



NORBOND®

V4600 Series

Providing durable, long-lasting security

Gray, Closed-Cell, Polyurethane Foam Tape

Saint-Gobain NORBOND® V4600 series bonding tapes combine a gray polyurethane foam substrate with a high-performance, pressure-sensitive acrylic adhesive on both sides. The foam substrate allows energy and stress in the joint to be dissipated over the entire bond. NORBOND V4600 is an ideal choice for severe exterior bonding applications where a gray aesthetic is required. The product is durable in all weather conditions and provides resistance against UV light, extreme temperatures, fungi, oxidation and ozone.

The V4600 series is specially designed to provide the following features:

- Stress distribution reduces pressure points, thereby minimizing distortion
- High-performance, durable acrylic adhesive provides a strong, long-lasting bond
- Conformable, closed-cell polyurethane foam has excellent environmental resistance
- Prevents corrosion of dissimilar materials by eliminating the contact between them
- Standard polyethylene liner excels in automated production

Available Sizes

Standard thickness: .030 and .045 in.

Master roll size: 56 in. (1422 mm) width. Slit rolls also available.

Standard roll length varies with thickness.

Nonstandard roll length available on special order.

Applications

- Window muntin bars
- Emblems and ornamentation
- Trailer roof bows
- Panel stiffeners
- Signs and nameplates
- Weatherstripping
- Body side molding
- Composite panels



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NORBOND® V4600 Series – Properties

Performance tests are run using standard test procedures. The values presented are typical values and should not be used for specification purposes.

| Property | Test Method | Value or Rating |
|--|------------------|-----------------|
| Density: lbs/ft ³ (kg/m ³) | ASTM D-1667 | 30 (480) |
| Peel Adhesion oz/in (N/m) 180° Peel 15-min. dwell | PSTC-3 | 108 (1,181) |
| Dynamic Shear Adhesion: psi (kPa), 72 hr. dwell stainless steel to paint | NTP-5 | 120 (827) |
| Dynamic Tensile Adhesion: psi (kPa) 24 hr. dwell aluminum to paint | NTP-11 | 100 (689) |
| Tensile Strength of Foam: psi (kPa) | ASTM D-412 DIE C | 130 (896) |
| Elongation of Foam: % | ASTM D-412 DIE C | 275 |
| Water Absorption: % by weight | NTP-36 | 5 |

NTP: Internal Test Procedure

Options (subject to minimum order requirements)

Liner: Red polyethylene liner is standard. Other liners may be available with minimum order requirement.

Important Instructions

- Because Saint-Gobain cannot anticipate or control every potential application, we strongly recommend testing of this product under individual application conditions prior to commercial use.
- Surfaces must be clean and free of oil, grease, moisture, dust and dirt. Isopropyl alcohol is good for cleaning the surface.
- Apply a uniform pressure of 15 psi (103 kPa) to promote good contact between the material to be bonded and the tape. The application temperature should be between 60°F and 125°F (16°C to 52°C). It is not recommended to apply these tapes at temperatures below 60°F (16°C), as the adhesive does not flow in this condition and can result in poor bonding.
- Recommended Service Temperature is between -40°F to 200°F (-40°C to 93°C).
- The adhesion between the substrate and the tape increases with time, typically reaching final bond strength in 72 hours. Heating the product above 105°F (40°C) will accelerate the adhesion process.

Shelf Life

12 months after the date of sale when stored in original packaging at temperatures up to 70°F (21°C) and 50% relative humidity.



Need more adhesion? Stick with Saint-Gobain NORBOND Adhesion Promoters.

NORBOND adhesion promoters are designed to work in conjunction with acrylic, pressure-sensitive adhesive systems (such as those used on NORBOND tapes). NORBOND improves bonding on substrates that resist adhesion. It can be used to develop an immediate quick-stick and generally improves pressure-sensitive acrylic adhesive systems. This enhances adhesion to irregular and curved surfaces. Various formulations are available for specific substrates.

NORBOND® is a registered trademark of Saint-Gobain Performance Plastics.



Saint-Gobain Performance Plastics

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Limited Warranty: For a period of 6 months from the date of first sale, Saint-Gobain Performance Plastics warrants this product(s) to be free from defects in manufacturing. Our only obligation will be to provide replacement product for any portion proving defective, or at our option, to refund the purchase price thereof. User assumes all other risks, if any, including the risk of injury, loss or damage, whether direct or consequential, arising out of the use, misuse, or inability to use this product(s).

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NORBOND® V4600 – Standard Roll Sizes

| Product No. | Thickness in. (mm) | Length ft. (m) |
|-------------|--------------------|----------------|
| V4630 | .030 (.8) | 200 (61) |
| V4645 | .45 (1.2) | 200 (61) |

3 in. I.D. cardboard cores standard