Installation Guide
DELTA®-VENT SA

Flashing Systems for
FLANGE WINDOWS

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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.

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Method Selection Guide

Strip-in methods for flange windows

Flange Windows

Strip-in method

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2. Flat sill (page 14)
3. Sloped sill (page 22)
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Cut-out methods for flange windows

Cut-out method

1. DELTA®-FAS CORNER (page 38)

2. Flat sill (page 44)

3. Sloped sill (page 50)

4. Backdam (page 56)
Strip-in method

1. With DELTA®-FAS CORNER

- DELTA®-VENT SA
- DELTA®-BUG SCREEN
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- Backer rod and DELTA®-TILAXX sealant
- Window shims
Step 1
Framing
Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA.

Step 2
Sheathing
Install DELTA®-FAS CORNERS and staple on vertical leg to temporarily hold in place.
**Strip-in method**

1. **With DELTA®-FAS CORNER**

**Step 5**
Install DELTA®-VENT SA membrane below window, with cut-out minimum 8” (200 mm) above sill.

**Step 6**
Install DELTA®-FLASHING membrane at sill. Overlap 2” (50 mm) onto face of wall to provide sub-sill drainage.

**Step 7**
Install pre-cut strip of DELTA®-VENT SA at jamb. Lap 12” (300 mm) onto face of wall at jamb and minimum 3” (75 mm) at head.

**Step 8**
Install DELTA®-VENT SA membrane at head of rough opening to provide continuity of WRB and Air Barrier into rough opening.
Step 9
Install DELTA®-MULTI-BAND tape at corner to seal membrane.

Step 10
Install DELTA®-MULTI-BAND tape at overlaps to seal membrane laps and help ensure continuity of air barrier.

Step 11
Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Step 12
Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rought openings and under setting block locations for window.

Install window in accordance with manufacturer’s specifications.
Strip-in method

1. With DELTA®-FAS CORNER

**Step 13**
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2" onto face of wall.

**Step 14**
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

**Step 15**
Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA

**Step 16**
Install DELTA®-VENT SA membrane, minimum 6" (150 mm) vertical lap.
Install DELTA®-VENT SA membrane. Lap a minimum 4” (100 mm) onto lower membrane and onto flashing leg.

Install DELTA®-MULTI-BAND at overlap to seal membrane and flashing. Provide a 3/4” (20 mm) reveal on face of flashing.

Install DELTA®-MULTI-BAND tape at overlaps to seal membrane.*

Install metal flashing over window head. Use DELTA®-MULTI-BAND tape to seal top edge of flashing.

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

1. With DELTA®-FAS CORNER

**Step 21**
Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

**Step 22**
Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

**Step 23**
Install metal window sill flashing as part of water-shedding surface.

**Step 24**
Install cladding and window trim. Install sealant around perimeter of window frame between trim and frame.
2. With flat sill

- **Structural framing**
- **Sheathing**
- **DELTA®-ADHESIVE LVC**
- **DELTA®-MULTI-BAND**
- **Metal head flashing with drip edge**
- **Window trim**
- **Metal sill flashing with drip edge**
- **Cladding**
- **Window shims**
- **Backer rod and DELTA®-TILAXX sealant**

![Diagram of Strip-in method with flat sill](image)
Step 1

Install DELTA®-VENT SA membrane below window with cut-out minimum 8” (200 mm) above sill.

Step 2

Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA.

Step 3

Step 4

Install DELTA®-VENT SA membrane below window with cut-out minimum 8” (200 mm) above sill.
2. With flat sill

**Step 5**
Install DELTA®-FLASHING membrane at sill. Overlap 2" (50 mm) onto face of wall to provide sub-sill drainage.

**Step 6**
Install gusset constructed from DELTA®-FLASHING membrane at sill/jamb corner to cover pinhole.

**Step 7**
Install corner membrane constructed from DELTA®-FLASHING at sill/jamb corner. Lap 2" (50 mm) onto sill and face of wall.

