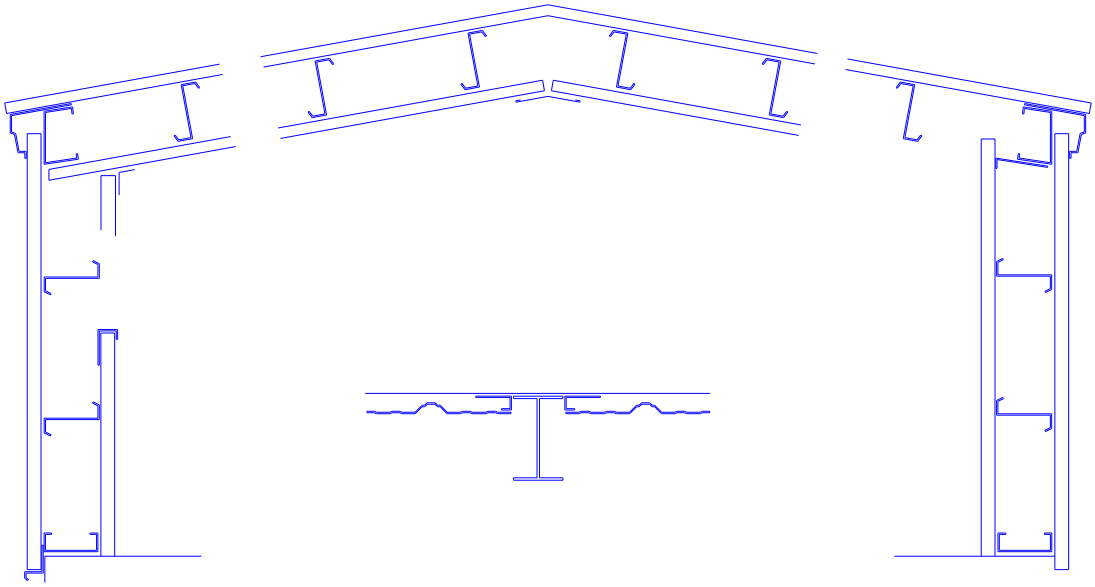
ADP-2 LINER PANEL

ERECTION GUIDE

BEHLEN
4025 E. 23rd St. • Box 569
Columbus, Nebraska 68601

IMPORTANT NOTE:
If prints are provided for this project, this book must accompany them.



NOTE: See back side of cover for latest changes to this manual.

BEHLEN MFG. CO.
COLUMBUS, NE 68601

TECHNICAL INFORMATION 55063

Rev. 10/2/17
11/05/04

NOTE: If pink sheets are included in this manual, refer to them for latest revisions.

LATEST CHANGES	BY: SR	DATE: 10/2/17
PAGE	CHANGE	
2	Revised the fastener schedule	

FRAME BUILDING LINER TABLE OF CONTENTS

9/21/05

GENERAL INFORMATION

The erection information presented herein is provided as a supplement to the erection drawings prepared for your specific job. The information, illustrations and procedures in this guide are typical for most Behlen buildings. Variations may occur because of special building requirements. Always refer to the erection drawings supplied with each job which will govern specific part and assembly arrangements and applicable illustration details.

Because Behlen products are constantly being improved, the information contained herein is subject to change without notice.

The following fastener schedule is to be used with this erection guide and will correspond to the fastener schedule in the erection drawings supplied with each job.

FASTENER SCHEDULE

Loc.	Part No.	Description
①		As Noted On Rigid-Frame Elevation
②	3228100	Screw ¼ x 3/4 FL-TP SD WW
③	3228084	Screw 12 x 1 HWH SD NW
④	3228101	Screw 12 x 1-1/4 FL-TP SD WW
⑤	3228105	Screw ¼ x 1-1/4 LG-LF SD WW
⑥	3228099	Screw 8 x ½ HWH SD NW
⑦		
⑧	3188333	Bolt ½ x 2 HVHX A325 GALV and Nut (1328191)
⑨	1328199	Bolt 5/8 x 2-1/4 HVHX A325T GALV and Nut (1328195)
⑩	1328187	Bolt ¾ x 1-1/2 HVHX A325T GALV and Nut (1328192)
⑪	1328190	Bolt ¾ x 2-1/2 HVHX A325T GALV and Nut (1328192)
⑫	3228100	Screw ¼ x 3/4 FL-TP SD WW for ADP-1 Roof
	3228103	Screw ¼ x 3/4 LG-LF SD WW for SSR
⑬	3228101	Screw 12 x 1-1/4 FL-TP SD WW for ADP-1 Roof
	3228105	Screw ¼ x 1-1/4 LG-LF SD WW for SSR
⑭	3228087	Screw 12 x 1-1/4 HWH SD #5PT NW
⑮	1328193	Bolt ½ x 1-1/2 HVHX A325T GALV and Nut (1328191)
⑯	3208170	Bolt ½ x 1 FLT RD HD A307 PLTD and Nut (2688007)
⑰	3228102	Screw 12 x 2 FL-TP SD WW

Abbreviations

HD = Head
SD = Self-Drilling
ST = Self-Tapping
SS = Stainless Steel
PT = Point
RD = Round
WW = With Washer
NW = No Washer
FLT = Flat
HVHX = Heavy Hex
GALV = Galvanized
PLTD = Plated
HWH = Hex Washer Head
FL-TP = Flat Top
LG-LF = Long Life

ERECTION INFORMATION

Liner panel sidelaps shall be stitched together with a ② fastener at 24" centers.

HANDLING LONG TRIM COMPONENTS

When removing long trims from the shipping crate and during installation, care should be taken by construction workers to avoid damage caused by buckling.

2-1-18

Fasteners For Construction

STOP . . . PLEASE READ

RECOMMENDED INSTALLATION FOR SELF-DRILLING TAPPING FASTENERS TO INSURE FASTENER PERFORMANCE.

* Apply with 1800 RPM electric screw gun.

* Drive socket size must fit appropriately to fastener head.

Socket Types:

1. **Super Star Socket** - Used for long-life non-magnetic screw heads. Can be used with carbon screw to avoid drill chips collecting on magnetic sockets.

   Inland Part No. - 1/4" (3518045) 5/16" (3518046) 3/8" (3518047)

2. **Non-magnetic** - Used by erectors on roofing applications, mainly to avoid drill chips collecting in sockets.

   Special Order - 1/4" 5/16" 3/8"

Drilling/Driving fastener must be held perpendicular to the fastening surface.

Self-Drilling fasteners should not be forced in. Allow the drill point to do the work.

- CAUTION -

Over-torquing may result in fastener separation/failure (head popping off).
Care should be exercised during installation.
Torque of 30-60 in. lbs. Based on fastener size and application.

FOR APPLICATION SUPPORT, CONTACT:
ATLAS BOLT & SCREW TECHNICAL SERVICES (800) 321-6977
Inland Buildings (800) 438-1606

*1800 RPM screw guns and sockets are available at your local tool house or from:
Dynamic Fasteners 1-800-821-5448

GENERAL INFORMATION

HANDLING LONG TRIM COMPONENTS

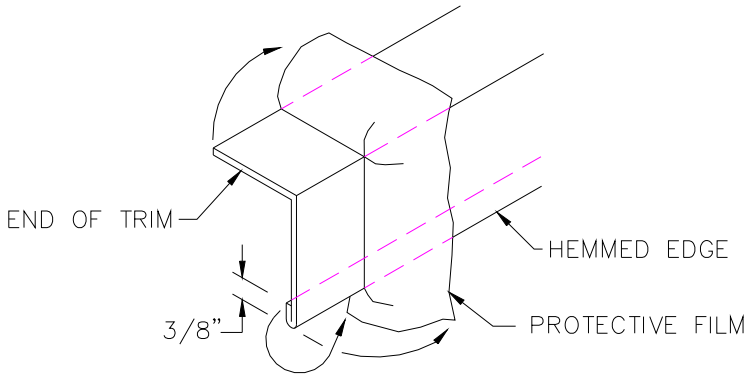
When removing long trims from the shipping crate and during installation, care should be taken by construction workers to avoid damage caused by buckling.

PROTECTIVE FILM REMOVAL

The trim components received with this building have a protective film on the colored surface that must be removed prior to installation.

Prolonged exposure (more than 3 weeks) to rain and/or sunlight will adversely effect the protective film making removal difficult.

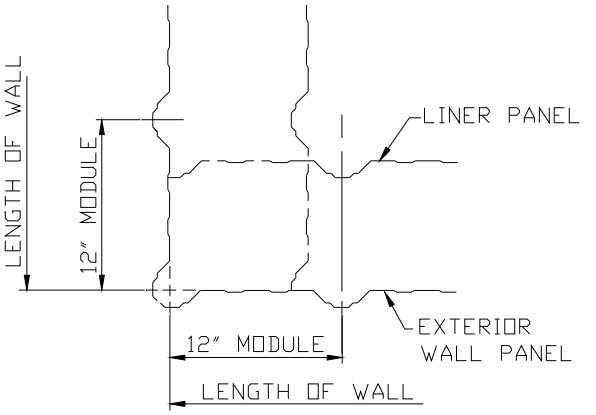
When film is being removed from trim having a hem along its edge, the film should be peeled off along the entire end. This includes the 3/8" hemmed area on the back side. Pull the entire film strip at a constant rate. Do NOT try to rip the film off as it will tend to tear at the hemmed edge and corners leaving a strip that will have to be removed separately.



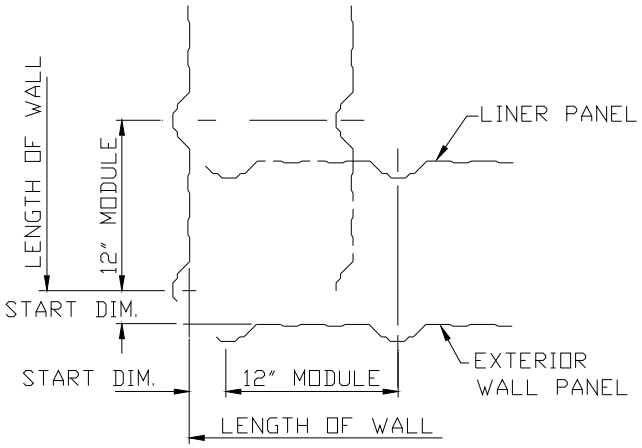
RELATIONSHIP OF LINER PANEL AND EXTERIOR PANEL RIBS

Liner panels for a complete sidewall or endwall surface have been detailed with a process similar to the exterior wall panels. The location of the liner panels is based on the length of the exterior wall surface and whether there is a "Start Dimension" at each end of the wall surface. This detailing process will keep the liner panel ribs and the exterior panel ribs in line.

During the erection process, the sidewall liner panel locations may start or stop at J-trims as desired but on the endwall surface, the liner panel length may be insufficient if moved to some other location.

