

V A R C O P R U D E N B U I L D I N G S

Basic Panels & Accessories



The field guide for correct installation of Varco Pruden's Wall and Roof Systems, Tuff-Lites, Wallites, Doors, Windows, Gutters and Trim.



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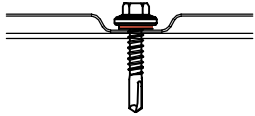

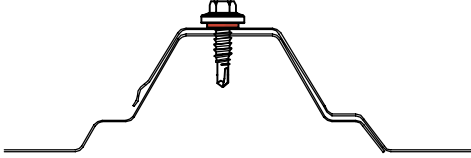

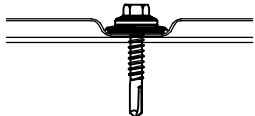

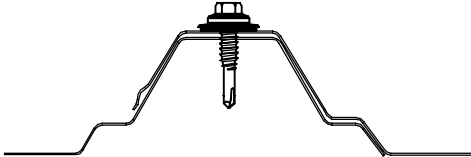

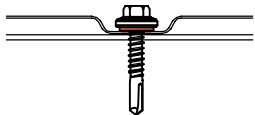

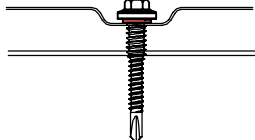

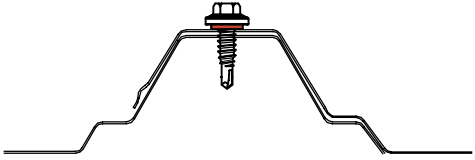

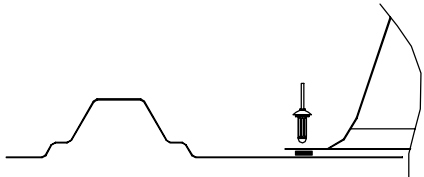

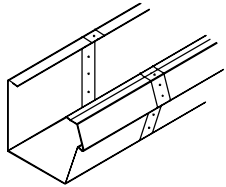
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NOTE: BUILDING PLANS AND SED'S SUPERCEDE INSTALLATION GUIDE.
SEE SED'S FOR SPECIFIC PART NUMBERS AND SEALANTS REQUIREMENTS.



FASTENER		APPLICATION	
ROOF 	#12-14 x 1 1/4" SELF - DRILL STRUCTURAL FASTENER W/ 5/8" O.D. SEALING WASHER (1 1/2" OPTIONAL)	<ul style="list-style-type: none"> • PANEL TO STRUCTURAL CONNECTIONS • TUF-LITE INSTALLATION (UL-60) 	
ROOF 	1/4-14 x 7/8" SELF - DRILL STITCH FASTENER W/ 5/8" O.D. SEALING WASHER	<ul style="list-style-type: none"> • PANEL TO PANEL CONNECTIONS • TUF-LITE INSTALLATION (UL-60) • GUTTER 	
ROOF 	#12-14 x 1 1/4" SELF - DRILL STRUCTURAL FASTENER W/ 7/8" O.D. SEALING WASHER (1 1/2" OPTIONAL)	<ul style="list-style-type: none"> • PANEL TO STRUCTURAL CONNECTIONS • TUF-LITE INSTALLATION (UL-90) 	
ROOF 	1/4 - 14 x 1 1/8" SELF - DRILL STITCH FASTENER W/ 7/8" O.D. SEALING WASHER	<ul style="list-style-type: none"> • PANEL TO PANEL CONNECTIONS • TUF-LITE INSTALLATION (UL-90) 	
WALL 	#12-14 x 1 1/4" SELF - DRILL STRUCTURAL FASTENER W/ 5/8" O.D. SEALING WASHER	<ul style="list-style-type: none"> • PANEL TO STRUCTURAL CONNECTIONS • TRIM TO STRUCTURALS 	
WALL 	#17/12-14 x 1 7/8" SELF - DRILL STRUCTURAL STAND-OFF FASTENER W/ 5/8" O.D. SEALING WASHER	<ul style="list-style-type: none"> • PANEL TO STRUCTURAL CONNECTIONS WITH GREATER THAN 4" BLANKET INSULATION (EXCEPT AT CRIMPED BASE AND AT FRAMED OPENINGS) 	
WALL 	1/4-14 x 7/8" SELF - DRILL STITCH FASTENER W/ 5/8" O.D. SEALING WASHER	<ul style="list-style-type: none"> • PANEL TO PANEL CONNECTIONS • TRIM TO PANELS 	
MISC. 	VP-205 RIVET	<ul style="list-style-type: none"> • LOUVERS • WALL LITES 	
MISC. 	1/8" BLIND RIVET	<ul style="list-style-type: none"> • BUILDING TRIM, EAVE GUTTER LAPS & CLOSURES 	

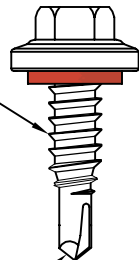
1. CHECK THE WAREHOUSE SHIPPING LIST FOR THE TYPE AND NUMBER OF FASTENERS SHIPPED.
2. THE ABOVE INFORMATION IS TO BE USED AS AN IDENTIFICATION GUIDE FOR THE PROPER APPLICATION OF EACH TYPE OF FASTENER.



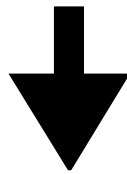
1/4-14 X 7/8"
SELF-DRILLING
STITCH FASTENER

DEEP THREADS DRAW
PANELS SECURELY
TOGETHER

LARGE THREAD BODY,
SMALL DRILL POINT,
EXTRUDES HOLE IN
PANEL, INCREASING
HOLDING POWER.



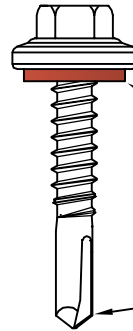
PANEL TO
PANEL
APPLICATION



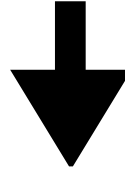
12-14 X 1 1/4"
(1 1/2" OPTIONAL)
SELF-DRILLING
STRUCTURAL
FASTENER

5/8" ROOF
SEALING WASHER

NON
WALKING-HIGH
SPEED DRILL POINT



PANEL TO
STRUCTURAL
APPLICATION

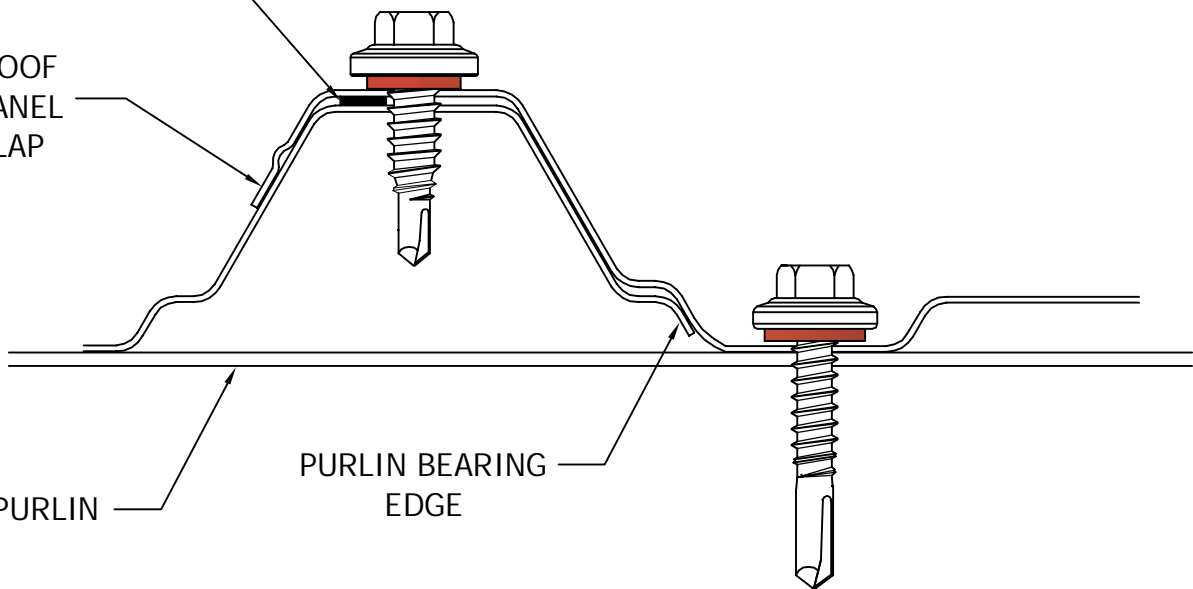


TAPE SEALANT

ROOF
PANEL
LAP

PURLIN

PURLIN BEARING
EDGE



SECTION THROUGH ROOF
SHOWING CORRECT
FASTENER APPLICATION

NOTE: AFTER PRE-DRILLING, METAL
SHAVINGS MUST BE CLEANED FROM
PANEL SURFACE TO PREVENT
CORROSION.

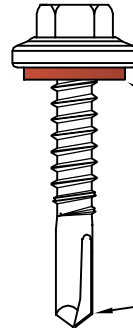
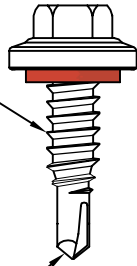


1/4-14 X 7/8"
SELF-DRILLING
STITCH FASTENER

12-14 X 1 1/4"
(1 1/2" OPTIONAL)
SELF-DRILLING
STRUCTURAL
FASTENER

DEEP THREADS DRAW
PANELS SECURELY
TOGETHER

LARGE THREAD BODY,
SMALL DRILL POINT,
EXTRUDES HOLE IN
PANEL, INCREASING
HOLDING POWER.

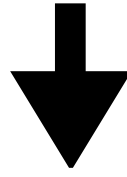
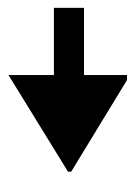


5/8" ROOF
SEALING WASHER

NON
WALKING-HIGH
SPEED DRILL POINT

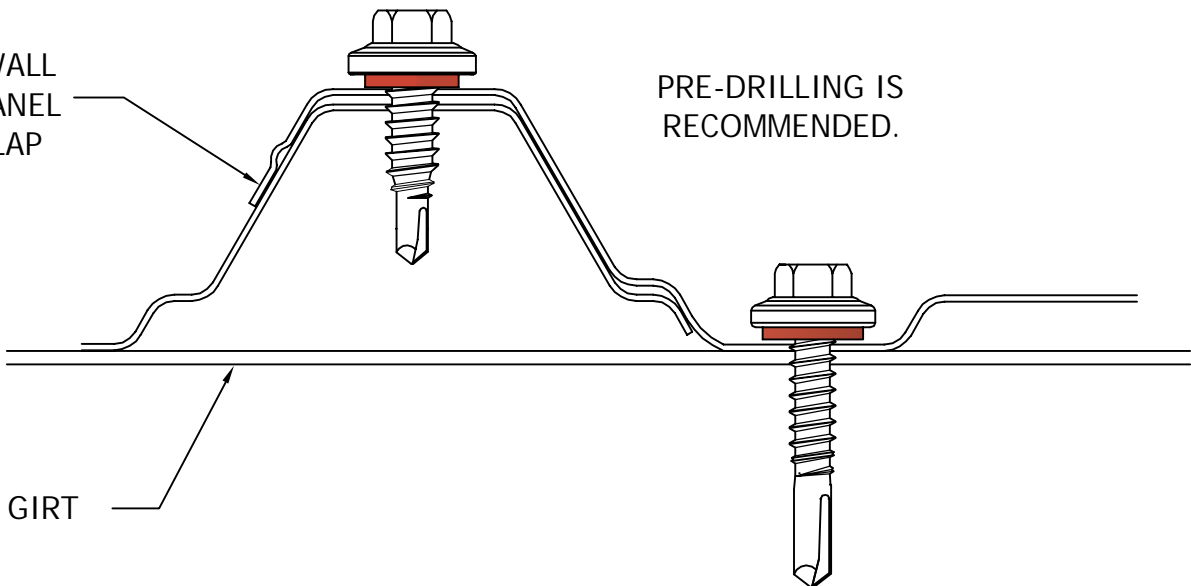
PANEL TO
PANEL
APPLICATION

PANEL TO
STRUCTURAL
APPLICATION



WALL
PANEL
LAP

PRE-DRILLING IS
RECOMMENDED.



GIRT

SECTION THROUGH WALL
SHOWING CORRECT
FASTENER APPLICATION

NOTE: AFTER PRE-DRILLING, METAL SHAVINGS
MUST BE CLEANED FROM PANEL
SURFACE TO PREVENT CORROSION.

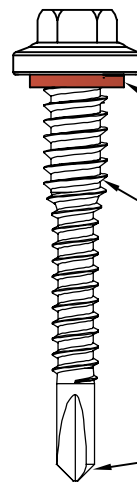
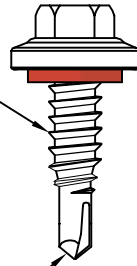


1/4-14 X 7/8"
SELF-DRILLING
STITCH FASTENER

17/12-14 X 1 7/8"
SELF-DRILLING
STAND-OFF
STRUCTURAL
FASTENER

DEEP THREADS DRAW
PANELS SECURELY
TOGETHER

LARGE THREAD BODY,
SMALL DRILL POINT,
EXTRUDES HOLE IN
PANEL, INCREASING
HOLDING POWER.



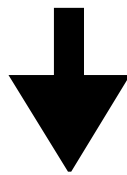
5/8" ROOF
SEALING WASHER

#17 STAND-OFF
SHOULDER

NON
WALKING-HIGH
SPEED DRILL POINT

PANEL TO PANEL APPLICATION

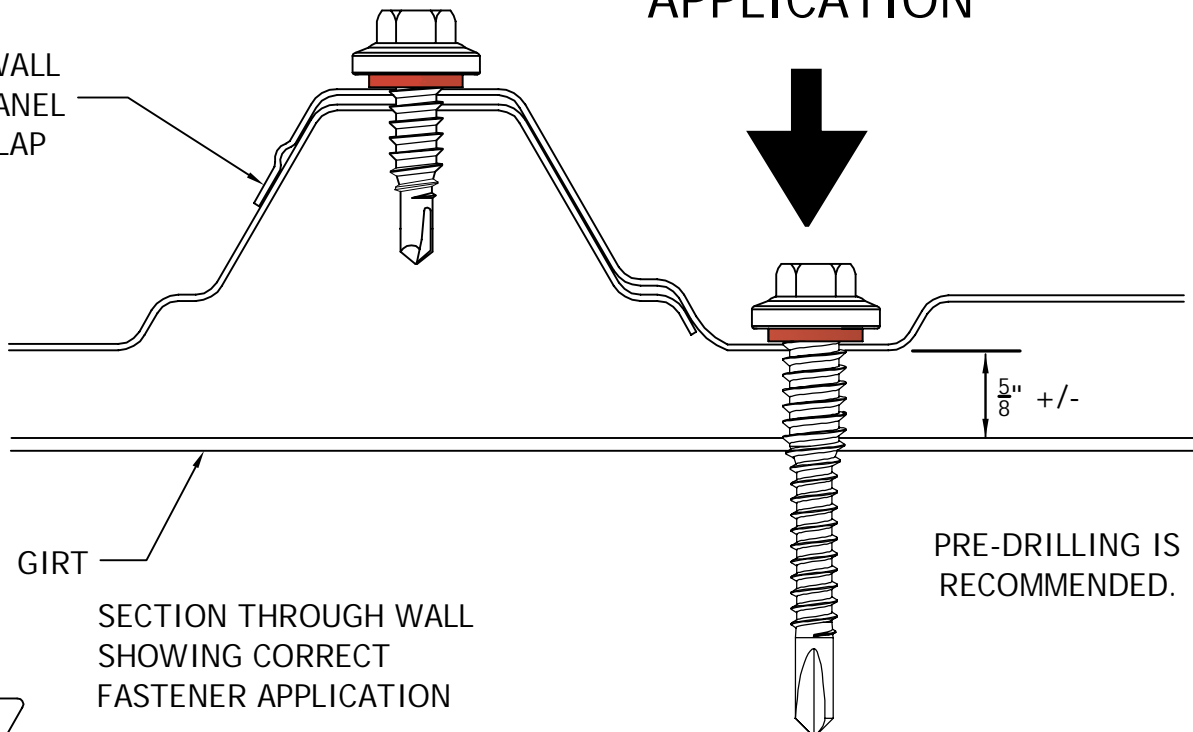
NOTE:
AFTER PRE-DRILLING,
METAL SHAVINGS MUST
BE CLEANED FROM
PANEL SURFACE TO
PREVENT CORROSION.



NOTE: USE STANDARD 1 1/4" FASTENERS AT
CRIMPED BASE AND AROUND FRAMED
OPENINGS.

PANEL TO STRUCTURAL APPLICATION

WALL
PANEL
LAP



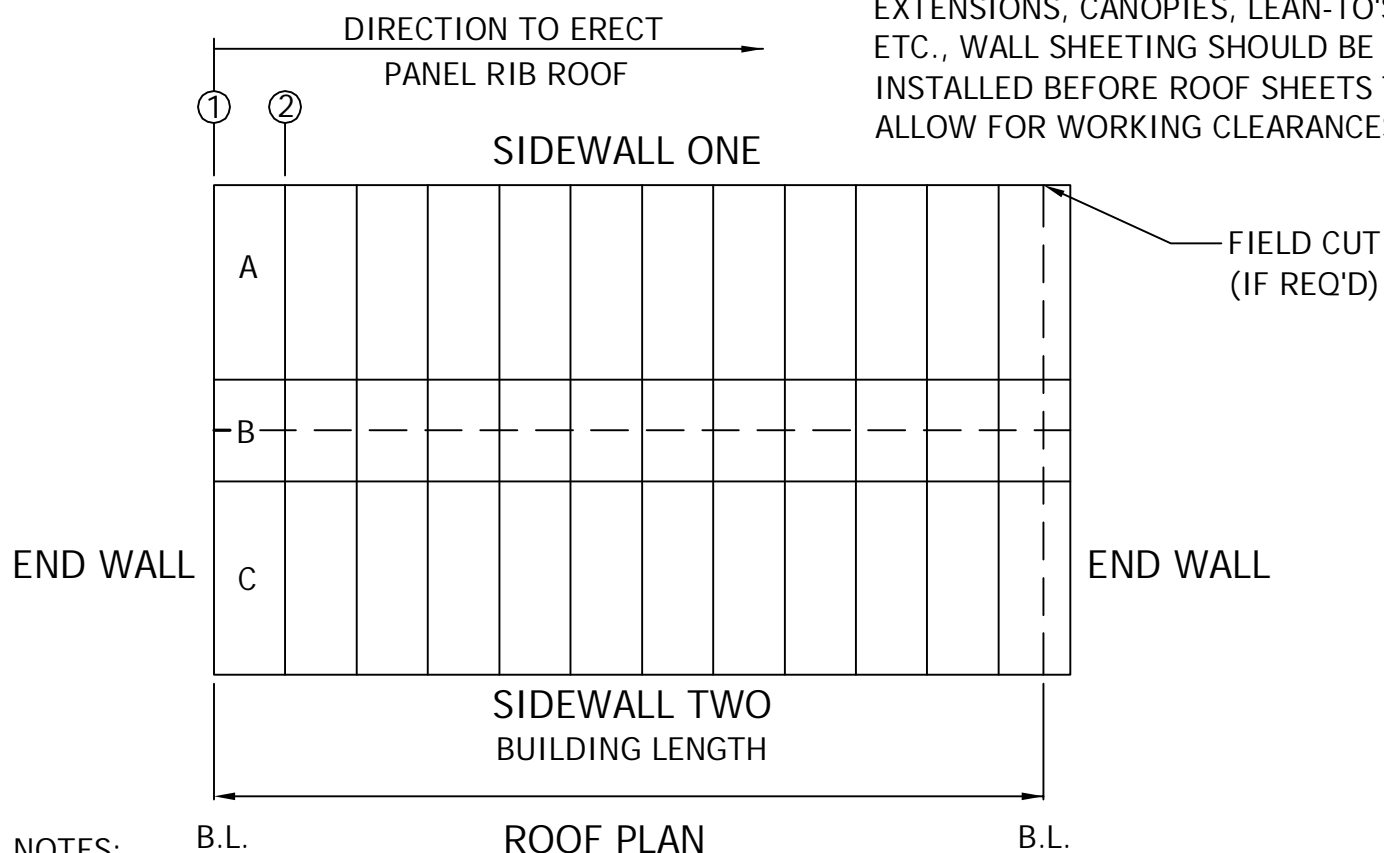
PRE-DRILLING IS
RECOMMENDED.

SECTION THROUGH WALL
SHOWING CORRECT
FASTENER APPLICATION

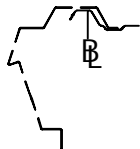


IMPORTANT NOTE:

FOR BUILDINGS HAVING ROOF EXTENSIONS, CANOPIES, LEAN-TO'S, ETC., WALL SHEETING SHOULD BE INSTALLED BEFORE ROOF SHEETS TO ALLOW FOR WORKING CLEARANCES.



NOTES:

1. (A) & (C) denote panel rib roof sheets (B) denotes panel rib cap sheet.
2. Line (1) is location of the lap rib & line (2) represents the purlin bearing rib of panels (A) & (C) and cap sheet (B).
3. Locate the center of the lap rib exactly over B.L. Attach panels (A) & (C). Then attach cap sheet (B).

4. Each side of the panel rib roof and the panel rib cap must be run in conjunction with each other to insure correct alignment.
5. Refer to different sections of this manual for details relating to eave alignment of roof panels, mastic application, fastener types and spacing and building accessories located on the roof.
6. All damaged paint finishes are to be retouched to prevent rusting.
7. In the event a screw is installed in the wrong location or should a screw break during the driving process, remove the screw and install one of a larger diameter to prevent a potential leak. If removal of a screw remnant is not possible, water proofing measures are to be taken to insure water tightness.

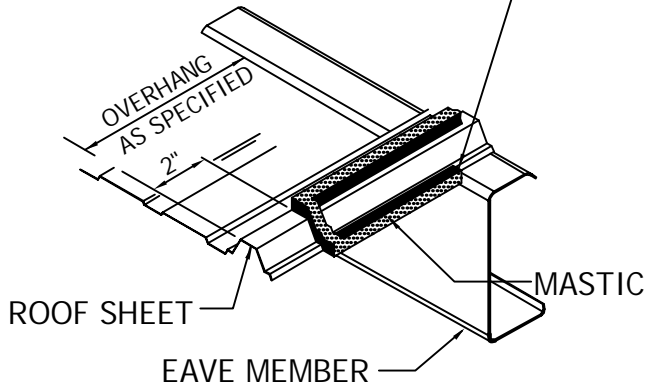


NOTES:

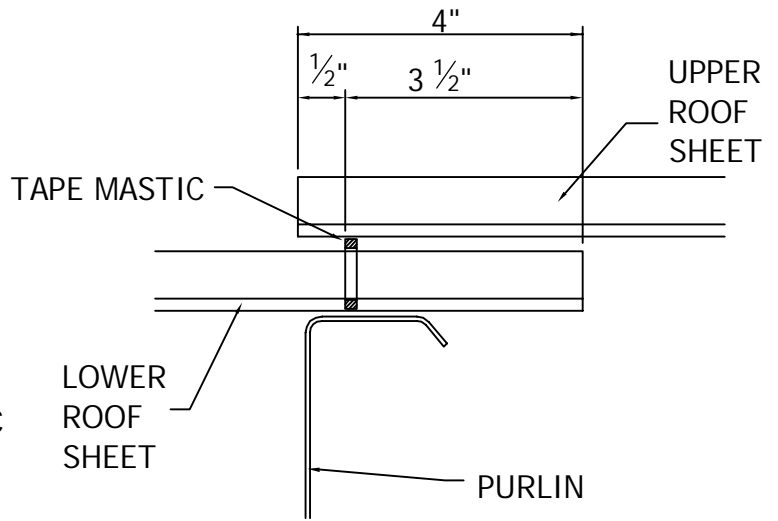
8. Concentrated heavy loads (personnel or materials) occurring on the roof during construction shall be distributed uniformly over a large area in such a manner as to prevent damage to building components.
9. All metal shavings occurring as a result of drilling operations on the roof are to be removed in such a manner as to prevent damage or staining of roof finish.



EXTEND MASTIC DOWN PURLIN BEARING EDGE AND RETURN TO WEB SIDE OF EAVE MEMBER



MASTIC DETAIL AT EAVE PURLIN



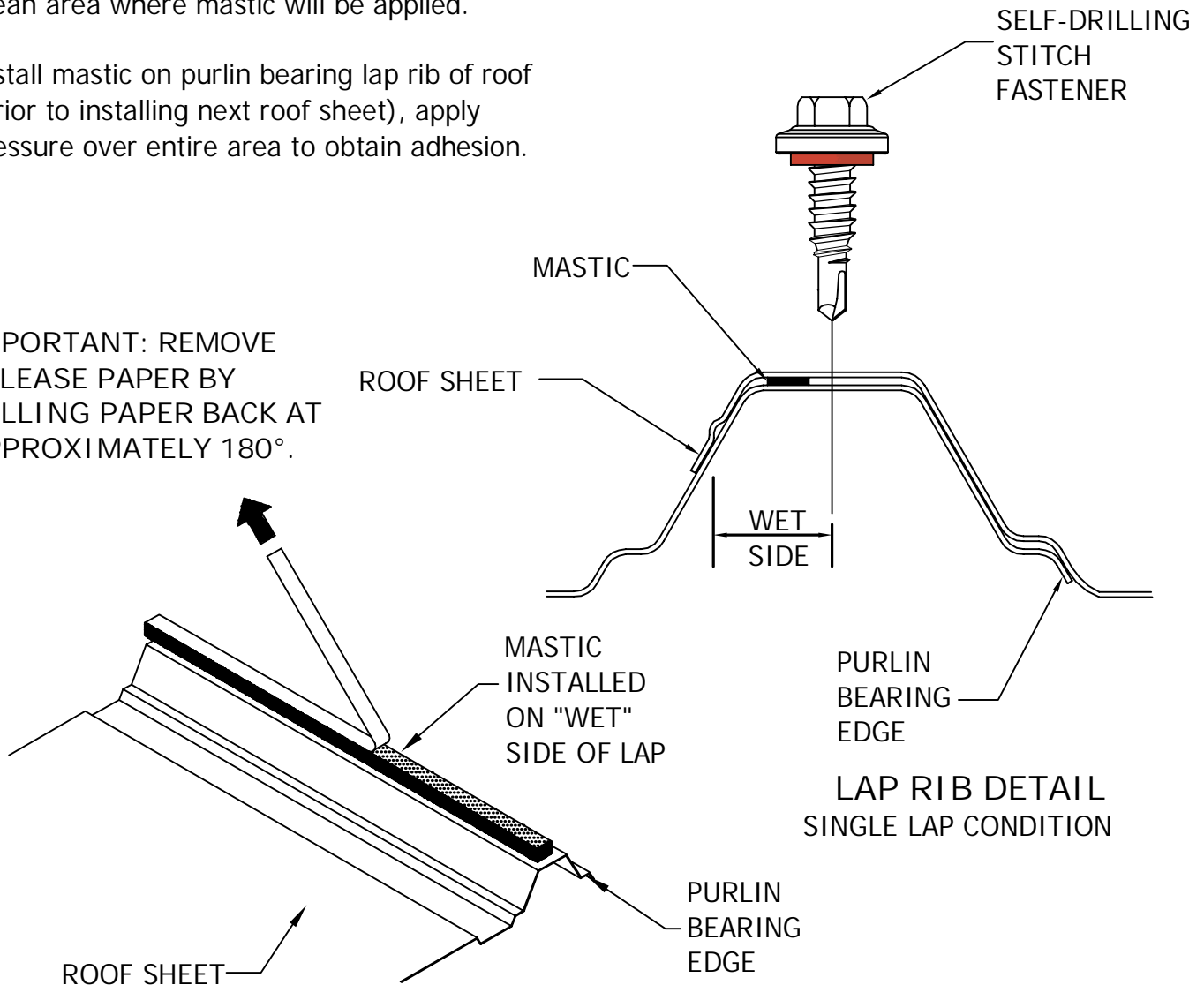
END LAP DETAIL

Install mastic at end lap edges as shown (all roof sheet end laps)

Clean area where mastic will be applied.

Install mastic on purlin bearing lap rib of roof (prior to installing next roof sheet), apply pressure over entire area to obtain adhesion.

IMPORTANT: REMOVE RELEASE PAPER BY PULLING PAPER BACK AT APPROXIMATELY 180°.



REMOVING RELEASE PAPER

INSTALLATION PROCEDURE / TAPE MASTIC



1. Position roof sheet "A" lap rib over previously installed roof sheet purlin bearing edge. Use standard lap dimensions.

2. Start tape mastic approx. 6" up adjacent sheet overlapping previously installed mastic.

3. Install mastic across roof sheet and down purlin bearing rib as shown.

4. Install mastic on "WET" side of purlin bearing edge as shown.

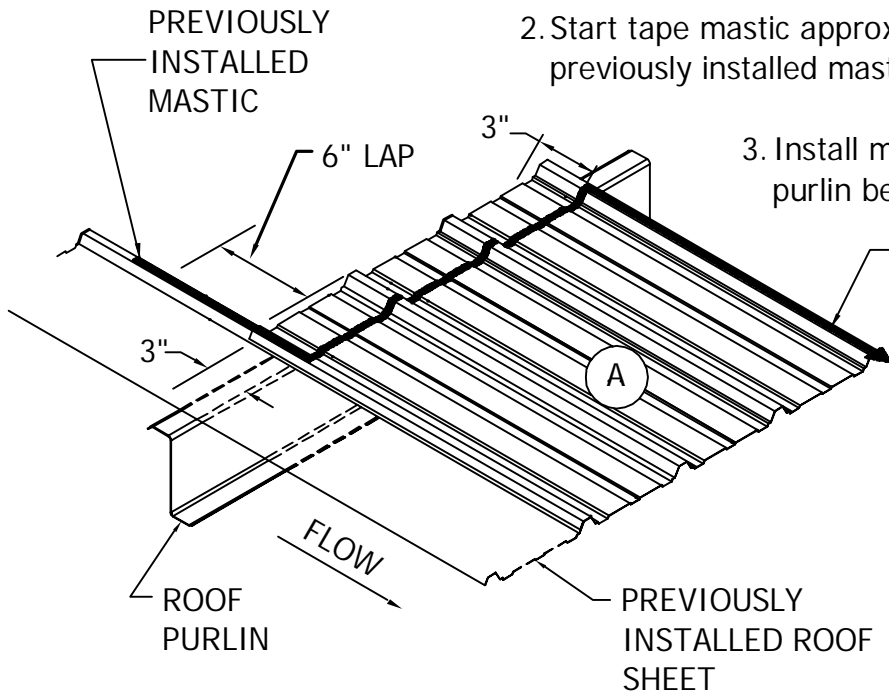
5. Fasten roof sheet to purlins other than purlin at end lap condition. Refer to fastener details for recommended types and placement of roof fasteners.

6. Remove release paper before installing sheet "B".

7. Position sheet "B" over previously installed roof sheets. Used standard roof sheet lap dimensions.

8. Attach sheet "B" to purlins per fastening details. Use only recommended roof fasteners and install in sequence as shown.

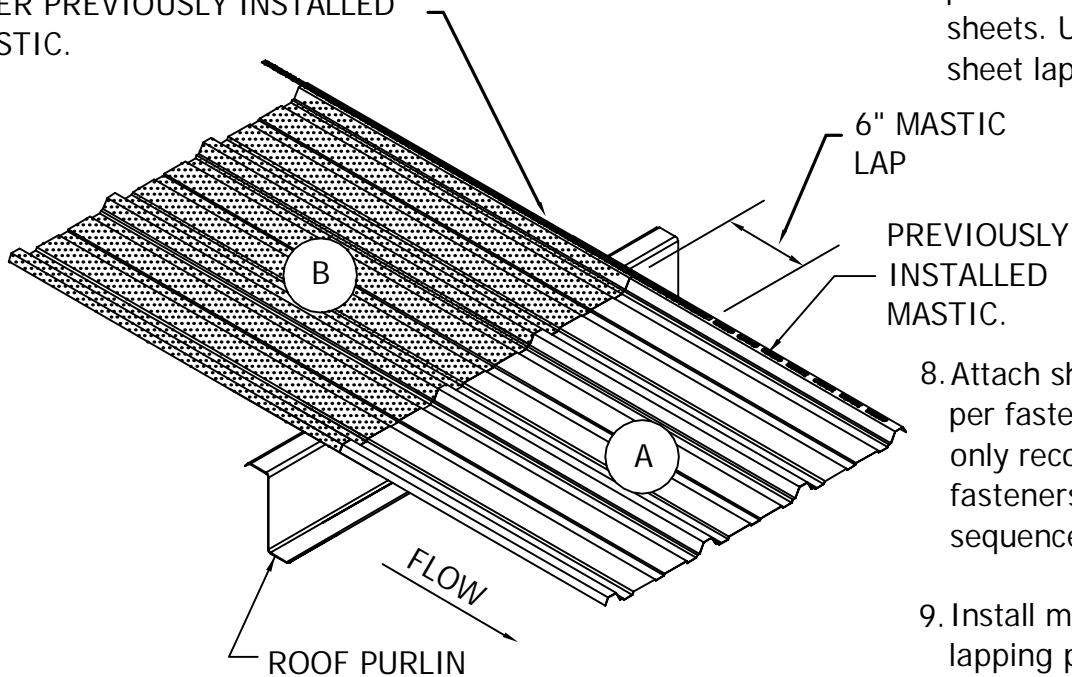
9. Install mastic as shown, lapping previously installed mastic approx. 6". Remove release paper from mastic.



STEP ONE

ROOF SHEET END LAP CONDITION

INSTALL MASTIC ON "WET" SIDE OF SIDE-LAP AND EXTEND DOWN 6" OVER PREVIOUSLY INSTALLED MASTIC.



