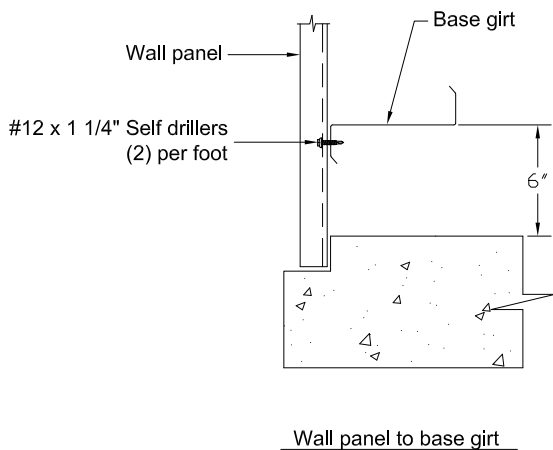
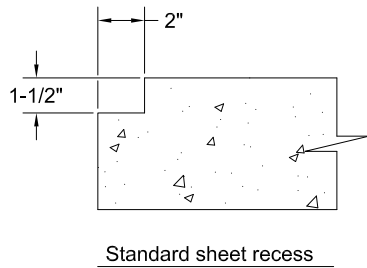
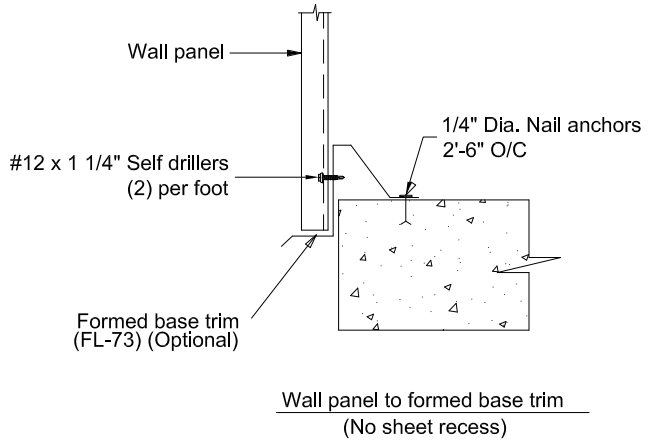
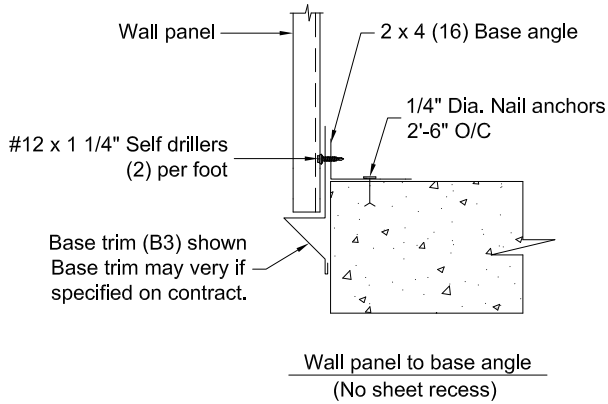
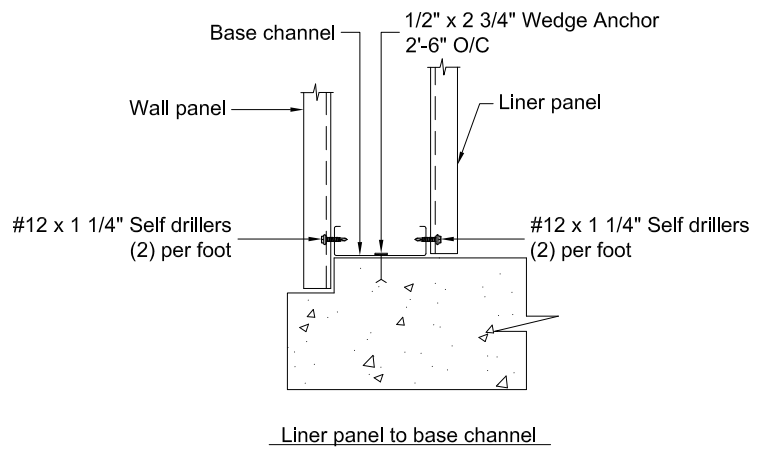
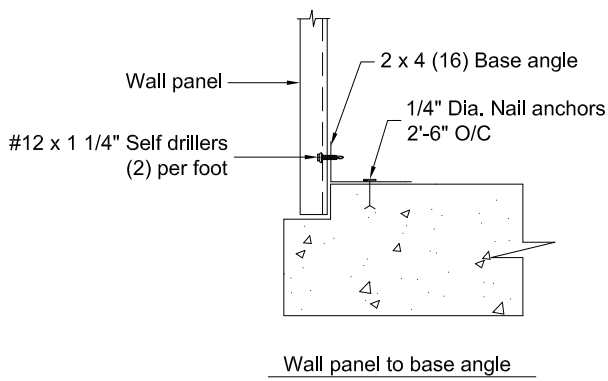


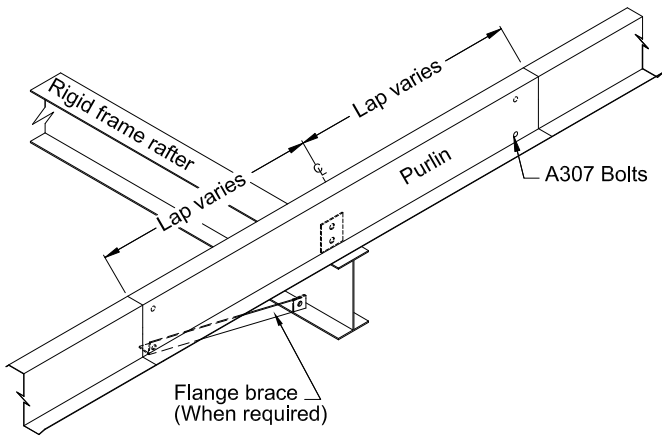
Table of Contents

1. Base Conditions
2. Rigid Frame Column and Rafter
3. Coldform Endwall Column and Rafter
4. Mill Endwall Column and Rafter
5. Rigid Frame Endwall
6. Fastener Spacings and Patterns
7. Roof Panel
8. Wall Panel with Gutter or Eave Trim
9. Wall Panel with High Side Rake Trim
10. Skylight Panel
11. Framed Opening
12. Walk Door
13. Window
14. Ridge Vent
15. Louver & Fan
16. Portal Frame
17. Standard Trim
18. Sag Angle
19. Endwall Roof Overhang
20. Strapping
21. Insulation
22. Downspout - Corrugated
23. Downspout - Box



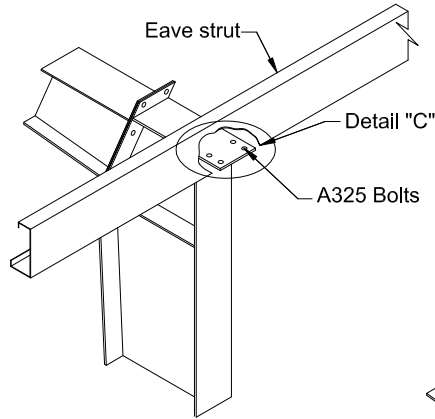
1. Standard 2 x 4 (16) base angle comes in 20'-0" lengths. Base angle should be omitted at overhead doors, personnel doors, and framed openings. Base angle should be attached using nail anchors furnished by the manufacturer.
2. Base girts (Optional) are furnished continuous from column to column and must be field cut at personnel doors.
3. Base channel (Optional) will be furnished in 20'-0" lengths. Omit base channel at all overhead doors, personnel doors, and framed openings. Field cut base channel as needed. Base channel should be attached using wedge anchors furnished by the manufacturer.
4. Base closures do not come standard at all base conditions. However, base closures can be marked on the contract to add to your building. Manufacturer does add base closures when no sheet recess is specified and when the building is not insulated. Base closures come in a 3'-0" length and are placed at the perimeter of the building. Omit base closures at overhead doors, personnel doors, and when sheet recess is used. (Unless specified otherwise)
5. All base members anchored directly to the floor must be anchored 3" from each end and on 2'-6" centers between.

Location	Bolt Size
Purlin Connection	A307 1/2" X 1 1/4"
Girt Connection	A307 1/2" X 1 1/4"
Eave Strut Connection	A325 1/2" X 1 1/4"

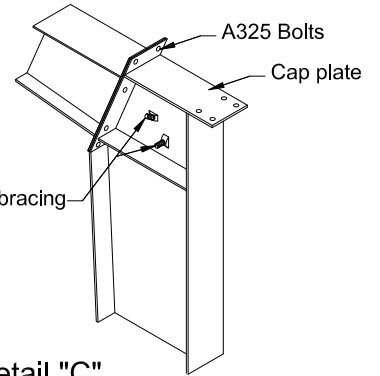


Detail "A"

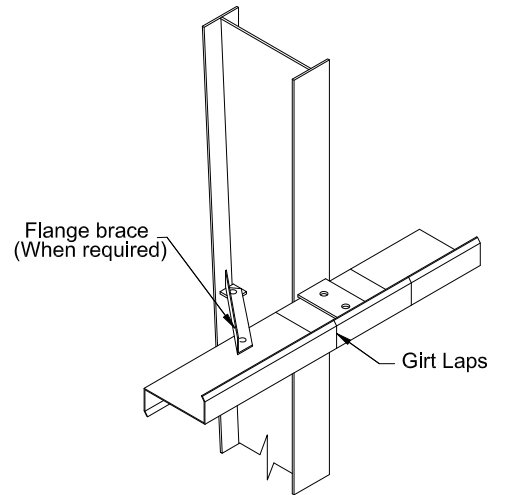
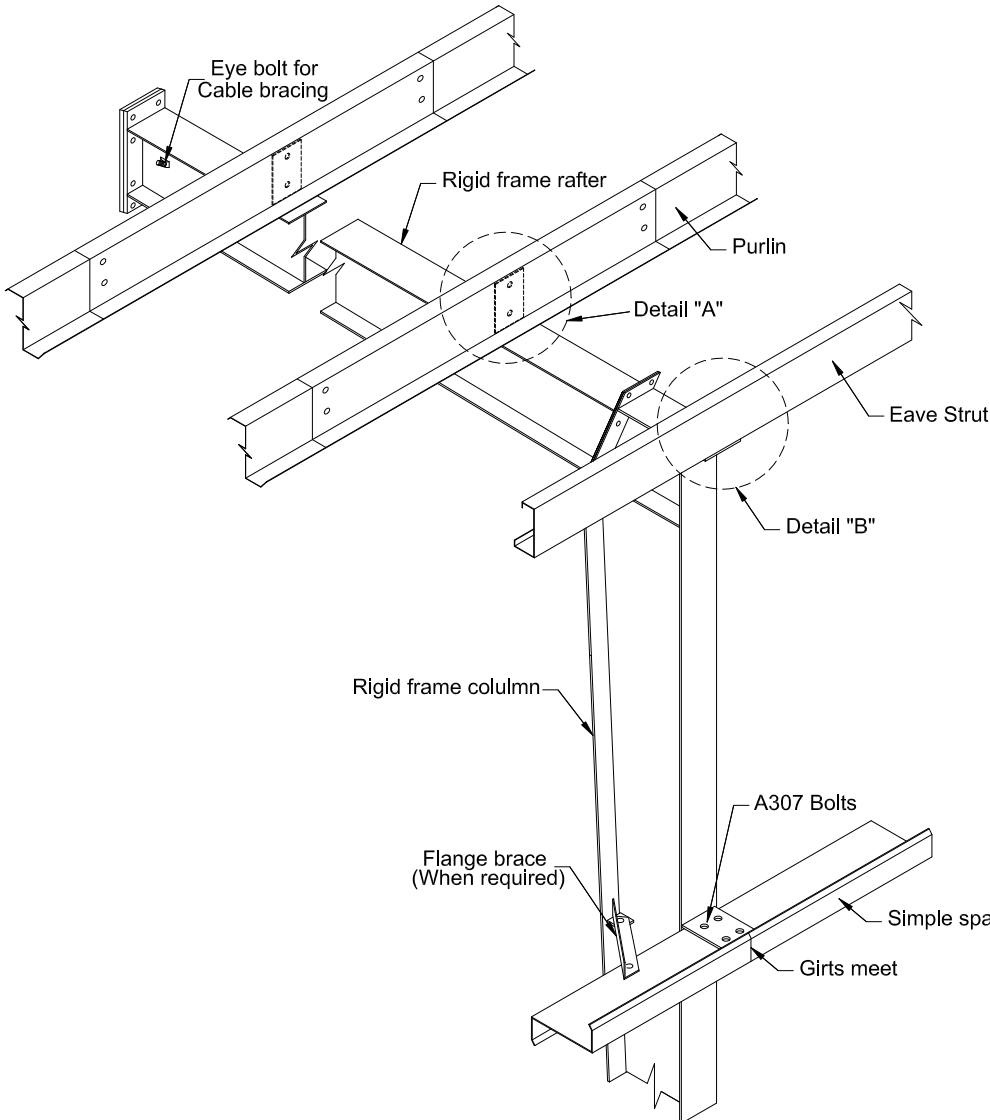
Refer to roof framing plan for purlin laps (May vary)
(Only place bolts in the designated holes)



Detail "B"



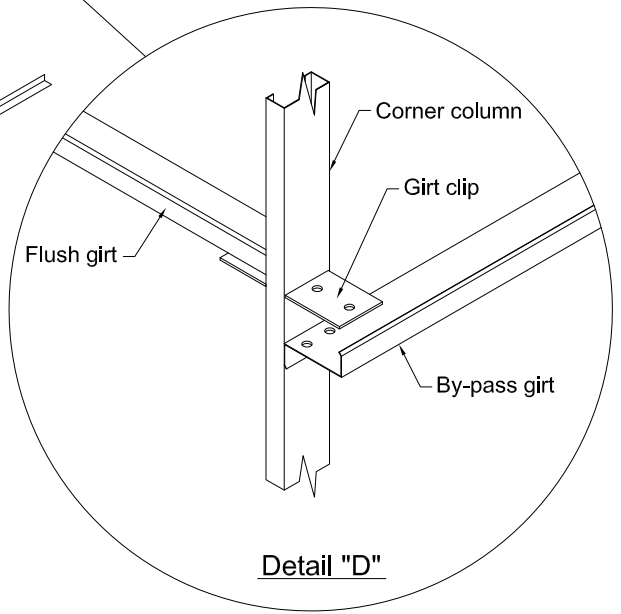
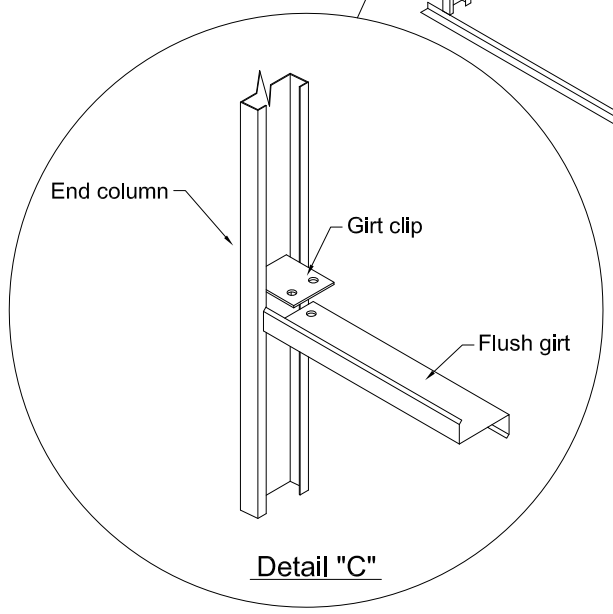
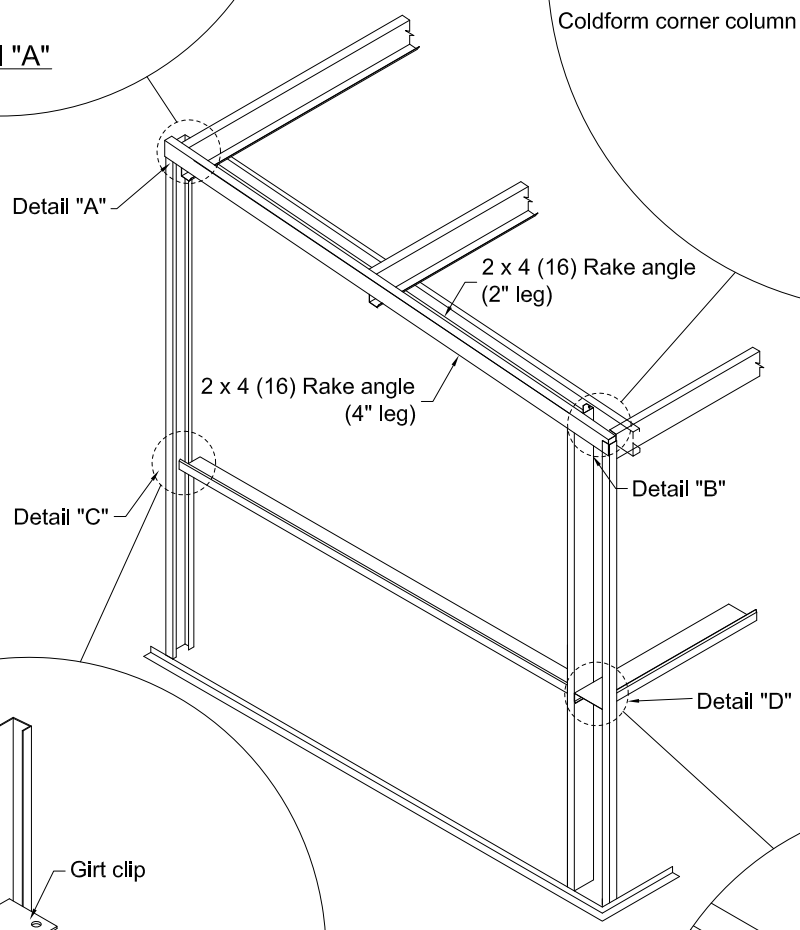
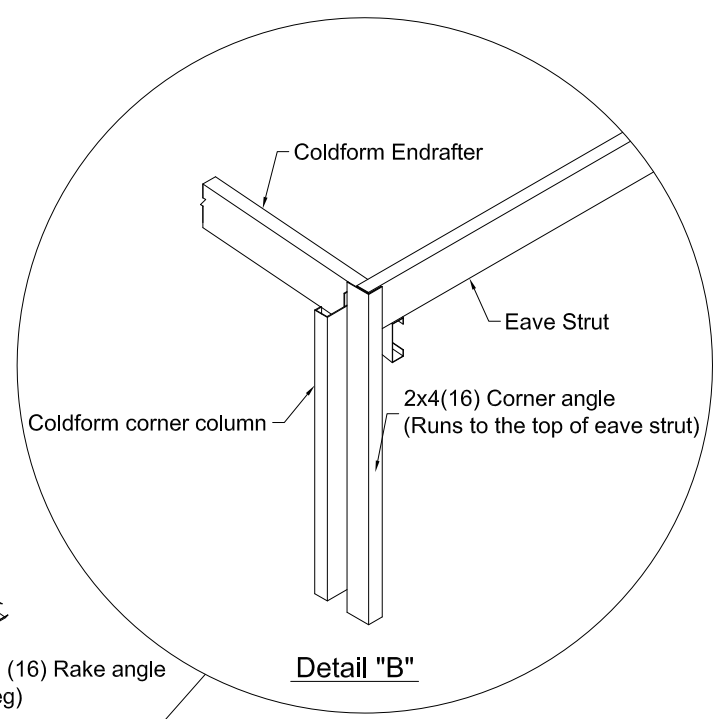
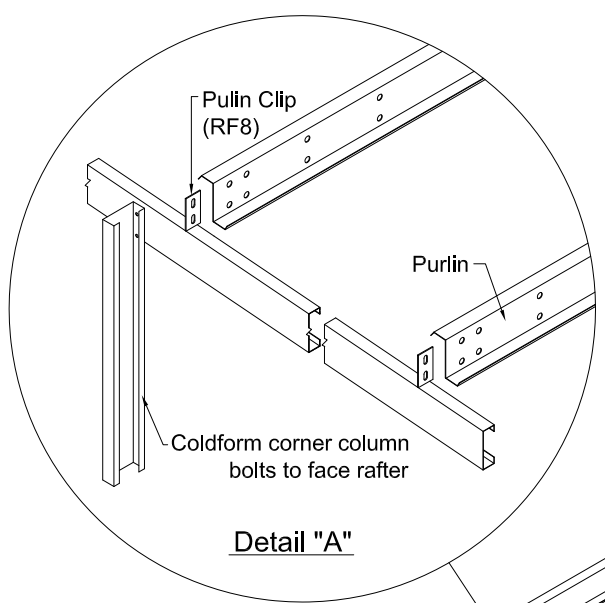
Detail "C"



