

AR Dia Framed Opening AR Layout
5/8"

AR Dia Walk Door AR Layout
1/2"

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
0	8/ 8/18	FOR ERECTOR INSTALLATION	ASR	BAM	GVR
1	9/28/18	REV FOR ERECTOR INSTALLATION	GRK	AVS	GVR

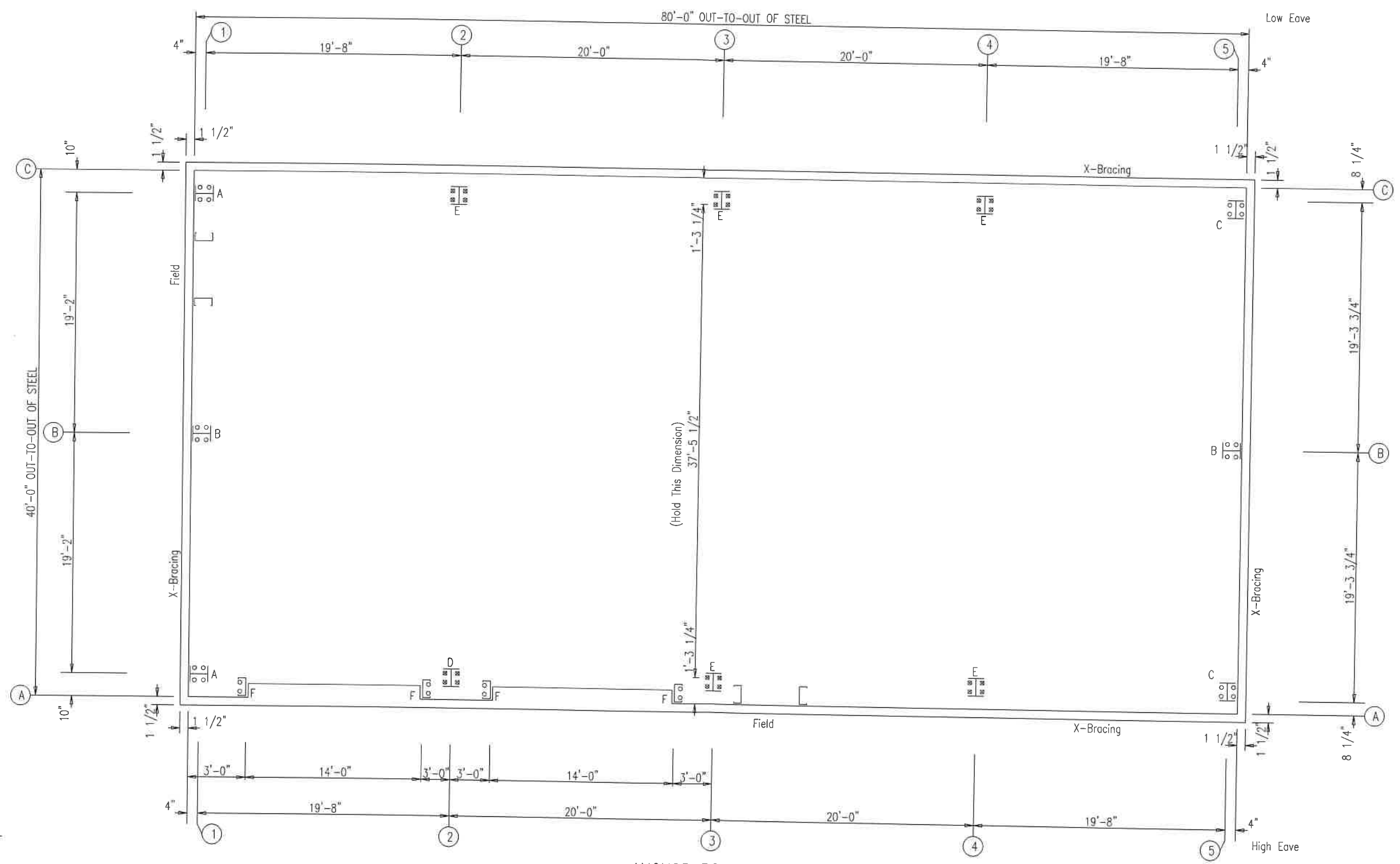
TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
 CUSTOMER: THE GOUR-MART LTD OWNER: THE GOUR-MART LTD
 LOCATION: PENTICTON, BC V2A 8Y2 CA

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	I	A	16-B-63921	F3	1

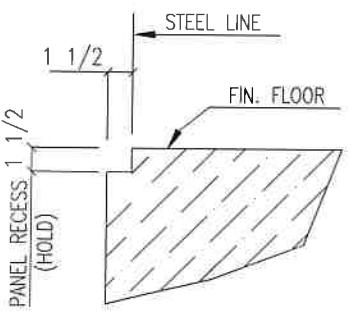


○ Dia= 5/8"
 ⊗ Dia= 3/4"



ANCHOR BOLT PLAN

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



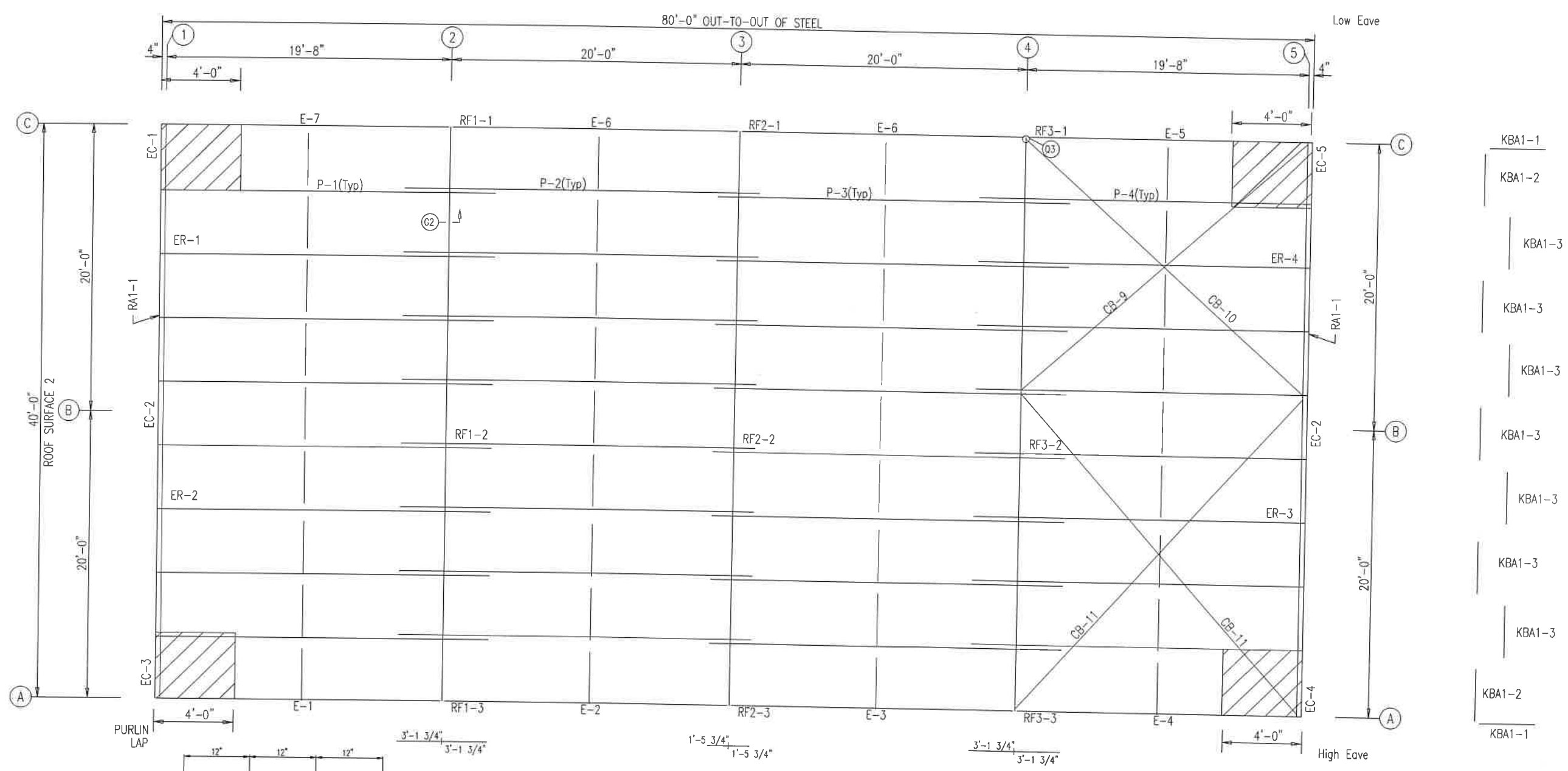
CONCRETE NOTCH DETAIL

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TORO STEEL BUILDINGS 1405 DENISON STREET MARKHAM, ON L3R 5V2 CA							
PROJECT: DARRELL CAPUNE T18-0110		OWNER: THE GOUR-MART LTD					
CUSTOMER: THE GOUR-MART LTD		JOB NUMBER: 16-B-63921					
LOCATION: PENTICTON, BC V2A 8Y2 CA		SCALE: N.T.S.		PHASE: 1		SHEET NUMBER: F1	
CAD	DATE: 9/28/18	SCALE: N.T.S.	PHASE: 1	BUILDING ID: A	JOB NUMBER: 16-B-63921	SHEET NUMBER: F1	ISSUE: 1



MEMBER TABLE		
ROOF PLAN		
MARK	PART	LENGTH
P-1	8X25Z14	23'-1 1/2"
P-2	8X25Z16	24'-7 1/2"
P-3	8X25Z16	24'-7 1/2"
P-4	8X25Z14	23'-1 1/2"
E-1	8ES1H14	19'-11 1/2"
E-2	8ES1H14	19'-11 1/2"
E-3	8ES1H14	19'-11 1/2"
E-4	8ES1H14	19'-11 1/2"
E-5	8ES1L14	19'-11 1/2"
E-6	8ES1L14	19'-11 1/2"
E-7	8ES1L14	19'-11 1/2"
CB-9	1/2" DIA. ROD	25'-9"
CB-10	1/2" DIA. ROD	26'-1"
CB-11	1/2" DIA. ROD	28'-10"
KBA1-1	L1X1X14C	8'-1/4"
KBA1-2	L1X1X14C	4'-4 3/8"
KBA1-3	L1X1X14C	4'-7 3/8"



ROOF FRAMING PLAN

NOTE: ALL KBA'S ARE EQUALLY SPACED IN ALL THE BAYS.

Fastener Location at Shaded location

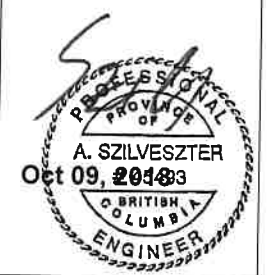
- GENERAL NOTES:
1. INSTALL ALL PURLIN AND FLANGE BRACES (FB) AS SHOWN.
 2. ROOF PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
 3. STRUT PURLINS, IF PROVIDED, MUST BE INSTALLED AND FASTENED TO ROOF SHEETING PER "PBR" PANEL ROOF DETAIL.
 4. DO NOT ADD ANY ADDITIONAL ROOF OPENINGS WITHOUT BUILDING 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.

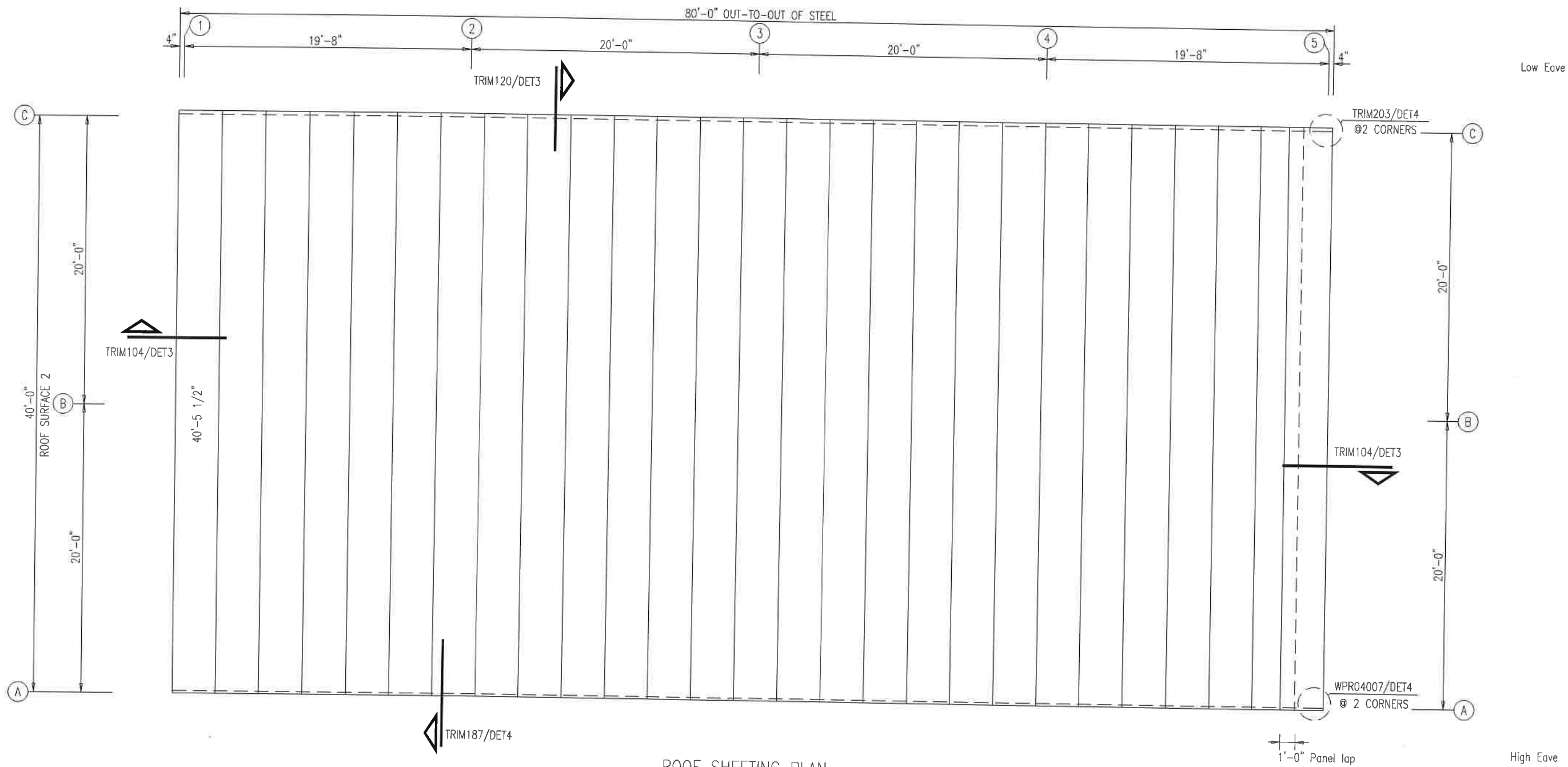
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
 CUSTOMER: THE GOUR-MART LTD OWNER: THE GOUR-MART LTD
 LOCATION: PENTICTON, BC V2A BY2 CA

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	E1	0





ROOF SHEETING PLAN
 PANELS: 26 Gauge PBR - Galvalume

- 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.

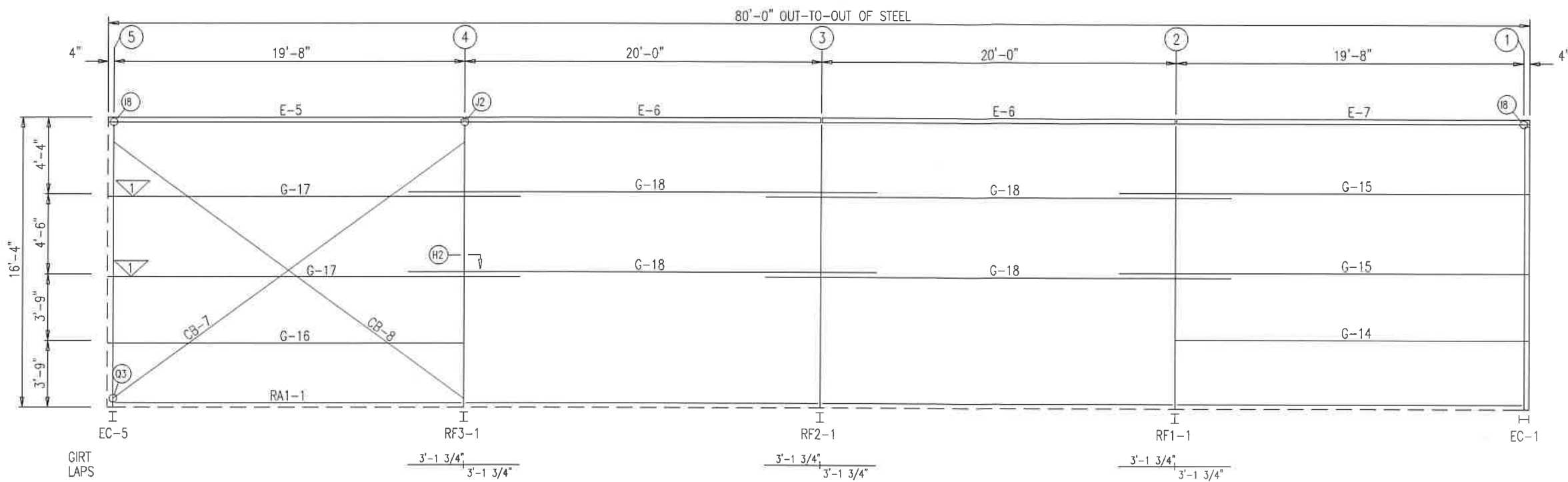
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TORO STEEL BUILDINGS
 1405 DENISON STREET
 MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
 CUSTOMER: THE GOUR-MART LTD OWNER: THE GOUR-MART LTD
 LOCATION: PENTICTON, BC V2A 8Y2 CA

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	9/28/18	N.T.S.	1	A	16-B-63921	E2	0

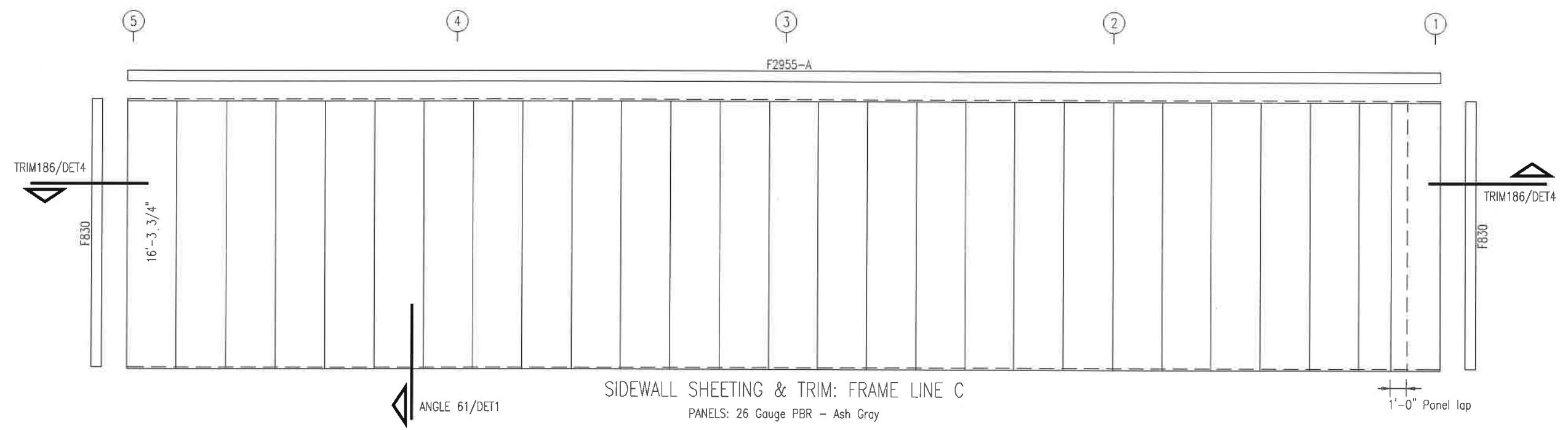




MEMBER TABLE		
FRAME LINE C		
MARK	PART	LENGTH
E-5	8ES1L14	19'-11 1/2"
E-6	8ES1L14	19'-11 1/2"
E-7	8ES1L14	19'-11 1/2"
G-14	8X25Z13	20'-3 1/2"
G-15	8X25Z16	23'-1 1/2"
G-16	8X25Z13	20'-3 1/2"
G-17	8X25Z16	23'-1 1/2"
G-18	8X25Z16	26'-3 1/2"
CB-7	1/2" DIA. ROD	25'-0"
CB-8	1/2" DIA. ROD	24'-10"

FLANGE BRACE TABLE		
FRAME LINE C		
VID	MARK	LENGTH
1	FB29.3	L2X2X14G 2'-5 1/4"

SIDEWALL FRAMING: FRAME LINE C



SIDEWALL SHEETING & TRIM: FRAME LINE C
PANELS: 26 Gauge PBR - Ash Gray

GENERAL NOTES:

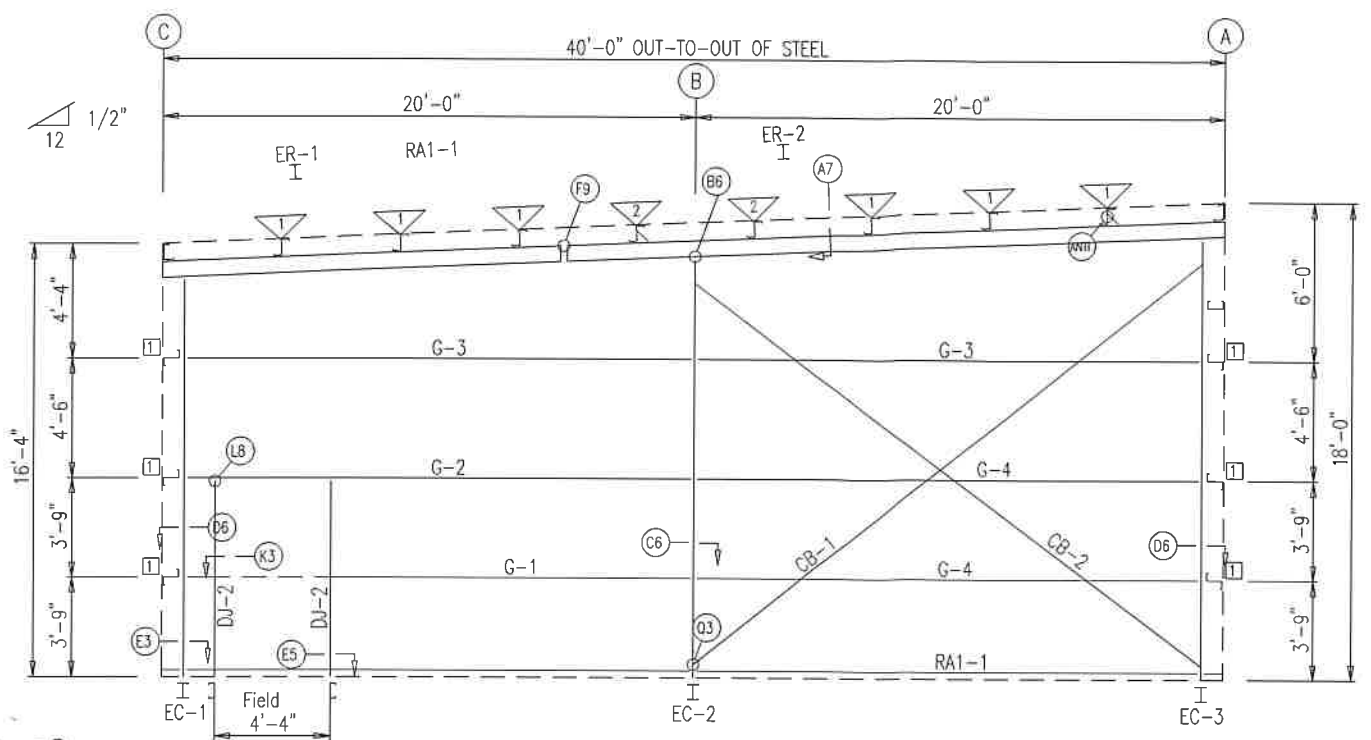
- INSTALL ALL GIRTS AND FLANGE BRACES (FB) AS SHOWN.
- WALL PANEL PROVIDES STRUCTURAL STABILITY TO THE BUILDING.
- OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
- AFTER INSTALLATION,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

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1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

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CUSTOMER: THE GOUR-MART LTD			
LOCATION: PENTICTON, BC V2A 8Y2 CA			
CAD	DATE	SCALE	PHASE
	9/28/18	N.T.S.	1
BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
A	16-B-63921	E4	0





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				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	5/8"	1 3/4"
Columns/Raf	4	A325	1/2"	1 1/4"

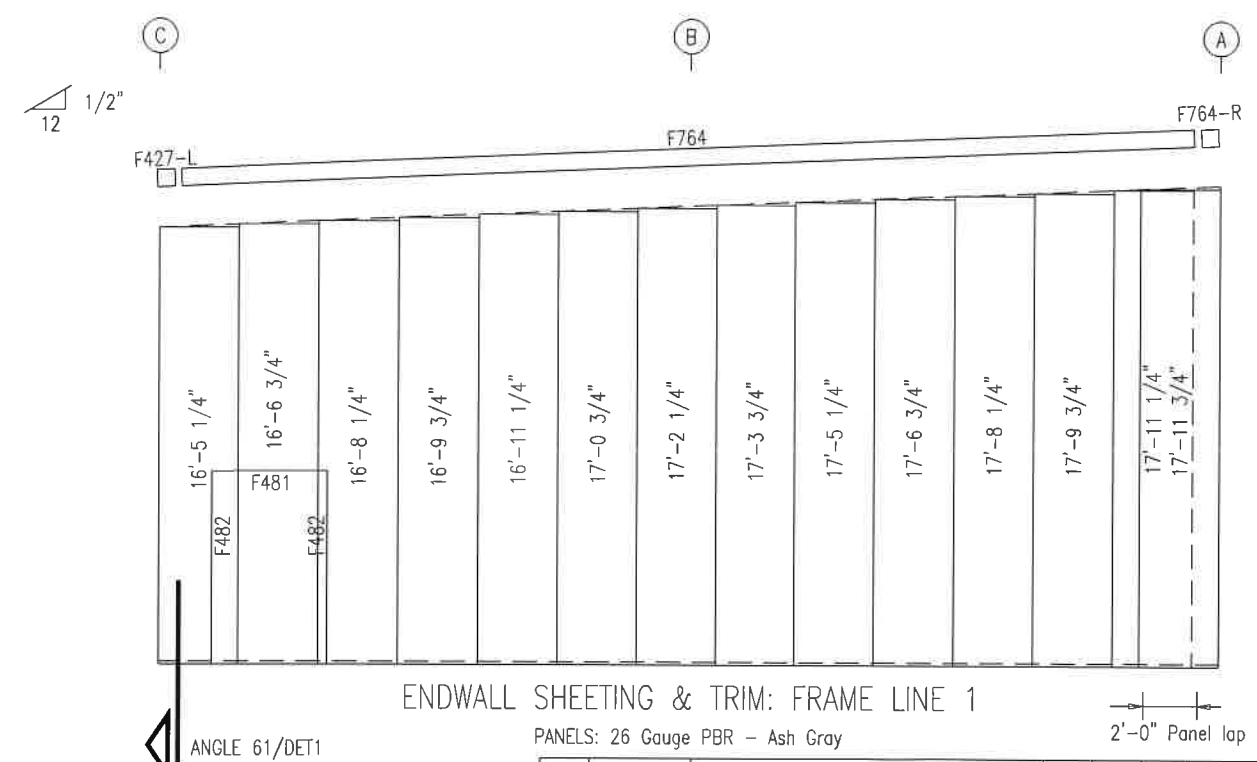
MEMBER TABLE		
FRAME LINE 1		
MARK	PART	LENGTH
EC-1	W8X10	14'-11 3/16"
EC-2	W8X10	15'-8 3/4"
EC-3	W8X10	16'-6 5/16"
ER-1	W8X13	15'-0 5/8"
ER-2	W8X13	24'-11 5/8"
DJ-2	8F25C16	7'-6"
G-1	8X25Z16	18'-6"
G-2	8X35Z12	18'-6"
G-3	8X25Z12	18'-6"
G-4	8X25Z13	18'-6"
CB-1	5/8" DIA. ROD	25'-1"
CB-2	5/8" DIA. ROD	24'-7"

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

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

Proposed 8" exposed foundation all around.
al.

