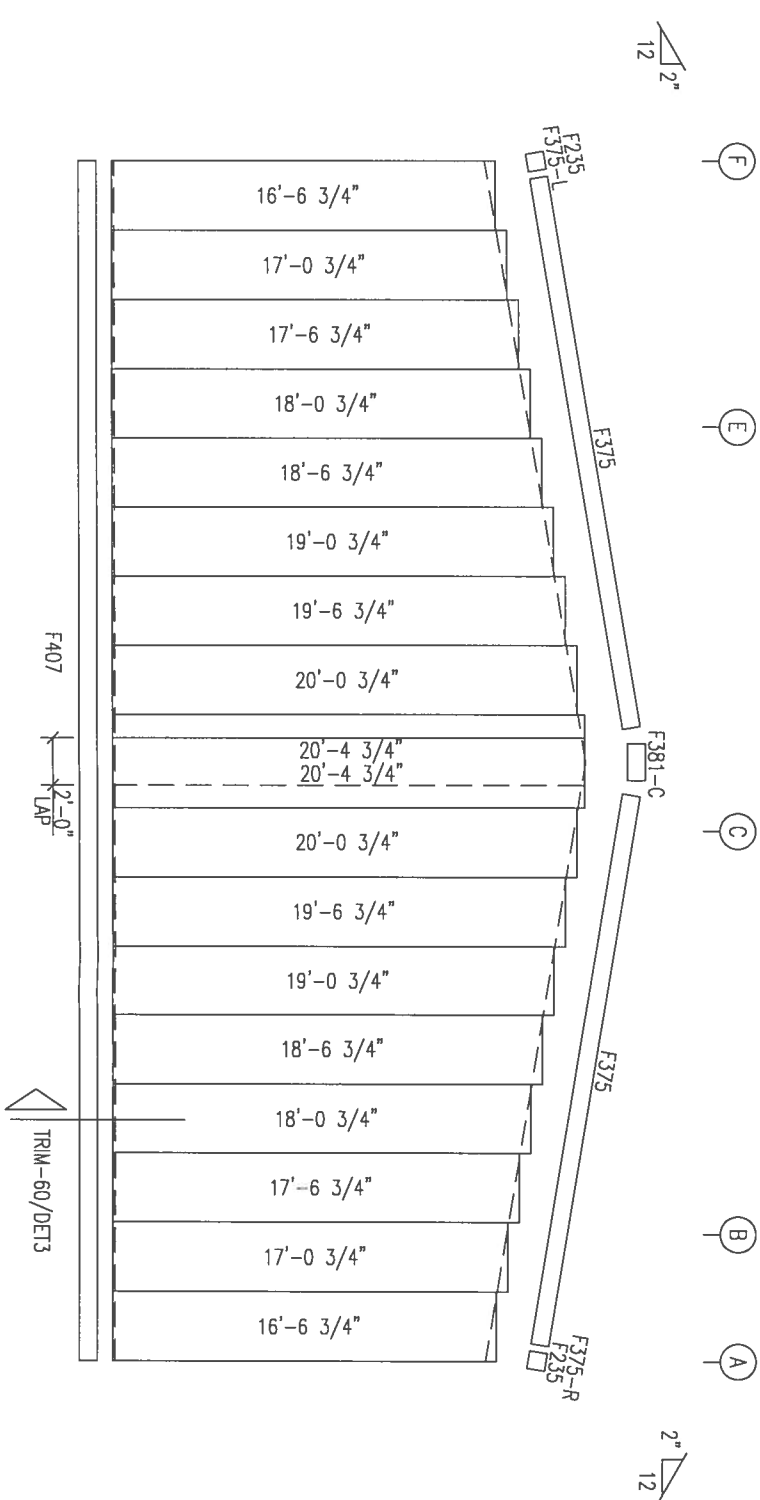
MEMBER TABLE		
FRAME LINE 1	PART	LENGTH
EC-1	BF25C14	14'-8"
EC-2	BF35C12	16'-5 5/8"
EC-3	BF35C12	18'-4 5/8"
EC-4	BF25C14	15'-5 5/8"
EC-5	BF25C14	14'-8 1/2"
ER-1	WB8X10	26'-4 1/16"
ER-2	WB8X10	26'-4 1/16"
G-1	8X25Z16	10'-2"
G-2	8X25Z14	17'-5 1/2"
G-3	8X25Z16	17'-5 1/2"
G-4	8X25Z14	17'-1 3/4"
G-5	8X25Z16	17'-1 3/4"
G-6	8X25Z16	4'-2"
CB-1	1/4" CABLE	13'-3"
CB-2	1/4" CABLE	13'-11"
CB-3	1/4" CABLE	12'-11"

FLANGE BRACE TABLE		
FRAME LINE 1	PART	LENGTH
1	FB29.3	12X2X1/4G 2'-5 1/4"
2	FB6-1	12X2X1/8" 2'-5 1/4"

CONNECTION PLATES		
FRAME LINE 1	MARK/PART	
1	SC-5	



ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Gauge PBR - Ash Gray

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM

5244 Bear Creek Court  
Irving, TX 75061  
Voice 214-687-9999  
Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16

CUSTOMER: SIMQUE CONSTRUCTION LLC

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO. INC

DATE: 11/27/18

SCALE: N.T.S.

PHASE: 1

BUILDING ID: A

JOB NUMBER: 16-B-81820

SHEET NUMBER: E5

Nov 29, 2018

Drawing has been digitally signed.

STATE OF FLORIDA

PROFESSIONAL ENGINEER

No. 38305

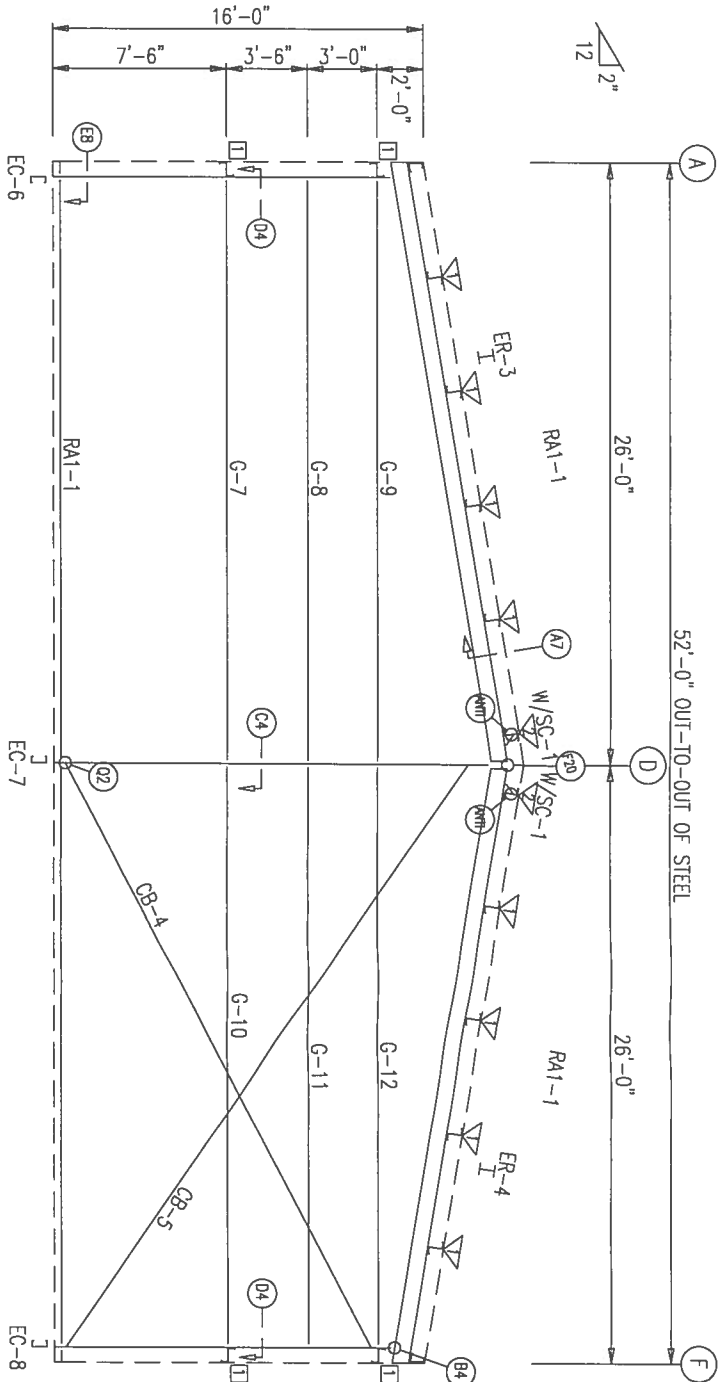
BEARING FRAME ONLY!  
WASHER TO BE USED AT ENDWALL COLUMN TO ENDWALL  
RAFTER CONNECTION. USE ONE WASHER ON COLUMN SIDE.  
WASHER NOT NEEDED ON CLIP SIDE.

BOLT TABLE				
FRAME LINE 3		QUAN	TYPE	DIAM
LOCATION				LENGTH
ER-3/ER-4		8	A325	5/8"
Cor-Column/Raft		4	A325	1/2"
EC-7/ER-4		4	A325	5/8"

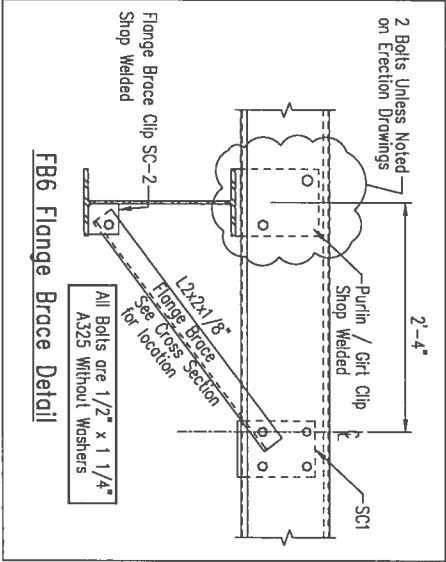
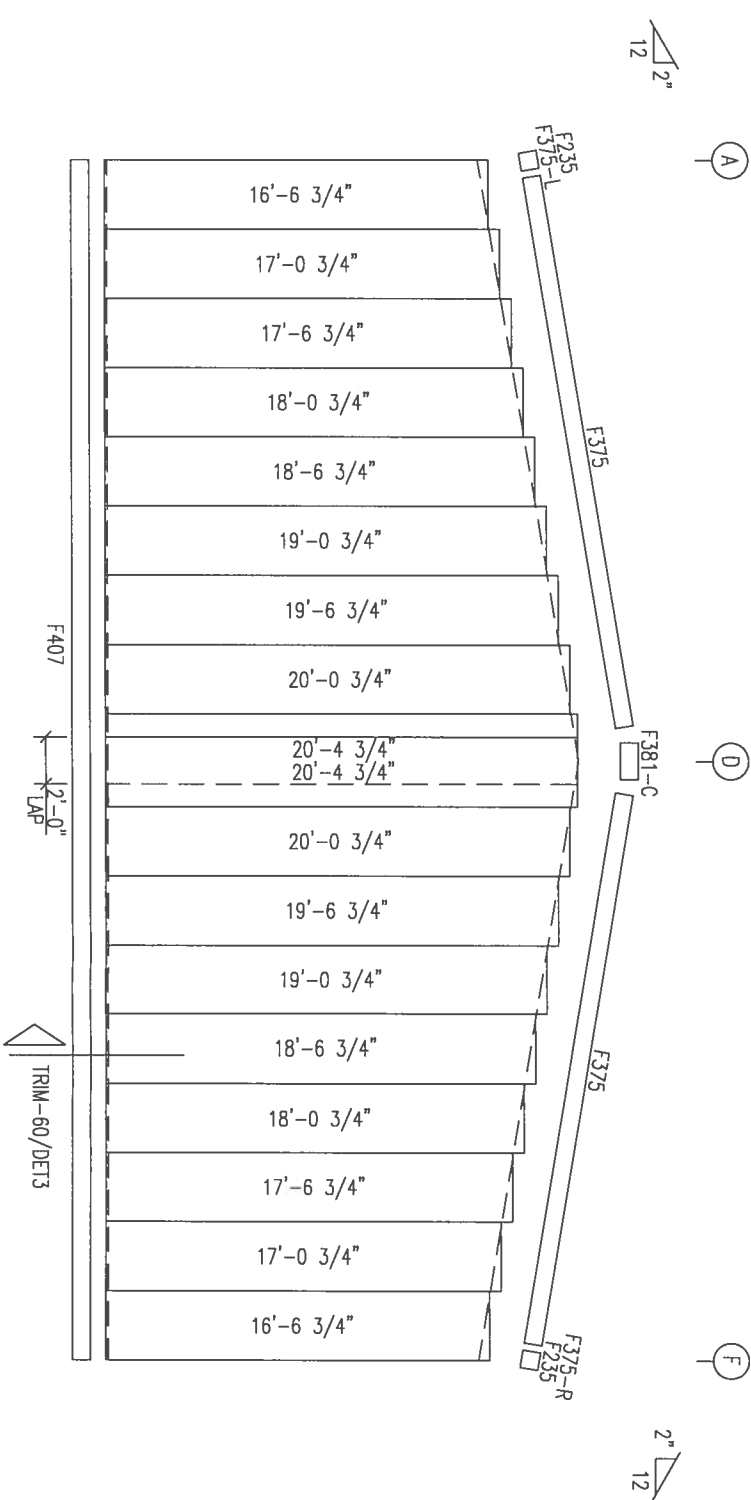
MEMBER TABLE		
FRAME LINE 3	PART	LENGTH
EC-6	12F25C14	14'-8"
EC-7	12F35C12	18'-8 1/8"
EC-8	12F25C14	14'-8"
ER-3	WBX10	26'-4 1/16"
ER-4	WBX10	26'-4 1/16"
G-7	8X25Z12	24'-8"
G-8	8X25Z14	24'-8"
G-9	8X35Z13	24'-8"
G-10	8X25Z12	24'-11 3/4"
G-11	8X25Z14	24'-11 3/4"
G-12	8X35Z13	24'-11 3/4"
CB-4	1/4" CABLE	29'-3"
CB-5	1/4" CABLE	31'-4"

FLANGE BRACE TABLE			
FRAME LINE 3	MARK	PART	LENGTH
1	FB29.3	L2X2X14G	2'-5 1/4"
2	FB6-1	L2X2X1/8"	2'-5 1/4"

CONNECTION PLATES	
FRAME LINE 3	
ID	MARK/PART
1	SC-5



ENDWALL FRAMING: FRAME LINE 3



NOTE:- FIELD SLOT GIRTS FOR BRACING SEE DETAIL ZZ IN DET-5

GENERAL NOTES:

1. INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
2. WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

ENDWALL SHEETING & TRIM: FRAME LINE 3

PANELS: 26 Gauge PBR - Ash Gray

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



MESCO Building Solutions

5244 Bear Creek Court  
Voice 214-687-9999

Irving, TX 75061  
Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16

CUSTOMER: SIMQUE CONSTRUCTION LLC

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO., INC.

