

Norandex™

Weather Resistant Barrier Installation Guide

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NORANDEX™
1 ABC Parkway | Beloit, WI 53511

1-800-528-0942
www.norandex.com



1 | INSTALLATION CONSIDERATIONS

-Norandex WRBs should be installed over sheathing, or directly to framing, before the windows and door have been installed. Special considerations must be reviewed and approved by Norandex prior to start.

-STUCCO applied over wood-based sheathing shall comply with IBC section 2510.6 and IRC section R703.7.3 which states “in dry (b) climate zones, one weather-resistant barrier complying with ASTM E2556 Type II shall be separated from the stucco by a layer of foam plastic insulating sheathing, or other nonwatery absorbing layer, or a drainage space. In moist (A) or marine (C) climate zones, weather-resistant barriers shall comply with one of the following. In addition to the weather-resistant barrier, a space or drainage material not less than 3/16” (4.8 mm) in depth shall be applied to the exterior side of the weather-resistant barrier, OR drainage on the exterior side of the weather-resistant barrier shall have a minimum drainage efficiency of 90 percent in accordance with ASTM E2273.

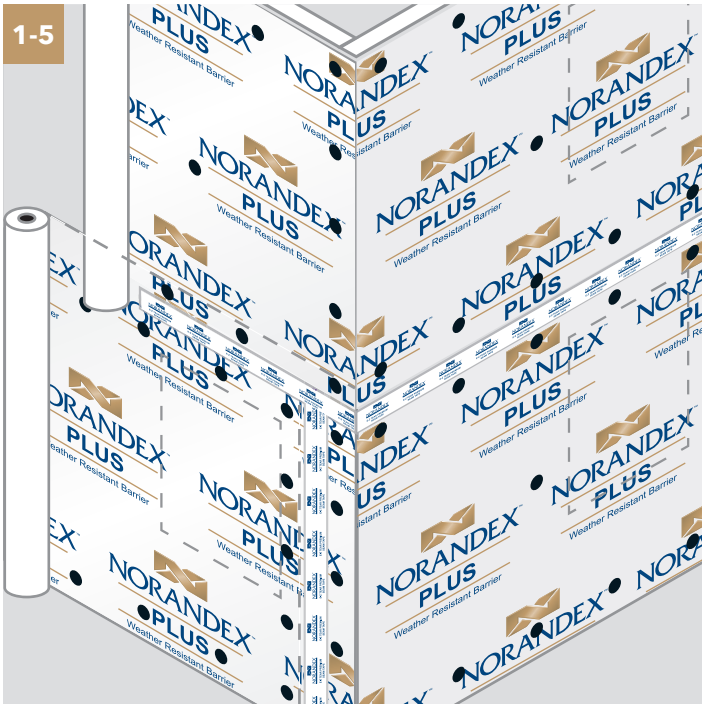
-EIFS shall comply with IRC R703.9.2, which installed over wall assemblies (with exception of substrates of concrete or masonry) EIFS shall have an average drainage efficiency of 90 percent. The weather-resistant barrier shall comply with ASTM E2556 Type I or II, and shall be applied between the EIFS and the wall sheathing.

-BRICK should be installed per manufacturer’s installation instructions and per IRC 703.8. Section 703.8.4 of IRC states that a nominal 1” airspace is required between the veneer and WRB for wood stud construction. The Brick Industry recommends 1” airspace for wood stud construction and 2” airspace in front of steel stud construction. Norandex WRBs should be installed consistent with these codes and recommendations.

-STONE VENEER is referenced in IBC Section 1404.7, and states that two layers of weather-resistant barrier shall be used. Two layers of Norandex WRBs can be used, or one layer of Norandex WRB and one layer of grade D building paper, with the Norandex WRB being the front or back layer.

-EXTERIOR INSULATION and Norandex WRBs should be installed according to the manufacturer’s instructions. Exterior insulation can be installed behind or over the Norandex WRB, based on the design of the structure. All wall flashing should be integrated with the Norandex WRB layer for a high-performance wall assembly. All fasteners used to install Norandex WRBs to insulation board should be long enough to penetrate the insulation completely.