**Step 8**
Install pre-cut strip of DELTA®-VENT SA at jamb. Lap 12" (300 mm) onto face of wall at jamb and minimum 3" (75 mm) at head.
Install 3/8" (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Install window shims in accordance with window manufacturer's specifications. Typically at quarter points of rough openings and under setting block locations for window.

Install DELTA®-FLEXX-BAND tape at overlaps to seal membrane and ensure continuity of air barrier.

Install DELTA®-VENT SA at head of rough opening to provide continuity of WRB.

Install DELTA®-MULTI-BAND tape to seal at corner.
Strip-in method

2. With flat sill

Step 13
Install window in accordance with manufacturer’s specifications.

Step 14
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2" onto face of wall.

Step 15
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

Step 16
Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA.
**Step 17**

Install DELTA®-VENT SA membrane, minimum 6” (150 mm) vertical lap.

**Step 18**

Install DELTA®-MULTI-BAND tape at overlaps to seal membrane.*

**Step 19**

Install metal flashing over window head. Use DELTA®-MULTI-BAND tape to seal top edge of flashing.

**Step 20**

Install DELTA®-VENT SA membrane. Lap a minimum 4” (100 mm) onto lower membrane and onto flashing leg.

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

2. With flat sill

Step 21
Install DELTA®-MULTI-BAND at overlap to seal membrane and flashing. Provide a 3/4" (20 mm) reveal on face of flashing.

Step 22
Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

Step 23
Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

Step 24
Install metal window sill flashing as part of water-shedding surface.
Install cladding and window trim. Install sealant around perimeter of window frame between trim and frame.
Strip-in method

3. With sloped sill

- DELTA®-VENT SA
- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Window shims
- Backer rod and DELTA®-TILAXX sealant
Step 1: Prime substrate with DELTA™-ADHESIVE LVC before applying DELTA™-VENT SA.

Step 2: Sheathing

Step 3: Install DELTA™-VENT SA membrane below window with cut-out minimum 8" (200 mm) above sill.

Step 4: Framing
**Strip-in method**

3. With sloped sill

**Step 5**
Install DELTA®-FLASHING membrane at sill. Overlap 2” (50 mm) onto face of wall to provide sub-sill drainage.

**Step 6**
Install gusset constructed from DELTA®-FLASHING membrane at sill/jamb corner to cover pinhole.

**Step 7**
Install corner membrane constructed from DELTA®-FLASHING at sill/jamb corner. Lap 2” (50 mm) onto sill and face of wall.

**Step 8**
Install pre-cut strip of DELTA®-VENT SA at jamb. Lap 12” (300 mm) onto face of wall at jamb and minimum 3” (75 mm) at head.
Step 9
Install 3/8" (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Step 10
Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rough openings and under setting block locations for window.

Step 11
Install DELTA®-MULTI-BAND tape at overlaps to seal membrane and ensure continuity of air barrier.

Step 12
Install DELTA®-VENT SA at head of rough opening to provide continuity of WRB.

Install DELTA®-FLEXX-BAND tape to seal at corner.
Strip-in method

3. With sloped sill

Step 13
Install window in accordance with manufacturer’s specifications.

Step 14
Install DELTA®FLASHING around perimeter of flange. Cover fasteners and lap 2” onto face of wall.

Step 15
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

Step 16
Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA.
Step 17
Install DELTA®-VENT SA membrane, minimum 6” (150 mm) vertical lap.

Step 18
Install DELTA®-MULTI-BAND tape at overlaps to seal membrane.*

Step 19
Install metal flashing over window head. Use DELTA®-MULTI-BAND tape to seal top edge of flashing.

Step 20
Install DELTA®-VENT SA membrane. Lap a minimum 4” (100 mm) onto lower membrane and onto flashing leg.

* Not required where there is a self-adhered edge.
Install cladding and window trim.
Install sealant around perimeter of window frame, between trim and frame.

3. With sloped sill

Step 21
Install DELTA®-MULTI-BAND at overlap to seal membrane and flashing. Provide a 3/4" (20 mm) reveal on face of flashing.

Step 22
Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.
Install vertical strapping for cladding attachment and to provide cavity for drainage and ventilation.

Step 23
Install metal window sill flashing as part of water-shedding surface.