ENDWALL FRAMING: FRAME LINE 1



ENDWALL SHEETING & TRIM: FRAME LINE 1

PANELS: 26 Gauge PBR - Ash Gray
 2'-0" Panel lap

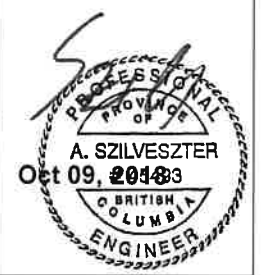
NOTE:
 FIELD SLOT GIRTS FOR BRACING
 SEE DETAIL ZZ / DET5

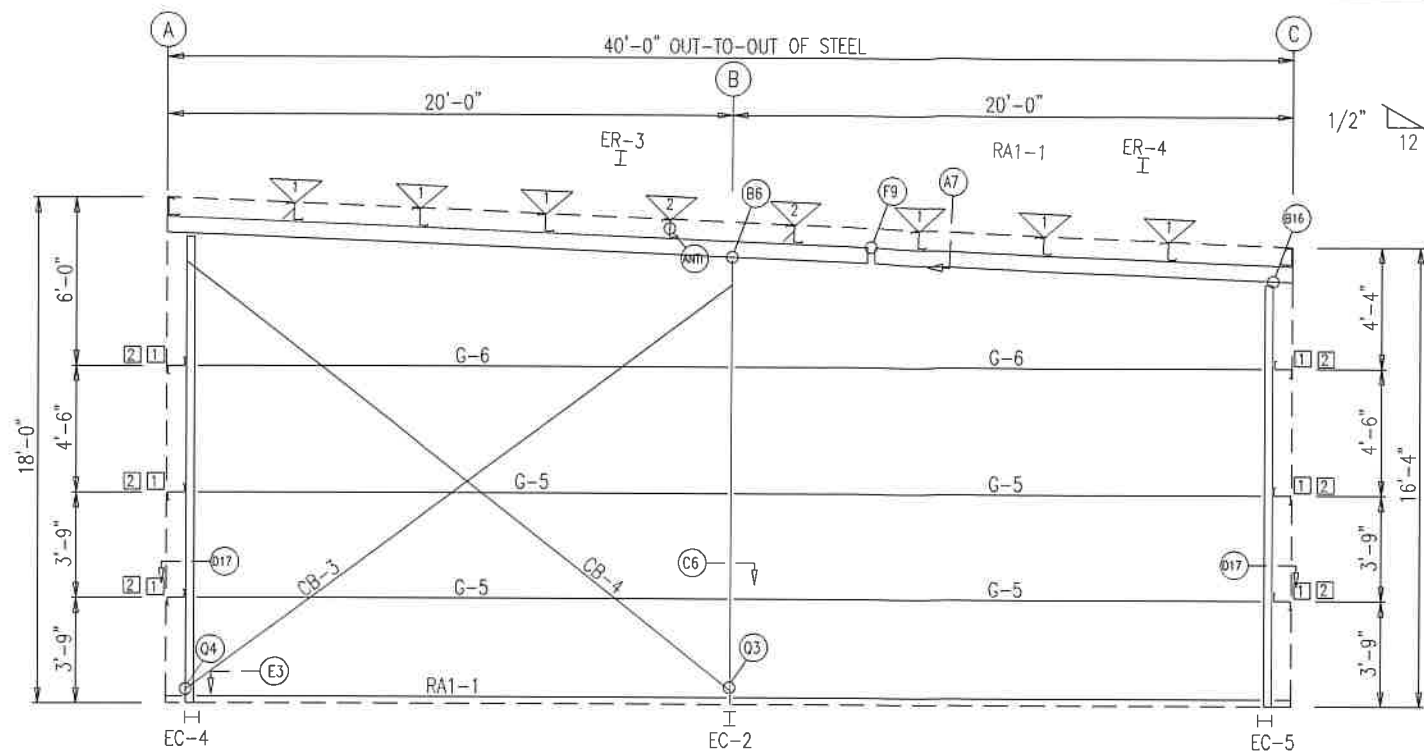
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 3. OTHER THAN FOR WALK DOORS AND WINDOWS SHOWN ON THE CONTRACT, DO NOT ADD ADDITIONAL WALL OPENINGS WITHOUT APPROVAL OF BUILDING MANUFACTURER OR PROFESSIONAL ENGINEER.
 4. AFTER INSTALLATION, WIPE ALL PANELS CLEAN OF METAL SHAVINGS CAUSED BY DRILLING.

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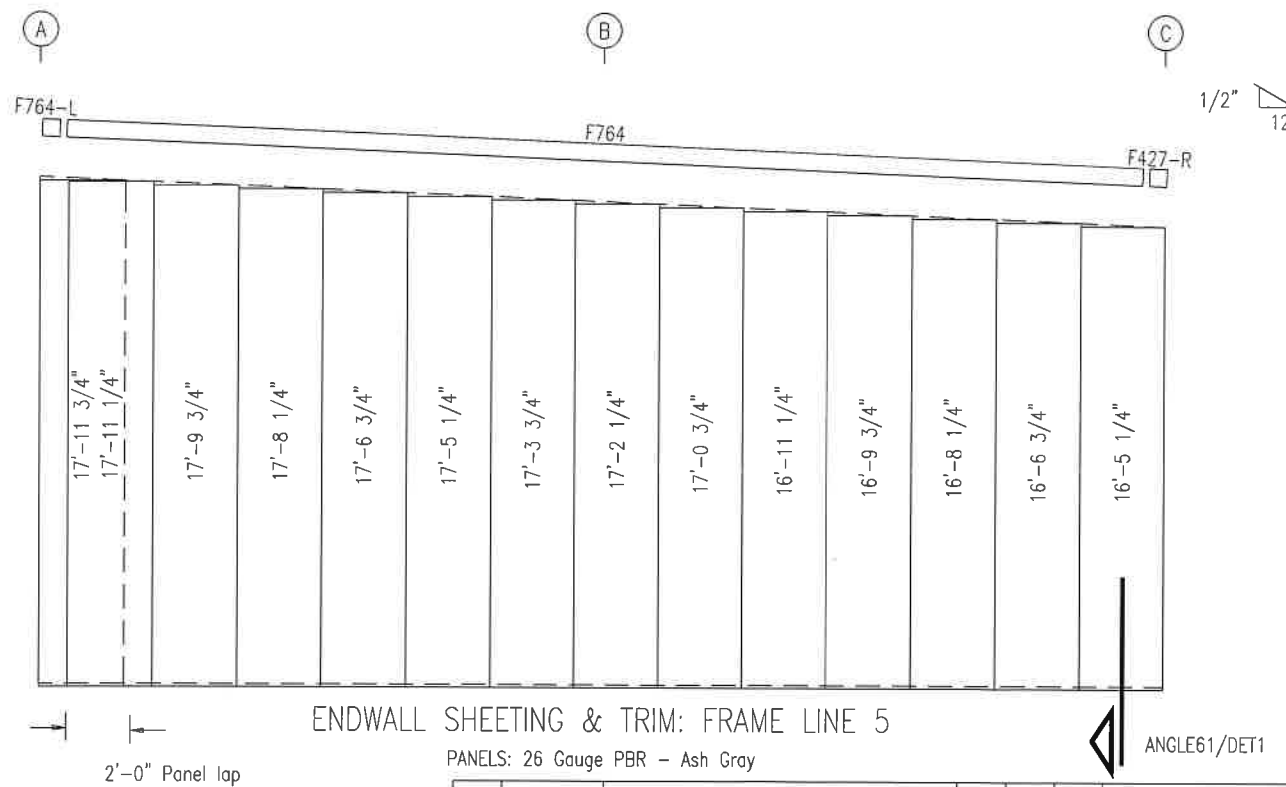
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 1405 DENISON STREET
 MARKHAM, ON L3R 5V2 CA

PROJECT:	DARRELL CAPUNE T18-0110						
CUSTOMER:	THE GOUR-MART LTD						
OWNER:	THE GOUR-MART LTD						
LOCATION:	PENTICTON, BC V2A 8Y2 CA						
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	9/28/18	N.T.S.	1	A	16-B-63921	E5	0





ENDWALL FRAMING: FRAME LINE 5



ENDWALL SHEETING & TRIM: FRAME LINE 5

2'-0" Panel lap

PANELS: 26 Gauge PBR - Ash Gray

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 5				
LOCATION	QUAN	TYPE	DIA	LENGTH
ER-3/ER-4	8	A325	5/8"	1 3/4"
Cor_Column/Raf	4	A325	5/8"	1 1/2"
EC-2/ER-3	4	A325	1/2"	1 1/4"

MEMBER TABLE FRAME LINE 5		
MARK	PART	LENGTH
EC-2	W8X10	15'-8 3/4"
EC-4	W8X10	16'-7 3/8"
EC-5	W8X10	15'-0 7/16"
ER-3	W8X13	24'-11 5/8"
ER-4	W8X13	15'-0 5/8"
G-5	8X25Z13	18'-3 5/8"
G-6	8X25Z12	18'-3 5/8"
CB-3	5/8" DIA. ROD	23'-11"
CB-4	5/8" DIA. ROD	24'-7"

CONNECTION PLATES FRAME LINE 5	
ID	MARK/PART
1	SC-5
2	PC22-1

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

NOTE:
 FIELD SLOT GIRTS FOR BRACING
 SEE DETAIL ZZ / DET5

- 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.

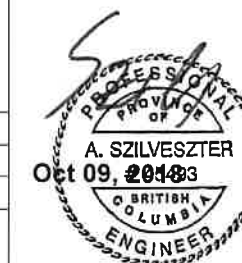
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TORO STEEL BUILDINGS
 1405 DENISON STREET
 MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
 CUSTOMER: THE GOUR-MART LTD
 OWNER: THE GOUR-MART LTD

LOCATION: PENTICTON, BC V2A BY2 CA

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
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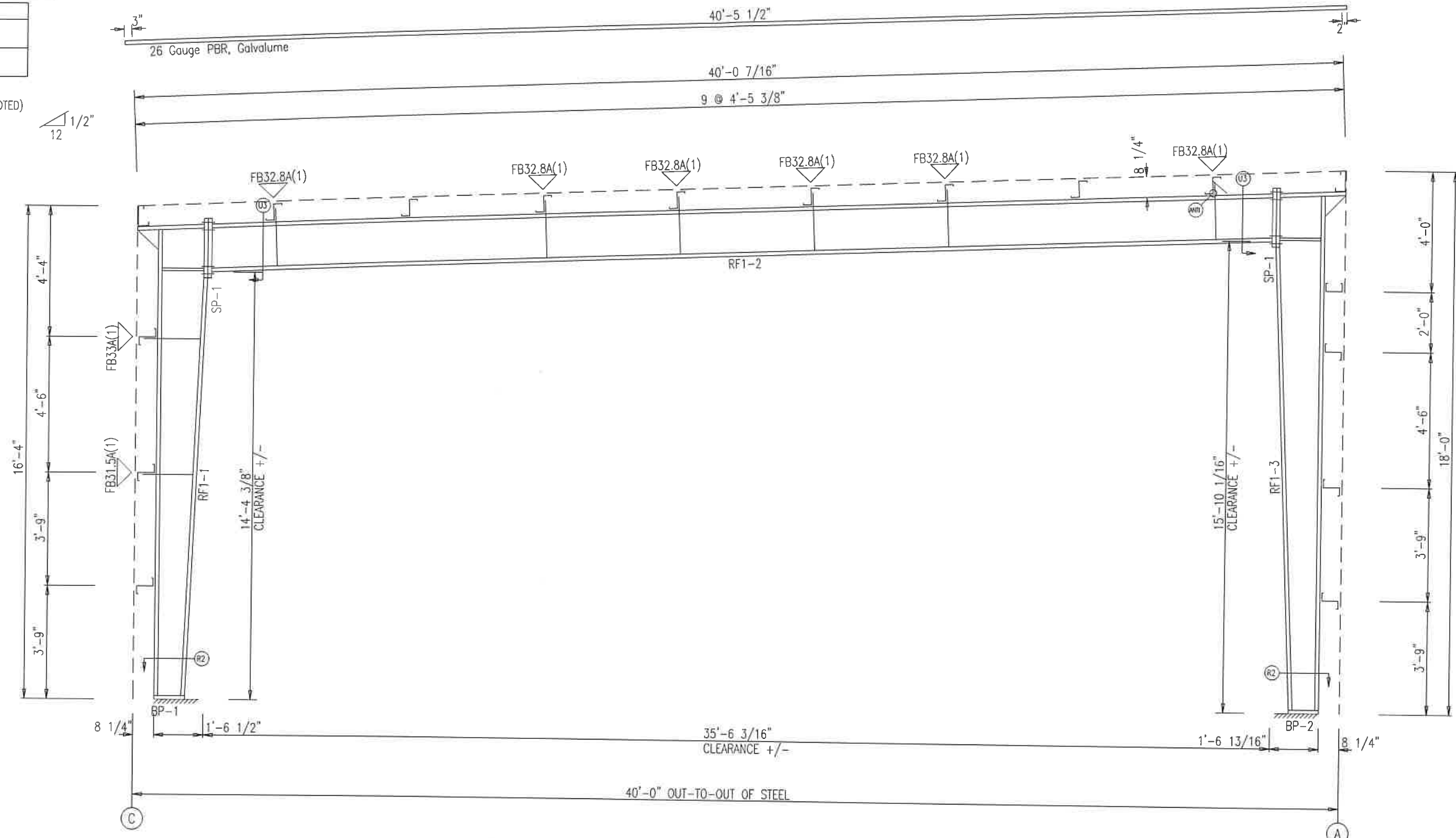
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Qty Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/4"	6"	5/8"	1'-10 3/4"

STIFFENER TABLE				
Mark	Stiff Mark	Width	Plate Size Thick	Length
RF1-1	St- 1	2 1/2	1/4"	18"
RF1-3	St- 1	2 1/2	1/4"	18"

BASE PLATE TABLE			
Col Mark	Width	Plate Size Thick	Length
BP-1	6"	3/8"	9 1/2"
BP-2	6"	3/8"	10"

FLANGE BRACES: BOTH SIDES (UNLESS NOTED)
 FBxxA(1): xx=length(in)
 A - L2X2X14G

MEMBER TABLE							
Mark	Web Depth		Web Plate		Outside Flange		Inside Flange
	Start/End	Thick	Length	W x Thk x Length	W x Thk x Length	W x Thk x Length	
RF1-1	9.0/12.2	0.156	60.0	5 x 1/4" x 187.5	5 x 1/4" x 169.1		
RF1-2	12.2/18.0	0.185	128.2	5 x 1/4" x 26.5			
	16.0/16.0	0.156	240.0	5 x 1/4" x 240.0			
	16.0/16.0	0.156	185.5	5 x 1/4" x 184.8			
RF1-3	18.0/14.8	0.185	86.8	6 x 1/4" x 26.6	5 x 1/4" x 184.8		
	14.8/ 9.0	0.156	120.0	6 x 1/4" x 206.8	6 x 1/2" x 66.7	6 x 3/8" x 120.1	



GENERAL NOTES:

- FULLY TIGHT - BOLT TIGHTENING - BOLTED JOINTS WITH A325 TYPE 1 BOLTS GREATER THAN 1/2" DIAMETER ARE SPECIFIED AS PRE-TENSIONED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, DECEMBER 31, 2009. PRE-TENSIONING CAN BE ACCOMPLISHED BY USING THE TURN-OF-NUT METHOD OF TIGHTENING, CALIBRATED WRENCH, TWIST OFF TYPE TENSION CONTROL BOLTS OR DIRECT TENSION INDICATOR AS ACCEPTABLE TO THE INSPECTING AGENCY AND BUILDING OFFICIAL. INSTALLATION INSPECTION REQUIREMENTS FOR PRE-TENSIONED JOINTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.2) USING TURN-OF-NUT METHOD IS SUGGESTED. THE CONNECTIONS ON THIS PROJECT ARE NOT SLIP CRITICAL.
- ALL FIELD CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 BOLTS.
- INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

FRAME CROSS SECTION: FRAME LINE 2

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TORO STEEL BUILDINGS
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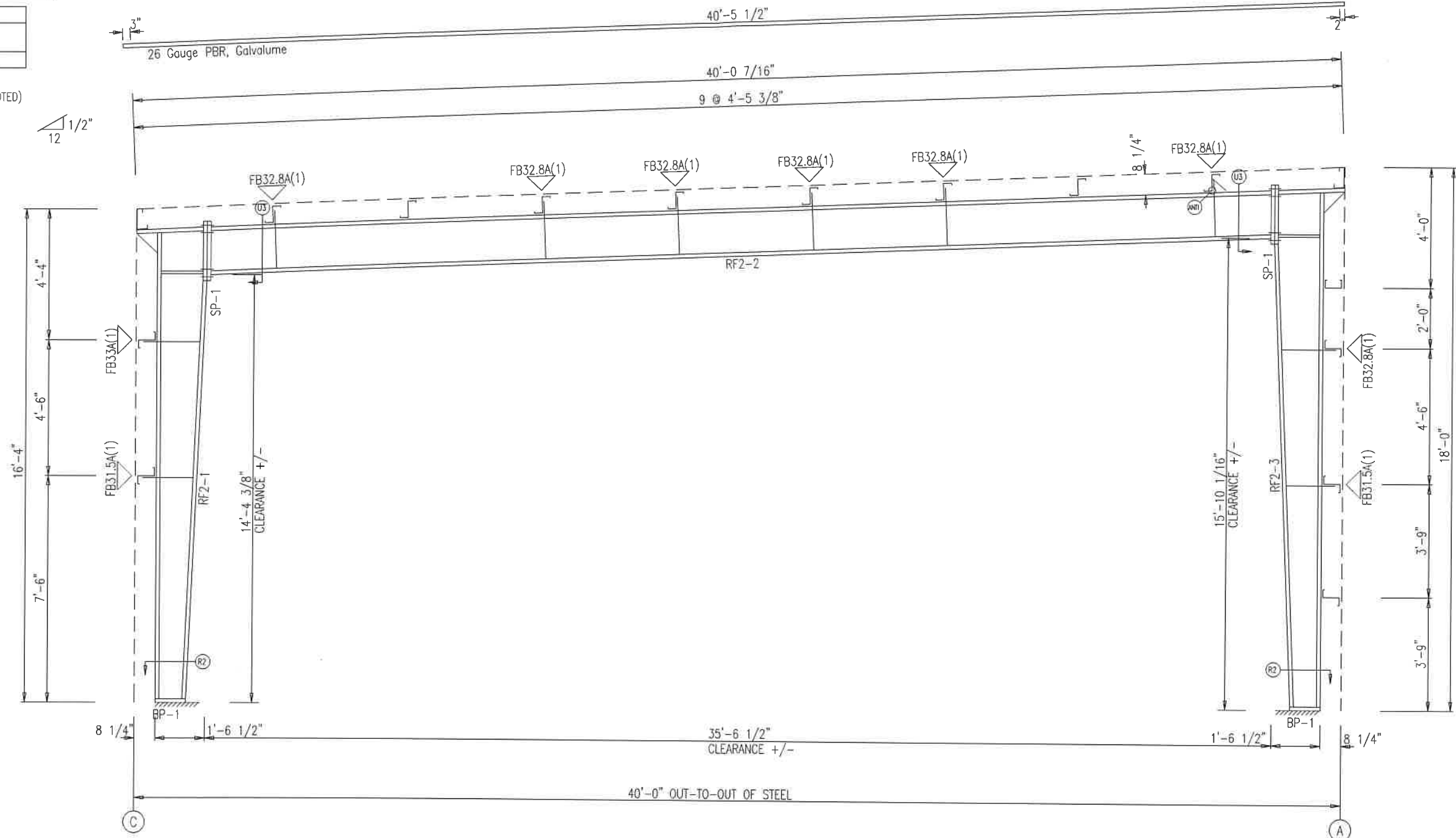
SPLICE PLATE & BOLT TABLE										
Mark	Qty	Top	Bot	Ini	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/4"	6"	5/8"	1'-10 3/4"	

STIFFENER TABLE				
Mark	Stiff Mark	Width	Plate Size Thick	Length
RF2-1	St- 1	2 1/2"	1/4"	18"
RF2-3	St- 1	2 1/2"	1/4"	18"

BASE PLATE TABLE			
Col Mark	Width	Plate Size Thick	Length
BP-1	6"	3/8"	9 1/2"

FLANGE BRACES: BOTH SIDES (UNLESS NOTED)
 FBxxA(1): xx=length(in)
 A - L2X2X14G

MEMBER TABLE								
Mark	Web Depth		Web Plate		Outside Flange		Inside Flange	
	Start/End	Thick	Thick	Length	W x Thk x Length	W x Thk x Length	W x Thk x Length	
RF2-1	9.0/12.2	0.156	60.0		5 x 1/4" x 187.5		5 x 1/4" x 169.1	
RF2-2	12.2/18.0	0.185	128.2		5 x 1/4" x 26.5			
	16.0/16.0	0.156	240.0		5 x 1/4" x 240.0		5 x 1/4" x 240.0	
RF2-3	16.0/16.0	0.156	185.5		5 x 1/4" x 184.9		5 x 1/4" x 184.9	
	18.0/14.8	0.185	86.8		5 x 1/4" x 26.5		5 x 1/4" x 186.8	
	14.8/ 9.0	0.156	120.0		5 x 1/4" x 206.8			



GENERAL NOTES:

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- ALL FIELD CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 BOLTS.
- INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

FRAME CROSS SECTION: FRAME LINE 3

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A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	CVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	CVR

TORO STEEL BUILDINGS
 1405 DENISON STREET
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 CUSTOMER: THE GOUR-MART LTD OWNER: THE GOUR-MART LTD
 LOCATION: PENTICTON, BC V2A BY2 CA

