







# MODERN SIMPLE AND ELEGANT

Well thought-out architecture is the challenge of an aesthetically pleasing building that has to provide modern-day living comfort and at the same time satisfy the demands of an energetically optimised building.

The façade should play a major part in a modern and sophisticated building.

For façades with rear-ventilation we can offer our partners and customers an adhesive system by reputable manufacturers from Europe that can meet all demands that are made on a façade.

An optically pleasing façade leaves no space for screws and rivets. They are a thing of the past.

Our partners such as Saint Gobain and EGO Adhesives have years of experience with adhesive systems and can benefit from a large number of reference projects.

We are only too pleased to provide our customers and their partners with technical support.



SEALS. REALLY. WELL.
CUTS. REALLY. WELL.
BONDS. REALLY. WELL.

The DRG system holds many advantages in both new constructions and renovations.







#### Advantages:

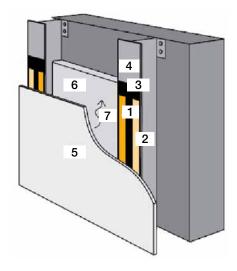
- Perfectly attractive design without rivets and screws
- Flexible and elastic adhesive joints
- Cost-saving due to economical installation
- Protection against contact corrosion
- Increased thermal separation on the outer wall
- Our partners have years of experience and references
- Huge cost-saving in installation
- An insulation system for standard types of panel

#### The value of beauty

Taking into consideration the total costs of a project with a mounted façade and its life cycle of over 30 years, the cost of an invisible mounting is very low in comparison with the technical solution of smooth elegance.



# The basic concept of our façade system is 'a one-stop product'



- 1. EGOsil one-part moisture-hardening structural adhesive\*
- Installation tape Saint Gobain Thermalbond V2100 or V2200, double-sided adhesive tape for securing the panels\*
- 3. EGO primer pigmented, solvent-based bonding agent\*
- 4. Aluminium profiles
- 5. Façade panel
- 6. Insulation material (e.g. mineral wool)
- 7. Rear ventilation space







<sup>\*</sup> from DRG



# The components from one source

DRG's solution consists of an adhesive from EGO and duct tape for installation from Saint Gobain, as well as various products for pre-treatment of the subsurface.

The two-sided adhesive tape is open-cell and is used for temporarily fixing the façade panels while the adhesive is hardening. The adhesives are one-part, moisture-hardening adhesives which can withstand extreme dynamic and static stress as well as weather conditions. After hardening the adhesive remains permanently elastic and is therefore able to bond various materials with varying thermal coefficients of expansion. It eliminates load fatigue at the corners of the panels and prevents cold bridges.

The calculation of the adhesion joint depends on the weight and size of the panels, the maximum wind load (pressure-suction effect) and differences in the temperature.

We are only too pleased to support you in the calculation of the materials required.

## DRG Façade Adhesion Systems

	EGOsil 333	EGOfex 421
Chemical basis	One-part, moisture hardening structural silicone adhesive, neutral cure (oxime)	One-part moisture hardening structural polyurethane adhesive
Typical uses	Exterior wall facing for opaque panels, in particular porous concrete elements and printed and coated glass	Exterior wall facing for opaque panels
Colour	black	Grey or white
Delivery method	600 ml foil bag	300ml cartridge 600ml foil bag
Skin-forming time	approx. 10 minutes	60 min.
Working temperature	-60°C to +150°C	-40°C to +80°C
Storability	12 months	9 months

Adhesive tape Thermalbond V2200	Open-cell polyurethane foam tape for securing Panels
Adhesive agent	Primer stick
Remover	Total removal of adhesive remains
Cleaning agent	For cleaning of metal



## EGOsil 333

#### One-part silicone sealant



EGOsil 333 is a ready-to-use neutral, high quality one-part silicone sealant, which in reaction with air moisture vulcanizes to an elastic seal.