CAD

DATE

SCALE

PHASE

BUILDING ID

JOB NUMBER

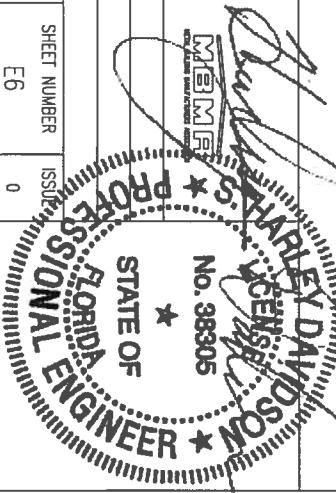
SHEET NUMBER

ISSUE

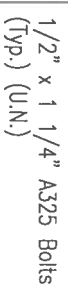
0

Nov 29, 2018

Drawing has been digitally signed.



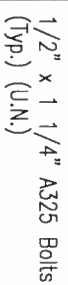




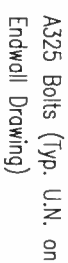
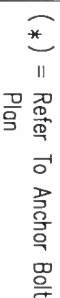
A7



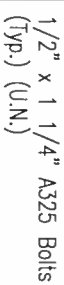
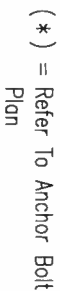
ANTI



D4




B4




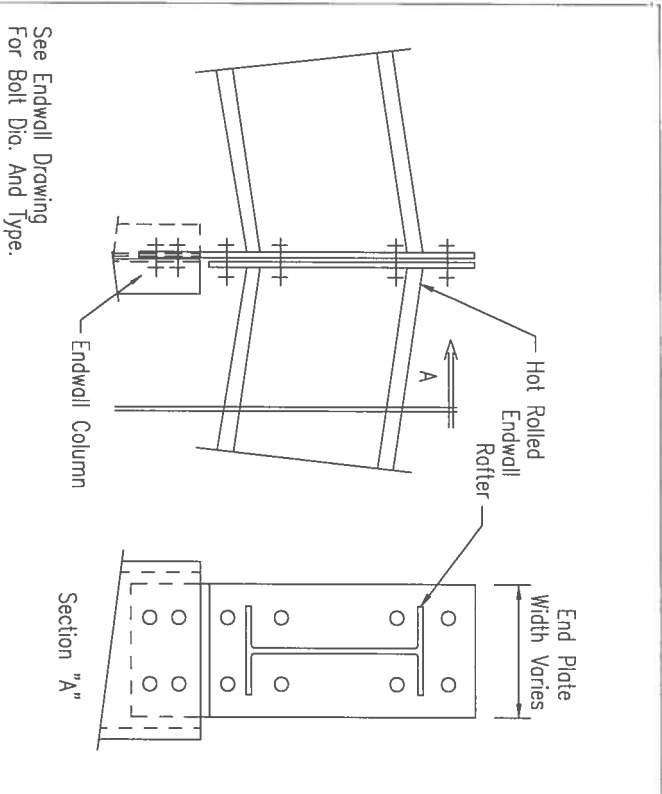
C4



F12

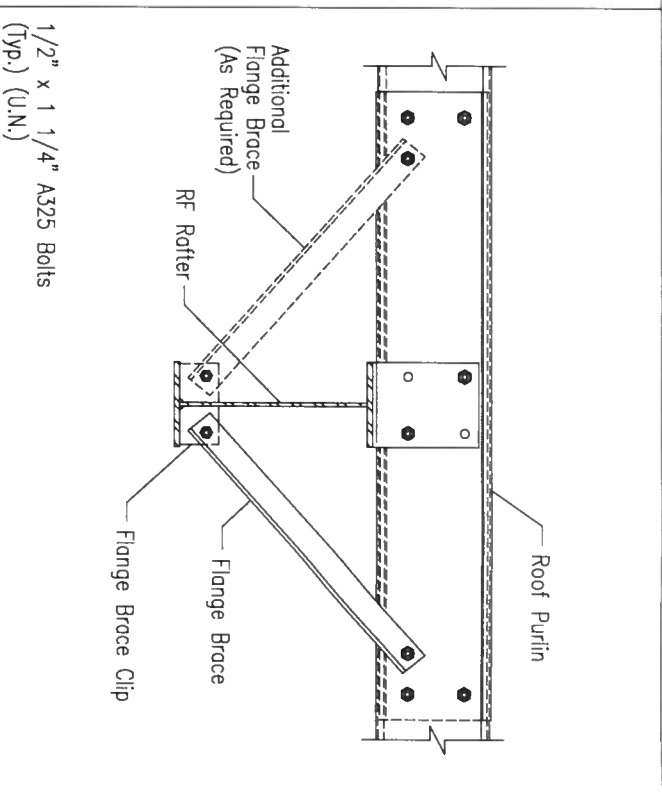
ISSUE	DATE	DESCRIPTION	BY	C&D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM
 <p style="text-align: center;"> <b>MESCO Building Solutions</b>                      5244 Bear Creek Court     Irving, TX 75061                      Voice 214-687-9999     Fax 214-687-9737                 </p>					
PROJECT: SIMQUE -- NICKELSON 52X40X16					
CUSTOMER: SIMQUE CONSTRUCTION LLC			OWNER: D.R. NICKELSON & CO., INC		
LOCATION: LAKE CITY, FL 32055					
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER
	11/27/18	N.T.S.	1	A	16-B-81820
					SHEET NUMBER
					DET1
					ISSUED
					0





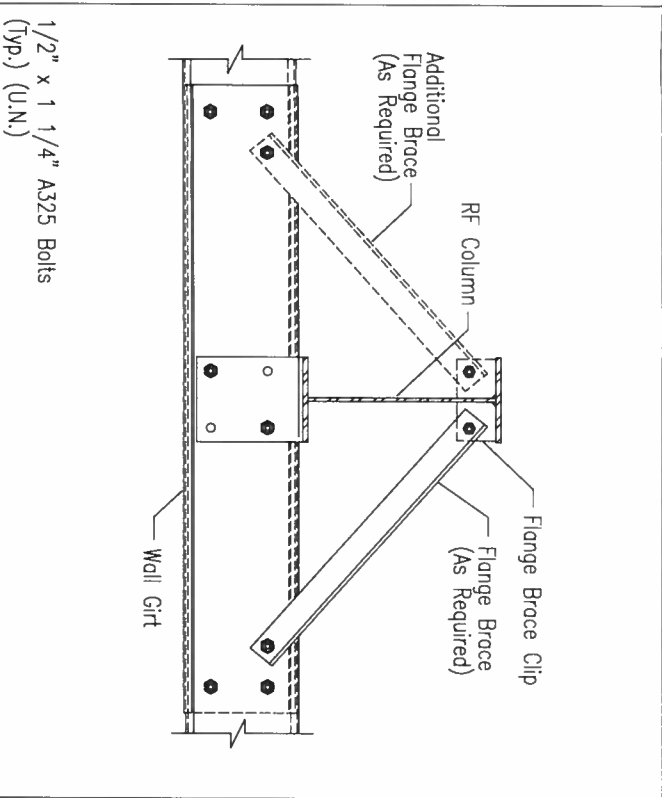
See Endwall Drawing  
For Bolt Dia. And Type.

F20 RAFTER SPLICE AT SURFACE CHANGE



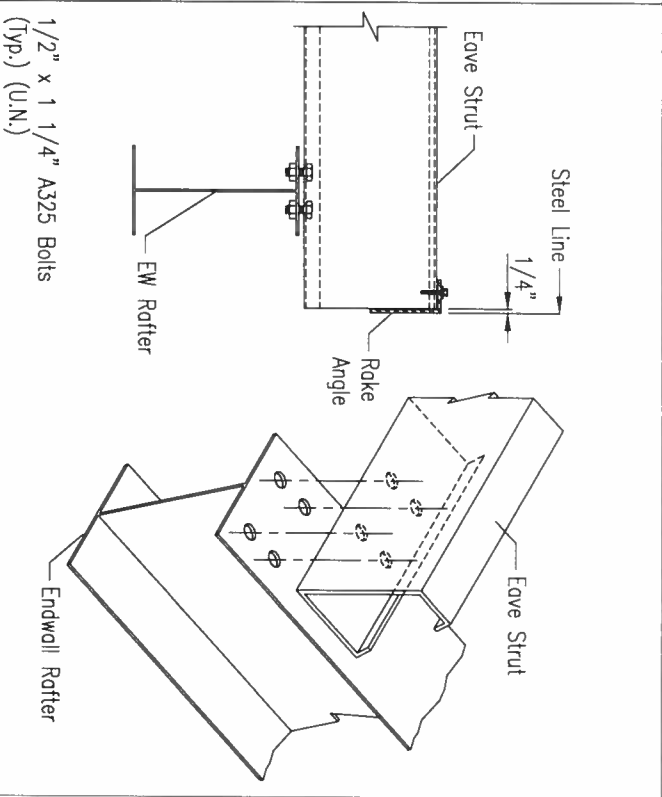
1/2" x 1 1/4" A325 Bolts  
(Typ.) (U.N.)

G2 ROOF PURLIN TO INTERIOR FRAME RAFTER



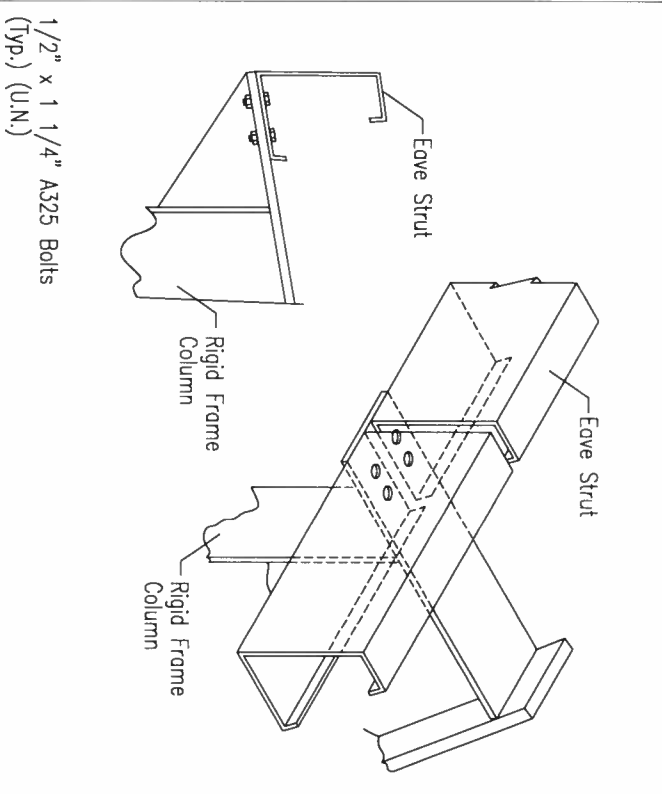
1/2" x 1 1/4" A325 Bolts  
(Typ.) (U.N.)

H2 WALL GIRT TO RIGID FRAME COLUMN



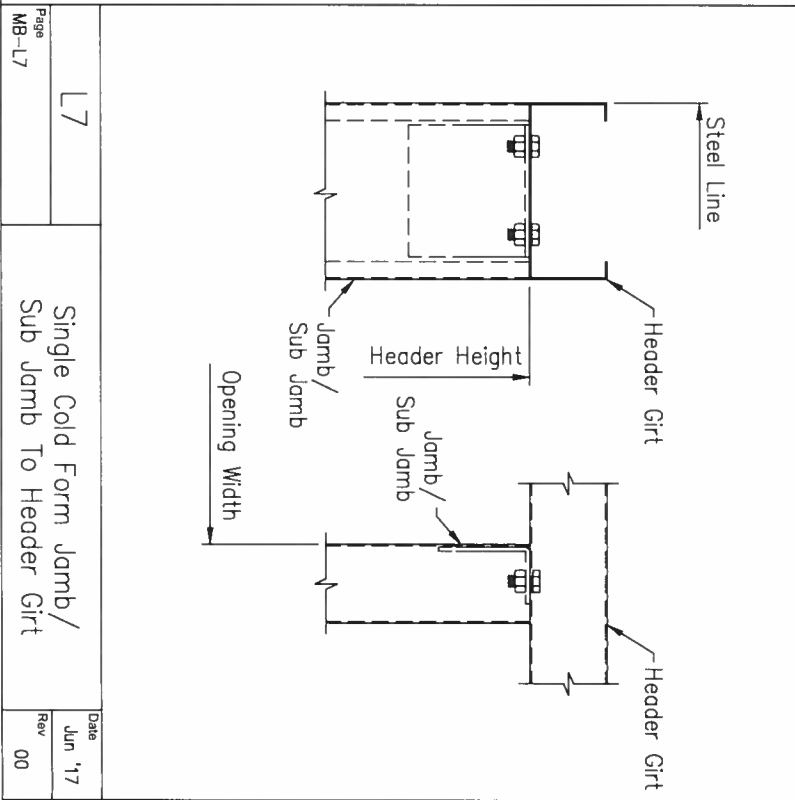
1/2" x 1 1/4" A325 Bolts  
(Typ.) (U.N.)

