



DUCHESNE

Solidly Dependable®



INSTALLATION GUIDE

Concealed fastener profile



AUTHENTIK™
DUCHESNE

CONTEMPORARY ORIGINAL

The Authentik™ profile features a trendy style while recalling the stamp of yesteryear's traditional roofs.

R20170331

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3. IMPORTANT NOTICE

3.1 PRODUCT INSPECTION BEFORE INSTALLATION

Any defect related to the appearance of siding products, mouldings and accessories must be communicated to Duchesne et Fils Ltée before the installation of the product. Duchesne et Fils Ltée reserves the right to refuse any request for reimbursement of expenses related to the installation of the product (labor, equipment, ect.) for any defect that could have been detected before the installation.

Each Authentik™ panel comes with a factory applied plastic film in order to avoid damaging the surface while handling, transportation or installation. The plastic film must be removed within 60 days after reception of the material regardless that it is installed or not. Direct exposure to the sun and/or high humidity may cause the plastic film to adhere permanently to the metal and alter its color.

3.2 INSTALLATION

The present document contains installation instructions and examples relevant to the concealed fastener roofing and siding by Duchesne. The examples are valid at the time of the publication. The information contained in this installation guide is intended to be an aid and does not depict all situations. All projects should comply to any building code or regulation applicable in your region. Please communicate with your local authorities to ensure that your project is conform.

Duchesne et Fils Ltée reserves the right to modify the content of this guide at any time and without any further notice. To be sure that you have the most recent information, visit our Web site (www.duchesne.ca) or contact one of our representatives.

Duchesne recommends that the installation of the concealed fasteners roofing and siding profiles by Duchesne be done by a professional steel siding installer.

3.3 INSTALLATION ON A ROOF

Authentik™ profile by Duchesne must be installed on a solid substrate.

A roofing underlayment is required for all roof projects realised with the Authentik™ profile. Contact Duchesne to determine which roofing underlayment is recommended for your project.

The Authentik™ profile by Duchesne must be installed on a minimum 3/12 pitch. In the case where a sealant is applied on site, the minimum pitch may be 1.5/12. It is the responsibility of the installer to ensure the tightness of the installation with sealant.

3.4 INSULATION AND VENTILATION

Proper design, appropriate ventilation as well as an adequate installation of the components are required to prevent condensation in a building. Condensation is a phenomenon that is not unique to metal buildings, it can occur in all types of constructions. When condensation occurs, it can create moisture problems and cause the loss of insulation efficiency.

Contact a building insulation and ventilation professional to assure to have the best practices to prevent condensation.

3.5 RESTRICTIONS

Any failure to respect these installation directives outlined by Duchesne, can lead to a total refusal to any claim by Duchesne et Fils Ltée.

4. THE PROFILE

The Authentik™ profile (Figure 4.a, 4.b and 4.c) is offered in panels of 16" (406 mm) and 20" (508 mm) wide and is proposed in three different versions:

- With multiple ribs (Figure 4.a)
- With striations (Figure 4.b)
- Flat (Figure 4.c)

This profile is also available with a nail strip (Figure 4.a and 4.c) or with clips (Figure 4.b). Installation with clips allows to tolerate a bigger thermal expansion. Which means, a control of the contraction or expansion of the material during temperature variation. It is recommended to use the clip profile when the length panel is more than 20' (6m).

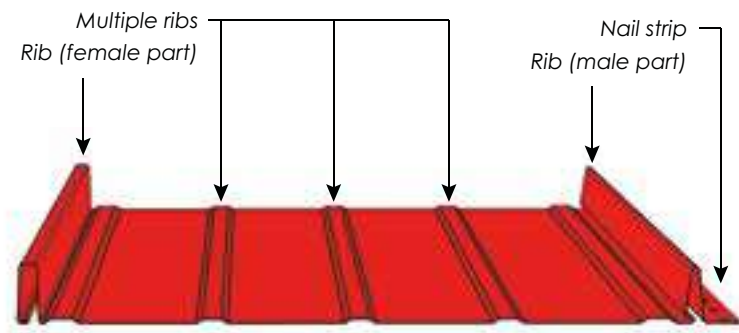


Figure 4.a | Authentik™ multiple ribs

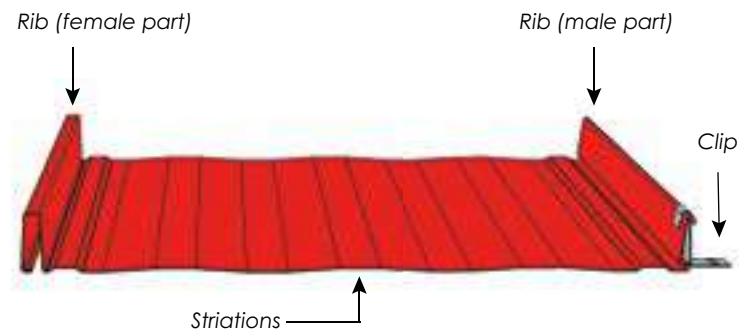


Figure 4.b | Authentik™ striations

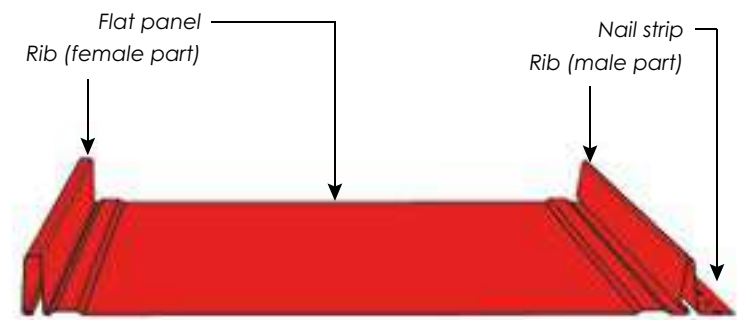
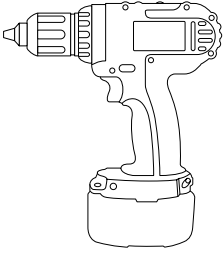
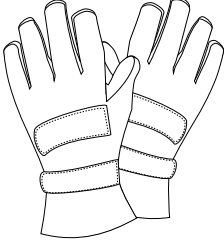
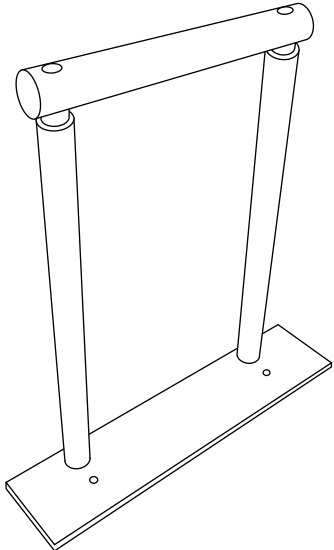
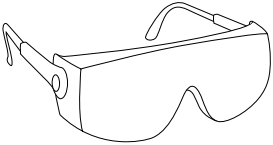
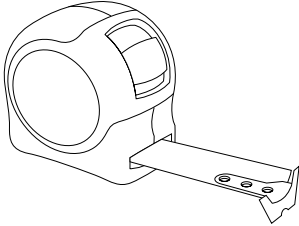
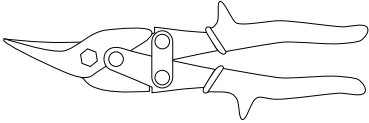
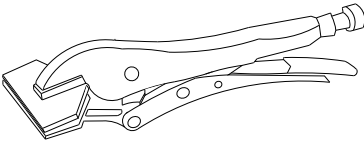


Figure 4.c | Authentik™ flat


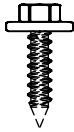
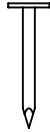
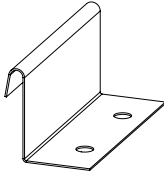
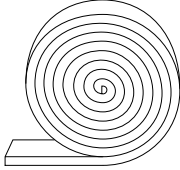
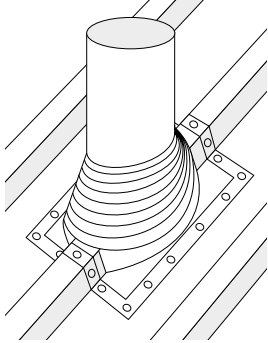
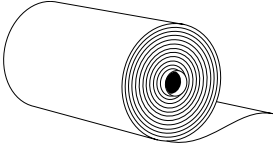
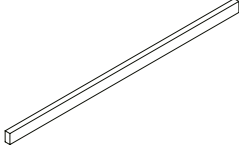
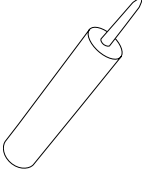
5. TOOLS AND EQUIPMENTS

Below are the tools, instruments and protective equipments necessary to undertake a project with a concealed fastener profile.

Electric screw driver allowing for variable torque	Protective gloves	Bending tools
		 <p data-bbox="1101 1304 1477 1367">Offered by Duchesne et Fils ltée, several widths available.</p>
Safety glasses	Measuring tape	
		
Snips	Sheet metal tool	
		

6. ACCESSORIES AND MOULDINGS
6.1 ACCESSORIES

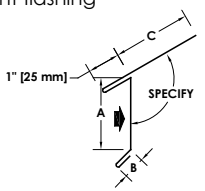
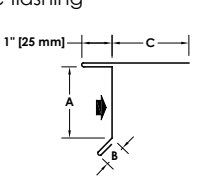
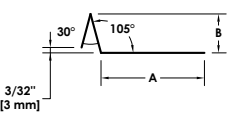
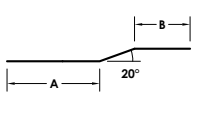
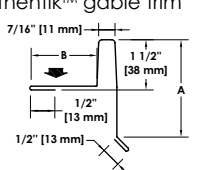
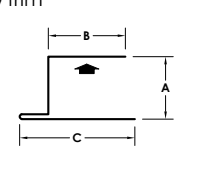
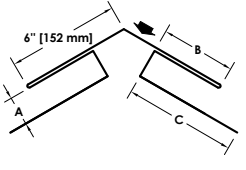
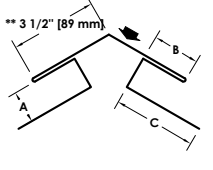

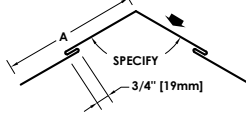
Below are the accessories necessary to undertake a project with the Authentik™ profile.

ACCESSORIES		
<p>#12 x 1" METAL-STEEL galvanized screws with pancake head</p>  <ul style="list-style-type: none"> • Used to fasten the Authentik™ panels, clips and certain flashings. 	<p>Galvanized/ prepainted METAL-WOOD screws</p>  <ul style="list-style-type: none"> • Used to fasten certain flashings 	<p>Roofing nails</p>  <ul style="list-style-type: none"> • Used to fasten certain flashings
<p>Authentik™ clips</p>  <ul style="list-style-type: none"> • Only for the clip panels 	<p>Metal building tape (butyl)</p>  <ul style="list-style-type: none"> • 1/16" X 1/4" X 50' (1,5 mm x 6,3 mm x 1,52 m) • 1/16" X 1/2" X 50' (1,5 mm x 12,7 mm x 1,52 m) 	<p>Rubber pipe flashing</p> 
<p>Roofing underlayment</p>  <ul style="list-style-type: none"> • Skidproof 	<p>Unnotched foam closure strip</p>  <ul style="list-style-type: none"> • 1" X 2" X 4' (25,4 mm x 50,8 mm x 1,2 m) 	<p>Tube of coloured caulking</p>  <ul style="list-style-type: none"> • Cartridge of 300 ml

Refer to the steel roofing and siding, moulding and accessories catalog for more information.

6.2 MOULDINGS

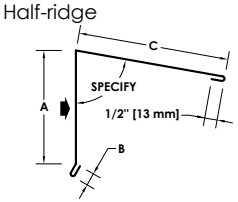
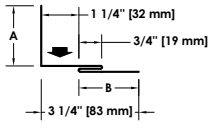
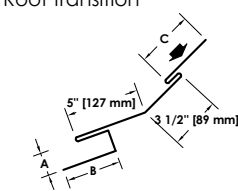
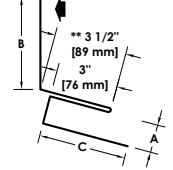

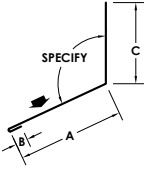
 STANDARD LENGTH **10 FEET (3.05 m)**
 STANDARD **GAUGE 30**
 INDICATES PREPAINTED SIDE

MOULDINGS									
Description	Dimensions				Description	Dimensions			
Front flashing 	Code	A	B	C	Side flashing 	Code	A	B	C
	410	1 1/8" 28.5 mm	1/2" 13 mm	To specify		412	1 1/8" 28.5 mm	1/2" 13 mm	To specify
Starter fastener 	Code	A	B	C	Fastener 	Code	A	B	C
	1302	2" 51 mm	3/4" 19 mm	-		1304	1 1/4" 32 mm	3/4" 19 mm	-
Authentik™ gable trim 	Code	A	B	C	« J » trim 	Code	A	B	C
	1312	3" 76 mm	2 1/8" 54 mm	-		1047	1 5/8" 41 mm	2" 51 mm	3" 76 mm
Ridge cap 	Code	A	B	C	Ridge cap 	Code	A	B	C
	954	1 9/16" 40 mm	4" 102 mm	6 1/2" 165 mm		944	1 9/16" 40 mm	3" 76 mm	4" 102 mm
Ridge cap 	Code	A	B	C	Ridge cap 	Code	A	B	C
	132	8 1/2" 216 mm	-	-		147	7 1/2" 191 mm	-	-
	133	11 1/2" 292 mm	-	-		148	10 1/2" 267 mm	-	-
	135	À spécifier	-	-					

* If the roof pitch is not specified when ordering, a roof pitch of 5/12 will be automatically applied.

6.2 MOULDINGS

 STANDARD LENGTH **10 FEET (3.05 m)**
 STANDARD **GAUGE 30**
 INDICATES PREPAINTED SIDE

MOULDINGS									
Description	Dimensions				Description	Dimensions			
Half-ridge 	Code	A	B	C	Sidewall flashing 	Code	A	B	C
	406	4 1/2" 114 mm	1/2" 13 mm	To specify		118	2" 51 mm	2" 51 mm	-
Roof transition 	Code	A	B	C	Flashing 	Code	A	B	C
	928	1 9/16" 40 mm	To specify	To specify		1018	1 5/8" 41 mm	5 1/8" 130 mm	4 5/8" 117 mm
Valley 	Code	A	B	C	Flashing 	Code	A	B	C
	145	7 1/2" 191 mm	-	-		408	5 1/2" 140 mm	1/2" 13 mm	To specify
	146	10 1/2" 267 mm	-	-					

* If the roof pitch is not specified when ordering, a roof pitch of 5/12 will be automatically applied.

7. GENERAL INFORMATION

Safety features

You must be extremely cautious when walking on a steel roof because the panels can be very slippery. Extra precaution should be taken if the panels are wet, since the risk of a fall is accentuated. It is recommended to wear skid proof boots. Furthermore, if you have to work in heights, you should observe the security regulations of your region.

When you are working with steel panels, wear gloves at all times because the sharp edges can cause severe injuries. Also, if electric tools are being used to cut or drill the steel, safety glasses must be worn at all times.

Manipulation

Handle Duchesne crates carefully to avoid damaging the panels. Pay special attention to avoid a bouncing movement of the crates. It is important to follow certain rules when manipulating:

1. The bundles containing panels of a maximum of 20 feet (6 m) can be carried by a forklift ([Figure 7.a](#)). Beyond that length, a boom and yoke should be used. ([Figure 7.b](#))
2. Lift the bundles by the centre.

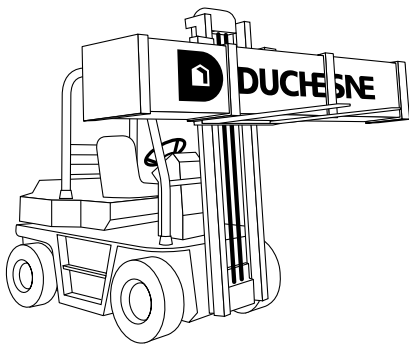


Figure 7.a | Handling crates less than 20 feet (6m)

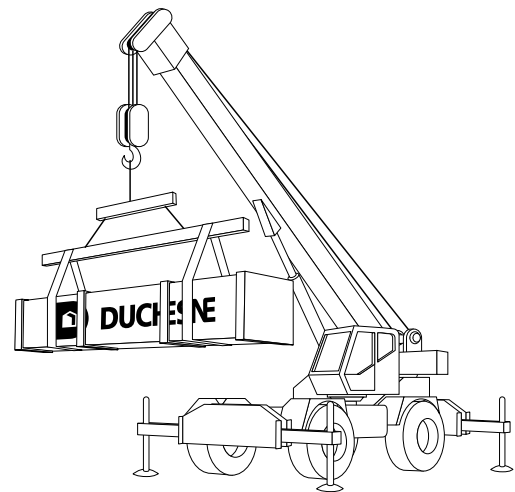


Figure 7.b | Handling crates more than 20 feet

3. Use straps or nylon belts. Never use steel cables or chains to haul the crates with a boom. This could damage the panels.
4. Be careful not to damage the panels when removing them from the crate.

5. Never carry a panel by the extremities, always handle it lengthways and carry it vertically. [Figure 7.c.](#)

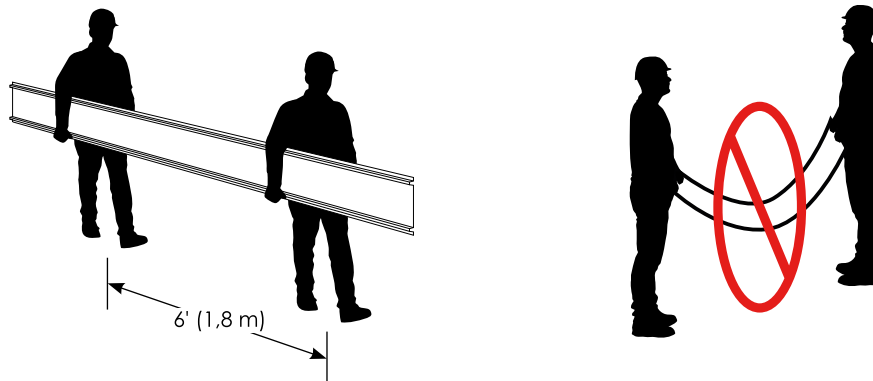


Figure 7.c | Handling a panel manually

6. Don't manipulate the panels when there are strong winds.
7. The panels over 6 feet (1.8 m) should be carried by at least two persons. In general, there should be a person per 6 feet (1.8 m) of panel. For example, a panel of 18 feet (5.5 m) will require 3 persons and a panel of 20 feet (6 m) will require 4.