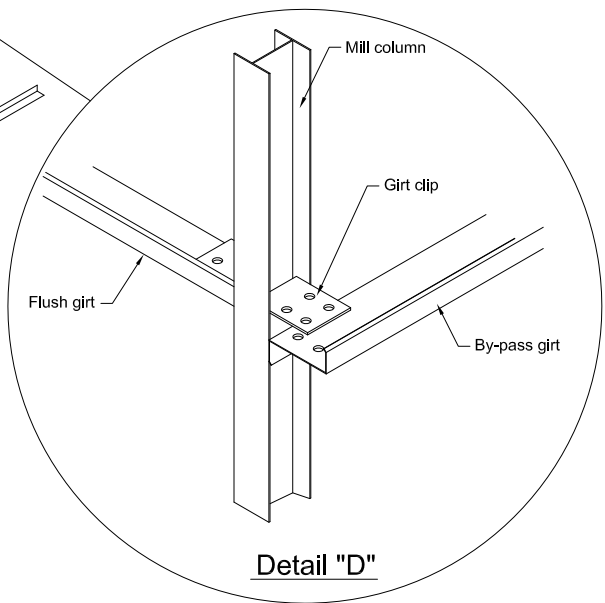
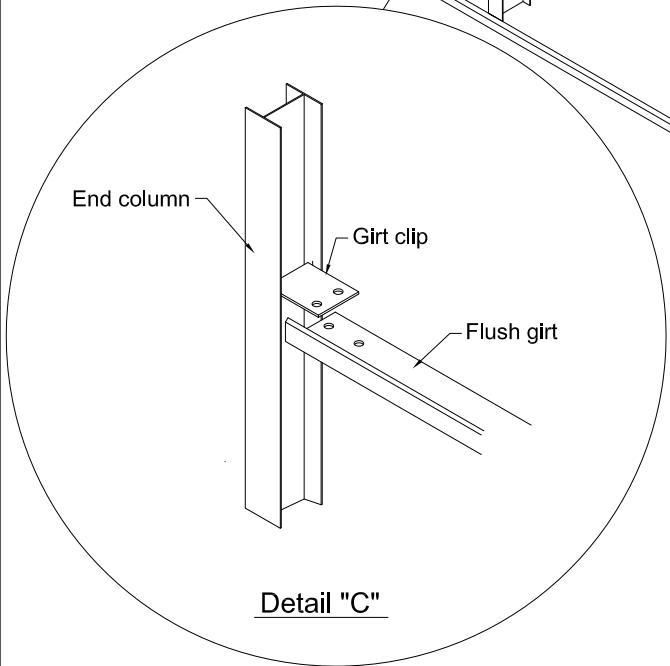
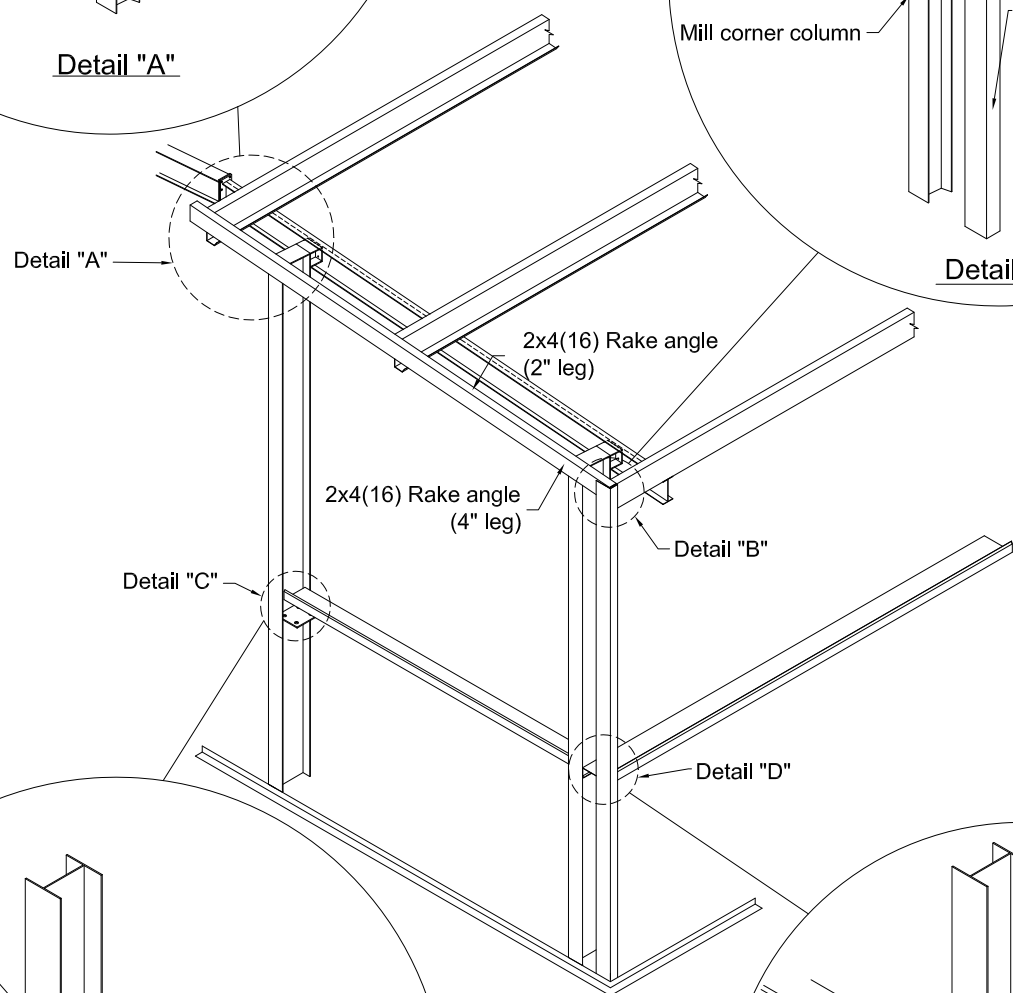
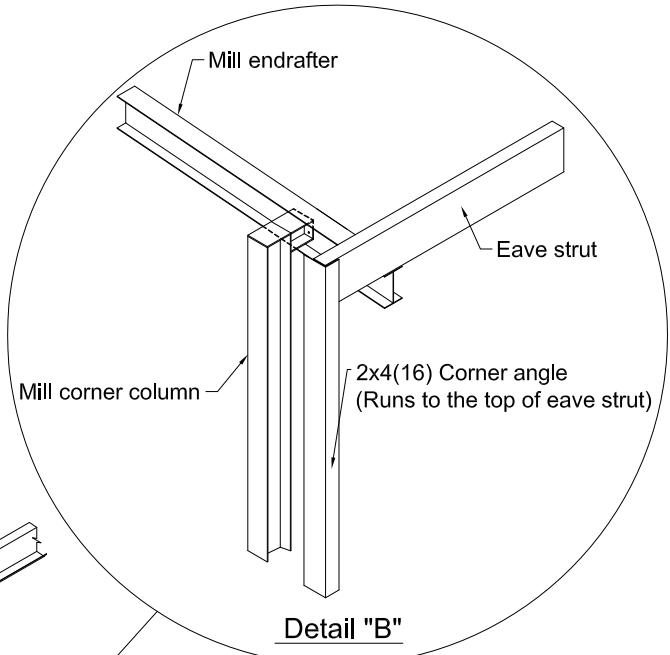
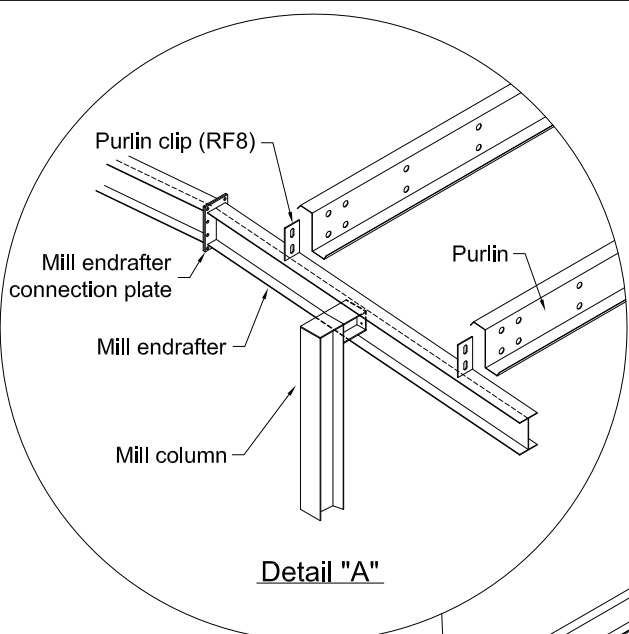
Standard girt lap

Refer to framing diagram for girt laps.

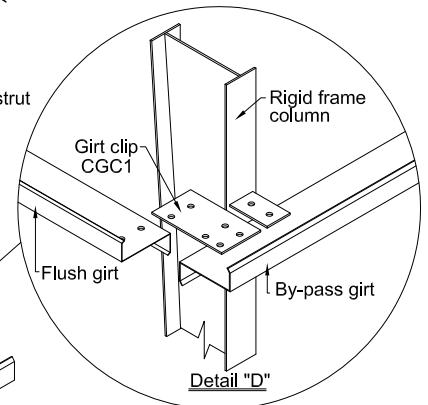
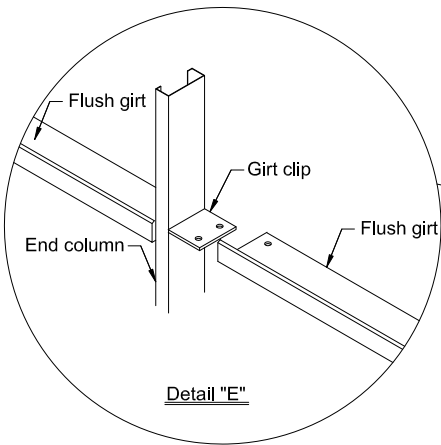
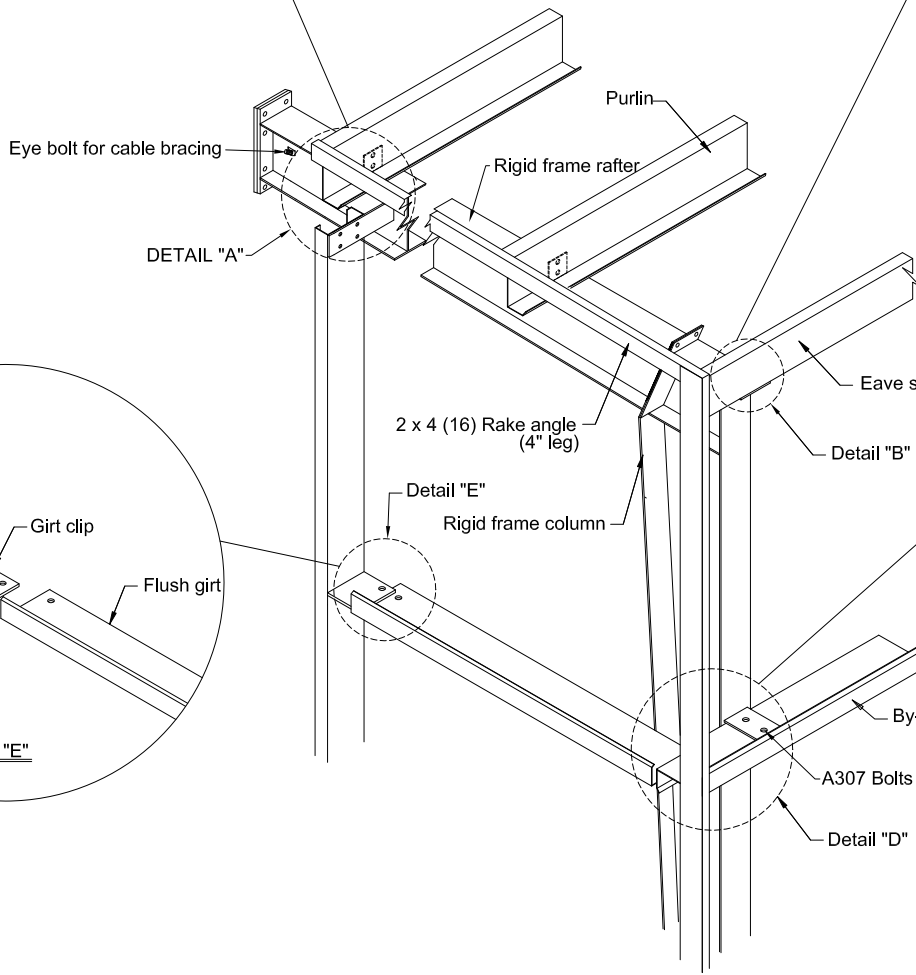
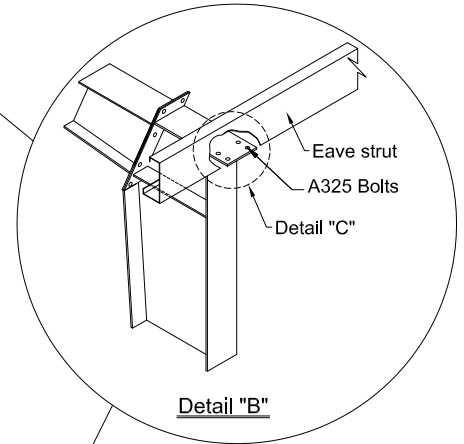
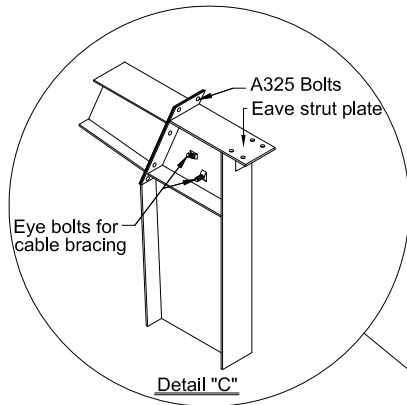
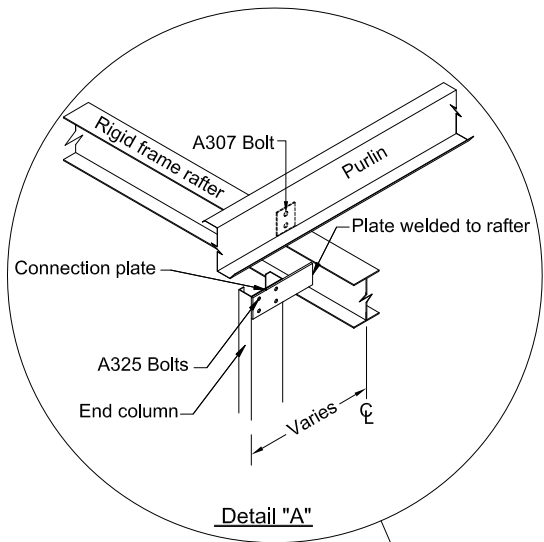
Location	Bolt Size
Purlin Connection	A307 1/2" x 1 1/4"
Girt Connection	A307 1/2" x 1 1/4"
Eave Strut Connection	A325 1/2" x 1 1/4"



