

DuPont™ Tile Bond™ Roof Tile Adhesive

One-Component, Minimal-Expanding Foam for Clay and Concrete Roof Tiles

FEATURES/BENEFITS

Description

DuPont™ Tile Bond™ Roof Tile Adhesive* is a portable one-component polyurethane foam adhesive for attaching concrete and clay roof tiles. Packaged in a self-contained disposable can or canister, it is quicker and easier to install compared to traditional attachment methods such as screws, mortar, wire ties and clips. Minimal expanding Tile Bond™ also provides greater attachment strength while minimizing nail penetrations and reducing roof weight loads.

Tile Bond™ is designed for use with low/flat, medium, high and two-piece barrel profiles of roof tile when applied to a preapproved underlayment. With its easy-to-use dispensing equipment, Tile Bond™ can be quickly and efficiently dispensed in a highly consistent manner, eliminating the need for expensive equipment and ratio monitoring. It is an excellent choice for all new, reroof and specialty applications, including hip and ridge, rake and valley, and field and eave installations.

Available Sizes

Sizes:

- 28 oz. can with reusable straw
- 23 lb. canister with gun/hose assembly
- 23 lb. canister only

Theoretical Yields**:

- High-profile tile: 3–5 squares
- Medium-profile tile: 5–7 squares
- Low-profile tile: 7–9 squares

Ease of Use

Tile Bond™ offers a number of convenient features:

- Restartability – cylinder can be easily shut off, stored and restarted numerous times to ensure full use of product
- Highest yield in both field and hip/ridge applications – up to 350 field tiles per 23 lb. tank
- Lowest cost per installed tile among single component adhesives
- Moisture-cured – can be used on wet substrates
- Improved efficiency – have multiple installers working at once
- Proven to not lift tiles
- No off-ratio concerns, capital or equipment necessary, no extra clean up or maintenance or external power source required
- Texas DOI, Miami-Dade County and Florida Building Code approved
- Hurricane-zone qualified

Sustainable Solutions

Tile Bond™ has zero ozone-depletion potential. Both tank and aerosol have a volatile organic compound (VOC) content of 1.0 wt. % (13 g/L). The VOC content was determined according to the California Air Resources Board and the South Coast and Ventura Air Quality Management Districts Rule 1168 Adhesives and Sealants (amended Jan. 7, 2005) and the Ozone Transport Commission Model Rule for Adhesives and Sealants (effective Jan. 1, 2009).

* Tile Bond™ is a former product of The Dow Chemical Company

** Theoretical yields may differ from actual usage, and environmental conditions may vary the actual in-place yields.

PROPERTIES

DuPont™ Tile Bond™ Roof Tile Adhesive exhibits physical properties as indicated in Table 1 when tested as represented. Review all instructions and (Material) Safety Data Sheet ((M)SDS) before use. Please contact DuPont at 1-866-583-2583 when additional guidance is required for writing specifications that include this product.

TABLE 1: Typical Physical Properties¹ of Tile Bond™ Roof Tile Adhesive

Test Method	Property	Typical Value	Units
ASTM D1621	Compressive Strength ²	14.3	psi, min.
ASTM D2842	Water Absorption	2.2	% by volume, max.
ASTM E96	Water Vapor Permeance ³	3.0	perm, max.
ASTM D1623	Tensile Strength	31.2	psi @ 180°F, 65% RH for 120 days, concrete to concrete
ASTM D1622	Density	1.8	lb/ft ³
ASTM D2856	Closed Cell Content	86.3	%
–	Shelf Life	12	months
–	Working/Open	Set tile within adhesive pad within 4 minutes of dispensing adhesive. ⁴	–

¹ Not to be considered sales specifications.

² Vertical compressive strength is measured at 10% deformation or at yield, whichever occurs first.

³ Based on 1" thickness.

⁴ High temperature and humidity will accelerate the curing process.