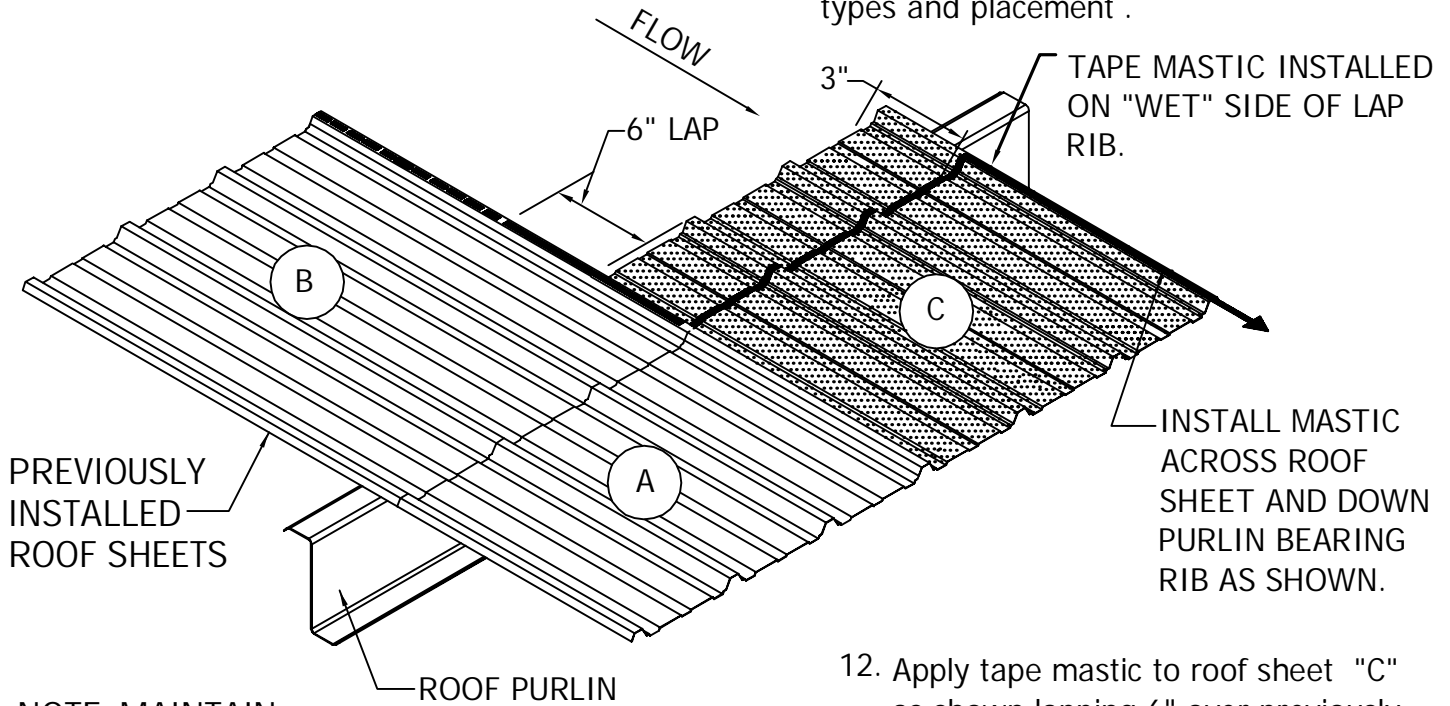
STEP TWO

ROOF SHEET END LAP CONDITION



10. Position roof sheet "C" over previously installed roof sheets as shown. Maintain standard lap dimension.

11. Fasten roof sheet to purlins other than purlin at end lap condition. Refer to fastener details for recommended fastener types and placement.



PREVIOUSLY
INSTALLED
ROOF SHEETS

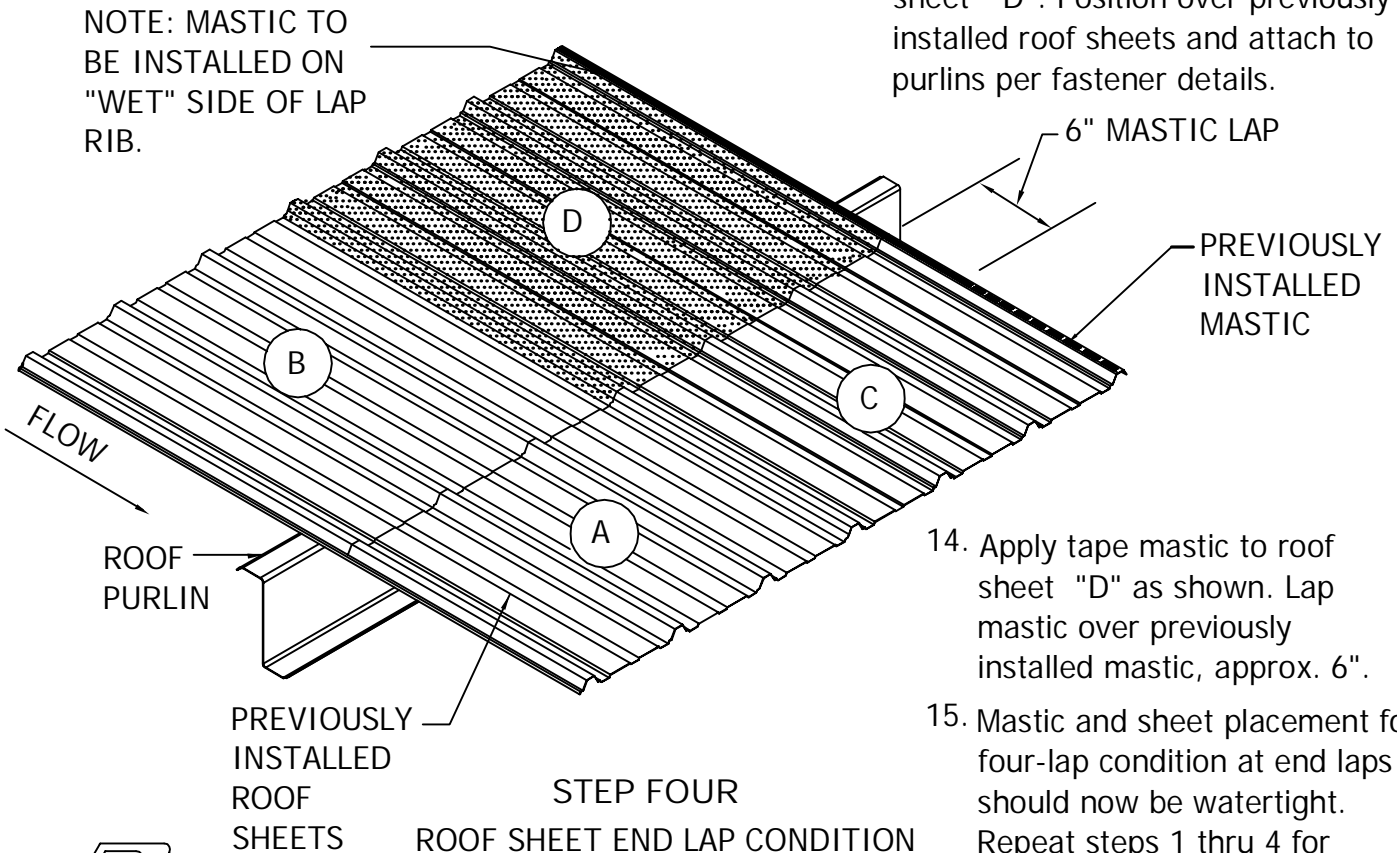
ROOF PURLIN

NOTE: MAINTAIN
STANDARD ROOF
SHEET/PURLIN LAP
DIM.

STEP THREE
ROOF SHEET END LAP
CONDITION

12. Apply tape mastic to roof sheet "C" as shown lapping 6" over previously installed mastic.

13. Remove release paper and install sheet "D". Position over previously installed roof sheets and attach to purlins per fastener details.



NOTE: MASTIC TO
BE INSTALLED ON
"WET" SIDE OF LAP
RIB.

ROOF
PURLIN

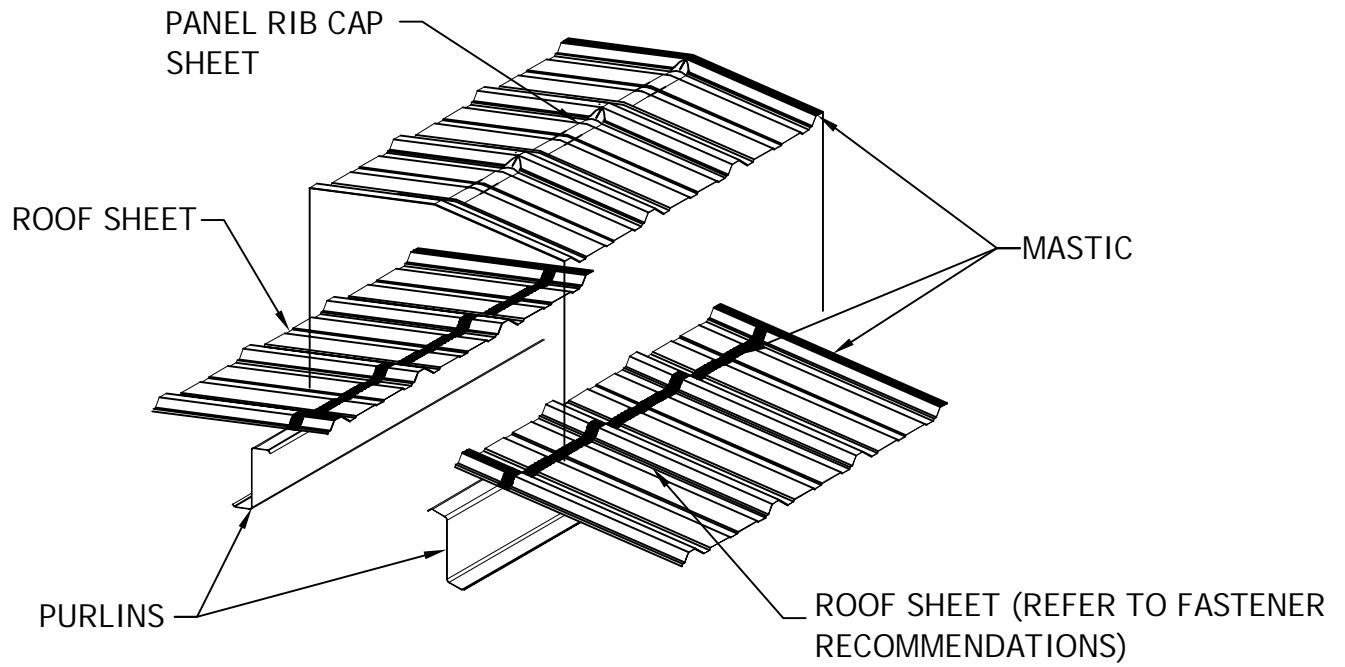
PREVIOUSLY
INSTALLED
ROOF
SHEETS

STEP FOUR
ROOF SHEET END LAP CONDITION

14. Apply tape mastic to roof sheet "D" as shown. Lap mastic over previously installed mastic, approx. 6".

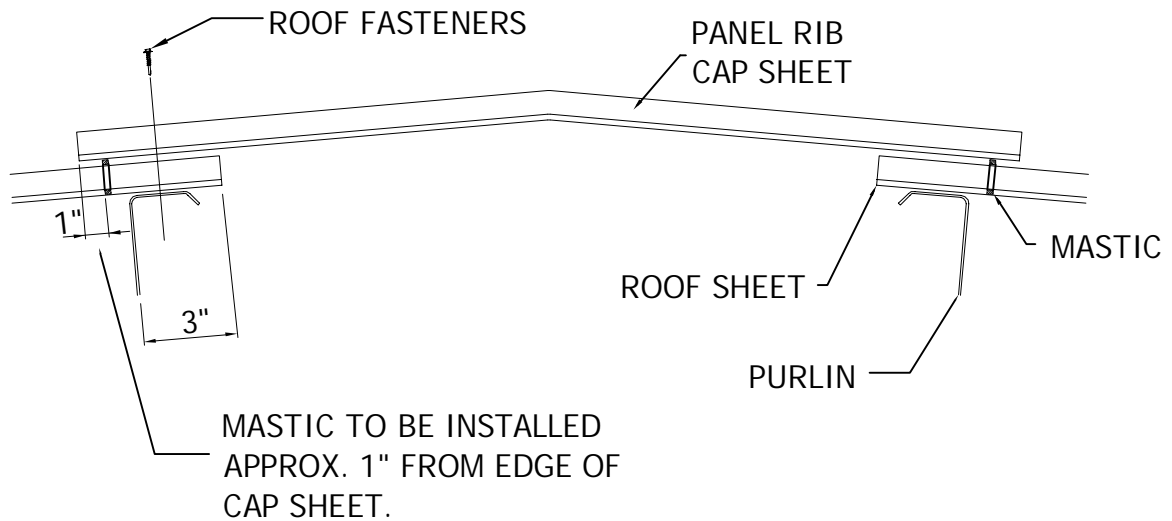
15. Mastic and sheet placement for four-lap condition at end laps should now be watertight. Repeat steps 1 thru 4 for remaining roof sheets.





NOTE: CAP SHEET TO BE USED AS AN ALIGNMENT GUIDE WHEN STARTING SHEETING ON OPPOSITE SIDE OF RIDGE.

CAP SHEET INSTALLATION



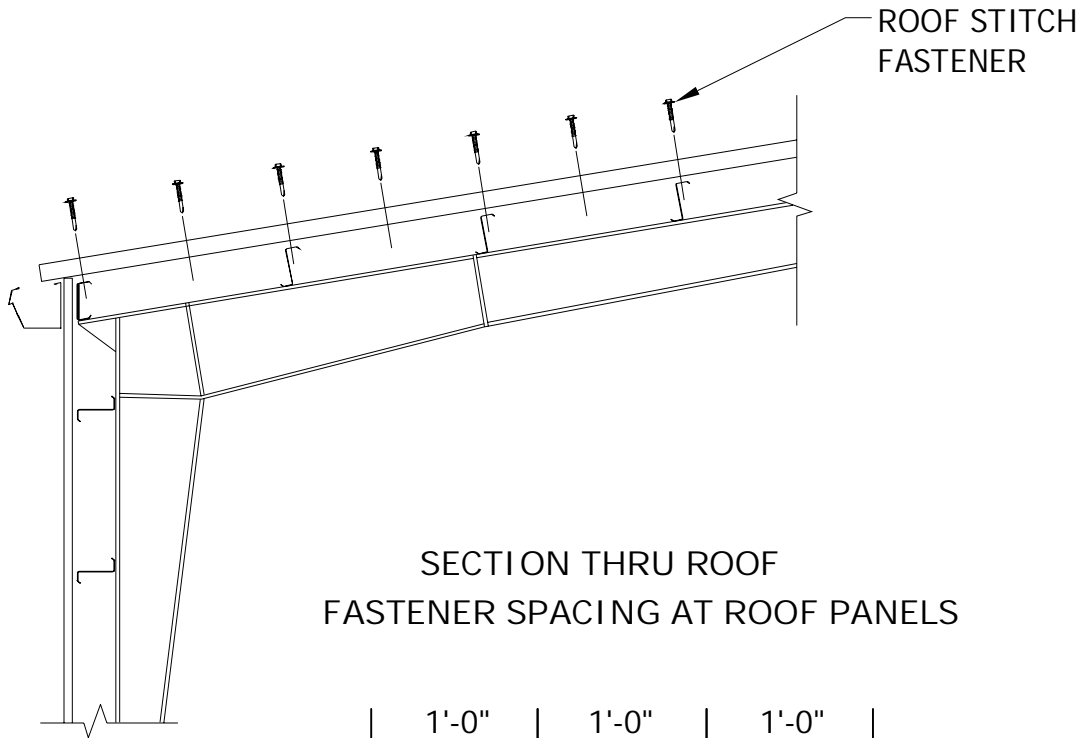
SECTION THRU RIDGE



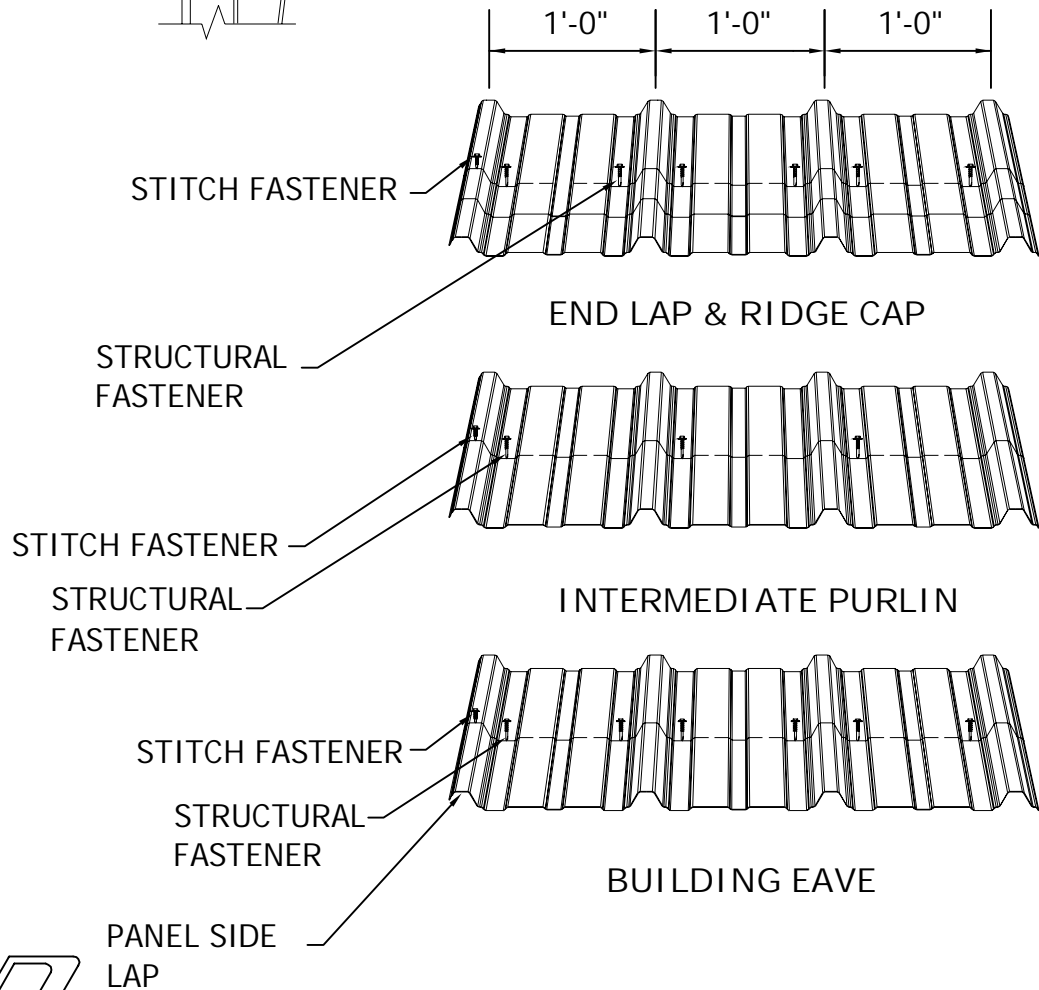
FASTENER APPLICATION ON ROOF

VP "STANDARD" ROOF CONSTRUCTION

(QUALIFIES AS UL CLASS 60 UPLIFT RATED ROOF)

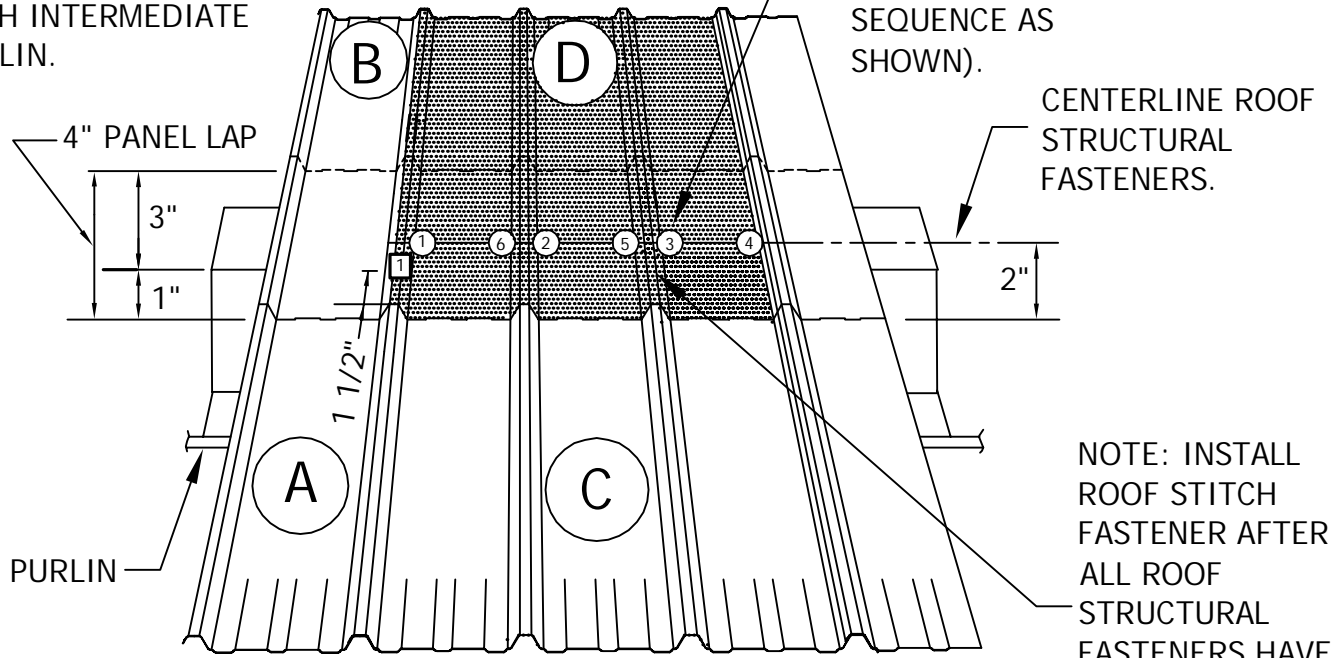


SECTION THRU ROOF
FASTENER SPACING AT ROOF PANELS



NOTE: INSTALL ROOF STITCH FASTENERS AT MID-POINTS BETWEEN EACH INTERMEDIATE PURLIN.

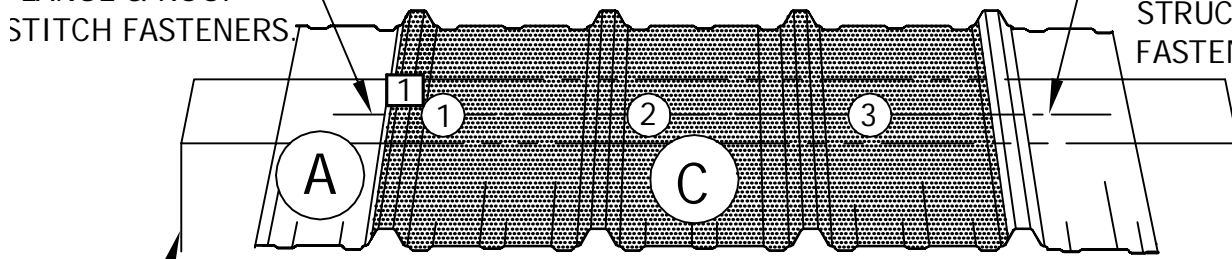
NOTE: INSTALL ROOF STRUCTURAL FASTENERS FIRST. (IN SEQUENCE AS SHOWN).



TYPICAL AT RIDGE CAP & ROOF SHEET END LAPS

CENTERLINE PURLIN FLANGE & ROOF STITCH FASTENERS

CENTERLINE PURLIN FLANGE & ROOF STRUCTURAL FASTENERS.

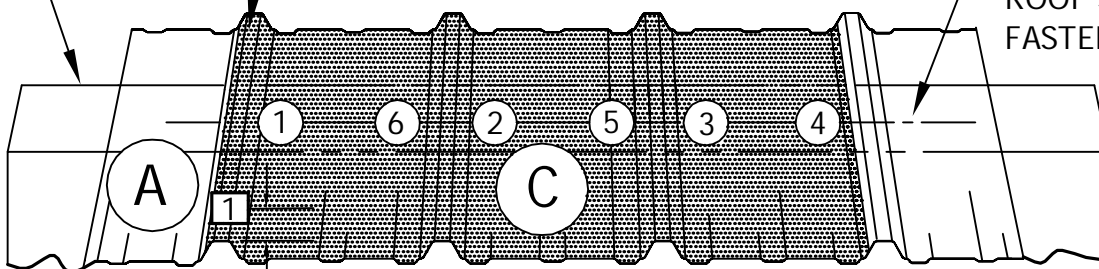


TYPICAL AT INTERMEDIATE PURLINS

EAVE MEMBER

STITCH FASTENER (TYPICAL)

CENTERLINE EAVE MEMBER FLANGE & ROOF STRUCTURAL FASTENERS.



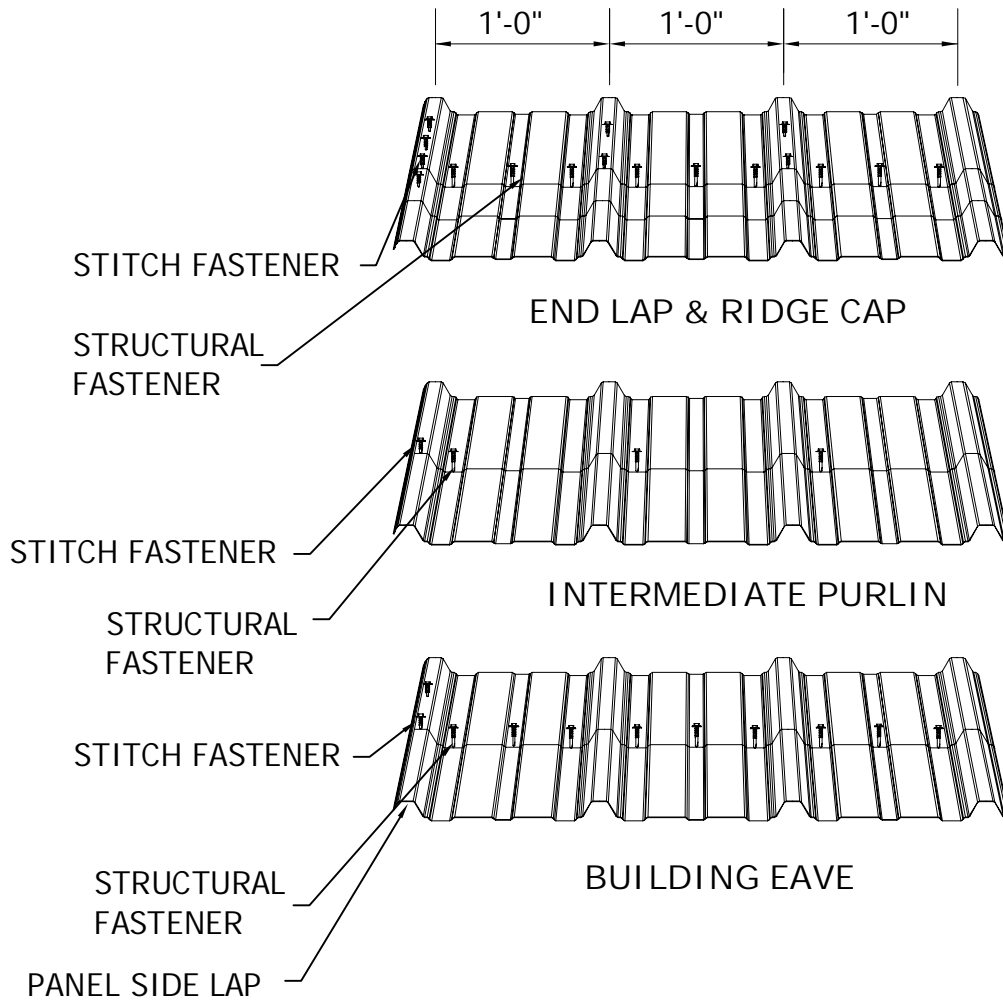
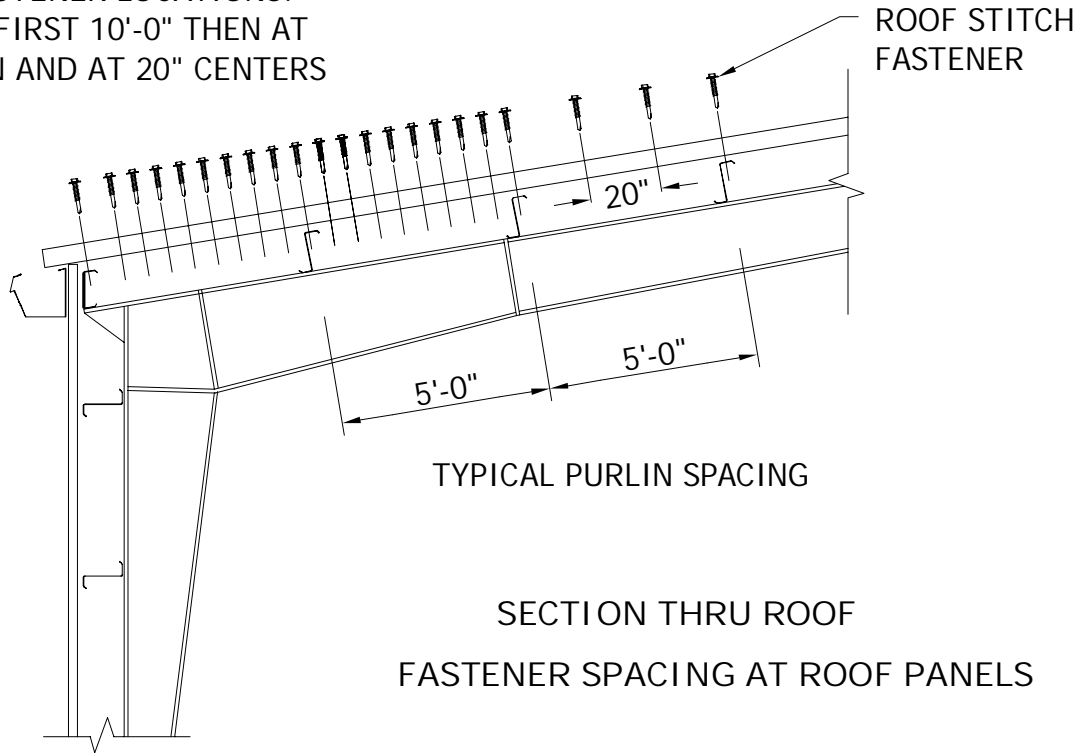
TYPICAL AT INTERMEDIATE PURLINS



FASTENER APPLICATION ON ROOF

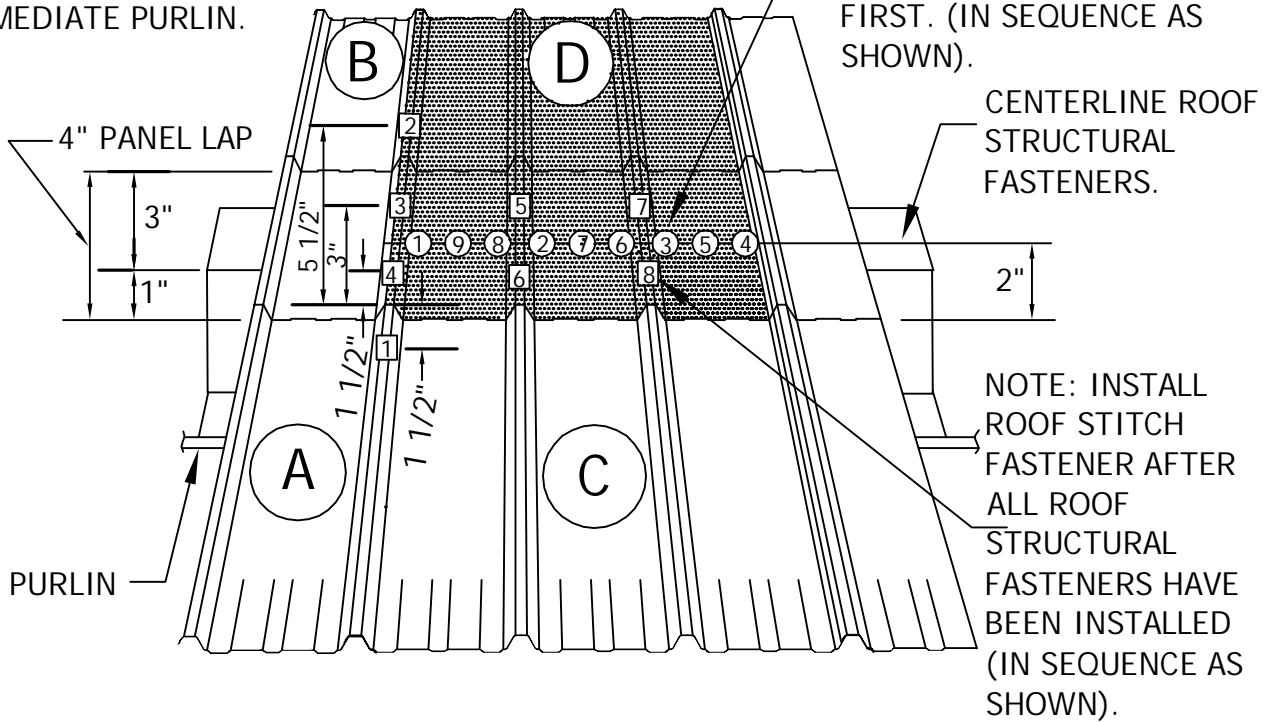
"ICE DAMMING"

SIDE LAP FASTENER LOCATIONS:
6" O.C. FOR FIRST 10'-0" THEN AT
EACH PURLIN AND AT 20" CENTERS
TO RIDGE.



NOTE: INSTALL (2) ROOF STITCH FASTENERS (AT 20" O.C.) BETWEEN EACH INTERMEDIATE PURLIN.