Storage

It is important to respect certain rules in regards to storage in order to conserve the aesthetics and physical properties of Duchesne's siding panels.

If the panels cannot be installed upon reception, they should be stored indoors, in a dry and ventilated area. Exterior storage is at the customer's risk. However, if the material has to be stored outside, here are a few recommendations. [\(Figure 7.d\)](#)

1. If possible, choose an area that is leveled and at a distance so that the panels will not obstruct the execution of the project.
2. Cover the ground with a plastic tarp to prevent the soil humidity to reach the panels.
3. Lay the panels at roughly 6" (152 mm) of the ground to permit an air circulation.
4. Raise one side of the bundle to permit the rain water to flow freely.
5. Cover the panels with a tarp. Do not use plastic because it could create condensation.

If, despite this method, the panels are wet, they must be separated and dried immediately in order to avoid the formation of stains, mildew and the appearance of rust.

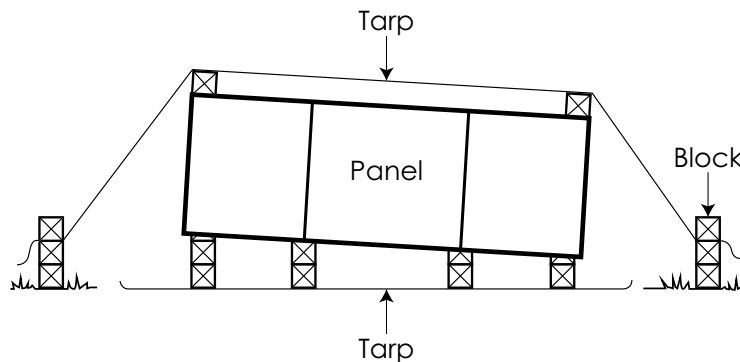


Figure 7.d | Outdoor storage

Oil canning

Oil canning is a deformation of the material, which has the effect of creating an uneven surface and an undesirable visual effect.

All steel panels with a large surface are likely to develop oil canning because of the physical constraint tolerance inherent to the raw material. The phenomenon of oil canning can increase with the thermal dilatation or an incorrect installation of the panels. Be sure that the surface where the panels will be installed is leveled and solid. While fastening, avoid tightening screws too tight and do not stretch the panels trying to adjust the covering width that will create oil canning.

The risk of oil canning can also be reduced by choosing to use a model with multiple ribs or striations and installing a maximum 20' length.

8. IDENTIFICATION OF THE COMPONENTS

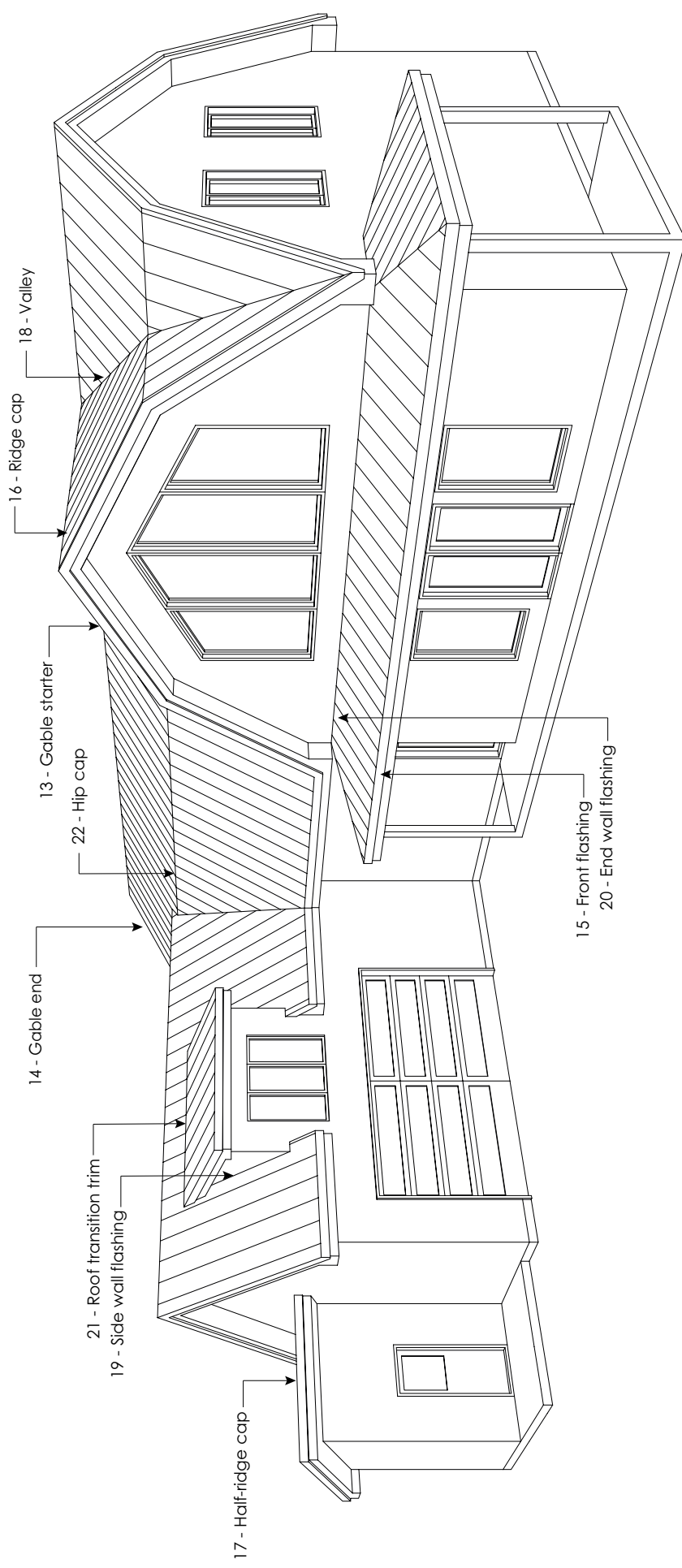


Figure 8.a | Identification of the components

9. WORK PLANNING
9.1 PREPARATION

It is important to determine how the installation of the roof will be done, as this will impact the type of mouldings you will need. Before starting the installation of the panels, be sure that your roof is square, lower corners of the roof must form 90 degree angles.

To do so, draw a line at 6 feet (1.8 m) from one corner of the gable and a line at 8 feet (2.4 m) from the same corner on the eave. If the distance between these two lines is 10 feet (3 m), then the roof is square. (See [Figure 9.a](#) and [Figure 9.c](#))

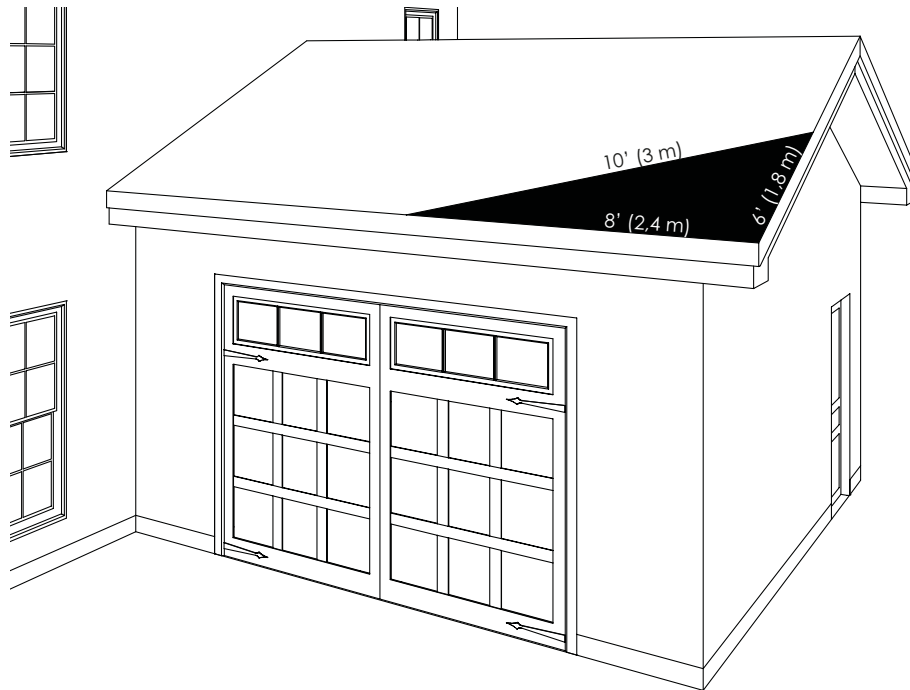


Figure 9.a | Square roof

If the surface is not square, it is recommended to cut at angle the first panel lengthwise ([Figure 9.b](#)), in such a way to correct the deviation of the roof so to allow the following panels to be perpendicular to the eave and the ridge. Refer to installation method of gable starter [section 13.2](#) or gable end [section 14.2](#).

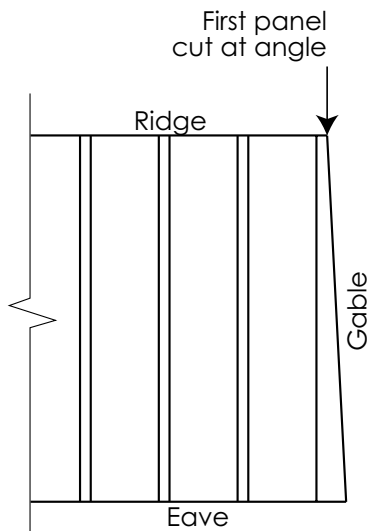


Figure 9.b | Angle cut for correction of deviation

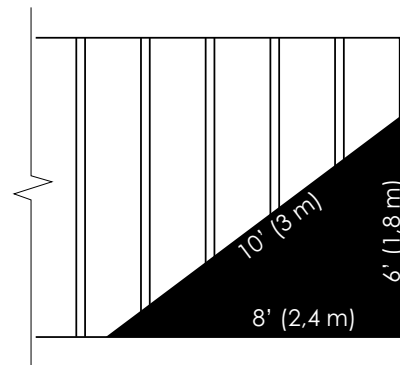


Figure 9.c | Measurement identification

9.2 EXECUTION SEQUENCING

STEP 1:

- Be sure of the flatness of the surface, meaning that it should be without any imperfections. If not, it may cause oil canning.
- Plan your work to minimize movement on installed panels.

STEP 2:

- Identify required mouldings depending of the configuration of the roof and your preference in terms of appearance. Installing panels with clips has special features that will affect your choice of mouldings ([section 12](#)). The roof slope influences the choice of ridge cap, some do not settle on an upper slope superior to 9/12 ([section 16](#)).
- Determine the positioning of your panels. The size of the surface to be covered and the width of the panels will influence their positioning. It is recommended to center the panels on the roof, in this way you will have equal panels on each side of the roof.
- Determine the width of the panels at the extremities, see below a calculation example:
 - Calculate the number of panels required:
 $9'-8''$ (2946 mm) (full roof width) divided by 2 = $4'-10''$ (1473 mm)
 $4'-10''$ (1473 mm) / $1'-4''$ (406 mm) (panel width) = 3.625 panels to cover each half of the roof.
 Round off quantity to the following number: gives 4 panels
 Multiply by 2 to cover each half.
 So you will need 8 panels to cover the entire roof.
 - Calculate the width of the first and the last panel:
 You have 3 full panels + 0.625 of the last panel. You must multiply 0.625 by the covering width of the panel which is $16''$ (406 mm) to have the covering width of the first panel and the last panel:
 $0.625 \times 16''$ (406 mm) (panel width) = $10''$ (254 mm).

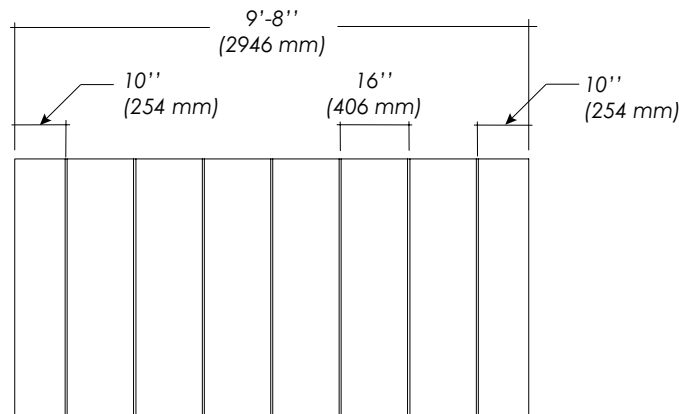


Figure 9.d | Calculation example

- According to the result of your calculation, 2 options are possible:
 - Option 1:** You start and finish the roof with a rib, a certain width is necessary for aesthetics. This option is recommended:
For a panel of 16" (406 mm): the width of the sheets at the ends is more than 10" (254 mm)
For a panel of 20" (508 mm): the width of the sheets at the ends is more than 16" (406 mm)
Gable starter method 1 or 3. [Section 13.1](#) or [13.3](#) and Gable end method 1. [Section 14.1](#)
 - Option 2:** You start and finish with flat panels, this option applies to all possible widths. Gable starter method 2. [Section 13.2](#) and gable end method 2. [Section 14.2](#)
- Consider the direction of the dominating winds to determine the right position to install the panels. The dominating winds must come in contact with the side of the panel which has the anchorage (screws or clips) fastened to the substrate first.

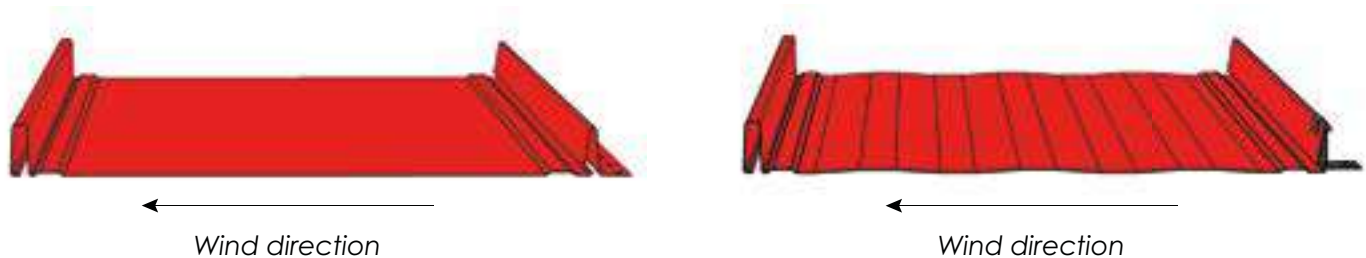


Figure 9.e | Position of the panels in relation to the direction of the wind

STEP 3:

- Install a first layer of roofing underlayment in the valleys.

STEP 4:

- Fasten the front flashing (410) and side flashing (412) if required to the perimeter of the roof.
- Fasten the valleys.

STEP 5:

- Install the roofing underlayment over the entire roof. Refer to the installation guide of the roofing underlayment manufacturer for proper installation.
- The roofing underlayment must overlap the front flashing, side flashing (410 and 412) and the valleys (145 and 146).

STEP 6:

- Fasten all the mouldings in which you must insert the panels into an opening. Such as:
 - Ridge caps (954 – 944 – 147 – 148)
 - Sidewall flashings (118 – 1018)
 - Flashings (1018)
 - Roof transitions (928)

STEP 7:

- See section 10 for the preparation of the panels and other sections suitable for installation.
- Remove all plastic film from the panels once they are installed.

STEP 8:

- Complete the installation of the mouldings that have to be installed after the installation of the panels. Such as:
 - Ridge caps (132-133)
 - Half ridges (406)
 - Flashings (408)
 - Gable trims(1312)

Installation arrangement: Note that the following installation sections are not necessarily in the order in which the elements will be installed. They indicate, with the help of sectional and isometric views, the installation rules for a method of assembly of a roof but without explaining the global order of installation which is specific to each building.

10. PANEL PREPARATION

Remove the plastic film at the end of the panels that may come in contact with the mouldings or screws to prevent the film from getting stuck in the assembly and in the cutouts.

It is best to carry out the following steps while on the ground, not on the roof, trestles may be helpful.

10.1 CLOSURE OF THE EXTREMITY OF THE RIB

Allows to close the end of the ribs to prevent the insects to climb up and gives an aesthetic finish.

- Using a pair of snips, cut the male rib 3/4" (19 mm) from the end. (Figure 10.a)
- Notch both curved sides of the female rib with a depth of 3/4" (19mm) and remove 1/4" (5 mm) from the end to leave 1/2" (13 mm) of material to close the ends of the ribs. (Figure 10.a)
- When you close the ribs using a ridge cap method [section 16.4](#), you must fill the female rib with caulking.

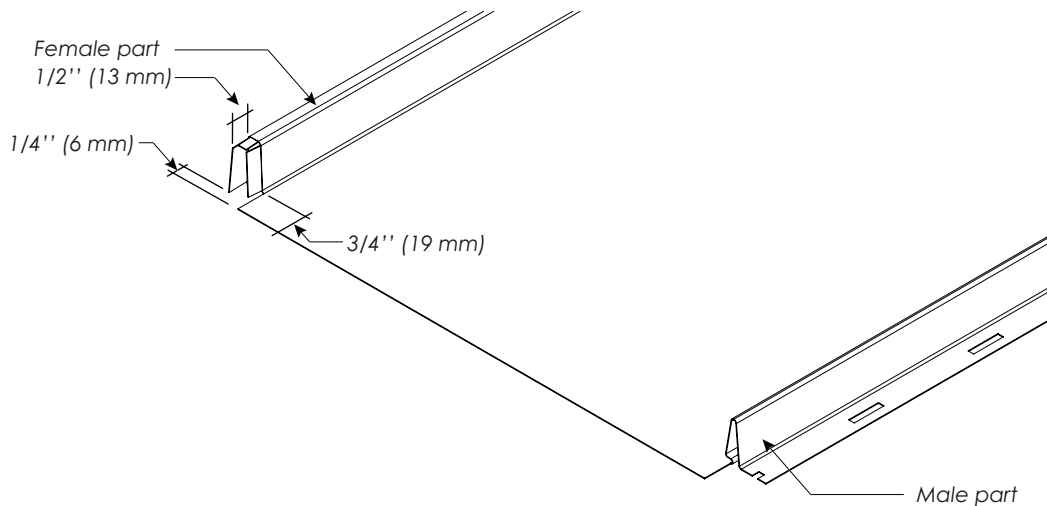


Figure 10.a | Panel cutout

- Fold the sections of the rib in the sequence shown below:

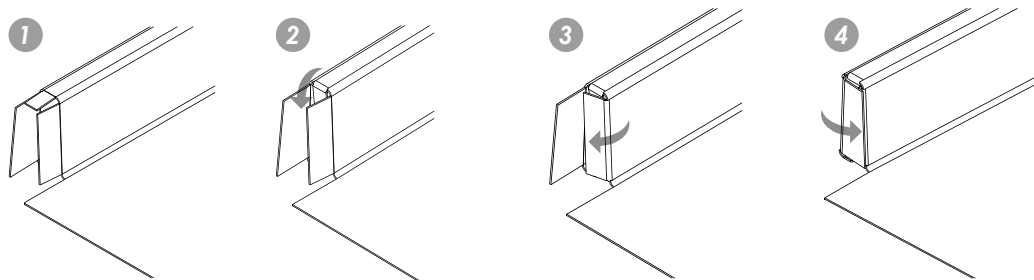


Figure 10.b | Rib folding sequence

10.2 180 DEGREE BEND

Used to hook the panels to the front flashing (#410). Section 15.

