

Installation Guide DELTA®-VENT SA



Flashing Systems for
FLANGE WINDOWS

Dörken – Leading Through Technical Competence

Dörken Systems Inc. (ISO 9001-2008) is a subsidiary of the Dörken Group that has over 100 years of experience in the construction industry. Developed from innovative ideas and manufactured on state-of-the-art production lines, the premium quality products for moisture management in building enclosures set standards for reliability, durability, and energy savings. Located in Beamsville, Ontario, Canada, Dörken provides customized solutions and products of outstanding quality. Dörken Systems Inc. is and always will be a trustworthy and highly respected partner for designers, architects, distributors and installers.

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Introduction

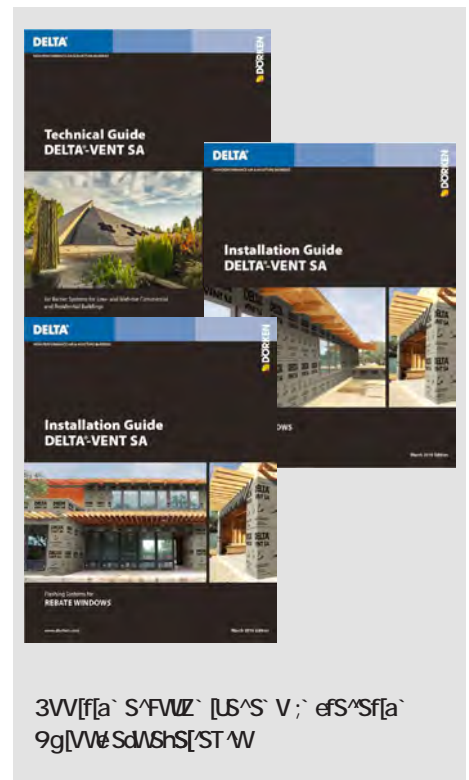
DELTA®-VENT SA water-resistive barrier and air barrier

This Installation Guide covers the preparation of rough window openings with DELTA®-VENT SA Water-resistive Barrier and Air Barrier and its components.

The following diagrams present a step-by-step sequence for all installations. There are several options for these installation sequences. The window manufacturer's specifications, and architectural considerations, such as flashing and trim will vary. All installations, regardless of variations, will follow the same fundamental approach.

The membrane's primary purpose is to function as a vapor permeable water-resistive barrier and continuous air barrier. Special attention is paid to interface areas to ensure that water or air cannot penetrate the assembly. Following the steps outlined in this Installation Guide will help ensure best practice installations.

These diagrams for DELTA®-VENT SA are intended only as a guide and are for the convenience of architects, specifiers, contractors and other interested parties. The final application and details are the sole responsibility of the design authority on record for the project.



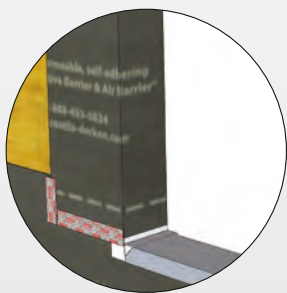
Method Selection Guide

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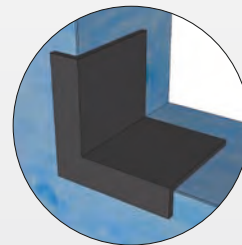
Flange Windows



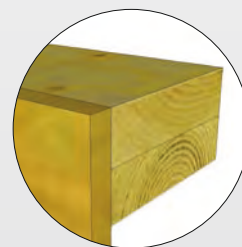
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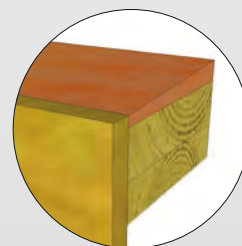
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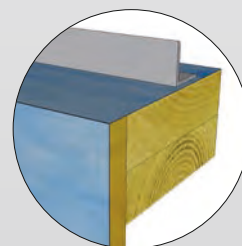
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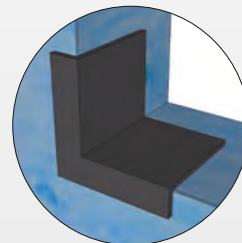


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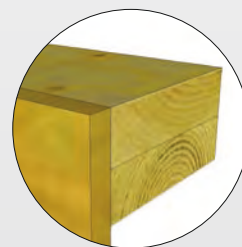
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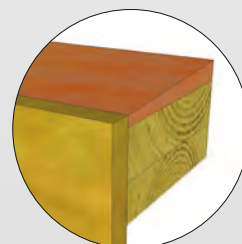
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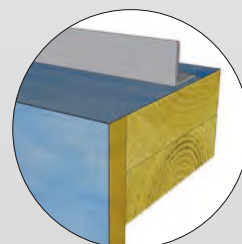
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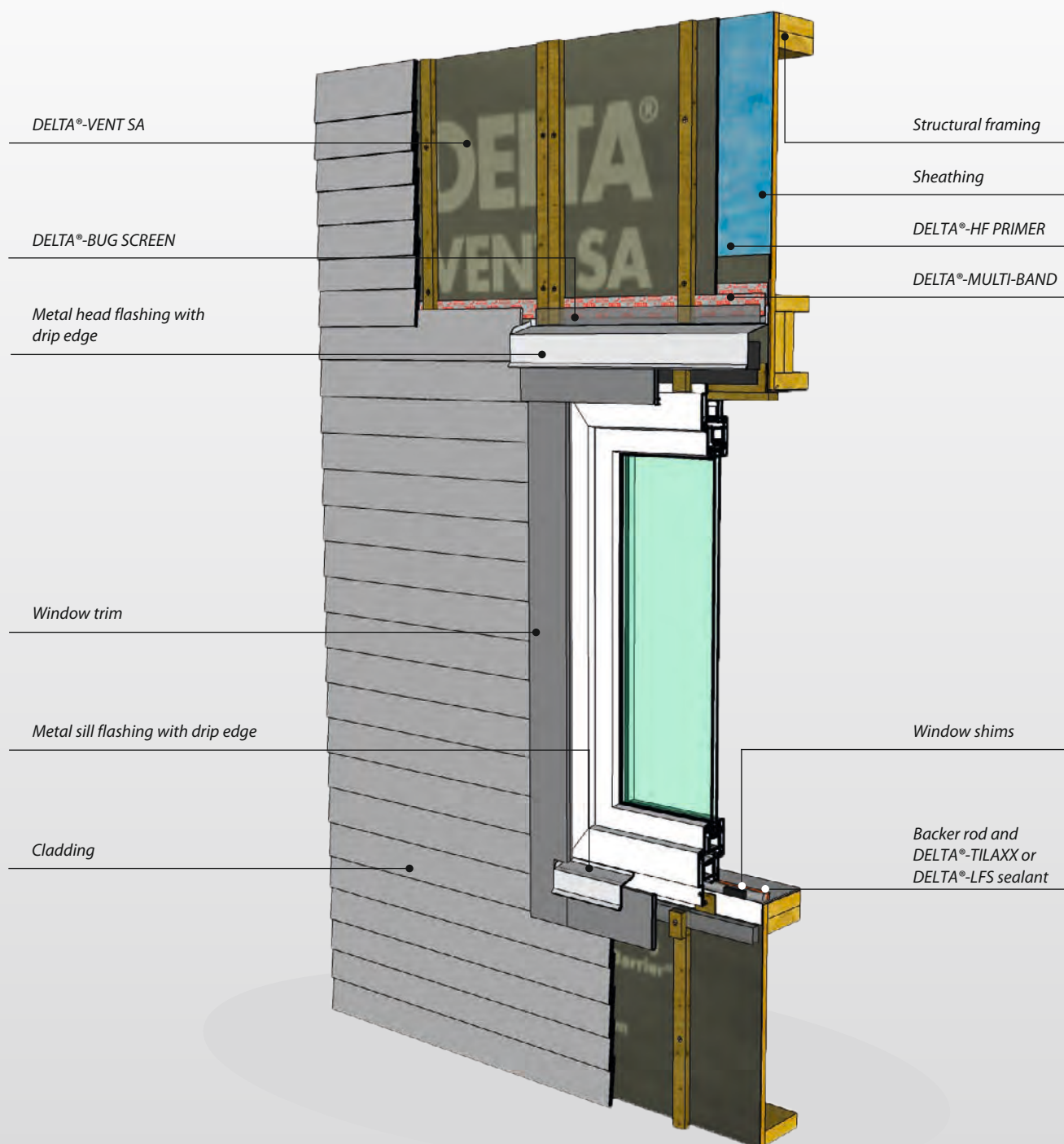


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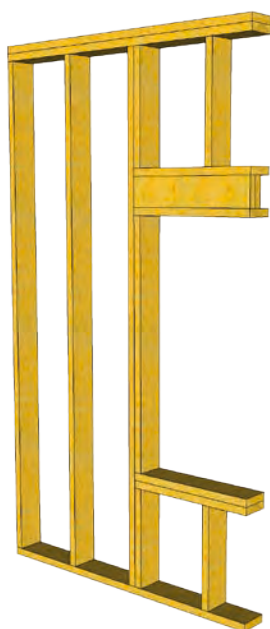


Strip-in method

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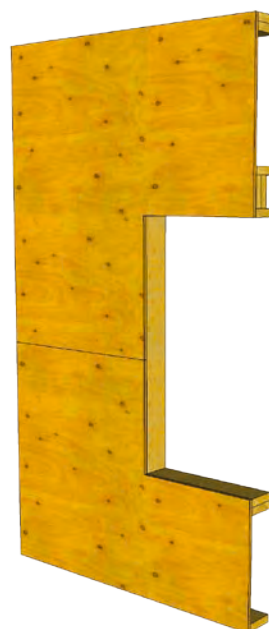


Step 1



Framing

Step 2



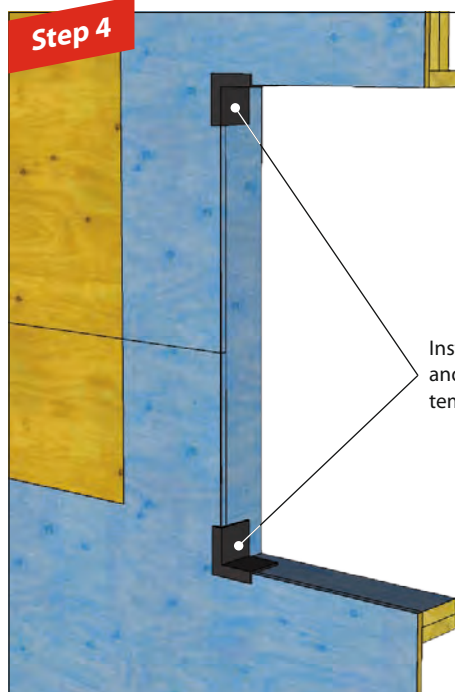
Sheathing

Step 3



Prime substrate with
DELTA®-HF PRIMER
before applying
DELTA®-VENT SA.

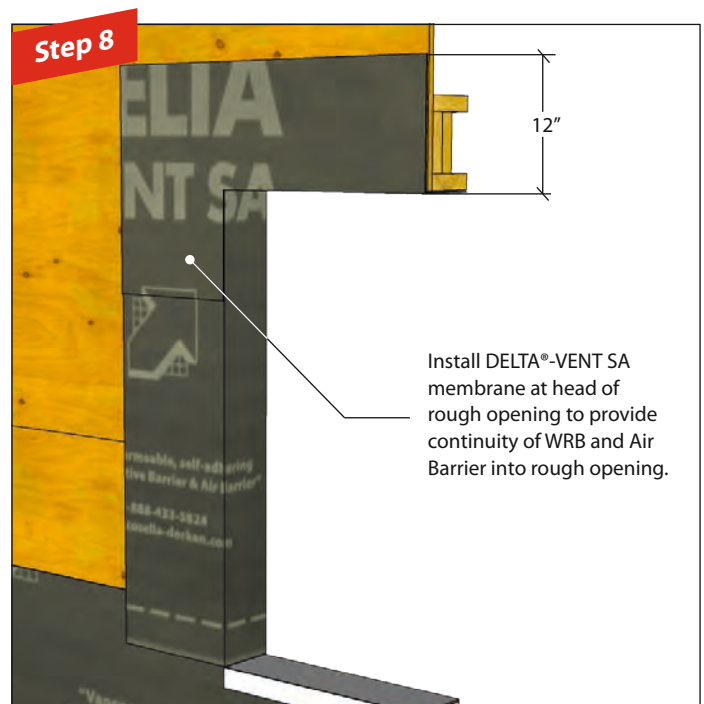
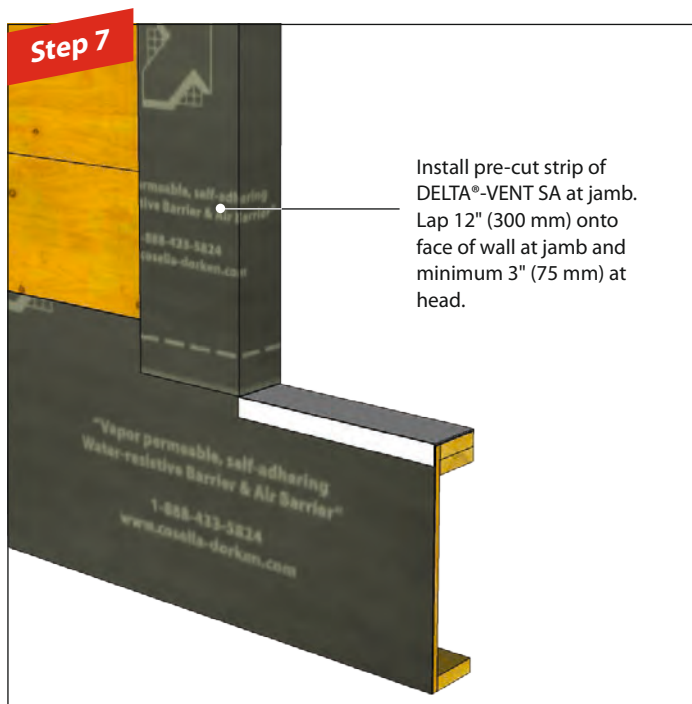
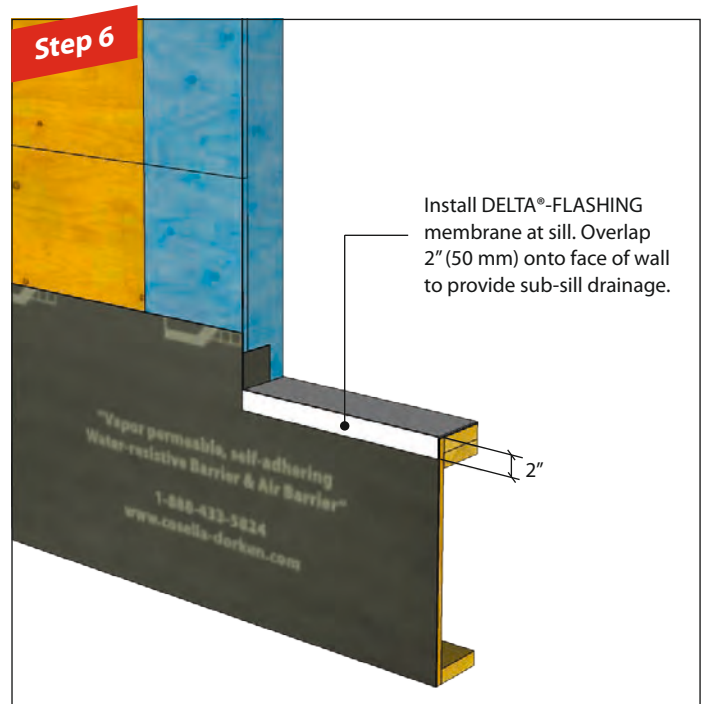
Step 4

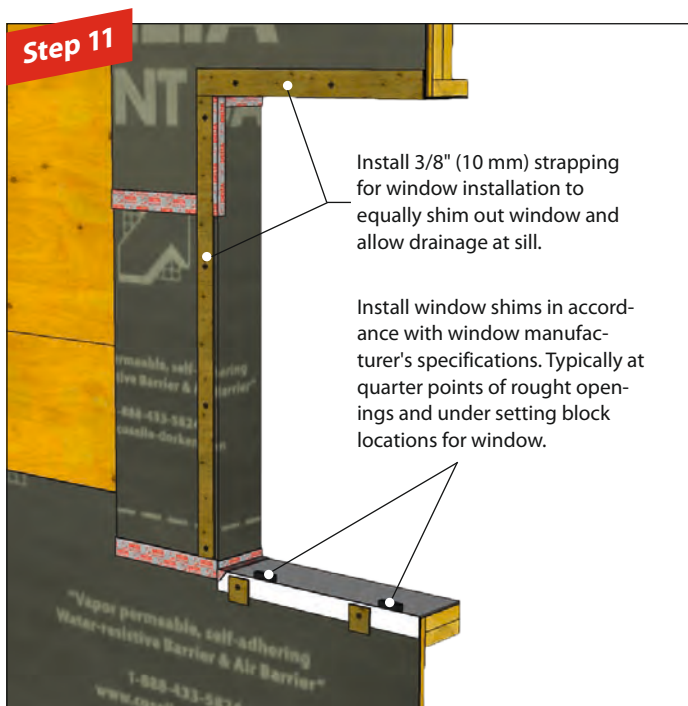
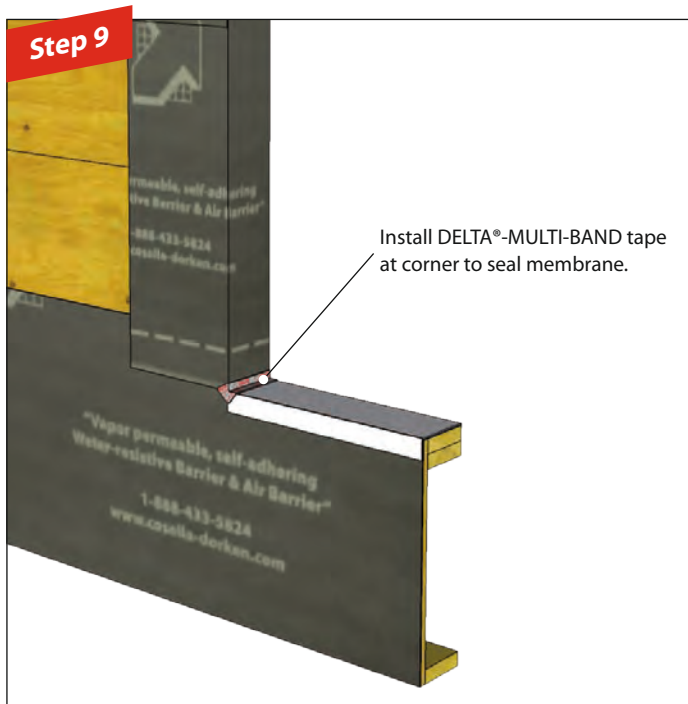


Install DELTA®-FAS CORNERS
and staple on vertical leg to
temporarily hold in place.

Strip-in method

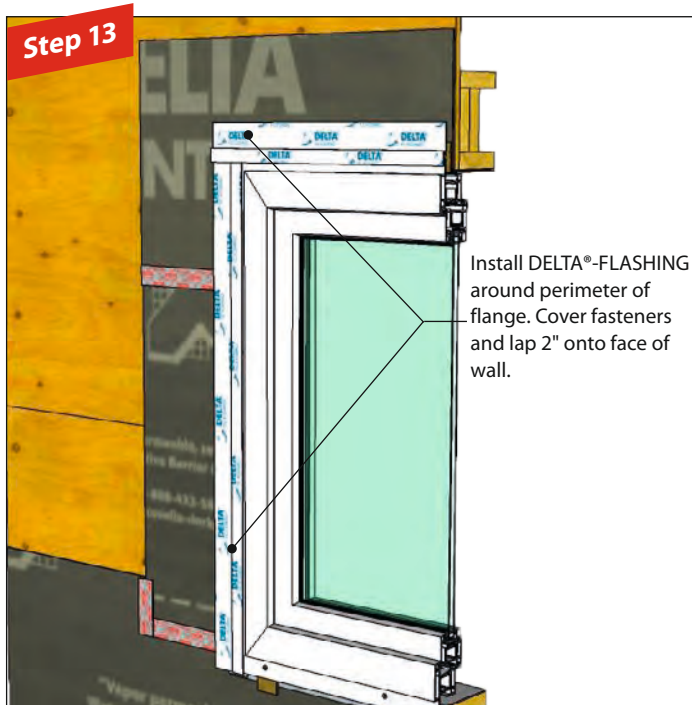
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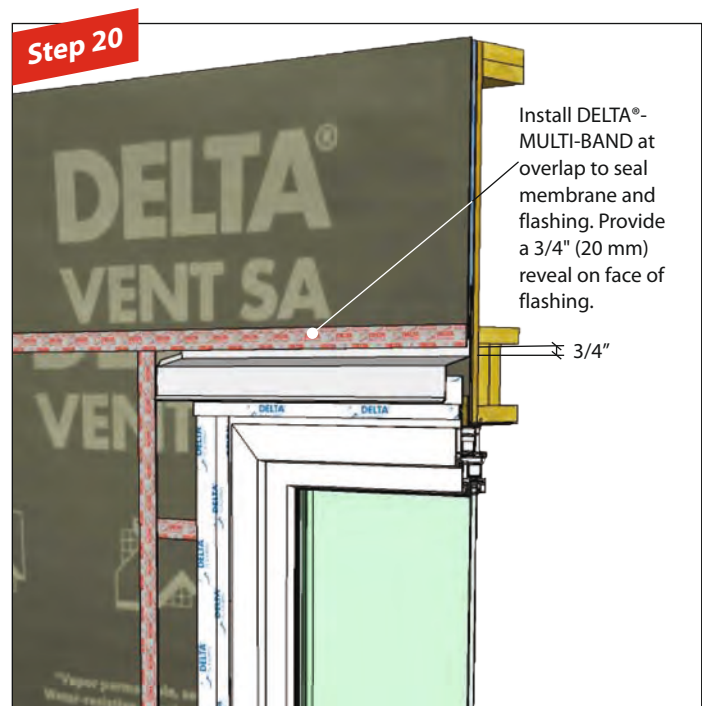
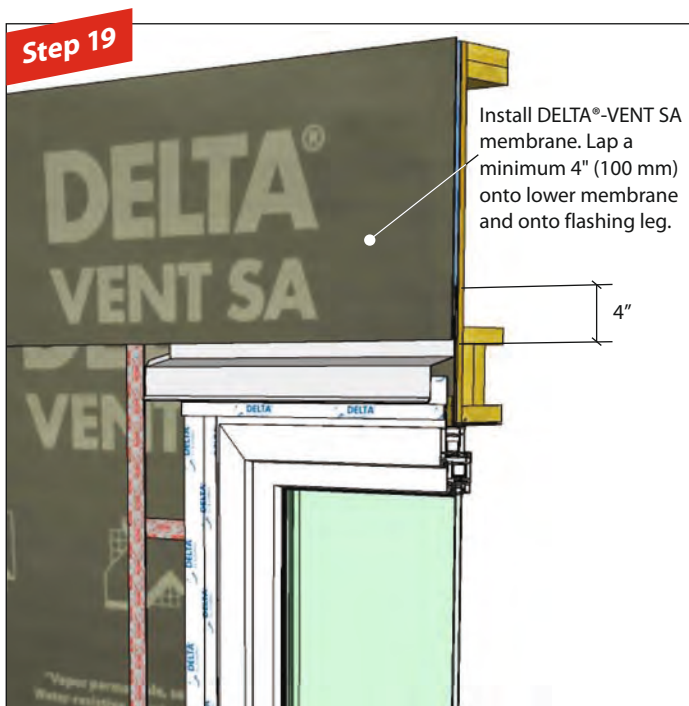
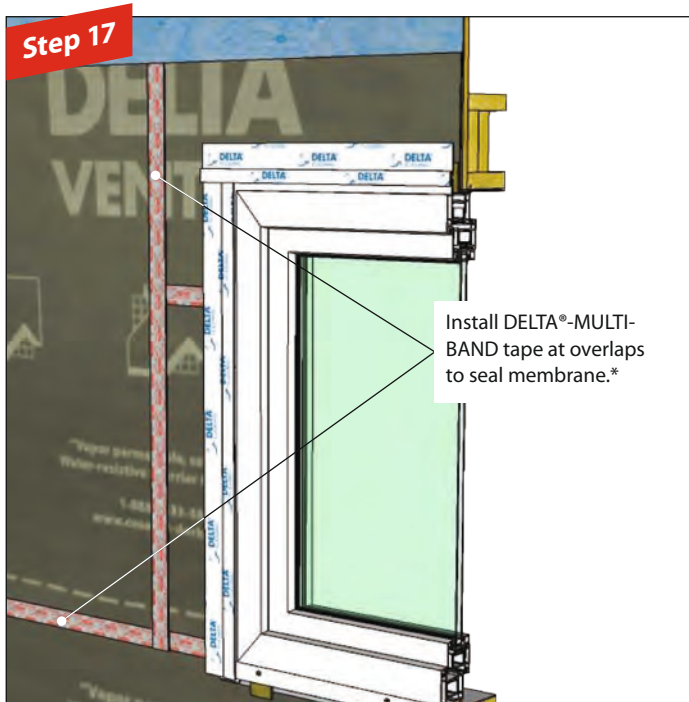




