

HIGH PERFORMANCE BUILDING SOLUTIONS

# Shaping the façades of world cities with silicone technologies

India product guide

**DOW**

®



## DOWSIL™ High Performance Building Solutions

Product name	Components	Product properties
<b>Structural glazing silicones</b>		
DOWSIL™ 983 SGS Structural Glazing Sealant	2	ASTM C1184; ASTM C719-Class 25; SWRI; KS F 4910(G-25HM)
DOWSIL™ 121 Structural Glazing Sealant	2	ASTM C1184; ASTM C719-Class 25; SWRI; ETAG 002
DOWSIL™ 795 Structural Glazing Sealant	1	ASTM C1184; ASTM C920; ASTM C719-Class 50; SWRI; KS F 4910(G-25HM)
DOWSIL™ 995 Silicone Structural Glazing Sealant	1	ASTM C1184; ASTM C920; ASTM C719-Class 50; Gb16776
DOWSIL™ 896 Panelfix Sealant	1	CTM 97B,ASTM D2202,ASTM C 679,CTM 663A, CTM 1430,ISO 8339
<b>Weatherproofing</b>		
DOWSIL™ 791 Weatherproofing Sealant	1	ASTM C920; GRADE NS, CLASS 50, USE NT,M,G,A. ASTM C719-Class 25; ISO 11600 F&G 25 LM; JC/T 882-2001 / 25 LM- GB/T 14683-2003 B G; F25 LM;KS F4910(F-25LM) EN15651 1/2:2012; CNS 8903 F-G-25LM 9030 (SR-1)
DOWSIL™ 791T Weatherproofing Sealant	1	SNJF FAÇADE & VITRAGE
DOWSIL™ 790 Building Sealant	1	ASTM C920; ASTM C719-Class 100/50; SWRI; JC/T 881-2001
DOWSIL™ Firestop 700 Silicone Sealant	1	CE MARKED ETAG 026: EUROCLASS B ACC; EN 13501/1, 2 TO 4 HOURS ACC; EN 1366/4 - BS 476 Part 22; ISO 11600 F&G 25 LM; SNJF; DIN 18545 T2; CLASS OF DIN 18540
DOWSIL™ 789 Weatherproofing Sealant	1	KS F 4910(F-25LM)
DOWSIL™ 789P Silicone Hybrid Sealant	1	ISO1 1183-1, DIN2 53505,DIN 53504 S2,CTM3 ,ISO 7390
DOWSIL™ EPDM Membrane		
DOWSIL™ 991 High Performance Sealant	1	ASTM C719 +/-50%; ASTM C920, Type S, Grade NS, Class 50, Use NT, M, G, A; ASTM C510; SGBP 2014-395; GBT23261-2009; CNS 8903 F-G-25LM 9030 (SR-1)
DOWSIL™ Firestop 400 Acrylic Sealant	1	Tested to BS 476 Part 22/1987; meets BS 476 Part 7/1987, Class 2
DOWSIL™ 688 Silicone Glazing and Cladding Sealant	1	BS 5889; BS EN ISO 11600 20 LM
<b>Insulating glass silicones</b>		
DOWSIL™ 982 Insulating Glass Sealant	2	ASTM C1369; ASTM E2190; KS F 4910(G-20HM)
DOWSIL™ 982-FS Insulating Glass Sealant	2	ASTM C1369; ASTM E2190
DOWSIL™ 3362 Insulating Glass Sealant	2	ETAG 002; EN1279; SNJF Vi-VEC
DOWSIL™ 3-0117 Insulating Glass Sealant	1	ETAG 002; EN1279; Cekal
DOWSIL™ 335 Butyl Sealant	1	EN ISO 1183,Acc. to EN1279-4 (2018) Test Method, ISO 1133B

## DOWSIL™ Professional sealants

Product name
DOWSIL™ 817 Mirror Adhesive
DOWSIL™ GP Silicone Sealant
DOWSIL™ Neutral Plus Silicone Sealant
DOWSIL™ DC-1000 Silicone Sealant
DOWSIL™ Sanitary Sealant
DOWSIL™ Glass Silicone Sealant

## Cleaners and primers

Product name
DOWSIL™ R40 Universal Cleaner
DOWSIL™ Primer 1200 OS (Nonporous Substrates)
DOWSIL™ Primer C OS (Nonporous Substrates)
DOWSIL™ Construction Primer P (Porous Substrates)
DOWSIL™ 3522 Cleaning Solvent (for Pumps Only)

# Dow Quality Bond™

Bringing quality to incredible heights



Valid from December 2019 to November 2020



The Dow Quality Bond™ Program lifts silicone sealing and bonding to the highest level by implementing standards of best practice in quality control, quality assurance and production application with specialist silicone applicators.

