

One part, low modulus, elastomeric building sealant.

USES

For sealing movement joints in building structures that are traditionally sealed with silicone, polysulphide and polyurethane sealants. Ideal for silage pits vertical & horizontal joints.

DESCRIPTION

Nitoseal 151 is a one part, low modulus, elastomeric building sealant supplied in 600ml hermetically sealed aluminium sachets for application with the Quattro GX Guns.

The sealant is based on a specially developed polymer system which gives enhanced technical properties over conventional one part silicone polysulphide and urethane sealants. It has been specifically formulated for sealing and re-sealing movement joints in building facades, building panels, silage pits, effluent tanks and in block and brickwork as well as for sealing perimeter joints around door and window frames.

Nitoseal 151 cures by reaction to oxygen in the atmosphere to form a low modulus elastomeric seal with enhanced curing properties allowing movement to be accommodated during the curing cycle.

The sealant exhibits good adhesion to most building surfaces including concrete, aluminium, brick, uPVC, stone and wood. Its low modulus characteristics assist in reducing stress on the bond which is particularly important when considering low tensile strength substrates.

Nitoseal 151 will not normally stain most building materials and is available in a comprehensive range of colours; these factors and its excellent tooling and finishing characteristics result in an aesthetically pleasing finish to a high performance joint.

DESIGN CRITERIA

Nitoseal 151 can be applied to joints between 6mm and 40mm wide and between 6mm and 20mm deep. The sealant forms an elastomeric skin soon after application and has been designed with a cure mechanism which enables it to accommodate movement during the cure period.

Mechanical strength will develop over a period of 10 to 28 days depending on joint size and climatic conditions.

Joints which are expected to experience continual cyclic movement should be designed such that the sealant is applied to an optimum width : depth ratio of 2:1, subject to the overriding recommended minimum sealant depths set out below.

6mm for accurately formed non-porous surfaces such as glass and metal.
10mm for precast concrete, in-situ concrete, brick and other porous surfaces.

As with all types of sealers the sealing slot should be formed using Expandafoam closed cell polyethylene foam back-up strip which supports the sealant during application and provides a bond breaker at the base of the slot to allow movement to be accommodated over the full width of the sealant.

To ensure that the sealant remains within its stated movement capacity (25% MAF), sealing slot widths should be designed in accordance with the recommendations of BS 6093.

ADVANTAGES

- Meets performance requirements of BS 5215 and BS 5889 Type 'A'.
- Low modulus.
- Enhanced cure rate by reaction with atmosphere oxygen.
- Non staining to most substrates.
- Good slump resistance.
- Safe to use.
- Extra colours available.



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|---|--|
| Form: | Paste |
| Standard colours: | Light Grey |
| Also Available: | Teak, Brick Red, Buff, Black, White |
| Movement accommodation factor (MAF) : BS 6093: | 25% butt joints / 50% lap joints |
| Skinning time: 25oC, 65% RH: | 60 minutes |
| Application temperature: | 5oC to 50oC |
| Typical hardness shore : 'A' at 25oC : | 20o + 5o |
| Service temperature : range : | -40oC to 70oC |
| Solids Content: | 100% |
| Density: | 1.5kg/litre |
| Flash point: | >65oC |
| Flammability: | Burns but does not readily support combustion. |
| Staining index : ASTM D 2203 - 88: | 1 |

PROPERTIES

APPLICATION INSTRUCTIONS

- Joint surfaces must be clean, dry and frost free. Remove all dust and laitance by grit blasting, grinding or rigorous wire brushing. Remove all rust, scale and protective lacquers from metal surfaces. non-porous surfaces should be degreased.
- Any expansions joint filler must be checked to ensure that it is tightly packed and no gaps or voids exist at the base of the sealing slot before positioning a bond breaker.
- A bond breaker is, however, not required on a cellular polyethylene joint filler such as Expandafoam or Hydrocell.
- In movement joints, **Nitoseal 151** can be firmly supported by a closed cell foam back-up strip, Expandafoam or Expan cell which will act as a bond breaker.
- Where a particular neat finish is required, mask the face edges of the joint before priming and remove immediately after tooling is completed.

MAINTENANCE

No special requirements, however, any damage found during routine building inspections should be cut out and replaced.

PRIMING

Where surfaces may be friable or dusty or where high movement or stress may be encountered, **Q/Seal P1** may be used as a primer.

LIMITATIONS

| Joint Size in mm | Litres per metre run | Metre per 600ml sachet |
|------------------|----------------------|------------------------|
| 6 x 6 | 0.036 | 16.67 |
| 10 x 6 | 0.060 | 10.00 |
| 12 x 6 | 0.072 | 8.33 |
| 12 x 10 | 0.120 | 5.00 |
| 20 x 10 | 0.200 | 3.00 |
| 25 x 12 | 0.300 | 2.00 |
| 30 x 15 | 0.450 | 1.33 |
| 40 x 20 | 0.800 | 0.75 |

- *Not suitable for trafficked joints.
- *Not suitable for potable water tanks.
- *Not to be used in contact with bitumen compounds.

ESTIMATING STORAGE

Storage life of 12 months in original containers when kept in dry conditions between 5oC and 27oC.

HEALTH AND SAFETY

Nitoseal 151: This product is safe in normal use, however, good hygiene practices should be followed. Wear suitable gloves and eye protection.

Keep out of eyes. Do not consume. Keep away from children and pets and wash hands thoroughly after use. Empty sachets should be disposed of in accordance with waste disposal regulations and not left lying about.