18 LOW SIDE EAVE STRUT TO HOT ROLLED RAFTER

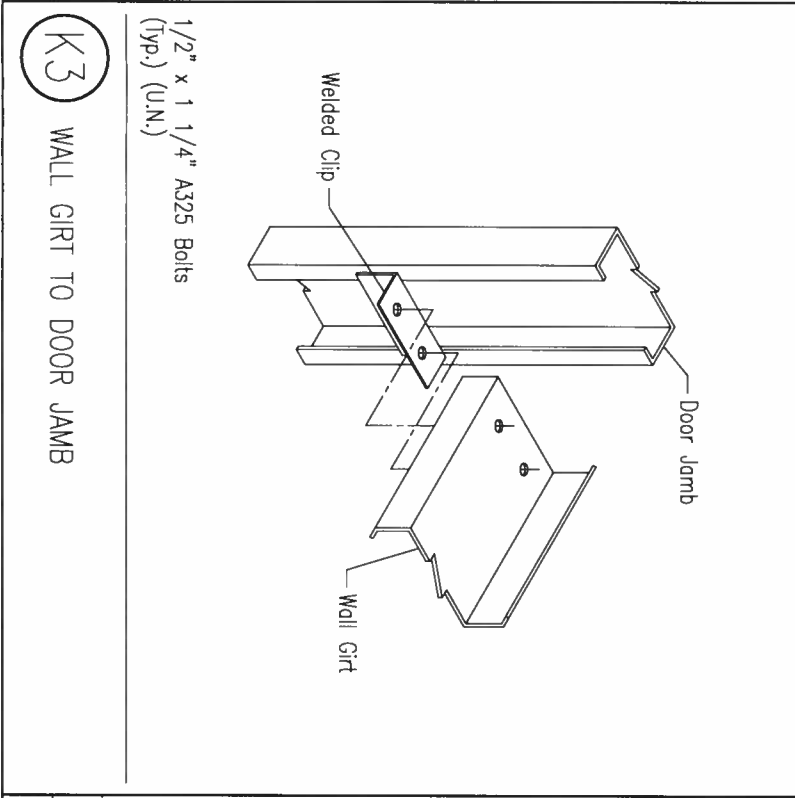


1/2" x 1 1/4" A325 Bolts  
(Typ.) (U.N.)

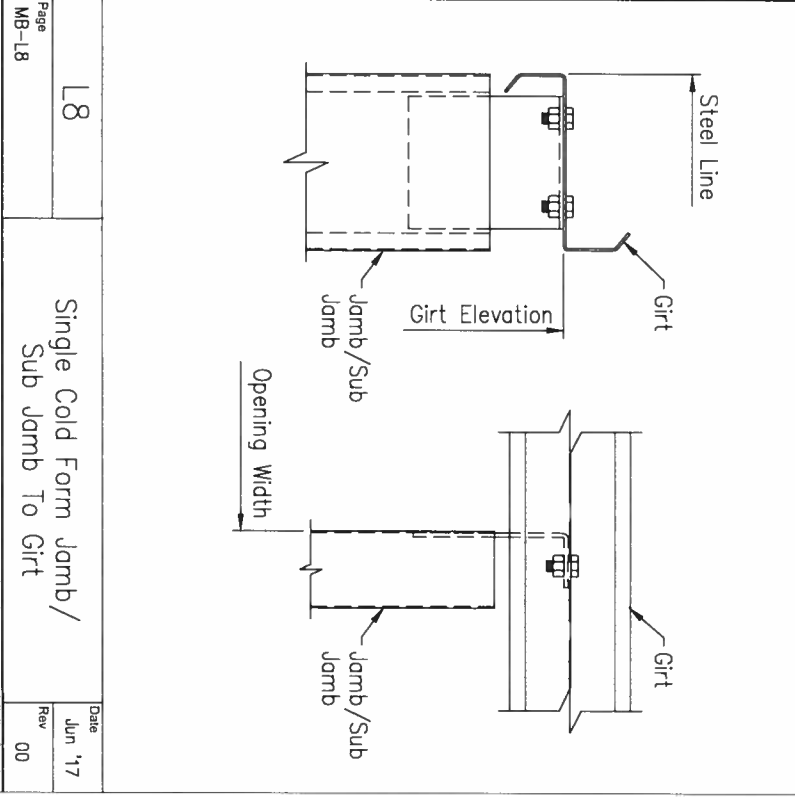
J2 EAVE STRUT TO RIGID FRAME



L7  
Single Cold Form Jamb/  
Sub Jamb To Header Girt



K3  
WALL GIRT TO DOOR JAMB



L8  
Single Cold Form Jamb/  
Sub Jamb To Girt

Page MB-L7


Date Jun '17  
Rev 00

Page MB-L8

Date Jun '17  
Rev 00

Drawing has been digitally signed.

ISSUE	DATE	DESCRIPTION	BY	OK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHW

		<b>MESCO Building Solutions</b>			
5244 Bear Creek Court		Irving, TX 75061			
Voice 214-687-9999		Fax 214-687-9737			
PROJECT: SIMQUE - NICKELSON 52X40X16					
CUSTOMER: SIMQUE CONSTRUCTION LLC		OWNER: D.R. NICKELSON & CO., INC			
LOCATION: LAKE CITY, FL 32055					
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER
	11/27/18	N.T.S.	1	A	16-B-81820

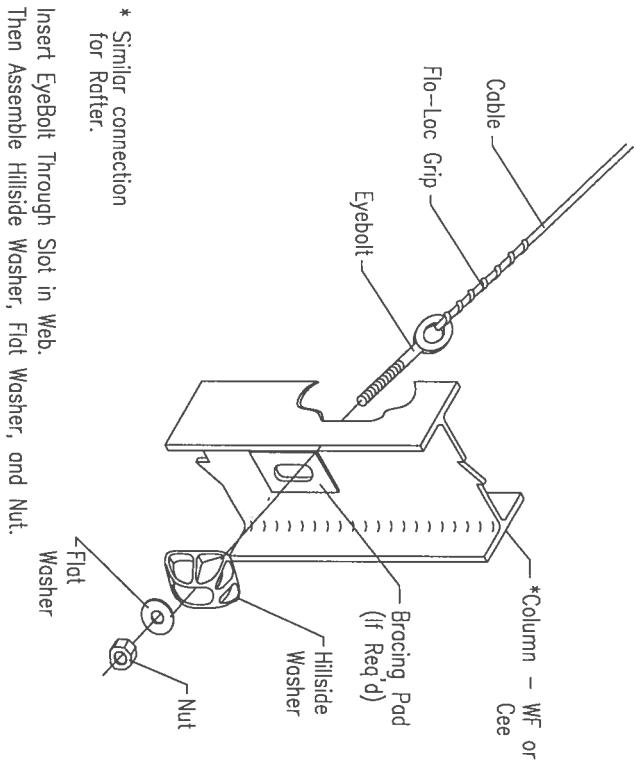
Nov 29, 2018

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
No. 38305  
HARLEY DAVIDSON  
JENSEN

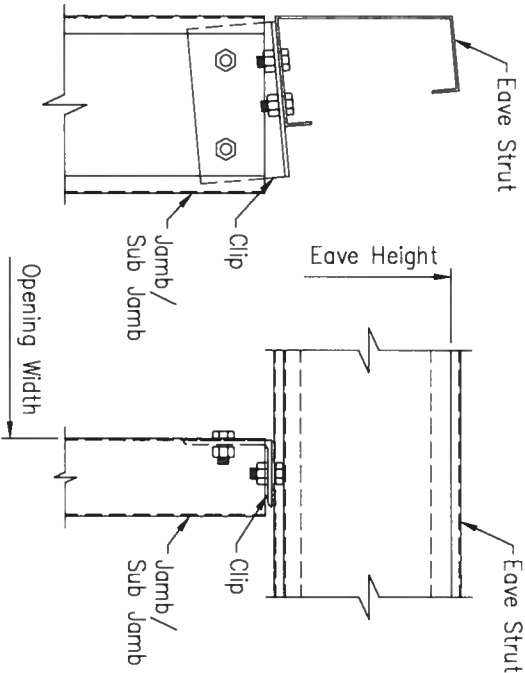




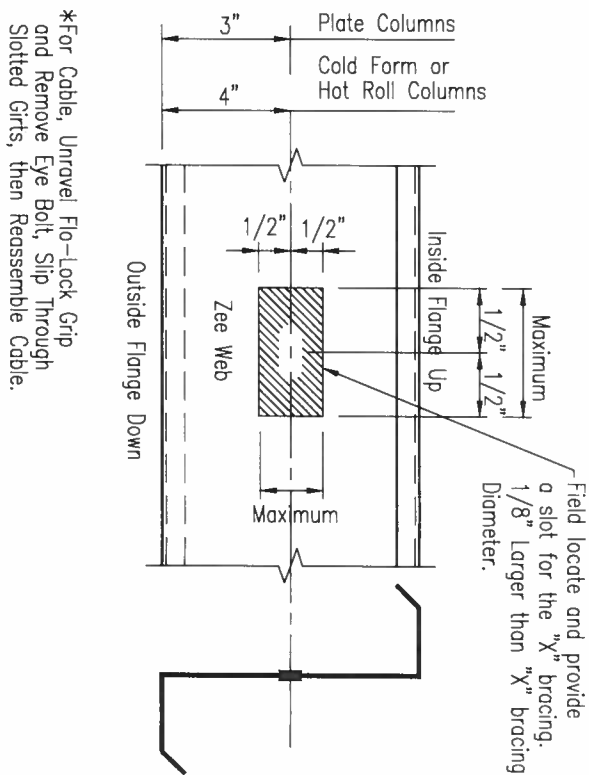




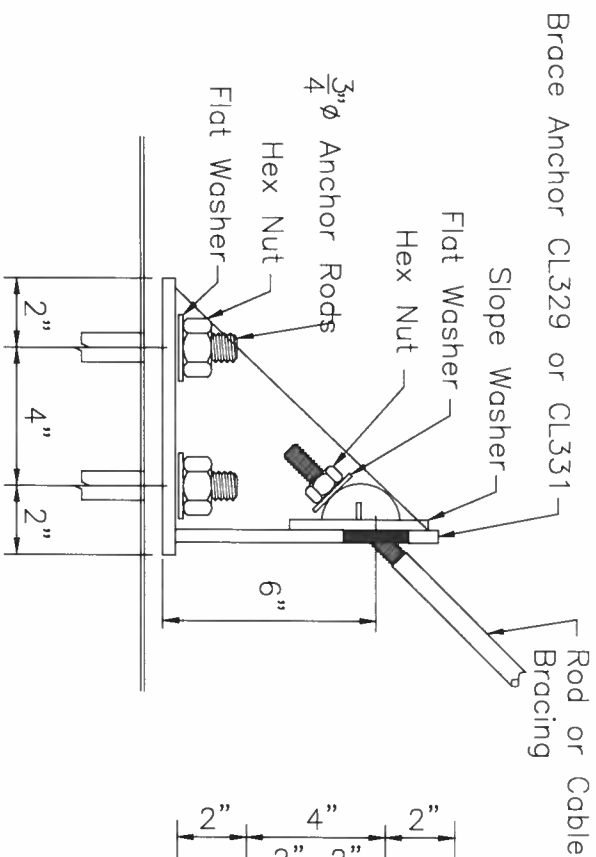
Q2 DIAGONAL CABLE, EYEBOLT END



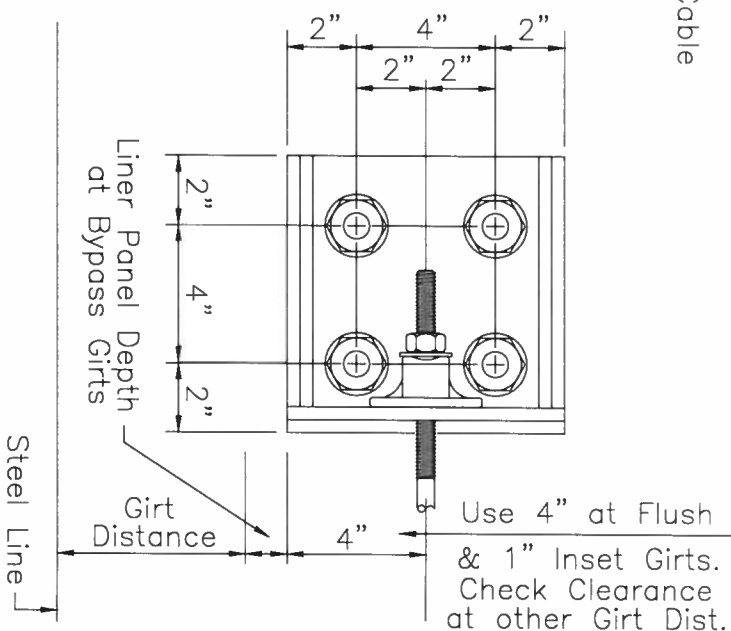
Page MB-L1	L1	Single Cold Form Jamb/Sub Jamb To Low Side Eave Strut	Date Dec '17
			Rev 00



Z7 CABLE AT FLUSH WALL GIRT



Q6 DIAGONAL BRACE CLIP TO FLOOR DETAIL



ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM

**MESCO Building Solutions**

5244 Bear Creek Court Irving, TX 75061  
Voice 214-687-9999 Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16  
CUSTOMER: SIMQUE CONSTRUCTION LLC  
LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO, INC

