

SEALANT COMPATIBILITY STRUCTURAL GLAZING

STOPRAY® SMART

*Technical
information*



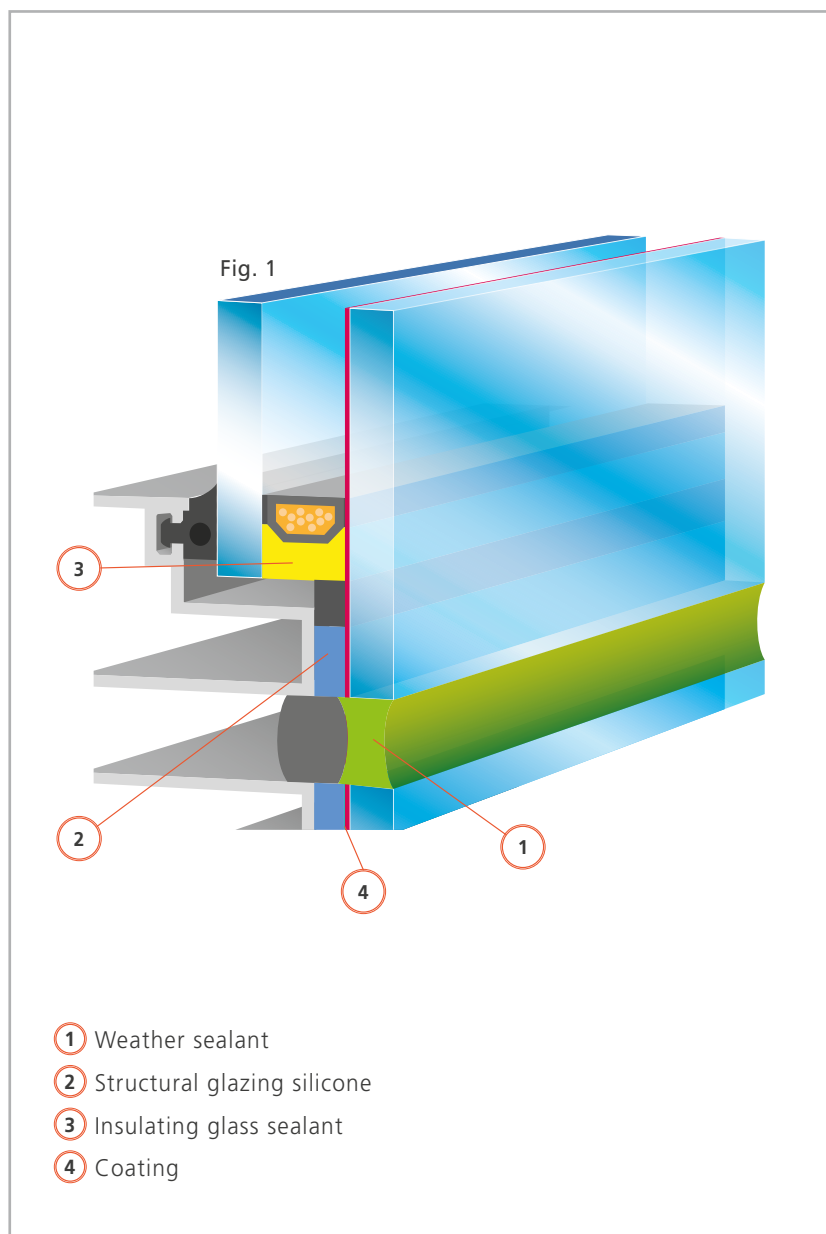
GLASS UNLIMITED

STOPRAY® SMART

Sealant compatibility - Structural glazing

Assembling off-line (i.e. magnetron) silver coated glass into insulating glass units usually requires prior edge-deletion to prevent adverse chemical reactions – between external moisture, the sealants and the silver layer from the coating – from occurring.

For the Stopray® Smart products, tests using different sealants have shown that, under strict conditions described in this brochure, prior edge-deletion may no longer be required.