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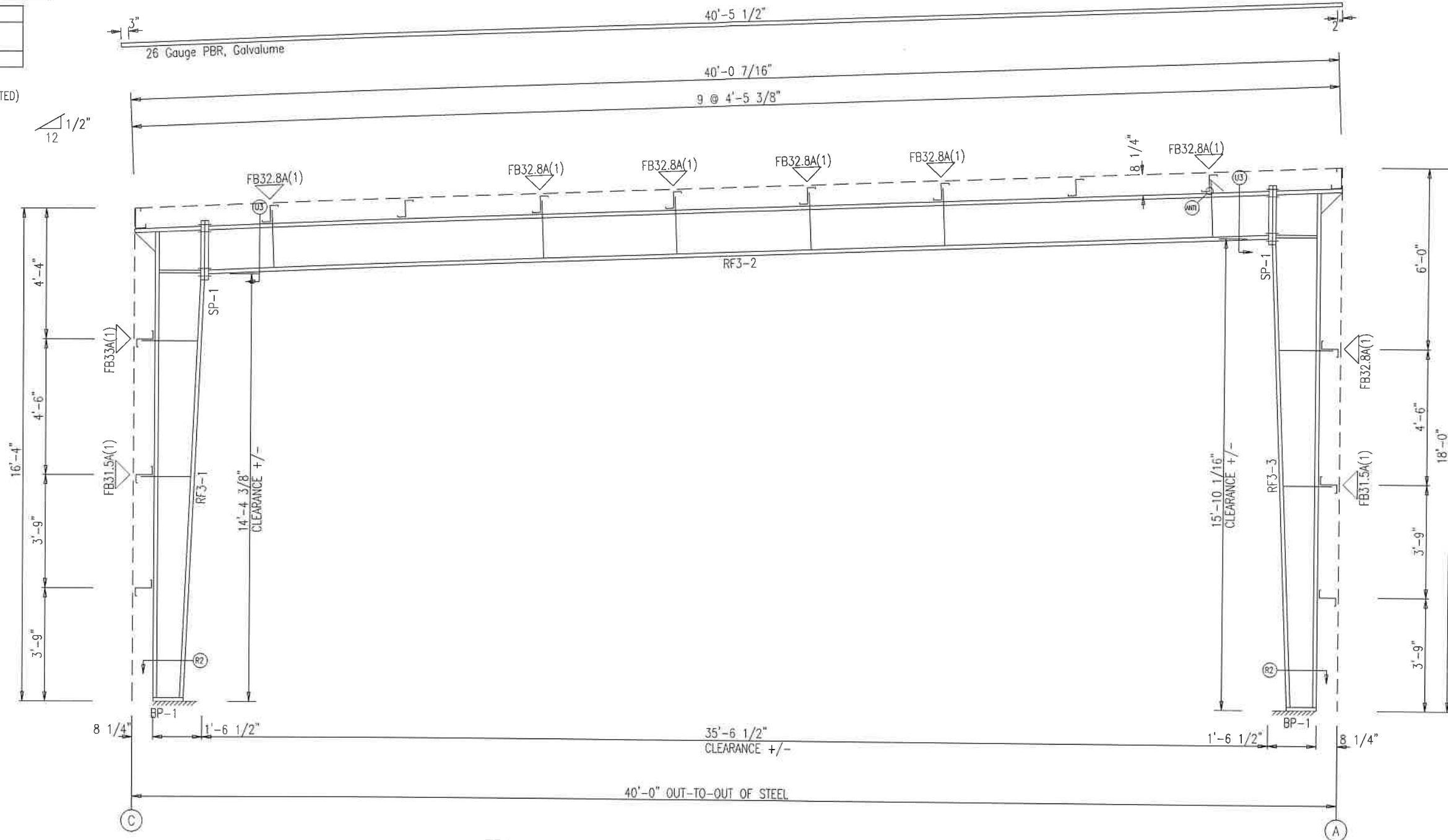
SPLICE PLATE & BOLT TABLE									
Mark	Qty Top	Qty Bot	Int	Type	Dia	Length	Width	Thick	Length
SP-1	4	4	0	A325	3/4"	2 1/4"	6"	5/8"	1'-10 3/4"

STIFFENER TABLE				
Mark	Stiff Mark	Width	Plate Size Thick	Length
RF3-1	St- 1	2 1/2	1/4"	18"
RF3-3	St- 1	2 1/2	1/4"	18"

BASE PLATE TABLE			
Col Mark	Width	Plate Size Thick	Length
BP-1	6"	3/8"	9 1/2"

FLANGE BRACES: BOTH SIDES (UNLESS NOTED)
 FBxxA(1); xx=length(in)
 A = L2X2X14G

MEMBER TABLE							
Mark	Web Depth		Web Plate		Outside Flange		Inside Flange
	Start/End	Thick	Length	W x Thk x Length	W x Thk x Length	W x Thk x Length	
RF3-1	9.0/12.2	0.156	60.0	5 x 1/4" x 187.5	5 x 1/4" x 26.5	5 x 1/4" x 169.1	
RF3-2	12.2/18.0	0.185	128.2	5 x 1/4" x 240.0	5 x 1/4" x 240.0	5 x 1/4" x 240.0	
RF3-3	16.0/16.0	0.156	240.0	5 x 1/4" x 184.9	5 x 1/4" x 26.5	5 x 1/4" x 184.9	
	18.0/14.8	0.185	86.8	5 x 1/4" x 206.8	5 x 1/4" x 206.8	5 x 1/4" x 186.8	
	14.8/ 9.0	0.156	120.0				



GENERAL NOTES:

- FULLY TIGHT - BOLT TIGHTENING - BOLTED JOINTS WITH A325 TYPE 1 BOLTS GREATER THAN 1/2" DIAMETER ARE SPECIFIED AS PRETENSIONED JOINTS IN ACCORDANCE WITH THE SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, DECEMBER 31, 2009. PRE-TENSIONING CAN BE ACCOMPLISHED BY USING THE TURN-OF-NUT METHOD OF TIGHTENING, CALIBRATED WRENCH, TWIST OFF TYPE TENSION CONTROL BOLTS OR DIRECT TENSION INDICATOR AS ACCEPTABLE TO THE INSPECTING AGENCY AND BUILDING OFFICIAL. INSTALLATION INSPECTION REQUIREMENTS FOR PRE-TENSIONED JOINTS (SPECIFICATION FOR STRUCTURAL JOINTS SECTION 9.2) USING TURN-OF-NUT METHOD IS SUGGESTED. THE CONNECTIONS ON THIS PROJECT ARE NOT SLIP CRITICAL.
- ALL FIELD CONNECTIONS OF SECONDARY FRAMING SHALL BE BOLTED WITH A325 BOLTS.
- INSTALL ALL FLANGE BRACES ON COLUMN AND RAFTER AS SHOWN

FRAME CROSS SECTION: FRAME LINE 4

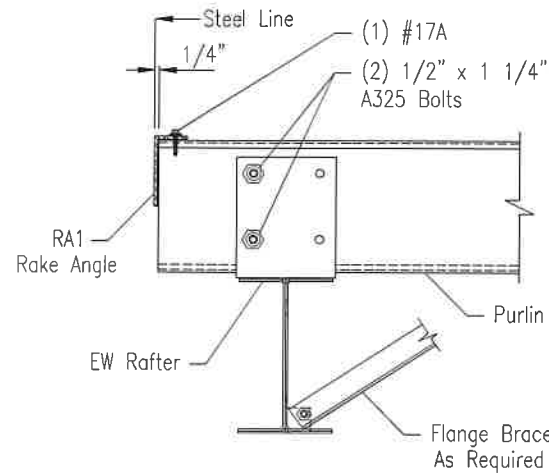
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS

1405 DENISON STREET
 MARKHAM, ON L3R 5V2 CA

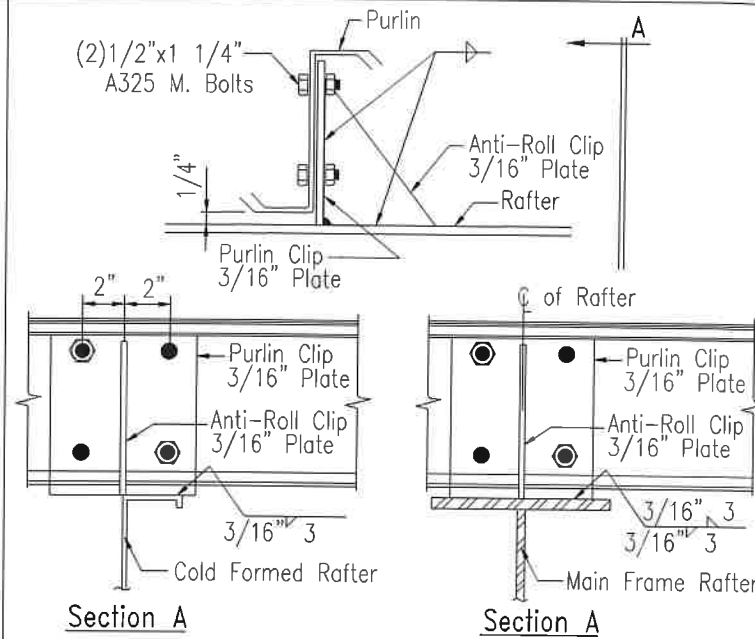
PROJECT:	DARRELL CAPUNE T18-0110						
CUSTOMER:	THE GOUR-MART LTD						
OWNER:	THE GOUR-MART LTD						
LOCATION:	PENTICTON, BC V2A 8Y2 CA						
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	E9	0



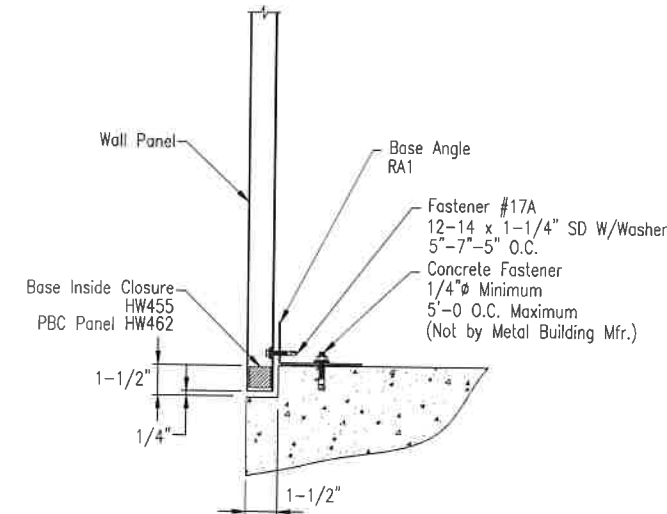


1/2" x 1 1/4" A325 Bolts
(Typ.) (U.N.)

A7 SECTION THRU HOT ROLLED RAFTER



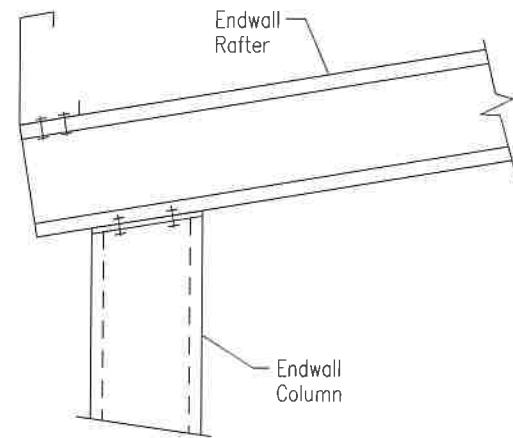
ANTI PURLIN ANTI-ROLL CLIP



Base Angle With Panel Recess
Without Base Trim

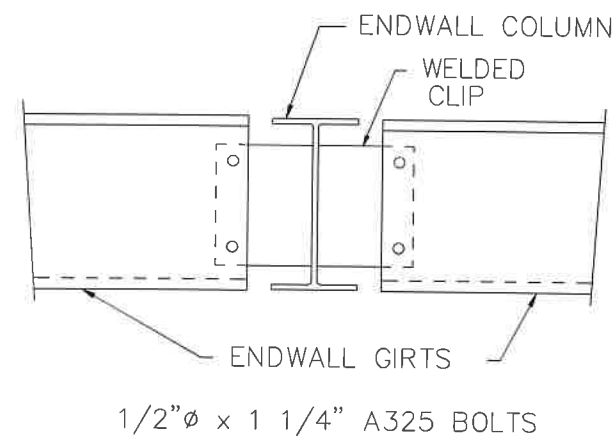
ANGLE_61

B6 HOT ROLLED ENDWALL COLUMN TO RAFTER

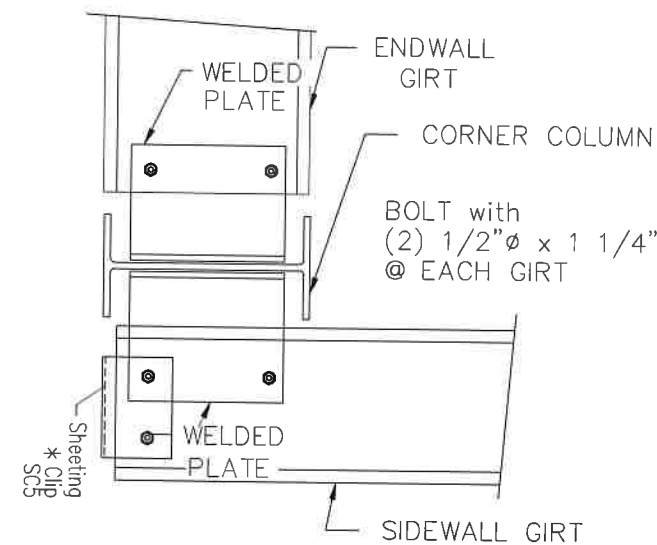


Refer To Endwall Drawing
For Bolt Dia. And Type

B16 CORNER COLUMN TO ENDWALL RAFTER

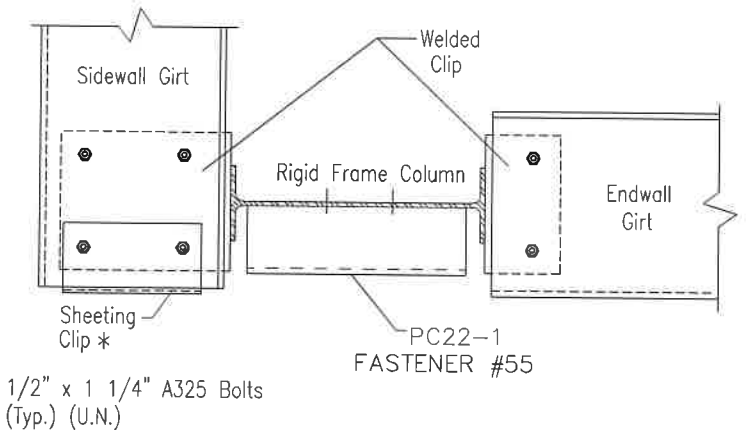


C6 ENDWALL COLUMN TO WALL GIRT



D6 CORNER COLUMN TO WALL GIRT

*PART	APPLICATION
SC-5	8" Girt Depth
SC-54	10" Girt Depth
SC-55	12" Girt Depth



D17 CORNER COLUMN TO WALL GIRT

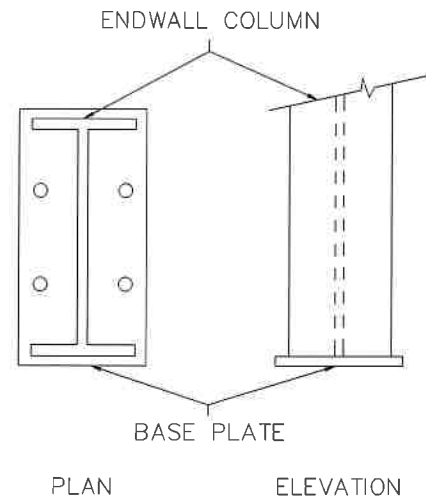
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

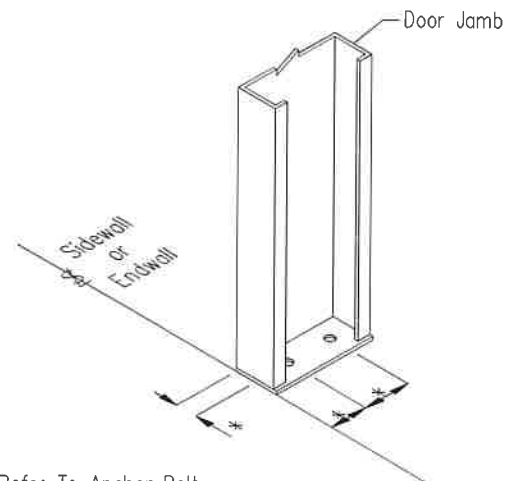
PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
OWNER: THE GOUR-MART LTD

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET1	0



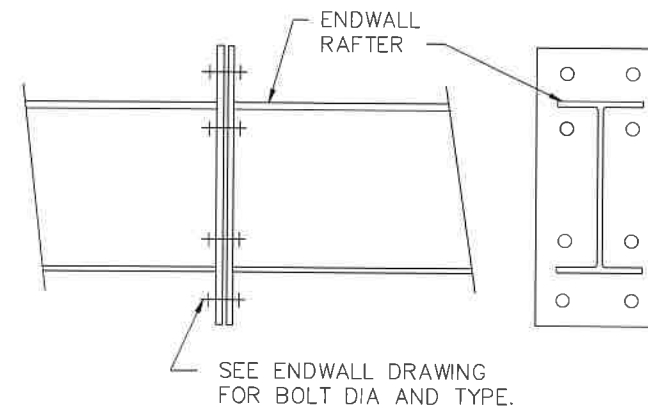


E3 BASE PLATE FOR ENDWALL COLUMN

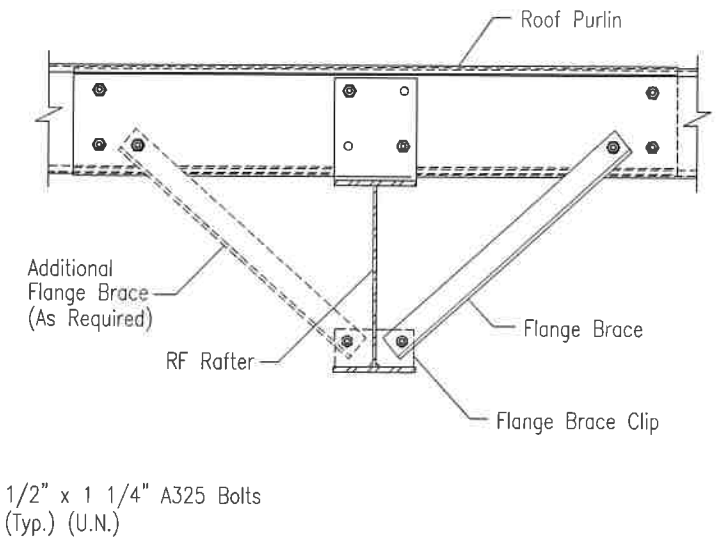


(*) = Refer To Anchor Bolt Plan

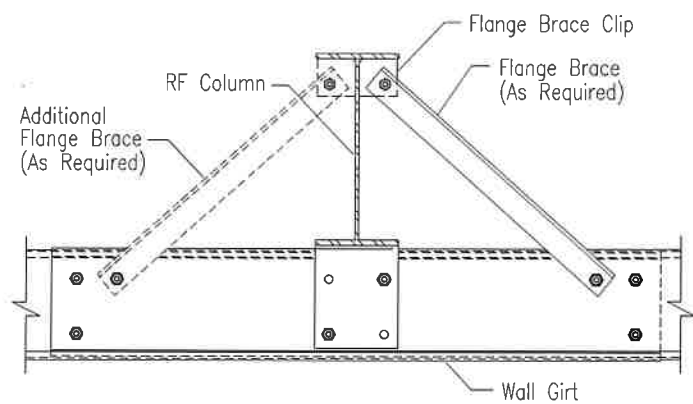
E5 BASE PLATE FOR DOOR JAMB



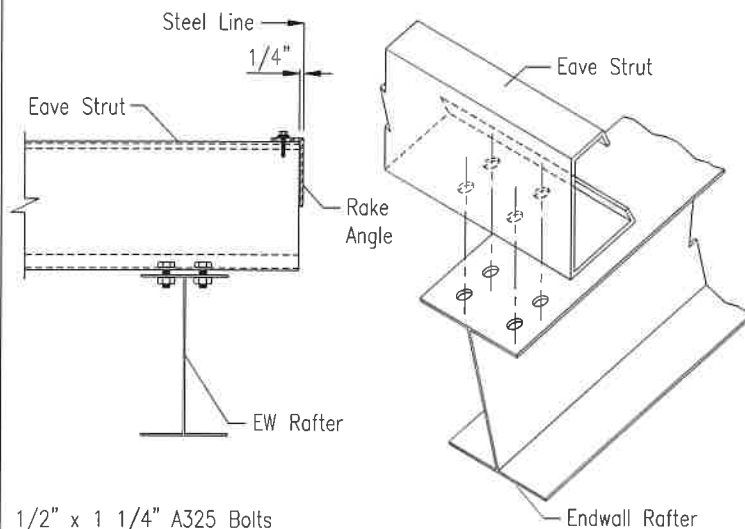
F9 RAFTER SPLICE ALONG SURFACE



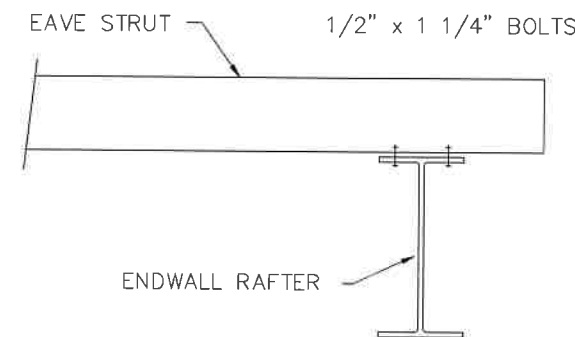
G2 ROOF PURLIN TO INTERIOR FRAME RAFTER



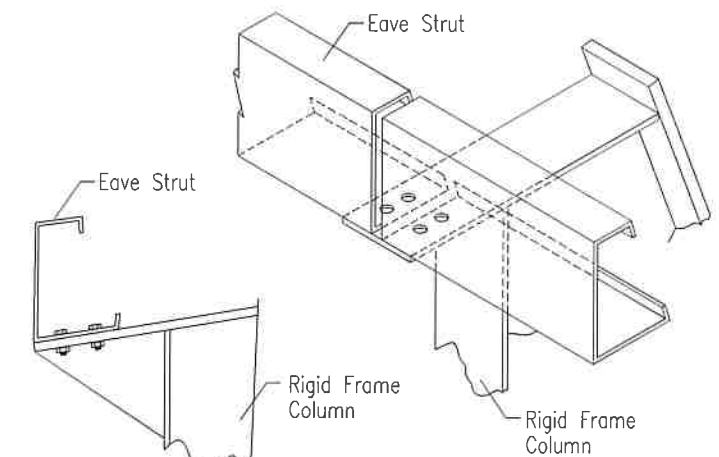
H2 WALL GIRTS TO RIGID FRAME COLUMN



I8 LOW SIDE EAVE STRUT TO HOT ROLLED RAFTER



I17 EAVE STRUT TO ENDWALL RAFTER



J2 EAVE STRUT TO RIGID FRAME

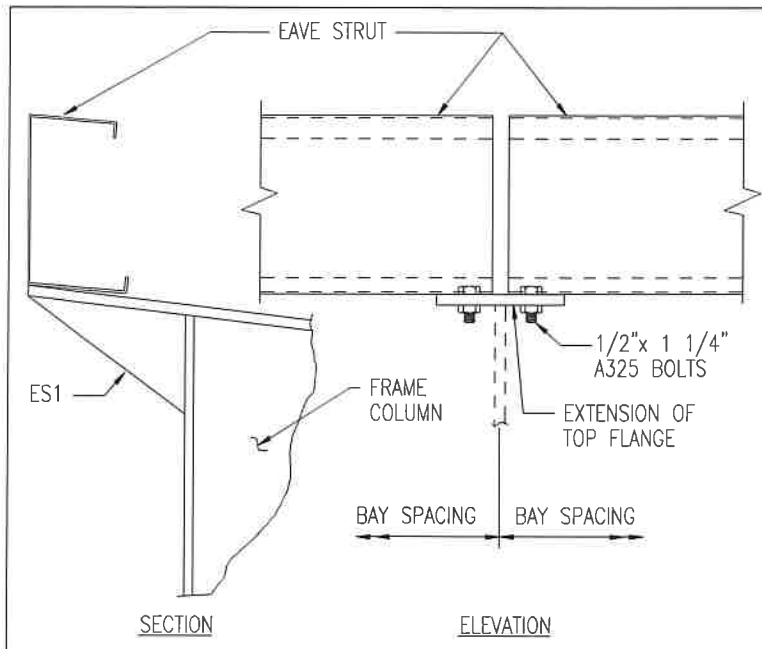
ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

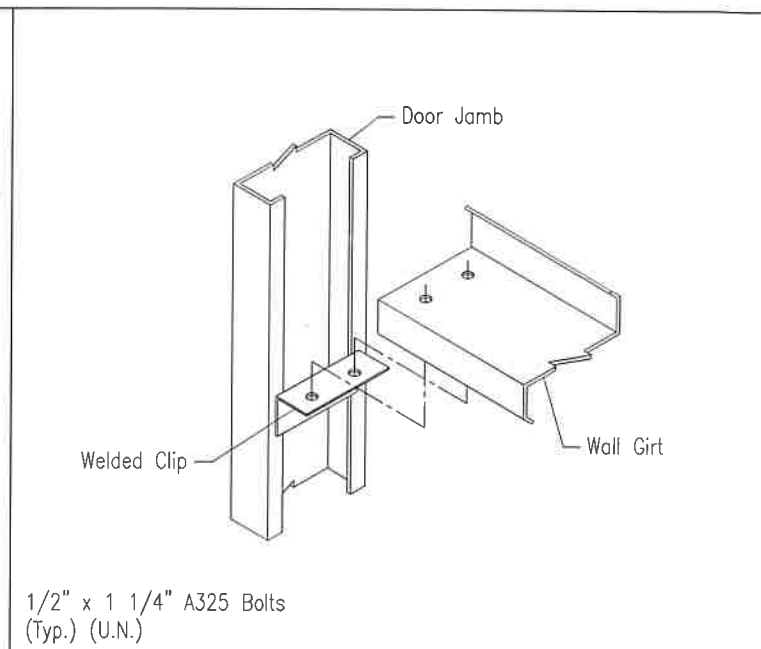
PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
OWNER: THE GOUR-MART LTD
LOCATION: PENTICTON, BC V2A 8Y2 CA

