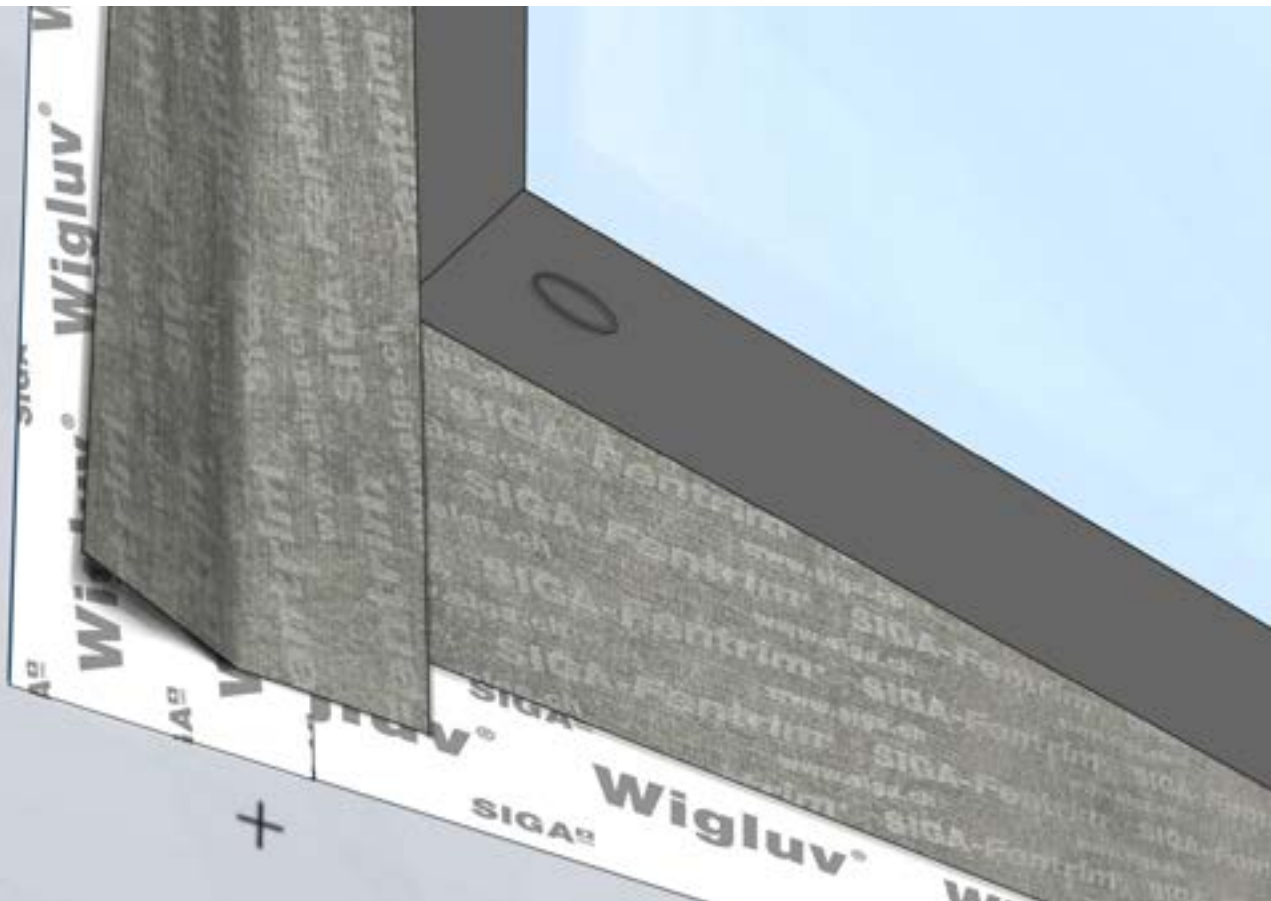
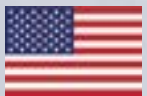


# The Ultimate Guide to **Window Flashing**

How to achieve a permanent air and watertight window installation



# Introduction

These guidelines are intended to portray the broad installation practices required to achieve an effective and simple window flashing installation in commercial and residential construction, for the convenience of contractors, specifiers, and other construction professionals.

Diligence paid to sealing techniques, whether on windows or doors, is crucial in creating a watertight and airtight enclosure for buildings that are required to deliver high performance.

*These instructions do not replace any national, provincial, or local building codes. Install all products in accordance with manufacturer's specifications, local building codes, or (where applicable) specifications established by the licensed design professional.*

*Regional standard practices, environmental conditions, and codes may vary and supersede the procedures contained within. The responsibility for compliance is yours: the installer, inspector, and owner(s).*

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# Purpose of Window Flashing

## 1.1 FLASHING DESIGN CONSIDERATIONS

*High-performance window installation requires high-performance materials*

The best insulated window is worthless without having the surrounding joints completely sealed because wind-driven rain and outdoor air can find their way into walls around windows and doors. When you're designing window opening details, the first concern is reliable waterproofing and airtightness for the lifetime of the building. Both issues entirely depend on the sealing materials you are using, as well as the technique and craftsmanship of the installation.

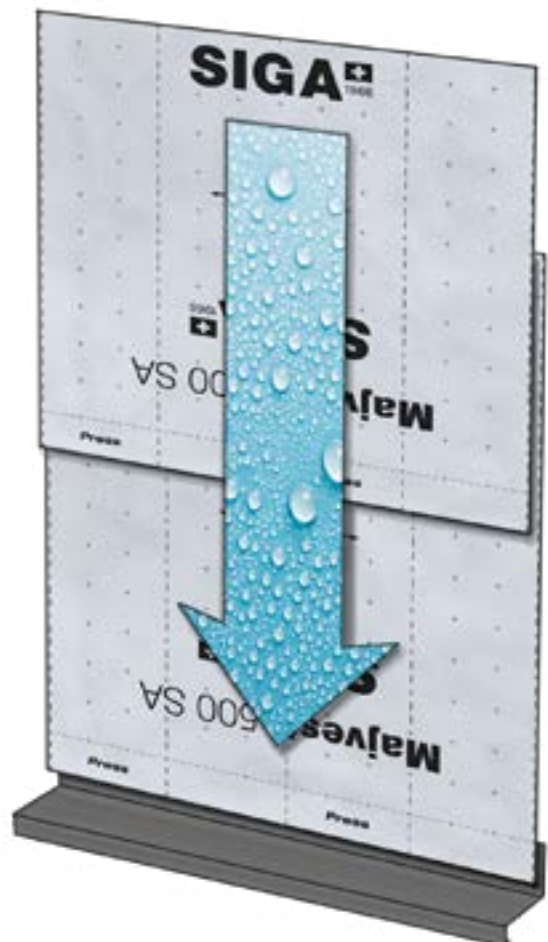
## 1.2 MOISTURE MANAGEMENT

*"Shingle-fashion" principle*

Where water shedding surfaces are disrupted by openings like windows and doors, it becomes crucial to develop proper detailing that keeps liquid water away from any organic structural elements for the lifetime of the building.

When detailing transitions between water shedding surfaces the most important part is the concept of gravity. Liquid water will always find its way downwards, which is why horizontal transitions should always employ positive lapping following the "shingle-fashion" principle.

In this approach the upper material is lapped over the lower material so water will naturally flow down and away from the structure.



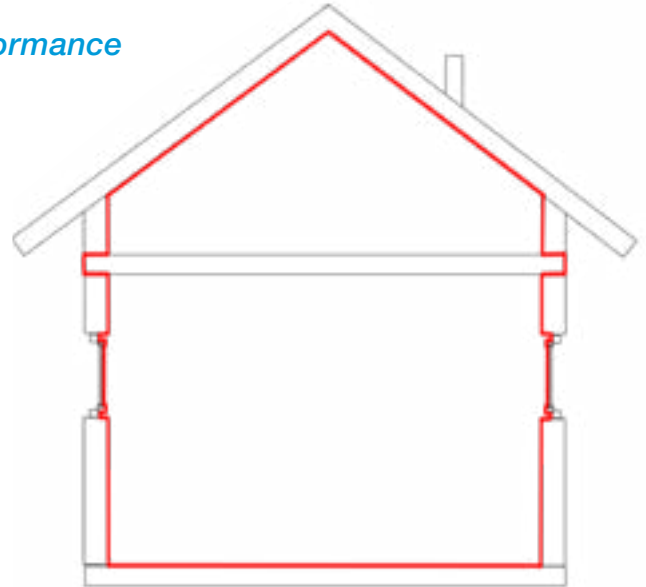
### 1.3 CONTINUOUS AIRTIGHTNESS

*Airtightness is an important aspect for high-performance buildings*

Requirements on airtightness are changing. While some regions are adopting airtightness regulations faster than others, the general trend is clear: Air leakage results in major energy losses and building codes are getting stricter to improve sustainability.

An airtight envelope not only lowers the monthly energy bills but also avoids convection of warm moist air into the walls which can later lead to building damage.

The often used red pen method can help you reduce the risk of leaks. By outlining your building envelope in a continuous red line, you will be able to identify and address weak points and potential leaks in the early planning stages of the building.

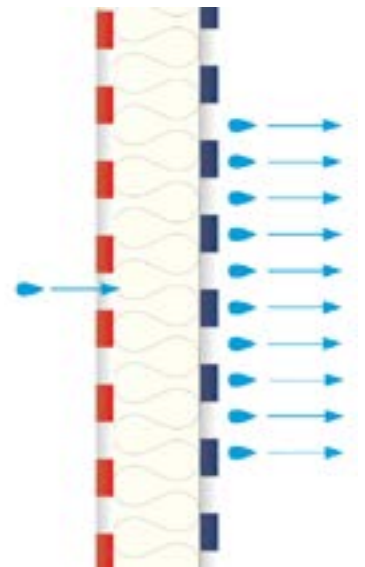


### 1.4 PERMEABILITY

*10 x less permeable on the inside than on the outside*

For optimal function of your walls the vapor drive at different times of the year needs to be taken into consideration. In heating dominated climates the vapor drive is directed from the heated indoor climate to the outside. This means warm humid air constantly tries to move through the walls. An industry trend toward vapor open or permeable exterior membrane products is clearly noticeable.

All SIGA products for the exterior are designed at least 10X more vapor permeable than their interior counterparts and therefore make up a safe system.



# Installation Requirements

## 2.1 PRECONSTRUCTION

Air-barrier continuity requires collaboration between everyone involved on a building project. For best results, hold a preconstruction meeting with all parties relevant to building envelope construction (architects, consultants, contractors, manufacturer's representatives, and/or building owners) before proceeding with installation of flashing components. Other materials may be used but must be compatible with one another. Refer to each product's technical specifications for compatibility and usage.

## 2.2 SUBSTRATE PREPARATION

- Substrate should be smooth, dry and free of debris, including frost, grease, dirt and sharp edges.
- Mechanical fasteners should be installed flush to the substrate surface.
- Masonry joints should be struck flush.
- Voids over 1" should be filled and tooled flush, using compatible sealant or spray foam.
- Use the primer SIGA Dockskin® on hard-to-adhere-to surfaces.
- Door and window rough sill framing must be level or slightly sloped to the exterior to ensure proper drainage to the exterior.

## 2.3 SITE CONDITIONS

- For fully closed wall facade installations only. Not for use with permanent UV exposure.
- Maximum UV exposure per Climate Zone as defined by the IECC:

Majvest® 500 SA:

- < 6 months for Zones 3 to 8
- < 3 months for Zones 1 and 2

Wigluv®:

- < 12 months for Zones 1 to 8

Fentrim® grey:

- < 4 months for Zones 3 to 8
- < 3 months for Zones 1 and 2

- SIGA self-adhered flashing products perform best when installed at temperatures above 14°F (-10°C).
- Do not install in rain or inclement weather, or when substrate is damp or frost-covered.

## 2.4 STORAGE

- Majvest 500 SA, Wigluv, Fentrim and Rissan®: Store in cool, dry location in original packaging. Protect from UV during storage. No long-term storage limitations, when above conditions are maintained.
- Dockskin: Store in original container. Protect from freezing.

# Installation

## 3.1 COMPONENTS

Use the SIGA products below to complete a resilient, above-grade building envelope. Additional product data can be found at the end of these guidelines, or at [siga.swiss](http://siga.swiss)

	PRODUCT	DIMENSIONS	AREA
MEMBRANE PRODUCTS			
	Majvest 500 SA 60"	60 in x 100 ft	500 sq ft
	Majvest 500 SA 18"	18 in x 100 ft	150 sq ft
FLASHING PRODUCTS			
	Wigluf 60	2.4 in x 131 ft	
	Wigluf 100	3.9 in x 82 ft	
	Wigluf 150	5.9 in x 82 ft	
	Wigluf 230	9 in x 82 ft	
	Rissan 60	2.4 in x 82 ft	
	Rissan 100	3.9 in x 82 ft	
	Rissan 150	5.9 in x 82 ft	
	Fentrim 230 grey 75mm	2.9 in x 82 ft	
	Fentrim 230 grey 100mm	3.9 in x 82 ft	
	Fentrim 230 grey 150mm	5.9 in x 82 ft	
	Fentrim 430 grey 100mm	3.9 in x 82 ft	
	Fentrim 430 grey 150mm	5.9 in x 82 ft	
	Fentrim 430 grey 230mm	9 in x 82 ft	
	Fentrim IS 20 75mm	2.9 in x 82 ft	
	Fentrim IS 20 100mm	3.9 in x 82 ft	
	Fentrim IS 20 150mm	5.9 in x 82 ft	
PRIMER			
	Dockskin	2.2lbs	54 sq ft / bottle

### 3.2 USAGE MATRIX

	Majvest 500 SA	Wigluv 60	Wigluv 100/150/230	Fentrim 430 grey 100/150/230	Fentrim 230 grey 75/100/150	Fentrim IS20 75/100/150	Rissan 60	Rissan 100/150
<b>RECOMMENDED USAGE</b>								
Field of Wall (WRB)								
Rough Opening on the Exterior								
Rough Opening on the Interior								
Window Seal on the Exterior								
Window Seal on the Interior								
<b>SUBSTRATES WITH MINIMUM OVERLAP</b>								
Unfinished Wood / Plywood / OSB	N/A	1"	1"	1"	1"	1"	1"	1"
Wood Fiber Insulating Panels	N/A		2"*	2"*	2"*	2"*		2"*
Exterior Gypsum	N/A	1"	1"	1"	1"	1"	1"	1"
Metal	N/A	1"	1"	1"	1"	1"	1"	1"
Hard Plastics / Vinyl	N/A	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Electrical Wires	N/A	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
Rigid Insulation EPS / XPS / PU	N/A	1"	1"	1"	1"	1"	1"	1"
Concrete	N/A		2"*	2"	2"	2"		2"*

\* When used with the SIGA primer Dockskin

### 3.3 REQUIRED TOOLS

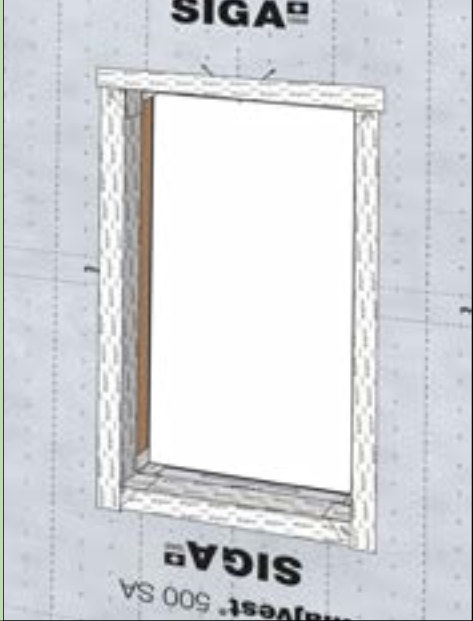
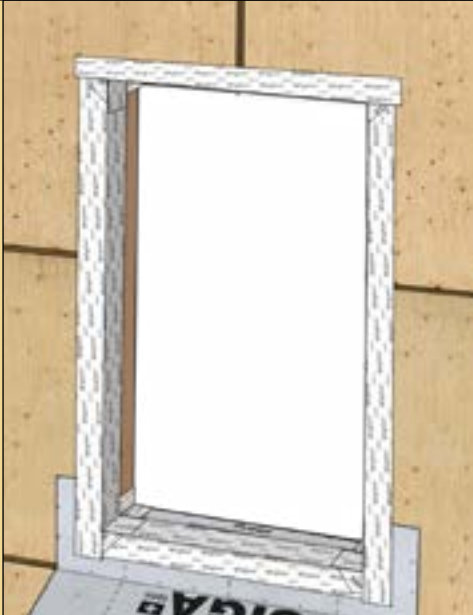
- Sharp razor knife
- Tape measure
- Hammer tacker or other temporary fasteners
- Roller or squeegee for corners
- Brush to clean debris from substrate
- Level
- Plastic or composite shims
- Weather resistive barrier (WRB)
- Optional: Rigid back dam



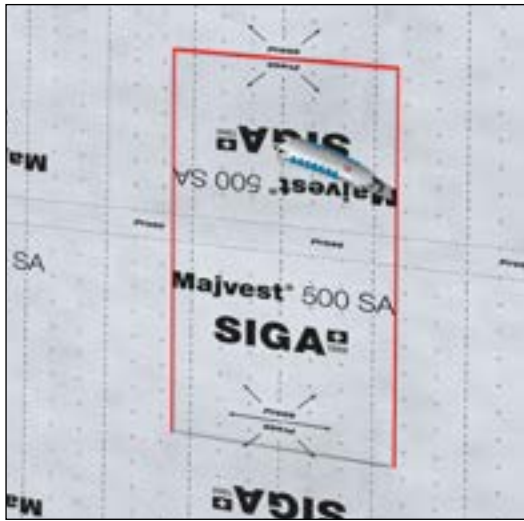
# Rough Opening Details

Depending on the needs of your building, you could use a variety of different rough opening treatments. Here we've detailed two methods that are depending on whether the windows are installed before the field WRB or after. Both methods offer superior air sealing and only consider the sequencing of your envelope installation.

Need something modified for your specific job? Contact SIGA at [www.siga.swiss](http://www.siga.swiss) for assistance.

WRB PRE-INSTALLED		<p><b>The Cut-Out Method</b> <span style="float: right;">Page 9</span></p> <ul style="list-style-type: none"> <li>✓ Tape adhered directly to substrate and WRB</li> <li>✓ No pathways for water created</li> <li>✓ Clean termination of WRB — no wrinkles</li> </ul>
WRB INSTALLED AFTER WINDOW		<p><b>The Target Method</b> <span style="float: right;">Page 16</span></p> <ul style="list-style-type: none"> <li>✓ Tape adhered directly to substrate</li> <li>✓ Install a small section of WRB (also called “apron”) below the sill</li> <li>✓ Split release liner can be left on for later integration of membrane with proper “Shingle-fashion” lapping.</li> </ul>

## 4.1 CUT-OUT METHOD



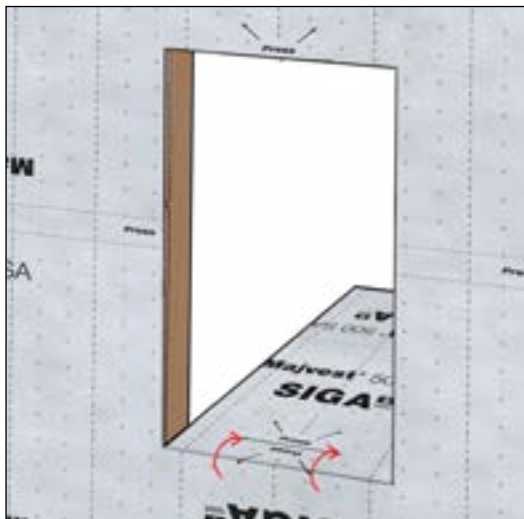
Secure Majvest 500 SA around rough opening by pressing on the membrane over the entire area using a roller or squeegee.

Cut Majvest 500 SA flush with jambs and head.



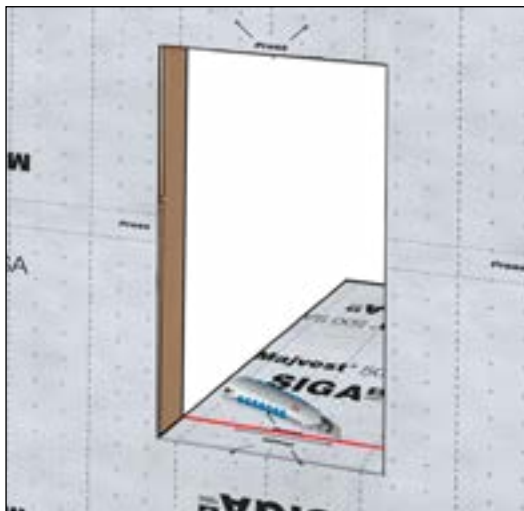
### EXPERT TIP

In order to make a straight cut, angle your knife against the sheathing and use it as a guide.

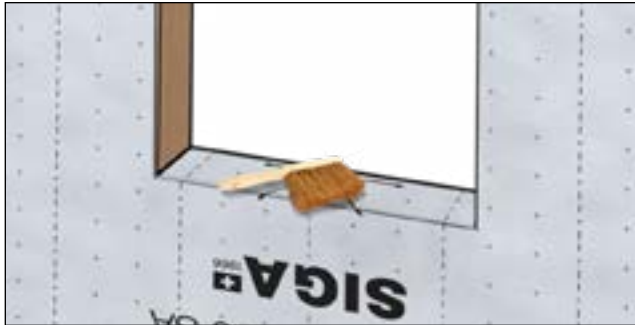


Flap Majvest 500 SA to the inside onto the sill.

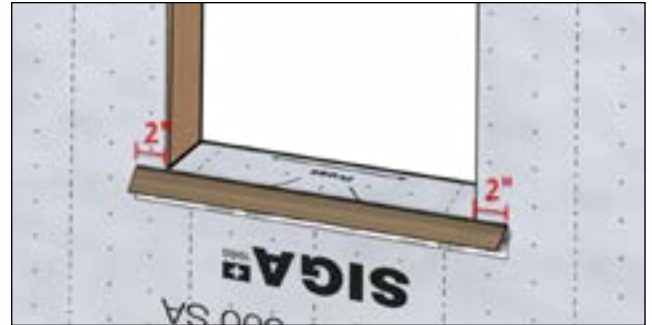
Make sure to not create any wrinkles or folds. Press on using a roller or squeegee.



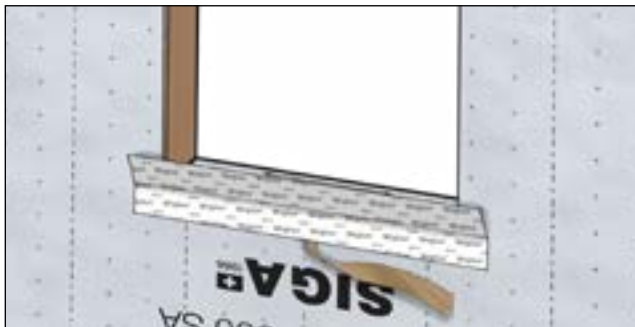
Cut Majvest 500 SA flush with the interior sill portion.



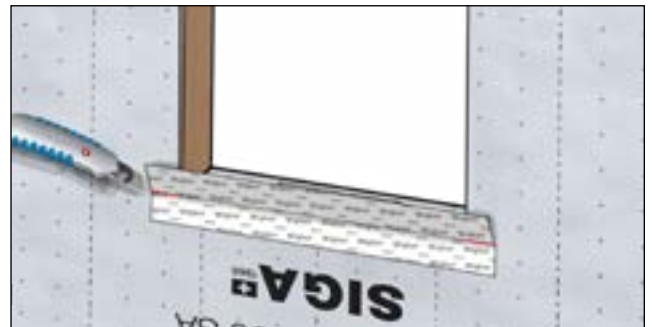
Clean debris and dust from the substrate.