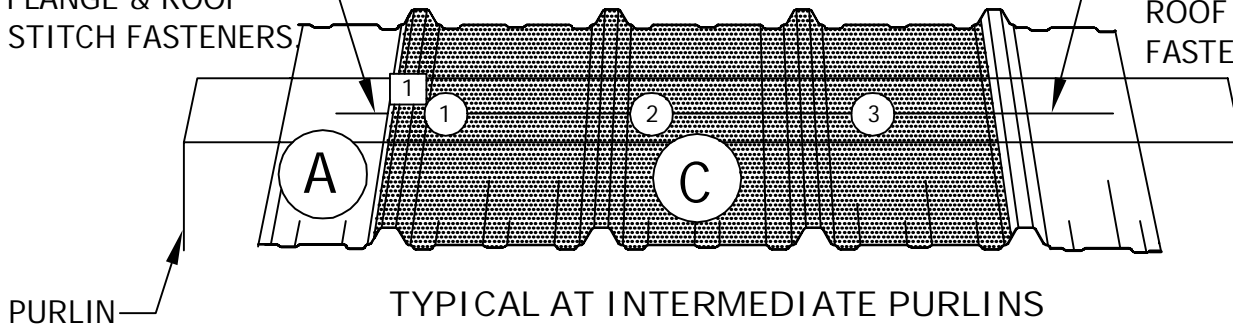
NOTE: INSTALL ROOF STRUCTURAL FASTENERS FIRST. (IN SEQUENCE AS SHOWN).



TYPICAL AT RIDGE CAP & ROOF SHEET END LAPS

CENTERLINE PURLIN FLANGE & ROOF STITCH FASTENERS

CENTERLINE PURLIN FLANGE & ROOF STRUCTURAL FASTENERS.

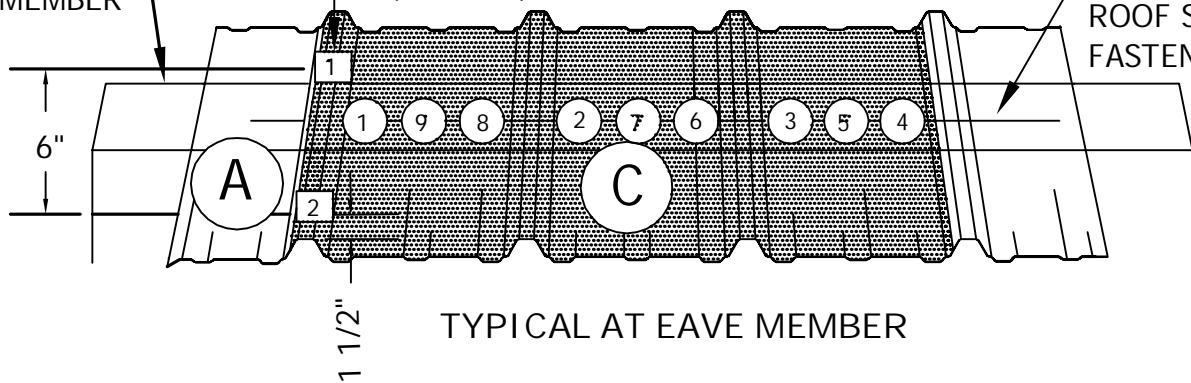


TYPICAL AT INTERMEDIATE PURLINS

EAVE MEMBER

STITCH FASTENER (TYPICAL)

CENTERLINE EAVE MEMBER FLANGE & ROOF STRUCTURAL FASTENERS.

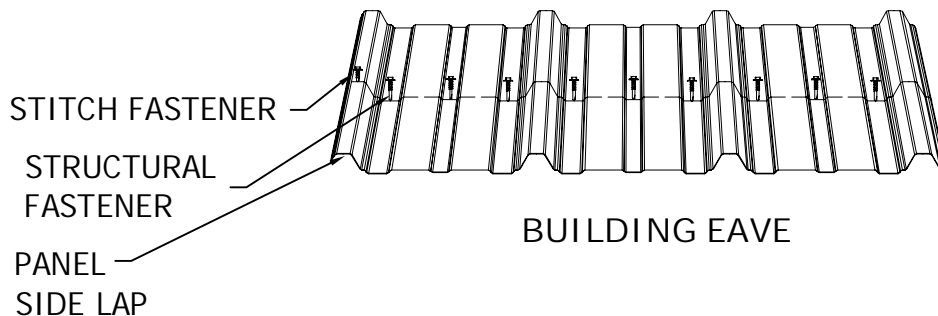
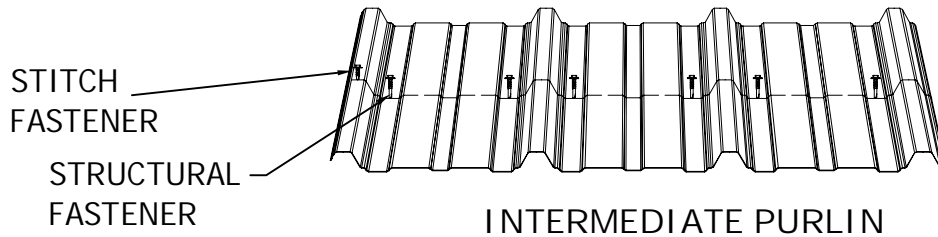
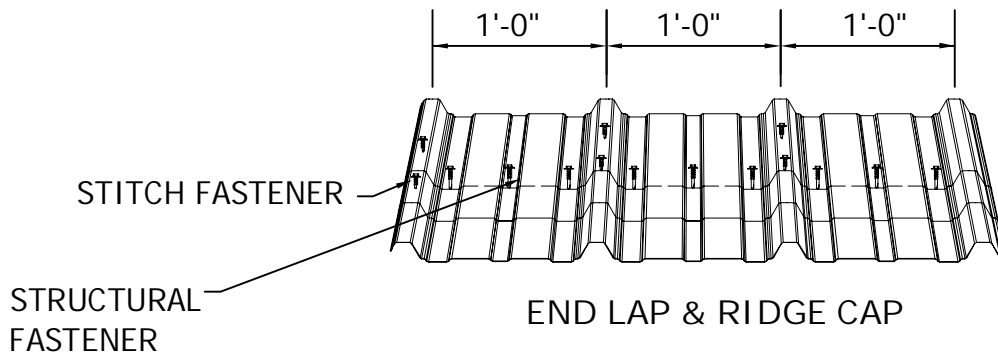
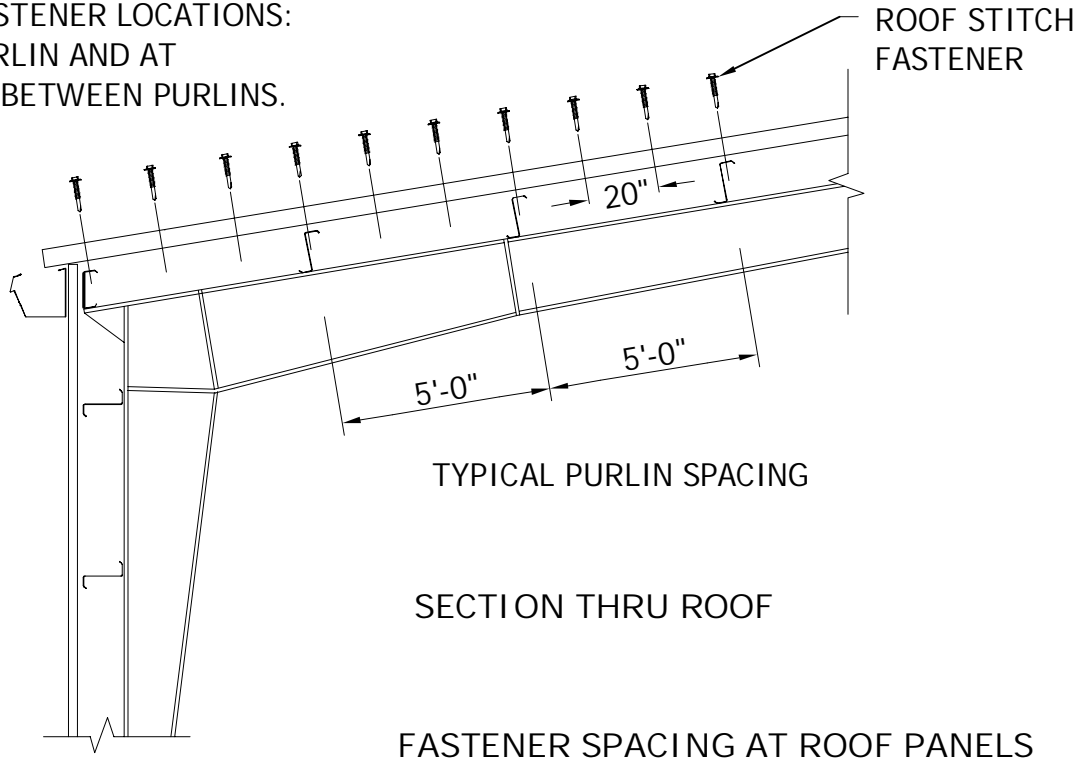


TYPICAL AT EAVE MEMBER

FASTENER APPLICATION ON ROOF

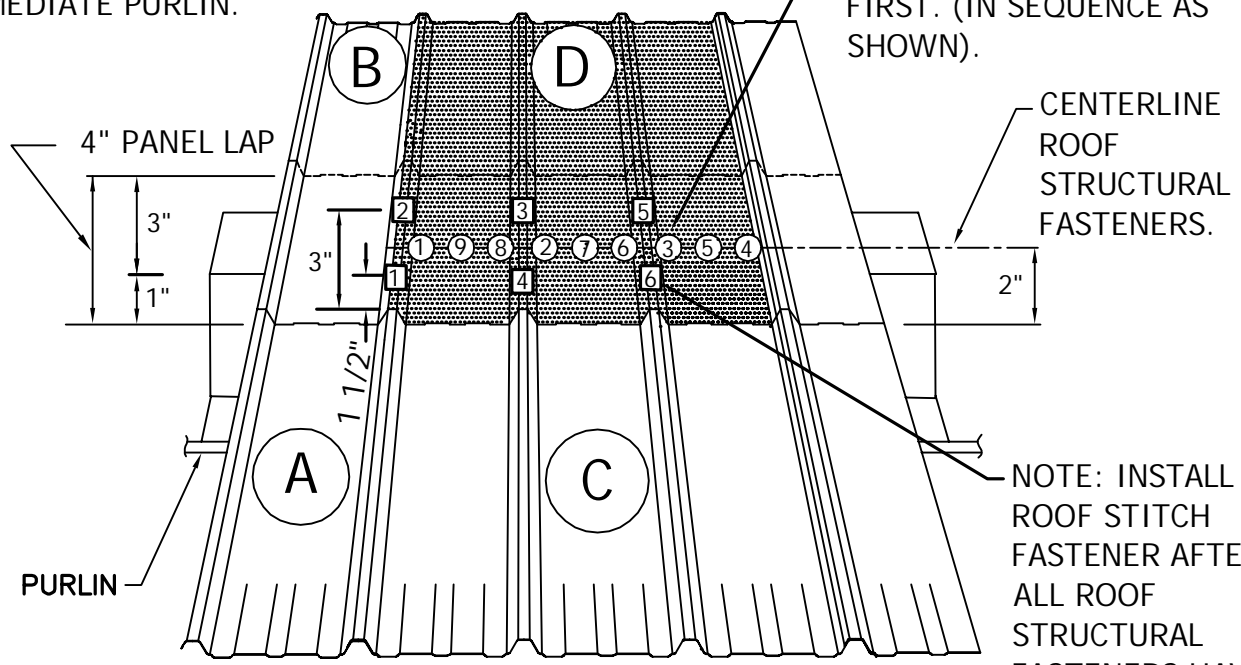
"UL CLASS 90-UPLIFT RATED"

SIDE LAP FASTENER LOCATIONS:
AT EACH PURLIN AND AT
MID-POINTS BETWEEN PURLINS.



NOTE: INSTALL ROOF STITCH FASTENERS AT MID-POINTS BETWEEN EACH INTERMEDIATE PURLIN.

NOTE: INSTALL ROOF STRUCTURAL FASTENERS FIRST. (IN SEQUENCE AS SHOWN).

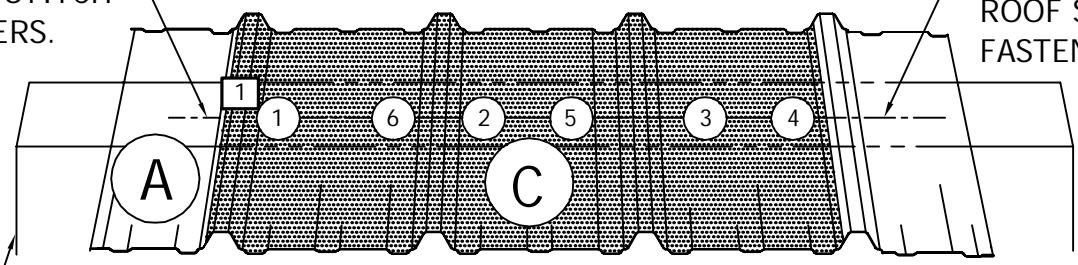


NOTE: INSTALL ROOF STITCH FASTENER AFTER ALL ROOF STRUCTURAL FASTENERS HAVE BEEN INSTALLED (IN SEQUENCE AS SHOWN).

TYPICAL AT RIDGE CAP & ROOF SHEET END LAPS

CENTERLINE PURLIN FLANGE & ROOF STITCH FASTENERS.

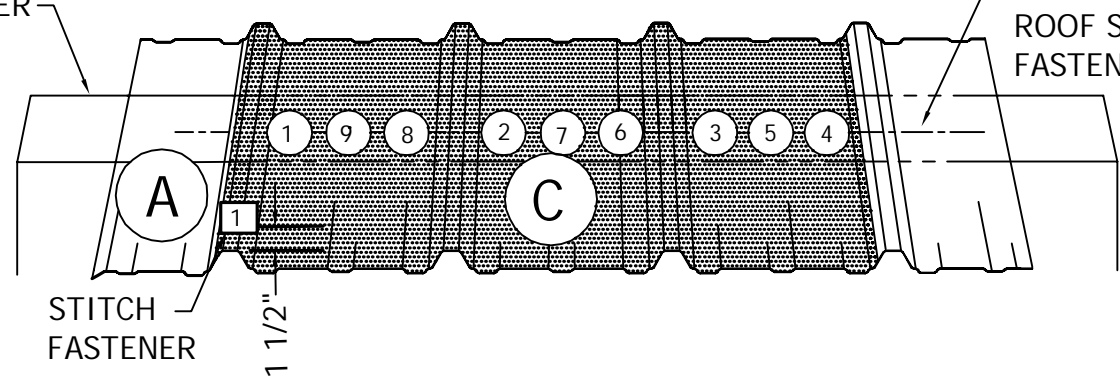
CENTERLINE PURLIN FLANGE & ROOF STRUCTURAL FASTENERS.



TYPICAL AT INTERMEDIATE PURLINS

EAVE MEMBER

CENTERLINE EAVE MEMBER FLANGE & ROOF STRUCTURAL FASTENERS.



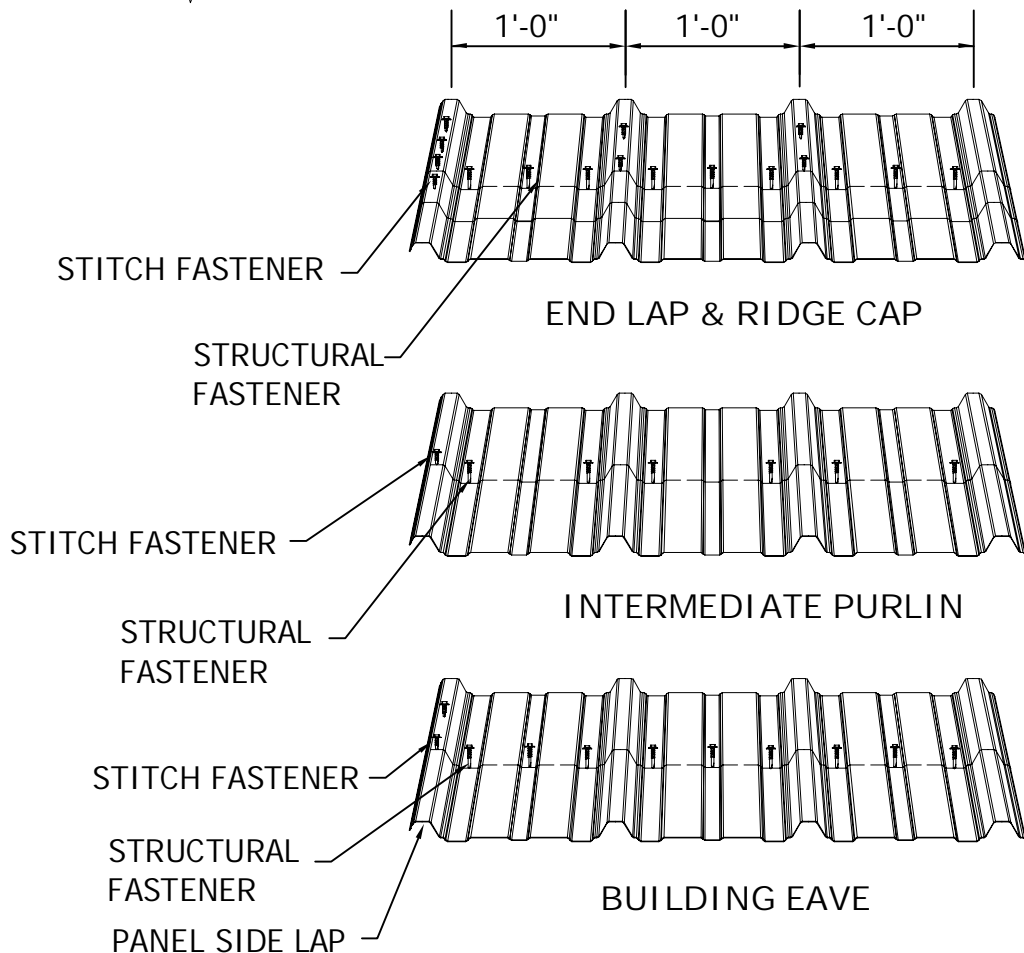
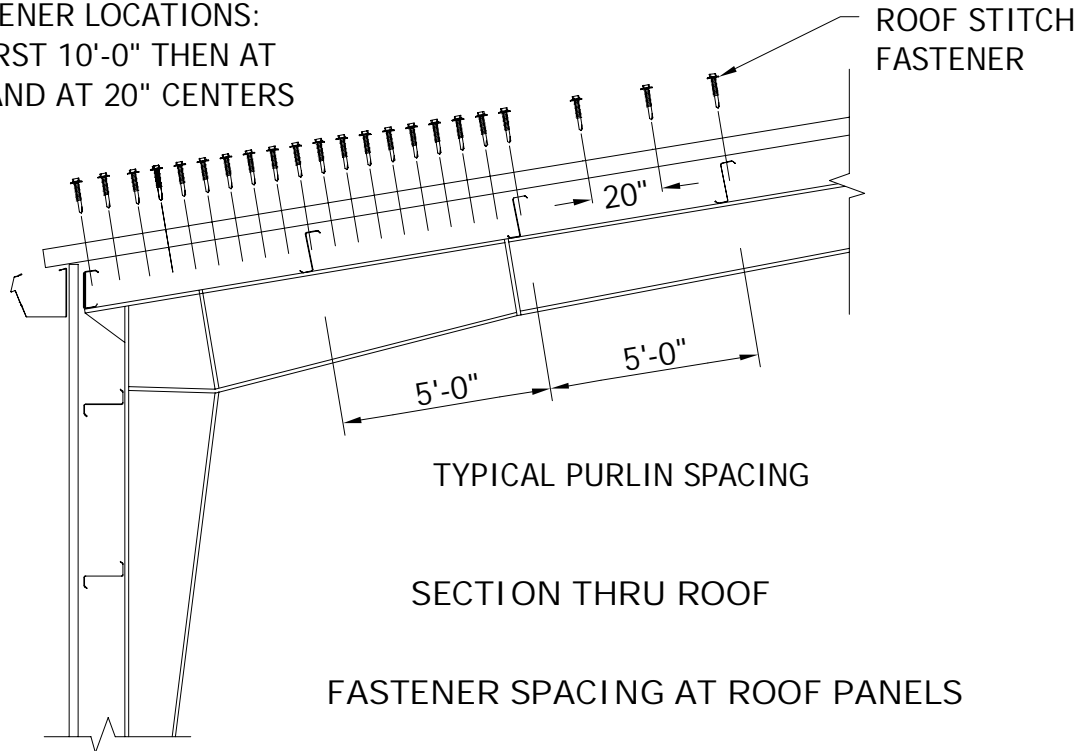
TYPICAL AT EAVE MEMBER
B-12



FASTENER APPLICATION ON ROOF

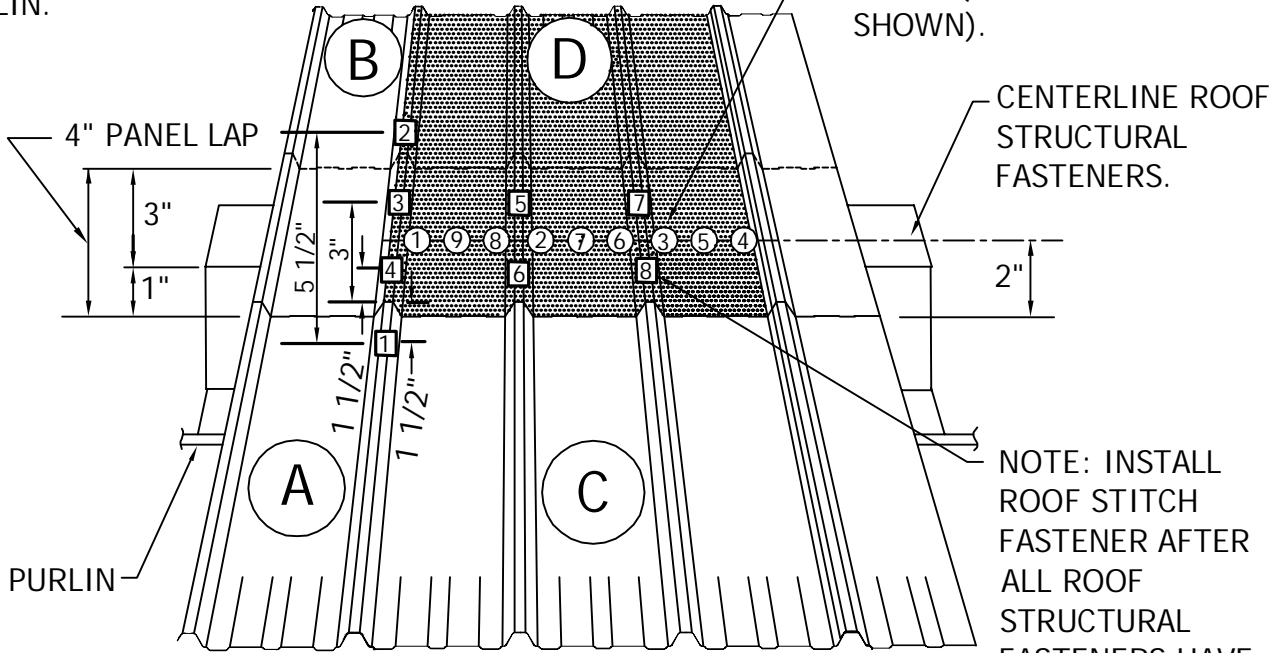
"UL CLASS 90-UPLIFT RATED & ICE DAMMING"

SIDE LAP FASTENER LOCATIONS:
6" O.C. FOR FIRST 10'-0" THEN AT
EACH PURLIN AND AT 20" CENTERS
TO RIDGE.



NOTE: INSTALL (2) ROOF STITCH FASTENERS AT (AT 20" O.C.) BETWEEN EACH INTERMEDIATE PURLIN.

NOTE: INSTALL ROOF STRUCTURAL FASTENERS FIRST. (IN SEQUENCE AS SHOWN).

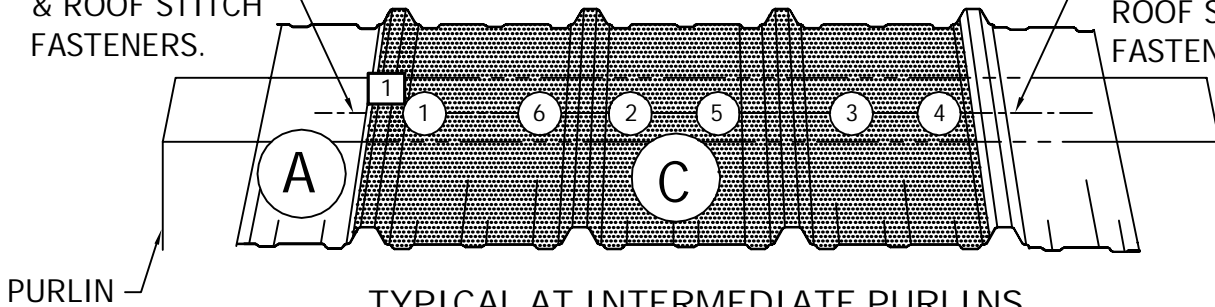


NOTE: INSTALL ROOF STITCH FASTENER AFTER ALL ROOF STRUCTURAL FASTENERS HAVE BEEN INSTALLED (IN SEQUENCE AS SHOWN).

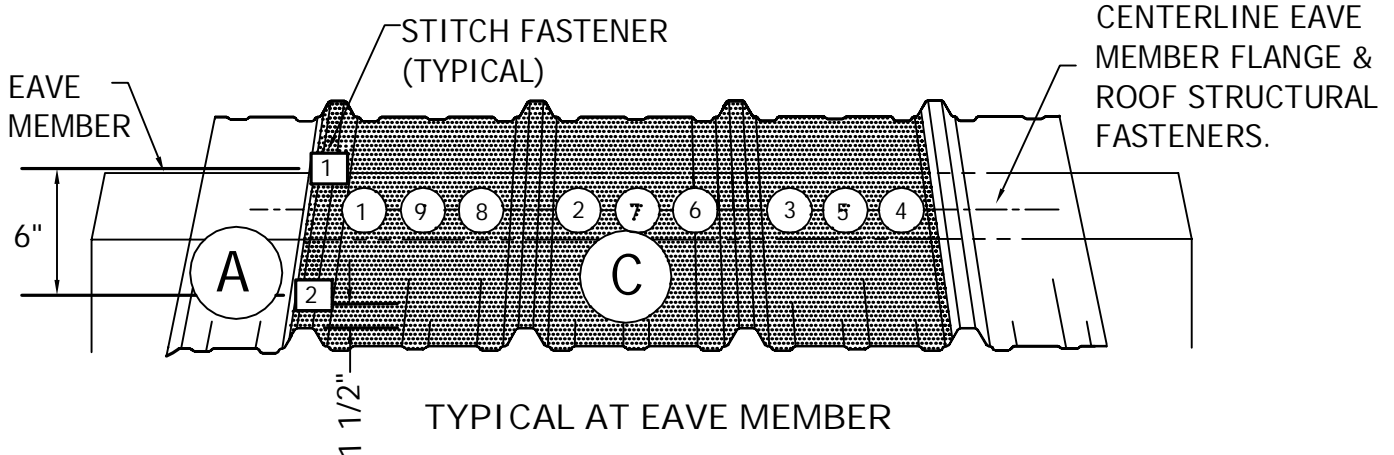
TYPICAL AT RIDGE CAP & ROOF SHEET END LAPS

CENTERLINE PURLIN FLANGE & ROOF STITCH FASTENERS.

CENTERLINE PURLIN FLANGE & ROOF STRUCTURAL FASTENERS.

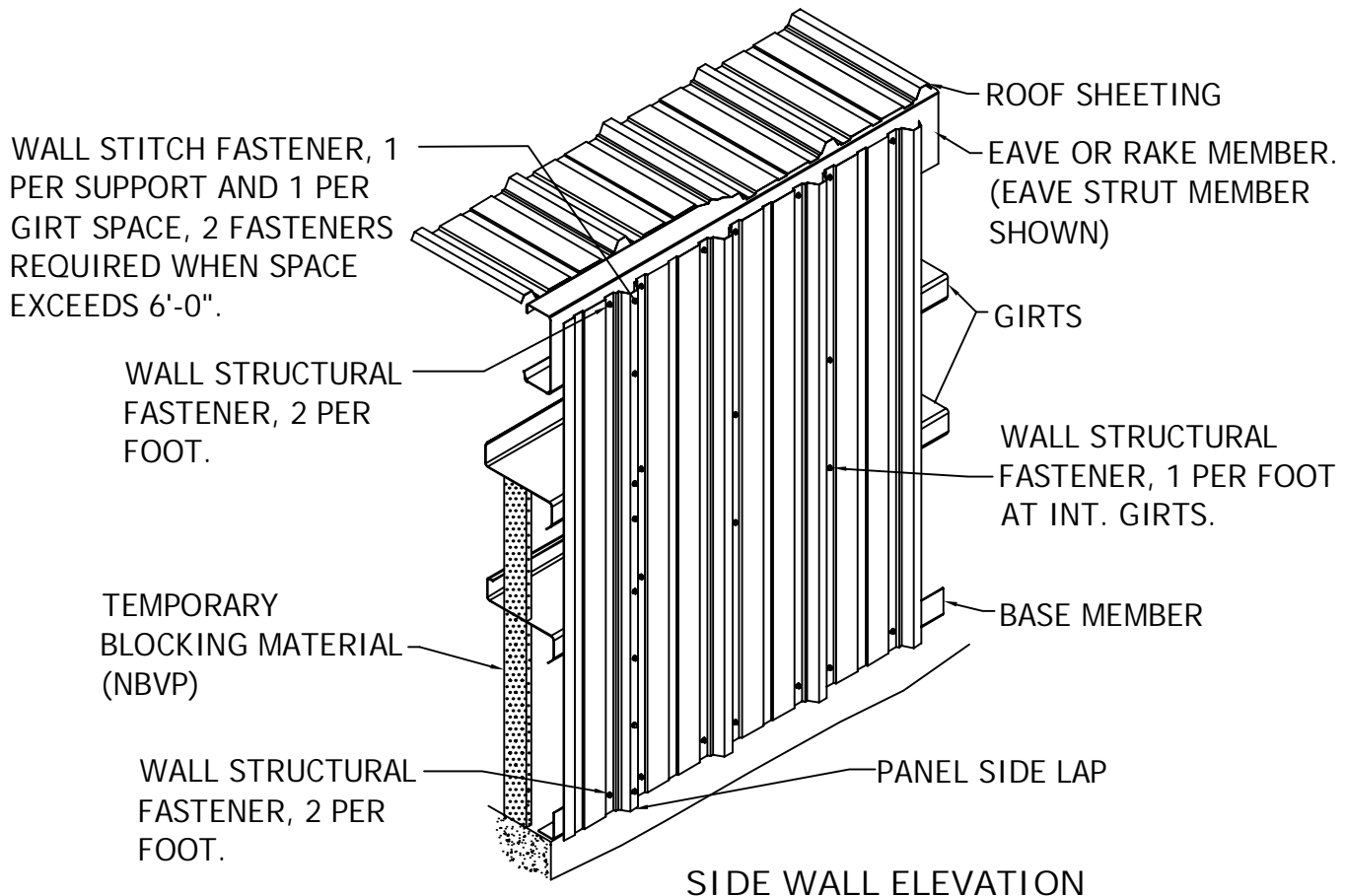


TYPICAL AT INTERMEDIATE PURLINS



TYPICAL AT EAVE MEMBER

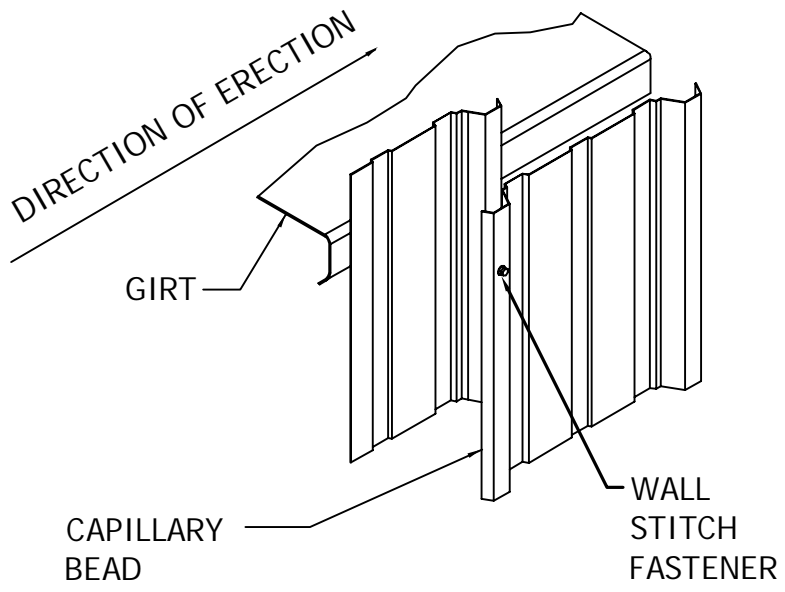




SIDE WALL ELEVATION

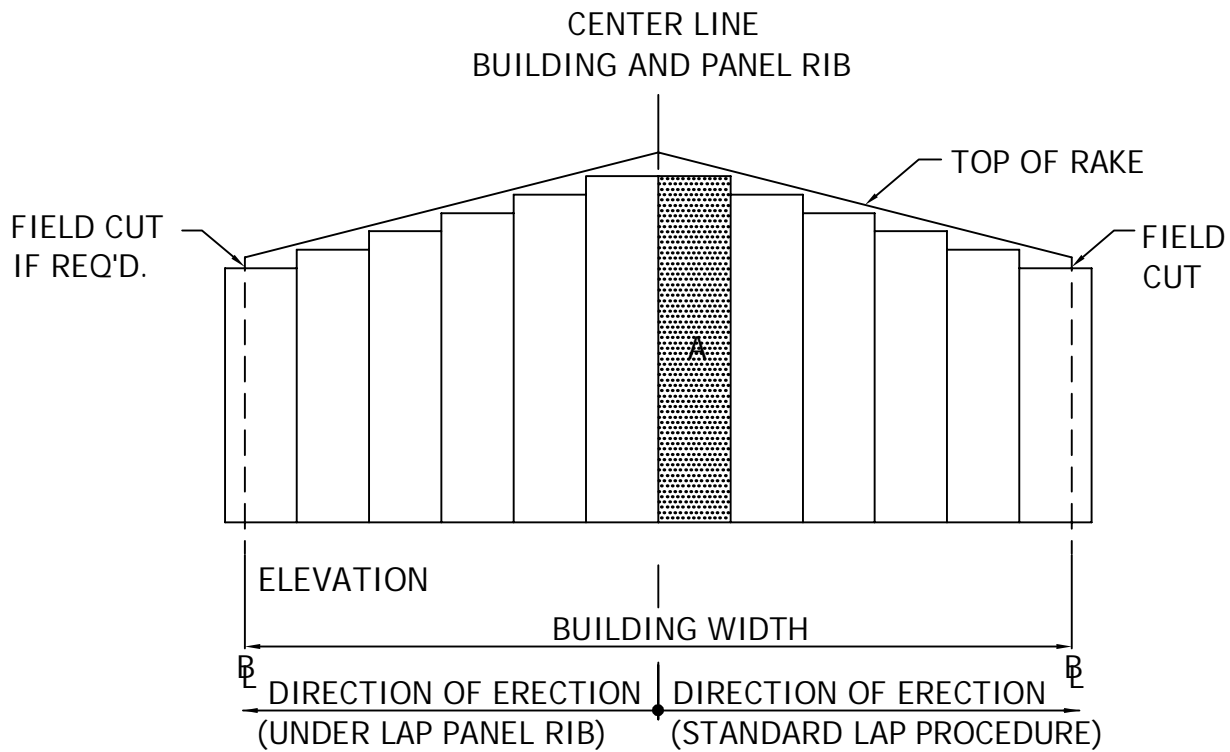
NOTE: FOR INSULATION GREATER THAN 4", USE #17/12-14 X 1 $\frac{7}{8}$ " STAND-OFF STRUCTURAL FASTENERS. ALWAYS USE 12-14 X 1 $\frac{1}{4}$ " AT CRIMPED BASE AND AT FRAMED OPENINGS.