Launched in Europe in 2007 for high performance silicone applications, Quality Bond™ has gone from strength-to-strength and has a high level of fabricator and applicator membership around the world. The value of Quality Bond™ is widely recognised by architects and consultants who request and depend on Quality Bond™ members to uphold standards of application to ensure best performance, safety and durability of building projects.

### Benefits for specifiers

By specifying a Quality Bond™ member on your project, you can gain the assurance that your sealant applicator has been trained and audited to meet the highest quality standards set by Dow.

Currently available in Europe, the Middle East, Africa, India, ASEAN, and Greater China, Quality Bond™ reinforces our commitment to instilling the highest quality standards.

With accelerating architectural creativity and fast-growing requirements in energy efficiency and transparency fueling demand for advanced glazing and bonding solutions, Quality Bond™ helps ensure the very best in performance, safety, and durability.

### Benefits for members

Becoming a qualified member indicates to your customers that your performance standards and training are world-class. Members of the Quality Bond™ community share in our extensive know-how in structural glazing, insulating glazing, panel bonding and other silicone-based bonding and sealing applications.

For further information on Quality Bond membership, please visit [qualitybond.com](http://qualitybond.com).

# A journey of innovative silicone construction



**1958**

**First silicone weatherproofing sealant**



**1964**

**First two-sided structural silicone application: "Total Vision" system**

**1968**

**Two-sided structural glazing in curtainwalls**



**1971**

**First four-sided structural silicone application**

**455 W. FORT ST.**  
Detroit, Michigan, USA  
Architect: Smith Hinchman & Grylls



**1976**

**First four-sided structural silicone application unsupported**

**MENTOR MUNICIPAL CENTER**  
Mentor, Ohio, USA

**2013**

**Constantly curved design**

**FLAME TOWERS**  
Baku, Azerbaijan  
Architect: HOK International



**2012**

**Complex reflective glass design**

**HARPA CONCERT HALL**  
Reykjavik, Iceland  
Architect: Henning Larsen Architects, Batteriid Architects



**2010**

**Serigraphed, S-shaped glass panels**

**MUSEUM AAN DE STROOM**  
Antwerp, Belgium  
Architect: Neutelings Riedijk Architects

**Free-form glass panels**

**FONDATION LOUIS VUITTON**  
Paris, France  
Architect: Frank Gehry



**2014**

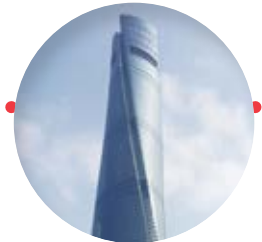
**Curved glass and ceramic panels**

**ICE KRAKOW**  
Kraków, Poland  
Architect: Ingarden & Ewý Architekci, Arata Isozaki & Associates



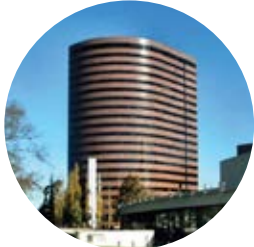
**Megatall, high energy efficiency**

**SHANGHAI TOWER**  
Shanghai, China  
Architect: Gensler



**Crystal clear bonding (exterior)**

**INSTITUTE FOR RESEARCH AND TREATMENT OF CANCER**  
Torino, Italy  
Architect: Studio Cucchiari S.R.L.



1984

First generation of fast-curing two-part structural silicones

1985

Protective glazing for seismic loads

**CENTER TOWER**  
Costa Mesa (Los Angeles), California, USA  
Architect: CRS Sirrino



1989

First four-sided structural glazing in Hong Kong

**CAMERON CENTRE**  
Tsim Sha Tsui, Hong Kong

1992

Protective glazing for bomb blast and hurricane loads



Dramatic and imposing entrance façade

**OLD TRAFFORD**  
Manchester, United Kingdom  
Architect: AFL

2008

Curved glass, daylight opening

**NATIONAL GRAND THEATER OF CHINA**  
Beijing, China  
Architect: Paul Andreu



2004

Clean sealant technology

**PIER 1 IMPORTS**  
Fort Worth, Texas, USA  
Architect: Kendall/Heaton Associates Inc.

2002

2003



Impact-resistant glazing

**WESTIN DIPLOMAT RESORT & SPA**  
Hollywood, Florida, USA  
Architect: Nichols, Brosch, Sandoval and Associates



Gridshell glass roof

**CHADSTONE SHOPPING CENTRE**  
Melbourne, Victoria, Australia  
Architect: CallisonRTKL, The Buchan Group

2015

XXL glass structurally bonded

**CORNING MUSEUM OF GLASS**  
Corning, New York, USA  
Architect: Thomas Phifer and Partners



2017

High-rise construction

**PING AN INTERNATIONAL FINANCE CENTER**  
Shenzhen, China  
Architect: Kohn Pedersen Fox Associates



2020

Planned as world's tallest building

**JEDDAH TOWER**  
Jeddah, Makkah, Saudi Arabia  
Architect: Adrian Smith + Gordon Gill Architecture LLP

## Get Edge with Dow

### Leading expertise

#### Global specification



Dow's dedicated project support team works in close collaboration with architects and consultants on a global basis, to offer training, specification advice and leading support. This has proven to be especially valuable when addressing technically challenging and complex designs in façade construction where knowledge and experience transfer can be key. Early engagement by Dow with project stakeholders can support efficiency of design and exploration of innovative solutions which can be captured and tested at project conception to produce smarter, deliverable buildings.