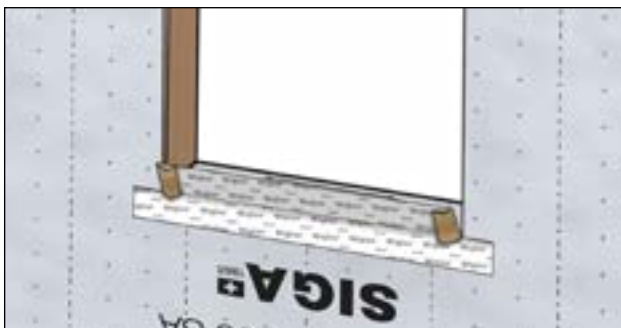
Cut Wicluf 4" wider than the sill so it will extend 2" past each end of the rough opening.



Crease the tape using the split backing and remove one backing strip. Center and apply to exterior face.



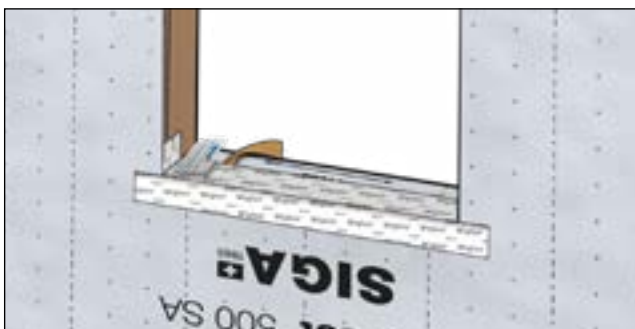
Cut tape lengthwise toward corners.



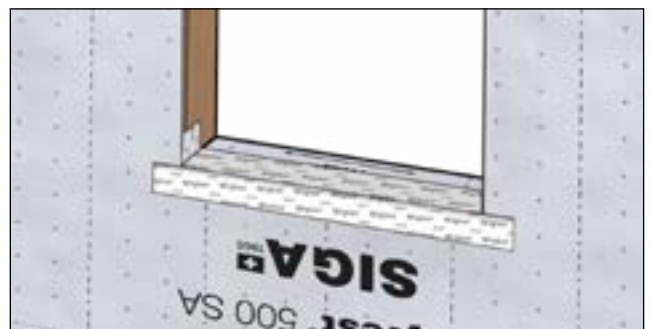
Flap ends up.



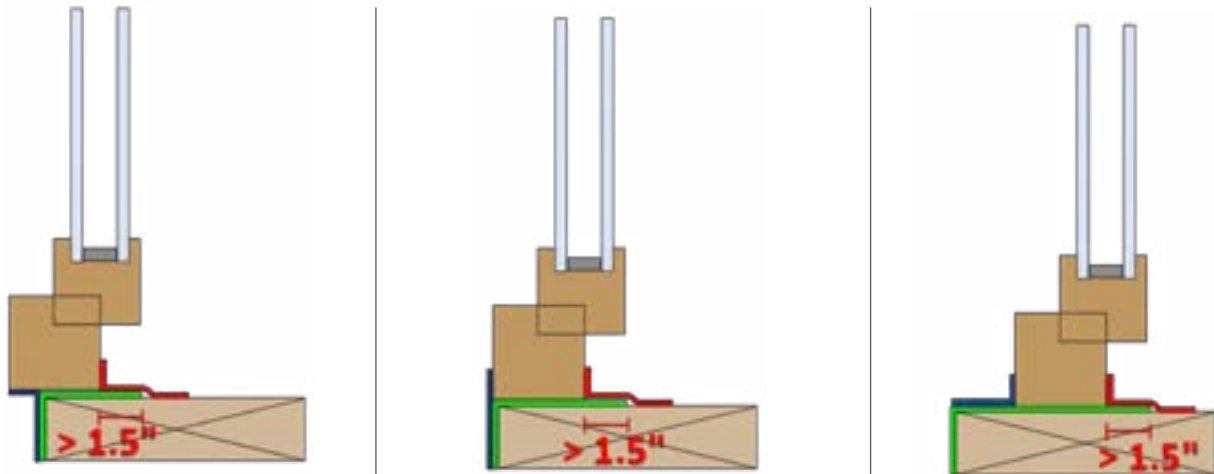
Fold tape onto sill.



Remove second backing strip and apply tape on sill. Firmly press the tape on with a roller or squeegee.

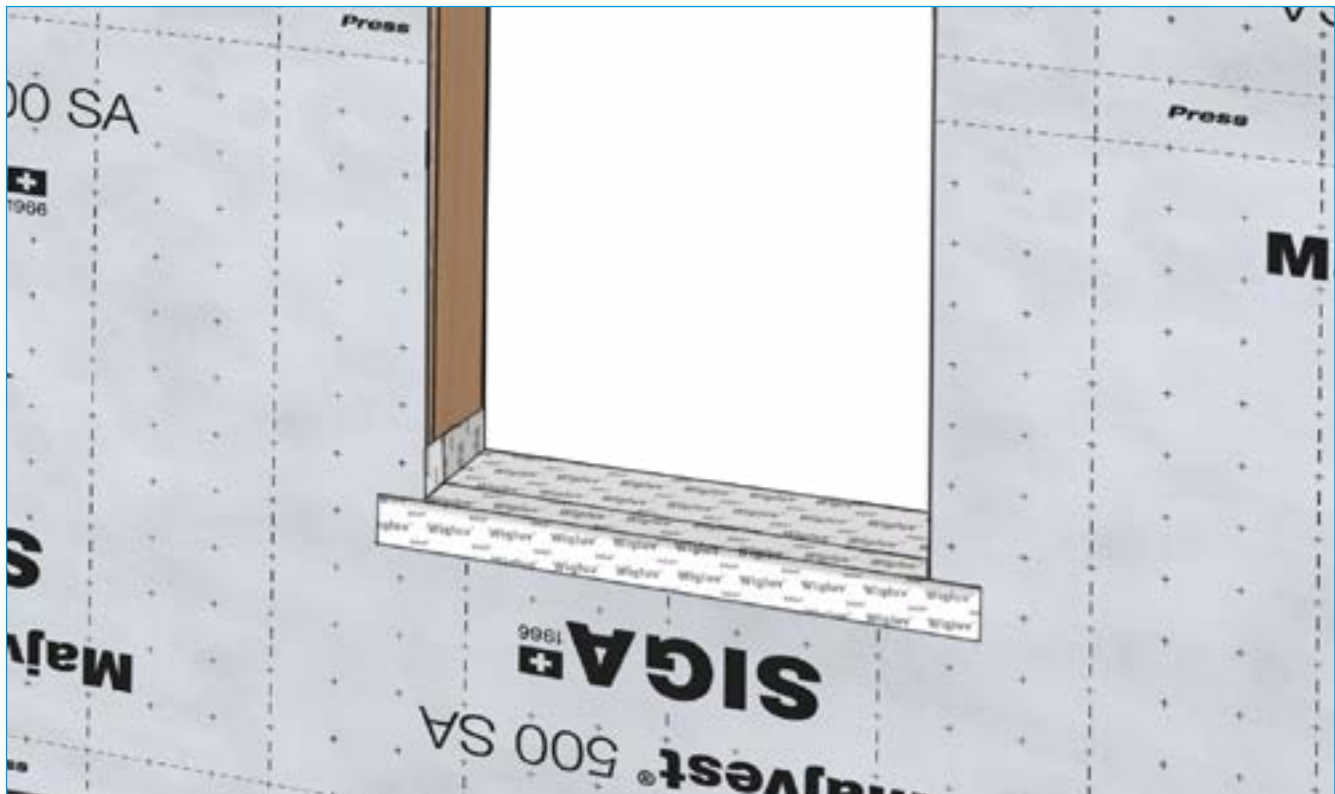


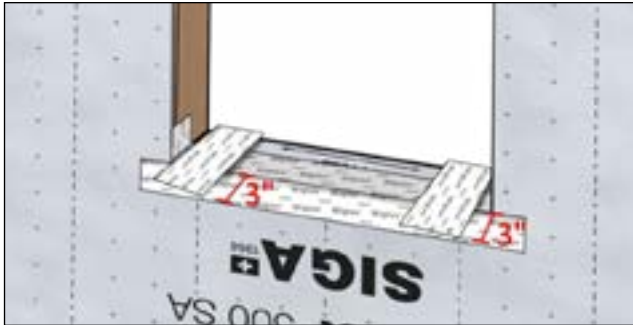
How it should look.



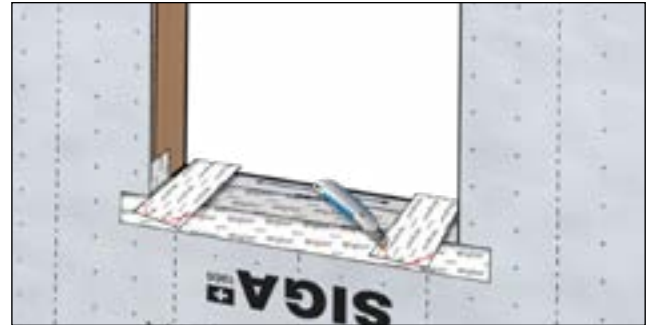
## EXPERT TIP

Depending on your window installation you need to make sure that the flashed part of the sill is at least 1.5" deeper than the inner edge of your window frame. This can be achieved by adding extra tape with at least a 1" overlap.





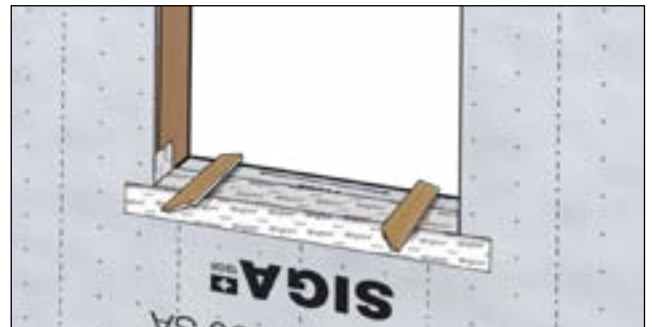
Create two gussets with Wicluf 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



Cut one end of the tape at a 45 degree angle to create a "dog ear."



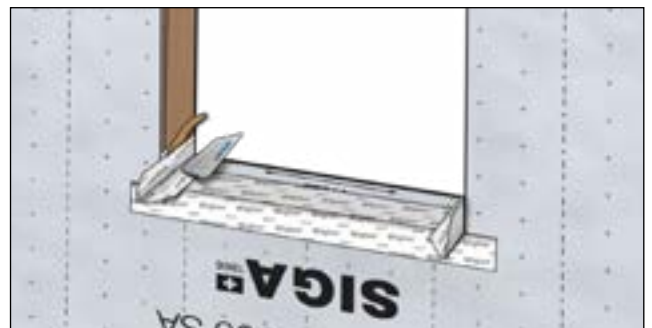
Crease tape lengthwise.



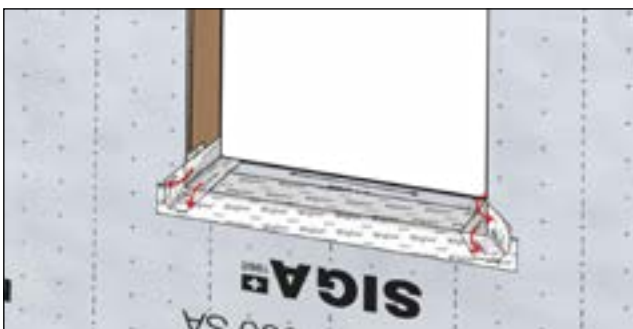
Fold tape in the middle.



Work gusset into corner while removing one backing strip.



Firmly press the tape onto the rough opening using a roller or squeegee.

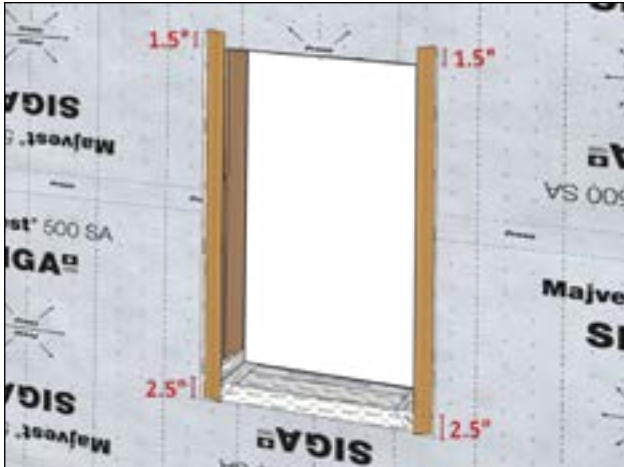


Stretch the Wicluf tape around the corner toward the exterior — wrinkles are normal!

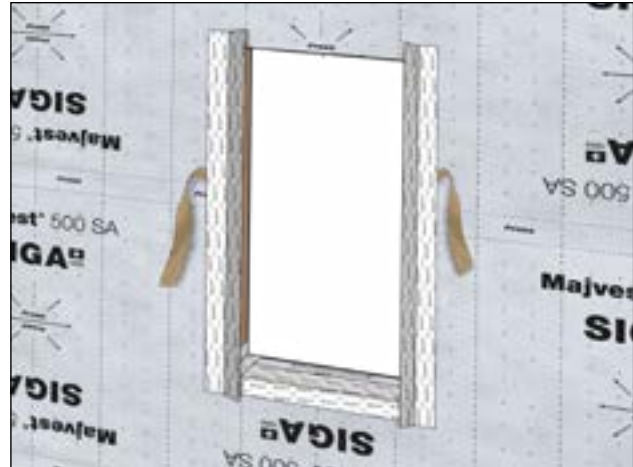


How it should look.

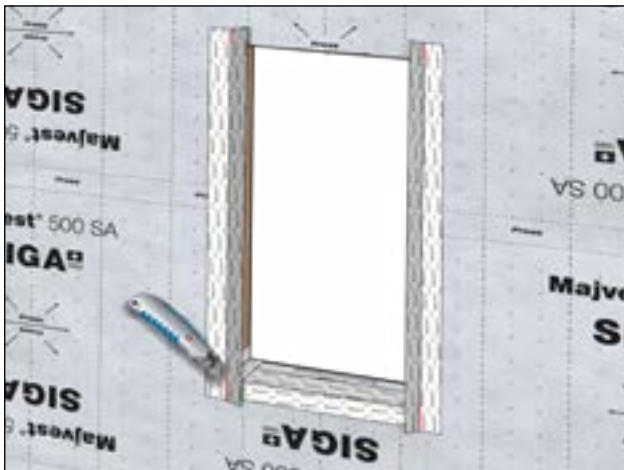




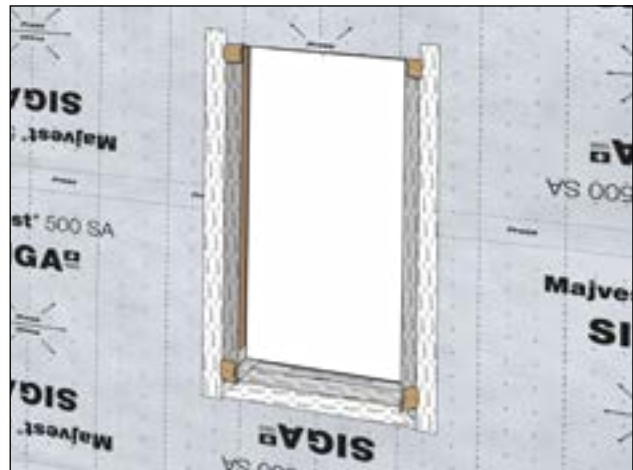
Cut Wigluv +4" longer than jambs to extend 1.5" on top and about 2.5" on the bottom.



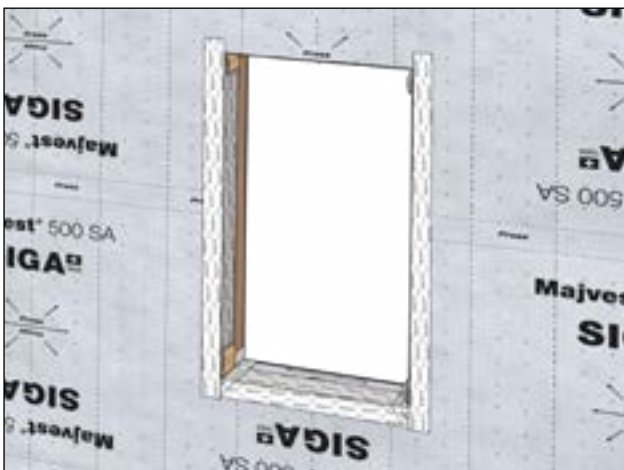
Crease the tape along the split backing and remove one backing strip.



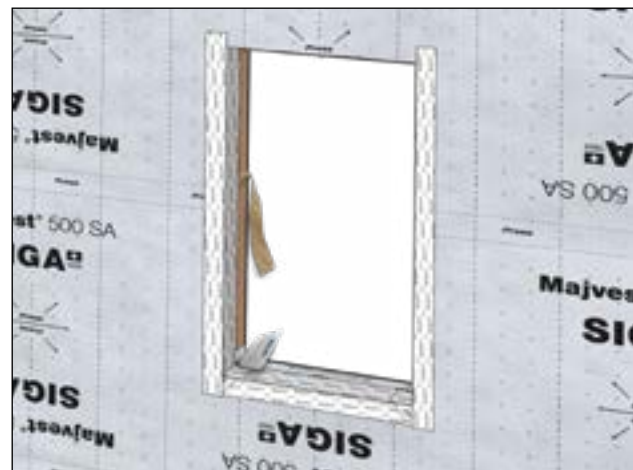
Cut lengthwise toward corners.



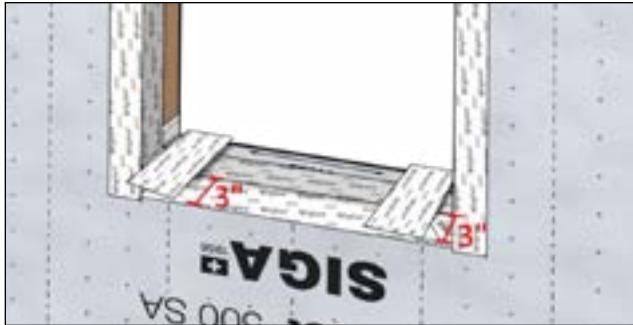
Flap ends up.



Fold tape onto the jambs.



Remove second backing strip and apply tape on jambs while firmly pressing on with a roller or squeegee.



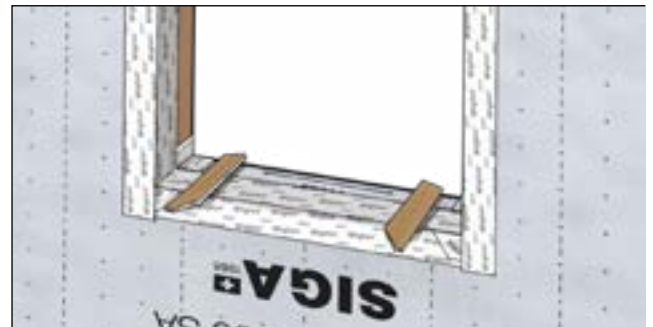
Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



Cut one end of the tape at a 45 degree angle to create a "dog ear."



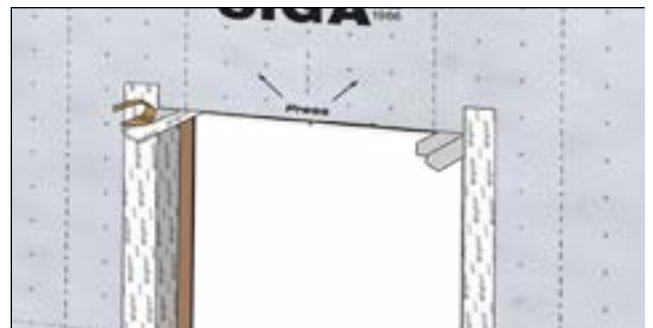
Crease tape lengthwise.



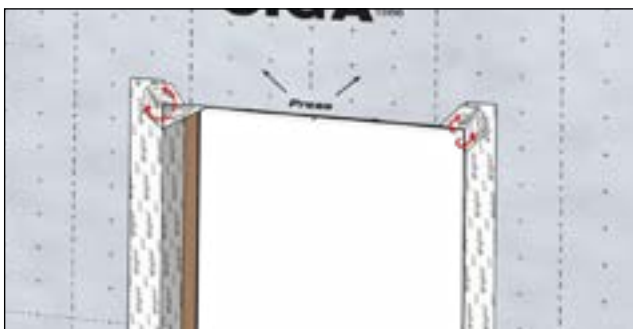
Fold tape in the middle.



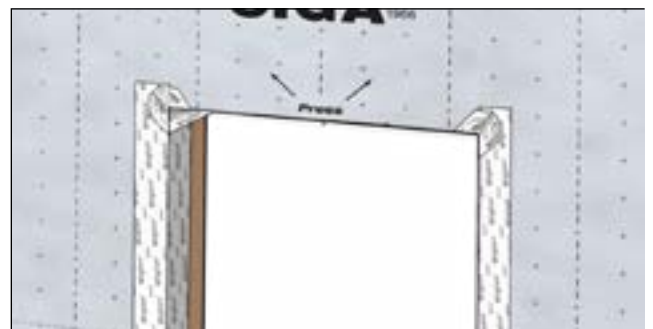
Work both gussets in top corners while removing one backing strip.



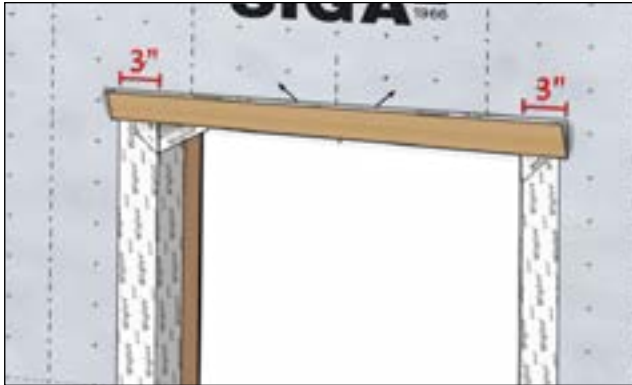
Press on firmly using a roller or squeegee.



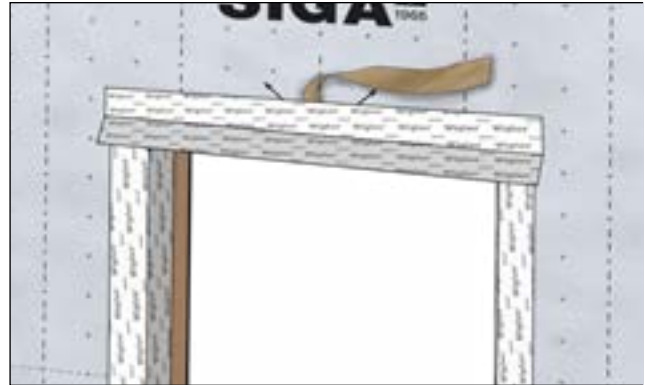
Stretch the Wigluv tape around the corner toward the exterior — wrinkles are normal!



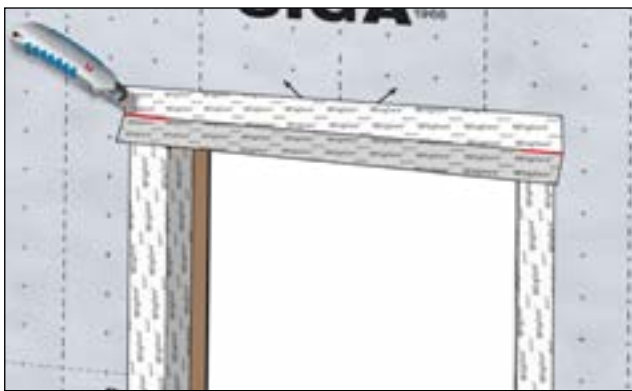
How it should look.



