INNOVATIVE TRANSPARENT SILICONE SOLUTIONS FOR ARCHITECTURAL GLASS APPLICATIONS

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TRANSPARENT SPACERS FOR INSULATING GLASS UNITS

- Rigid materials (PMMA, Glass)
- Bonding with double-sided tape
CRYSTAL CLEAR SILICONE TECHNOLOGY

- A **FULLY cured** product, having the unique capability to be reactive towards a primed surface

Prime substrate | <5min | Apply spacer | <5min | Assembly finished

- Durable chemical adhesion,
- Cannot be peeled off (cohesive failure)
- Adhesion on glass, stainless steel, mill finish/anodized aluminum, etc
CRYSTAL CLEAR SILICONE SPACER FOR INSULATING GLASS UNITS

- Commercial refrigerators

- Architectural Glass

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- 2-Component, self leveling, room temperature curing transparent silicone
- Develops room temperature adhesion on glass and metals without primer
- No bubble generation even in confined area
- Stable properties over wide Temperature range
- Durable properties upon heat and UV exposure
- Compatible with DOWSIL™ silicones
Stable Properties from -40°C to 150°C

- High Clarity
  - LT = 90% @ 350nm and LT >93% @ 400-800 nm
  - Haze = 6% @ 350nm & haze <4% above 450 nm

- Impact resistance: up to 3B3 (EN 12600)
- Promising acoustic damping properties

Applications

- Decorative and functional laminates with glass/other substrates
3D PRINTED SILICONE APPLICATIONS

3DP silicone products are used for applications requiring high precision such as seals or connectors.

3DP silicones can be used in construction, at the Intersection of Design and Performance where Every Node is Geometrically Unique.
3D PRINTABLE RTV SILICONE

- 1-part RTV silicone, Hardness 33 (A scale), TFT = 14 minutes, 1.2 MPa tensile, 1.04 g/ml gravity
- Extrusion based Additive manufacturing

Influence of infill direction (0°, ±45°, 90° relative to the tensile direction) and adjacent line spacing (compression) on the void formation and maximum tensile strength versus cast silicone.

- Define process parameters which minimize the elongated voids, infill tangency voids, and surface edges.
- When these conditions are achieved, the infill direction does not play a significant role in the tensile strength of a part.
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