Strip-in method

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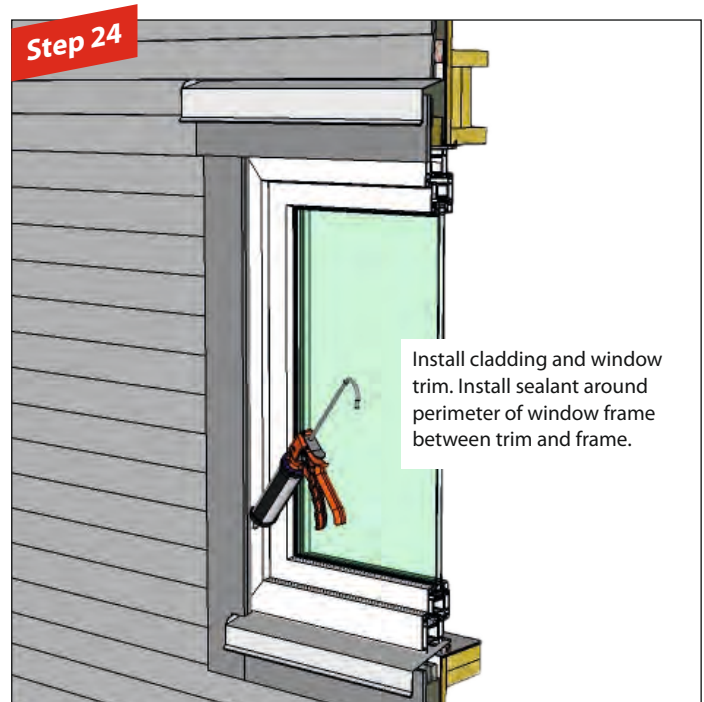
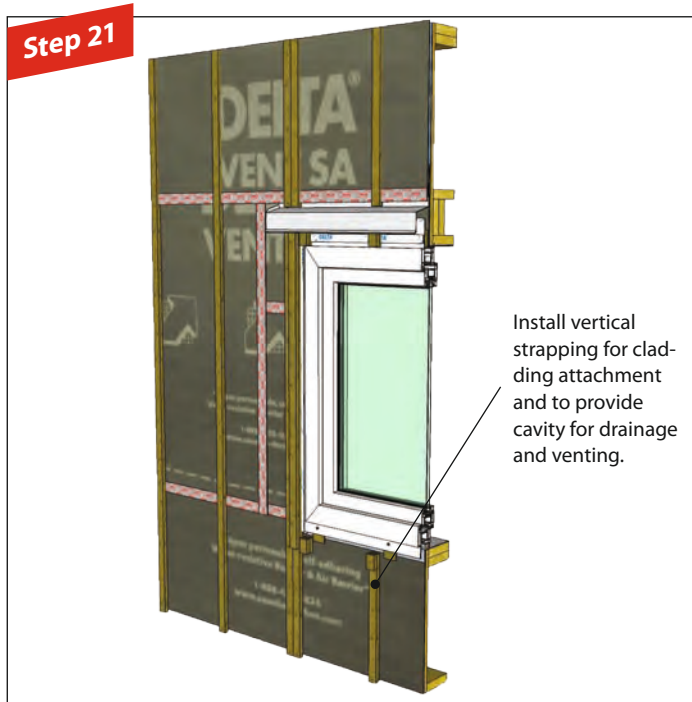




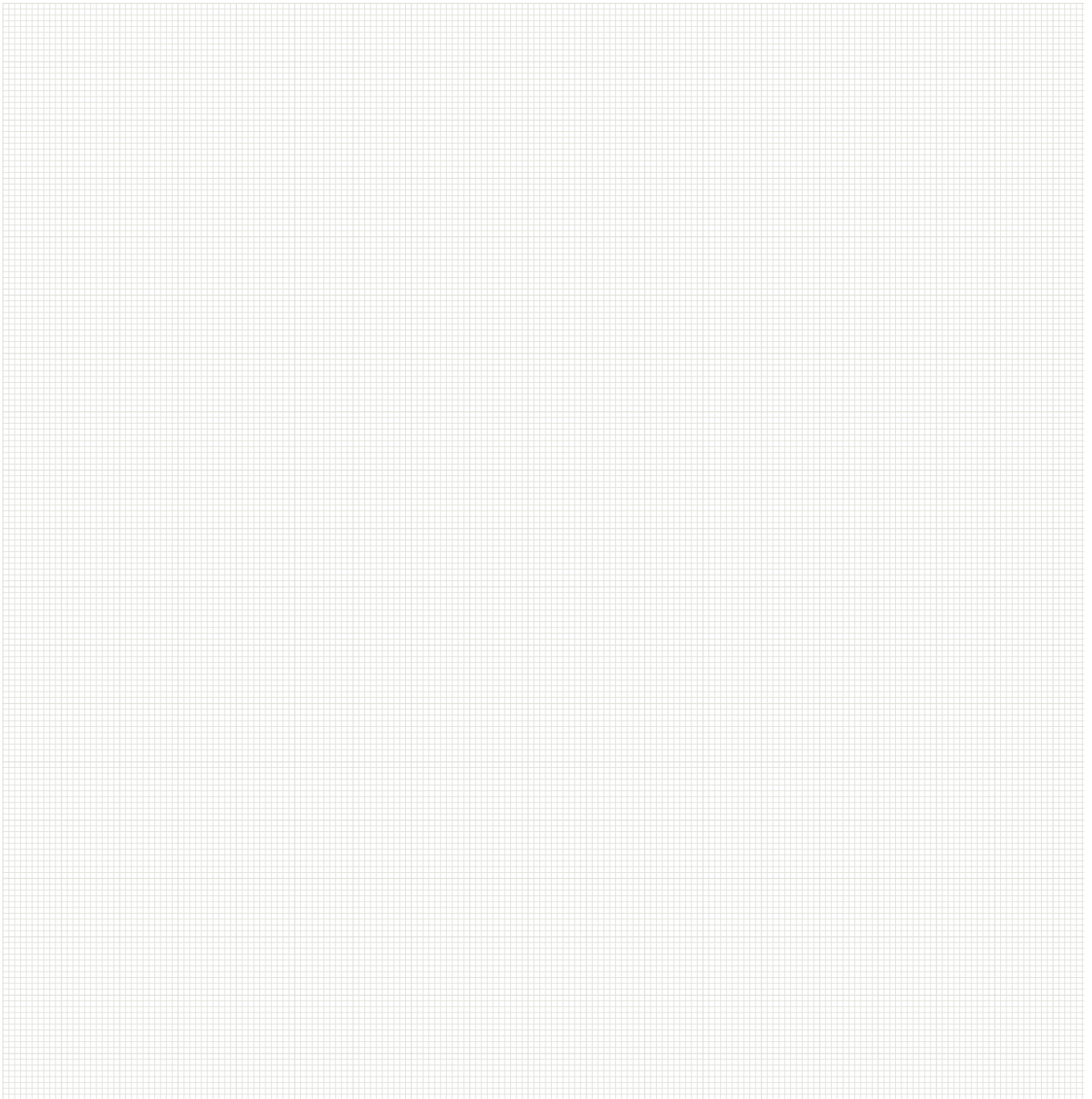
* Not required where there is a self-adhered edge.

Strip-in method

1. With DELTA®-FAS CORNER

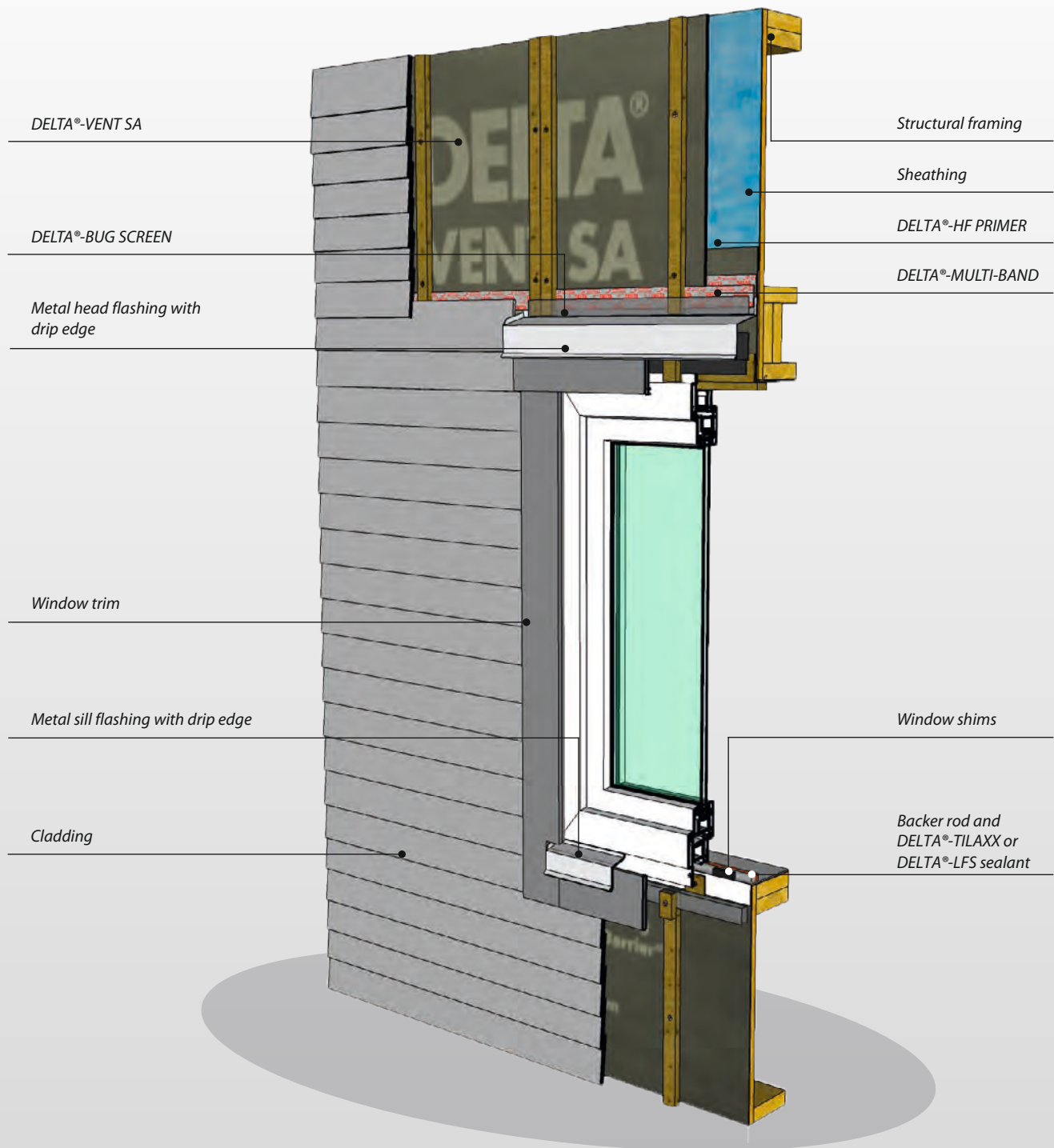


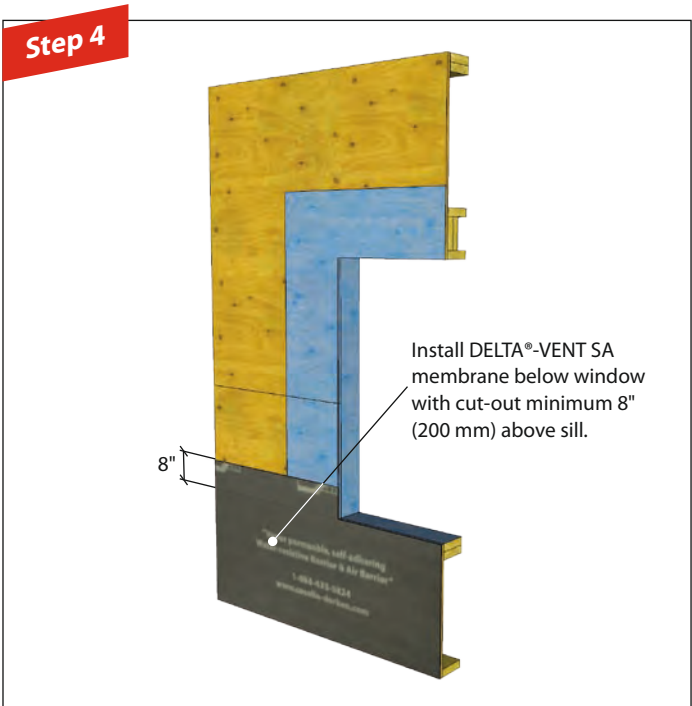
Notes



Strip-in method

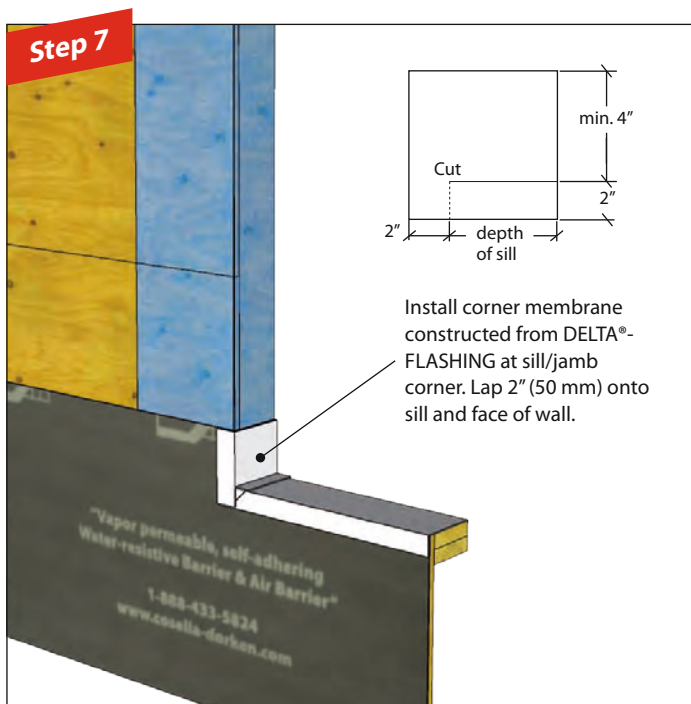
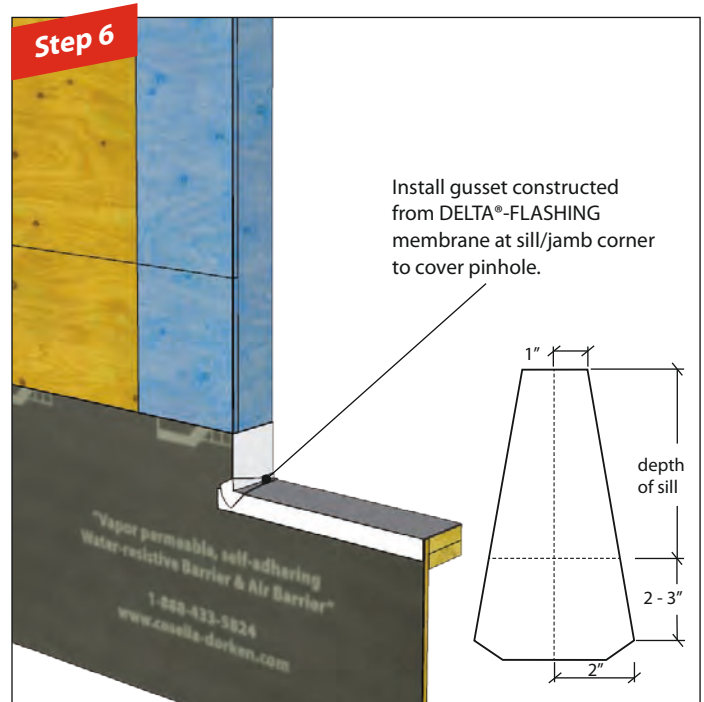
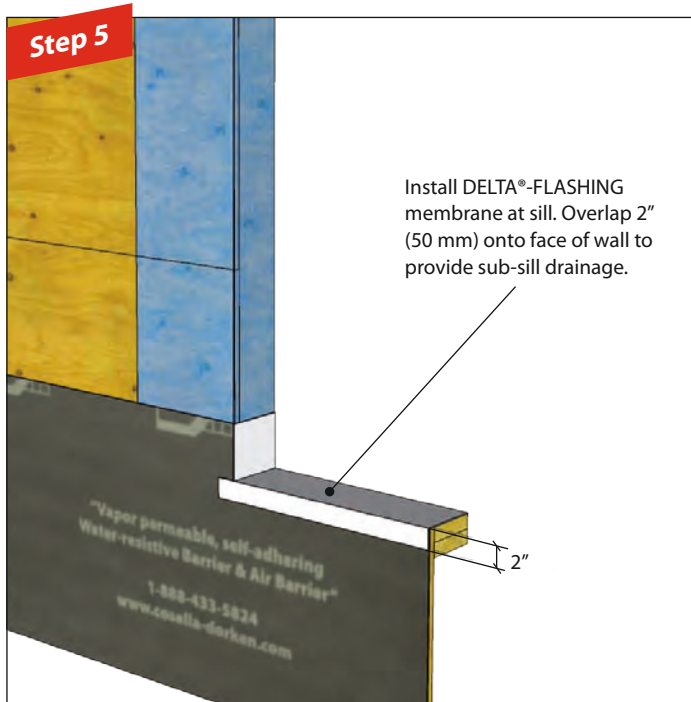
2. With flat sill

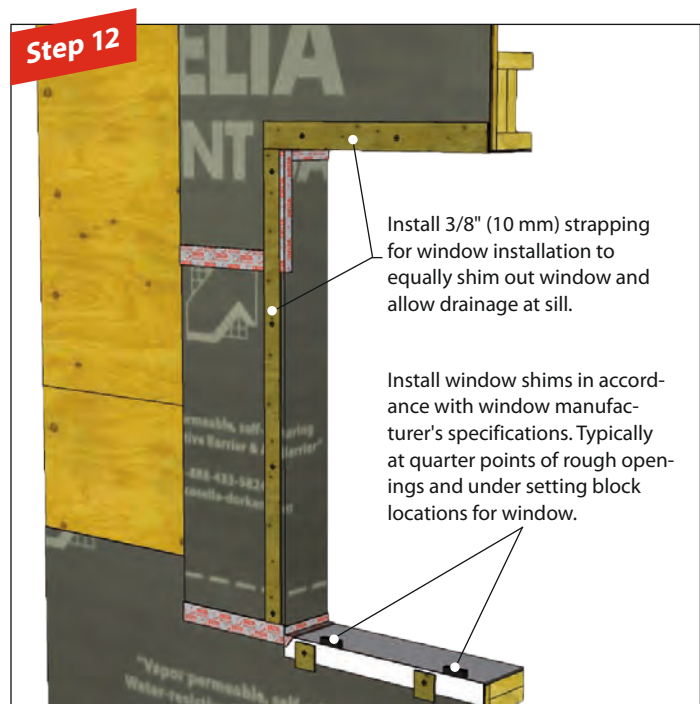
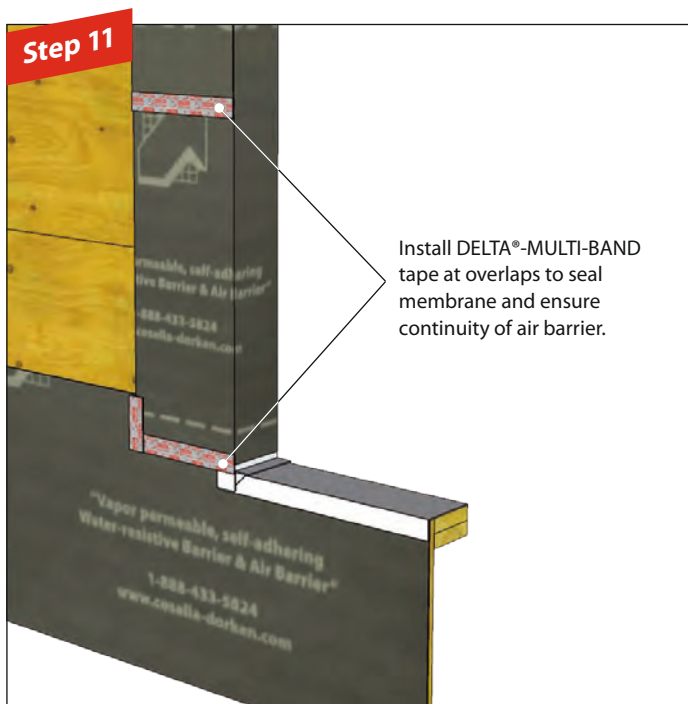




Strip-in method

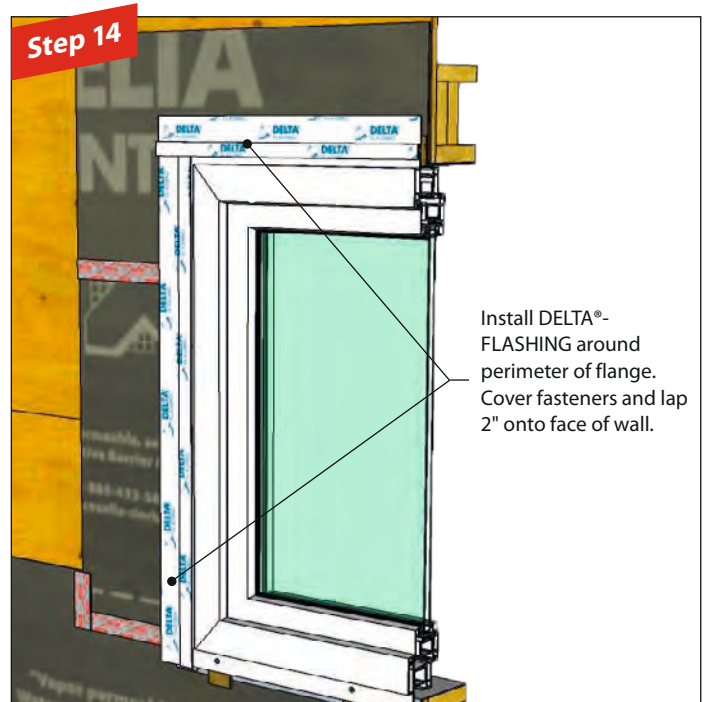
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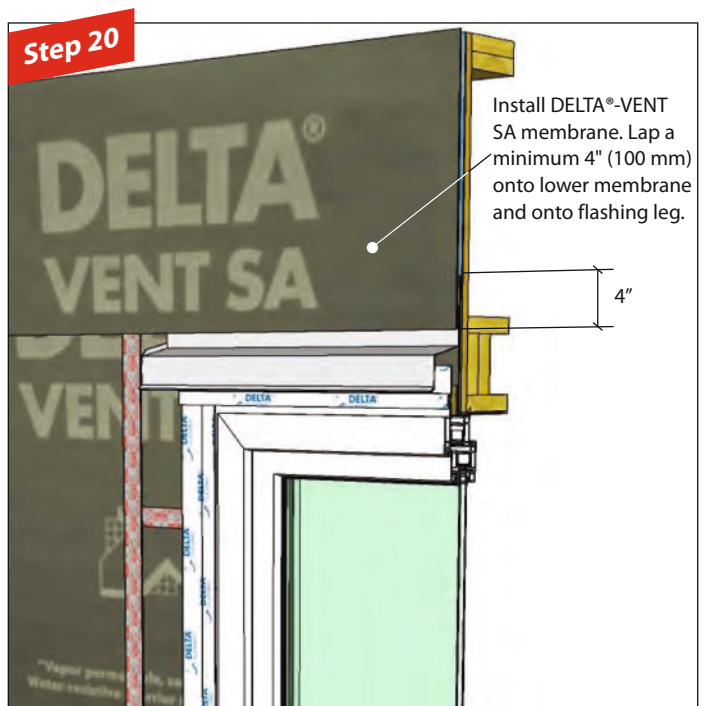
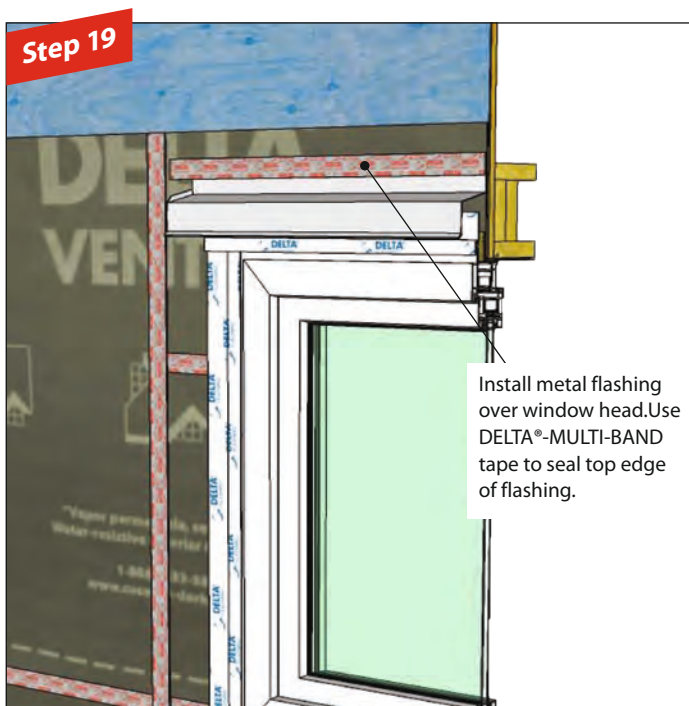
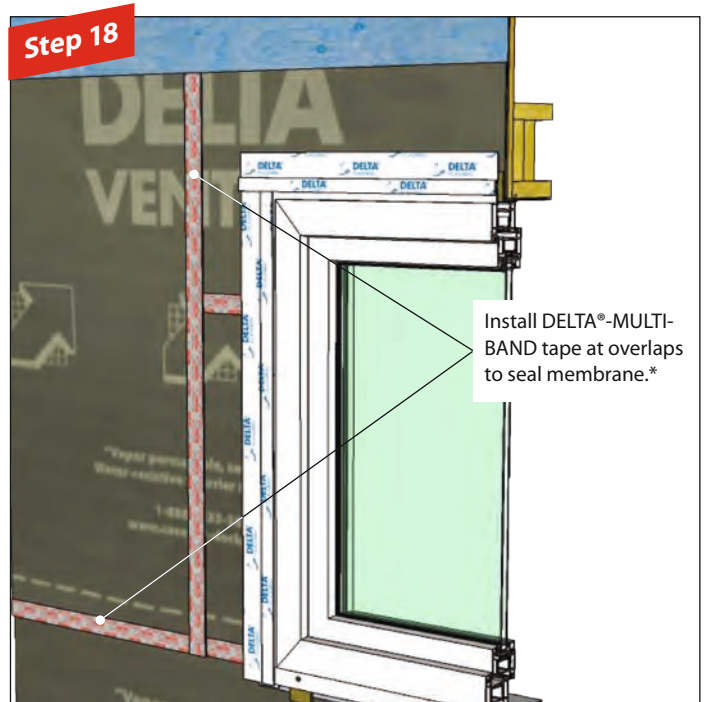
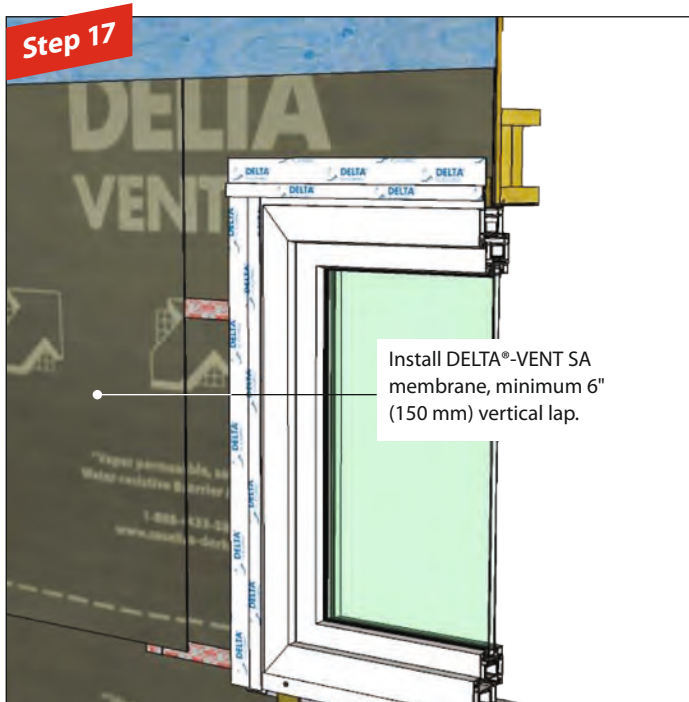