TESTING

Applicable Standards

Tile Bond™ meets the following ASTM standards:

- **E84** – Foam adhesives, see Underwriters Laboratories, Inc. (UL) Classified, file R18231
- **ASTM E108** – UL file R18231
- **D1622** – Standard Test Method for Apparent Density of Rigid Cellular Plastics
- **D1623** – Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
- **D1621** – Standard Test Method for Compressive Properties of Rigid Cellular Plastics
- **E96** – Standard Test Methods for Water Vapor Transmission of Materials
- **D2842** – Standard Test Method for Water Absorption of Rigid Cellular Plastics

Notice

Tile Bond™ complies with the following codes:

- Florida Building Code FL #717
- South Florida Building Code, Broward County, 2002 Edition
- Miami-Dade NOA No: 16-0222.01 Expiration Date: 08/23/2021
- Texas DOI RC 28
- UL R18231

Contact your DuPont sales representative or local authorities for state and local building code requirements and related acceptances.

HANDLING

WARNING: For Professional Use Only. Read and follow the entire Handling section and the Safety Data Sheets (SDSs, formerly MSDSs or Material Safety Data Sheets) carefully before use. The information below is designed to protect the user and allow for safe use and handling of DuPont™ products. Follow all applicable federal, state, local and employer regulations.

Precautionary Statements

- All one component foams like Tile Bond™ are moisture cured. Low humidity and cooler temperatures will extend the cure time. However, final adhesion properties are unaffected.
- Tile Bond™ contains isocyanate blowing agent. Do not breathe vapor or mist. Use in well-ventilated areas or wear proper respiratory protection. Cover all skin. Isocyanate is irritating to the eyes, skin and respiratory system, and may cause sensitization by inhalation or skin contact.
- This product is intended for outdoor use where natural ventilation occurs and respiratory protection is not expected to be required. Care should be taken to avoid workers being sprayed with product downwind.
- Tile Bond™ is very sticky and will adhere to most surfaces and skin. Do not get foam on skin. Wear gloves and goggles or safety glasses. Cured foam must be mechanically removed or allowed to wear off in time.
- Tile Bond™ should be stored away from heat sources. It is a combustible product and may present a fire hazard if exposed to an open flame or heat source that exceeds temperatures above 240°F (116°C).
- Contents are under pressure.

Shelf Life and Storage

Store DuPont™ Tile Bond™ Roof Tile Adhesive between 40–80°F (4.4°–26.7°C) to ensure adhesive quality, maximum yield and shelf life. Do not exceed 120°F (48.9°C). Store partially used Tile Bond™ adhesive upright with the hose attached and pressurized. The cylinder valve must be in the off position.

Disposal

All pressure must be released from cylinder before disposal. Disposal of Tile Bond™ residue must be done with adequate ventilation. NEVER PUNCTURE OR INCINERATE CYLINDER. Always cover all skin, wear gloves and goggles when disposing of cylinders.

1. Close cylinder valve.
2. Remove dispensing hose from cylinder.
3. Hold tank upside down over waste container with valve facing away from you and any others in the area.
4. Slowly open valve on the cylinder.

5. Set cylinder into waste container and allow residual pressure and chemical to escape.
6. Cover waste container with loosely fitting covers and allow contents to set for several days.
7. Dispose of in accordance with federal, state and local environmental regulations.

NOTE: If no waste container is available, the cylinder of Tile Bond™ can be inverted in its original carton using the method described above and allowed to empty.

Supplemental Information

For more specific instructions, see Tile Bond™ operating instructions; Florida Roofing, Sheet Metal and Air Conditioning Contractors Association, Inc. (FRSA)/Tile Roofing Institute (TRI) Concrete and Clay Roof Tile Installation Manual; or contact a local DuPont representative. Local regulations may require manufacturer-approved installer training certification.



**For more information visit us at
tilebond.com
or call 1-800-448-9835**

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DuPont Polyurethane Foam Insulation and Sealants

CAUTION: When cured, these products are combustible and will burn if exposed to open flame or sparks from high-energy sources. Do not expose to temperatures above 240°F (116°C). For more information, consult (Material) Safety Data Sheet ((M)SDS), call DuPont at 1-866-583-2583 or contact your local building inspector. In an emergency, call 1-989-636-4400 in the U.S. or 1-519-339-3711 in Canada.

Tile Bond™ adhesive products contain isocyanate and a blowing agent. Read the label and (Material) Safety Data Sheet ((M)SDS) carefully before use. Wear long sleeves, gloves, and goggles or safety glasses. Provide adequate ventilation or wear proper respiratory protection. Contents under pressure. For outside use only.

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