

# Dow Corning® TSSA Transparent Silicone Structural Adhesive

Crystal Clear Bonding for Point Fixed Glass Facades

# **Key Features**

# **Design & Aesthetics**

- Crystal clear adhesive for almost invisible bonding
- Enables sleek and flush glass facades
- No interruption of colored or clear glass interlayers
- Small point fixing connections\* for pure glass aesthetics

# **Energy Efficiency & Sustainability**

- Enables point fixing of gas-filled IGunits without breaching the glass
- Allows usage of high performing insulated glass units with low u<sub>g</sub>-values
- Supports long-term performance and durability of gas-filled IG units as IG cavity is not drilled

## **High Strength & High Quality**

- 10 times higher structural design load\*
- High movement capability
- Factory bonding through
   Dow Corning® Quality Bond TSSA applicators



*Dow Corning* TSSA was used at the Dow Corning European Distribution Center in Feluy, Belgium to increase energy efficiency of the structure through the use of innovative structural bonding technology.

<sup>\*</sup>compared to standard structural glazing sealants





# New Generation of Structural Adhesives – *Dow Corning* TSSA – Enabling Freedom of Design

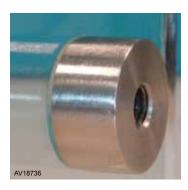
# **Typical Applications**

Interior and exterior point fixed bonding, eg:

- Point fixed glass facades, including
  - Curved glass
  - Laminated glass
- Structural glass fixation in facades
- Balustrades and fixation of steel fittings
- Interior decorative point fixed applications

## "Invisible" Fixing Points for Crystal Clear Bonding





Due to it's high design strength, *Dow Corning* TSSA permits small point fixations. From the outside, only the stainless steel discs are visible as the silicone film is transparent.

Dow Corning TSSA enables crystal clear bonding for sleek and flush glass facades

#### Uniform & Sleek Facades for more Design Freedom

*Dow Corning* TSSA allows the un-interrupted appearance of colored interlayers, ceramic frits or glass prints as the bonding adhesive is applied to the inside surface of the glass.





# New Generation of Structural Adhesives – *Dow Corning* TSSA – Safe and High-Quality Application

# Description

Dow Corning TSSA is a crystal clear film adhesive specifically designed for point fixed bonding applications. This high strength silicone adhesive is supplied as a film in a thickness of 1 mm in ready to apply die-cut buttons.

The design strength for dynamic loads is at 1.3 MPa. For static loads the design value is at 0.6 MPa.

Dow Corning TSSA can be easily applied and pre-fixed to the point fixing connectors. It is heat curing and therefore well suited for autoclaving or vacuum bag applications. The installation on site is easy and safe.

#### **System Design**

For high quality system designs it is important to carefully consider all relevant steps in a system development.

- 1. System Engineering (incl. hardware design)
- 2. TSSA Application
- 3. Installation of point fixed facade

All steps are equally important. *Dow Corning* will supply any technical support and information needed.

#### Easy and Secure Installation with Safety Indicator

The on-site installation of point fixed facades with *Dow Corning* TSSA is similar to the installation of a mechanically fixed facade.

Additional security is delivered by a safety indicator on the silicone film: The adhesive turns white when the stress level exceeds the maximum design value and returns back crystal clear when stress is removed.

#### **High Quality Application**

Dow Corning TSSA will only be applied by Dow Corning Quality Bond members. With this we ensure proper quality control processes and documentation. Quality Bond applicators receive regular trainings and are annually audited by a Dow Corning specialist. For more information visit www.qualitybond.com.

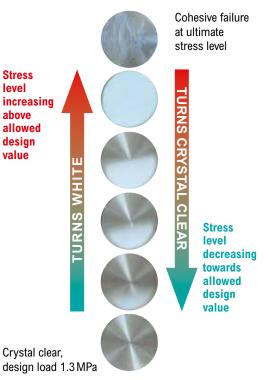




Dow Corning TSSA:
12 buttons
per card
with 50 mm
diameter.
Other button sizes
upon request.







For further technical details, please refer to our TSSA Quality Manual.



#### dowcorning.com/CrystalClearBonding

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