



TECHNICAL DATA SHEET



Henkel Corporation
Professional and Consumer Adhesives
Avon, OH 44011
Phone 1-800-624-7767
Fax (440) 937-7067
www.henkel.com www.winteqsystem.com

DESCRIPTION

OSI® TeQ::Flash™ flexible flashing is a rubberized asphalt backed, self-adhering 20-mil membrane. This membrane is a laminate consisting of a 2 mil high density polypropylene film and a removable release sheet that has been developed specifically for the WINTeQ™ Window Installation System. It is efficient, easy to use and provides excellent moisture and air infiltration protection around windows. It can also be used to seal doors and similar gaps and openings. TeQ::Flash™ can be easily applied in horizontal and vertical applications and will adhere to most common building substrates including vinyl, wood and concrete.



RECOMMENDED USES:

TeQ::Flash™ is part of the WINTeQ™ Window Installation System and is used to provide an air and vapor barrier around window and door flanges and joints and cracks in exterior wall assemblies. It is also useful for other above grade wall flashing applications.

LIMITATIONS:

- Do not use in areas where flashing will be subject to continuous exposure to sunlight or to temperatures in excess of 180°F (82°C)
- Concrete, masonry and some exterior gypsum substrates may require priming for best results
- Do not apply primer or flashing to damp, frosty or contaminated surfaces

Item #	Packaging	Size
1022836	Cardboard Roll	4" x 100'
1022835	Cardboard Roll	6" x 100'
1020002	Cardboard Roll	9" x 100'
1022834	Cardboard Roll	12" x 100'

FEATURES & BENEFITS:

Feature	Benefits
Provides a strong, long lasting seal around fasteners and penetrations.....	Prevents wall assembly leaks
High durability.....	Resists mechanical damage and is tough tear resistant
Self-adhering.....	Easy to install, inspect and repair
Part of a complete Window Installation System.....	WINTeQ™ is the first complete & fully compatible window installation system

DIRECTIONS

Tools Typically Required:

Utility knife.

Safety Precautions:

Wear gloves and wash hands after use.

Application Procedures:

METHOD A: SILL PAN METHOD

Step 1: Cut Weather Resistant Barrier

Cut and remove weather resistant barrier (WRB) from rough opening using the new modified "O" method. The modified "O" cut employs the technique of cutting the WRB back 2" beyond the jambs to allow for direct and permanent seal of the window flange to the exterior sheathing. Cut top portion of WRB to create flap, then fold up and temporarily tape above head (Figure 1).

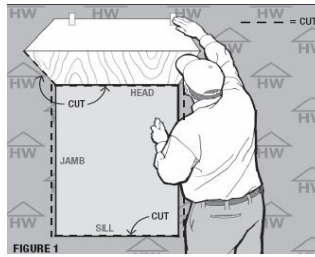


Figure 1

Step 2: Install Sill Plan Flashing

2.1.1 Remove backing from pre-cut WINTeQ™ corner guard and position a guard at each jamb and sill intersection so that ½ of the guard is covering the flat sill and jamb and the remaining half is pulled out over the exterior sheathing (Figure 2).

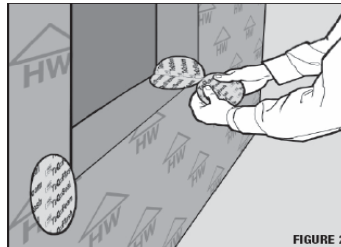


Figure 2

Cutting and Applying Flashing

The following flashing cut formulas should be used to determine the length of each strip of flashing for each window.

Tip: It is best to pre-cut flashing to save time during installation process. Using the rough opening dimensions and the formula listed will ensure appropriate length. Be sure to label the cut pieces for easy identification during installation.

FLASHING LENGTHS AND CUT FORMULAS	
Sill Flashing	= RO ^W + 2"
Jamb Flashing	= RO ^H + (2 x flashing width) - 1"
Head Flashing	= RO ^W + (2 x flashing width) + 2"
Legend	
RO	= rough opening
RO ^H	= rough opening vertical (height)
RO ^W	= rough opening horizontal (width)

2.2.1 Pre-cut a length of 6" TeQ::Flash™ 12" longer than the sill rough opening. Apply pre-cut flashing by removing the release backing and carefully starting 6" up and 3" in rough opening (or minimum depth of window frame) on one jamb side. Continue to apply the flashing across sill and up opposite side jamb. Once the flashing is attached to the sill and jambs, make a cut in each corner to allow the remaining unattached flashing to fold out and over the exterior sheathing (Figure 3).

