

## LOW MODULUS 1 PART POLYURETHANE SEALANT

### DESCRIPTION

**Conflex LM** is a one component low modulus polyurethane sealant curing via air humidity to form a highly elastic weather proof seal.

### USES & ADVANTAGES

**Conflex LM** is used for sealing joints where a permanently flexible seal is required e.g. expansion and construction joints in precast and insitu concrete, parapets, brick and blockwork, window and door permanent sealing, acoustic jointing, marble, granite and G.R.C. facades, external cladding curtain walls etc.

#### Advantages include:-

- Excellent weathering resistance.
- Can be over painted.
- Non staining.
- Excellent acoustic rating.
- Non toxic, approved for potable water contact.
- High Durability.
- 1 component ready for use.
- No mixing, less wastage.

### JOINT DESIGN

More joint movement can be accommodated in a thin bead of sealant than a thick bead.

**Conflex LM** polyurethane sealant depth should be a minimum of 6 mm. or half of the joint width, whichever is greater. Back up materials impregnated with oil or bitumen materials are not to be used. Adhesion between the back up material and sealant must not occur because the excessive stresses exerted on the product may cause failure of the sealant.

### PROPERTIES

#### UNCURED

Property	Value / Test Method
<b>Density:</b>	Approx. 1.27 kg/litre
<b>Tack Free Time:</b>	2 hours; AS1526/TT-S-00230C /ASTM C679
<b>Curing Time@23°C:</b>	≥ 2 mm/24 hrs 50% RH
<b>Flow, Sag or Slump:</b>	Nil; AS1526/TT-S-00230C /ASTM C639
<b>Staining:</b>	None; AS1526/TT-S-00230C /ASTM C510

#### After 7 Days Cure at 25°C and 50% RH

<b>Hardness (Shore A):</b>	20 ± 5; AS1526/ASTM D2240
<b>Tensile Strength:</b>	1 N/mm <sup>2</sup> ; ASTM D 412
<b>Elongation at Break:</b>	600%; ASTM D 412
<b>Elastic Recovery:</b>	≥85%; AS1526/TT-S-00230C
<b>Elastic Modulus: at 100%</b>	≥0.40% N/mm <sup>2</sup> ; AS1526/TT-S-00230C

<b>Ozone Resistance:</b>	Excellent
<b>UV Resistance:</b>	Good; ASTM C793-75
<b>Joint Movement:</b>	+/-25%; TT-S-00230C
<b>Capability</b>	/ASTM C719
<b>Temperature Resistance:</b>	-40°C to +80°C
<b>Stain and Colour Change:</b>	None; AS1526/TT-S-00230C /ASTM C510

**Note:** Values given above are not intended to be used in specification preparation.

**Standards:** In addition to those standards shown under properties **Conflex LM** meets the following International performance standards:

- DIN 18.540 Part 2
- BS 4259-1983, BS 4254-1983, BS 5889 1980 Type A
- AS 1526-1973, AS 1527, AS 4020-1992, AS 1157-1972
- ASTM C920-1986, ASTM C290-79, USTT 5-227
- US FS TT S 0027E Type 2 Class A
- US FS TT S 00230C Type 2 Class A
- JIS A5758, 1979 PU-1-8020-AN
- French Approval S.N.J.F. & C.E.B.T.P.
- BS ISO 11600-F-25 LM.

### SUBSTRATE PREPARATION

Clean all joints by removing foreign matter and contaminants such as oil, dust, grease, frost, water, surface dirt, old sealants and any protective coating. Porous substrates should be cleaned as necessary by grinding, saw cutting, blast cleaning (sand or water), mechanical abrading or a combination of these methods that will be required to provide a sound, clean and dry surface for sealant application. Dust, loose particles, etc. should be blown out of joints with oil-free compressed air or vacuum cleaned. Non-porous and plastic surfaces should be cleaned by a solvent procedure or by mechanical means.

### PRIMING

**Conflex LM** polyurethane weatherproofing sealant may require **Conflex LM Primer** for masonry, steel and most common building materials. Joints must be thoroughly dry before applying primer and sealant. If sealant is to be applied to a material with specially treated surfaces or of particularly unusual surface characteristic consult Cormix International for primer recommendations. Prior to any use, however, it is always recommended that a bead of sealant be applied on the surface to test adhesion. Cormix recommends priming of all joints subjected to immersion. Apply **Conflex LM Primer** a min. of 30 minutes and a max. of 6 hours prior to the application of Conflex sealant. Primed areas not sealed within 6 hours should be re-prepared and primed.

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### METHOD OF APPLICATION

Install back-up material or joint filler as specified. Tape sides of joints. Apply **Conflex LM** polyurethane sealant in a continuous operation using a positive pressure adequate to properly fill and seal the joint. Tool the non-sag grade sealant with adequate pressure to spread the sealant against the back-up material and onto the joint surfaces. A tool with a concave profile is recommended to achieve the correct shape.

### APPLICATION LIMITATIONS

- a) **Conflex LM** sealant should not be applied with wet tooling techniques; using solvents, water or detergent /soap solutions is not recommended.
- b) **Conflex LM** sealant should not be applied to surfaces with special protective or cosmetic coating without prior consultation with the Cormix International Technical Service Department. Such surfaces include, but are not limited to mirrors, reflective glass, or surfaces coated with teflon polyurethane or polypropylene.
- c) **Conflex LM** sealant should not be applied to unpredictable absorptive surfaces such as marbles, limestone or granite unless a standard of appearance has been agreed on as a result of testing for stain and/or discolouration. Consult Cormix on the tests required.
- d) **Conflex LM** sealant cures via air humidity. **Conflex LM** can be affected by water before or during cure. The sealant should not be stored, applied or cured in areas where unusually high humidity or free water are present during the application or initial cure.
- e) **Conflex LM** sealant should be allowed to cure for 14 days prior to subjecting to an intermittent or continuous head of water.
- f) **Conflex LM** sealant should not be used in highly chlorinated areas such as swimming pools, spas etc. without prior consultation with Cormix International Technical Service Dept.
- g) Temperature range during application -5°C to +35°C.

### PACKAGING

**Packaging:** 300 ml.ctg. / 400 & 600 ml. ssg.  
**Colours:** Black, white, grey, beige.  
Others to order.

### STORAGE & SHELF LIFE

When stored at or below 27°C **Conflex LM** polyurethane weatherproofing sealant has a shelflife of 12 months from date of shipment from **Conflex LM** point of manufacture.

### HEALTH & SAFETY

On Contact, uncured sealant causes irritation. Avoid contact with eyes and skin. Contact lens wearers take appropriate precautions.

### TECHNICAL SERVICE

The Cormix International Technical Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

### QUALITY ASSURANCE

ISO 9001 : 2008 verified by TUV Nord.

### CONTACT DETAILS

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