Important

Only sealants tested with Stopray® Smart products which are referred in this brochure may be used without edge-deletion. **The use of any other sealant requires edge-deletion in any case.**

In case of serigraphy in contact with sealant, edge deletion is required before to apply serigraphy.

AGC recommends a mock up to ensure the desired aesthetic and validate the static load for the join. For special applications like step glazings with exposed coated surface (e.g. roofs, corners of structural glazings, etc.), a weather sealant is always required to protect the coating.



Use of Stopray® Smart products in structural glazing applications

- > Structural glazing is a curtain-wall technique consisting in bonding glass to a building's structural aluminum framework. Structural glazing allows opaque and/or transparent in-fill materials to be bonded to a building structure where glazing and weather sealant only are visible from exterior side. Structural glazing is a specific technique that requires special calculations, AGC recommends its clients to consult AGC's Technical Advice Service.
- > In structural glazing, the glass is glued on the aluminum framework by special structural glazing silicones (Fig.1). In the so called "stepped" insulating glass, it is the responsibility of the glass processor and/or curtain waller to protect the coating by the weather sealant against environmental impact.
- > In all cases, the coating has to be protected properly from external environmental elements and moisture even if the gap between insulating glass units is not sealed by any weather silicone. In this case the sealant has to cover the coated surface until the front end of the glass substrate. The bevel (edge working) helps to protect the coating effective against moisture. The figures 2a and 2b show an example when the insulating glass unit is supported in the spacer by mechanical means. We recommend to always fill the edge after assembling the insulating glass unit.

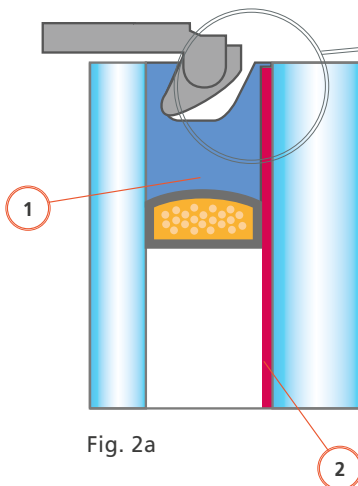
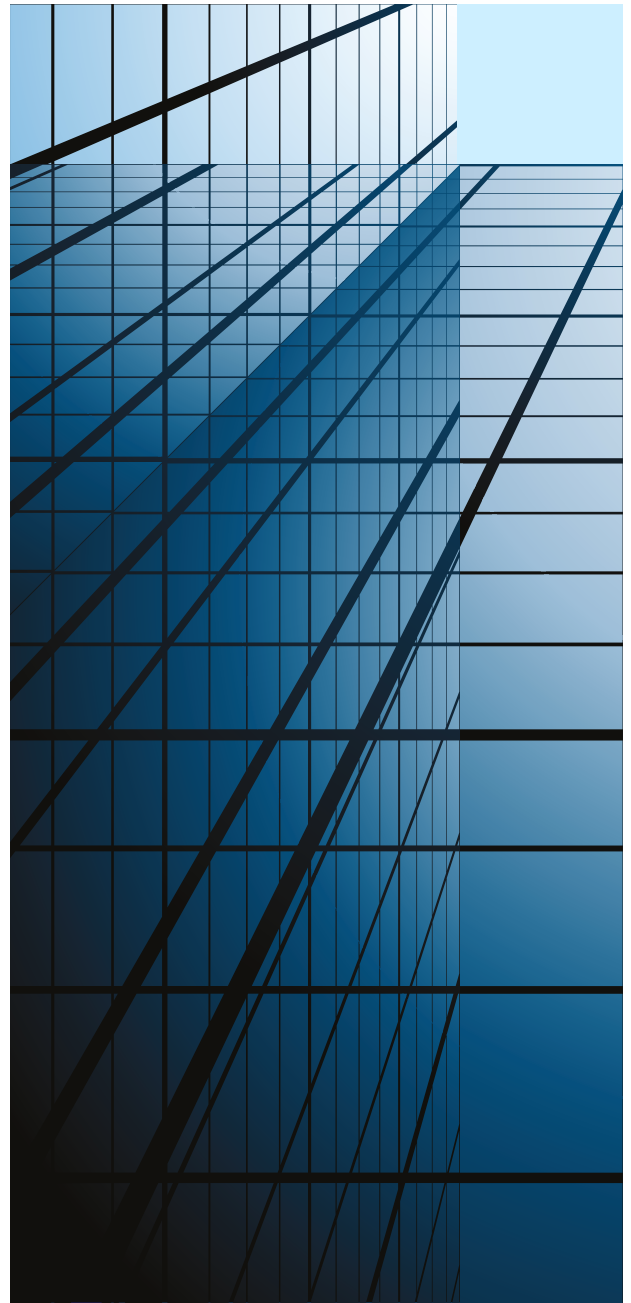