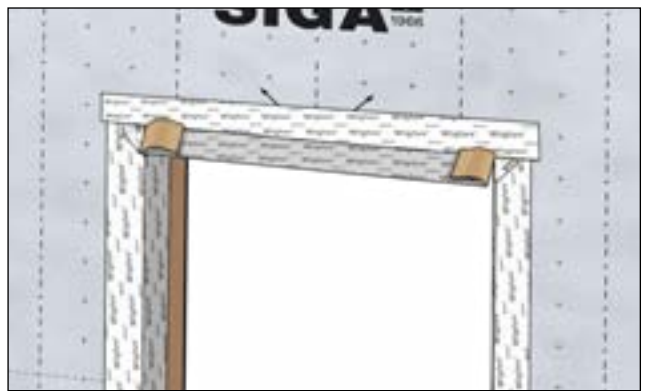
Cut Wigluv +6" wider than head to extend 3" past each end.



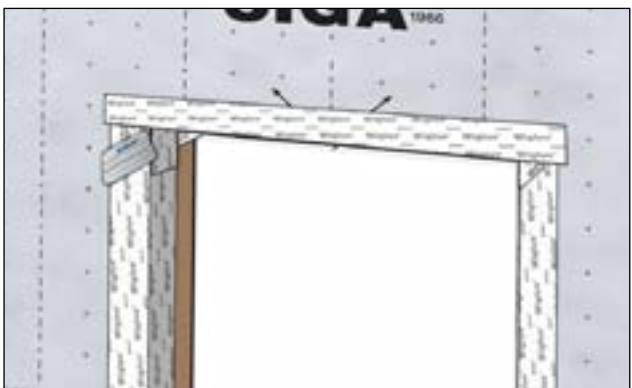
Crease along split backing and remove one backing strip.



Cut lengthwise toward corners.



Flap ends up and fold tape into the head.



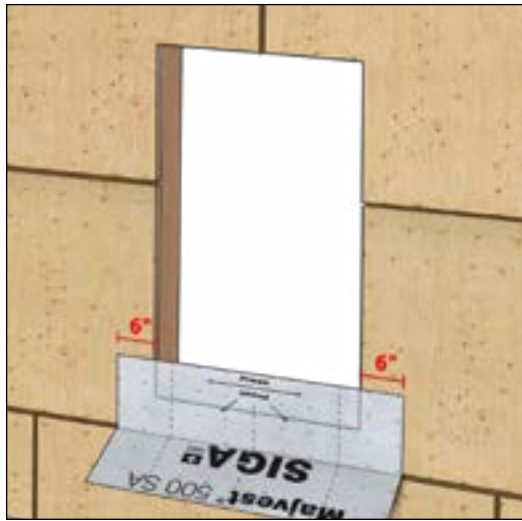
Remove second backing strip and apply tape on head while firmly pressing on with a roller or squeegee.



How it should look.

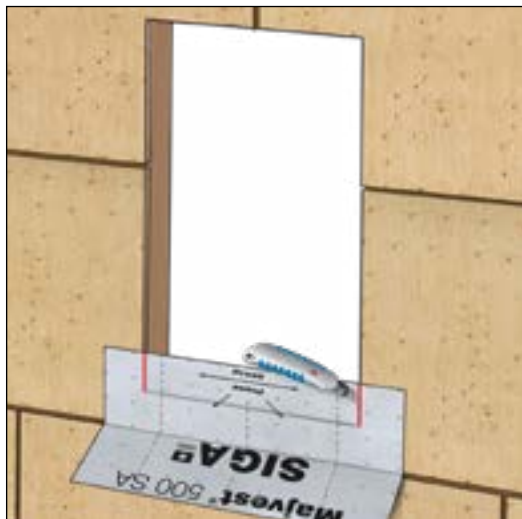


## 4.2 TARGET METHOD

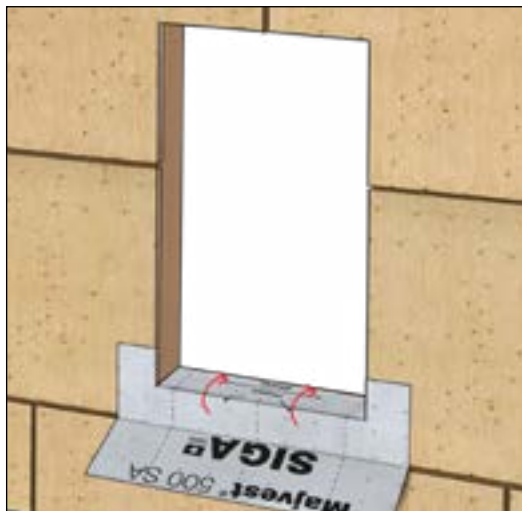


Install 18" Majvest 500 SA detail roll above the sill plate with a distance same as the sill depth. Cut membrane +12" wider than sill to extend 6" past each end.

**Do not pull off release liner of lower portion as the field WRB will later be integrated below.**

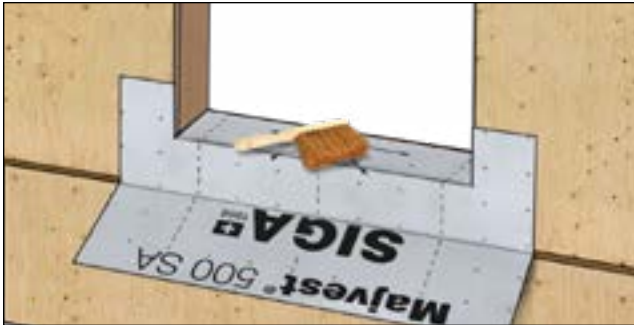


Cut along jambs into the corner while using the sheathing as a cutting guide.

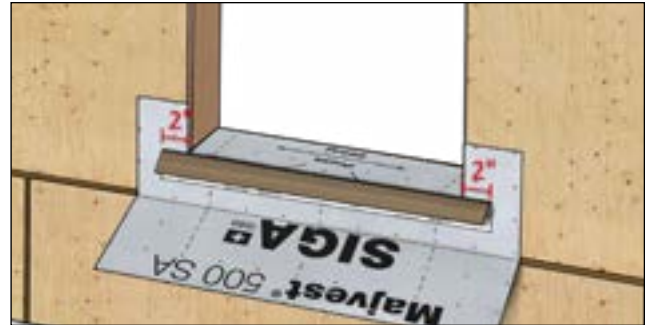


Flap Majvest 500 SA to the inside onto the sill.

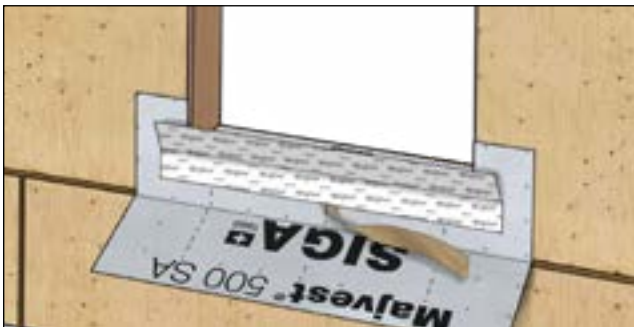
Make sure to not create any wrinkles or folds. Press on using a roller or squeegee.



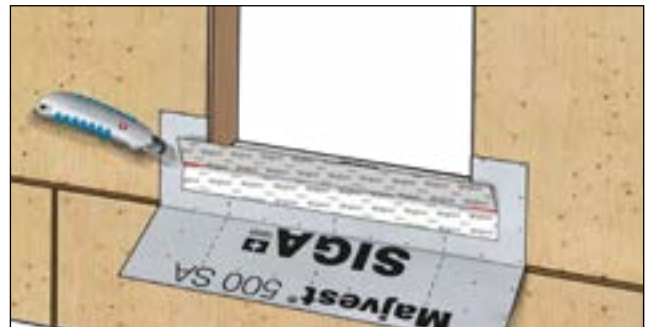
Clean debris and dust from the substrate.



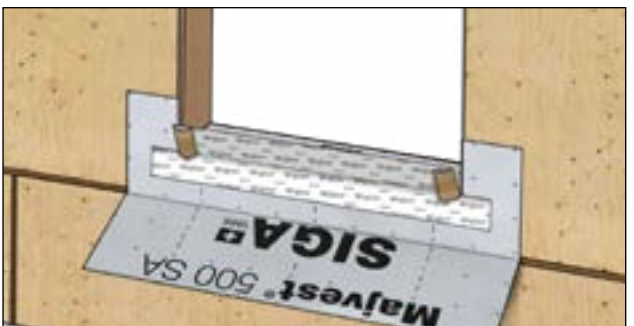
Cut Wigluv 4" wider than the sill so it will extend 2" past each end of the rough opening.



Crease the tape using the split backing and remove one backing strip. Center and apply to exterior face.



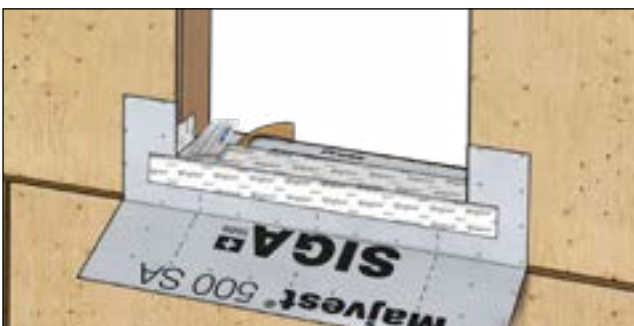
Cut tape lengthwise toward corners.



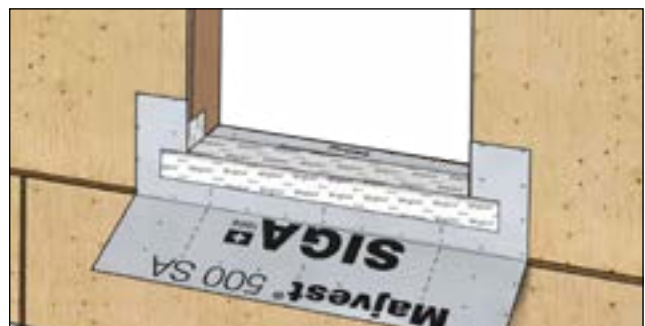
Flap ends up.



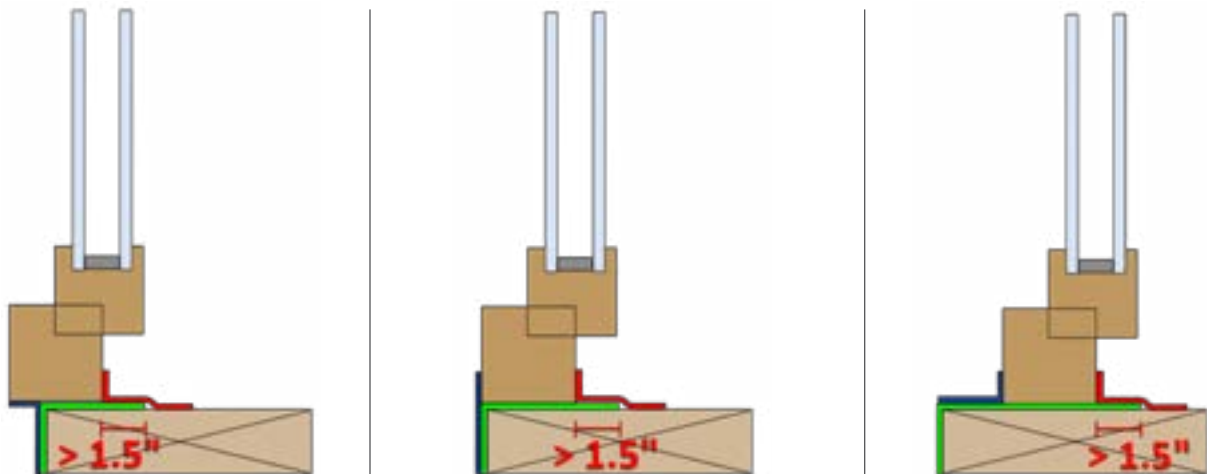
Fold tape onto sill.



Remove second backing strip and apply tape on sill while firmly pressing on with a roller or squeegee.



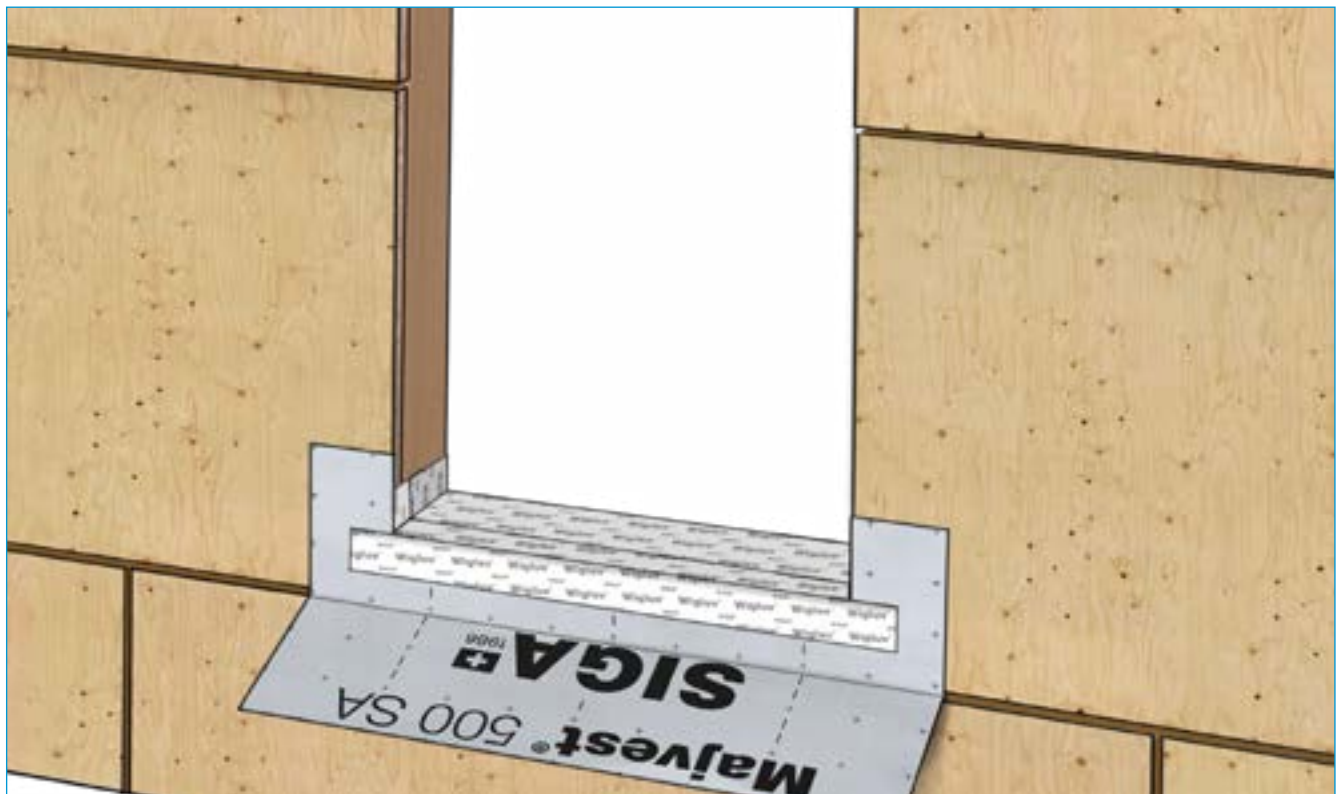
How it should look.



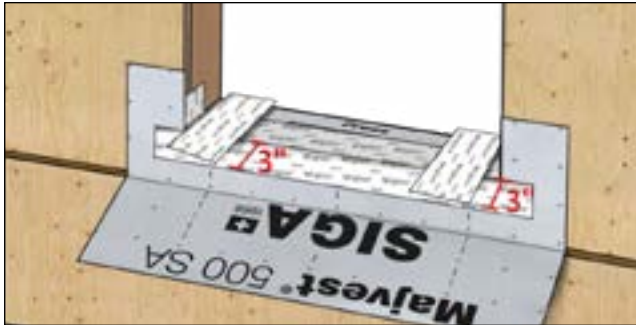
## EXPERT TIP

Depending on your window installation you need to make sure that the flashed part of the sill is at least 1.5" deeper than the inner edge of your window frame.

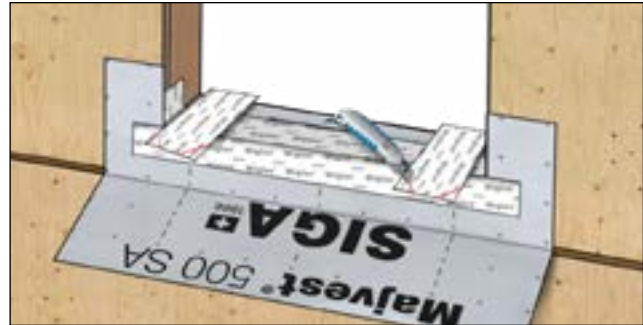
This can be achieved by adding extra tape with at least 1" overlap.



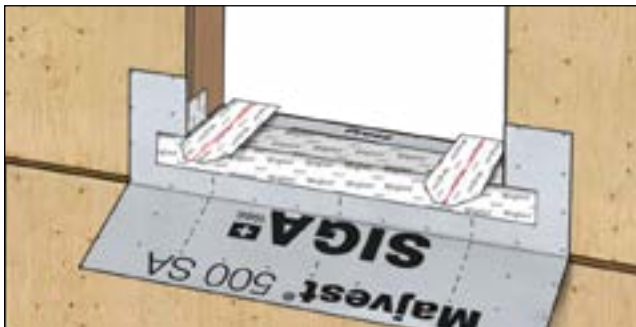




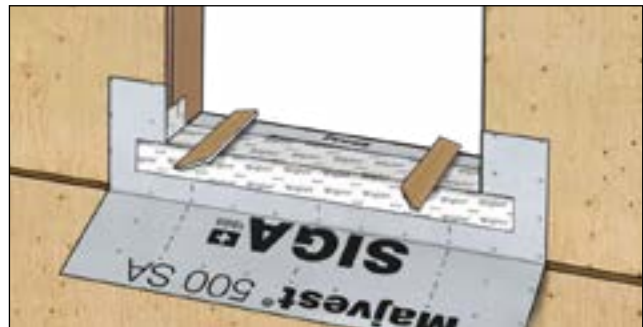
Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



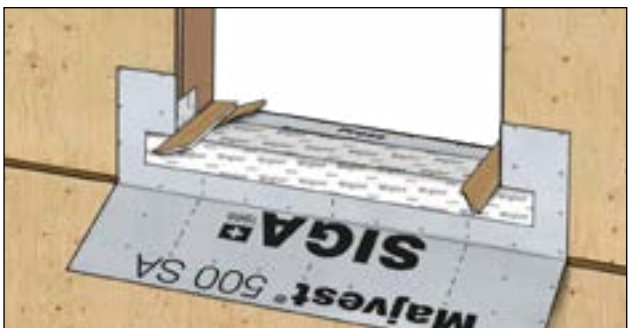
Cut one end of the tape at a 45 degree angle to create a "dog ear."



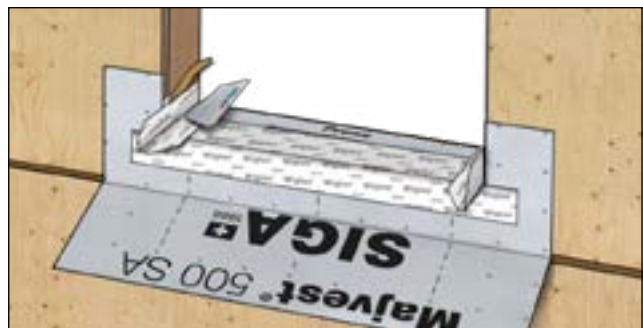
Crease tape lengthwise.



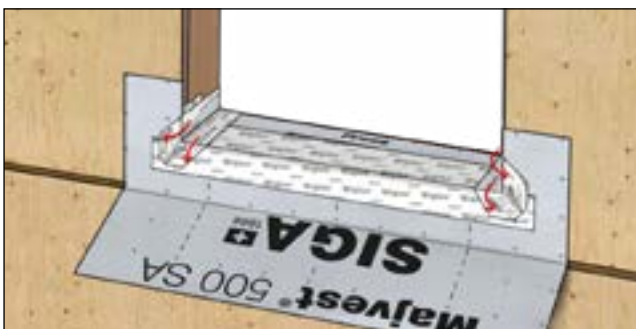
Fold tape in the middle.



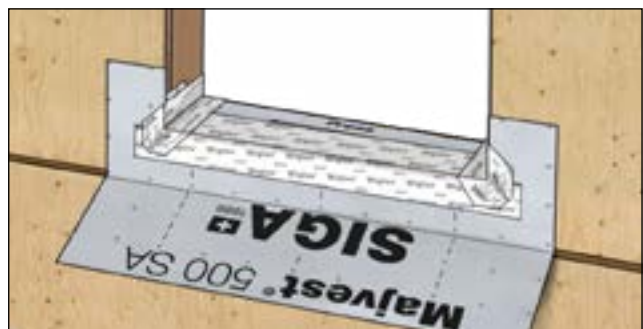
Work gusset into corner while removing one backing strip.



Firmly press the tape onto the rough opening using a roller or squeegee.



Stretch the Wigluv tape around the corner toward the exterior — wrinkles are normal!



How it should look.



Cut Wigluv +4" longer than jambs to extend 1.5" on top and about 2.5" on the bottom.



Crease the tape along the split backing and remove one backing strip.



Cut lengthwise toward corners.



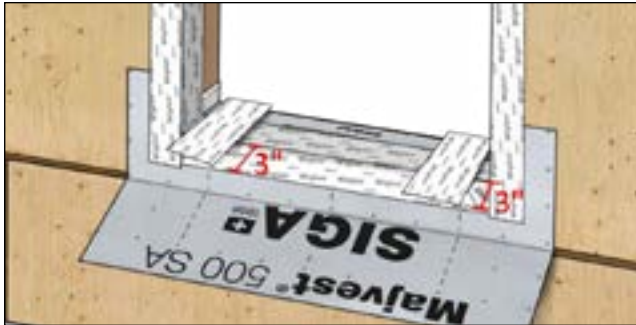
Flap ends up.



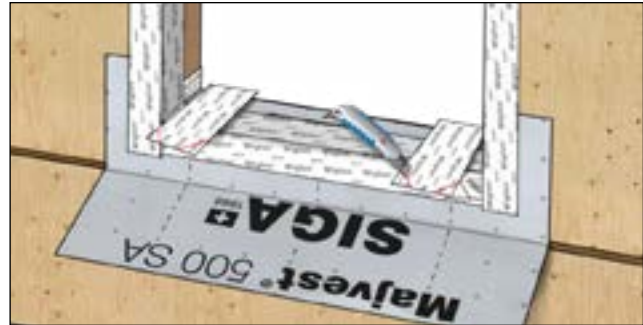
Fold tape onto the jambs.



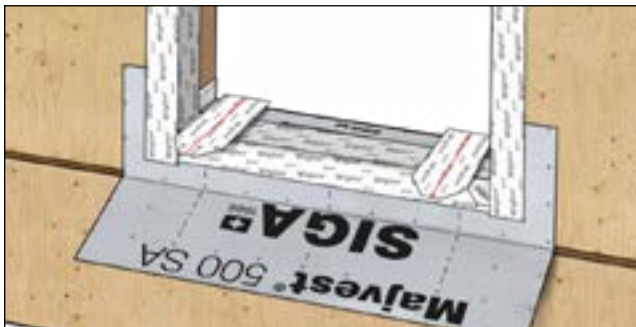
Remove second backing strip and apply tape on jambs while firmly pressing on with a roller or squeegee.



