

Concrete Joint Protection - Joint Sealants

Vertiseal®

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

Applications

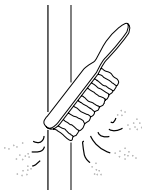
Sealing movement and construction joints in vertical faces of:

- Reinforced concrete structures
- Masonry walls
- Building facades
- Sewage treatment works
- Sea defence works.

Installation

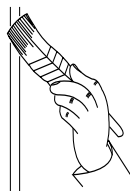
Joint Protection

- Prepare surfaces as mentioned overleaf.
- Apply masking tape and bond breaker tape where required, before priming.



Priming

- Use correct Primer. Do not prime below 5°C.
- Apply single coat of Primer using a paint brush, working the Primer well into the surface and ensuring complete coverage. Brush out well to avoid a thick coating.
- Apply sealant after one hour but within 24 hours. Refer to instructions on Primer tins.



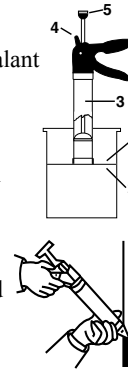
Mixing

- Mix and use immediately one complete unit at a time.
- Mix for 5-10 minutes at 500 rpm with a helical mixing paddle through the mass of material until completely streak free.
- Periodically scrape down sides and base of container with a palette knife to ensure all of the curing agent is blended thoroughly with the base compound.



Loading the Solid Barrel Gun

- Position follower Plate (1) over mixed sealant using a paper barrier (2) if required.
- Position barrel of gun (3) over Follower Plate.
- Place one hand over the handle of the gun so that the catch (4) is released, force downwards, while withdrawing the plunger (5) to draw sealant into the gun.
- Finally, screw the nozzle onto the gun and cut to size.



Application

Do not use below +5°C

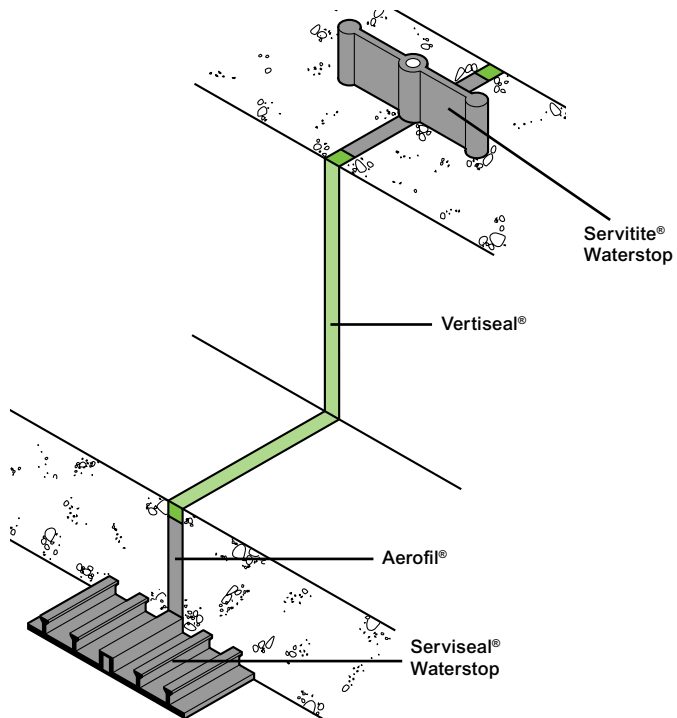
- Gun sealant into joints using an even trigger pressure.
- Clean nozzle occasionally to avoid contamination.
- Use a wet spatula to compact the sealant into the joint and to obtain a smooth polished finish.
- Remove any masking tape immediately after applying Vertiseal.

Polymer sealants can swell when immersed in water and should be recessed below the surface to permit this increase in volume.

Allow 7 days curing at +7°C and above before immersion in any liquid for Vertiseal. It may be necessary to provide drainage in the storage tanks during this time to prevent immersion.

Advantages

- **Easily mixed** - reactor-in-base aids uniform dispersal during mixing.
- **Durable** - resistant to environmental pollution, weathering and immersion.
- **Flexible** - capable of accommodating shear and transverse movement.
- **Excellent adhesion** - bonds to most common building substrates with appropriate primer.
- **Non-slumping** - can be used in wide joints up to 40 mm wide.
- **Low gunning force** - easy to apply.



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

Vertiseal®	2.55 litre mixed volume. (4 x 2.5 kg units per carton)
Storage	Store in original containers in dry conditions 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

$$\frac{\text{cross section of joint (mm}^2\text{) x length (m)}}{\text{Volume of unit (ml)}} = \text{no. of units of Vertiseal required}$$

Ancillary Products

Primer PS	1 litre can. Approx coverage 10m ²
Filler Boards	Aerofil® in various thicknesses

Equipment by Grace

Follower Plate	Unit
Solid Barrel Gun	Unit
Plastic Nozzle	Unit
Mixing Paddle	Unit

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

Performance

Property	Values
Pot life at 23°C	60 minutes
Shore A Hardness	10 - 20
Operating Temperatures	-30°C to +70°C
Installation Temperature	+5°C to +50°C
Specification Compliance	BS 4254: 1983, except working life.
Movement accommodation factor	25%
transverse shear	+/- 12.5%
	+/- 50%
Based on a joint width to depth ratio of 1.5:1.	

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.

Health and Safety

For Vertiseal 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 or from our web site at www.graceconstruction.com.

There is no legal requirement for a Material Safety Data Sheet for Follower Plate, Solid Barrel Gun, Plastic Nozzle or Filler Boards. For health and safety questions on this products please contact Grace Construction Products Limited.

NBS Specification Clause

Refer to Clause E40 530.

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Surface	Treatment
Concrete & Masonry	Surfaces must be clean and dry. Wire brush thoroughly and remove dust and all contaminants. Prime with Primer PS .
Metals	Remove any corrosion or millscale by grit or shot blasting, wire brush, grinder or chemical remover. Degrease the surfaces with clean cloths and oil free cleansing solvent. Prime with a non-porous surface primer* (contact Grace for advice).
Glass and Glazed Materials	Thoroughly clean the surfaces with clean cloths and oil free cleansing agent. Prime with a 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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