Air and Moisture Protection for More Energy-Efficient Buildings

You Know Us. You Trust Us.

Meeting regulatory requirements for energy efficiency is a significant challenge that continues to grow as codes tighten and building owners demand more sustainable, near-zero-energy buildings. Traditional air barrier systems have reached their limit, struggling to meet the installation and performance needs of modern building construction.

Drawing upon more than 40 years of proven silicone weatherproofing expertise, Dow Corning offers durable and reliable solutions for airtight and watertight performance. By bringing the key benefits of silicone technology to the air and weather barrier market, Dow Corning gives architects and contractors an edge over incumbent technologies and the potential to outperform current air barrier industry standards.

The Dow Corning® Silicone Air Barrier System is an air and weather barrier solution that ensures energy efficiency and protection from the elements. Alleviating the shortcomings of current air barriers, this system meets architects’ needs for high-performance building designs:

- ABAA evaluated
- Airtight performance exceeding industry standards
- Long-term UV resistance
- Passes NFPA 285 assembly testing
- Complete offering of compatible accessory materials
- Vapor-permeable and breathable
- One-coat spray application; may also be roller applied
- Water-based, low-VOC formulation ideal for green constructions
- Can be applied at temperatures as low as 20°F (-6°C)
- Primerless adhesion to most construction substrates
A Silicone System for Building Protection

The Dow Corning® Silicone Air Barrier System is a suite of fully compatible high-performance silicone technologies from Dow Corning designed to work in concert to help protect the entire building envelope in both new construction and renovation projects.

- **Dow Corning® DefendAir 200 Silicone Liquid Applied Air and Weather Barrier**
- **Dow Corning® Silicone Transition System (STS)**
  - **Dow Corning® Silicone Transition Strips**
  - **Dow Corning® Silicone Transition Corners**
- **Dow Corning® 758 Silicone Weather Barrier Sealant**
- **Dow Corning® 791 Silicone Weatherproofing Sealant**
- **Dow Corning® 778 Silicone Liquid Flashing**
High Performance Building Solutions From Dow Corning Help You *Build a Better Barrier™*

**Airtightness**

Uncontrolled air leakage can result in increased energy use and costs. *Dow Corning®* Silicone Air Barrier System is specifically designed to ensure the airtightness of the building envelope.

- The air infiltration rates of *Dow Corning®* DefendAir 200 beat current industry standards, helping keep energy costs down.
- By securely adhering to challenging flashing materials and construction substrates, *Dow Corning®* 758 Silicone Weather Barrier Sealant ensures continuous sealing without additional penetrations from mechanical fasteners.

**Temperature Flexibility**

*Dow Corning®* DefendAir 200 provides a durable airtight seal over a wide range of temperatures. It can be installed at temperatures as low as 20°F and has a service temperature range of -20°F to 300°F (TIS 2016-i0000-76352). As substrates expand and contract thermally, *Dow Corning®* DefendAir 200 will remain flexible – moving with the substrates while maintaining its adhesion. When complemented by its other silicone accessory components (*Dow Corning®* 791 Silicone Weatherproofing Sealant, *Dow Corning®* 778 Silicone Liquid Flashing and *Dow Corning®* Silicone Transition System), the *Dow Corning®* Silicone Air Barrier System provides unparalleled flexibility and durability while maintaining airtight building envelope.

**UV Resistance**

Ongoing exposure to sunlight and ultraviolet (UV) radiation – especially during construction delays – is a reality often faced on construction projects. Compared to organic materials, silicones provide greater UV stability, making them the right choice for applications requiring temporary – or long-term – outdoor exposure.

- *Dow Corning®* DefendAir 200 remains unaffected by UV exposure, making it ideal for rainscreen applications where the barrier will be exposed to UV radiation. This allows design professionals more freedom in rainscreen applications, eliminating concern about how their designs will affect the air barrier performance.
- Extended sun exposure from unanticipated construction delays will not affect the performance of *Dow Corning®* DefendAir 200. Other manufacturers caution that their air barrier should be covered within as little as 30 days; failure to do so can add costs and cause delays if the material needs to be replaced. With no limit on exposure time before the exterior cladding is installed, contractors need not worry if *Dow Corning®* DefendAir 200 is left exposed.
Weatherproofing

Expanding on Dow Corning’s proven history with weatherproofing sealants for joint sealing, our next-generation solutions work as a system – ensuring weatherproof protection throughout the building envelope.

- **Dow Corning® DefendAir 200** prevents water infiltration but has the ability to “breathe.” This water-based coating dries to form a flexible membrane that is impervious to liquid water but allows moisture vapor to escape. This mitigates concerns about potential corrosion and mold growth caused by moisture trapped inside wall assemblies.