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET2	0

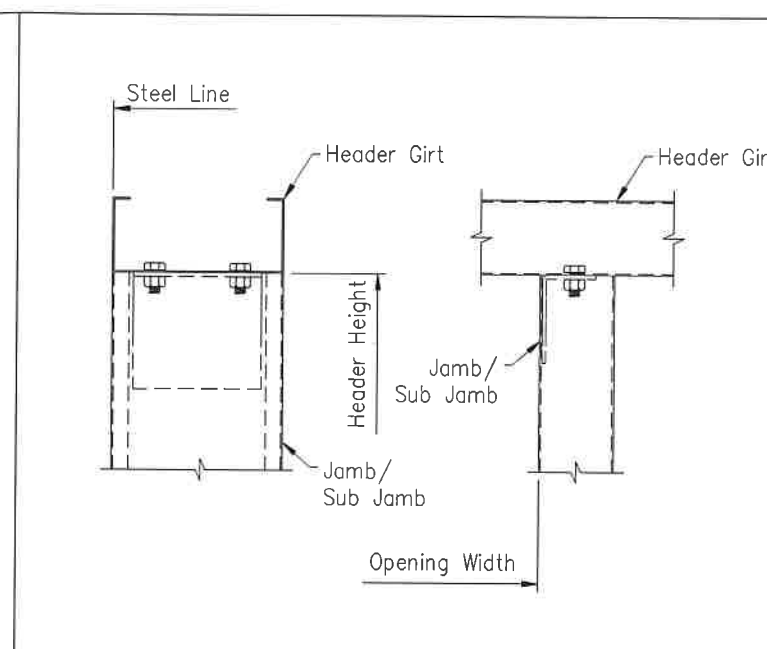




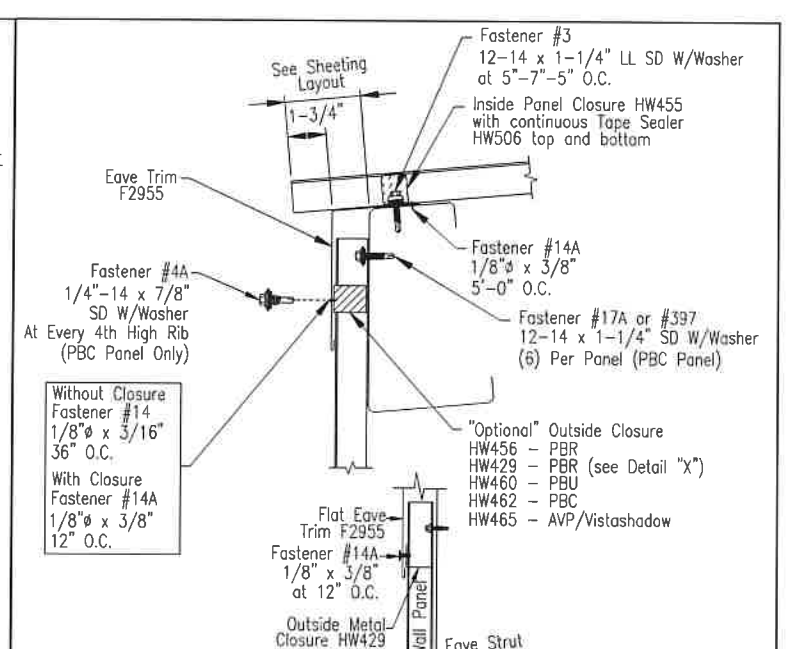
J8 EAVE STRUT TO RIGID FRAME



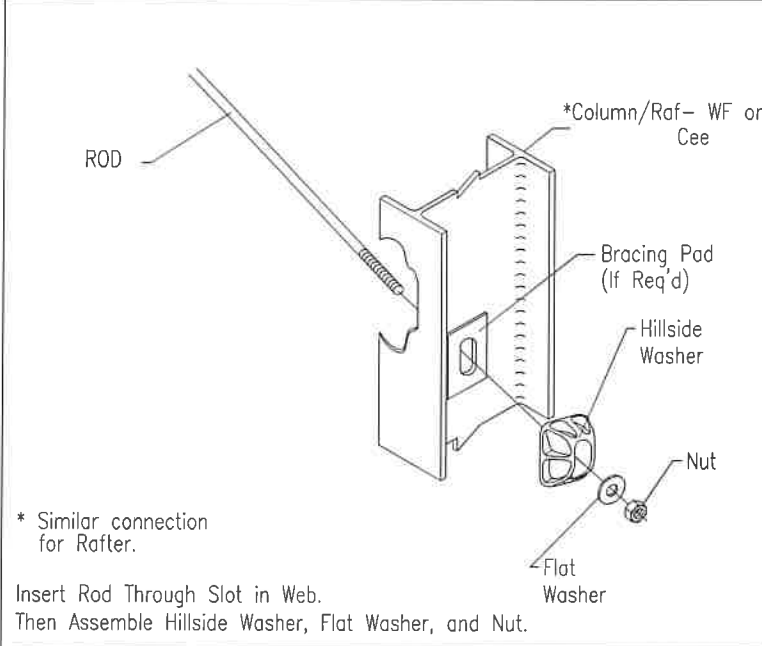
K3 WALL GIRT TO DOOR JAMB



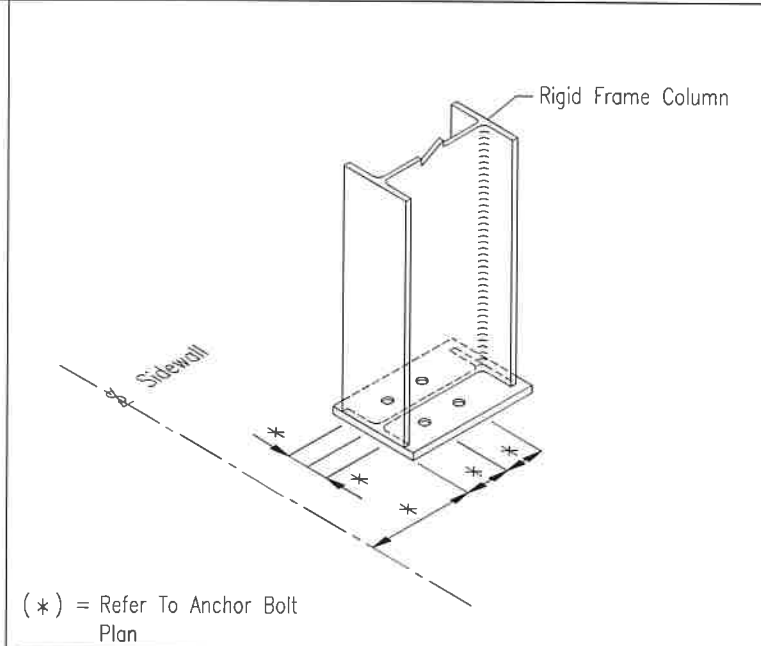
L7 Single Cold Form Jamb/
Sub Jamb To Header Girt



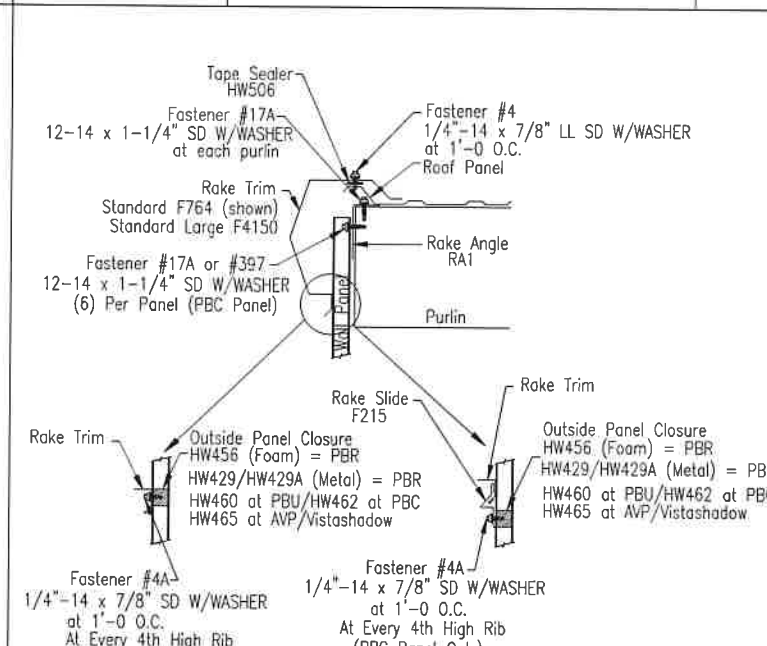
ZZ Low Eave Detail - PBR Roof
Flat Eave Trim - Sheeted Wall



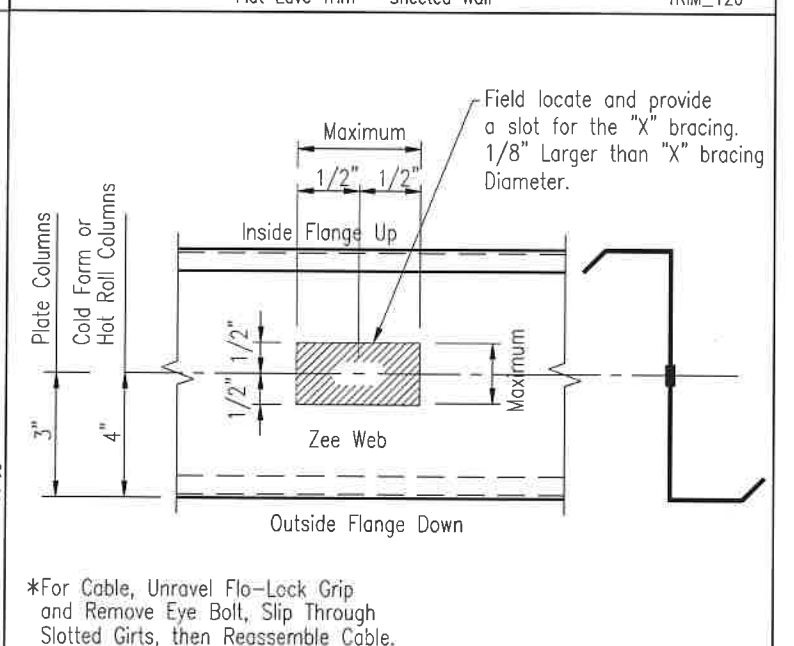
Q3 DIAGONAL ROD



R2 ANCHOR BOLTS AT SIDEWALL COLUMNS



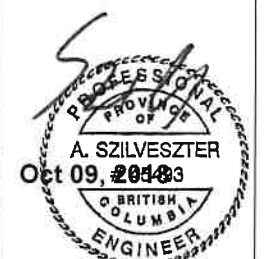
Rake Detail - PBR Roof
Classic Standard and Standard Large Rake Trim - Sheeted Wall TRIM_104

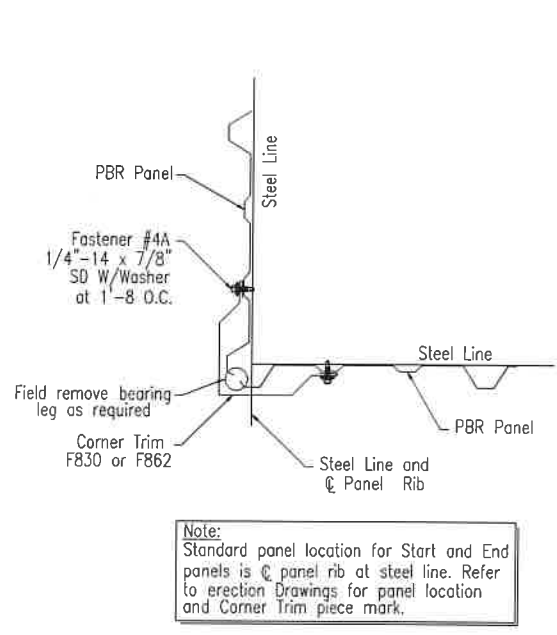


ZZ CABLE AT FLUSH WALL GIRT

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
0	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS							
1405 DENISON STREET							
MARKHAM, ON L3R 5V2 CA							
PROJECT: DARRELL CAPUNE T18-0110				OWNER: THE GOUR-MART LTD			
CUSTOMER: THE GOUR-MART LTD				OWNER: THE GOUR-MART LTD			
LOCATION: PENTICTON, BC V2A 8Y2 CA							
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET3	0

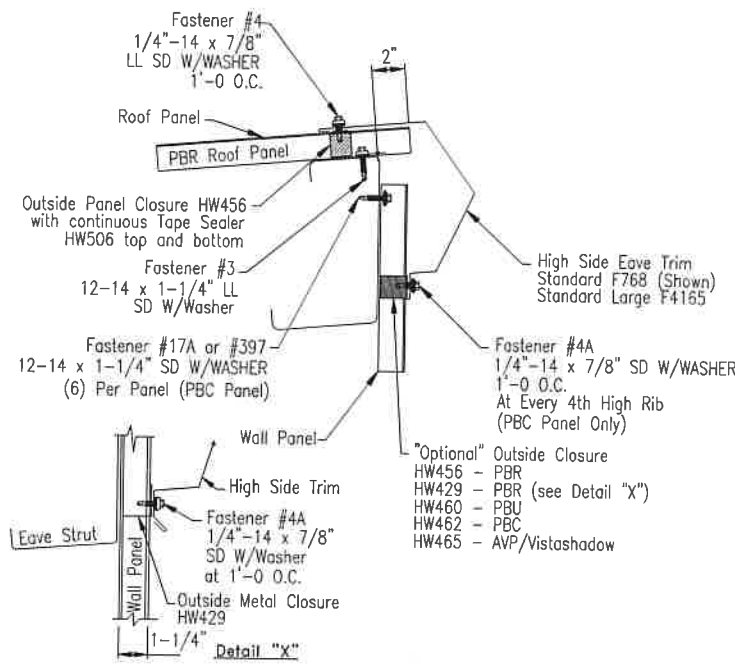




Note:
Standard panel location for Start and End panels is @ panel rib at steel line. Refer to erection Drawings for panel location and Corner Trim piece mark.

Outside Corner Trim - PBR Wall Panel

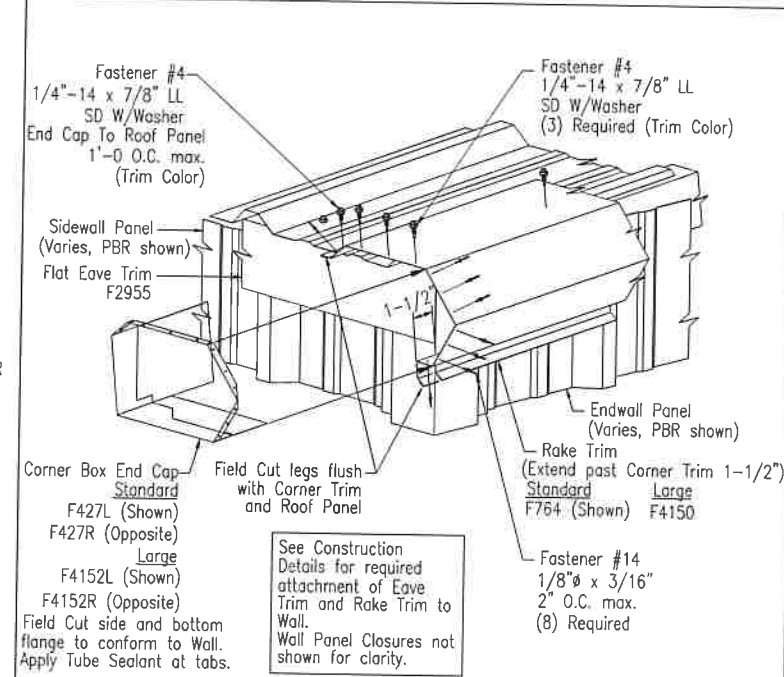
TRIM_186



High Side Eave Detail - PBR Roof

Classic Standard and Standard Large High Side Eave Trim - Sheeted Wall

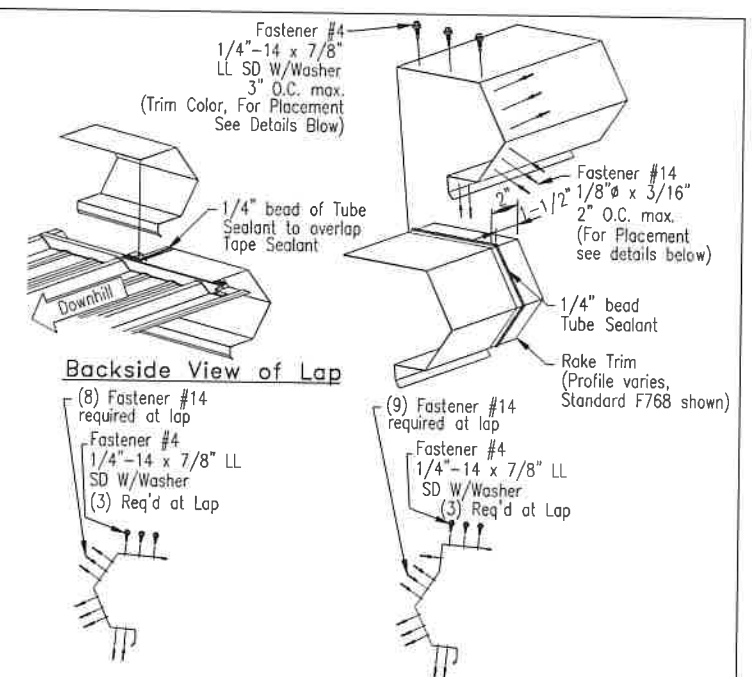
TRIM_187



Low Eave Rake Corner - PBR Roof

Standard and Standard Large Rake

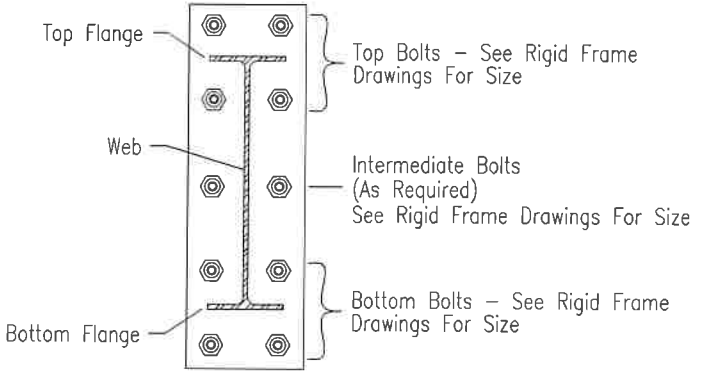
TRIM_203



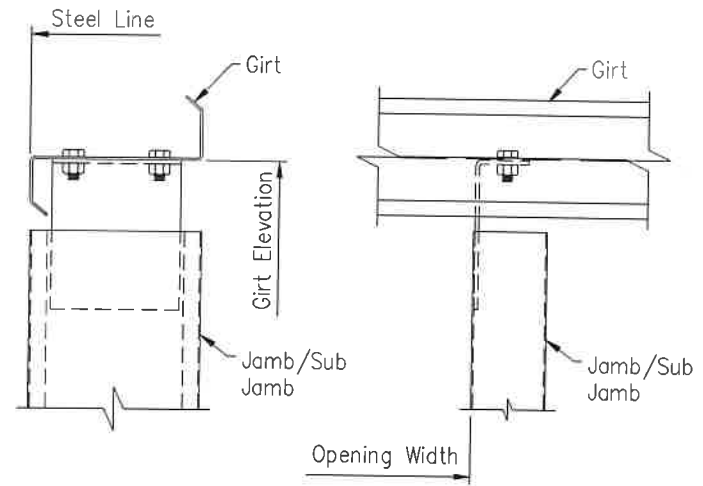
High Side Eave Trim - PBR Roof

End Lap Installation

TRIM_519



U3 BOLTS FOR RIGID FRAME RAFTER TO COLUMN CONNECTION



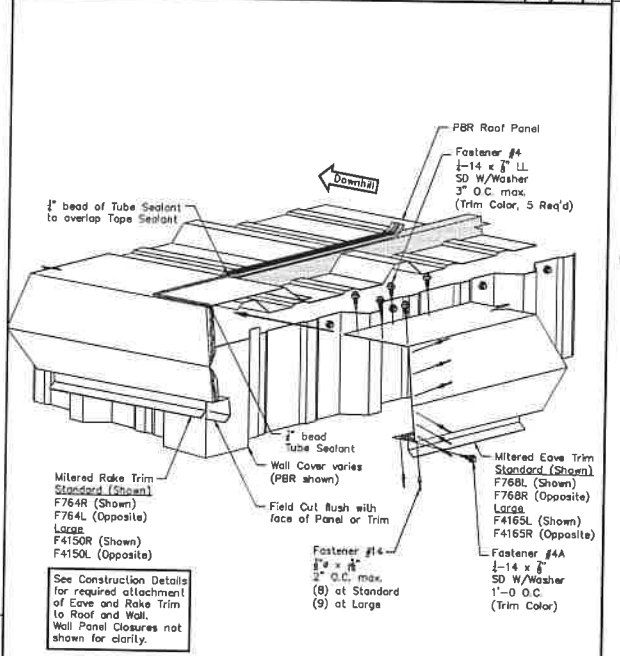
L8

Single Cold Form Jamb/ Sub Jamb To Girt

Date Jun '17
Rev 00

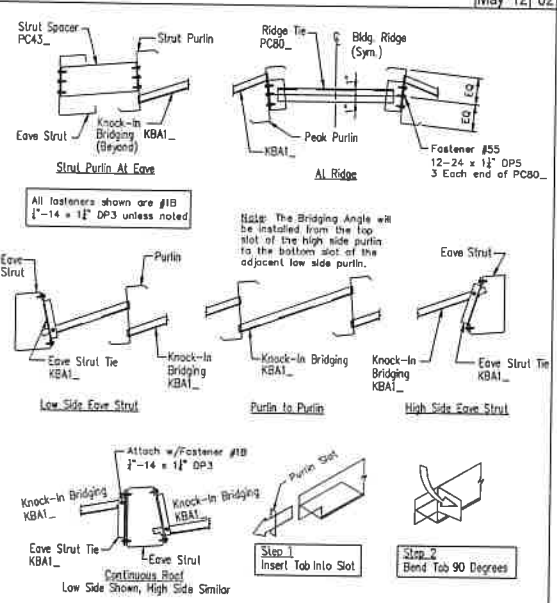
PBR Roof - Southern Standard and Southern Large High Eave Rake Corner - 1 1/4" Wall Panel

WPR04007
May '16 '03



Knock-In Bridging Installation Less Than 3:12 Single Row

KB01001
May '12 '02



ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
O	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
LOCATION: PENTICTON, BC V2A 8Y2 CA

OWNER: THE GOUR-MART LTD

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET4	0



Standard Grade

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.

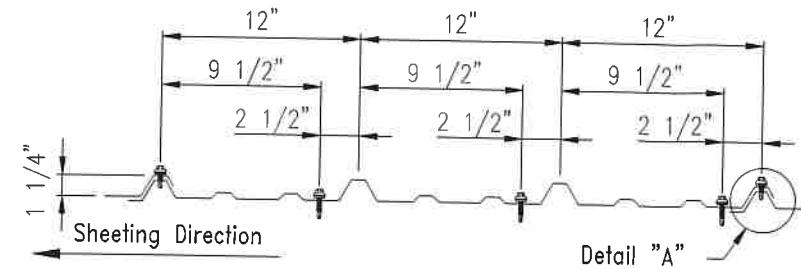
Long Life

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

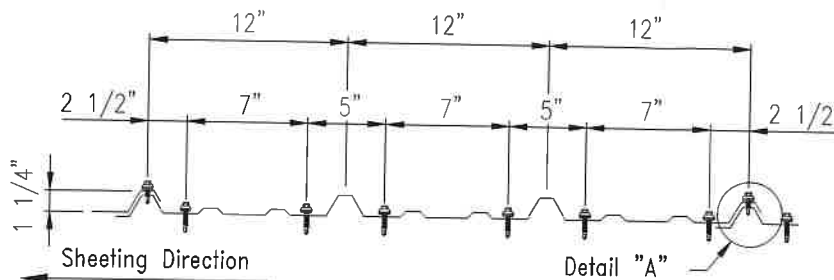
Member screws may be 1 1/4", 1 1/2", or 2" depending on insulation, application, or customer request.

Self-Drilling Screw Application

SCRW1



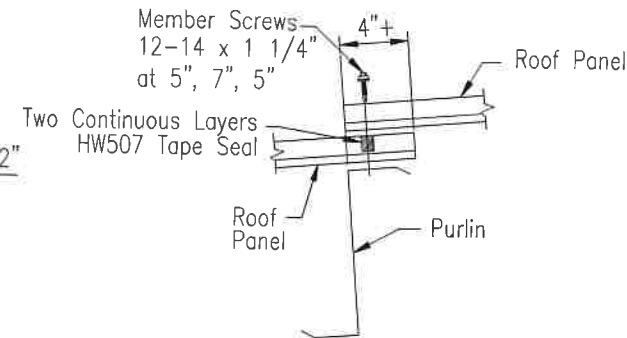
All Roof Members Except As Noted Below



At Eave Strut, Panel End Lap, and Peak Purlin

Stitch Screw
1/4-14 x 7/8"
At 20" O.C.