- You have previously cut the panel in section 10.1 (Figure 10.d)
- Use the appropriate folding tool (Figure 10.c) according to the width of the panel chosen.

- 16" (406 mm) panel: 17" (432 mm) tool
- 20" (508 mm) panel: 20" (508 mm) tool

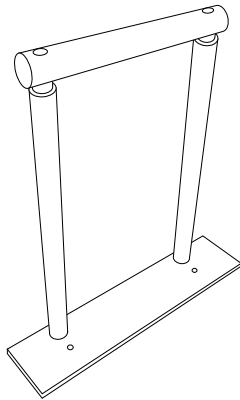


Figure 10.c | Bending tool

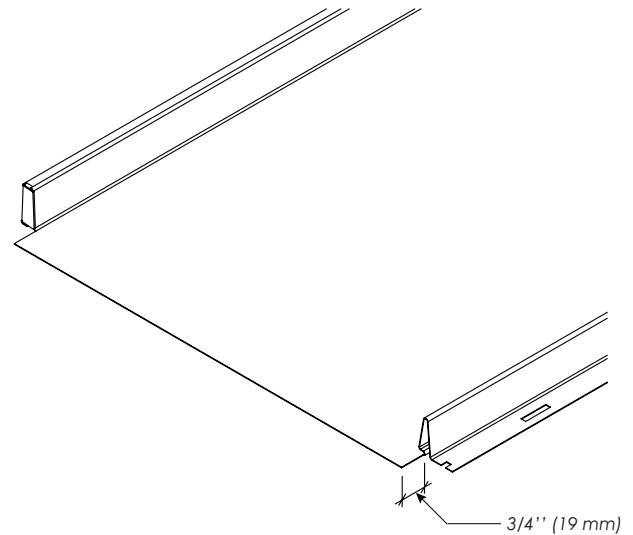


Figure 10.d | Cutout

- Fold in the sequence as shown below:

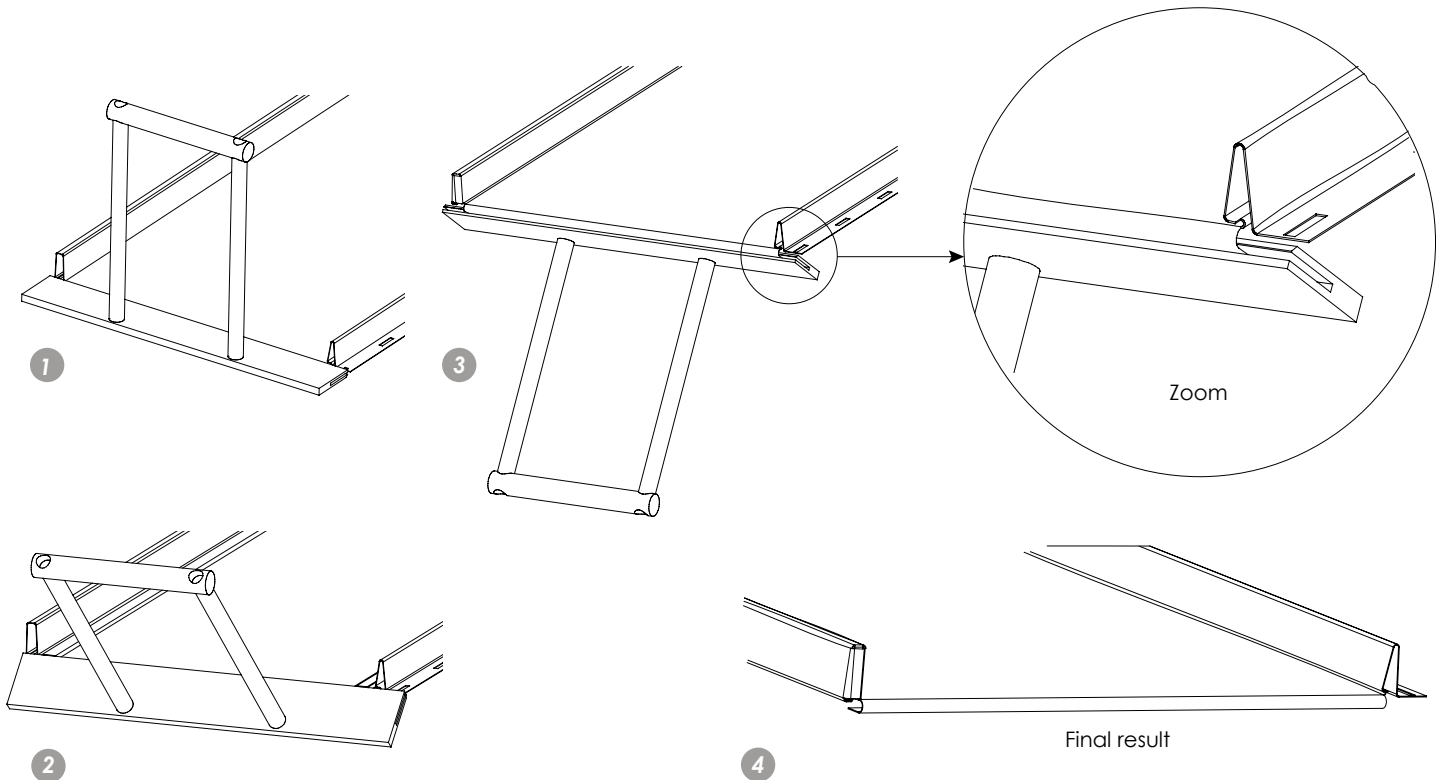


Figure 10.e | 180 degree folding sequence

10.3 90 DEGREE BEND

The 90 degree bend is the alternative method to the foam closures that allows to obstruct the space between the ribs as used in the installation method in [section 16.2](#).

- Using a pair of snips, cut the ribs at the extremity of the panel and leave 1 1/2" (38 mm) of the flat section.
- Use the appropriate bending tool according to the width of the panel to be installed.

- 16" (406 mm) panel: 15" (381 mm) tool
- 20" (508 mm) panel: 19" (483 mm) tool

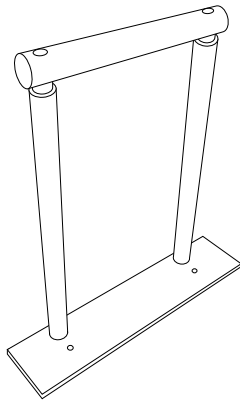


Figure 10.f | Bending tool

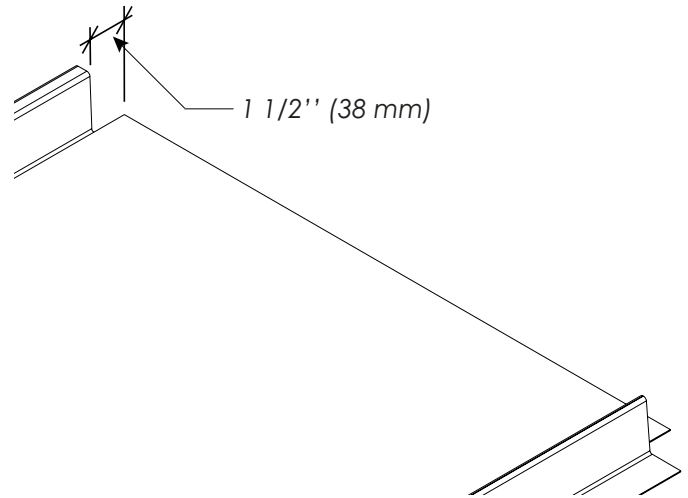


Figure 10.g – Cutout

- Bend in the sequence as shown below:

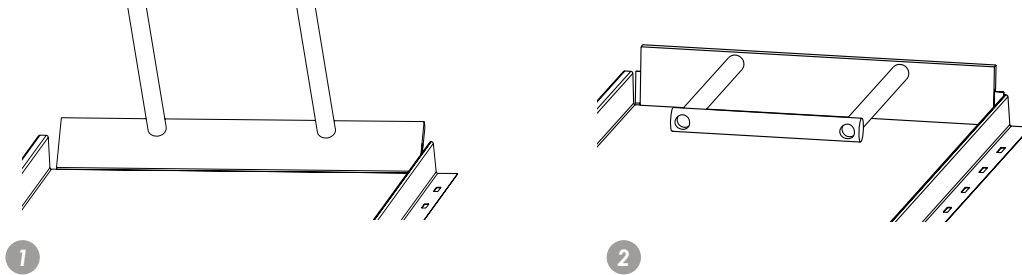


Figure 10.h | 90 degree bending sequence

- Apply caulking at the junction of the rib and the folded part.

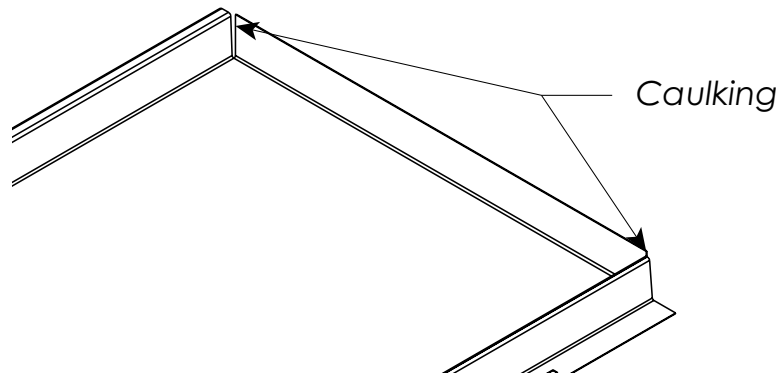


Figure 10.i | Caulking location

10.4 CUT WITHOUT FOLD

- Using a pair of snips, cut the ribs at the extremity of the panel leaving the flat section stick out of 3/4" (19 mm).

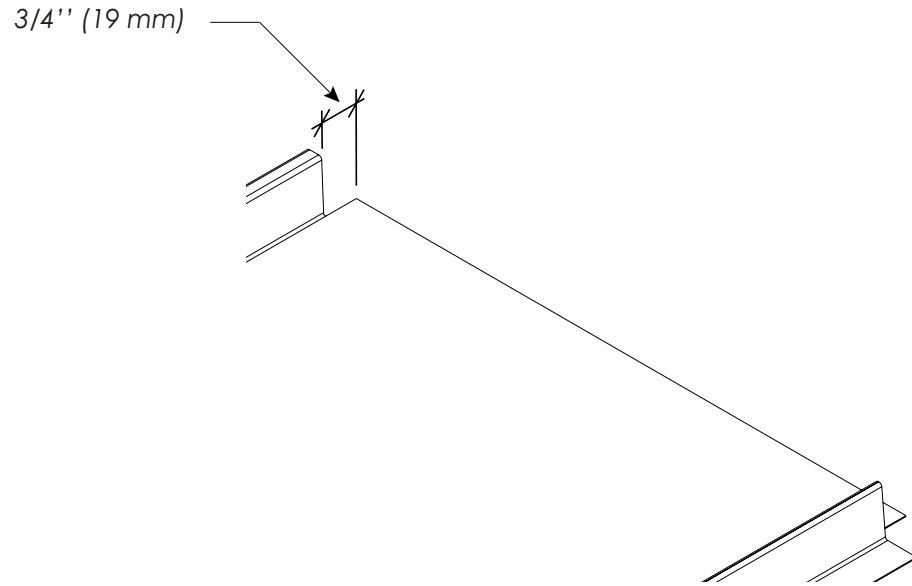


Figure 10.j | Cutout

11. INSTALLATION OF PANELS – NAIL STRIPS

The panels were prepared according to the type of installation chosen. For the assembly of the first panel see [section 13](#).

- The panel has a male and a female side that snaps into each other. ([Figure 11.a](#))

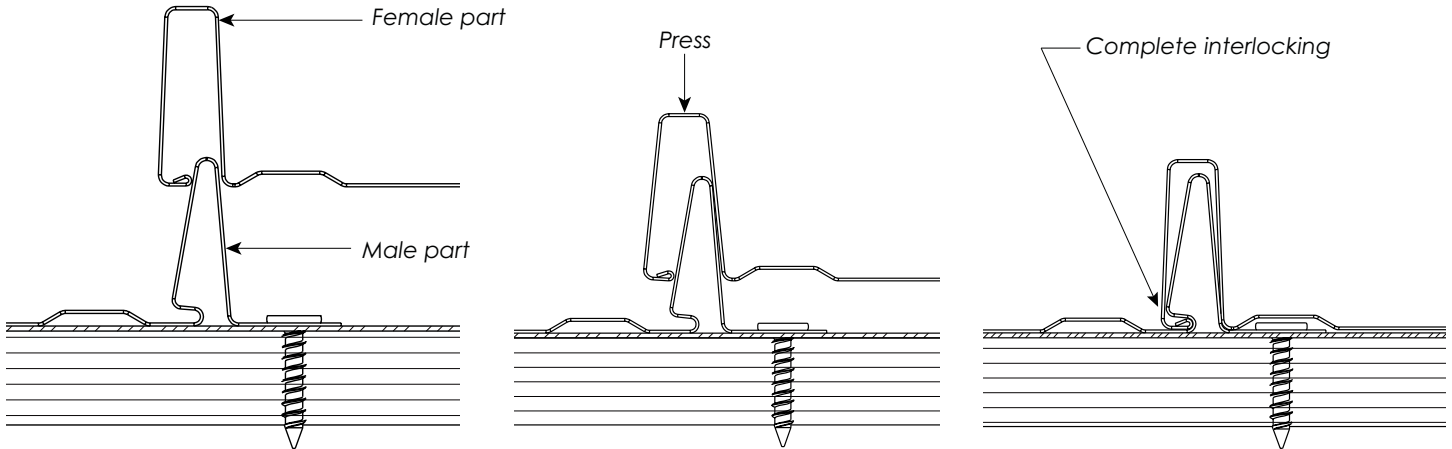


Figure 11.a | Interlocking of the panels

- Place the panel slightly offset, press the female part of the panel onto the male section of the previously installed panel, until complete interlocking. ([Figure 11.b](#))
- Apply a small pressure throughout the panel to create a shear effect and ensure complete interlocking.
- Slide the panel up so that the panel enters in the opening of the moulding and the 180 degree fold is hooked to the front flashing (410).

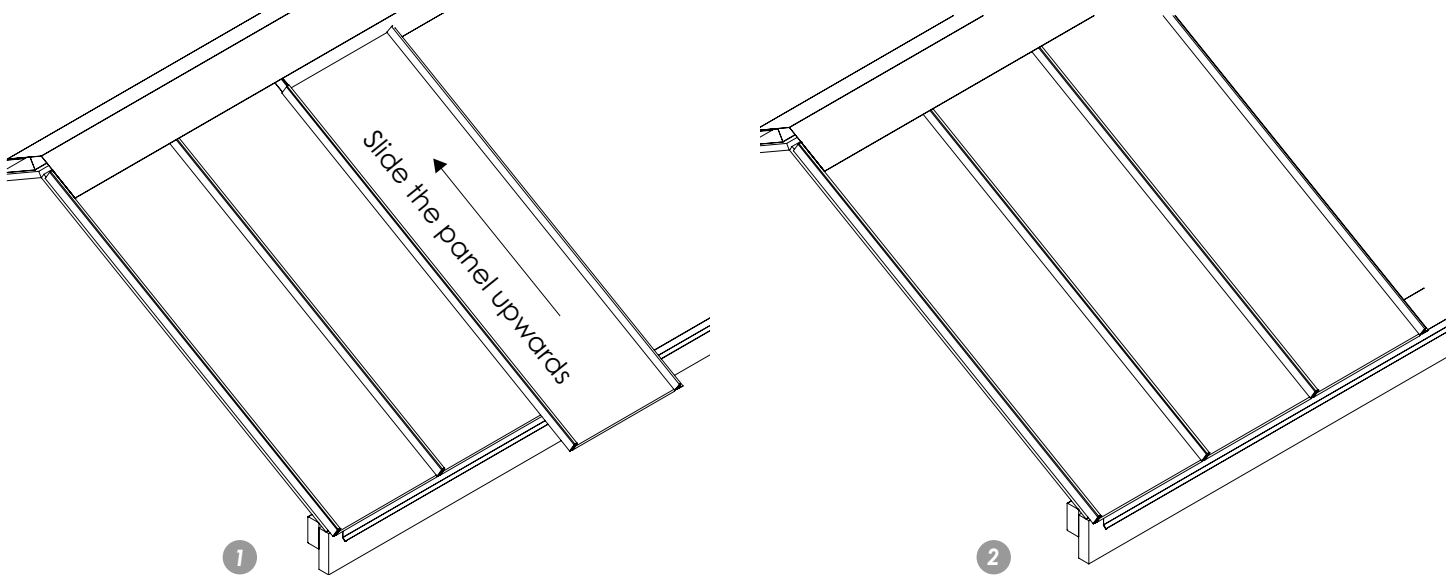


Figure 11.b | Slide the panel upwards

11. INSTALLATION OF PANELS – NAIL STRIPS

- Insert the first pancake head screw #12 x 1" in the highest of the panel. The screw must be installed at the top of this slot so to hold the panel in place.
- Insert the other screws in the center of the slots, starting at one extremity of the panel. Then, insert a screw at every 24" (609 mm) maximum.
- It is important not to tighten the screw too much to allow for thermal expansion.
- Once screwed down, the panel must be able to move slightly relative to the screws.