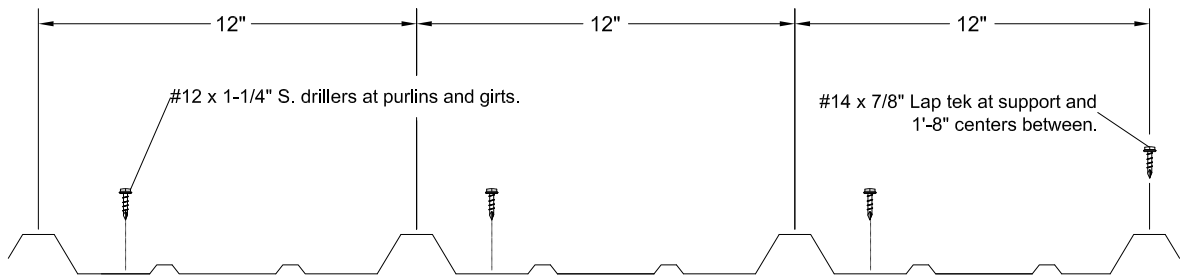
Location	Bolt Size
Purlin Connection	A307 1/2" x 1 1/4"
Girt Connection	A307 1/2" x 1 1/4"
Eave Strut Connection	A325 1/2" x 1 1/4"



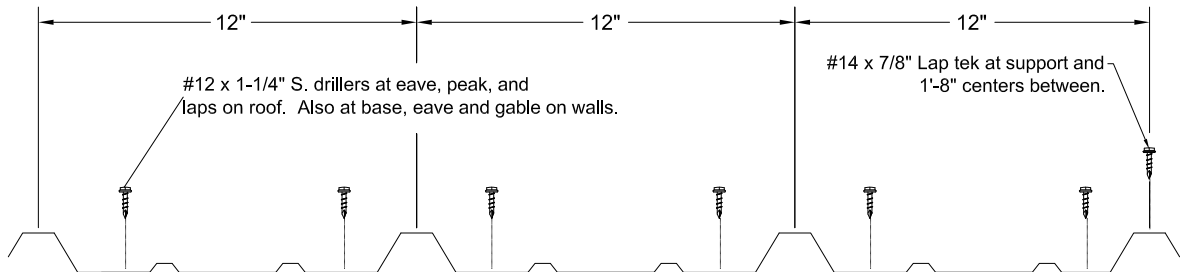
Location	Bolt Size
Purlin Connection	A307 1/2" X 1 1/4"
Girt Connection	A307 1/2" X 1 1/4"
Eave Strut Connection	A325 1/2" X 1 1/4"



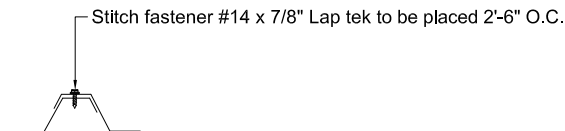
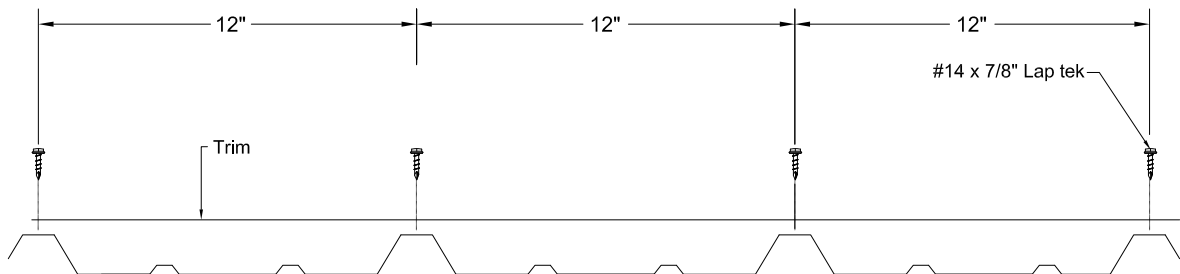
Pattern #1
(At intermediate support)



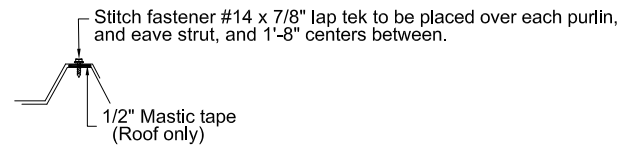
Pattern #2
(At eave or end lap)



Pattern #3
(At trim at roof)



Wall panel side lap detail



Roof panel side lap detail

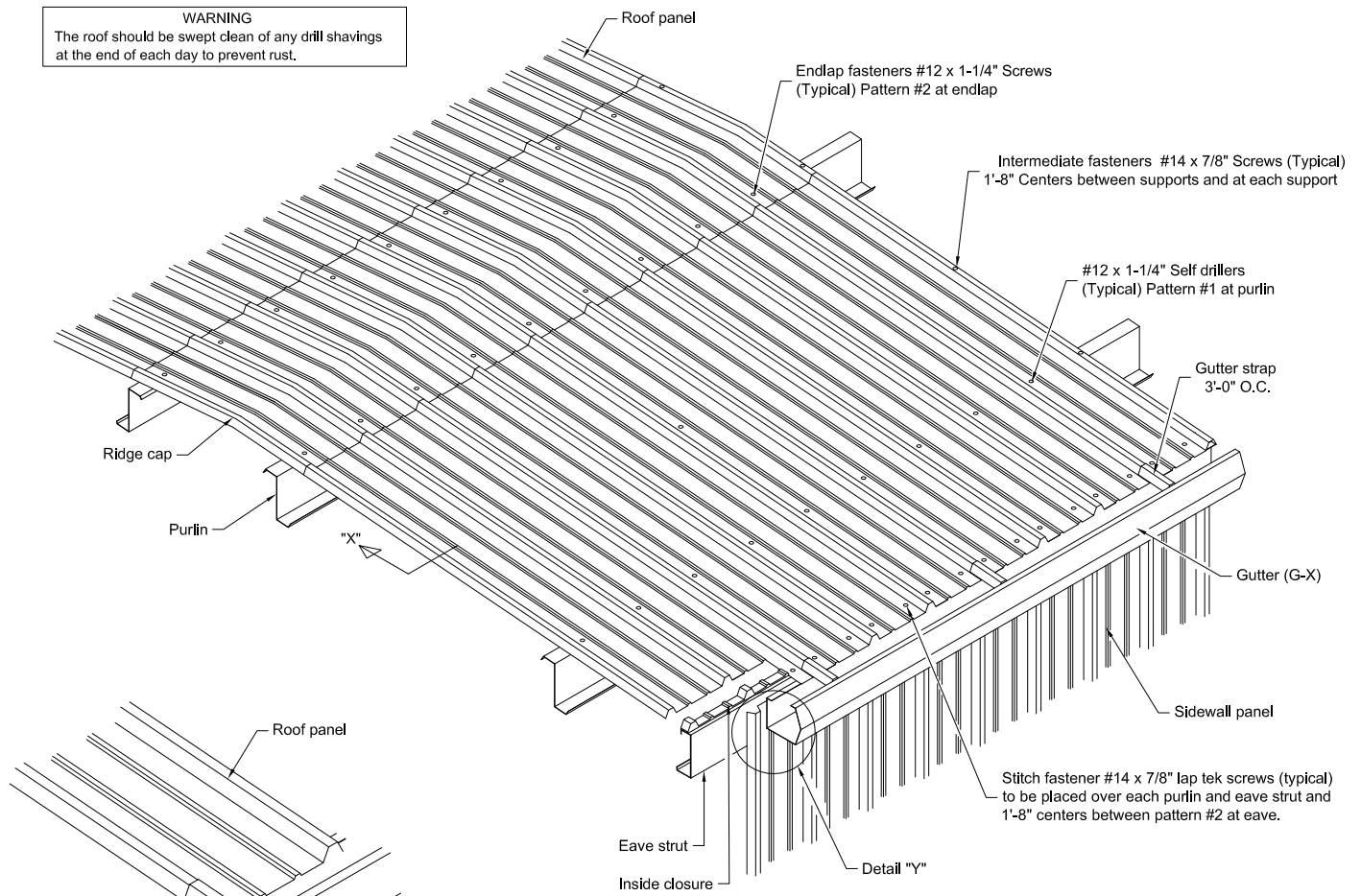
Warning! The roof should be swept clean of any drill shavings at the end of each day to prevent rust.

Wall Panel Fasteners - Panel to purlin connections to be #12-14x1-1/4" self-drilling hex head with a 5/8" O.D. washer 12" O.C. Spacing at all endlaps to be in a 5-7-5-7 in. repeating pattern. Spacing for panel to panel connections to be 2'-6" O.C. with a fastener located over each purlin.
Girts - No. 16 MSG min. gauge steel. (55 ksi minimum yield strength)

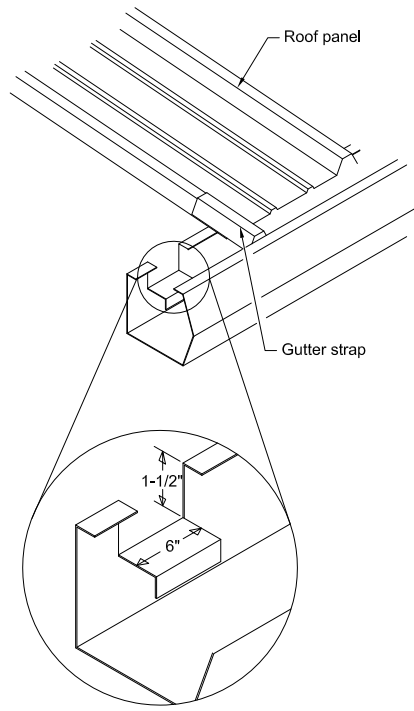
Construction #161

Roof Panel Fasteners - Panel to purlin connections to be #12-14x1-1/4" self-drilling hex head with a 5/8" O.D. washer 12" O.C. Spacing at all endlaps to be in a 5-7-5-7 in. repeating pattern. Spacing for panel to panel connections to be 1'-8" O.C. with a fastener located over each purlin.
Purlins - No. 16 MSG min. gauge steel. (55 ksi minimum yield strength)

WARNING
The roof should be swept clean of any drill shavings at the end of each day to prevent rust.

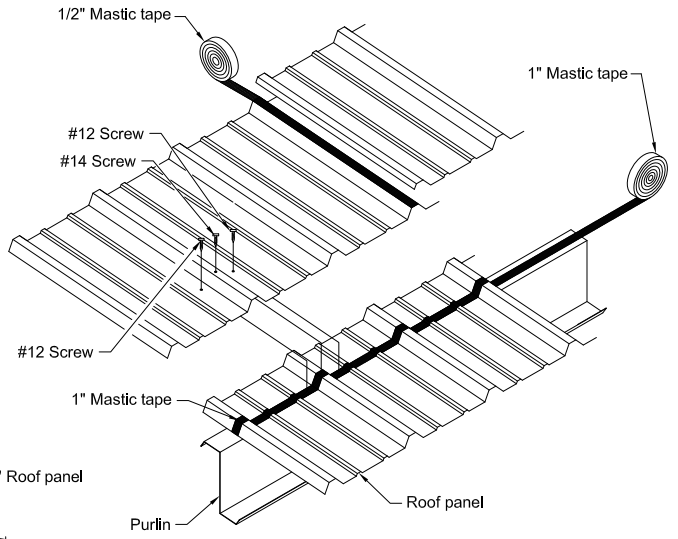


NOTE: Roof panels to have a 4" overhang at eave.

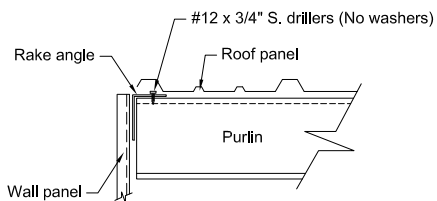


(Optional) Overflow window field bend @ 10'-0" O.C.

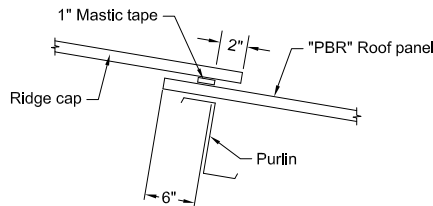
Detail "Y"

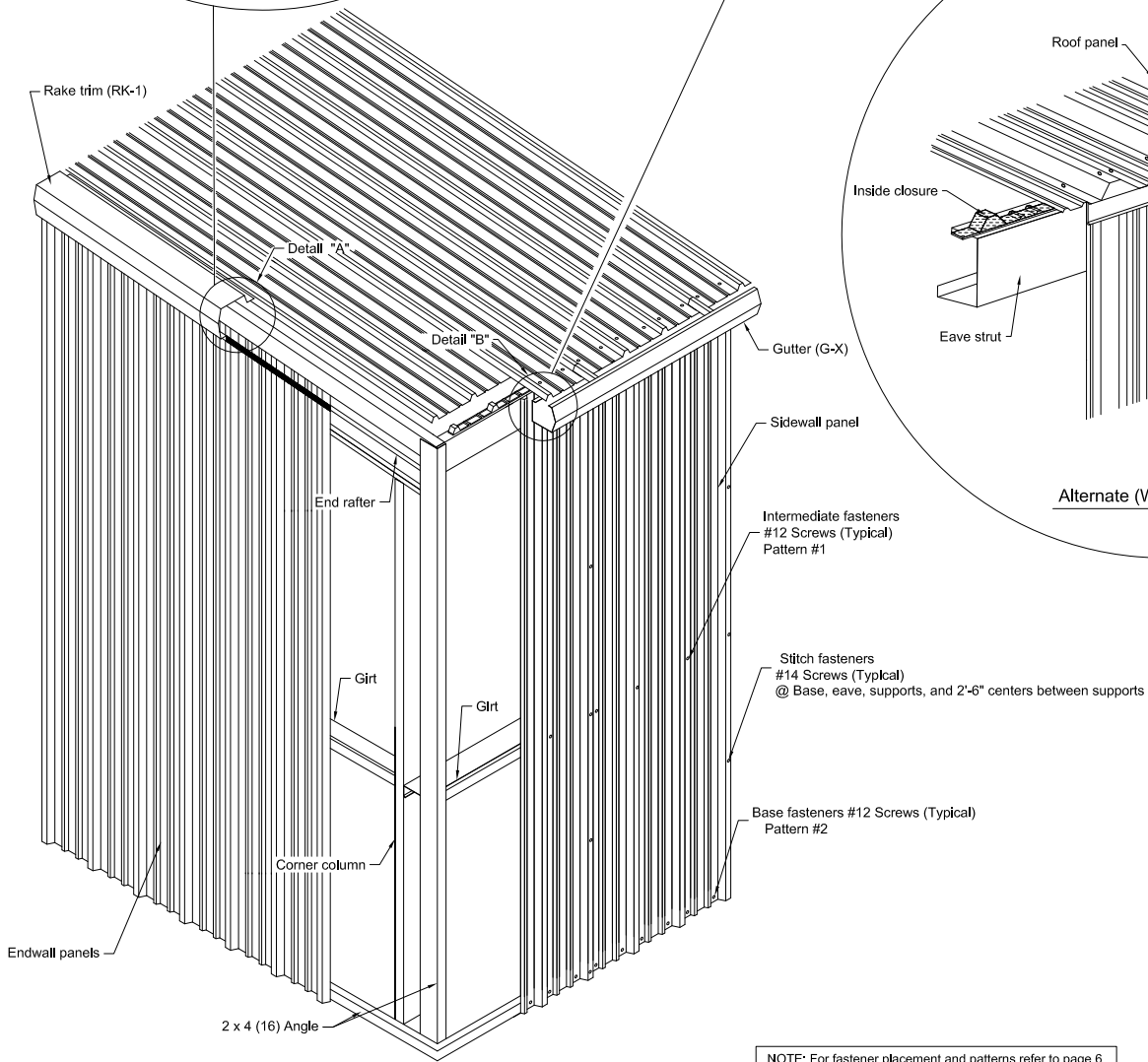
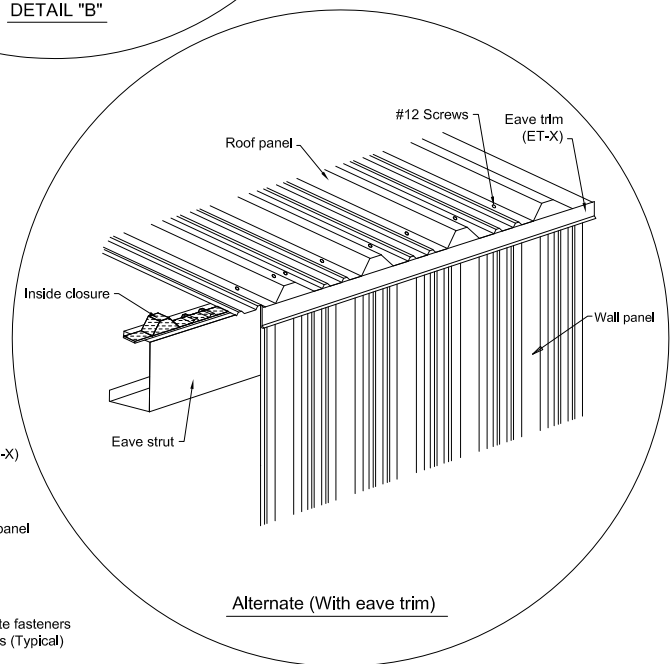
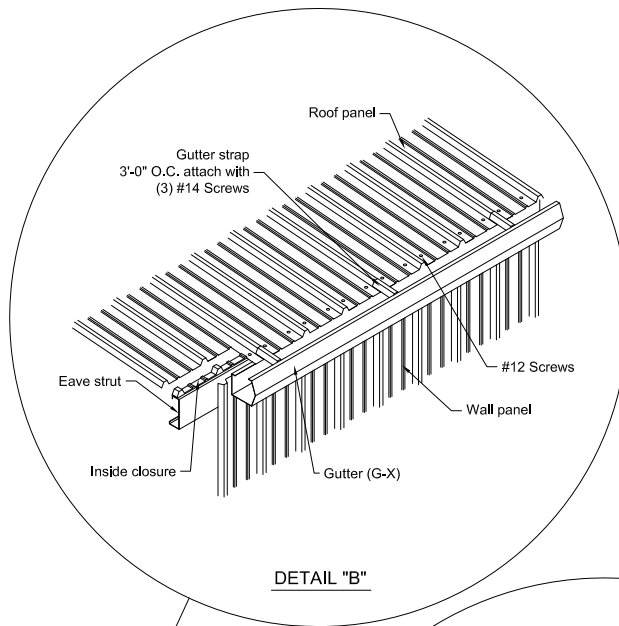
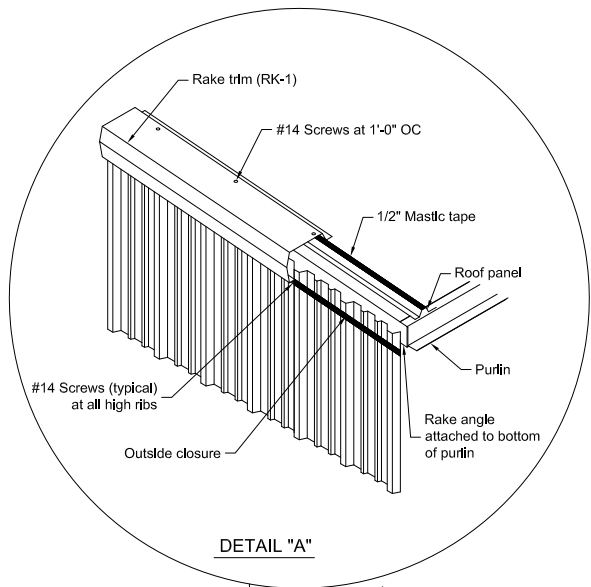


