



Technical Data Sheet

V70 Architectural Grade Silicone

Neutral Cure

Description

Bostik V70 is a high performance architectural grade structural glazing silicone.

One component, non flowing, Neutral cure, High modulus sealant.

It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant.

Classifications/Standards

Bostik V70 structural Glazing Silicone meets or exceeds the requirements of the following specification for a one – part sealant.

- AS-1288-2006
- ASTM C1184, Type S, Use G and O.
- C920: Type S Grade NS, Class 35, Use NT, A, G, O.
- GB – 16776
- Meets Low VOC Rating- 43g/L (SCAQMD)

Features

Bostik V70 silicone sealant meets the currently accepted engineering standards for structural glazing.

This high strength silicone sealant has very good unprimed adhesion properties, to a broad range of building substrates.

*(Substrate testing must always be carried out first).

These features make this product a very good reliable structural adhesive sealant for both the Construction and industrial industries.

The thixotropic nature of this product ensures that it will not slump in typical construction joints.

Excellent U.V Stability

Long Life Reliability

Bostik V70 has excellent natural ageing stability. It will maintain its elastomeric structural joint sealant properties permanently, even under harsh conditions and temperature extremes.

Recommended Uses

- Structurally glazed curtain wall systems
- Two and Four sided structural glazing
- Fin Glazing
- Non Structural Glazing applications
- Building Weather seal.
- Toughened Glass Assemblies
- Automotive Glazing
- Adhering of composite panels
- Stiffener for metal panels application

Application Instructions

Surface Preparation

Surfaces to be sealed must be clean, dry and free of wax, grease, cutting oils or any loose of flaking materials. Use the two-wipe process for impervious substrates. Ensure the cloths are clean and changed frequently, and use a suitable cleaner/solvent such as ZBond® Bostik R-40 (silicone) surface cleaner, IPA or 100% White Spirits.





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To achieve satisfactory adhesion a primer may be required for some substrates. Consult Bostik for more information.

Application

When extruding the sealant cut the nozzle to the desired width, cut the tip off the cartridge, and apply the sealant firmly to ensure good contact between the sealant and the substrate. Before the sealant has skinned, tool it off to ensure a good finish, and to improve the wetting out of the sealant to the substrate.

Clean / wipe of excess sealant with clean cloth or polyethylene scraper. Masking tape can be used. (Masking tape must be removed before skin over starts).

To achieve satisfactory adhesion a primer may be required for some substrates.

(Consult Bostik or your distributor for more information).

Joint Design

The sealant must be capable of withstanding the expected joint movement.

To calculate the joint width, establish the expected movement (expansion, contraction and shear movement) that the joint is required to withstand.

The joint movement capability of **Bostik V70** is ± 35

The Data Sheet on Joint Design contains the formula for calculating the required joint width from the expected joint movement and dynamic movement capability of the sealant.

The joint design must avoid three-sided adhesion.

The recommended sealant depth to width ration for a weather seal is normally half the joint width.

The minimum recommended joint depth is 6mm and the maximum is 15mm, ideally if the required joint width is 6mm the depth is also 6mm.

There is a separate formula for structural glazing. (Please contact our sales office for details)

(No warranty will be give for Bostik V70, on structural glazing and other applications unless Bostik has review all detail drawing of the project, and a signed copy of the joint design and substrate testing has been approved by Bostik before commencing any projects.)

Back up Material

Use a closed cell polyethylene-backing rod, 25% larger than the joint width, to control the depth of the joint.

Compatibility with Adjacent Substrates

Silicones are not always compatible with plasticised sealants, such as butyls.

Also some backing rods and glazing tapes contain bitumen or other agents that are incompatible with the silicone.

The incompatibility may cause discolouration, poor sealant cure or long term degradation of the sealant. Always carry out compatibility tests where contact with potentially incompatible materials occurs. (Bostik offers this service via our labs facilities for projects) .

Coverage

Approximately 8 lineal metres per 400gm cartridge based on an average joint size of 6mm depth and 6mm width.

Curing Time

Bostik V70 cures by absorbing atmospheric moisture it will cure 2-3mm in the first 24hrs and to a depth of 7mm in 7 days.

Depending on the joint design it may take between 14-21days before the silicone joint has fully cured. (Subject to temperature and atmospheric moisture) lower the moisture reduces the curing times. (Bostik has a 2 part structural silicone for faster curing).