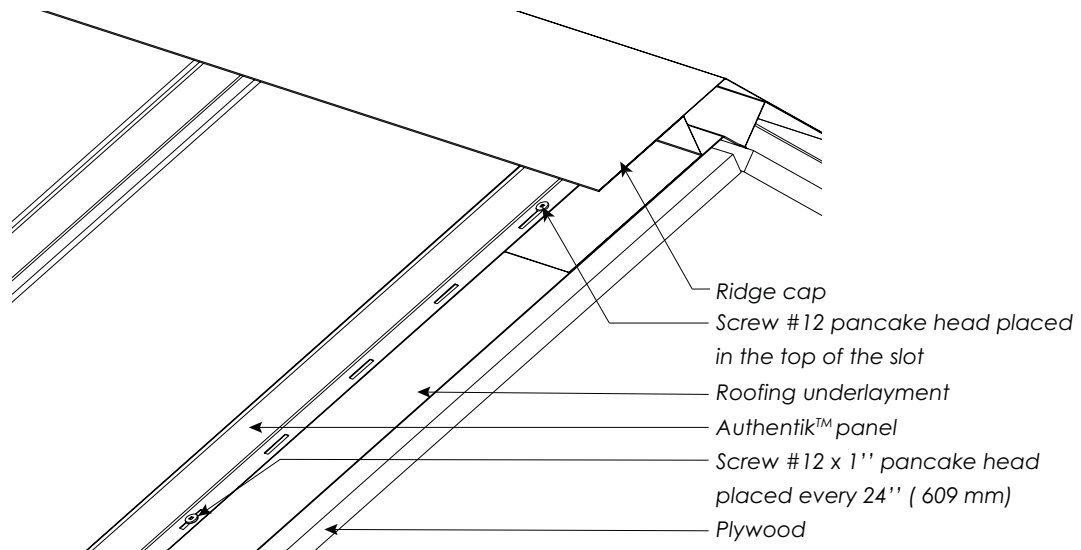


Figure 11.c | Screw positioning

12. INSTALLATION OF PANELS - CLIPS
12.1 ASSEMBLY OF PANELS - CLIPS

The panels were prepared according to the type of installation chosen. For the assembly of the first panel [section 13](#).

- The panel has a male and a female side that snaps into each other. ([Figure 12.a](#))

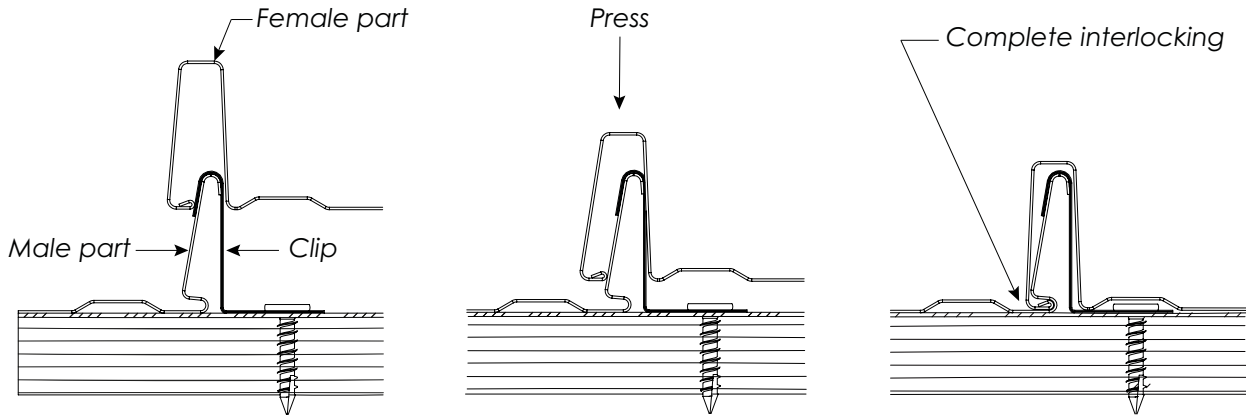


Figure 12.a | Interlocking of the panels

- Place the panel slightly offset, press the female part of the panel onto the male section of the previously installed panel, until complete interlocking. ([Figure 12.b](#))
- Apply a small pressure throughout the panel to create a shear effect and ensure complete interlocking.
- Slide the panel up so that the profile enters in the opening of the moulding and the 180 degree fold is hooked to the front flashing (410).

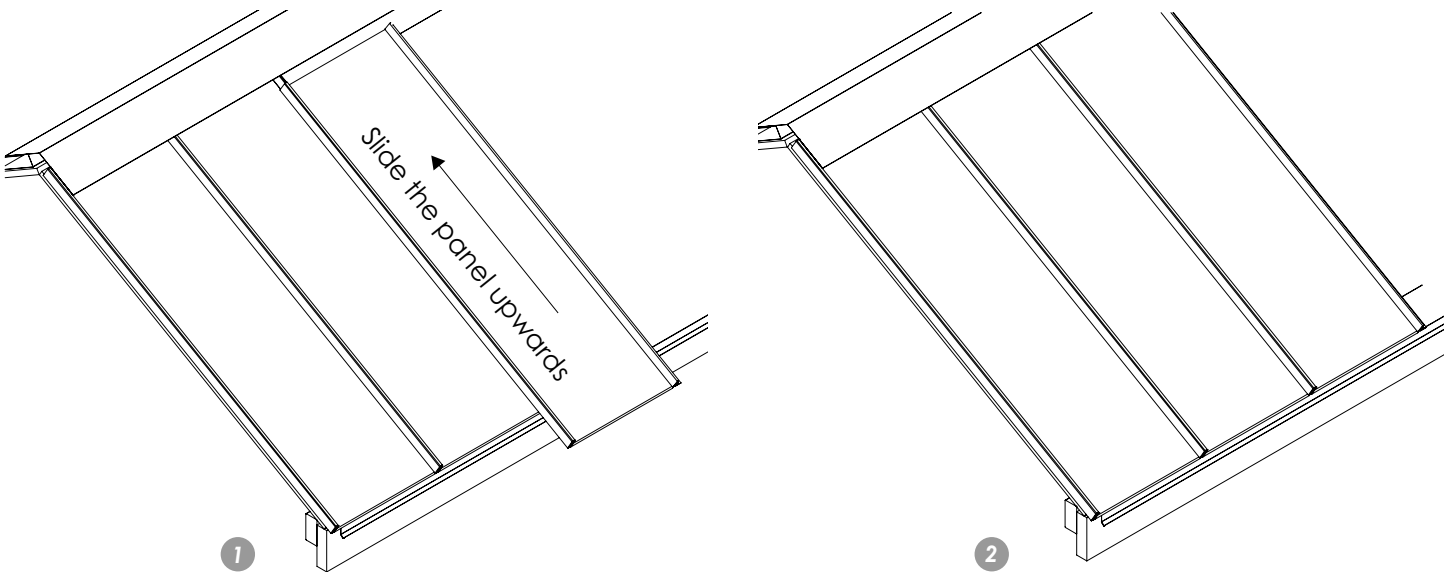


Figure 12.b | Slide the panel upwards

- In accordance with section 12.2, fasten the panel at the top with #12 x 1" or metal-wood prepainted or galvanised screws.
- Hook a clip on the male section of the panel, beginning at one end and thereafter every 24" (609 mm).
- Screw the clip correctly with two #12 x 1" pancake head screws.

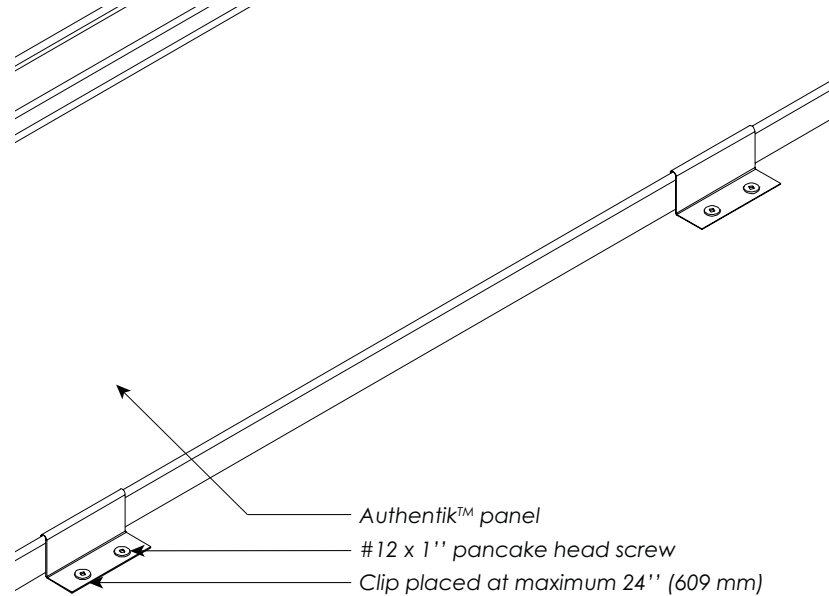


Figure 12.c | Screw positioning

12.2 INSTALLATION OF PANELS - CLIPS

Panels with clips should be screwed at the top of the sheets. Otherwise, the panel can slide down. The clips do not have the function of holding the panel in the longitudinal direction. Two options are possible:

Option 1: Screw to the edges of the openings as shown below. You will find installation details in [sections 16.1, 16.2 and 16.4.](#)

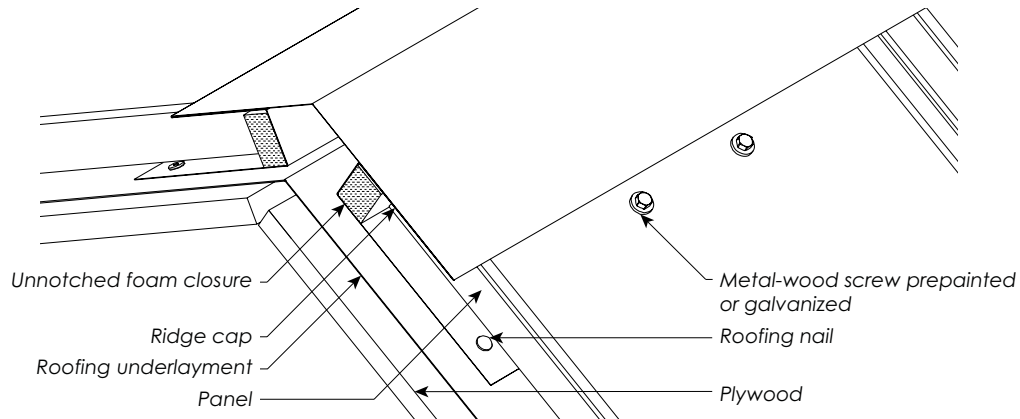


Figure 12.d | Visible screws

Option 2: Screw the panel through the « J » trim specially designed for this purpose as illustrated below. You will find installation details in [section 16.3.](#)

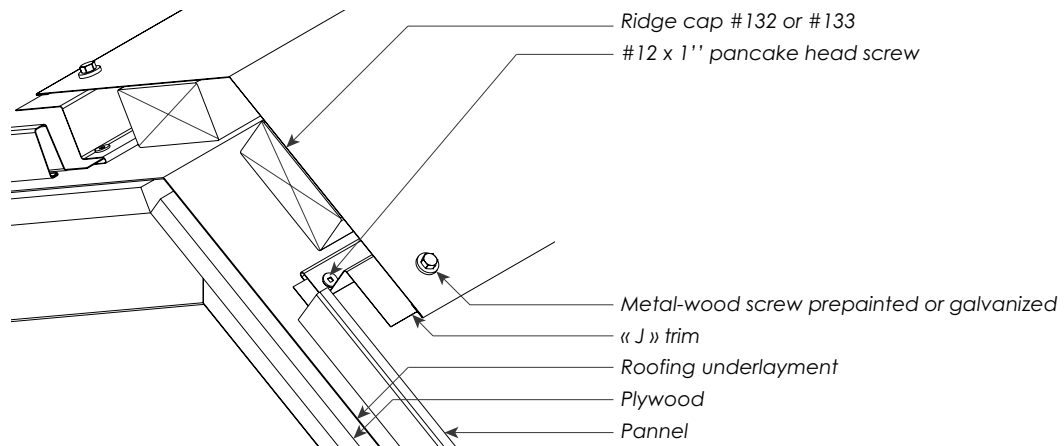


Figure 12.e | Concealed screws

Contact a specialist in steel installation to determine the number of screws required based on the length of the panel, roof slope and environmental conditions.

13. GABLE STARTER

13.1 GABLE STARTER - METHOD 1



- The roofing underlayment and the gable starter were previously installed. [Section 9.2.](#)
- Apply metal building tape on the roofing underlayment, so that it is in front of the # 12 x 1" pancake screw to protect the starter fastener from water infiltrations.
- Place the fastener so that, once installed, the panel exceeds approximately 1/4" (6 mm) from the side flashing.
- Screw the starter fastener with a # 12 x 1" pancake head screw. Be sure that it is positioned under the rib.
- Install and fasten the first panel by assembling it with the starter fastener. [Sections 11](#) or [12.](#)

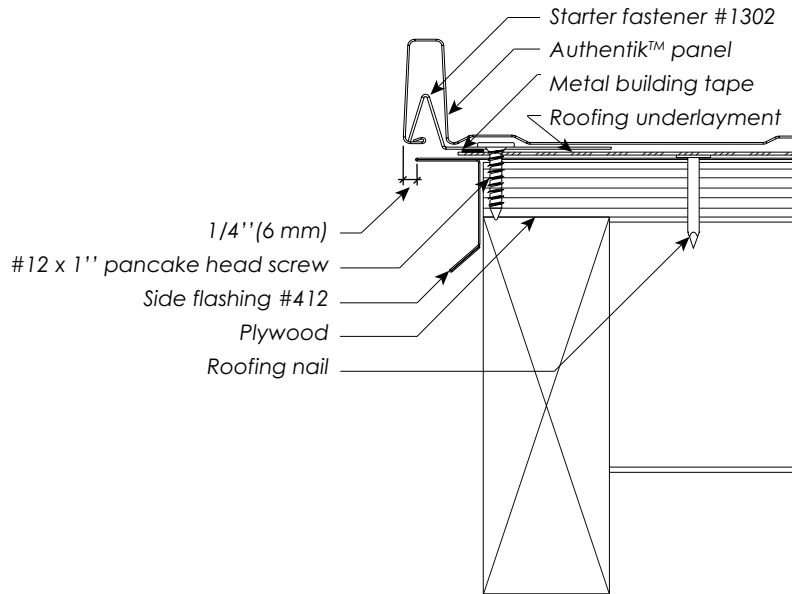


Figure 13.a | Gable starter section detail – method 1

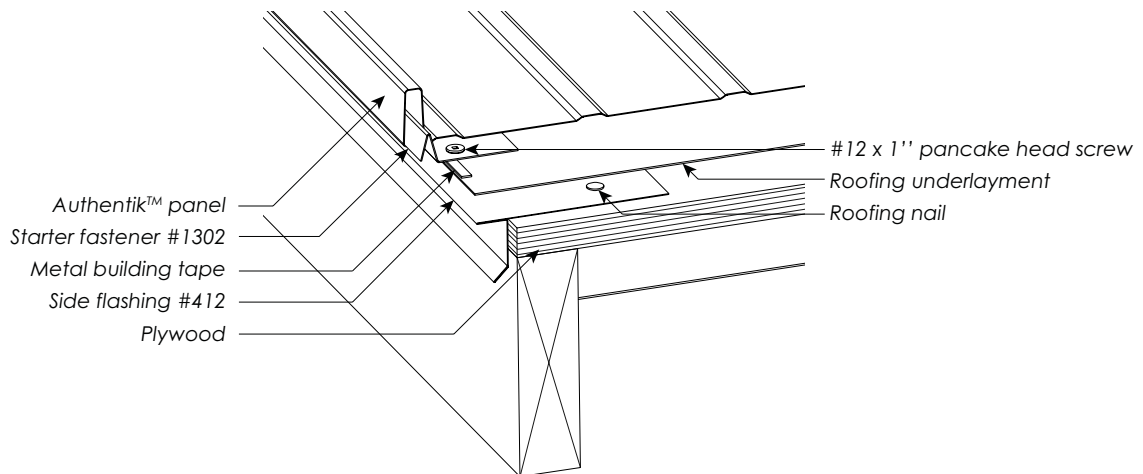
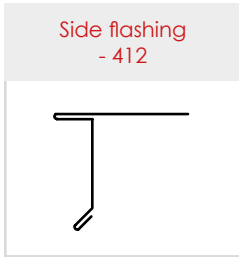


Figure 13.b | Gable starter 3D view – method 1

13.2 GABLE STARTER - METHOD 2



- The roofing underlayment and the side flashing were previously installed. [Section 9.2](#).
- Cut the panel of the female side at the required width. Plan for a 3/4" (19 mm) surplus to be folded.
- Using a pair of snips, notch the 3/4" (19 mm) surplus at every 16" (400 mm).
- Fold each 16" (406 mm) section to approximately 180 degrees on the panel length.
- Install and fasten the first panel on the roof so that the fold hooks to the side flashing and to the front flashing. [Sections 11](#) or [12](#).
- Pinch the fold on the starter using a sheet metal tool.

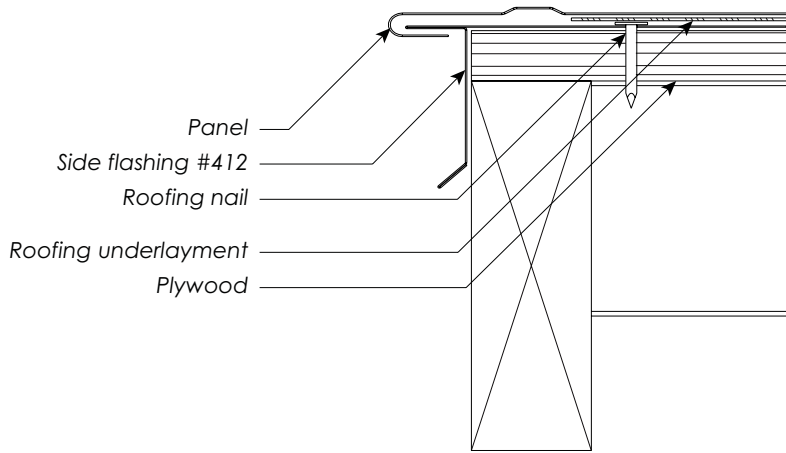


Figure 13.c | Gable starter section detail – method 2

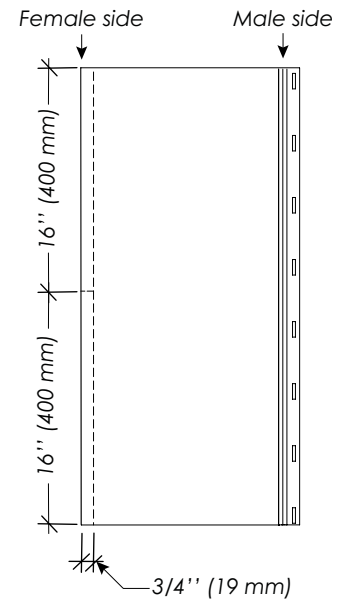


Figure 13.d | Cutout detail

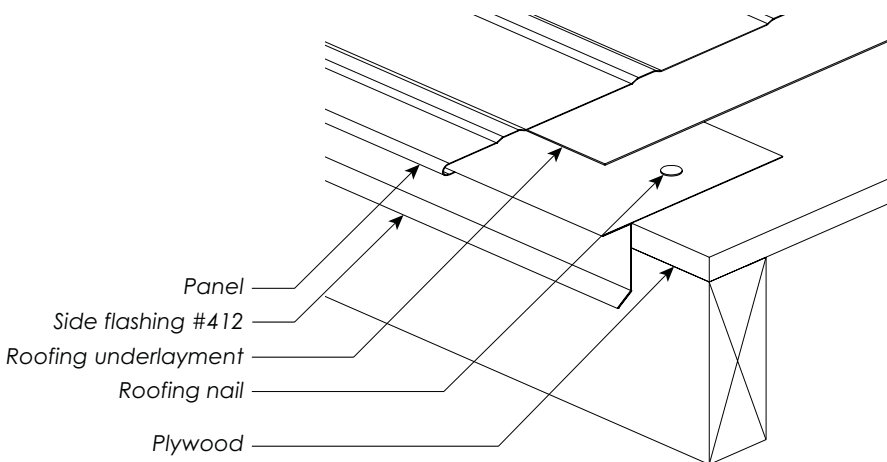


Figure 13.e | Gable starter 3D view – method 2

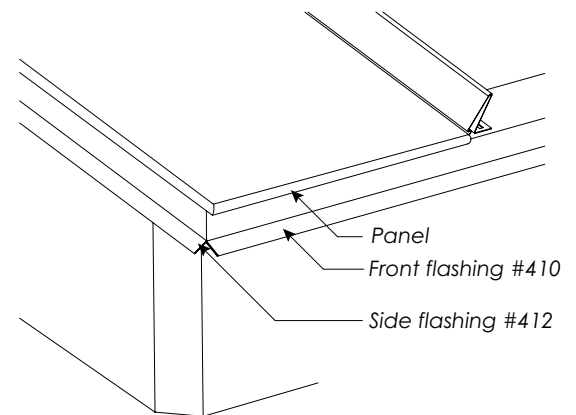


Figure 13.f | View of the lower corner

13.3 GABLE STARTER - METHOD 3



- The roofing underlayment and the side flashing were previously installed. [Section 9.2](#).
- Cut and install the first panel so that it is even with the end of the gable. [Sections 11](#) or [12](#).
- Apply metal building tape on the roofing underlayment, so that it is in front of the # 12 x 1" pancake screw to protect the fastener from water infiltrations.
- Place the fastener so that it is even with the gable end.
- Screw the fastener with a # 12 x 1" pancake head screw.
- Hook the Authentik™ gable trim to the fastener.
- Screw the Authentik™ gable trim to the gable end with a prepainted or galvanized metal-wood screw.