Strip-in method

2. With flat sill

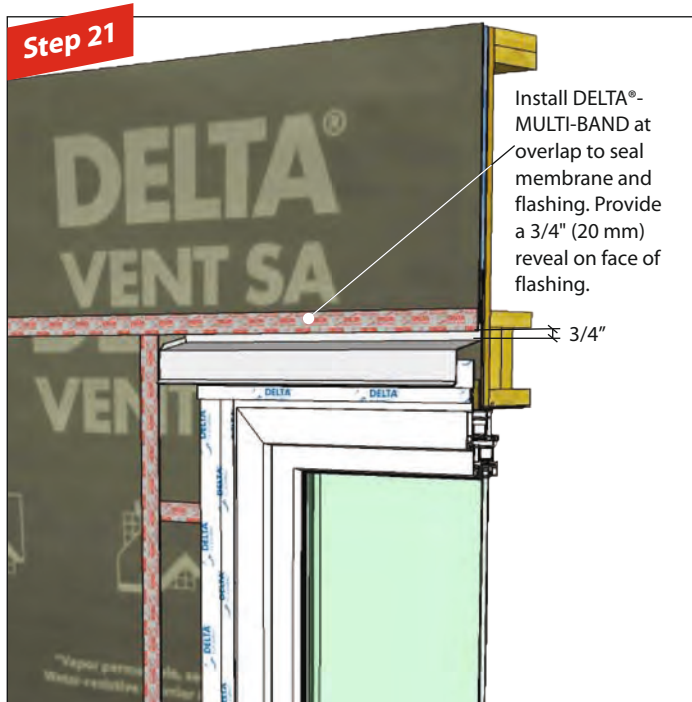




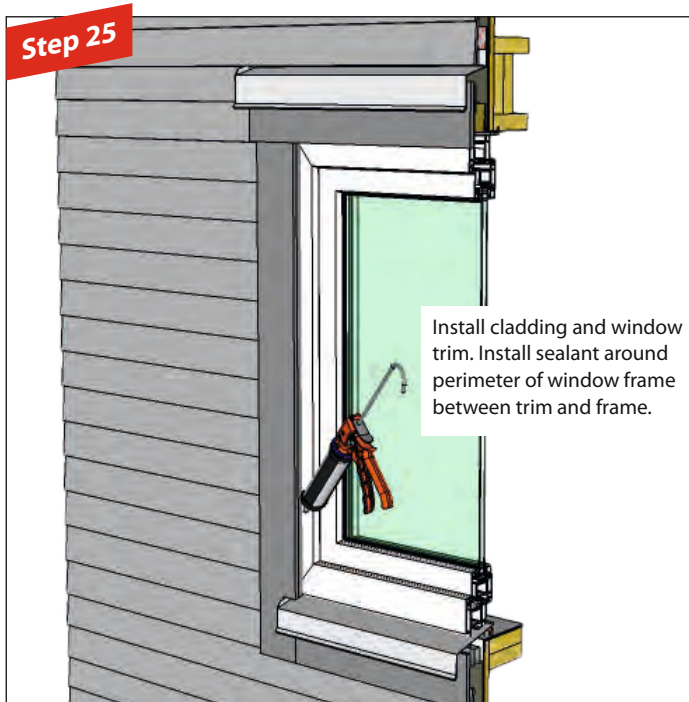
* Not required where there is a self-adhered edge.

Strip-in method

2. With flat sill

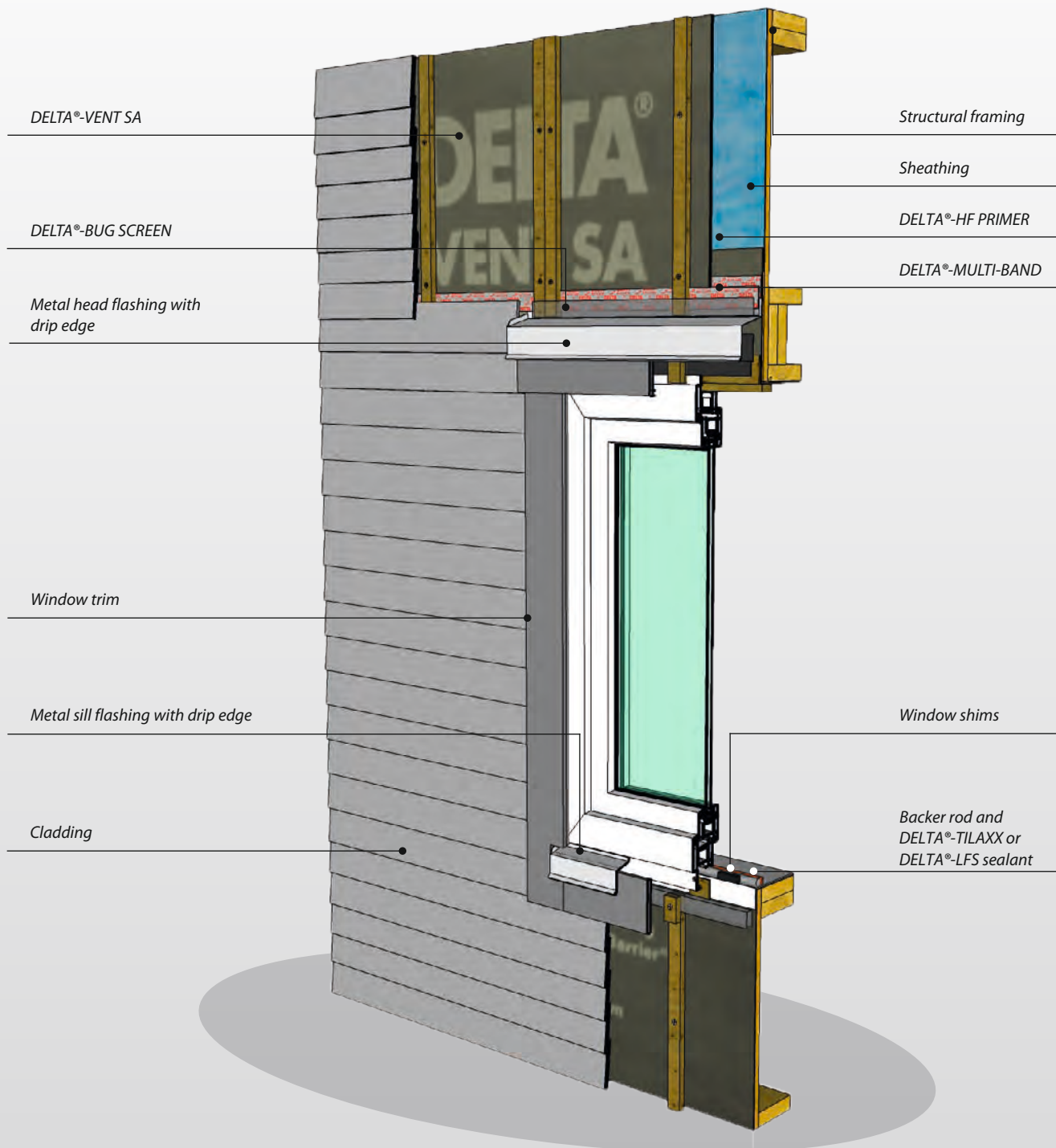


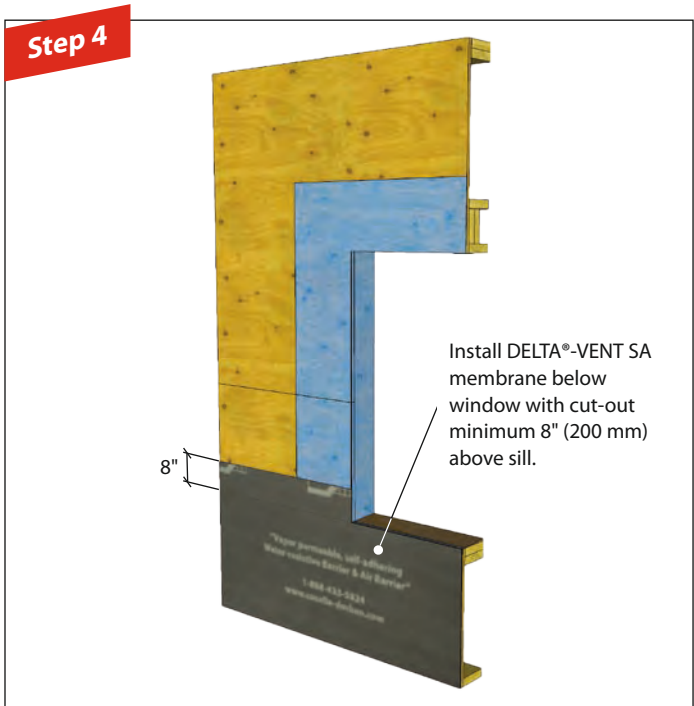
Notes



Strip-in method

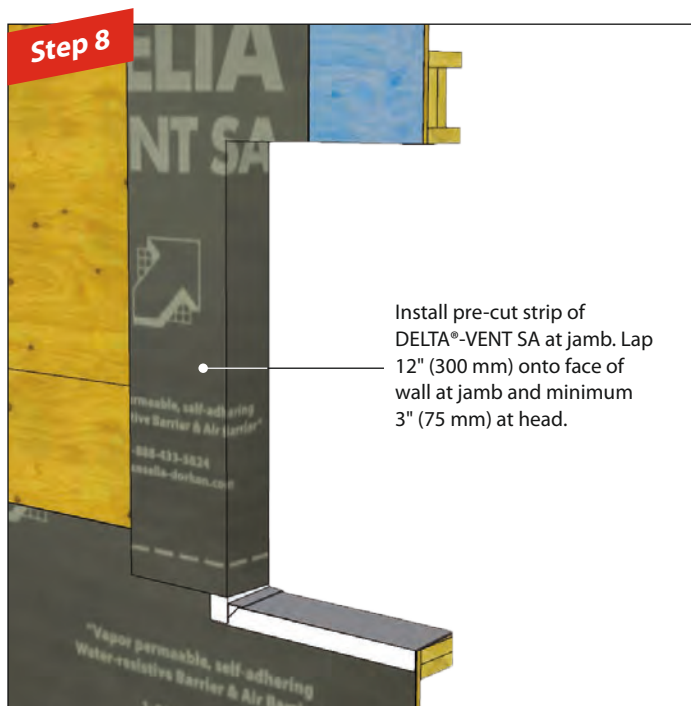
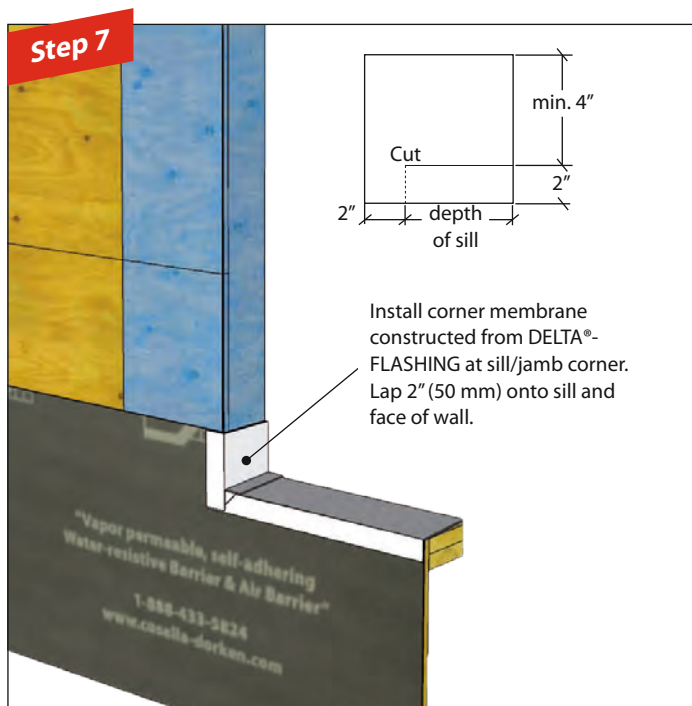
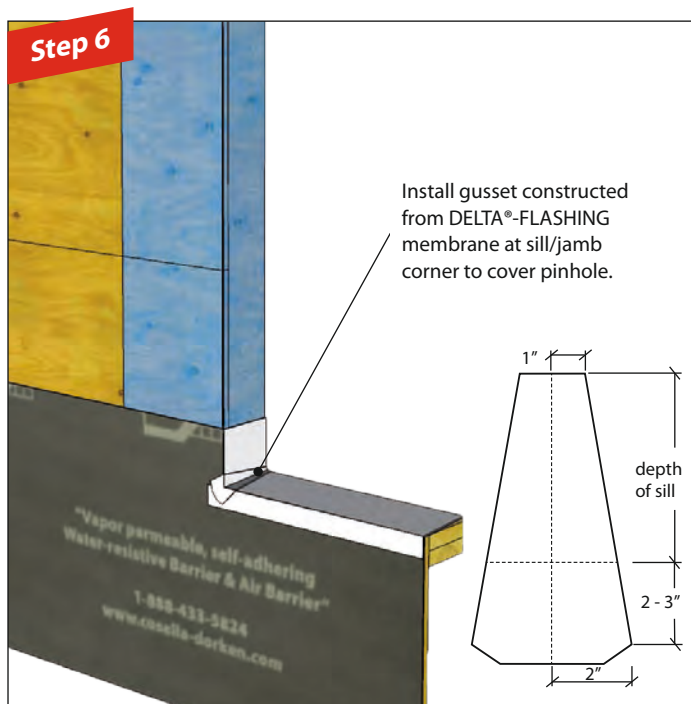
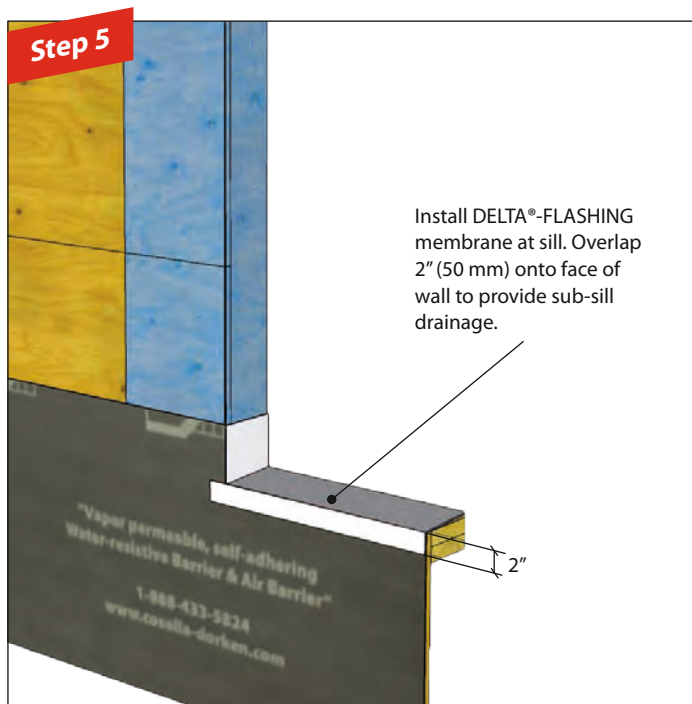
3. With sloped sill

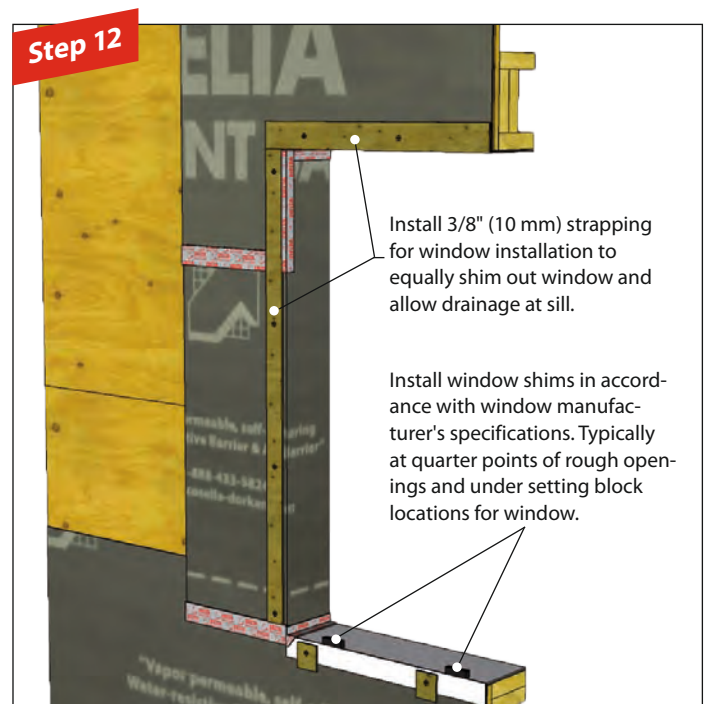
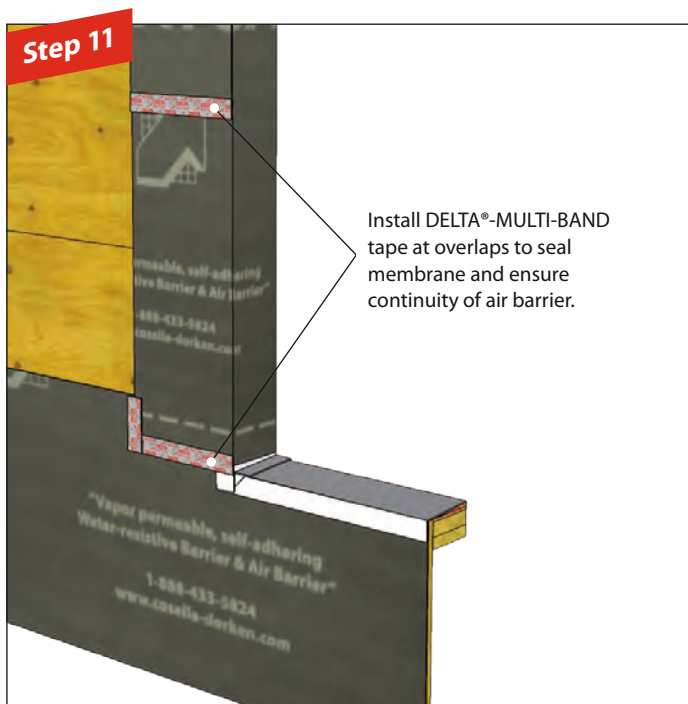
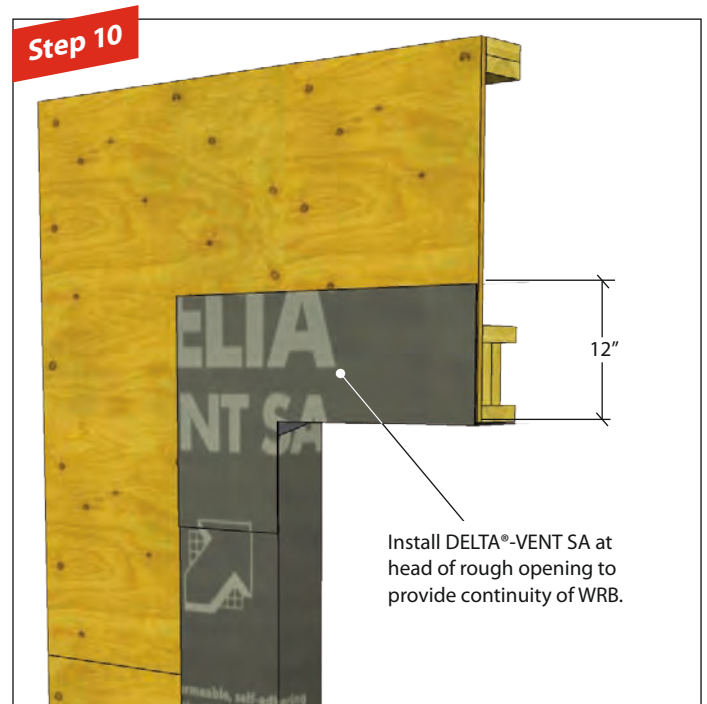




