



DOW

®

PRODUCT HIGHLIGHTS

FEATURED AT

glasstec
VIRTUAL
20 - 22 OCT 2020

DOW RESTRICTED

CONTENT

1. Industry trends
2. Innovations
3. New – DOWSIL™ Crystal Clear Spacer
4. DOWSIL™ Membrane Façade System
5. DOWSIL™ 335 Butyl Sealant
6. New – DOWSIL™ 375 Construction & Glass Embedding
7. DOWSIL™ Fire Safety Range
8. DOWSIL™ 3363 Insulating Glass Sealant
9. DOWSIL™ 994 Ultra Fast Bonding Sealant
10. New – DOWSIL™ Glass Coatings
11. New – Low VOC's
12. Available Service and Support



GLOBAL TRENDS

Architectural Designs

Climate

Modernization

Technology

Environment

Quality of life

Connectivity

Mobility

Population & Urbanization



IMPACTING DESIGN



XXL Glass

Digitalization

Fire Safety

Green Building

Sustainability

Energy Efficiency

Quality

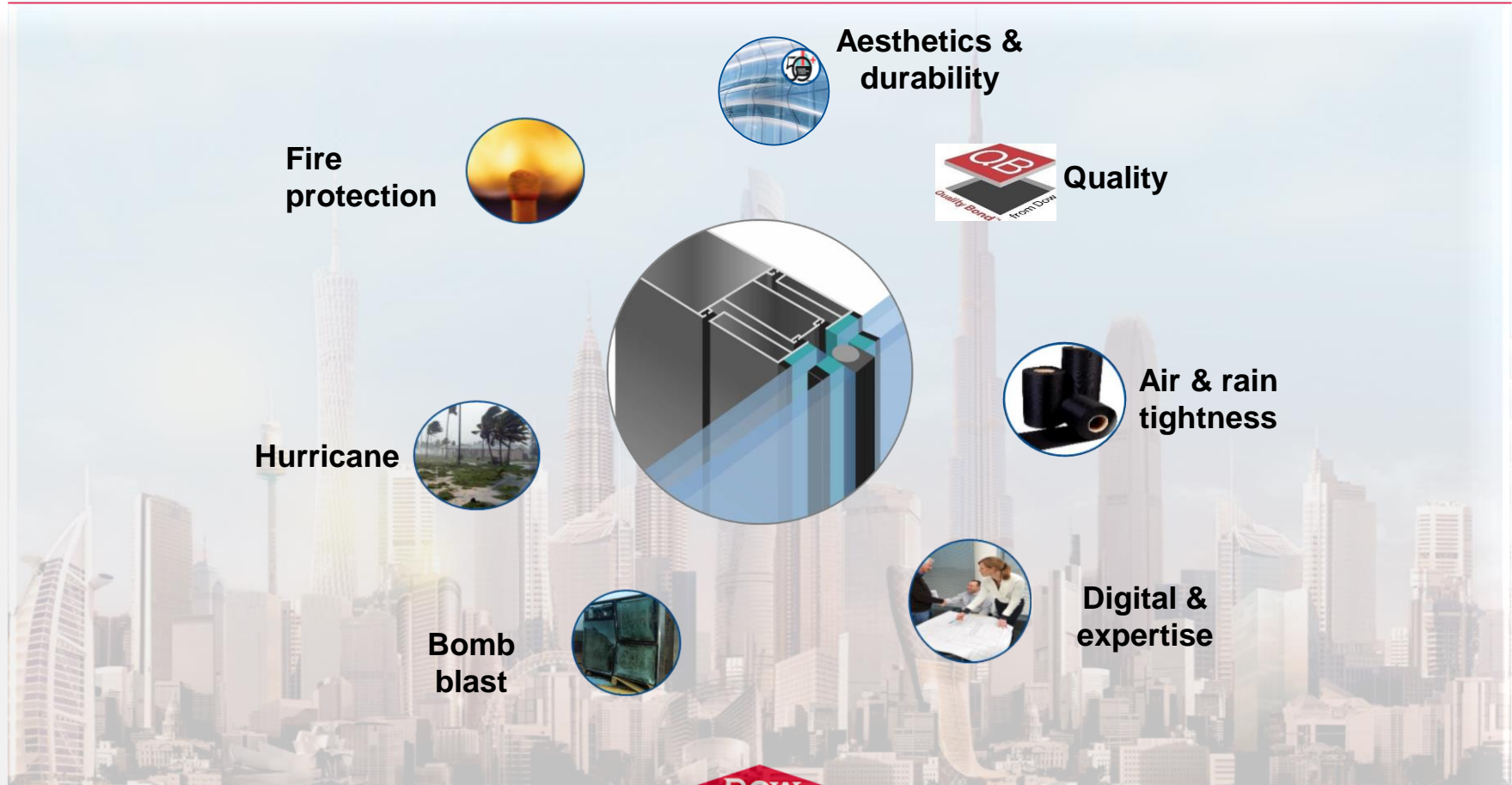
Productivity

Cost

Acoustics

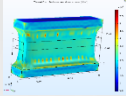
Durability

DOW ADDRESSING KEY TRENDS



DOW TECHNOLOGY & SERVICES

Engineering
experience



Quality Bond

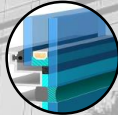
3D printable
silicones



Fire retardant
silicones



Structural silicone
Glazing



Insulating glass
Edge seal

Weatherproofing
Sealants



Color-matched
butyl

Decorative glass
lamination



Crystal Clear
Spacer



Sprayable air &
weather barrier



Hybrid sealants



Weatherproofing
membranes



Panel
bonding



Crystal Clear
Bonding & sealing



Digital project
management & training



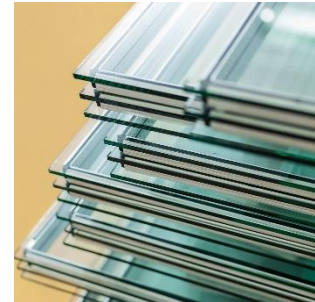
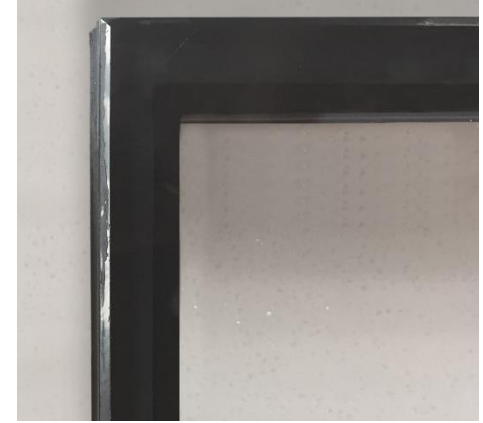


DOWSIL™ CRYSTAL CLEAR SPACER

HOW TO GET 'FULL VISION' ?



TODAY: Insulating glass unit as DOORS
sealed with **BLACK EDGE**



GET 'FULL VISION' WITH DOWSIL™ CRYSTAL CLEAR SPACER



A CRYSTAL CLEAR EDGE



DOWSIL™ CRYSTAL CLEAR SPACER