2 | WRB INSTALLATION INSTRUCTIONS



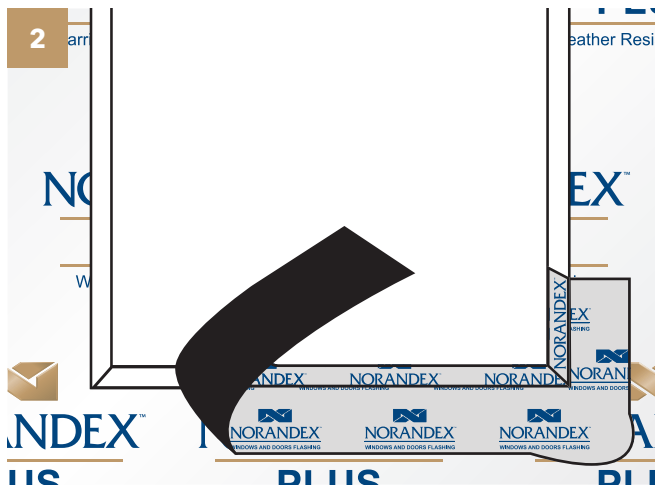
1. Install the WRB, printed side facing out, directly to the sheathing, insulation board, or directly to framing members.
2. Align the roll at bottom corner of structure, making sure to lap over the sill plate at a minimum 1" (2" or greater is recommended). Make sure the WRB is properly integrated into water drainage components. Make sure to start at a corner and fasten the material to a framing member or wood sheathing.
3. Wrap the entire structure, including windows and doors, starting at the bottom and moving up in a shingle lap technique. Product should be pulled tightly, eliminating all wrinkles or creases. Use cap staples, cap nails, or large head nails. Fasteners should be at a maximum 16" along the top and bottom sill, and 32" on center in the field.
4. All vertical laps should be a minimum of 6" and horizontal laps a minimum of 2".
5. All laps should be sealed using Norandex Seam Tape, except for the sill lap at the base of the structure, for a continuous barrier.

6. Cuts into the wrap for windows should either be an "I" cut where the jambs are folded and fastened to an interior framing member, and doing a 45 degree diagonal cut of the header WRB and folding up. An alternative is to completely cut away all WRB, including 1" on the jambs and sill, while still cutting the header at 45 degrees and folding up. AAMA procedure A or B is acceptable for Norandex WRBs, depending on the window manufacturers preferred method.

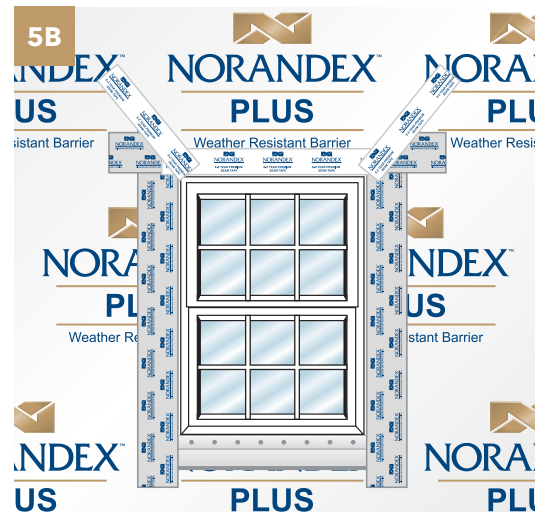
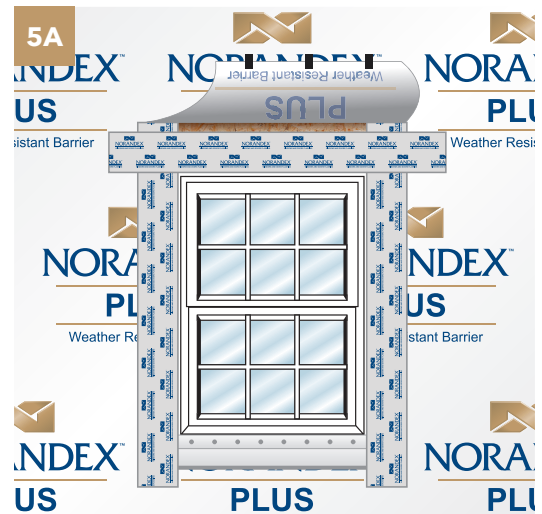
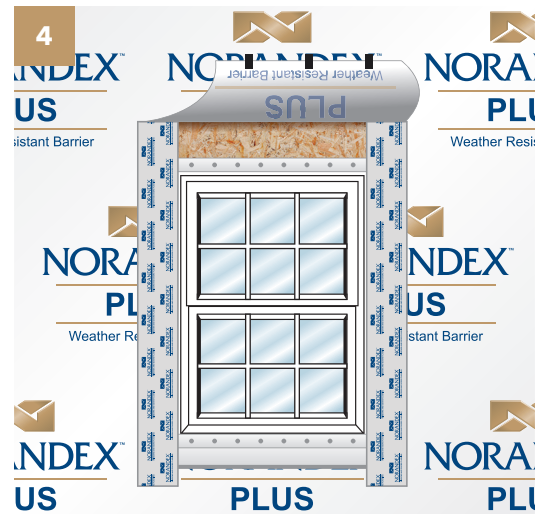