Strip-in method

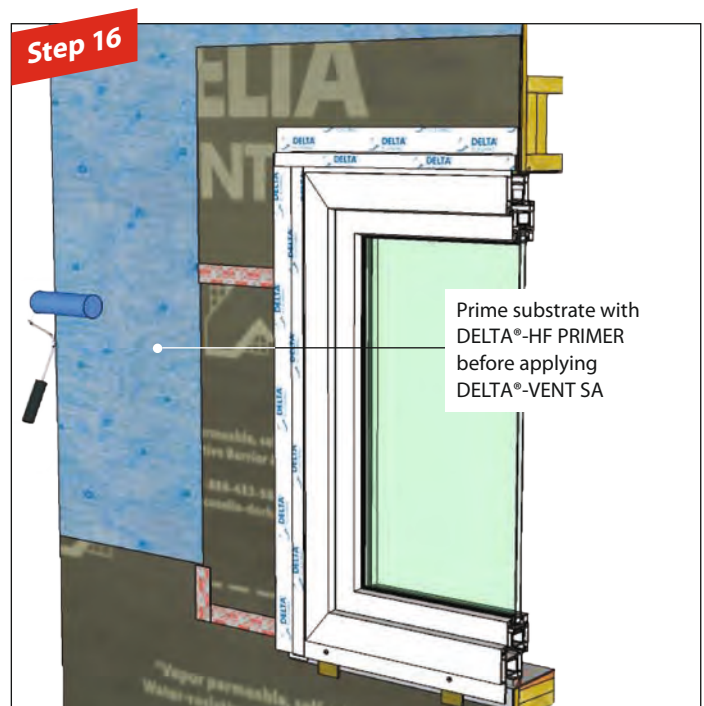
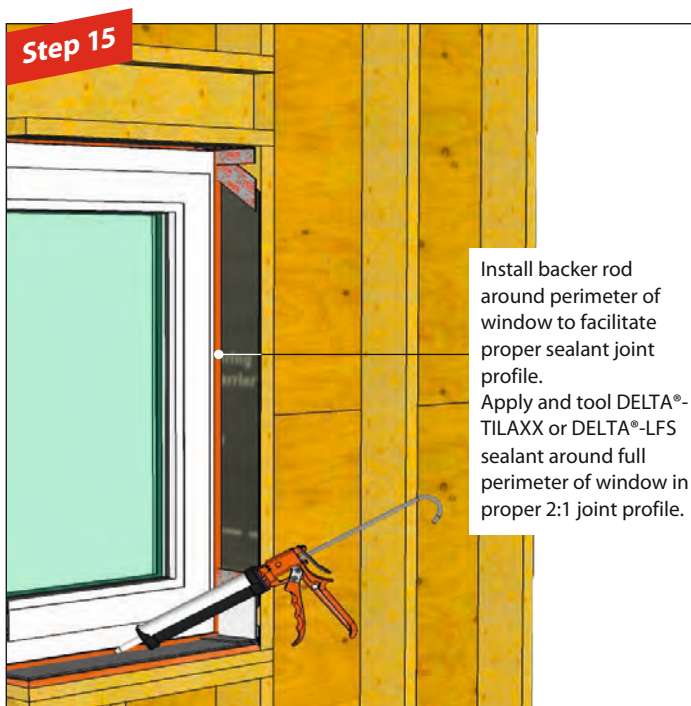
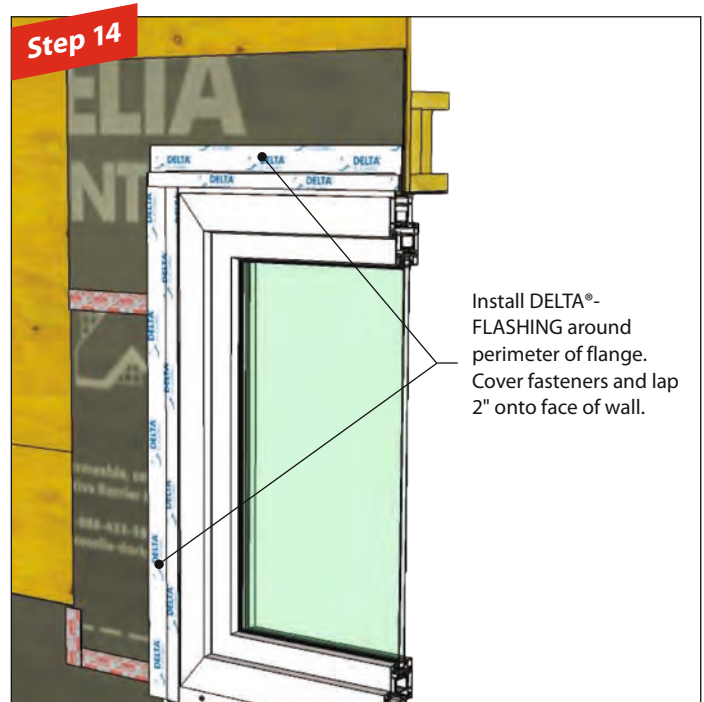
3. With sloped sill

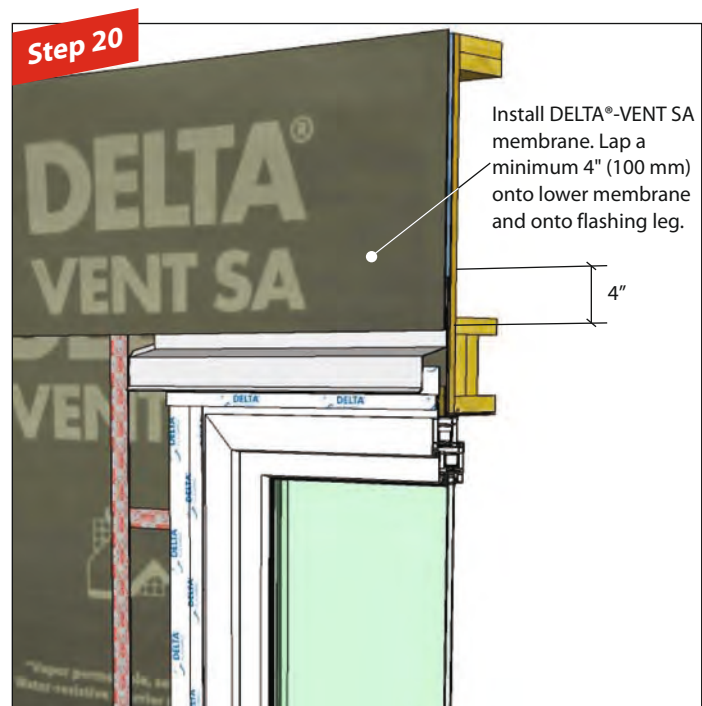
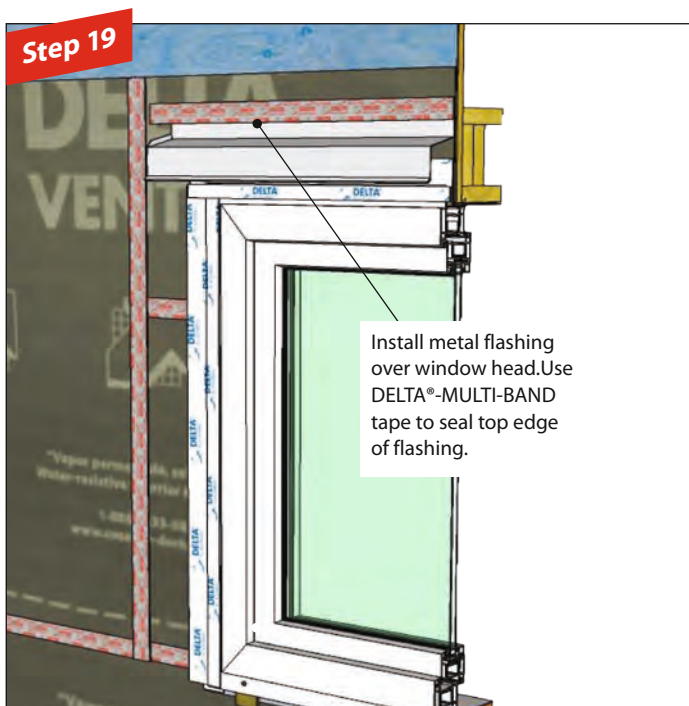
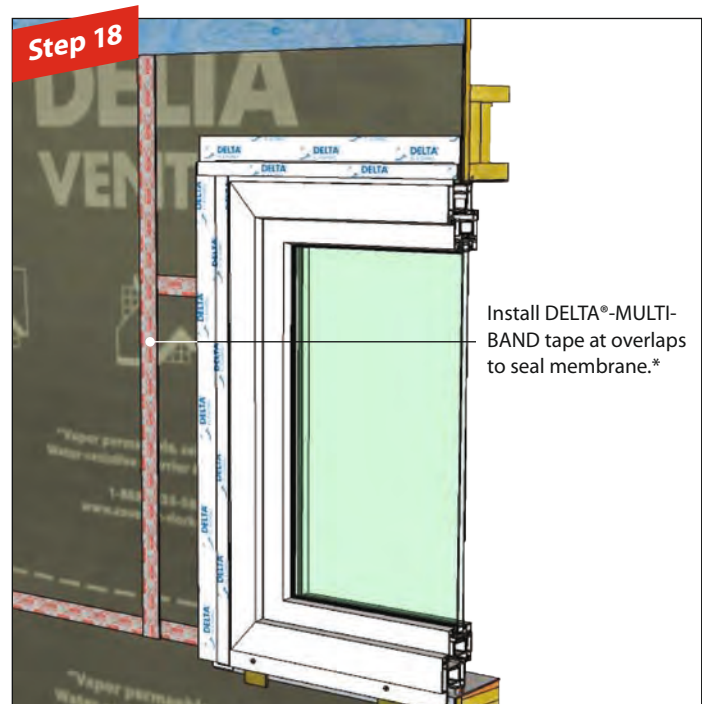
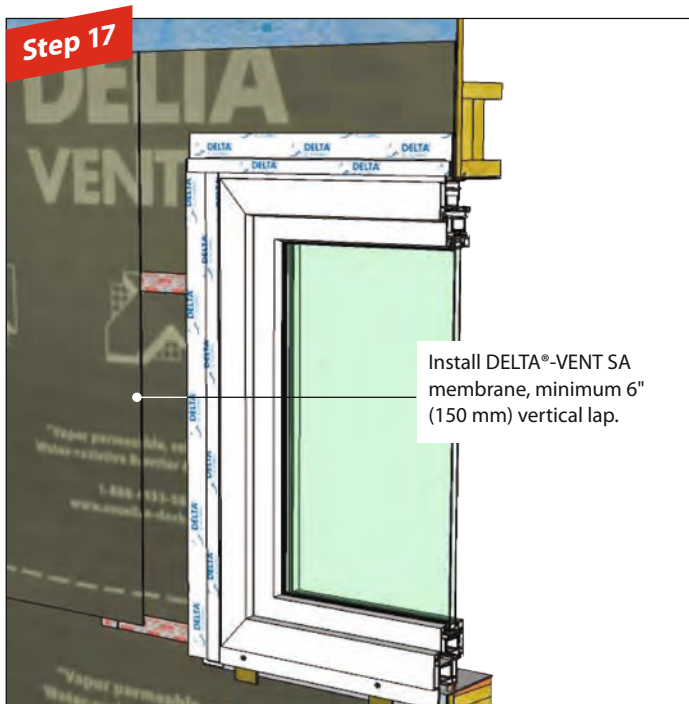




Strip-in method

3. With sloped sill

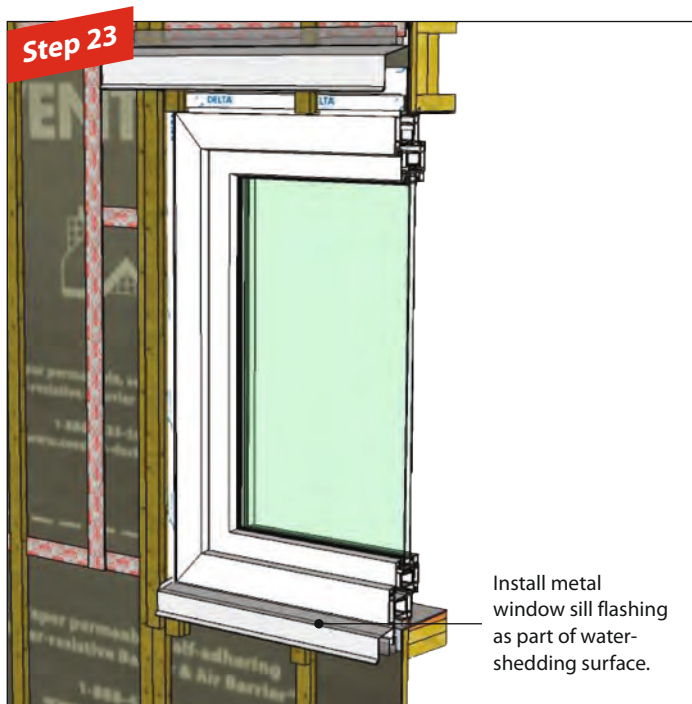
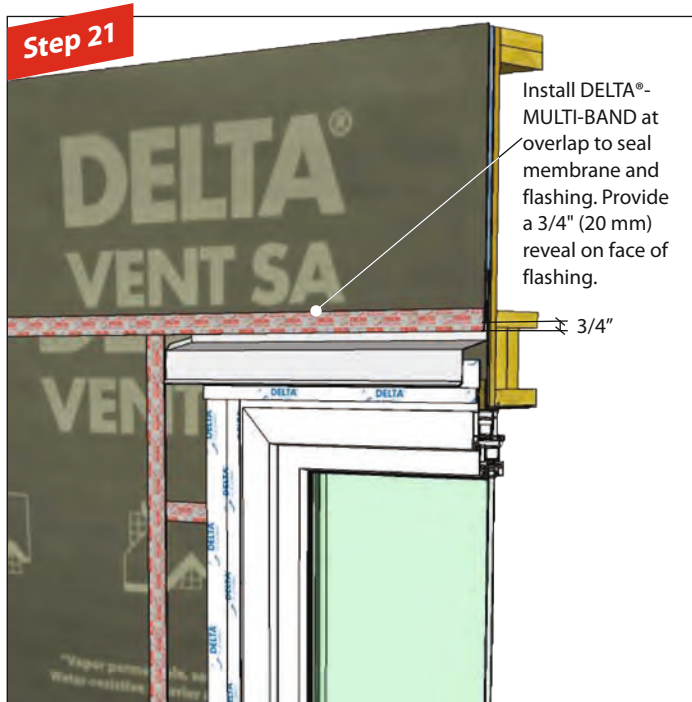




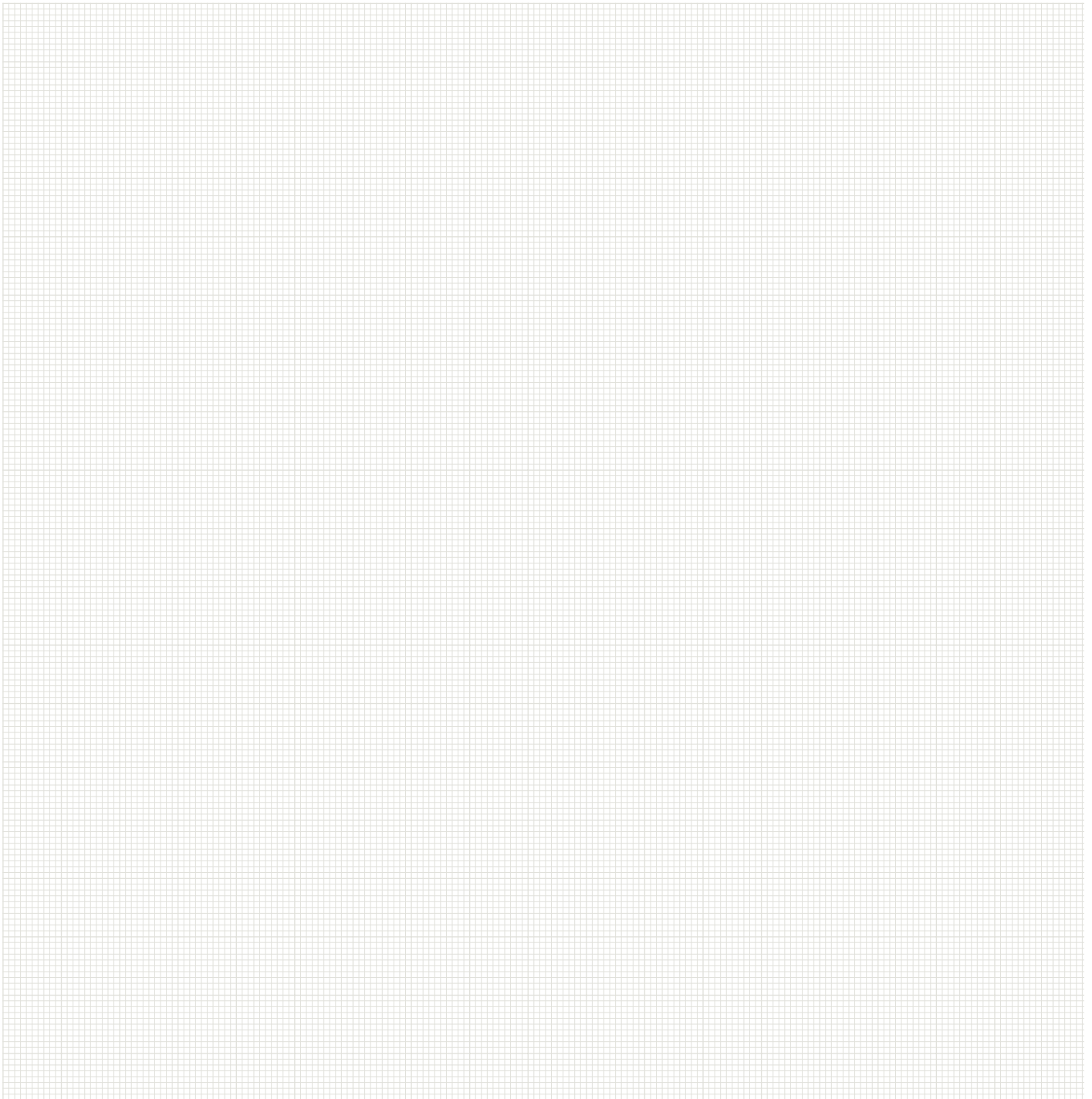
* Not required where there is a self-adhered edge.

Strip-in method

3. With sloped sill

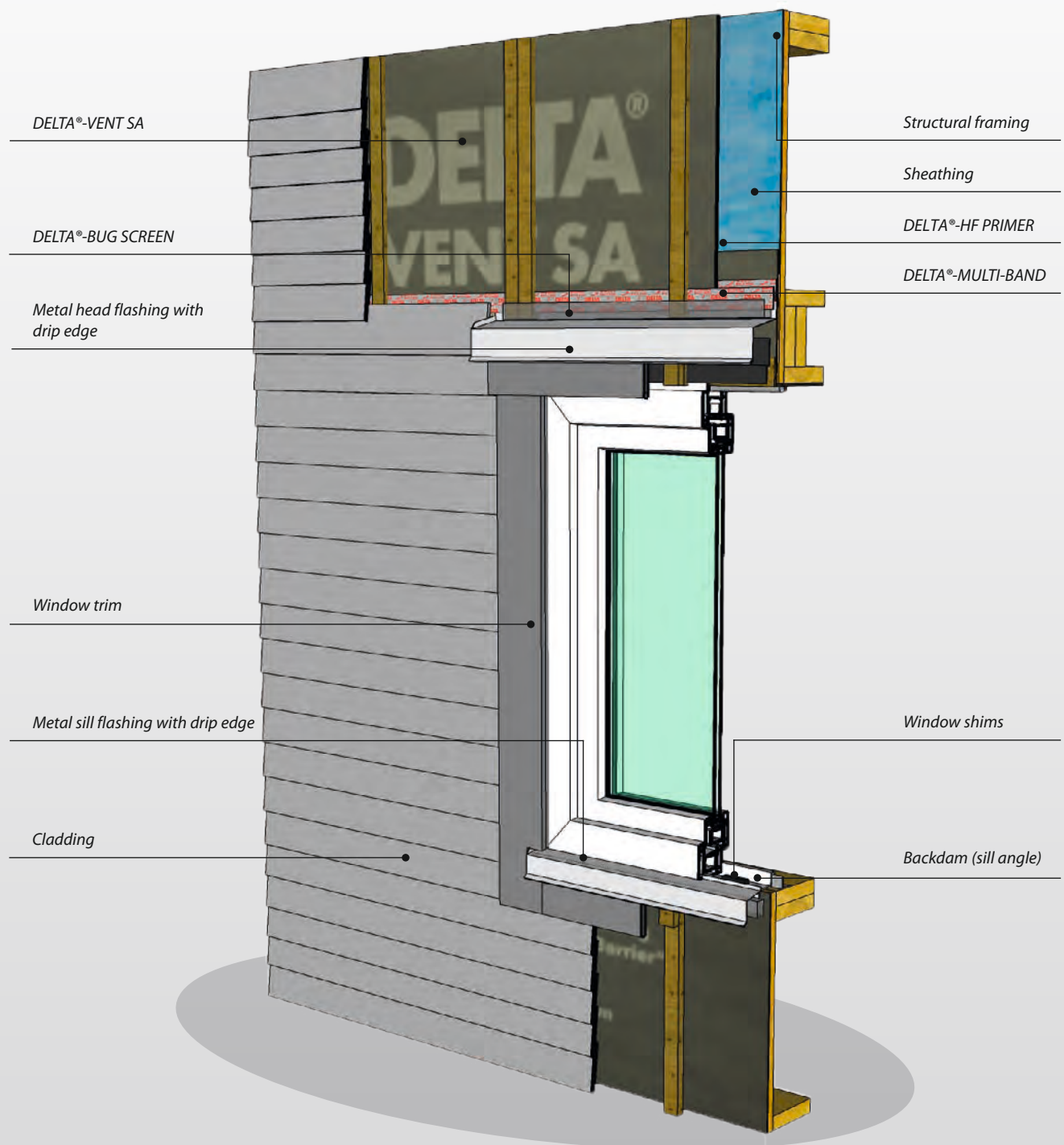


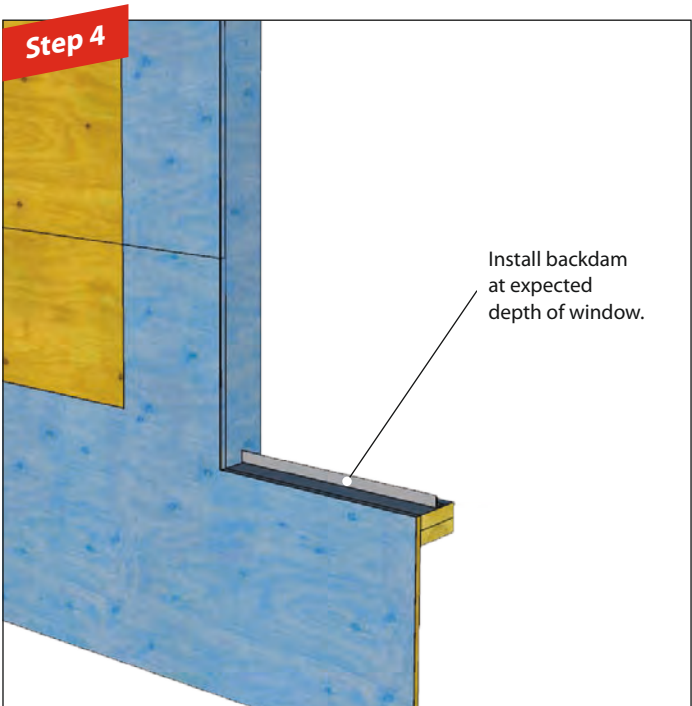
Notes



Strip-in method

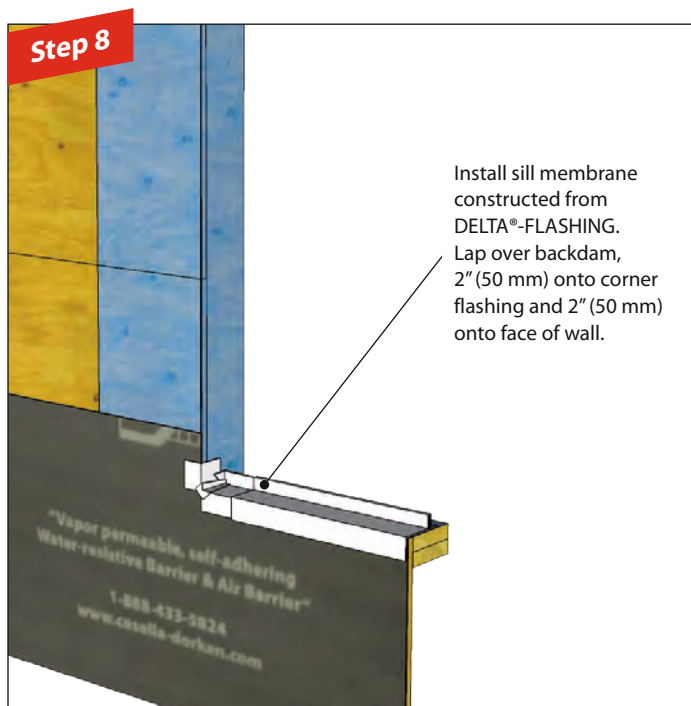
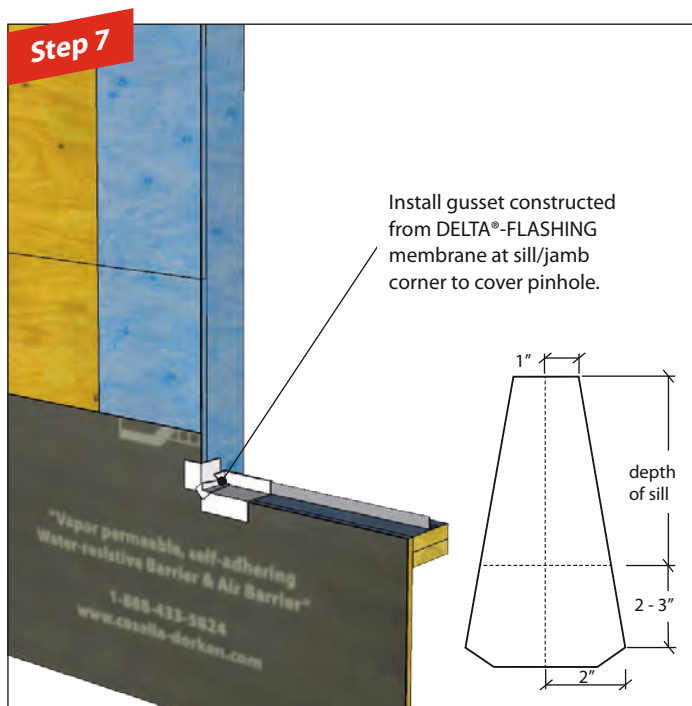
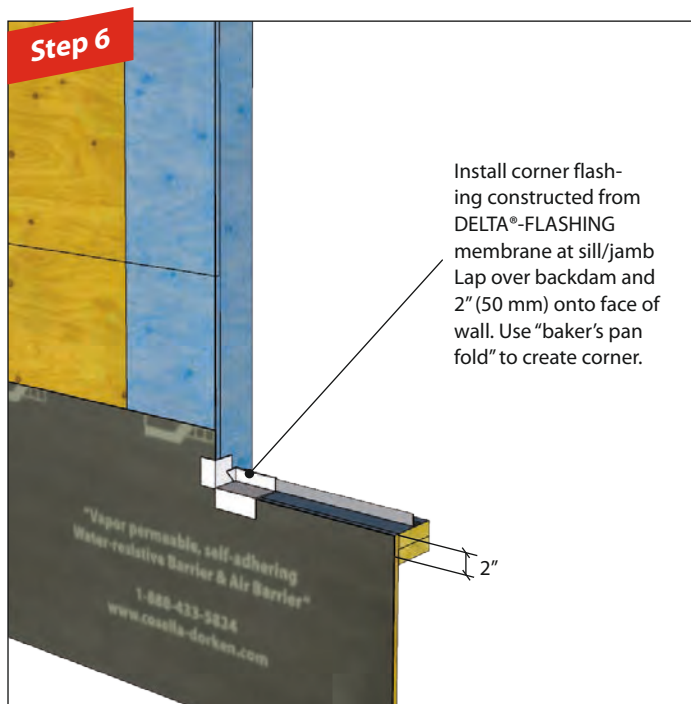
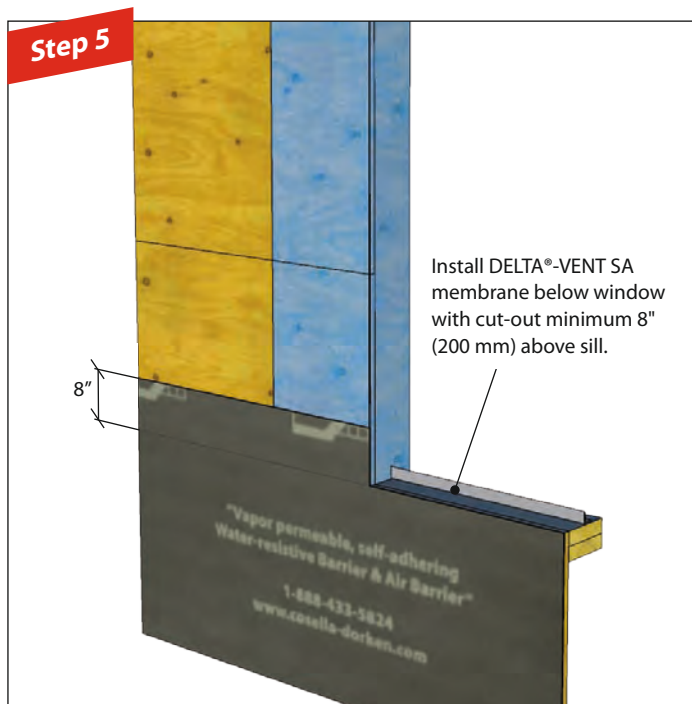
4. With backdam