Detail at ridge cap and panel end lap



Detail at endwall

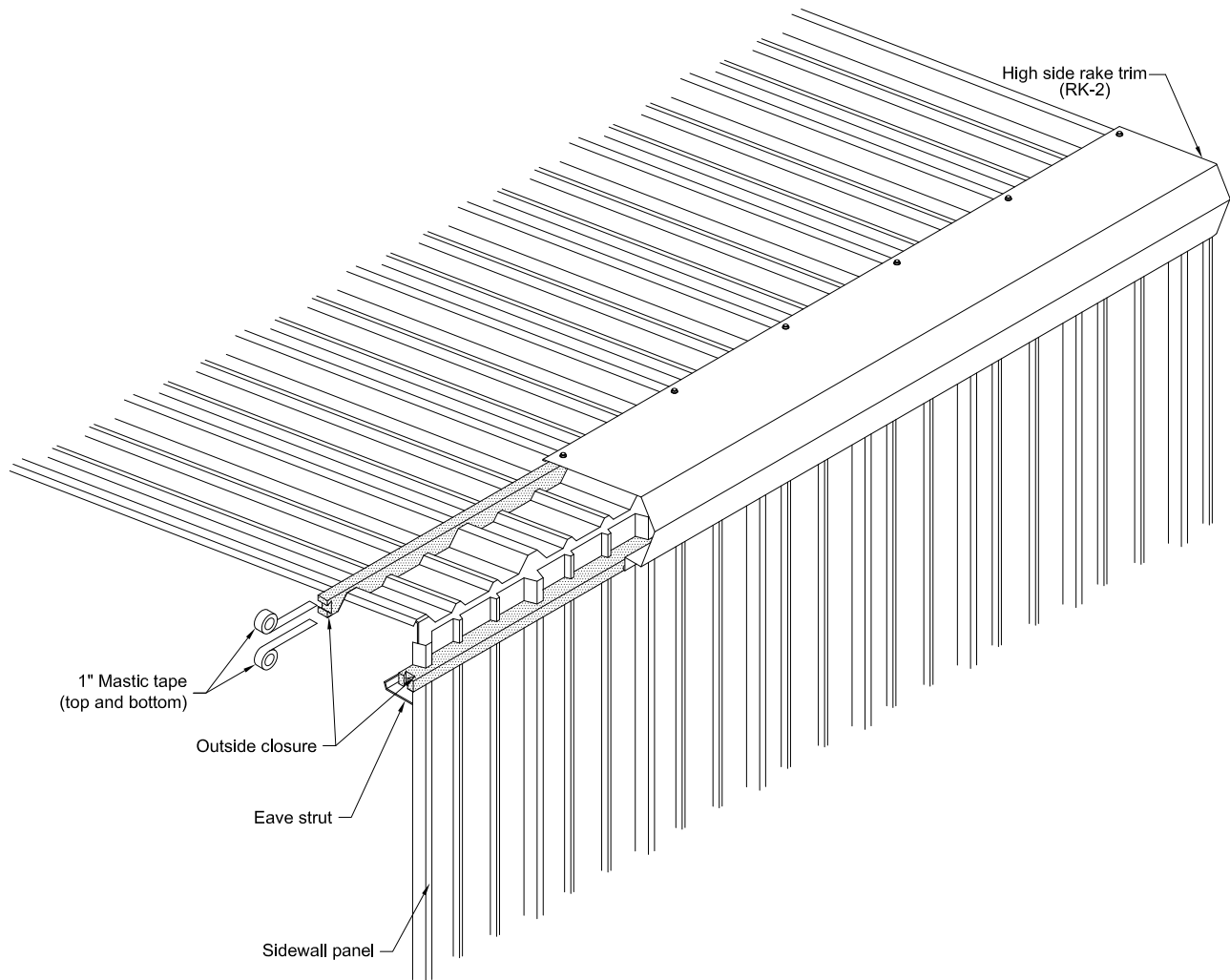




NOTE: For fastener placement and patterns refer to page 6.

NOTE: Wall fastener to be color coated to coordinate with panels.

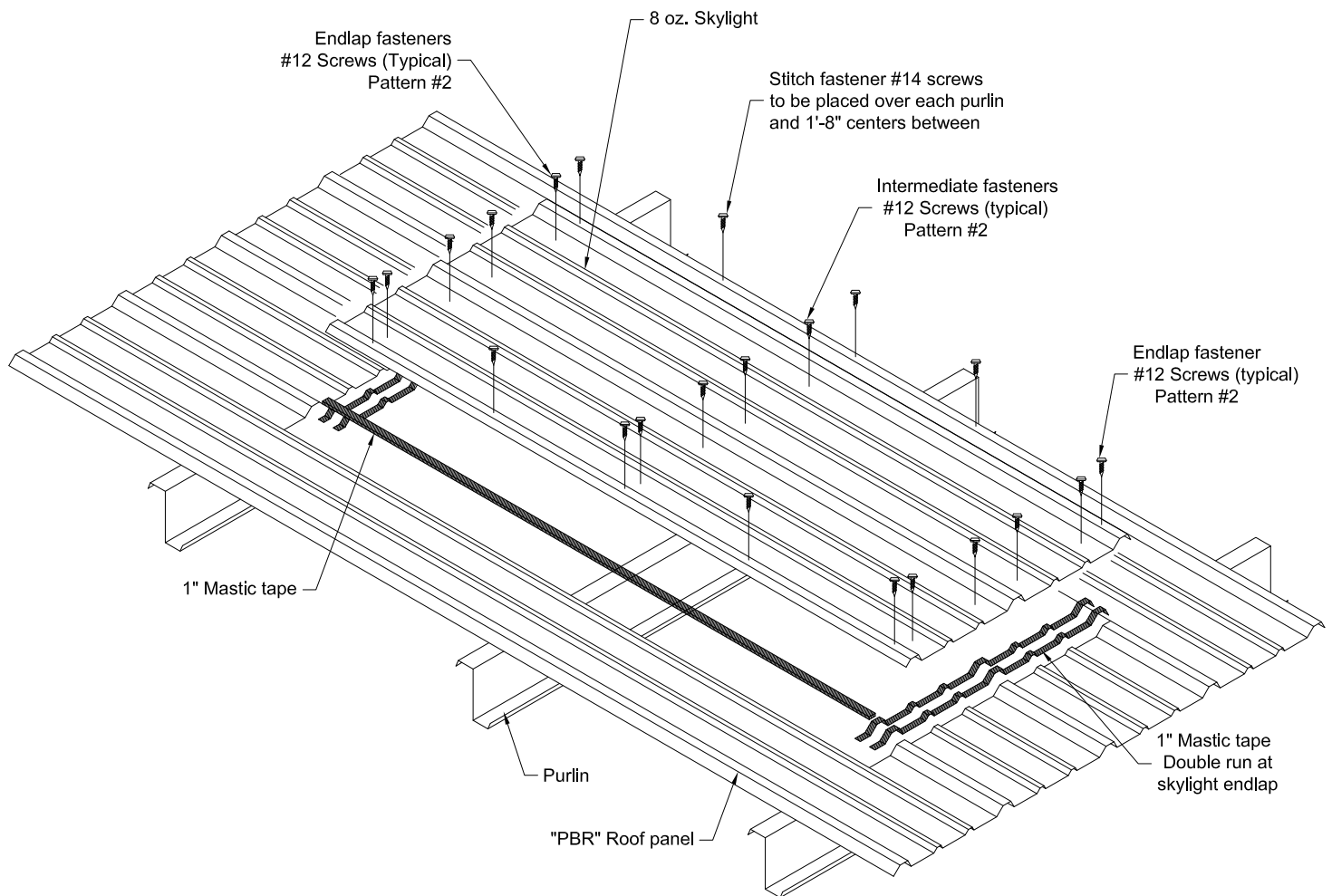
Note: Attach high side rake trim to roof panels and wall panels with #14X7/8" lap teks.



High side condition of single slope buildings

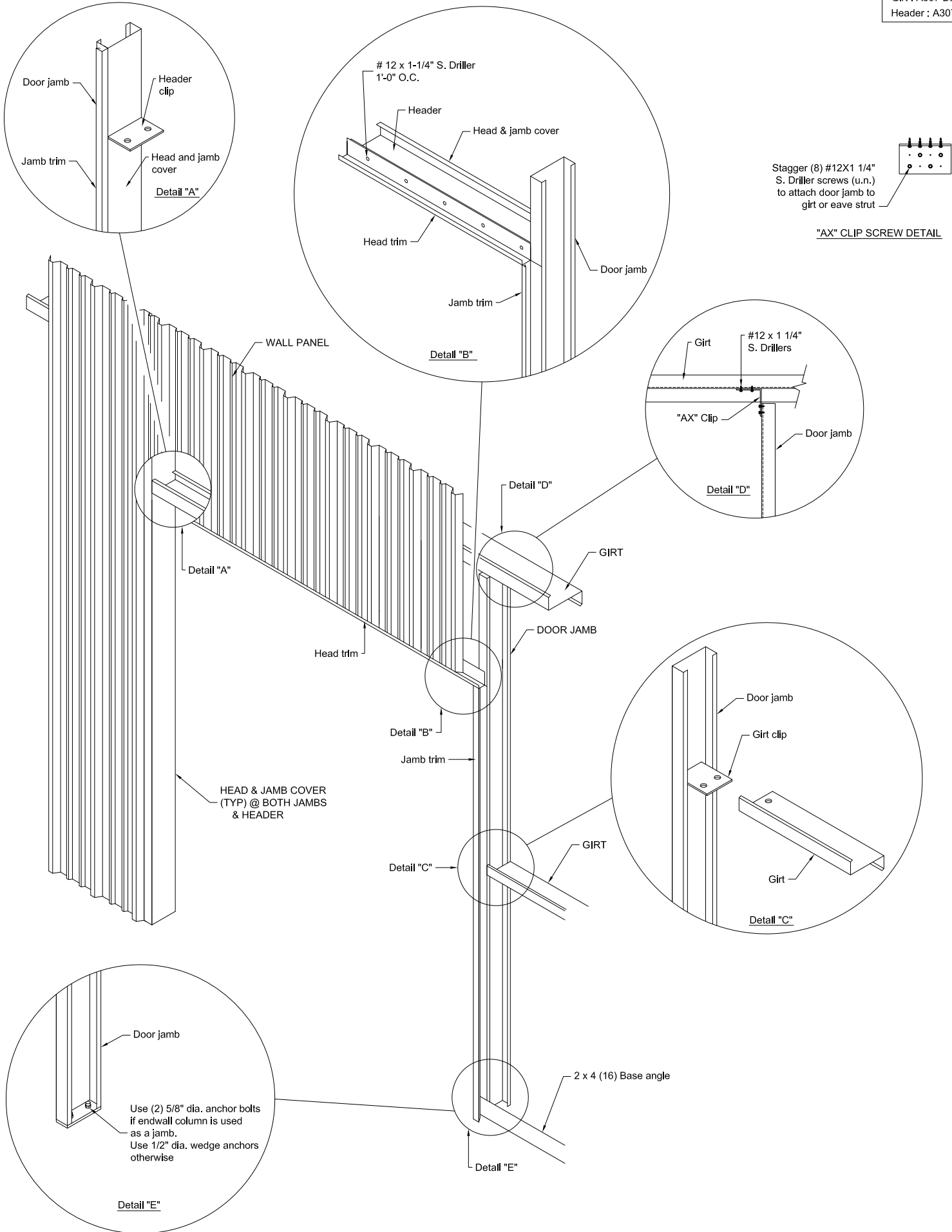
WARNING:

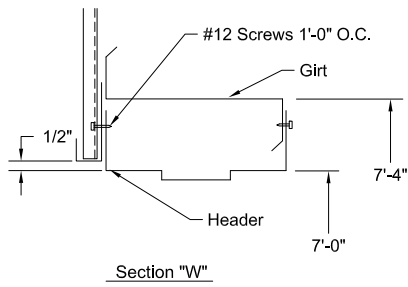
The roof should be swept clean of any drill shavings at the end of each day to prevent rust.



Notes:

1. Skylight trim will be shipped only when roof is insulated.
2. Sidelap fiberglass skylight panels on top of metal roof panels.
3. See erection drawings for skylight location and laps.
4. For fastener placement refer to fastener spacing and patterns on page 6.