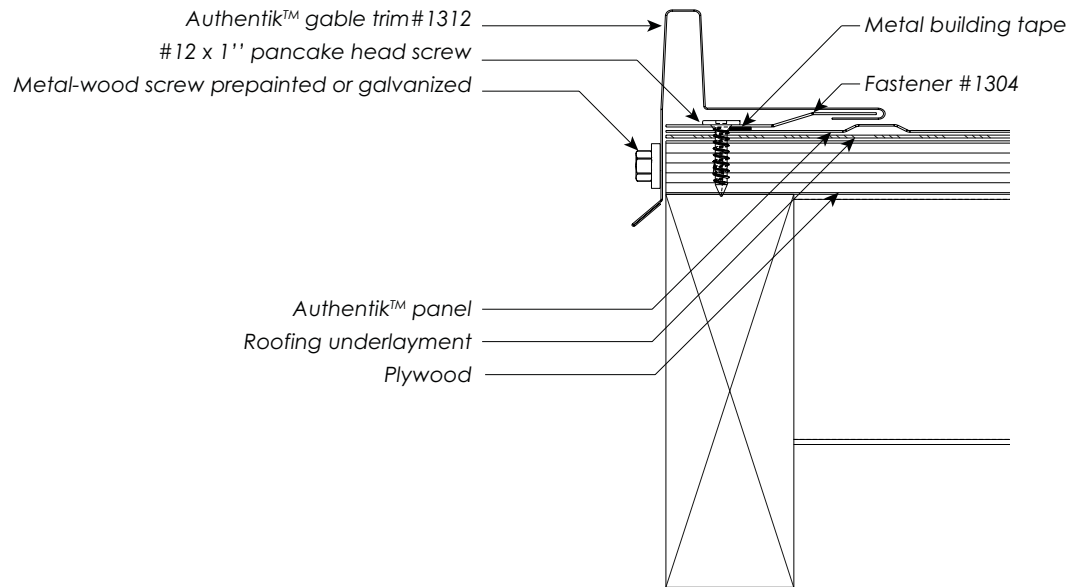


Figure 13.g | Gable starter section detail – method 3

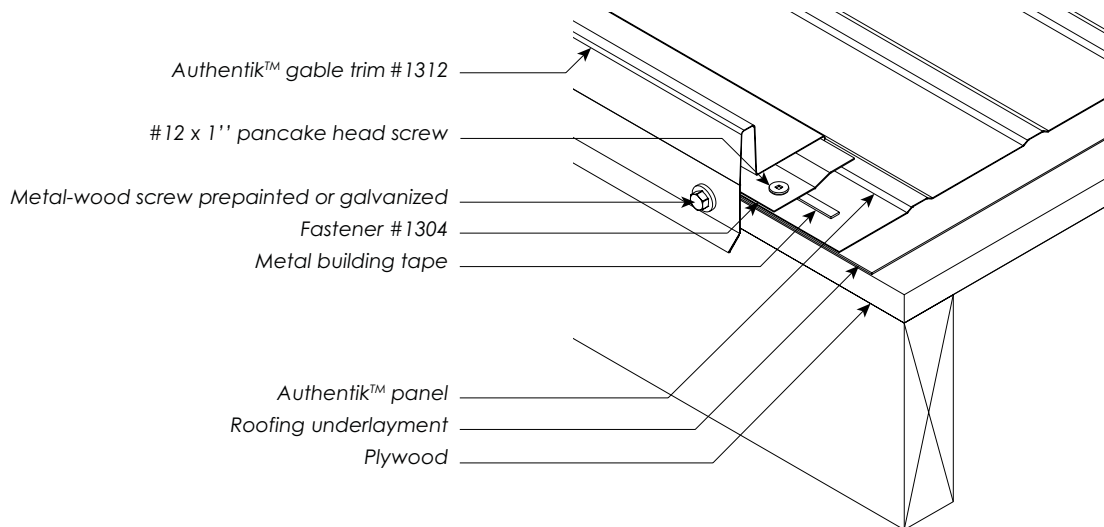


Figure 13.h | 3D view gable starter – method 3

14. GABLE END
14.1 GABLE END - METHOD 1



- The roofing underlayment has been previously installed. [Section 9.2](#).
- Cut and install the last panel so that it is even with the end of the gable. [Sections 11](#) or [12](#).
- Apply metal building tape on the roofing underlayment, so that it is in front of the # 12 x 1" pancake screw to protect the fastener from water infiltrations.
- Place the fastener so that it is even with the gable end.
- Screw the fastener with a # 12 x 1" pancake head screw.
- Hook the Authentik™ gable trim to the fastener.
- Screw the Authentik™ gable trim to the gable end with a prepainted or galvanized metal-wood screw.

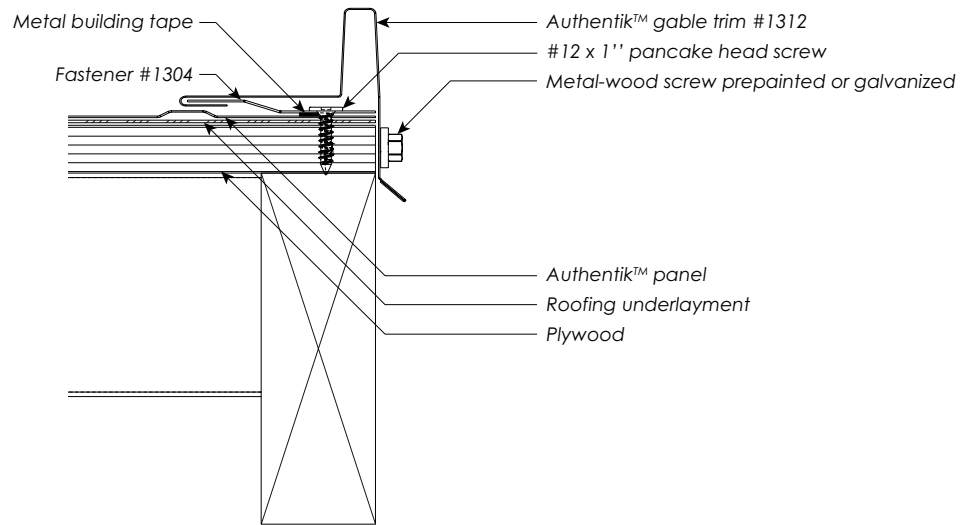


Figure 14.a | Gable end section detail – method 1

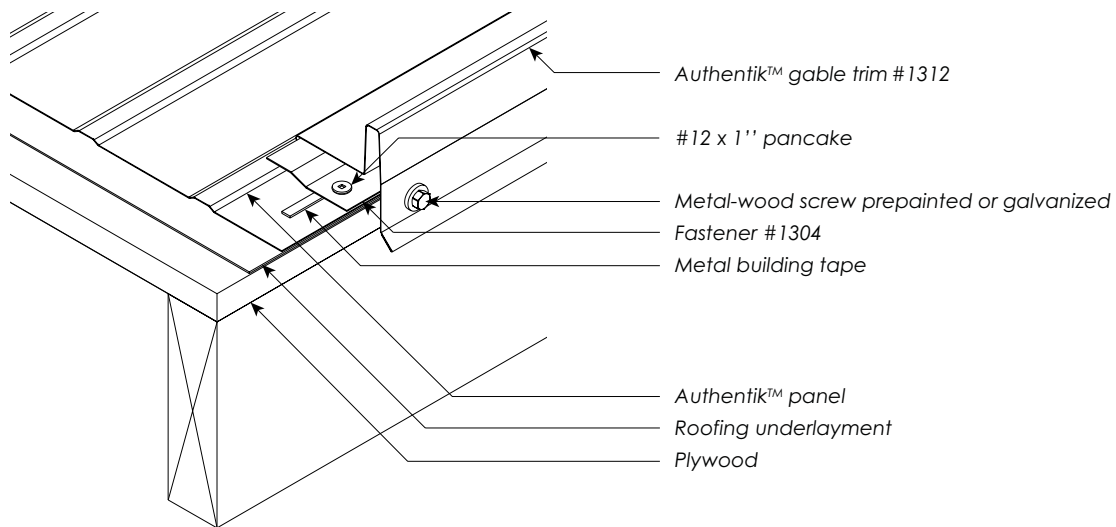
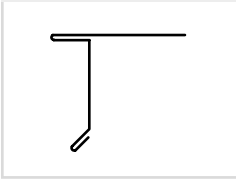


Figure 14.b | Gable end 3D view – method 1

14.2 GABLE END – METHOD 2

Side flashing - 412



- The roofing underlayment and the front flashing were previously installed. [Section 9.2](#).
- Cut the panel at the required width. Plan for a 3/4" (19 mm) surplus to be folded.
- Using a pair of snips, notch the 3/4" (19 mm) surplus at every 16" (406 mm).
- Fold each 16" (406 mm) section to approximately 180 degrees on the panel length.
- Install the last panel on the roof so that the fold hooks to the side flashing. [Sections 11](#) or [12](#).
- Pinch the fold on the side flashing using a sheet metal tool.

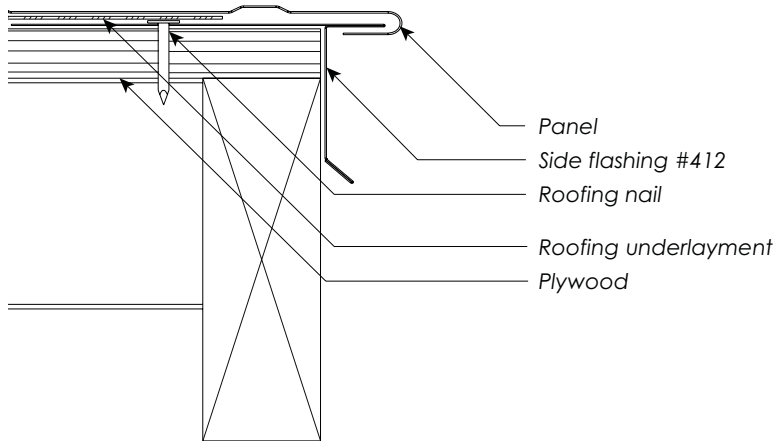


Figure 14.c | Gable end section detail – method 2



Figure 14.d | Profile section detail

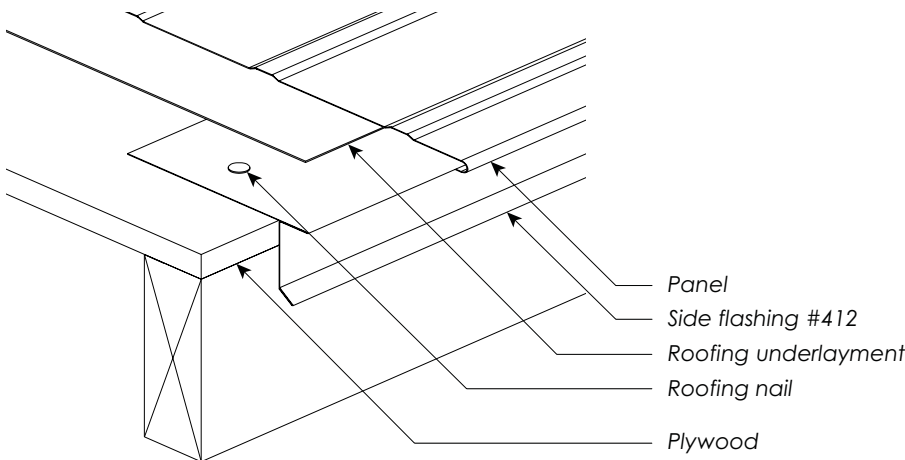


Figure 14.e | Gable end 3D view – method 2

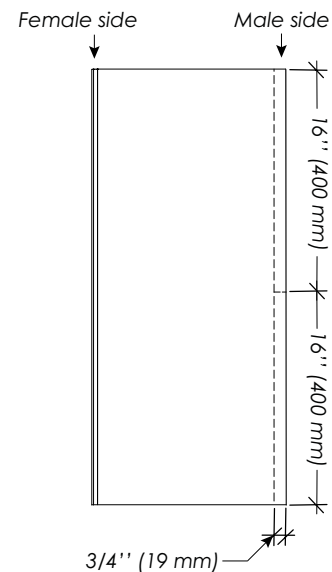
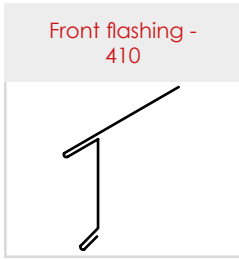


Figure 14.f | Cutout detail

15. FRONT FLASHING



- The front flashing and the roofing underlayment were previously installed. [Section 9.2.](#)
- The end of the ribs have been closed and the 180 degree angle has been previously made. [Sections 10.1](#) and [10.2.](#)
- Install and fasten the panels. [Sections 11](#) or [12.](#)

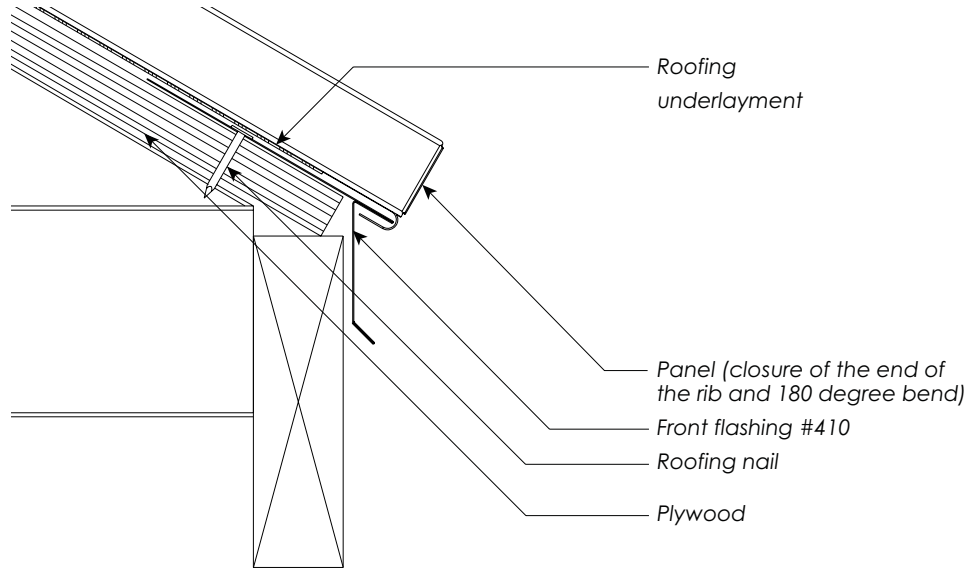


Figure 15.a | Front flashing section detail

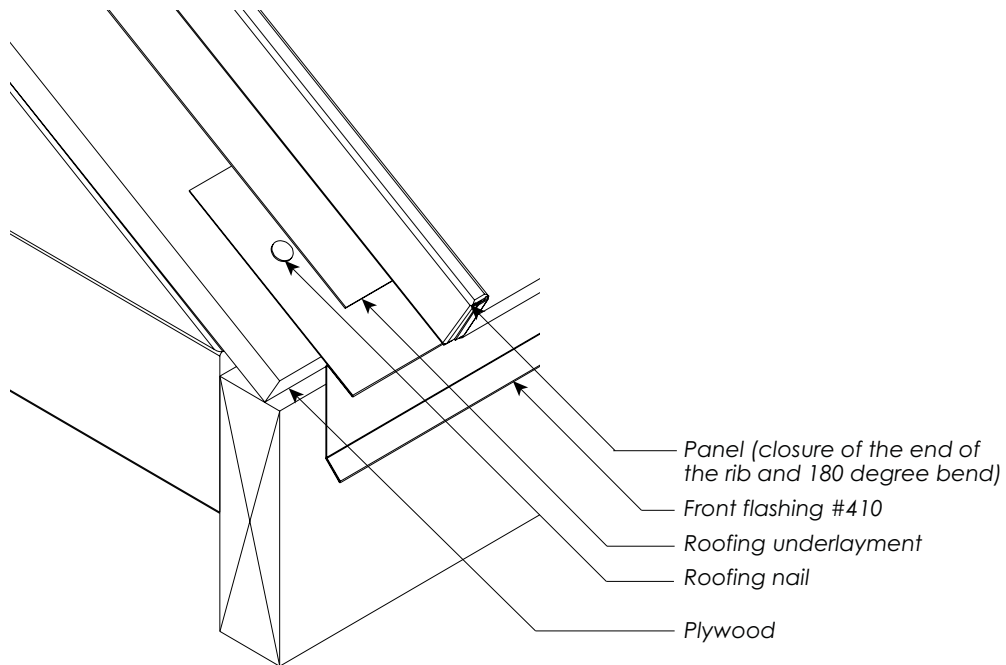


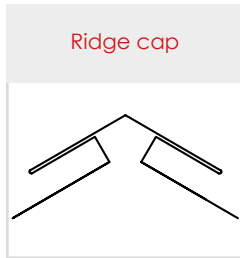
Figure 15.b | Front flashing 3D view

16. RIDGE CAP

The installation method of the ridge cap is determined by the desired aesthetic, by your preferences in terms of installation and by the peculiarities specific to your roof (roof pitch) and according to the type of panel installed, clip or strip nail.