Application: Insulating Glass Doors for commercial refrigeration

- Doors, side elements
- Air-filled insulating glass
- Energy conservation
- No additional technical requirements



DOWSIL™ CRYSTAL CLEAR SPACER

GET YOUR FULL VISION WITH A FLEXIBLE, PRODUCTIVE AND DURABLE CLEAR SPACER



Features

- Very high transparency
- Fast manual application
- Chemical adhesion to glass
- Flexible, elastic Silicone
- Supplied ready to use
- No outgasing



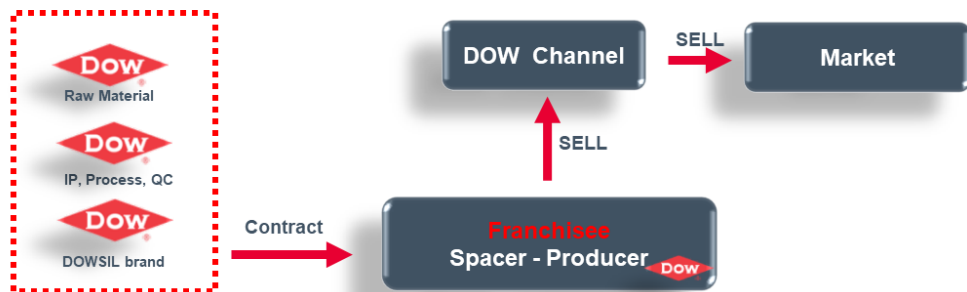
Benefits

- Crystal Clear aesthetics
- Increased cost efficiency
- High adhesion durability
- Various shapes, round, rectangular, etc.
- Flexible spacer accommodating movement
- Compatibility to Dow Silicones for Insulating Glass

SOLD THROUGH DOW TECHNICAL DISTRIBUTION

Where do I get my spacer?

- Discuss your needs, spacer sizes, individual length of DOWSIL Crystal Clear Spacer with your DOW distributor
- Spacer will be made available based on your individual needs
- DOW proven quality, tailored to your needs

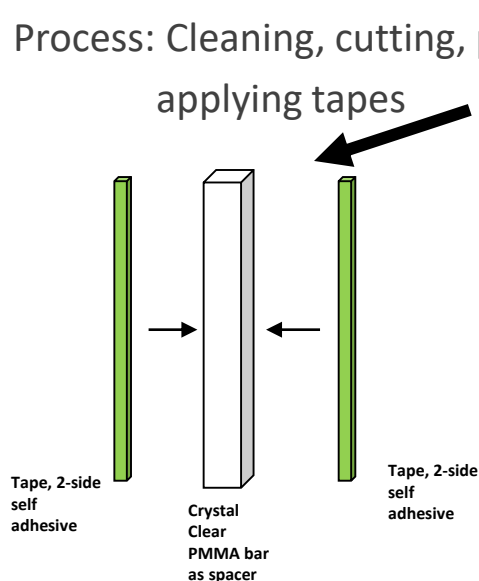


COST & PRODUCTIVITY ENHANCEMENT

TODAY Solution: PMMA, PC, glass bars

- ✓ Crystal clear spacers PMMA, PC, glass bars
- ✓ Process: Cleaning, cutting, priming

applying tapes



NEW DOWSIL Crystal Clear Spacer:

- **Glass cleaning & Priming**
- **Spacer application**
- **Chemical adhesion in 5 Minutes**
- **DONE**



REALIZING CRYSTAL CLEAR SHAPED IG UNITS



First units have been produced and placed in supermarket



DOWSIL™ CRYSTAL CLEAR SPACER PRODUCT DETAILS

Where to buy

- Contact Your local DOW Technical distributor

Promotion

- DOW Spacer application manual
- DOW Sell sheets
- DOW Technical data sheet

Application

- Flexible Silicone Spacer for Insulating glass, air-filled
- IG for commercial refrigerator doors, side elements, etc.