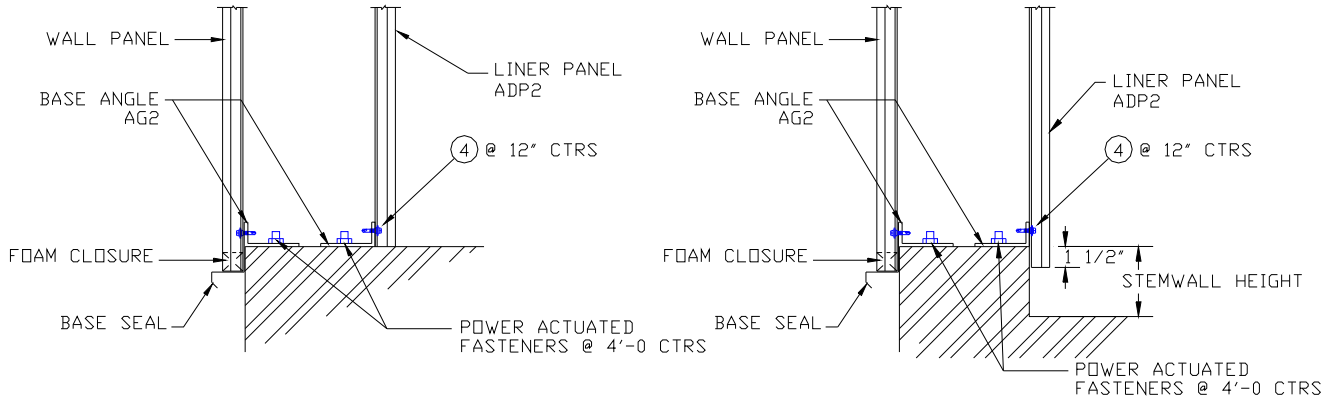


NO START DIMENSION

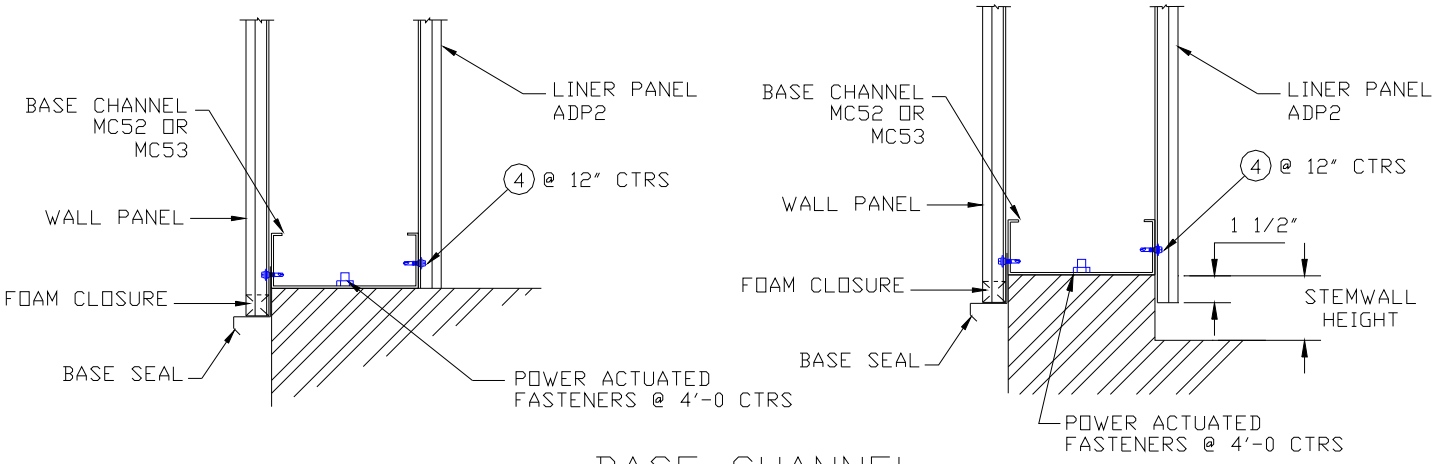


START DIMENSION

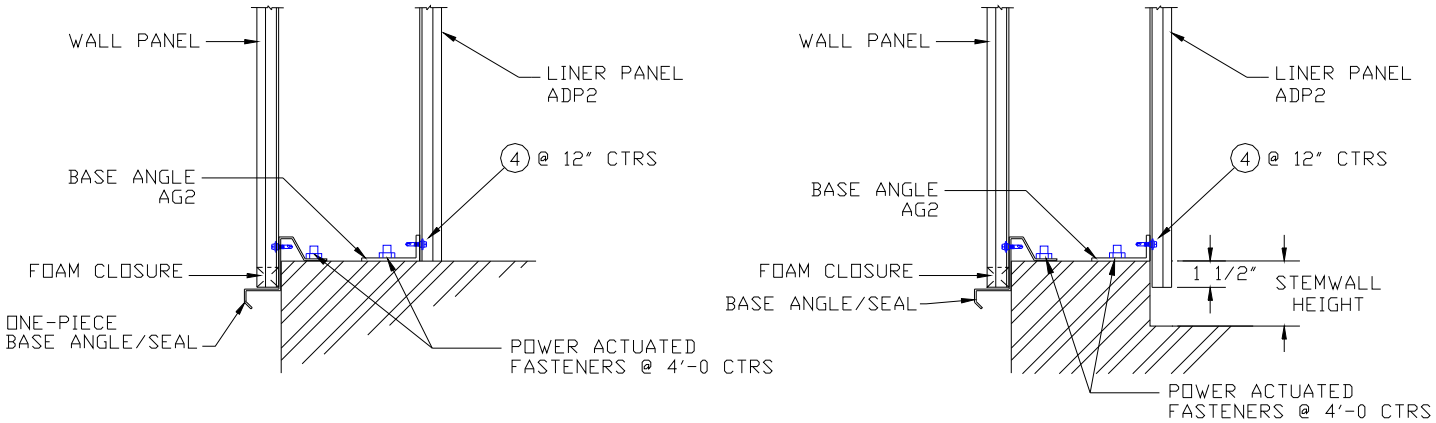
LINER AT BASE



BASE ANGLES

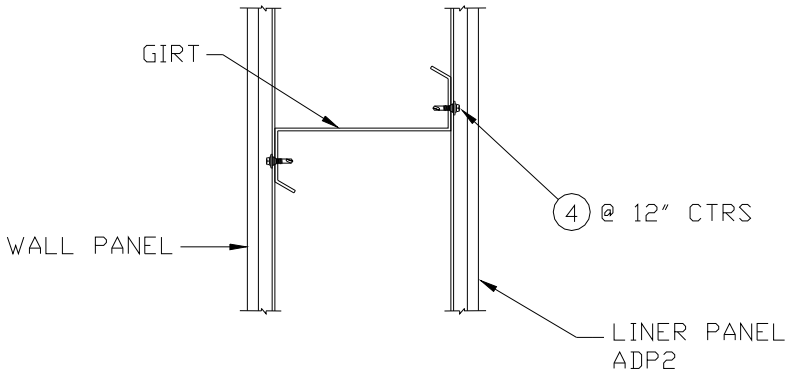


BASE CHANNEL

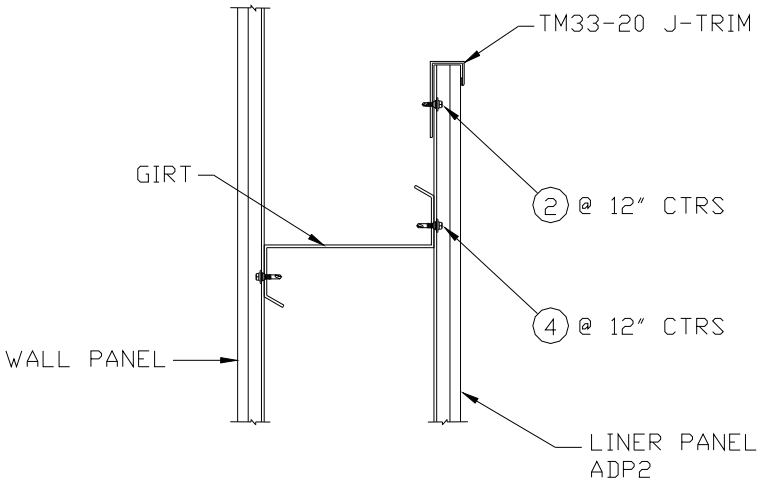


ONE-PIECE BASE ANGLE/SEAL

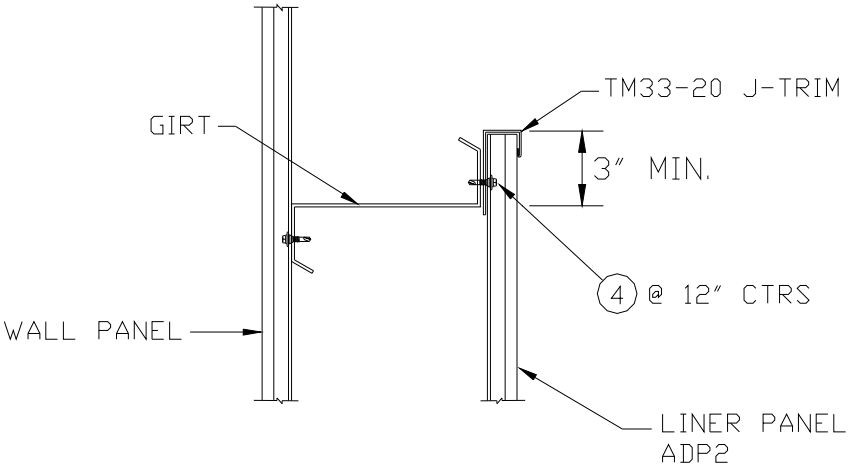
LINER AT GIRT



AT GIRT

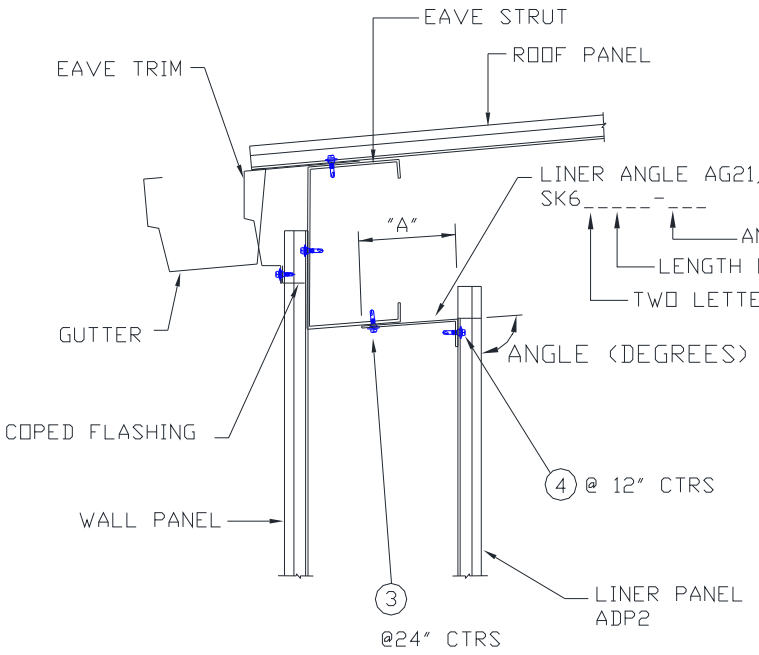


ENDING NEAR A GIRT



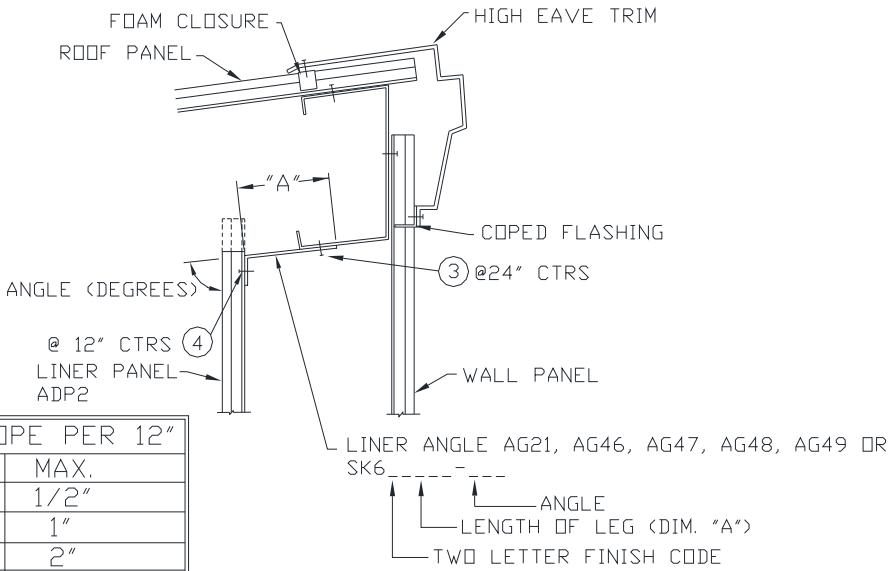
ENDING AT A GIRT

LINER AT EAVE STRUT



LOW EAVE

PART NUMBER	ROOF SLOPE PER 12"	
	MIN.	MAX.
AG21	--	1/2"
AG65	9/16"	1"
AG66	1 1/16"	2"
AG67	2 1/16"	3"
AG68	3 1/16"	4"
SK6_____-___	4 1/16"	--

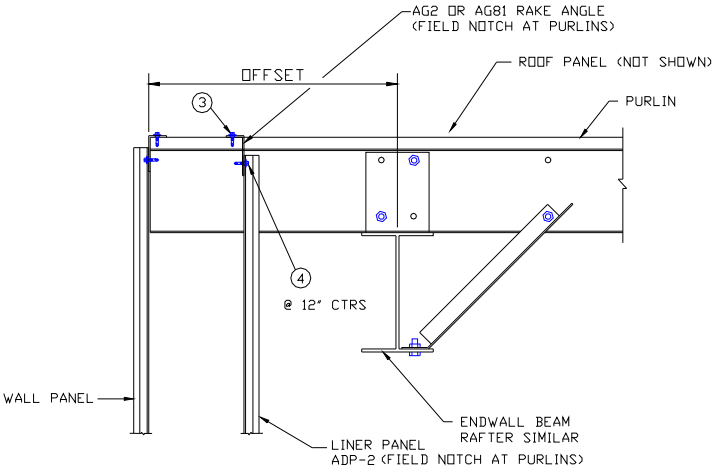


HIGH EAVE

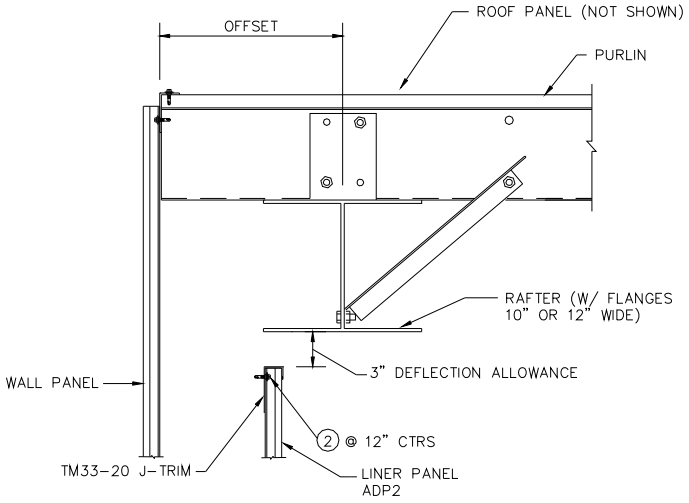
PART NUMBER	ROOF SLOPE PER 12"	
	MIN.	MAX.
AG21	--	1/2"
AG46	9/16"	1"
AG47	1 1/16"	2"
AG48	2 1/16"	3"
AG49	3 1/16"	4"
SK6_____-___	4 1/16"	--

8-23-12

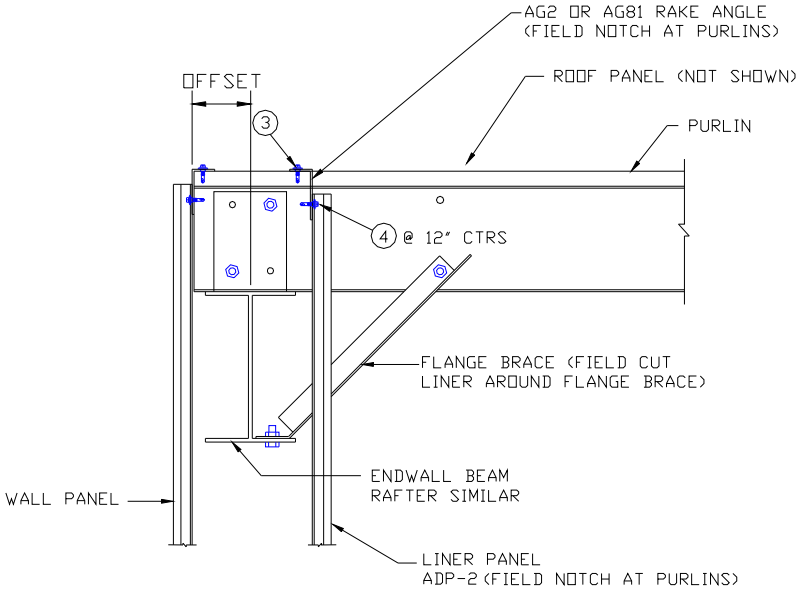
LINER AT RAKE



RAFTER OFFSETS OF 1'-0", 1'-2" , 1'-4", 1'-5", 2'-0" OR 2'-2"

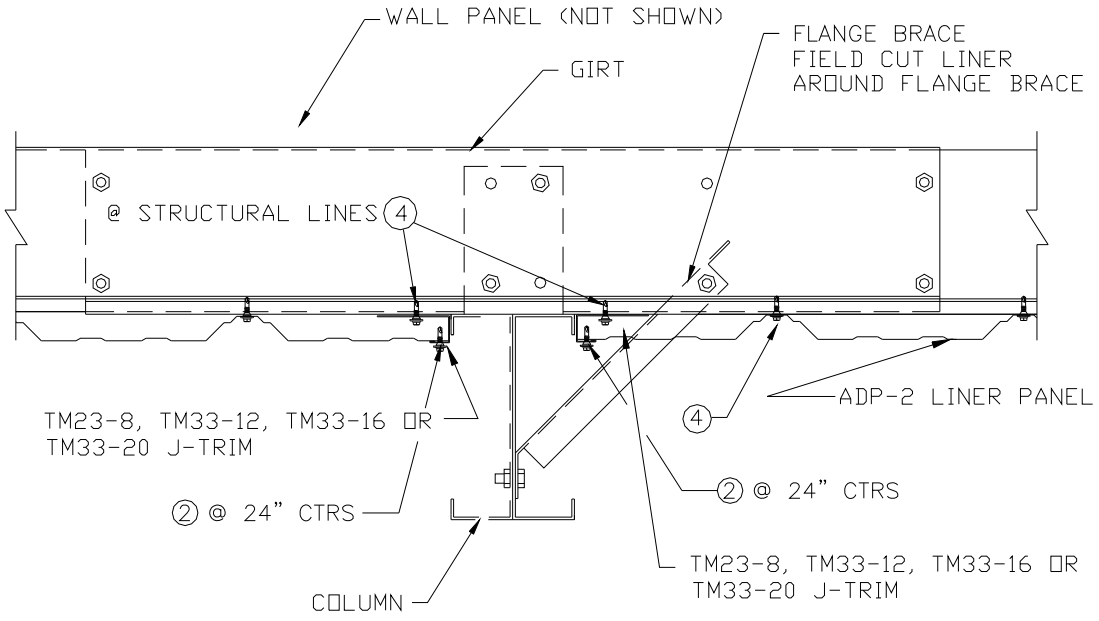


RAFTER OFFSETS OF 1'-0" OR 1'-2"
(RAFTER FLANGE WIDTHS OF 10" OR 12")