16.1 RIDGE CAP – METHOD 1

This type of ridge cap needs to be installed on a 1.5/12 to 9/12 slope.



- The roofing underlayment and the ridge cap were previously installed. [Section 9.2.](#)
- Insert an unnotched foam closure strip into the opening of the ridge cap.
- Install and fasten the panels. [Sections 11](#) or [12.](#)

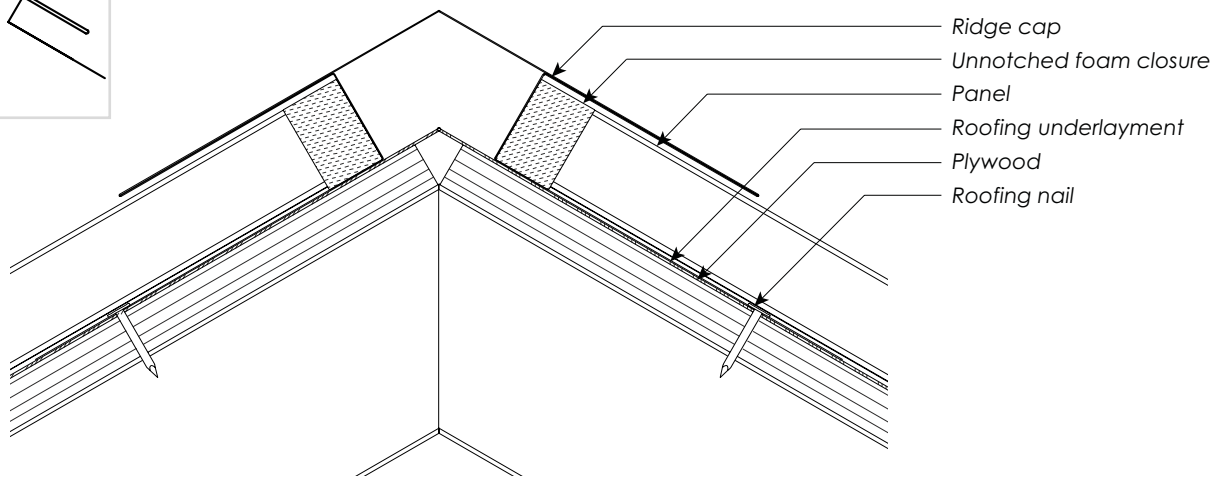


Figure 16.a | Ridge cap section detail – method 1

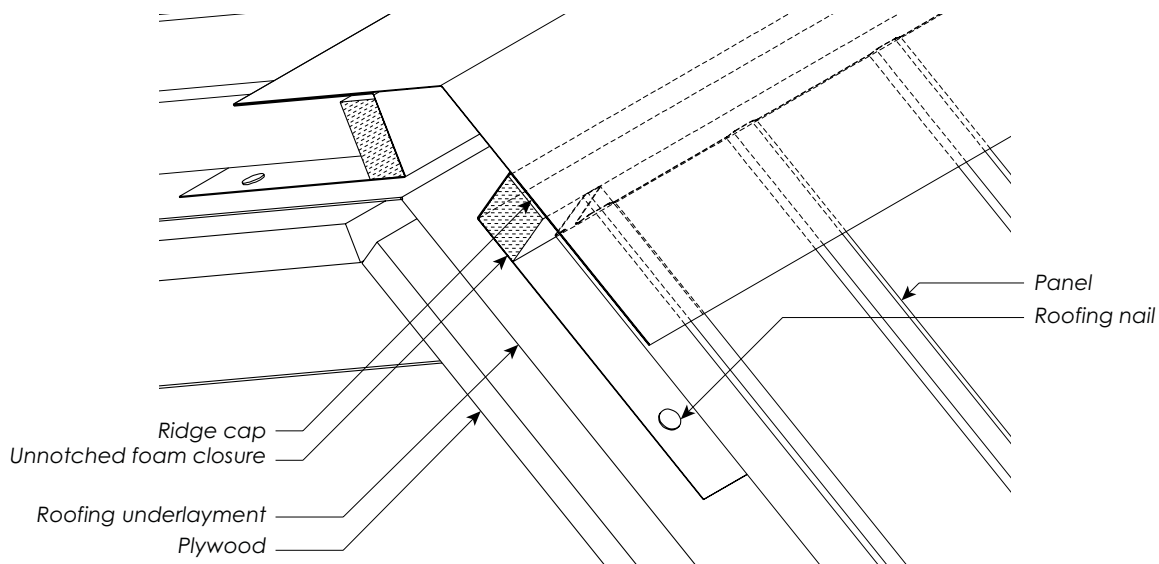
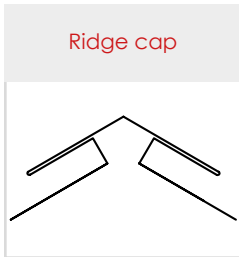


Figure 16.b | Ridge cap 3D view – method 1

16.2 RIDGE CAP – METHOD 2

This type of ridge cap needs to be installed on a 1.5/12 to 9/12 slope.



- The roofing underlayment and the ridge cap were previously installed. [Section 9.2.](#)
- The 90 degree fold was previously made. [Section 10.3.](#)
- Install and fasten the panels. [Sections 11 or 12.](#)

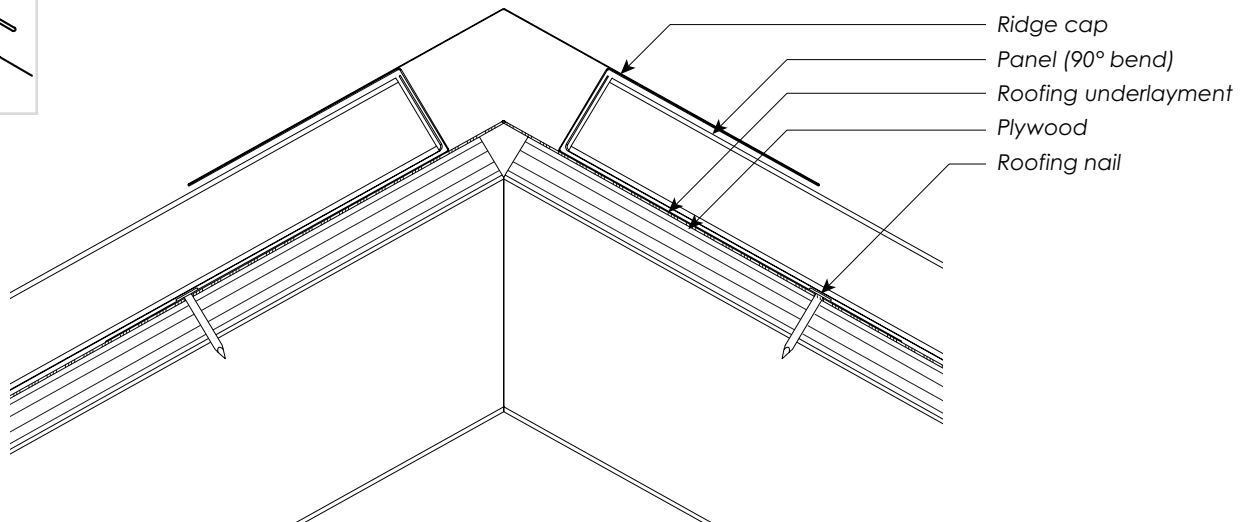


Figure 16.c | Ridge cap section detail – method 2

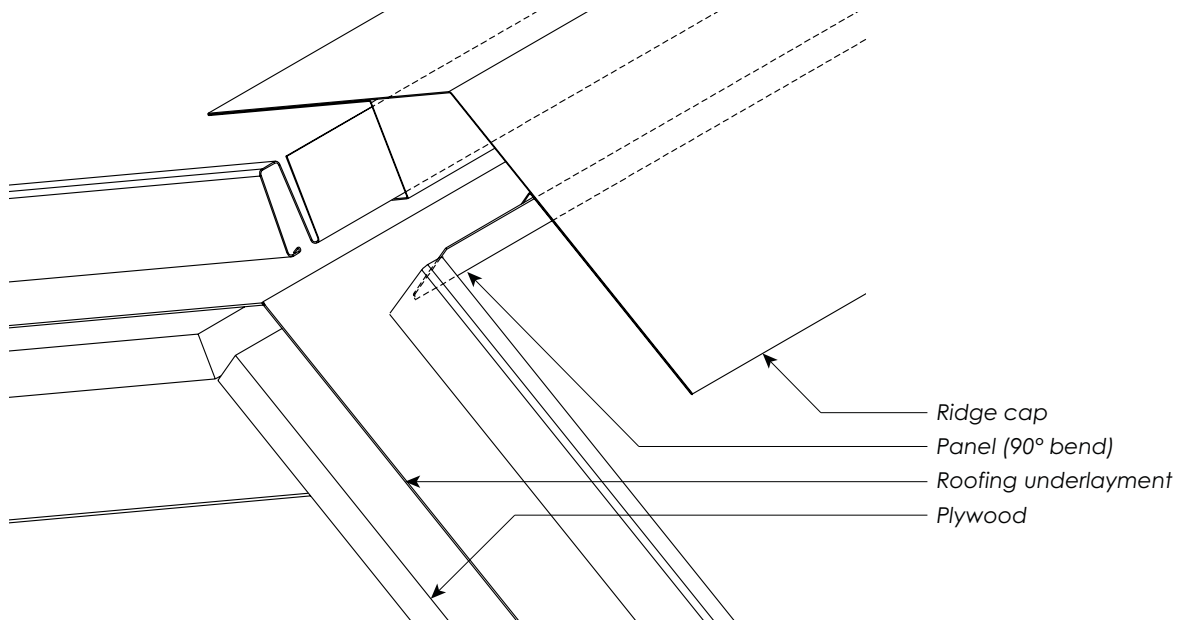
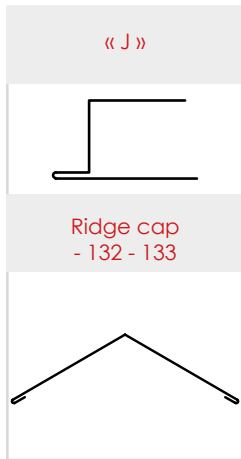


Figure 16.d | Ridge cap 3D view – method 2

16.3 RIDGE CAP – METHOD 3

This method is mainly used for panels with clips, it allows to hide the screws that hold the panels longitudinally as explained in section 12.1.



- The roofing underlayment was previously installed. [Section 9.2](#)
- Be sure to measure the location of the « J » trim with the ridge cap.
- Nail the « J » trim using roofing nails. Do not install the ridge cap.
- Apply caulking in the fold of the « J » trim.
- The panels were previously cut without folding. [Section 10.4](#).
- Install and fasten the panel so that the 3/4" (19 mm) flat section slides into the fold of the « J » trim. [Sections 11](#) or [12](#).
- Screw through the fold of the « J » trim to immobilize the panel.
- Apply caulking where the panel meets the « J » trim.
- If needed, install two pieces of wood to support the ridge cap.
- Hook the half ridge cap to the « J » trim and screw them together with pre-painted or galvanized metal-wood screws.

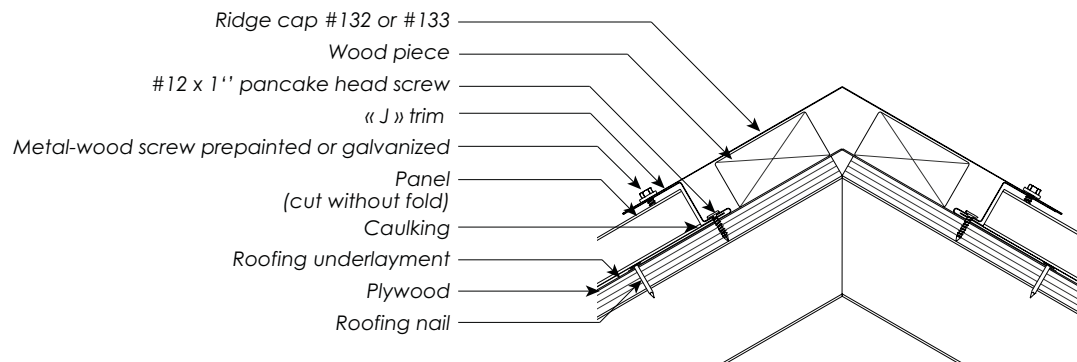


Figure 16.e | Ridge cap section detail – method 3

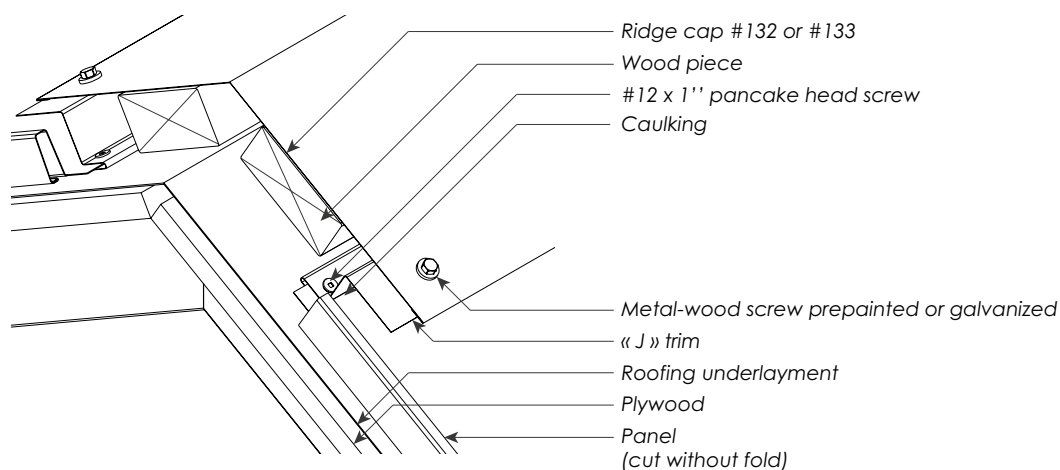
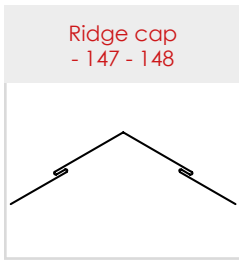


Figure 16.f | Ridge cap 3D view – method 3

16.4 RIDGE CAP – METHOD 4



- The roofing underlayment and the ridge cap were previously installed. [Section 9.2](#).
- The panels were previously cut without folding. [Section 10.4](#).
- The closure of the extremity of the rib was previously made by adding caulking in the extremity. [Section 10.1](#).
- Apply caulking into the fold of the ridge cap.
- Install and fasten the panels. [Sections 11](#) or [12](#).

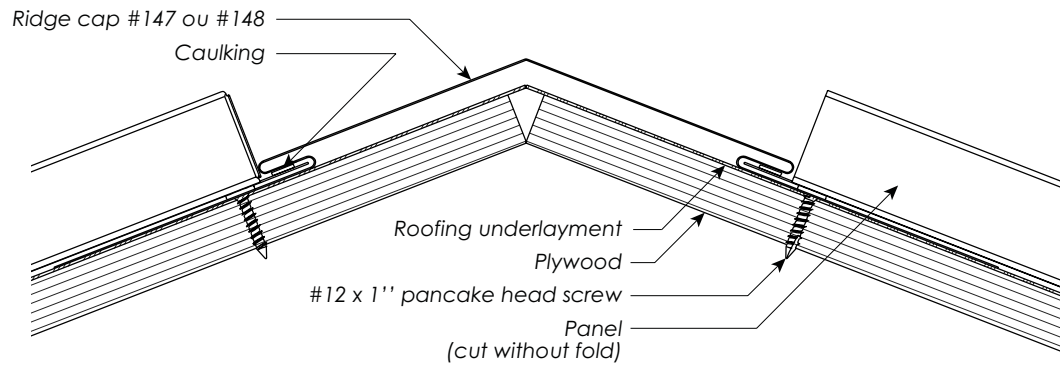


Figure 16.g | Ridge cap section detail – method 4

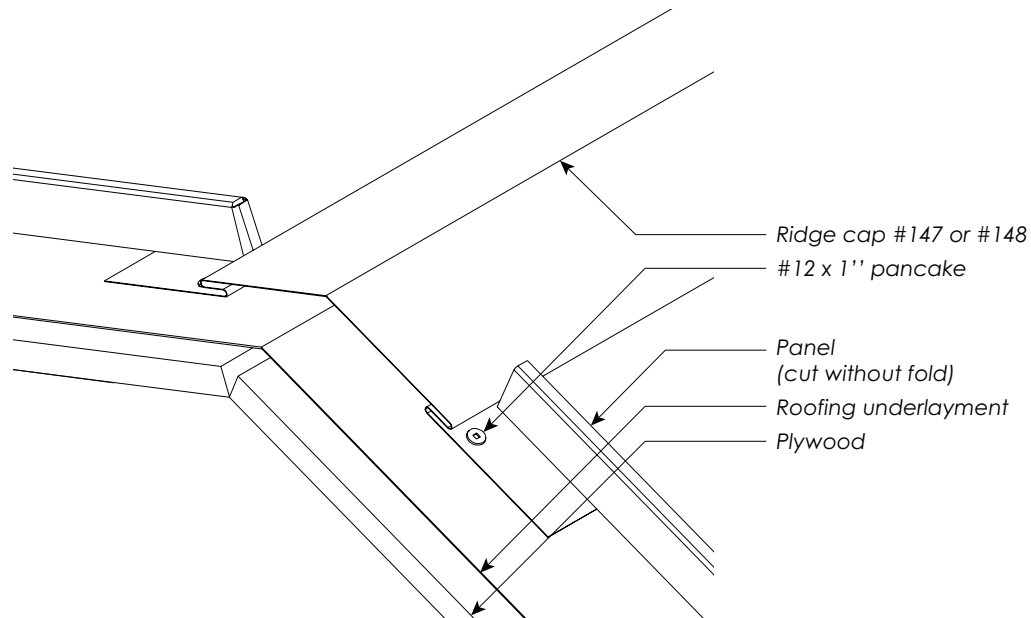
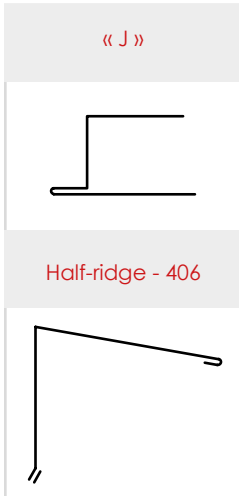


Figure 16.h | Ridge cap 3D view – method 4

17. HALF RIDGE



- The roofing underlayment was previously installed. [Section 9.2](#)
- Determine the location of the « J » trim with the half-ridge.
- Fasten the « J » trim in place using roofing nails. Do not install the half-ridge.
- Apply caulking in the fold of the « J » trim.
- The panels were previously cut without folding. [Section 10.4](#).
- Install and fasten the panel so that the 3/4" (19 mm) flat section slides into the fold of the « J » trim. [Sections 11](#) or [12](#).
- Screw through the fold of the « J » trim to immobilize the panel.
- Apply caulking where the panel meets the « J » trim.
- Hook the half ridge to the « J » trim. Screw the half ridge to the eave with a pre-painted or galvanized metal-wood screw.