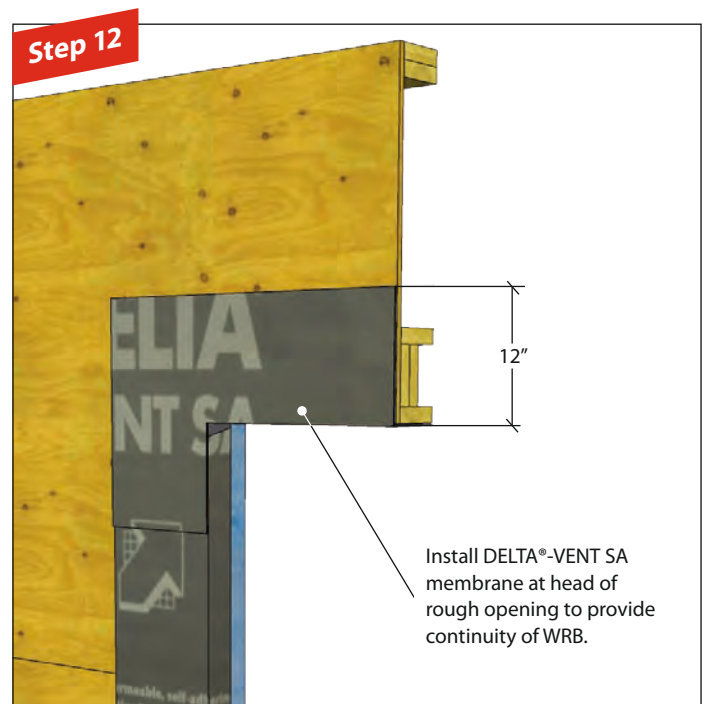
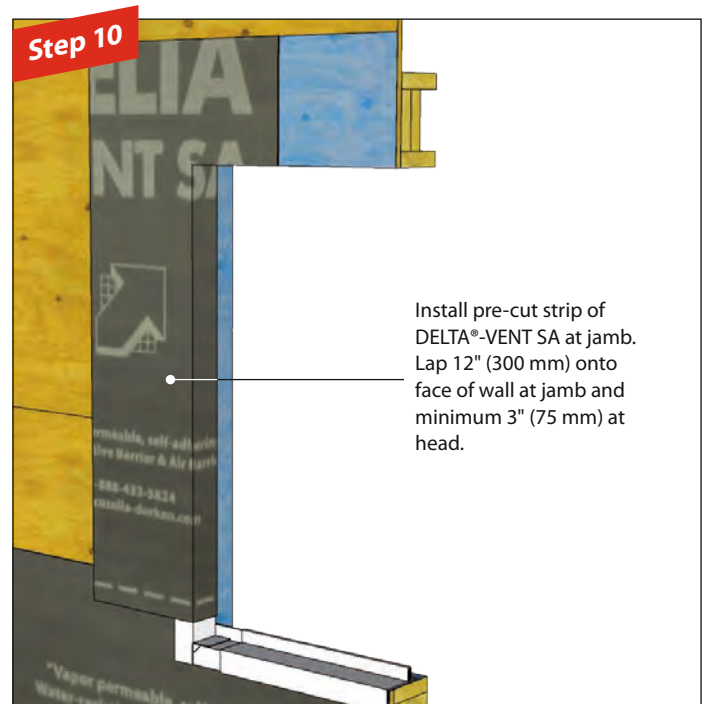
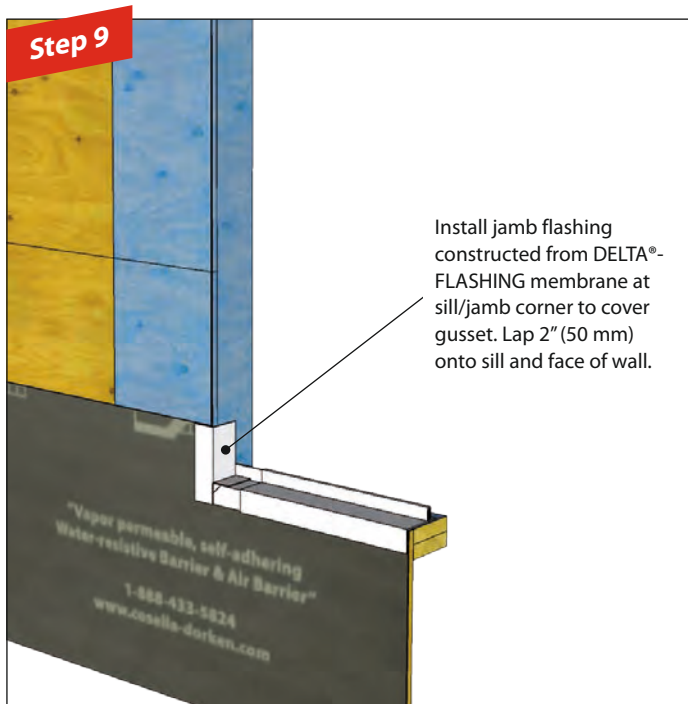




Strip-in method

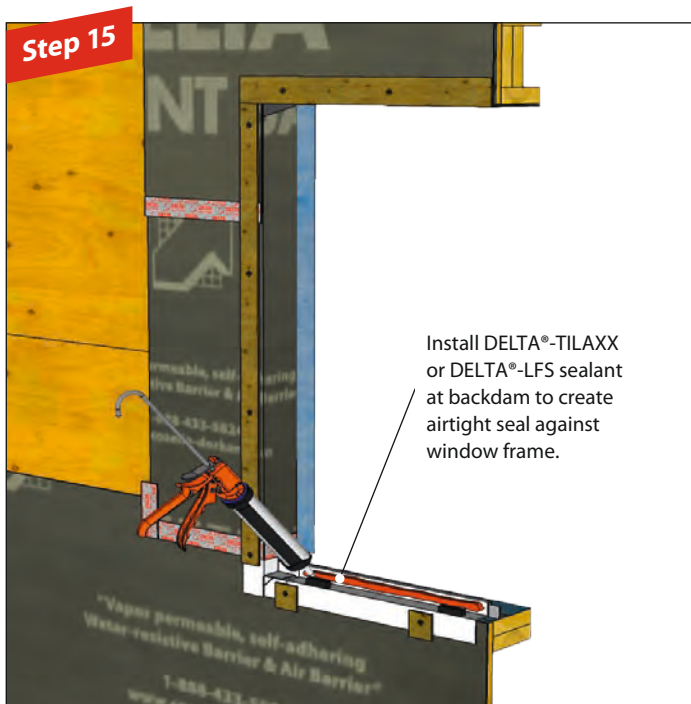
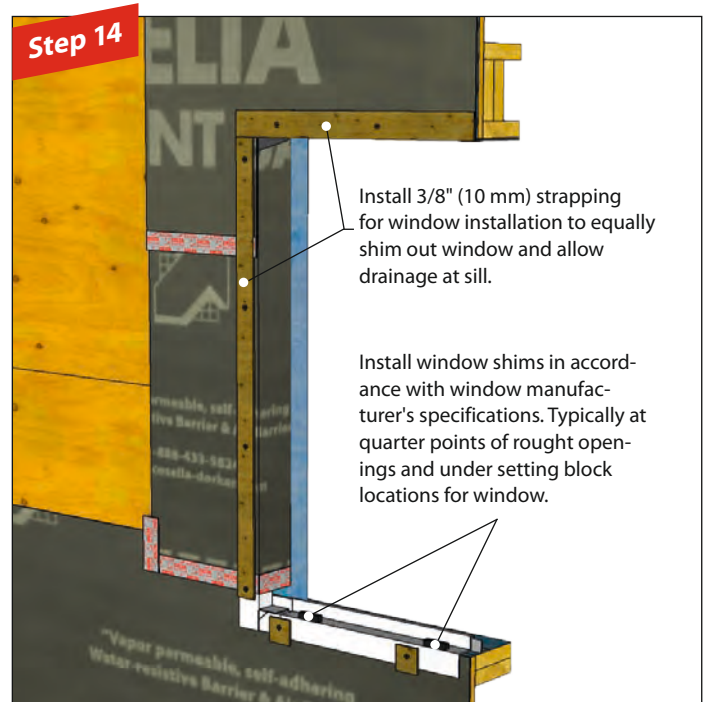
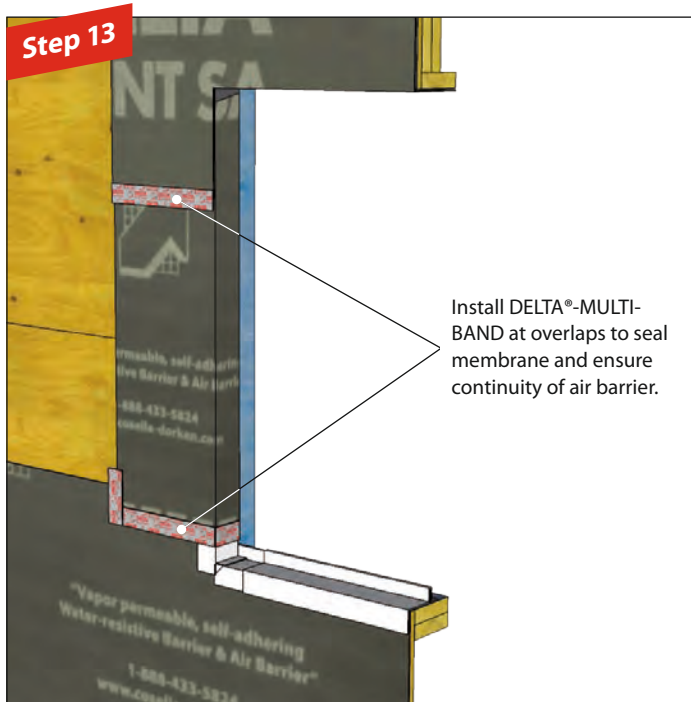
4. With backdam

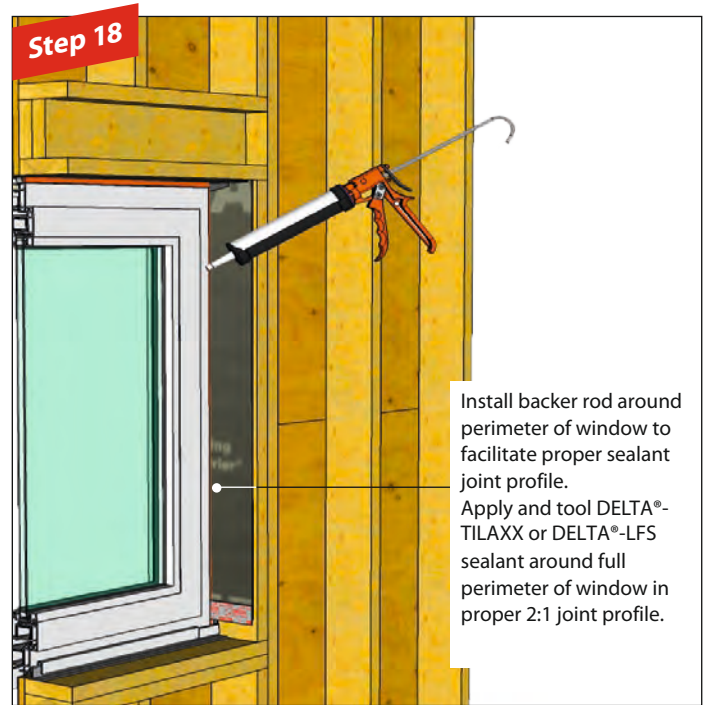
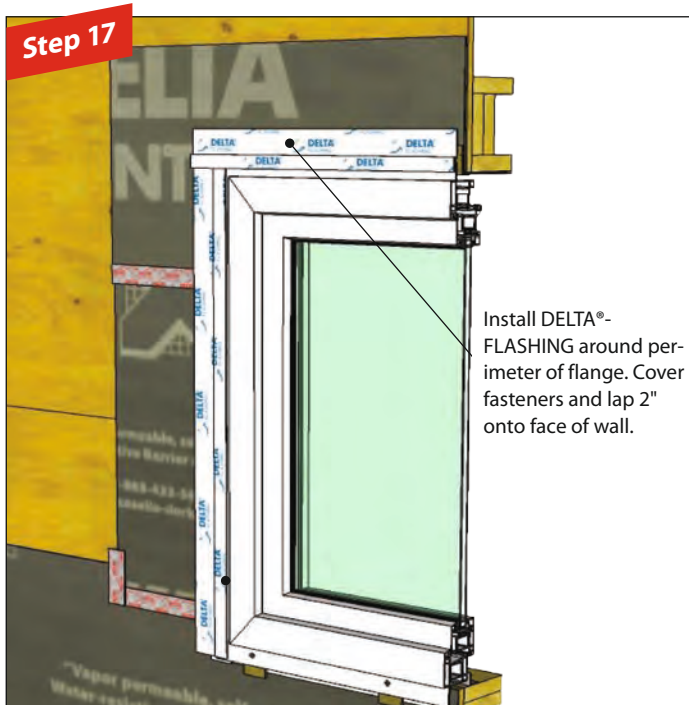




Strip-in method

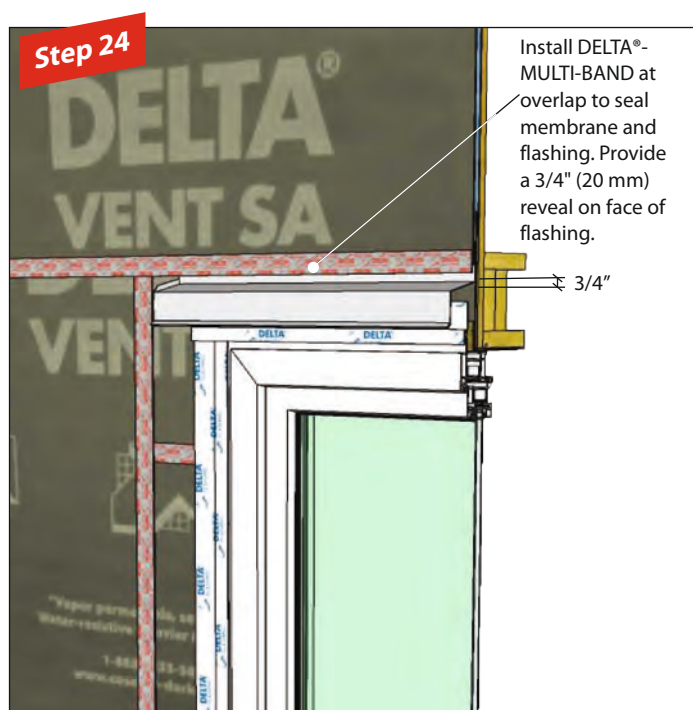
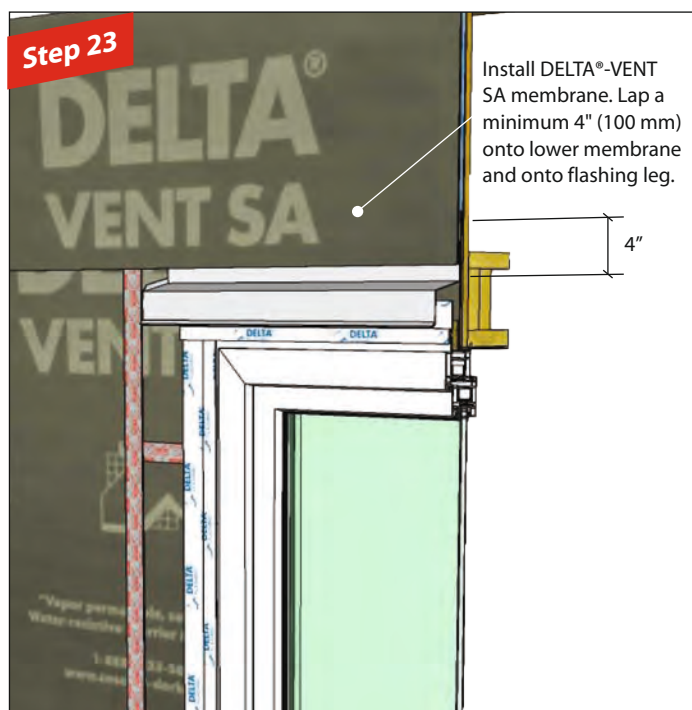
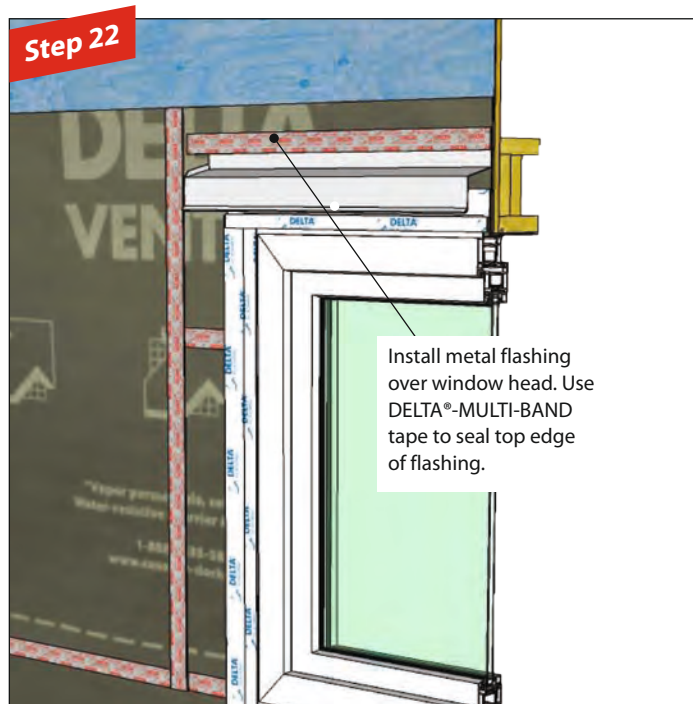
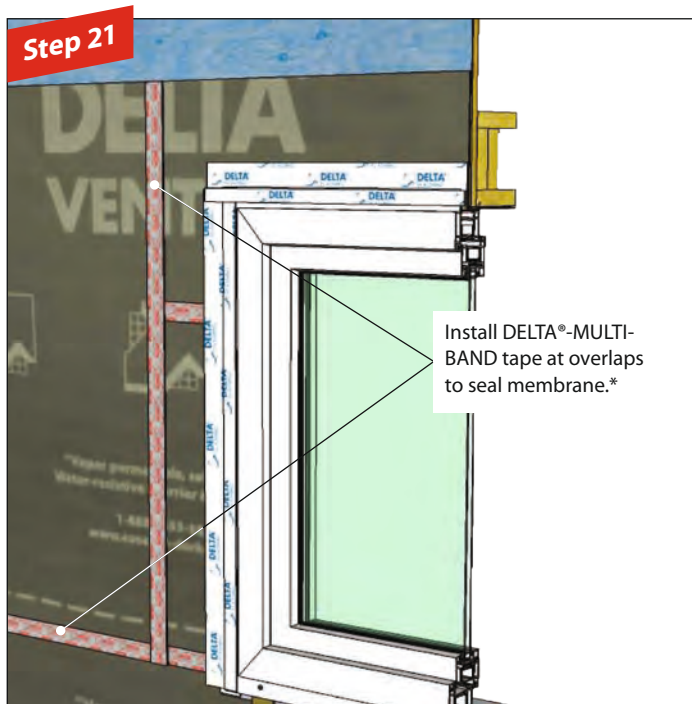
4. With backdam



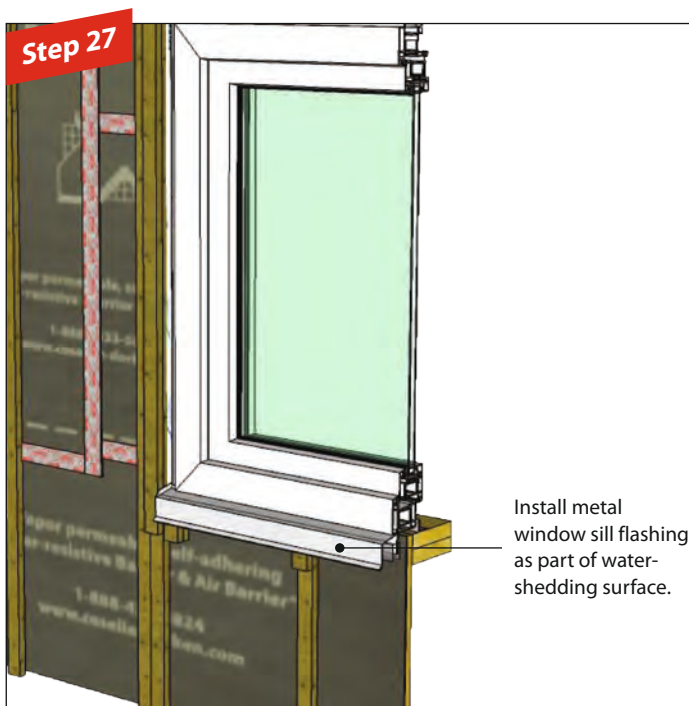


Strip-in method

4. With backdam

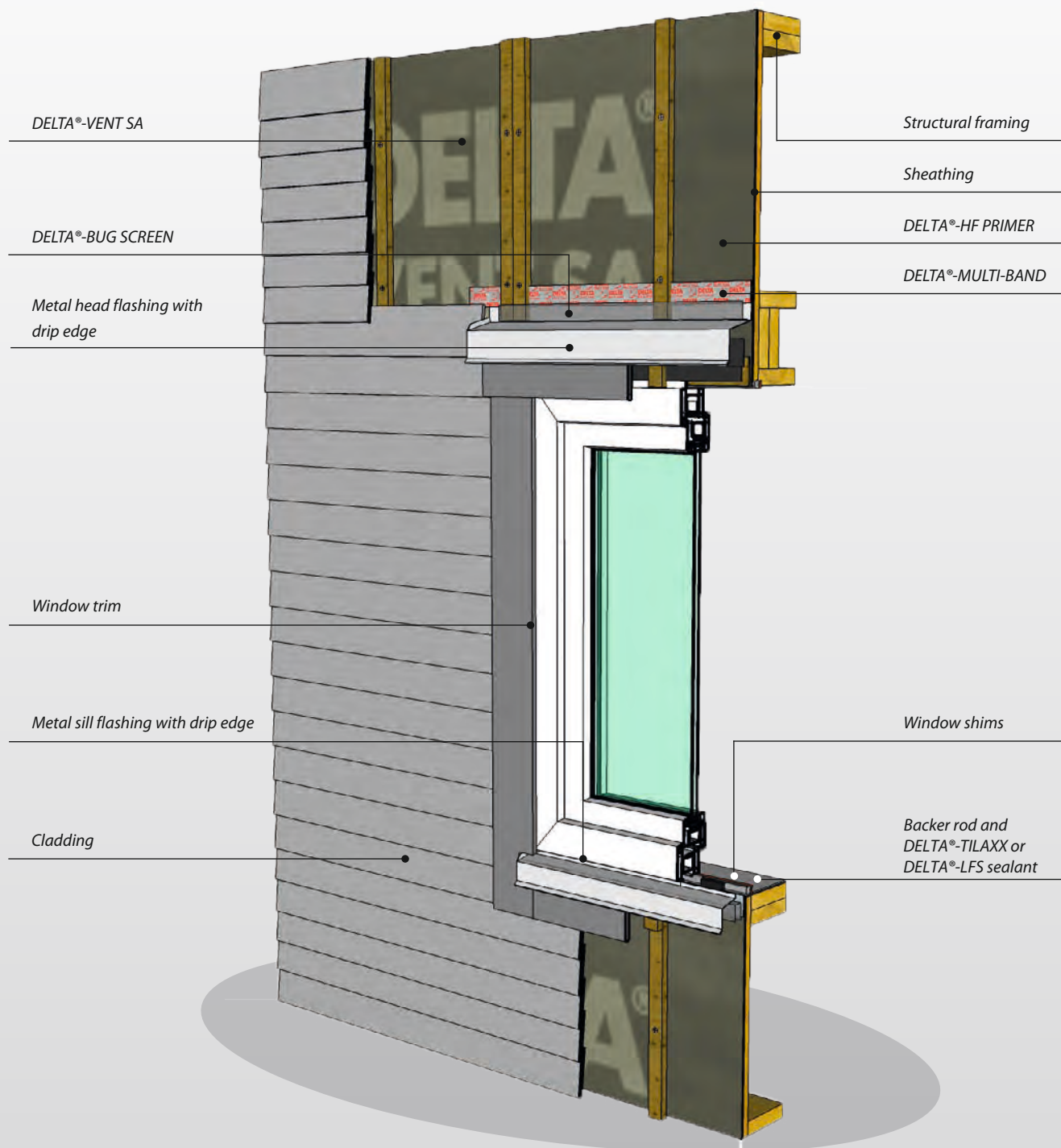


* Not required where there is a self-adhered edge.

