

5CLM

ARCHITECTURAL GRADE SILICONE

28th November 2018

YOUR SMART ADVANTAGES

- Bostik 5CLM is a non-staining high joint movement silicone sealant suitable for new construction work or remedial applications on facades work, including metal/aluminium composite panels.
- Even on building that have high joint movement Bostik 5CLM places minimum stress on the adhesion bond, between the silicone and the substrate, in working joint application.
- Excellent prime less adhesion too many building substrates. *(Substrate test is always recommended first).
- Excellent elongation movement capabilities +100% / -50%
- Excellent UV stability
- The thixotropic nature of this product ensures that it
- will not slump in typical construction joints.
- Long life reliability
- Bostik 5CLM has excellent natural ageing stability.
- It will maintain its elastomeric joint sealant properties permanently, even under harsh conditions and temperature extremes.

DESCRIPTION

Bostik 5CLM is a high performance architectural grade, Low modulus, High Joint Movement silicone. It cures by absorption of atmospheric moisture to form a flexible and durable elastomeric sealant.

USES

- All types of building facades restoration and weatherproofing.
- Curtain wall joints
- Marble and Granite joints *(Stain testing must be carried out first before use on any project).
- Expansion and control joints.
- Precast panels
- Concrete panels
- Weather seal / weatherproofing of coated metal and Aluminium composite panels.
- Anodized aluminium
- Coated copper and brass plaques
- Splash backs
- Expansion joints on pavers

APPLICATION INSTRUCTIONS SURFACE PREPARATION

Always ensure that the surfaces to be sealed are dry and free from oil, dirt and grease. Use the two-wipe process for **Non Porous substrates**. Ensure the cloths are clean and changed frequently, and use a suitable cleaner/solvent such as IPA or 100% White Spirits.

For Porous substrates must be sound, dry and free of contaminants such as oils and curing agents, loose material and laitance. The substrate must be sufficiently cured and dry before sealant application. May need to wire cut or wire brush surface before use.

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 dynamic movement capability of **Bostik 5CLM.** is +100 - 50%.

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 sealant depth for a weather seal is **<u>normally half</u>** <u>**the joint width**</u>.

The minimum acceptable joint depth is 6mm; therefore, if the required joint width is 6mm the depth is also 6mm.

No warranty will be give for Bostik 5CLM unless Bostik has review all detail drawing of the project, and a signed copy of the joint design and substrate testing has been carried out / approved by Bostik before commencing of any project.

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 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 6 lineal metres per 300ml cartridge based on an average joint size of 10mm depth and 5mm width.

CURING TIME

Bostik 5CLM cures by absorbing atmospheric moisture, it will skin over in approximately 8 minutes and cure 2-3mm in the first 24 hours, and to a depth of 7mm in 7 days (Subject to temperature and atmospheric moisture, lower moisture reduces the curing times).

LIMITATIONS

BOSTIK 5CLM 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)
- 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 (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.
- Where painting of the 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 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 Marble, Granite and 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.

Stain test must be carried out first before any warranty will be given.

(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.

PRODUCT CHARACTERISTICS

Skin Time (BS 5889)6-10 minutesTack Free Time (ASTM C679)2.5 hoursTooling Time (ASTM C679)6-10 minutesSag or Slump (BS 5889)nilProduct code	I RODOCT CHARACTERISTICS	
Tooling Time (ASTM C679)6-10 minutesSag or Slump (BS 5889)nilProduct code370gm cartridge/15 percartonCharcoal30840558Light Grey30840237Dark Grey30603719Beige30840557White30840559600ml sausages	Skin Time (BS 5889)	6-10 minutes
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BOSTIK 5CLM

TYPICAL PERFORMANCE DATA (approx.)	
Shore A Hardness (ASTM C661)	15
100% Modulus (ASTM D412)	0.25 MPa
Tensile Strength (ASTM D412)	1.0 MPa
Elongation (ASTM D412)	800%
Peel Strength after UV through Glass (BS 5889)	87N/25mm
Dynamic Movement Capacity (ASTM C920)	+100% -50%
Application Temperature	+5°C to +40°C
Service Temperature	-35°C to +150°C
Accelerated Aging and Weathering (ASTM C792)	Excellent

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 5CLM** is 12 months from the date of manufacture when stored below 23°C and below 50% relative humidity.

For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.

BOSTIK HOTLINE

Smart help 1800 898 551

This datasheet is for the general help of users. It is provided in good faith. The data is current and accurate to the best of our knowledge. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. Users should carry out tests to decide the product's suitability for purpose. This data sheet and the properties of the product may change without notice. Users, suppliers and retailers should check that the data sheets they have are the latest. To the maximum extent permitted by law, Bostik disclaims all warranties in relation to manufacture and use of the product. Bostik is not liable for representations made by users, suppliers or retailers about the product. Bostik is not liable for any loss or damage resulting from incorrect, careless, or negligent use or storage of the product, including use of out of date product. Any liability arising from use of the product is limited to the replacement or purchase price of the product. Bostik does not exclude rights and remedies that cannot be excluded by legislation, for example under the Australian Consumer Law (ACL). Sale of the product by Bostik is subject to the Bostik Australia Proprietary Limited Conditions and Terms of Sale. For more information on Bostik, products, and conditions of use and sale visit www.bostik.com/au