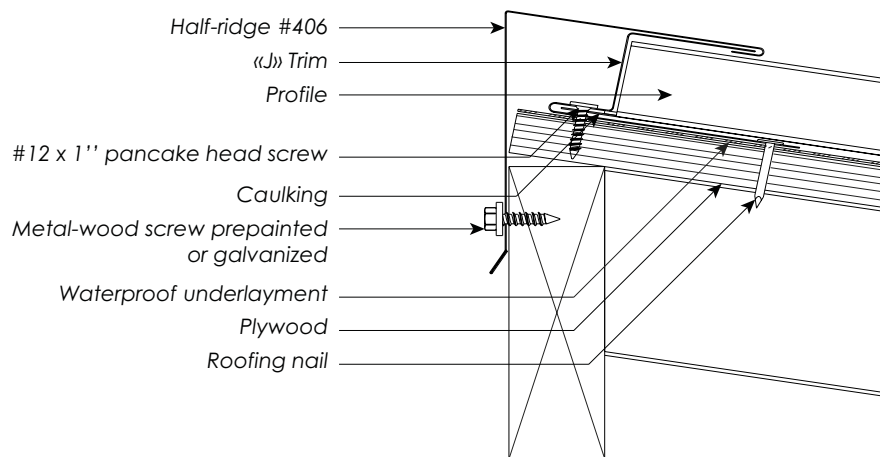


Figure 17.a | Half ridge section detail – method 1

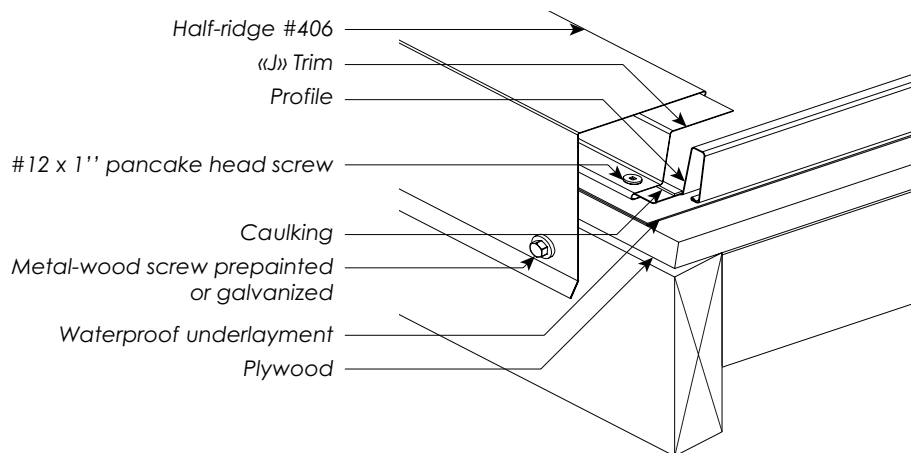


Figure 17.b | Half ridge 3D view – method 1

18. VALLEY



- The roofing underlayment and the valley were previously installed. [Section 9.2](#).
- Lay down a second layer of waterproof underlayment to overlap the valley flashing on both side.
- The closure of the extremity of the rib and the 180 degree fold were previously made. [Sections 10.1](#) and [10.2](#).
- Install and fasten the panels. [Sections 11](#) or [12](#).

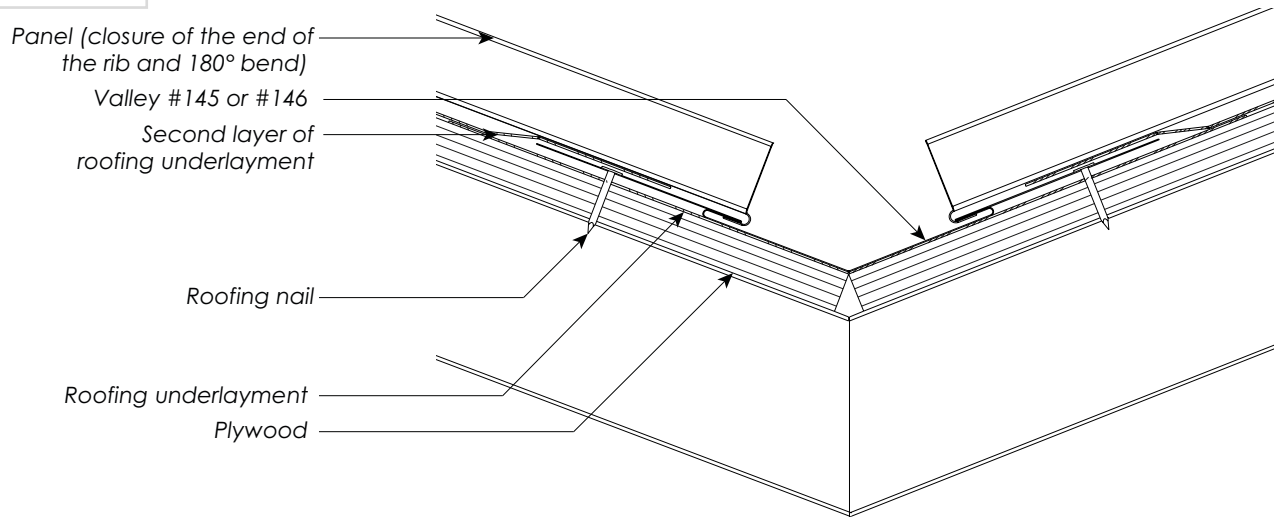


Figure 18.a | Valley section detail

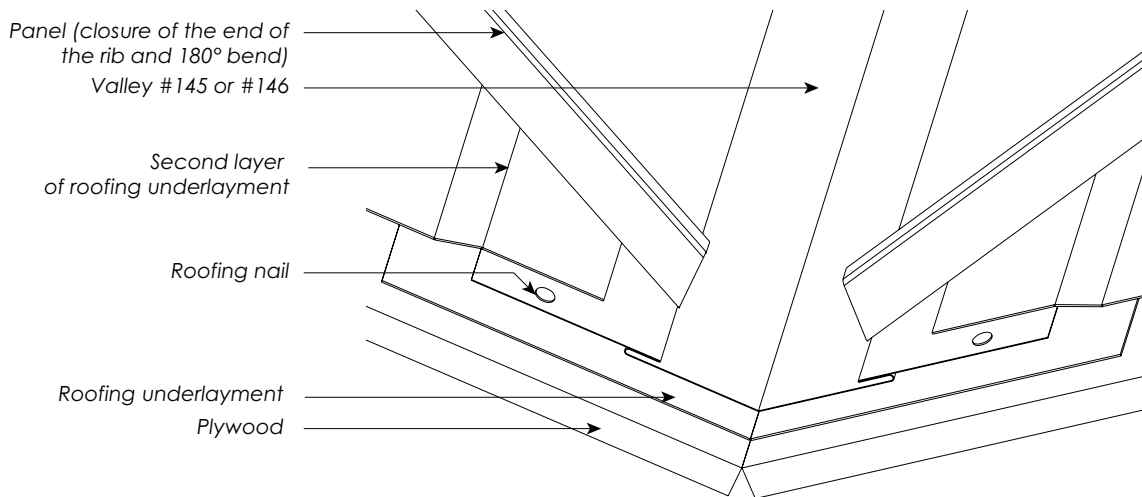
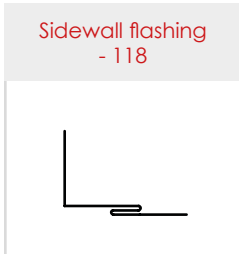


Figure 18.b | Valley 3D view

19. SIDEWALL FLASHING

The installation method of the sidewall flashing is determined by the desired aesthetic, by your preferences in terms of installation and by the peculiarities specific to your roof.

19.1 SIDEWALL FLASHING – METHOD 1



- The roofing underlayment and the sidewall flashing were previously installed. [Section 9.2](#).
- Be sure that the roofing underlayment goes up on the wall (about 4" to 6" (102 to 152 mm)) higher than the moulding.
- Apply caulking in the fold of the sidewall flashing.
- Cut the panel at the required width.
- Insert the panel into the fold of the sidewall flashing.
- Install and fasten the panel. [Sections 11](#) or [12](#).

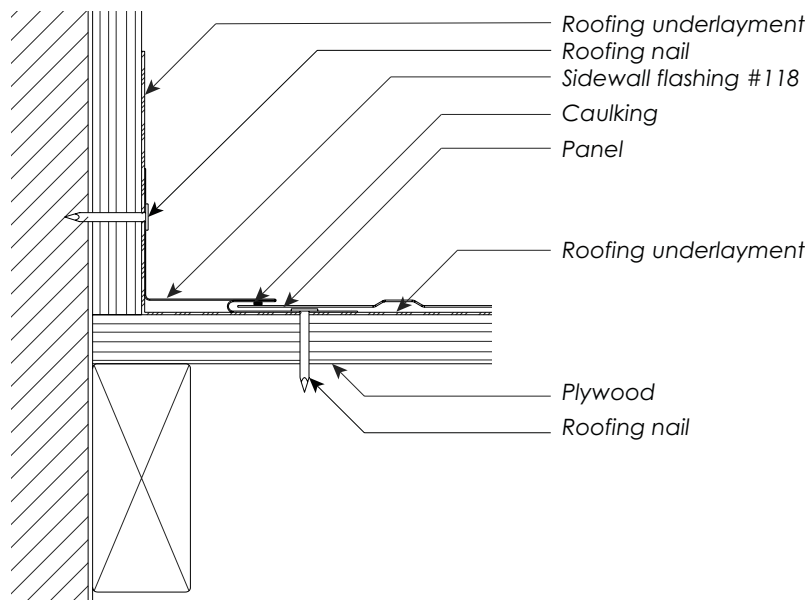


Figure 19.a | Sidewall flashing section detail – method 1

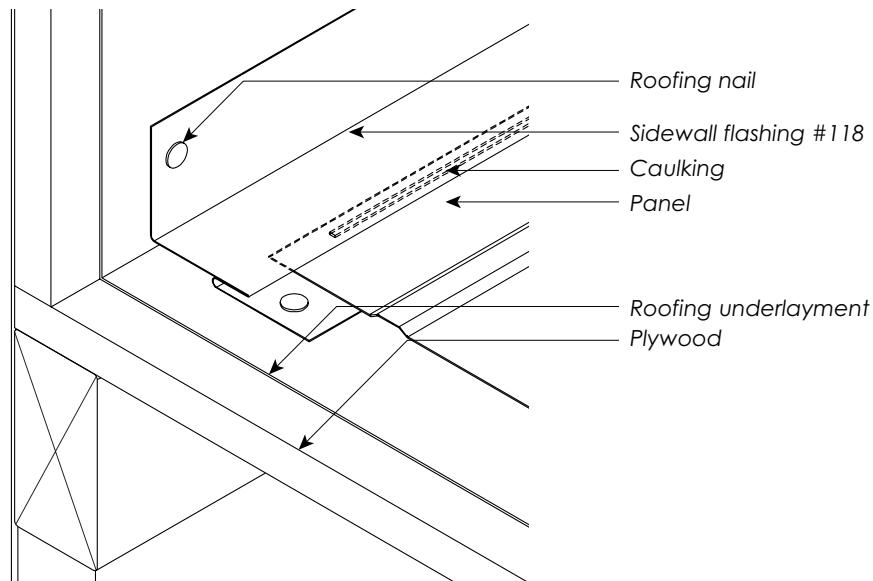
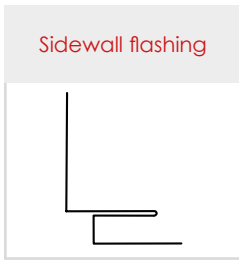


Figure 19.b | Sidewall flashing 3D view – method 1

19.2 SIDEWALL FLASHING – METHOD 2



- The roofing underlayment and the sidewall flashing were previously installed. [Section 9.2](#).
- Be sure that the roofing underlayment goes up on the wall (about 4" to 6" (102 to 152 mm)) higher than the moulding.
- Cut the panel at the required width. Plan for a 1 1/4" (32 mm) surplus to be folded at 90 degree all along the panel.
- Using a pair of snips, notch 1 1/4" (32 mm) deep at every 16" (406 mm) to do the 90 degree bend.
- Bend a 90 degree fold at every 16" (406 mm) section on the panel length.
- Apply two rows of metal building tape on the face of the 90 degree bend as shown on [Figure 19.c](#).
- Insert the panel inside the opening.
- Install and fasten the panels. [Sections 11](#) or [12](#).

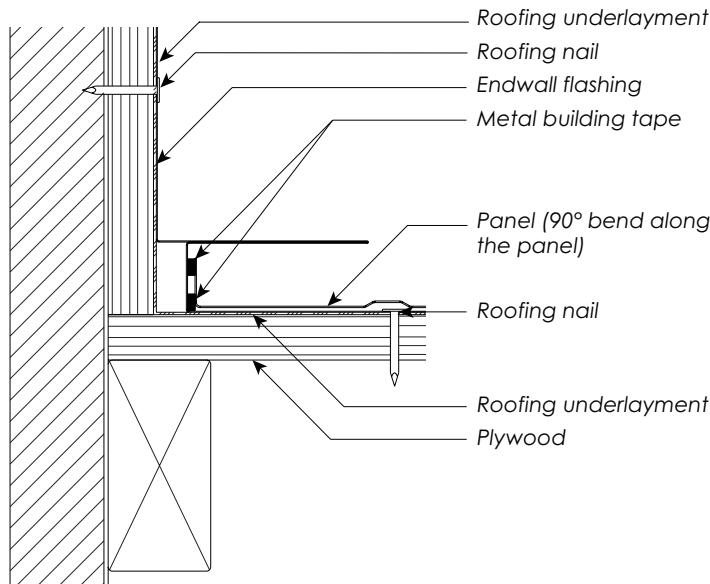


Figure 19.c | Sidewall flashing section detail – method 2

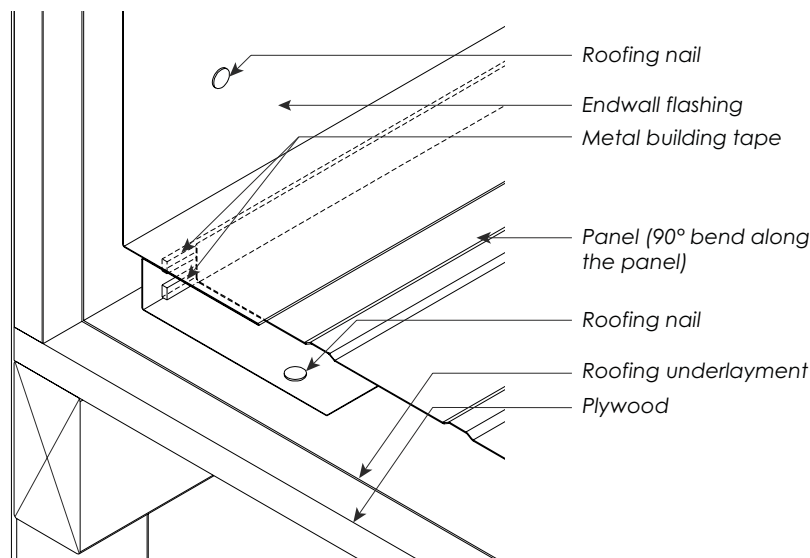
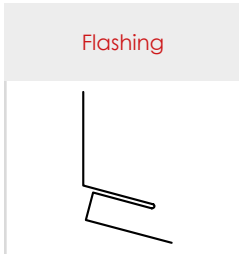


Figure 19.d | Sidewall flashing 3D view – method 2

20. END WALL

The installation method of the end wall is determined by the desired aesthetic, by your preferences in terms of installation, by the peculiarities specific to your roof and by the type of panel installed, with clip or nail strip.

20.1 END WALL - METHOD 1



- The roofing underlayment and the flashing were previously installed. [Section 9.2](#).
- Be sure that the roofing underlayment goes up on the wall (about 4" to 6" (102 to 152 mm)) higher than the moulding.
- Insert an unnotched foam closure strip into the opening.
- Install and fasten the panels. [Sections 11](#) or [12](#).

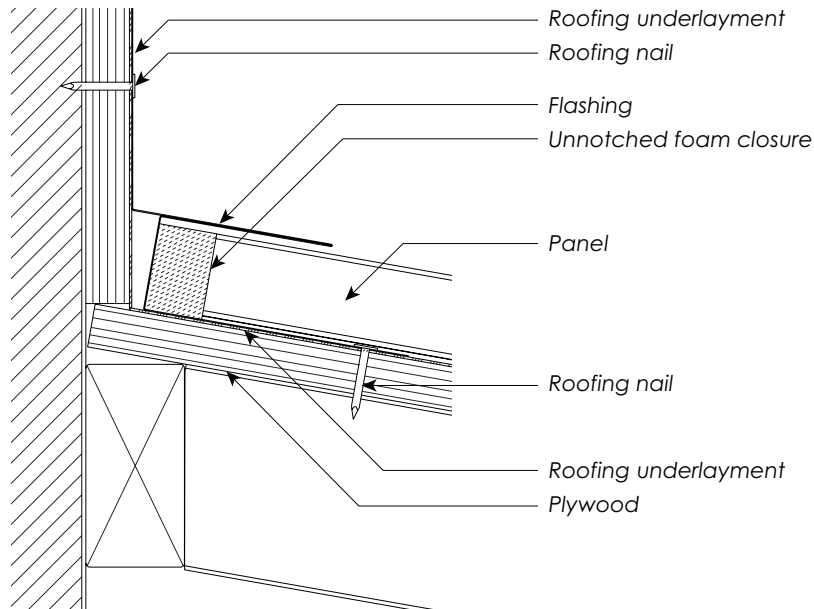


Figure 20.a | End wall section detail – method 1

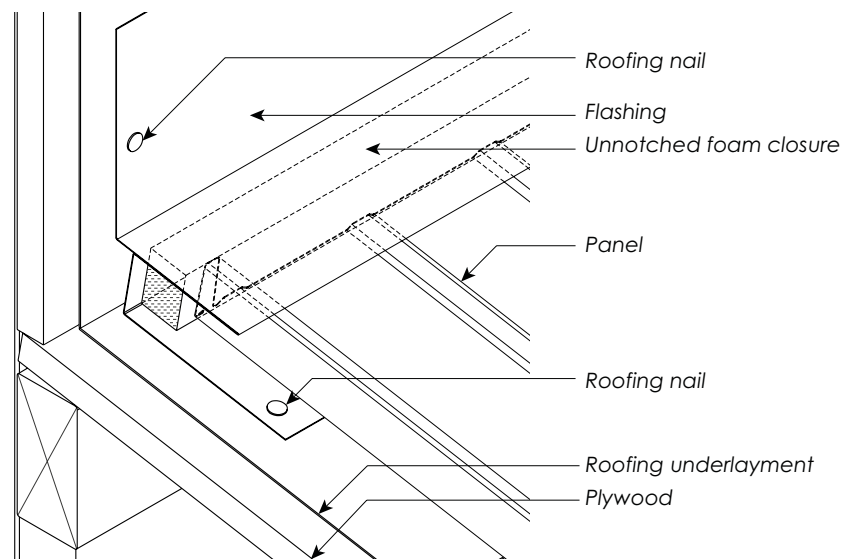
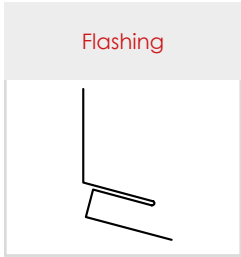


Figure 20.b | End wall 3D view – method 1

20.2 END WALL – METHOD 2



- The roofing underlayment and flashing were previously installed. [Section 9.2](#).
- Be sure that the roofing underlayment goes up on the wall (about 4" to 6" (102 to 152 mm)) higher than the moulding.
- The 90 degree bend was previously made. [Section 10.3](#).
- Install and fasten the panels. [Sections 11](#) or [12](#).

