



Anhui Surmount New Materials Co., Ltd.

SMT-Z35L Silicone Weatherproof Sealant

Product Introduction

This product is a paste-like, one-component, low modulus, neutral curing silicone sealant specially designed for weatherproof sealing applications for various curtain walls (glass curtain walls, aluminum panel curtain walls, etc.). It features excellent weather resistance. After artificial accelerated weathering tests, the physical and chemical properties of the sealant show no significant changes. To use, extrude the sealant from the cartridge into the joint to be sealed using a caulking gun. The sealant cures gradually from the surface inward at room temperature by absorbing moisture from the air, forming an elastomer and creating an effective seal.

Performance Characteristics

- Non-oily type, low modulus, neutral curing, non-corrosive to most building materials.
- Class 35 Movement Capability: Maintains performance integrity under normal expansion, contraction, and shear deformation of curtain walls.
- Excellent weather aging resistance, resistant to aging, UV, ozone, and water.
- Excellent high and low-temperature performance: After curing, it does not become brittle, harden, or crack at -50°C, and does not soften or degrade at 150°C, maintaining good strength and elasticity.
- One-component, easy to use, with good extrudability and thixotropy within 5°C - 40°C.
- Excellent adhesion to most building materials.
- Good compatibility with other neutral silicone sealants.

Scope of Application

- Weatherproof sealing applications for various curtain walls.
- Bonding and sealing applications for wood, concrete, and various painted metal profiles.

Usage Limitations

- Do not use as a structural sealant.
- Not suitable for use on copper or polycarbonate materials.
- Not recommended for use in airtight spaces, as the sealant requires moisture from the air to cure.
- Do not apply when the material surface temperature is below 5°C or above 40°C.
- Do not use on condensation-prone or damp surfaces.
- Do not use in areas of continuous water immersion or perpetual dampness.
- Avoid contact with rubber materials (e.g., gaskets, rubber spacers) to



Anhui Surmount New Materials Co., Ltd.

prevent yellowing.

- Avoid contact with acidic or alkaline substances (e.g., exterior wall cleaning solutions) to prevent discoloration.
- Do not use on materials that may exude oils, plasticizers, or solvents, such as surfaces of oil-impregnated wood.

Physical Properties (Tested according to GB/T 14683-2017 standard)

Item		Result
Slump, mm		≤3
Extrusion Rate, mL/min		≥150
Tack-Free Time, h		≤3
Movement Capability, %		±35
Elastic Recovery, %		≥80
Tensile Modulus, MPa	23°C	≤0.4 and ≤0.6
	-20°C	
Adhesion after Extension at Standard Conditions		No Failure
Adhesion after Extension after Water Immersion		No Failure
Adhesion after Heat-Cold Cycling		No Failure
Adhesion after UV Radiation		No Failure
Adhesion after Water Immersion and Light Exposure		No Failure
Weight Loss, %		≤8

Application Instructions

1. Before Application:

- Conduct compatibility tests between the structural sealant and contacting materials, as well as adhesion tests with the intended substrates before application.

2. Application Method:

- Application surfaces must be clean, dry, and free from contaminants.
- Place the cartridge into a suitable caulking gun. Cut the nozzle according to the joint width. Extrude the sealant into the joint, ensuring it makes full contact with both sides of the joint.
- Tool the sealant firmly to ensure adhesion and remove any excess material.

3. Precautions:

- Use the product within its shelf life. Do not use expired product.
- Strictly follow the procedures established during adhesion testing.
- The product releases trace chemicals during curing. Ensure adequate



Anhui Surmount New Materials Co., Ltd.

- ventilation in the workspace. It is non-toxic after curing.
- Avoid direct contact with skin and eyes. Do not ingest.
 - Keep out of reach of children.

Storage and Transport

The product is classified as non-hazardous for transport. Store in a cool, dry place below 27°C. The shelf life is 12 months. Use as soon as possible after receipt.

Packaging

This product is available in cartridges 300ml or sausages 590ml. Custom packaging may also be available upon request.

This instruction manual is for reference purposes only and does not carry any warranty. Please test its suitability beforehand.