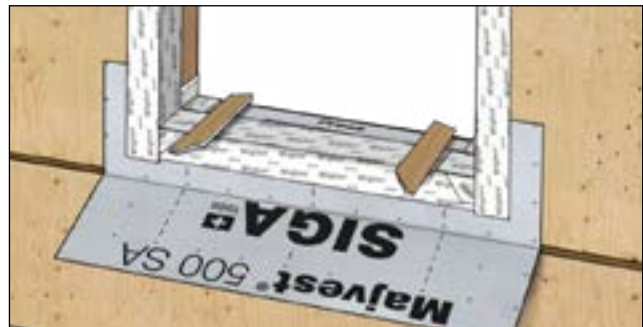
Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



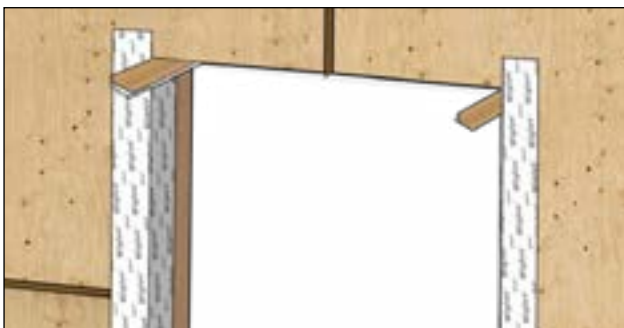
Cut one end of the tape at a 45 degree angle to create a "dog ear."



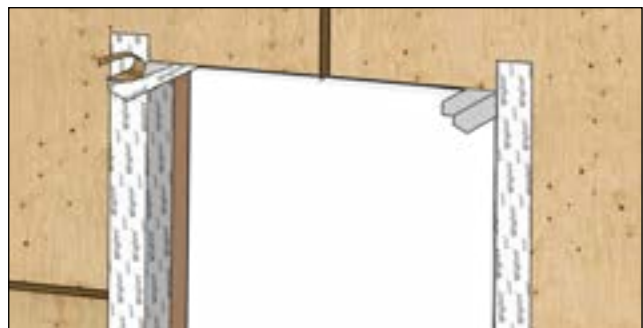
Crease tape lengthwise.



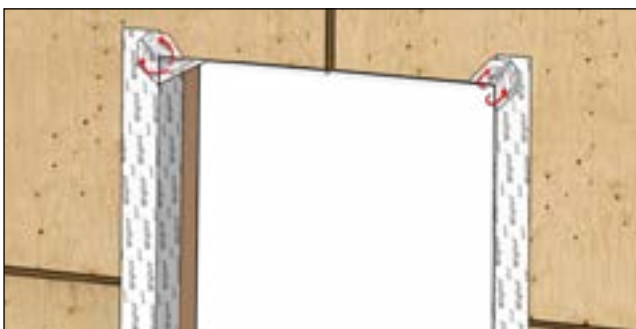
Fold tape in the middle.



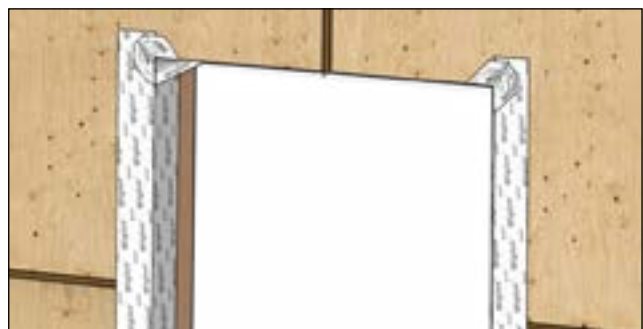
Work both gussets in top corners while removing one backing strip.



Press on firmly using a roller or squeegee.

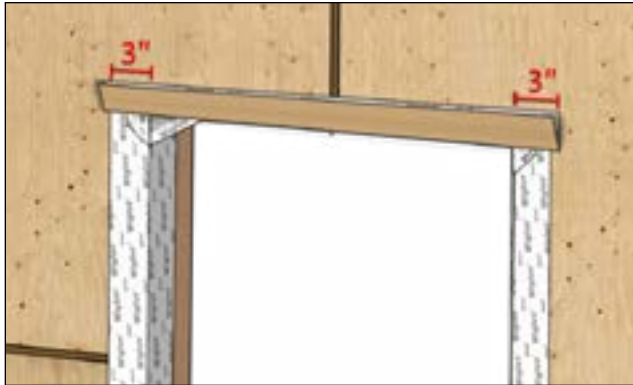


Stretch the Wigluv tape around the corner toward the exterior — wrinkles are normal!

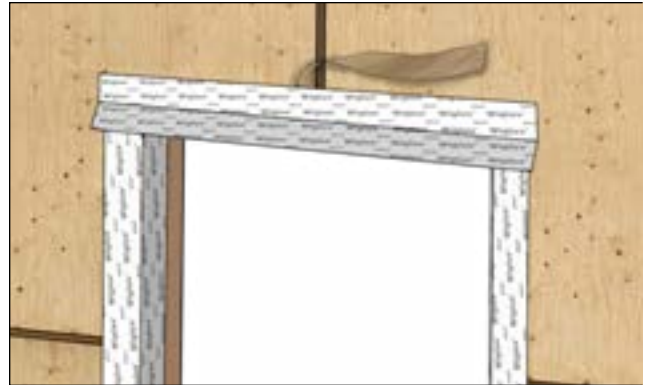


How it should look.

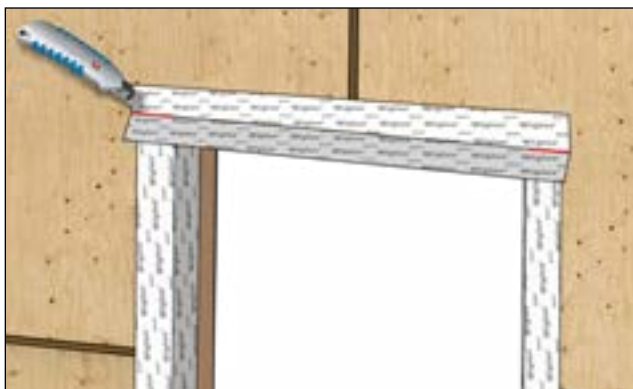




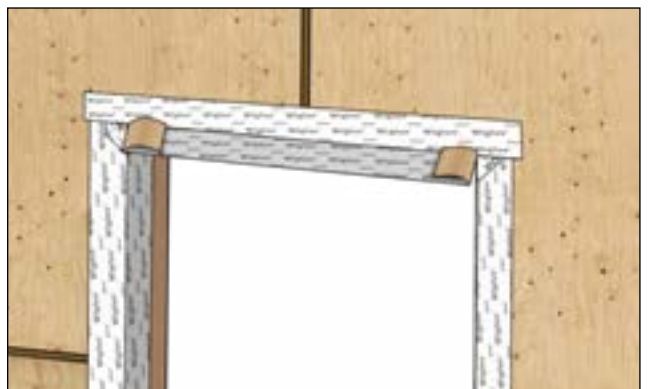
Cut Wigluv +6" wider than head to extend 3" past each end.



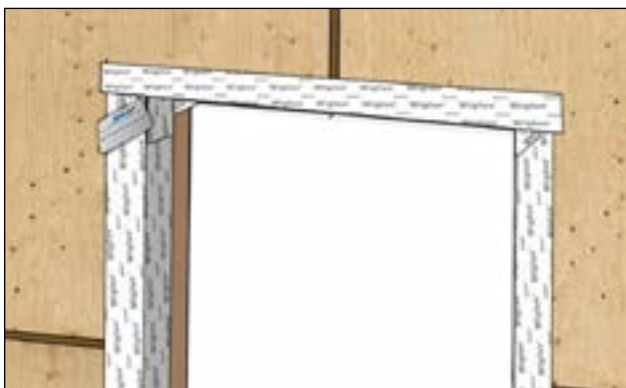
Crease along split backing and remove one backing strip.



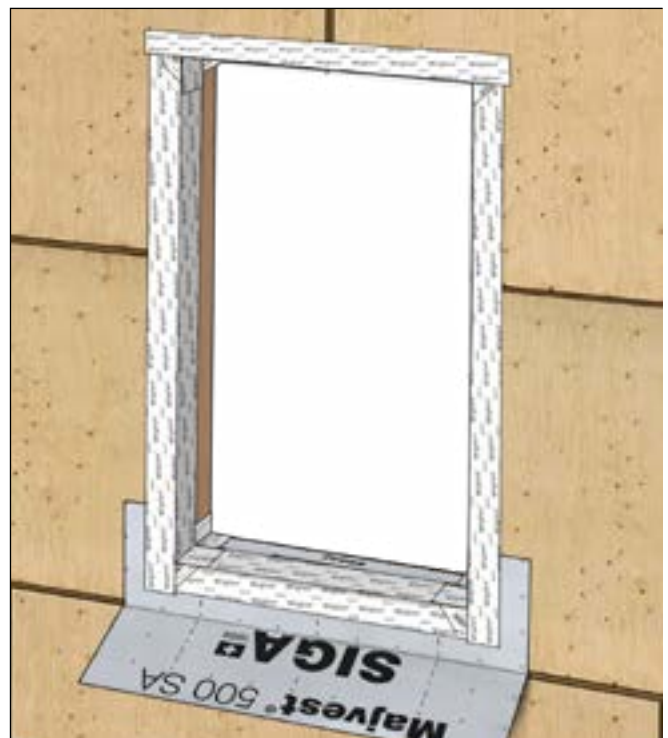
Cut lengthwise toward corners.



Flap ends up and fold tape into the head.

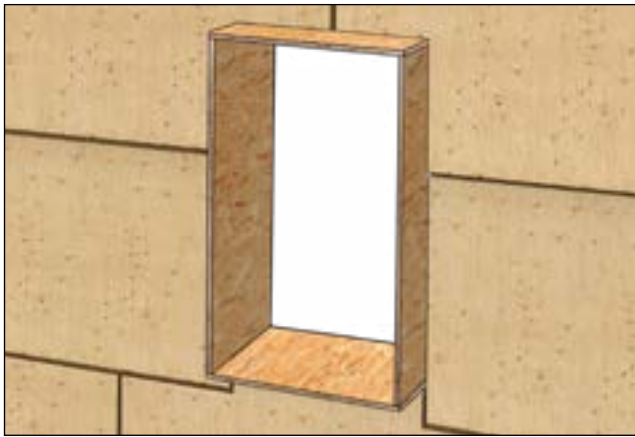


Remove second backing strip and apply tape on head while firmly pressing on with a roller or squeegee.



How it should look.

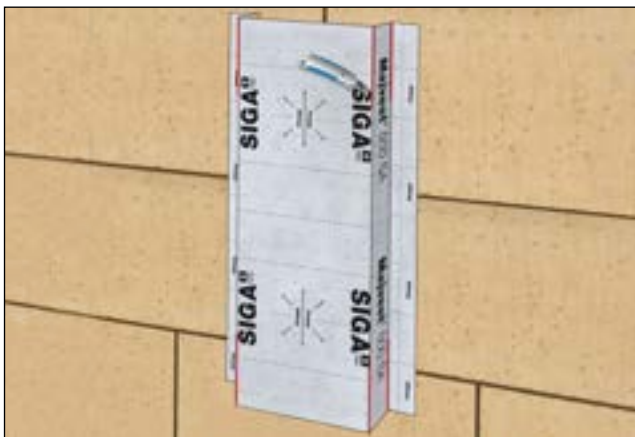
### 4.3 EXTENSION BUCK METHOD



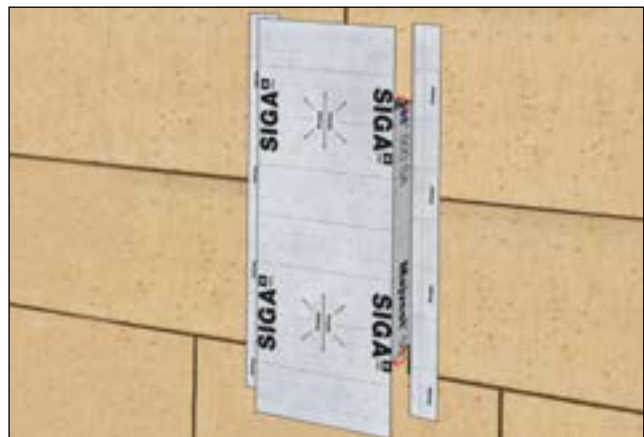
Frame window buck as per specifications.



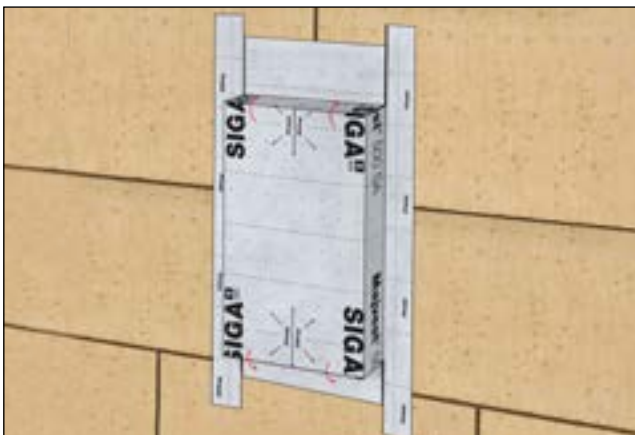
Install Majvest 500 SA while leaving at least 8" overlap on all four sides. Press on using a roller or squeegee.



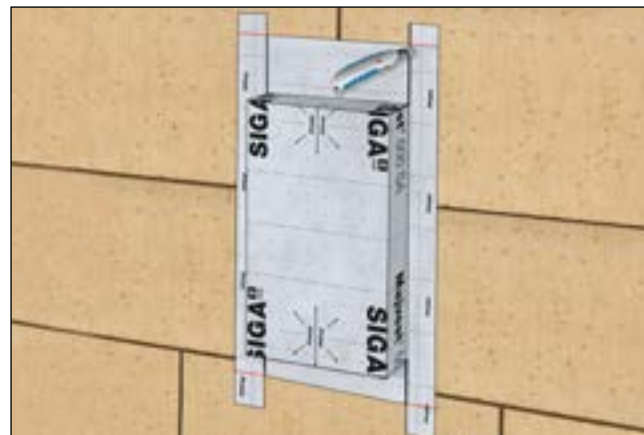
Make 8 vertical straight cuts starting in each corner outwards.



Flap 4 middle sections inside on the extension buck and press on firmly.



Fold front pieces in on top and press on firmly. **Do not press on bottom flap to the substrate as the field membrane will later be integrated below.**

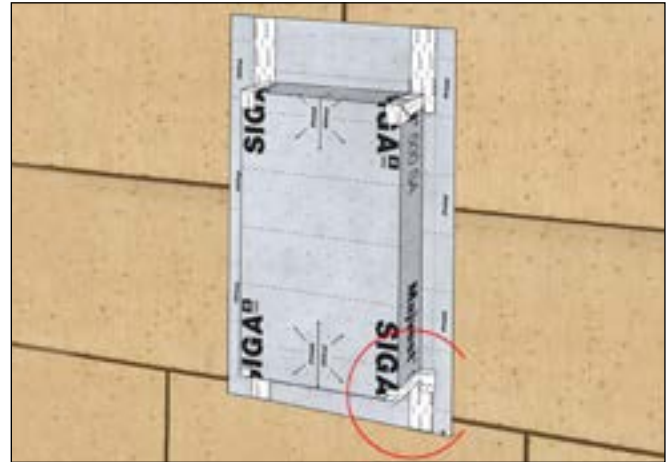


Cut the protruding Majvest 500 SA flaps so that the WRB lines up horizontally.

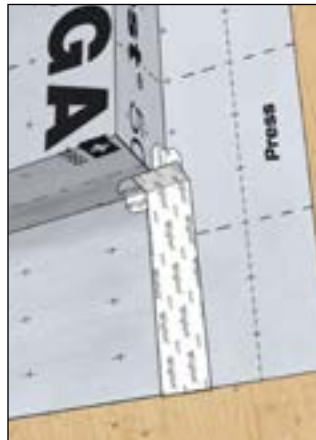


## Creating the Bottom Seal

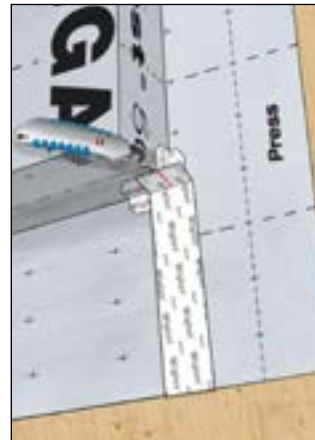
When taping the corners special care must be taken in order to create positive lapping. The corners are potential weak spots and therefore need to be treated with great care making sure the tape is tightly fitted with pressure in the corners.



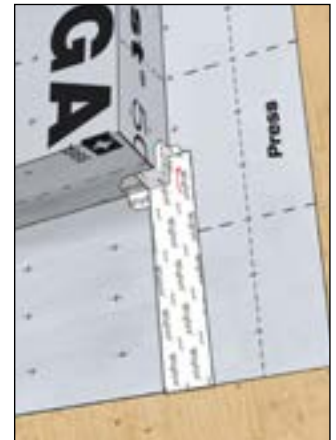
Use 4" long tape strip and apply into corner while using the stretch of Wigluv.



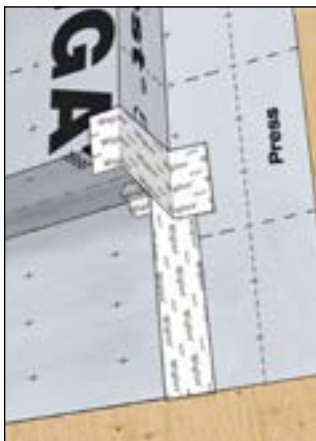
Tape membrane with Wigluv 100 and overlap corner piece from below.



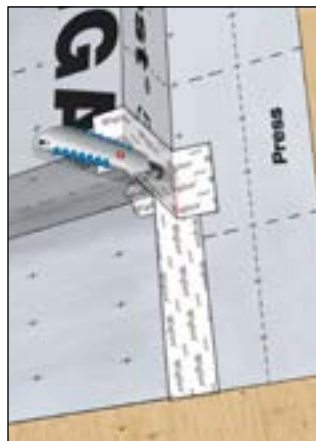
Cut tape toward corner. Be careful not to puncture the tape below.



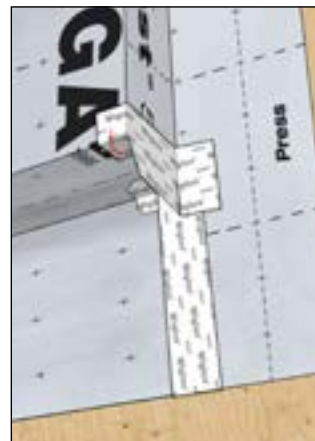
Flap tape up and adhere to Majvest. Apply pressure.



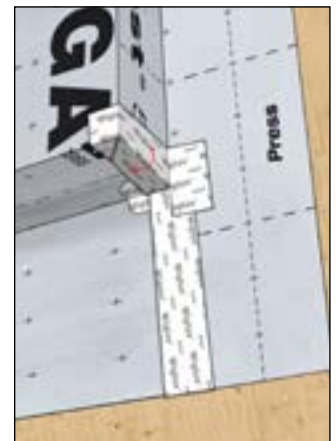
Apply tape around horizontal portion overlapping about 2" around each corner.



Cut tape toward corner. Be careful not to puncture the tape below.



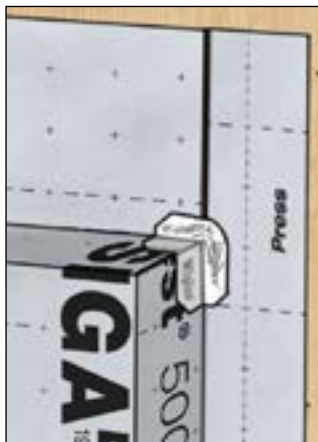
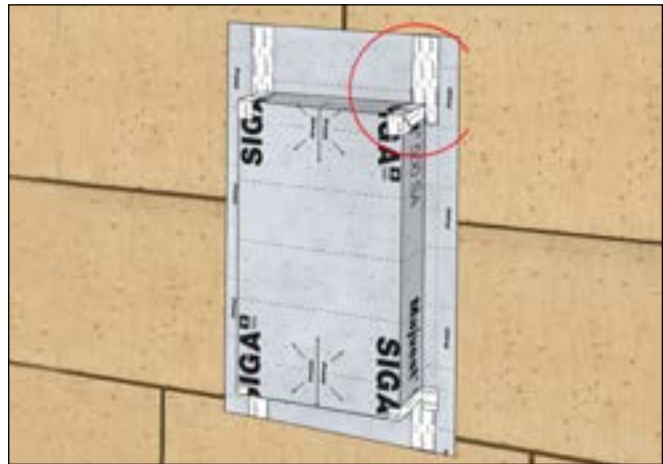
Fold tape on narrow side inward and adhere to the membrane.



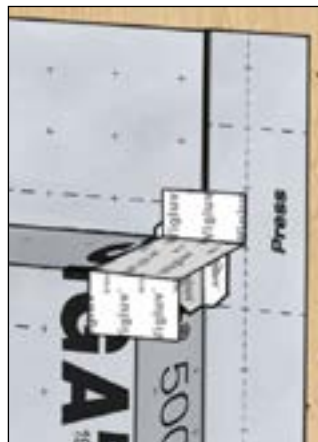
Fold remaining tape section onto the bottom of the extension buck. Apply pressure.

## Creating the Top Seal

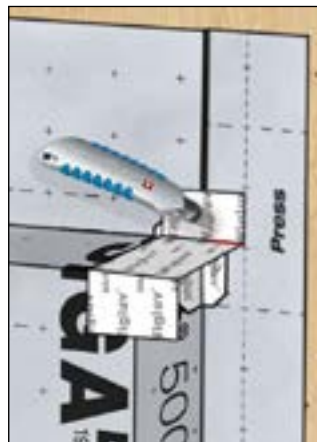
When taping the corners special care must be taken in order to create positive lapping. The corners are potential weak spots and therefore need to be treated with great care making sure the tape is tightly fitted with pressure in the corners.



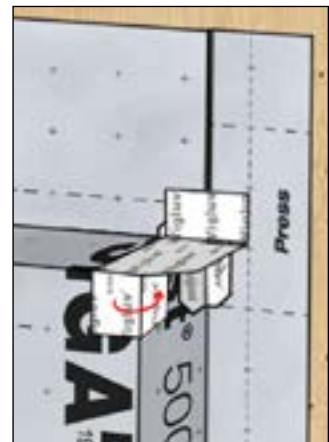
Use 4" long tape strip and apply into corner while using the stretch of Wigluv.



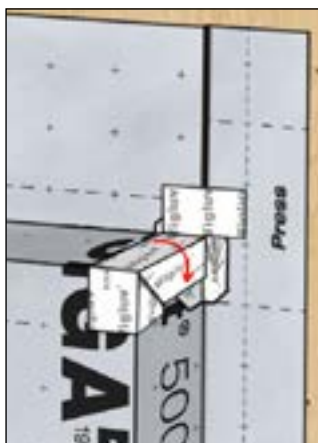
Apply tape around horizontal portion overlapping about 2" around each corner.



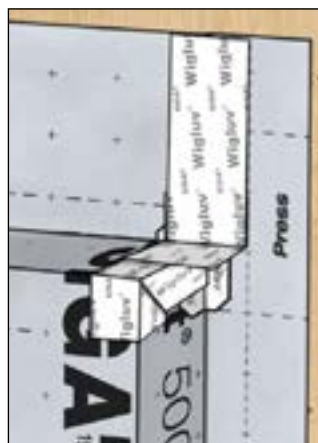
Cut tape toward corner. Be careful not to puncture the tape below.