3 | WINDOW FLASHING INSTALLATION INSTRUCTIONS

1. Make sure all window openings and surfaces are free from excessive moisture and debris. All flashing products require pressure (roller) for optimum adhesion. For any non-wood sheathing an adhesion test is suggested as surfaces differ. All products should have superior adhesion to most surfaces, but if required use an adhesion promoter in order to guarantee maximum results.
2. The sill flashing should be cut at least 12" longer than the rough opening. Place the product into the sill and remove the release liner on the framing side, covering at least 6" up each jamb, making sure the sill flashing does NOT go into the interior of the wall or is stretched up the jamb. Stretch the flashing on the outside of the windows, making sure there is at least 2" of coverage onto the WRB. If using straight flashing in the sill please refer to the Norandex Straight flash window sill technical installation instructions.



3. For AAMA Method A, place the window into the opening and seal properly.
4. Cut the jamb flashing at least 3" past the sill flashing and 3" past the header rough opening. Place the flashing over the sill flashing and use pressure.
5. Cut the header flashing past the jamb flashing and apply using pressure. Let the WRB lay over the header flashing and using tape to secure the joints.

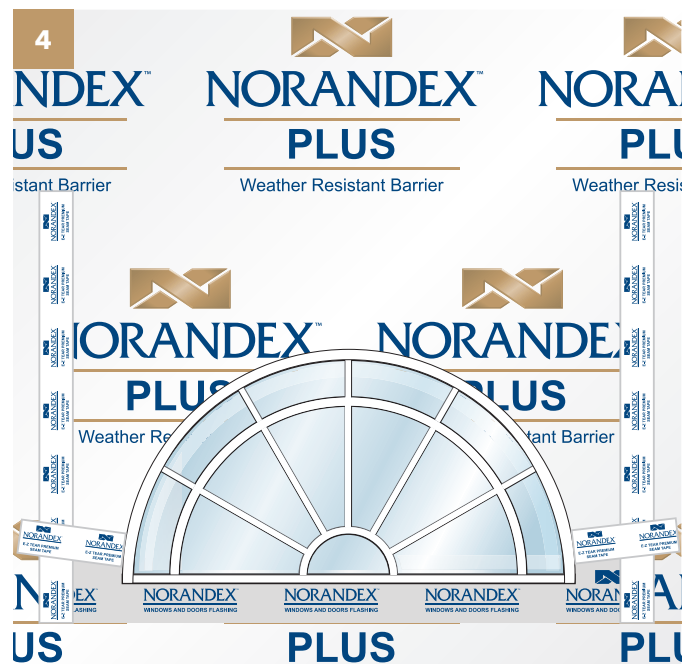
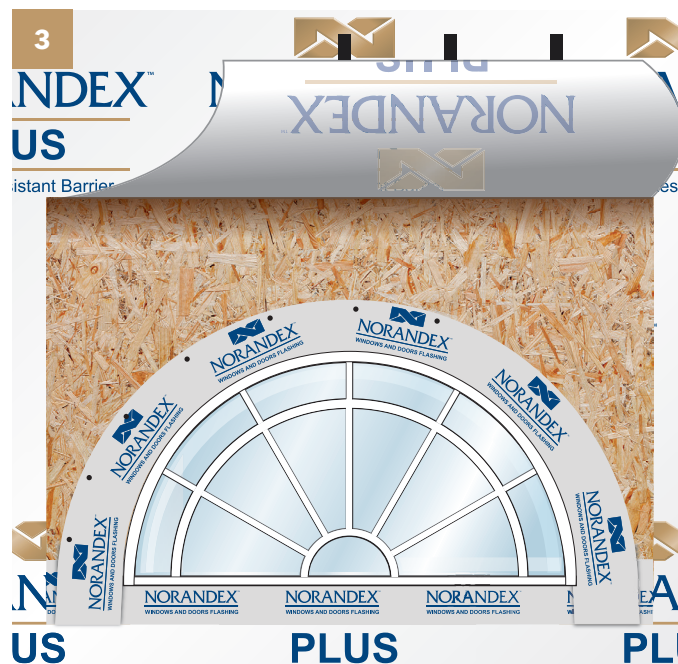
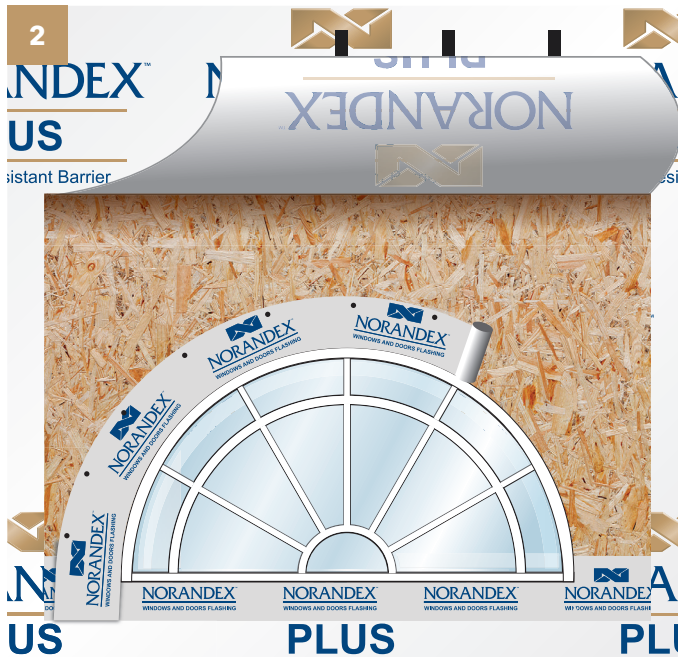


For any other window condition please contact Norandex, or refer to the installation instructions for the condition.

4 | ARCHED WINDOW FLASHING