Dimensions

- Length: < 1,80 m per spacer
- Thickness: 12,5 mm
- Bite: 10 mm
- Other dimensions tailored to your needs

Price

- Dependent on spacer dimensions, spacer length and volume
- For specific price requests, please contact your local distributor.
- Indicative price 9,5-10,5€/m

Samples for testing

- Samples available on request. Please contact Davide Bianchi



DOW



DOWSIL™ MEMBRANE FAÇADE SYSTEM

A system for façade sealing

Providing high quality and a compatible solution

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DOWSIL™ MEMBRANE FAÇADE SYSTEM FOR FAÇADE SEALING

OFFERING AN OPTION WITH HIGH QUALITY AND COMPATIBLE COMPONENTS



Features

- **High quality** due to use of NORDEL™ EPDM raw materials from Dow
- **Compatible solution** through System Package: Membrane & Adhesive
- **Quick and easy** installation
- One stop shop
- Acts as a vapor control acc. To EN 13984
- Act as a vapor control acc. to EN13984



Benefits

- Compatible solutions gives peace of mind
- High performance at low thickness allowing high Flexibility for 3-dimensional fitting
- Membrane AND Adhesive: Resistant to UV light, temperature extremes, chemical pollutants and moisture
- Low VOC materials (sealant & membrane) complying with very high indoor air quality standards



DOWSIL™ MEMBRANES FAÇADE SYSTEM

PRODUCT

Product	Description
DOWSIL™ Membrane	High performance EPDM membrane for use as water vapor control layer according to EN 13984: <ul style="list-style-type: none">• DOWSIL Membrane Dual• DOWSIL Membrane Outside
DOWSIL™ 300 Adhesive	One component, elastic SMP Adhesive



DOWSIL™ MEMBRANES FAÇADE SYSTEM

DOWSIL™ MEMBRANES AND DOWSIL™ 300 ADHESIVE



High performance EPDM membranes

- DOWSIL™ Membrane DUAL 0.6
- DOWSIL™ Membrane DUAL 1.0
- DOWSIL™ Membrane DUAL 1.2
- DOWSIL™ Membrane OUTSIDE 0.6

	DOWSIL™ Membranes DUAL 0.6	DOWSIL™ Membranes DUAL 1.0	DOWSIL™ Membranes DUAL 1.2	DOWSIL™ Membranes OUTSIDE 0.6
Thickness [mm]	0.6	1.0	1.2	0.6
Length [m]	25	25	25	25
Width [mm]	100, 150, 200, 250, 300, 350, 1400 *	100, 150, 200, 250, 300, 350, 1400 *	100, 150, 200, 250, 300, 350, 1400 *	100, 150, 200, 250, 300, 350, 1400 *

*Other dimensions available on request

**The graphic representations are presented here for illustrative purposes only and should not be construed as product specifications.

- DOWSIL™ 300 Adhesive – black, 600ml SGE



DOWSIL™ MEMBRANES FAÇADE SYSTEM

DOWSIL™ MEMBRANES AND DOWSIL™ 300 ADHESIVE



Certifications

- DOWSIL™ Membranes acc. to EN 13984

Warranty

DOWSIL Membranes & DOWSIL Adhesive 300
Level 1 (product warranty)

Samples

- Samples are available on request



DOWSIL™ MEMBRANES FAÇADE SYSTEM, MEMBRANES AND 300 ADHESIVE

MATERIAL NUMBERS

Type	Roll Width [mm]	QTY/pallet	Material Number	Type	Roll Width [mm]	QTY/pallet	Material Number
DOWSIL™ Membrane Dual 0.6	1400	28	99124134	DOWSIL™ Membrane Dual 1.2	1400	15	99124023
	1000	28	99152241		1000	15	99152198
	600	35	99152197		700	15	99152240
	350	70	99124022		600	15	99152196
	300	105	99124105		466	30	99152199
	250	105	99124106		350	30	99124024
	200	140	99124107		300	45	99124029
	150	210	99126946		250	60	99124142
	100	315	99126948		200	75	99124144
DOWSIL™ Membrane Dual 1.0	1400	21	99124141		150	90	99126945
	350	48	99124139		100	150	99127040
	300	72	99124150	DOWSIL™ Membrane Outside 0.6	1400	28	99124121
	250	96	99124143		350	70	99124122
	200	120	99124145		300	105	99124025
	150	144	99126949		250	105	99124026
	100	240	99126921		200	140	99124136
					150	210	99127029
					100	315	99127216
DOWSIL™ 300 Adhesive	600 ml SGE	20 SGE/ carton 50 cartons/ pallet	99150339				



