

PRODUCT DESCRIPTION

Alstone SS-900 Structural Sealant / Adhesive is a high modulus one-component, self priming, shelf-stable, neutral-cure, elastomeric adhesive specifically formulated for silicone structural glazing, exhibiting the following unique features:

- Excellent UV resistance.
- Excellent unprimed adhesion to most common building substrates, including glass, reflective glass, anodized aluminum, granite and paints, including most fluoro polymer based paints.
- Excellent shelf life and "Use By" dating.
- Noncorrosive by-products.
- 15-year performance warranty available.
- Cures to extremely tough elastomeric rubber Structural applications require prior testing and written Test review by Alstone.

Basic Uses

Alstone SS-900 Structural Sealant is designed for use in structural applications such as factory or field glazing of glass and metal. Once cured, this adhesive forms a durable, flexible, watertight bond that can be warranted for 15 years.

Limitations

Alstone SS-900 Structural Sealant should not be applied:

- To building materials that bleed oils, plasticizers or solvents – materials such as impregnated wood, oil-based caulks, green or partially vulcanized rubber gaskets or tapes.
- In totally confined spaces (the sealant requires atmospheric moisture for cure).
- When surface temperatures exceed 55°C (131°F).
- Where painting of the sealant is required, as the paint film may crack and peel.
- In below-grade applications.
- For use as an interior penetration firestop sealing system.
- In horizontal floor joints where abrasion and physical abuse are likely to be encountered.

- To frost-laden or damp surfaces.
- For continuous immersion in water.

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

TYPICAL PROPERTIES

These values are not intended for use in preparing specifications.

As Supplied

Specific Gravity.....	1.36
Color.....	Black
Tack-Free Time, 50% RH, hours.....	1.5
Curing Time, 50% RH, at 25°C (77°C), days.....	7-14
Full Adhesion, days.....	14-21
Flow, Sag or Slump, inches.....	<0.1
Working Time, minutes.....	15-25

As Cured - After 7 days at 25°C (77°C), 50% RH

Durometer Hardness, Shore A, points.....	40
Ultimate Tensile, psi.....	350
Ultimate Elongation, %.....	525
Tear Strength, die B, ppi.....	49
Peel Strength, ppi.....	40

As Cured - After 21 days at 25°C (77°C), 50% RH

Tensile at 25%, psi.....	48
Tensile at 50%, psi.....	75
Joint Movement Capability, %.....	±50

As Cured - After 21 days at 25°C (77°C), 50% RH and Subjected to 4,500 hours QUV ASTM G-53

Tensile at 25%, psi.....	50
Tensile at 50%, psi.....	78

Specification Writers: Please obtain a copy of the Alstone Sales Specification for this product, and use it as a basis for your specifications. It may be obtained from any Alstone Sales Office, or from Alstone Customer Service.

COMPOSITION AND MATERIALS

Alstone SS-900 Structural Sealant is a one-part, ready-to-use material that has the consistency of toothpaste. This consistency remains uniform over a wide temperature range from -15 to 55°C (5 to 131°F), allowing the sealant to be applied easily at most temperatures.

Packaging: Alstone SS-900 Structural Sealant is supplied in 300ml disposable plastic cartridges and 600ml sausages that fits ordinary caulking guns. It can be dispensed by many air-operated guns and most types of bulk dispensing equipment. A complete dispensing guide is available from Alstone.

Color: Alstone SS-900 Structural Sealant is available in black. White color is available on prepaid orders.

Applicable Standards: Alstone SS-900 Structural Sealant has been internally tested and is designed to meet or exceed the test requirements of ASTM Specification.

TECHNICAL DATA

Alstone SS-900 Structural Sealant is virtually unaffected by sunlight, rain, sleet, snow and temperature extremes. Its unique weatherability enables it to retain its original design properties even after years of exposure. Cured sealant will remain elastomeric in cold to -40°C or heat to 149°C.

INSTALLATION

Structural glazing applications for Alstone SS-900 Structural sealant must be reviewed by the Technical Service staff of Alstone Silicone.

The following instruction provide a general overview of the installation process.

Joint Design: The design of a silicone structural joint must be prepared by the design professional, based upon industry-accepted design guidelines.

Basic design parameters include:

- Glue line thickness must not be less than 1/4 in. (6.4mm).
- Structural bite must not be less than glue thickness.
- Structural bite (in.) must be greater than or equal to the smallest leg of the largest lite (ft) x windload (lb/ft²) ÷ 480.
- The structural sealant joint must be able to be filled using standard caulking practices.
- The structural joint must not move during cure. These are preliminary guidelines, consistent with common industry practice.

Preparatory Work: Clean all joints and glazing pockets, removing all foreign matter and contaminants such as grease, oil, dust, water, frost, surface dirt, old sealants or glazing compounds and protective coatings. Metal and glass surfaces should be cleaned by mechanical or solvent procedures. Detergent or soap and water treatments are not acceptable. In all cases where used, solvents should be wiped on and off with clean, oil-free and lint-free cloths. Follow solvent manufacturer's recommended safe handling procedures.