- Extremely strong adhesion
- Resistant to UV and weathering
- High mechanical rigidity
- Stable
- Quick curing

- Tack-free after a short time
- Premium quality application
- Tested in accordance with ift guidelines DI-01/1 and DI-02/1

Technical data – Product features					
Curing system:		neutral (oxime)			
Density	DIN EN ISO 10563 approx. 1 g/cm <sup>3</sup>				
Application temperature	+5 °C to +40°C				
Temperature stability		-60 °C to +150°C			
Shore A hardness	DIN 53505	арргох. 33			
Ausspritzverhalten	DIN EN ISO 8394-1	approx. 240 g/min (6mm; 3bar)			
Modulus at 100 % elongation	DIN EN ISO 8339	approx. 0,6 N/mm2			
Volume shrinkage	DIN EN ISO 10563	< 10 %			
Elastic recovery	DIN EN ISO 7389	ca. 100 %			
Movement accommodation		20 %			
Viscosity	DIN EN ISO 7390	stable			
Skin formation time		5 - 6 minutes			
Cure rate		approx. 2 mm/24 hours.			
Ignition temperature	DIN 51794	approx. 450 °C			
Building material class	DIN 4102 DIN EN 13501	B2, flammability Euro class E			

STORAGE: AT 5°C AND DRY IN ORIGINAL PACKING; DURABLE 12 MONTHS AFTER RECEIPT BY CUSTOMER.

The information in this data sheet is based on results taken from practical experience and tests we have carried out and are no assurance of properties in the sense of rulings of the BGH (Federal Court of Justice).

As we have no influence on the variety of materials or of processing of these, no obligations can be derived from this information or from consultation with our technical customer service. We recommend carrying out your own testing in each case.

Please observe our processing guidelines.



## Thermalbond® V2200 Series

#### Polyurethane foam spacer for structural glazing



The Thermalbond V2200 series designed by Saint Gobain was intended specially to provide the following features. Due to the open-cell structure of the foam, air and moisture can reach the silicone to give optimum hardening.

The semi-rigid polyurethane foam is compatible with all silicones tested. Low thermal conductivity improves the performance of the wall and can support LEED points. Excellent resistance to temperature variations, fungi and oxidation. With polyethylene or polypropylene liner which can easily be removed without leaving cracks.

#### Sizes available:

Standard thickness: 3.2, 4.8, 6.4, 6.0 and 9.5mm

Standard roll dimension: 1422 wide. Cut lengths are also available.

The standard roll length depends on the thickness.

#### Technical data - Product features

Material		semi-rigid polyurethane foam		
Density, kg/m³	ASTM D-1667	352		
Force to compress 10%, kPa	ASTM D-1667	110		
Hardness Shore A	ASTM D-2240	30		
Tensile strength, kPa	ASTM D-412	896		
Elongation (%)	ASTM D-412	105		
Dynamic tensile adhesion kPa -15 min. dwell	NTP-11	310		
Dynamic shear adhesion kPa -15 min. dwell	NTP-5	206		
Static shear adhesion (hours@RT) -7 kPa load	NTP-57	2000+		
Thermal conductivity K factor - BIU, w/m°C	ASTM C-518	0.08		
Migratory staining of acrylic enamel 200 hours UV@60° (140°F)	ASTM D-925	no staining		

**STORAGE:** DRY AT ROOM TEMPERATURE IN ORIGINAL PACKING. SHELF LIFE 1 YEAR AFTER RECEIPT BY CUSTOMER.

Contact surfaces must be clean and dry, also free from oil, grease, dust and dirt. We recommend cleaning with products of Weiss-Chemie which we are pleased to offer you.

Apply the adhesive tape using even pressure of 103 kPA (15psi) in order to achieve good contact between the adhesive tape and the material on which it is to be used. The processing temperature should be between 16°C and 50°C (60°C and 125°F). We do not recommend processing at below 16°C (60°F) as the adhesive is too solid at low temperatures and will possibly not bond well.

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## Façade adhesion: simple with DRG-Coro 99XX SPT!

