

# Hi-Seal™ PU+

## Class A Polyurethane Construction Sealant

### Product

Hi-Seal PU+ is a low modulus, one component, Class A polyurethane sealant.

### Description

When fully cured Hi-Seal PU+ it will form a tough, flexible seal capable of cyclic expansion and compression movement of ± 25% of the original joint width.

Hi-Seal PU+ is virtually unaffected by normal weathering conditions, ultra-violet radiation, atmospheric contamination and pollution.

Its excellent weatherability enables it to retain its original properties after years of exposure.

(C.S.I.R.O. RILEM Long- Term Durability Study)

### Recommended Uses

#### Sealing joints in:

- Insitu concrete
- Precast and tilt up panels
- Brick & blockwork
- Aluminium windows
- Granite, sandstone and marble
- Interior / Exterior

### Features and Benefits

- UV and weather resistant
  - Excellent resistance to aging and weathering
  - Permanently flexible
  - Will not shrink or crack
- Thixotropic - no sagging or running
- Excellent flexibility - joint movement ±25%
- Acoustic rated
- Suitable for contact with drinking water - AS4020-1994
- Non-corrosive neutral cure
- Paintable with acrylic based surface coatings
- AS1157-1972 fungus and mildew resistant

### Approvals and Standards

- CSIRO RILEM LONG - TERM SEALANT DURABILITY STUDY DBCE Doc. 97/196 (M)
- ISO 11600-Class F-25LM
- ASTM C.920-87 & 98 (USA) as Type S, Grade NS, Class 25, use NT, G,A,M,&O as an external joint sealant
- AS4020 – 1992 Potable water
- AS1157-1972 Resistance to fungal growth
- Ministry of Agriculture and fisheries New Zealand (Meat, fish, Game, Poultry- All areas)

### Performance Properties

Property	Typical Value
Appearance	Non-sag smooth thixotropic paste
Chemical type	Polyurethane
Application temperature	+5°C to +35°C
Tool working time	30mins at 20°C
Tack free time	6 to 12 hours
Cure rate	2mm per 24 hour period
Max. joint movement	±25%
Max. joint width	50mm
Elongation at break	900%
Cure hardness	Shore A30
Tensile strength	1.3N / mm <sup>2</sup>
Service temperature	-40°C to 70°C
Chemical resistance	Dilute alkalis and acids. Temporary contact with petrol, diesel and other hydrocarbons



## Application Instructions

### Preparation:

Clean and dry all surfaces by removing foreign matter and contaminants such as oil, dust, grease, frost, water, dirt, old sealants and any protective coating. Dust and loose particles should be blown out of joints or vacuum cleaned. Non porous surfaces may require preparation / priming, refer primer selection guide. Cleaning solvents should not be allowed to dry or evaporate without being wiped with a clean, dry cloth. DO NOT USE METHYLATED SPIRITS.

### Priming:

For maximum performance on porous surfaces and in all immersed applications use Ramset N49 Primer.

5077 cleaner / N40 primer is recommended for non-porous surfaces.

### Application:

Hi-Seal PU+ should be dispensed from either the cartridge or sausage by means of a caulking gun (available from Ramset).

Pierce the membrane at the top of the cartridge and screw on the nozzle. Cut nozzle to give the required angle and bead size. Place the cartridge in a Ramset applicator gun and squeeze the trigger.

For sausages, a barrel gun is required, clip the end of the sausage and place in barrel gun.

Screw end cap and nozzle on to barrel gun. Using the trigger extrude the sealant, to stop depress using the catch plate.

Apply Hi-Seal PU+ in a continuous bead using enough pressure to properly fill the joint.

### Precaution

Hi-Seal PU+ should not be;

- Used in chlorinated water such as swimming pools, spas etc.
- Used on any material containing bitumen. Bitumen products should not come into contact with Hi-Seal PU+
- Constantly immersed in salt water
- Used for glazing applications
- Applied to cement based substrates within 28 days of initial pour or set.
- Used in trafficable joints
- Applied at temperatures below 5°C.
- Joints subject to prolonged immersion in water.

## Paintability

Ramset Hi-Seal PU+ can be painted after full cure. Coatings containing solvents such as enamels, oil based or other coatings may cause the surface of the sealant to react creating a tacky surface. A field test is recommended to ensure compatibility of the coatings with Hi-Seal PU+.

## Health & Safety

On contact, uncured sealant causes irritation. Gloves and protective goggles should be worn during application and use.

- Avoid contact with skin, eyes and avoid breathing in vapour.
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do not induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes and see a doctor.
- For more detailed information refer to Material Safety Data Sheet.

## Clean-Up

Clean up uncured material and equipment immediately after using solvent. Do not use solvents on skin.

Cured Hi-Seal PU+ is difficult to remove via chemical means and mechanical means may be necessary.

## Storage

Store between 5°C and 30°C. Shelf life is 18 months in original unopened cartridge or sausage.

## Usage

Approximate usage based on a 10 x 10 joint  
600ml sausage - 6 metres

## Packaging

Colour	Pack Size	Order Number
Grey	300ml cartridge	HYSLGYG375
Grey	600ml sachet	HSPUG600