

APTC Proflex HY

Hybrid construction sealant

Description

APTC Proflex HY is a high performance, one component, construction sealant based on hybrid technology. The low modulus, moisture curing formulation has excellent primerless adhesion to many substrates and is UV and weather resistant whilst remaining permanently elastic once cured.

APTC Proflex HY does not contain any isocyanates or solvents and will not bubble on damp surfaces.

Uses

APTC Proflex HY is suitable for use in the following applications:

- Construction sealant— for building joints requiring a high movement sealant up to +/- 25%
- Expansion joints—in brickwork and concrete
- Waterproofing— as a joint sealant underneath compatible water based or acrylic membranes in internal and external waterproofing applications.

Suitable substrates: Concrete, precast & tilt panels, render, brick and blockwork, plasterboard, fibre cement sheet, aluminium windows, stainless steel, fibreglass and painted wood.

Features & Benefits

One component—easy to use	Permanently elastic
Gunnable at low temperatures	UV and weather resistant
Will not bubble on damp concrete	Low shrinkage
Low modulus (\pm 25% movement)	Excellent adhesion to typical building substrates
No isocyanates, solvents, silicones	Paintable

Technical Specifications

SKIN FORMATION	90 minutes (@23°C / 50%R.H.)
CURING RATE	2.5mm/24h (23°C / 50%R.H.)
SHORE A HARDNESS	25
TEMPERATURE RESISTANCE	-30°C to +70°C
SPECIFIC GRAVITY	1.34g/ml
JOINT MOVEMENT CAPABILITY	\pm 25%
MODULUS 100%	0.35 N/0.45N/25mm
ELONGATION AT BREAK	600%
VOC	10.8g per litre
CHEMICAL RESISTANCE:	Dilute acids, alkali's and some solvents.

Surface Preparation

All surfaces and substrates must be clean and sound. Any loose particles, grease, oils, silicones, curing compounds or laitance must be removed before application of the product.

Primer:

APTC Proflex HY will generally provide excellent adhesion without the use of a primer on most non-porous substrates. Porous substrates may require pre-treatment before application. Please consult with APTC Australia for recommendations of suitable primers.

Joint Design:

Joints should be designed to accommodate both the sealants movement capability and expected joint movement. Refer to APTC Australia for technical advice on joint design.

- Maximum joint width allowed up to 50mm*
- Minimum joint depth 5mm

For best performance and maximum adhesion the following depth to width ratio should be applied:

Joint size	Depth to width ratio
Up to 12mm	1:1
12mm to 35mm	1:2
35mm to 50mm*	*Refer to APTC Australia for technical advice on joint design before commencing application

Backing rod:

Backing rod must be used to ensure correct sealant geometry and maximum contact with the substrate. Place all backing materials before priming and application.

Pre-testing for adhesion

Where adhesion is critical to the success of the project, APTC Australia requires preliminary pre-testing of adhesion and compatibility prior to the commencement of application.

Pre-testing for adhesion is intended to eliminate potential field problems. Variability on the quality, type, cured properties and surface contaminants can affect adhesion. Pretesting will aid in determining the proper surface preparation method.

Application

APTC Proflex HY can be applied using a quality sausage applicator gun.

- Cut nozzle to the desired width and cut crimp on sausage.
- Extrude the sealant firmly into the joint ensuring it completely fills all cavities and wets out both sides of the joint.
- Tool sealant off in a concave shape before skinning to ensure a quality finish. Clean/wipe excess sealant using a suitable sealant tool. Masking tape can be used but must be removed before sealant begins to skin.

APTC Proflex HY can be applied using a quality sausage applicator gun.

- Application temperature must always be between 5°C and 40°C.
- Damaged sealant can be repaired with **APTC Proflex HY**

Painting:

APTC Proflex HY can be painted with water based and most 2 component paints. Synthetic paints may need longer drying time. Testing of paint compatibility is recommended before application.

It is recommended to slightly sand sealant and junction surfaces prior to painting. For best results, paint within a few days of application.

Clean up

Fresh/wet sealant can be cleaned using mineral spirits. Once cured, sealant can only be removed through mechanical means.

Available colours

Beige, Black, Bronze, Concrete Grey, Epping Grey, Light Brown, Midnight, Off White, Redwood, Sandstone and White.

Packaging & Shelf Life

Packaging: 600ml foil sausages

Storage/shelf life: 15 months from production date in unopened packaging. Store in a cool and dry place at temperatures between 5°C and 25°C.

Limitations

APTC Proflex HY is not suitable for use in the following applications:

- On frost-bearing surfaces or if temperature is below 5°C or above 40°C
- Glazing applications
- Mirrors, natural stone
- Aquariums, fishtanks, under water applications or where chlorides are present (swimming pools)
- Under solvent based or bitumen membranes.
- Will not adhere to PE, PP, PC, PMMA, PTFE, soft plastics, neoprene or bituminous substrates
- **APTC Proflex HY** is not resistant to all chemicals and may affect some coatings
- Cracking may occur on painted surfaces in joints with movement.
- The suitability of the product for each intended use must be determined by the purchaser prior to the application of the sealant.

Health & Safety

APTC Australia supports best practice in material handling; gloves, mask, safety goggles and protective clothing should be worn when handling and using this product. Ensure adequate ventilation when applying.

Product may cause an allergic skin reaction. May cause allergy or asthmatic symptoms/ breathing difficulties if inhaled. Keep out of reach of children



Health & Safety cont'd

SKIN: If product comes into contact with the skin, remove contaminated clothing & wash off with warm soapy water. Seek medical advice if irritation occurs. **SWALLOWED:** DO NOT induce vomiting. If swallowed drink plenty of water and seek medical advice. **EYES:** In case of contact with eyes, hold eyes open and flood with water for at least 15 minutes. Seek medical advice. **INHALATION:** Remove from contaminated area and seek medical advice.

If poisoning occurs contact a doctor or Poisons Information Centre Ph, 13 11 26 (Australia)

Safety data sheets (SDS) for this product are available on the APTC Australia website www.aptcaust.com.au. Read the TDS and SDS carefully before using any product.

Disclaimer

The information and recommendations provided regarding the application and use of APTC Australia products are based on APTC Australia's current knowledge and experience, assuming proper storage, handling, and application according to our guidelines. However, due to variations in materials, substrates, and site conditions, we cannot guarantee any warranties related to merchantability or fitness for a particular purpose, nor assume any liability based on this information, written recommendations, or other advice. Users must assess the suitability of the products for their specific application and purpose. APTC Australia reserves the right to modify product properties at any time. Third-party proprietary rights must be respected. All orders are subject to our current terms of sale and delivery. For the most up-to-date product information, users should refer to the latest version of the local product data sheet, which can be provided upon request.