Step 24
Install cladding and window trim.
Strip-in method

4. With backdam

- DELTA®-VENT SA
- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- DELTA®-BUG SCREEN
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Window shims
- Backdam (sill angle)
**Step 1**

Framing

**Step 2**

Sheathing

**Step 3**

Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA.

**Step 4**

Install backdam at expected depth of window.
Strip-in method

4. With backdam

Step 5
Install DELTA®-VENT SA membrane below window with cut-out minimum 8” (200 mm) above sill.

Step 6
Install corner flashing constructed from DELTA®-FLASHING membrane at sill/jamb. Lap over backdam and 2” (50 mm) onto face of wall. Use “baker’s pan fold” to create corner.

Step 7
Install gusset constructed from DELTA®-FLASHING membrane at sill/jamb corner to cover pinhole.

Step 8
Install sill membrane constructed from DELTA®-FLASHING. Lap over backdam, 2” (50 mm) onto corner flashing and 2” (50 mm) onto face of wall.
Step 9
Install jamb flashing constructed from DELTA®-FLASHING membrane at sill/jamb corner to cover gusset. Lap 2” (50 mm) onto sill and face of wall.

Step 10
Install pre-cut strip of DELTA®-VENT SA at jamb. Lap 12” (300 mm) onto face of wall at jamb and minimum 3” (75 mm) at head.

Step 11
Install DELTA®-FLEXX-BAND tape to seal at corner.

Step 12
Install DELTA®-VENT SA membrane at head of rough opening to provide continuity of WRB.
Strip-in method

4. With backdam

Step 13: Install DELTA®-MULTI-BAND at overlaps to seal membrane and ensure continuity of air barrier.

Step 14: Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill. Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rought openings and under setting block locations for window.

Step 15: Install DELTA®-TILAXX sealant at backdam to create airtight seal against window frame.

Step 16: Install window in accordance with manufacturer’s specifications.
Step 17
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2" onto face of wall.

Step 18
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

Step 19
Prime substrate with DELTA®-ADHESIVE LVC before applying DELTA®-VENT SA

Step 20
Install DELTA®-VENT SA membrane, minimum 6" (150 mm) vertical lap.
Strip-in method

4. With backdam

**Step 21**
Install DELTA®-MULTI-BAND tape at overlaps to seal membrane.*

**Step 22**
Install metal flashing over window head. Use DELTA®-MULTI-BAND tape to seal top edge of flashing.

**Step 23**
Install DELTA®-VENT SA membrane. Lap a minimum 4" (100 mm) onto lower membrane and onto flashing leg.

**Step 24**
Install DELTA®-MULTI-BAND at overlap to seal membrane and flashing. Provide a 3/4" (20 mm) reveal on face of flashing.

* Not required where there is a self-adhered edge.
Step 25

Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

Step 26

Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

Step 27

Install metal window sill flashing as part of water-shedding surface.

Step 28

Install cladding and window trim. Install sealant around perimeter of window frame, between trim and frame.
Cut-out method

5. With DELTA®-FAS CORNER

- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- DELTA®-VENT SA
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Window shims
- Backer rod and DELTA®-TILAXX sealant
Step 1

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

Step 2

Sheathing

Step 3

Prime substrate with DELTA®-ADHESIVE LVC 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

**Step 5**
Install DELTA®-MULTI-BAND gusset at jamb/sill corner to seal pinhole. Overlap onto face of wall.

**Step 6**
Fold in membrane around header, sill and jamb.

**Step 7**
Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

**Step 8**
Install DELTA®-FLASHING membrane at sill. Overlap 2" (50 mm) onto face of wall to provide sub-sill drainage.

Install DELTA®-MULTI-BAND gusset at jamb/sill corner to seal pinhole. Overlap onto face of wall.
Install DELTA®-MULTI-BAND vertically to seal edge of corner and maintain air barrier continuity.

Install DELTA®-MULTI-BAND diagonally to seal edge of membrane.

Install DELTA®-MULTI-BAND at jamb to seal edge of membrane. Overlap onto face of wall.