Detail "A"



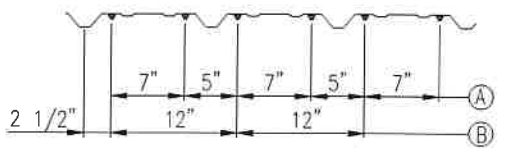
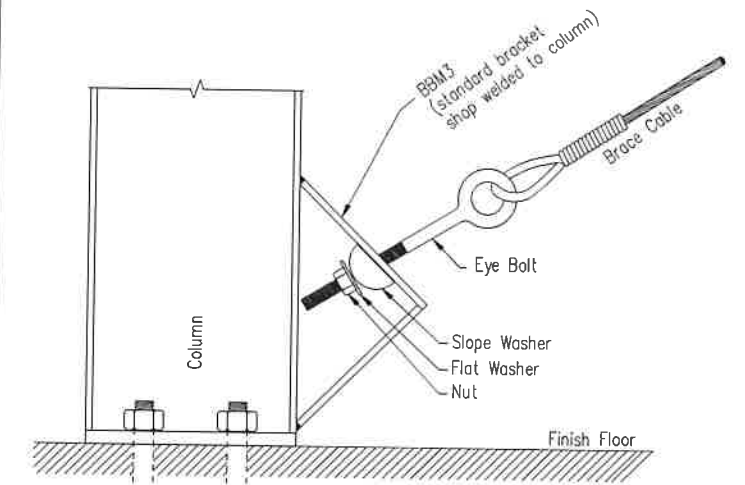
Section Thru Panel End Laps

Fastener Location for "PBR" Roof Panel

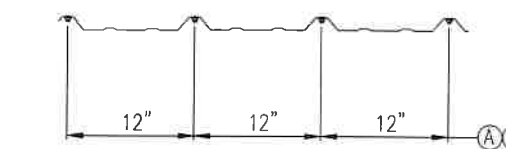
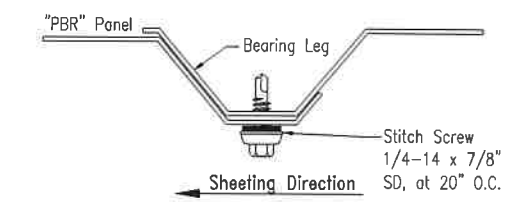
TRIM_175

Q4

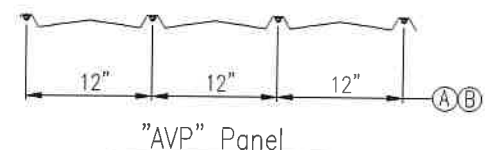
Brace Cable Detail



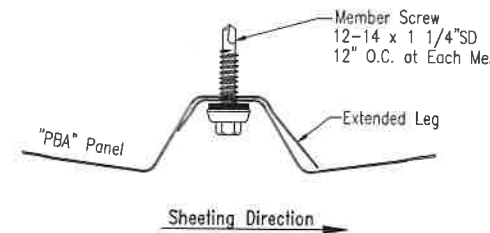
"PBR" Panel



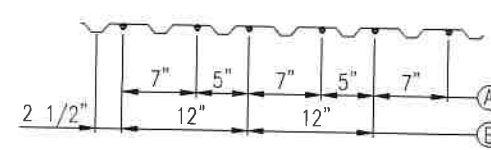
"RVPBR" Panel



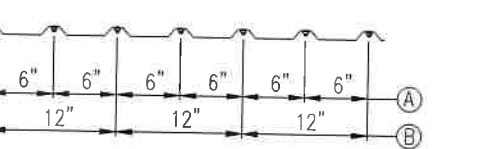
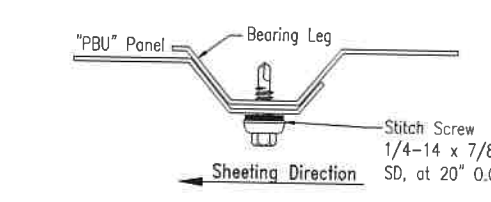
"AVP" Panel



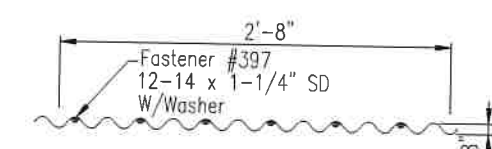
- (A) = At Base, Rake, Eave, and Mid Span End Laps
- (B) = At Intermediate Member, and at Optional Liner Panel



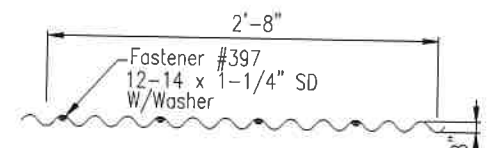
"PBU" Panel



"RVPBU" Panel



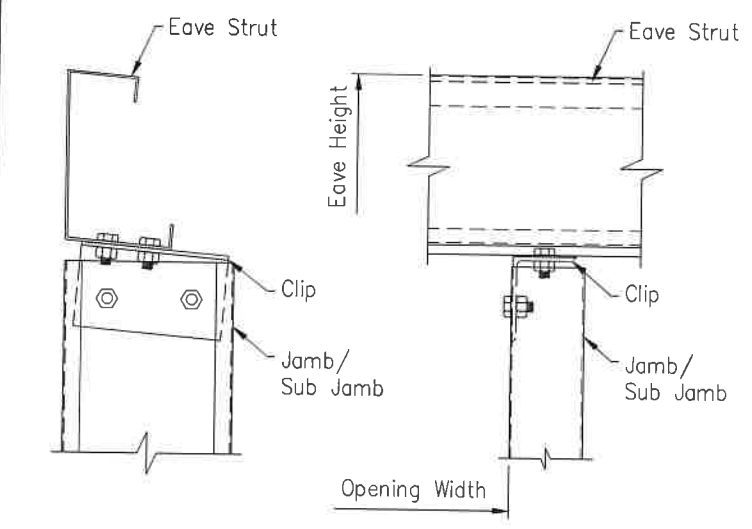
PBC Fastener Location At Panel Ends



PBC Fastener Location At Intermediate Supports



PBC Panel Sidelap



L14

Single Cold Form Jamb/Sub Jamb To High Side Eave Strut

Date Dec '17
Rev 00

TRIM_174

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
D	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS

1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
LOCATION: PENTICTON, BC V2A 8Y2 CA
OWNER: THE GOUR-MART LTD

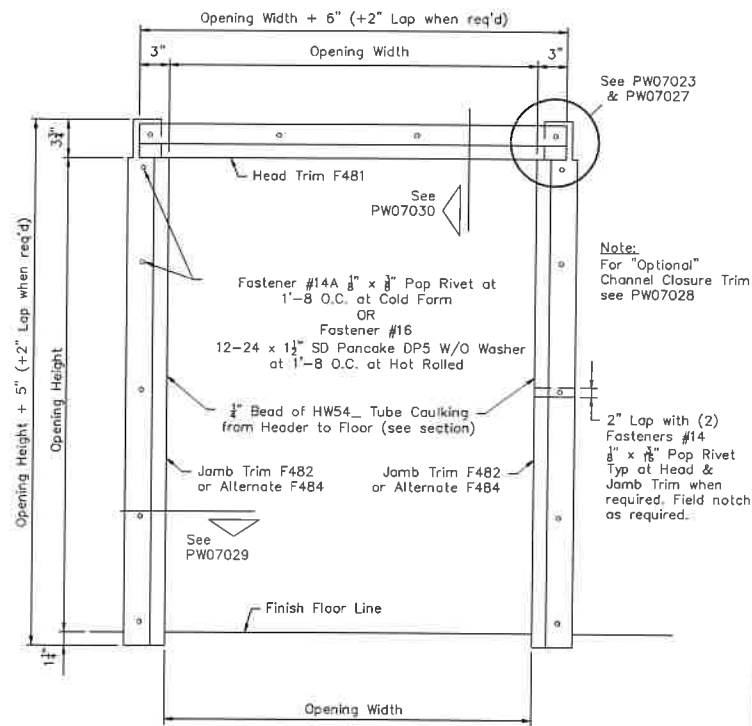
CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET5	0



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

Page: PW07022
Date: Sep '14 '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.



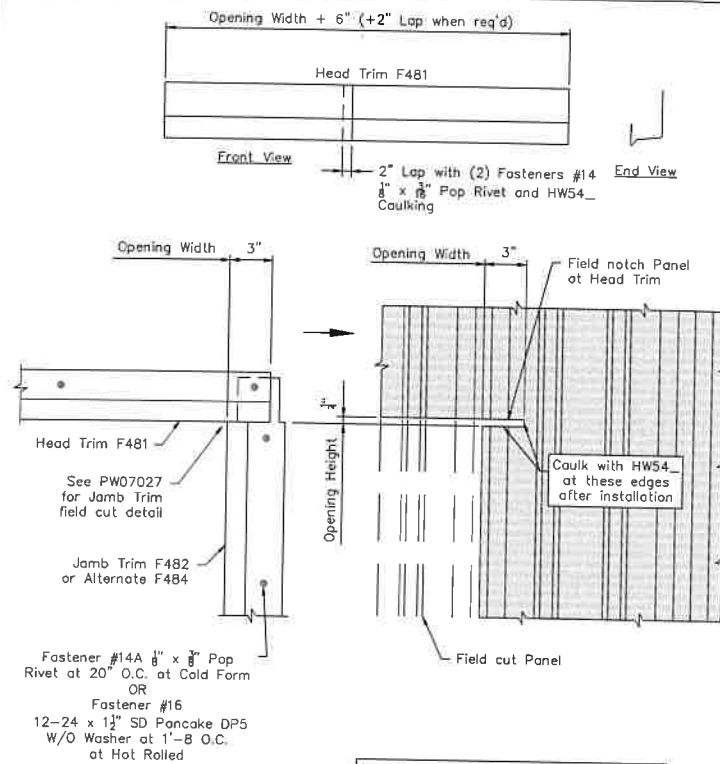
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

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

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

Page: PW07023
Date: Sep '14 '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.



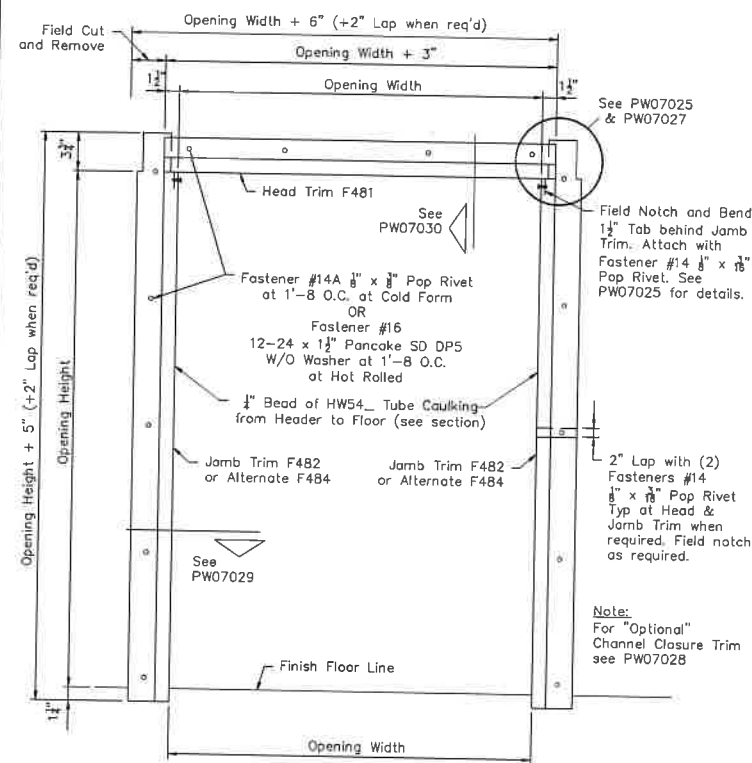
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

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

Page: PW07024
Date: Sep '14 '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.



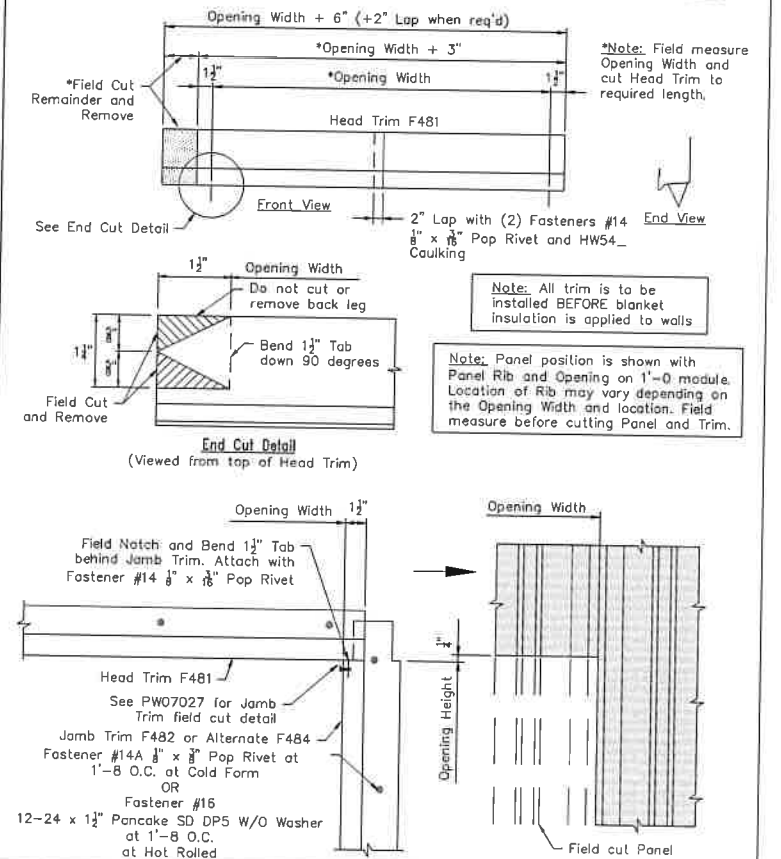
Note: All trim is to be installed BEFORE blanket insulation is applied to walls.

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

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

Page: PW07025
Date: Sep '14 '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: Field measure Opening Width and cut Head Trim to required length.

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

Note: Panel position is shown with Panel Rib and Opening on 1'-0 module. Location of Rib may vary depending on the Opening Width and location. Field measure before cutting Panel and Trim.

ISSUE	DATE	DESCRIPTION	BY	CK'D	DSN
A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
O	9/28/18	FOR ERECTOR INSTALLATION	GRK	AVS	GVR

TORO STEEL BUILDINGS

1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110

CUSTOMER: THE GOUR-MART LTD

OWNER: THE GOUR-MART LTD

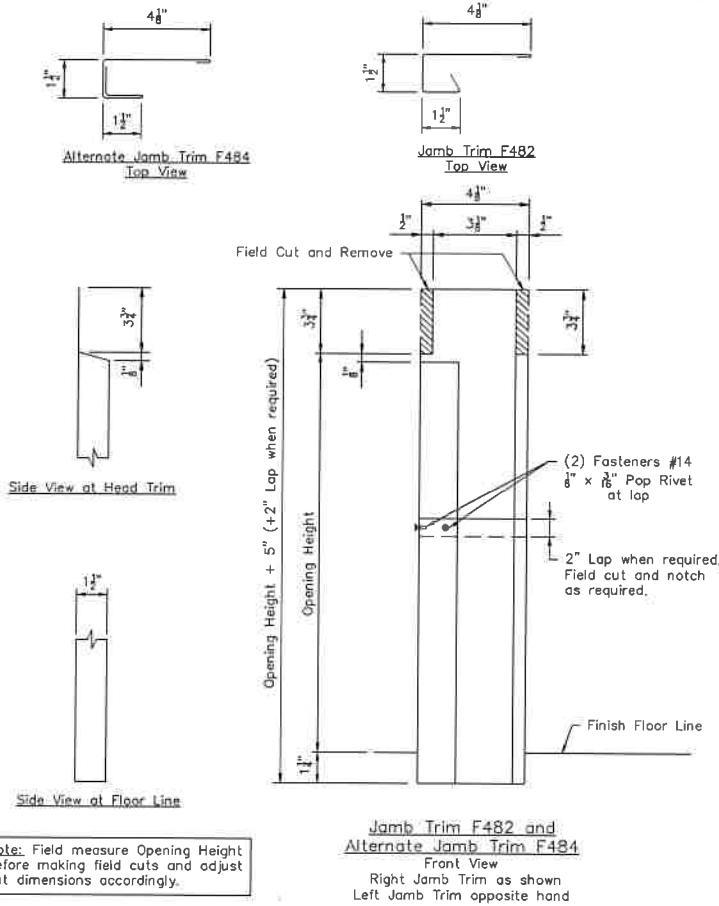
LOCATION: PENTICTON, BC V2A 8Y2 CA

CAD	DATE	SCALE	PHASE	BUILDING ID	JOB NUMBER	SHEET NUMBER	ISSUE
	9/28/18	N.T.S.	1	A	16-B-63921	DET6	0



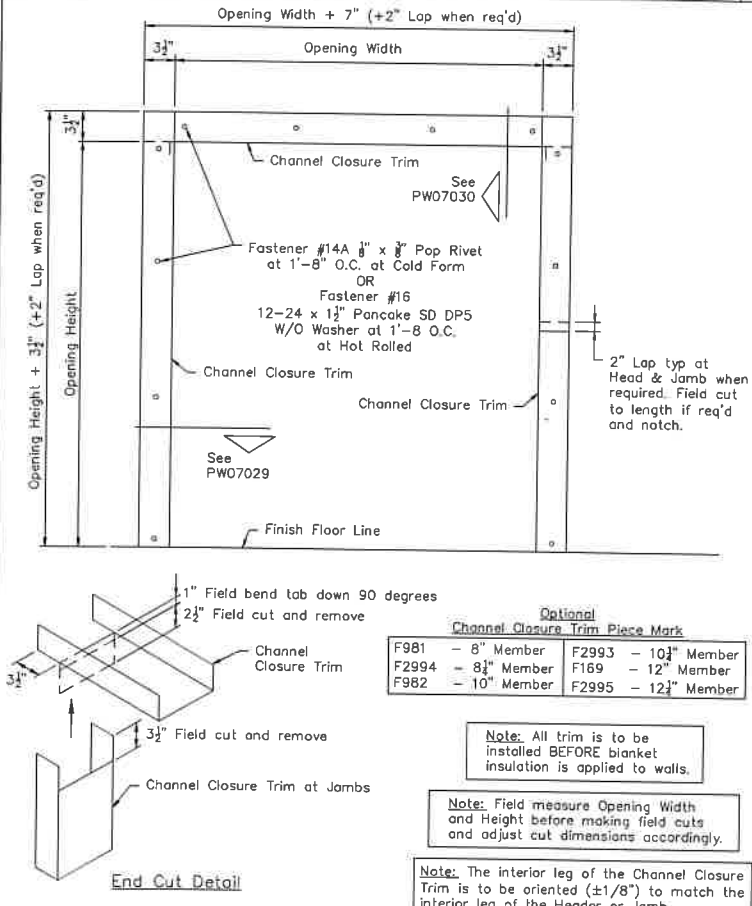
PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Field Cut Details

Page PW07027
Date Nov '17 Rev 02



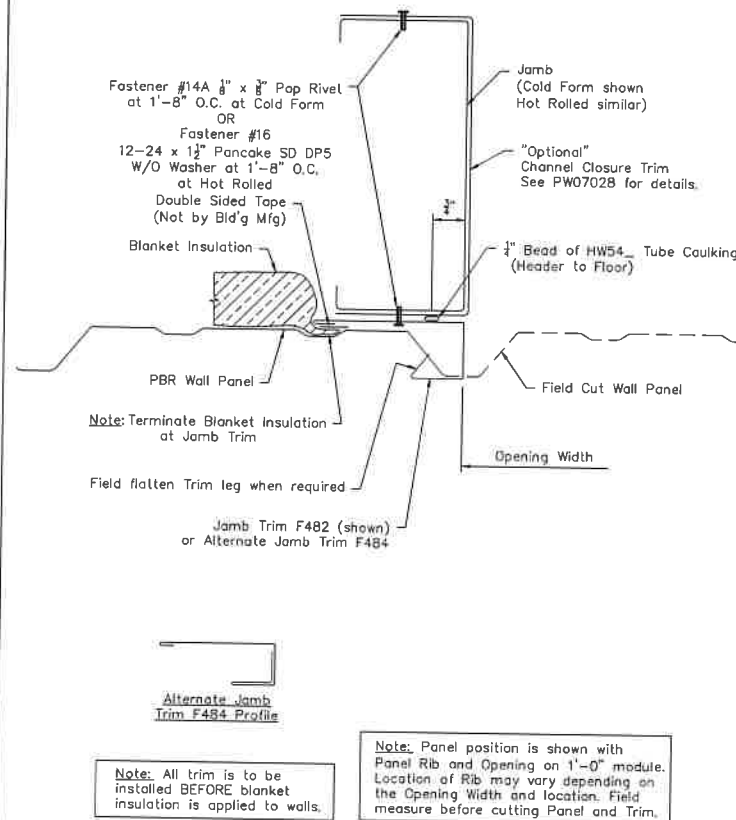
PBR Wall Panel - Three Sided Framed Opening
"Optional" Channel Closure Trim

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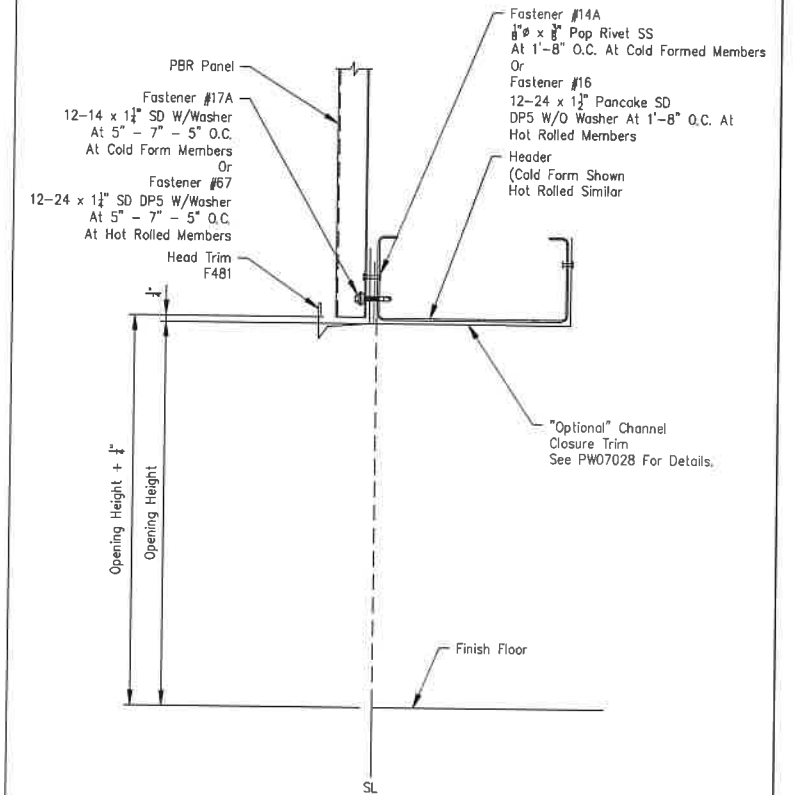
PBR Wall Panel - Three Sided Framed Opening
Jamb Trim Installation

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PBR Wall Panel - Three Sided Framed Opening
Head Trim Installation