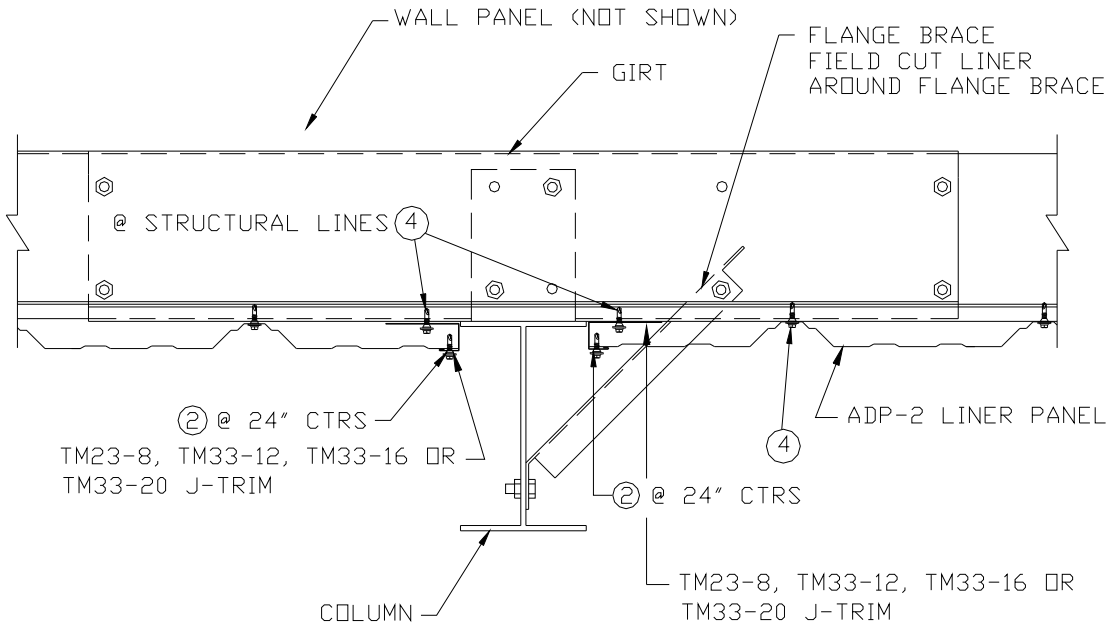


RAFTER OFFSETS OF 4" OR 5"

LINER AT COLUMNS – BY-PASS GIRTS

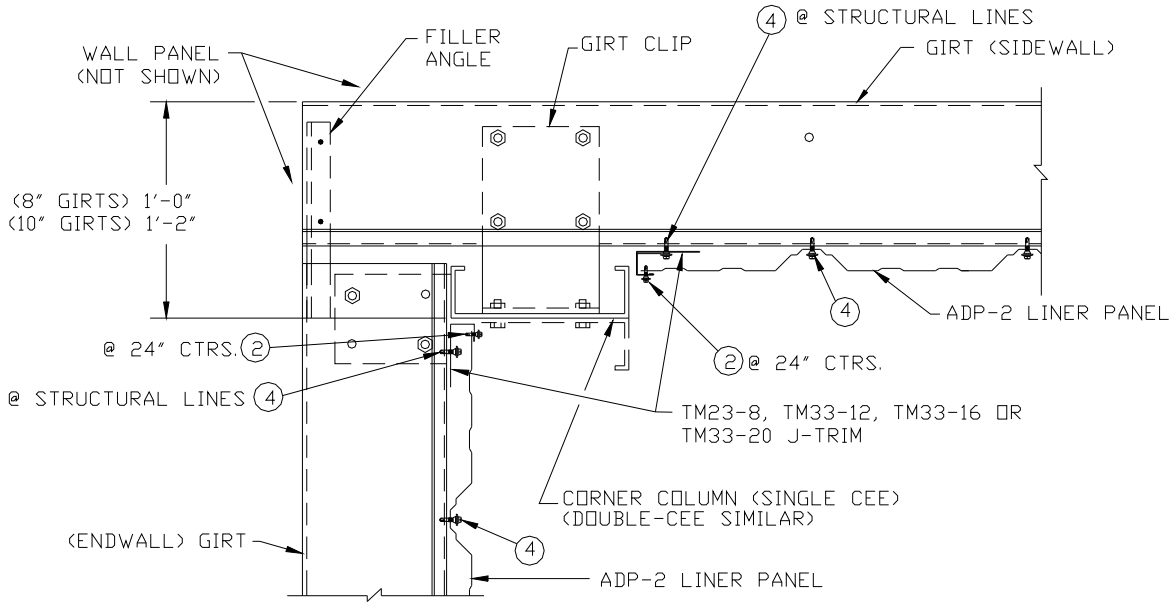


DOUBLE CEE COLUMN (SINGLE CEE IS SIMILAR)



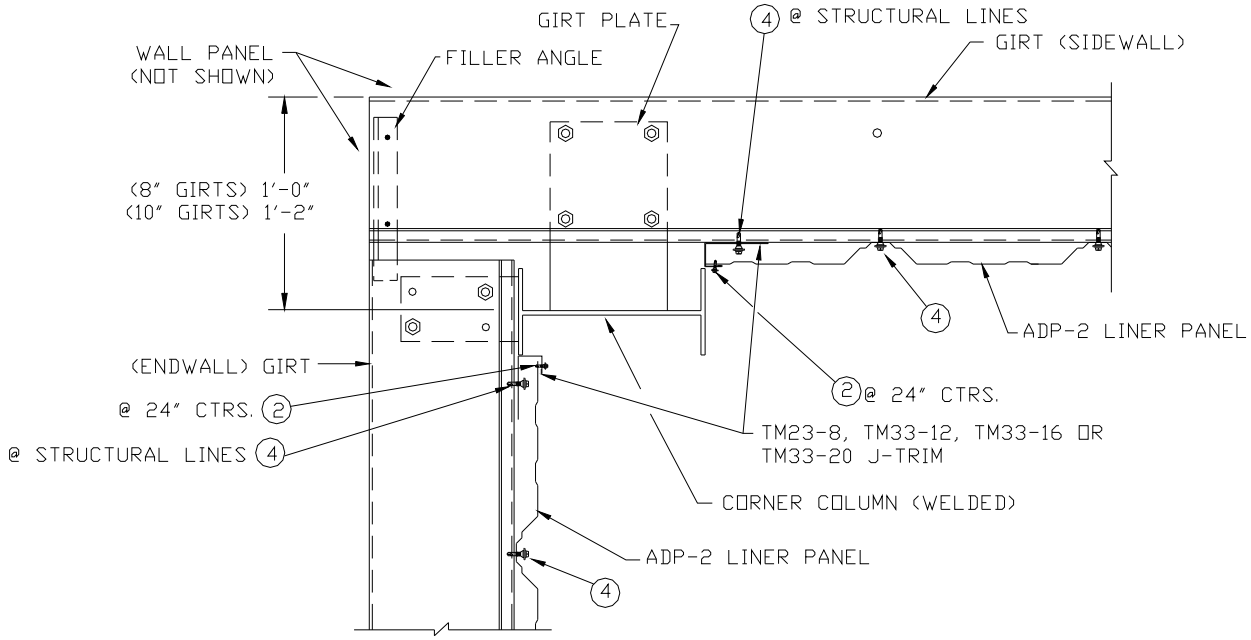
WELDED COLUMN

LINER AT CORNER – BY-PASS SIDEWALL/ENDWALL GIRTS



CORNER COLUMN (SINGLE CEE OR DOUBLE-CEE)

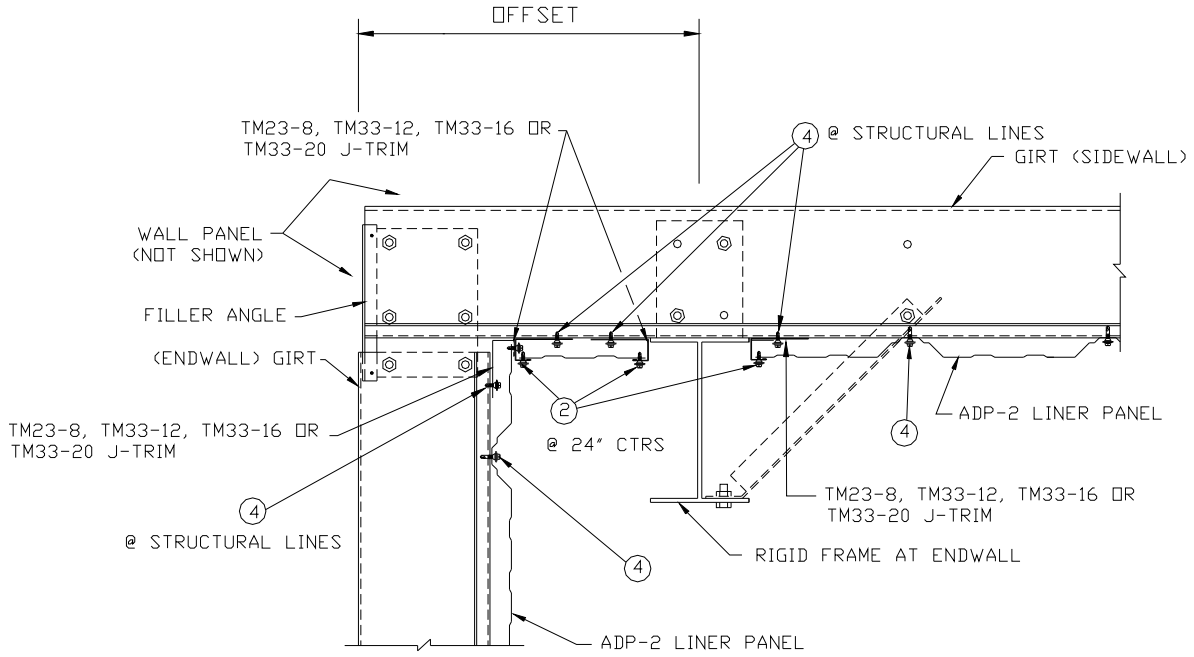
- BY-PASS SIDEWALL GIRT
- BY-PASS ENDWALL GIRT



CORNER COLUMN (WELDED OR DOUBLE-CEE)

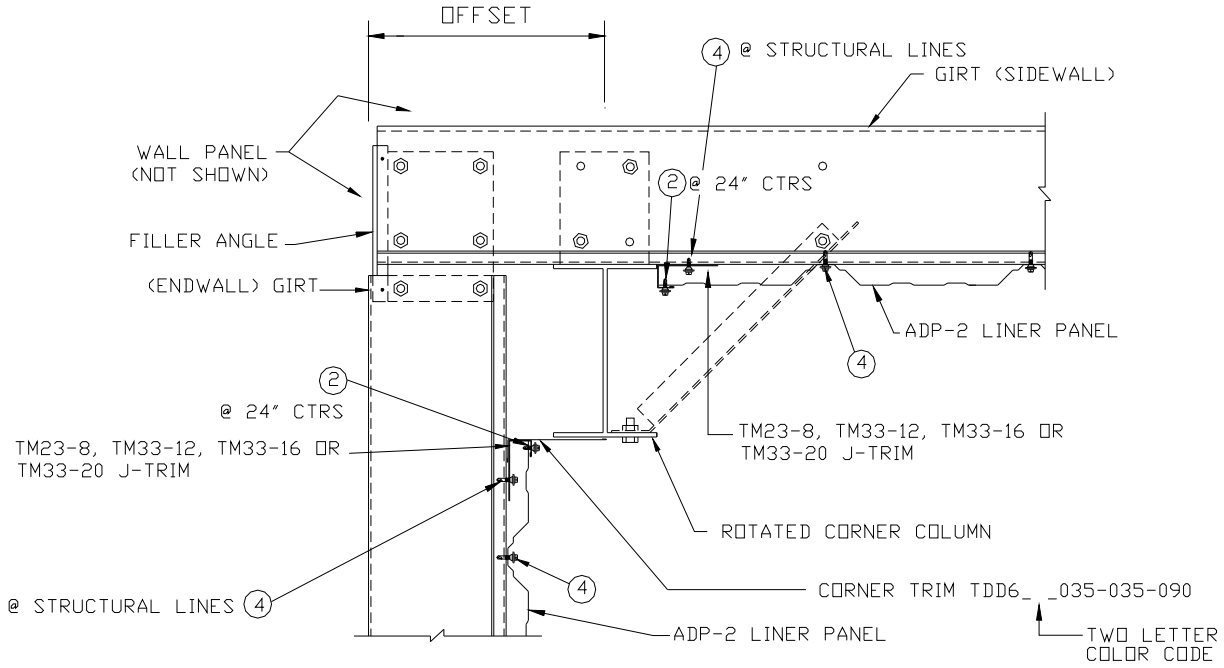
- BY-PASS SIDEWALL GIRT
- BY-PASS ENDWALL GIRT

LINER AT CORNER – BY-PASS SIDEWALL/ENDWALL GIRTS



RIGID FRAME AT ENDWALL W/1'-4" OR MORE OFFSET

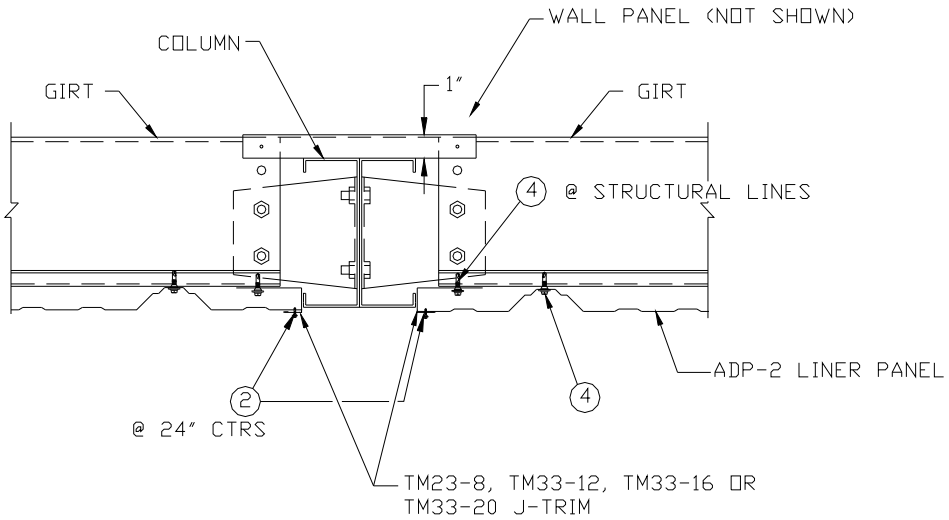
- BY-PASS SIDEWALL GIRT
- BY-PASS ENDWALL GIRT



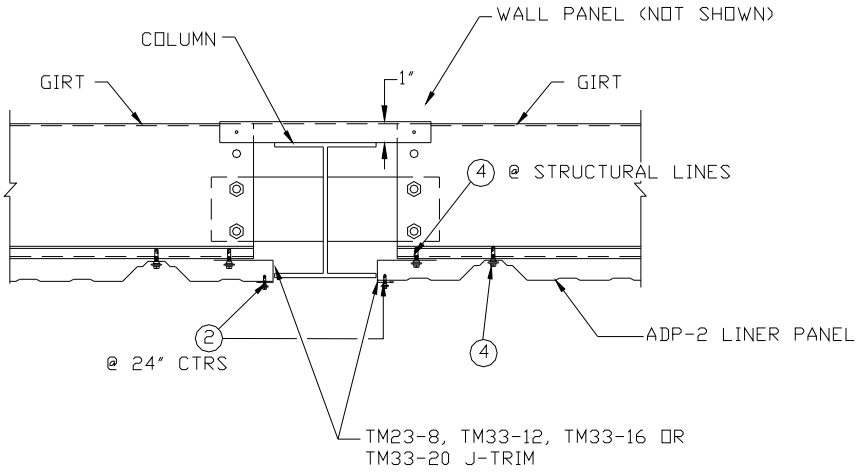
ROTATED CORNER COLUMN W/1'-0" OR 1'-2" OFFSET