1. Make sure all window openings and surfaces are free from excessive moisture and debris. All flashing products require pressure (roller) for optimum adhesion. For any non-wood sheathing an adhesion test is suggested as surfaces differ. All products should have superior adhesion to most surfaces, but if required use an adhesion promoter in order to guarantee maximum results.
2. The sill flashing should be cut at least 12" longer than the rough opening. Place the product into the sill and remove the release liner on the framing side, covering at least 6" up each jamb, making sure the sill flashing does NOT go into the interior of the wall or is stretched up the jamb. Stretch the flashing on the outside of the windows, making sure there is at least 2" of coverage onto the WRB.
3. Cut the jamb flashing at least 3" past the sill flashing and 3" past the header rough opening. Place the flashing over the sill and apply pressure to ensure proper adhesion.
4. Using Norandex Flex Flashing, cut a header piece 12" longer than the window arc. Install the flashing to the contour of the window, applying pressure and overlapping the jamb or sill flashing. Let the WRB lay over the header flashing and use seam tape to secure the joints, making sure to NOT tape along the window arc.

For any other window condition, please contact Norandex, or refer to the installation instructions for the condition.



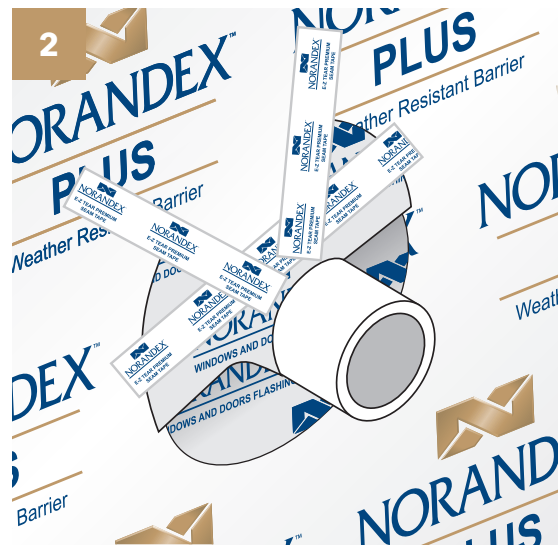
5 | SQUARE PENETRATIONS AND TEARS



1. For square (flanged) penetrations cut around the penetration carefully a minimum of 1" around the flange. Use Norandex straight or flex flashing, starting at the bottom, then the sides, and finally the header in order to create proper shingling.

