



Dow Building Solutions

# 1 PRODUCT NAME

## TILE BOND™ Roof Tile Adhesive

### 2 Manufacturer

The Dow Chemical Company  
Building Solutions  
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Midland, MI 48674  
1-866-583-BLUE (2583)  
Fax 1-989-832-1465  
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Building Solutions  
250 – 6th Ave. SW, Suite 2200  
Calgary, AB T2P 3H7  
1-866-583-BLUE (2583) (English)  
1-800-363-6210 (French)  
www.dowstyrofoam.ca/4architects

### 3 Product Description

TILE BOND™ is a portable one-component polyurethane foam roof tile adhesive for attaching concrete and clay roof tiles. It reduces installation time and labor costs compared to traditional attachment methods such as screws, mortar, wire ties and clips. TILE BOND minimal-expanding adhesive also provides greater attachment strength while minimizing nail penetrations and reducing roof weight loads. 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. Packaged in a self-contained, disposable canister, TILE BOND adhesive is consistently dispensed, eliminating problematic ratio and calibration issues typical in two-component systems.

### BASIC USE

TILE BOND™ Roof Tile Adhesive is designed for use with low/flat, medium, high and two-piece barrel profiles of roof tile in new, reroof and specialty applications when applied to a pre-approved underlayment. It is ideal for all new, reroof and specialty applications, including hip and ridge, rake and valley, and field and eave installations.

### SIZES

- 20 oz (568 ml) can with straw dispenser will adhere up to 40 field tiles
- 23 lb (10 kg) canister with gun/hose assembly will adhere up to 750 field tiles
- 23 lb (10 kg) canister only

### 4 Technical Data

#### APPLICABLE STANDARDS

TILE BOND™ Roof Tile Adhesive meets the following ASTM standards:

- E84 – Class 1 foam adhesives, see Underwriters Laboratories, Inc. (UL) Classified, reports R13655 and R18231
- E108 – Standard Test Methods for Fire Tests of Roof Coverings
- 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
- D2126 – Standard Test Method for Response of Rigid Cellular Plastics to Thermal and Humid Aging

- D2842 – Standard Test Method for Water Absorption of Rigid Cellular Plastics

#### CODE COMPLIANCE

TILE BOND™ Roof Tile Adhesive complies with the following codes:

- Florida Building Code FL 717-R1
- International Residential Code (IRC) and International Building Code (IBC); see ICC-ES NER-2201A
- SBCCI-ES Evaluation Report 2201
- South Florida Building Code, Broward County, 1999 Edition
- Miami-Dade NOA 06-0417.02, Expiration Date 8/23/11



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

#### PHYSICAL/CHEMICAL PROPERTIES

TILE BOND™ Roof Tile Adhesive exhibits physical properties as indicated in Table 1 when tested as represented.

#### ENVIRONMENTAL DATA

TILE BOND™ Roof Tile Adhesive contains isocyanate, hydrofluorocarbon and polyol. TILE BOND has zero Volatile Organic Compounds (VOCs) emissions, per the California Air Resources Board and California South Coast Air Management District definitions found in 17 CCR s94508, and SCAQMD Reg. I, Rule 102. Read the Material Safety Data Sheet carefully before use.

TILE BOND Roof Tile Adhesive

TABLE 1

Wear protective clothing, gloves and goggles and provide adequate ventilation and/or wear proper respiratory protection.

**FIRE PROTECTION**

TILE BOND™ Roof Tile Adhesive should be stored away from heat sources. It is combustible and may present a fire hazard if exposed to flame or temperatures above 240°F (115°C).

For more information, consult MSDS, call Dow at 1-866-583-BLUE (2583) or contact your local building inspector.

**5 Installation**

TILE BOND™ Roof Tile Adhesive is a minimal-expanding foam that is quick and easy to dispense and will not lift roof tiles. See TILE BOND adhesive operating instructions or contact a local Dow representative for more specific instructions.

**6 Availability**

TILE BOND™ Roof Tile Adhesive is distributed through an extensive network of Dow Building Solutions distributors. For more information, call: 1-800-232-2436 (English) 1-800-565-1255 (French)

Physical Properties <sup>(1)</sup> of TILE BOND™ Roof Tile Adhesive	
Property and Test Method	Value
Compressive Strength <sup>(2)</sup> , ASTM D1621, psi, min.	10
Water Absorption, ASTM D2842, % by volume, max.	3.96
Water Vapor Permeance <sup>(3)</sup> , ASTM E96, perm, max.	2.67
Tensile Strength, ASTM D1623, psi @ 180°F, 65% RH for 90 days, concrete to concrete	17
Dimensional Stability, ASTM D2126, % volume change @ -40°C, 2 weeks	1.01
@ 70°C, 97% humidity, 2 weeks	10.44
Density, ASTM D1622, lb/ft <sup>3</sup>	1.91
Shelf Life, months	12

(1) Not to be considered sales specifications.  
 (2) Vertical compressive strength is measured at 10 percent deformation or at yield, whichever occurs first.  
 (3) Based on 1" thickness.

**7 Warranty**

Not applicable.

**8 Maintenance**

When installed in accordance with Dow installation recommendations, TILE BOND™ Roof Tile Adhesive is a permanent adhesive requiring no maintenance.

**9 Technical Services**

Dow can provide technical information to help address questions when using TILE BOND™ Roof Tile Adhesive. Technical personnel are available to assist with any roof tile project. For technical assistance, call: 1-866-583-BLUE (2583) (English) 1-800-363-6210 (French)

**10 Filing Systems**

- [www.dowstyrofoam.com/architect](http://www.dowstyrofoam.com/architect)
- [www.dowstyrofoam.ca/4architects](http://www.dowstyrofoam.ca/4architects)
- [www.sweets.com](http://www.sweets.com)

**IN THE U.S.:**

- For Technical Information: **1-866-583-BLUE (2583)**
- For Sales Information: **1-800-232-2436**

**THE DOW CHEMICAL COMPANY**

- Building Solutions • 200 Larkin • Midland, MI 48674
- [www.dowstyrofoam.com/architect](http://www.dowstyrofoam.com/architect)

**IN CANADA:**

- For Technical Information: **1-866-583-BLUE (2583)** (English); **1-800-363-6210** (French)
- For Sales Information: **1-800-232-2436** (English); **1-800-565-1255** (French)

**DOW CHEMICAL CANADA INC.**

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- [www.dowstyrofoam.ca/4architects](http://www.dowstyrofoam.ca/4architects)

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COMBUSTIBLE: TILE BOND™ Roof Tile Adhesive should be stored away from heat sources. For more information, consult MSDS, call Dow at 1-866-583-BLUE (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™ Roof Tile Adhesive contains isocyanate, hydrofluorocarbon and polyol. Read the Material Safety Data Sheet carefully before use. Wear protective clothing, gloves and goggles and provide adequate ventilation and/or wear proper respiratory protection.

