









ENGINEERED SOLUTIONS

SPECseal MS40

HIGH MODULUS ONE COMPONENT MS SEALANT/ADHESIVE







High Modulus UV Resist

Adhesi

DESCRIPTION

SpECseal MS40 is a high quality sealant/adhesive, based on MS Polymer Technology. It is a single component, elastomeric sealant with excellent adhesion property on various substrates.

TYPICAL USES

- Precast wall panel joints
- Expansion joints
- Control joints
- Connection joints
- Window frame parameter sealant
- Sealing of GRC panel systems, anodized aluminium, masonry, porcelain, coated metal, finish wood, epoxy and polyester panels, uPVC, polystyrene, stainless steel

ADVANTAGES

- Solvent free
- Isocynates free
- Paintable
- No air bubbling
- No shrinkage
- Primerless bonding to most surfaces
- Non staining on natural stone
- Very easy to apply
- Permanently elastic after curing
- Excellent resistance to UV radiation
- Excellent resistance to many chemicals
- Very good adhesion on many materials

TECHNICAL DATA

| PROPERTIES | VALUES |
|---------------------------------------|---|
| Colours | Grey, white, beige and ivory. Other colours subject to |
| | minimum quantity. |
| Skin Formation @ 23 °C and 50 % RH | 20-50min |
| Cure Depth (24hrs) at 23°C and 50% RH | Approx. 3mm |
| Specific Gravity | 1.50 ± 0.03 |
| Shore A Hardness ASTM C661 | 40±5 |
| Elastic Recovery (ISO 7389) | >70% |
| Elongation at Break ASTM D412 | 250 ± 25% |



| PROPERTIES | VALUES |
|-------------------------|-----------------|
| Temperature Resistance | -30°C to +90°C |
| Movement Capability | 25% |
| VOC Content | <10g/L |
| US EPA Method 24 | |
| Slump | <1 mm |
| ASTM D2202 | |
| Tensile strength | 1.30±0.20 N/mm2 |
| ASTM D412 | |
| Application Temperature | 5°C-40°C |

APPLICATION INSTRUCTIONS

PREPARATION

It is essential that the joint arises are clean and free from any deleterious matter which could prevent adequate bond to the substrate. The substrates must be clean, dry, free of dust and grease and other contaminations.

APPLICATION

- 1. Cut the tip of the sausage carefully and slip it into the caulking gun.
- 2. Cut the nozzle into an appropriate diameter at an angle of approximately 45°C to 60°C.
- 3. Place the nozzle into the caulking gun and screw tight.
- 4. Extrude the sealant with a single bead. Tool the sealant bead with a clean and dry tool before the sealant skins for a smooth finishing.

CLEAN UP

Wet sealants can be cleaned up with acetone or mineral spirits. Cured sealants can only be removed mechanically.

JOINT DESIGN

Joint dimension should be designed by taking into consideration the movement capability of the sealant and the anticipated joint movement.

Generally the joint width-to-depth ratio is 2:1 for joint width ≥ 12 mm, or 1:1 for joint width <10 mm.



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COVERAGE

| Width | Depth | Coverage (600 ml) * |
|-------|-------|------------------------|
| 6 mm | 6 mm | 15.15 meter |
| 10 mm | 10 mm | 5.45 meter |
| 20 mm | 10 mm | 2.73 meter |
| 25 mm | 12 mm | 1.82 meter |

*The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.

CALCULATION FORMULA: $X / [(Y \times Z) \times 1.1] = Coverage$

X = volume of sausage in ml,

Y = joint width in cm, Z = joint depth in cm,

1.1 = 10% wastage assumption,

Coverage = linear meter run in cm per sausage

LIMITATIONS

Not recommended for the following applications:

- Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces.
- Overcoated with oil based paint not compatible

PACKAGING

SpECseal MS40 is supplied in 600ml sausage.

STORAGE AND SHELF LIFE

SpECseal MS40 has a shelf life of 12 months when stored in original packaging at a maximum temperature of $25\,^{\circ}$ C. If stored at high ambient temperatures or at high humidity the shelf life will be reduced by as much as 50 - 60%.

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