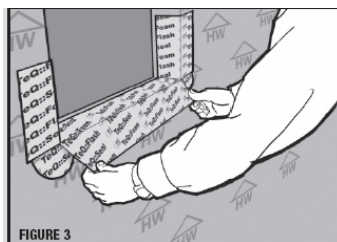


Figure 3

2.2.3 Roll smooth to ensure air bubbles are removed and flashing is adhered to the sill and exterior sheathing.

Step 3: Install Window

3.1.1 Shim sill and jambs to allow for a minimum ¼" gap (½" gap optimal) between rough opening and window. Some window manufacturers require the placement of shims and WINTeQ™ recommends placement of shim on the sill to allow for a minimum ¼" gap. When called for by the window manufacturer, shims must be left in place. When used as a spacer they can be removed after the window has been mechanically anchored.

For left in place shims, apply a bead of TeQ::Seal™ across where shim will mount. Embed shim in sealant and then apply a second bead of sealant over shim. This will ensure a complete seal around the shim.

- 3.2.1 Apply a continuous bead of TeQ::Seal™ Window Flange Sealant to the interior side of the nailing fin, on jambs and head flanges and an intermittent bead on the sill flange (Figure 4).

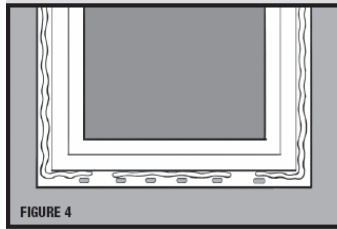


Figure 4

- 3.3.1 Install window into opening within 10 minutes by placing window sill on rough opening sill shims and tilt in header (Figure 5). Press firmly into place.



Figure 5

- 3.4.1 Place a mechanical fastener on one side of the nailing flange in the upper part of the flange. Do not drive the fastener all the way in this time.
- 3.5.1 Check for level, plumb and true, shim as necessary to achieve.
- 3.6.1 Ensure window is square and operates smoothly.
- 3.7.1 Continue to mechanically fasten the window in place beginning at the opposite side of the first fastener. Make sure window remains plumb, true and square.
- 3.8.1 Do not over drive fastener heads.

Step 4: Install Jamb Flashing

TeQ::Flash™ should be installed to both sides of the jamb following the listed steps.

- 4.1.1 Jamb flashing should extend above the head and below sill of the rough opening equal to the width of the flashing less ½”.
- 4.2.1 Install jamb flashing so that the flashing covers the nailing flange and is tight to window frame edge (Figure 6).

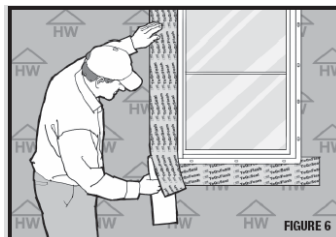


Figure 6

- 4.3.1 Roll smooth to ensure air bubbles are removed and intimate contact is made between substrates (Figure 7).

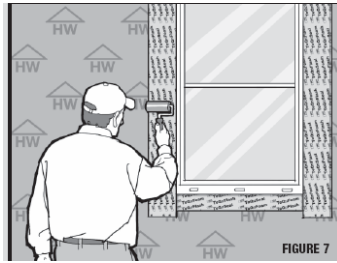


Figure 7

Step 5: Install Head Flashing

Install TeQ::Flash™ to the head condition of the window flange as described in the listed steps.

5.1.1 Head flashing should extend beyond jamb flashing by 1" on both sides (Figure 9). Apply head flashing under WRB flap created in Step 1.