Modern adhesive technology opens new perspectives for façade and glazing construction. Using suitable adhesive systems façade constructors can achieve rigidity that permits intricate, seamless glass façades and structural glazing façades of the highest aesthetic appearance. In such constructions the panels become co-supporting elements of the façade, posing high demands on the adhesive system used and which can be implemented with the product DRG-Coro 99XX SPT for glass façades. Set new aesthetic standards in glazing design and technology!

#### Quick, secure and for ever

Bonded glass façades are among the most sophisticated tasks in façade construction due to the demands on stability and durability. The DRG-Coro SPT series are specially designed two-sided adhesive tapes with immense bonding strength, especially developed for adhesion of façade elements of glass and structural glazing façades. They join glass elements in façade construction to their sub-construction safely and durably. Adhesion is faster and more rational than with conventional bonding methods, no matter whatever material the bonding partner is.

#### Stability and long life are guaranteed

The adhesive tape series consists entirely of a close cell high-performance acrylic adhesive with unique viscose elasticity, which remains even after final rigidity is reached. Due to this viscose elastic adhesion façade elements bonded with the SPT series can withstand impact, shock, tensile and shearing stress without loss of stability.

With a view to ageing and weathering resistance this type of adhesive tape is superior to conventional adhesive systems: as the process for glass façades in construction cannot be damaged by fixtures, the vulnerability toward corrosion and leaks is reduced.

#### Economic advantages for installers and façade constructors

Façade elements bonded with DRG-Coroplast have economic advantages throughout the processing chain, in addition to their aesthetic advantages: glass façade elements can be produced quickly and cleanly using the adhesive tapes. The prefabricated elements can be transported after a short time and ideally, ready to mount.

Attachment of glass façade elements to the sub-construction by the façade constructor is quicker than usual: the pre-fabricated glass panels are simply pressed onto the construction and immediately upon pressing reach up to 80% of the maximum bonding strength. There is no longer any awkward handling with silicone adhesive for glass, no wasted time waiting for hardening. This means rational installation on schedule at lower cost.

# Coroplast 9904 SPT, 9908 SPT, 9911 SPT, 9915 SPT, 9920 SPT, 9930 SPT high-performance adhesive tape

#### Technical data

Adhesive tape composition

Adhesive: modified acrylic adhesive Backing: close-cell acrylic foam, grey Adhesive: modified acrylic adhesive

Masking: PE foil

#### **Product features**

Very good resistance to temperature Excellent adhesive properties and shearing strength values Available as converter roll, single roll, level wound spool or stamped part

Test	Norm / standard	Unit	Typical value					
			9904 SPT	9908 SPT	9911 SPT	9915 SPT	9920 SPT	9930 SPT
Tape thickness	DIN EN 1942	mm	0.5	0.9	1.2	1.6	2.1	3.1
Elongation at break	DIN EN 14410	%	750	750	750	750	750	650
Breaking strength	DIN EN 14410	N/cm	6	10	16	20	25	30
Adhesive strength on steel	DIN EN 1939	N/cm	20	20	26	28	30	32
Adhesive strength on acrylic lacquer *	DIN EN 1939	N/cm	11	12	24	24	24	24
Shearing strength		Min	> 10.000	> 10.000	> 10.000	> 10.000	> 10.000	> 10.000
Temperature range		°C	- 40 - +160	- 40 – +160	- 40 – +160	- 40 – +160	- 40 - +160	- 40 – +160

<sup>\*90°</sup> deduction after 72h, aluminium reinforced. / 90° peel test; dwell time 72h.



## References



Apple, Corl, IRL Product: Thermalbond V2200 Processor: Marte Glas



Opernpassage Vienna Product: Thermalbond V2200 EGOsil 333



Orbi Tower, Vienna Product: Coroplast 9915 Processor: Strabag



Pier East Vienna Airport Product: Thermalbond V2200 EGOsil 333



**Autohaus Benda Simmering** Product: EGOsil 333



Siemens City Vienna Product: Thermalbond V2200, EGOsil 333



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