Install DELTA®-MULTI-BAND gusset at jamb/head corner. Seal face end of gusset with DELTA®-MULTI-BAND.
Cut-out method

5. With DELTA®-FAS CORNER

**Step 13**
Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

**Step 14**
Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rought openings and under setting block locations for window.

**Step 15**
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2” onto face of wall.

**Step 16**
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.
Step 17
Install metal flashing at window head. Seal with DELTA*-MULTI-BAND tape.

Step 18
Install DELTA*-BUG SCREEN at cladding openings. Fasten in place with nails.

Step 19
Install metal window sill flashing as part of water-shedding surface.

Step 20
Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

Install cladding and window trim. Install sealant around perimeter of window frame, between trim and frame.
6. With flat sill

- **DELTA®-VENT SA**
- **DELTA®-BUG SCREEN**
- **Metal head flashing with drip edge**
- **Window trim**
- **Metal sill flashing with drip edge**
- **Cladding**
- **Structural framing**
- **Sheathing**
- **DELTA®-ADHESIVE LVC**
- **DELTA®-MULTI-BAND**
- **Backer rod and DELTA®-TILAXX sealant**
- **Window shims**
Step 1

Framing

Step 2

Sheathing

Step 3

Prime substrate with DELTA®-ADHESIVE LVC 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

- **Step 5**: Fold in membrane around header, sill and jamb.
- **Step 6**: Install DELTA®-FLASHING sill membrane. Ensure a minimum 2” (50 mm) lap onto face of wall and up jamb.
- **Step 7**: Install dart-shaped gusset constructed from DELTA®-FLASHING at jamb/sill corner. Ensure 2” (50 mm) minimum lap onto face of wall.
- **Step 8**: Install corner membrane constructed from DELTA®-FLASHING at jamb/sill corner.
Step 9
Install DELTA®-MULTI-BAND to seal edge at header. Lap 2” (50 mm) onto face of wall.

Step 10
Install DELTA®-MULTI-BAND to seal membrane lap and ensure continuity of air barrier.

Step 11
Install DELTA®-MULTI-BAND gusset at jamb/head corner. Seal face end of gusset with DELTA®-MULTI-BAND.

Step 12
Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rought openings and under setting block locations for window.
Cut-out method

6. With flat sill

Step 13
Install window in accordance with manufacturer’s specifications.

Step 14
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2” onto face of wall.

Step 15
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

Step 16
Install metal flashing at window head. Seal with DELTA®-MULTI-BAND tape.
Step 17

Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

Step 18

Install metal window sill flashing as part of water-shedding surface.

Step 19

Install cladding and window trim. Install sealant around perimeter of window frame, between trim and frame.
Cut-out method

7. With sloped sill

- DELTA®-VENT SA
- DELTA®-BUG SCREEN
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- Window shims
- Backer rod and DELTA®-TILAXX sealant
- Sloped window sill
- Window shims
Step 1: Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

Step 2: Sheathing

Step 3: Prime substrate with DELTA®-ADHESIVE LVC 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**

**Step 5**
Fold in membrane around header, sill and jamb.

**Step 6**
Install DELTA®-FLASHING sill membrane. Ensure minimum 2" (50 mm) lap onto face of wall and up jamb.

**Step 7**
Install dart-shaped gusset constructed from DELTA®-FLASHING at jamb/sill corner. Ensure 2" (50 mm) minimum lap onto face of wall.

**Step 8**
Install corner membrane constructed from DELTA®-FLASHING at jamb/sill corner.
**Step 9**
Install DELTA®-MULTI-BAND to seal membrane lap and ensure continuity of air barrier.

**Step 10**
Install DELTA®-MULTI-BAND to seal edge at header. Lap 2” (50 mm) onto face of wall.

**Step 11**
Install DELTA®-MULTI-BAND gusset at jamb/head corner. Seal face end of gusset with DELTA®-MULTI-BAND.

**Step 12**
Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rough openings and under setting block locations for window.
7. With sloped sill

**Step 13**
Install window in accordance with manufacturer’s specifications.

**Step 14**
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2" onto face of wall.

**Step 15**
Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

**Step 16**
Install metal flashing at window head. Seal with DELTA®-MULTI-BAND tape.
Step 17
Install vertical strapping for cladding attachment and to provide cavity for drainage and venting.

Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

Step 18
Install metal window sill flashing as part of water-shedding surface.

Step 19
Install cladding and window trim.
Install sealant around perimeter of window frame, between trim and frame.
8. With backdam

- DELTA®-VENT SA
- DELTA®-BUG SCREEN
- Metal head flashing with drip edge
- Window trim
- Metal sill flashing with drip edge
- Cladding
- Structural framing
- Sheathing
- DELTA®-ADHESIVE LVC
- DELTA®-MULTI-BAND
- Window shims
- Backdam (sill angle)
Install DELTA®-VENT SA membrane over entire wall surface. X-cut the membrane.

Step 1: Framing

Step 2: Sheathing

Step 3: Prime substrate with DELTA®-ADHESIVE LVC 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

Step 5
Fold in membrane around header, sill and jamb.

Step 6
Install backdam at expected depth of window.

Step 7
Install corner flashing constructed from DELTA®-FLASHING membrane at sill/jamb. Lap over backdam and 2" (50 mm) onto face of wall. Use “baker’s pan fold” to create corner.

Step 8
Install dart-shaped gusset constructed from DELTA®-FLASHING at jamb/sill corner. Ensure 2" (50 mm) minimum lap onto face of wall.
Step 9
Install sill membrane from DELTA®-FLASHING. Lap over backdam, 2” (50 mm) onto corner flashing and 2” (50 mm) onto face of wall.

Step 10
Install jamb flashing constructed from DELTA®-FLASHING membrane at sill/jamb corner to cover gusset. Lap 2” (50 mm) onto sill and face of wall. Seal reverse lap with DELTA®-MULTI-BAND.

Step 11
Install DELTA®-MULTI-BAND to seal edge at header. Lap 2” (50 mm) onto face of wall.

Step 12
Install DELTA®-MULTI-BAND gusset at jamb/head corner. Seal face end of gusset with DELTA®-MULTI-BAND.
8. With backdam

**Step 13**
Install 3/8” (10 mm) strapping for window installation to equally shim out window and allow drainage at sill.

Install window shims in accordance with window manufacturer’s specifications. Typically at quarter points of rought openings and under setting block locations for window.

**Step 14**
Install DELTA®-TILAXX sealant at backdam to create airtight seal against window frame.

**Step 15**
Install window in accordance with manufacturer’s specifications.

**Step 16**
Install DELTA®-FLASHING around perimeter of flange. Cover fasteners and lap 2” onto face of wall.
**Step 17**

Install backer rod around perimeter of window to facilitate proper sealant joint profile. Apply and tool DELTA®-TILAXX sealant around full perimeter of window in proper 2:1 joint profile.

**Step 18**

Install metal flashing at window head. Seal with DELTA®-MULTI-BAND tape.

**Step 19**

Install vertical strapping for cladding attachment and to provide cavity for drainage and venting. Install DELTA®-BUG SCREEN at cladding openings. Fasten in place with nails.

**Step 20**

Install cladding and window trim. Install sealant around perimeter of window frame, between trim and frame. Install metal window sill flashing as part of water-shedding surface.
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®-Accessories are exhaustively tested for compatibility. Together they assure superior performance in air-tight building enclosures.

DELTA®-FLASHING 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®-MULTI-BAND 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®-FLEXX-BAND 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®-THAN is a permanently elastic adhesive and sealant made with a special rubber compound. It is ideal for sealing around penetrations, terminations, etc.

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

DELTA®-LIQUIXX is a revolutionary fluid-applied flashing membrane with low vapor permeability. It is ideal for completing the air barrier continuity around difficult configurations and complex details. It may also be used to seal window openings.