- NOTES:
1. Block girts to "LEVEL POSITION" before starting panel erection. Maintain blocking until panel to structural fasteners are installed.
 2. Align and plumb first wall panel with the roof panel (making sure notched top of side wall panel fits ribs of first roof panel).
 3. Attach panel to secondary framing (see recommendations for fastener type and spacing).
 4. Proceed to install adjacent panel. Use only a minimum number of fasteners to hold panels in place until chalk lines can be popped, to assure a straight line run of fasteners.
 5. Install side lap fasteners only after all structural fasteners are in place.



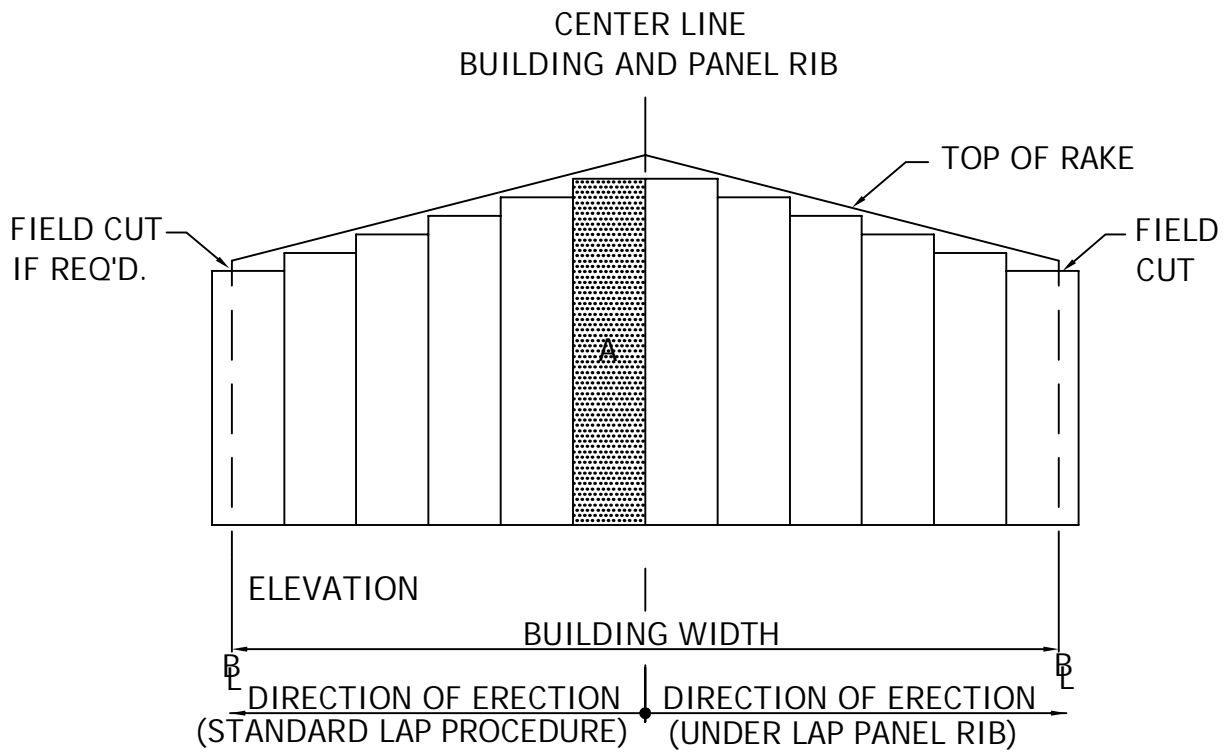
SIDE LAP DETAIL





NOTE:

1. Endwall panel marked "A" will be installed first, make sure panel is plumb and that the center of the panel rib is located at the exact center of the building ridge .
2. Attach panel "A". Do not fasten along the left hand edge of panel. The rib of all remaining panels to the left of panel "A" must be underlapped.
3. Field cut panels at building line if required or back lap if acceptable.
4. As roof pitch increases, protective measures are to be taken to prevent personnel or materials from falling from building and resulting in bodily injury.

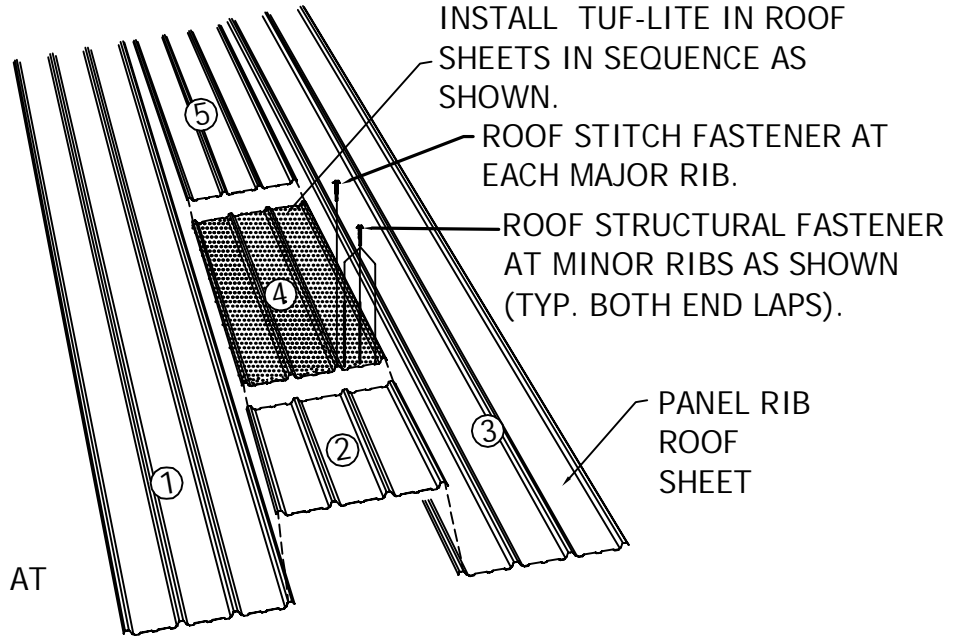


NOTE:

1. Endwall panel marked "A" will be installed first. Make sure panel is plumb and that the center of the panel rib is located at the exact center of the building ridge.
2. Attach panel "A". Do not fasten along the right hand edge of panel. The panel rib of all remaining panels to the right of panel "A" MUST BE UNDERLAPPED.
3. Field cut panels at building line if required or back lap if acceptable.
4. As roof pitch increases, protective measures are to be taken to prevent personnel or materials from falling from building and resulting in body injury.

PANEL RIB TUF-LITE STANDARD INSTALLATION

IMPORTANT NOTE:
DO NOT STEP, WALK OR
PLACE HEAVY LOADS ON
TUF-LITE PANELS.



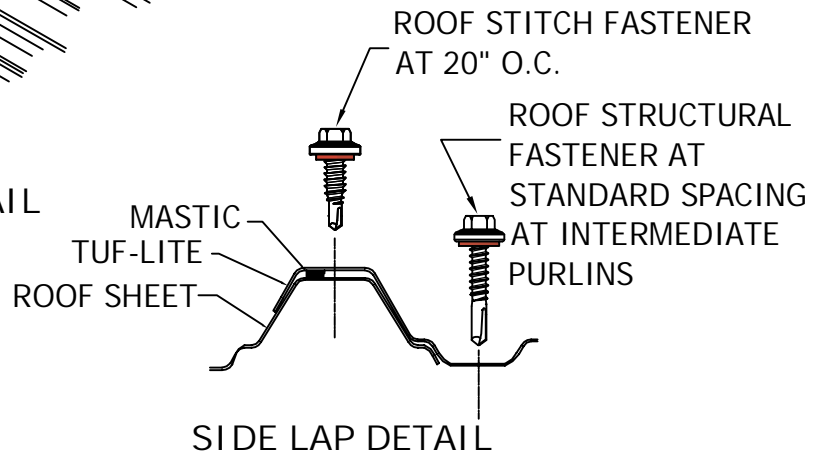
INSTALLATION SEQUENCE

ROOF STITCH FASTENER AT EACH MAJOR RIB.

ROOF STRUCTURAL FASTENER AT MINOR RIB AS SHOWN (TYP. BOTH END LAPS)

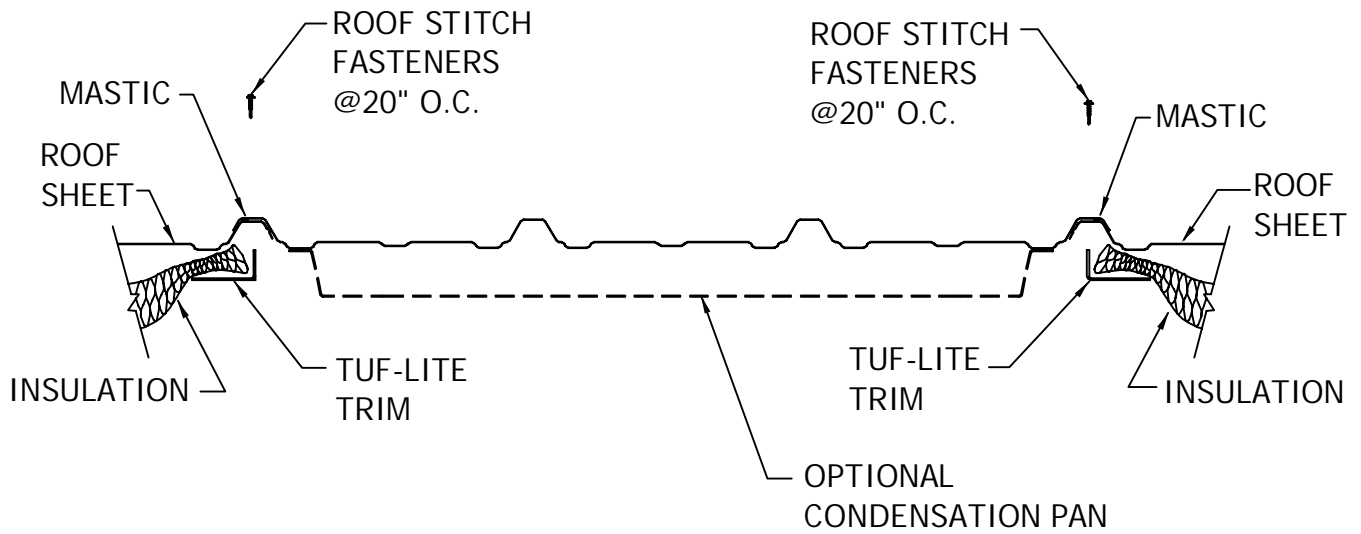
MASTIC:
DOUBLE ROW
REQUIRED AT LOWER
END LAP ONLY.
SINGLE ROW AT
UPPER END LAP.

END LAP DETAIL

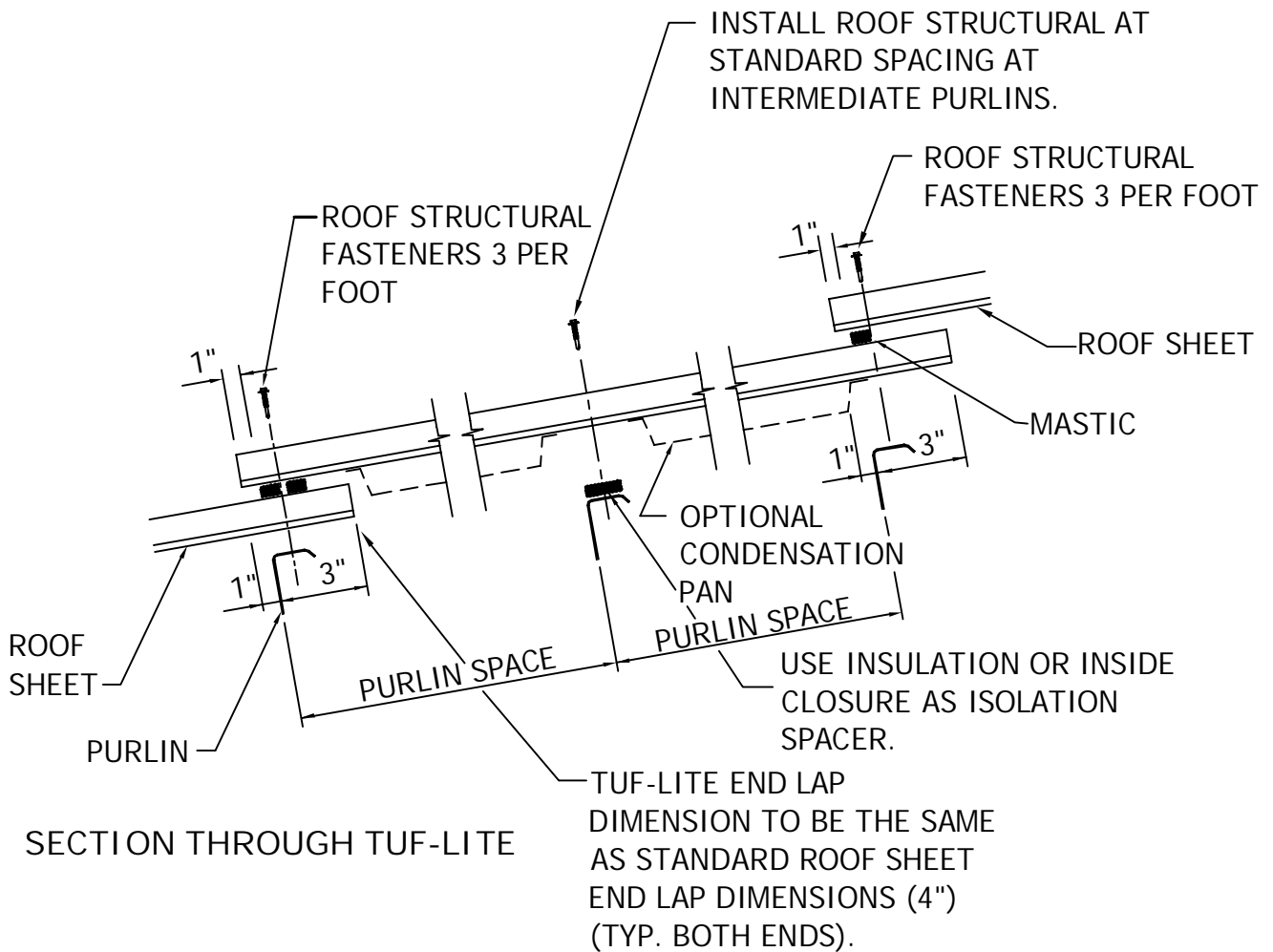


IMPORTANT: TUF-LITES SHALL BE INSTALLED AS ROOF IS SHEETED AND PROTECTIVE MEASURES TAKEN TO INSURE AGAINST MATERIALS OR PERSONNEL FROM FALLING THROUGH TUF-LITE.





TUF-LITE SIDE LAP DETAIL



SECTION THROUGH TUF-LITE

TUF-LITE END LAP DIMENSION TO BE THE SAME AS STANDARD ROOF SHEET END LAP DIMENSIONS (4") (TYP. BOTH ENDS).

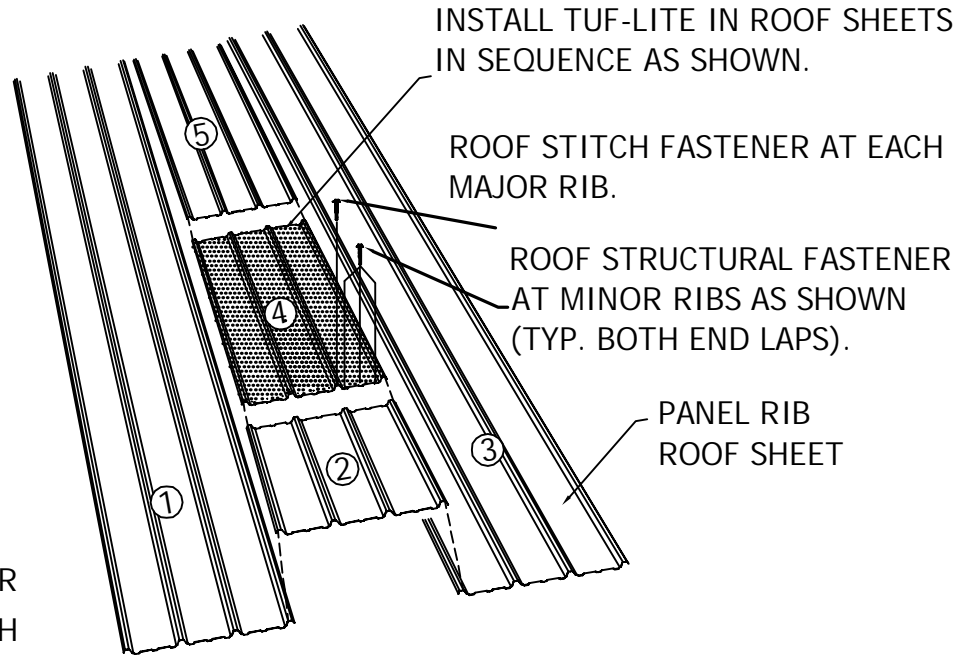


PANEL RIB TUF-LITE INSTALLATION

U.L. CLASS 90 UPLIFT

IMPORTANT NOTE:

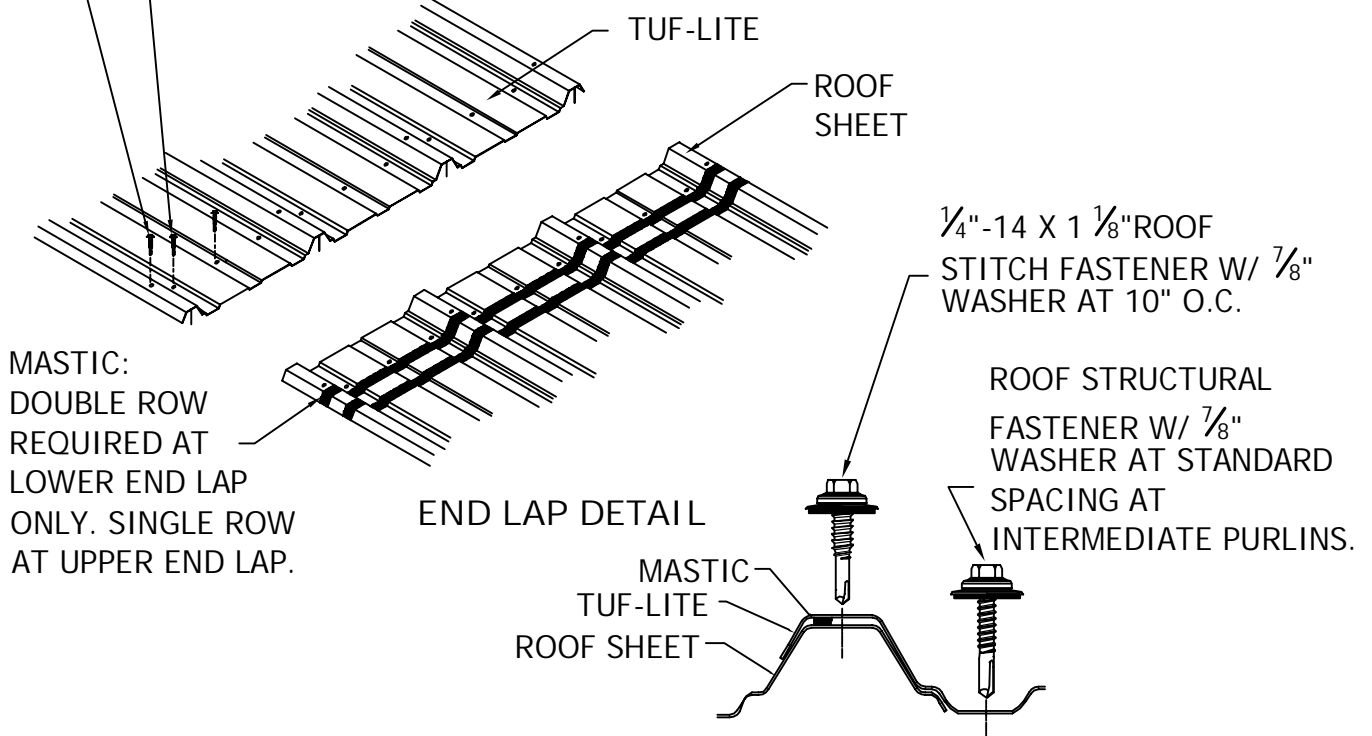
DO NOT STEP, WALK, OR PLACE HEAVY LOADS ON TUF-LITE PANELS.



INSTALLATION SEQUENCE

$\frac{1}{4}$ "-14 X $1\frac{1}{8}$ " ROOF STITCH FASTENER w/ $\frac{7}{8}$ " WASHER AT EACH MAJOR RIB.

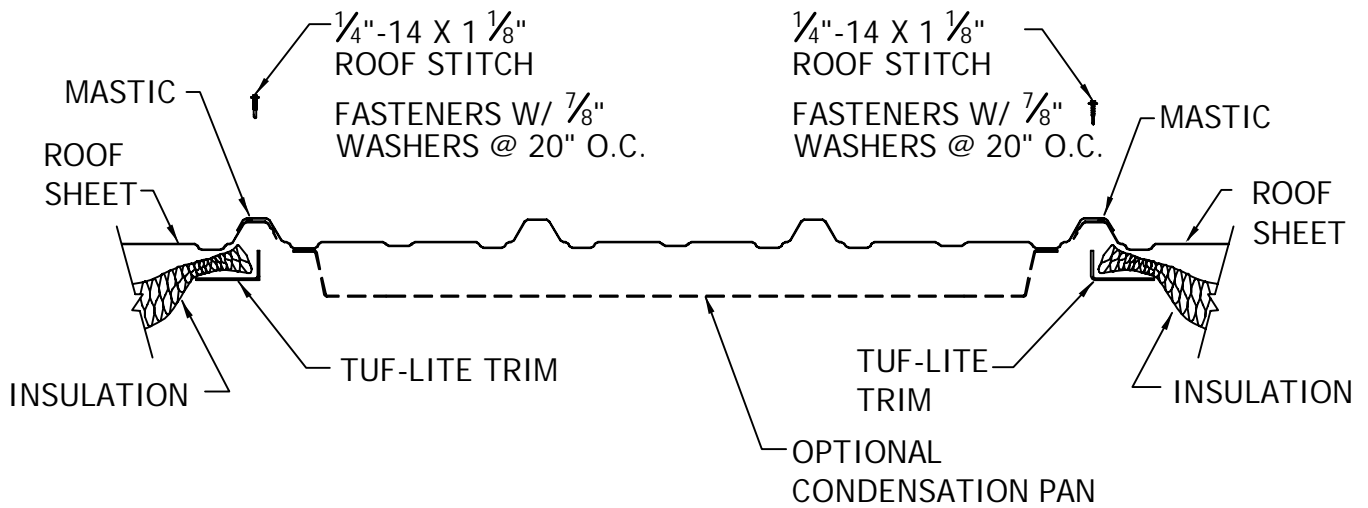
ROOF STRUCTURAL FASTENER W/ $\frac{7}{8}$ " WASHER AT MINOR RIB AS SHOWN (TYP. BOTH END LAPS)



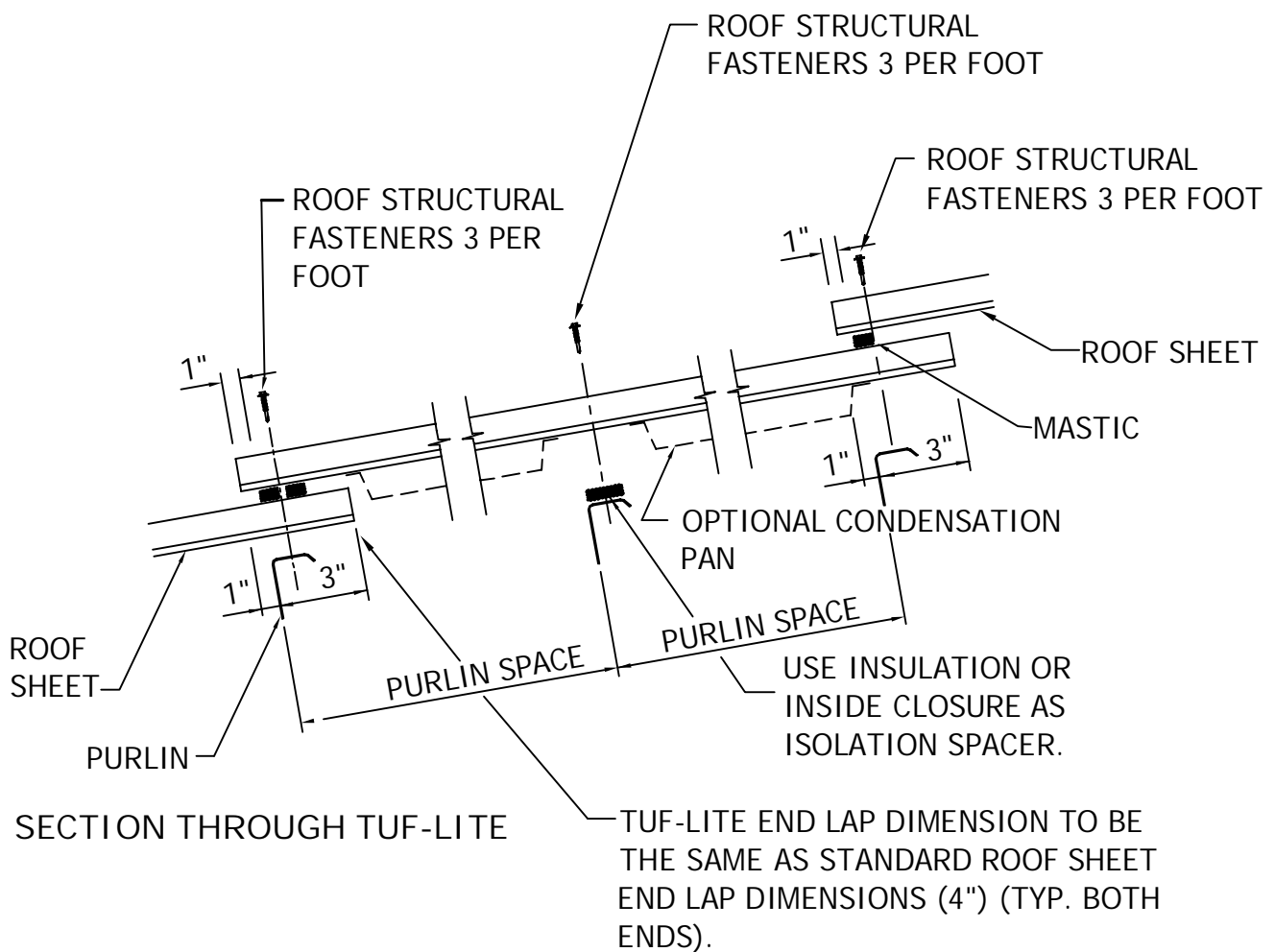
SIDE LAP DETAIL

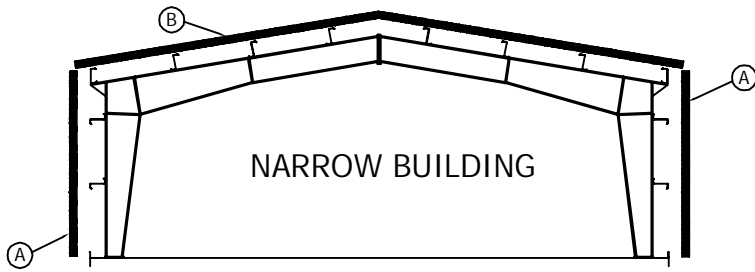
IMPORTANT: TUF-LITES SHALL BE INSTALLED AS ROOF IS SHEETED AND PROTECTIVE MEASURES TAKEN TO INSURE AGAINST MATERIALS OR PERSONNEL FROM FALLING THROUGH TUF-LITE.





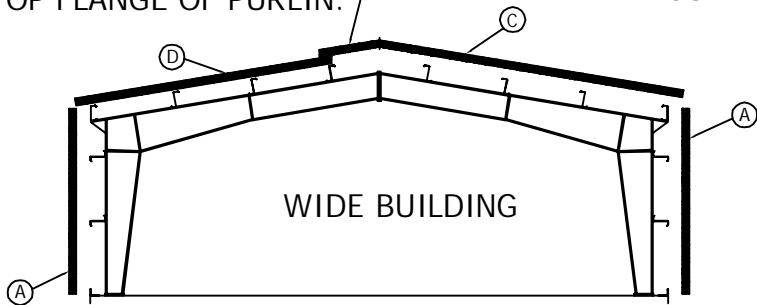
TUF-LITE SIDE LAP DETAIL



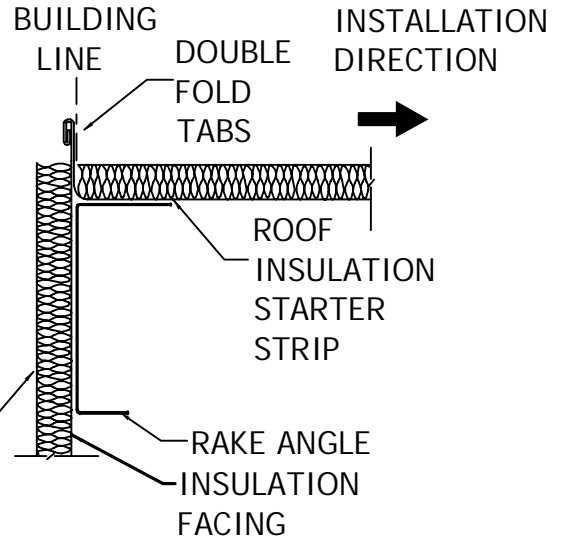


INSULATION METHOD #1

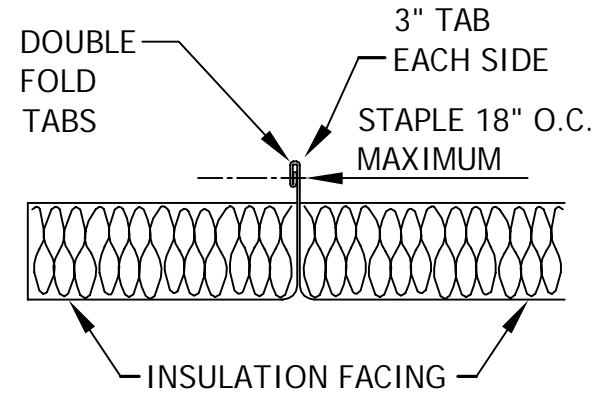
ATTACH (D) TO PURLIN,
LAP (C) OVER (D) AND
GLUE, MAKE SURE (D)
DOES NOT EXTEND PAST
TOP FLANGE OF PURLIN.