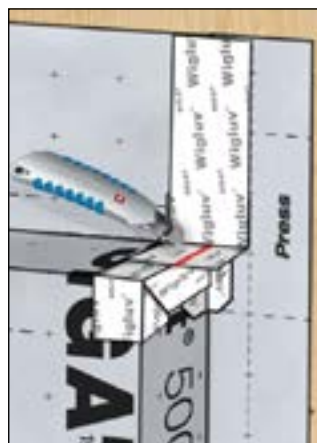
Flap tape in and adhere to Majvest 500 SA. Apply pressure.



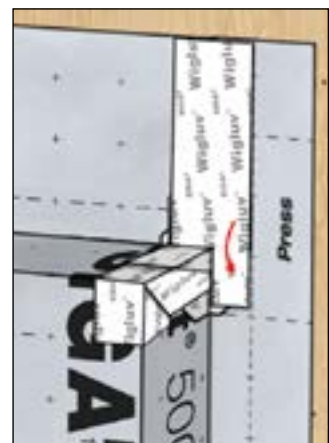
Fold remaining tape section onto the exterior jamb of the extension buck. Apply pressure.



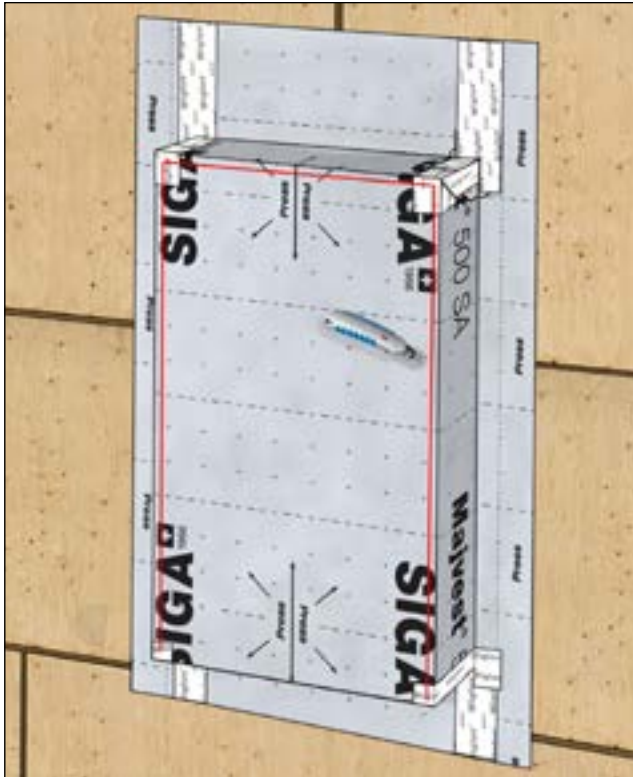
Tape membrane with Wigluv 100 and overlap corner piece.



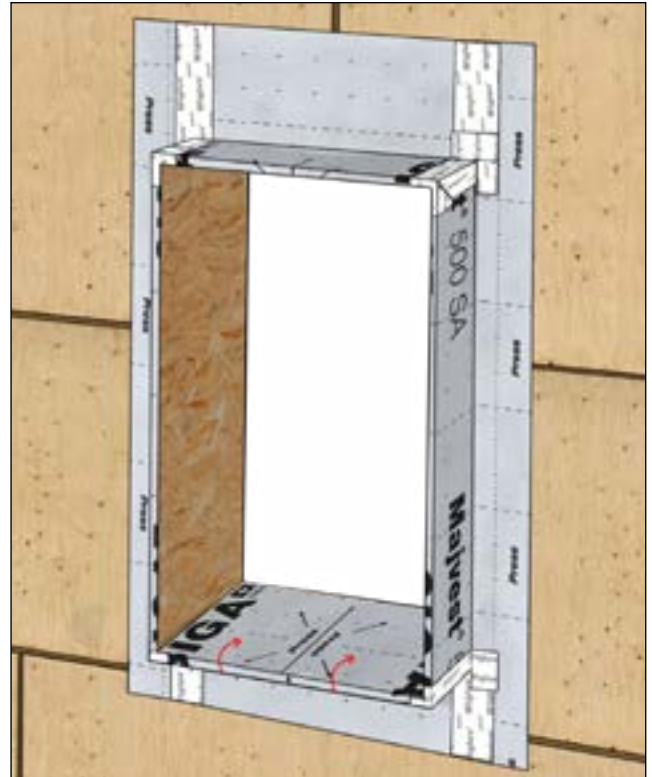
Cut tape toward corner. Be careful not to puncture the tape below.



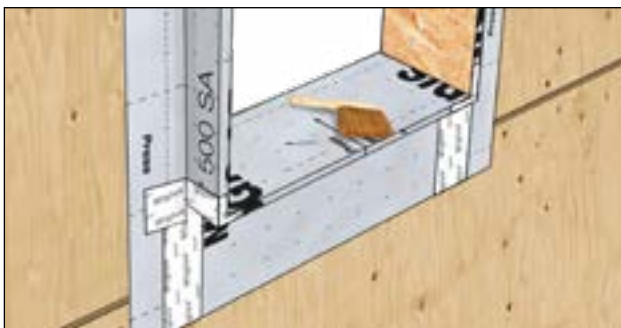
Flap tape down and adhere to Majvest 500 SA. Apply pressure.



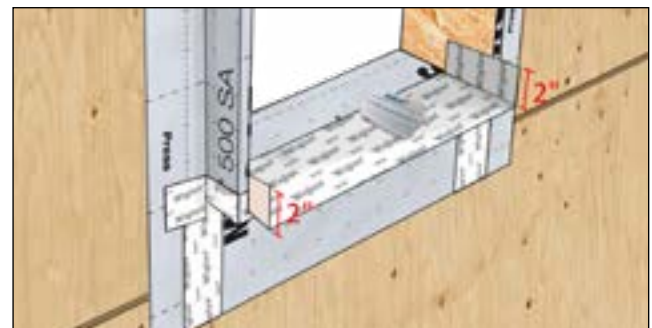
Cut out membrane while using the inner edge of jambs and head as a guide.



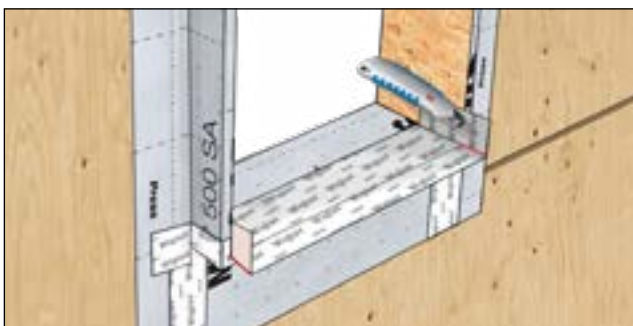
How it should look.



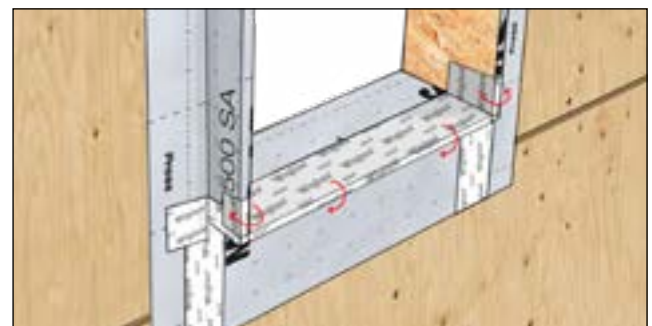
Clean debris and dust from the substrate.



Cut Wigluv 4" wider than the sill so it will extend 2" past each end of the rough opening.

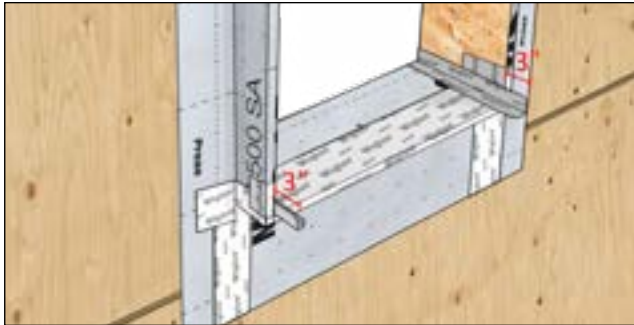


Cut lengthwise toward corners.

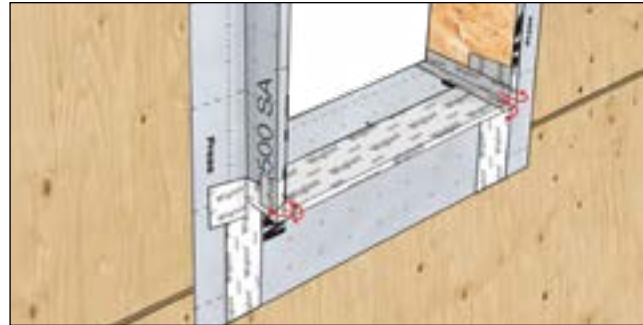


Flap ends around extension buck and apply even pressure. Don't overstretch tape.

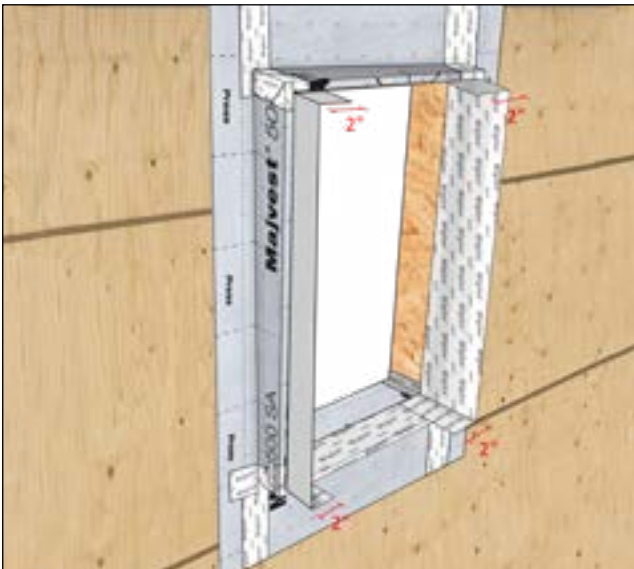




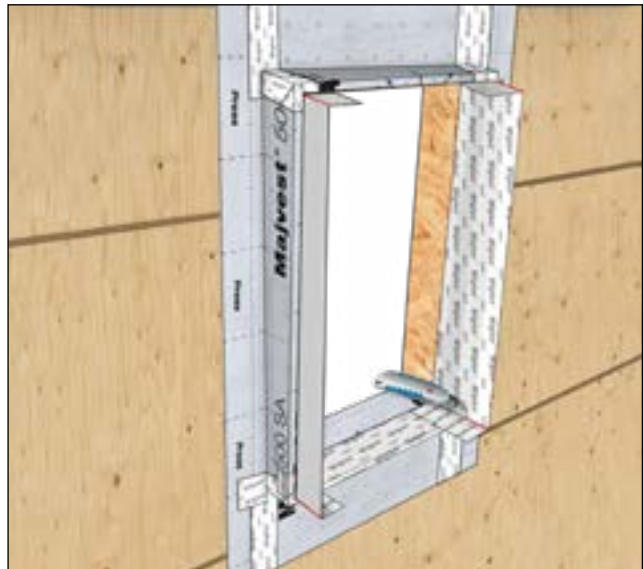
Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



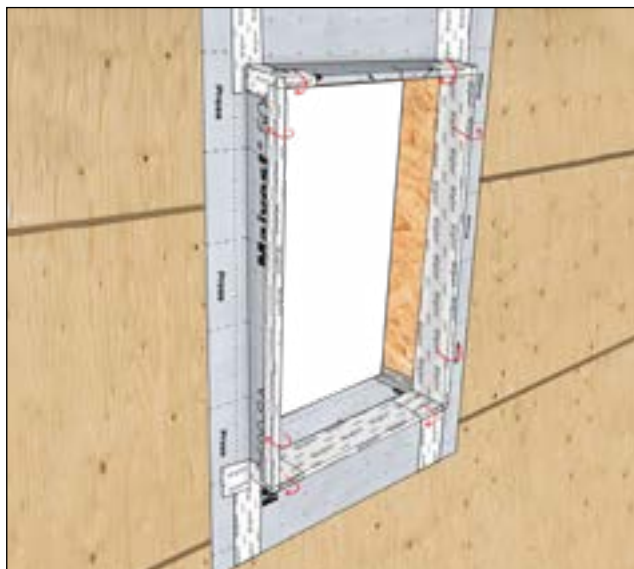
Stretch the Wigluv tape around the corner toward the exterior — wrinkles are normal!



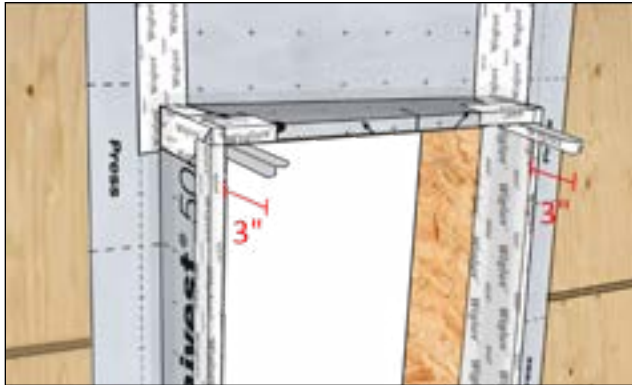
Cut Wigluv 4" wider than the jamb so it will extend 2" past each end of the rough opening.



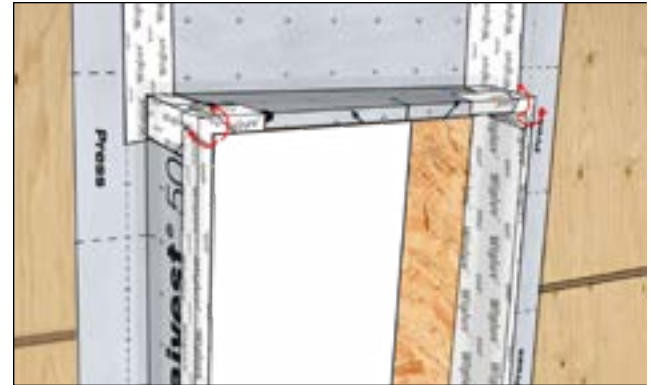
Cut lengthwise toward corners.



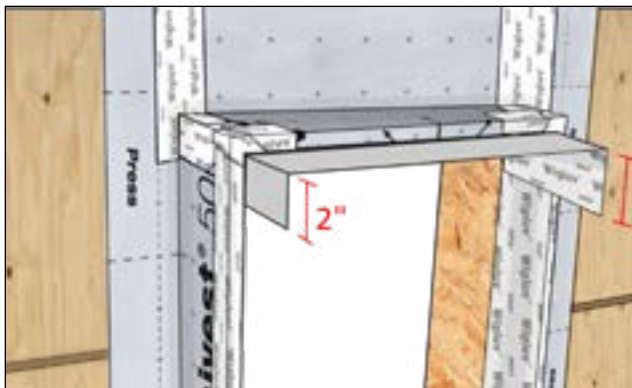
Flap ends around extension buck and apply even pressure. Don't overstretch tape.



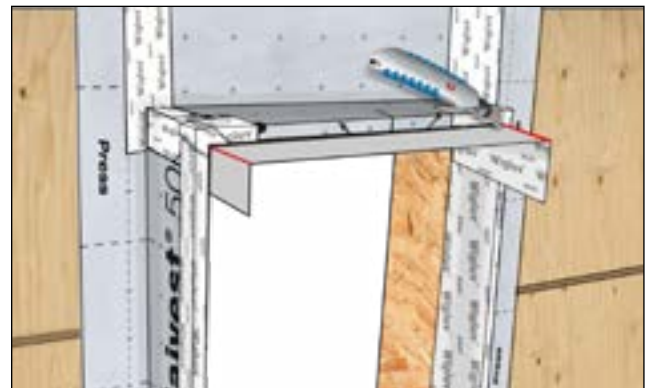
Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the rough opening plus 3".



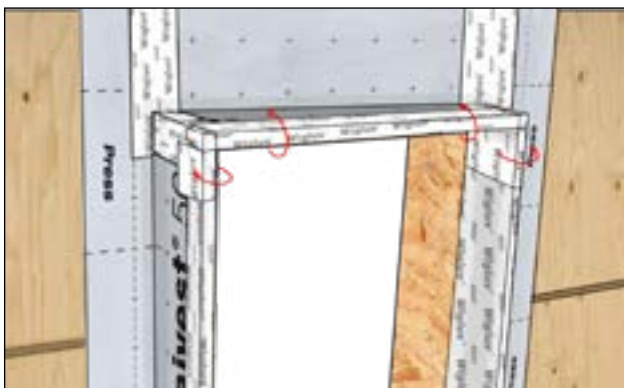
Stretch the Wigluv tape around the corner toward the exterior — wrinkles are normal!



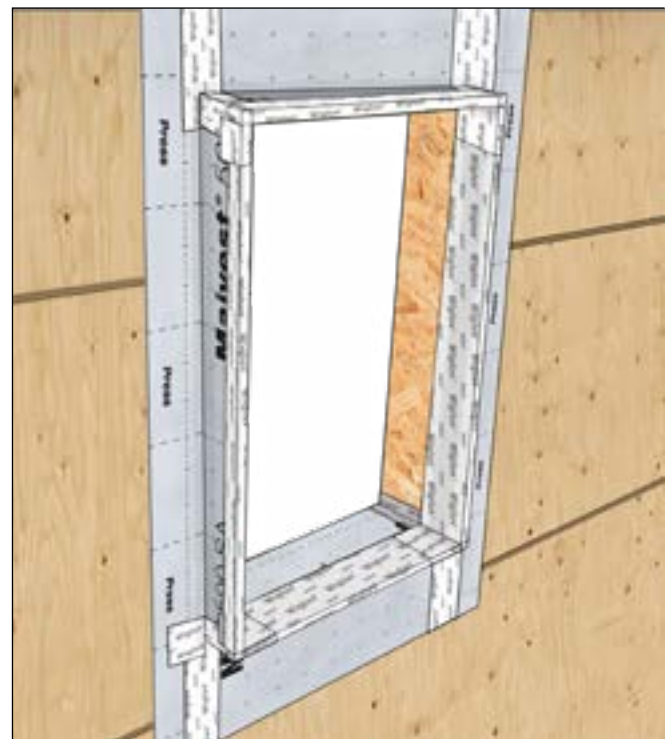
Cut Wigluv 4" wider than the head so it will extend 2" past each end of the rough opening.



Cut lengthwise toward corners.



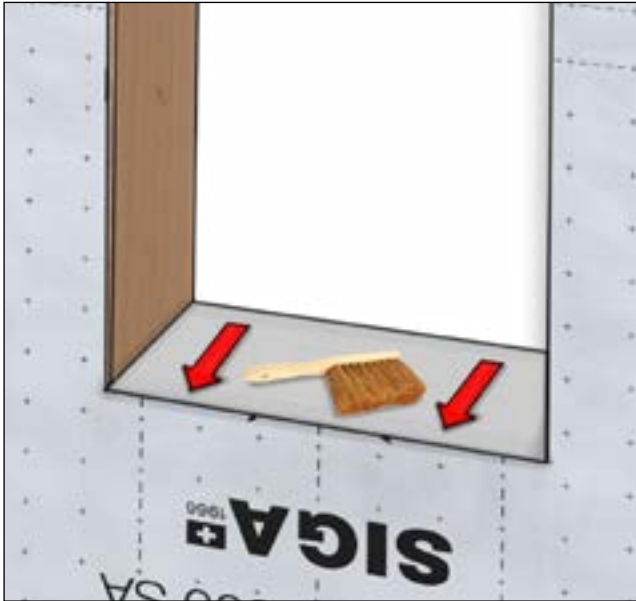
Flap ends around extension buck and apply even pressure. Don't overstretch tape.



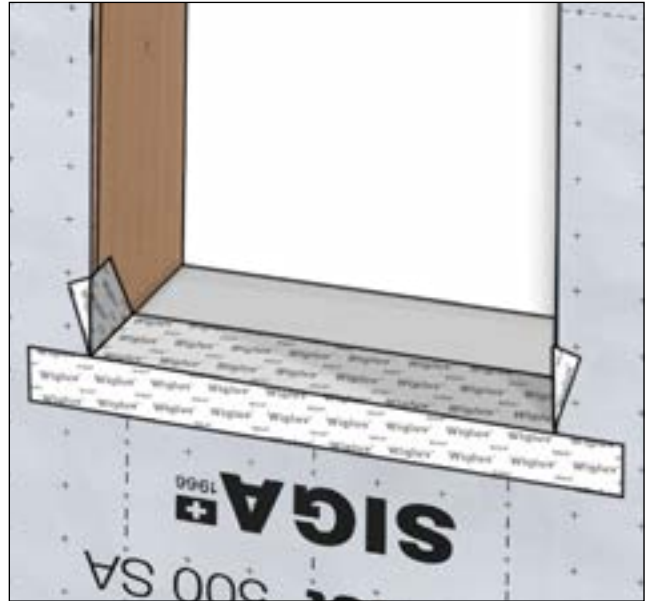
How it should look.

# Sill Flashing Details

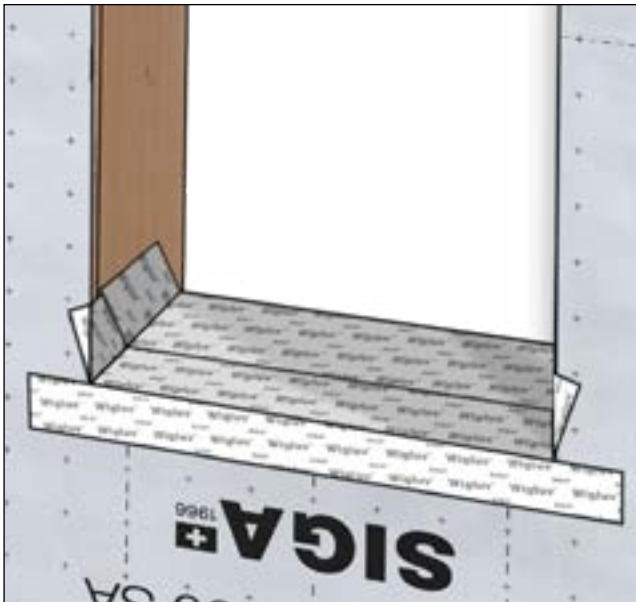
## 5.1 SLOPED SILL



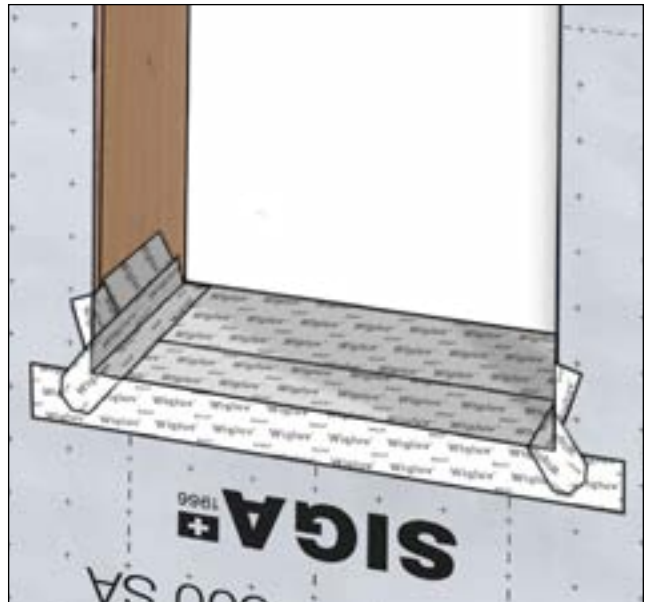
Fix sloped sill material to sill as per project specification. Clean area from dust and debris.



