

V4

METAL AND MASONRY SILICONE

28th November 2018

YOUR SMART ADVANTAGES

- Highly elastic neutral cure low modulus sealant
- Superior adhesion to metal and masonry
- Non-slumping formula
- Long Life Reliability
- Excellent natural ageing stability will maintain its elastomeric joint sealant properties permanently, even under harsh conditions and temperature extremes.

DESCRIPTION

Bostik V4 is a one component, non-flowing, neutral cure, low modulus silicone sealant. It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant.

USES

- Precast panels
- Concrete panels
- Anodized aluminum
- Coated copper and brass plaques
- Sealing of polycarbonate sheeting
- Splash back
- Expansion joints on pavers
- General purpose building and construction sealant

PRODUCT CHARACTERISTICS

Tack Free Time	2-3 Hours
Skin Time	8-15 Minutes
Tooling Time	15 Minutes
Slag or Slump	NIL

Product codes

 300ml cartridge/15 per carton

 Charcoal
 30840578

 Light Grey
 30840241

 Dark Grey
 30840579

 White
 30840580

TYPICAL PERFORMANCE DATA (approx.)		
Shore A Hardness	17 – 21	
100% Modulus	0.25 MPa	
Tensile Strenath	0.80 MPa	

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Elongation	600%
Peel Strength after UV through glass	67N/25mm
Dynamic Movement Capacity	±35%
Accelerated Ageing and Weathering (ASTM C792)	Excellent
Application Temperature*	+5°C to +40°C
Service Temperature	-50°C to +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.

DIRECTIONS FOR USE

Read and understand the Safety Data Sheet before using this product. SDS can be acquired by visiting www.bostik.com.au or by scanning the relevant QR code on pack.

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 IPA or 100% White Spirits.

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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.
- 2. 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 off excess sealant with clean cloth or polyethylene scraper. Masking tape can be used. (Masking tape must be removed before skin over starts).

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 V4** is ±35%. The joint design must avoid three-sided adhesion.
- The recommended sealant depth to width ratio 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.

(No warranty will be given for Bostik V4 unless Bostik has reviewed all detail drawings of the project, and a signed copy of the joint design and substrate testing has been approved by Bostik before commencing any projects.)

BACKING MATERIAL

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

COMPATABILITY WITH ADJACENT SUBSTRATES

Silicones are not always compatible with plasticized 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 discoloration, 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 16 lineal meters per 300ml cartridge based on an average joint size of 6mm depth and 3mm width.

CURING

Bostik V4 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 14-21 days before the silicone joint has fully cured. (Subject to temperature and atmospheric moisture) Lower atmospheric moisture reduces the curing rate.

LIMITATIONS

Bostik V4 is <u>NOT</u> 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
- Structural applications for glazing
- Under Water Applications on concrete, some plastic materials etc. (including swimming pools)
- 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 stones. (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 my affect or discolour the sealant, particularly during product curing.
- This product is neither tested nor can be used for medical or pharmaceutical use.
- Surfaces in contact with food.
- Where painting of sealant is required.
- Where building materials may bleed oil, plasticiers or solvents, some vulcanized rubbers and tapes.
- Surfaces subject to corrosion / oxidisation -eg mill aluminium.
- This silicone is not paintable. If there is a requirement to paint the sealant, use Bostik MS or PU 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.

CLEANING

Remove excess uncured sealant immediately with a damp cloth or water. Cured silicone is best removed by scraping or sanding. Use Bostik Handy Wipe towels to remove silicone from skin.

BOSTIK COOPERATIVE 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) 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.

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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.

STORAGE AND 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 V4** is 12 months from the date of manufacture when stored below 23°C and below 50% relative humidity.

DISPOSAL

Empty cartridges may be disposed via local landfill. If spilt, absorb with clay, sand or earth. Collect and seal in properly labeled metal container. Dispose of according to local authority regulations. Do not dispose of down drains or into local waterways.

HEALTH AND SAFETY

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

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

First Aid

If accidently swallowed or it gets into someone 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)

Important Notice for Users Suggestions for use should not be taken as an inducement to infringe any particular patent. *Bostik V4 is a registered trademark of Bostik Australia. (Testing for Bostik V4 carried out by Bostik & independent company).



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