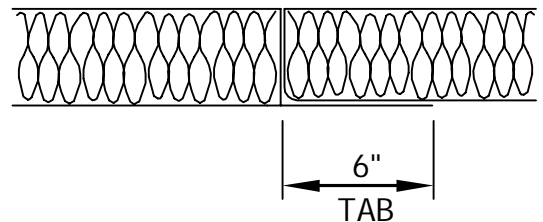
INSULATION METHOD #2



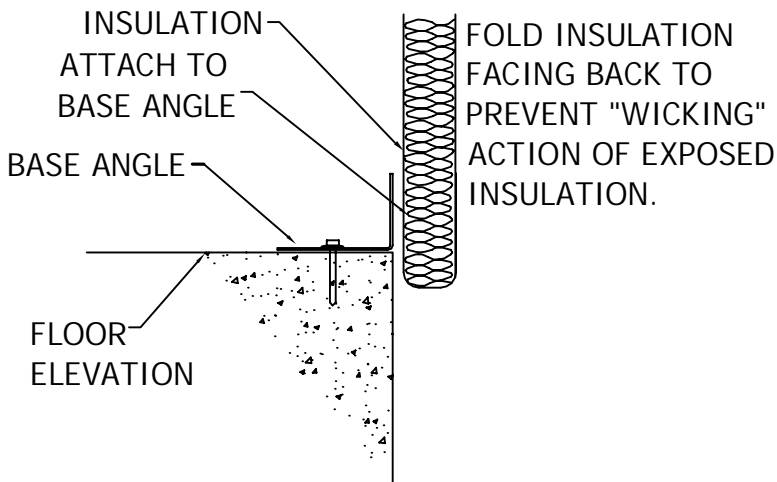
STARTING ROOF INSULATION



INSULATION SIDE TAB DETAIL
(ROOF AND WALL APPLICATIONS)



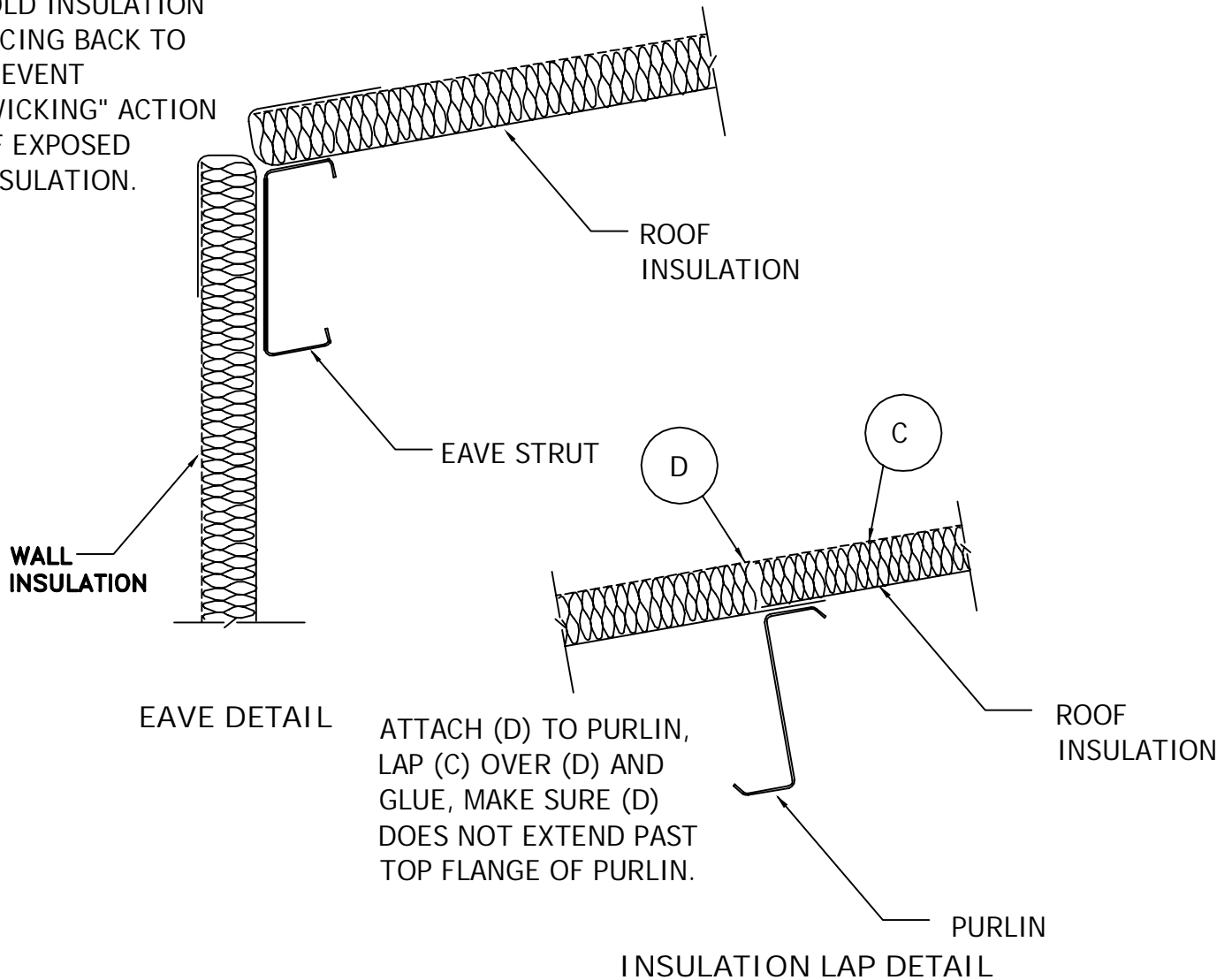
INSULATION SIDE LAP DETAIL
(OPTIONAL)



WALL BASE DETAIL



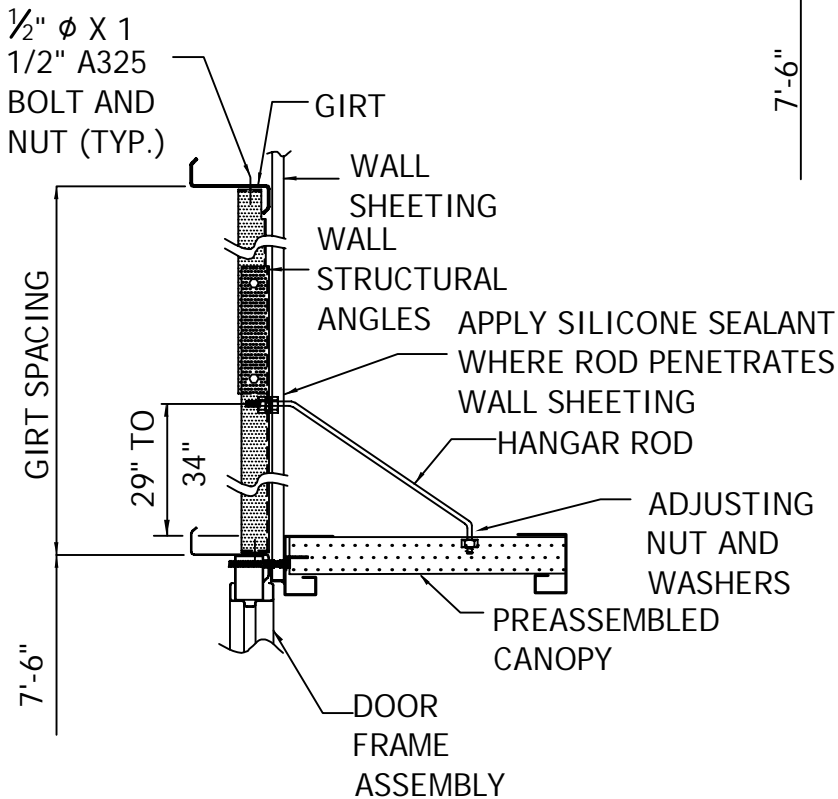
FOLD INSULATION
FACING BACK TO
PREVENT
"WICKING" ACTION
OF EXPOSED
INSULATION.



GENERAL NOTES:

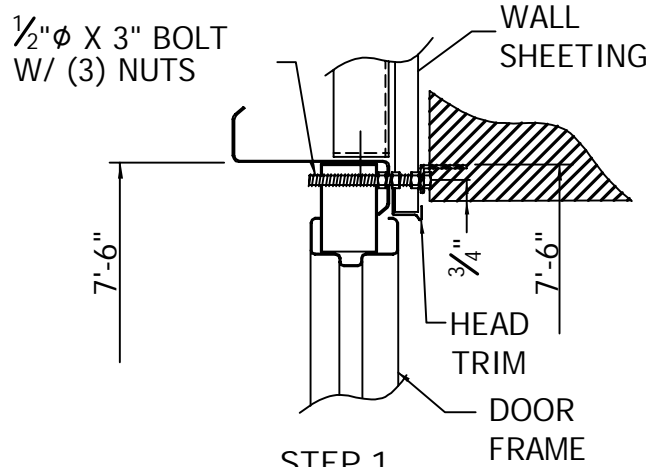
1. Wall insulation (A) is shipped in maximum roll lengths and is to be field cut to exact lengths before installing. Wall insulation should extend from top of eave member to 1" below floor elevation. Do not cut long and trim at bottom of wall panels. Glue at eave member and base angle, pull facing tight and hold in place until wall panel is attached (See Wall Base Detail).
2. Roof insulation (B) is shipped as one roll for each length or for two or more lengths to be field cut from a single roll, depending on building width. Pull insulation simultaneously from each side of the building until facing is snug. Allow insulation to expand to it's full thickness. Fold insulation facing back to prevent " WICKING" action of exposed insulation, similar to wall base detail. Glue to top of eave member and trim excess insulation.
3. Roof insulation (C) and (D) are shipped as one roll for each length. Install in a similar manner to insulation (B). Use same procedure for end walls as for side walls.





SECTION @ CANOPY ASSEMBLY

NOTE:
DRILL FASCIA AND ATTACH SCOUP TO DRAIN AWAY FROM DOOR OPENING.

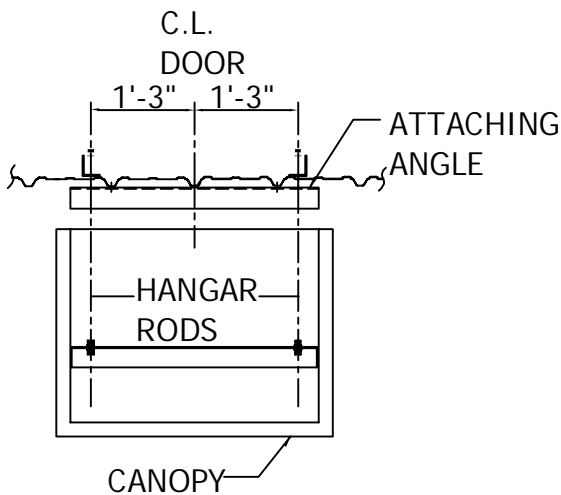


STEP 1
Mount attaching angle at 7'-6" above floor. Locate over door and attach w/ (2) BOLTS- $\frac{1}{2}$ " ϕ X 3" AND (3) NUTS as shown.

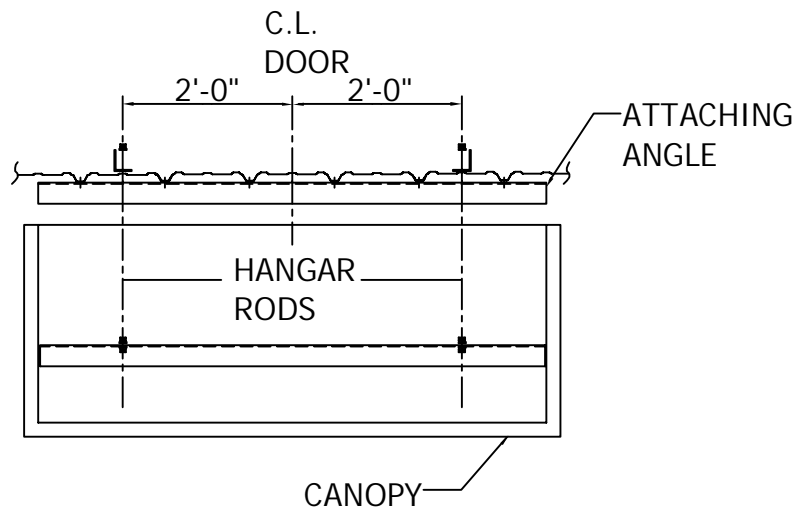
STEP 2
Locate wall structural angles between girts. Field drill $\frac{9}{16}$ " hole top and bottom into girts and bolt into place.

STEP 3
Drill (2) holes through wall sheet at 29" - 34" above top of canopy as shown and install hangar rods w/ (2) NUTS.

STEP 4
Bolt canopy to attaching angle and hangar rods as shown.



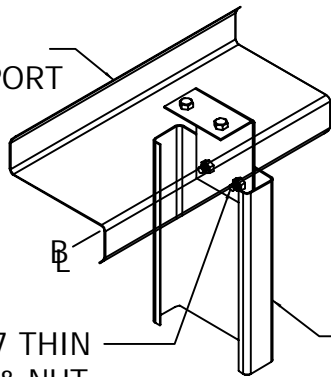
3070 DOOR CANOPY



6070 DOOR CANOPY



ZEE GIRT
(JAMB SUPPORT
GIRT)



(2) 1/2" A307 THIN
HEAD BOLT & NUT

DETAIL "A"

WALL
STRUCTURAL
FASTENER

HEADER

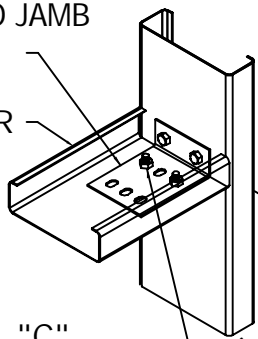
WALL
PANEL

HEADER
TRIM

DOOR
FLASHING

SECTION "B"

HEADER TO JAMB
CLIP
DOOR HEADER



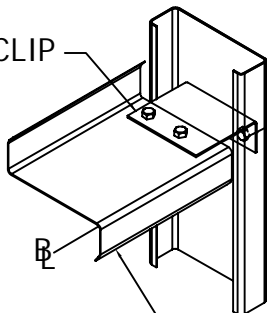
SINGLE JAMB

DETAIL "C"

(2) 1/2" A307 THIN
HEAD BOLT & NUT

GIRT CLIP

SINGLE JAMB



(2) 1/2" A307 THIN
HEAD BOLT & NUT

DETAIL "D"

ZEE GIRT SHOWN
CEE GIRT SIMILAR

GIRT

GIRT

"A"

"B"

HEADER

"C"

"D"

"F"

JAMB

GIRT

"E"

BASE
MEMBER

WALL
STRUCTURAL
FASTENER

JAMB, SINGLE
OR DOUBLE

JAMB BASE
CLIP

1/2" ANCHOR
RODS WITH
HARDENED WASHER

6"
MAX

FRAMED
OPENING

CONCRETE FSNR
AT 24" O.C.
(BY BUILDER)

BASE MEMBER

DETAIL "E"

DOOR
FLASHING

WALL
STRUCTURAL
FASTENER

JAMB TRIM
AT MINOR RIB

(2) 1/2" A307 THIN
HEAD BOLT & NUT

DOOR
FLASHING

JAMB FLASHING

WALL PANEL
WALL

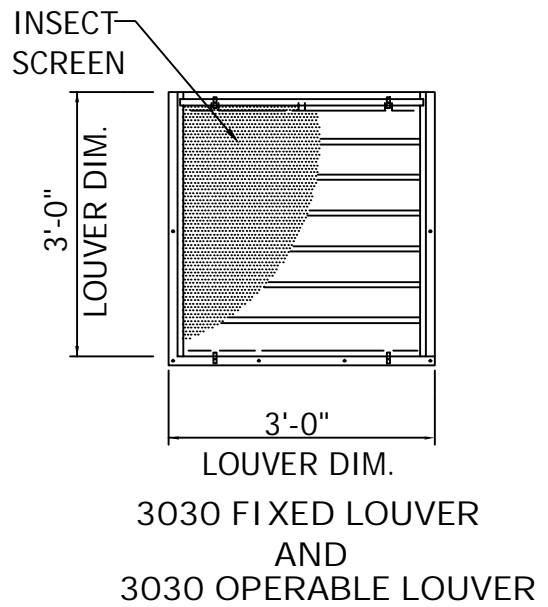
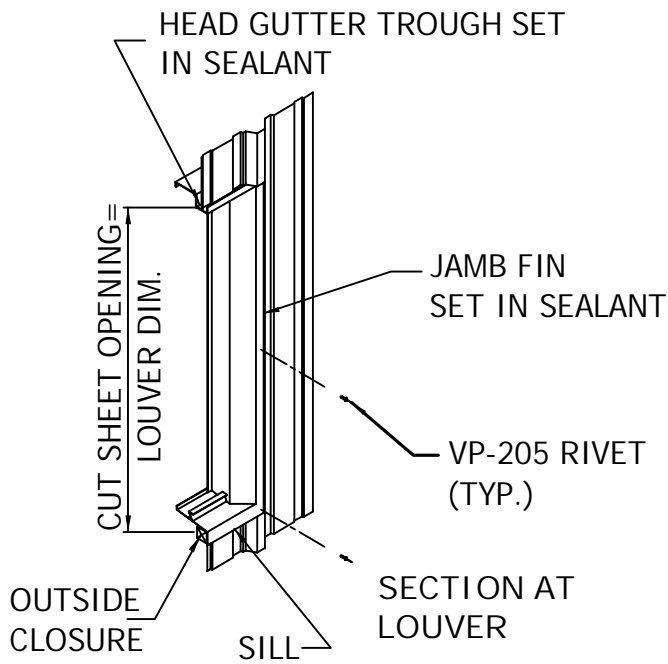
STRUCTURAL
FASTENER

JAMB TRIM
AT MAJOR RIB

JAMB TRIM
(FIELD
BEND)

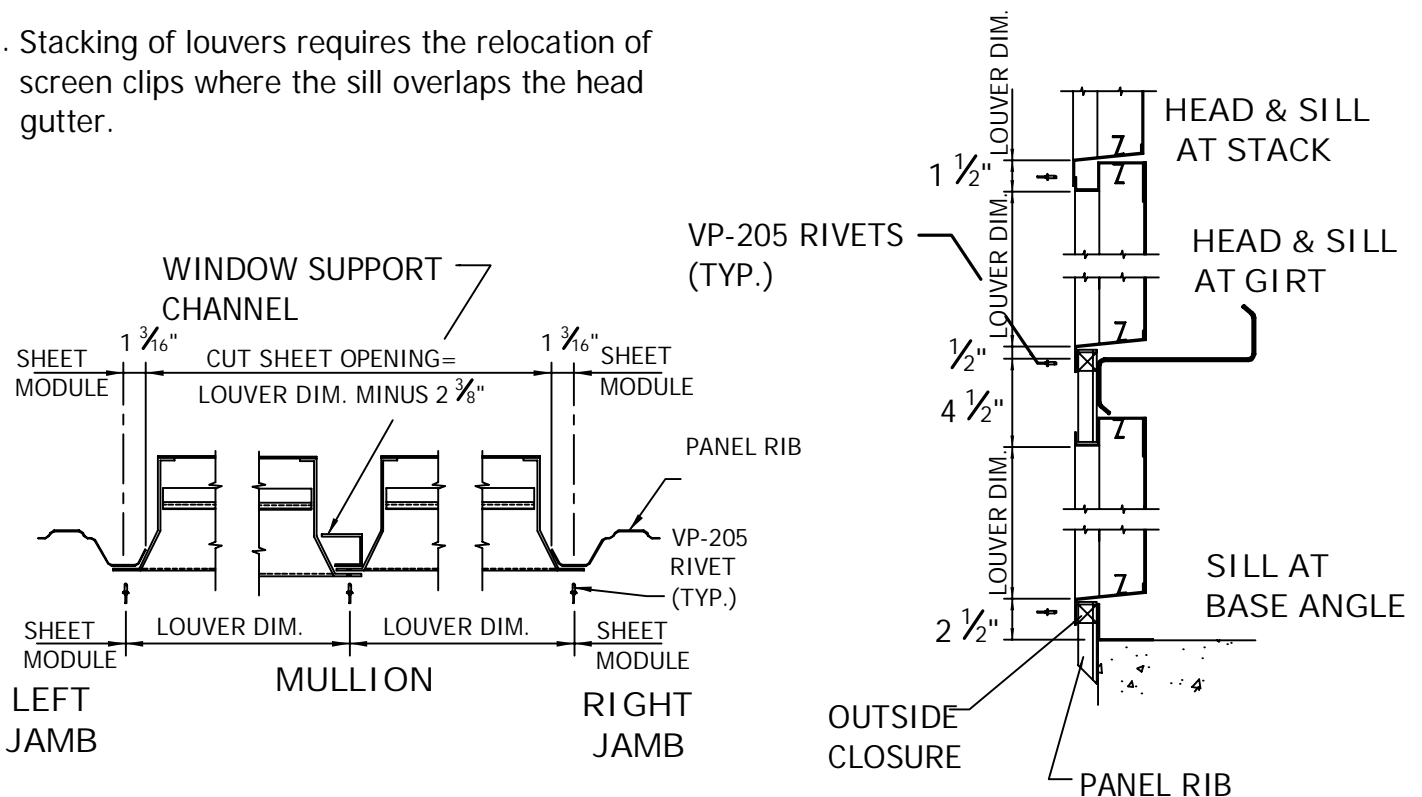
SECTION "F"

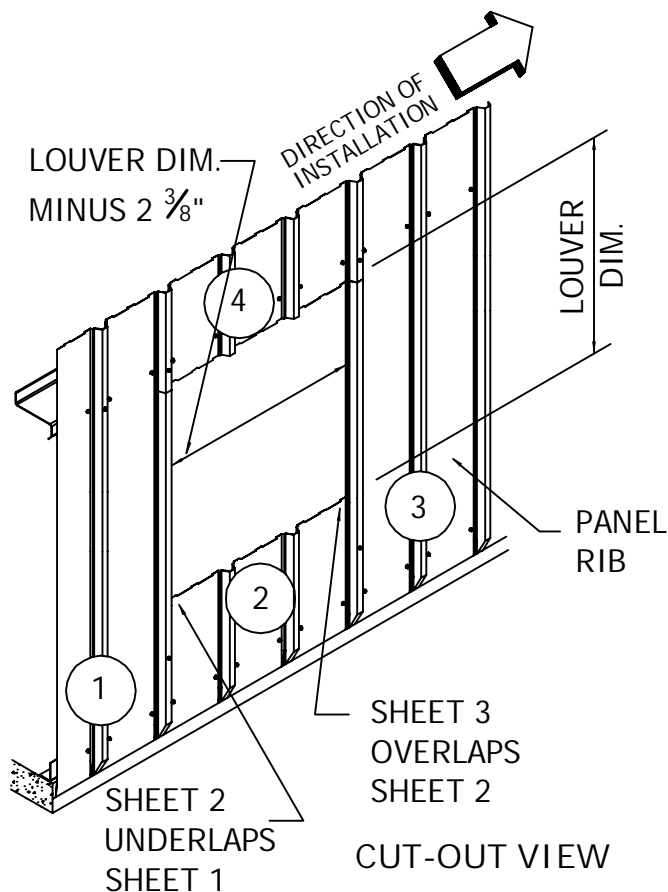




GENERAL PROCEDURES

1. Installation procedures shown are for louvers installed on the 3'-0" panel rib module.
2. Mulling of louvers requires the use of a window support channel at each mullion.
3. Stacking of louvers requires the relocation of screen clips where the sill overlaps the head gutter.





STEP 1
Install wall sheet 1 in sequence shown. Install insulation as noted in general procedures if required.

STEP 2
Install sheet 2 by underlapping sheet 1.

STEP 3
Install sheet 3 in the normal manner.

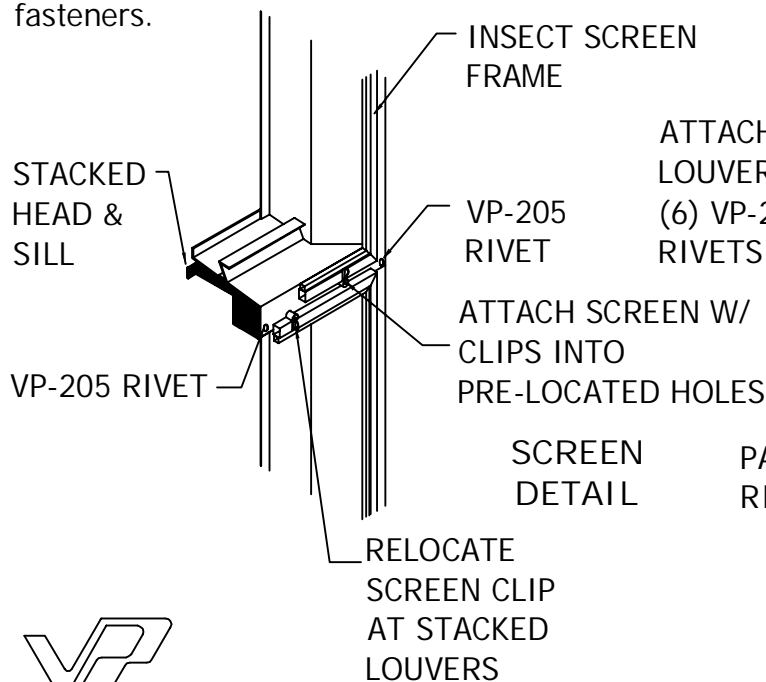
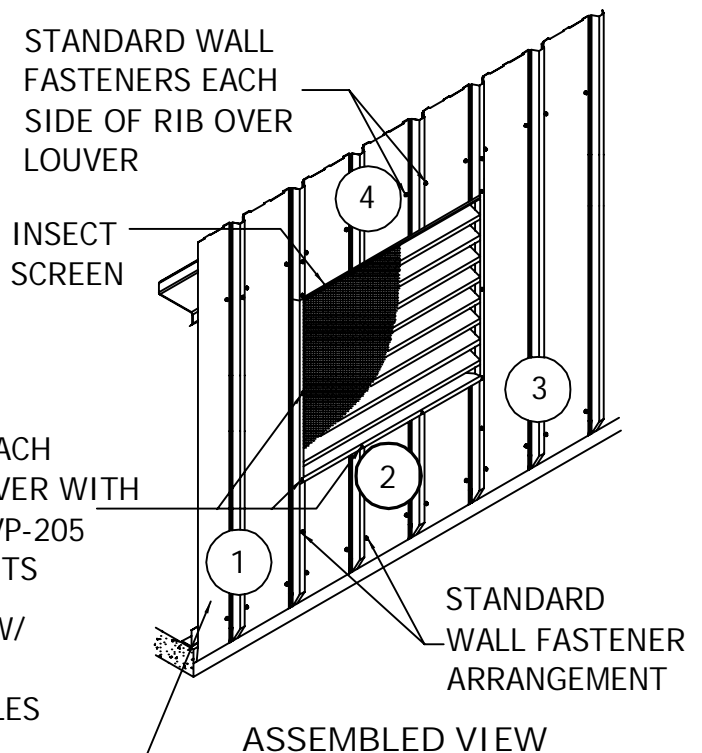
STEP 4
Cut opening in insulation.

STEP 5
Install louver over sheet 3 with jamb fins placed to overlap ribs of adjacent sheets 1 & 3. (DO NOT UNDERLAP LOUVER JAMBS.) Set Jamb in sealant.

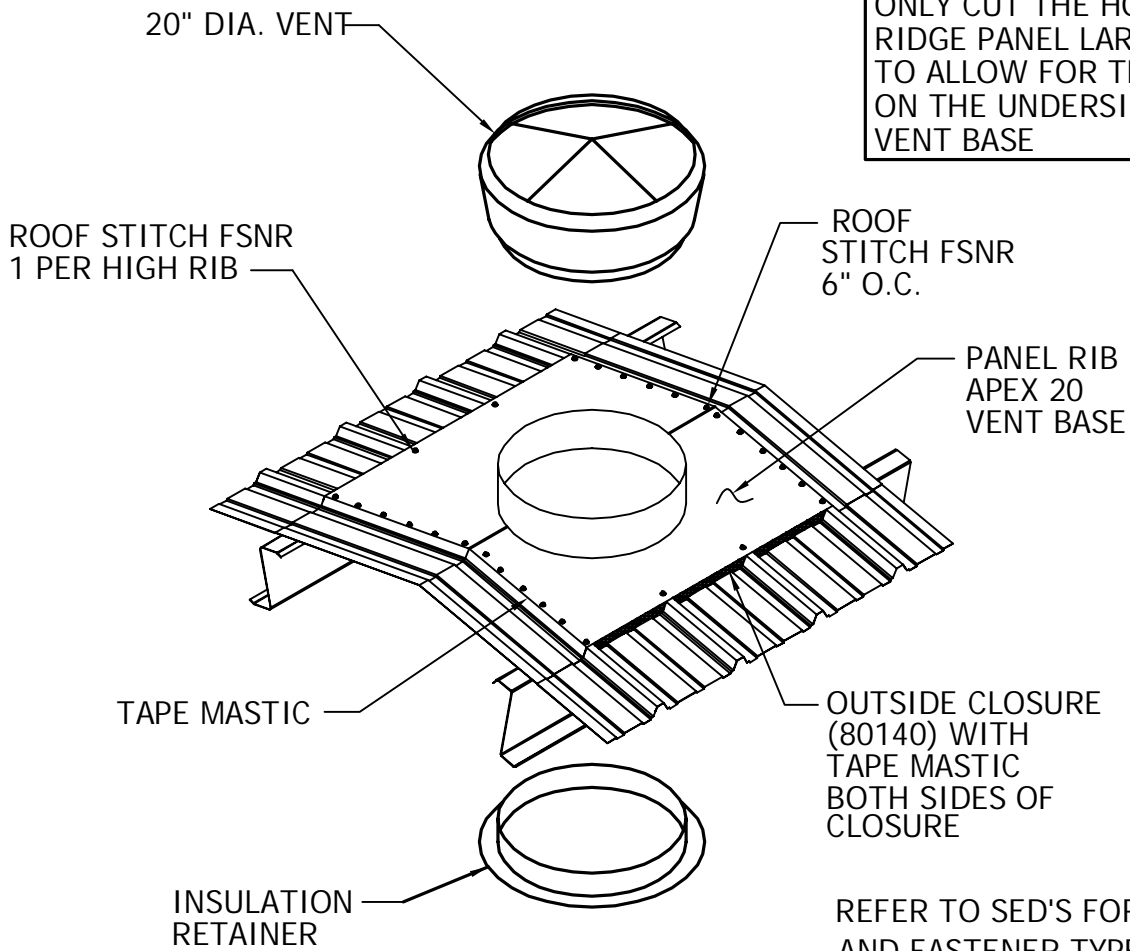
STEP 6
Install sheet 4 above louver. Lap sheet 4 over jamb fins at louver head and into bottom of head gutter trough. Sheet 4 to be installed with lap ribs overlapping the side ribs of sheets 1 and 3. Set head in sealant.

STEP 7
Attach louver with (6) VP-205 Rivets. (2) Rivets each jamb and 2 Rivets at sill. Complete attachment of wall sheets to girts and side laps with standard wall fasteners.

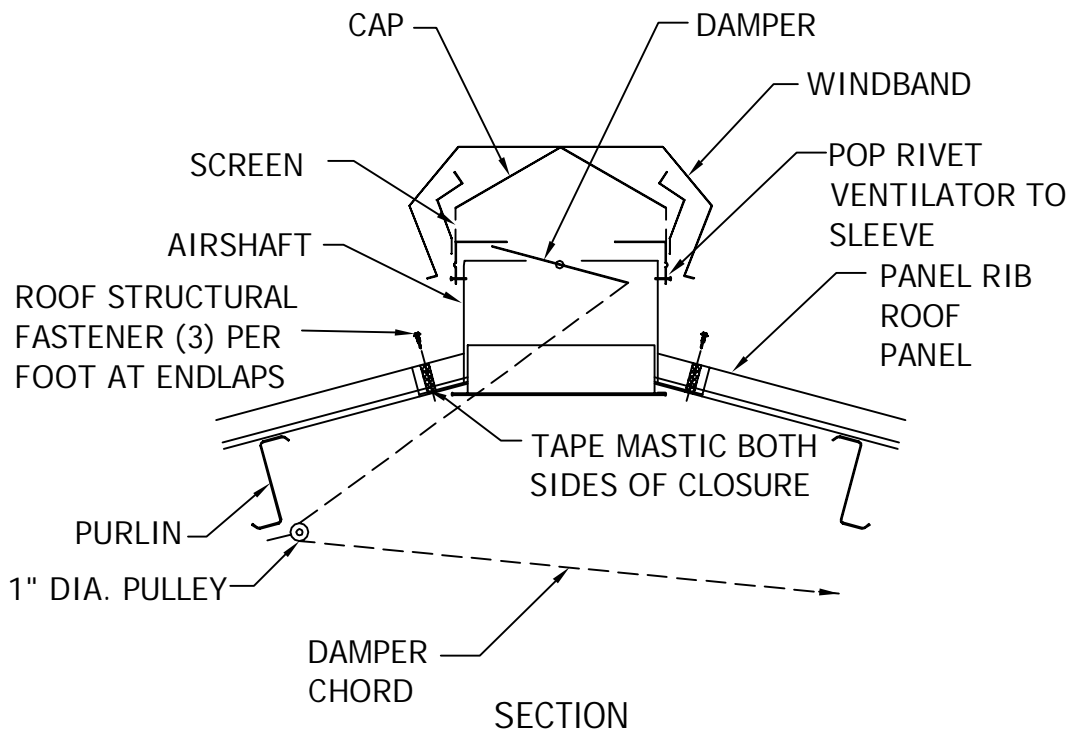
STEP 8
Attach insect screen to outside of louver using clips provided. Locate dogging clip for operable louver as require and fasten with standard wall fasteners.