Cut Wicluf 4" wider than the sill so it will extend 2" past each end of the rough opening. Flash sill as usual while cutting the tape lengthwise toward the corners.

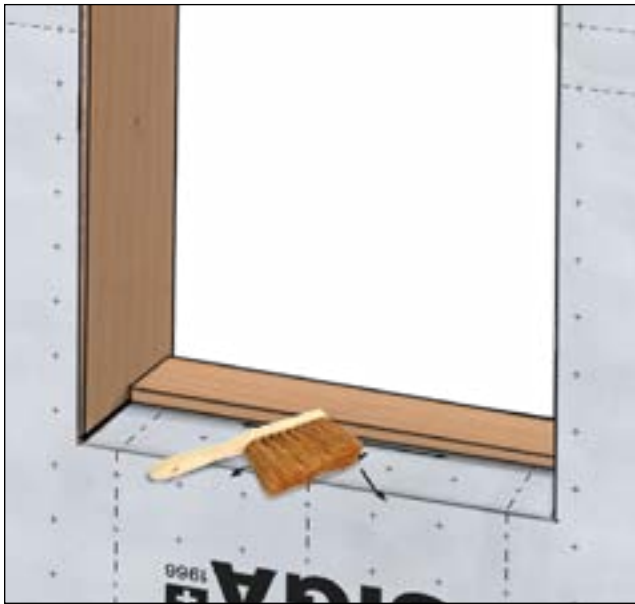


Add another tape layer if needed to extend past inner surface of installed window.

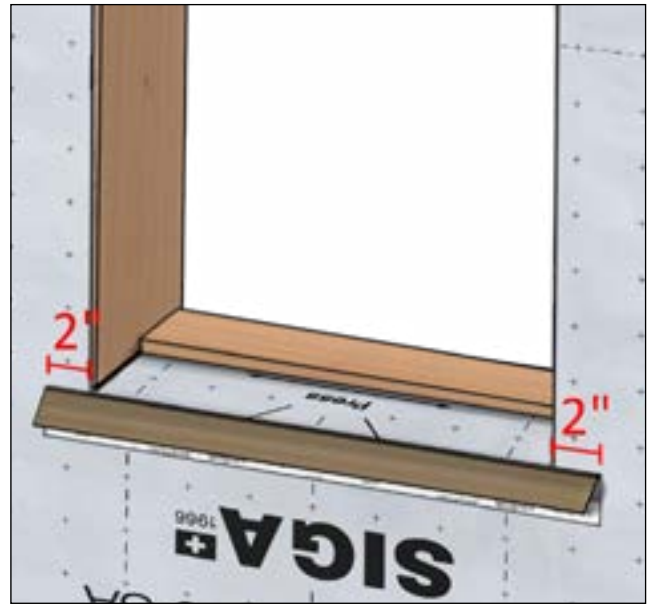


Add corner gussets and stretch around corners — wrinkles are normal!

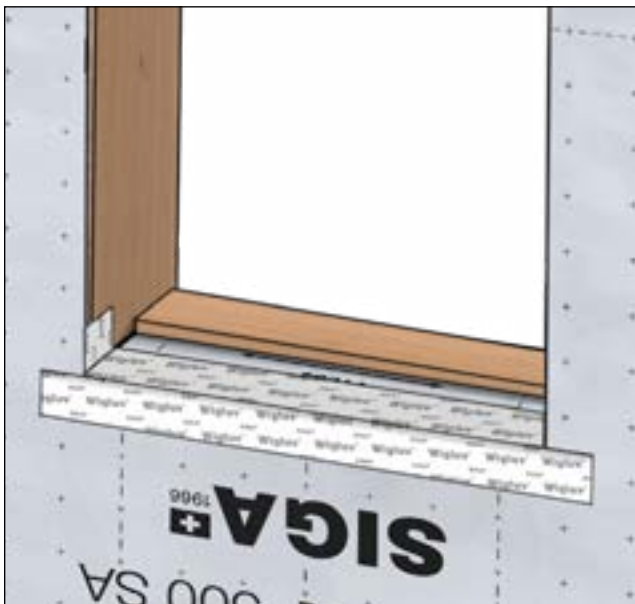


**5.2 BACKDAM**

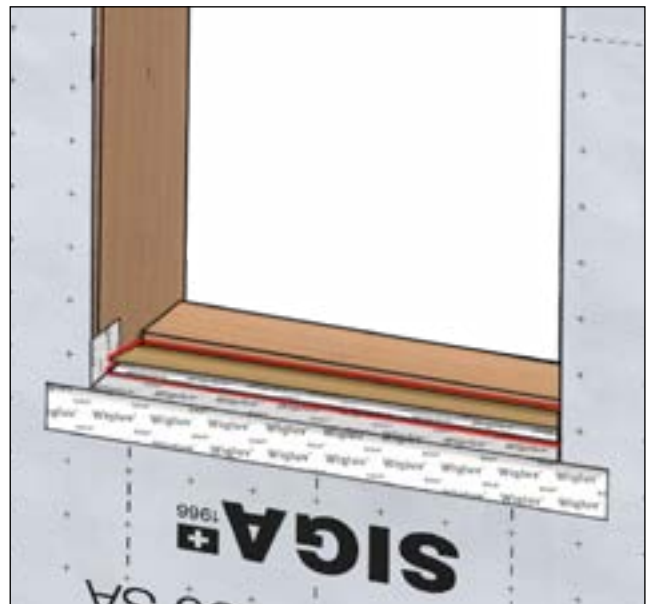
Fix backdam material to sill as per project specification. Clean area from dust and debris.



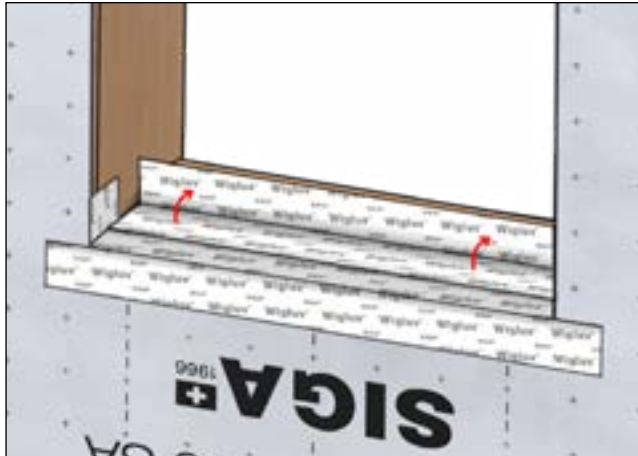
Cut Wicluf 4" wider than the sill so it will extend 2" past each end of the rough opening. Crease the tape using the split backing and remove one backing strip.



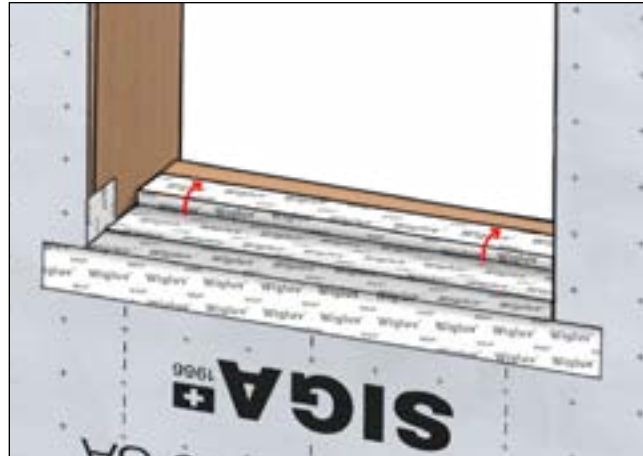
Flash sill as usual while cutting the tape lengthwise toward the corners.



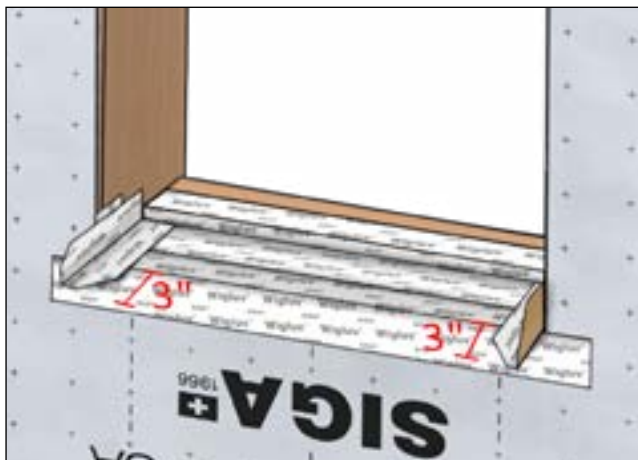
Add tape the same width as the sill and overlap 1" onto the pre-flashed part.



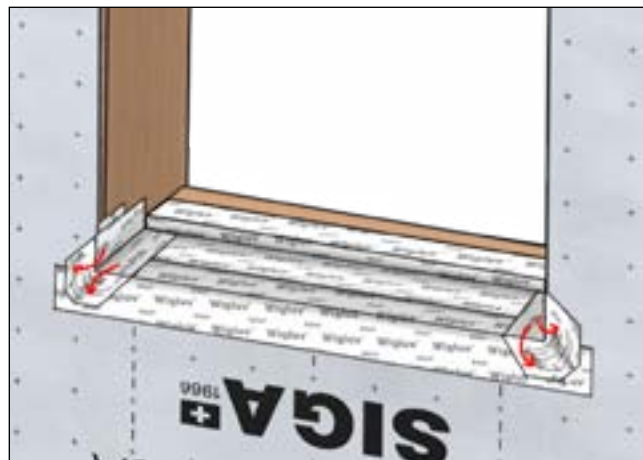
Remove backing paper and fold up while working the tape tightly in the corner using a squeegee.



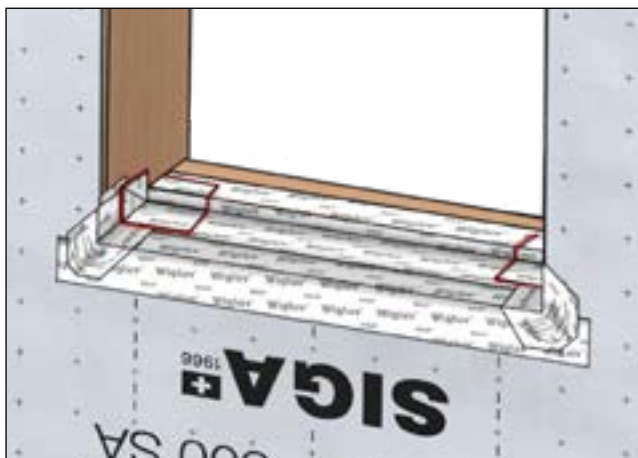
Flap over rest of tape while applying even pressure.



Create two gussets with Wigluv 100 by cutting a piece of tape that's the full depth of the backdam plus 3". Cut one end of the tape at a 45 degree angle to create a "dog ear".



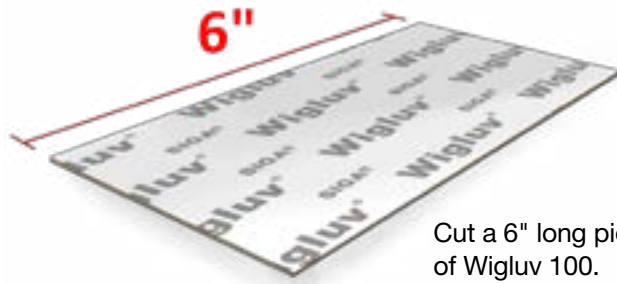
Use stretch of Wigluv tape and work around corner. Press on firmly using a roller or squeegee — wrinkles are normal!



Install 3D corner boot shown on page 32. Press on firmly using a roller or squeegee.



## 3-D Corner Boot



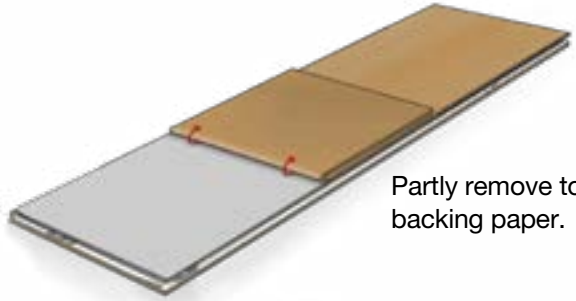
Cut a 6" long piece of Wigluv 100.



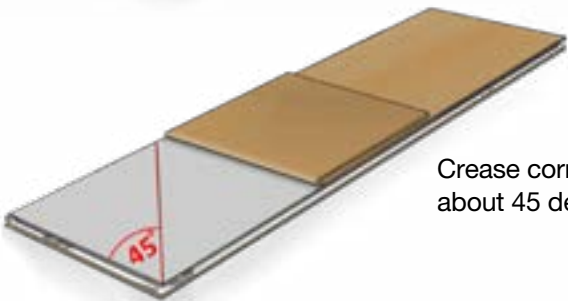
Crease along middle.



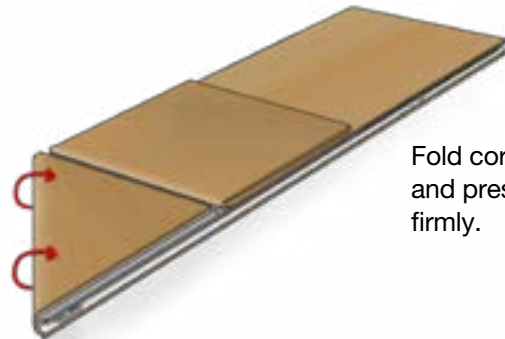
Fold over at split backing.



Partly remove top backing paper.



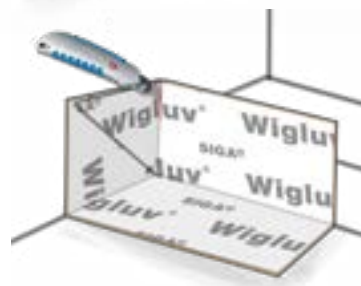
Crease corner at about 45 degrees.



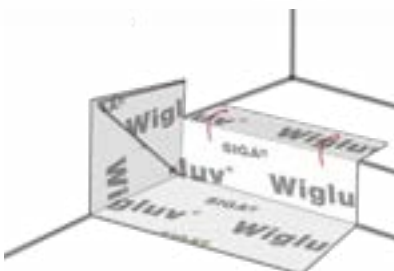
Fold corner over and press on firmly.



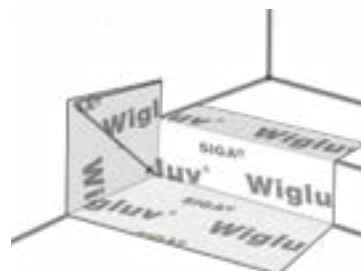
Open corner boot and fold rectangular.



Position in corner and cut to depth of backdam.



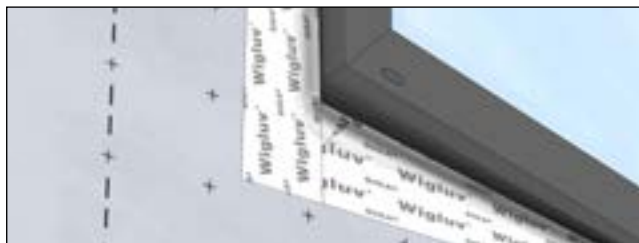
Fold over flap and press onto backdam.



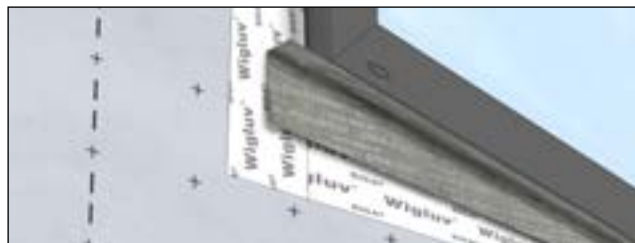
How it should look.

# Window Seal on the Exterior

## 6.1 PROTRUDING NON-FLANGED WINDOW



**OPTIONAL** Dependent on window type the sill can either be taped or left open for drainage. Check with your window manufacturer before taping.



Cut Fentrim 230 grey about 2" wider than the width of the prepared rough opening. Apply narrow side of the tape along underside of the window while applying firm pressure.



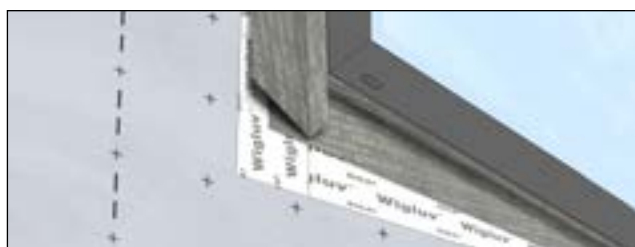
Remove backing paper and press on firmly using a roller or squeegee.



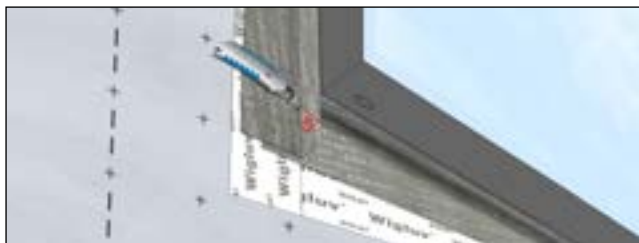
Make 45° cuts at each end, from the inside corner outwards, make sure to not cut the tape too deep to avoid pinholes.



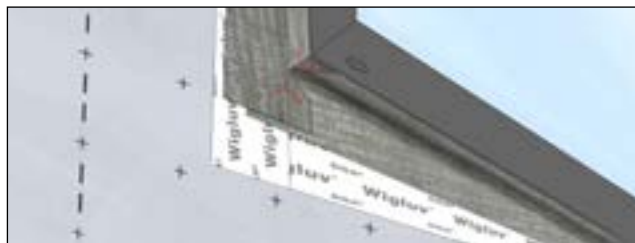
Fold both ends up and apply firm pressure.



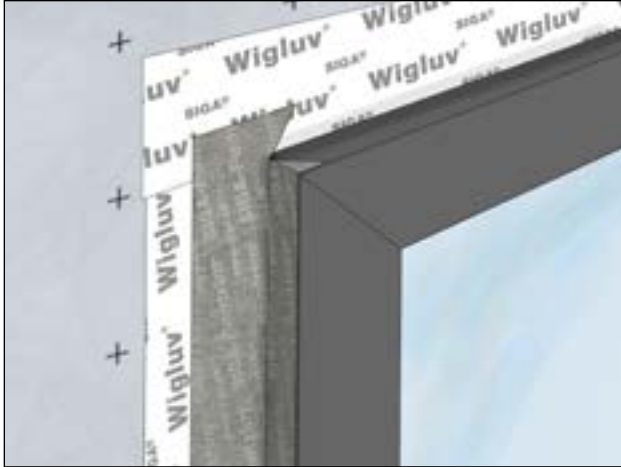
Cut Fentrim 230 grey about 2" wider than the vertical portion of the rough opening. Apply narrow side of the tape along the window while applying firm pressure.



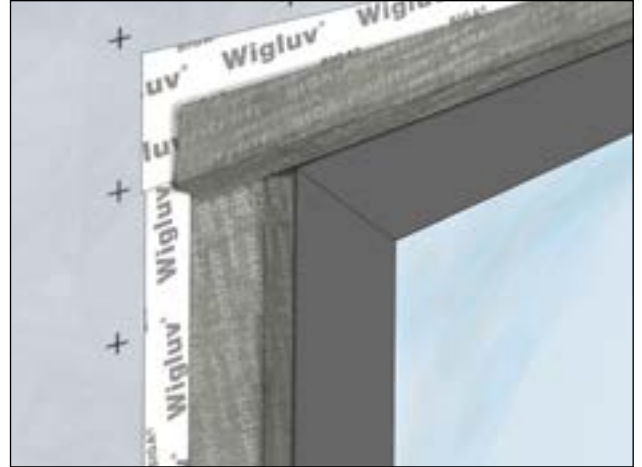
Remove backing paper and press on firmly using a roller or squeegee. Make 45° cuts at each end, from the inside corner outwards, make sure to not cut the tape too deep to avoid pinholes.



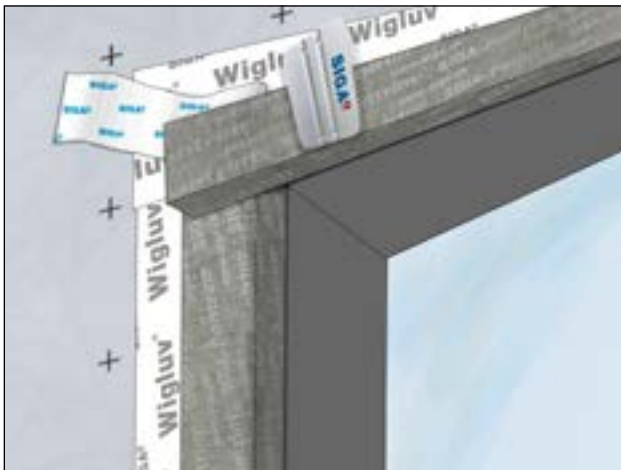
Fold both ends up and apply firm pressure. Repeat on both sides.



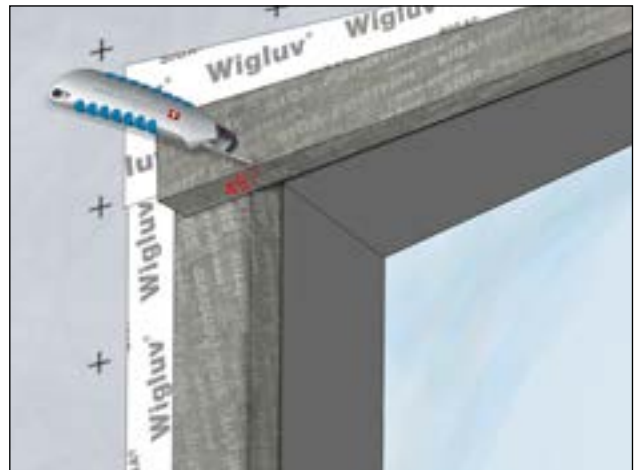
Cut Fentrim 230 grey about 4" wider than the width of the prepared rough opening so both ends are overlapping the tape on the jamb.



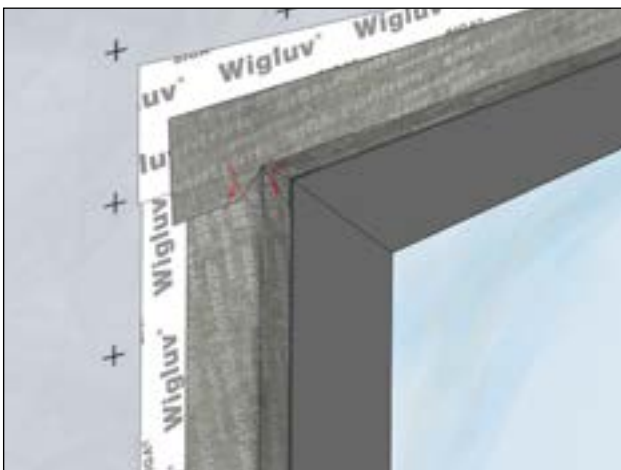
Apply narrow side of the tape along the top of the window while applying firm pressure.



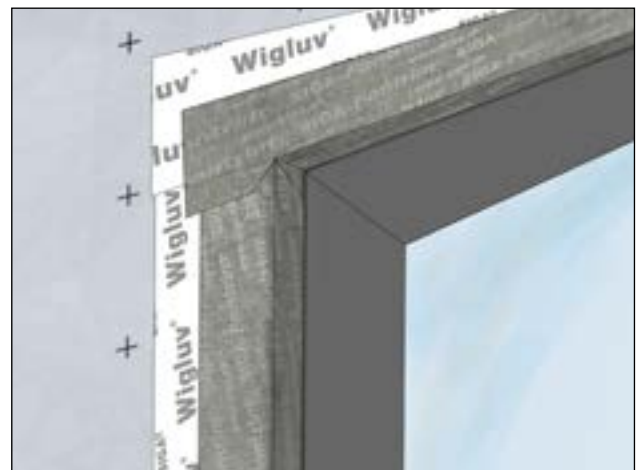
Remove larger backing paper and press on firmly using a roller or squeegee.