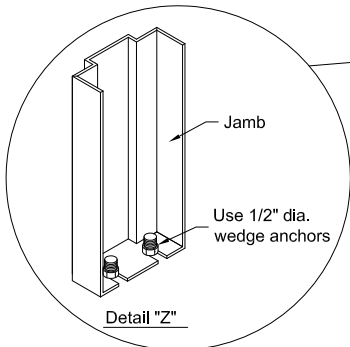
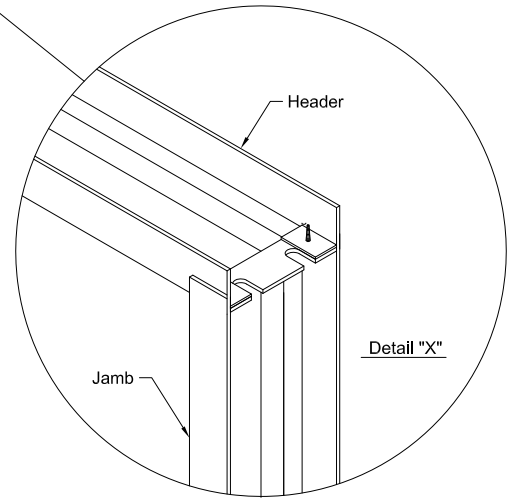
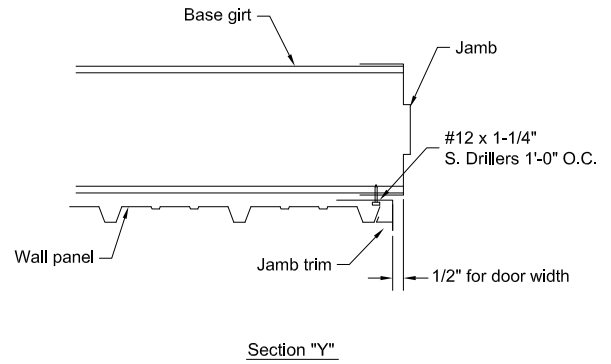
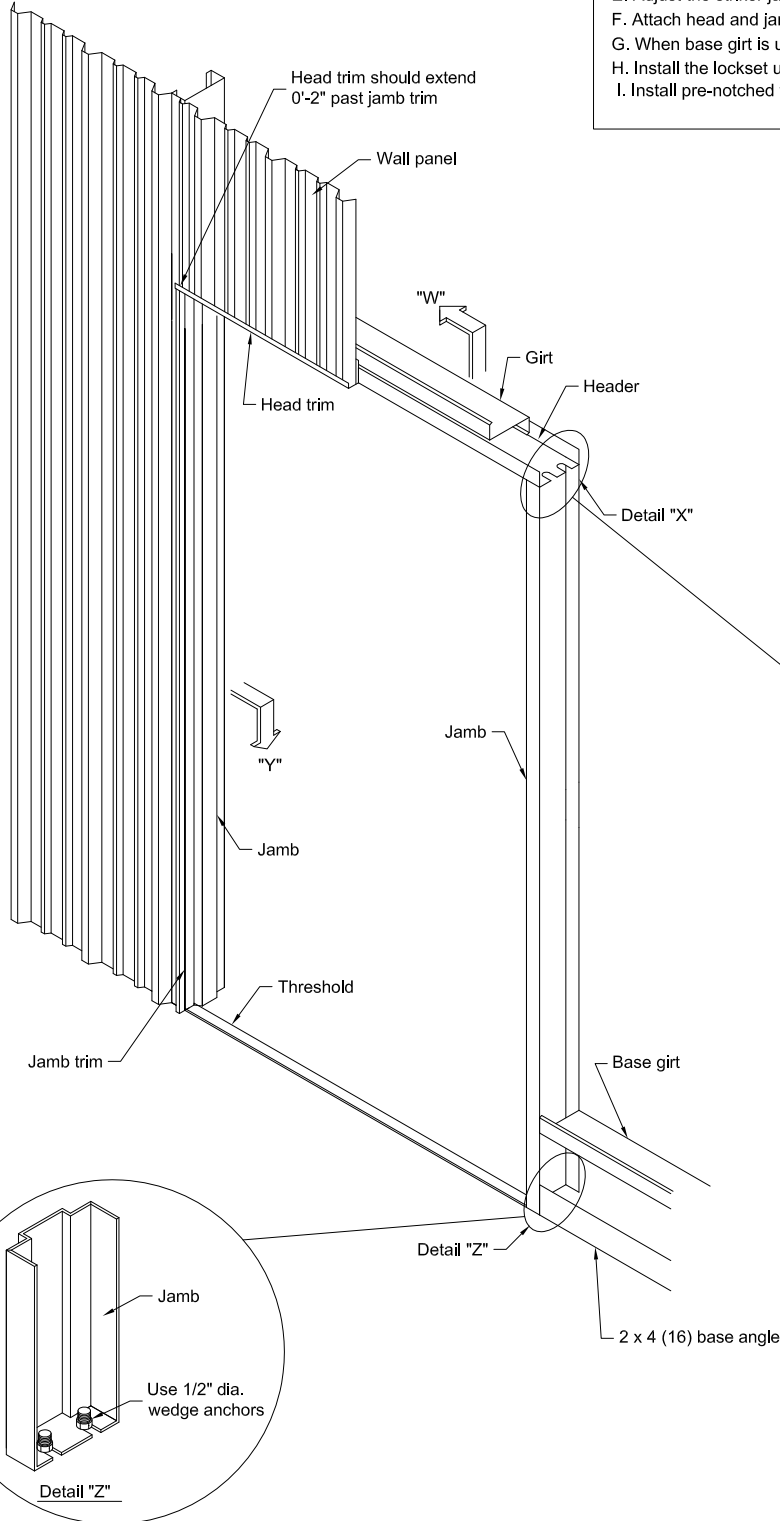


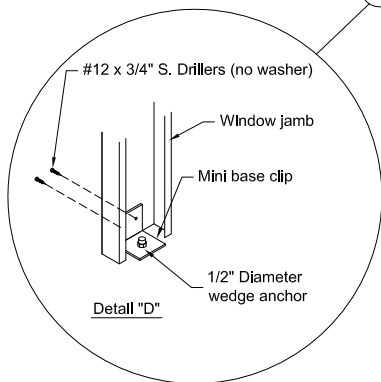
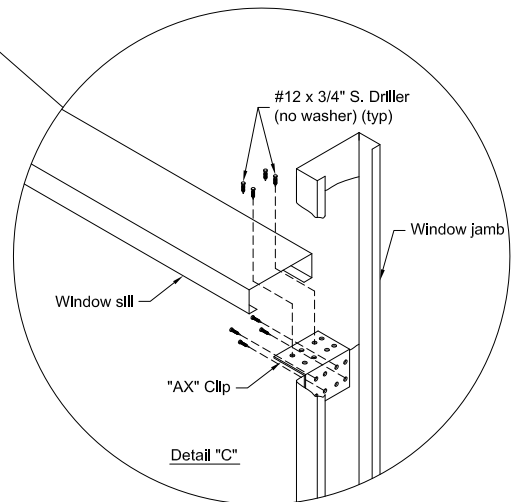
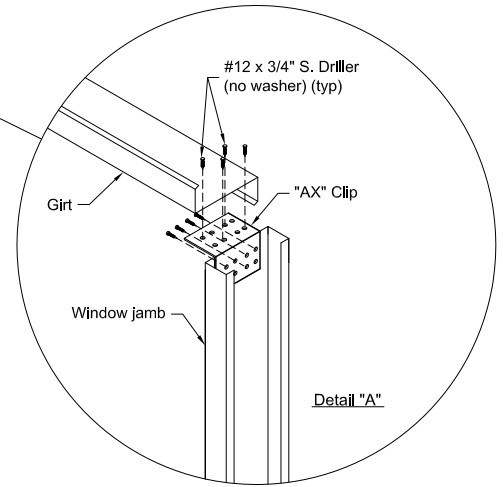
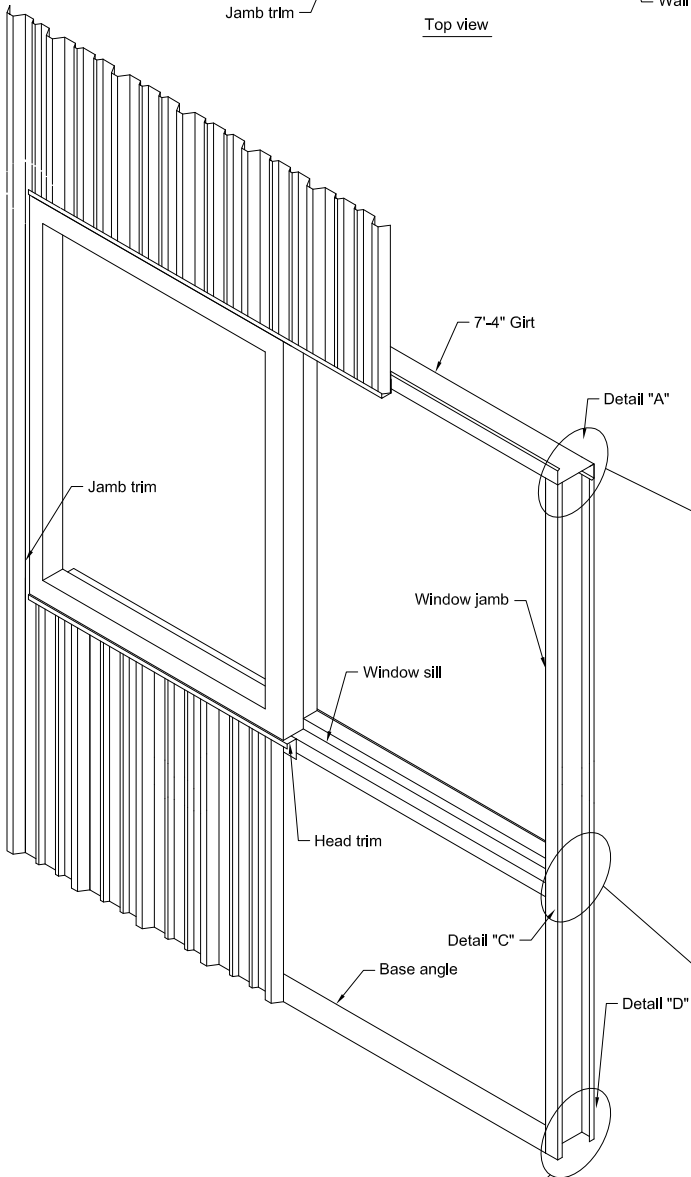
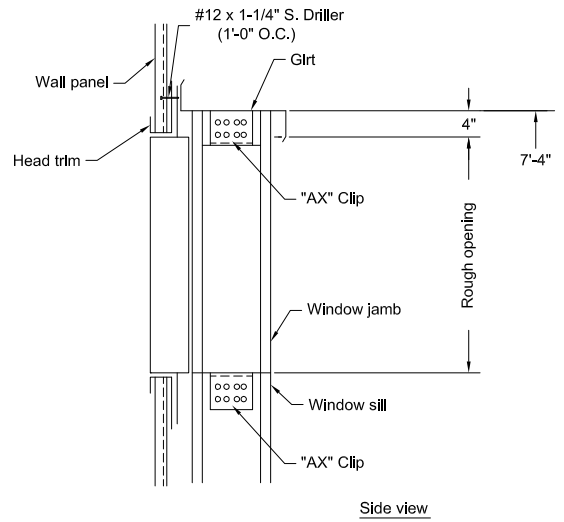
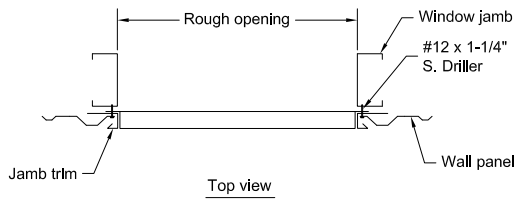
General notes:

1. Walk doors are to be field located before attaching the wall panels.
2. Door frames are shipped unassembled for field assembly.
3. When optional base girt is used, 2 x 4 (16) base angle is not furnished.
(Unless specified otherwise on contract.)
4. The following installation procedure is for installing a door under standard conditions.

Installation

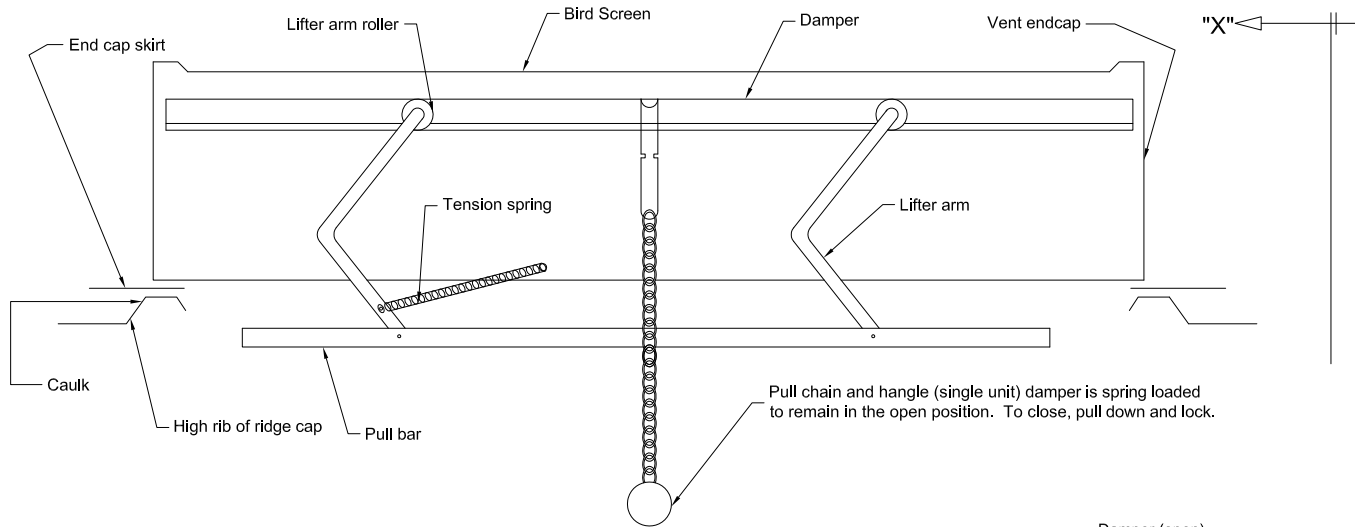
- A. Assemble the door frame. Attach header to jamb with the bolts and nuts furnished with the frame kit.
- B. Set frame in place, plumb hinge jamb and anchor to foundation.
- C. Attach header to girt with (2) #12 x 1-1/4" screws @ 1'-0" O.C.
- D. Hang the door leaf.
- E. Adjust the striker jamb to the door frame with #12 screws.
- F. Attach head and jamb trim to the door frame with #12 screws.
- G. When base girt is used. Field cut @ door and attach to jambs with (2) #12 screws. See section "Y".
- H. Install the lockset using the instructions included with the lockset.
- I. Install pre-notched threshold utilizing the spring clips which are already installed in the threshold.





Notes to erector:

1. All window sub-framing will be made with 8" cee material unless noted otherwise.
2. Head trim to extend 2" past inside edge of jamb trim.
3. All "AX" clips are 3"x5"x10ga.x5" long and are shipped loose.
4. Field drill weep holes in head trim as needed for water damage.

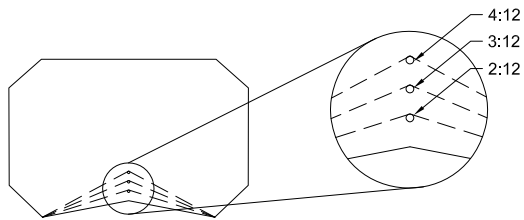
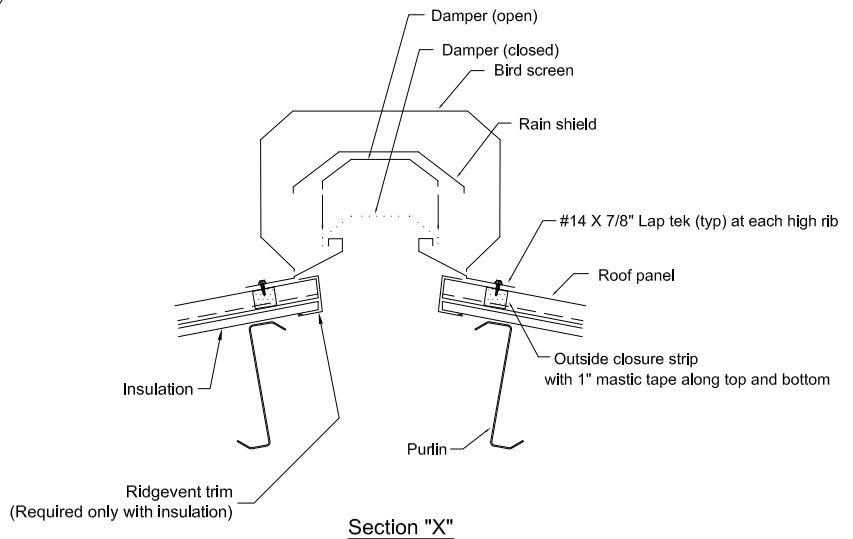


Pull chain and hangle (single unit) damper is spring loaded to remain in the open position. To close, pull down and lock.

Installation procedure

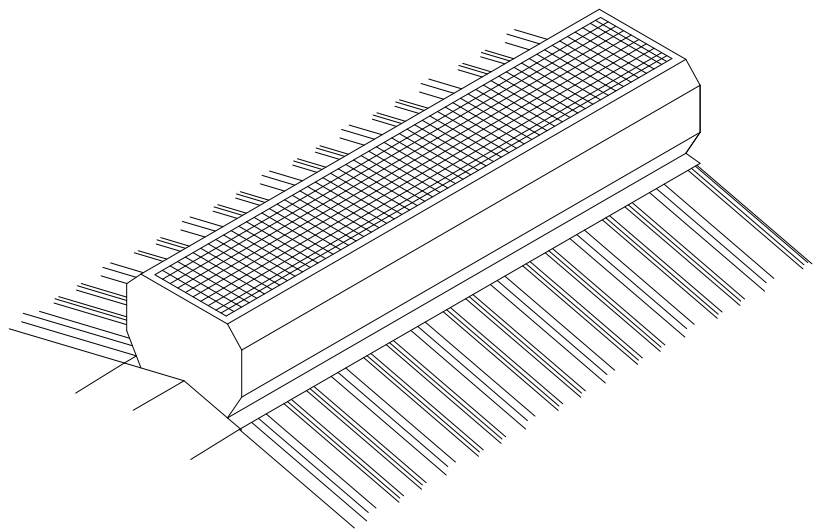
1. Leave (3) ridge caps off where ridge vent is to be placed, then back lap (one) ridge cap or operator will not work.
2. Field cut end caps for required roof slope.
3. Attach end cap skirts to both ends of ridge vent with pop rivets. Note that endcap skirts will lap over ridgecap by 1'-0".
4. Apply outside closure to roof panels with 1" mastic tape top and bottom along each side of 10'-0" opening.
5. Apply 1" mastic tape to high rib of ridge cap at each end of opening.
6. Set ridge vent in place and attach to roof panels at high rib with #14x7/8" lap teks.

Note: Ridge vents are stocked in galvalume and white only.

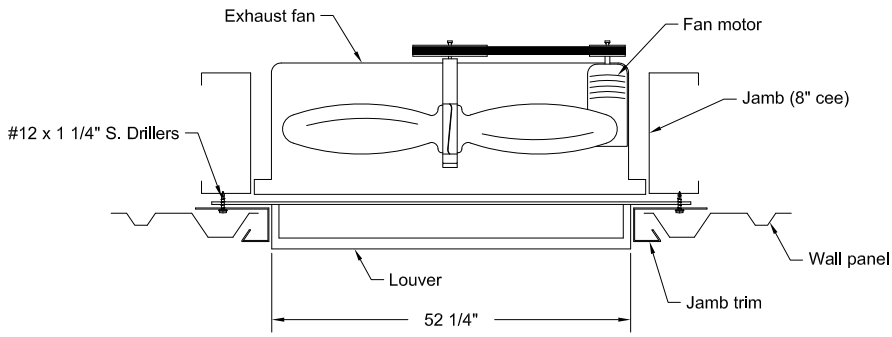


End cap modification detail
For roof slope greater than 1:12

Note: End cap is factory cut for 1:12 pitch.
Three dots indicate 2:12, 3:12, & 4:12 pitches.
Field cut for your desired pitch.