ONLY CUT THE HOLE IN THE RIDGE PANEL LARGE ENOUGH TO ALLOW FOR THE FLANGE ON THE UNDERSIDE OF THE VENT BASE

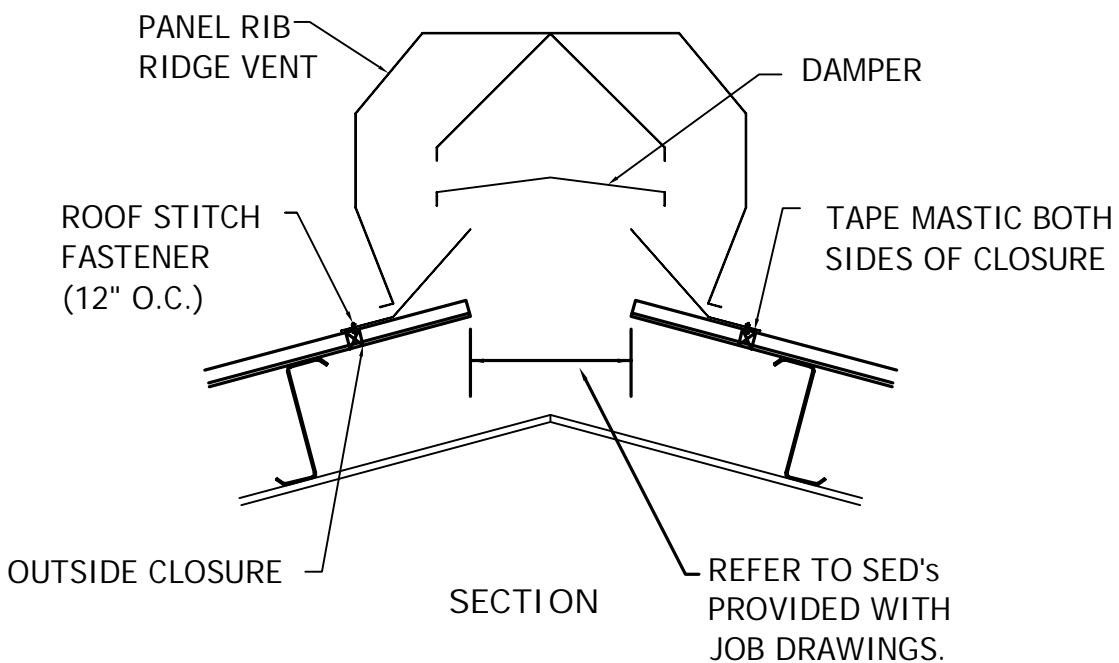
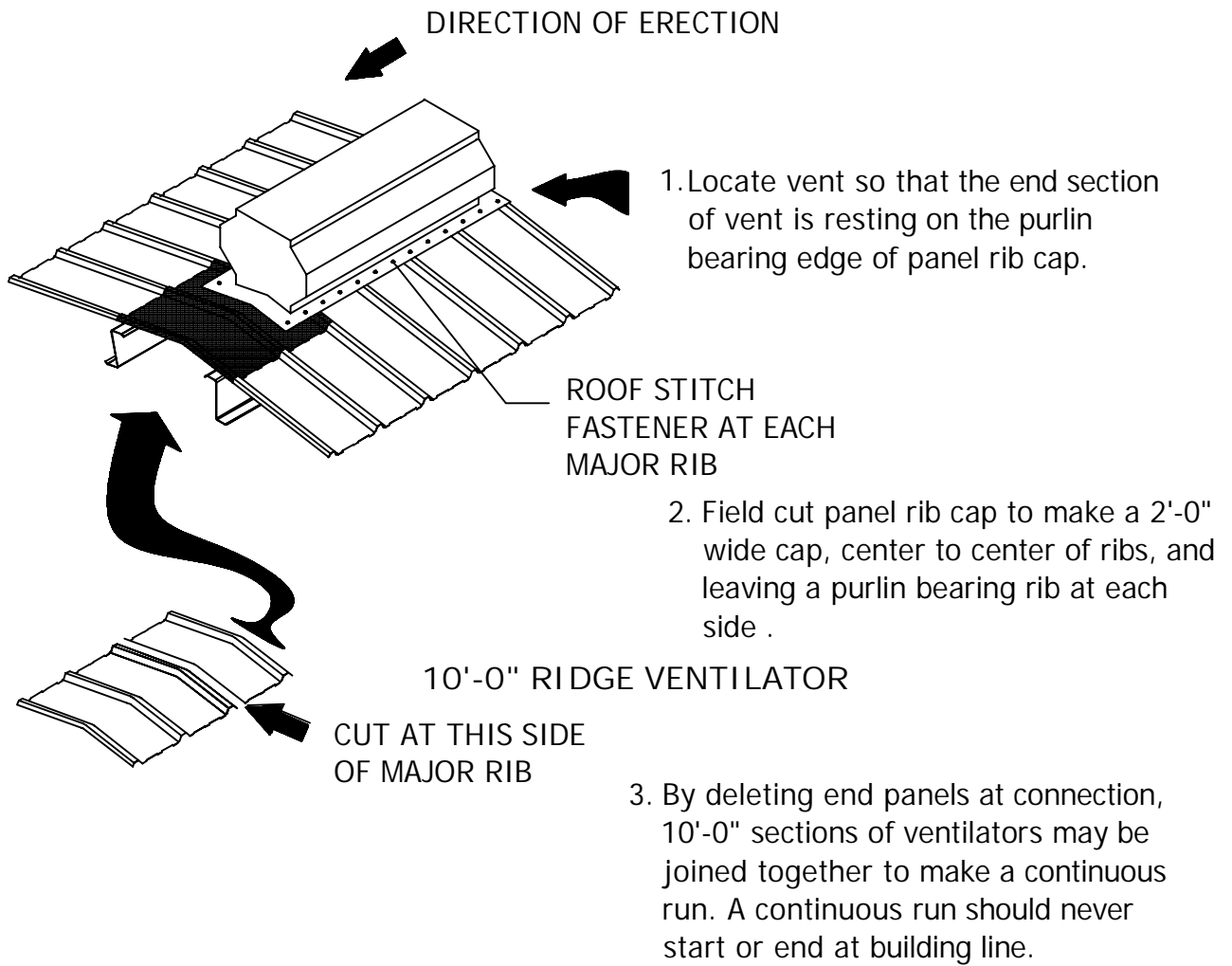


APEX 20 VENTILATOR



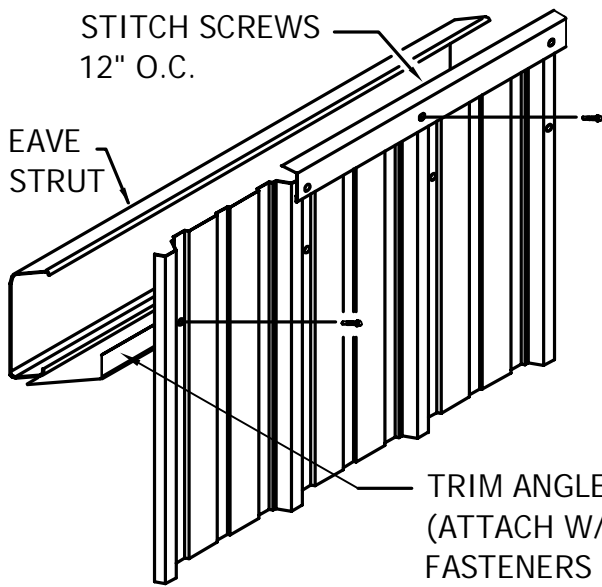
NOTE: DETAILED INSTALLATION INSTRUCTIONS ARE PACKAGED WITH EACH VENTILATOR.





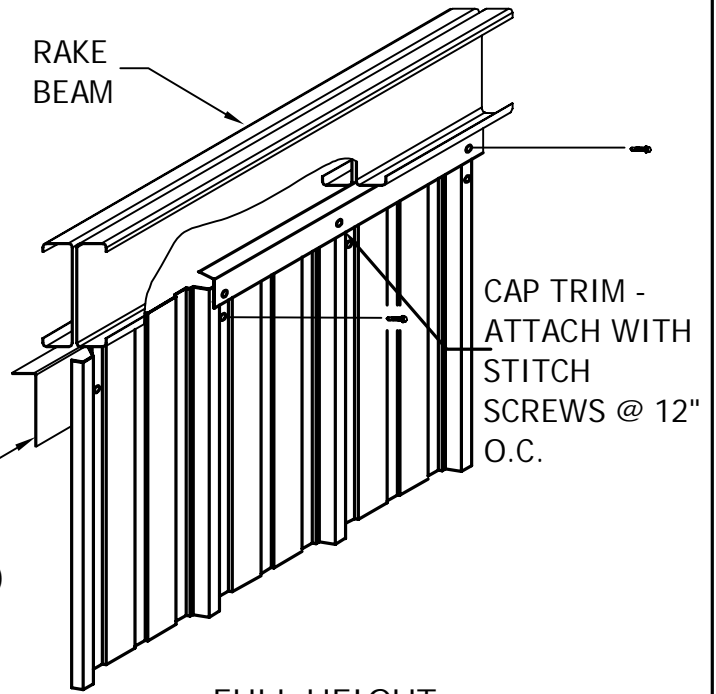
CAP TRIM -
ATTACH WITH
STITCH SCREWS
12" O.C.

EAVE
STRUT



FULL HEIGHT LINER
@ SIDEWALL

RAKE
BEAM



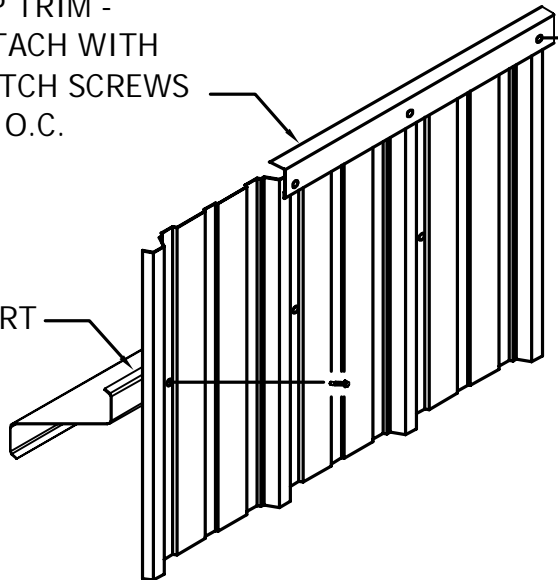
FULL HEIGHT
LINER @ RAKE

NOTES:

1. Liner attaches to face of girts w/wall structural fasteners at 12" o.c.
2. Field cut liner panel, if required, to follow slope of rake beam.

CAP TRIM -
ATTACH WITH
STITCH SCREWS
12" O.C.

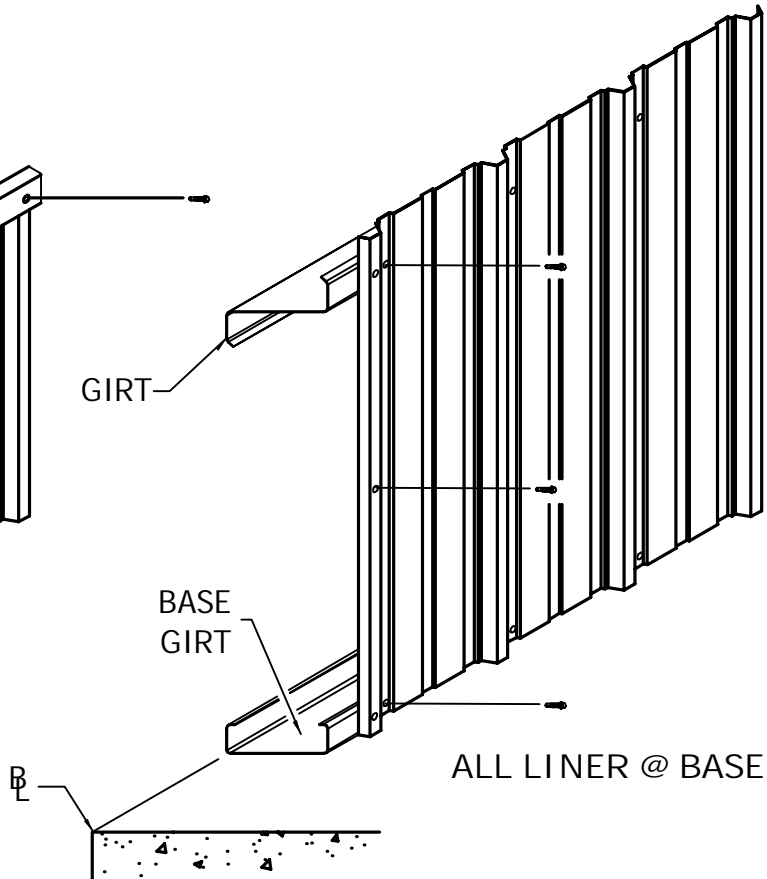
GIRT



PARTIAL HEIGHT
LINER

GIRT

BASE
GIRT



ALL LINER @ BASE



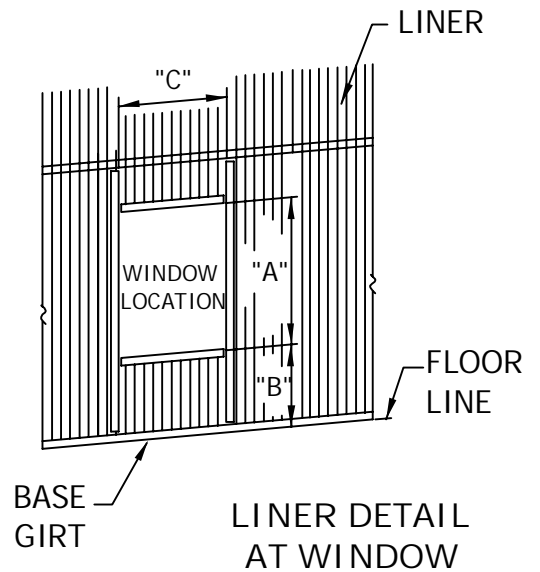
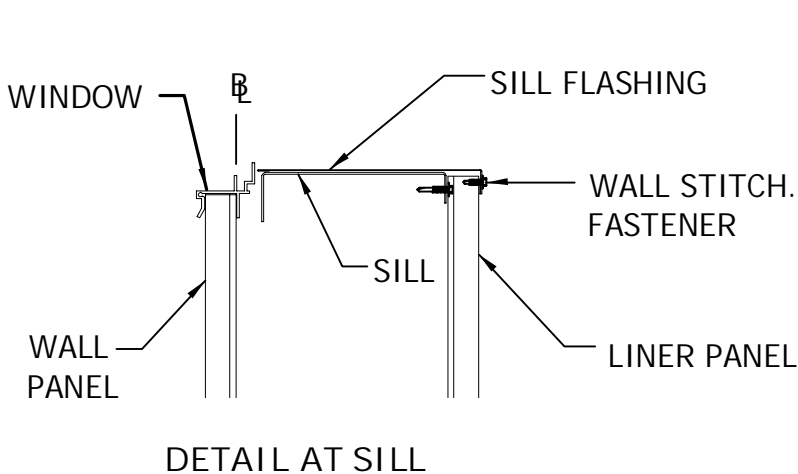
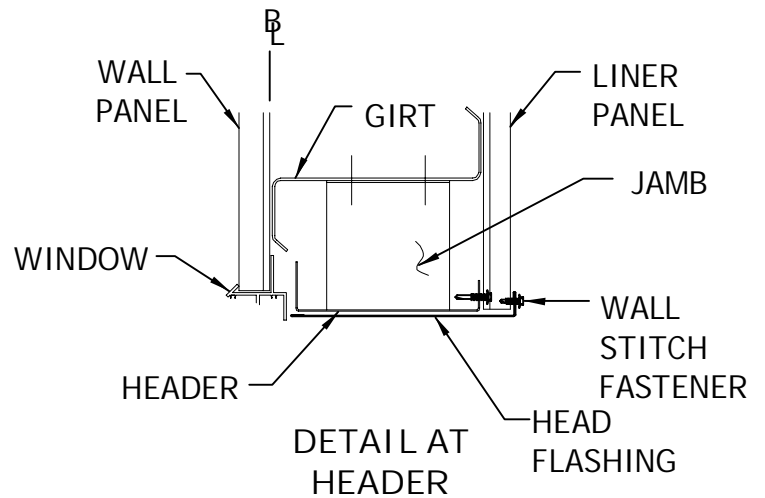
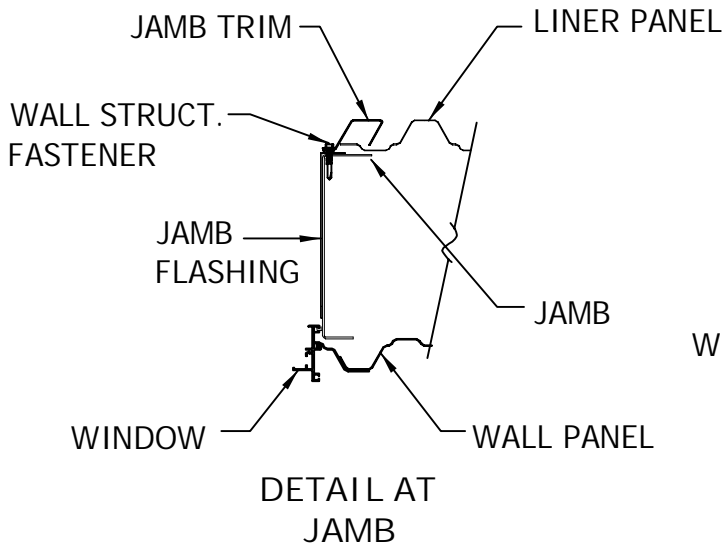
NOTES:

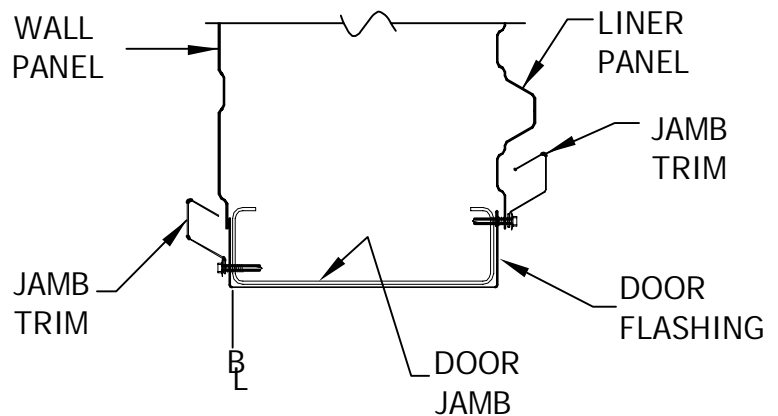
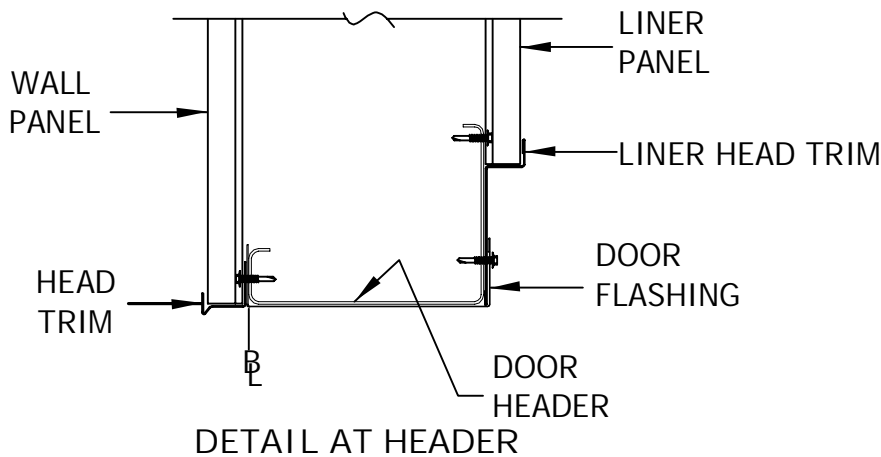
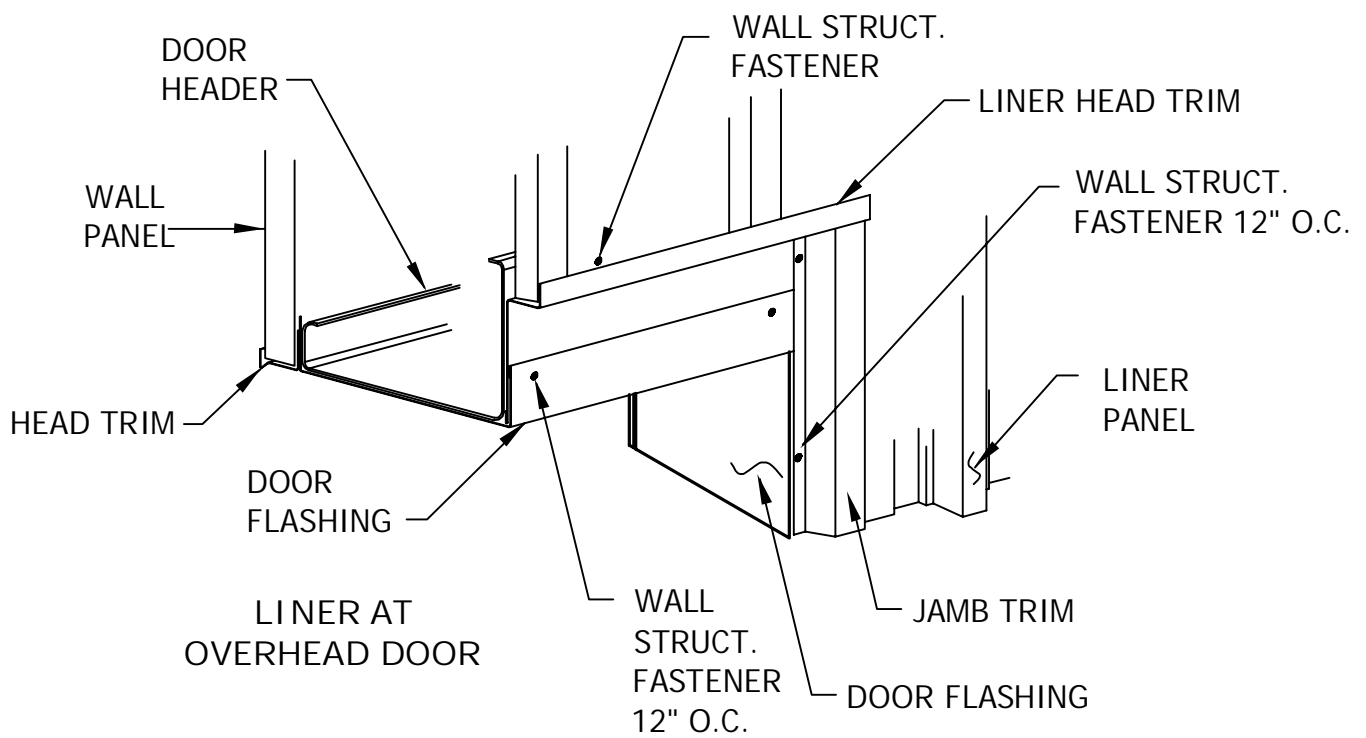
1. Liner attaches to face of girts w/wall structural fasteners @ 12" o.c.

WINDOW OPENING SIZES

WINDOW SIZE	DIM. "A"	DIM. "B"	DIM. "C"
2060	72"	12"	21 1/4"
3030	36"	48"	33 1/4"
3040	48"	36"	33 1/4"
6030	36"	48"	69 1/4"
6040	48"	36"	69 1/4"

* DIM. A & C ARE INSIDE CLEAR FRAMING DIMENSIONS. (DIM. B IS FROM FLOOR LINE TO TOP OF SILL).



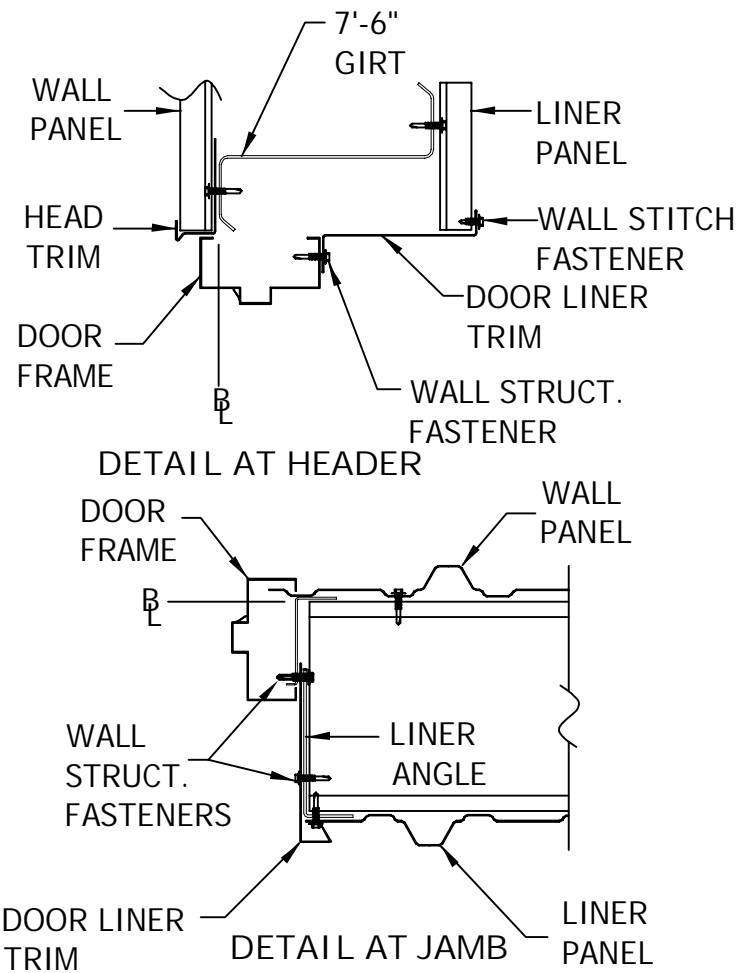
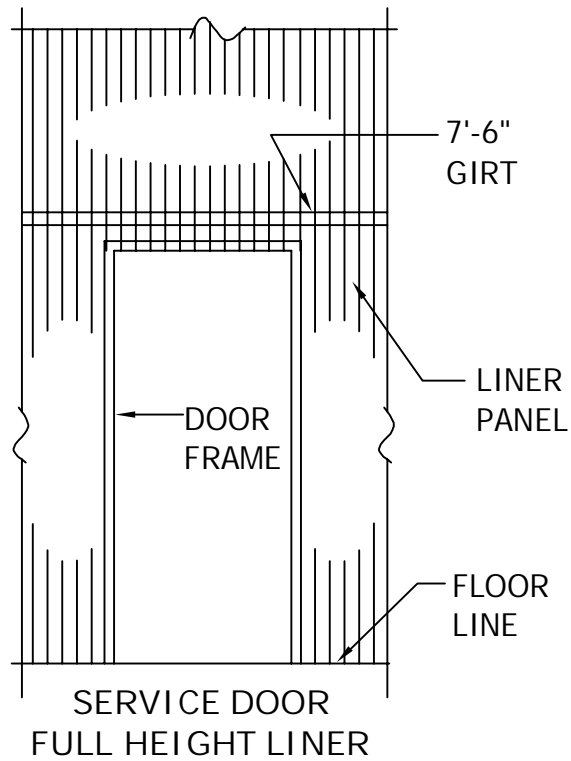
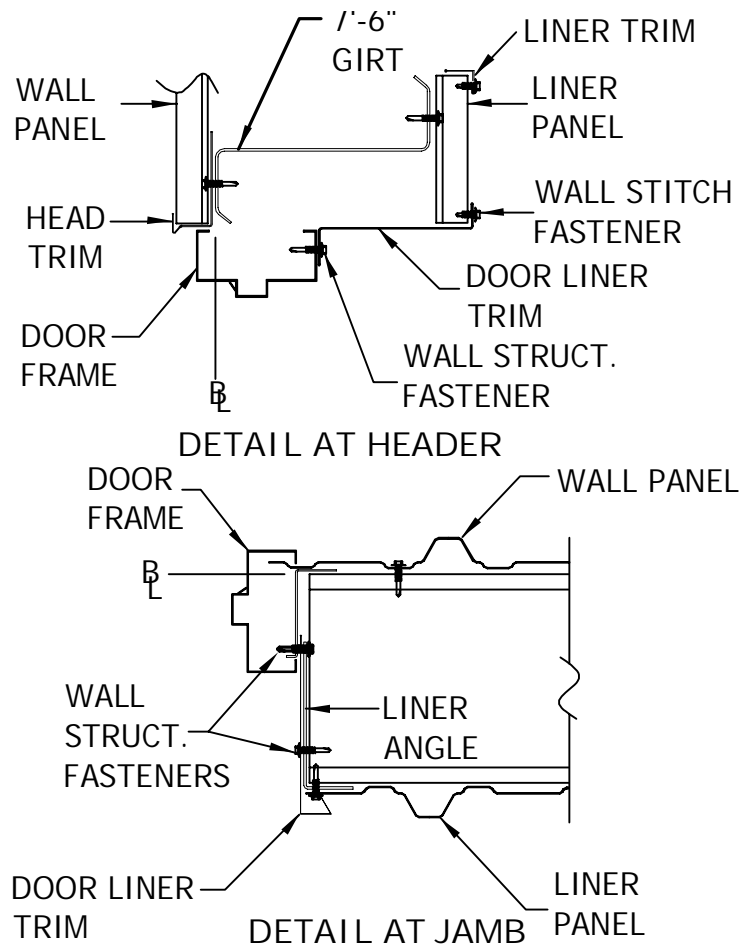
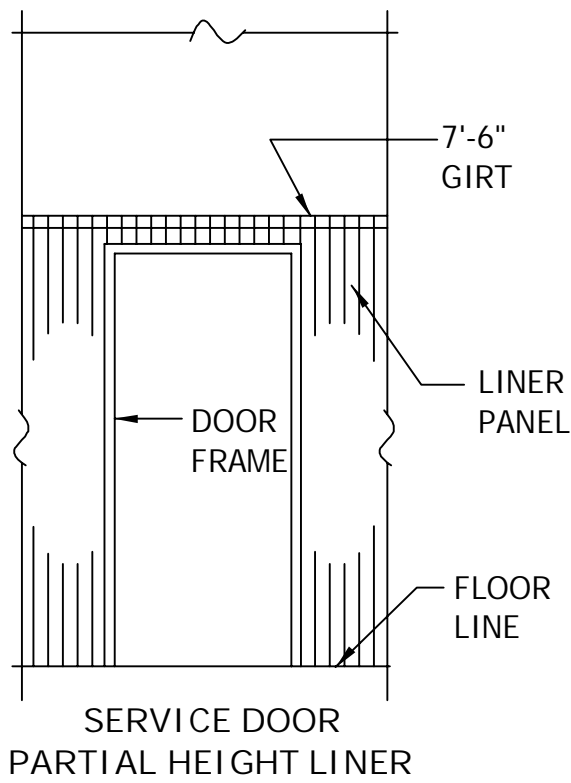


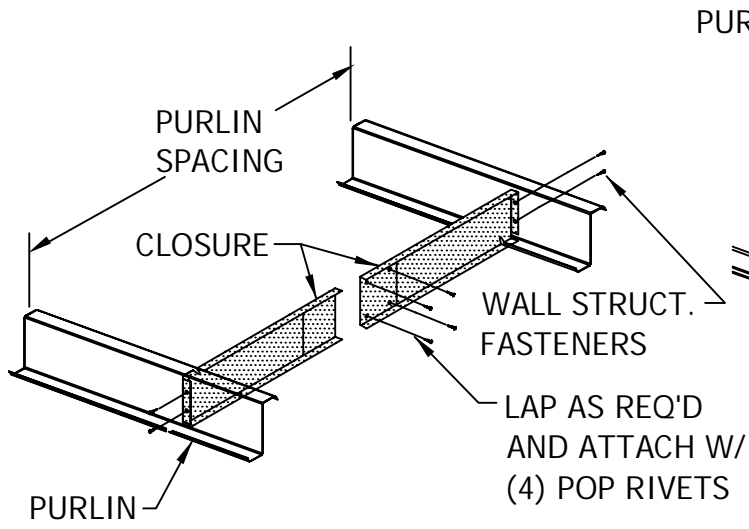
NOTES:

1. Liner attaches to inside face of girts w/wall structural fasteners.
2. All overhead door flashing & trim attaches to framing w/wall structural fasteners 12" O.C.