WHAT HAPPENS TO FAÇADE/BUILDING COMPONENTS WHEN MOISTURE/WATER VAPOR TRANSMISSION IS NOT CONTROLLED



DOWSIL™ MEMBRANE FAÇADE SYSTEM - APPLICATIONS



▲ sealing the window perimeter



▲ sealing the joint between floors



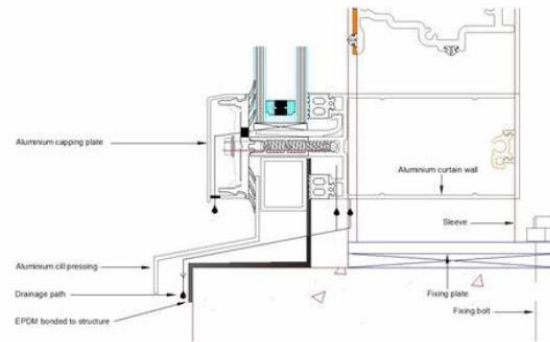
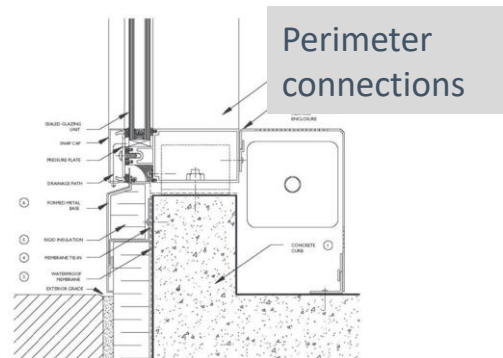
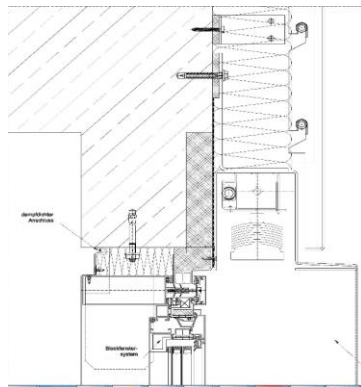
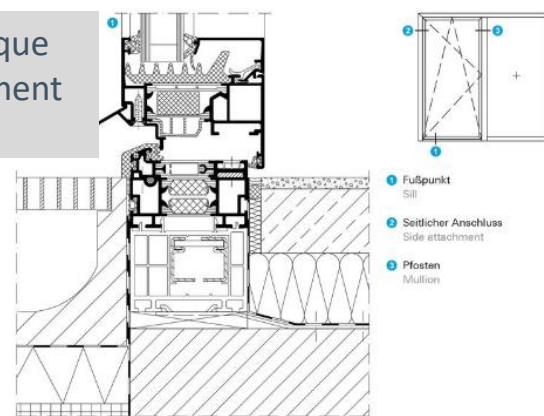
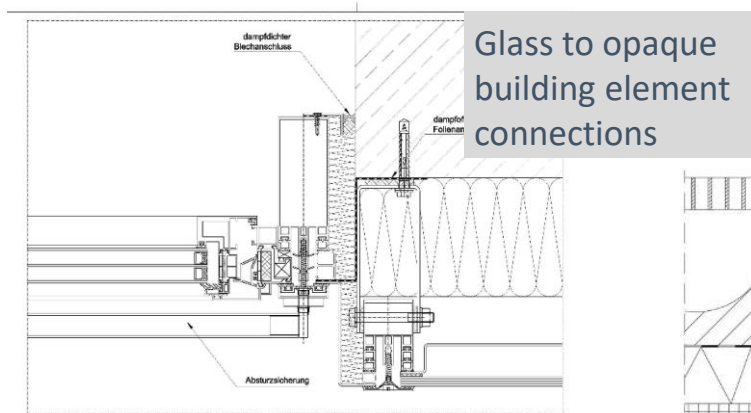
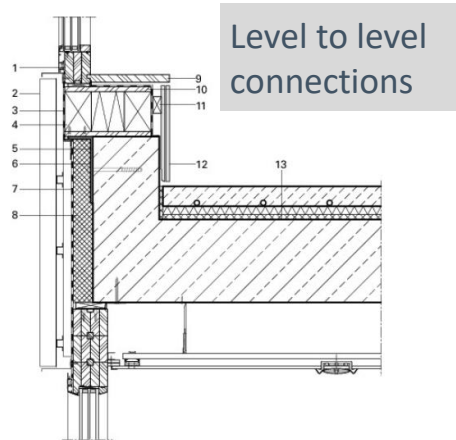
▲ sealing the window perimeter, window/starter sill



▲ sealing the vertical-to-horizontal transition location



SEAL CHALLENGING CONNECTIONS:





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DOWSIL™ 335 BUTYL SEALANT

DOWSIL™ 3363 IG SEALANT

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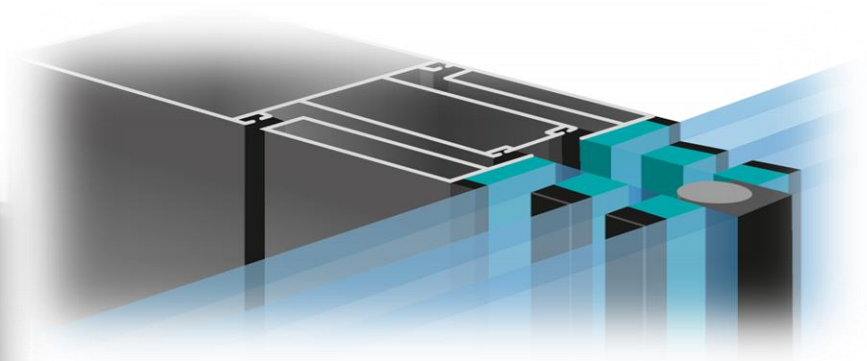
High Performance for incredible heights DOWSIL™ 3363 High Strength IG



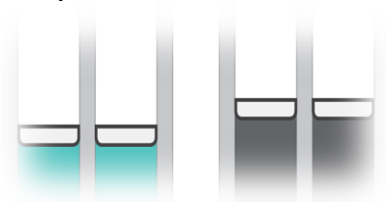
#Adrian Smith & Gordon Gill Architecture - Jeddah Tower, Jeddah / DOWSIL 993/3363/791



Proven DOWSIL™ 3363 Insulating Glass Sealant for enhanced productivity and economic joints in demanding applications



- A fully compatible package for pure glass facades
- Bundled with DOWSIL 335 Butyl it further enhances aesthetics for one edge-one color and one system



DOWSIL™ 335 BUTYL SEALANT SPECIAL BLACK



Features

- **High temperature resistance** up to **+95°C**
- Meets the requirements acc.to EN 1279- (part 2,3 & 4)
- **Good physical adhesion** to glass and a variety of warm edge and standard spacers
- **Solvent-free*** and **odorless**
- **Compatible** with the DOWSIL™ range of neutral façade silicone materials

* being manufactured without added solvent.



Benefits

- No evidence of Butyl trickles or flows due to high temperature resistance
- Homogeneous edge due to color matching to
 - DOWSIL™ 3362 Insulating Glass Sealant
 - DOWSIL™ 3363 Insulating Glass Sealant
- System package - one stop shop