Masking: Areas adjacent to joints may be masked to ensure neat sealant lines. Do not allow masking tape to touch clean surfaces to which the silicone sealant is to adhere. Tooling should be completed in one continuous stroke immediately after sealant application and before a skin forms.

Masking should be removed immediately after tooling.

Method of Application: Install backup material or joint filler, setting blocks, spacer shims and tapes as specified.

Apply Alstone SS-900 Structural Sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint. Tool or strike Alstone SS-900 Structural Sealant with light pressure to spread the material against the backup material and the joint surfaces. A tool with a concave profile is recommended to keep the sealant within the joint. In glazing, tool the sealant applied at the sill so that precipitation and cleaning solutions will not pool. It is imperative that uncured silicone sealants are not allowed to contact non-abradable surfaces such as polished granites, metal or glass. Because excess silicone sealant cannot be completely removed with organic or chlorinated solvents, these surfaces must be masked or extreme care taken to prevent any silicone sealant from contacting them during sealant application. Once an uncured sealant contacts the surface, it will leave a film that may change the aesthetic surface characteristics of that substrate.

In cases where uncured sealant is inadvertently applied to adjacent surfaces,

the sealant should be cleaned while still uncured, using a commercial solvent such as xylene, toluene or methyl ethyl ketone. Observe proper precautions when using flammable solvents.

SAFE HANDLING INFORMATION

Product safety information required for safe use is not included. Before handling, Read product and material safety data sheets and container labels for safe use, Physical and health hazard information. The material safety data sheet is available from your Alstone Silicone representative, or distributor, or by writing to Alstone Customer Service, or by calling 8800787878.

Storage and Shelf Life: When stored at or below 30°C Alstone SS-900 Silicone Sealant has a shelf life of greater than one year from date of manufacture, indicated by the "Use By" date on product packaging.

AVAILABILITY AND COST

Availability: Alstone SS-900 Silicone Sealant is available throughout the India through authorized construction sealant distributors.

Cost: Contact your local Alstone representative for the name of your nearest distributor.

WARRANTY

Limited Weather seal Warranty: Alstone Silicone produces and sells a full line of silicone construction sealants and adhesives. These products offer a variety of physical characteristics and adhesion properties.

Alstone SS-900 Silicone Sealant is part of that line and, when used with compatible substrates and when applied within the stated shelf life and according to manufacturer's recommendations for application and joint design, Alstone Silicone warrants that it will perform as a watertight weatherseal for a period of 15 years from the date of application. In addition to maintaining the integrity of the weatherseal, the sealant will not change color when used with backup materials and substrates that have been approved for compatibility by Alstone Silicone after specific testing by alstone.

Limitations: This warranty specifically excludes failure of the sealant due to:

- Natural causes such as lightning, earthquake, hurricane, tornado, fire, flooding, etc., or
- Movement of the structure resulting in stresses on the sealant that exceed Alstone Silicone written specifications for elongation and/or compression for the sealant, whether due to structural settlement, design error or construction error, or
- Disintegration of the underlying substrates, or
- Mechanical damage to the sealant caused by individuals, tools or other outside agents, or
- Changes in the appearance of the sealant from the accumulation of dirt or other contaminants deposited on the sealant from the atmosphere.

Remedies: In the event of a claim under this warranty, you must notify Alstone Silicone in writing within 30 days of the occurrence of the failure. Alstone Silicone's sole liability shall be to furnish sufficient silicone replacement material to restore the integrity of the weatherseal. Any labour or other cost associated with the repairs is the responsibility of the owner.

ALSTONE SILICONE SHALL NOT BE LIABLE FOR AND EXPRESSLY DISCLAIMS ANY LIABILITY FOR DAMAGE TO THE CONTENTS OF THE STRUCTURE OR FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE, WHETHER IN CONTRACT OR IN TORT, INCLUDING NEGLIGENCE.

THIS WARRANTY IS IN LIEU OF ALL OTHER WRITTEN OR ORAL, EXPRESS OR IMPLIED WARRANTIES AND ALSTONE SILICONE SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE.

Structural Adhesion Warranty: Alstone SS-900 Silicone Sealant may be used as a structural adhesive under certain conditions, but Alstone Silicone disclaims any general adhesion warranty.

Alstone Silicone will issue project specific Structural Adhesion Warranties on a case-to- case basis as per **APMS (Advanced Project Management Services)** No Structural Adhesion Warranty will be issued until Alstone Silicone has reviewed the pertinent building tests and specifications and has completed adhesion and compatibility testing of the various materials to be used with Alstone SS-900 Silicone Sealant. For details on how to obtain the Structural Warranty, please contact your Alstone Silicone representative.

MAINTENANCE

If sealant becomes damaged, replace the damaged portion. Alstone SS-900 Silicone will adhere to cured silicone sealant with only a preparatory solvent wipe to remove accumulated dirt.

TECHNICAL SERVICES

Complete technical information and literature are available from Alstone Silicone and authorized sealant distributors. Laboratory testing and technical service are available from Alstone Silicone. Kindly see **APMS (Advanced Project Management Services)** document.