Fig. 2a

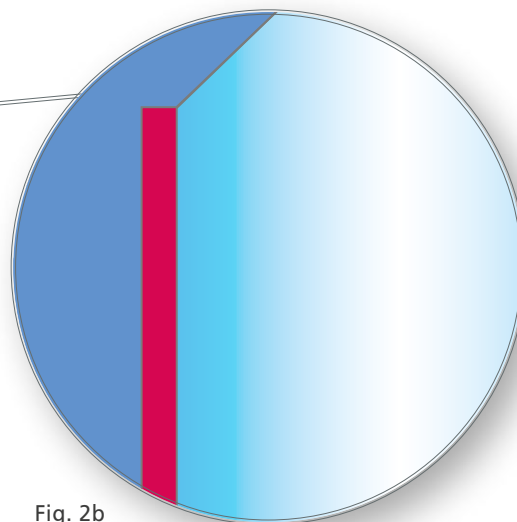


Fig. 2b

- ① Structural glazing silicone
- ② Coating



Compatible insulating glass sealants and structural glazing silicones for Stopray® Smart 51/33 and Smart 30/20

AGC provides a limited warranty to Stopray® Smart products and not provide any warranty regarding further processing or end product, which remains under full responsibility of the processor and or curtain waller.

Manufacturer	Sealant ID	Type	Application	SMART 51/33	SMART 30/20
Dow Corning	DC993	Silicone	Structural glazing	✓	✓
Dow Corning	DC895	Silicone	Structural glazing	●	●
Dow Corning	DC3362	Silicone	Insulated glass	✓	✓
Dow Corning	DC3362 HD	Silicone	Insulated glass	●	●
Dow Corning	DC3793	Silicone	Insulated glass	✓	✓
Dow Corning	DC791	Silicone	Weather sealant	✓	✓
Dow Corning	DC791T (with primer)	Silicone	Weather sealant	✓	✓
Fenzi	Thiover	Polysulphide	Insulated glass	✓	✓
Fenzi	Thiover F1	Polysulphide	Insulated glass	✓	✓
Kömmerling	GD 677	Polyurethane	Insulated glass	✓	✓
Kömmerling	GD 116	Polysulphide	Insulated glass	✓	✓
Kömmerling	PS 200	Polysulphide	Insulated glass	✓	✓
SIKA	SG500	Silicone	Structural glazing	✓	✓
SIKA	IG25	Silicone	Insulated glass	●	●
SIKA	IG25HM+	Silicone	Insulated glass	✓	✓
Tremco	JS 442	Polyurethane	Insulated glass	✓	✓

✓ tested ● under test

Important note

The proper protection of the Stopray® Smart coatings is always under the responsibility from the processor and curtain waller.

It is the responsibility of the processor to inspect the processed coated glass adequately before and after each step of fabrication and prior to installation. Failure to apply all professional standards, customary instructions and processing instructions written in this processing guide and related links will automatically void any warranty regarding coated glass of AGC. We advise the processor to undertake some preliminary trials with the typical glass compositions for the project prior to any further commitment with his customer. The processor is solely responsible for the quality of the final product.

In case of needs, the AGC's Technical Advisory Service is available to supply additional product or process information.