DOWSIL™ 335 BUTYL SEALANT

PRIMARY SEALANT FOR GAS-FILLED INSULATING GLASS



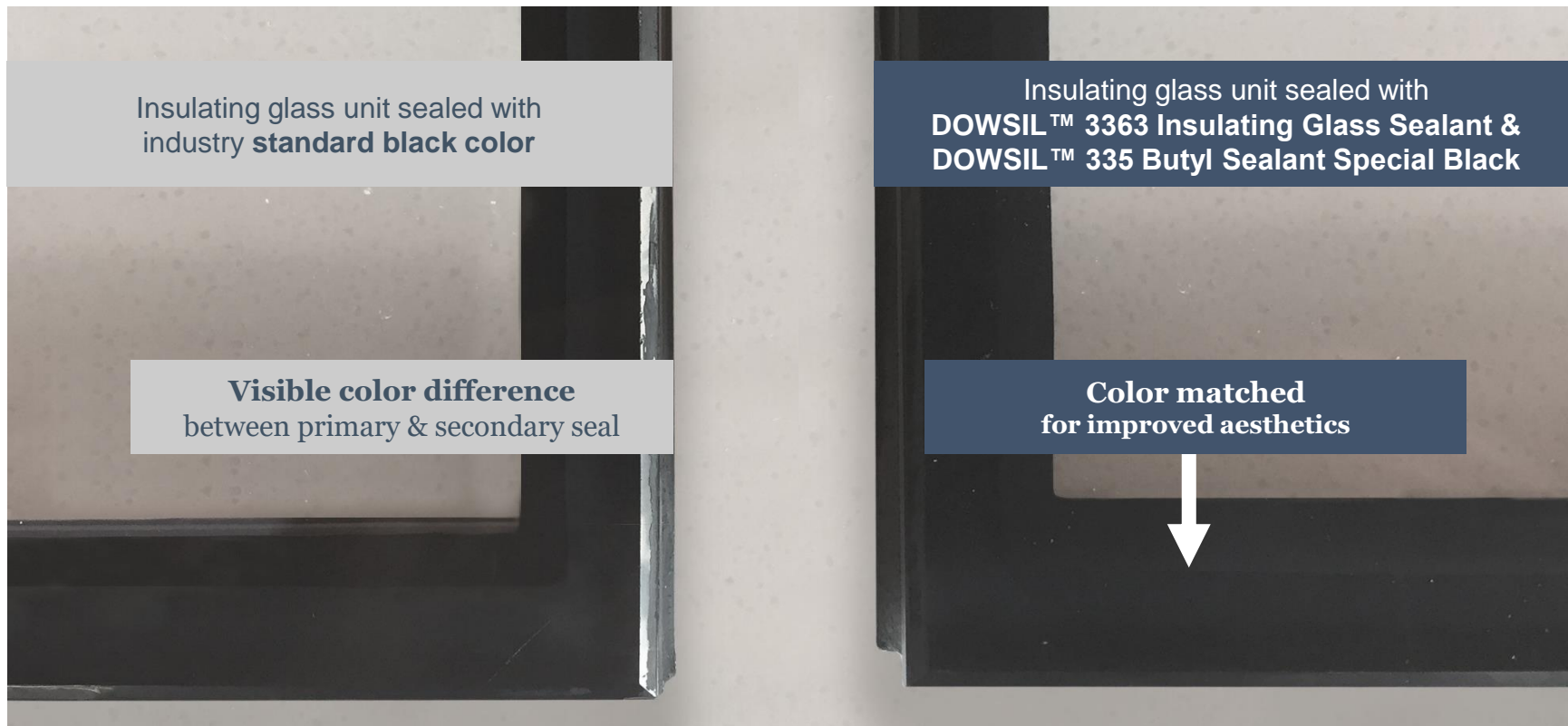
Application

- Butyl primary sealant for Insulating Glass
- Commercial and residential insulating glass



DOWSIL™ 335 BUTYL SEALANT SPECIAL BLACK

PRIMARY SEALANT FOR GAS-FILLED INSULATING GLASS



DOWSIL™ 335 BUTYL SEALANT

TECHNICAL SNAPSHOT PRODUCT PROPERTIES

Material numbers

DOWSIL™ 335 SPECIAL BLACK, 7.4 kg slug *	99151264
DOWSIL™ 335 SPECIAL BLACK, 200kg drum	99151265
DOWSIL™ 335 BLACK, 7.4kg slug*	99151196
* 96 slugs/ pallet	

Certifications (Special Black)

- Compatibility to DOWSIL™ 3363, 3362, 993, 994
- DOWSIL 335 Specail Black:
 - EN 1279 part 2/3/4
 - High temperature test
 - CEKAL
- DOWSIL 335 Black:
 - EN 1279 part 2

Applications

- Butyl primary sealant for Insulating Glass
- Commercial and residential insulating glass
- Applicable with standard butylizers
- *NOTE: not to be used with soft/flexible spacers*

Colors

- Standard black
- Special black (color matched)

Warranty

- No warranty as for any other Butyls in the market

Samples

- Samples are available on request

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DOWSIL™ 375

CONSTRUCTION & GLASS EMBEDDING

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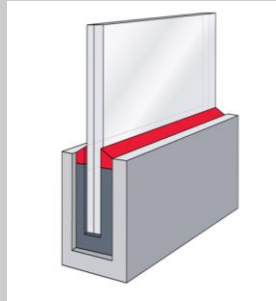
DOWSIL™ 375 CONSTRUCTION & GLASS EMBEDDING

EFFICIENCY, DURABILITY, AESTHETICS



Features

- New high strength polyurethane technology
- Superfast curing
- Excellent flowability
- Light packaging
- Black color option



Benefits

- Enhanced productivity
- Efficient & fast application
- Pure glass aesthetics & invisible bond
- Ergonomic handling due to light packaging
- Compatible & warranted system
(top seal: DOWSIL™ 813C Silicone)



DOWSIL™ 375 CONSTRUCTION AND GLASS EMBEDDING: APPLICATION

Apply tape to protect glass



Apply release agent on glass and U-profile



Insert glass panel into U-profile



Fix with setting blocks and block gaps



Pour part B in part A pail and mix thoroughly



Transfer into U-profile by pumping or pouring



Allow to level and leave to cure



Certified according DIN 18008-4



MARKETING MIX STRATEGY – 4P

DOWSIL™ 375 CONSTRUCTION & GLASS EMBEDDING

Price

- Value pricing & Specification
- Selling price DOWSIL 375: distribution 7,5-8 €/kg
- Direct: 8-9€/kg
- Color paste directly by distribution

Where to buy?

- Direct or through distribution
- Samples available on request; please contact Guy Beaucarne

System package

- DOWSIL 375 PU
- DOWSIL 813 SI
- COLOR PASTE Black
- Silicone spray recommendation

Product

- DOWSIL 375 Glass Embedding Part A - Polyol, 16kg pail (GMID available)
- DOWSIL 375 Glass Embedding Part B - Hardener, 3kg (GMID available)
- Color paste (distribution only)
- DOWSIL™ 813 Silicone

Promotion

- Technical datasheet
- Glass Embedding sellsheet
- Glass Embedding application video
- Distributor launch video
- External presentation
- Webinar, PBM, Direct promotion

Certification & Warranty

- 10 Years product warranty
- System (DOWSIL 375 & 813)
- Under Quality Bond Program
- Impact resistance testing and approval ongoing
- Global certification need: not (yet) considered