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A	8/ 8/18	FOR CONSTRUCTION PERMIT	ASR	BAM	GVR
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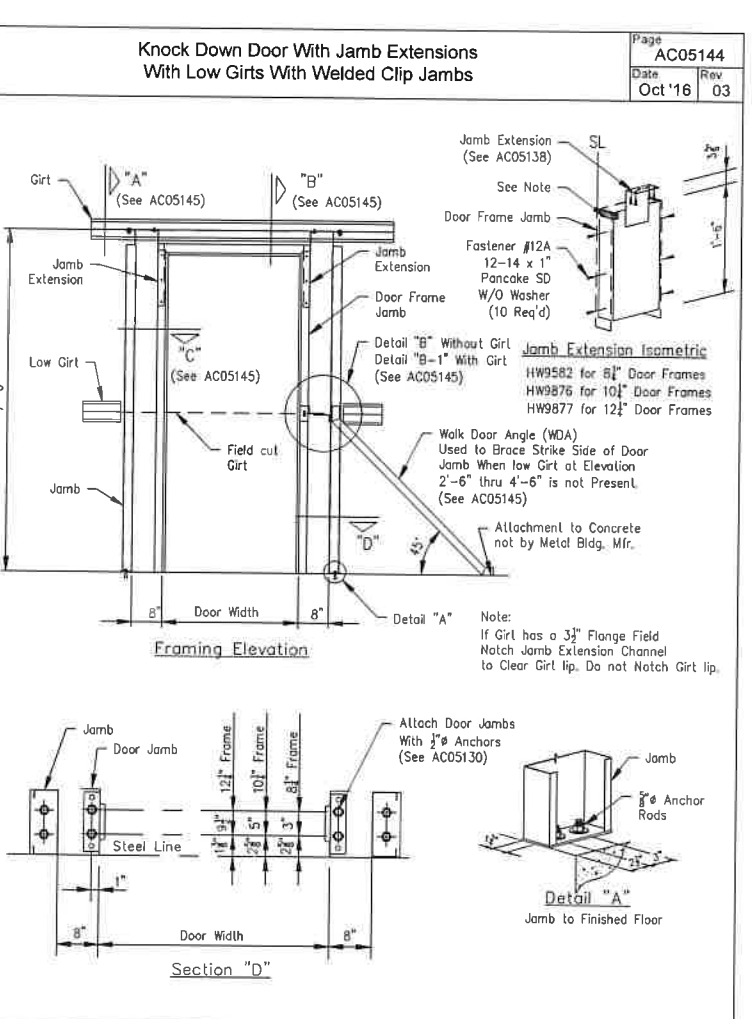
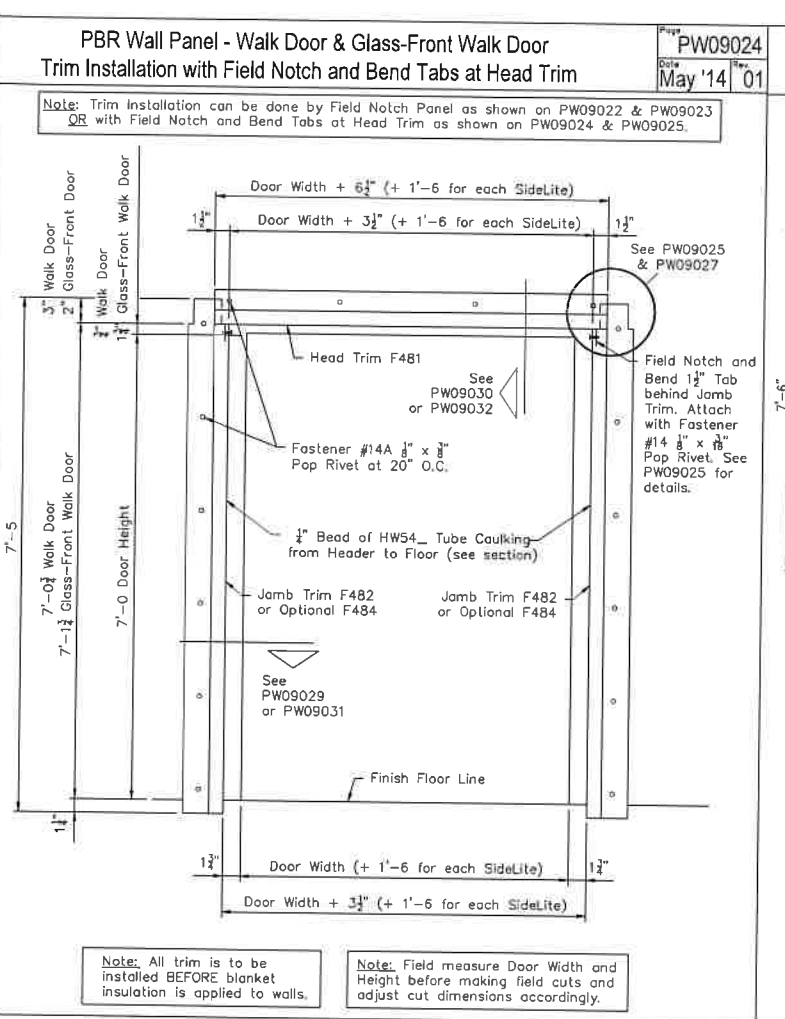
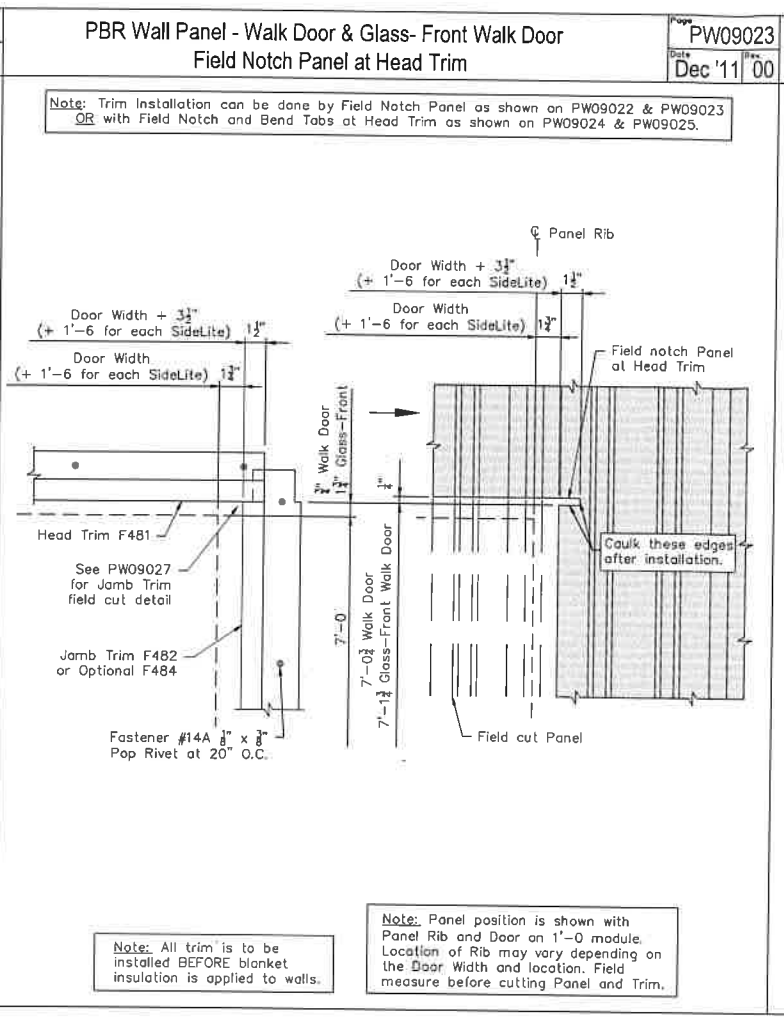
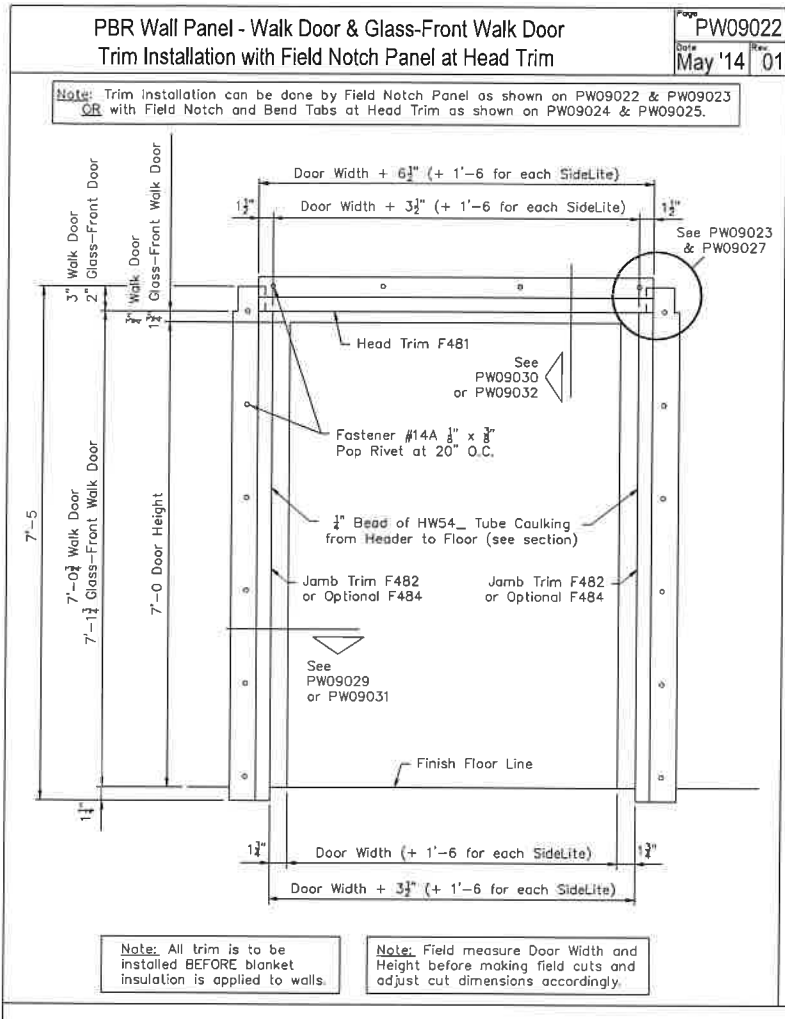
TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
LOCATION: PENTICTON, BC V2A 8Y2 CA

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	9/28/18	N.T.S.	1	A	16-B-63921	DET7	0





STANDARD WALK DOOR (KNOCK DOWN) WITH PBR WALL PANELS

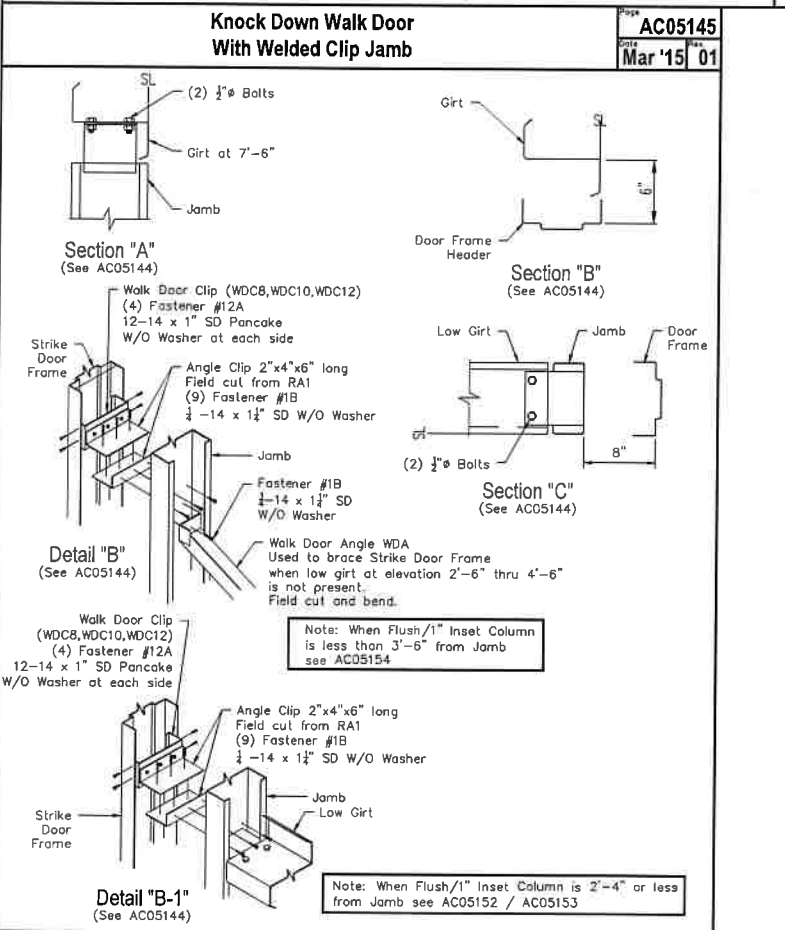
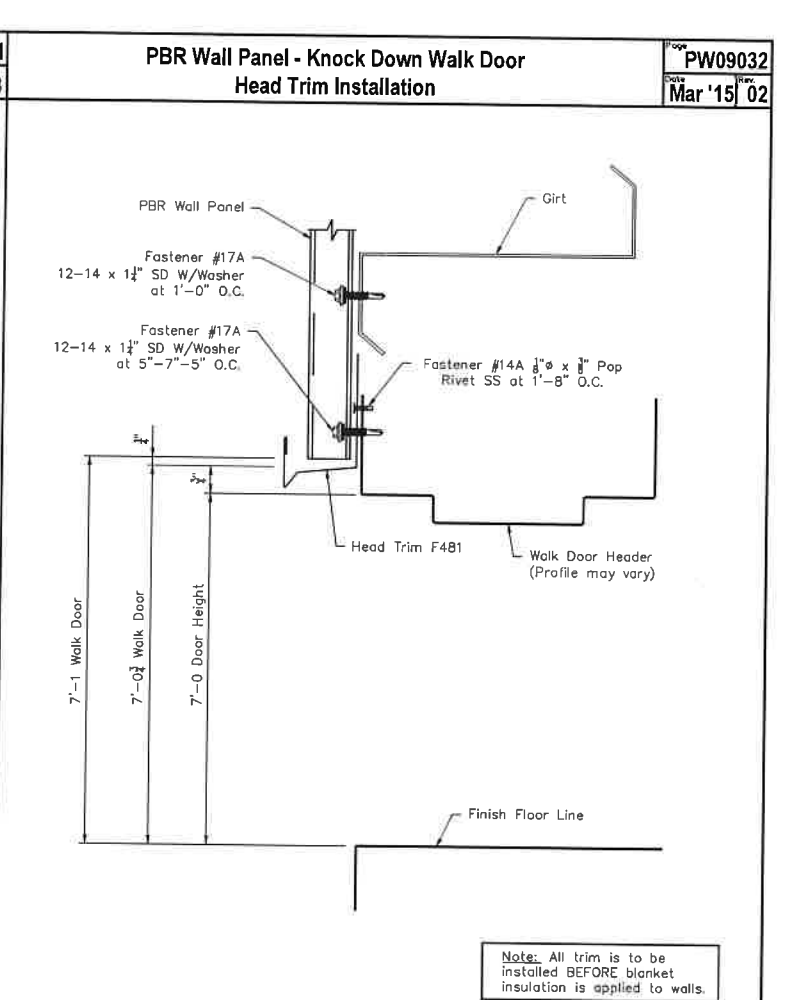
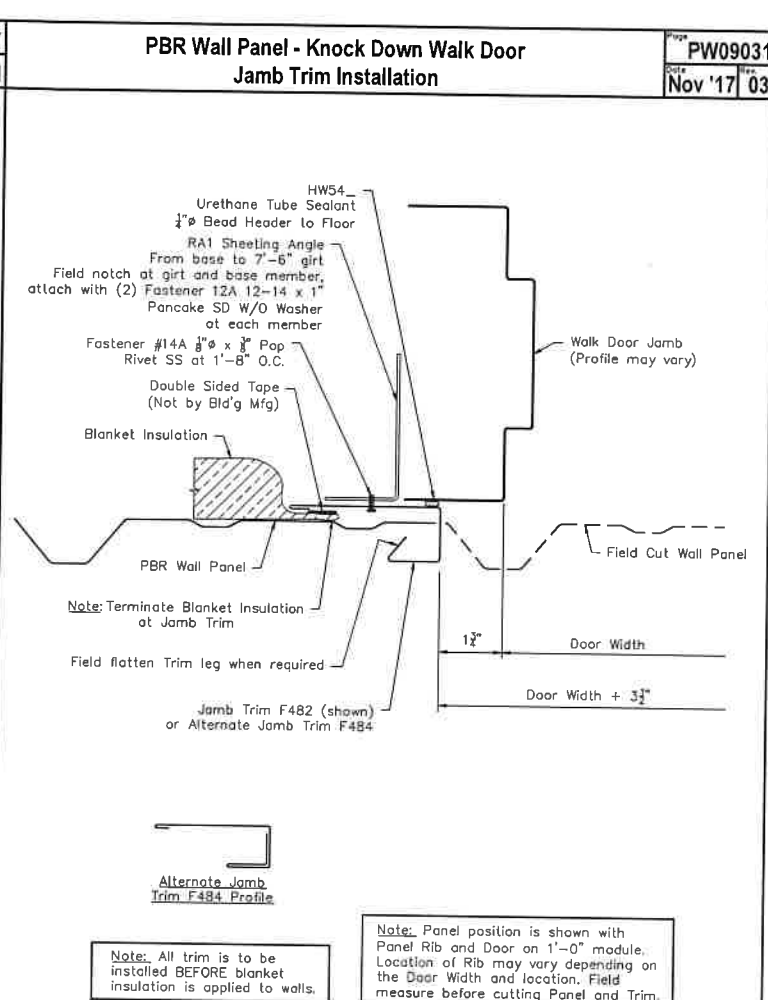
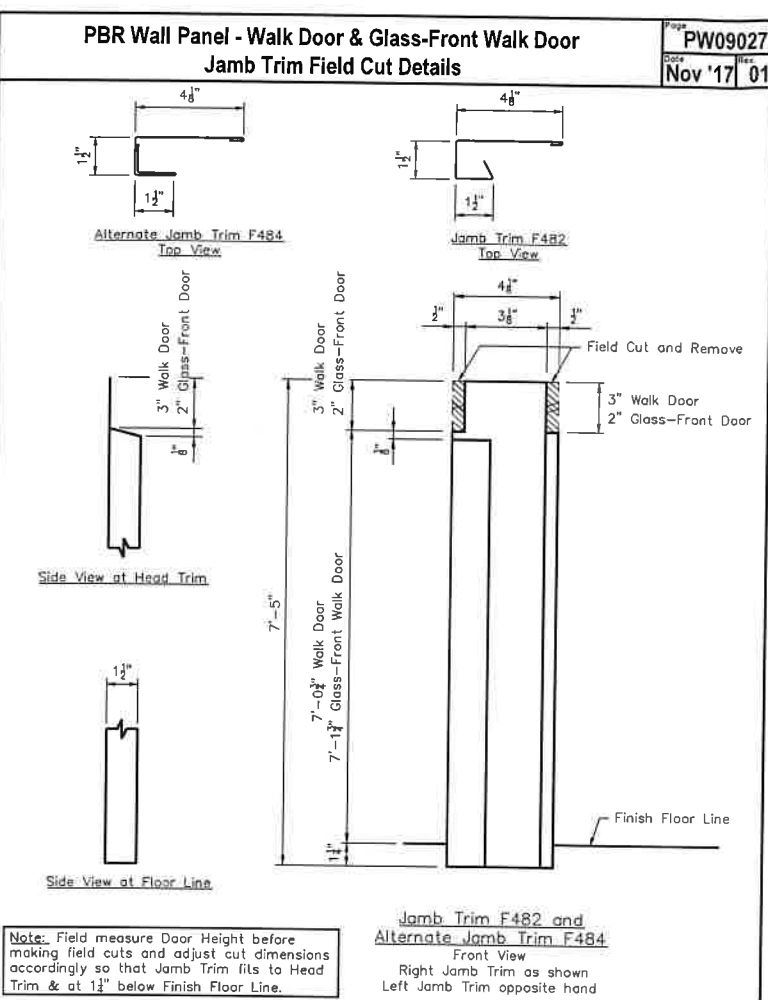
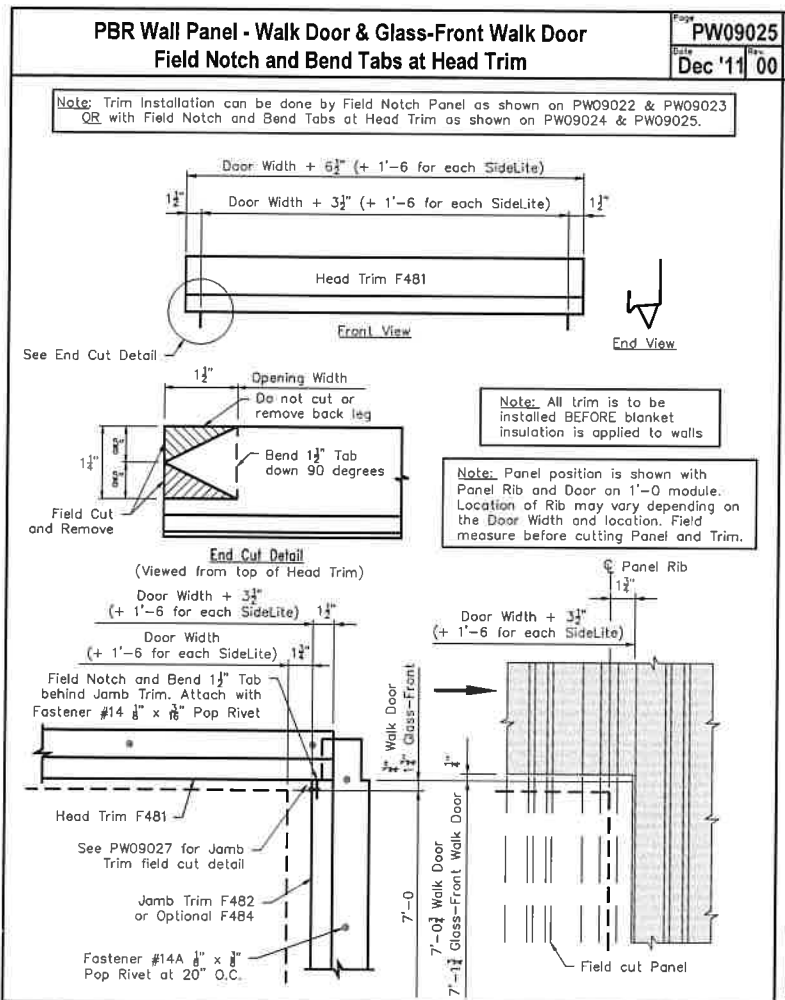
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TORO STEEL BUILDINGS
1405 DENISON STREET
MARKHAM, ON L3R 5V2 CA

PROJECT: DARRELL CAPUNE T18-0110
CUSTOMER: THE GOUR-MART LTD
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STANDARD WALK DOOR (KNOCK DOWN) WITH PBR WALL PANELS

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Field Service Procedures

In Order To Give You Prompt Services And Keep Problems To A Minimum, Please Handle Any Shortages Or Back Charges In The Following Manner:

- Carefully Check Your Packing List While Unloading.
- Mark Any Items Which Appear To Be Missing And Notify The Field Service Department At The Number Shown In The Title Block As Soon As Possible. Calling Someone Else Could Delay The Proper Response.

INITIAL CLAIM:

In The Event Of An Error, The Customer Must Promptly Make A Written Or Verbal "Initial Claim" To The Manufacturer For The Correction Of Design, Drafting, Bill Of Materials Or Fabrication Error.

The "Initial Claim" Includes:

- Description Of The Nature And Extent Of The Errors, Including Quantities.
- Description Of The Nature And Extent Of Proposed Corrective Work, Including Estimated Man-Hours.
- Materials To Be Purchased From Other Than The Manufacturer, Including Estimated Quantities and Cost.
- Maximum Total Cost Of Proposed Corrective Work And Materials To Be Purchased From Other Than The Manufacturer.

SHORT MATERIALS:

Immediately Upon Delivery Of Materials, Quantities Are To Be Verified By The Customer Against Quantities That Are Billed On The Shipping Documents. Neither The Manufacturer Nor The Carrier Is Responsible For Material Shortages Against The Quantities Billed On The Shipping Documents If Such Shortages Are Not Noted On The Shipping Documents When The Material Is Delivered And Acknowledged By The Carrier's Agent. If The Carrier Is The Manufacturer, Claims For Shortages Are To Be Made By The Customer To The Common Carrier. If The Material Quantities Received Are Correct According To The Quantities Billed On The Shipping Documents, But Are Less Than The Quantities Ordered Or The Quantities That Are Necessary To Complete The Metal Building According To The Order Documents, Claim Is To Be Made To The Manufacturer.

DAMAGED OR DEFECTIVE MATERIAL:

Damaged Or Defective Material, Regardless Of The Degree Of Damage, Must Be Noted On The Shipping Documents By The Customer And Acknowledged By The Carrier's Agent. The Manufacturer Is Not Responsible For Material Damaged In Unloading Of Packages Or Nested Materials, Including, But Not Limited To: Fasteners, Sheet Metal, "C" And "Z" Sections And Covering Panels That Become Wet And/Or Damaged By Water While In The Possession Of Others. Packaged Or Nested Material That Becomes Wet In Transit Must Be Unpacked, Unstacked And Dried By The Customer. If The Carrier Is The Manufacturer, The Customer Must Make Claim For Damaged Directly To The Manufacturer. If The Carrier Is A Common Carrier, The Customer Must Make The Claim For Damage To The Common Carrier. The Manufacturer Is Not Liable For Any Claim whatsoever Including, But Not Limited To Labor Charges Of Consequential Damages Resulting From Customer's Use Of Damaged Or Defective Materials That Can Be Detected By Visual Inspection.

EXCESSIVE MATERIAL:

The Manufacturer Reserves The Right To Recover Any Material Delivered In Excess Of Those Required By The Order Documents.

OIL CANNING IS NOT A CAUSE FOR REJECTION

Authorization For Corrective Work

Normal Erection Operations Include The Correction Of Minor Misfits By Amounts Of Reaming, Chipping, Welding Or Cutting And The Drawing Of Elements Into Line Through The Use Of Drip Pins. Errors That Cannot Be Corrected By The Foregoing Means Or Which Require Major Changes In The Member Configuration Should Be Reported Immediately To The Owner And The Fabricator By The Erector. To Enable Whoever Is Responsible Either To Correct The Error Or Approve The Most Efficient And Economical Method Of Correction To Be Used By Others. (AISC 303-10, Section 7.14). If The Error Is The Fault Of The Manufacturer An "Authorization For Corrective Work" Must Be Issued In Writing By The Manufacturer To Authorize The Corrective Work At A Cost Not To Exceed The Maximum Total Cost Set Forth. Alternative Corrective Work Other Than That Proposed In The "Initial Claim" May Be Directed By The Manufacturer In The "Authorization Of Corrective Work". Only The Field Service Department May Authorize Corrective Work.

FINAL CLAIM:

The "Final Claim" In Writing Must Be Forwarded By The Customer To The Manufacturer Within (10) Days Of The Completion Of The Corrective Work Authorized By The Manufacturer.