2. Tears can occur due to the nature of a construction site, and can be easily handled. All tears should be covered using Norandex Seam Tape, Norandex flashing, or another small piece of Norandex WRBs, properly lapped and then taped.

6 | ROUND PENETRATIONS AND TEARS



1. For round or non-flanged penetrations, based on the condition of the penetration there are two methods.
 - a. If the penetration is cut cleanly, use Norandex Flex Flashing to provide a seal around the penetration, using a piece of Norandex straight flashing on the top for shingling if necessary.
 - b. If the penetration is NOT a clean cut, cut a piece of Norandex WRBs to go over the obstruction, with enough coverage to lap the existing product. Tape the Norandex WRB in place using

Norandex seam tape or Norandex flashing, starting from the bottom and moving up. Finally use Norandex Flex flashing, as stated in method A.

2. Tears can occur due to the nature of a construction site, and can be easily handled. All tears should be covered using Norandex Seam Tape, Norandex flashing, or another small piece of Norandex WRBs, properly lapped and then taped.

7 | NOTES AND CONSIDERATIONS

All Norandex branded flashing tapes are synthetic rubber butyl with a woven or nonwoven surface based on product performance objectives. These products should be used in conjunction with all Norandex WRBs, for a complete system that has been tested and approved. Failure to do so could result in product incompatibility or less than optimal performance. All Norandex branded products have been tested to their specific application, and are not intended for use outside of these parameters as performance cannot be guaranteed.

All products have been tested to the most recent standards and

applicable building codes. Norandex weather-resistant barriers are designed as a secondary barrier to bulk water intrusion, and are not designed for extended use as the primary waterproofing barrier. All siding and exterior product manufacturer installation instructions and warranties should be reviewed thoroughly before installing Norandex WRBs.

Any conditions not listed in this document can either be found in a technical bulletin, separate installation manual, or should be addressed by a representative of Norandex before installation begins.

For optimal performance as a continuous barrier Norandex has developed these procedures and recommendations for its Norandex products to be used for general guidance. The design professional or builder should consider all the requirements and characteristics of the structure to suit the specific building requirements. Failure to do so, may result in less than optimal performance.

8 | OTHER INFORMATION

Norandex WRBs (weather-resistant barriers) have been tested and comply with the most recent versions of the International Residential Code (IRC), International Building Code (IBC), and International Energy Code (IECC) standards. All Norandex WRB products listed below qualify as water-resistant barriers based on ICC-ES AC308 acceptance criteria listed on the following evaluation reports:

- ICC-ES Evaluation Report ESR-4132
- X Wrap Low-Perm, X Wrap High-Perm, X Wrap Commercial
- ICC-ES Evaluation Report ESR-1602
- Norandex™ Wrap and Norandex™ Wrap Plus

All of these products exceed the requirements for ASTM E2556 Type II (Standard Specification for Vapor Permeable Flexible Sheet Weather-resistant barriers Intended for Mechanical Attachment)

These products also have been tested to the following standards:

- AATCC 127 Water Penetration Test (not including Norandex Wrap® and Norandex Wrap Plus®)
- ASTM E 1677 Standard Specification for an Air Retarder Material or System for Low-Rise Framed Building Walls
- ASTM E 2178 Standard Test Method for Air Permeance of Building Materials
- ASTM E96 Water Vapor Transmission
- ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
- ASTM E2273 (Norandex™ X Wrap WRBs)

APPROVALS AND REPORTS

ICC-ESR 4132

ICC-ESR 1602

CCMC #14120

Norandex™ flashing products meet AAMA 711 requirements.

ICC-ES ESL-1238

LIT EPB-100 10/2023