Make 45° cuts at each end, from the inside corner outward, make sure to not cut tape too deep to avoid pinholes.

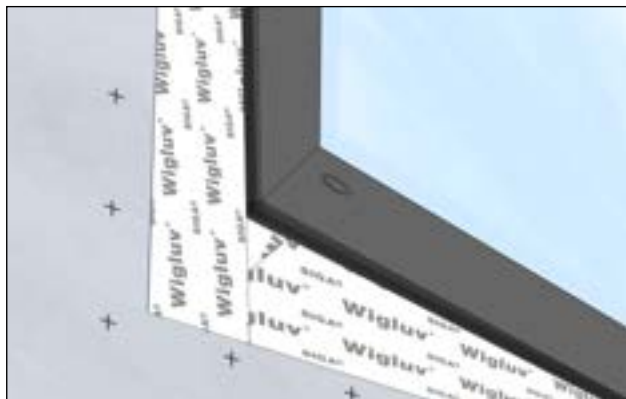


Fold both ends up and apply firm pressure. Repeat on both sides.

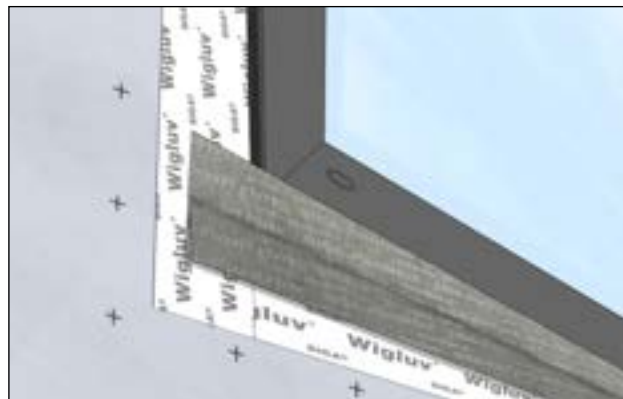


How it should look.

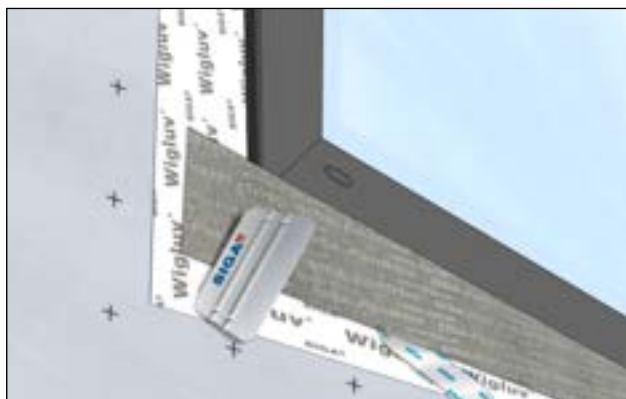
## 6.2 FLUSH NON-FLANGED WINDOW



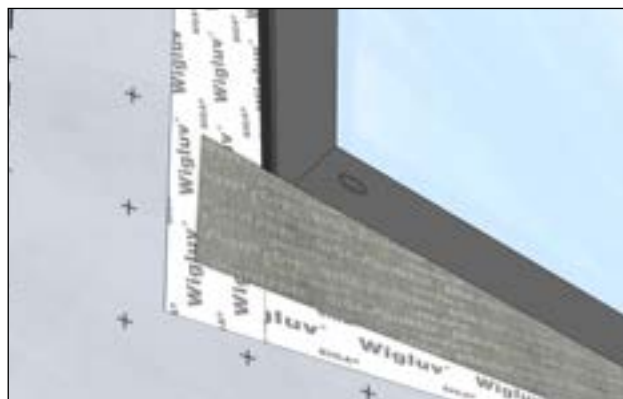
**OPTIONAL** Dependent on window type the sill can either be taped or left open for drainage. Check with your window manufacturer before taping.



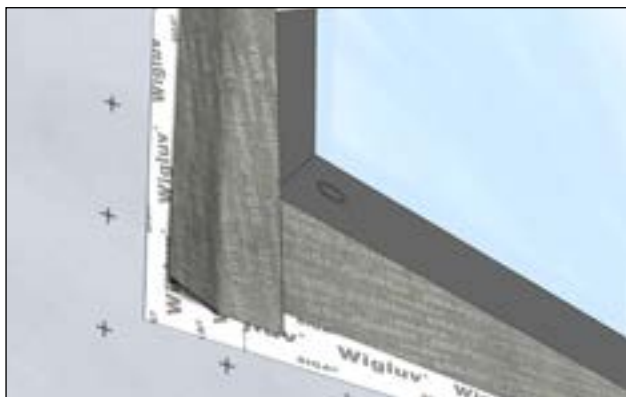
Cut Fentrim 430 grey about 2" wider than the width of the prepared rough opening. Remove one backing paper and apply the tape along underside of the window while applying firm pressure.



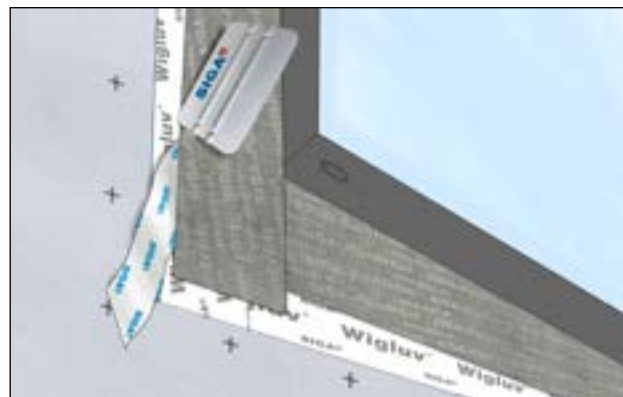
Remove second backing paper and press on firmly using a roller or squeegee.



Make sure the tape is fully adhered.

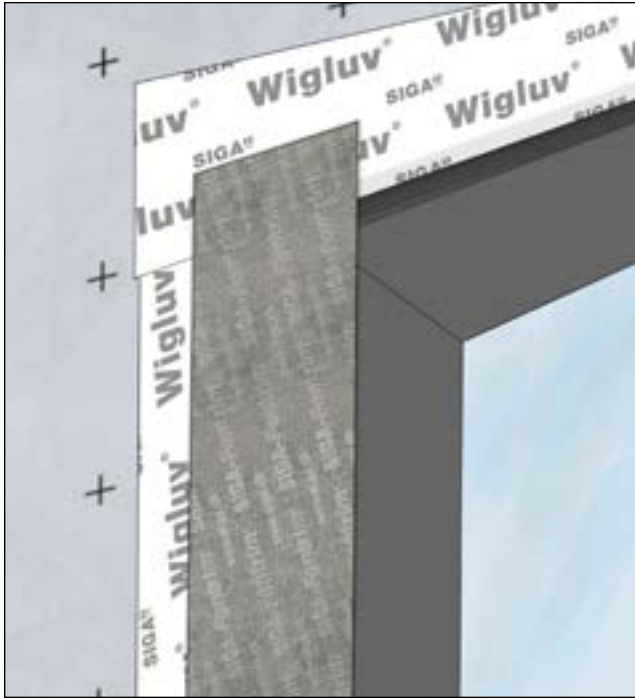


Cut Fentrim 430 grey about 2" wider than the vertical portion of the rough opening. Remove one backing paper and apply the tape along the vertical portion of the window while applying firm pressure.

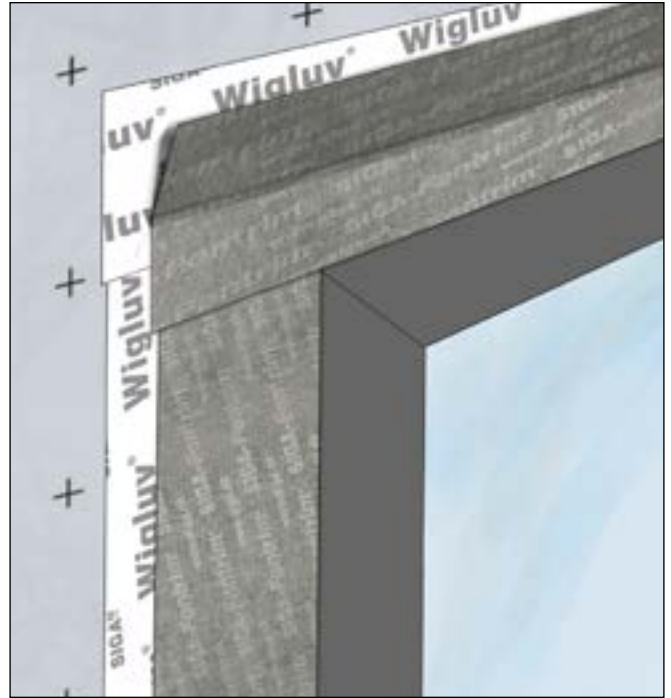


Remove second backing paper and press on firmly using a roller or squeegee.

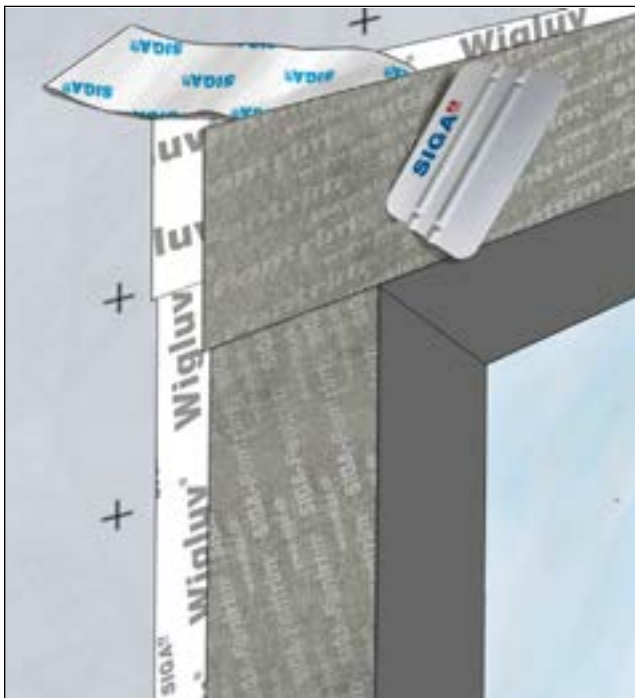




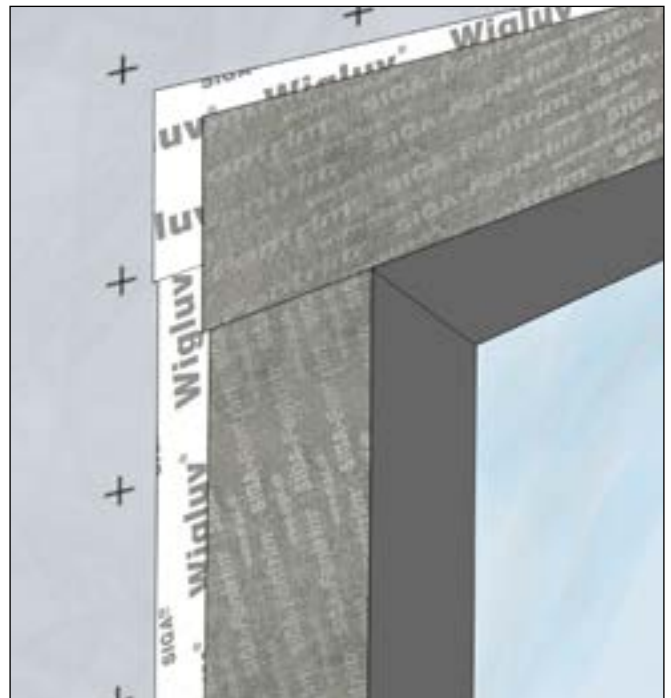
Cut Fentrim 430 grey about 4" wider than the width of the prepared rough opening so both ends are overlapping the tape on the jamb.



Remove one backing paper and apply the tape along the top of the window while applying firm pressure.

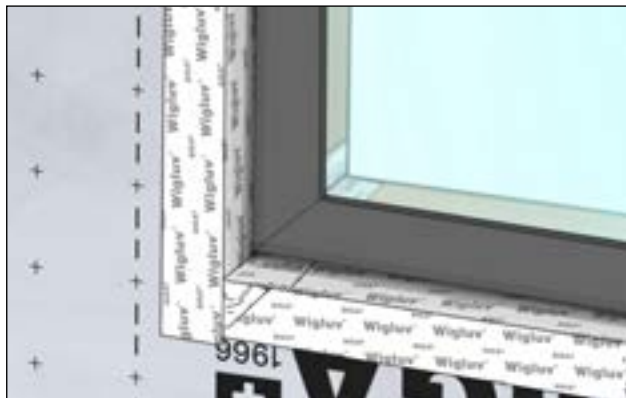


Remove second backing paper and press on firmly using a roller or squeegee.

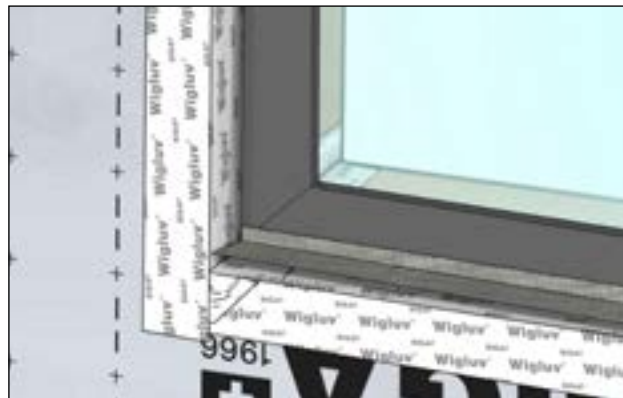


How it should look.

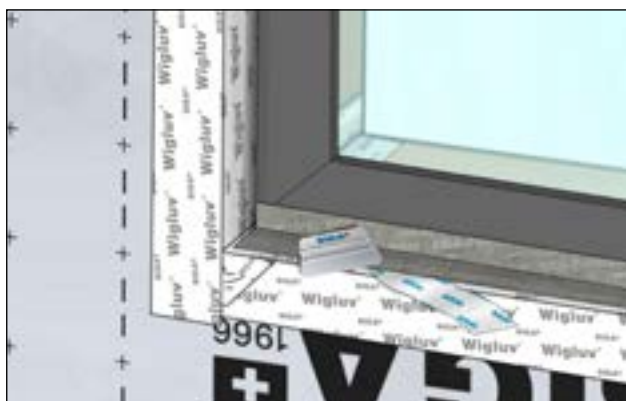
### 6.3 INSET NON-FLANGED WINDOW



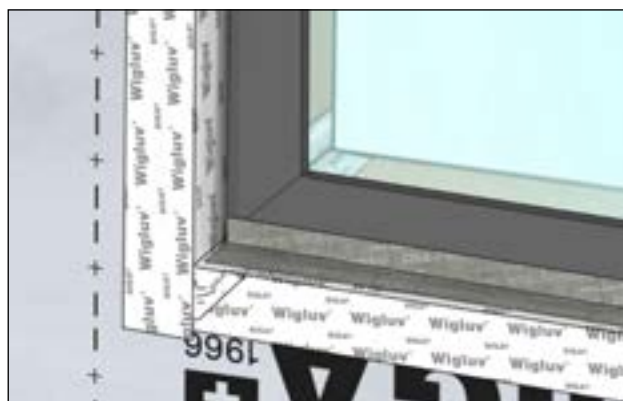
**OPTIONAL** Dependent on window type the sill can either be taped or left open for drainage. Check with your window manufacturer before taping.



Cut Fentrim 230 grey the same width as the prepared rough opening. Apply narrow side of the tape along the window frame while applying firm pressure.



Press on firmly while removing the second backing strip.



How it should look.



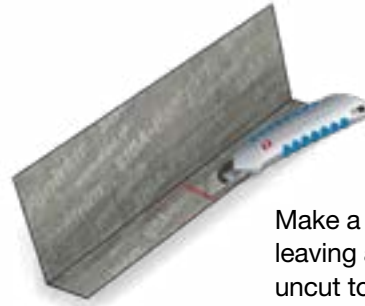
## GOOD TO KNOW

It is common practice to leave the sill on the outside untaped in many markets. This habit is a cautionary measure in case the frame is compromised over the lifetime of the building or drainage is achieved on the underside of the frame. Modern high-performance windows mostly employ frames that have a built in drainage pan that lets any water inside exit through weep holes in the front of the frame. Check with the window manufacturer to see what they recommend.

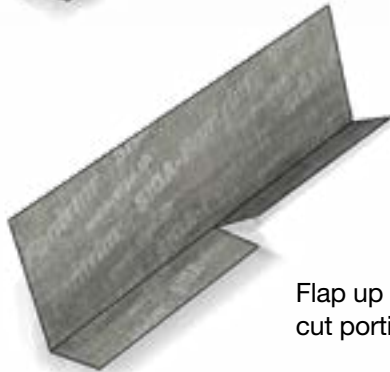
## Creation of Tape Corner Piece



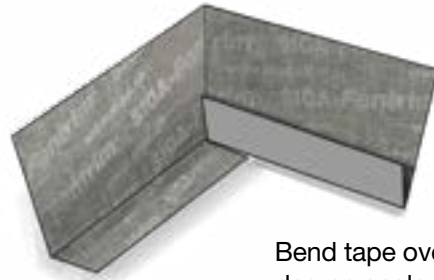
Cut a strip of Fentrim 230 grey with about 5" in length.



Make a cut in the middle leaving about 1/16" to the fold uncut to avoid pinholes.



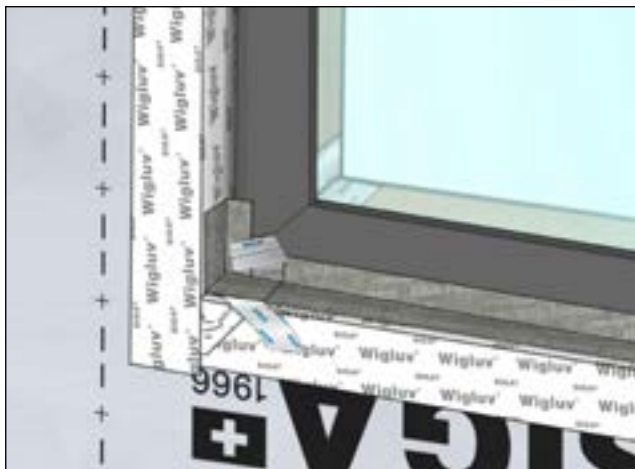
Flap up one side of the cut portion.



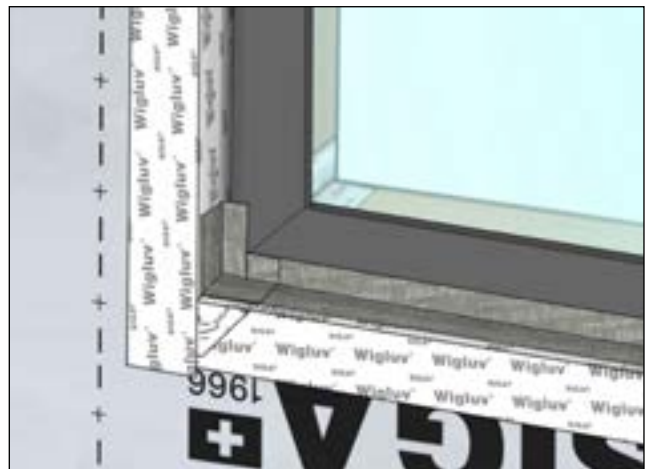
Bend tape over to a 90 degree angle.



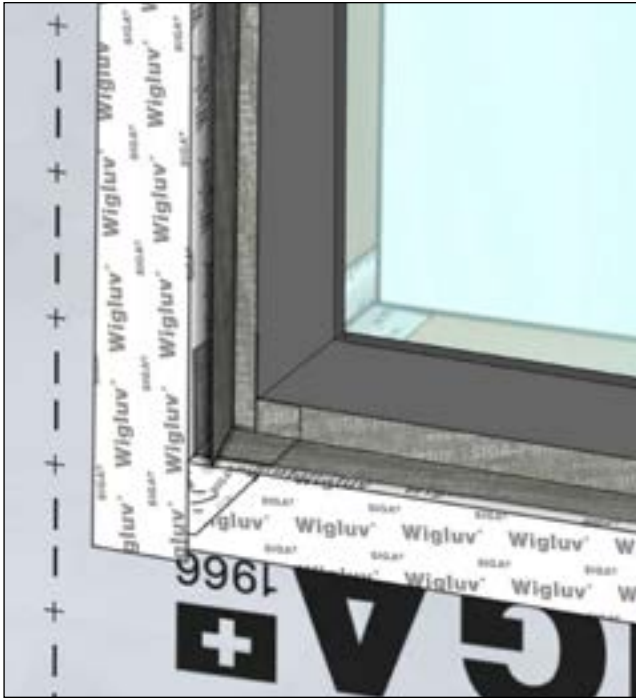
Overlap tape onto itself and press on firmly ensuring no pinhole is created.



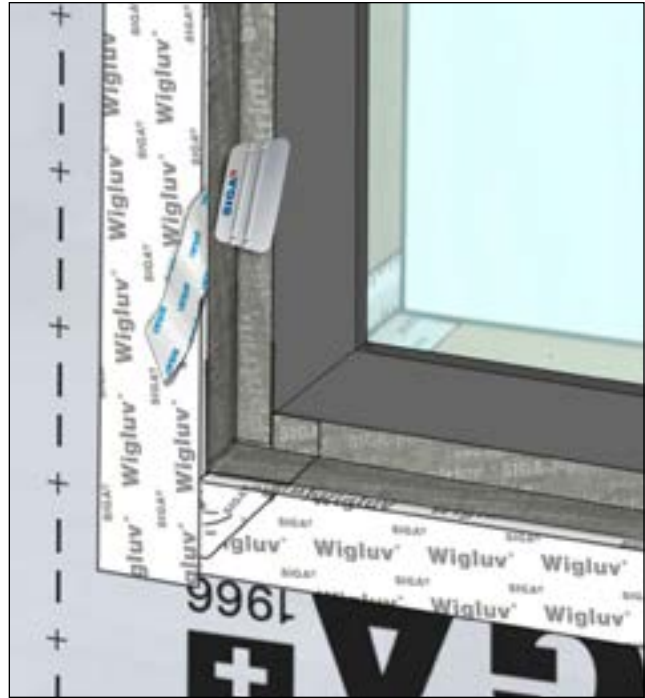
Apply 3D corner boot in bottom corner while applying firm pressure — repeat on both sides.



