

## Case Study:

# Zeppelin University Friedrichshafen, Germany



## The Project

The striking façade of the double skinned glass ‘cubed’ building at this pioneering, internationally renowned university blends in effortlessly with the surrounding scenery, providing a tranquil teaching and learning environment for students and lecturers alike.

The external, large, laminated safety glass façade has been structurally bonded with silicone onto metal frames. Inside the building, the insulating glass units have been constructed using mechanical fixation. The use of silicone structural glazing facilitates an excellent aesthetic appearance with a smooth surface on the building façade, which allows for easy cleaning and building maintenance.

## The Challenge

Whilst the silicone structural glazing technique is already commonly specified in Germany, restrictive legislation exists which states that structures above the height of 8m must always be constructed using additional mechanical fixation.

## The Solution

The unsupported structurally glazed façade was designed in close co-operation with engineering experts Delta-X and the upper construction authority in Baden-Württemberg, Landesstelle für Bautechnik, who were also responsible for granting this special approval. As a consultant in this approval process, Dow Corning’s experience and specialist skills in the high-performance application of silicone structural glazing was paramount in securing this authorization.

Dow Corning is honoured to have played a part in this consultation process resulting in a special exception to German law and an innovation in construction for the German construction market.

## The Product

Certified by European Technical Approval ETA 01/0005, *Dow Corning 993* exhibits excellent weathering properties and high resistance to ultra-violet radiation, heat and humidity once cured. It is ideal for structural bonding of glass and metal, including coated, enamelled and reflective glass.

**City:** Friedrichshafen  
**Country:** Germany  
**Product:** Dow Corning® 993  
Silicone Structural  
Glazing Sealant

**Building Owner:** Zeppelin University GmbH  
**Architects:** Fritz Hack  
**Façade**  
**Constructor:** Metallbau Schneider GmbH  
**Engineering**  
**Consultant:** Delta-X GmbH  
**Applicator:** Eckbert Telpl Mobile  
Innovative Verklebetechnik

## The Project:

- Zeppelin University is a state-recognised private institution of higher education bridging business, culture and politics
- Based in the region where three countries meet, Germany, Austria and Switzerland, a new building and extension to this university was officially dedicated in January 2008
- This noteworthy development, costing in the region of €17 million, included investment in the beachfront campus at Lake Constance as well as a double skinned façade in one of the university buildings
- The refurbished university block offers 3,400 square metres of floor space on four floors of study facilities
- *Dow Corning 993 Silicone Structural Glazing Sealant* was specified for structurally bonding the glass on the external façade of this double skinned structure

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Form Number: 62-1535-01



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