- **Dow Corning® 791 Silicone Weatherproofing Sealant** provides robust primerless adhesion to all materials of the **Dow Corning® Silicone Air Barrier System**. Together, this proven sealant and other **Dow Corning®** brand materials offer a compatible system that provides long-term durability for the building envelope.
Air & Weather Barrier

*Dow Corning*® DefendAir 200 is a water-based liquid applied silicone air and water barrier for both renovation and new construction.

**APPLICATIONS:**
- Suitable for use on many construction projects, including exterior sheathing, preformed panels, steel stud walls and rainscreen applications
- Adheres strongly to common wall substrates, such as DensGlass®, concrete masonry units (CMU), oriented strand board (OSB), plywood and others

**FEATURES/BENEFITS:**
- ABAA evaluated
- Airtight performance exceeding industry standards
- Long-term UV resistance
- Passes NFPA 285 assembly testing
- Complete offering of compatible accessory materials
- Vapor-permeable and breathable
- One-coat spray application; may also be roller applied
- Water-based, low-VOC formulation ideal for green constructions
- Can be applied at temperatures as low as 20°F (-6°C)
- Primerless adhesion to most construction substrates

Transition System

The *Dow Corning*® Silicone Transition System features high-performance precured 100 percent silicone rubber strips and corners – *Dow Corning*® Silicone Transition Strips and *Dow Corning*® Silicone Transition Corners.

**APPLICATIONS:**
- Sealing transitions from curtain wall, storefront and punched windows to the façade opening
- For inboard, outboard and in-plane designs

**FEATURES/BENEFITS:**
- Continuous airtight transition from the window to the wall
- Easy to install using Dow Corning-approved silicone sealants – no mechanical fasteners required
- In-shop or on-site installation

*Dow Corning*® DefendAir 200 applies easily over construction substrates to ensure airtight performance.
Weatherproofing Sealants

*Dow Corning® 758 Silicone Weather Barrier Sealant* meets the adhesion challenge posed by flashing materials, adhering to the most demanding substrates without need for a primer.

**APPLICATIONS:**
- A sealing material for self-adhered and nonwoven spunbound weather-resistant barrier materials

**FEATURES/BENEFITS:**
- Used to establish continuous, airtight protection
- Robust adhesion to a wide variety of materials, including fluid-applied air barriers, HDPE and other polyolefin materials used in sheet-applied air barriers

*Dow Corning® 791 Silicone Weatherproofing Sealant* provides proven silicone weatherproofing performance.

**APPLICATIONS:**
- Airtight sealing of seams and joints when using DensGlass® or other sheathing material
- Perimeter sealing of windows, doors and other building penetrations

**FEATURES/BENEFITS:**
- Optimal for adhering *Dow Corning® Silicone Transition System* to *Dow Corning® DefendAir 200*
- Excellent weatherability – virtually unaffected by sunlight, rain, snow, ozone

Through Cavity Flashing

*Dow Corning® 778 Silicone Liquid Flashing* is a trowel-applied compound with a long open time that enables a durable, weatherproofing seal at building penetrations and complex transitions.

**APPLICATIONS:**
- Window and door flashing
- General purpose sealing requirements for transition details behind the exterior façade

**FEATURES/BENEFITS:**
- Compatible with *Dow Corning® DefendAir 200*
- Can also be used with other weather barrier types, including self-adhering and liquid-applied membranes
- Long tooling time to facilitate workflow of prepping a whole window opening
- High durometer for abrasion resistance
- Durable, flexible silicone chemistry

A Dow Corning System Warranty

The *Dow Corning® Silicone Air Barrier System* is backed by industry-leading limited warranty protection options of up to 15 years when installed per *Dow Corning* published guidelines. Shorter-term warranty protection is available for system components used separately. Contact your *Dow Corning* sales representative for full details.
HANDLING PRECAUTIONS

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CORNING CUSTOMER SERVICE.

LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer’s tests to ensure that our products are safe, effective and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow Corning’s sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW CORNING SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.

DOW CORNING DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

®TM Trademark of the Dow Chemical Company.

Dow Corning is a registered trademark of Dow Corning Corporation. The Corning portion of the Dow Corning trademark is a trademark of Corning Incorporated, used under license.

BuildaBetterBarrier.com is a trademark of Dow Corning Corporation.

DensGlass® is a registered trademark of Georgia-Pacific Gypsum LLC.

THERMAX™ is a trademark of The Dow Chemical Company.

SECUROCK® is a registered trademark of USG.

©2015, 2017 Dow Corning Corporation, a wholly owned subsidiary of The Dow Chemical Company.

All rights reserved.