BOND BREAKER & MS JOINT SEALANT

MOISTURE CURING MS SEALANT

Bastion MS Bond Breaker, a single-component, solvent-free, and isocyanate-free sealant. This moisture cured silane modified hybrid sealant offers exceptional properties for various sealing and bonding applications in the building and construction industry. With a very low VOC content, Bastion MS Bond Breaker forms a durable and flexible seal and bond that can withstand cyclic expansion and compression movements, extending and compressing up to 50% (± 25%) of the original joint dimensions (ASTM C719).

Designed to withstand normal weathering conditions, including rain, sunlight, snow, sleet, UV radiation, ozone, atmospheric contamination, and pollution, Bastion MS Bond Breaker retains its original properties even after years of exposure. Its physical properties remain stable across a wide temperature range (-50ºC to 120ºC).

Recommended for use in construction and expansion joints, perimeter sealing around doors and windows frames, and sealing various building substrates such as precast panels, brickwork, blockwork, granite, sandstone, marble, plasterboard, ceramics, as well as aluminum, steel, glass, dry timber, and PVC. It can also serve as a bond breaker/fillet sealant in combination with selected waterproofing membranes from the Bastion product range. Prior to application, it is advisable to conduct an adhesion test on the substrate.

Key Features:

- Fast tack-free time and curing rate.

- High bond strength.

- Good adhesion to porous and non-porous substrates, including metals, concrete, brick, wood, plasterboard, GRC, and CFC.

- Medium modulus, providing resilience and permanent elasticity.

- Excellent weathering and UV resistance, ensuring color stability.

- Resistant to fungal attack.

- One-component formulation, no mixing required.

- Accommodates high movement (± 25%) as per ASTMC719.

- Suitable for damp substrates.

- Does not support fungal growth.

Installation Procedure

Surface Preparation:

Ensure that all surfaces are free from contaminants such as dirt, dust, grease, oil, frost, water, old sealants, and protective coatings. Remove any loose particles from joints using oil-free compressed air or a vacuum cleaner. For metal surfaces, it may be necessary to rub them down and clean them afterward. Allow the substrate to dry after cleaning or degreasing. Most common substrates, including building substrates, natural stone, treated wood, PVC, and plastics, exhibit excellent adhesion to Bastion MS Bond Breaker.

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Priming Porous Substrates:

In general, priming of porous substrates is not required. However, it is recommended to conduct adhesion tests before proceeding with the application.

Priming Non-Porous Substrates:

Metal substrates must be free from rust, scale, or oxide film. Clean non-porous substrates such as plastics and metals using MEK or isopropyl alcohol (IPA) with the two-cloth method described below. Examples of non-porous substrates include UPVC outlets and pipe work, brass, copper fittings, stainless steel trays and flashings, PVC, ABS, Polyamide, fiberglass, and polyester.

Two-Cloth Method - Solvent Wipe:

1. Dampen a clean, dry cloth with MEK or IPA and evenly spread it over the non-porous substrate, using a cleaning or rubbing action.

2. Immediately wipe off any solvent residues with a second clean, dry cloth using a buffing action.

3. Allow the substrate to dry for at least 5 minutes before applying Bastion MS Bond Breaker.

4. Repeat the process if the surface is contaminated before applying the sealant.

Application:

To use Bastion MS Bond Breaker as an adhesive or sealant, dispense it from the sausage using a hand or air-operated caulking gun suitable for this purpose. Open the end of the sausage and position it with the pierced end facing upward at the top of the nozzle. Attach the nozzle and housing to the gun barrel. To stop the product flow, extrude the required amount of product from the sausage using the gun's trigger, and then depress the catch plate mechanism located at the rear of the gun, just above the trigger, with your thumb.

Apply Bastion MS Bond Breaker in a continuous operation, using sufficient pressure to ensure proper filling and sealing of the cavity.

Construction Adhesive Applications:

Bastion MS Bond Breaker offers the convenience of not requiring application on both bonding surfaces. However, it is essential to properly prepare both surfaces as per the prescribed preparatory work. Apply the adhesive in beads or daubs onto the prepared substrate. The bonded materials can be joined immediately or left open for up to 15 minutes after application before bonding. In cases where no mechanical fixing is used in conjunction with the adhesive, clamping is necessary until full cure is achieved. Apply only the necessary amount of sealant to achieve an adequate bond, considering the surface texture. Any excess sealant can be removed with a dry cloth or solvent wipe before curing. For exposed adhesive, create a flush finish using a spatula or putty knife.