- BY-PASS SIDEWALL GIRT
- BY-PASS ENDWALL GIRT

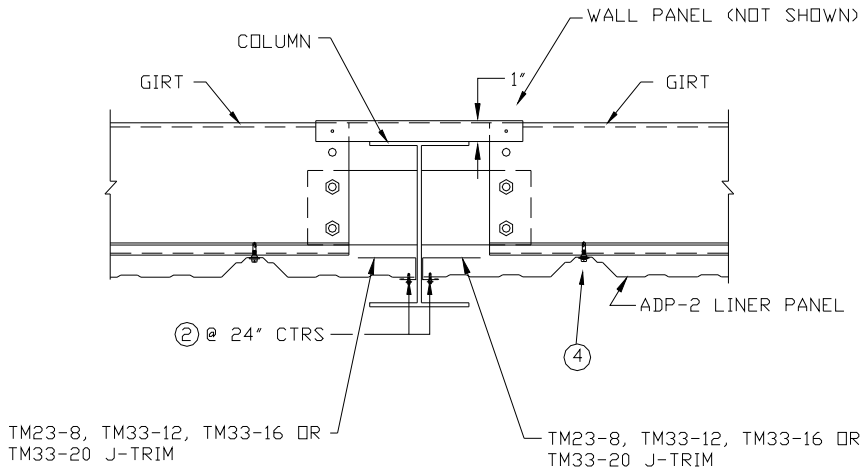
LINER AT COLUMN – 1” PROJECTION – FLUSH GIRTS



DOUBLE CEE COLUMN (SINGLE CEE IS SIMILAR)

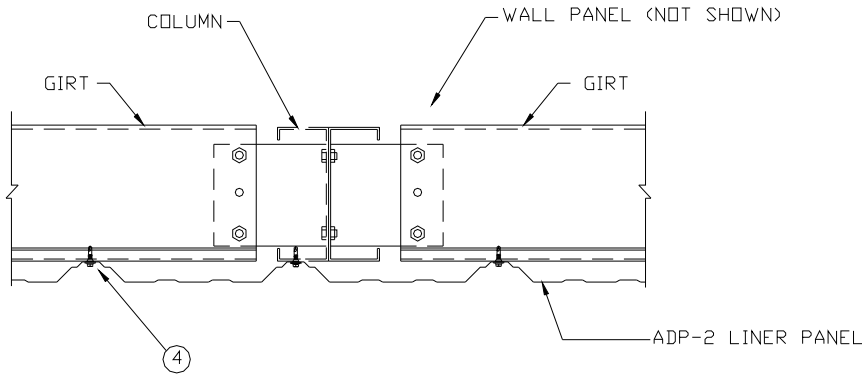


WELDED COLUMN W/DEPTH EQUAL TO GIRT DEPTH

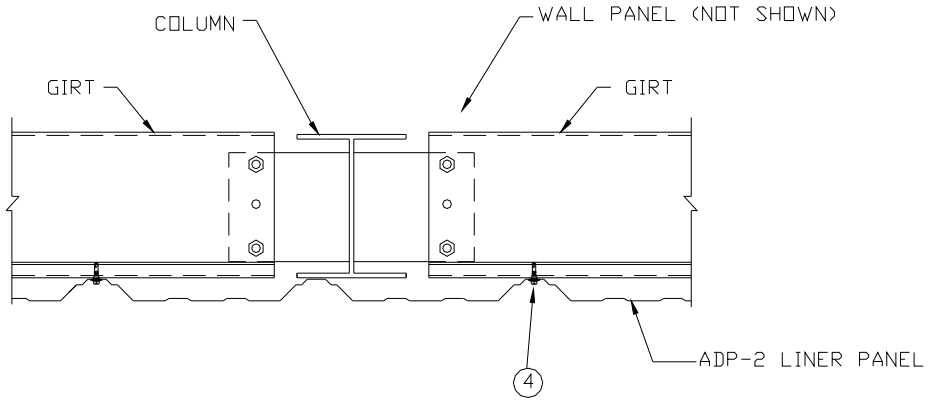


WELDED COLUMN W/DEPTH GREATER THAN GIRT DEPTH

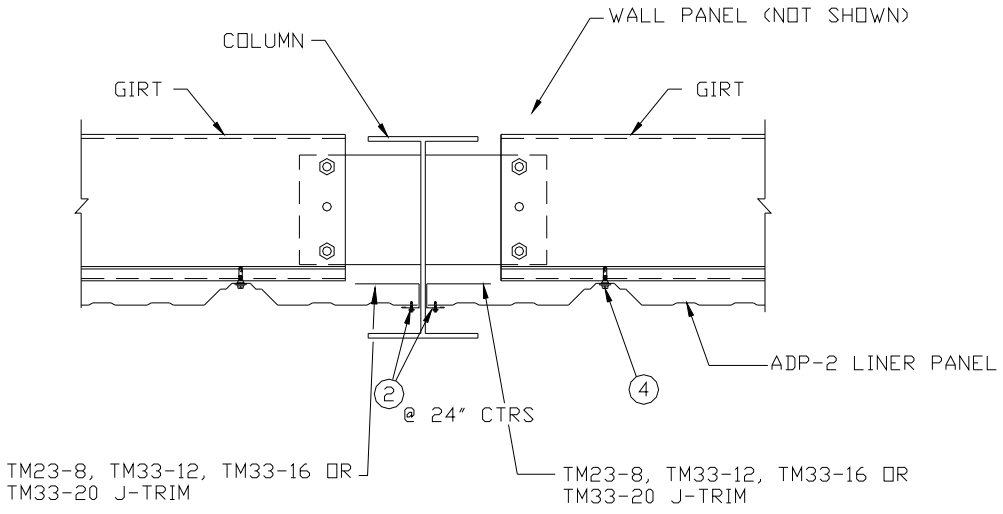
LINER AT COLUMNS – 0” PROJECTION – FLUSH GIRTS



SINGLE OR DOUBLE CEE COLUMNS



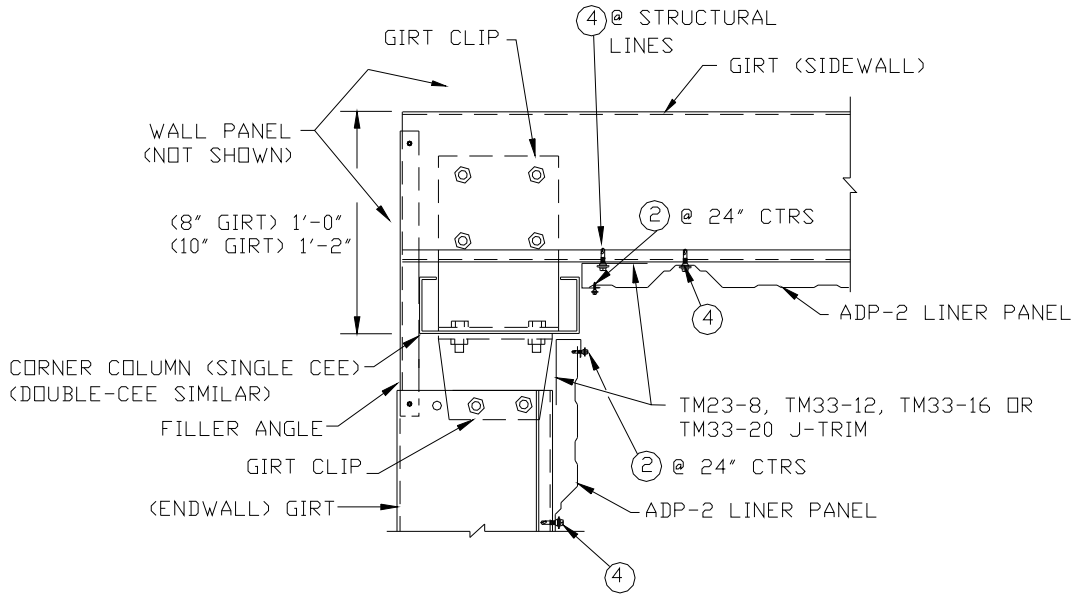
WELDED COLUMN W/DEPTH EQUAL TO GIRT DEPTH



WELDED COLUMN W/DEPTH GREATER THAN GIRT DEPTH

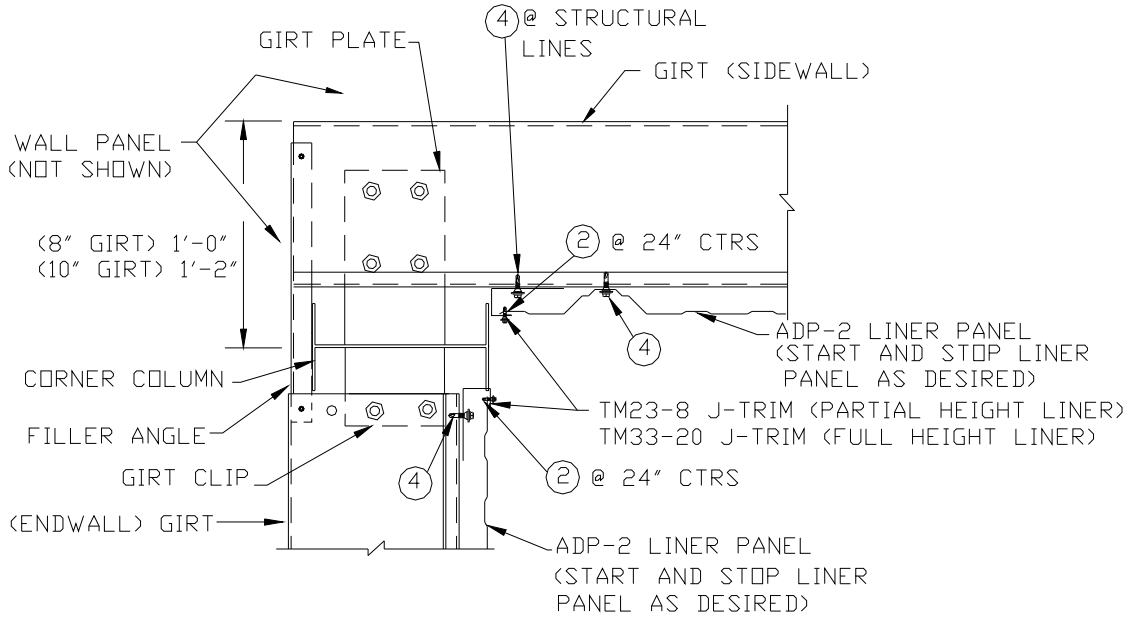
LINER AT CORNER – FLUSH SIDEWALL/ENDWALL GIRTS

1 INCH GIRT PROJECTION



CORNER COLUMN (SINGLE-CEE)
(DOUBLE-CEE CORNER COLUMN SIMILAR)

- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT

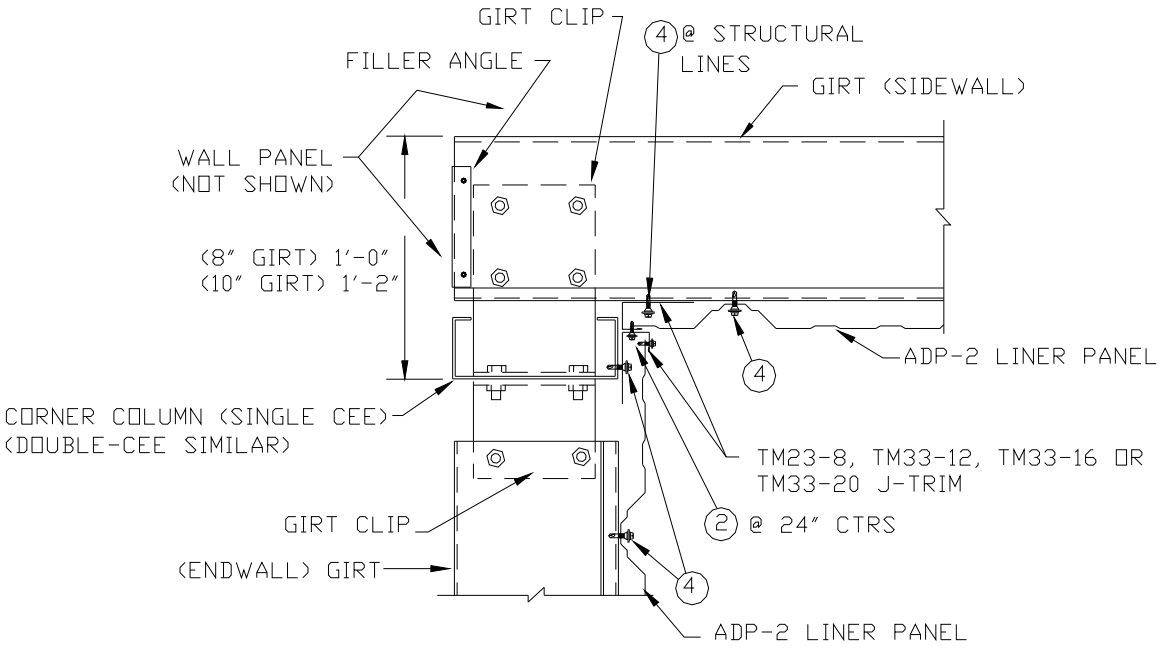


CORNER COLUMN (WELDED)

- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT

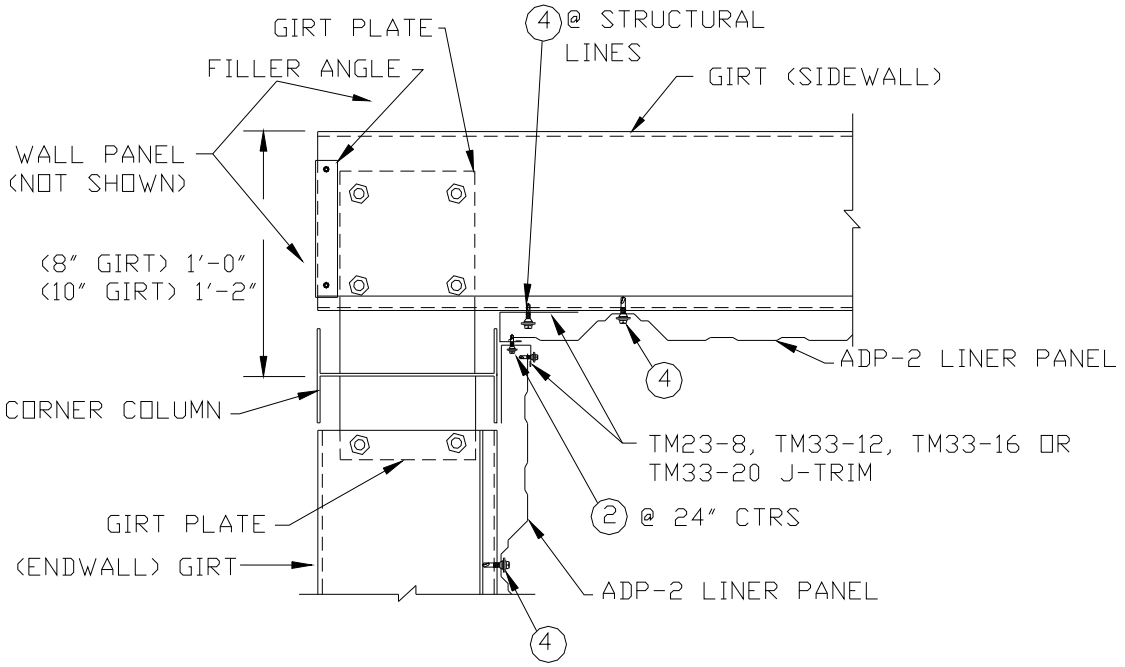
LINER AT CORNER – FLUSH SIDEWALL/ENDWALL GIRTS

0 INCH GIRT PROJECTION



CORNER COLUMN (SINGLE-CEE)
(DOUBLE-CEE CORNER COLUMN SIMILAR)

- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT

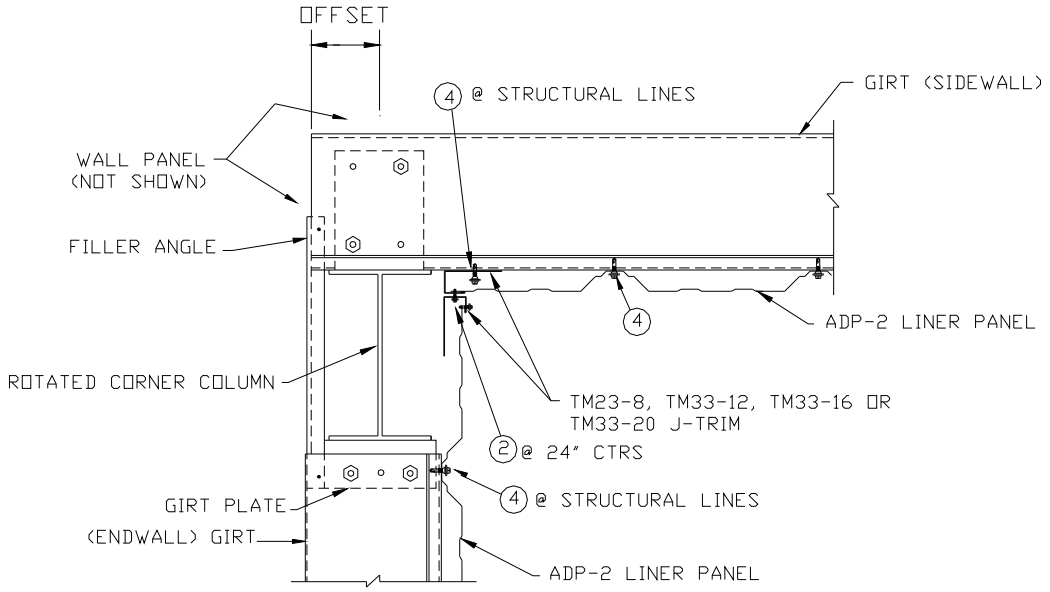


CORNER COLUMN (WELDED)

- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT

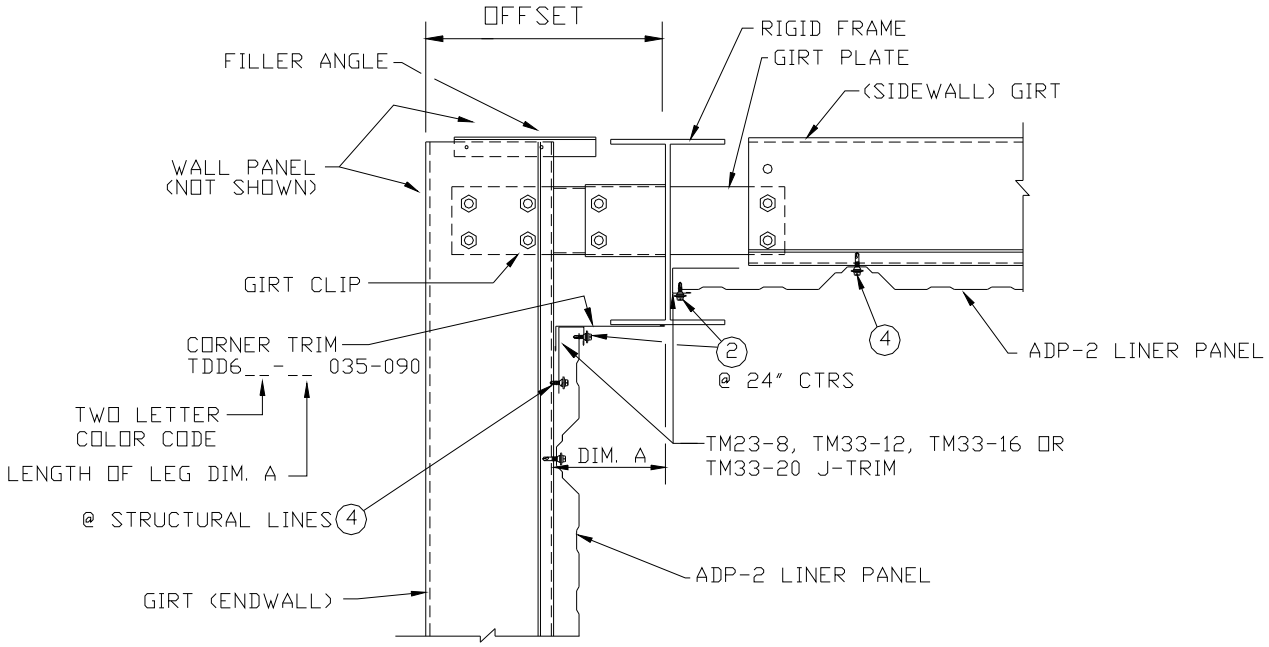
LINER AT CORNER – FLUSH SIDEWALL/ENDWALL GIRTS

0 INCH GIRT PROJECTION (1 INCH GIRT PROJECTION IS SIMILAR)



ROTATED CORNER COLUMN W/4" OR 5" OFFSET

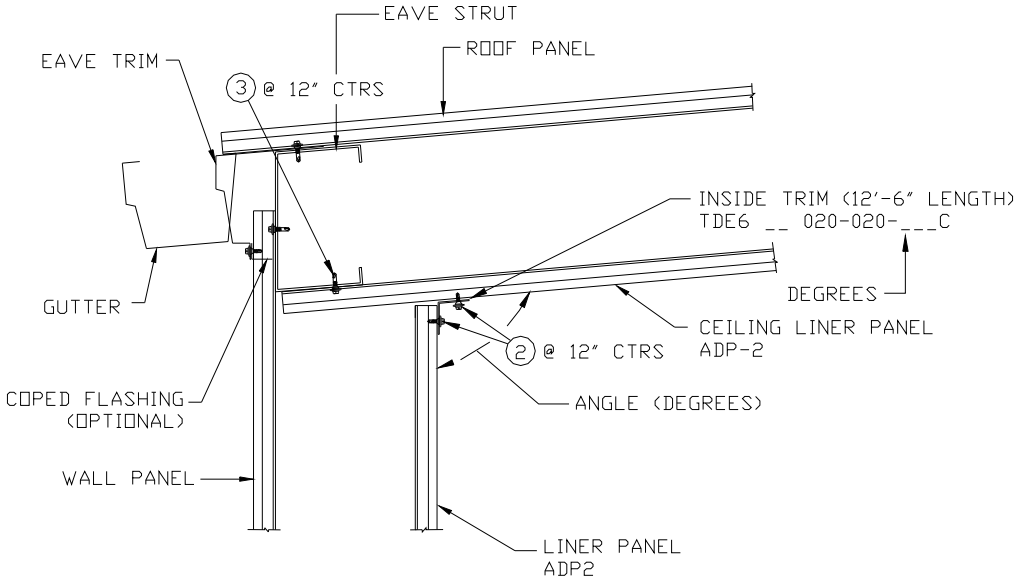
- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT



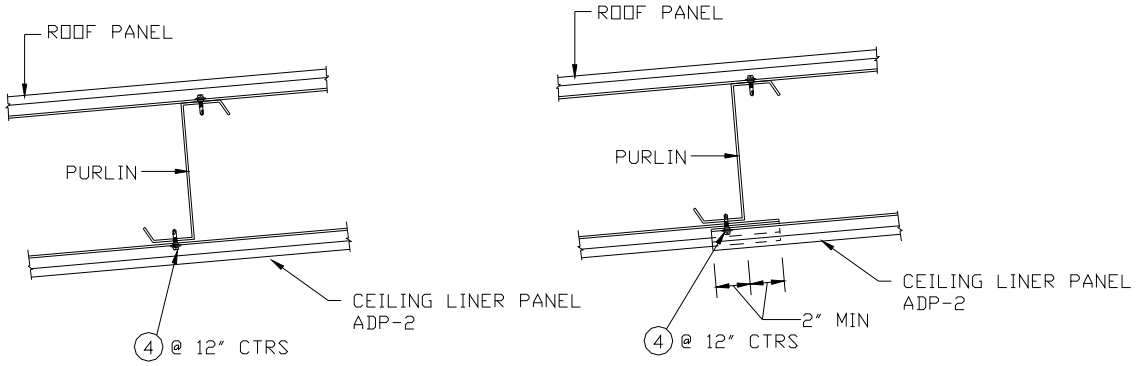
RIGID FRAME AT ENDWALL W/1'-4" OR 1'-5" OFFSET