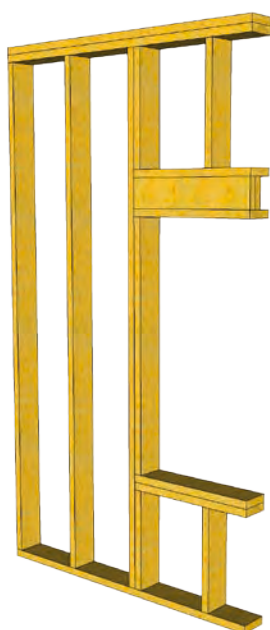


Cut-out method

5. With DELTA®-FAS CORNER

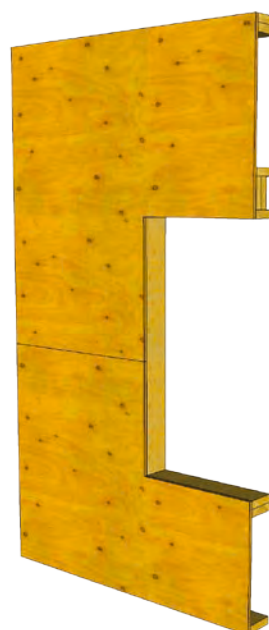


Step 1



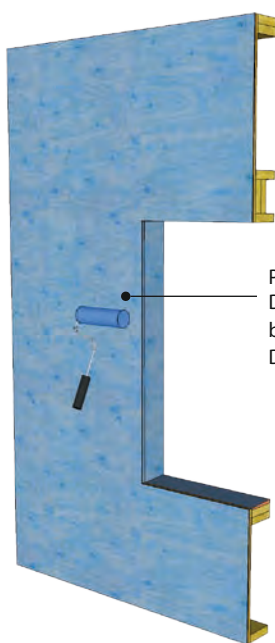
Framing

Step 2



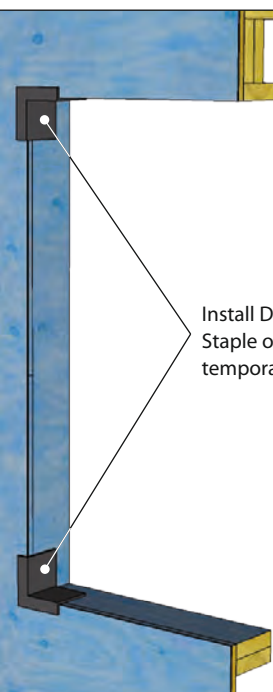
Sheathing

Step 3



Prime substrate with DELTA®-HF PRIMER before applying DELTA®-VENT SA.

Step 4



Install DELTA®-FAS CORNERS. Staple on vertical leg to temporarily hold in place.

Cut-out method

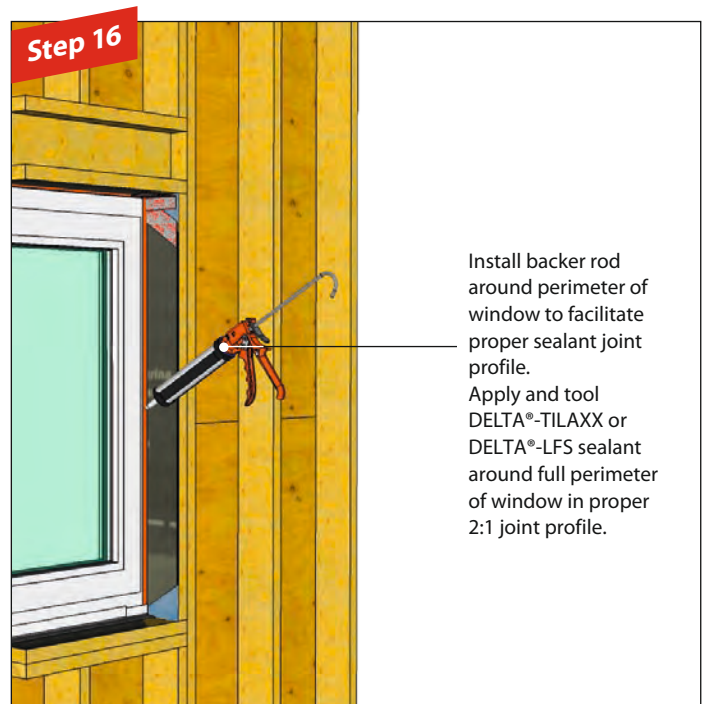
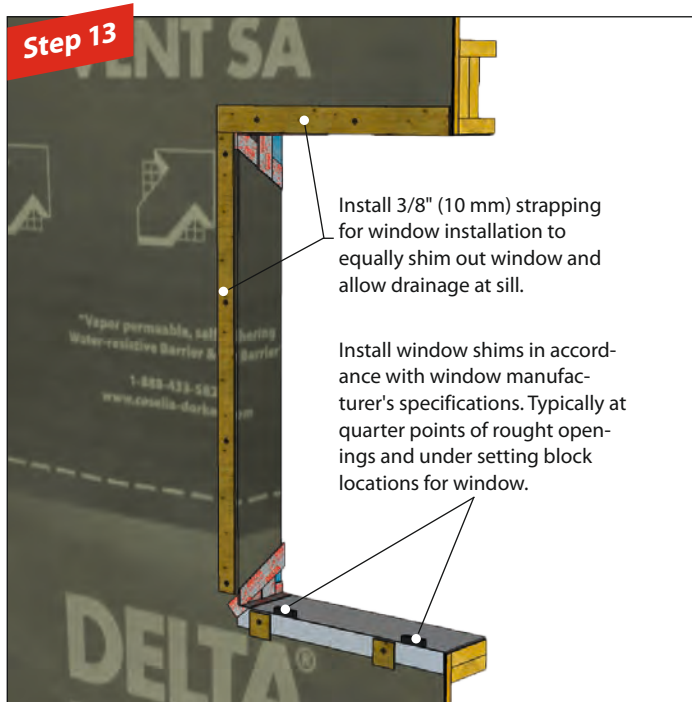
5. With DELTA®-FAS CORNER





Cut-out method

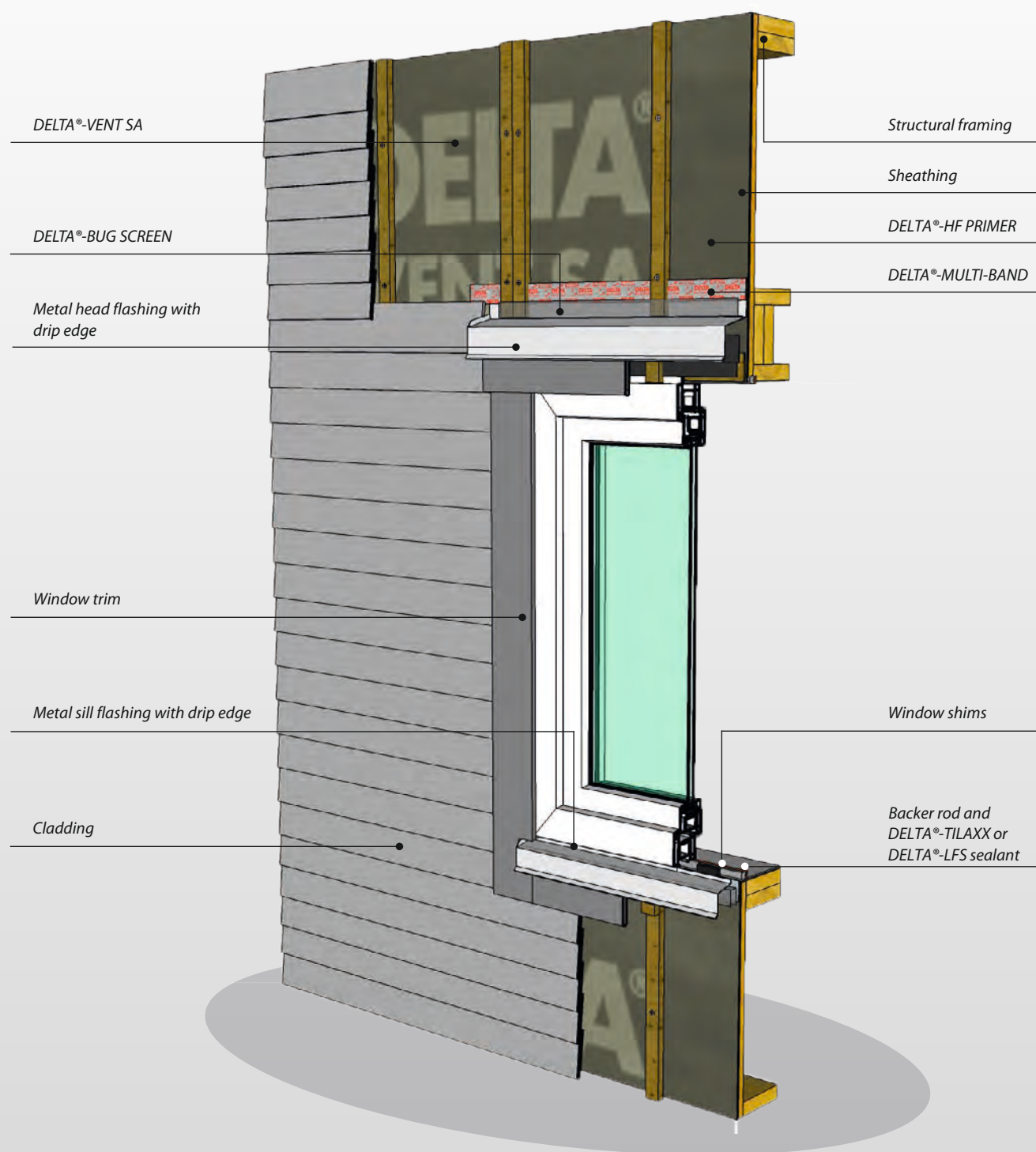
5. With DELTA®-FAS CORNER



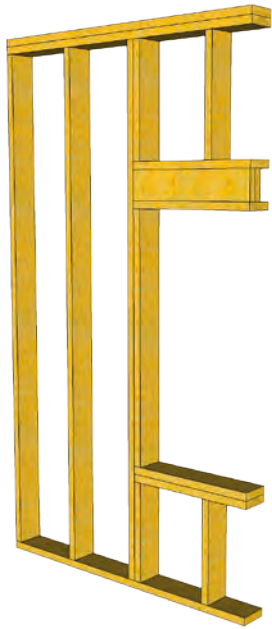


Cut-out method

6. With flat sill

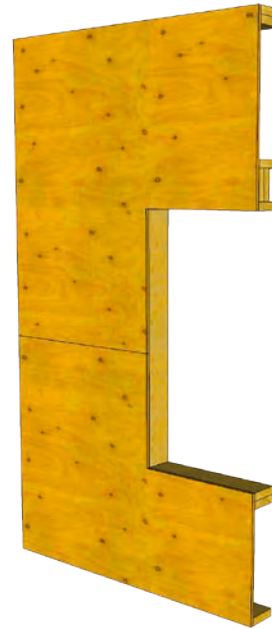


Step 1



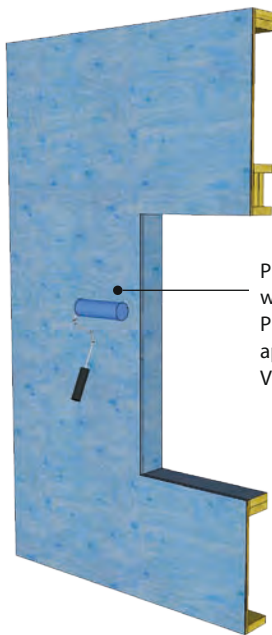
Framing

Step 2



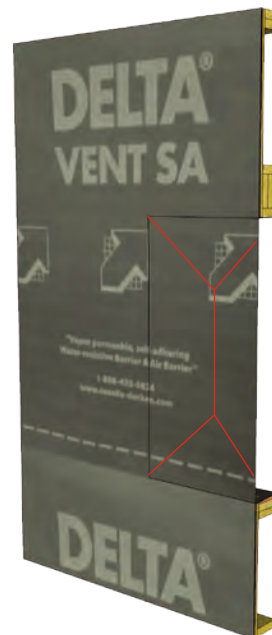
Sheathing

Step 3



Prime substrate with DELTA®-HF PRIMER before applying DELTA®-VENT SA.

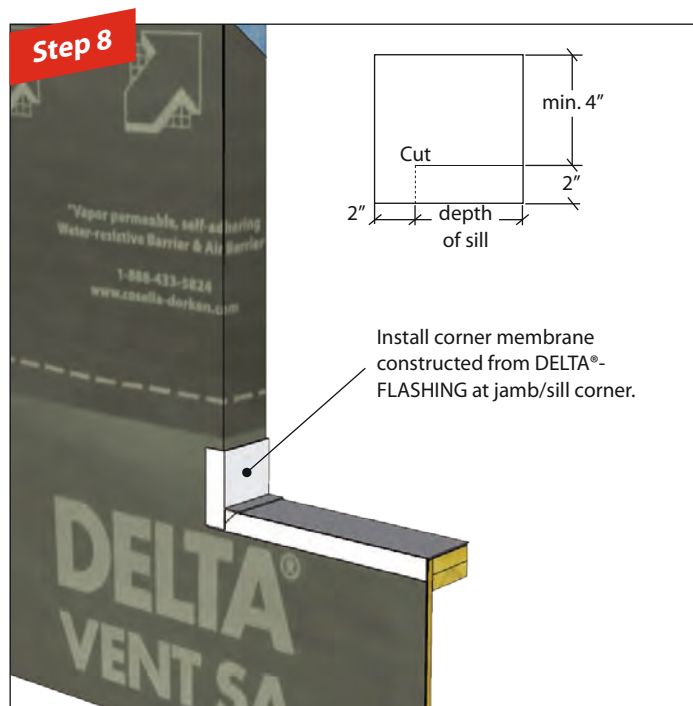
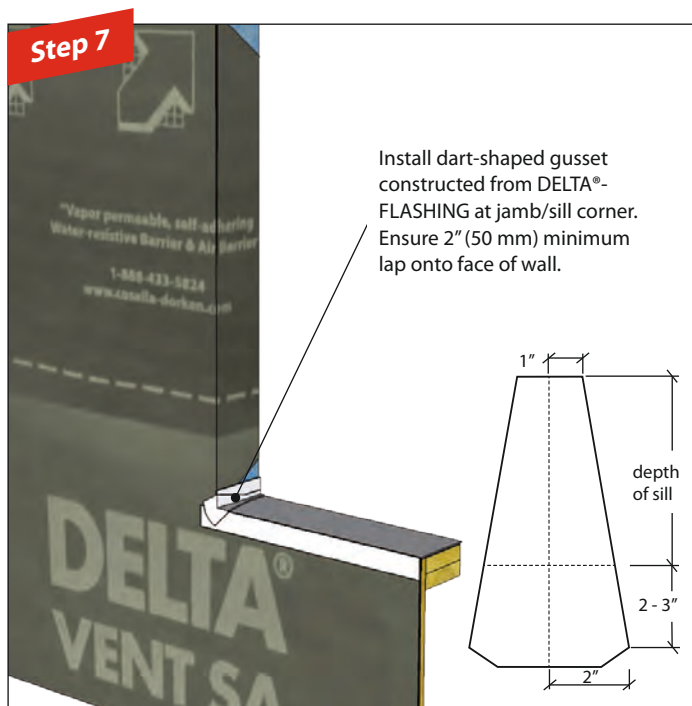
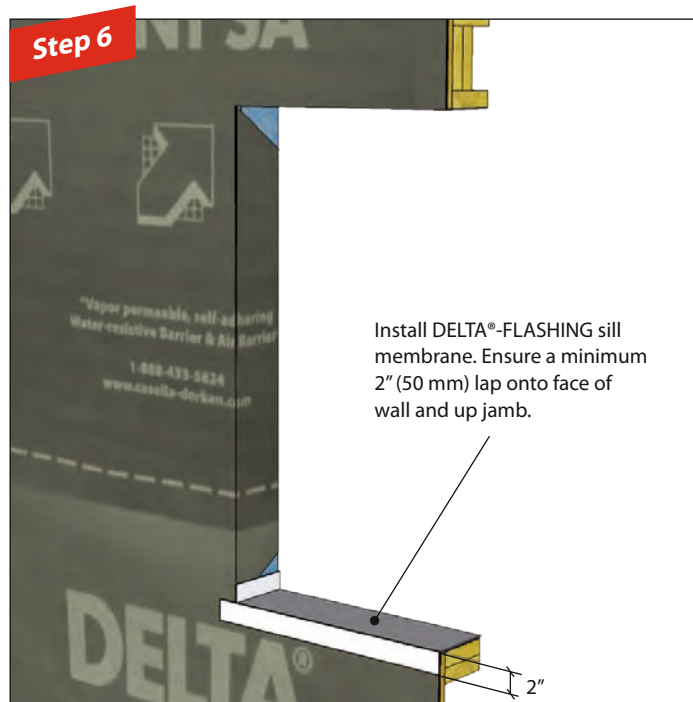
Step 4

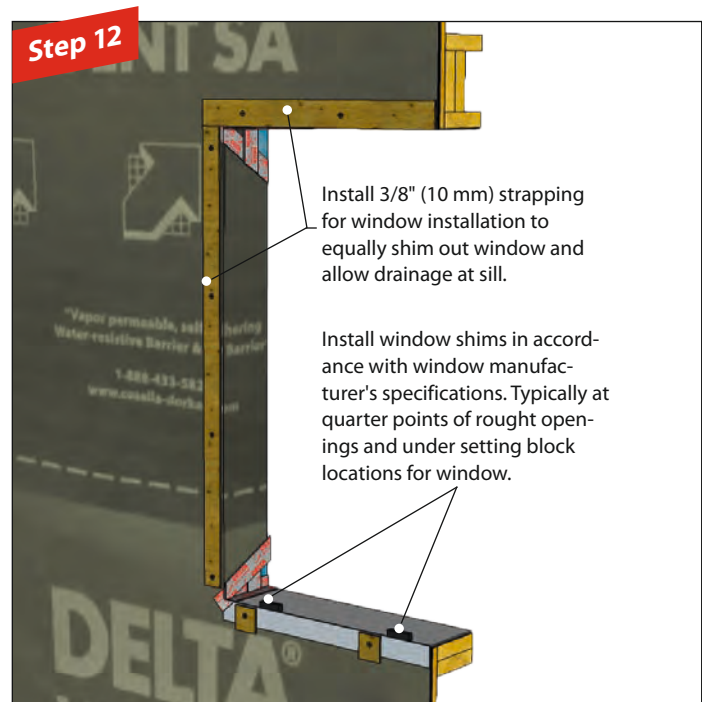
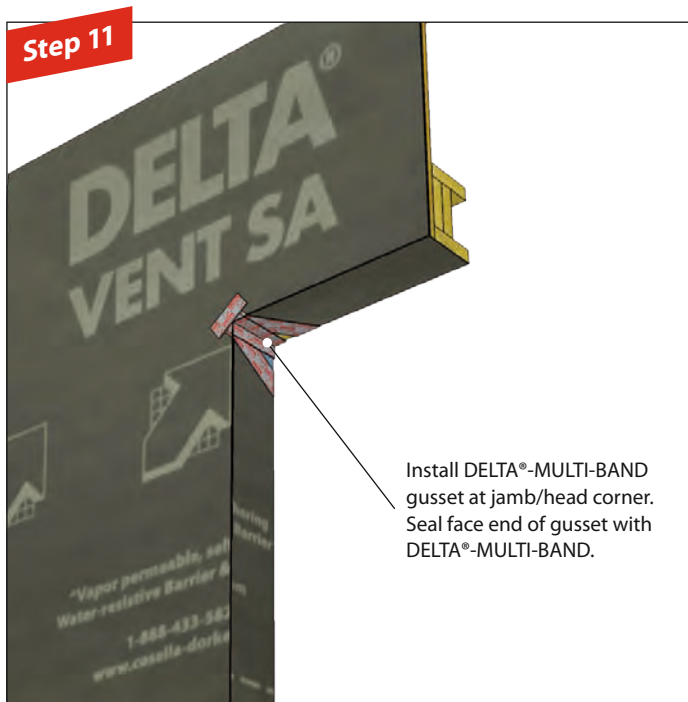
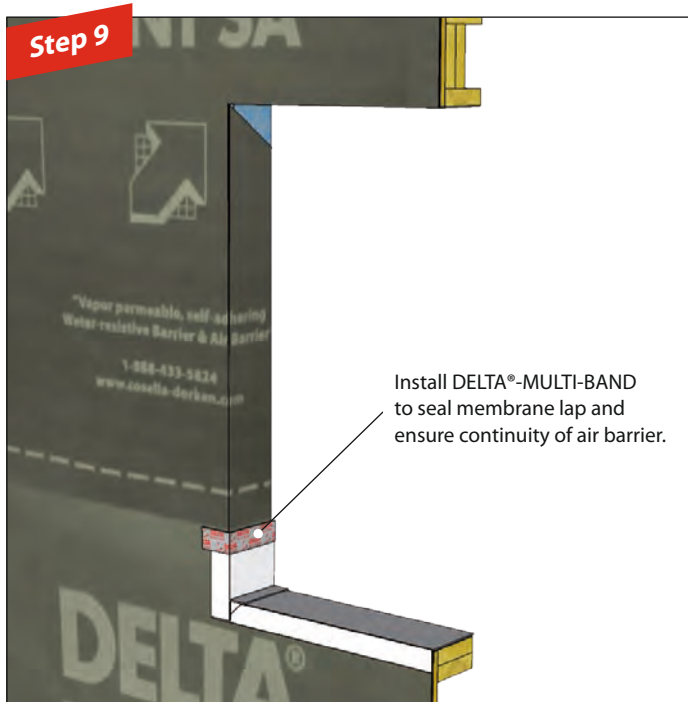


Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

Cut-out method

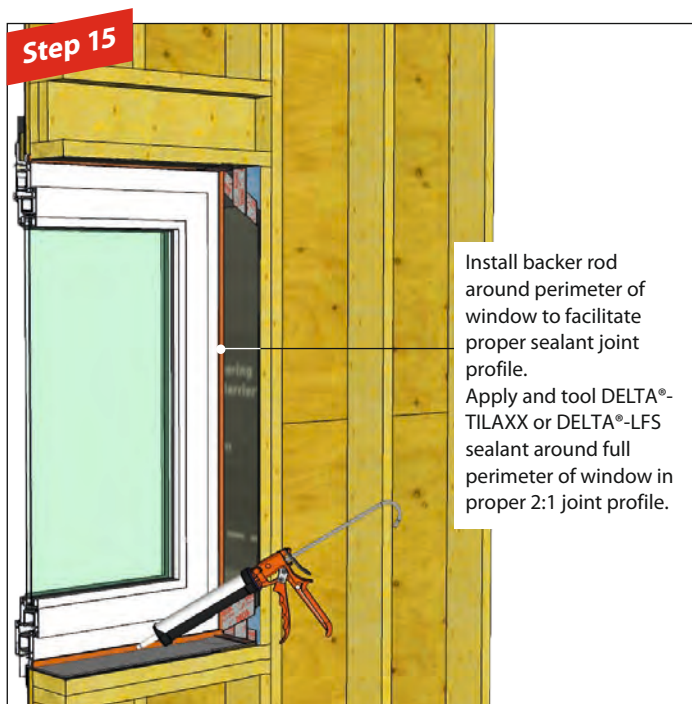
6. With flat sill

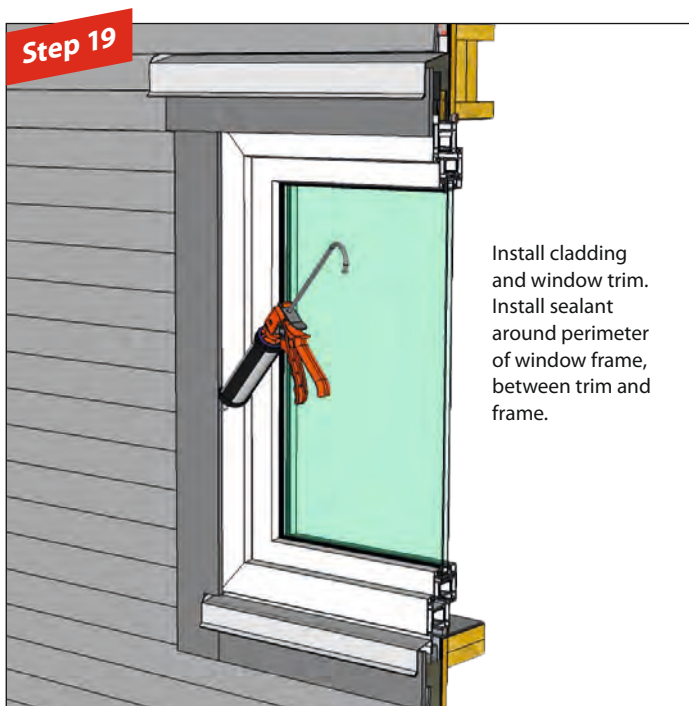




Cut-out method

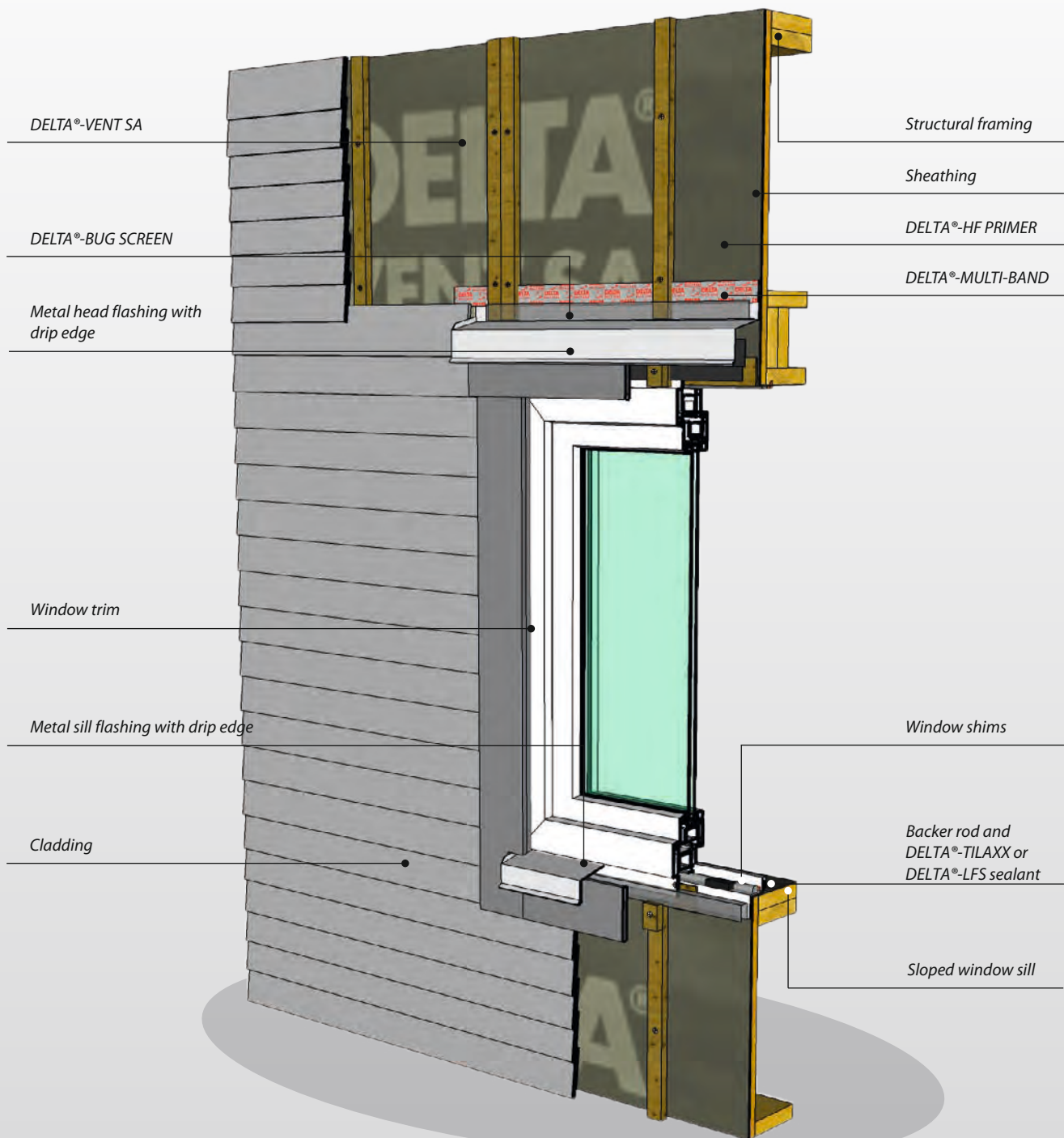
6. With flat sill



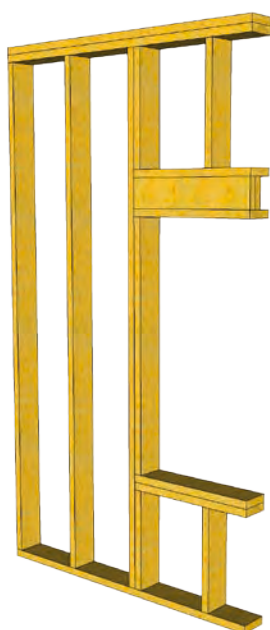


Cut-out method

7. With sloped sill



Step 1



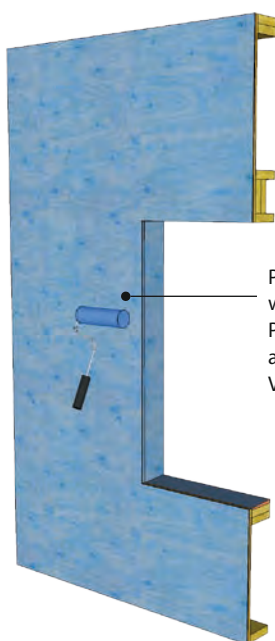
Framing

Step 2



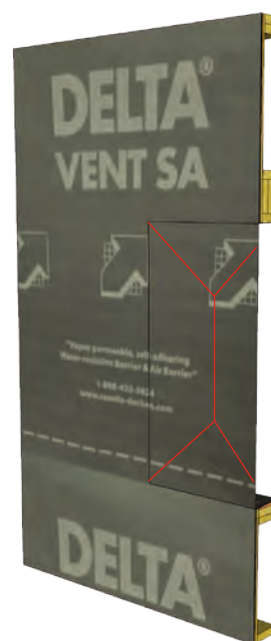
Sheathing

Step 3



Prime substrate with DELTA®-HF PRIMER before applying DELTA®-VENT SA.

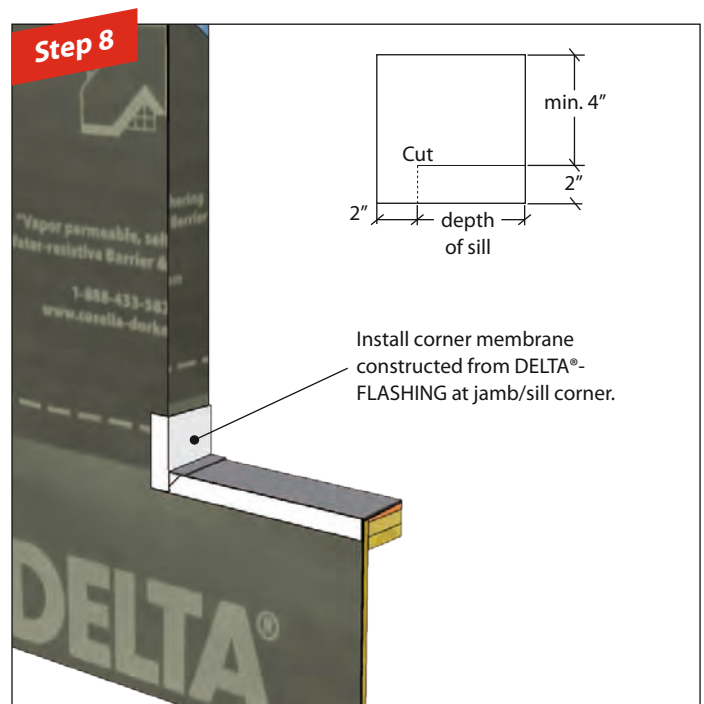
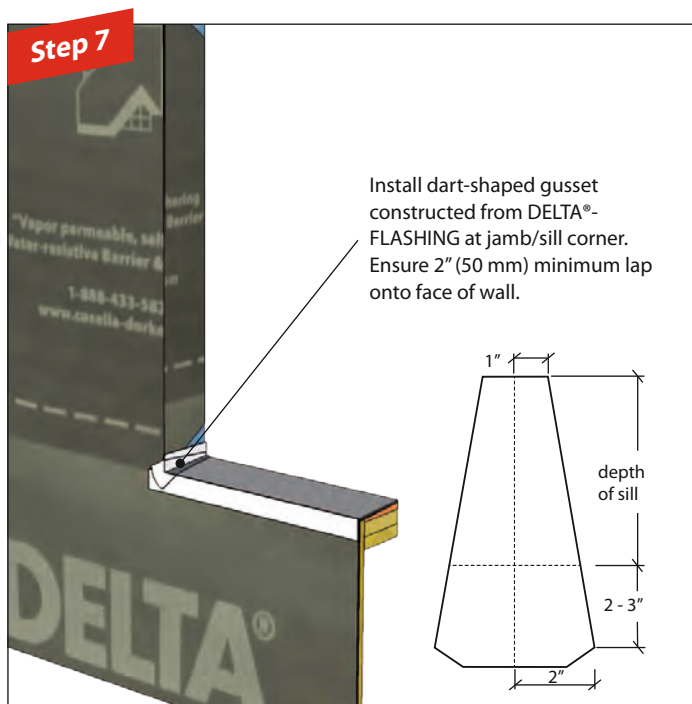
Step 4

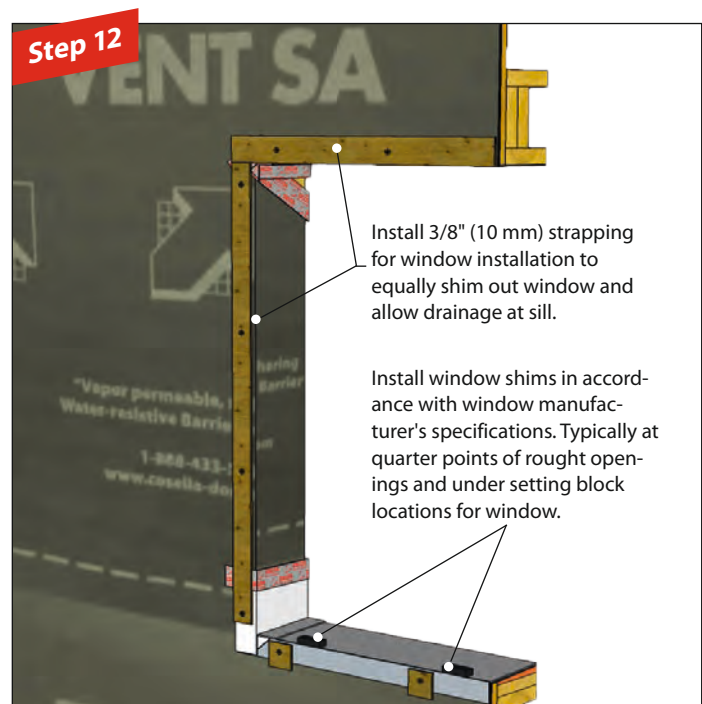


Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

Cut-out method

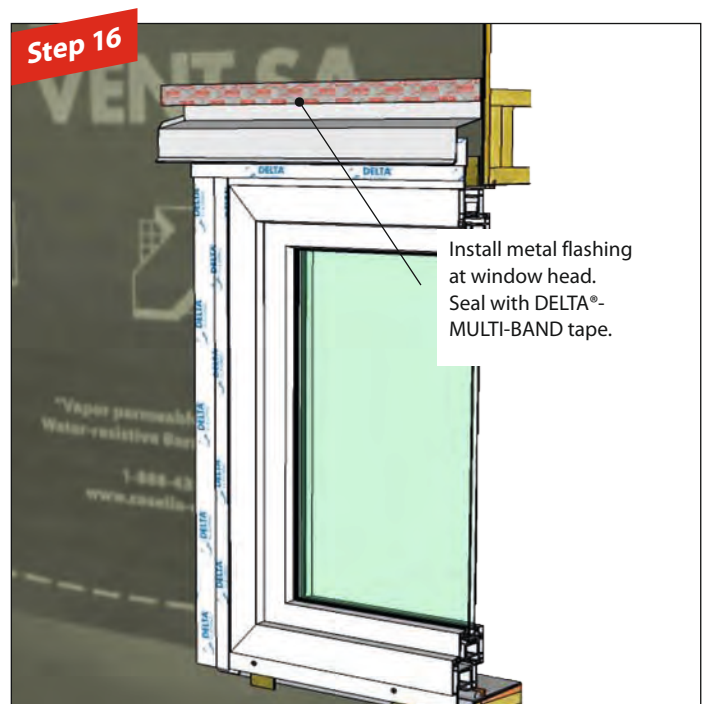
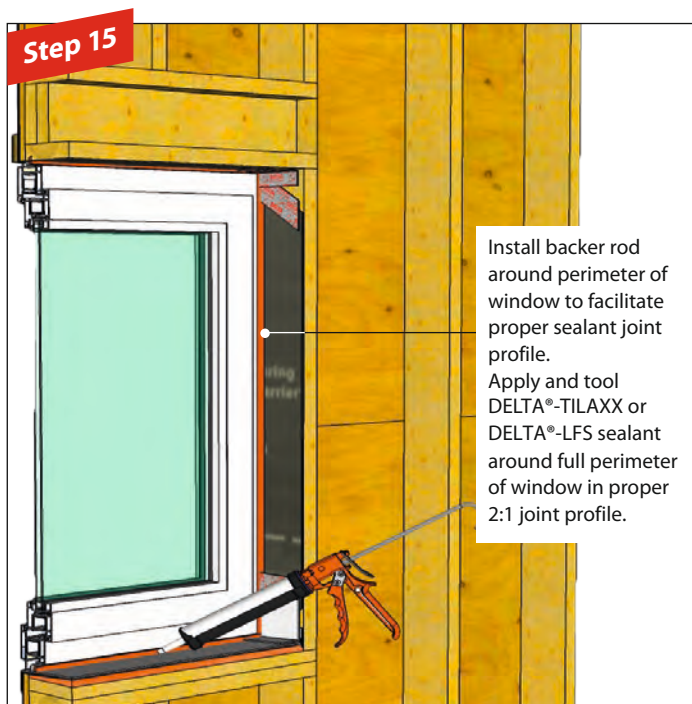
7. With sloped sill

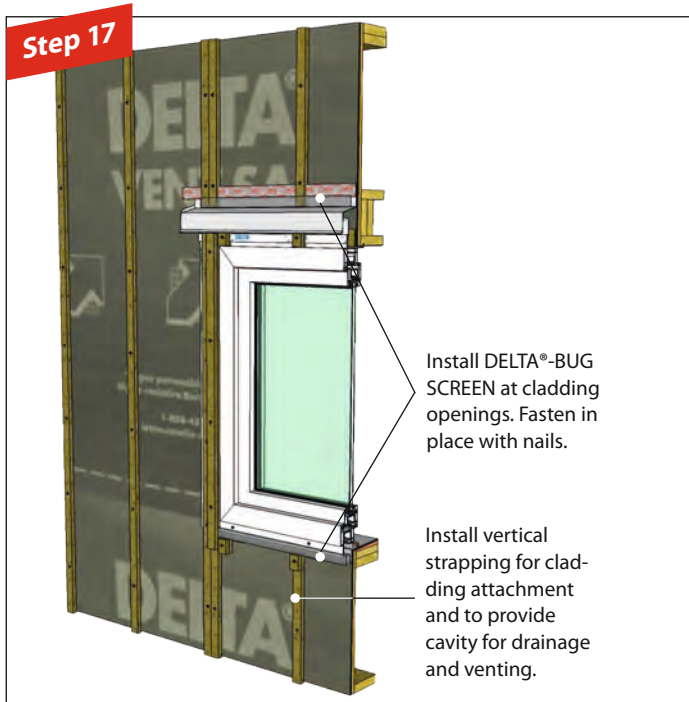




Cut-out method

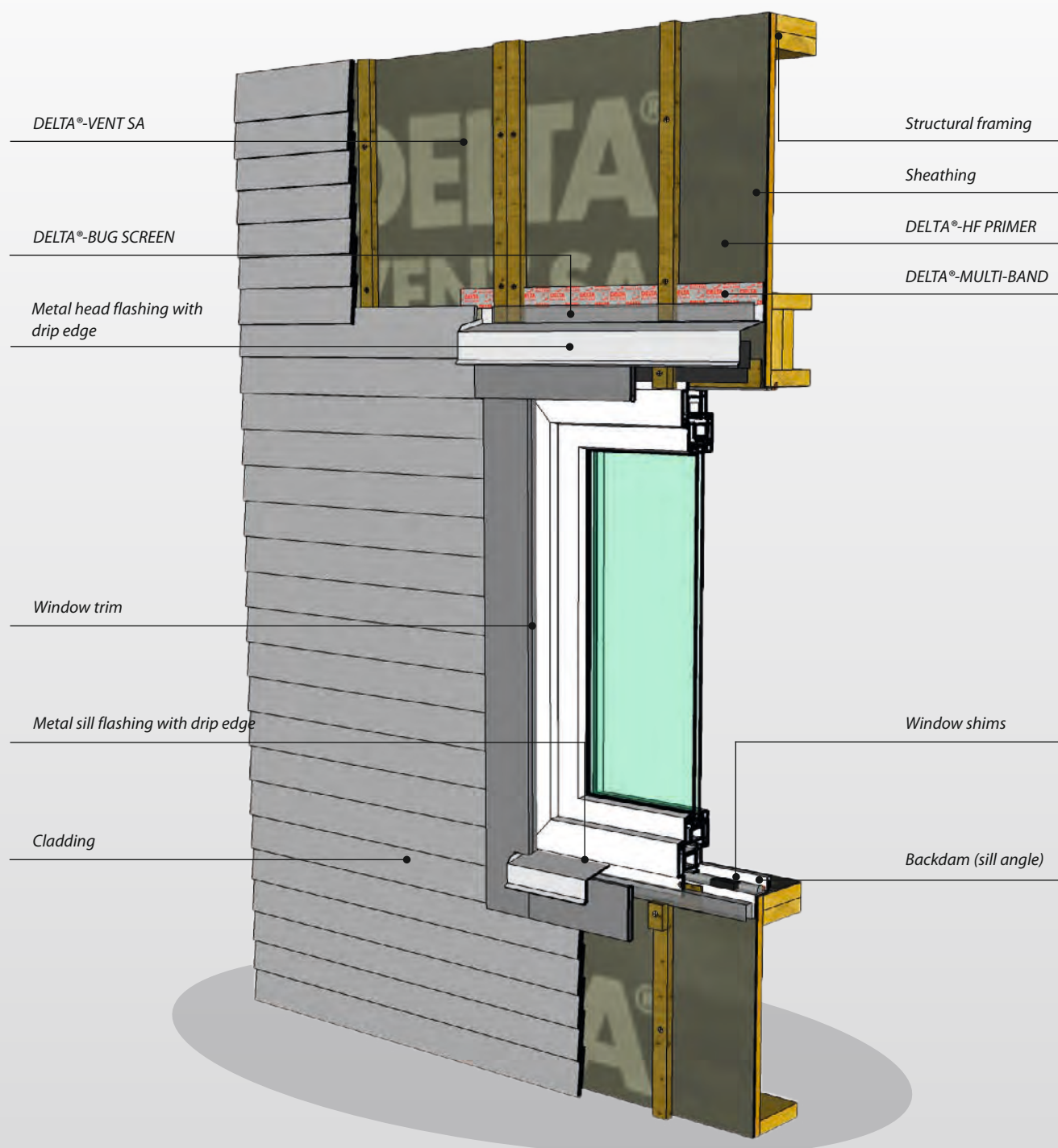
7. With sloped sill



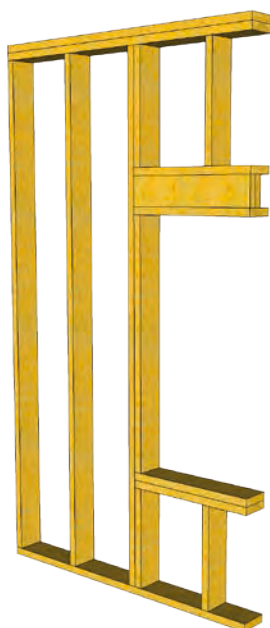


Cut-out method

8. With backdam

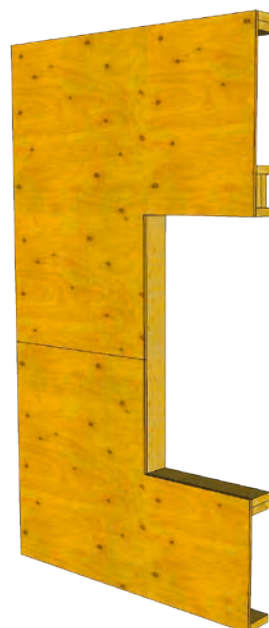


Step 1



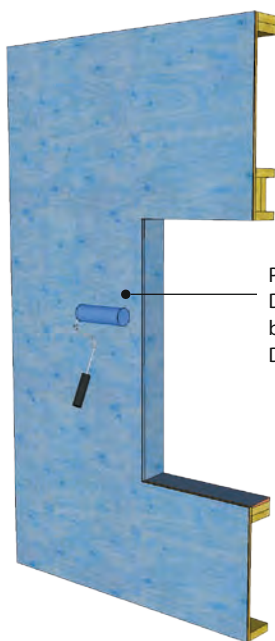
Framing

Step 2



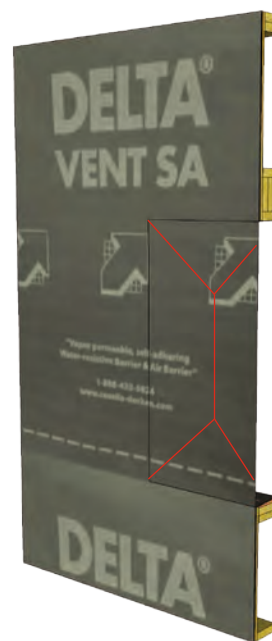
Sheathing

Step 3



Prime substrate with DELTA®-HF PRIMER before applying DELTA®-VENT SA.

