

Concrete Joint Protection - Joint Sealants

Paraseal®

Two-part, cold applied, pouring grade polysulphide sealant for sealing horizontal movement joints in buildings, and civil engineering structures.

Applications

Horizontal movement and construction/contraction joints in:

- Reinforced concrete structures
- Bridges
- Subways
- Tunnels
- Culverts
- Tanks
- Silos and other reinforced concrete buildings

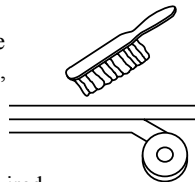
Where Paraseal® is subject to attrition from vehicles, etc. it should be recessed 3 mm below the wearing surface to minimise the effect from wear and debris. Polymer sealants can swell when immersed in water and should be recessed below the surface to permit this increase in volume.

Installation

Do not use below +5°C. When temperature is below +10°C, store containers for several hours at 21°C to ease mixing and application.

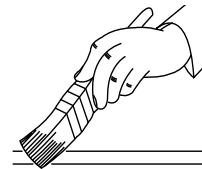
Joint Protection

Ensure surfaces are clean, dry and free from residual joint fillers, slot formers, loose aggregate, paint, corrosion, oils, grease, concrete curing agents or mould release agents. Apply masking tape and bond breaker tape where required before priming.



Priming

Select correct primer from table. Application of Primer should not be carried out below +5°C. Apply single coat of primer using a paint brush, working Primer well into the surface and ensuring complete coverage. Brush out well to avoid a thick coating. Apply sealant after one hour but not later than 24 hours. refer to instructions on Primer cans.

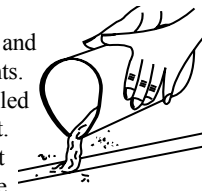


Mixing

Mix and immediately use one complete unit at a time. Using a palette knife, transfer all of the curing agent into the base compound. Mix for 5 minutes at 500 rpm with a helical mixing paddle, moving paddle through mass of the material until completely streak free. Periodically scrape down the sides and base of container with a palette knife ensure all of the curing agent is thoroughly blended with the base compound.

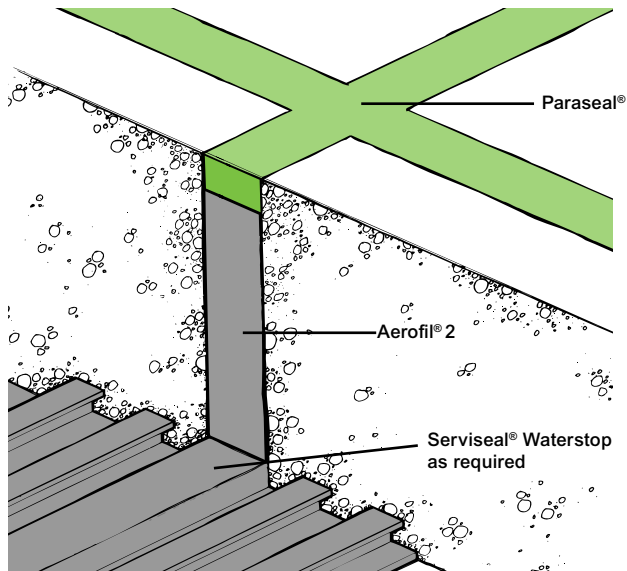
Application

Crush top of container to form spout and pour sealant directly into primed joints. Joints over 20 mm deep should be filled in two passes to avoid air entrapment. Compact sealant into joint with a wet wooden spatula and smooth off to the desired finish. Remove any masking tape immediately after applying Paraseal. Use a proprietary tool cleaner to clean equipment.



Advantages

- **Durable** - resistant to environmental pollution, weathering and immersion.
- **Flexible** - capable of accommodating shear and transverse movement.
- **Resistant to damage** - Shore hardness 15-25 provides tough resilient sealant.
- **Performance** - conforms to BS4254: 1983.
- **Chemical resistant** - occasional spillage of dilute acids, alkalis, fuel and oil.
- **Cold applied** - chemically curing, easily mixed and applied, self-levelling.
- **Excellent adhesion** - bonds to all building substrates with the appropriate primer.



Details shown are typical illustrations only and not working drawings. For assistance with working drawings and additional technical advice please contact Grace Technical Services



Supply

Paraseal®	5 litre pack. (2 packs per carton)
Storage	Store in original containers between +5°C and +25°C
Shelf life	12 months
Coverage (for estimating purposes only. No allowance for wastage, etc.)	
The number of units can be calculated by using the formula	
$\frac{\text{cross section of joint (mm}^2\text{) x length (m)}}{5000} = \text{no. of units of Paraseal required}$	
Ancillary Products	
Primer PS	1 litre can, average coverage 10m ²
Filler Boards	Aerofil® in various thicknesses

Equipment and Materials by Others: Wire brush, heavy duty 500 r.p.m electric drill, palette knife, masking tape, bond breaker tape, tool cleaner, paint brush for priming, helical mixing paddle and non porous surface primer.

Performance

Property	Values
Colour	Grey
Pot life at 23°C	60 minutes
Operating Temperatures	-40°C to +90°C
Installation Temperatures	+5°C to +50°C
Recommended Movement	Transverse ± 12.5% Shear ± 50% (based on a joint width to depth ratio of 1.5:1)
Movement accommodation factor	25%
Shore A Hardness	15-25
Specification Compliance	BS 4254: 1983

All declared values shown in this data sheet are based on test results determined under laboratory conditions and with the product sample taken directly from stock in its original packing without any alteration or modification of its component parts.

Curing

Allow 28 days curing at +5°C or 7 days at +25°C before immersion in any liquid. It may be necessary to provide drainage in the storage tanks during this time to prevent immersion.

Health and Safety

For Paraseal and Primer PS read the product label and Material Safety Data Sheet (MSDS) before use. Users must comply with all risk and safety phrases. MSDS's can be obtained from Grace Construction Products.

NBS Specification Clause

Refer to Clause E40 530.

Surface	Treatment	Primer
Concrete & Masonry	Surfaces must be clean and dry. Wire brush thoroughly and remove dust and all contaminants.	Primer PS
Metals	Remove any corrosion or millscale by grit or shot blast, wire brush, grinder or chemical remover. Degrease the surfaces with clean cloths and oil free cleansing solvent.	Use a suitable non porous surface primer*
Wood (bare)	Wood surfaces must be clean and dry. Cut back or abrade where necessary to sound timber.	Primer PS
Glass and Glazed Materials	Thoroughly clean the surfaces with clean cloths and oil free cleansing agent.	Use a suitable non porous surface primer*
Coated Surfaces	Where feasible, coatings should be removed and the surfaces treated and primed as above.	

* Primer is only required where surface is permanently submerged or inundated for long periods of time.

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