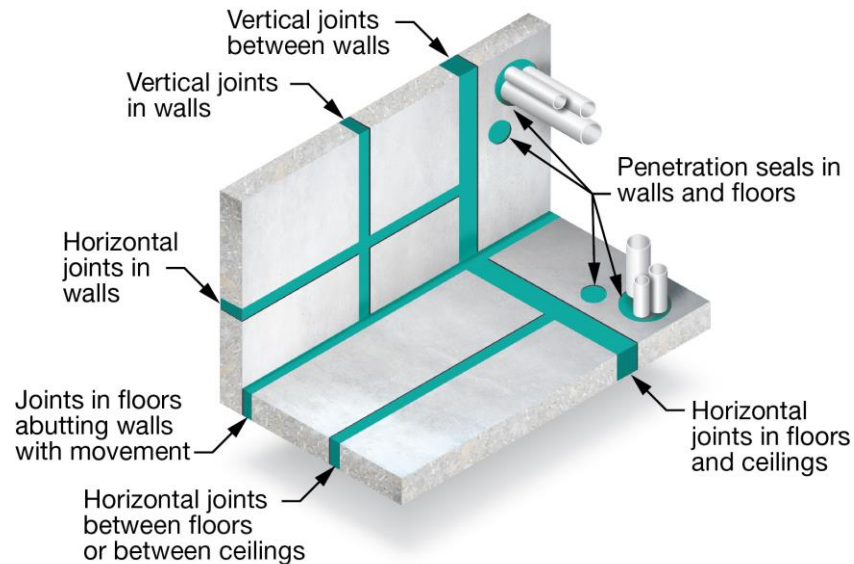
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DOWSIL™ FIRE SAFETY FOR HIGH PERFORMANCE BUILDINGS

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DOWSIL™ FIRE SAFETY RANGE APPLICATIONS



DOWSIL™ FIRE RESISTANT SEALANT RANGE

DOWSIL™ product	Type	Application
DOWSIL™ 3-6548 RTV Silicone Foam	2p silicone foam	Penetration seals in floors and walls, linear joints in floors
DOWSIL™ FIRESTOP 700 Sealant	1p silicone, gun grade	Linear joints in walls, penetration seals in walls
DOWSIL™ Smoke Seal 800SL	1p silicone, self leveling	Linear joints, smoke seals
DOWSIL™ FIRESTOP 400 Sealant	1p acrylic, intumescent	Internal perimeter pointing around fire-rated door and window frames



DOWSIL™ 3-6548 RTV SILICONE FOAM | CHARACTERISTICS

- Two-component dark grey silicone rubber foam
 - 50% closed cell
 - Low density (machine-manual mixing: 0.3-0.523 g/cm³)
 - Excellent fire movement capacity (25%)
 - Thermal Conductivity= 0.084 W/mK
- Certified for
 - Fire rated penetration seals in floors according to annex B of EN1366-3: small cables (Ø27mm) with PVC sheathing and medium cables (Ø50 mm) : up to EI 60
 - Fire rated penetration seals in walls and floors according to BS476-22: up to EI 240
 - Fire rated linear joints in floors (EN1366-4): up to EI120



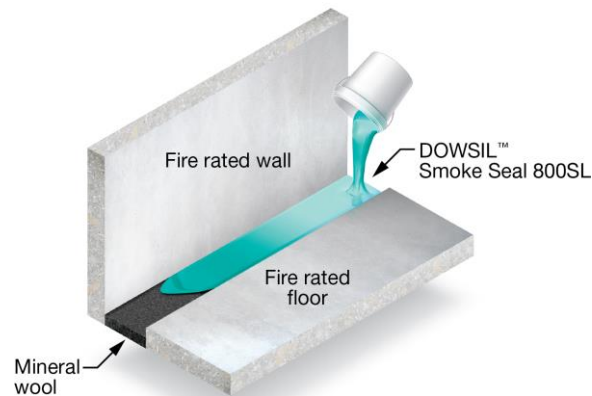
DOWSIL™ FIRESTOP 700 SILICONE SEALANT | CHARACTERISTICS

- A low-modulus, one-part, neutral-curing silicone
 - Excellent adhesion to most porous and non-porous surfaces
 - Joint movement capability ($\pm 50\%$) according to EN ISO 11600
- Application
 - Working time: 15 minutes
 - TFT: 1.5 hours
- Certified for
 - Fire rated horizontal and vertical linear joints in walls (EN1366-4 and BS476-22)



DOWSIL™ SMOKE SEAL 800SL | CHARACTERISTICS & APPLICATION

- A self-leveling, one-part, neutral curing silicone
 - Expansion joints in fire compartment floors or at the connection between floor slab and wall
 - Maintains the MW in place during thermal movements to avoid vertical flame and smoke spread
 - Excellent adhesion to most porous and non-porous surfaces
 - Excellent fire movement capacity (25%)
- Application
 - Skin over time: 25 minutes
 - TFT: <1 hour
- Certified for
 - Fire rated linear joints in floors/floor to wall (EN1366-4)



DOWSIL™ FIRESTOP 400 ACRYLIC SEALANT

- A one-part, intumescent acrylic rubber sealant
 - Internal perimeter pointing around fire-rated door and window frames
 - Sealing of small internal joints between fire-rated partitions used in offices, for example, to separate rooms
 - Its intumescent qualities helps support the sealant to swell in heat conditions to form an effective barrier against fire and smoke
 - Low movement capacity (7.5%)
 - Good adhesion to a variety of substrates without the use of a primer
 - Does not emit halogenated by-products under fire conditions