### Digital project management

#### Keeping your projects on the fast-track to success



#### **COOL (COstruction OnLine)**

Efficient processes are paramount in enabling both you and your customers run a project smoothly and on-time. That's why we support you with our user-friendly COOL online planning tool during the planning phase and over the course of the project.

A modern and efficient way to handle projects, COOL provides support for design planning, joint calculation, laboratory tests and service and warranty inquiries through an intuitive user interface. Service and warranty inquiries are also accelerated and simplified considerably thanks to the project data stored in COOL. Find out more at [dow.com/cool](https://www.dow.com/cool).



#### **Structural calculators**

Calculators are available for structural glazing, insulating glazing, crystal-clear bonding and panel bonding applications. These calculators have been developed to give an indicative estimate of sealant and primer usage as well as structural bite, deadload, glueline thickness and thermal movement calculations. Complete testing and/or design approval by Dow technical specialists is recommended prior to product application.

<https://www.dow.com/en-us/market/mkt-building-construction/construction-calculators.html>



#### **Dow Inspiration studio and technical academy**

Dow is more than just your supplier of innovative silicone materials. We want to collaborate with you on every stage of your project, from concept to completion. This starts by sharing our proven experience in silicone sealants and adhesives. Start your collaboration today with Dow by attending one of our training workshops in our brand new Inspiration studio. Workshop dates, languages and registration can be found at [qualitybond.com](https://www.dow.com/qualitybond).



#### **Digital information sharing**

Search our product catalogue at [dow.com/construction](https://www.dow.com/construction) for quick and easy access to more information and technical documentation concerning our product range.

## **Dow India's world-class technology centre in Mumbai**

**The Centre helps unlocks value for customers by developing applications that improve their competitive edge in the marketplace**

Dow Chemical International Pvt. Ltd. now boasts of a state-of-the-art application development hub 'Dow India Technology Centre' (DITC) in Navi Mumbai. The centre fosters innovation and enables collaboration with customers to create sustainable, market-centric products and solutions.



**Spread over 70,000 sq. ft.**



**70+ R&D professionals**



**8 labs, corss-industry colutions**

Our research center is armed with advance monitoring equipment, chemical handling and management systems, and exposure control kits and is designed to protect against adverse environmental impacts.

It houses dedicated testing facilities targeting different industries and markets to help address customer needs. It has all the necessary infrastructure to test, design and recommend different product needs.



## Learn more

### About Dow High Performance Building

Dow High Performance Building, part of Dow Consumer Solutions, collaborates with industry professionals around the world to develop solutions to enhance design and aesthetics, increase durability, advance the energy efficiency of buildings, and improve the health and safety of building occupants. Taking a holistic approach, Dow brings together expertise from across the company to help customers find solutions to a wide range of high-performance building challenges.

Featuring DOWSIL™ brand products, Dow's high performance building solutions include proven materials for structural and protective glazing, weatherproofing, insulating glass, window and door fabrication, and building materials protection, as

well as innovations for high-efficiency insulation, LED lighting, thermal management systems, and the incorporation of photovoltaic cells and solar panels into building design.



Learn more about Dow's full range of high performance building solutions, including service and support, at [dow.com/construction](https://www.dow.com/construction).

Dow has sales offices, manufacturing sites, and science and technology laboratories around the globe. Find local contact information at [dow.com/contactus](https://www.dow.com/contactus).

**DOWSIL™**



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