**Nov 29, 2018**

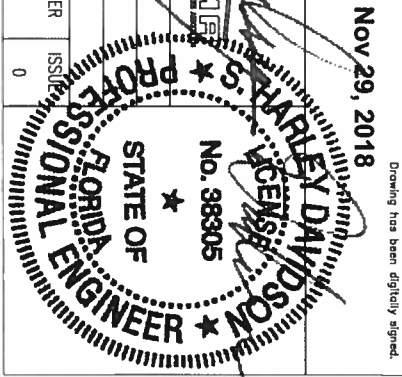
*Davidson*

**DAVIDSON**

FLORIDA PROFESSIONAL ENGINEER

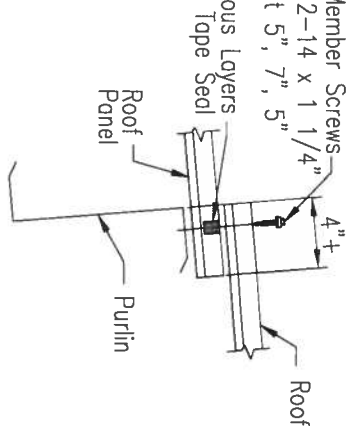
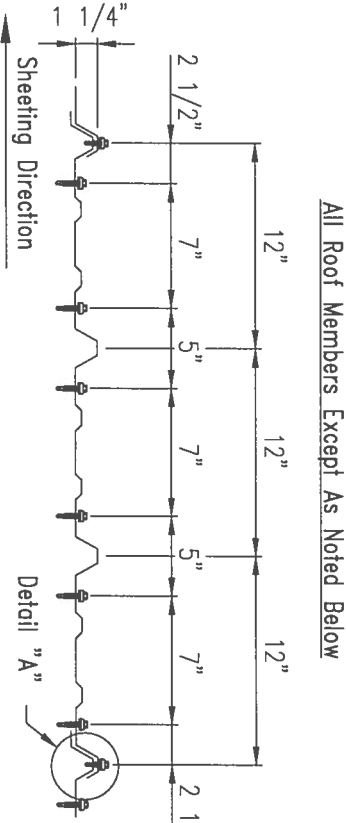
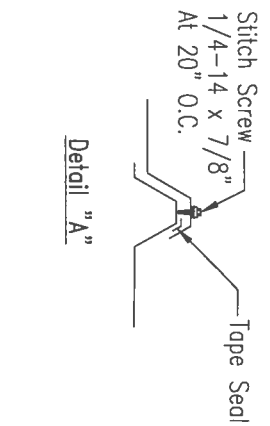
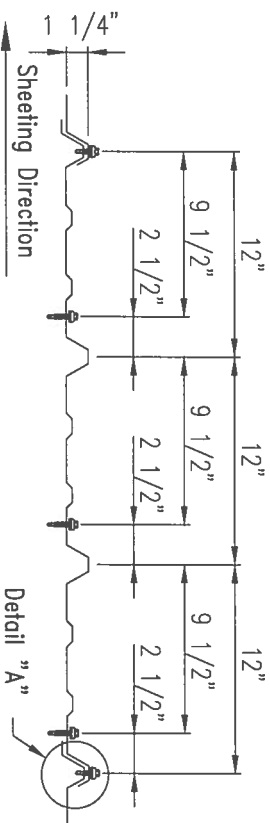
No. 38305

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	11/27/18	N.T.S.	1	A	16-B-81820	DET5	0









At Eave Strut, Panel End Lap, and Peak Purlin

Section Thru Panel End Laps

### Fastener Location for "PBR" Roof Panel

TRM\_175

Description	Fastener Number	Application
1/4"-14 x 7/8"	4A	Stitch & Trim Screw
12-14 x 1 1/4"	17A	Member Screw
12-14 x 1 1/2"	17B	Member Screw
12-14 x 2"	28	Member Screw

Note:  
Standard details call for 1 1/4" fasteners as member screws by default.

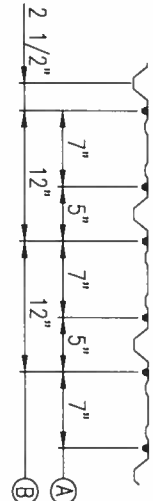
Long Life  
Member screws may be 1 1/4", 1 1/2", or 2"

depending on insulation, application, or customer request.

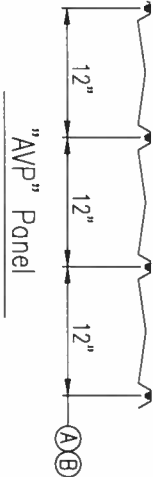
Description	Fastener Number	Application
1/4"-14 x 7/8"	4	Stitch & Trim Screw
12-14 x 1 1/4"	3	Member Screw
12-14 x 1 1/2"	3A	Member Screw
12-14 x 2"	58	Member Screw

### Self-Drilling Screw Application

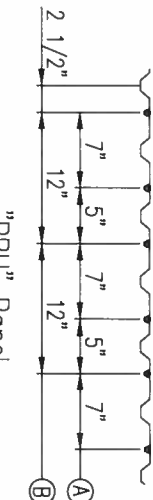
SCRW1



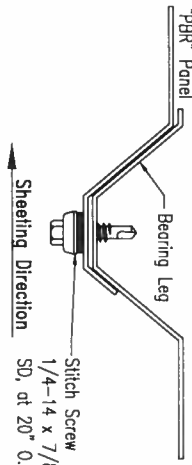
"PBR" Panel



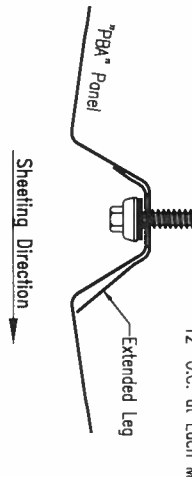
"AVP" Panel



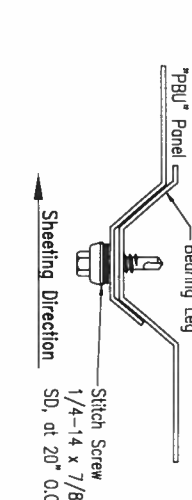
"PBU" Panel



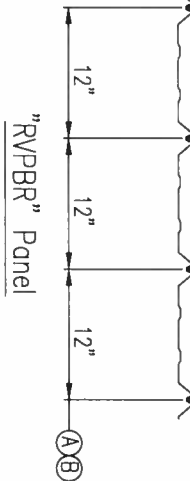
"PBR" Panel



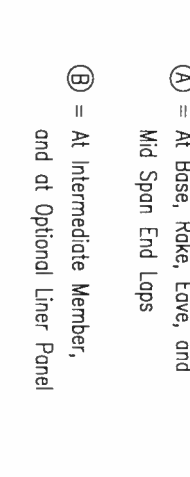
"PBA" Panel



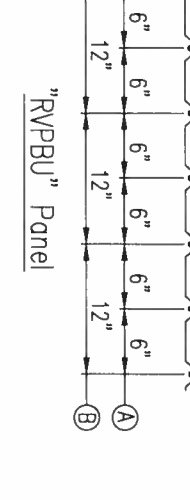
"PBU" Panel



"RVPBR" Panel

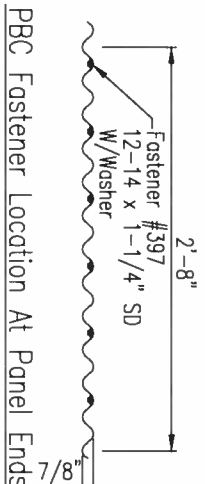
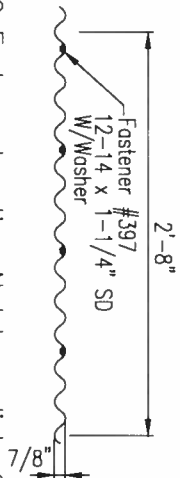


"RVPBR" Panel

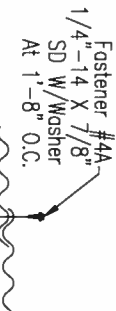


"RVPBU" Panel

### PBC Fastener Location At Intermediate Supports



PBC Fastener Location At Panel Ends



PBC Panel Sidelap


TRM\_174

Nov 29, 2018

MESCO Building Solutions  
5244 Bear Creek Court  
Voice 214-687-9999

Irving, TX 75061  
Fax 214-687-9737

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



# MESCO Building Solutions

5244 Bear Creek Court  
 Irving, TX 75061  
 Voice 214-687-9999 Fax 214-687-9737

PROJECT:	SIMQUE – NICKELSON 52X40X16					OWNER:	D.R. NICKELSON & CO., INC	
CUSTOMER:	SIMQUE CONSTRUCTION LLC							
LOCATION:	LAKE CITY, FL 32055							
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER			
	11/27/18	N1:S.	1	A	16-B-81820			

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
No. 36305  
Davidson

PBR Wall Panel - Three Sided Framed Opening  
Trim Installation with Field Notch Panel at Head Trim

Rev. PW07022  
Date: Sep '14  
Issue: 03

PBR Wall Panel - Three Sided Framed Opening  
Field Notch Panel at Head Trim

Rev. PW07023  
Date: Sep '14  
Issue: 03

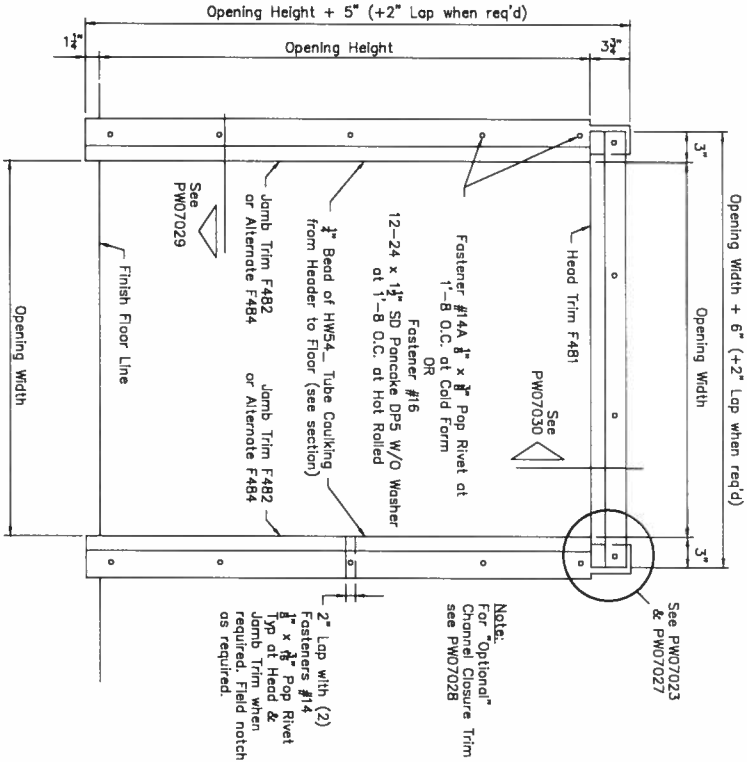
PBR Wall Panel - Three Sided Framed Opening  
Trim Installation with Field Notch and Bend Tabs at Head Trim

Rev. PW07024  
Date: Sep '14  
Issue: 03

PBR Wall Panel - Three Sided Framed Opening  
Field Notch and Bend Tabs at Head Trim

Rev. PW07025  
Date: Sep '14  
Issue: 03

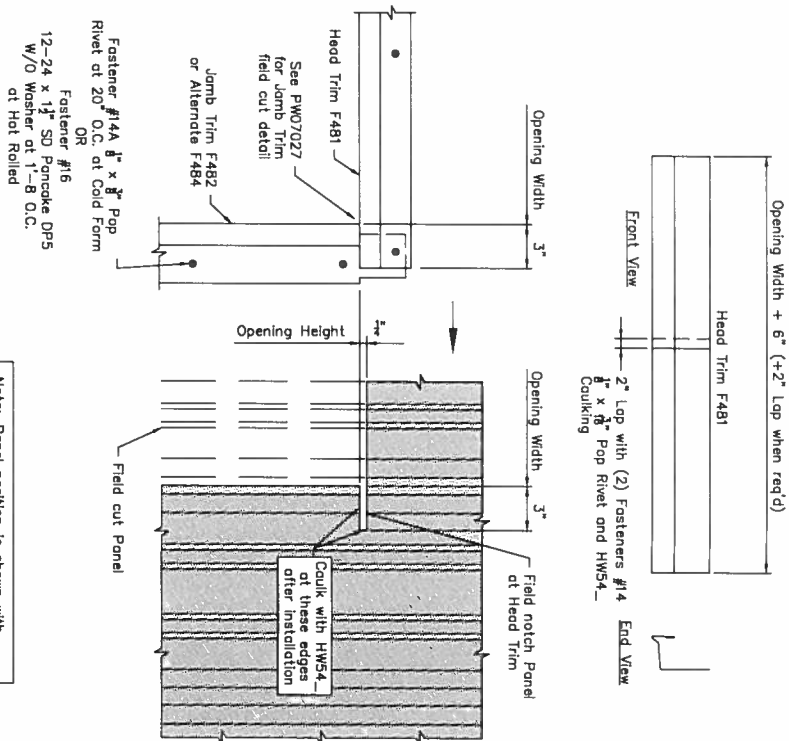
Note: Trim installation can be done by Field Notch Panel as shown on PW07022 & PW07023  
OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

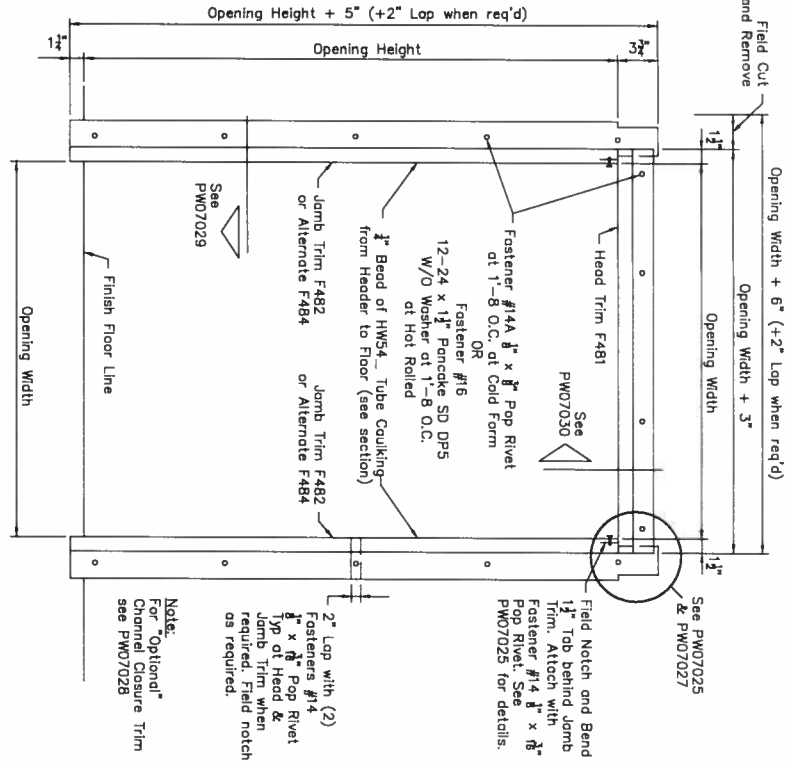
Note: Trim installation can be done by Field Notch Panel as shown on PW07022 & PW07023  
OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