- Certified for
 - Vertical linear joints in wall (150 mm) applications (BS 476-20)
 - Bite ranging from 6 to 25mm, thickness from 6 to 15 mm
 - Single (EI 60) and double joints (EI 240)
 - Backing material: MW and PU/PE



DOWSIL™ FIRE-RATED SEALANTS FOR SMOKE AND FIRE RETARDANCY

✓
EN 1366

✓
ETA

DOWSIL™ FIRESTOP 700 Silicone Sealant

Fire-rated sealant for interior and exterior linear joints and penetration seals

DOWSIL™ FIRESTOP 400 Acrylic Sealant

Fire-rated paintable seals for interior walls and gap sealing

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DOWSIL™ FIRE-RATED SEALANTS FOR SMOKE AND FIRE RETARDANCY



**DOWSIL™
Smoke Seal 800SL**

Fire-rated self-leveling sealant for floor joints
and horizontal connection seals



**DOWSIL™ 3-6548
RTV Silicone Foam**

Fire-rated silicone foam for sealing linear
cable/pipe penetrations and gaps













SUSTAINABLE SOLUTIONS










Low VOC OFFERING

Structural Glazing

Windows & Doors

Regulation or protocol	DOWSIL™ 895	DOWSIL™ 993	DOWSIL™ 994	DOWSIL™ 896	DOWSIL™ 776	DOWSIL™ 796	DOWSIL™ 799EU	DOWSIL™ 994
French VOC réglementations								
French CMR components	✓	✓	✓	✓	✓	✓	✓	✓
Italian CAM Edilizia	✓		✓	✓	✓	✓		✓
AgBB/ABG	✓	✓	✓	✓	✓	✓	✓	✓
Belgian Regulation	✓	✓	✓	✓	✓	✓	✓	✓
EMICODE	EC1 Plus	EC 1 Plus	EC 2	EC 1	EC 1	EC1 Plus	EC 1	EC 2
Indoor Air Comfort	✓	✓	✓	✓	✓	✓	✓	✓
Indoor Air Comfort GOLD	✓	✓				✓		
Blue Angel (DE-UZ 123)	✓		✓	✓	✓	✓		✓
BREEAM International	Exemplary level	Compliant	Exemplary level	Exemplary level	Exemplary level	Exemplary level	Compliant	Exemplary level
BREEAM Norway	✓	✓			✓	✓	✓	
CDHP	✓	✓	✓	✓	✓	✓	✓	✓
M1	✓	✓				✓	✓	
LEED v4.1								

Low VOC OFFERING

	Weaterproofing			Insulating Glazing			Fire Safety
Regulation or protocol	DOWSIL™ 791	DOWSIL™ 813C	DOWSIL™ Membrane	DOWSIL™ 300	DOWSIL™ 3362	DOWSIL™ 3363	DOWSIL™ FIRESTOP 700
French VOC régulations							
French CMR components	✓	✓	✓	✓	✓	✓	✓
Italian CAM Edilizia	✓	✓	✓				
AgBB/ABG	✓	✓	✓	✓	✓	✓	✓
Belgian Regulation	✓	✓	✓	✓	✓	✓	✓
EMICODE	EC1 Plus	EC1 Plus	EC1 Plus	EC1 Plus	EC 1	EC 1 Plus	EC 1 Plus
Indoor Air Comfort	✓	✓	✓	✓	✓	✓	✓
Indoor Air Comfort GOLD	✓	✓	✓	✓		✓	✓
Blue Angel (DE-UZ 123)	✓	✓	✓				
BREEAM International	Exemplary level	Exemplary level	Exemplary level	Exemplary level	Compliant	Compliant	Compliant
BREEAM Norway							
CDHP	✓	✓		✓	✓	✓	✓
M1	✓	✓	✓	✓	✓	✓	✓
LEED v4.1	✓	✓	Compliant	✓	✓	✓	

UNPARALLELED EXPERTISE MAKE US THE SOLUTION PROVIDER OF CHOICE

DESIGN SUPPORT

Design Recommendations, Blue Print Review, Advanced Calculations



APPLICATION SUPPORT

Start-up Service, Technical Trainings, Quality Bond Audits, New Technology Implementation



FAÇADE EXPERTISE

Hyper Elastic Material Models, FEM, Thermal Modelling



MATERIAL TESTING

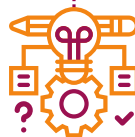
Substrate Adhesion, Compatibility, Staining, Analytical Support



DIGITAL PROJECT MANAGEMENT

COOL – Construction OnLine

Testing, Review, Calculation, Warranty



GLOBAL PRESENCE LOCAL SUPPORT

Local product certifications
Local technical distributor



LABORATORY SERVICE FOR PROJECTS



THANK YOU



Cornish College
of the Arts
Student Housing
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Architects and Casey
Braunger

ICE Krakow
Photo credit:
Courtesy of
Wojciech Wandzel

Shenzhen Ping
Photo credit:
Ping
An Insurance Group

Façade of the ICE
Krakow Kongress
Photo Credit:
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Baku Towers
Photo credit:
Photography by
Farid Khayrulin,
Design HOK

TSSA-Press Glass
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TSSA-Press Glass

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Seek

Together™