THE "FINAL CLAIM" MUST INCLUDE:

- Actual Number Of Man-Hours By Dated Of Direct Labor Use On Corrective Work And Actual Hourly Rate Of Pay.
- Taxes And Insurance On Total Actual Direct Labor.
- Other Direct Costs On Actual Direct Labor.
- Cost Of Materials (Not Minor Supplies) Authorized By The Manufacturer To Be Purchased From Other Than The Manufacturer, Including Copies Of Paid Invoices.
- Total Actual Direct Cost Of Corrective Work (Sum Of 1, 2, 3, And 4). The "Final Claims Are Credited To The Customer By The Manufacturer In The Amount Not To Exceed The Lesser Of The Maximum Total Cost Set Forth In The "Authorization For Corrective Work" Or The Total Direct Cost Of Corrective Work.

** IMPORTANT NOTE **

Cost Of Equipment (Rental Or Depreciation), Small Tools, Supervision, Overhead And Profit Are Not Subjected To Claims.

SHIPMENT ARRIVAL TIME:

Every Effort Will Be Made To See That The Carrier Arrives At The Jobsite On The Requested Hour. Manufacturer Makes No Warranty And Accepts No Responsibility For Costs Associated With A Shipment Not Arriving At The Requested Time Unless A Separate Agreement Has Been Made In Writing For A Guaranteed Arrival Time.

Unloading, Handling And Storage

STRUCTURAL:

A Great Amount Of Time And Trouble Can Be Saved If The Building Parts Are Unloaded At The Building Site According To A Pre-Arranged Plan. Proper Location And Handling Of Components Will Eliminate Unnecessary Handling.

NOTE:

Piece Marks Are Stenciled On The Primary Structural Members At The Lower End, 1'-0" From The End. Inspect All Shipments Prior To Releasing The Tie-downs For Loads That May Have Shifted During Transit.

REMEMBER SAFETY FIRST:

Blocking Under Columns And Rafters Protect The Splice Plates And The Slab From Damage During The Unloading Process. It Also Facilitates The Placing Of Slinga And Cables Around Members For Later Lifting And Allows Members To Be Bolted Together Into Sub-assemblies While On The Ground. Extra Care Should Always Be Exercised In The Unloading Operation To Prevent Injuries From Handling Steel And To Prevent Damage To Materials And The Concrete Slab. If Water Is Allowed To Remain For Extended Periods In Bundles Of Primed Parts, Such As Girts, Purlins, Etc., The Pigment Will Fade And The Paint Will Gradually Soften Reducing Its Bond To The Steel. Therefore, Upon Receipt Of A Job, All Bundles Of Primed Parts Should Be Stored At An Angle To Allow Any Trapped Water To Drain Away And Permit Air Circulation For Drying. Puddles Of Water Should Not Be Allowed To Collect And Remain On Columns Or Rafters For Some Reason.

The Coat Of Shop Primer Is Intended To Protect The Steel Framing Only For A Short Period Of Exposure To Ordinary Atmospheric Conditions. The Coat Of Shop Primer Does Not Provide The Uniformity Of Appearance, Or The Durability And Corrosion Resistance Of A Field Applied Finish Coat Of Paint Over Shop Primer.

Roof And Wall Panels

Manufacturer's Roof And Wall Panels Include Color Coated, Galvalume, And Galvanized, Provide Excellent Service Under Widely Varied Conditions. All Unloading And Erection Personnel Should Fully Understand That These Panels Are Quality Merchandise, Which Merits Cautious Care And Handling.

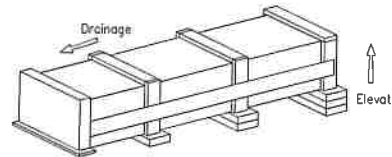
UNDER NO CIRCUMSTANCES SHOULD PANELS BE HANDLED ROUGHLY

Packages Of Sheets Should Be Lifted Off The Truck With Extreme Care Taken To Ensure That No Damage Occurs To Ends Of The Sheets Or To Side Ribs. The Packages Should Be Stored Off The Ground Sufficiently High To Allow Air Circulation Underneath The Packages. This Avoids Ground Moisture And Deters People From Walking On The Packages. One End Of The Package Should Be Elevated To Encourage Drainage In Case Of Rain. The Manufacturer Exercises Caution During Fabrication An Shipping Operations To Ensure That All Panel Stock Is Kept Dry. However Due To Climatic Conditions, Water Formed By Condensation Of Humid Air Become Trapped Between Sheets. Water Can Also Be Trapped Between The Stacked Sheets When Exposed To Rain. This May Discoloration Caused By Trapped Moisture. The Stain Is Usually Superficial And Has Little Effect On The Appearance Or Service Life Of The Panels As Long As It Not Permitted To Remain On The Panel. However, Moisture In Contact With The Surface Of The Panel Over An Extended Period Can Severely Attack The Finish And Reduce The Effective Service Life. See R1-07 Titled "Damage From Condensation Or Trapped Water".

CAUTION:

Care Should Always Be Taken When Walking On Panels. Use Safety Lines And Net When Necessary. Panels Are Slippery. Wipe Dry Any Moisture Or Surface Material That Has Puddled From Bundles Stored On A Slope. Dew, Frost, Or Other Forms Of Moisture Greatly Increase The Slipperiness Of The Panels. Always Assume Panel Surface Is Slippery And Act Accordingly. Never Walk Off Step On Skylights Or Translucent Panels.

Use Wood Blocking To Elevate And Slope The Panels In A Manner That Allows Moisture To Drain. Wood Blocking Placed Between Bundles Will Provide Additional Air Circulation. When Handling Or Unracking The Panels, Lift Rather Than Slide Them Apart. Buried Edges May Scratch The Coated Surfaces When Sheets Are Slid Over One Another. Never Allow Panels To Be Walked On While On The Ground.



Roof And Wall Panel Damage During Construction

The Quality Of Workmanship In Steel Construction Practices And Handling Methods Used During The Construction Of The Metal Building Can Significantly Affect The Appearance And Performance Of The Building Panels. Panel Damage During Construction Can Be The Result Of Faulty Installation Methods And/or Carelessness.

Overdriven Fasteners Cause Indentations Or Shallow Pockets In The Panel Around The Fastener Head. Rain Water Or Condensation Moisture Combined With Atmospheric Pollutants (primarily Sulfur Dioxide) And Dirt Particles Collect In These Pockets. The Combination Of Pollutants And Water Creates Acid Solutions That Will Cause Corrosion Damage To The Panel And Fastener. Rain May Wash Some Pollutants Away, But Moisture In Form Of High Humidity Can Keep These Areas Wet And Continue The Problem. Overdriving The Fastener Also Forces The Sealing Washer From Under The Head Creating A Leak At This Point. Proper Torque Adjustment Of The Screw Gun Or Preferably The Use Of A Depth Gauge Will Eliminate The Problem Of Overdriven Fasteners.

It Is Extremely Important That All Drill Shavings From The Installation Of Panel Fasteners And Fillings From The Saw Cutting Of Panels Be Removed From The Panel Surface. Corrosion Can Occur In A Matter Of Hours When These Shavings Or Fillings Are Not Removed And Are In Contact With Water Or Condensed Moisture. When Panels Are Pre-Drilled Or Cut In The Stack Prior To Erection All Shavings Must Be Cleaned From Both Sides Of The Panel To Prevent Corrosion Of The Panel By These Particles. It Is Imperative That The Roof Be Swept Clean At Least Daily And Certainly At Job Completion. The Final Cleaning Of The Roof Should Be Done Prior To Installing The Gutter So That The Shavings Are Not Deposited Into The Gutter And Left To Corrode. Any Other Foreign Objects Or Debris Left By Construction Personnel Should Also Be Removed From The Roof During The Erection Of The Roof And The Installation Of Such Equipment As Air Condition Units, Etc.

Personnel Walking On The Panel Can Cause Damage. Workmen Should Step Or Walk In The Broad Flat Areas Of The Panel And Avoid Stepping On The Panel Ends And Edges Which Can Be Bent By Careless Handling. If This Damage Is Severe, The Edges Must Be Straightened Prior To Erection Since The Appearance And/or Weather Tightness Of The Panel Could Be Affected. Dragging One Panel Across Another Can Cut Or Abrade The Coating Causing Unsightly Marks On The Panel Surface.

Attempts To Erect Panels During Windy Conditions Should Be Avoided To Prevent Damage And Of Safety Considerations.

Leaving Dirt Piled Against The Exterior Wall Panels At The Foundation Will Cause Panel Damage. This Dirt May Be Wet Or At Least Contain Some Moisture. Mud May Have Splashed Onto The Wall During Construction. Corrosion Damage May Occur Where This Dirt Or Mud Contacts The Panel. In Areas Where Lime Stabilization Of The Soil Is Required, Corrosion Damage From The Soil's Content Will Be Accelerated And Most Likely Be Severe. All Dirt Must Be Removed From The Panel Walls At The Time Of Completion Of Work. Pre-Primed Panels May Require Touch-up If The Coating Has Been Damaged During Handling Or Erection.

The Appearance Of The Building May Be Affected If Damaged Spots Or Scratches Are Located In Highly Visible Places Such As Around Doors, Windows, Etc.. If Damage Is Extensive Then Replacement Of The Entire Panel Should Be Considered.

Types Of Finishes

SHOP PRIMED STEEL:

All Structural Members Of The Metal Building System Not Fabricated Of Corrosion Resistant Material Or Protected By A Corrosion Resistant Coating Are Painted With One Coat Of Shop Primer Meeting The Performance Requirements Of SSPC Paint Specification No.15. The Coat Of Shop Primer Is Intended To Protect The Steel Framing For Only A Short Period Of Exposure To Ordinary Atmospheric Conditions. Shop Primed Steel Which Is Stored In The Field Pending Erection Should Be Kept Free Of The Ground And So Positioned As To Minimize Water Holding Pockets, Dust, Mud And Other Contamination Of The Primer Film. Repairs Of Damaged To Primed Surfaces And/Or Removal Of Foreign Material Due To Improper Field Storage Or Site Conditions Are Not The Responsibility Of The Manufacturer. The Manufacturer Is Not Responsible For Deterioration Of The Shop Coat Of Primer Or Corrosion That May Result From Exposure To Atmospheric And Environmental Conditions, Nor The Compatibility Of The Primer To Any Field Applied Coating. Minor Abrasions To The Shop Coat (Including Galvanizing) Caused By Handling, Loading, Shipping, Unloading And Erection After Painting Or Galvanizing Are Unavoidable. (MBMA 2012, Chapter IV 4.2.4).

GALVALUME:

Galvalume Is The Trade Name For A Patented Steel Sheet And Coil Product Having A Coating Of Corrosion Resistant Aluminum-Zinc Alloy. The Mixture Is Balanced To Obtain The Coating That Retains The Corrosion Resistance And Heat Reflectivity Of Aluminum And Galvanic Protection Of Zinc. The Best Properties Of Both Aluminum And Zinc Are Combined In This Coating And Offer Added Service Life For The Building.

Pre-Primed:

Using Galvalume Steel As A Substrate, Pre-Primed Steel Is Given An Additional Rust Inhibitor Primer Coat. This Primer Coat Further Increases The Corrosion Resistance. These Coatings Are Applied To The Exterior Surface Of The Panels And A Wash Coat Designed Only For Interior Use, Is Applied On The Opposite Side. Galvalume And Pre-Primed Steel Can Give Excellent Service For Many Years If A Few Rules Concerning Their Care And Maintenance Are Observed. All Of These Finishes Are Equally Subject To Damage And Corrosion When Care Is Not Provided.

PAINT AND COATING MAINTENANCE:

Remove Smudge Marks From Bare Galvalume:

Formula #09 Has Proven To Be Somewhat Effective. Lightly Rub With A Clean Cloth And Rinse With Water. Do Not Rub More Than Required To Remove Smudge Marks. No Product Will Remove All Smudge Marks.

Remove Rust Stains:

Soft Scrub Without Bleach Has Proven To Be Somewhat Effective. Rub With A Soft Cloth And Rinse With Water. Do Not Rub More Than Required To Remove Stain. No Product Will Completely Remove Rust Stains.

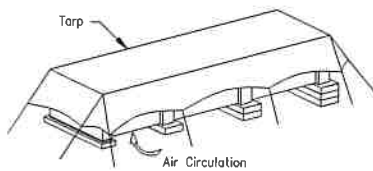
To Touch-Up Scratches In Paint (Not Bare Metal):

Clean Area To Be Painted With Mild Detergent. Rinse Thoroughly And Dry. Using A Small Artist's Brush, Lightly Apply A Minimal Amount Of Color Matched Touch-Up Paint Required To Fill/Cover The Scratch. Contact The Building Manufacturer For Assistance With Ordering/Purchasing Touch-Up Paint As Needed.

Damage From Condensation Or Trapped Water

It Is Extremely Important That The Panels Be Monitored For Evidence Of Trapped Water Or Moisture Condensation While Awaiting Erection. High Humidity Conditions With Temperature Cycling Will Cause Condensation Between Panels Within The Bundle. Condensation Can Occur Frequently Near The Sea Coast Or Other Large Bodies Of Water.

If Jobsite Covers Are Used, They Should Be Tied Away From The Bundle At Corners To Allow Air Circulation Around The Bundle. This Will Help Prevent Moisture Evaporating From The Ground Or Building Floor From Condensing On The Panels. Plastic Or Other Impermeable Covers Are Not Recommended, immediate Action Is Required If The Panels Are Found To Be Wet From Any Cause. The Bundles Must Be Opened And Each Panel Un-Stacked And Thoroughly Dried On Both Sides. Re-Stacking The Panel At A Slight Angle To Each Other To Prevent Nesting Will Allow Air Circulation And Assist In Keeping The Panel Dry. In Severe Conditions Large Fans Can Be Used To Circulate Air Between The Un-Stacked Panels And Accelerate Drying. Damage To The Panel Coating Occurs When Panels Become Wet And Are Allowed To stay wet. damage Can Occur To Nested Panels Within 24 to 48 Hours. This Damage Shows Corrosion And Discoloration Of The Panel Surface And Is Commonly Called Wet Storage. Stain, Zinc Oxidation, Or "White Rust".



A Softening Of The Point Film Can Occur With Pre-Primed Steel Under Wet Storage Conditions And The Durability Of The Panel Finish Substantially Decrease. Bare Galvanized And Galvalume Panels React More Quickly To Surface Oxidation Since They Lack The Additional Protection Of Paint. Zinc Coated Or Galvalume Panels Under Normal Exposure Form A Zinc Aluminum Oxide Film On Their Surface Allowing A Slow Oxidation Process Called "Weathering" To Occur That Inhibits Further Corrosion. In Nested Bundles Constant Contact Of The Panels With Condensed Or Trapped Water Prevents This Weathering Process.

Rapid Oxidation Of The Zinc Or Zinc Aluminum Coating Can Now Occur And May Lead To "Red Rust" In A Short Time. In Contact With Roof Panels, Especially Galvalume Household Cleaner Of The Type Used On Porcelain Sinks And Bathtubs May Be Used To Remove Stains. Wire Brushing Or Abrasive Materials Should Be Avoided Since Scratching Or Removal Of The Coating Could Occur. Panel With Significant Damage Should Be Replaced By The Buyer Prior To Erection.

Safety Commitment

The Builder/Contractor Is Responsible For Applying And Observing All Pertinent Safety Rules And OSHA Standards As Applicable.

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.

It Is Strongly Recommended That Safe Working Conditions And Accident Prevention Practices Be The Top Priority Of Any Job Site.

Local, State And Federal Safety And Health Standards, Whether Standard Statutory Or Customary, Should Always Be Followed To Help Ensure Worker Safety.

Make Sure All Employees Know The Safest And Most Productive Way Of Erecting A Building. Emergency Procedures Should Be Known To All Employees. 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.

For The Purposes Of Determining Lift Requirements, No Bundle Supplied By The Manufacturer Will Exceed 4,000 Pounds. For Further Information Also reference The Bill Of Materials For Individual Member Weights Of Structural Members. If Additional Information Is Required Contact The Field Service Department.

ICE AND SNOW REMOVAL:

Excessive Ice And Snow Removal Should Be Removed From The Roof Immediately To Prevent Damage To Roof And Possible Collapse. Do Not Use Metal Tools To Remove The Ice Or Snow As This Can Damage The Paint And/Or Galvalume Coatings. Also Be Careful Around Pipes And Flashings. Be Extremely Careful If Your Roof Has Light Transmitting Panels. These Panels Will Not Support A Person's Weight And Will Be Difficult Or Impossible To See If They Are Covered With Ice Or Snow. See MBMA Low-Rise Building Systems Manual, Appendix A8 For Details On Snow Removal Procedures. These Procedures Should Commence When Half Of The Design Roof Snow Load Is Realized.

DEBRIS REMOVAL:

Any Foreign Debris Such As Sawdust, Dirt, Leaves, Animal Droppings, Etc. Will Cause Corrosion Of The Roof, Gutters, Trim, Etc. If Left On The Building Surface For A Long Enough Time. The Roof Should Be Periodically Inspected For Such Conditions And If Found, They Should Be Rectified In A Manner Consistent With These Roof Maintenance Guidelines. Never Allow Treated Lumber Or Concrete/Mortar/Grout To Come In Contact With Roof Panels, Especially Galvalume For Extended Periods Of Time.

PERIODIC INSPECTION:

All High-Strength Shall Be Periodically Be Inspected For Tightness. Particularly In Crane Buildings And After Seismic Or Wind Activity. The Crane Manufacturer Will Specify A Minimum Period But It Should Not Exceed Two Years.

DRAINAGE:

- Keep Roof Free Of Debris And Keep Debris Out Of Gutter To Allow Water Quickly Drain From The Roof.
- Do Not Use Wood Blocking To Hold Equipment Off The Panel Seams. This Blocks The Flow Of Water And Hold Moisture.
- Do Not Allow Rooftop AC Units Or Evaporative Coolers To Drain Onto The Roof.
- Anything That Traps Or Holds Moisture On A Roof Will Cause Premature Corrosion.

Roof Maintenance Guidelines

- Inspect Roof For Damage After Heavy Storms.

- Inspect And Reseal As Necessary All Roof Curbs And Other Penetrations With Urethane Sealant.

- Always Get Manufacturer Approval Before Making Any Modifications To The Roof.

- Repaint Any Areas That Are Susceptible To Rust As Required.

- When Performing Roof Maintenance, Always Take The Following Precautions:
 - Use Fall Protection And Other Safety Protection As Required.
 - Do Not Walk On Roof Flashing Such As Gutter, Rake, Hip Or Ridge Flash.
 - Do Not Walk On Light Transmitting Panels (LTP's). They Will Not Support A Person's Weight.
 - Guard All LTP's And Roof Openings.
 - Step Only In The Panel Flat Directly On Or In Close Proximity To A Supporting Roof Structural.

- After Other Trades Have Been On The Roof For Any Reason, Inspect The Roof For Damage Caused By Workers Including Chemical Or Solvent Spills, Scratches In The Paint Or Galvalume Coating, Excessive Foot Traffic And Punctures. Make Sure That All Debris Or Scrap Left Behind By Workers Is Removed From The Roof Immediately. Avoid Using Cutoff Saws And Welding Equipment Over The Roof. The Roof Must Adequately Protected.

FOOT TRAFFIC:

Keep Foot Traffic To A Minimum. Heavy Foot Traffic Can Cause Ponding On Low Pitched Roofs. This Is Particularly True Just Up Slope From The Eave And At Endlaps.

Always Walk In The Flat Of The Panel Near A Supporting Roof Structural. Do Not Walk On Trim Or In Gutters. On Bare Galvalume Roofs, Excessive Foot Traffic May Cause Black Burnish Marks. If Regular Foot Traffic Is Planned For A Roof, Provisions Should Be Made For A Properly Designed And Installed Walkway System. In Order To Limit Access To The Roof, Roof Hatches Or Access Ladders Should Be Locked At All Times. A Sign Posted At The Access Site Stating That Only Authorized Personnel Are Allowed On The Roof. In Addition A Log Book Should Be Kept Of All Visits To The Roof And The Reason For Such Visits.

DISSIMILAR METALS:

Never Allow Your Roof To Come In Contact With, Or Water Runoff From Any Dissimilar Metal Including But Not Limited To: Copper, Lead Or Graphite. This Includes Copper And Arsenic Salts Used In Treated Lumber, Calcium Used In Concrete, Mortar And Grout.

Never Step On Light Transmitting Panels (LTP's) Or Unattended Roof Panels



Panels May Collapse If Not Properly Secured

Roof Panels Must Be Completely Attached To The Purlins And To Panels On Either Side Before They Can Be A Safe Walking Surface. Light Transmitting Panels (LTP's) Translucent Panels Can Never Be Considered As A Walking Surface.

Partially Attached Or Unattached Panels Should Never Be Walked Ont!

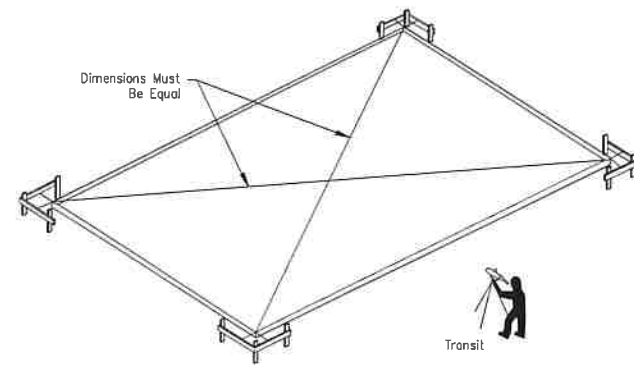
Do not:

- Step On Rib At Edge Of Panel.
- Step Near Crease In Rib At Edge Of Panel.
- Step Within 5 Feet Of Edge On Unsecured Panel.

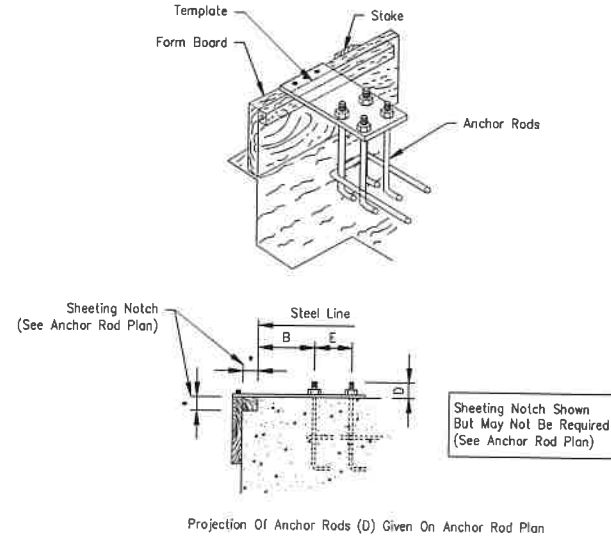
A Single Roof Panel Must Never Be Used As A Work Platform. An OSHA Approved Runway Should Be Used For Work Platforms. (Consult OSHA Safety And Health Regulations For The Construction Industry). Safety First!

Building Anchorage

1. To Determine That The Foundation Is Square, Measure Diagonal Dimensions To Be Sure They Are Of Equal Length.
2. 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.
3. 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 Start-up.



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 A Template Or Similar Means, So That They Will Remain Plumb And In Correct Location During The Placement Of The Concrete. A 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 Costly Installation Labor And Equipment Arrives.

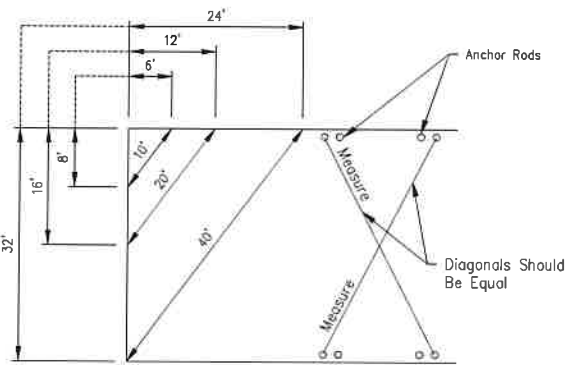


Pre-Erection Notes:

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

- 1.) 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 Bolts For Square.

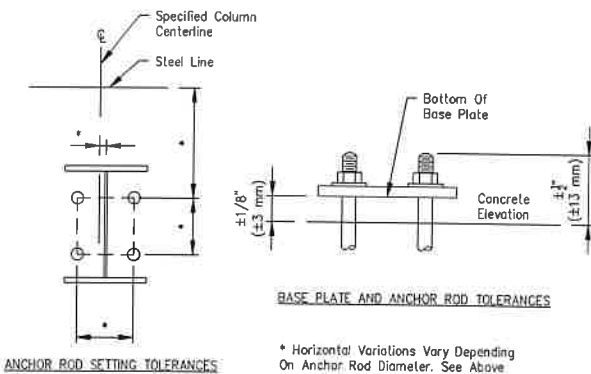


Measure Along Adjacent Sides Of Foundation Using A Pair Of Dimensions Shown. If The Diagonal Distance Between These Points Is As Noted, The Corner Is Square. Diagonal Measurements Between Opposite Anchor Rods Will Indicate If These Bolts Are Set Square.