- FLUSH SIDEWALL GIRT
- FLUSH ENDWALL GIRT

LINER AT CEILING

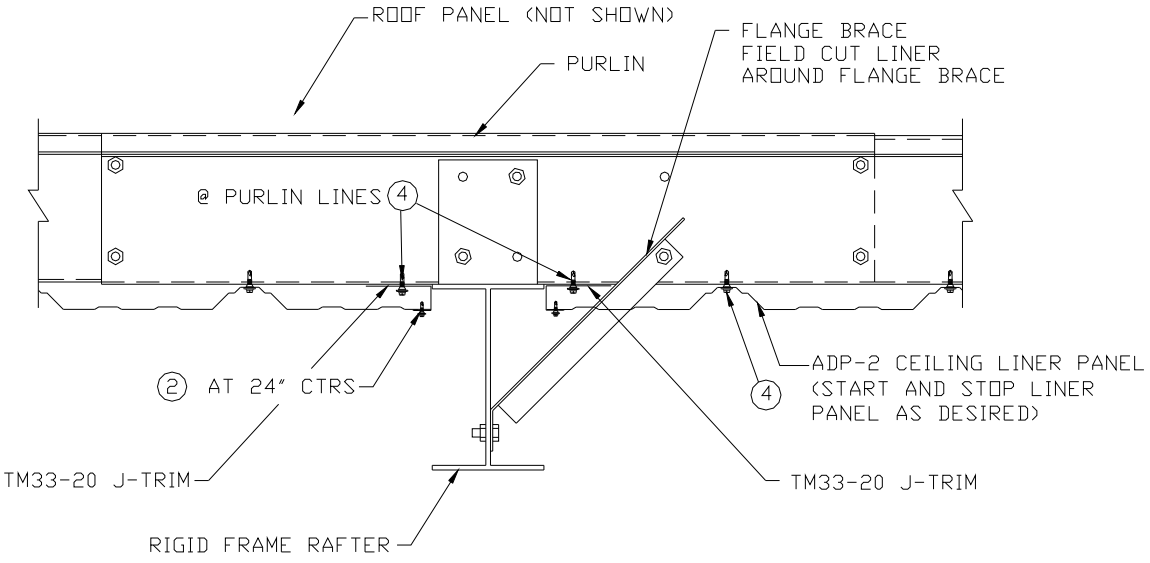


AT EAVE



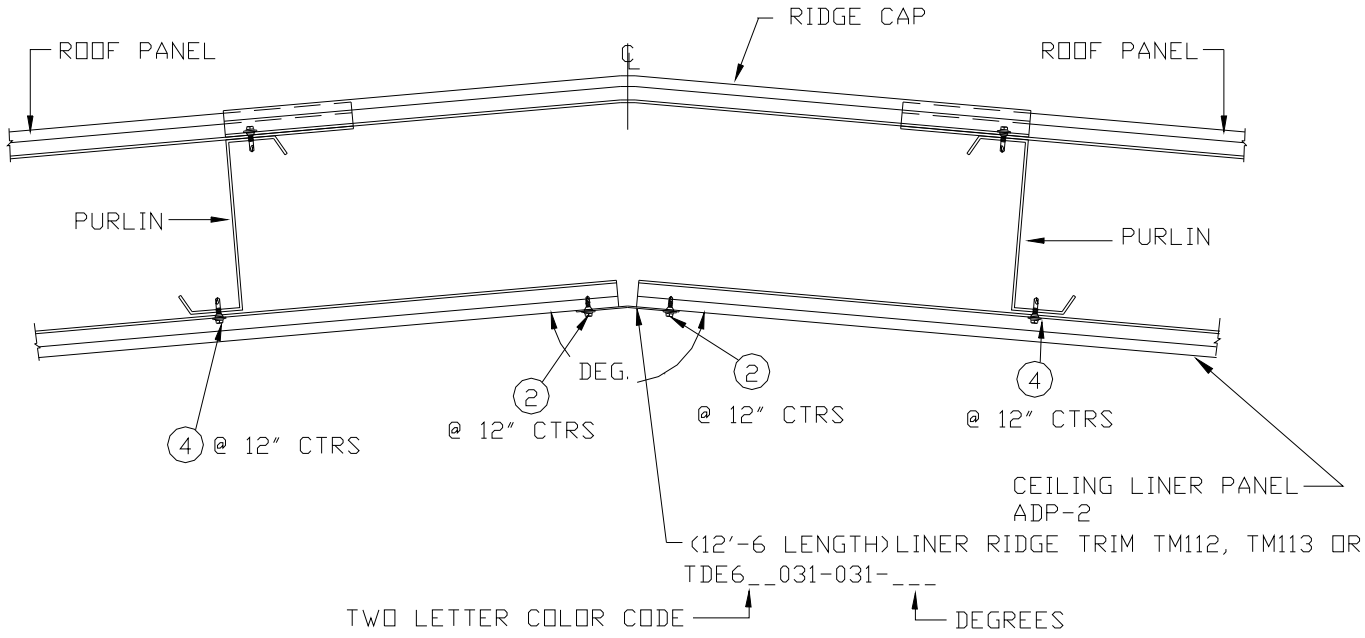
LINER TO PURLIN

LAP OF LINER AT PURLIN

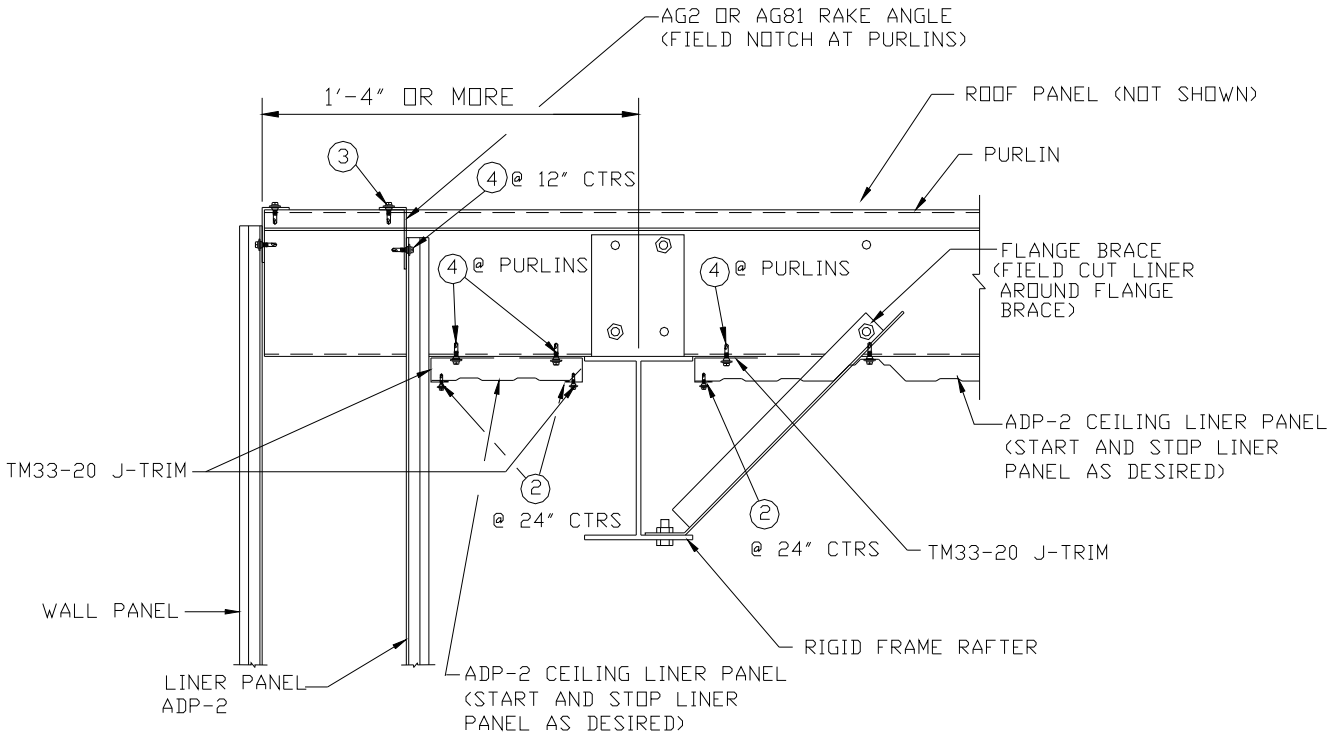


LINER AT RAFTER

LINER AT CEILING

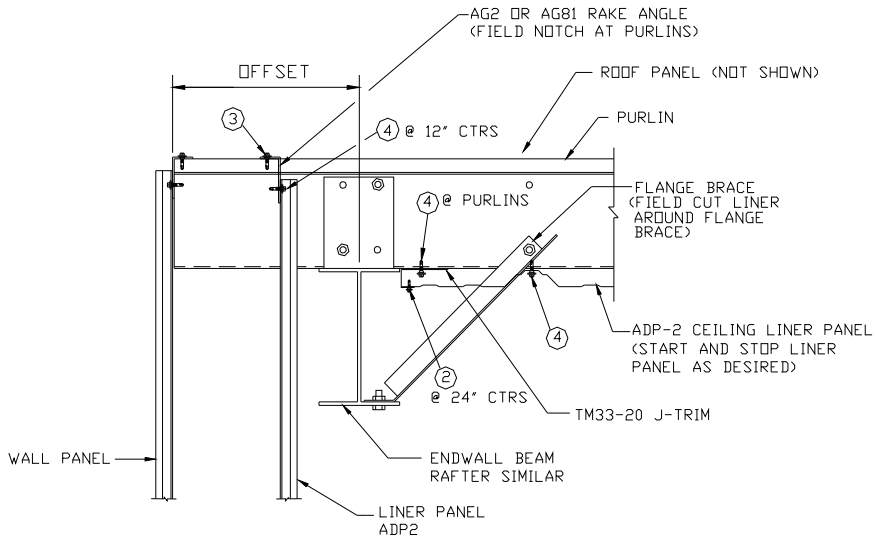


LINER AT RIDGE

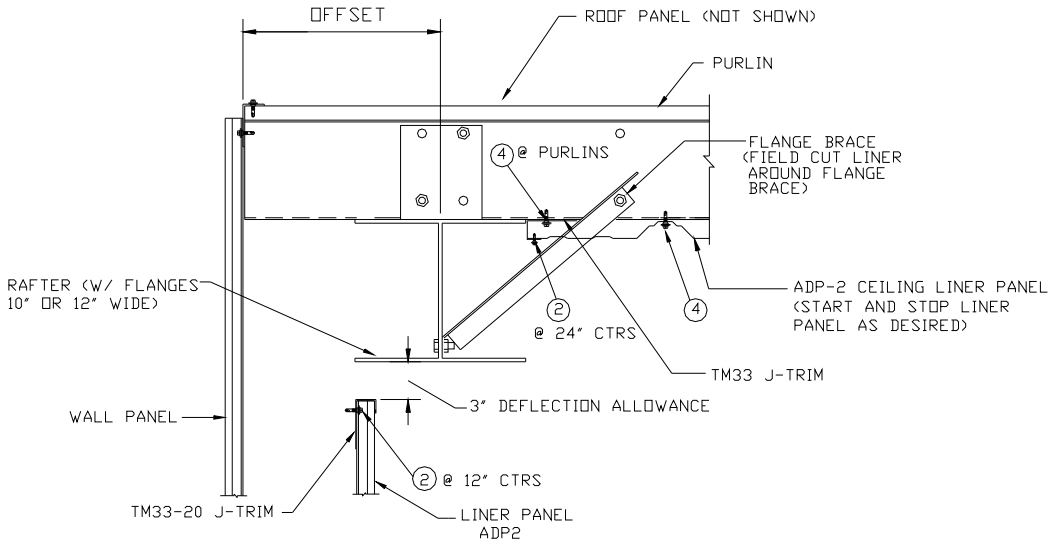


LINER AT RAKE - RAFTER OFFSET OF 1'-4" OR MORE

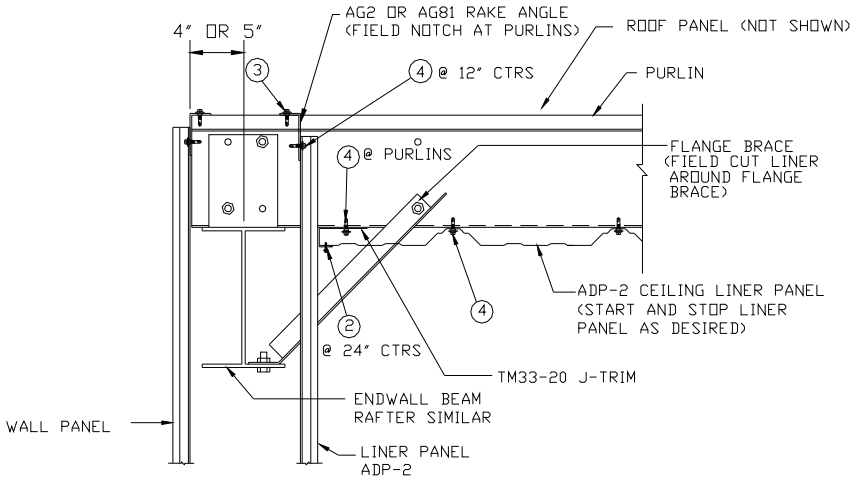
LINER AT CEILING



LINER AT RAKE - RAFTER W\6" MAX. FLANGE WIDTH - OFFSET OF 1'-0" OR 1'-2"

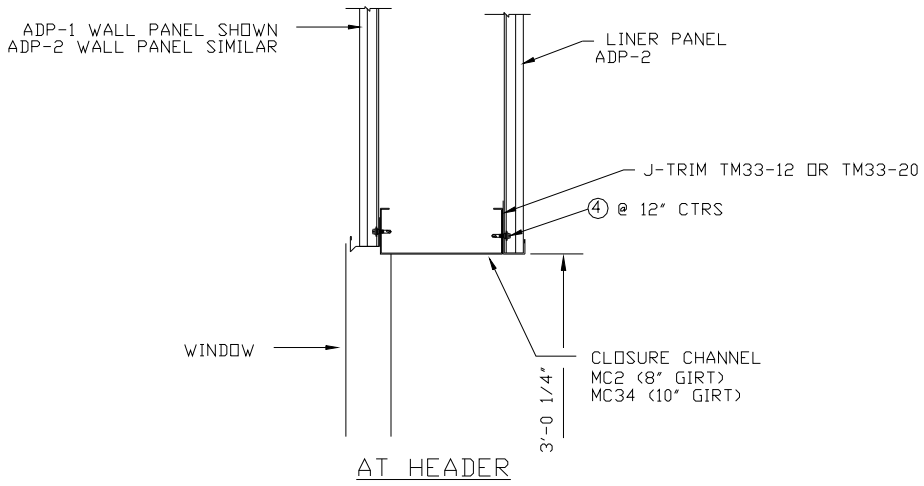


LINER AT RAKE - RAFTER W/8" FLANGE WIDTH - OFFSET OF 1'-0" OR 1'-2"

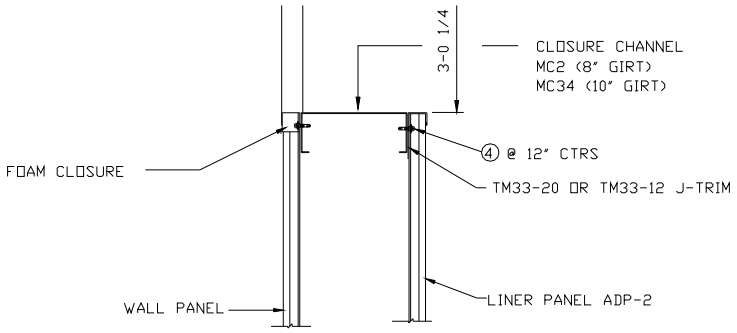


LINER AT RAKE - RAFTER OFFSET OF 4" OR 5"