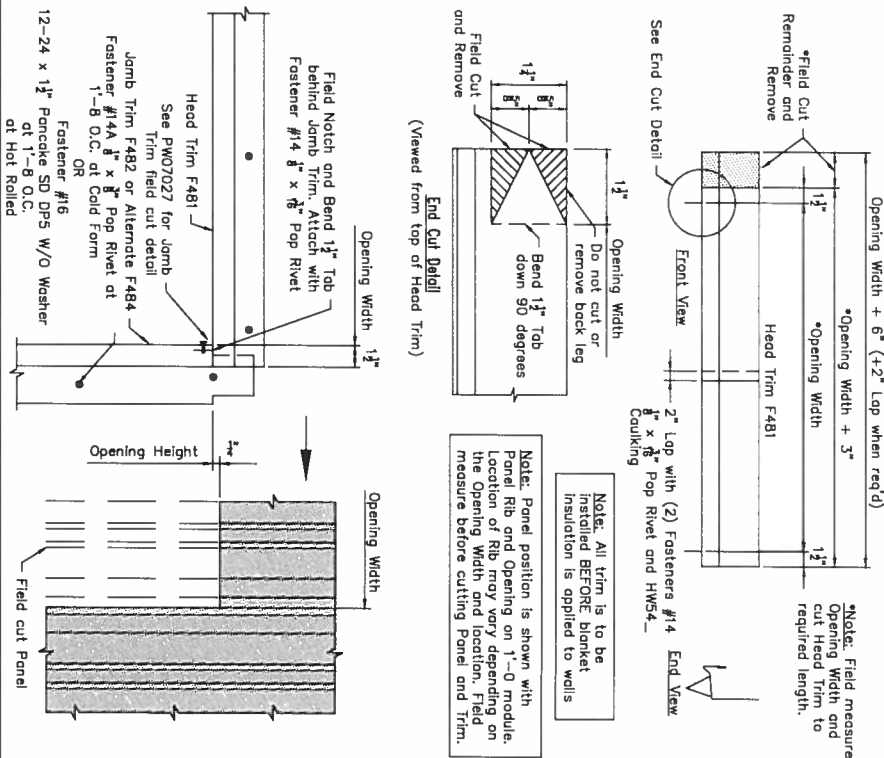
Note: Trim installation can be done by Field Notch Panel as shown on PW07022 & PW07023  
OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Field measure Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

Note: Trim installation can be done by Field Notch Panel as shown on PW07022 & PW07023  
OR with Field Notch and Bend Tabs at Head Trim as shown on PW07024 & PW07025.



Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Opening Width and Height before making field cuts and adjust cut dimensions accordingly.

STANDARD FRAMED OPENING DETAILS (PBR WALL PANEL)

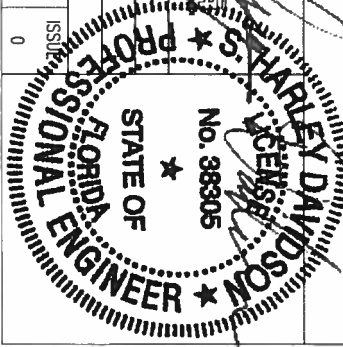
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM

**MESCO Building Solutions**  
5244 Bear Creek Court  
Irving, TX 75061  
Voice 214-687-9999  
Fax 214-687-9737

**MESCO Building Solutions**  
5244 Bear Creek Court  
Irving, TX 75061  
Voice 214-687-9999  
Fax 214-687-9737

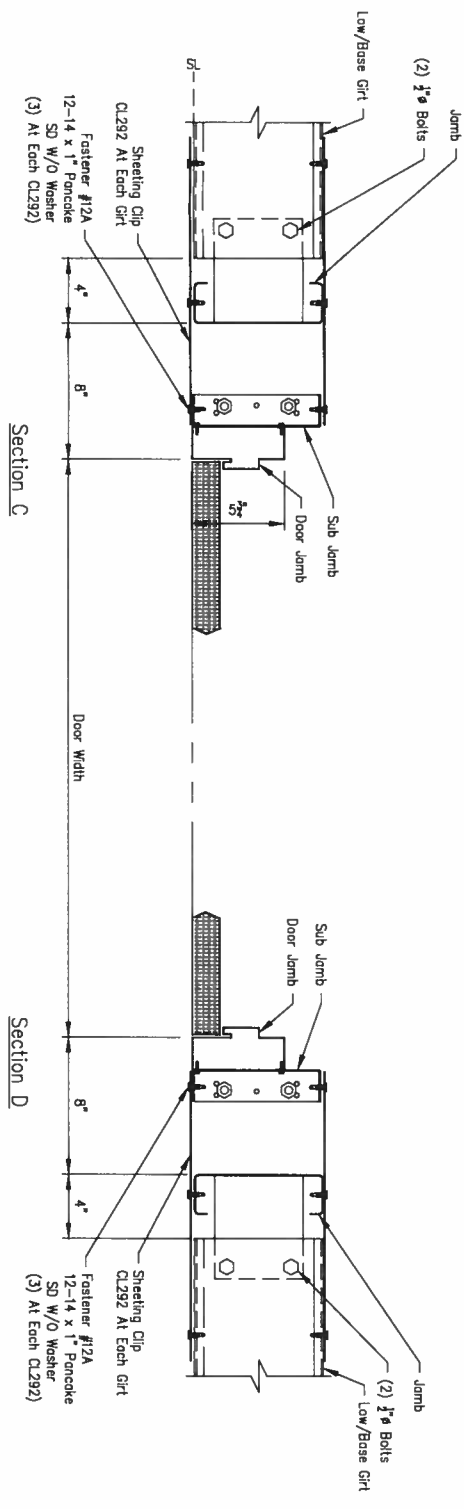
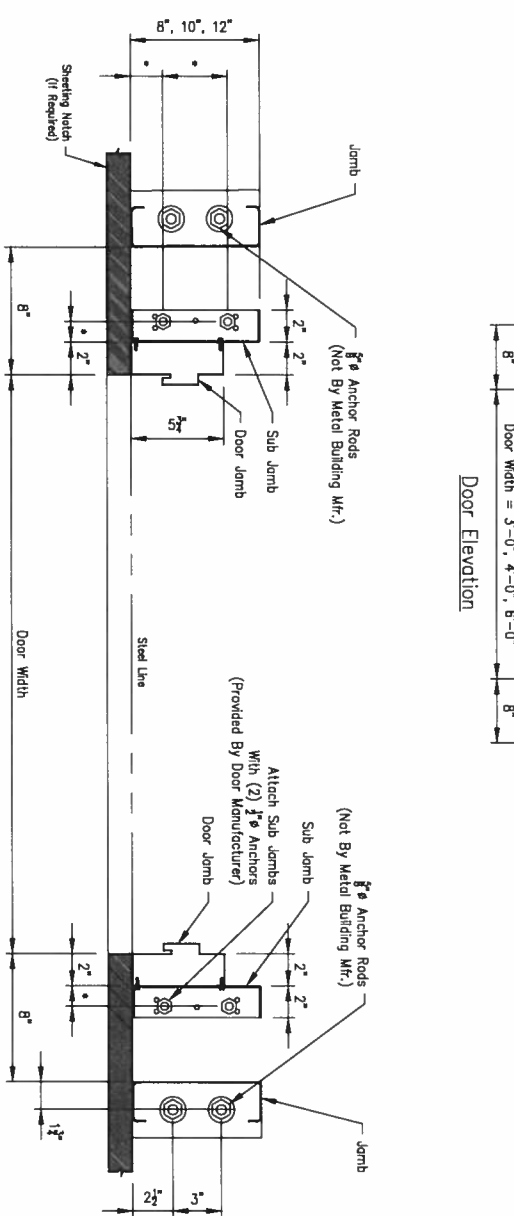
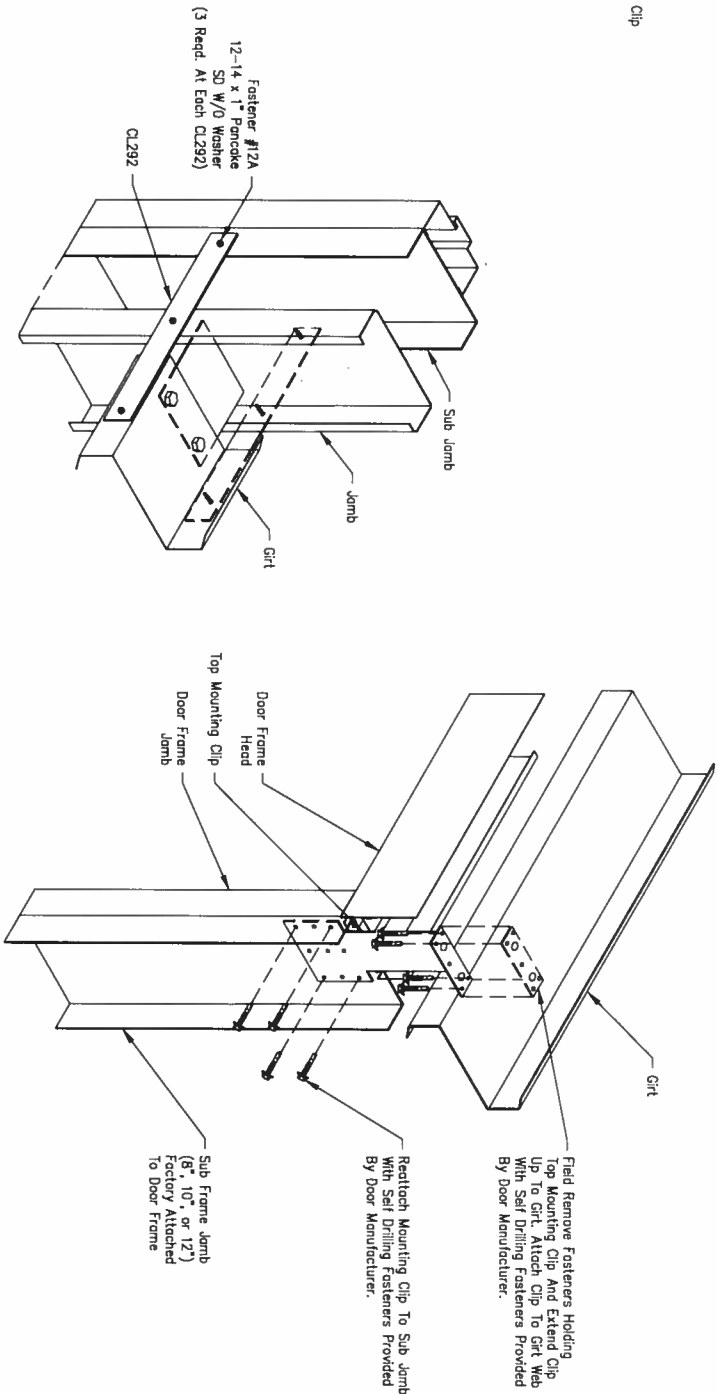
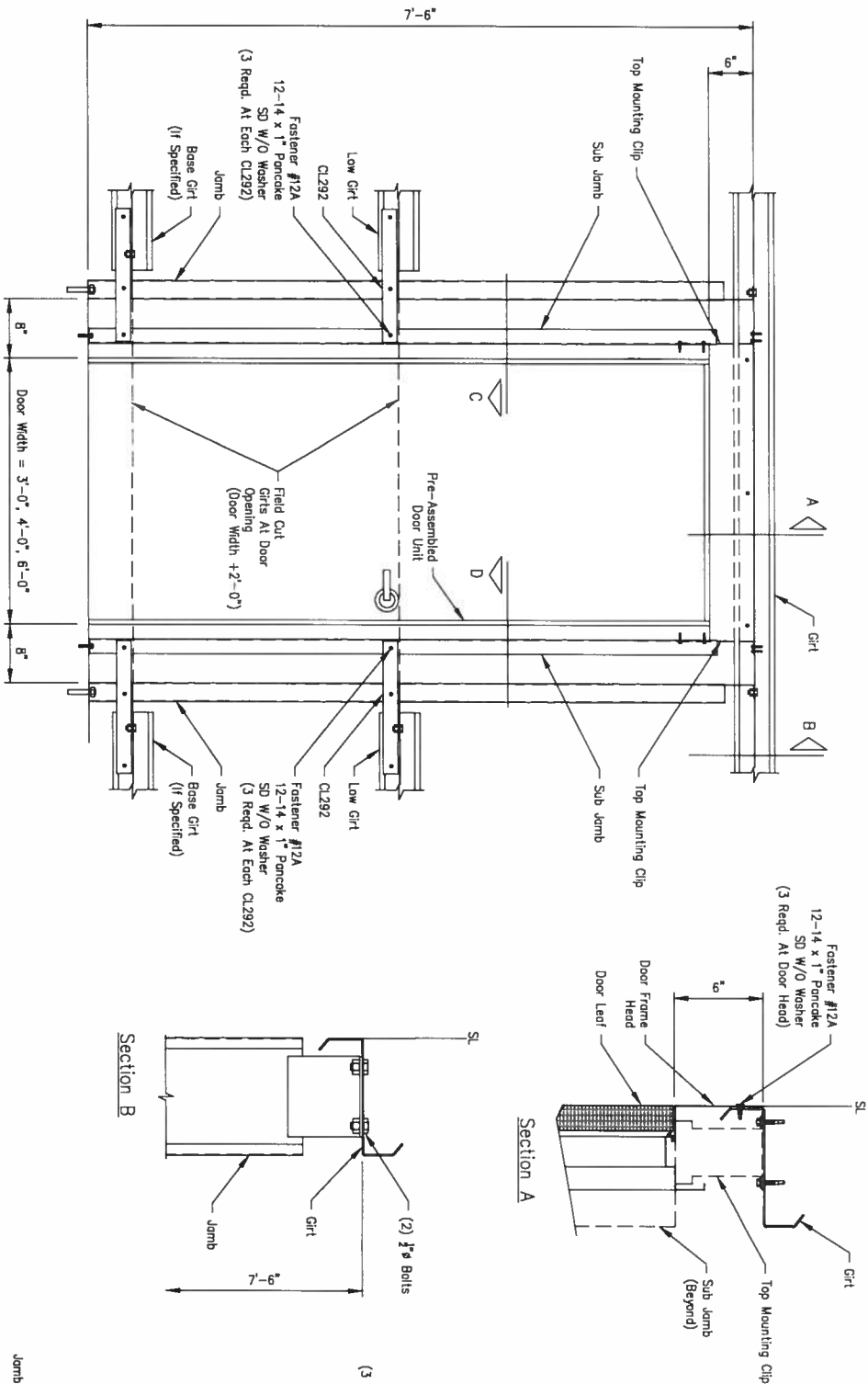
Nov 29, 2018

Drawing has been digitally signed.