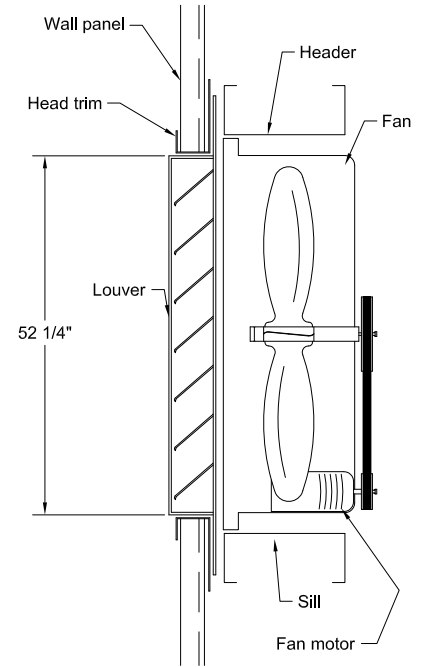
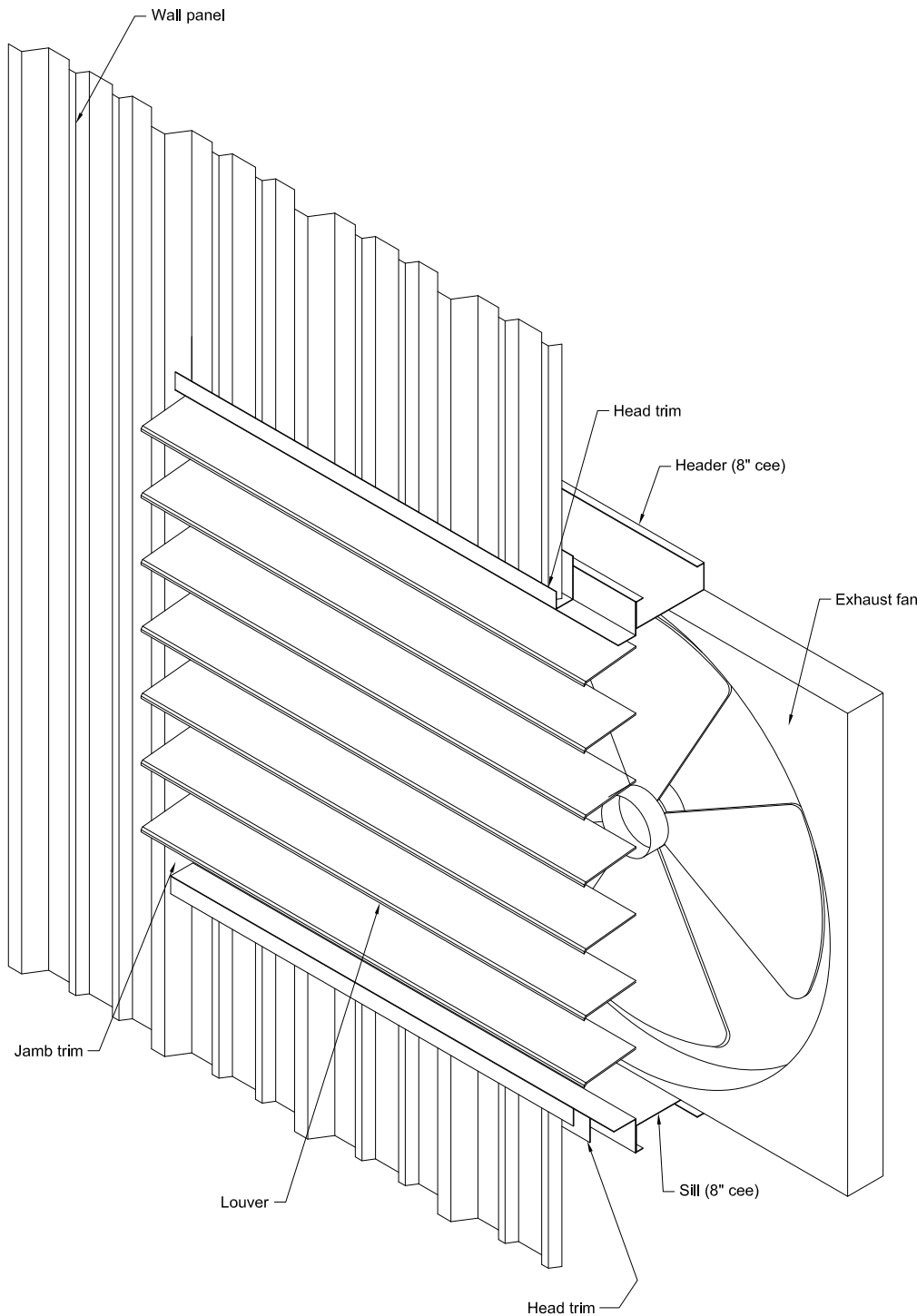
WARNING:
The roof should be swept clean of any drill shavings at the end of each day to prevent rust.

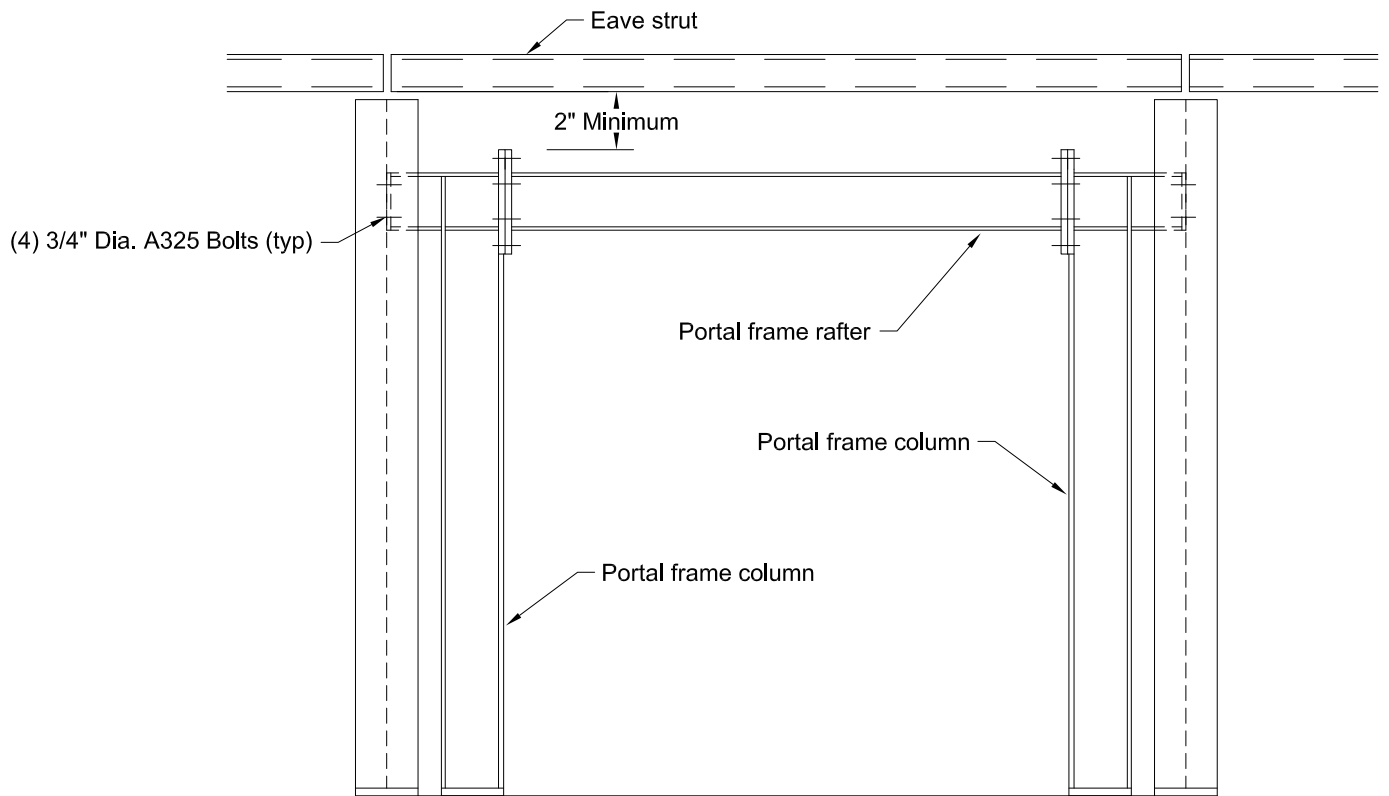
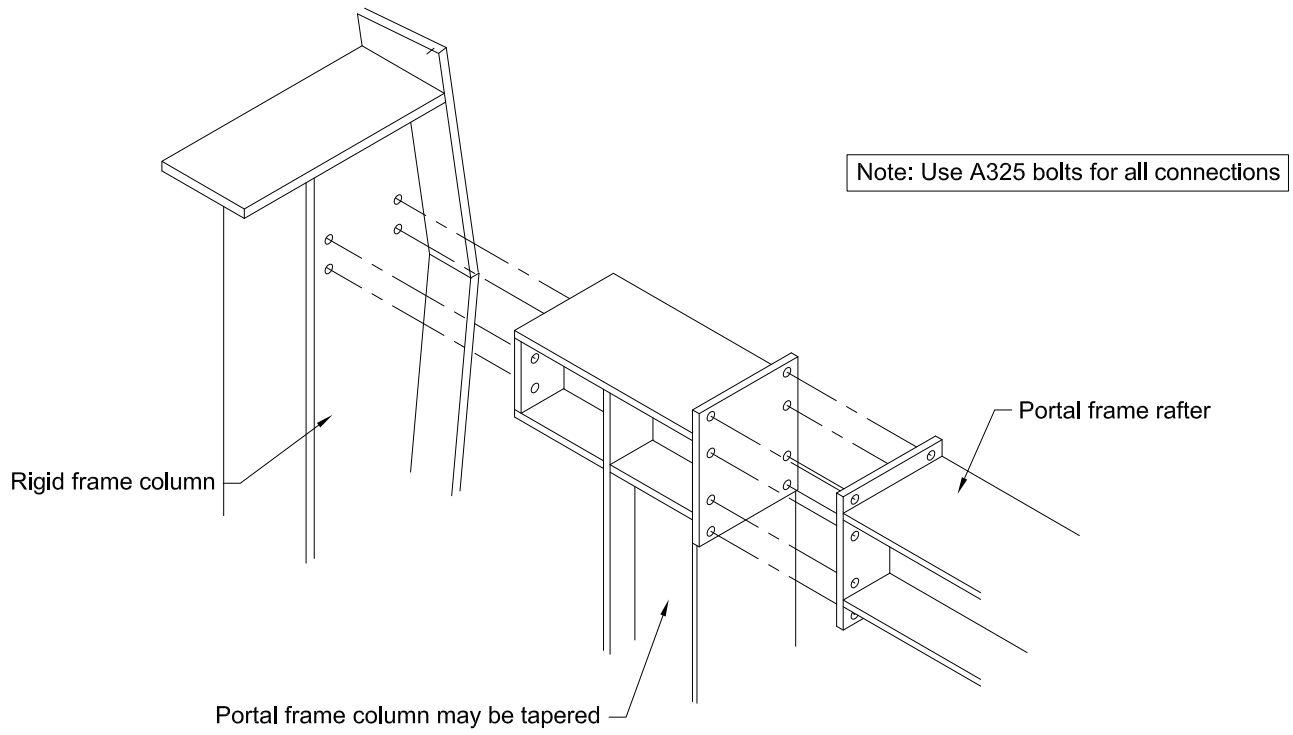


Note: See erection drawings for framed opening location.

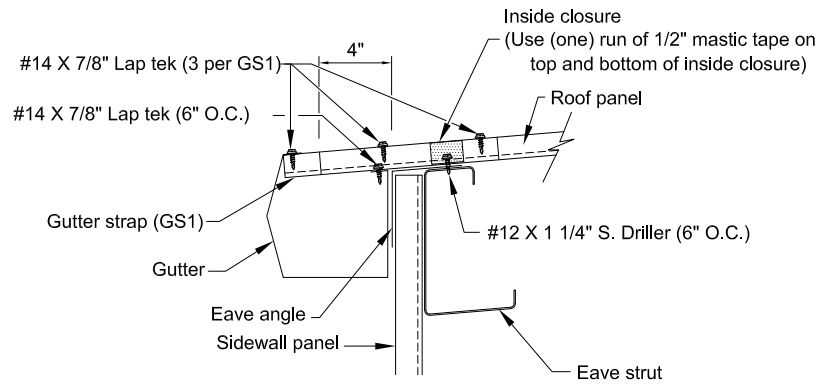
Note: All material and hardware are shipped with fan.

Note: Field drill weep holes in head trim for drainage.