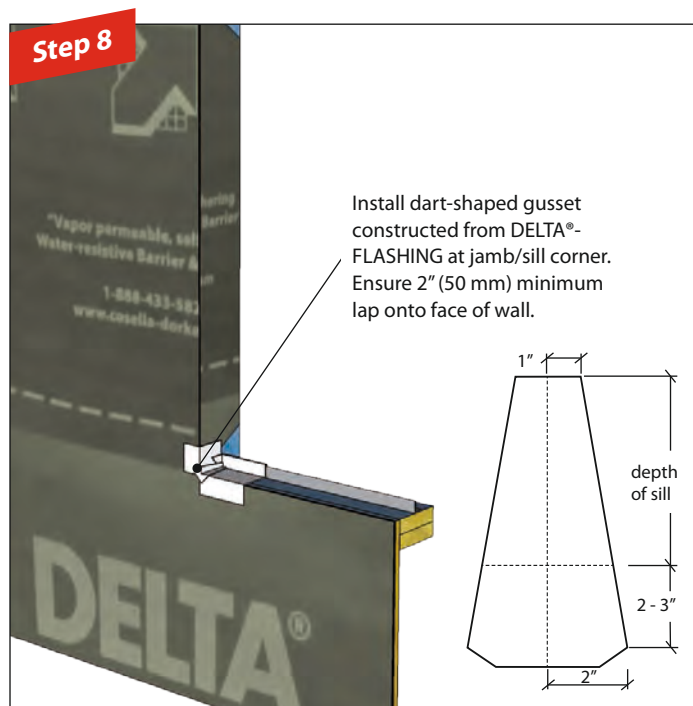
Step 4

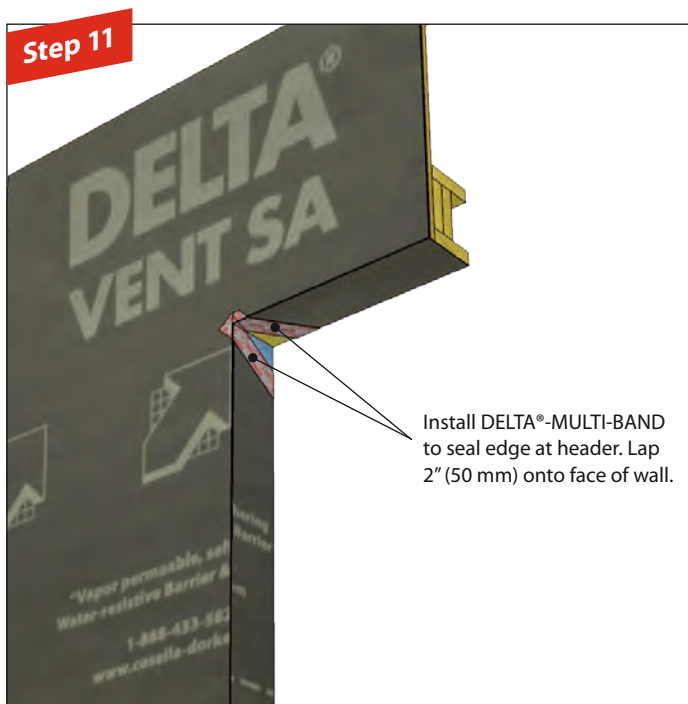
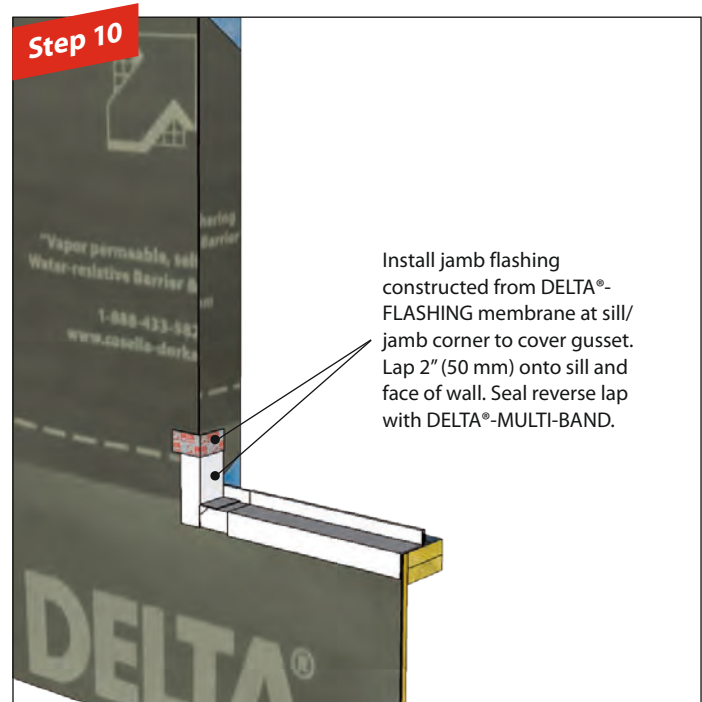


Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

Cut-out method

8. With backdam

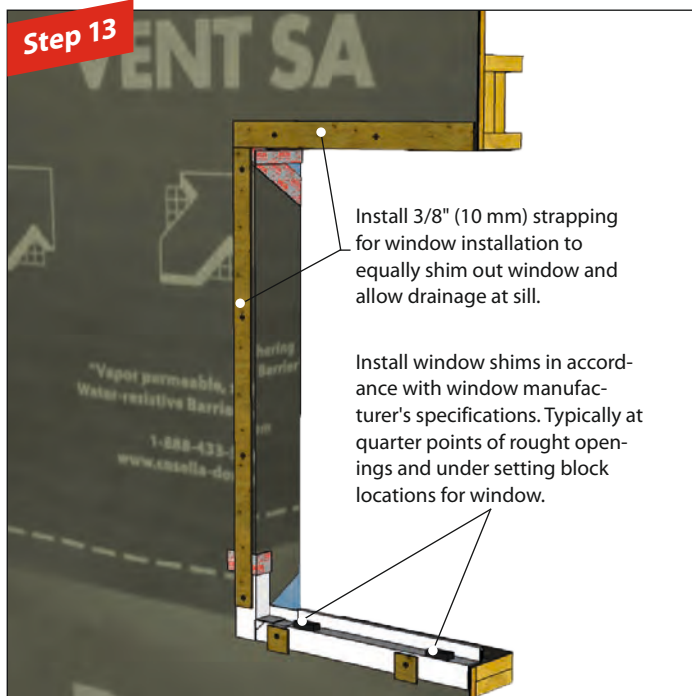




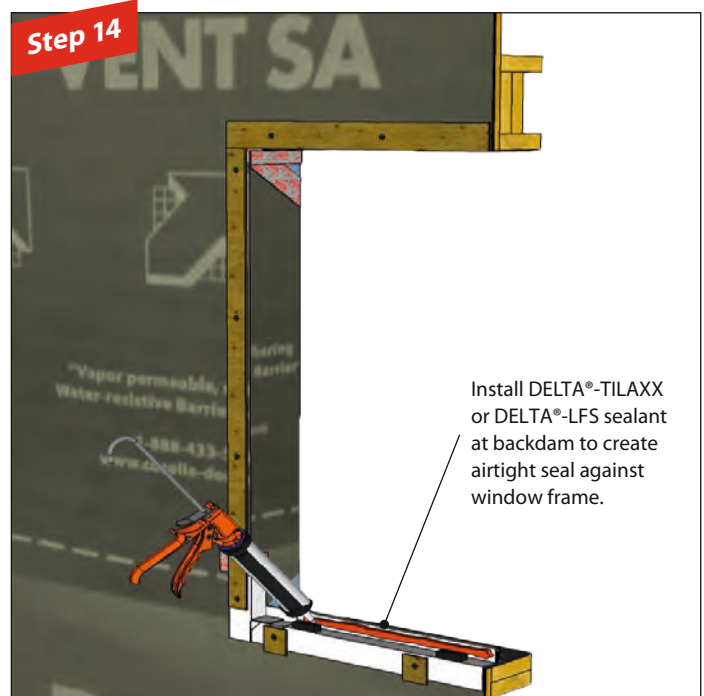
Cut-out method

8. With backdam

Step 13



Step 14

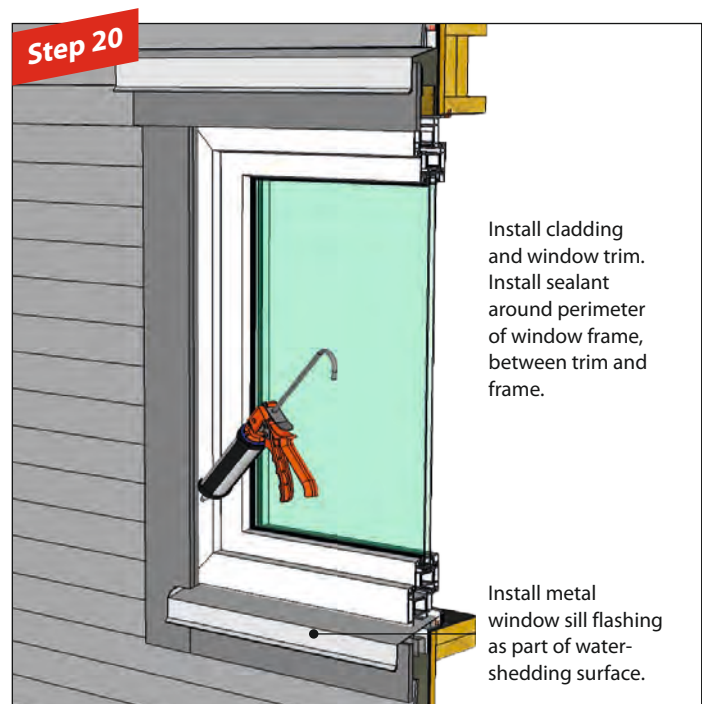
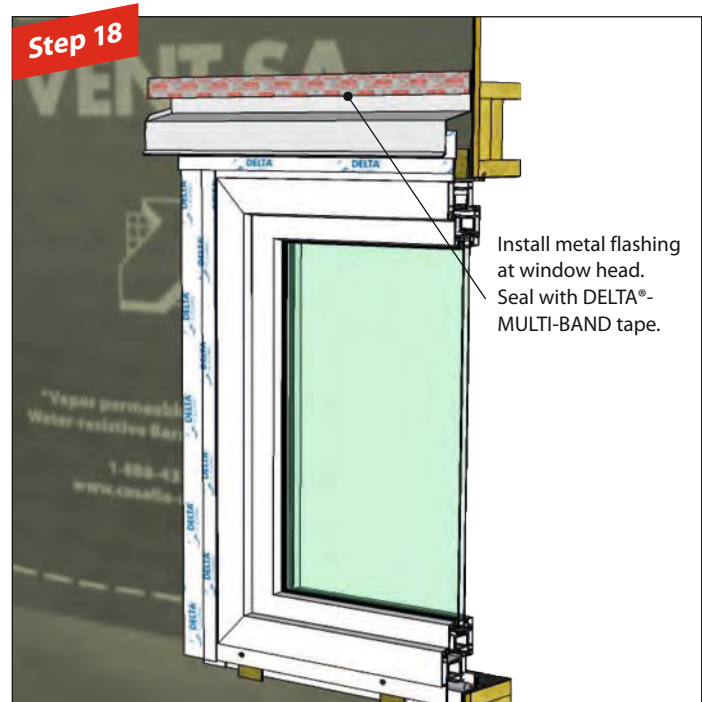
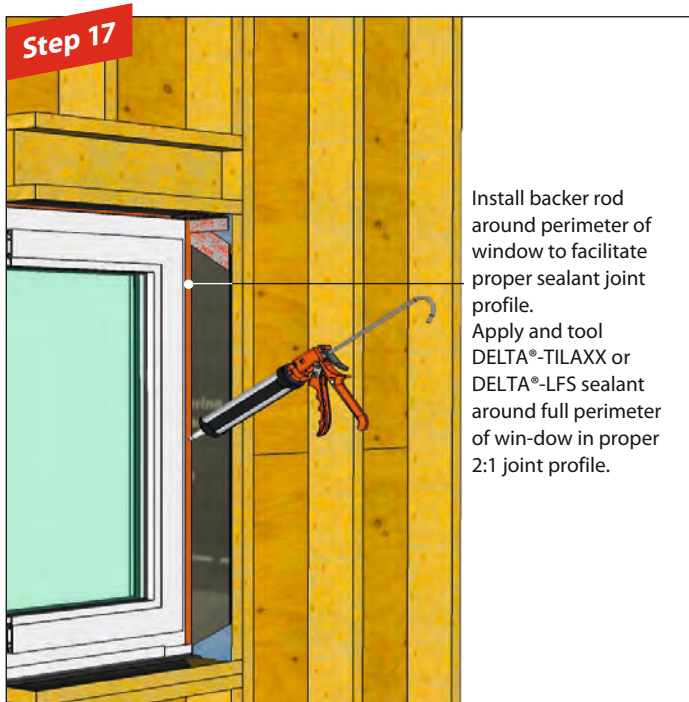


Step 15



Step 16





DELTA® Accessories

DELTA® Air Barrier System Components

Assuring an air-tight building enclosure

Using DELTA®-VENT SA to create an energy-efficient and air-tight building is a great choice. Choosing premium DELTA® Air Barrier System Components will help complete the job to meet the highest standards.

The secret to ensuring the overall effectiveness of an air barrier system is in the details, such as sealing windows, doors and penetrations. Proper attention to details is critically important to achieve an air-tight assembly. All components must be interconnected to successfully resist air and water infiltration, and turn individual materials, components and assemblies into a complete Air Barrier System.

DELTA®-FAS CORNER and DELTA®-FAS JOINT are exhaustively tested for compatibility. Together they assure superior performance in air-tight building enclosures.

DELTA®-LFS is a best-in-class self-adhering membrane used to flash around window and door openings. Cut in practical and convenient widths, it provides superior long-term protection against air and water leaks.

DELTA®-FAS JOINT is a very tough and durable seam tape with an aggressive pure acrylic adhesive. It is suitable for use at end and side laps or other detail areas. It sticks tenaciously to DELTA®-VENT SA as well as all other common construction substrates like OSB, plywood, metal, glass, etc.

DELTA®-FAS JOINT is a two-ply stretchable tape with a premium butyl rubber adhesive for use at penetrations such as service pipes, arched windows, window flanges, corners and joints. It is formed easily by hand into irregularly-shaped areas, forming a tight bond to wood, vinyl, metal and other common building materials.

DELTA®-FAS CORNER is a unique preformed corner for sealing windows and doors in air- and water-tight construction. Both durable and UV resistant, it provides top performance in detailing energy-efficient enclosures. DELTA®-FAS CORNER is easy to use and saves both time and labor during installation.

DELTA®-LFS is a one-part, moisture curing, room-temperature vulcanizing (RTV), 100% silicone adhesive and sealant that cures to form a low-modulus silicone rubber that maintains long-term adhesion and flexibility.

DELTA®-HF PRIMER is a high quality permanent-ly elastic adhesive and sealant for durable air-tight bonding to all common construction surfaces where moderate movement of components is expected.

DELTA®-HF PRIMER is a solvent free primer for self-adhering membranes used as per of surface conditioner. It consolidates surface dust on dirty construction site substrates, assuring reliable long-term air-tight adhesion for DELTA®-VENT SA.

The comprehensive line of DELTA®-Accessories by Dörken delivers complete solutions for energy-efficient and durable building enclosures.

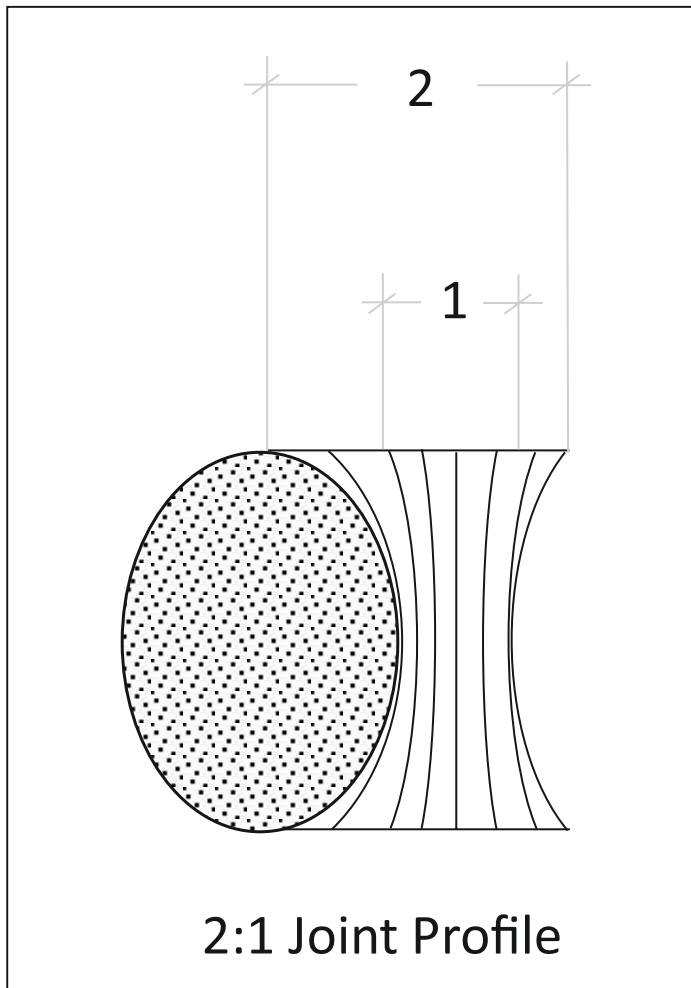


DELTA® Air Barrier System Components

			
DELTA®-FLASHING	DELTA®-MULTI-BAND	DELTA®-FLEXX-BAND	DELTA®-FAS CORNER
<p>Premium self-adhesive flashing membrane with aggressive tack.</p>	<p>Universal adhesive tape that sticks tenaciously and is highly resistant to aging.</p>	<p>Stretchable butyl-rubber compound tape with special carrier membrane.</p>	<p>Flexible pre-fabricated window corner. Permanently UV resistant.</p>
<p>Recommended Use</p> <ul style="list-style-type: none"> ■ For flashing of window and door openings. 	<p>Recommended Use</p> <ul style="list-style-type: none"> ■ For all DELTA® membranes to seal laps and penetrations. 	<p>Recommended Use</p> <ul style="list-style-type: none"> ■ Stretchable flashing for details and penetrations. ■ Pre-stretch where required. 	<p>Recommended Use</p> <ul style="list-style-type: none"> ■ Provides reliable air- and water-tight window details.
<p>Surface temperature min. +41 °F (+5 °C) Recommended storage: room temperature</p>	<p>Surface temperature min. +41 °F (+5 °C) Recommended storage: room temperature</p>	<p>Surface temperature min. +41 °F (+5 °C) Recommended storage: room temperature</p>	<p>–</p>
<p>Temperature Range -40 °F to +176 °F (-40 °C to +80 °C)</p>	<p>Temperature Range -40 °F to +176 °F (-40 °C to +80 °C)</p>	<p>Temperature Range -40 °F to +176 °F (-40 °C to +80 °C)</p>	<p>Temperature Range -40 °F to +176 °F (-40 °C to +80 °C)</p>
<p>Size Width: 6" (15.25 cm), 9" (23 cm) Length: 75' (22.85 m)</p>	<p>Size Width: 2 3/8" (6 cm), 4" (10 cm) Length: 82' (25 m)</p>	<p>Size Width: 4" (10 cm) Length: 33' (10 m)</p>	<p>Measurements 7" x 7" x 4" (18 cm x 18 cm x 10 cm)</p>

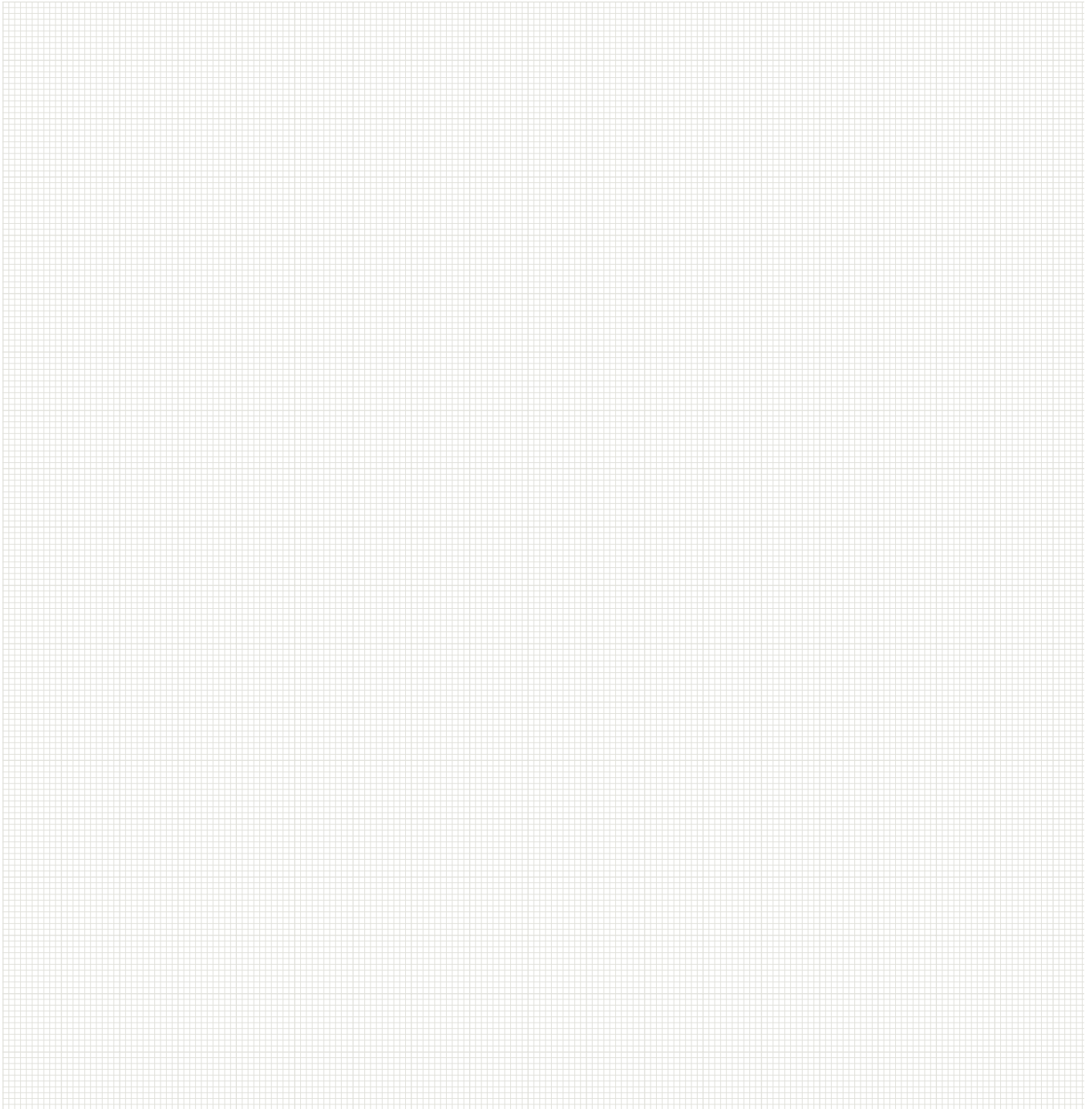
			
DELTA®-LFS	DELTA®-TILAXX	DELTA®-ADHESIVE LVC	DELTA®-HF PRIMER
Permanently elastic detail compound and sealant .	High quality permanently elastic adhesive and sealant that retains flexibility.	Low solvent surface conditioner.	Solvent free primer for self-adhering membranes used as surface conditioner.
Recommended Use <ul style="list-style-type: none"> ■ For sealing and adhering of DELTA® membranes. ■ Provides greater security in detail areas. ■ Suitable for areas with minimal movement of components. ■ Liquid flashing for windows and door opening. 	Recommended Use <ul style="list-style-type: none"> ■ For durable air-tight bonding to all common construction surfaces where moderate movement of components is expected. ■ Suitable for sealing of openings around windows (installed with backer rod). 	Recommended Use <ul style="list-style-type: none"> ■ Consolidates surface dust on dirty construction site substrates assuring reliable long-term air-tight adhesion. ■ Compliant with OTC rules for industrial adhesives and sealants and California South Coast Rule 1168. 	Recommended Use <ul style="list-style-type: none"> ■ Consolidates surface dust on dirty construction site substrates assuring reliable long-term air-tight adhesion. ■ Compliant with OTC rules for industrial adhesives and sealants and California South Coast Rule 1168.
Application Conditions Open time: 0°C to 50°C (120°F)	Application Conditions Open time: 30 minutes at min. +41 °F (+5 °C)	Surface temperature Application conditions: min. +25 °F (-4 °F) Recommended storage: min. 32 °F (0 °C)	Surface temperature Application conditions: min. 5 °C (40 °F) to 70 °C (104 °F) Recommended storage: min. 5 °C (40 °F)
Application Rate Approx. 23' (7 linear m) per cartridge	Application Rate Approx. 23' (7 linear m) per cartridge	Application Rate Up to 250 sqft/gal (6.13 sqm/l) depending on porosity and texture of surface	Application Rate Up to 23 m²/l (250 ft²/0.26 gal.) depending on porosity and texture of surface.
Temperature Range -76°F to 392°F (-60°C to 200°C)	Temperature Range -22 °F to +176 °F (-30 °C to +80 °C)	Temperature Range -40 °F to +176 °F (-40 °C to +80 °C)	Temperature Range 5°C (40°F) to 70°C (150°F)
Size 10.2 fl.oz (300 ml) cartridge 20 fl.oz (600ml) sausage	Size 10.5 fl.oz (310 ml)	Size 4.5 gal (17 l)	Size 5 l (1.3 gal)

Appendix



Recommended 2:1 Window Joint Profile

Notes



About Dörken

Dörken delivers innovative, premium quality products to the construction market.

A North American manufacturer based out of Beamsville, Ontario, Dörken Systems Inc. is a subsidiary of the Dörken Group, a leading European developer and manufacturer of waterproofing and drainage products sold worldwide. Other top-performing WRBs from Dörken include DELTA®-FASSADE S, DELTA®-STRATUS SA and DELTA®-VENT S.

For more information,
call 1-888-4DELTA4 (433-5824) or
visit www.dorken.com

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A Dörken Group company



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