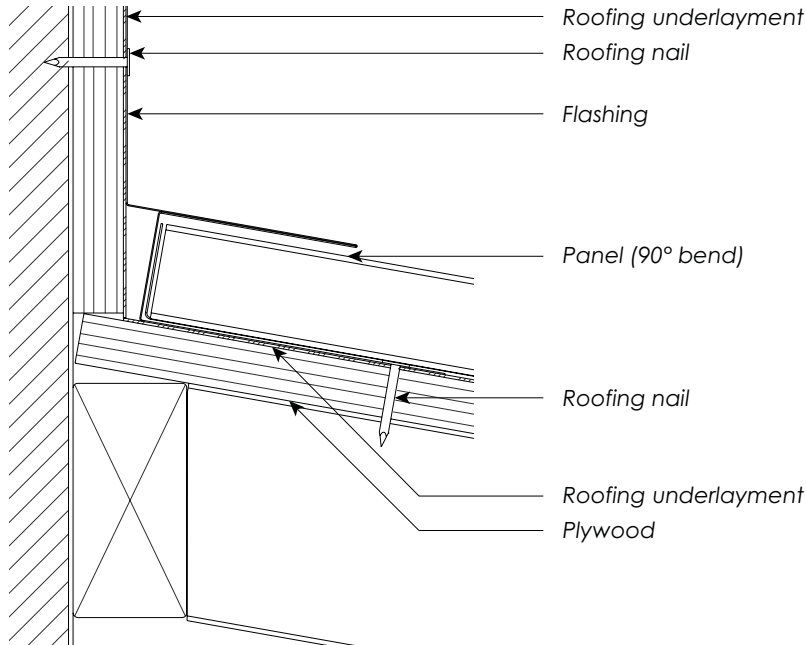


Figure 20.c | End wall section detail – method 2

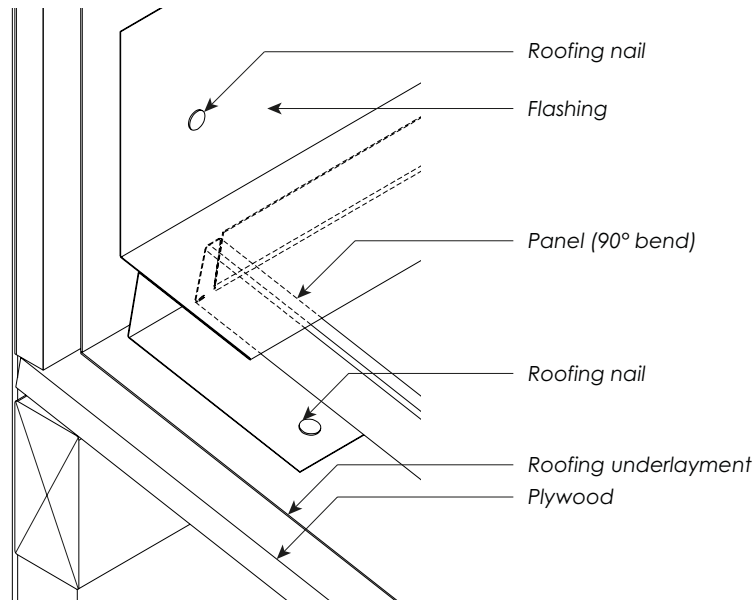
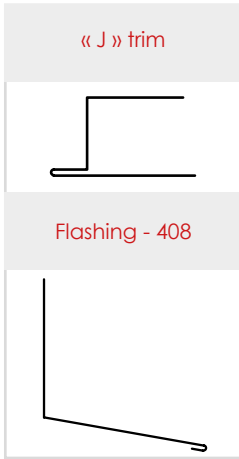


Figure 20.d | End wall 3D view – method 2

20.3 END WALL - METHOD 3

This method is specifically used when installing panels with clips, allowing the panels to be screwed longitudinally as explained in section 12.2.



- The roofing underlayment was previously installed. [Section 9.2](#).
- Be sure that the roofing underlayment goes up on the wall (about 4" to 6" (102 to 152 mm)) higher than the moulding.
- Determine the location of the « J » trim with the flashing.
- Fasten the « J » trim in place using roofing nails. Do not install the flashing.
- Apply caulking into the fold of the « J » trim.
- The panels were previously cut without folding. [Section 10.4](#).
- Install and fasten the panel. [Sections 11 or 12](#).
- Apply caulking where the panel meets the « J » trim.
- Hook the flashing to the « J » trim and fasten it to the wall.

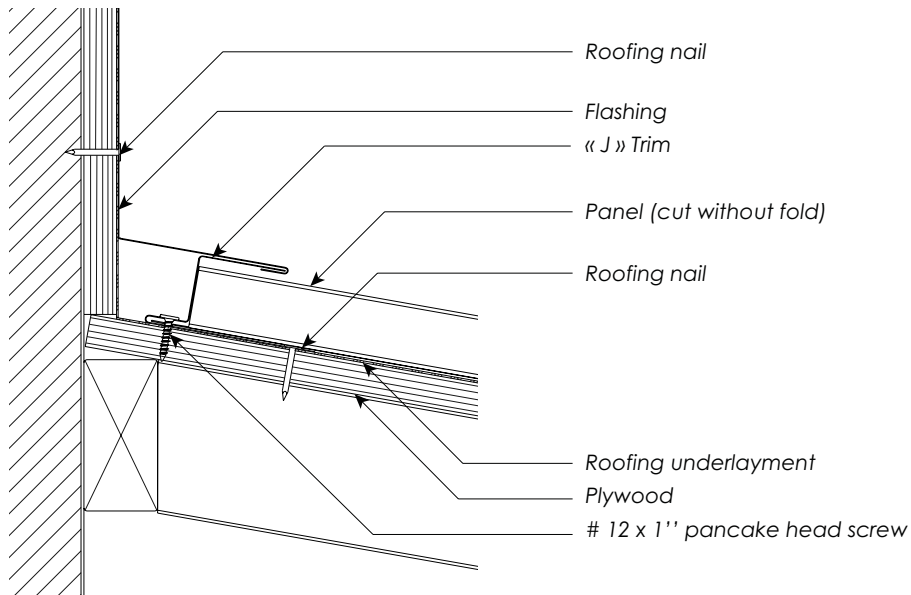


Figure 20.e | End wall section detail – method 3

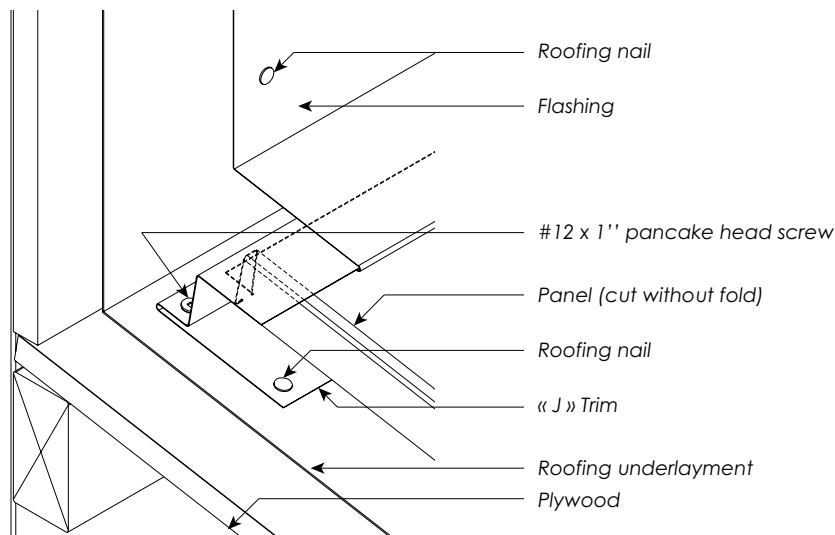
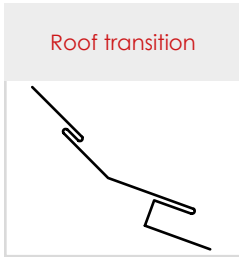


Figure 20.f | End wall 3D view – method 3

21. ROOF TRANSITION

21.1 ROOF TRANSITION - METHOD 1



- The roofing underlayment and roof transition were previously installed. [Section 9.2](#).
- Be sure to have a second layer of roofing underlayment to overlap the upper part of the roof transition trim.
- Upper panels must be installed before the lower panels to avoid damage when moving on the lower panels.
- The closure of the extremity of the rib and the 180 degree fold were previously made on the upper panels. [Sections 10.1](#) and [10.2](#).
- Install and fasten the upper panels. [Sections 11](#) or [12](#).
- Insert an unnotched foam closure strip into the opening.
- Install and fasten the lower panels. [Sections 11](#) or [12](#).

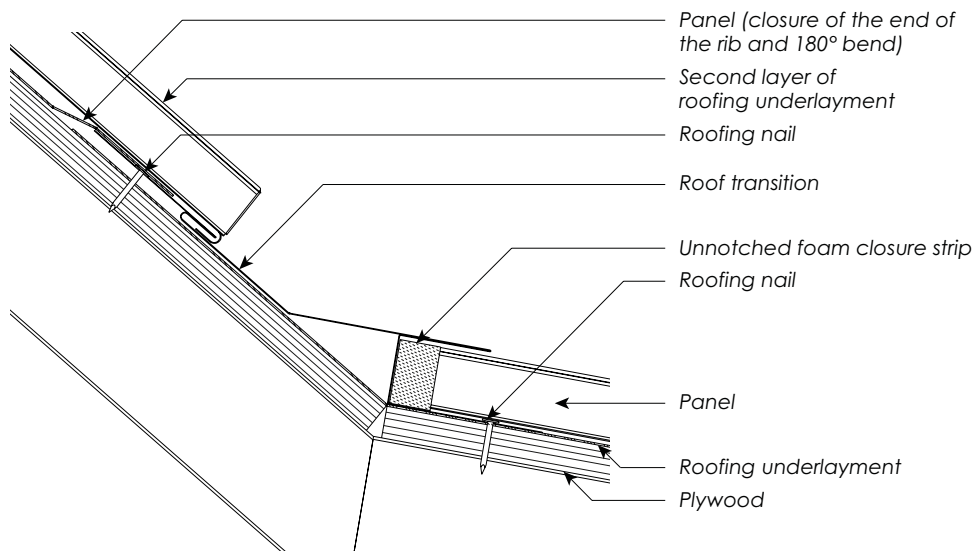


Figure 21.a | Roof transition section detail – method 1

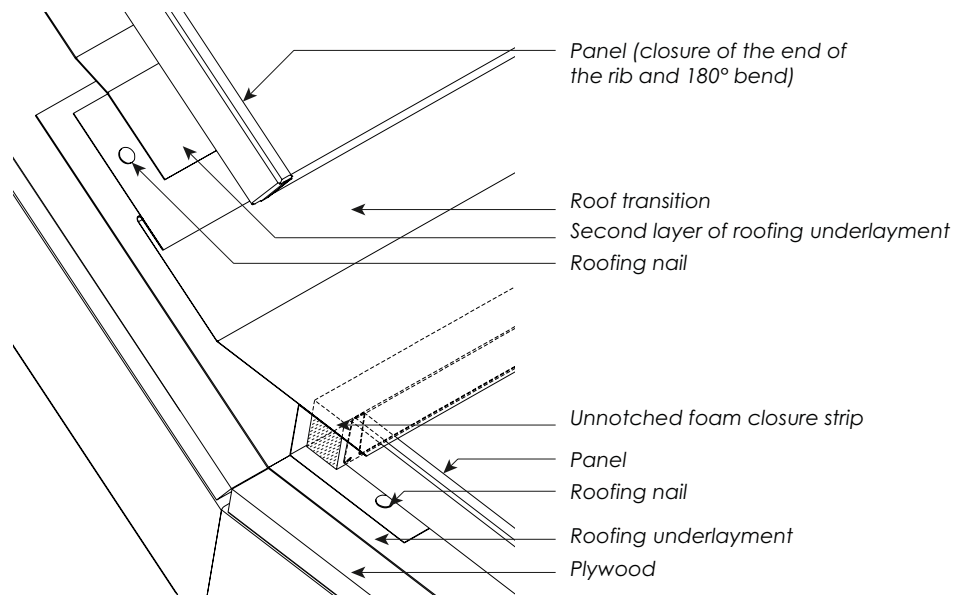
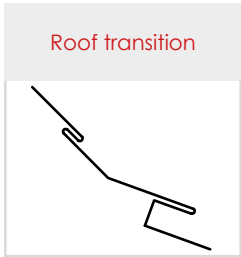


Figure 21.b | Roof transition 3D view – method 1

21.2 ROOF TRANSITION – METHOD 2



- The roofing underlayment and roof transition were previously installed. [Section 9.2](#).
- Be sure to have a second layer of roofing underlayment to overlap the upper part of the roof transition.
- Upper panels must be installed before the lower panels to avoid damage when moving on the lower panels.
- The closure of the extremity of the rib and the 180 degree fold were previously made on the upper panels. [Sections 10.1 and 10.2](#).
- Install and fasten the upper panels. [Sections 11 or 12](#).
- The 90 degree fold was previously made. [Section 10.3](#).
- Install and fasten the lower panels. [Sections 11 or 12](#).

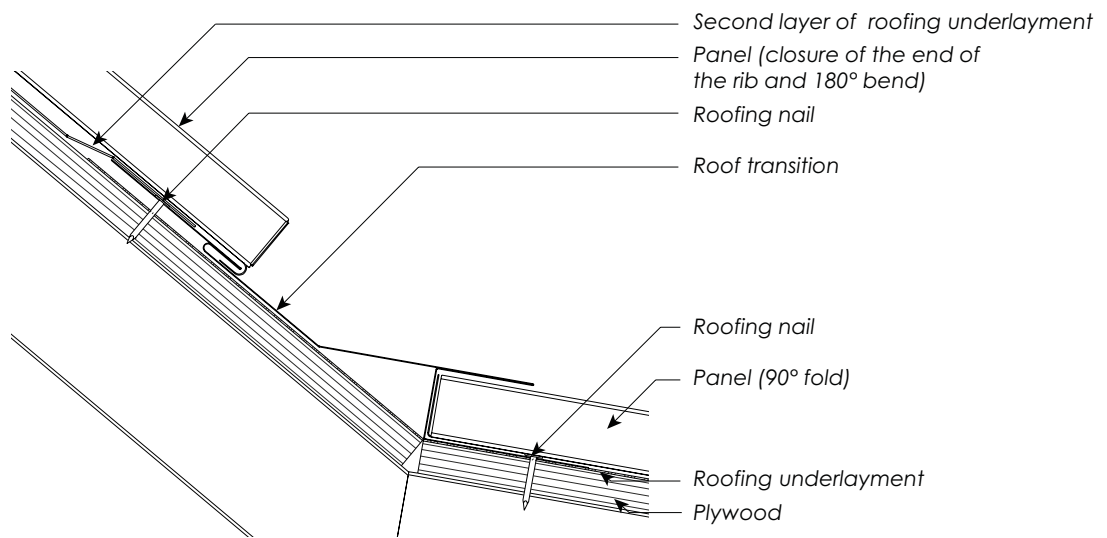


Figure 21.c | Roof transition section detail – method 2

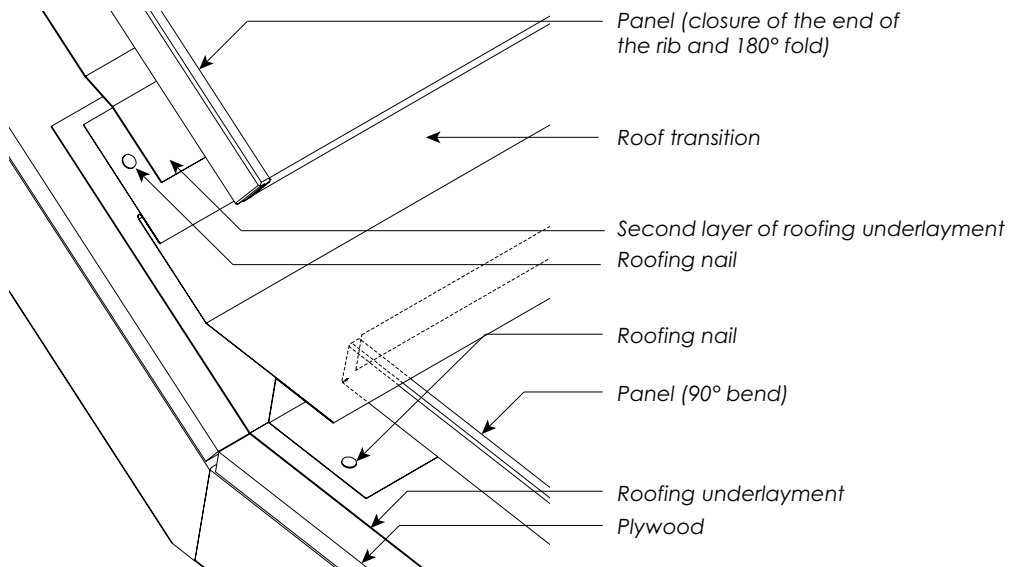


Figure 21.d | Roof transition 3D view – method 2