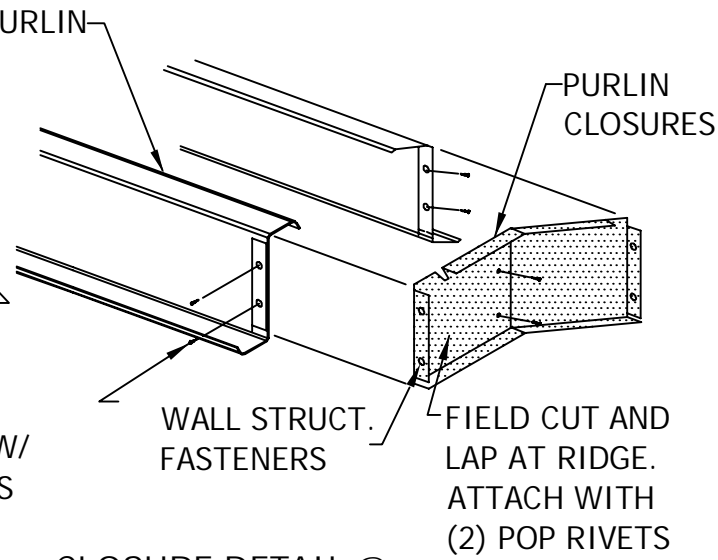
DETAIL AT JAMB



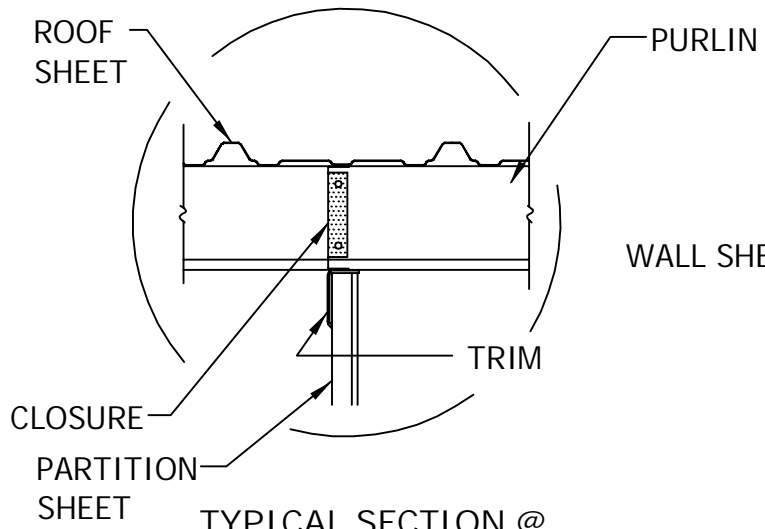




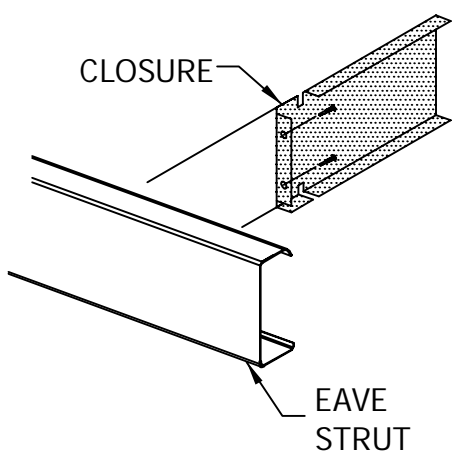
CLOSURE DETAIL @ PURLINS



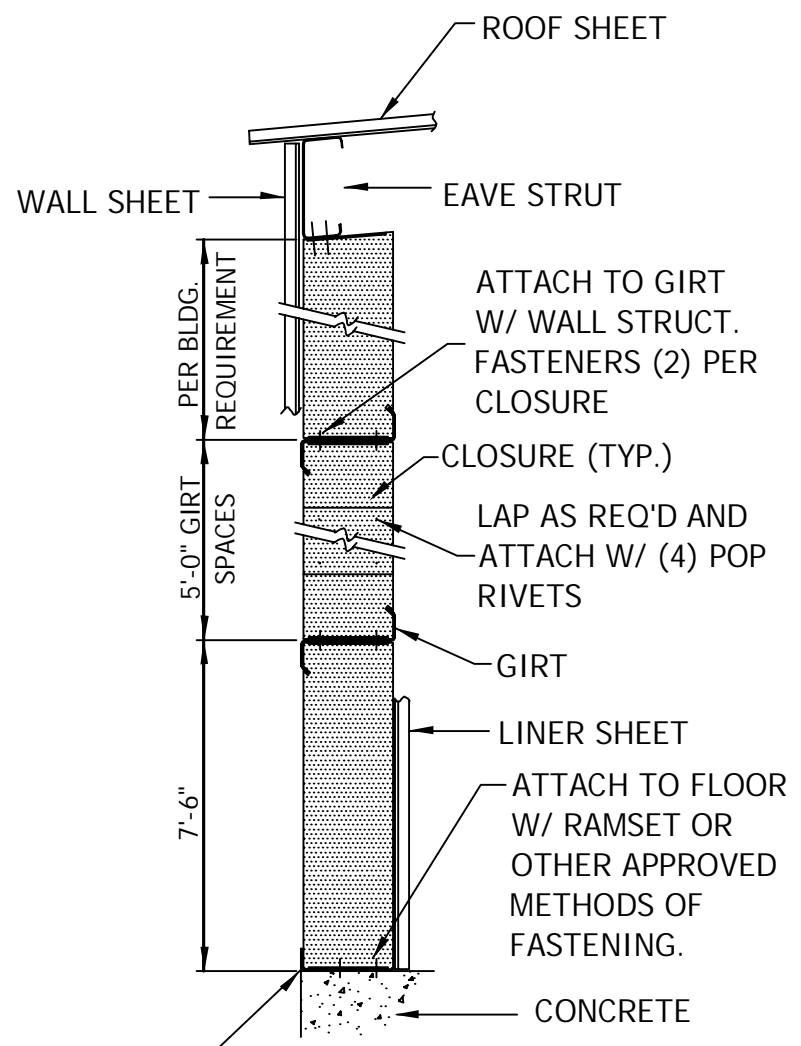
CLOSURE DETAIL @ RIDGE PURLINS



TYPICAL SECTION @ CLOSURE

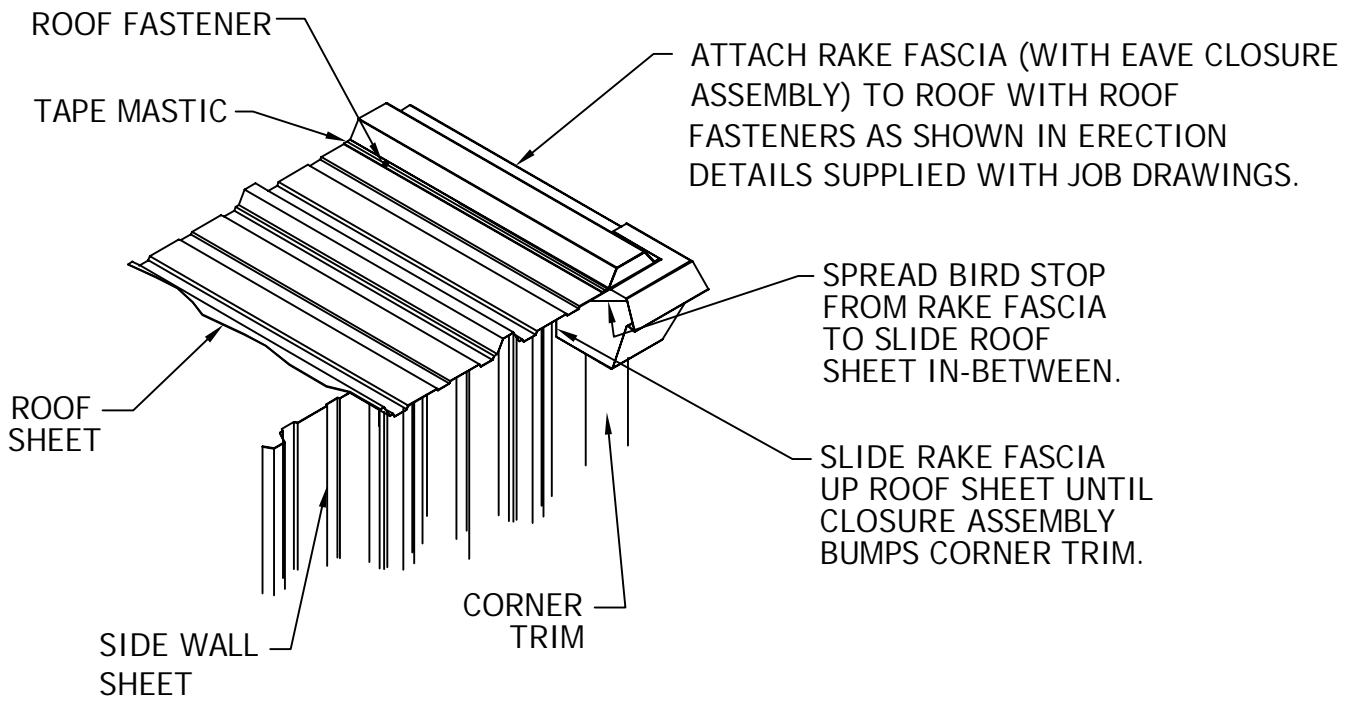


CLOSURE DETAIL @ EAVE

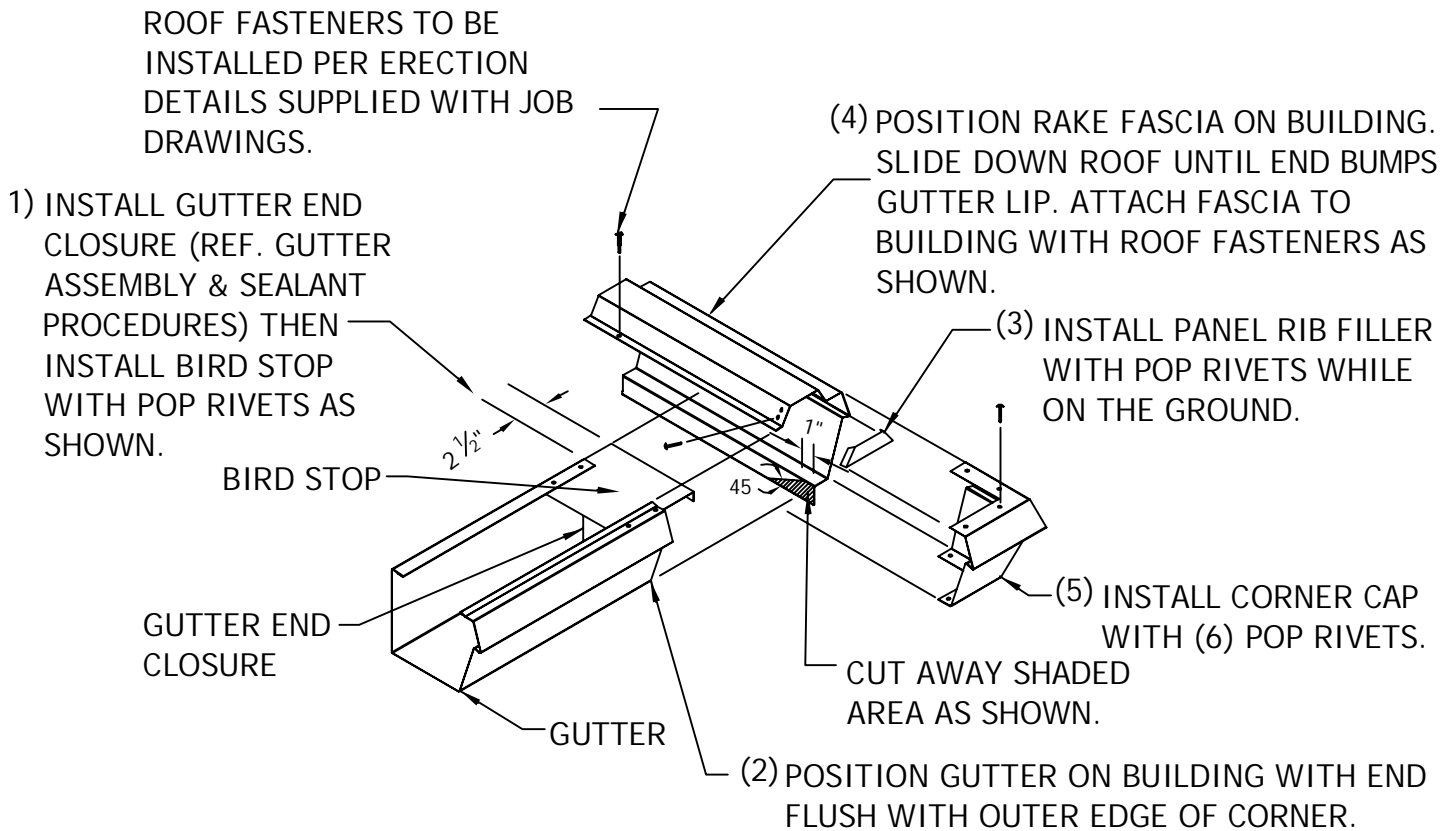


SECTION @ GIRTS CLOSURES



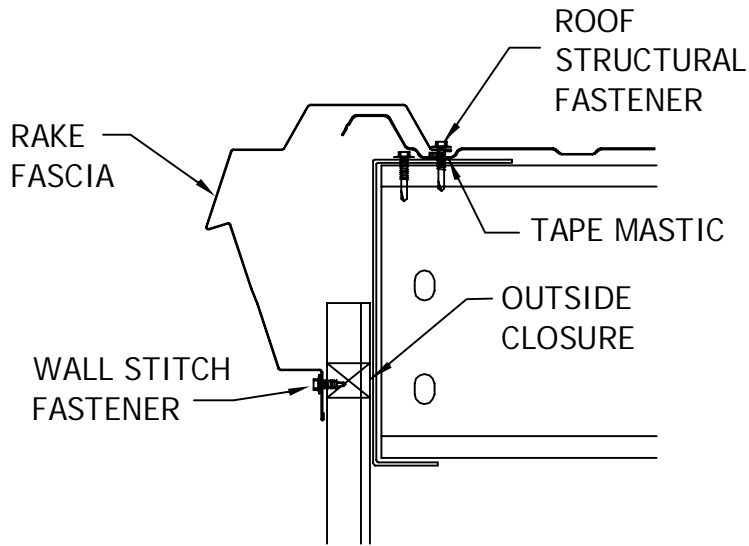


RAKE FASCIA EAVE CLOSURE ASSEMBLY
(WITHOUT EAVE GUTTER)

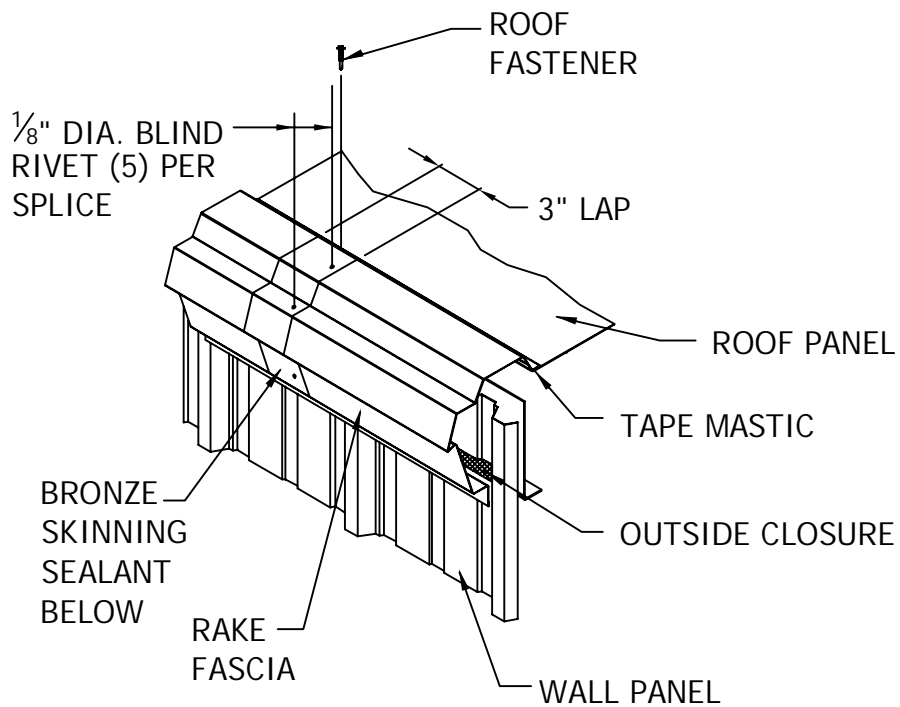


RAKE FASCIA EAVE CLOSURE ASSEMBLY
(WITH EAVE GUTTER)

SEE ERECTION DRAWING
DETAILS FOR FASTENER
TYPE AND SPACING.

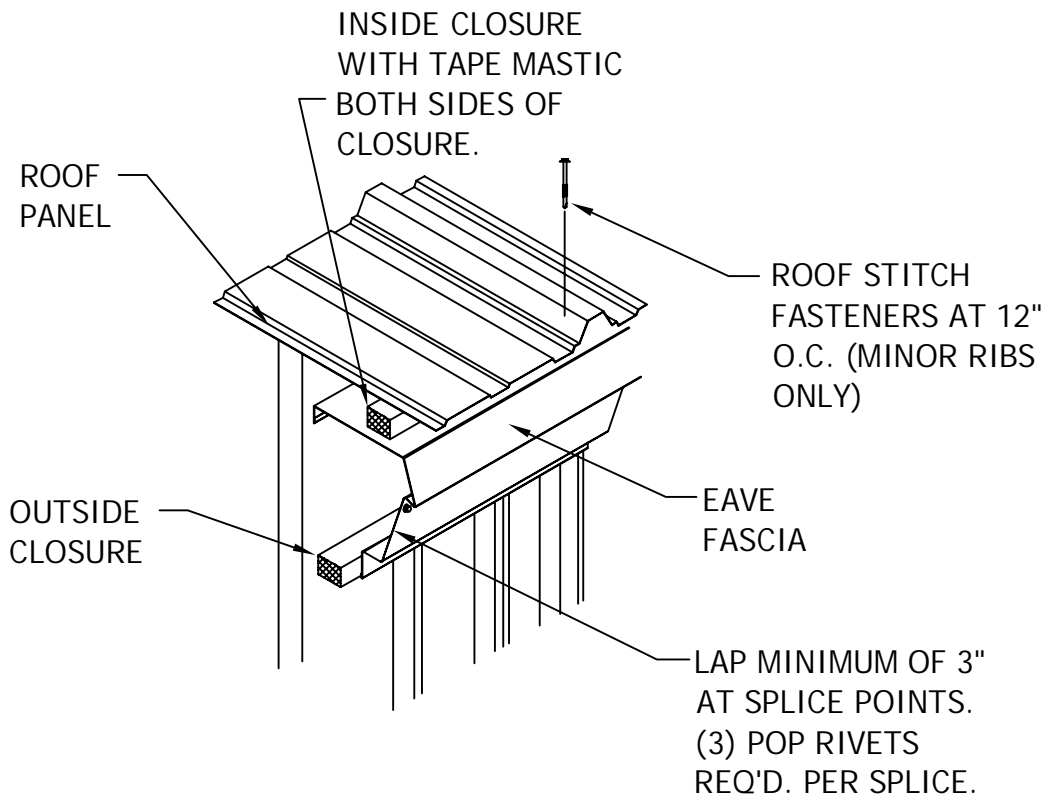
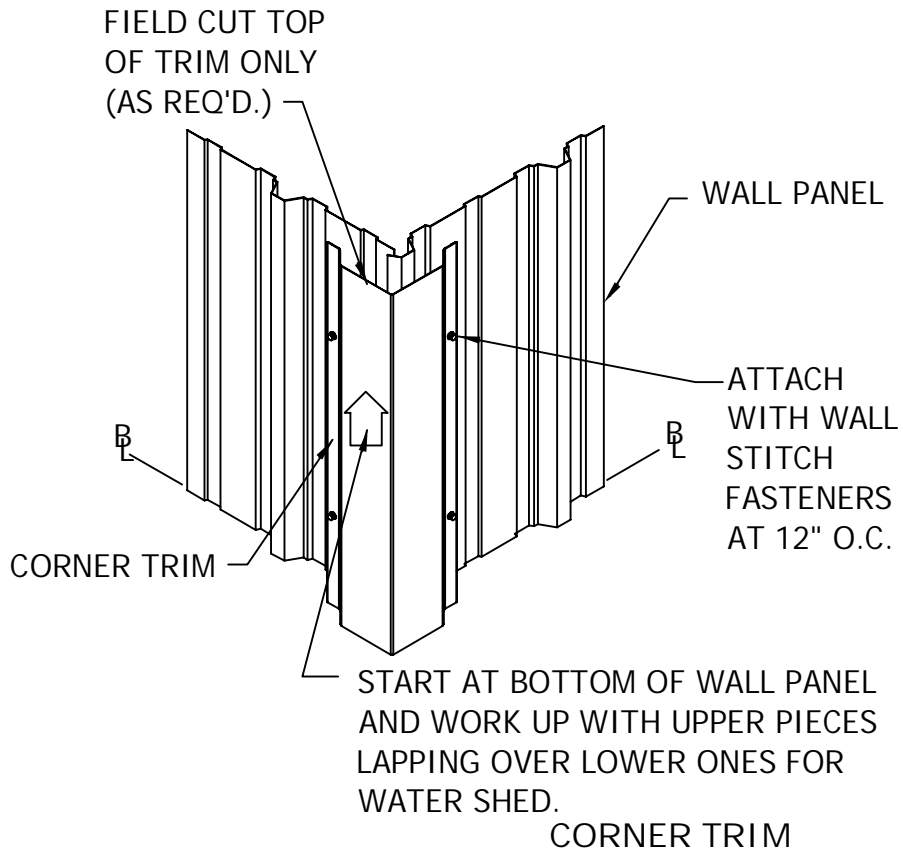


INSTALL FASCIA



FASCIA SPLICE

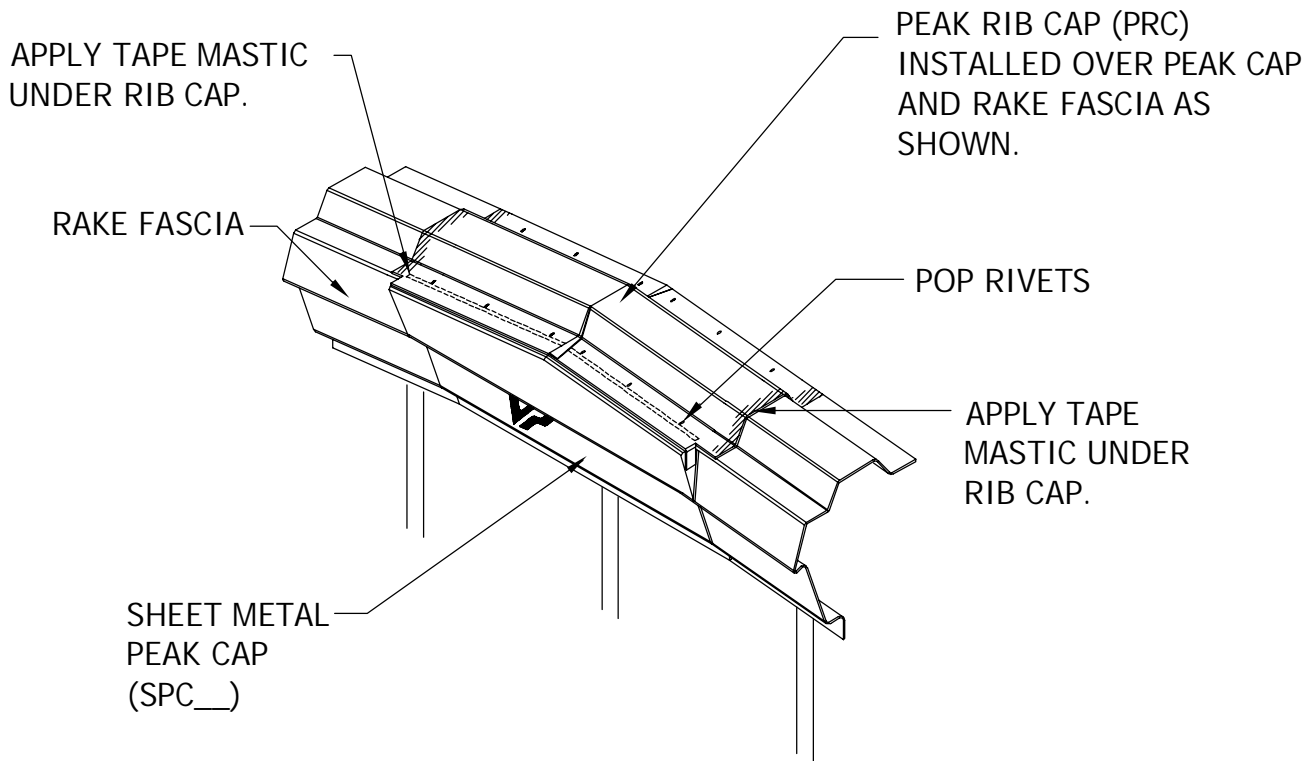
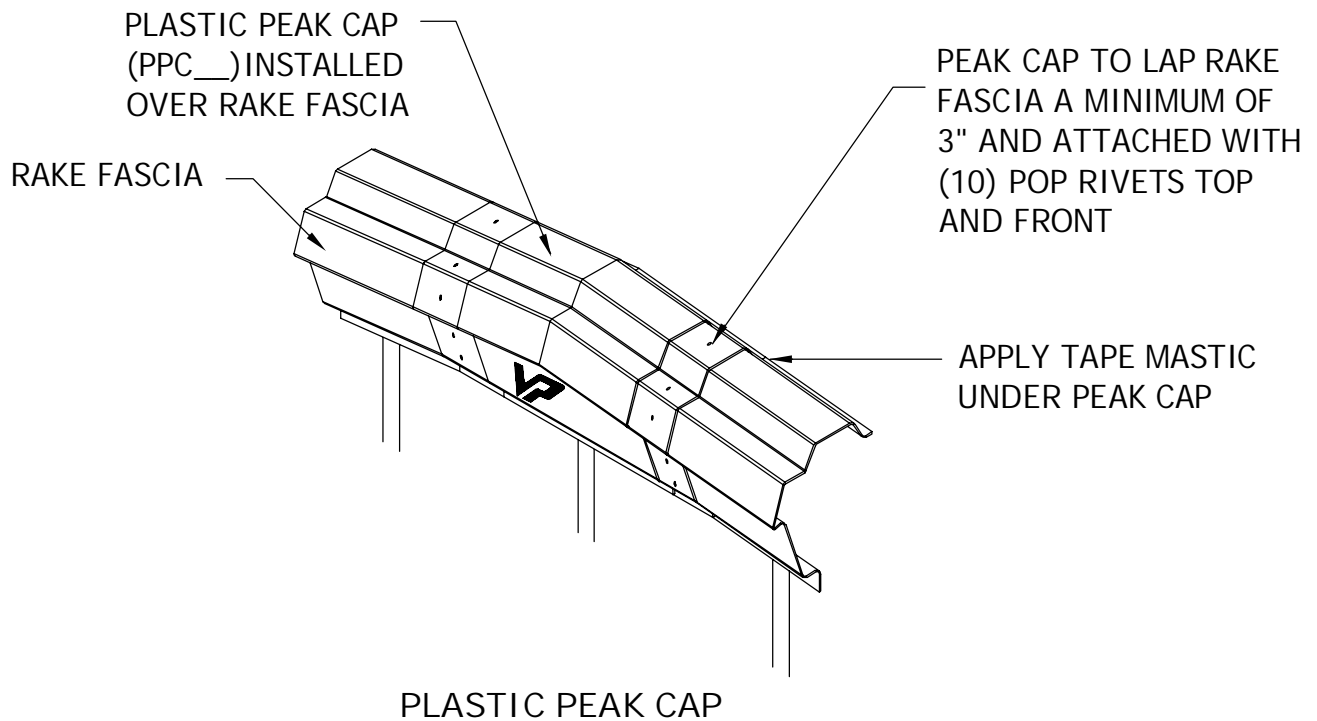




EAVE FASCIA



DETAILS SHOWN ARE FOR PANEL RIB ROOF ONLY



GUTTER END CLOSURE

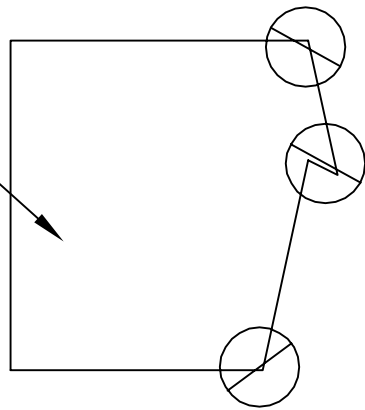


FIG. A: FIELD TRIM LOCATIONS

PROCEDURE:

1. Place gutter end closure in position as shown in FIG. B and check for proper nesting.
2. Trim as required $\frac{1}{16}$ " to $\frac{1}{8}$ " at locations shown in FIG. A to insure proper nesting.
3. Locate gutter end closure in place 1" from gutter end as shown in FIG. B.

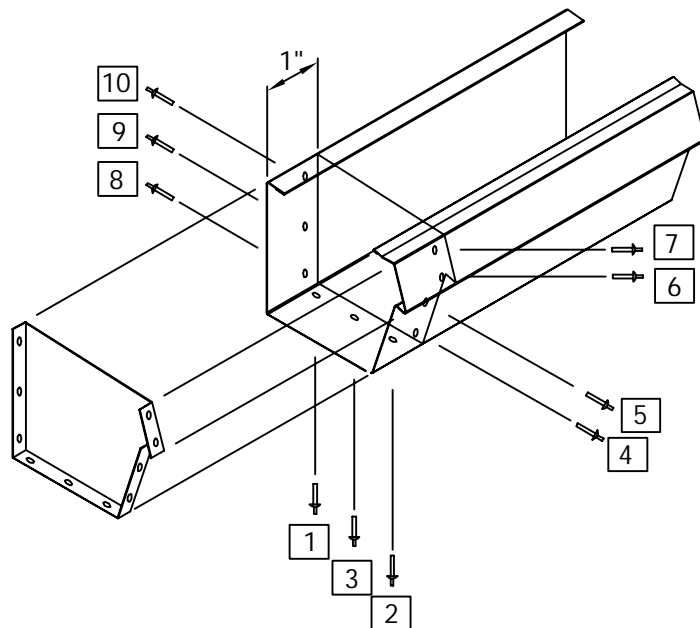


FIG. B: ASSEMBLY

4. Secure gutter end closure in place with standard $\frac{1}{8}$ " pop rivets. IMPORTANT: Fasten in sequence as shown in FIG. B.
5. Apply $\frac{1}{4}$ " fillet bead of recommended gun grade sealant inside gutter at joint connection. FIG. C.

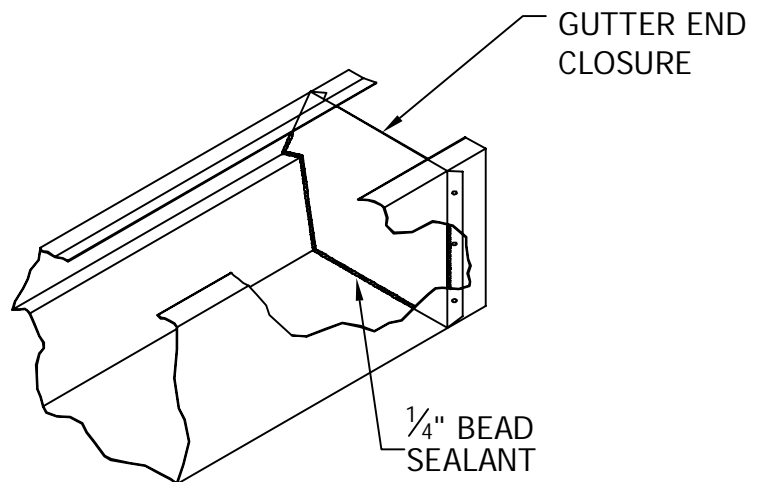
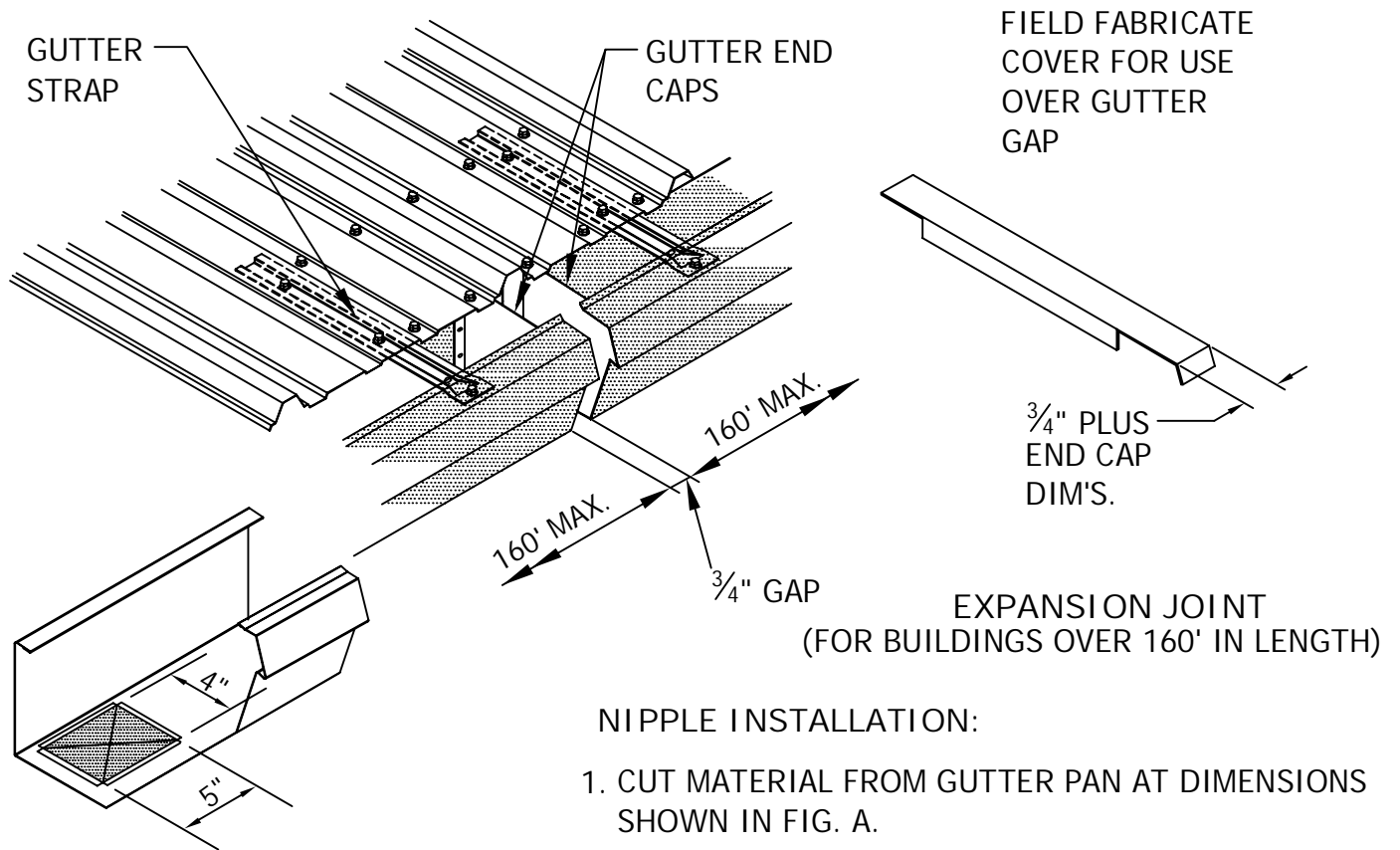


FIG. C: SEALANT APPLICATION



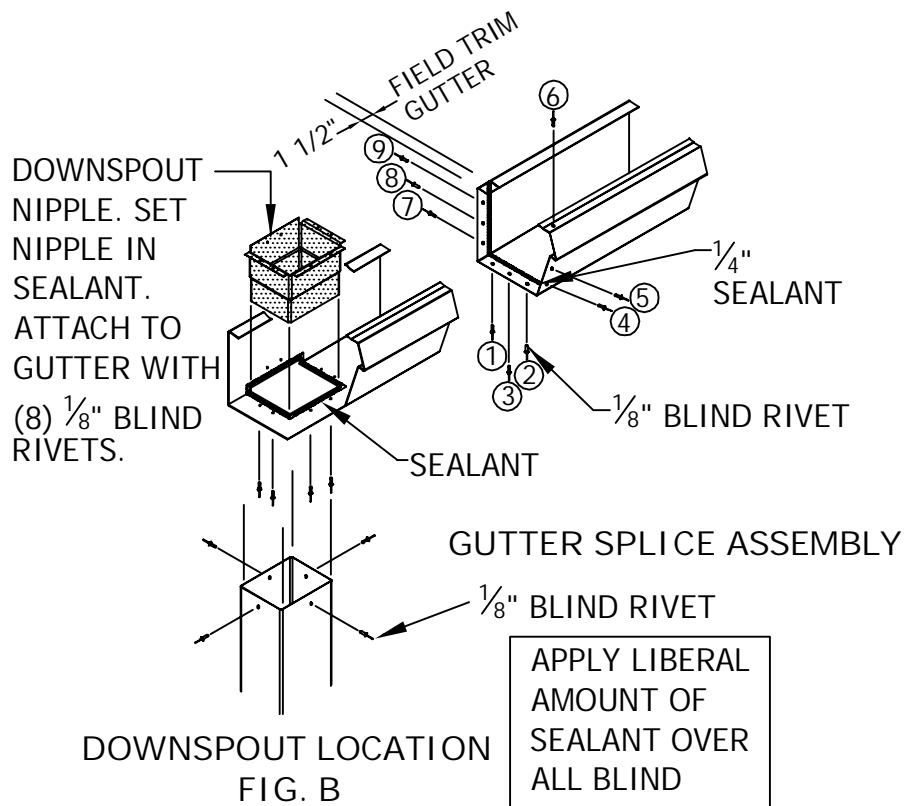
DOWNSPOUT LOCATION
FIG. A

PROCEDURE: GUTTER
ASSEMBLY

1. Field trim back flange of outside gutter section as shown in FIG. B. "GUTTER SPLICE ASSEMBLY"
2. Apply $\frac{1}{4}$ " bead of recommended gun grade sealant 1" from gutter edge as shown in FIG. B.
3. Place gutter sections together with $1 \frac{1}{2}$ " Lap.
4. Secure gutter sections together standard $\frac{1}{8}$ " blind rivets. IMPORTANT: FASTEN IN SEQUENCE AS SHOWN IN FIG. B.