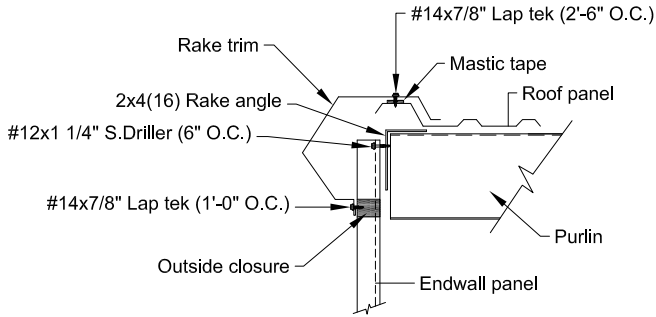




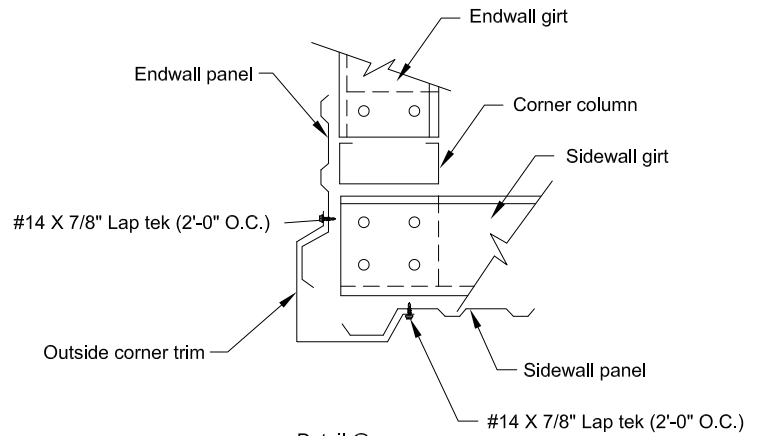
Note:: Column profiles may vary



Detail @ gutter

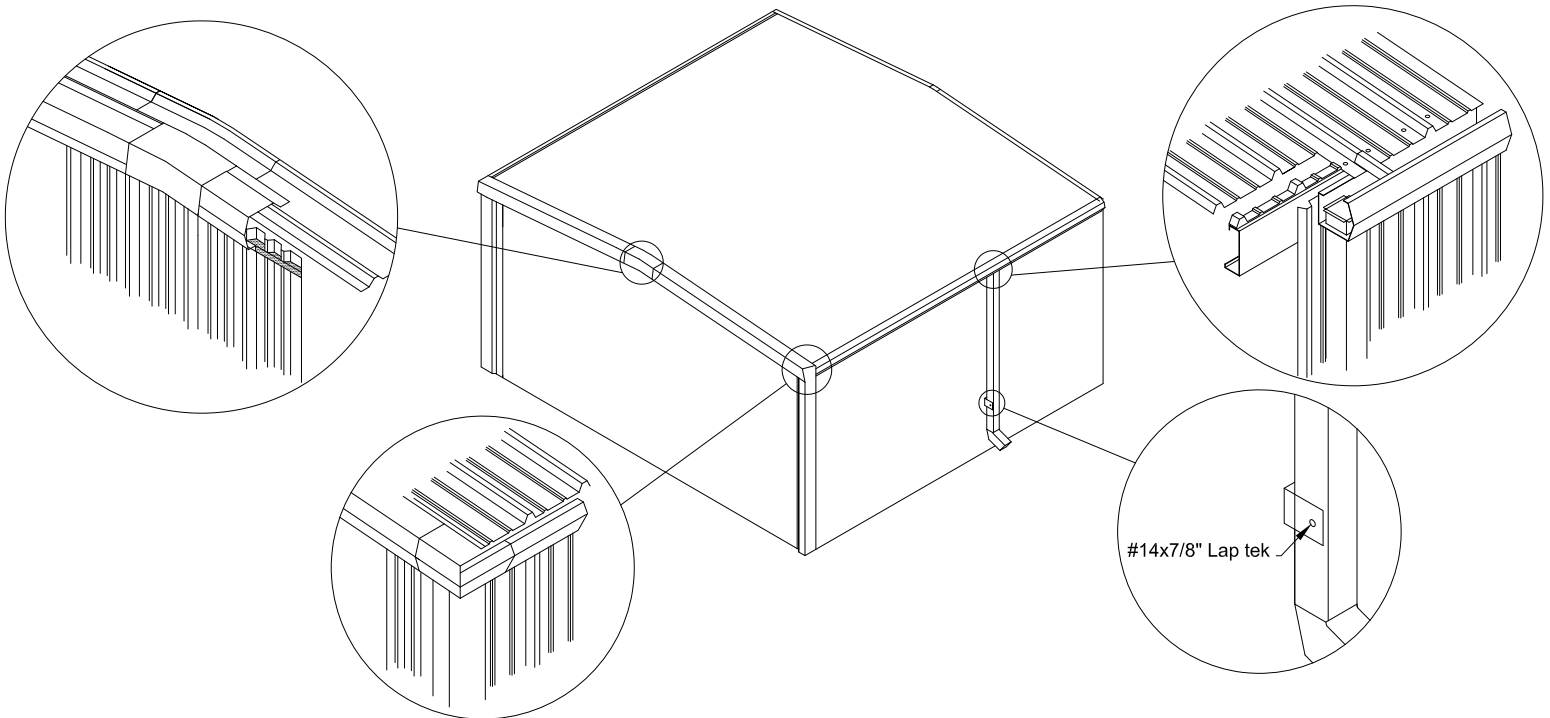


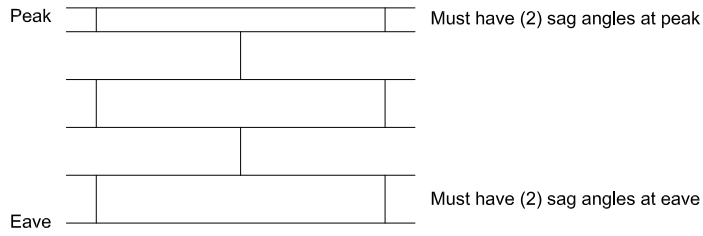
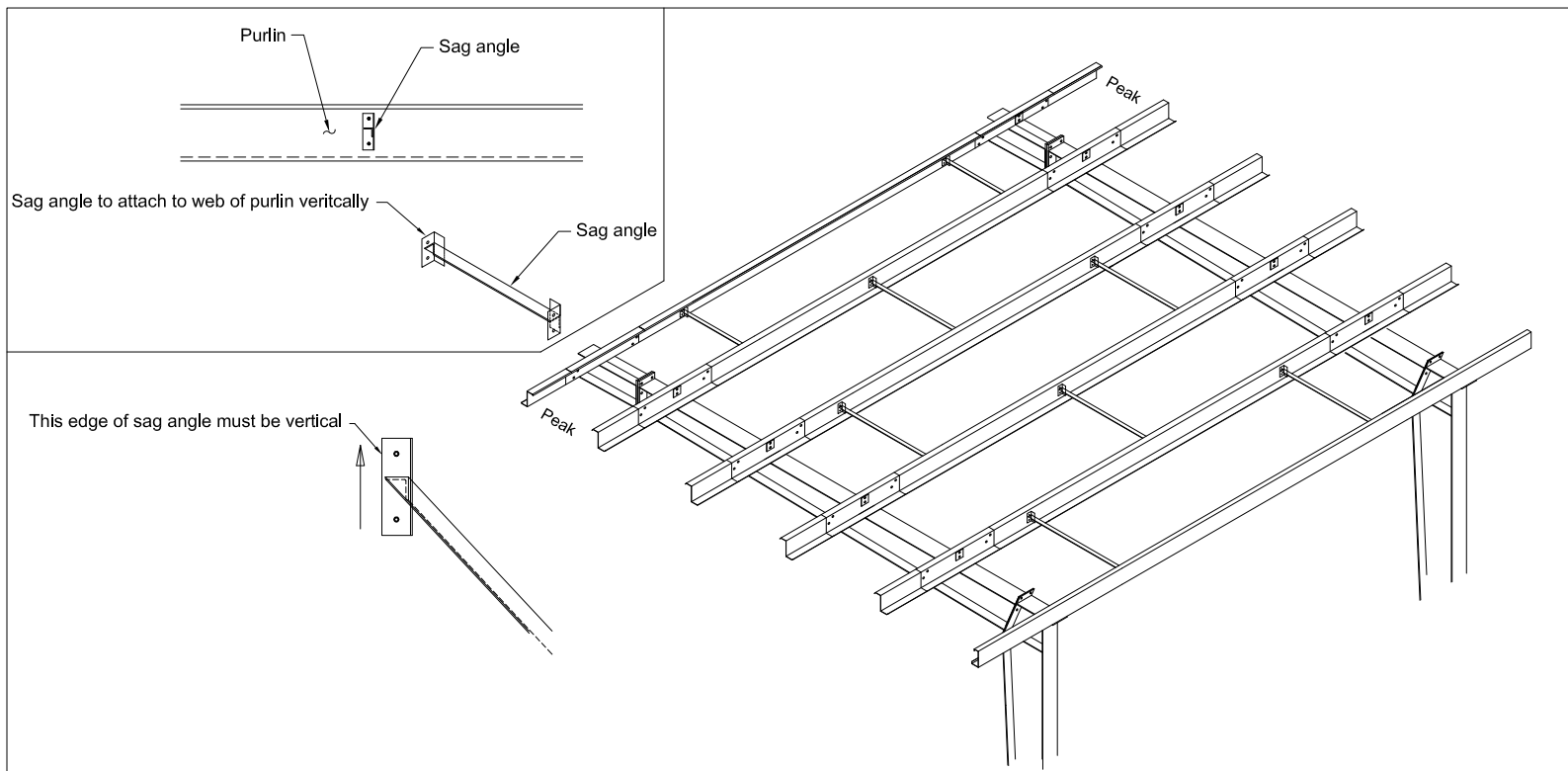
Detail @ endwall



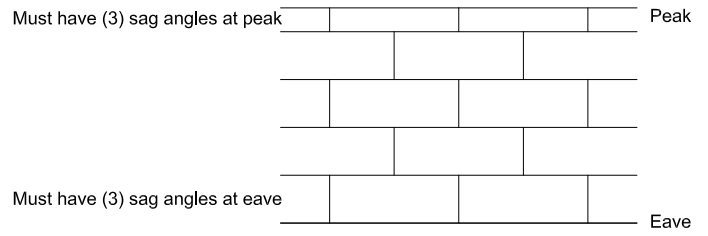
Detail @ corner

Gutter joints - (10) Pop rivets per joint and (one) tube of caulk per (3) joints.
 Downspouts - (10) Pop rivets per downspout joint and (one) tube of caulk per (3) downspout joint.
 Corner boxes - (10) Pop rivets per corner box.
 Peak boxes - (10) Pop rivets per peak box.
 Gutter endcaps - (10) Pop rivets per gutter endcap and (one) tube of caulk per (2) gutter endcaps.



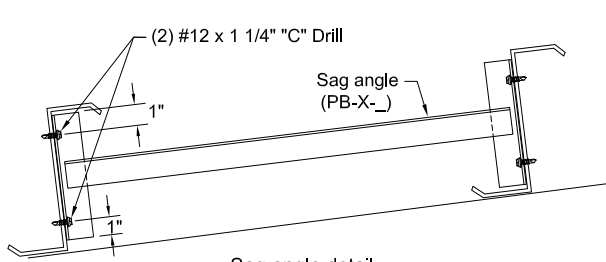


Bays with (3) point sag angle

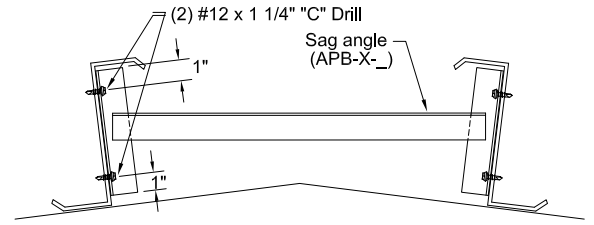


Bays with (5) point sag angle

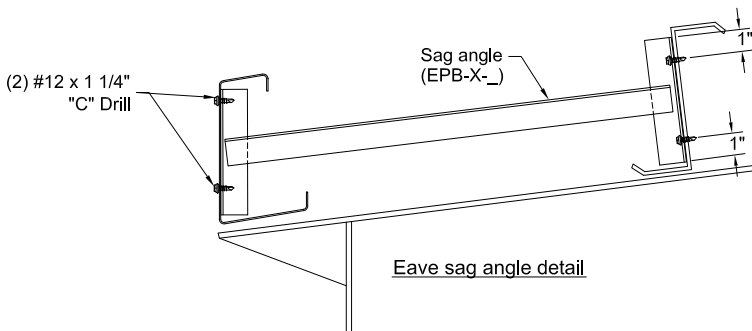
1. Sag angles will be specified on the erection drawings when required.
2. If sag angles are required, use the examples above unless specified otherwise on the erection drawings.



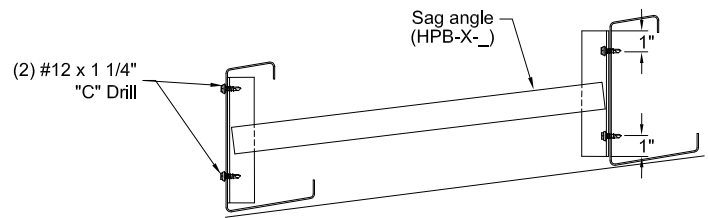
Sag angle detail



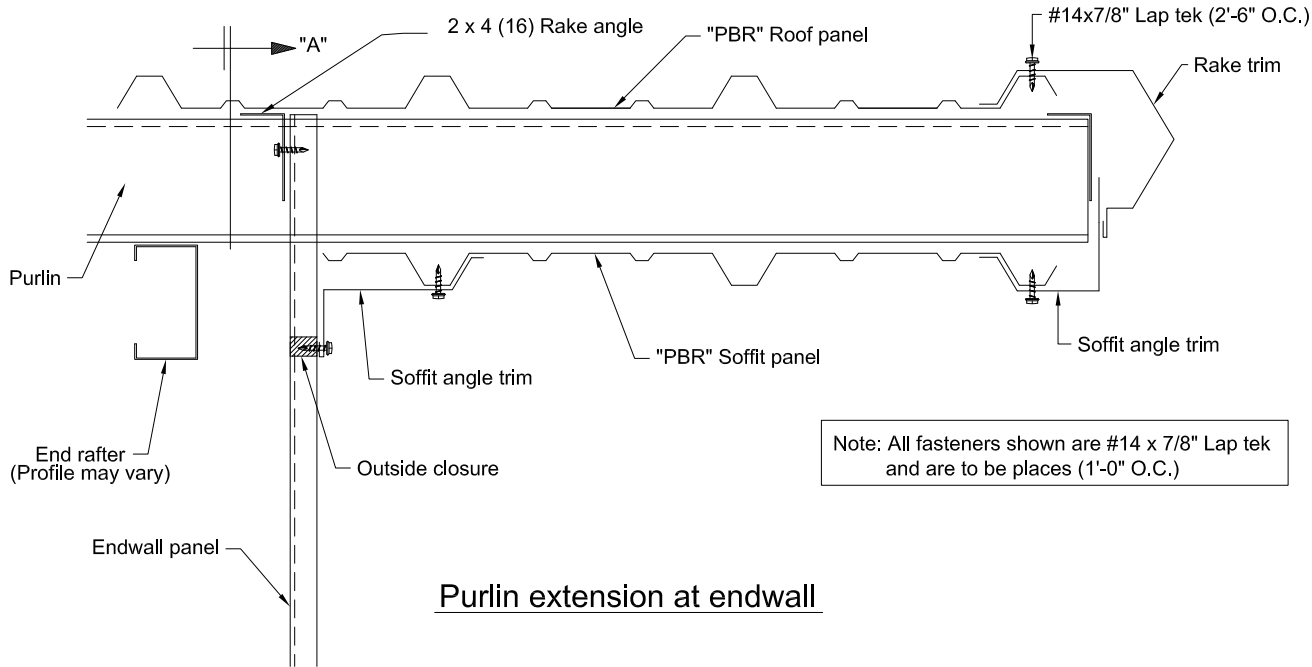
Peak sag angle detail



Eave sag angle detail

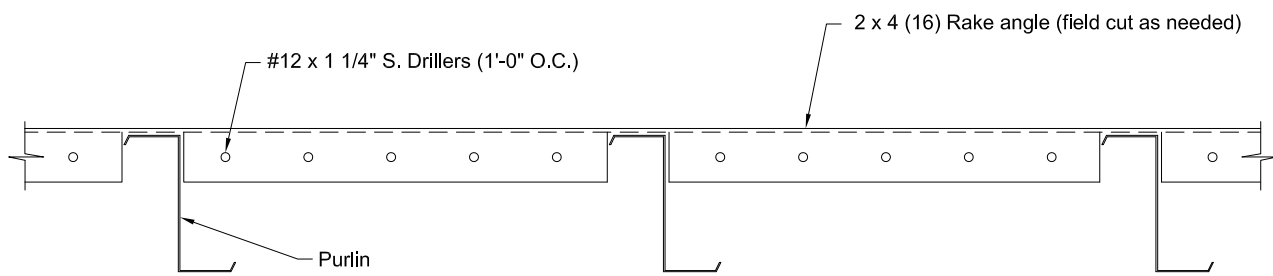


Canopy sag angle detail

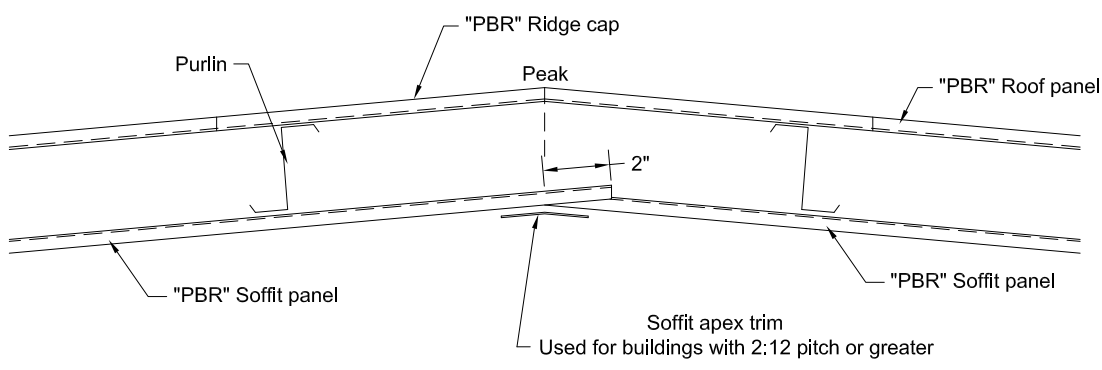


Note: All fasteners shown are #14 x 7/8" Lap tek and are to be placed (1'-0" O.C.)

Purlin extension at endwall



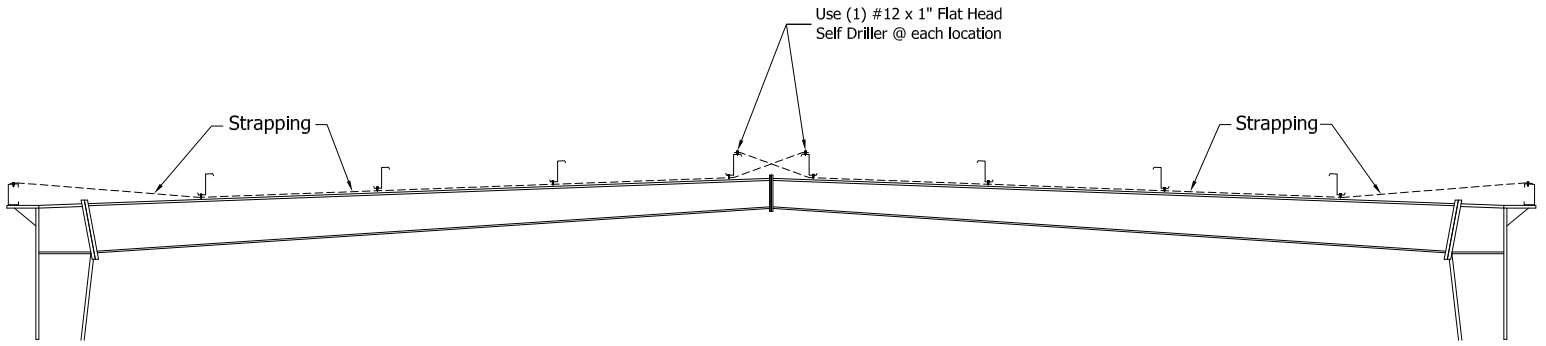
Section "A"