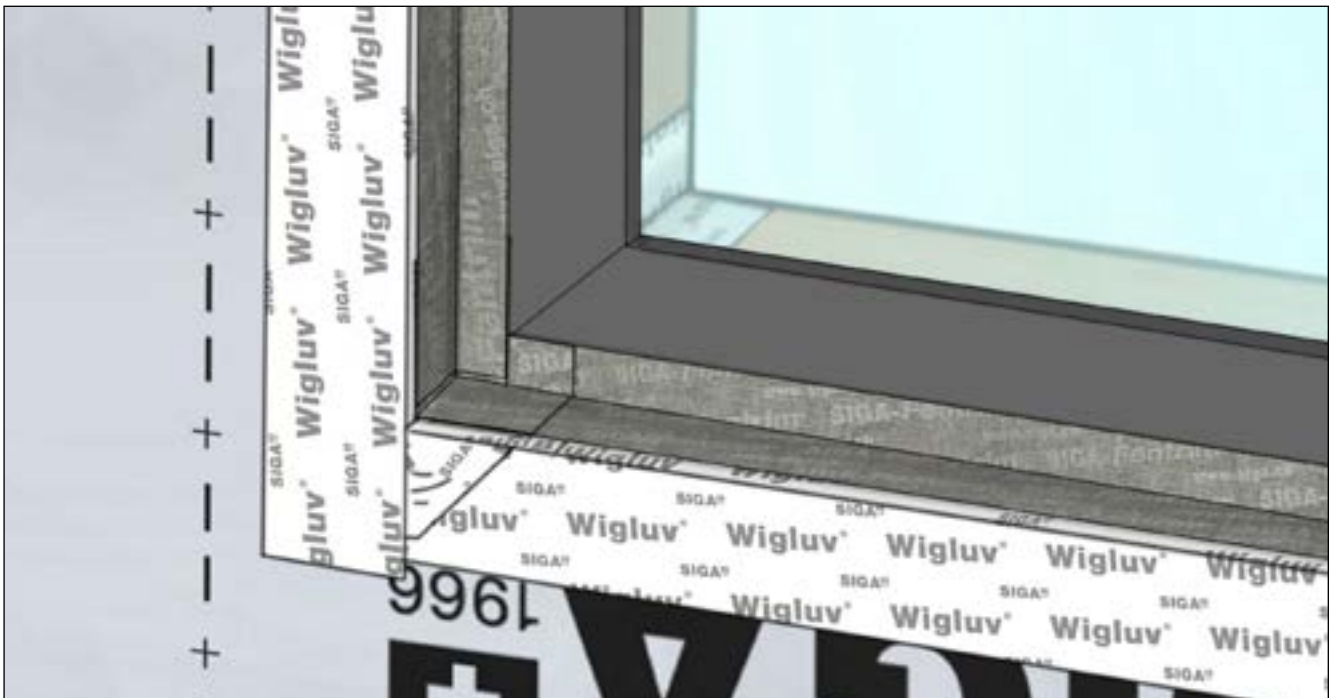
How it should look.



Cut Fentrim 230 grey the same length as the vertical portion of the rough opening. Apply pre-folded section of the tape along vertical portion of the window frame.

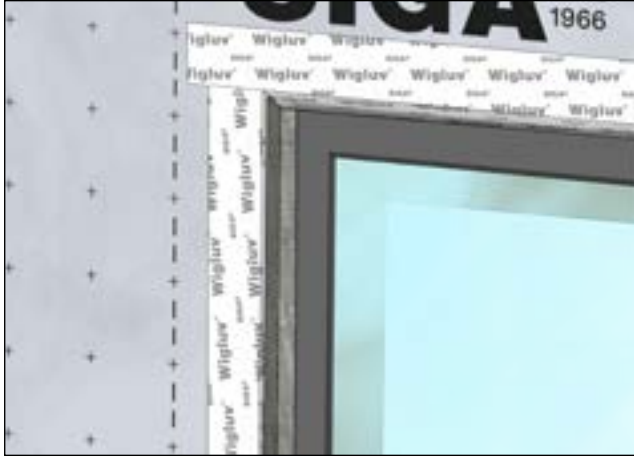


Remove backing strip and press on tape firmly using a roller or squeegee — repeat on both sides.

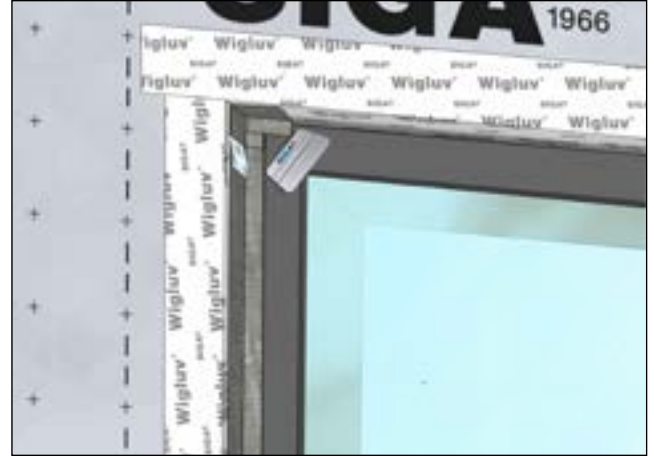


How it should look.

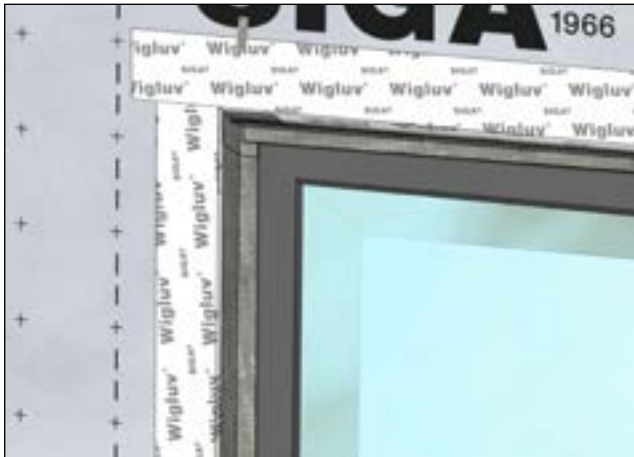




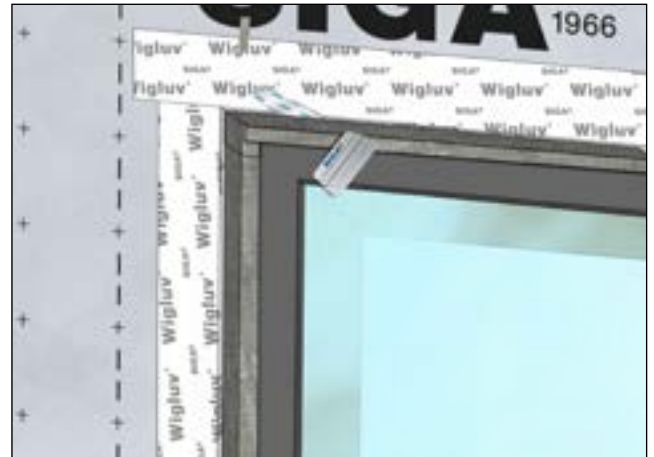
Make sure substrate is clean from dust and debris.



Apply 3D corner boot in top corner while applying firm pressure — repeat on both sides.



Cut a strip of Fentrim 230 grey as long as the horizontal portion of the rough opening. Apply pre-folded tape section along the horizontal portion of the frame.



Remove backing paper and work tape onto the pre-flashed top, do not install tape with tension, press on firmly.



How it should look.

## 6.4 FLUSH FLANGED WINDOW



Install flanged window on flashed rough opening as per manufacturer's recommendation. For flanged windows the sill is rarely taped, check with the window manufacturer before tape installation.



Apply Fentrim 430 grey along jambs while overlapping 1.5" on top and 2.5" on the bottom while removing one backing strip.



Remove second backing strip and apply firm pressure using a roller or squeegee.



Cut Fentrim 430 grey +6" wider than rough opening to overlap 3" on each side. Apply tape along top of the window while removing one backing strip.



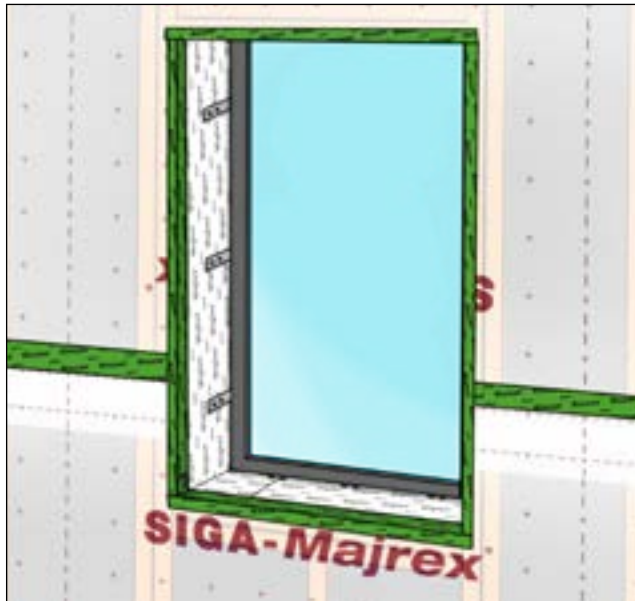
Remove second backing strip while applying firm pressure using a roller or squeegee.



How it should look.

# Window Seal on the Interior

## 7.1 INTERIOR TAPE INSTALLATION



Install window as per manufacturer's recommendation.



Apply Fentrim IS 20 directly on window frame with the pre folded section.

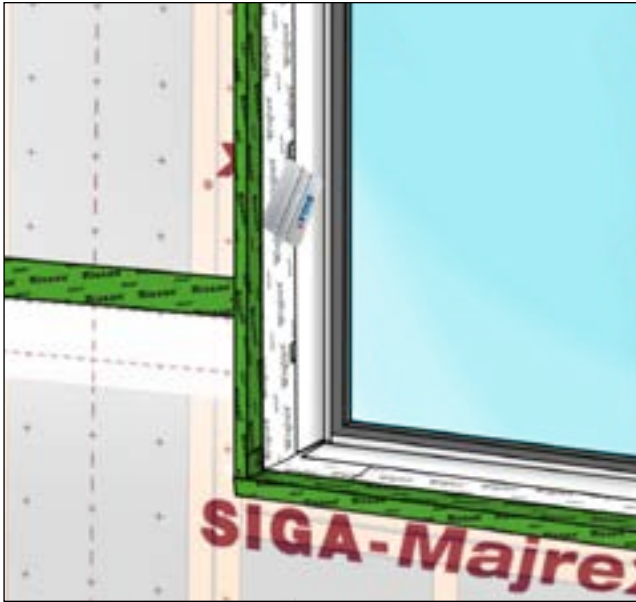


Remove backing paper and apply firm pressure using a roller or squeegee.



Apply Fentrim IS 20 along vertical section of window.

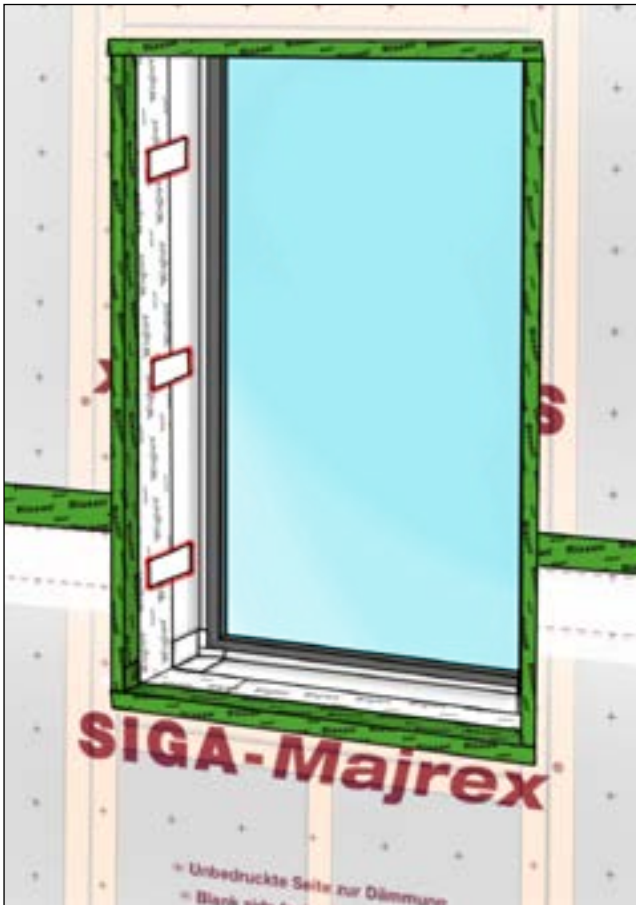




Remove backing paper and apply firm pressure using a roller or squeegee.



Create corner piece (page 38) and place into corners. Repeat step for all 4 corners.



Tape around the interior face of the window, and seal the mounting brackets or any other possible sources of leakage.



## 7.2 INTERIOR TAPE PRE-INSTALLATION



Bond the narrow side of Fentrim IS 20 on the length of the window with an extension corresponding to the width of the Fentrim IS 20 past each end. Press on firmly.



Apply Fentrim IS 20 on opposite side of frame.



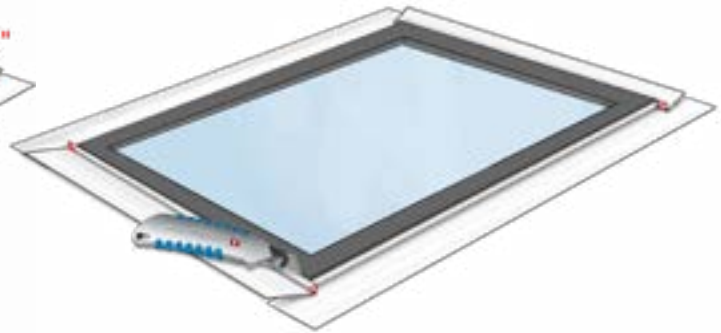
Make 45° cuts to the folded edge at each end, from the inside corner outward.



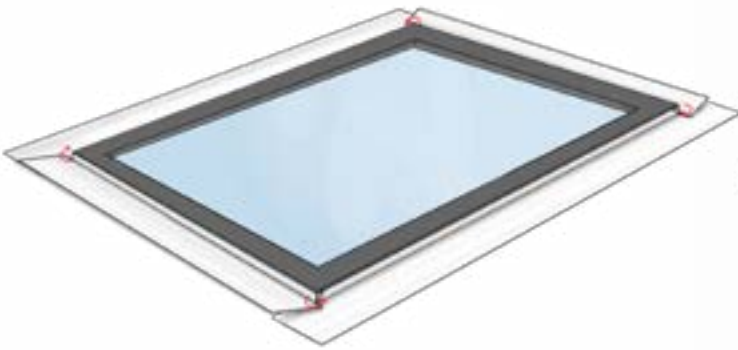
Flap over cut pre-folds so they are in plane with the wider tape sections. Bond flaps of the narrow tape to the window frame.



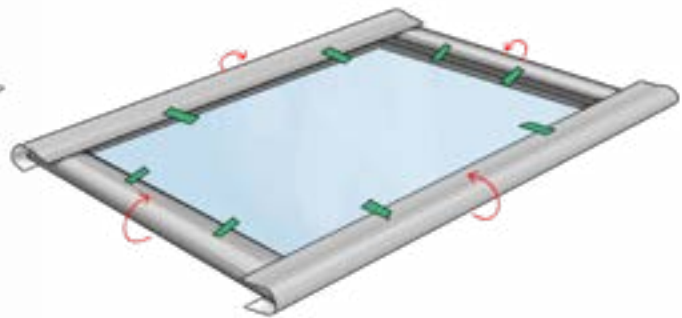
Apply Fentrim IS 20 on top and bottom of frame while making sure all tapes line up — overlap 1/2" on each side.



Make 45° cuts to the folded edge at each end, from the inside corner outward.



Bond flaps of the narrow tape to the window frame.



For easier install, temporarily fold tapes up and fix them with a piece of masking tape. Window is ready to be installed.

# SIGA Reliability

## Product Performance and Limitations

SIGA Cover Inc. (SIGA) products have the properties set forth in the corresponding Technical Data Sheets (available at [www.siga.swiss](http://www.siga.swiss)). However, SIGA excludes any liability for processing or use that does not comply with these guidelines, or:

- In case of unusual influences on the product, in particular of chemical or mechanical nature.
- If permanent mechanical strain (e.g. due to tensile and compression forces) has an impact on the seal.
- If multi-layered sheeting or paneling materials do not have sufficient cohesive strength.
- In case of open facade cladding with Majvest® or Majvest® 500 SA.
- In case of air-sealing in areas with extraordinary moisture levels (e.g. sauna and swimming pool applications).
- When using Dockskin®, if the primed surface is not applied with Majvest® 500 SA, Wigluv®, Rissan® or Fentrim®.
- When the prerequisites for the secure laying of sheeting are not fulfilled. The substructure must be free of any protruding objects which could cause injury, such as screws etc.
- When the prerequisites for reliable sealing are not fulfilled. The substrate must be dry, structurally sound and free of any dirt, grease and debris. It must not be adhesive-repellent. Before sealing clean the substrate and sheeting and perform an adhesion test on site.
- If substrates are too loose or not densified enough. Strengthen affected areas with the high-performance primer Dockskin®.
- If bonds are made under standing water.
- If creases or tension are not relieved. Cut and reseal in the affected areas.

In the IECC (2018) North America is divided into 8 different climate zones. Accordingly, different zone-related requirements are to be considered regarding the building envelope. For information about climate zones please refer to the International Energy Conservation Code. Consult your planner or building scientist to check whether your planned construction will meet the requirements of the respective climate zone.

## Guidelines

These Guidelines can become invalid if new knowledge is acquired or new developments are made. The most up to date version is available at [www.siga.swiss](http://www.siga.swiss). SIGA assumes no liability for the accuracy, completeness or appropriateness of the drawings included in these Guidelines for a specific installation or purpose. Confirm project specific conditions with a local licensed design professional in order to assure compliance with all legal requirements. SIGA is not licensed to provide professional engineering or architectural services.

## Technical Product Properties

SIGA high-performance adhesives are free of solvents, VOCs, high boilers, plasticizers, chlorine and formaldehyde. They cannot be removed after application. SIGA adhesives are pressure-activated and require firm installation pressure. Ageing resistant, durable adhesive power. Made without rubber, resins or solvent to prevent embrittlement.

**Installation temperature (tapes and membranes):** From -10°C / +14°F

**Service temperature resistance (tapes):** -40°C to +100°C / -40°F to +212°F

**Service temperature resistance (membranes):** -40°C to +80 °C / -40°F to +176°F

Store SIGA products cool and dry in original packaging. In addition, store Dockskin® frost-free, and Majrex®, Majvest®, Majvest® 500 SA, Majvest® 700 SOB away from direct UV exposure. For Dockskin®, observe the use-by date.

## 10-Year Limited Warranty

For complete warranty details, consult your local Application Advisor or find the SIGA Limited Warranty Document (available at <https://siga.swiss>).

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# Product Information

## Majvest® 500 SA

Self-Adhered Vapor Permeable Water-Resistive Barrier and Air Barrier Membrane



microporous PP sheet with full-coverage adhesive on reverse  
Thickness: 28 mils • Installed Weight per unit area: 0.84 oz/sq ft  
UV stable: 6 months (IECC zones 3-8) • Fire behavior: Class A (ASTM E-84) • 16 US perms (ASTM E96 Method A)

- ✓ **high adhesive strength at high and low temperatures**  
sticks in all seasons, long-term building value
- ✓ **printed measuring grid**  
fast and easy application
- ✓ **tear-resistant release liner with a 50/50 split**  
easy to remove, saves time

### Product specifications

	Majvest SA 500 60"	Majvest SA 500 18"
ARTICLE NO.	8920-152030	8920-046030
PALLET	20 rolls	30 rolls
WIDTH	1.52 m / 60"	0.45 m / 18"
LENGTH	30.5 m / 100'	30.5 m / 100'
WEIGHT/ROLL	16.7 kg / 36.8 lbs	5.0 kg / 11.0 lbs

## Wigluv® 60

Elastic, semi-permeable tape for sealing membrane overlaps and penetrations



- ✓ **high adhesive strength at high and low temperatures**  
reliable, no building damage
- ✓ **vapor semi-permeable 1.7 US perms**  
prevents condensation build-up
- ✓ **driving rain-proof and impermeable to bulk water**  
permanent protection for roof and facade

### Product specifications

	Wigluv 60
ARTICLE NO.	7510-6040
BOX	10 rolls
WIDTH	60 mm / 2.4"
LENGTH	40 m / 131'

Semi-permeable special PO film • UV exposure: 12 months • 1.7 US perms • The bond must not be under standing water

Stick with us.



## Wigluv® 100/150/230

Low-profile, semi-permeable flashing tape for window and door installation



- ✓ **high adhesive strength at high and low temperatures**  
reliable, long-term building value
- ✓ **vapor semi-permeable 1.7 US perms**  
prevents condensation build-up
- ✓ **split backing strip**  
simple and quick to apply

### Product specifications

	Wigluv 100	Wigluv 150	Wigluv 230
ARTICLE NO.	7510-6040	7510-15025	7510-23025
BOX	6 rolls	4 rolls	2 rolls
WIDTH	100mm / 3.9"	150mm / 5.9"	230mm / 9"
LENGTH	25 m / 82'	25 m / 82'	25 m / 82'

Semi-permeable special PO film • UV exposure: 12 months • 1.7 US perms • The bond must not be under standing water

## Fentrim® 230 Grey

High-performance tape resistant to driving rain for window and door frames, for outdoor application



- ✓ **high adhesive strength at high and low temperatures**  
reliable, long-term building value
- ✓ **5/8" pre-folded, without backing strip**  
fastest bonding to window frames
- ✓ **bonding from -10°C / 14°F**  
fast and tight window installation all year-round

### Product specifications

	Fentrim® 230 grey	Fentrim 230 grey	Fentrim 230 grey
ARTICLE NO.	9612-007525.03	9612-010025.03	9612-015025.03
BOX	8 rolls	6 rolls	4 rolls
WIDTH	75 mm / 2.9"	100 mm / 3.9"	150 mm / 5.9"
LENGTH	25 m / 82'	25 m / 82'	25 m / 82'

semi-permeable special PO film (1.7 US perms) • fleece-backed formable, impermeable to water • UV exposure: 4 months (IECC zones 3-8)  
The bond must not be under standing water  
US Patent No. 7.445.828 B2

## Fentrim® 430 Grey

High-performance tape resistant to driving rain for window and door frames, for outdoor application



semi-permeable special PO film (1.7 US perms) • fleece-backed formable, impermeable to water • UV exposure: 4 months (IECC zones 3-8)  
The bond must not be under standing water  
US Patent No. 7.445.828 B2

- ✓ **high adhesive strength at high and low temperatures**  
sticks in all seasons, long-term building value
- ✓ **no primer required for masonry**  
fast and easy application
- ✓ **robust fleece backed carrier material**  
easy to remove, saves time

### Product specifications

	Fentrim 430 grey	Fentrim 430 grey	Fentrim 430 grey
ARTICLE NO.	9712-10025	9712-15025	9712-23025
BOX	6 rolls	4 rolls	2 rolls
WIDTH	100 mm / 3.9"	150 mm / 5.9"	230 mm / 9"
LENGTH	25 m / 82'	25 m / 82'	25 m / 82'

## Fentrim® IS 20

Airtight high-performance tape for window and door frames, for indoor application



Semi-impermeable special PO film (0.17 US perms) • fleece-backed, formable, impermeable to water • The bond must not be under standing water • US Patent No. 7.445.828 B2

- ✓ **high adhesive strength at high and low temperatures**  
reliable, long-term building value
- ✓ **5/8" mm pre-folded, without backing strip**  
fastest bonding to window frames
- ✓ **bonding from -10°C / 14°F**  
fast and tight window installation all year-round

### Product specifications

	Fentrim IS 20	Fentrim IS 20	Fentrim IS 20
ARTICLE NO.	9611-156025	9611-158525	9611-1513525
BOX	8 rolls	6 rolls	4 rolls
WIDTH	75mm / 2.9"	100mm / 3.9"	150mm / 5.9"
LENGTH	25 m / 82'	25 m / 82'	25 m / 82'



# Training

Gain know-how from our experts. SIGA offers job site training and educational workshops to help you achieve your air and weathertightness goals.



## Job Site Training

Receive on-site application training and technical support to ensure your SIGA products are installed correctly and fit the unique details of your job.

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[Sign up for job site training](https://www.siga.swiss/us_en/training/job-site-training)



## Educational workshops

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