DELTA®-ADHESIVE LVC is a low solvent 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

<table>
<thead>
<tr>
<th>DELTA-FLASHING</th>
<th>DELTA-MULTI-BAND</th>
<th>DELTA-FLEXX-BAND</th>
<th>DELTA-FAS CORNER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium self-adhesive flashing membrane with aggressive tack.</td>
<td>Universal adhesive tape that sticks tenaciously and is highly resistant to aging.</td>
<td>Stretchable butyl-rubber compound tape with special carrier membrane.</td>
<td>Flexible pre-fabricated window corner. Permanently UV resistant.</td>
</tr>
<tr>
<td><strong>Recommended Use</strong></td>
<td><strong>Recommended Use</strong></td>
<td><strong>Recommended Use</strong></td>
<td><strong>Recommended Use</strong></td>
</tr>
<tr>
<td>■ For flashing of window and door openings.</td>
<td>■ For all DELTA® membranes to seal laps and penetrations.</td>
<td>■ Stretchable flashing for details and penetrations.</td>
<td>■ Provides reliable air- and water-tight window details.</td>
</tr>
<tr>
<td><strong>Surface temperature</strong></td>
<td><strong>Surface temperature</strong></td>
<td><strong>Surface temperature</strong></td>
<td><strong>Temperature Range</strong></td>
</tr>
<tr>
<td>min. +41 °F (+5 °C)</td>
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<td>min. +41 °F (+5 °C)</td>
<td>-40 °F to +176 °F (-40 °C to +80 °C)</td>
</tr>
<tr>
<td>Recommended storage: room temperature</td>
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<td>Recommended storage: room temperature</td>
<td>(Recommended storage: room temperature)</td>
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<tr>
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</tr>
<tr>
<td><strong>Size</strong></td>
<td><strong>Size</strong></td>
<td><strong>Size</strong></td>
<td><strong>Measurements</strong></td>
</tr>
<tr>
<td>Width: 6” (15.25 cm), 9” (23 cm) Length: 75’ (22.85 m)</td>
<td>Width: 2 3/8” (6 cm), 4” (10 cm) Length: 82’ (25 m)</td>
<td>Width: 4” (10 cm) Length: 33’ (10 m)</td>
<td>7” x 7” x 4” (18 cm x 18 cm x 10 cm)</td>
</tr>
<tr>
<td>DELTA®-THAN</td>
<td>DELTA®-TILAXX</td>
<td>DELTA®-LIQUIXX</td>
<td>DELTA®-ADHESIVE LVC</td>
</tr>
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</tr>
</tbody>
</table>

**Recommended Use**
- For sealing and adhering of DELTA® membranes.
- Provides greater security in detail areas.
- Suitable for areas with minimal movement of components.
- 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).
- For air-tight connection of complex details and air barrier continuity.
- Suitable for all common construction surfaces.
- Consolidates surface dust on dirty construction site substrates ensuring 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: 30 minutes at min. +41°F (+5°C)
- Open time: 3 - 4 hours at +70°F (+21°C) and 45% RH
- Surface temperature
  - Application conditions: min. +25°F (-4°F)
  - Recommended storage: min. 32°F (0°C)

**Application Rate**
- Approx. 23' (7 linear m) per cartridge
- Approx. 23' (7 linear m) per cartridge
- Approx. 2.8 fl.oz/sqft (0.9 l/sqm)
- Up to 250 sqft/gal (6.13 sqm/l) depending on porosity and texture of surface

**Temperature Range**
- -22°F to +176°F (-30°C to +80°C)
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- -40°F to +176°F (-40°C to +80°C)

**Size**
- 10.5 fl.oz (310 ml)
- 10.5 fl.oz (310 ml)
- 0.66 gal/pail (2.5 l/pail)
- 4.5 gal (17 l)

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*Permanently elastic special rubber compound sealant and adhesive.*

*High quality permanently elastic adhesive and sealant that retains flexibility.*

*Viscous, pure acrylic dispersion with enclosed fabric reinforcement.*

*Low solvent surface conditioner.*

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*Recommended Use*  
- For sealing and adhering of DELTA® membranes.  
- Provides greater security in detail areas.  
- Suitable for areas with minimal movement of components.

*Recommended Use*  
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Appendix

Recommended 2:1 Window Joint Profile

2:1 Joint Profile
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*-MAXX, DELTA*-FOXX and DELTA*-VENT S.

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