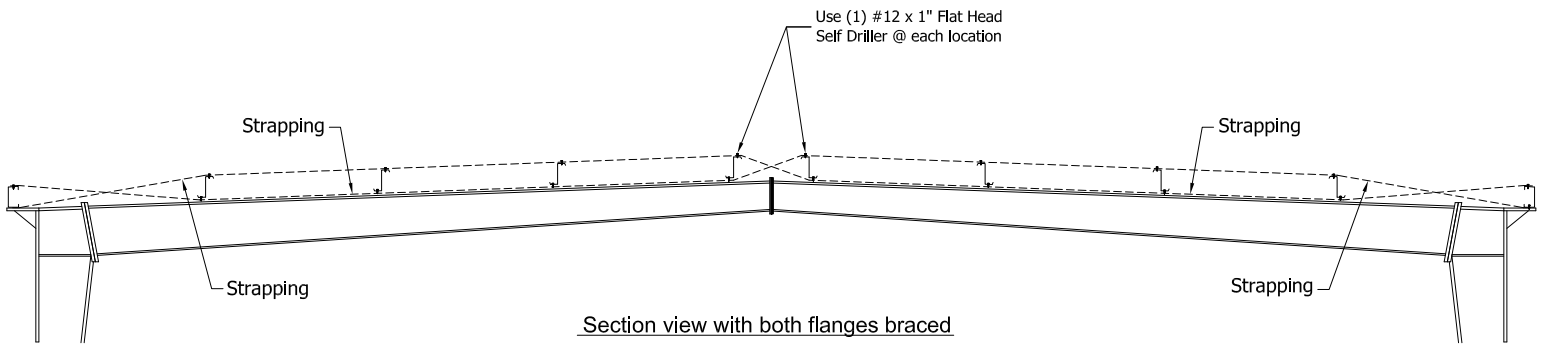
SOFFIT PANEL LAP AT ENDWALL PEAK

Note: Soffit panels to lap 2" at peak

Note: Refer to page 6 for fastener spacing and placement

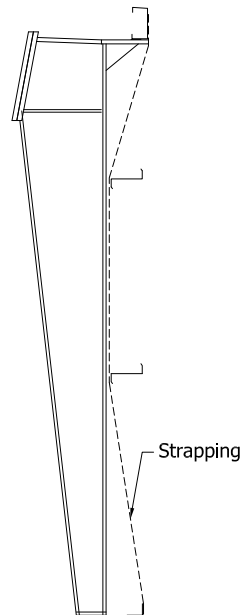


Section view with bottom flange braced



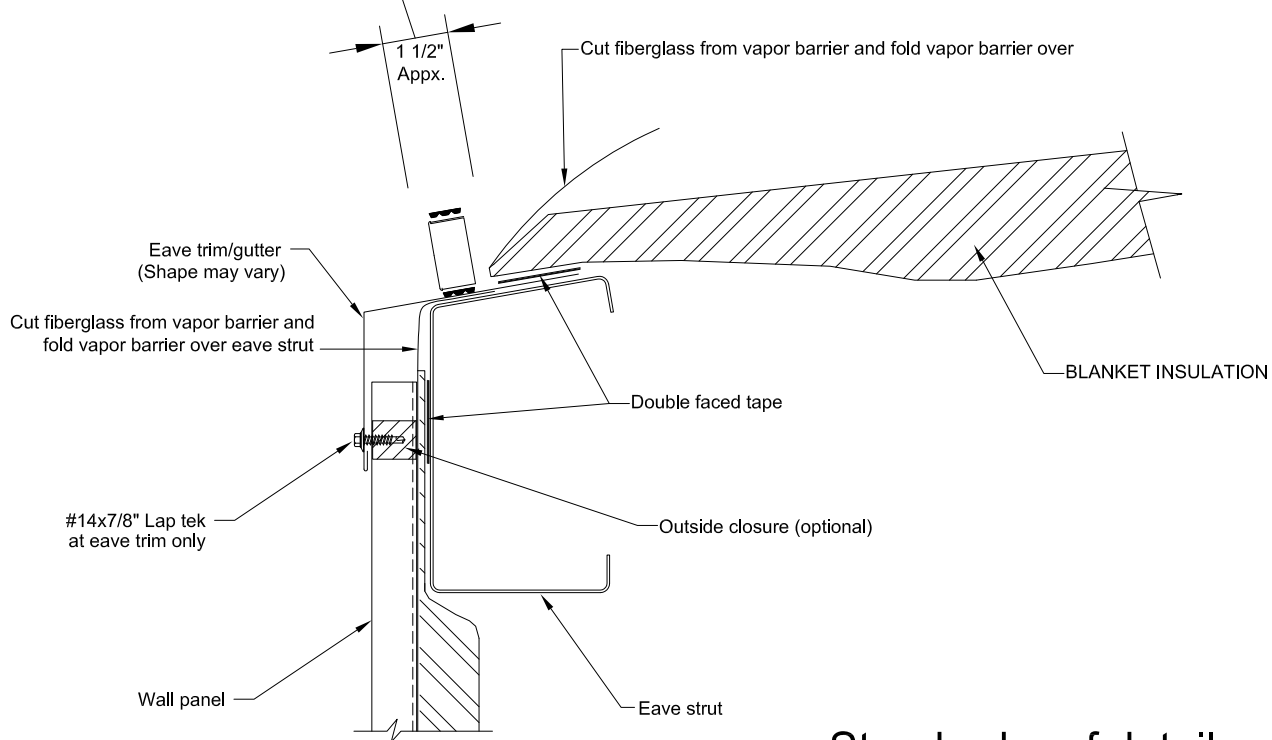
Section view with both flanges braced

Note: Refer to erection drawings for strapping placement. Strapping will be specified on erection drawings if required.



Sidewall view for strapping

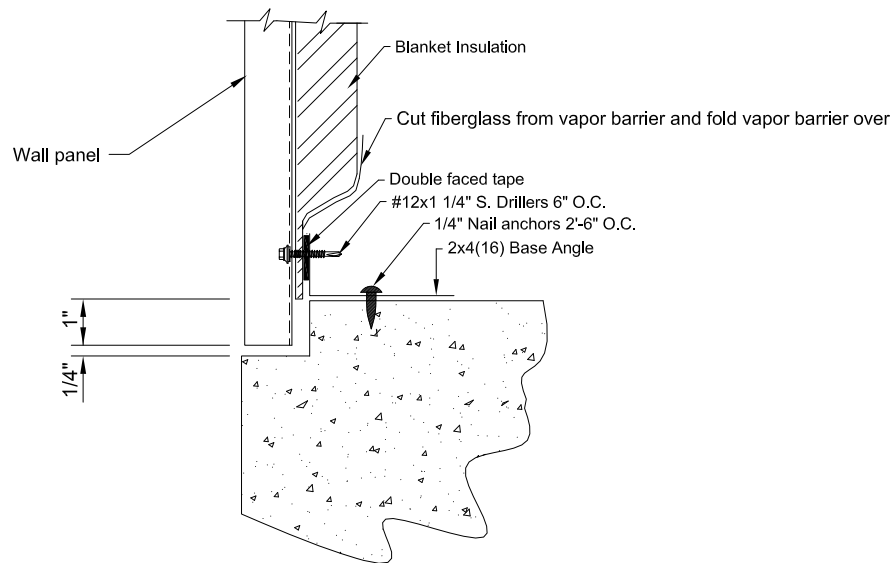
Allow room to install mastic tape and closure strip



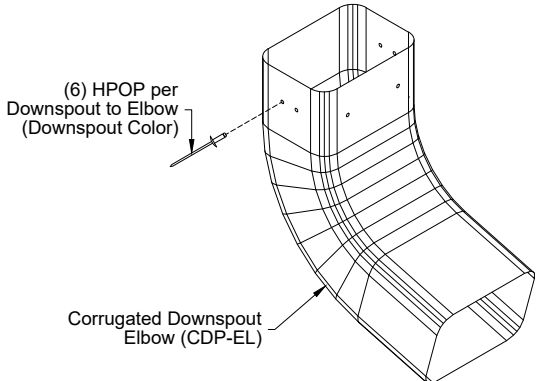
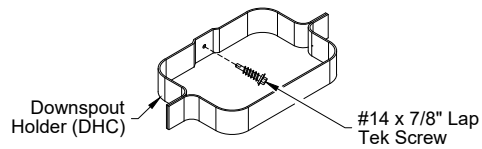
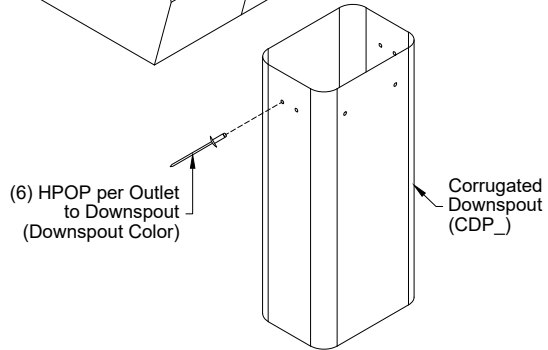
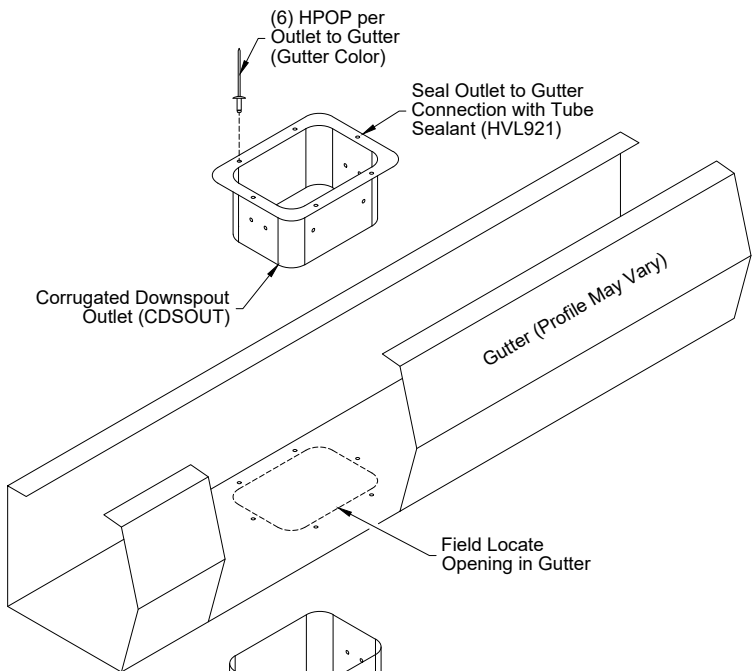
Standard roof detail

Notes:

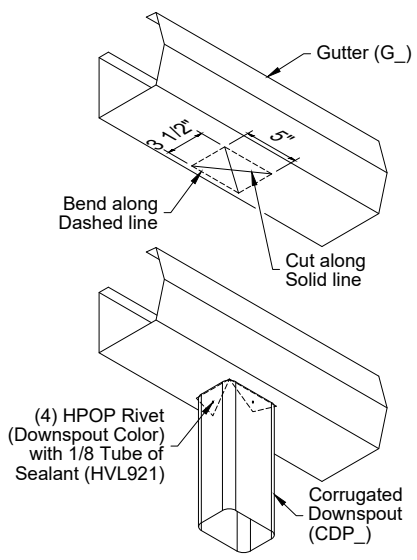
1. Do not allow insulation to wick moisture.
2. Never cut the insulation off even with the edge of the panels.
3. Trim excess fiberglass from vapor barrier back and fold vapor barrier over fiberglass 3" at base and eave.
4. Insulation which wicks moisture will damage panels and void any panel warranty.



Standard base detail

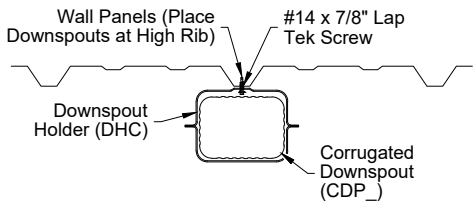


Downspout Outlet Option 2

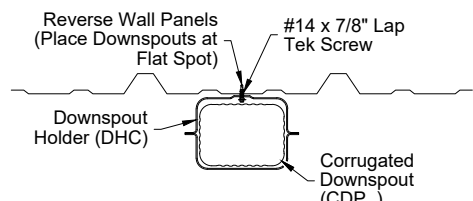


Downspout Strap Attachment

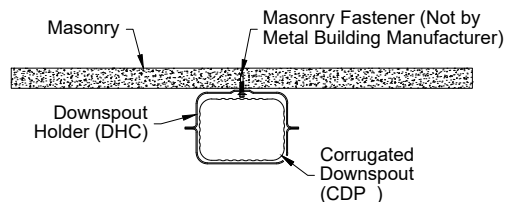
"PBR" Panel Attachment



Reverse "PBR" Panel Attachment

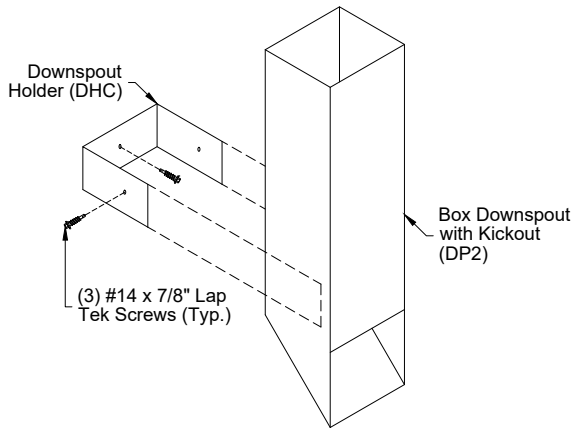
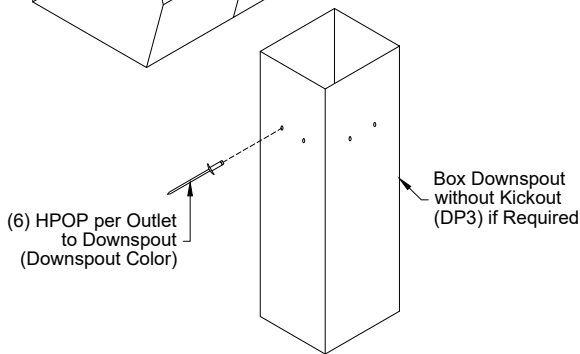
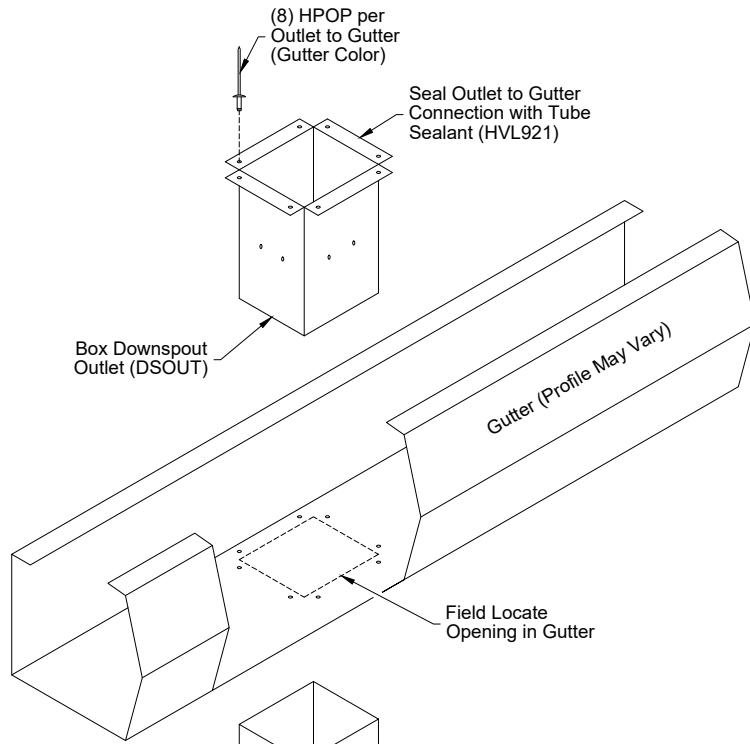


Masonry Wall Attachment

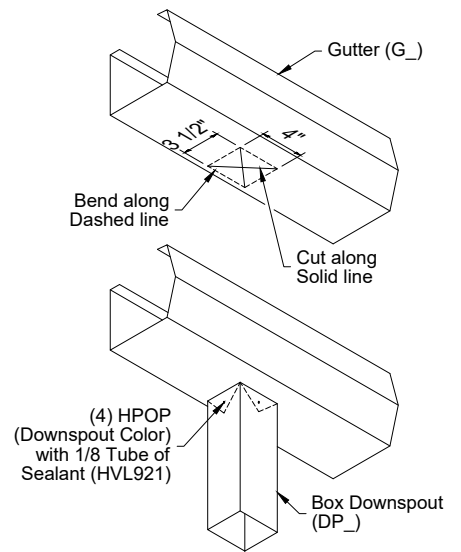


Notes:

1. Locate all downspouts along sidewall per Downspout Strap Attachment Detail, one at each end and spaced evenly between.
2. A splice is required for eave height greater than 12'-0". Always measure the required length starting at the swaged end. After cutting to length, insert the swaged end of the cut downspout into the top of the lower downspout / elbow.
3. Downspout straps are located at the bottom of a downspout, below a splice, and at the midpoint of downspouts longer than 10'-6".

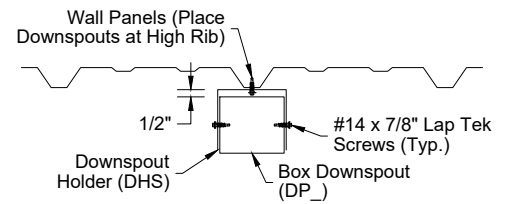


Downspout Outlet Option 2

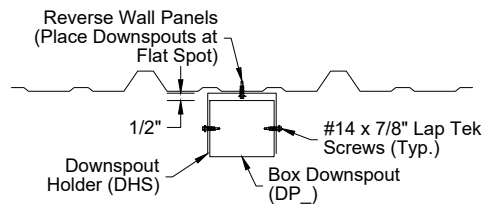


Downspout Strap Attachment

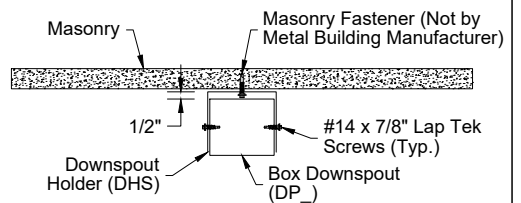
"PBR" Panel Attachment



Reverse "PBR" Panel Attachment



Masonry Wall Attachment



Notes:

1. Locate all downspouts along sidewall per Downspout Strap Attachment Detail, one at each end and spaced evenly between.
2. A splice is required for eave height greater than 20'-0". Always measure the required length starting at the swaged end. After cutting to length, insert the swaged end of the cut downspout into the top of the lower downspout / elbow.
3. Downspout straps are located at the bottom of a downspout, below a splice, and at the midpoint of downspouts longer than 10'-6".