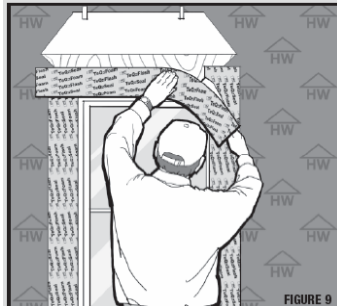


Figure 9

5.2.1 Install head flashing so that the TeQ::Flash™ covers the nailing flange and is tight to the window frame edge.

5.3.1 Remove tape that holds flap created in Step 1 and pull flap down over head flashing (Figure 10).

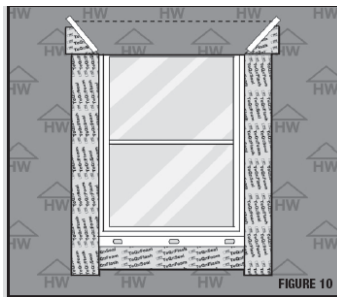


Figure 10

5.4.1 Apply tape over diagonal cut made in the WRB made using the modified "O" method.

Step 6: Install Interior Insulation

Interior insulation is an integral part of the WiNTEQ™ System Window Installation. Once window has been fully installed following Steps 1 through 5, TeQ::Foam™ can be applied to the interior side of the window between the rough opening and the window frame. TeQ::Foam™ has been specifically designed for window and door applications and should be installed using the listed steps (6.1.1 – 6.8.1).

6.1.1 Safety first, always wear gloves, eye protection and proper work clothes when using TeQ::Foam™.

6.2.1 Attach applicator gun to TeQ::Foam™ can.

6.3.1 Starting at the header cavity on one side of the window, insert gun nozzle into gap (Figure 11).

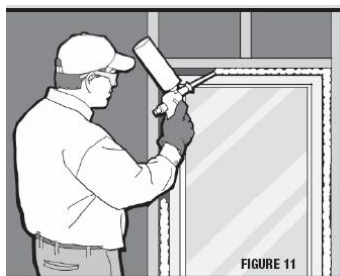


Figure 11

6.4.1 Pull trigger on applicator gun and begin to apply foam while simultaneously moving applicator along gap.

6.5.1 Apply foam to a depth of approximately ½ of the depth of the cavity between the window frame and the rough opening (Figure 12).

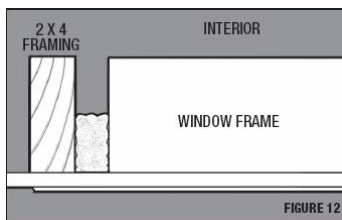


Figure 12

6.6.1 Continue application of foam down each jamb gap and into the sill gap.

6.7.1 Trim off excess foam with sharp knife once cured (approximately 10 minutes).

6.8.1 Clean up spills and foam from unwanted areas immediately with acetone. Cured foam is difficult to remove and must be sanded or cut away.

METHOD B: BARRIER METHOD

(Window Installation based on AAMA 2400 Method "A1")

Step 1: Cut Weather Resistant Barrier

Cut and remove weather resistant barrier (WRB) from rough opening using WINTeQ™ modified "O" method. Cut top portion of WRB to create flap, then fold up and temporarily tape above head condition (Figure 1).

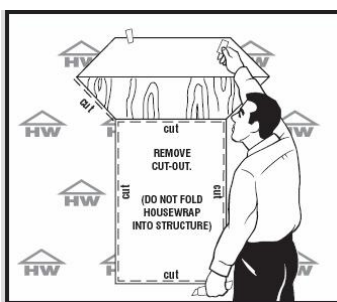


Figure 1

Step 2: Install Sill Flashing

2.1.1 Apply TeQ::Flash™ to sill condition by removing the release backing and placing the top edge level to the rough opening (Figure 2). Sill flashing should extend past rough opening on each side equal to the approximate width of TeQ::Flash™ (i.e. 9" flashing should extend beyond jambs on each side by 9").



Figure 2

Cutting and Applying Flashing

The following flashing cut formulas (Figure 3) should be used to determine the length of each strip of flashing for each window. The ASTM standard requires a minimum width of 9" for flexible flashing. Wider flashing materials (i.e. 12") may be used.

Tip: It is best to pre-cut flashing to save time during installation process. Using the rough opening dimensions and the formula listed will ensure appropriate length. Be sure to label the cut pieces for easy identification during installation.

FLASHING LENGTHS AND CUT FORMULAS	
Sill Flashing	= $RO^W + 2"$
Jamb Flashing	= $RO^H + (2 \times \text{flashing width}) - 1"$
Head Flashing	= $RO^W + (2 \times \text{flashing width}) + 2"$
Legend	
RO	= rough opening
RO ^H	= rough opening vertical (height)
RO ^W	= rough opening horizontal (width)

Figure 3

2.2.1 Roll smooth to ensure air bubbles are removed and intimate contact is made between substrates (Figure 4).

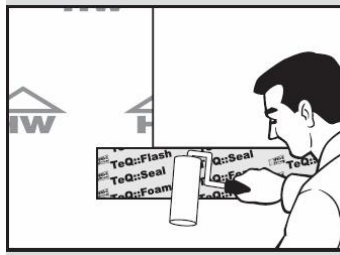


Figure 4

Step 3: Install Window

3.1.1 Shim sill and jambs to allow for a minimum 1/4" gap (1/2" gap optimal) between rough opening and window. Some window manufacturers require the placement of shims and WINTeQ™ recommends placement of shim on the sill to allow for a minimum 1/4" gap. When called for by the window manufacturer, shims must be left in place. When used as a spacer they can be removed after the window has been mechanically anchored.