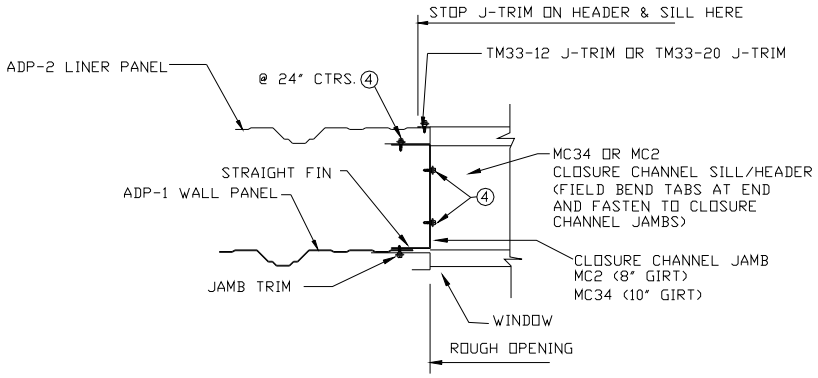
LINER AT SELF-FRAMING WINDOW



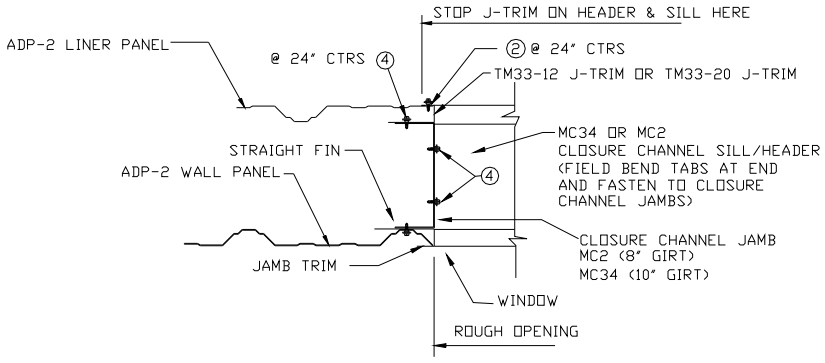
AT HEADER



AT SILL

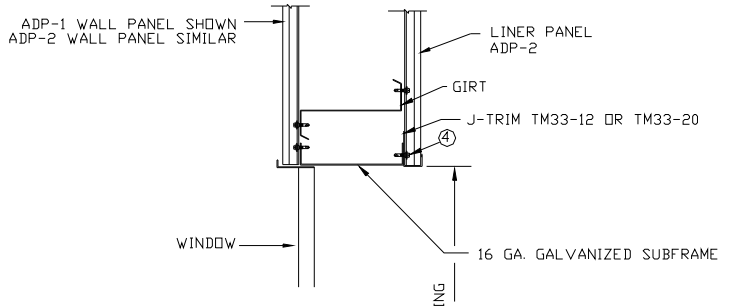


AT JAMB WITH ADP-1 WALL PANEL

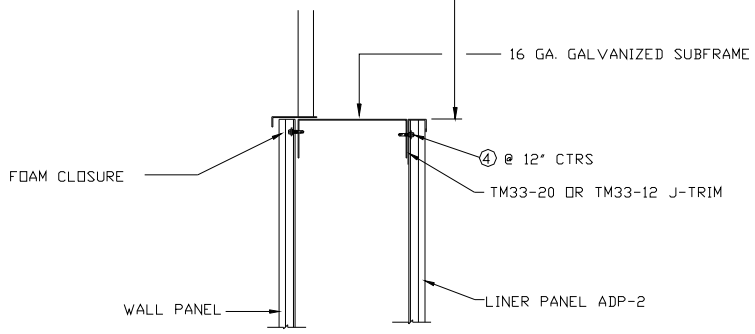


SECTION THRU JAMB w/ADP-2 WALL PANEL
w/ADP-2 LINER PANEL

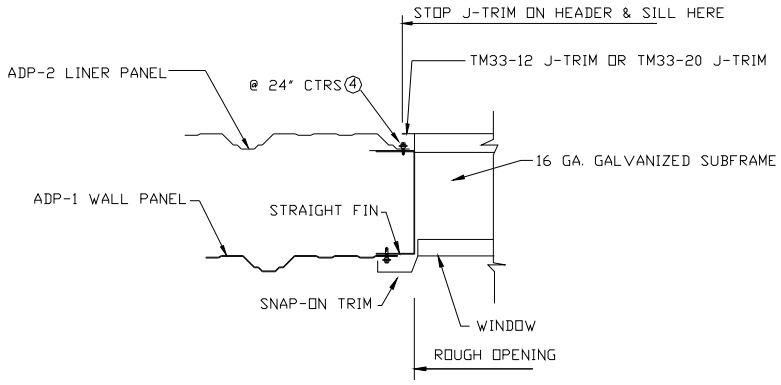
LINER AT PREASSEMBLED WINDOW



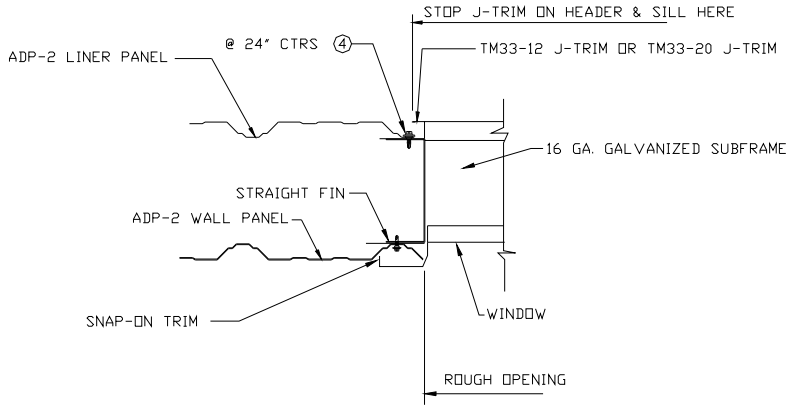
AT HEADER



AT SILL

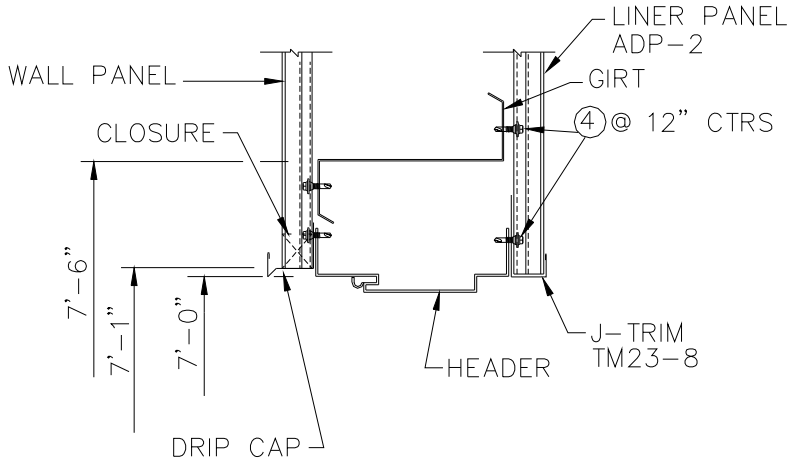


AT JAMB WITH ADP-2 PANEL

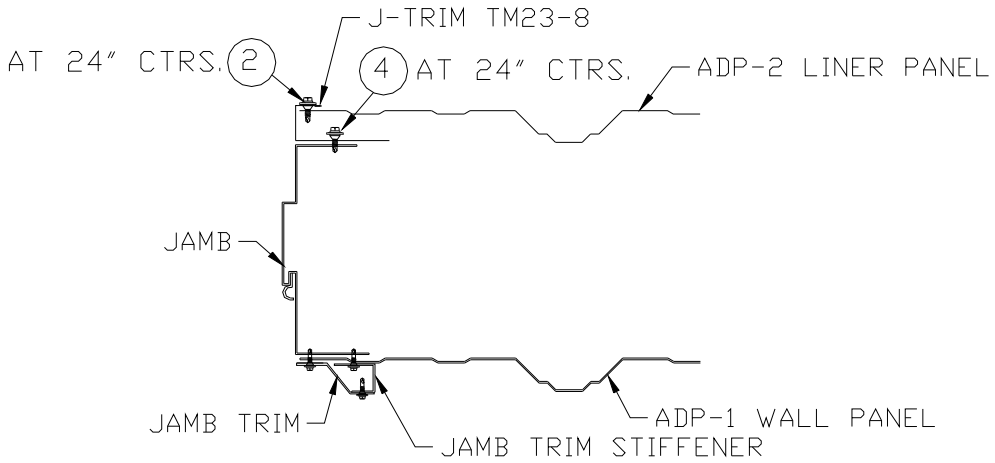


SECTION THRU JAMB WITH ADP-2 WALL PANEL
w/ADP-2 LINER PANEL

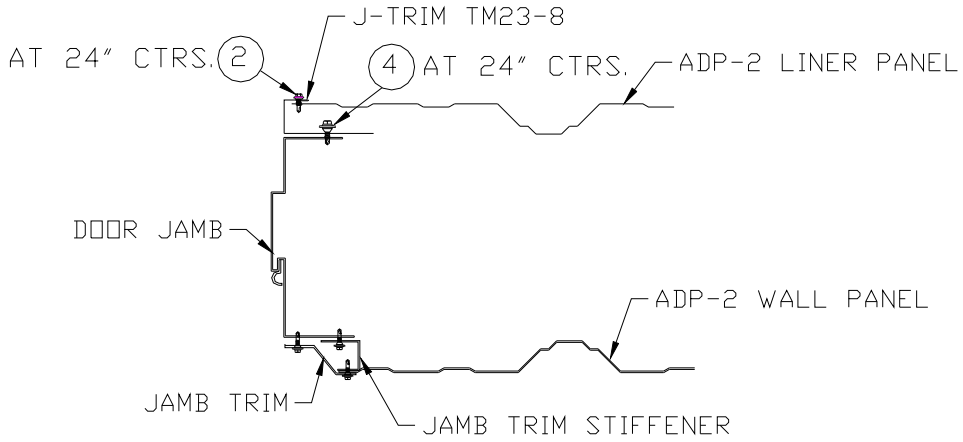
LINER AT KNOCK-DOWN DOOR



AT HEADER



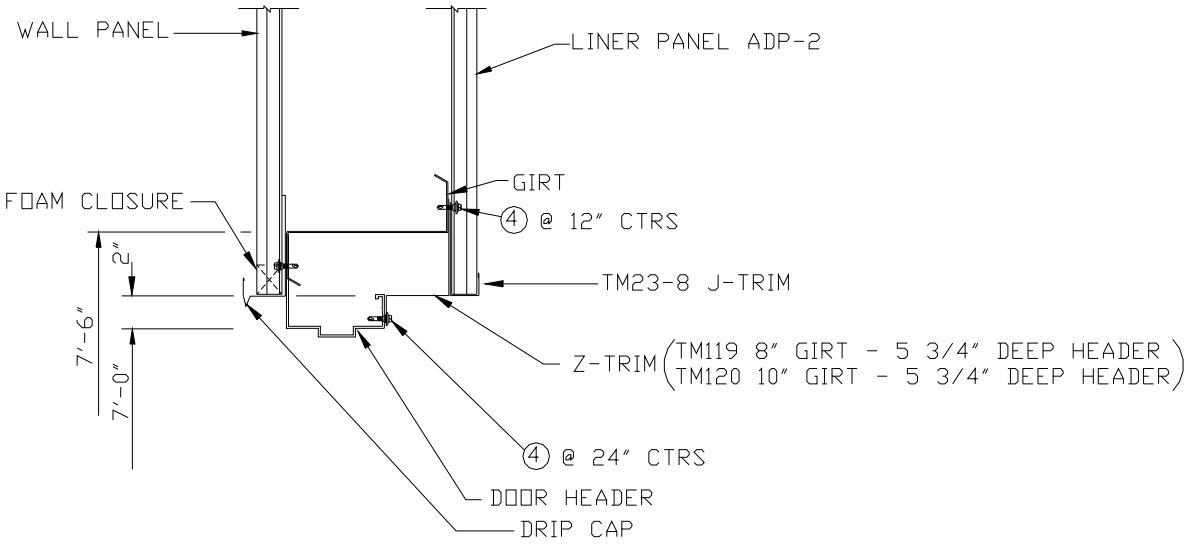
AT JAMB WITH ADP-1 WALL PANEL



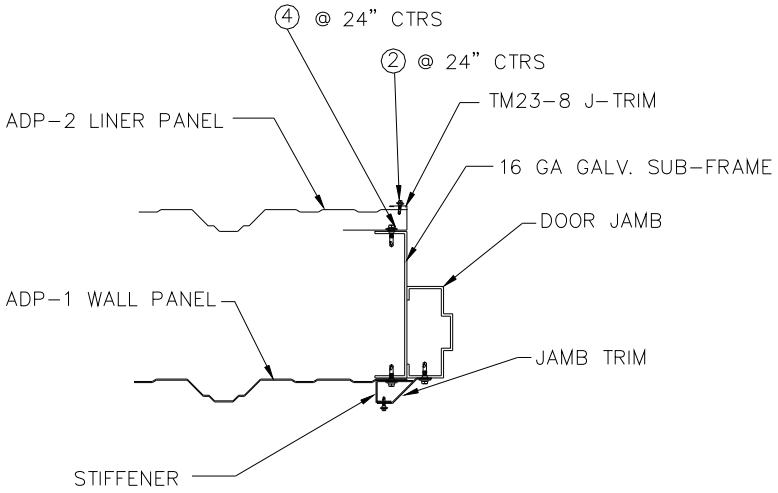
AT JAMB WITH ADP-2 WALL PANEL

7/21/06

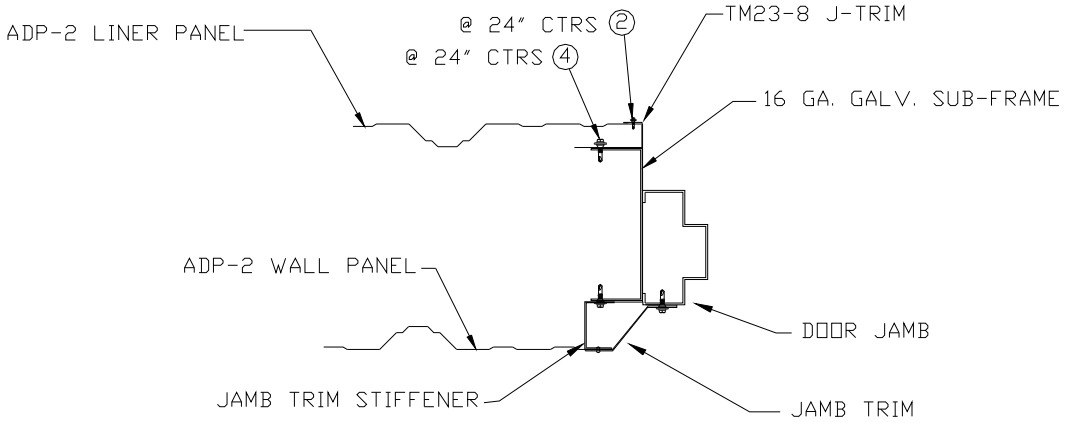
LINER AT PREASSEMBLED DOOR



AT HEADER

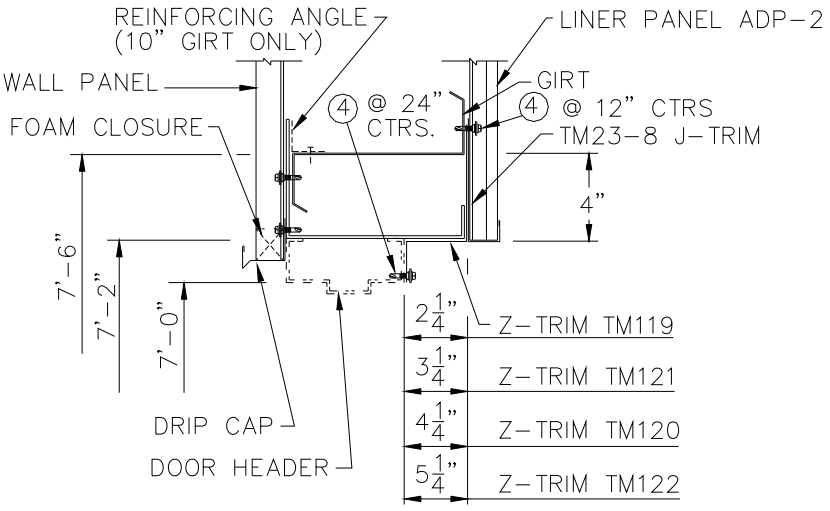


