Technical Data Sheet
5CLM Architectural Grade Silicone
Neutral Cure

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.

Classifications/Standards
Bostik 5CLM Sealant meets or exceeds the requirements of the following specification for a one – part sealant.

- + 100% / -50% Joint Movement
- Meets Low VOC Rating- 40g/L (SCAQMD)
- AS/NZS4020-2005 – Drink water approved AWQC
  *(Grey only)

Features
- Bostik 5CLM. is a Non staining high joint movement Silicone sealant suitable for new construction work or remedial applications on façades 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.

Recommended 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
- Splashbacks
- Expansion joints on pavers

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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 Z Bond R-40, 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 weatherseal is **normally half the joint width**.
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 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 6 lineal metres per 300ml cartridge based on an average joint size of 10 mm depth and 5 mm 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 24hours, 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

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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	6-10 Minutes	BS 5889
Tack Free Time	2.5 Hours	ASTM C679
Tooling Time	6-10 Minutes	ASTM C679
Sag or Slump	Nil	BS5889

Cured Properties

Property	Mean Result Achieved	Test Method
Shore A Hardness	15	ASTM C 661
Modulus at 100% Elongation	0.25 MPa	ASTM D 412
Tensile Strength	1.0 MPa	ASTM D 412
Elongation a Rupture	800%	ASTM D 412
Peel Strength after UV through Glass	87N/25mm	BS5889
Dynamic Movement Capacity	+100% -50%	ASTM C 920
Accelerated Aging and Weathering	Excellent	ASTM C 792

Temperature

	Minimum	Maximum
Application Temperature	+5°C	+40°C
Service Temperature	-35°C	+150°C

Application of the sealant at + 5°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 5CLM** is 6 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 ready 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 accidently swallowed or it gets into someone eyes, contact a Doctor or Poisons Information Centre (Phone Australia 131 126; New Zealand 0800 764 766)

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SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.
EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)

Packaging

370grm - polyethylene cartridge

Product Details

Item Number	Size	Colour	Pack Quantity
661540	370grm	Charcoal	15
331376	370grm	Light Grey	15
321730	370grm	Dark Grey	15
661530	370grm	Beige	15
661560	370grm	White	15

Important Notice for Users
Suggestions for use should not be taken as an inducement to infringe any particular patent.
*Bostik 5CLM is a registered trademark of Bostik Australia.

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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Certified System
Quality
ISO 9001
SAI GLOBAL
Quality endorsed ISO9001 (Thomastown site) TS16949 (Automotive).

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