\* Anchor Placement To Match Sub Jamb Base Dimensions As Determined By Door Manufacturer.  
The Adequacy Of The 3/8" Base Anchor Is Not The Responsibility Of The Building Manufacturer.  
The Adequacy Of These Base Anchors Should Be Determined By A Qualified Foundation Engineer.

### Pre-Assembled Door Anchor Placement

Page	AC05270
Date	Nov '18
Rev	00

ISSUE	DATE	DESCRIPTION	BY	CHK'D	DSN
0	11/27/18	FOR ERECTOR INSTALLATION	ASD	KSS	CHM



**MESCO Building Solutions**

5244 Bear Creek Court  
Irving, TX 75061  
Voice 214-687-9999 Fax 214-687-9737

PROJECT: SIMQUE - NICKELSON 52X40X16

CUSTOMER: SIMQUE CONSTRUCTION LLC

LOCATION: LAKE CITY, FL 32055

OWNER: D.R. NICKELSON & CO., INC

DATE: 11/27/18

SCALE: N.T.S.

PHASE: 1

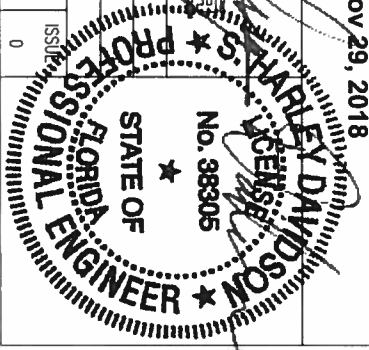
BUILDING ID: A

JOB NUMBER: 16-B-81820

SHEET NUMBER: DET11

Nov 29, 2018

Drawing has been digitally signed.

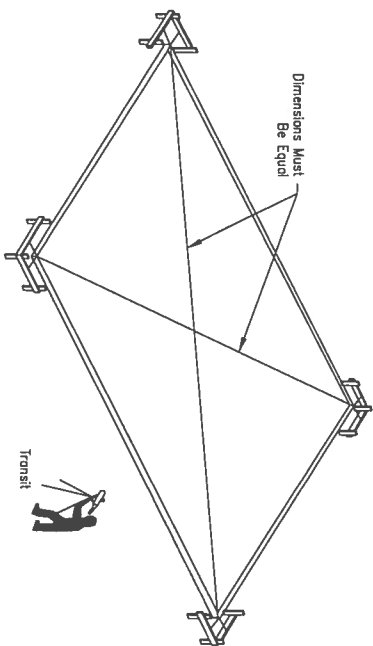






Building Anchorage

- To Determine That The Foundation Is Square, Measure Diagonal Dimensions To Be Sure They Are Of Equal Length.
- To Determine That The Foundation Is Level, Set Up A Transit Or Level And Use A Level Rod To Obtain The Elevation At All Columns.
- Carefully Check The Location Of All Anchor Rods Against The Anchor Rod Setting Plan Furnished By The Manufacturer. All Dimensions Must Be Identical To Assure A Proper Set-up.

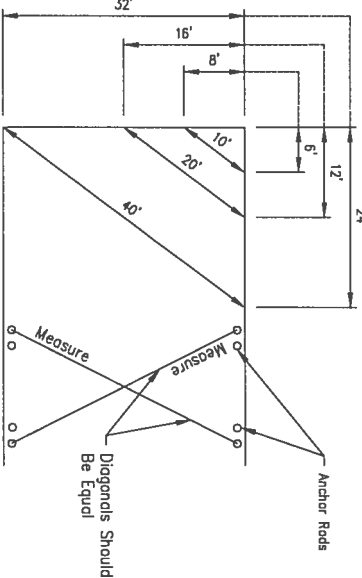


Pre-Erection Notes:

The Following Notes, Procedures And Suggested Recommendations Are Important Parts Of The Pre-Erection Process.

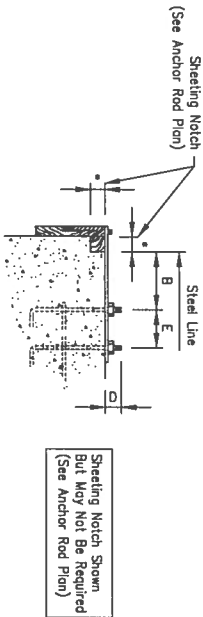
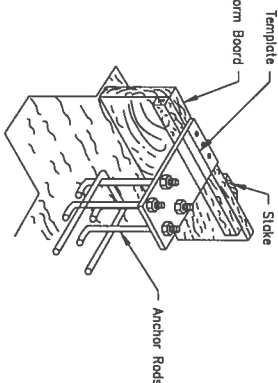
- Prior To The Time The Erection Crew Arrives, A Responsible Person Should Check The Job Site For Foundation Readiness, Square, And Accuracy And Anchor Rod Size And Location.

The Drawing Shown Below Indicates A Method Which May Be Used To Check The Foundation And Bats For Square.

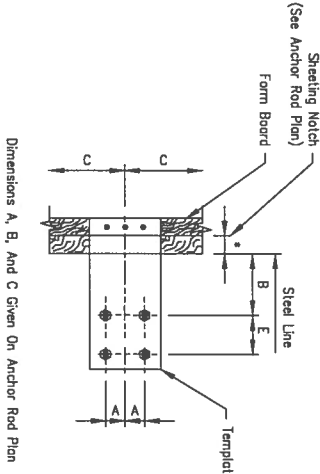


Measure Along Adjacent Sides Of Foundation Using A Pair Of Dimensions Shown. If The Diagonal Distance Between These Points Is As Noted, The Corner Is Square. Diagonal Measurements Between Opposite Anchor Rods Will Indicate If These Bolts Are Set Square.

It Is Extremely Important That Anchor Rods Are Placed Accurately And In Accordance With The Anchor Rod Setting Plan. All Anchor Rods Should Be Held In Place With Templates During The Placement Of The Concrete. After The Concrete Is Placed, The Projection Of The Pins, Set Of The Concrete, Final Check Should Be Made After Completion Of The Concrete Work And Prior To The Steel Installation. This Will Allow Necessary Corrections To Be Made Before Easily Installation Labor And Equipment Arrives.



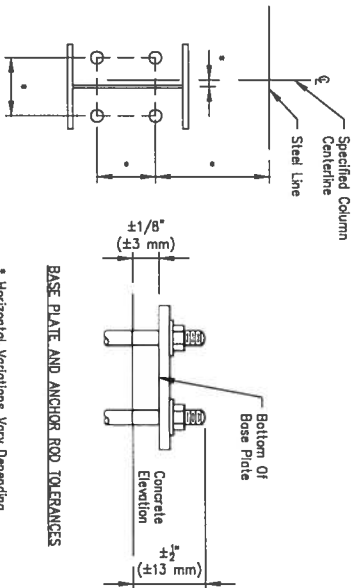
Projection Of Anchor Rods (D) Given On Anchor Rod Plan



AISC Code Of Standard Practice For Steel Building And Bridges Tolerances For Setting Anchor Rods

Anchor Rod Diameter, Inches (mm)      \*Horizontal Variation, Inches (mm)

$\frac{3}{4}$ " and  $\frac{7}{8}$ " (19 And 22 mm)       $\frac{1}{4}$ " (6 mm)  
 $1\frac{1}{4}$ ",  $1\frac{1}{2}$ " (25, 31, 38 mm)       $\frac{3}{8}$ " (10 mm)  
 $1\frac{3}{4}$ ", 2", 2 $\frac{1}{4}$ " (44, 50, 63 mm)       $\frac{1}{2}$ " (13 mm)



BASE PLATE AND ANCHOR ROD TOLERANCES

\* Horizontal Variations Vary Depending On Anchor Rod Diameter. See Above

Erection Tolerances

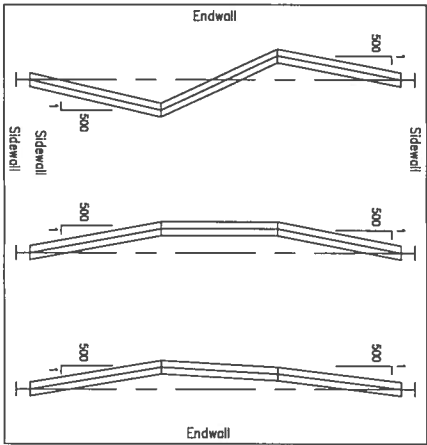
ERECTION BRACING:

It Is The Responsibility Of The Erector To Determine, Furnish And Install All Temporary Supports Such As Temporary Guys, Beams, Framework, Chocking, Or Other Elements Required For The Erection Operation (In Accordance With Section 7.10.3 Of AWS/AISC 303, Code Of Standard Practices For Steel Building And Bridges).

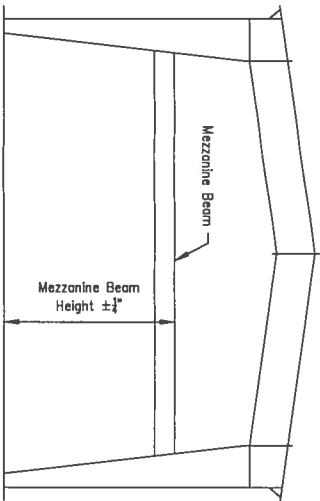
COLUMN ALIGNMENT TOLERANCES

Height	Tolerance (±)
10'	$\frac{1}{4}$ "
12'	$\frac{3}{8}$ "
15'	$\frac{1}{2}$ "
20'	$\frac{3}{4}$ "
25'	$\frac{1}{2}$ "
30'	$\frac{3}{4}$ "
45'	1 $\frac{1}{8}$ "
60'	1 $\frac{3}{8}$ "

ALIGNMENT TOLERANCE FOR MEMBERS WITH FIELD SPICES



MEZZANINE BEAM HEIGHT TOLERANCE



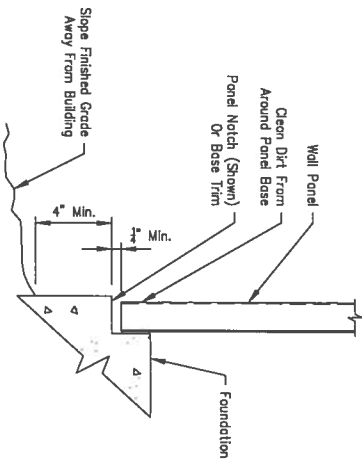
General Erection Notes

- All Structural Framing Members, Purlins, Girts, Clips, Flange Braces, Bolts, Bracing Systems, Roof And Wall Panels, Etc. Must Be Installed As Shown On Erection Drawings.
- It Is Extremely Important, Especially During Construction, That Panels At The Corners, Ridges And Ridges Be Kept Secure.

Panel Cautions And Notes

To Minimize Potential Of Corrosive Action At The Bottom Edge Of Wall Panels, The Contractor Must Assure That The Following Procedures Are Followed:

- The Concrete Foundation Should Be Cured For A Minimum Of Seven (7) Days Before Wall Panels Are Installed. (Uncured Concrete Is Highly Alkaline And Metal Panels Can Undergo Varying Degrees Of Corrosive Attack When In Direct Contact With The Concrete.) After The First Week Of The Curing Cycle, The Reaction Between Metallic Coatings On Steel And The Concrete Is Essentially Halated.
- Top Of Finish Grade At Building To Be A Minimum Of Four (4) Inches Below Bottom Of Panel.
- Finish Grade Is To Slope Away From Building To Ensure Proper Drainage.
- Upon Completion Of Finish Grading, All Dirt Is To Be Cleaned From Around Base Of Wall Panel Where It May Have Collected In Panel Notch Or On Base Trim.



Fastener Installation

Correct Fastener Installation Is One Of The Most Critical Steps When Installing Roof/Wall Panels. Drive The Fastener In Until It Is Tight And The Washer Is Firmly Seated. Do Not Overdrive Fasteners.

A Slight Extrusion Of Neoprene Around The Washer Is A Good Visual Tightness Check. Always Use The Proper Tool To Install Fasteners. A Fastener Driver (Screw Gun) With A RPM Of 1700-2000 Should Be Used For Self-Drilling Screws. A 500-600 RPM Fastener Driver Should Be Used For Self-Tapping Screws. Discard Worn Sockets, These Can Cause The Fastener To Wobble During Installation.

NOTE: Always Remove Metal Filings From Surface Of Panels At The End Of Each Work Period. Rusting Filings Can Destroy The Paint Finish And Void Any Warranty.



Tape And Tube Sealant

Proper Tape And Tube Sealant Application Is Critical To The Weather Tightness Of A Building. Tape Sealant Should Not Be Stretched When Installed. Apply Only To Clean, Dry Surfaces. Keep Only Enough Sealants On The Roof That Can Be Installed In A Day. During Warm Weather, Store Sealants In A Cool Dry Place. During Cold Weather (below 60°) Sealants Must Be Kept Warm (60°-90°) Until Application. After Tape Sealant Has Been Applied, Keep Protective Paper In Place Until Panel Is Ready To Be Installed.

