

Case Study:

Allianz Verwaltungsgebäude – Frankfurt, Theodor Stern Str. 1 Frankfurt am Main, Germany



The Project

- This new base for insurance giant Allianz in Frankfurt was erected on a brown field site.
- As well as a 6-storey block edge structure along Stresemannallee, the complex features a transparent avenue, known as the artery. Individual floors of the building sections are linked via steel bridges within the artery.
- The complex's large transparent facades afford vistas of the Main and the Frankfurt skyline.

The Challenge

- The building's sleek structurally glazed façade was achieved using a four-sided structural glazing systems to achieve glazing which sits flush with the frame.
- The building's insulating glass units have their edge seals fully exposed to the weather, making this an extremely challenging project for Dow Corning's technical team. Extreme variations in temperature, humidity, infrared and ultra-violet radiation require a sealant which can handle the most arduous of conditions.
- Given the high technical specification of the façade, the seal for the movement joints between the glass units required a sealant which would provide an exceptionally high movement capability.

The Solution

- The architects selected Dow Corning 993 for bonding the glass to the frames. Once cured, Dow Corning 993

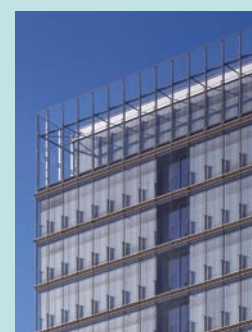
demonstrates excellent resistance to weathering, even under extreme conditions. It is formulated to retain its adhesive and mechanical properties under exposure to oxidizing gases such as ozone, UV radiation, IR radiation, salt spray, etc, throughout its long life. Dow Corning 993 meets all of the requirements according to ETAG 0002 and has a European Technical Approval (ETA) 01/0005 to be used as a Structural Glazing Sealant.

- The edge sealing for the IG units was carried out with Dow Corning 3362 – a two component neutral curing silicone sealant specially designed for high performance insulated glazing units. When correctly used Dow Corning 3362 exceeds BS and DIN performance specifications and fulfils the requirements for use as a secondary glazing sealant as laid down in the EN1279 as well as for argon-gas filling. It also meets the requirements according to pr EN13022 and ETAG 0002 and it owns an official European Technical Approval (ETA 03/0003). It is extremely stable even under extreme environmental conditions, making it perfect for this project where the edge seals are exposed.
- Dow Corning 797 (now known as Dow Corning 791) was selected for the building's movement joints thanks to its high movement capability (+/- 50%). It is ideally suited for expansion, connection, perimeter and all other types of movement joints and is compatible with all Dow Corning structural sealants.

City:	Frankfurt
Country:	Germany
Product:	Dow Corning® 993 Structural Glazing Sealant, Dow Corning® 3362 Insulating Glass Sealant, Dow Corning® 797 Silicone Weatherproofing Sealant (now known as Dow Corning® 791)
Architect:	HPP Hentrich-Petschnigg & Partner
Curtain Waller:	Alu Sommer/Stoob (Austria)
Glass Processor/ IG-Manufacturer:	Eckelt Glas (St. Gobain)/ Steyr (Austria)

The Project:

- The building's sleek structurally glazed façade was achieved using a four-sided structural glazing systems to achieve glazing which sits flush with the frame.
- The building's IG units have their edge seals fully exposed to the weather, while the seal for the movement joints between the glass units required an exceptionally high movement capability.
- Dow Corning 993 was used for bonding the glass to the frames.
- The edge sealing for the IG units was carried out with Dow Corning 3362:
- Dow Corning 797 (now known as Dow Corning 791) was selected for the building's movement joints thanks to its high movement capability (+/- 50%).



Contact Dow Corning...

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