AT JAMB WITH ADP-1 WALL PANEL

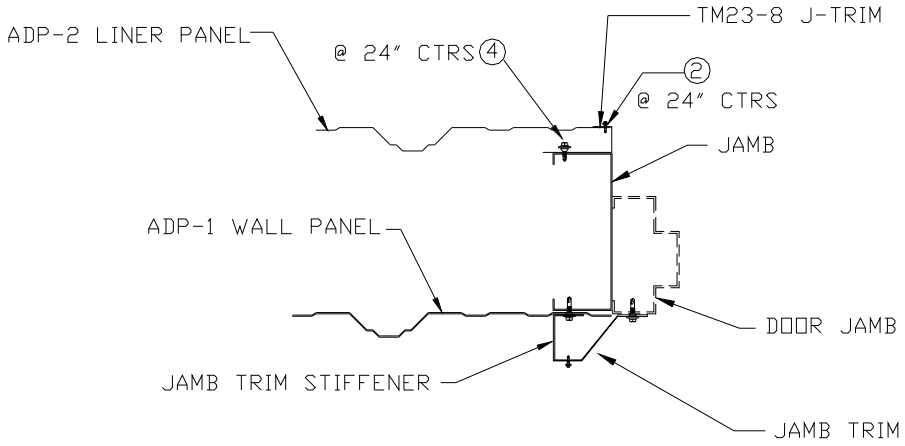


AT JAMB WITH ADP-2 WALL PANEL

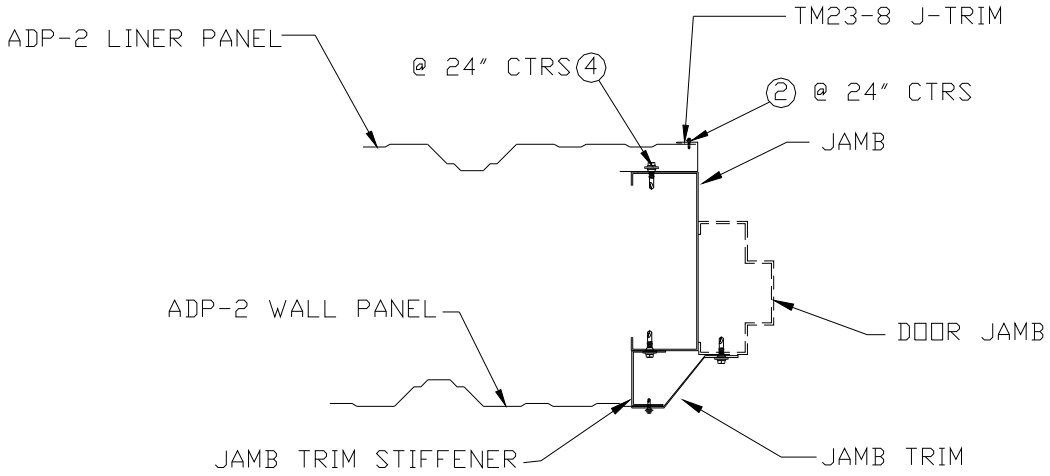
LINER AT WALK DOOR ROUGH FRAME



AT HEADER

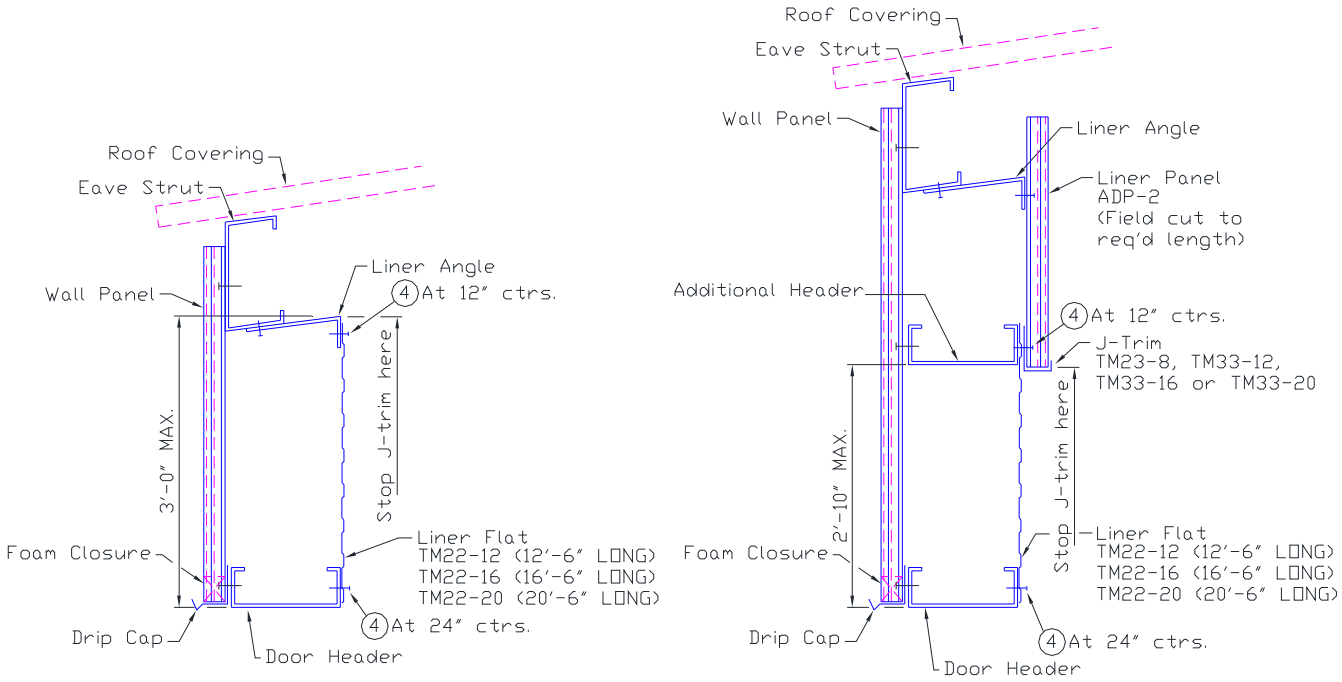


AT JAMB WITH ADP-1 WALL PANEL

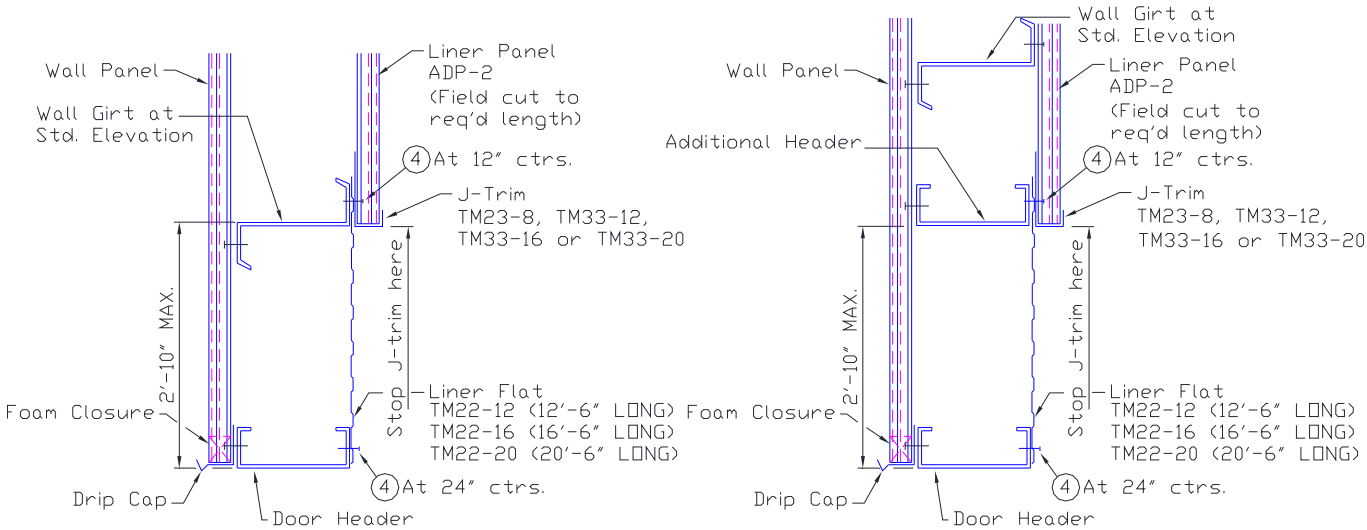


AT JAMB WITH ADP-2 WALL PANEL

LINER AT FRAMED OPENING



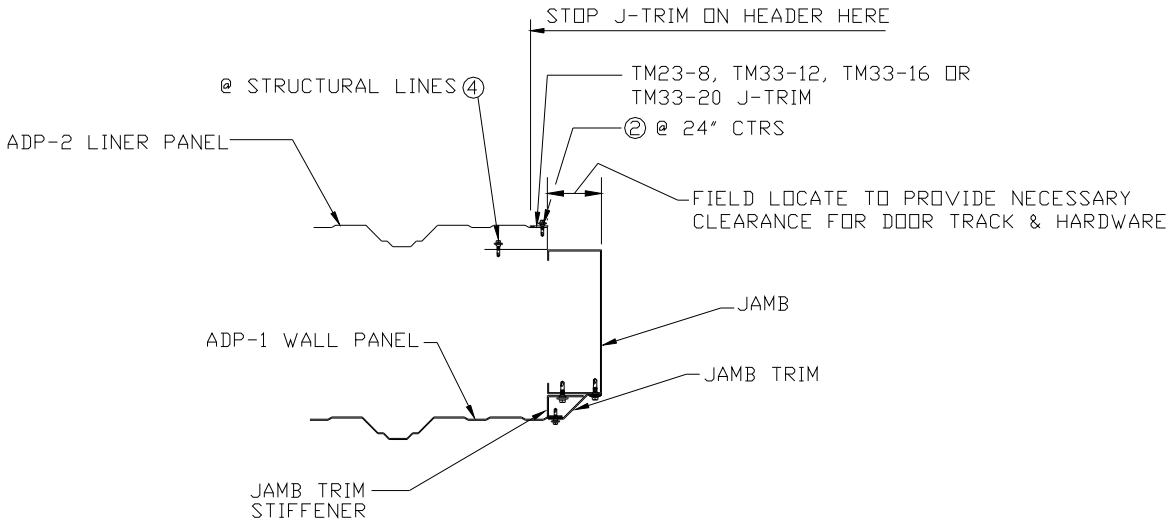
HEADERS NEAR EAVE STRUTS



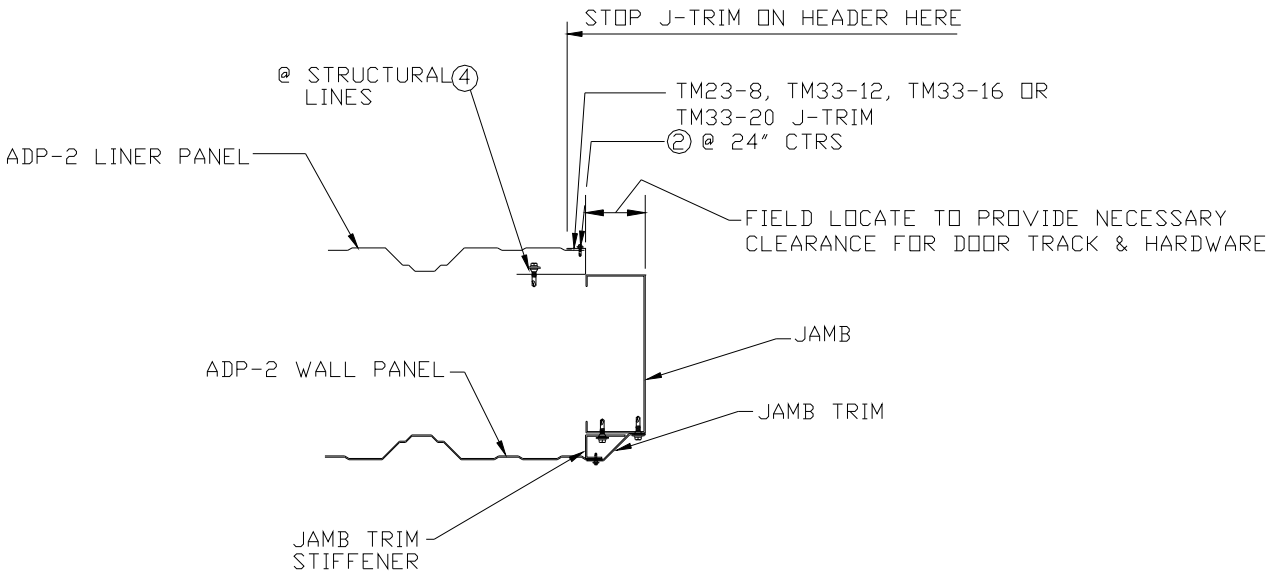
HEADERS BELOW SIDEWALL / ENDWALL GIRTS AT STANDARD ELEVATIONS

11/8/10

LINER AT FRAMED OPENING

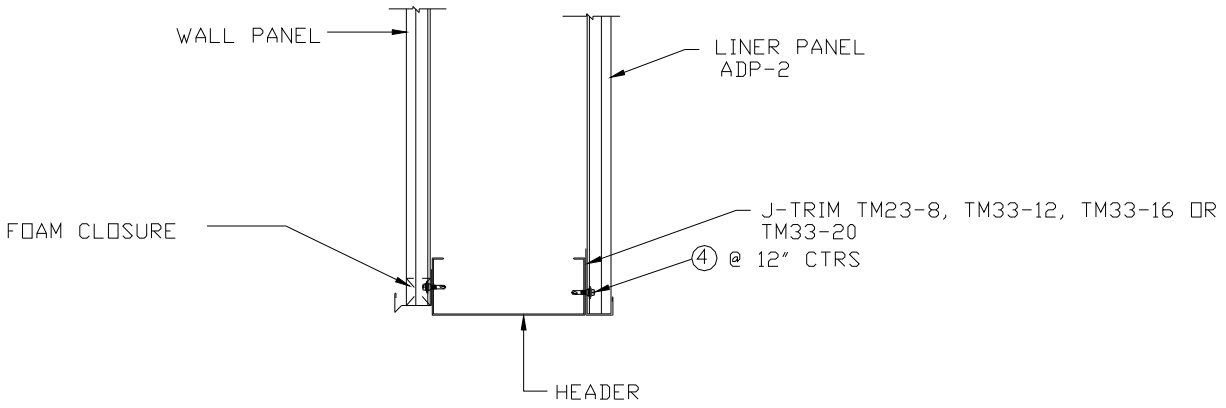


AT JAMB WITH ADP-1 WALL PANEL

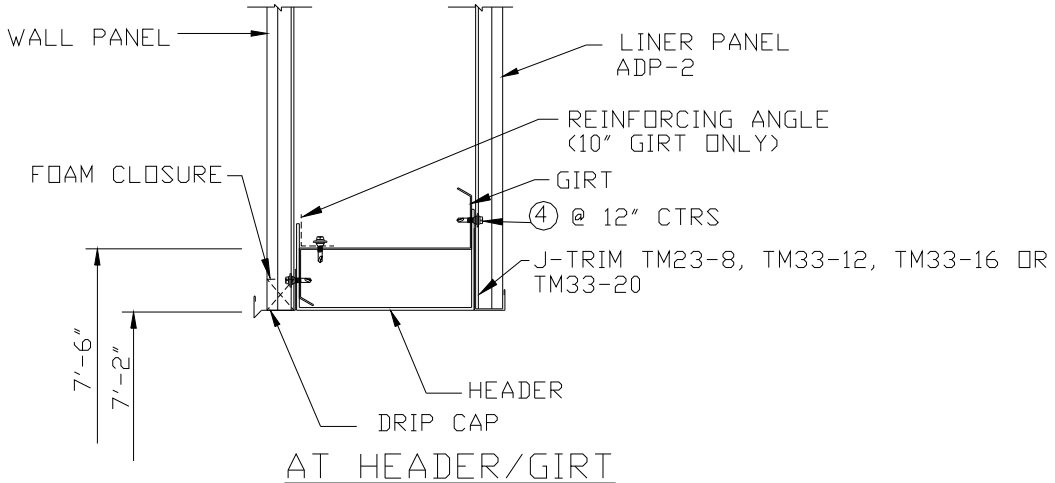


AT JAMB WITH ADP-2 WALL PANEL

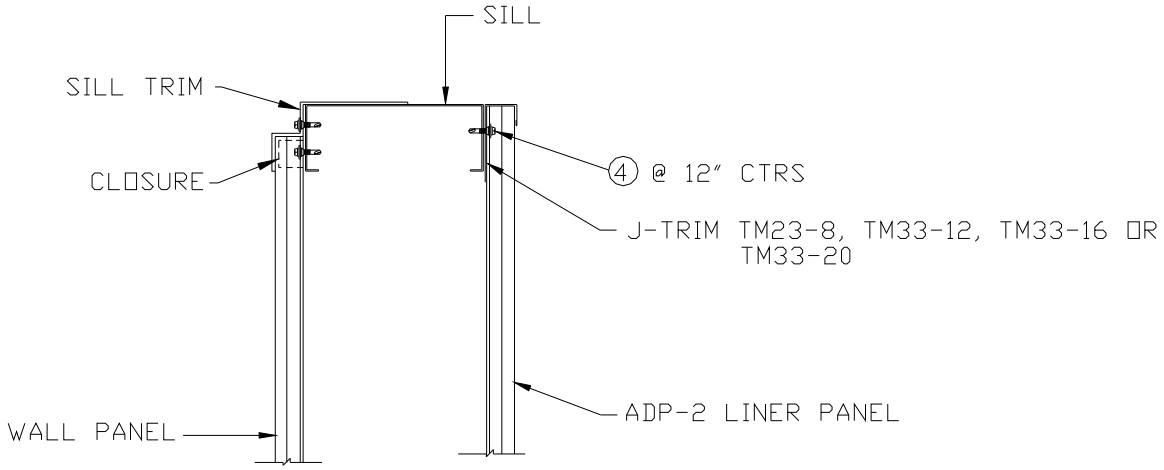
LINER AT FRAMED OPENING WITH SILL



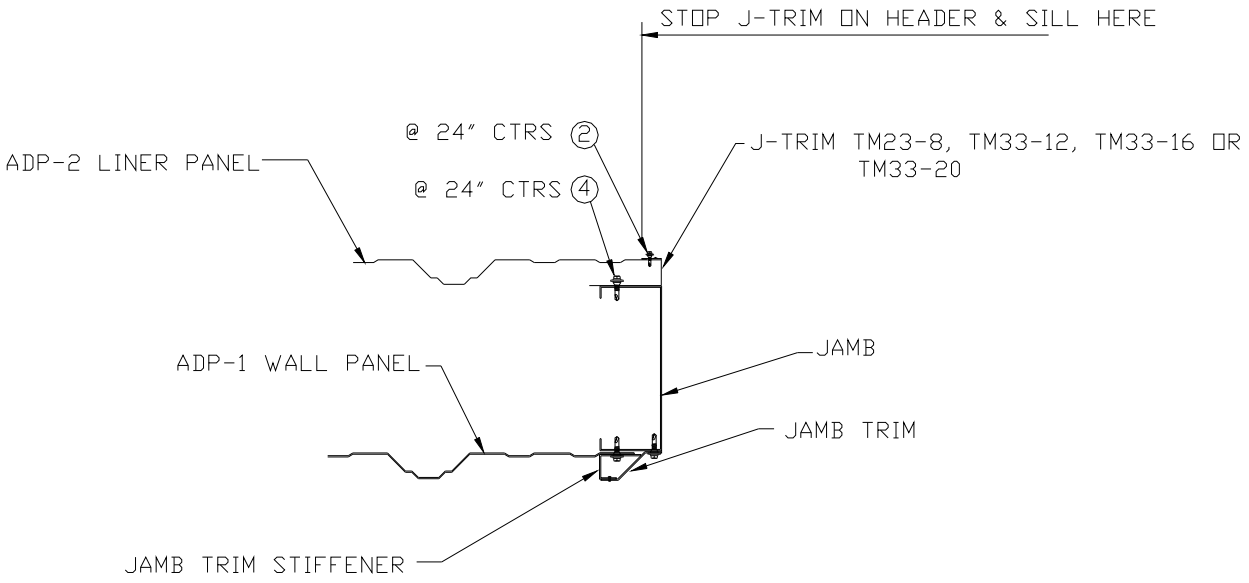
AT HEADER



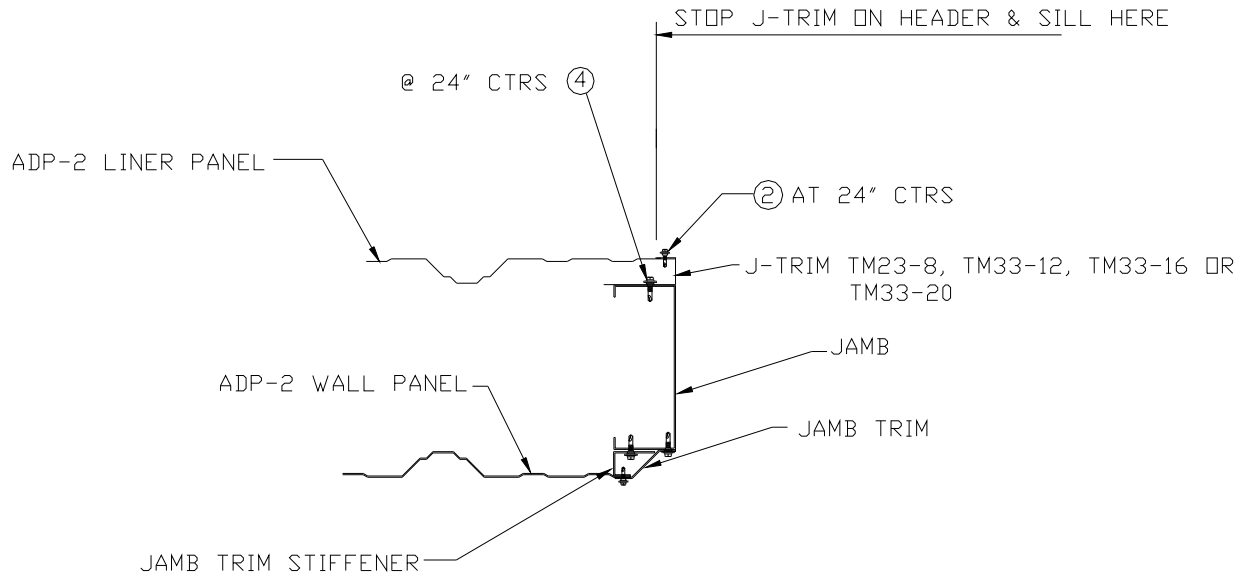
AT HEADER/GIRT



LINER AT FRAMED OPENING WITH SILL



AT JAMB WITH ADP-1 WALL PANEL



AT JAMB WITH ADP-2 WALL PANEL