Important Note

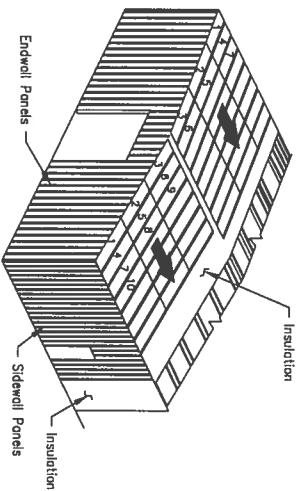
All Details, Recommendations And Suggestions Contained In This Erection Guide Or This Drawings Set Are For General Guidelines Only. And Not Meant To Be An Inclusive, Industry Accepted Installation Practices With Regard To All Aspects To Specificity Of Design. This Section Should Be Used Only As A General Guide. Knowledgeable Installation Personnel With Accepted Practices Should Be Used To Assure A Quality Project.

It Is Emphasized That The Manufacturer Is Only A Manufacturer Of Metal Building Components And Is Not Engaged In The Installation Of Its Products. Options Expressed By The Manufacturer About Installation Practices Noted In The Erection Guide Are Intended To Represent Only A Guide. Both The Quality And Safety Of Installation And The Ultimate Customer Satisfaction With The Completed Building Are Determined By The Experience, Expertise, And Skills Of The Installation Crews. As Well As The Equipment Available For Handling The Materials. Actual Installation Operations, Techniques And Site Conditions Are Beyond The Manufacturers Control.



PBR Roof Panels

For PBR Roofs With Ridge Panels, It Is Recommended That Both Sides Of The Ridge Be Sheeted Simultaneously. This Will Keep The Insulation Covered For The Maximum Amount Of Time And The Panel Flaps Can Be Kept In Proper Alignment For The Ridge Panel. This Is Critical On The PBR Panels So That The Ridge Cops Can Be Properly Installed. Check For Proper Coverage As The Sheeting Progresses.



Install The First Run Of Roof Panels Across The Building From Eave To Eave Or Eave To Ridge. To Allow Proper Installation Of The Ridge Trim, The Starting Location For The First Panel Must Be As Shown In The Ridge Details Included With The Erection Drawings. When The First Run Is Properly Located And Aligned With The Erection Drawings, When The First Run Is Properly Located And Aligned With The Correct Endlaps And Eave Overhangs, Fasten To Purins. Roof Panels Should Be Installed So That The Sidelap Is In A Direction Away From Prevailing Wind. Refer To Appropriate Lap Details Included With The Erection Drawings.

Install Remaining Roof Insulation And Panels. To Avoid Accumulative Error Due To Panel Coverage Gain Or Loss, Properly Align Each Panel Before It Is Fastened. Occasional Checks Should Be Made To Ensure That Correct Panel Coverage Is Maintained. Special Attention Should Be Given To Fastener, Sealant and Closure Requirements. Refer to Details Included With The Erection Drawings.

At Finishing End Of Roof, The Last panels May Require Field Modification For Installation Of Ridge Trim. Refer To Ridge Details Included With The Erection Drawings. DO NOT BACK LAP THROUGH FASTENED ROOF PANELS.

NOTE: Roof Types And Installation Requirements Will Vary. Refer To The Appropriate Details For Specific Panel Used.

IMPORTANT: Loose Fasteners, Blind Rivets, Dryll showings, Etc., Must Be Removed From The Roof To Guard Against Corrosion.

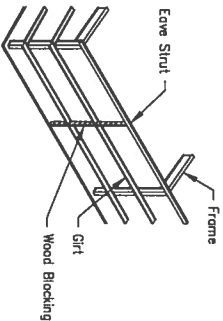
Wall Panels

Proper Horizontal And Vertical Alignment Of Supporting Structure (Girts Or Other Framing) Is The Responsibility Of The Installer. Failure To Align The Secondary members Properly Prior To Wall Installation Can Have A Direct Impact On The Final Appearance And Performance Of The Installed Wall System For Which The Metal Building Manufacturer Is Not Responsible.

Before Installing Wall Panels, The Girts Must Be Aligned To A Level Position So That There Is No Visible Sag. This Should Be Done Directly Ahead Of Panel Installation.

Girt Leveling May Be Accomplished By Strutting A Section Of Gable Angle Vertically Against The Outside Girt Flanges At Appropriate Mid-bay Location. When Girts Are Level, Attach The Girt Flanges To The Angle With Vase Girt Pliers Or Temporary Screws. Wood Blocking Cut To Fit The Spaces May Also Be Used For Alignment.

NOTE: Temporary Girt Blocking Is Not Recommended On Concealed Fastener Panels. The Removal Of The Blocks After Panel Installation Can Cause Oil Canning.

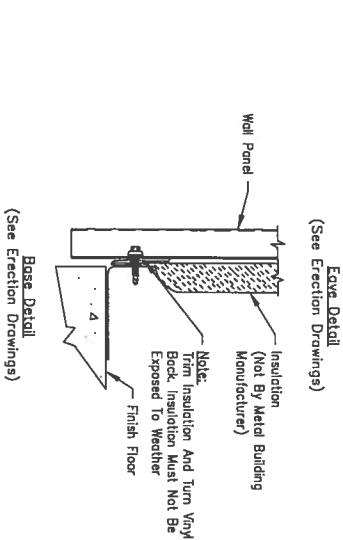
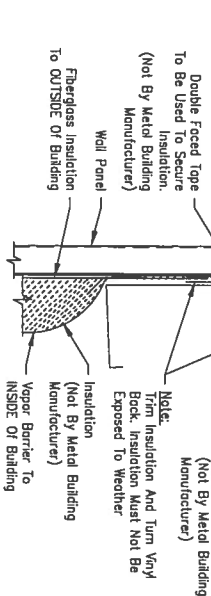
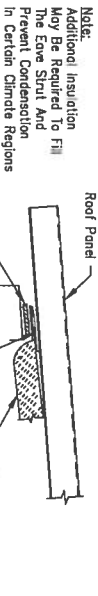


NOTE: Wall Panel Type And Installation Details Will Vary. Refer To The Erection Drawings And Details For The Specific Panel Used For Your Building.



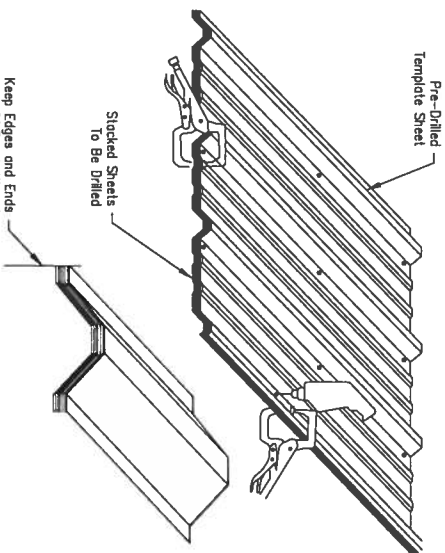
If Walls Are To Be Insulated With Blanket Insulation Over Girt Girt Flanges, Base And Eave, Place A Continuous Run Of Contact Tape Along The Eave Strut And Base Member.

NOTE: At The Base, Cut Off The Insulation A Minimum Of 1/2" Above The Bottom Of The Wall Panel. This Will Prevent The Insulation From Hanging Below The Wall Panel And Wicking Moisture.



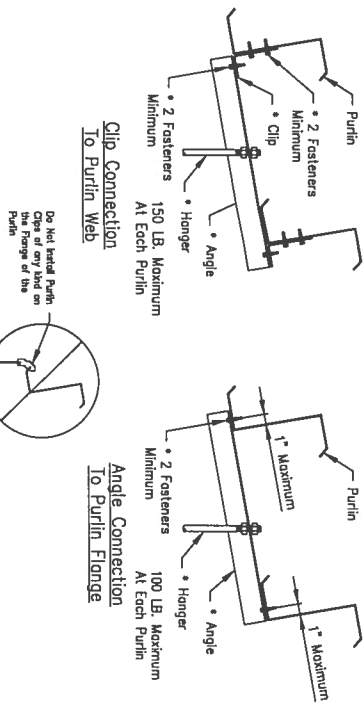
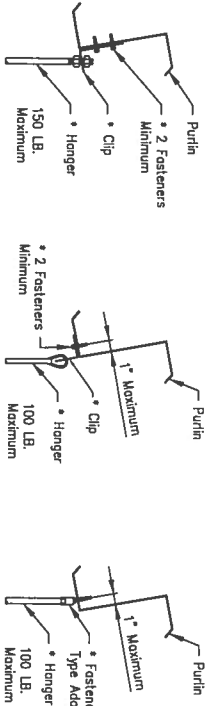
Sidelwall Panels Should Be Installed So That The Panel Sidelap Is In A Direction Away From The Prevailing Wind. Refer To Appropriate Lap Detail Included With Erection Drawings.)

NOTE: Check Periodically To Ensure That All Panels Are Aligned And Plumb.



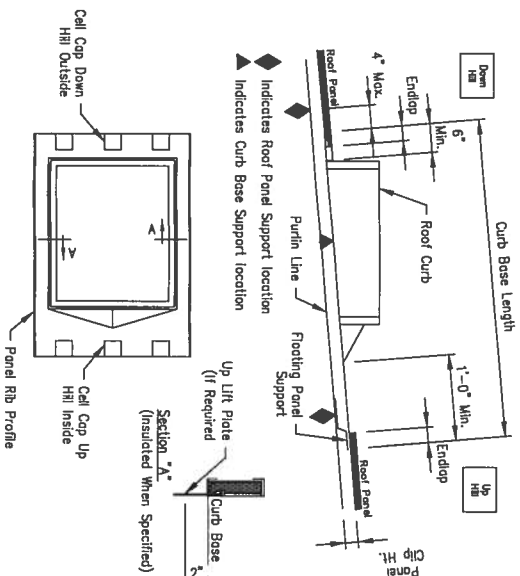
NOTE: After Drilling Panels, It Is Important To Clean Metal Flings Off All Panel Surfaces, Including Between Panels That Are Not Installed That Day, To Avoid Rust Stains.

Suggested Method Of Purlin Attachment For Building Accessories



\* Denotes Material Not Provided By Metal Building Manufacturer.  
The Total Hanger Load Shall Not Exceed The Design Collateral Load For The Building. Example: 5'-0" (Purlin Spacing) X 5'-0" (Hanger Spacing) X 6 PSF (collateral Load) = 150 Lbs./Sq. Foot  
See Cover Sheet For Design Collateral Load For This Building.  
Note: If The Building Is Designed For 0 PSF Collateral Load, then Adding Any Suspended System (I.e. Duct Work, Piping, Lights, Chalks, Etc.) Will Correspondingly Reduce The Design Live Load.

Roof Curbs When Not Supplied By Building Manufacturer



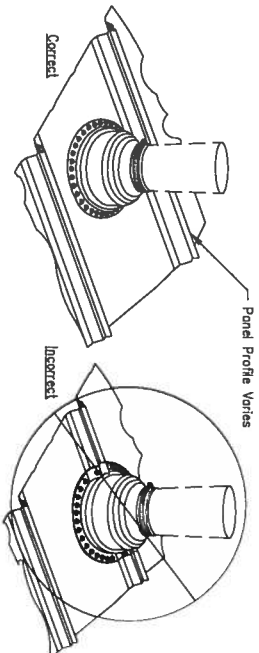
The Curb Details Shown Illustrate The Building Manufacturers Recommended Curb Style And Installation Method. It Is The Erector/Installer's Responsibility To Provide The Proper Curb Style And Install Them In Accordance With The Procedures Established By These Details. Failure By The Erector/Installer To Follow These Recommendations May Result In The Curbs Damaging The Roof System Or Excluded From Warranties.

- All Roof Curbs To Be:
1. .080 Aluminum Or 18 Ga. Stainless Steel (No Galvalume® Or Galvanized).
  2. Panel Rib To Panel Rib (No Flat Skirt Or Lay-Over Curbs).
  3. Installed With Down Hill End Over Panel And Up Hill End Under Panel Application For Water Flow At Panel Splice.
  4. Up Lift Prevention For Clip Applied Roof Systems Are Required If:
    - a. Wind Loads Exceed 110 MPH;
    - b. Curb Base Crosses A Purlin;
  5. Supported on (4) Sides By Primary Or Secondary Framing.
  6. Maximum Single Curb Weight Recommended Is 1500 Lbs.

