



# Product Information Sheet



Sheet Number: **0100**

Rev 22-11-06

## SHIELDFLEX 1000

### Polyurethane Sealant

### ShieldFlex 1000

#### Description:

Shieldflex 1000 is a single component, thixotropic, polyurethane based elastomeric joint sealant. Shieldflex 1000 is a moisture-cured material. When cured Shieldflex 1000 will exhibit tough elastomeric properties suitable for jointing and will also exhibit good adhesive performance.

#### Uses:

As an elastomeric joint sealant for:

- Joints in precast panel construction
- Expansion Joints in buildings and civil structures above and below ground
- Construction Joints
- Sealing penetrations in walls or floors around pipe work or ductwork etc.
- Retaining wall systems
- Curtain Walls
- Draught Proofing

#### Instructions for Use:

All surfaces must be sound, clean, dry and free from oils, grease and surface contaminants such as form release agents, curing membranes and hydrophobic water repellents.

Masonry, Brick and concrete surfaces:

Remove any loose particles and or surface laitance by mechanical means. Blow area down with an electric air blower or remove dust by other means such as vacuuming. Fill voids with a cement based fairing mortar or an epoxy fairing mortar. Metal surfaces:

The surface must be clean and free from rust, oils, grease and should be degreased with M.E.K. or Acetone

Priming: Is not necessary on most substrates that are clean and free of contaminants. Testing is recommended on all new substrates types.

Care should be taken applying Shieldflex 1000 where silicone compounds have been used.

#### Technical Data:

Application temperature range 5 degrees Celsius to 40 degrees Celsius

Service temperature range minus 20 degrees Celsius to 70 degrees Celsius

Colours Light Grey standard upon order White or Black (minimum quantity required)

Elastic Recovery > 65 %  
ISO 7389

Elongation at Break 600%  
ISO 8339

Movement Capability 25% of Joint width at time of installation

Shore A Hardness 23 to 27 after 28 days cure at 23 degrees Celsius, 50% R.H. DIN 53 505

Modulus of Elasticity (at 100%)  
ISO 8339 < .25 Mpa

Film Formation 2 to 4 hours

Cure rate after 24 hours (23 degrees Celsius, 50% R.H.)

< 2.5mm

#### Chemical Resistance Guide:

Water, Cleaning agents, Accidental spillage of oils. Hydrocarbons and diluted acids and alkalis.

#### Storage/Shelf life

Shieldflex 1000 is best stored at temperatures between 10 degrees Celsius and 25 degrees Celsius (dry). Keep room well ventilated. The shelf life of an unopened package is 12 months from date of manufacture.

#### Special Notes:

UV can alter the colour and gloss level of Shieldflex 1000 but this will not change performance.

Do not use in swimming pools.

The use of open cell backing rod will encourage Shieldflex 1000 to cure from both the front and back of the joint.

It is preferable to install an open cell backer rod to allow air/moisture transmission thus aiding cure.

If using closed cell backer rod bubbling can occur if the backer rod is punctured. It must be installed in undamaged condition.

Joints should be designed as width equals depth upto 12mm wide and if wider joints are to be filled they should be depth equals half the value of width.

## Features:

Excellent Adhesion

Same day skinning

Flexible

Non-sag

Can be painted over

Ready for use

Crack Bridges

## Benefits:

Adheres to most building materials

Easy to use

Allows for substrate movement

One coat usually sufficient

Neat workmanship

Place into application trigger gun

Seals expansion joins

**Notes:** There are many substrates on the market. Please consult Shieldcoat for further information regarding applications not on this sheet.