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Construction Sealant Applications:

Bastion MS Bond Breaker is particularly suitable for vertical joint sealing. A thin bead of sealant can accommodate greater joint movement compared to a thick bead. The recommended ratio of joint width to sealant depth is 2:1, ensuring that the sealant does not exceed 30mm in width or 5mm in depth. To prevent undesirable three-sided adhesion, use a bond breaker. Install open-cell polyurethane foam or closed-cell polyethylene foam rod as the recommended back-up material to control proper sealant geometry. Install the back-up material or joint filler according to specifications.

Apply Bastion MS Bond Breaker continuously using positive pressure to effectively fill and seal the joint. Apply adequate pressure while tooling the sealant to spread it against the back-up material and onto the joint sides. Remove any excess uncured sealant from all surfaces. Prior to the sealant curing, remove any masking tapes.

Bond Breaker/Fillet Sealant:

Apply Bastion MS Bond Breaker to the required transition area and tool it to form a 12-15mm wide cove.

Coverage:

The coverage table provided below is approximate and may vary depending on substrate conditions.

Package size	10mm x 5mm joint	30mm x 5mm joint
600ml sausage	12 lm	4.0 lm

Calculation formula (W x D X L) / 1000 = Litres
Litres / 0.6 = No of 600ml Sgs W = Width (mm), D = Depth (mm), L = Length (metres)

Important Notes:

Bastion MS Bond Breaker should not be used in the following situations:

• In highly chlorinated areas, such as swimming pools and spas.

• As a glazing sealant.

• On green masonry surfaces (requires a 28-day cure).

• At temperatures below 5°C or above 35°C.

• On polypropylene, polyethylene, or polycarbonate.

• On or near any bituminous products.

• Since each substrate and condition is unique, it is strongly recommended that the applicator or end user conducts their own tests to ensure the product meets their specific requirements.

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Paintability:

Bastion MS Bond Breaker can be painted after it has fully cured using waterborne coating systems. However, coatings with high solvent content, such as gloss enamels or oil-based undercoats, may cause the sealant's surface to react and become tacky. It is advisable to perform a field test to check compatibility. For the best appearance and performance, the paint used should have similar elongation capabilities to the sealant.

High build coatings with some elastomeric properties, such as quality acrylic emulsions, can tolerate low movement without significant distortion of the paint film.

Storage and Shelf Life:

Store Bastion MS Bond Breaker between 10°C and 30°C. The shelf life is twelve months in its original unopened cartridge or sausage.

Safety Precautions:

Always read SDS before use.

Clean-Up:

It is recommended to use protective goggles, barrier creams and ointments, gloves, and protective clothing. Clean up any uncured material and equipment immediately after use. Cured material can only be removed through mechanical means.

TYPICAL PROPERTIES

Tack free time (minutes)	30 minutes @ 23°C, 50%RH
Appearance	Non-sag smooth thixotropic paste
Cure System	Moisture Curing
Flammability	Non Flammable
Rate cure in mm/24hrs	3.0mm
UV Resistance	No change (dry UV 300w 25cm distance to specimen 6 weeks test
Tensile Strength	1.2MPa
Joint Movement ASTM C719	± 25%
Elongation at break	>400 %
Application Temp	5°C to 35°C
Hardness Shore A	32
Colour	Grey
Suitable joint width	5 – 30mm
Paintable approx.	After full cure
Service Temperature	-50°C to +120°C
Full cure	7 days
Acoustic properties	Excellent

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Manufactured for Bastion by RLA Polymers:

WARRANTY STATEMENT:

RLA Polymers guarantees this product against manufacturing defects and guarantees it to be manufactured to our published specifications.
We certify that this product is suitable for use when fully cured and will perform as described in our technical data sheet or other published materials.
RLA Polymers will replace the product free of charge when purchased from any legally verifiable source and where a product is proven to have been stored, handled, and install according to instructions published on our packaging and within the stated shelf life.
The Installation of all materials must be carried out per the relevant Australian Standards.
Warranty doesn't apply if damage, loss, failure to follow instructions, or other circumstances are out of our control.
Sufficient time and access to investigate any complaint must be accorded to RLA Polymers.
The consumer is responsible for any expenses incurred in making a claim.
A claim form can be requested by:
PHONE: 1800 242 931
EMAIL: info@rlapolymers.com.au
MAIL: 215 Colchester Road Kilsyth Victoria 3137 (Attention Customer Service)
WEBSITE: www.rlapolymers.com.au

AUSTRALIAN CONSUMER LAW:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The benefits under our warranty are in addition to other rights and remedies available to the consumer under the law in relation to the goods and services to which the warranty relates.

DISCLAIMER:

All statements and technical information contained herein are based on tests we believe to be reliable, but the accuracy thereof is not guaranteed. Users assume all risk and liability resulting from the use of the product and must confirm the suitability thereof by their own tests.
Conditions of Sale contain a limited warranty against manufacturing defects.