NIPPLE INSTALLATION:

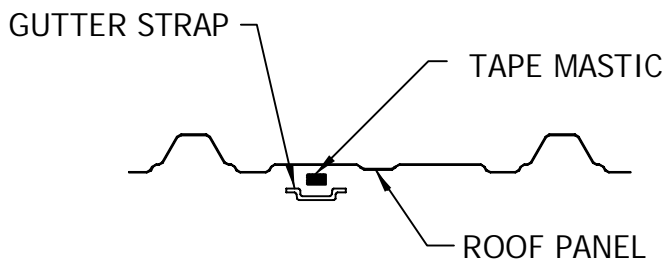
1. CUT MATERIAL FROM GUTTER PAN AT DIMENSIONS SHOWN IN FIG. A.
2. INSTALL NIPPLE AS SHOWN IN DETAIL BELOW.



DOWNSPOUT LOCATION
FIG. B

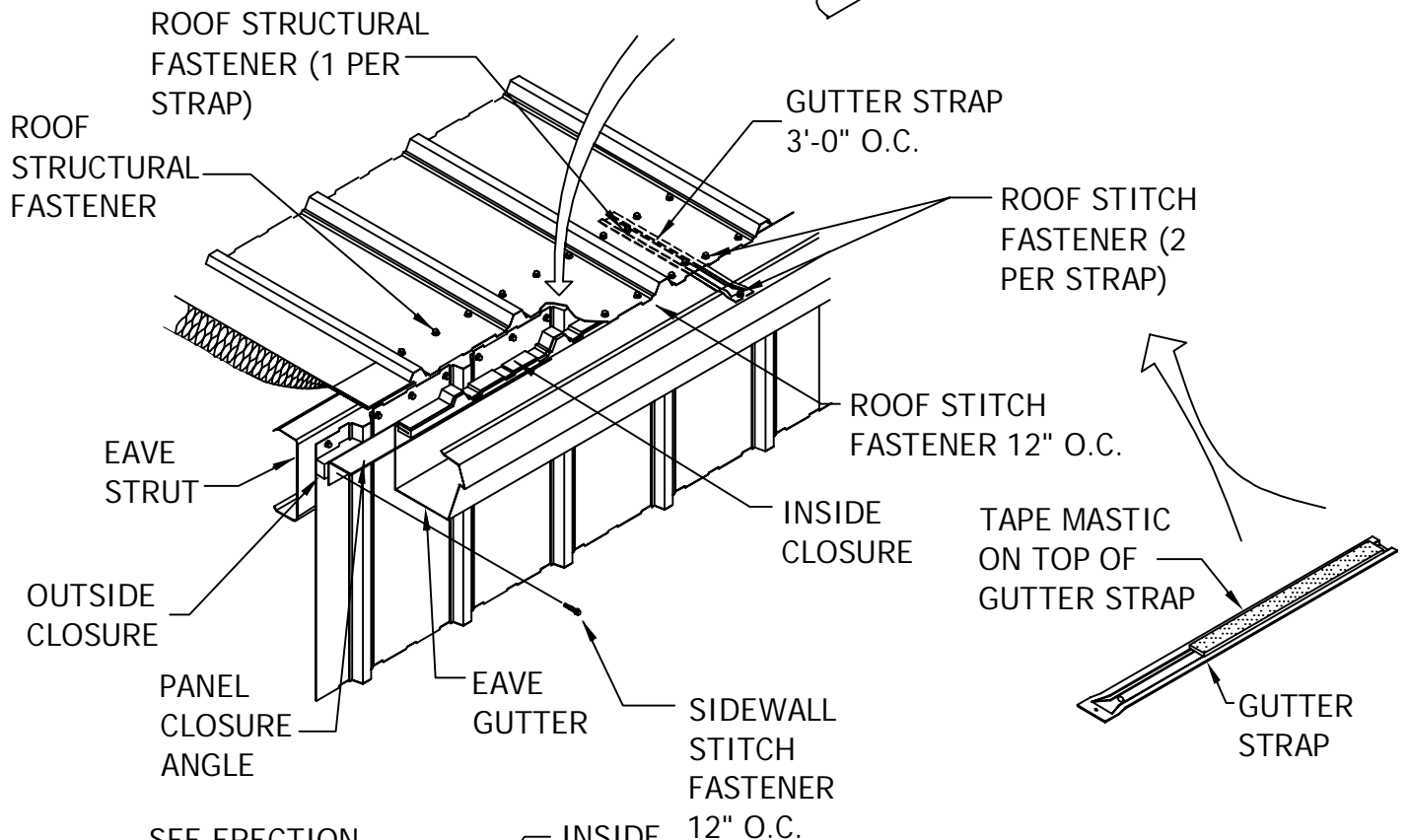
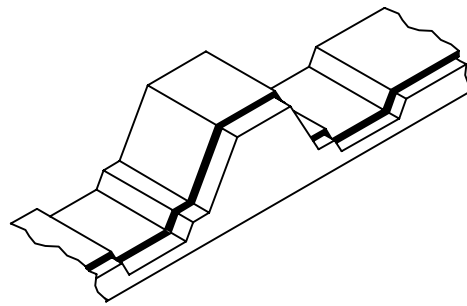
APPLY LIBERAL
AMOUNT OF
SEALANT OVER
ALL BLIND
RIVETS (INSIDE
GUTTER)



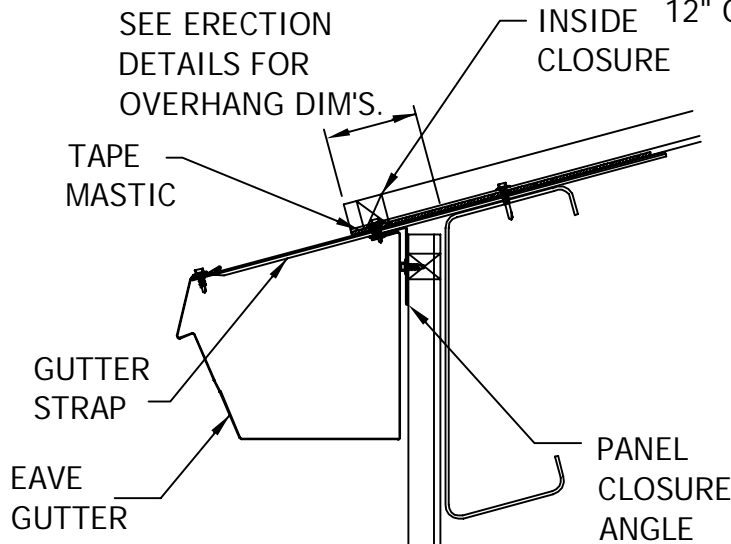


SECTION THRU GUTTER STRAP

APPLY TAPE MASTIC TO BOTH SIDES OF CLOSURE.



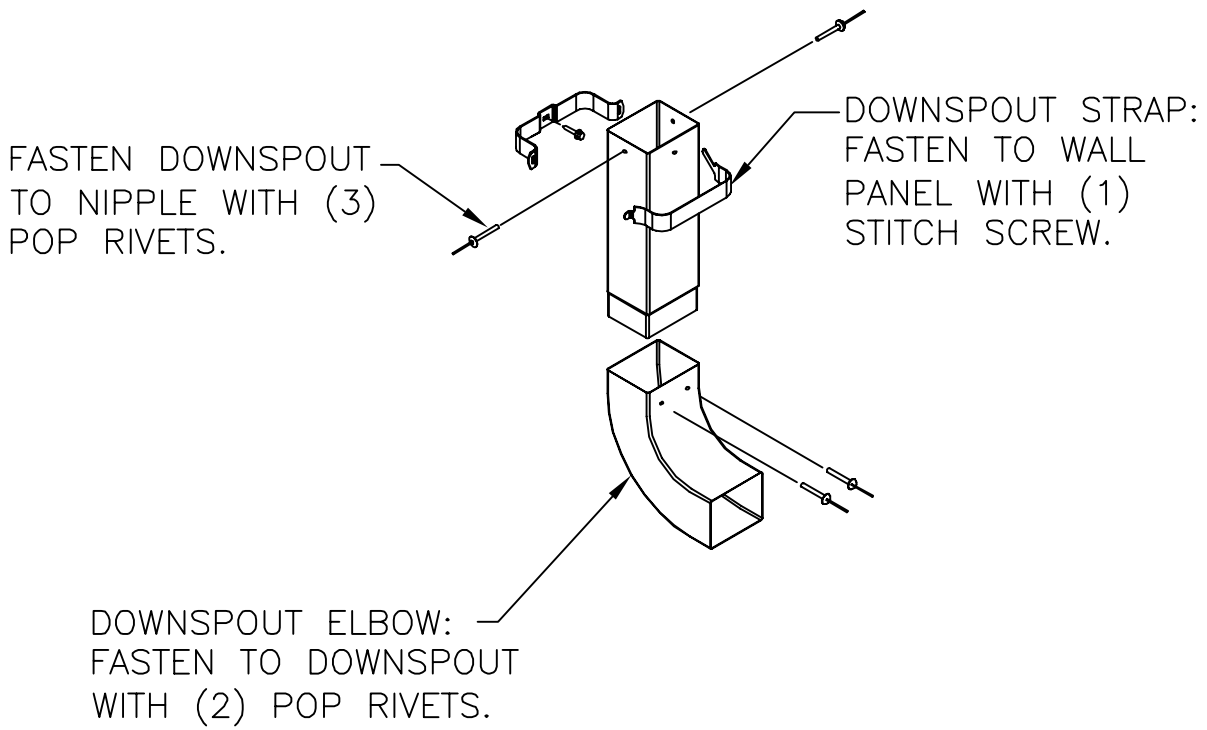
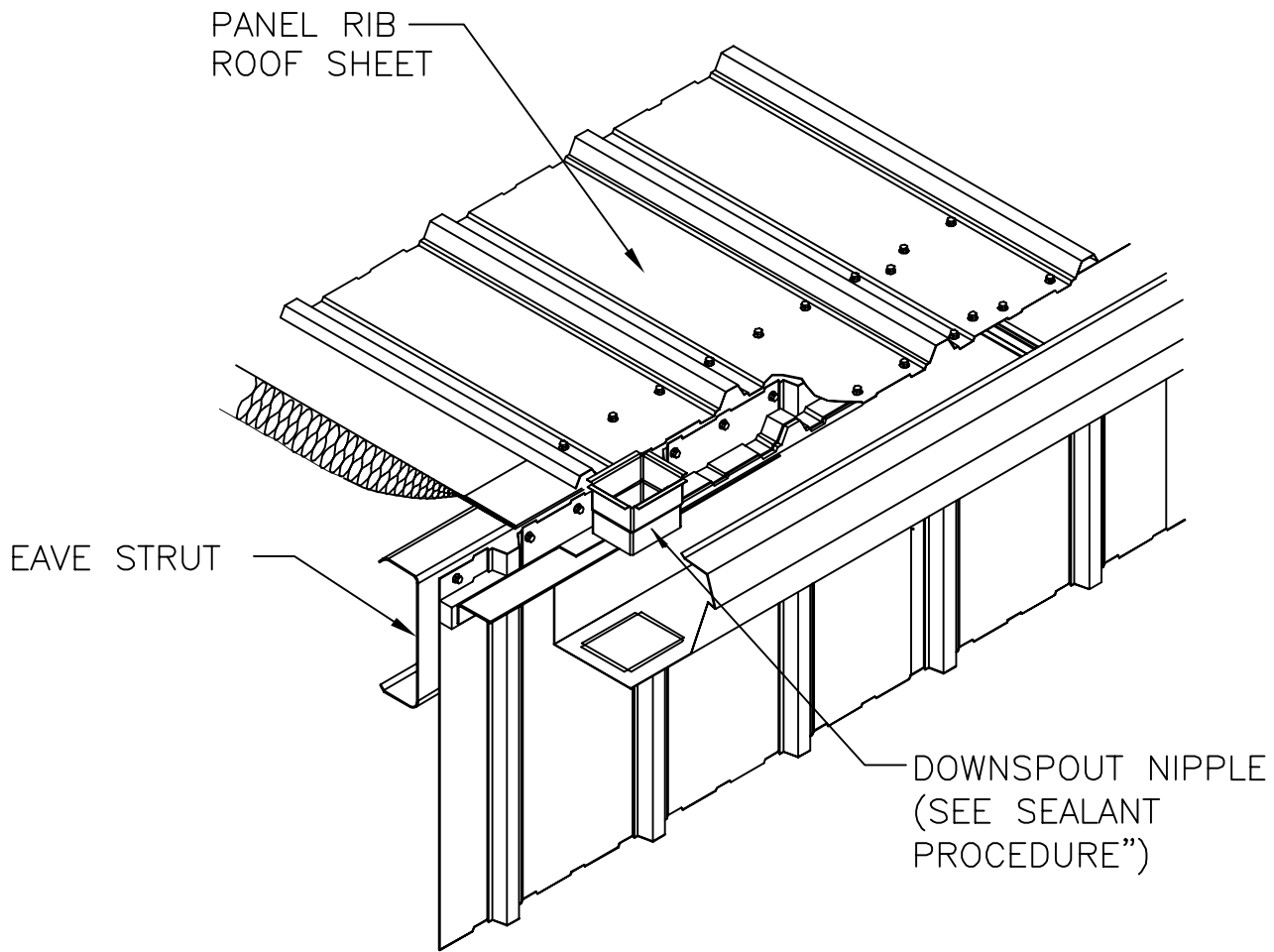
SEE ERECTION DETAILS FOR OVERHANG DIM'S.



SECTION AT EAVE

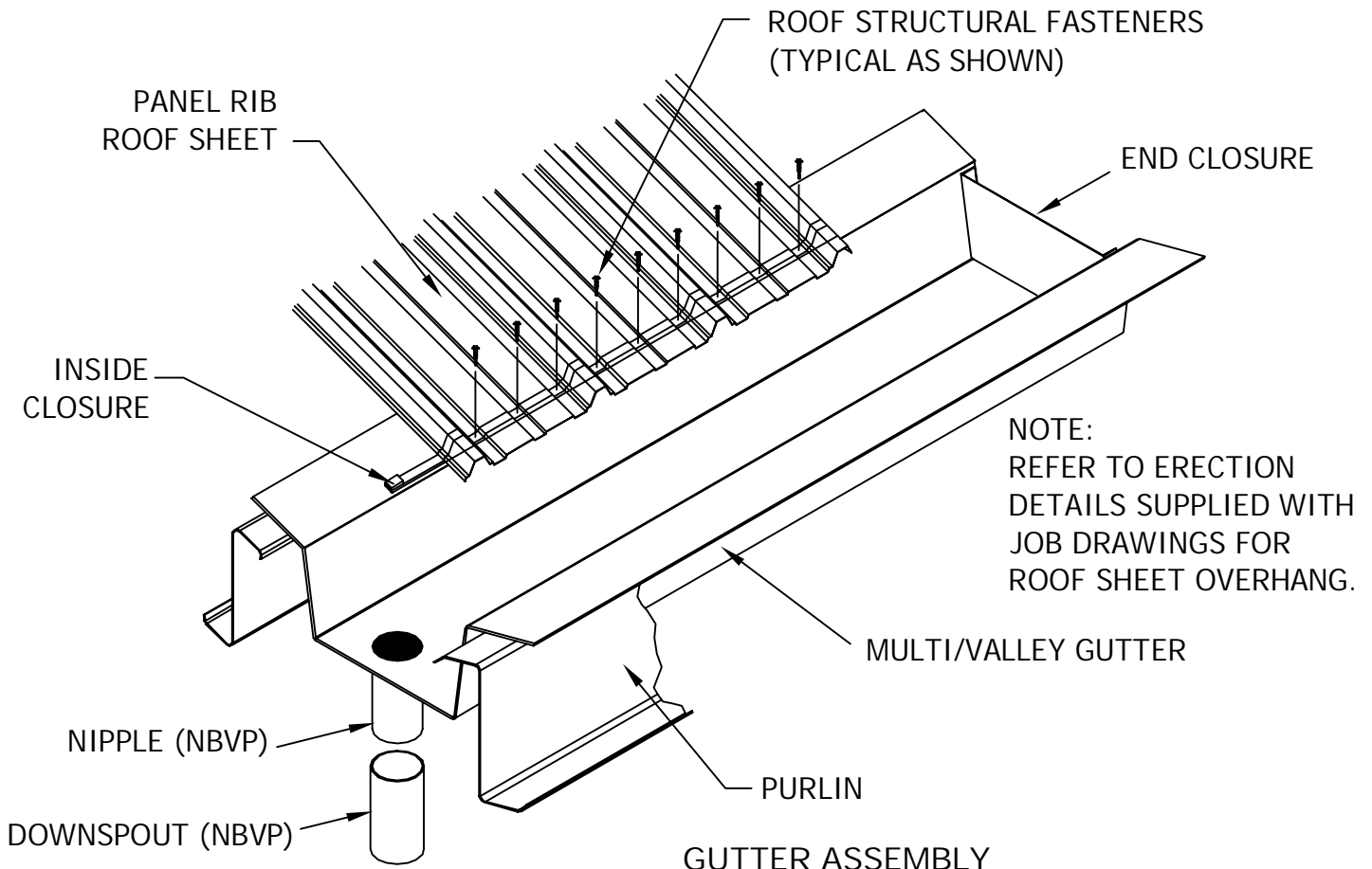
1. Panel closure angle, outside closures, inside closures and tape mastic must be in place before eave gutter can be installed.
2. Gutter strap must have tape mastic applied to bottom side before installation.
3. Install gutter strap with one roof structural fastener into eave strut.
4. Hang gutter, position, then attach to roof panel.
5. Attach straps to gutter and roof panel edges.





BUILDING TRIM INSTALLATION / VALLEY-GUTTER

(VALLEY GUTTER SHOWN, MULTI GUTTER SIMILAR)



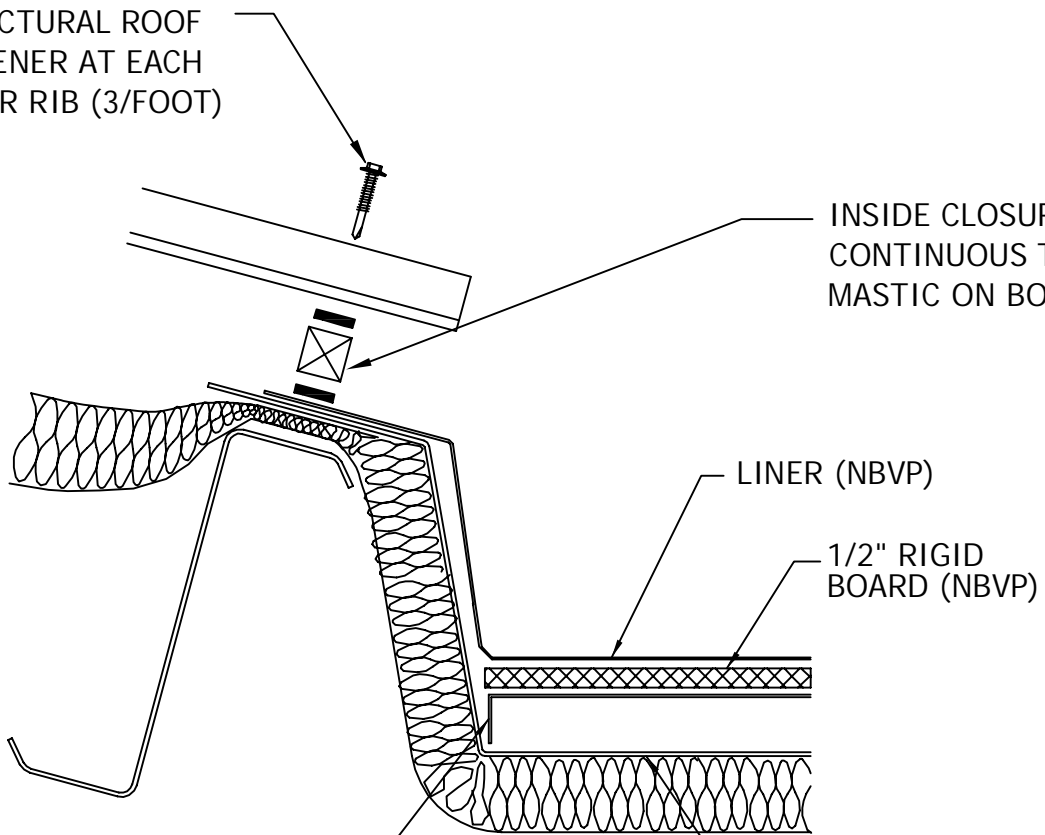
GUTTER ASSEMBLY

- Interior gutters and liners to be installed prior to the installation of the roof sheets.
- Interior gutters are to be installed level.
- Liners, rigid board and adhesives are NOT BY VP BUILDINGS. Refer to manufacturers instructions for installation procedures.
- Downspouts and downspout nipples are NOT PROVIDED BY VARCO PRUDEN. Welding of nipples to galvanized gutter is not recommended.
- Scratches and abrasions to the galvanized finish of the interior gutters should be touched up with cold galvanizing (N.B.V.P.).
- Install scuppers as required by local code. Scuppers are NOT BY VP BUILDINGS.
- Do not walk or stand in gutter.
- Details shown are VP BUILDINGS standards. Builder can specify tapered rigid board in lieu of drain wedges (RIGID BOARD NOT BY VP BUILDINGS)



STRUCTURAL ROOF
FASTENER AT EACH
MINOR RIB (3'/FOOT)

INSIDE CLOSURE WITH
CONTINUOUS TAPE
MASTIC ON BOTH SIDES.



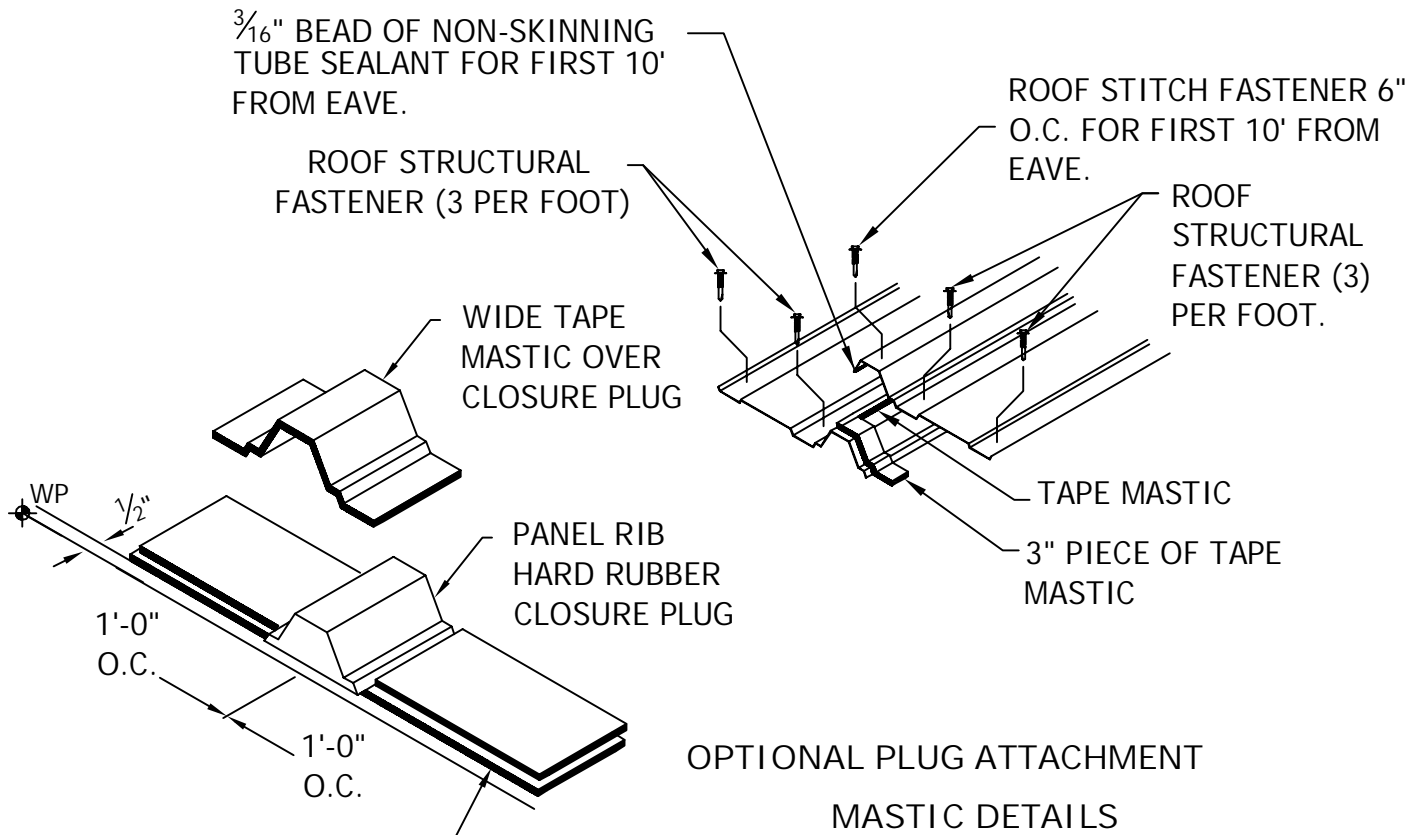
LINER (NBVP)

1/2" RIGID
BOARD (NBVP)

DRAIN WEDGE
(GDW-)

VALLEY GUTTER
OR MULTI GUTTER





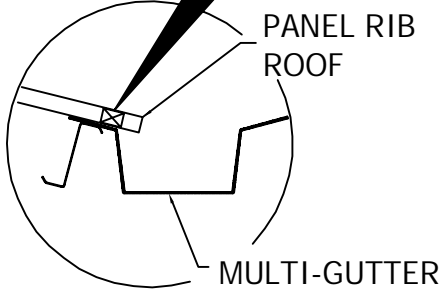
OPTIONAL PLUG ATTACHMENT
MASTIC DETAILS

(2) LAYERS
WIDE TAPE
MASTIC

INSTRUCTIONS

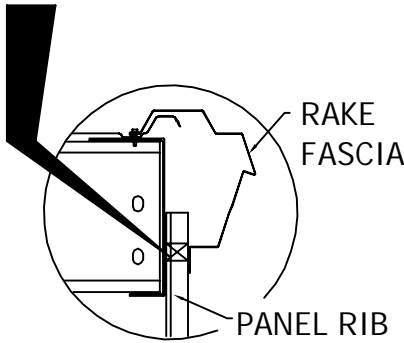
1. Refer to SED's for tape mastic sizes per location.
2. Apply (1) rows wide tape mastic 1/2" upslope from work point.
3. Install closure plug to align with panel rib major ribs.
4. Cut (1) 5" long piece of wide tape mastic and place over top of plug.
After installing sidelap mastic, install a 3" pigtail of
5. tape mastic from top of the rib down to mastic.
Apply 3/16" bead of non-skinning sealant to the wet side of the sidelap (UNDER THE ANTI-CAPILLARY BEAD) for the first 10' from the eave.
6. Install next panel and fasten sidelap with roof stitch fastener at 6" O.C. for first 10' from the eave.
7. Fasten eave end of panels with roof structural fastener in minor ribs (3 PER FOOT).
8. Use miter cut closure plugs at the valley condition between intersecting buildings. Install mastic as described above. Install fasteners in flat of panel at maximum 3" O.C.

INSIDE CLOSURE WITH ROOF STRUCTURAL FASTENER AT EACH MINOR RIB AT EAVE MEMBER.



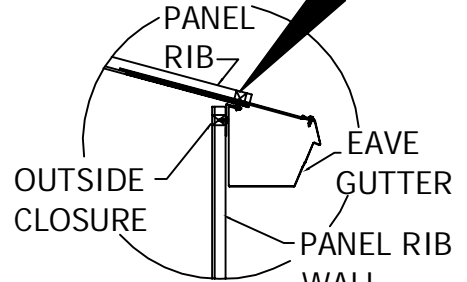
MULTI-GUTTER

OUTSIDE CLOSURE ATTACHES WITH WALL STITCH FASTENERS AT MAJOR RIBS.

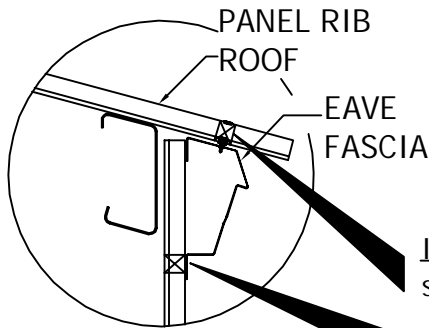


DETAIL AT RAKE FASCIA

INSIDE CLOSURE INSTALL WITH ROOF STITCH FASTENER IN MINOR RIBS.



EAVE GUTTER

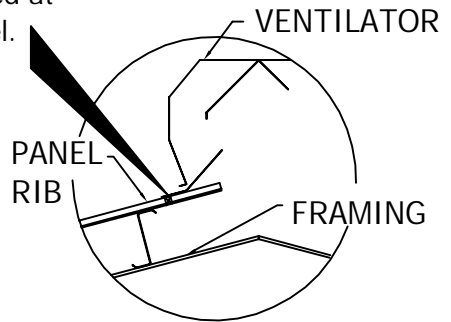


EAVE FASCIA

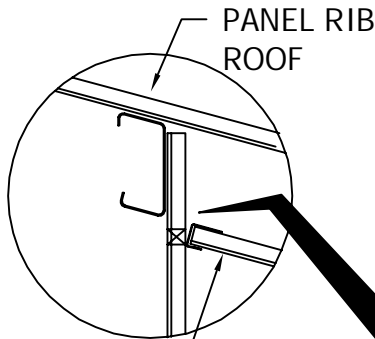
OUTSIDE CLOSURE use std. purlin fastener arrangement for attaching roof panel. Locate closure below fastener heads-attach ridge vent and closure with VP-200 rivets located at the major ribs of each roof panel.

INSIDE CLOSURE at top use roof stitch fastener at 12" O.C.

OUTSIDE CLOSURE at bottom attach with wall stitch fasteners at major ribs.



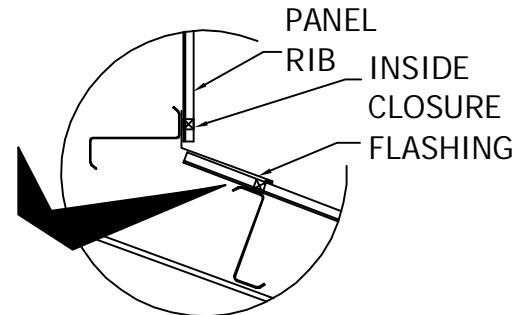
CONT. RIDGE VENT



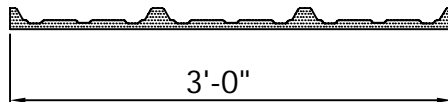
EAVE SOFFIT

OUTSIDE CLOSURE use std. purlin fastener arrangement for attaching roof panel. Locate closure below fastener heads. Attach flashing and closure with roof stitch fasteners at major ribs of each roof panel.

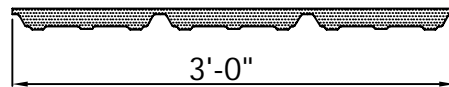
OUTSIDE CLOSURE Soffit trim attached with wall stitch fasteners located at each major rib of wall panel.



LEAN-TO



INSIDE CLOSURE



OUTSIDE CLOSURE



Design and recommended installation procedures are subject to change at any time, due to continued development work by Varco Pruden Buildings.

• • •

All panels formed from light gauge metal may exhibit waviness, also known as "Oil-Canning," commonly occurring in, but not restricted to, flat portions of a panel. This inherent characteristic is not a defect of material or manufacturing and is not cause for rejection.

• • •

For field installation questions, call your local VP Service Center. The job number is included on all building plans:

Arkansas:870-534-6030
 California:.....209-667-4951
 Missouri:.....816-238-7550
 North Carolina:336-996-4801
 Wisconsin:608-882-5000