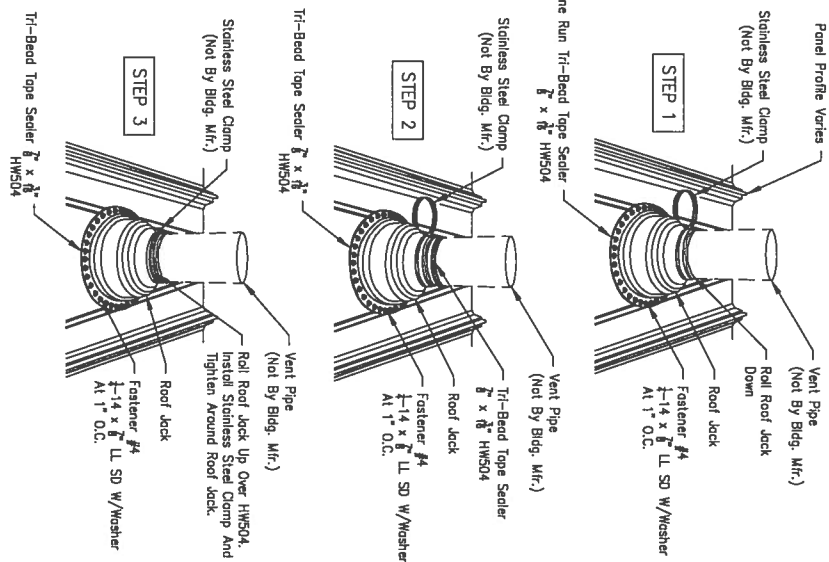
Roof Jack Installation when Not Supplied By Building Manufacturer

General Installation Notes

1. Do Not Use Galvanized Roof Jacks, Lead Hats, Or Other Residential Grade Roof Jacks. These Roof Jacks Do Not Have 20 Year Service Life And In Case Of Lead Hats Will Cause Galvanic Corrosion Of The Roof Panel.
2. Use EPDM Rubber Roof Sealer With An Integral Aluminum Band Bonded Into The 5/8" To 7/8" Deep Groove Between The Roof Jacks. The Sealer Must Be Applied To The 212°F. Use Silicone Roof Jacks For High Temperatures. Silicone Roof Jacks Have A Temperature Range Of -100°F To 437°F.
3. Retrofit Roof Jacks Are Available For Applications In Which The Top Of The Pipe Is Inaccessible, Eliminating The Possibility Of Sliding The Roof Jack Over The Top Of The Pipe.
4. Do Not Use Tube Sealant To Seal The Roof Jack To The Roof Panels. Use Roll Tape Sealer Between The Roof Jack And The Roof Panel And Attach The Roof Jack To The Roof Panel With Fastener #4 - 14 X 1/2" LL SD W/Washer At 1" O.C. Around The Base Of The Roof Jack. See Table Below For Quantities.
5. Trim The Top Of The Roof Jack To Fit Over The Pipe. Roll Down The Roof Jack Over The Pipe And Apply Tape Sealer For The Perimeter Of The Roof Jack Base Between The Roof Jack And The Roof Panel. Apply Tape Sealer Around The Pipe And Install A Stainless Steel Clamp (Not By Bldg. Mfr.) Over The Top Of The Roof Jack And Firmly Tighten To Form A Secure Compression Seal.
6. If The Pipe Diameter Is So Large To Block The Flow Of Water Down The Roof Panel, A Flat Base Roof Curb Must Be Installed Into The Roof And The Roof Jack Will Be Sealed To The Curb. A Two Piece Curb May Be Required When The Top Of The Pipe Is Inaccessible.
7. In Northern Climates, The Pipe Penetration Should Be Protected From Melting Ice Or Snow With A Snow Retention System Immediately Up Slope From The Pipe.

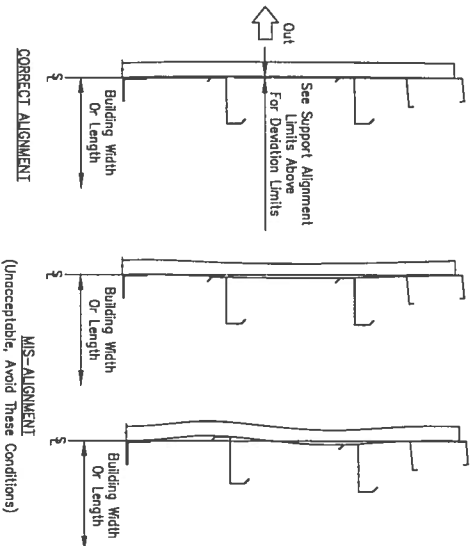


Install Pipe In Center To Allow Base Of Roof Jack To Lay Flat on Panel.  
Cannot Encompass More Than 75% Of Panel.



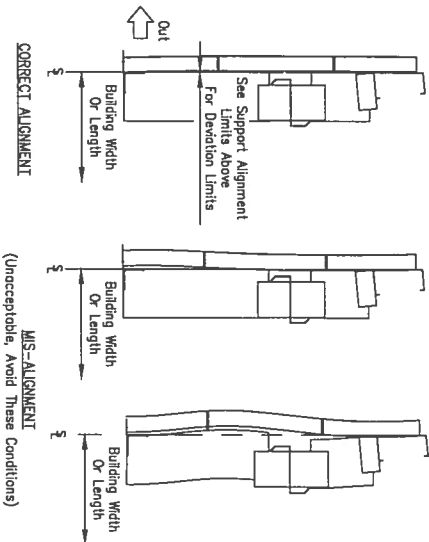
Secondary Steel Alignment For All Vertical IMP Project

Support Alignment Limits	
Support Span	Maximum Deviation Limit
5'-0" Or Less	0" to 1/16"
5'-0" To 10'-0"	0" to 1/8"
10'-0" And Up	0" to 1/4"



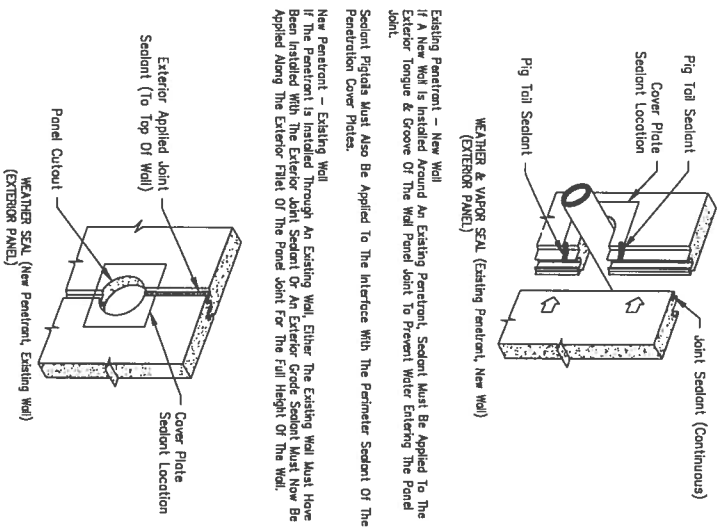
Secondary Steel Alignment For All Horizontal IMP Project

Support Alignment Limits	
Support Span	Maximum Deviation Limit
4'-0" Or Less	0" to 1/16"
4'-0" To 8'-0"	0" to 1/8"
8'-0" And Up	0" to 1/4"



Penetration Flashing Through IMP Walls

Weather Seal – If The Penetration Is Through An Exterior Wall With Vertical Wall Panel Material, It Will Be Subject To Water Infiltration. The Penetration Must Be Sealed To Prevent Water From Entering The Wall. The Seal Must Be Applied To The Exterior Side Of The Wall Panel Joint And Be Subject To Water Draining From The Panel Joint Into The Penetration Cavity. Steam Below Are Weather Seal Details When Intersecting A Panel Joint Cannot Be Avoided.



Thermal/Safe And Applied Finishes

Thermal/Safe Panel Notes:

Thermal/Safe Panel Details Are General Use/Unrated Construction Details And Do Not Offer Any Fire Resistance Continuity. Even When The Wall Assembly Itself Is Fire Resistant, The Fire Resistance Rating Of Structural Members Or Openings Is Provided By The Manufacturer. No Fire Resistance Rating Of Structural Members Or Openings Is Provided By The Manufacturer. Even Though It May Be Required On The Project, Consult The Engineer Of Record For The Overall Project Or Your Local Building Official Or Code To Determine If Fire Resistance Continuity Or Protection For Structural Members Or Openings Is Required.

Fire Protection Of The Wall Support Framing Ordered May Be Required, Subject To The Project's Building Code Requirements. Fire Protection Of The Structural Members Is Not By The Metal Building Manufacturer.

To Conform To The Requirements Of The ASTM E-119 Fire Resistance Rating, The Filler Insulation Must Have An Approved Classification Marking For Surface Burning Characteristics Or Fire Resistance.

To Conform To The Requirements Of The Panels' E-119 Fire Resistance Rating, The Joint Sealants Are Specified As A Silicone Sealant.

Applied Finishes

**STORAGE:** It is important to properly store the panels such that no moisture becomes trapped between the panels or in the applied finish for extended periods of time. Under certain conditions, extended exposure to moisture during improper storage can cause the coating to blister, peel or stain. Be certain to store the panels beneath the ground high enough to allow for air flow to circulate beneath the bundle and prevent water, mud or snow from entering. One end of the bundles should be slightly elevated to prevent water from entering the bundles. The bundles should be stored in a dry, well-ventilated area. The panels should be stored in a dry, well-ventilated area. The panels should be stored in a dry, well-ventilated area.

Get Lifting May Be Accomplished By Stacking A Section Of Gable Angle Vertically Against The Bundles. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area.

Note: Before Installing Insulated Metal Wall Panels, The GFRs Must Be Aligned To A Level Position So That There Is No Visible Gap. This Also Should Be Done At The Framed Opening Unit Over Head Insulated Metal Panels Have Been Installed. This Should Be Done Directly Ahead Of Panel Installation.

Get Lifting May Be Accomplished By Stacking A Section Of Gable Angle Vertically Against The Bundles. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area. The Bundles Should Be Stacked In A Dry, Well-Ventilated Area.

Field Remove Applied Coatings From Roof And Wall Trim At Lap Locations. (Min. 2" Lap Required)

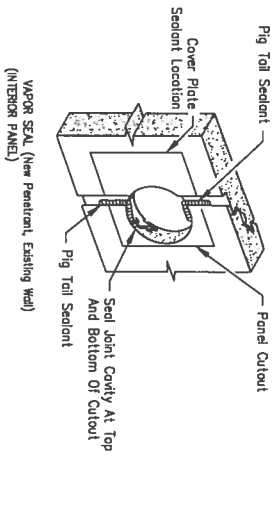
Penetration Flashing Through IMP Walls (Cont.)

Vapor Seal – Depending Upon The Building Vapor Control Requirements, Either The Existing Penetrant Or The New Penetrant May Be Required To Function As The Vapor Barrier. On An Exterior Wall With The Vapor Barrier On The Exterior Side Of The Wall, The Weather Seal Described Above Also Functions As The Vapor Seal.

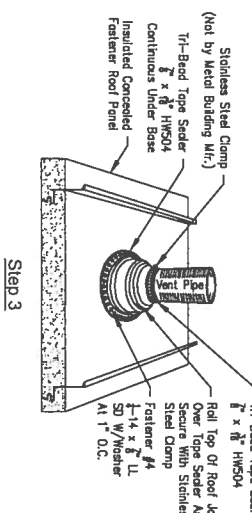
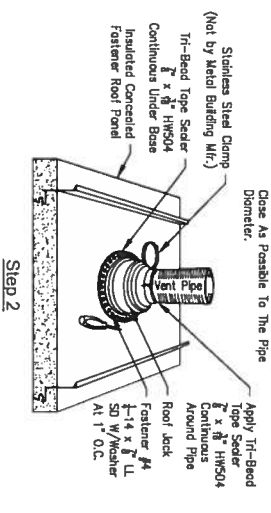
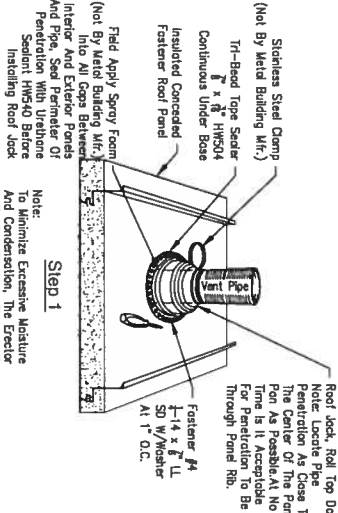
Existing Penetrant – New Wall: On An Exterior Wall With The Vapor Barrier On The Exterior Side Of The Wall, The Weather Seal Described Above Also Functions As The Vapor Seal. For Interior Walls And For Exterior Walls With Vapor Barrier On The Interior Side Of The Wall, Install The Pigtail Sealants To The Interface With The Cover Plate Sealant In The Same Manner As Described Above For The Weather Seal.

New Penetrant – Existing Wall: On An Exterior Wall With The Vapor Barrier On The Exterior Side Of The Wall, The Weather Seal Described Above Also Functions As The Vapor Seal. For Interior Walls And For Exterior Walls With Vapor Barrier On The Interior Side Of The Wall, Install The Pigtail Sealants To The Interface With The Cover Plate Sealant In The Same Manner As Described Above For The Weather Seal.

Apply The Pigtail Sealant To The Seal Of The Tongue-And-Groove Joint Confines At The Top And Bottom Edges Of The Panel Cut Out. Extend The Pigtail Sealant Along The Exterior Flange Of The Panel Joint To Interface With The Cover Plate Sealant.



Roof Jack Installation On CFR Roof Or Vent Pipes 8" Ø Or Less



Insulated Metal Panel Joint Sealants

Joint Sealant Requirements – Depending Upon The Project's Requirements, Sealants May Be Required In The Interior Or Exterior Of The Wall. On Some Projects, Different Wall Areas May Have Different Sealant Requirements. The Panel May Be Delivered With The Sealant Factory Applied, Or The Sealant May Require Field Installation.

Important: Refer To The Installation Drawings Or Project Specifications For The Specified Sealant And Location.

Field Installation Of Sealant – Apply The Panel Joint Sealant Into The Specified Interior And Or Exterior Metal Groove On The Panel's Female Edge. The Sealant Must Be Applied Continuously And As Close As Possible To The Bottom Of The Groove.

The Suggested Sealant Bead Size Is 3/8" To 1/2". Adjust The Sealant Bead Size To Ensure There Is Complete And Continuous Contact Of The Sealant With The Tongue Of The Adjacent Panel For The Joint Is Assembled, But Not So Much That Sealant Is Extruded Out Of The Panel Face.

Sealant Pigtail – It is Critical To Ensure Continuity Of The Sealant At The Intersections Between The Panel Joints And The Perimeter Flashing Assemblies.

After Each Panel Is Installed, Apply Sealant Pigtail Around The Panel's Interior Edge To Provide A Sealant Bridge Between The Panel Joint Sealant And The Interior Perimeter Sealant.

At The Panel's Exterior Face, Determine Where The Exterior Perimeter Sealant Will Be Located. Apply Sealant Pigtail Along The Panel Edge To Provide A Sealant Bridge Between The Panel's Joint Sealant And Exterior Perimeter Sealant.

Joint Assembly – Slide The Panel Joint Together In A Smooth Motion To Help Ensure The Uniform Dispersion Of The Sealant Within The Joint Cavity.

Do Not Assemble The Panel Joint In A Manner That Causes The Joint To Engage And Then Disengage. This May Cause The Sealant To Be Driven Out Of The Cavity, Leaving The Joint Unsealed.

Caution: If The Joint Is Assembled And Then Disassembled The Sealant Must Be Checked And Any Displaced Sealant Must Be Replaced.

Reference "Pig Tail Sealants" For Installation Illustrations.

Roof Jack Installation On LS-36 Roof Or Vent Pipes 8" Ø Or Less