For left in place shims, apply a bead of TeQ::Seal™ across area where shim will mount. Embed shim in sealant and then apply a second bead of sealant over shim. This will ensure a complete seal around the shim.

3.2.1 Apply a continuous bead of TeQ::Seal™ Window Flange Sealant to the interior side of the mounting flange. Apply TeQ::Seal™ so that it covers over nailing slots on flange when provided (Figure 5).



Figure 5

3.3.1 Install window into opening within 10 minutes by placing window sill on rough opening sill shims and tilt in header (Figure 6). Press firmly into place.

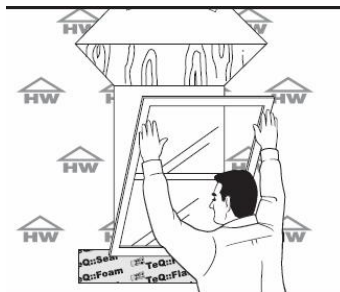


Figure 6

3.4.1 Place a mechanical fastener on one side of the nailing flange in the upper part of the flange. Do not drive the fastener all the way in at this time.

3.5.1 Check for level, plumb and true, shim as necessary to achieve.

3.6.1 Ensure window is square and operates smoothly.

- 3.7.1 Continue to mechanically fasten the window in place beginning at the opposite side of the first fastener. Make sure the window remains plumb, true and square.
- 3.8.1 Do not over drive fastener heads.

Step 4: Install Jamb Flashing

TeQ::Flash™ should be installed to both sides of the jamb following the listed steps.

- 4.1.1 Jamb flashing should extend above the head and below the sill of the rough opening equal to the width of the flashing less ½" (i.e. 9" flashing should extend beyond rough opening of head and sill by 8½"). Refer to Figure 3 for cut formulas.
- 4.2.1 Install jamb flashing so that the flashing covers the nailing flange and is tight to window frame edge (Figure 7).

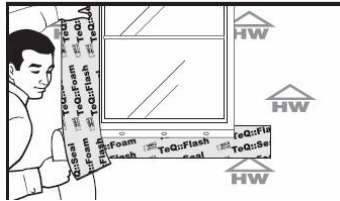


Figure 7

- 4.3.1 Roll smooth to ensure air bubbles are removed and intimate contact is made between substrates (Figure 8).

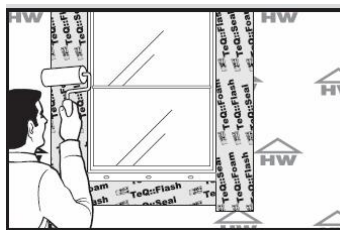


Figure 8

Step 5: Install head flashing

Install TeQ::Flash™ to the head condition of the window flange as described in the listed steps.

- 5.1.1 Head flashing should extend beyond jamb flashing by 1" on both sides (Figure 9). Apply head flashing under WRB flap created in Step 1.



Figure 9

- 5.2.1 Install head flashing so that TeQ::Flash™ covers the nailing flange and is tight to the window frame edge.
- 5.3.1 Remove tape that holds flap created in Step 1 and pull flap down over head flashing (Figure 10).

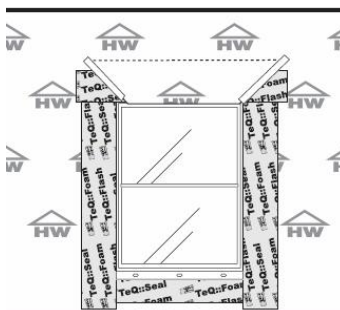


Figure 10

- 5.4.1 Apply tape over diagonal cut made in the WRB made using the modified "O" method.