Limitations

BOSTIK V70 is **NOT** suitable for use in the following applications:-

- As the sealant requires atmospheric humidity to cure, it will not cure in totally confined spaces where it does not have access to atmospheric humidity.
- Aquariums
- Under Water Applications on concrete, some plastic materials etc. (including swimming pools)



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- **Note.** This product is suitable for some under water non porous substrates applications where the sealant is in contact with water for extended periods eg metal tanks. (Please contact Bostik to confirm your design details before commencing such an application).
- Some stone's (Use Bostik 5CLM - we recommend the completion of a stain testing program before using sealant on stone)
- Below Grade Applications
- Horizontal walkways.
- Do not clean or treat the sealant with materials, cleaning agents or solvents, that may affect or discolour the sealant, particularly during product curing.
- Polycarbonate sheeting
- Sealant may discolour copper and brass.
- This product is neither tested nor can be used for medical or pharmaceutical use.
- Where painting of the sealant is required.
- Where building materials may bleed oil, plasticisers or solvents, some vulcanized rubbers and tapes.
- Surfaces subject to corrosion / oxidation -eg mill aluminium.
- **This silicone is not paintable.**

If there is a requirement to paint the sealant, use Bostik Paintable silicone sealant or Bostik Fill-A-Gap acrylic sealant products. Refer to Technical Data Sheet of product for appropriate application and follow both the sealant and paint manufacturers painting instructions carefully, when painting these sealants.

Bostik Co-operative Test Program

Effective sealant systems require the sealant to adhere to the substrates, and work in the joint without cohesive failure.

The intention of the program is to eliminate potential problems by pre-testing sealants with actual samples of the building materials to be used.

This test will provide detailed information about optimum surface preparation techniques, including recommendations for cleaning substrates, (cleaners / solvents), and primers if required.

We will also review the shop drawings - proposed joint designs for potential failures, such as three-sided adhesion, and requirements for wind or dead load systems.

For projects that incorporate stone substrates, we test (Stain Test) because of the variability of stone's, in terms of porosity and texture, we carry out these tests before commencement of each project.

(Test samples for stain test should be the same as will be used on the building).

To commence a test program contact your local Bostik office

Because of the importance of Surface Preparation, Sealant Application and Joint Design Bostik provide specific Data Sheets on these topics. These data sheets are available free of charge, and we strongly recommend that you consult these sheets before commencing application of the sealant.

Properties

Property	Mean Result Achieved	Test Method
Skin Time	8 Minutes	BS 5889
Tack Free Time	50 Minutes	ASTM C679
Tooling Time	10 Minutes	ASTM C679
Sag or Slump	Nil	BS5889



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Cured Properties

Property	Mean Result Achieved	Test Method
Shore A Hardness	31	ASTM C 661
Modulus at 100% Elongation	0.7 MPa	ASTM D 412
Tensile Strength	1.2 MPa	ASTM D 412
Elongation at Rupture	460%	ASTM D 412
Peel Strength after UV through Glass	89N/25mm	BS5889
Dynamic Movement Capacity	±35	ASTM C 920
Accelerated Aging and Weathering	Excellent	ASTM C 792

Temperature

	Minimum	Maximum
Application Temperature	-10°C	+40°C
Service Temperature	-50°C	+200°C

Application of the sealant at -10°C is permissible provided the surface to receive the silicone is dry and free of frost. The maximum service temperature listed is for transient temperature; the silicone sealant will deteriorate if subjected to these temperatures on a continuous basis

Storage & Shelf Life

Always store the sealant in a cool dry place. Ideal storage temperature is not more than 25°C. Prolonged storage at high temperatures may affect shelf life and ultimate performance.

The shelf life of **Bostik V70** is 9 months from the date of manufacture when stored below 23°C and below 50% relative humidity

Health & Safety

Full product safety information required for safe use is not included in this data sheet. Before handling, read the separate Material Safety Data Sheet (MSDS) and packaging for safe use. Always read the Technical Data Sheet and Material Safety Data Sheet (MSDS) before opening or using this product.

In case of product emergency refer to product labelling or MSDS and contact phone numbers. A copy of the product MSDS is available from Bostik or its distributors.

First Aid

If accidentally swallowed or it gets into someone's eyes, contact a Doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 0800 764 766)

SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)

Packaging

370gm - polyethylene cartridge

Product Details

Item Number	Size	Colour	Pack Quantity
661570	400gm	Black	15



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Important Notice for Users

Suggestions for use should not be taken as an inducement to infringe any particular patent.

*Bostik V70 is a registered trademark of Bostik Australia.

(Structural testing for Bostik V70 carried out by Bostik & independent company).



The information in this Technical Data Sheet is intended for the assistance of purchasers and is of a general nature. It reflects the extent of our knowledge and experience of our products and is based on tests which we believe to be reliable. However, no guarantee of accuracy can be given due to the wide range of surfaces, environmental and field conditions and variations encountered in raw materials, manufacturing equipment and methods at the place where the work is performed. Some of these will be beyond our knowledge or control. We recommend purchasers carry out their own tests to determine the suitability of the product for their particular purposes.

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Quality
ISO 9001

SAI GLOBAL

Quality endorsed ISO9001 (Thomastown site)
TS16949 (Automotive).