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

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

3/4" and 1" (19 And 22 mm)	1/8" (6 mm)
1", 1 1/4", 1 1/2" (25, 31, 38 mm)	3/16" (10 mm)
1 3/4", 2", 2 1/2" (44, 50, 63 mm)	1/4" (13 mm)



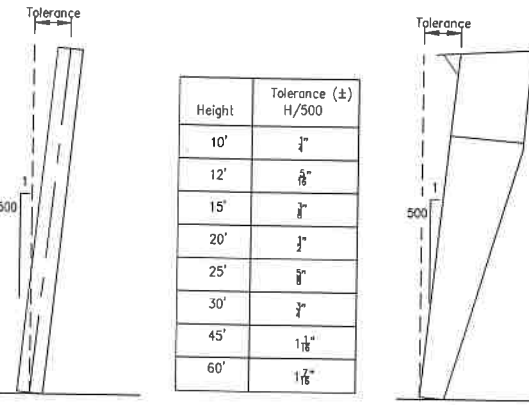
* Horizontal Variations Vary Depending On Anchor Rod Diameter. See Above

Erection Tolerances

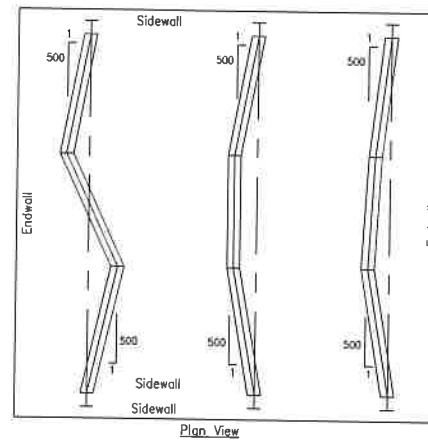
ERECTOR BRACING

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

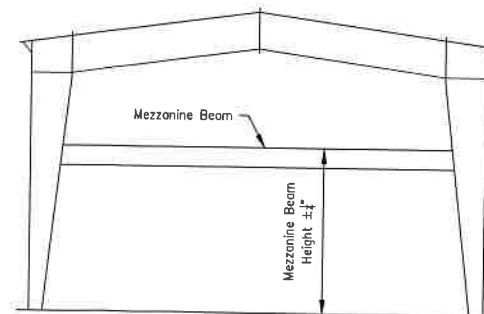
COLUMN ALIGNMENT TOLERANCES



ALIGNMENT TOLERANCE FOR MEMBERS WITH FIELD SPLICES



MEZZANINE BEAM HEIGHT TOLERANCE



General Erection Notes

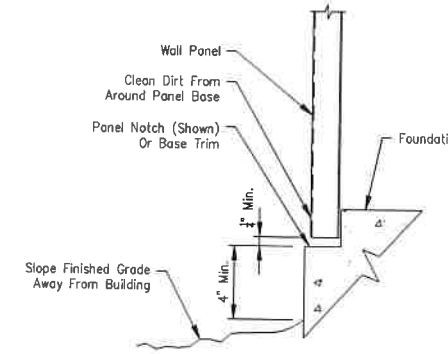
1.) All Structural Framing Members, Purlins, Girts, Clips, Flange Braces, Bolts, Bracing Systems, Roof And Wall Panels, Etc. Must Be Installed As Shown On Erection Drawings.

2.) It Is Extremely Important, Especially During Construction, That Panels At The Eaves, Rakes 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:

- 1.) 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 Halted.
- 2.) Top Of Finish Grade At Building To Be A Minimum Of Four (4) Inches Below Bottom Of Panel.
- 3.) Finish Grade Is To Slope Away From Building To Ensure Proper Drainage.
- 4.) 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.

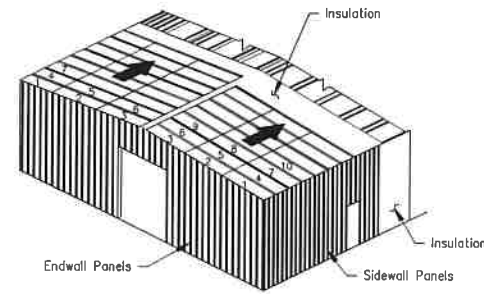
Important Note

All Details, Recommendations And Suggestions Contained In This Erection Guide Of This Drawings Set Are For General Guidelines Only, And Not Meant To Be All-Inclusive. Industry Accepted Installation Practices With Regard To All Areas Not Specifically Discussed In This Section Should Be Followed. Only Experienced, Knowledgeable Installers Familiar 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. Opinions 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 Ribs Can Be Kept In Proper Alignment For The Ridge Panel. This Is Critical On The PBR Panels So That The Ridge Caps 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 Rake Trim, The Starting Location For The First Panel Must Be As Shown In The Rake Details Included With The Erection Drawings. When The First Run Is Properly Located And Aligned With The Correct Endlaps And Eave Overhangs, Fasten To Purlins. 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 Rake Trim. Refer To Rake 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, Drill shavings, Etc., Must Be Removed From The Roof To Guard Against Corrosion.

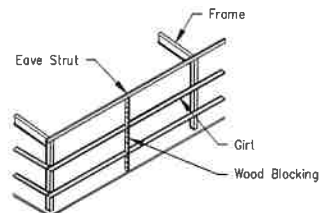
Wall Panels

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.

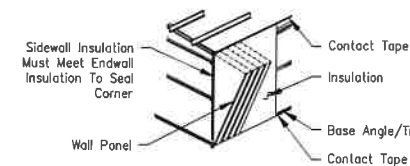
Before Installing Wall Panels, The Girts Must Be Aligned To A Level Position So That There Is No Visible Sag. This Should Be Done Directly Ahead Of Panel Installation.

Girt Leveling May Be Accomplished By Standing A Section Of Gable Angle Vertically Against The Outside Girt Flanges At Approximate Mid-bay Location. When Girts Are Level, Attach The Girt Flanges To The Angle With Vise Grip 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.



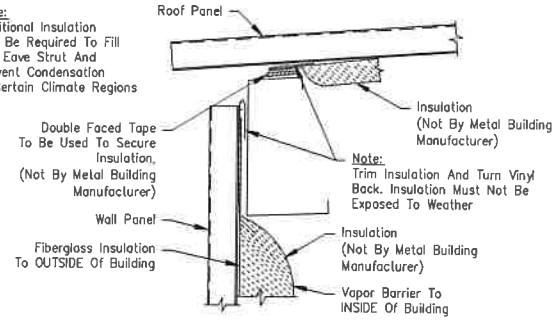
Note: Wall Panel Type And Installation Details Will Vary. Refer To The Erection Drawings And Details For The Specific Panel Used For Your Building.



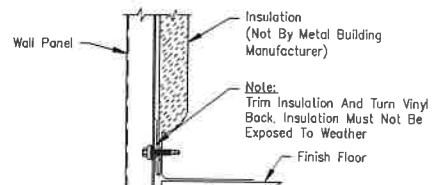
If Walls Are To Be Insulated With Blanket Insulation Over Girt Girt Flanges, Base And Eave, Place A Continuous Run Of Contact Tape Along The Eave Strut And Base Member.

Note: At The Base, Cut Off The Insulation A Minimum Of 1/4" Above The Bottom Of The Wall Panel. This Will Prevent The Insulation From Hanging Below The Wall Panel And Wicking Moisture.

Note: Additional Insulation May Be Required To Fill The Eave Strut And Prevent Condensation In Certain Climate Regions



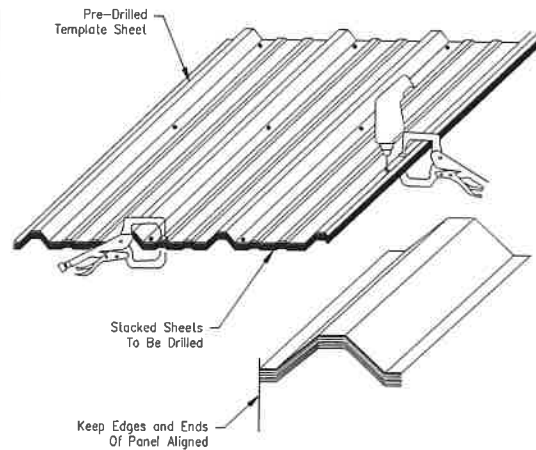
Eave Detail
(See Erection Drawings)



Base Detail
(See Erection Drawings)

Sidewall 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.)

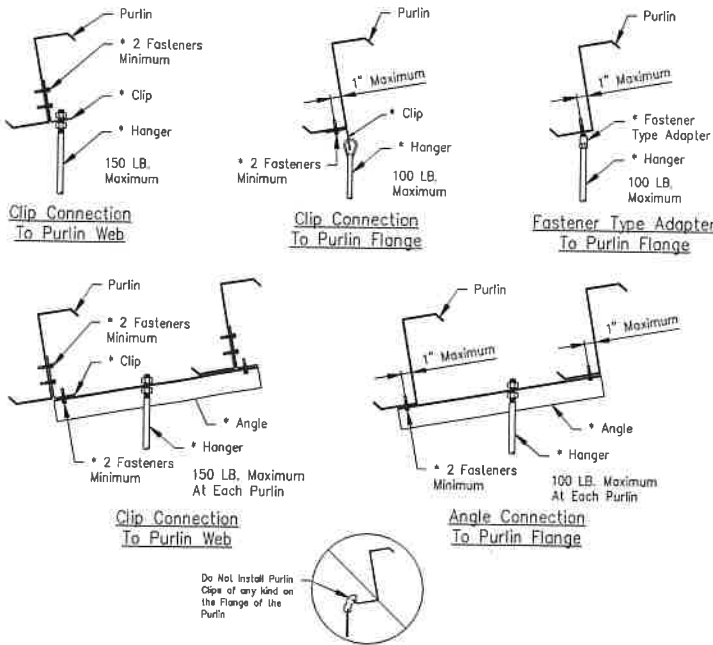
Note: Check Periodically To Ensure That All Panels Are Aligned And Plumb.



Screw Alignment Panel
(Through Fastened Panel Only)

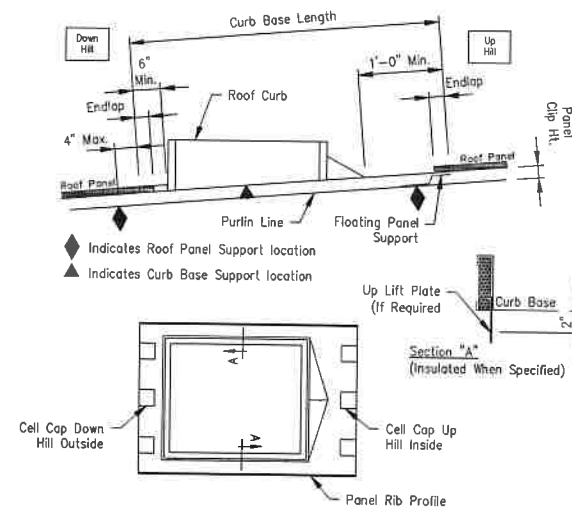
Note: After Drilling Panels, It Is Important To Clean Metal Filings Off All Panel Surfaces, Including Between Panels That Are Not Installed That Day, To Avoid Rust Stains.

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.
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, Ceilings, Etc.) Will Correspondingly Reduce The Design Live Load.

Roof Curbs When Not Supplied By Building Manufacturer

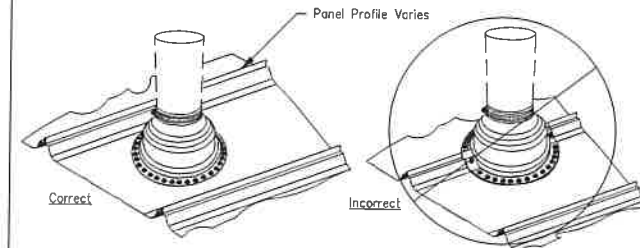


The Curb Details Shown Illustrate The Building Manufacturers Recommended Curb Style And Installation Method. It Is The Erector/Installer's Responsibility To Provide The Proper Curb Style And Install Them In Accordance With The Procedures Established By These Details. Failure By The Erector/Installer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

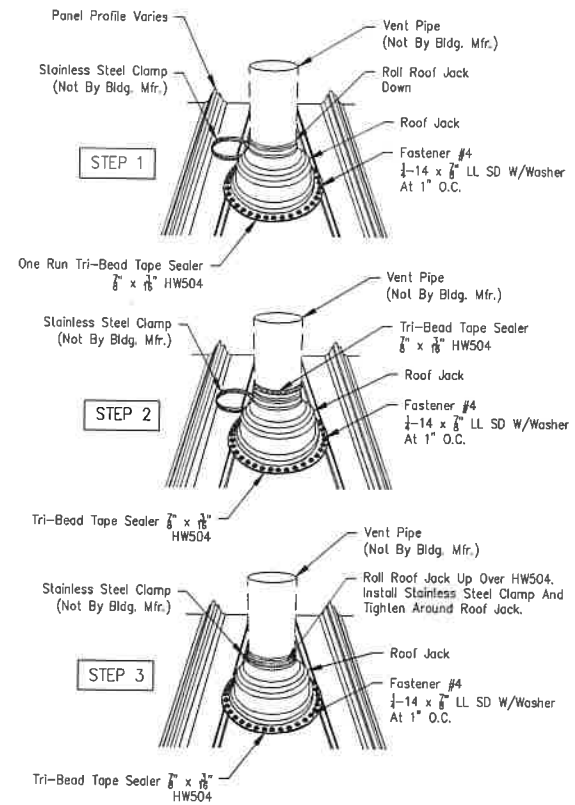
- All Roof Curbs To Be:
- .080 Aluminum Or 18 Ga. Stainless Steel (No Galvalume® Or Galvanized).
 - Panel Rib To Panel Rib (No Flat Skirt Or Lay-Over Curbs).
 - Installed With Down Hill End Over Panel And Up Hill End Under Panel Application For Water Flow At Panel Splice.
 - Up Lift Prevention For Clip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

Roof Jack Installation when Not Supplied By Building Manufacturer

- General Installation Notes**
- 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.
 - Use EPDM Rubber Roof Jacks With An Integral Aluminum Band Bonded Into The Perimeter Of The Base. EPDM Roof Jacks Have A Temperature Range From -65F To 212F. Use Silicone Roof Jacks For High Temperatures. Silicone Roof Jacks Have A Temperature Range Of -100F To 437F.
 - 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.
 - 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 1/4" x 3/8" LL SD W/Washer At 1" O.C. Around The Base Of The Roof Jack. See Table Below For Quantities.
 - 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.
 - 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.
 - In Northern Climates, The Pipe Penetration Should Be Protected From Moving Ice Or Snow With A Snow Retention System Immediately Up Slope From The Pipe.

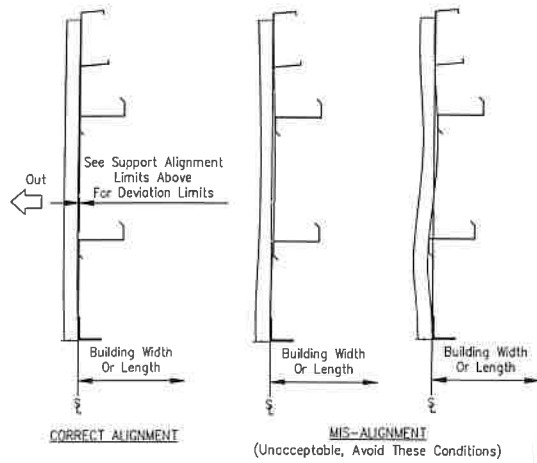


Install Pipe In Center To Allow Base Of Roof Jack To Lay Flat on Panel. Cannot Encompass More Than 75% Of Panel.



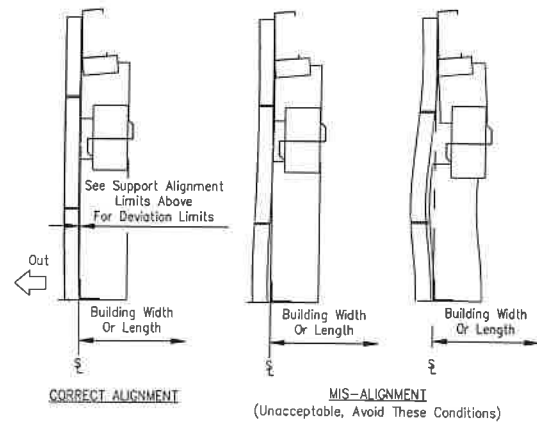
Secondary Steel Alignment For All Vertical IMP Project

Support 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"



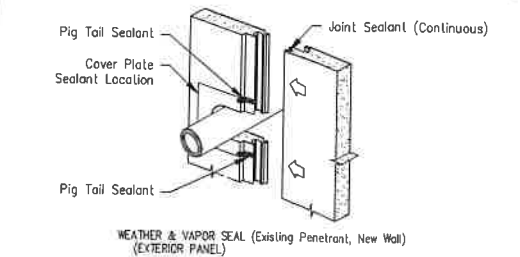
Secondary Steel Alignment For All Horizontal IMP Project

Support 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"



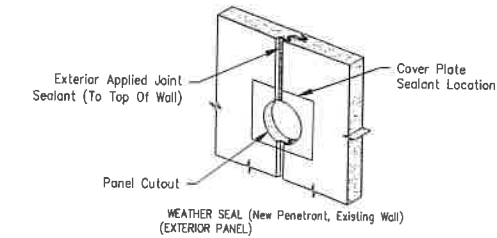
Penetration Flashing Through IMP Walls

Weather Seal - If The Penetration Is Through An Exterior Wall With Vertical Wall Panel Joints, It Is Best To Avoid Locating The Penetration Where It Will Intersect A Wall Panel Joint And Be Subject To Water Draining From The Panel Joint Into The Penetration Cavity.



Existing Penetrant - New Wall - If A New Wall Is Installed Around An Existing Penetrant, Sealant Must Be Applied To The Exterior Tongue & Groove Of The Wall Panel Joint To Prevent Water Entering The Panel Joint.

New Penetrant - Existing Wall - If The Penetrant Is Installed Through An Existing Wall, Either The Existing Wall Must Have Been Installed With The Exterior Joint Sealant Or An Exterior Grade Sealant Must Now Be Applied Along The Exterior Fillet Of The Panel Joint For The Full Height Of The Wall.



Penetration Flashing Through IMP Walls (Con't)

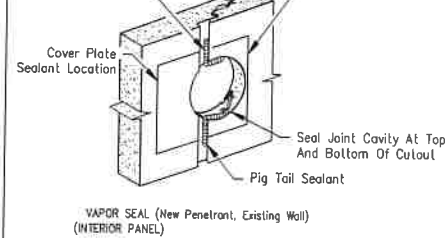
Vapor Seals - Depending Upon The Buildings Vapor Control Requirements, Either The Exterior Or Interior Side Of The Wall Panel Joints May Have Joint Sealant To Function As The Vapor Barrier.

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.

New Penetrant - Existing Wall - To Prevent Water Vapor Entering The Penetration Cavity On The Vapor Barrier Side Of The Wall, Pigtail Sealants Must Be Applied On The Panel Joint To Interface With The Perimeter Sealant Of The Penetration Cover Plates.

Apply The Pigtail Sealant To The Seal Of The Tongue-And-Groove Joint Cavities At The Top And Bottom Edges Of The Panel Cut Out.

Extend The Pigtail Sealant Along The Exterior Fillet Of The Panel Joint To Interface With The Cover Plate Sealant.



Insulated Metal Panel Joint Sealants

Joint Sealant Requirements - Depending Upon The Project's Requirements, Sealants May Be Required In The Panel Joints On Either Or Both Interior And Exterior Side 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 Locations.

Field Installation Of Sealant - Apply The Panel Joint Sealant Into The Specified Interior And 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 After The Joint Is Assembled, But Not So Much That Sealant Is Extruded Onto The Panel Face.

Sealant Pigtails - It Is Critical To Ensure Continuity Of The Sealants At The Intersections Between The Panel Joints And The Perimeter Flashing Assemblies.

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

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

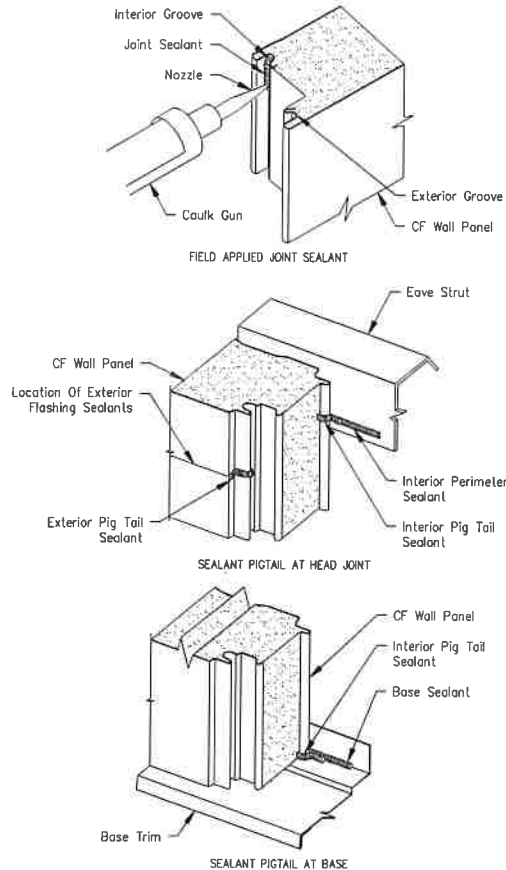
Joint Assembly - Slide The Panel Joint Together In A Smooth Motion To Help Ensure The Uniform Dispersion Of The Sealant Within The Joint Cavity.

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 Drawn Out Of The Cavity, Leaving The Joint Unsealed.

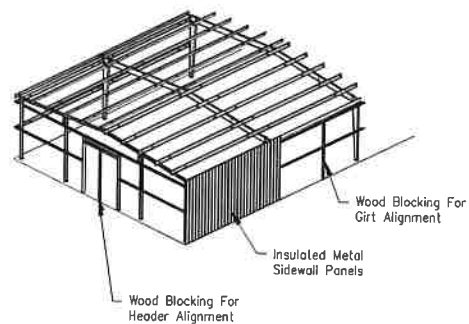
Caution: If The Joint Is Assembled And Then Disassembled The Sealant Must Be Checked And Any Displaced Sealant Must Be Replaced.

Reference "Pig Tail Sealants" For Installation Illustrations.

Pig Tail Sealants



Secondary Framing Alignment



Note: Before installing insulated metal wall panels, the Girts Must Be Aligned To A Level Position So That There Is No Visible Sag. This Also Should Be Done At The Framed Opening Until Over Head Insulated Metal Panels Have Been Installed. This Should Be Done Directly Ahead Of Panel Installation.

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

ThermalSafe And Applied Finishes

ThermalSafe Panel Notes:

ThermalSafe Panel Details Are General Use/unrated Construction Details And Do Not Offer Any Fire Resistance Continuity, Even When The Wall Assembly Itself Is Fire Resistance Rated.

Furthermore, 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 Panel's 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 Soften, Peel Or Stain. Be Certain To Store The Panel Bundles Off The Ground High Enough To Allow For Air Flow To Circulate Beneath The Bundles And Prevent Water, Mud Or Snow From Entering. One End Of The Bundles Should Be Slightly Elevated. It Is Recommended That The Plastic Wrapping Be Cut All The Way Around The Bundle Near The Base Intermittently So That Air May Flow Freely Around The Panels. Tarping Of The Panels Will Reduce The Possibility Of Rain Or Snow From Entering The Stack Of Panels. If The Panels Or The Trim Pieces Get Wet Or Moisture Is Noted Within The Packaging, Immediately Remove The Items For Separation And To Dry. Once Dry, Panels/Trim Can Be Stacked For Storage And Should Be Torped And Elevated.

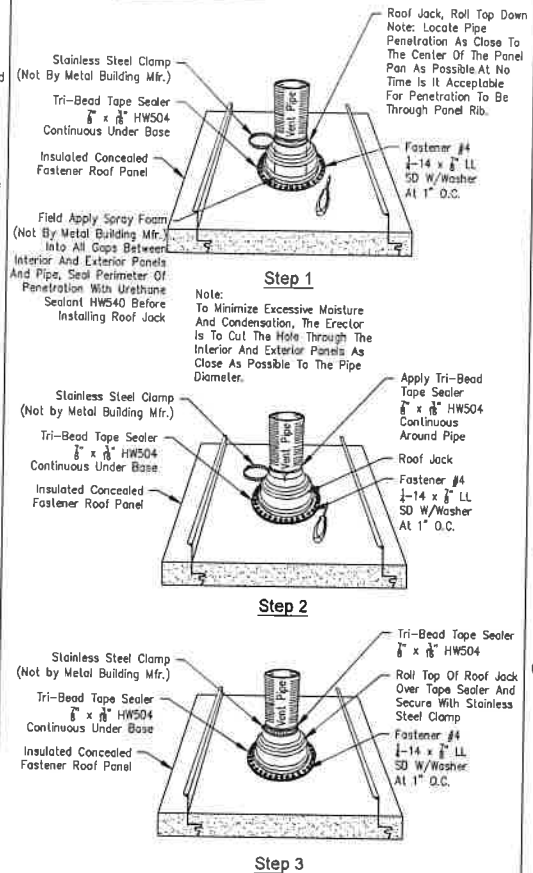
Installation:

Post Textured Products Are Batch Sensitive. Panels May Show Pattern Variations Between Phases, And Could Vary From Production Run To Production Run. Panel Elevations Should Be Identified When Materials Are Supplied. Bundles Are Labeled By Coating Day And Should Not Be Mixed During Installation. Reference Panel Bundle Label For Prod. Date 00/00/00 Located At The Bottom Of The Label.

Inspect Panels Prior To Installation. All Efforts Are Made During Manufacturing Of Panels To Ensure No Applied Coatings Becomes Adhered To The Interior Of Panel Sidelap Grooves. If Applied Coatings Is Present In The Panel Sidelap Grooves, Contact Panel Supplier For Instructions. Do Not Install Panels As The Applied Coating In The Grooves Can Interfere With Vapor Sealant Application As Well As Prevent The Panels From Fully Engaging.

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

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



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

