

Case Study:

Forum Hochhaus

Frankfurt am Main, Germany



The Project

- Two unevenly sized, yet complimentary, crescent shaped towers (named Kastor & Pollux) situated adjacent to the Frankfurt Messeturm and new exhibition hall in the city's western district.
- A spacious atrium annex houses a large performance and exhibition area and office space as well as restaurants, a business lounge, and public restrooms. This grand space is flooded with natural daylight through its four-story western glass wall as well as through its fully glazed roof.

The Challenge

- The building's sleek structurally glazed façade was achieved using a two-sided structural glazing system 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 challenging of conditions.

The Solution

- The two sided structural glazing system with the glass sitting flush in the frames was realised using *Dow Corning 993* for bonding the glass to the aluminium frames. *Dow Corning 993* is a two-part, neutral curing silicone sealant specifically developed to structurally bond glass and metal to other construction materials.

Dow Corning 993 meets all the requirements according to ETAG 0002 and has a European Technical Approval (ETA 01/0005) to be used as a structural glazing sealant. It is extremely stable under even extreme environmental conditions making it perfect for this project where the edge seals are exposed.

- 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 it also meets the requirements according to pr EN13022 and ETAG 0002 and owns an official European Technical Approval (ETA 03/0003). It is extremely stable under even 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

City:	Frankfurt
Country:	Germany
Product:	<i>Dow Corning® 993</i> <i>Structural Glazing Sealant,</i> <i>Dow Corning® 3362</i> <i>Insulating Glass Sealant,</i> <i>Dow Corning® 797</i> <i>Silicone Weatherproofing</i> <i>Sealant (previously known</i> <i>as Dow Corning® 791)</i> <i>Kohn Pedersen Fox & Ass.</i>
Architect:	
Company:	<i>Götz Werkstätten für</i> <i>Metallbau – Deggendorf</i> <i>(Germany)</i>

The Project:

- Two unevenly sized, crescent shaped towers with a spacious atrium annex housing a large performance and exhibition area and office space.
- The building's sleek structurally glazed façade was achieved using a two-sided structural glazing system to achieve glazing which sits flush with the frame while IG units have their edge seals fully exposed to the weather.
- The architectural team specified *Dow Corning 993* for bonding the glass to the aluminium 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%).



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.

Contact Dow Corning...

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UNITED KINGDOM, EIRE, NORDIC COUNTRIES, BENELUX, SOUTH AFRICA, MIDDLE EAST

Dow Corning Ltd
Meriden Business Park
Copse Drive
Allesley, Coventry, CV5 9RG, UK
Tel: +44 (0)1676 528 000 · Fax: +44 (0)1676 528 001

AUSTRIA, GERMANY, POLAND, SWITZERLAND & EASTERN EUROPE

Dow Corning GmbH
Rheingastrasse 34
D-65201 Wiesbaden, Germany
Tel: +49 (0)611 23 71 · Fax: +49 (0)611 237 603

FRANCE AND NORTH AFRICA

Dow Corning France S.A.
Le Britannia 20, Boulevard Eugene Deruelle
69432 Lyon, Cedex 3, France
Tel: +33 (0)4 72 84 13 83 · Fax: +33 (0)4 72 84 13 79

SPAIN & PORTUGAL

Dow Corning Iberica S.A.
Diagonal 613 5a planta
08028 Barcelona, Spain
Tel: +34 93 363 69 28 · Fax: +34 93 363 69 01

ITALY & EASTERN MEDITERRANEAN COUNTRIES

Dow Corning S.p.A.
Via Lombardia, 31/33
20098 - Sesto Ulteriano
Milan, Italy
Tel: +39 02 98 832 1 · Fax: +39 02 98 804 83

RUSSIA & CIS

Dow Corning GmbH
Representative Office
17/23 Taganskaya Street
Moscow 109147, Russia
Tel.: +7 095 783 66 48
Fax: +7 095 783 66 52

e-mail: construction.marketing@dowcorning.com

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