Step 6: Install Interior Insulation

Interior insulation is an integral part of the WINTeQ™ Window Installation System. Once window has been fully installed following Steps 1 through 5, TeQ::Foam™ can be applied to the interior side of the window between the rough opening and the window frame. TeQ::Foam™ has been specifically designed for window and door applications and should be installed using the listed steps (6.1.1 to 6.8.1).

- 6.1.2 Safety first, always wear gloves, eye protection and proper work clothes when using TeQ::Foam™.
- 6.2.2 Attach applicator gun to TeQ::Foam™ can.
- 6.3.2 Starting at the header cavity on one side of the window, insert gun nozzle into gap (Figure 11).

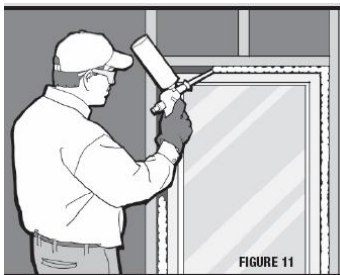


Figure 11

- 6.4.2 Pull trigger on applicator gun and begin to apply foam while simultaneously moving applicator along gap.
- 6.5.2 Apply foam to a depth of approximately ½ of the depth of the cavity between the window frame and the rough opening (Figure 12).

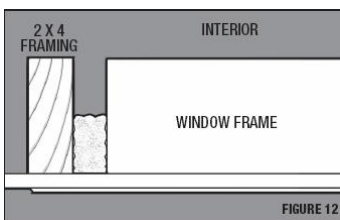


Figure 12

- 6.6.2 Continue application of foam down each jamb gap and into the sill gap.
- 6.7.2 Trim off excess foam with sharp knife once cured (approximately 10 minutes).
- 6.8.2 Clean up spills and foam from unwanted areas immediately with acetone. Cured foam is difficult to remove and must be sanded or cut away.

STORAGE AND DISPOSAL

Protect from excessive heat or cold. Store away from open flames and sparks. Do not store in direct sunlight or other harmful environmental conditions. Protect cartons from rain.

LABEL PRECAUTIONS

CAUTION! MAY CAUSE SKIN & EYE IRRITATION. Contains asphalt (8052-42-4), aromatic oil (6474209508), Calcium Carbonate (1317-65-3) and SBR Copolymer (9003-55-8). Avoid contact with skin and clothing. Avoid rubbing eyes while using product. Wear oil impermeable gloves. Wash hands after using. **FIRST AID:** For eye contact, flush with water for 15 minutes. Call a physician if irritation develops and persists. **WARNING:** Contains chemicals known to the State of California to cause cancer. For professional use only. **DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN.**

Refer to the Material Safety Data Sheet (MSDS) for further information

DISCLAIMER

The information and recommendations contained herein are based on our research and are believed to be accurate, but no warranty, express or implied, is made or should be inferred. Purchasers should test the products to determine acceptable quality and suitability for their own intended use. Nothing contained herein shall be construed to imply the nonexistence of any relevant patents or to constitute a permission, inducement or recommendation to practice any invention covered by any patent, without authority from the owner of the patent.

TECHNICAL DATA

Typical Physical Properties		Typical Performance Properties	
<u>Type:</u>	Rubberized Asphalt	<u>Tensile Strength:</u> (ASTM D 412)	709 psi
<u>Thickness:</u>	20 mil.	<u>Elongation:</u> (ASTM D 412)	500%
<u>Shelf Life:</u>	24 months from date of manufacture (Unopened)	<u>Lap Adhesion:</u> (ASTM D 1876 mod.)	4.5 lb / in width
		<u>Puncture Resistant:</u> (ASTM E 154)	27 lbs (min.)
		<u>Peel Strength:</u> (ASTM D 903)	4.5 lb / in width
		<u>Application Temperature:</u>	35°F (2°C) to 125°F (52°C) Note: Best results if applied at temperatures greater than 40°F (4°C)
		<u>Specifications:</u>	**Conforms to ASTM E2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights, Sec. 5.13 and Appendix X1.2 – Flexible Flashing

**The WINTeQ™ System uses similar practices and principle as ASTM E2112 Standard Practice for Installation of Exterior Windows, Doors and Skylights. ASTM E2112 is intended to provide technical guidance to organizations that are developing training programs for installers of fenestration units. The majority of fenestration units and materials used to install them are certified as meeting specified performance characteristics. The WINTeQ™ System products have been tested in accordance with the relevant specifications required for performance under both ASTM and AAMA guidelines. The specifications for each product are listed on each components individual technical data sheet.