

APTC Proflex Fire PU

Fire rated polyurethane sealant

AS1530:2014 & AS4072:1:2005(2016)

Description

APTC Proflex Fire PU is a single component, low modulus fire rated intumescent polyurethane sealant. Fire rated to 4 hours, it cures to form a tough and durable seal that is highly resistant to weathering and UV exposure with $\pm 25\%$ movement capabilities.

APTC Proflex Fire PU is acoustically rated with a non staining formulation that resists fungal growth.

Uses

APTC Proflex Fire PU is suitable for use in the following areas:

- Concrete including insitu concrete floors and walls
- Precast/tilt panels
- Brick and block work

Suitable substrates: concrete, brick, rendered masonry, plasterboard, fibre cement sheeting

Features & Benefits

Fire rated to 4 hours	$\pm 25\%$ movement capabilities
Low modulus	Acoustic rated
One component	Non staining
Excellent weather and UV resistance	Fungal resistance

Specifications and Technical Properties

APPEARANCE & CONSISTENCY	Non sag, smooth thixotropic paste
CURING SYSTEM	Moisture cure
SPECIFIC GRAVITY	1.45g/ml
SHORE A HARDNESS	≈ 30
TEMPERATURE RESISTANCE	-40°C to $+70^{\circ}\text{C}$
VOC CONTENT	64g/litre
TENSILE STRENGTH	$> 1.3\text{N/mm}^2$
ELONGATION AT BREAK	$> 900\%$
JOINT MOVEMENT CAPABILITY	$\pm 25\%$
CERTIFICATION	Jensen Hughes AS1530:2014 & AS4072:1:2005(2016)

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.

All dust and loose particles should be vacuum cleaned before application begins.

Concrete and other cement based substrates must be allowed to cure for a minimum of 28 days before application

Priming:

Priming of all surfaces is recommended prior to the application of **APTC Proflex Fire PU**.

Contact APTC Australia for more information on 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.

Minimum joint width: 6mm

Minimum joint depth: 6mm

Maximum joint width: 50mm

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

Joint size	Depth to width ratio
6mm to 10mm	1:1
Over 10mm up to 50mm	1:2

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 Fire PU can be applied using a quality sausage applicator gun.

- Cut nozzle to the desired width and cut crimp on sausage. **Do not cut the tip of the nozzle smaller than 6mm wide.**
- Extrude the sealant firmly into the joint ensuring it completely fills all cavities and wets out both sides of the joint and the backing material.

Application cont'd

- Tool sealant off in a concave shape before skinning to ensure a quality finish. Clean/wipe excess sealant using a suitable sealant tool.
- **Wet tooling techniques using water, solvents or a soapy solution should not be used to apply or finish APTC Proflex Fire PU.**
- Application temperature must always be between 5°C and 35°C.

Painting

APTC Proflex Fire PU can be painted after a minimum of 7 days.

- Coatings/paints with a high solvent content such as gloss enamel may cause a reaction resulting in a tacky surface developing. Contact APTC Australia for recommendations on suitable coatings.
- Surface coatings may crack or craze due to movement in the sealant.

Clean up

Fresh/wet sealant can be cleaned from tools using a citrus based or similar wipe.

Once cured, sealant can only be removed through mechanical means.

Packaging & Shelf Life

Packaging: 600ml foil sausages

Colours: Grey

Storage/shelf life: 12 months from production date in original unopened packaging. Store in a cool and dry place away from direct sunlight at temperatures between 5°C and 30°C.

Limitations

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

- Where the temperature is below 5°C or above 35°C
- In swimming pools, spas or other highly chlorinated areas
- Constant immersion in salt water
- Onto or near bitumen products
- Glazing applications, mirror backs, reflective glass
- In trafficable joints greater than 10mm in width
- Cracking may occur on painted surfaces in joints with movement.
- **APTC Proflex Fire PU** must not be exposed to water or alcohol before it has completely cured
- **APTC Proflex Fire PU** must not be applied to cement based substrates within 28 days of initial pour or set.
- 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. Product may cause allergy, asthmatic symptoms or difficulty breathing if inhaled. Keep out of reach of children.

SKIN: If product comes into contact with the skin, remove contaminated clothing and wash skin thoroughly. If irritation occurs, seek medical advice. **SWALLOWED:** If swallowed do NOT induce vomiting. Give a glass of water and seek medical advice. **EYES:** In case of contact with eyes, hold eyes open and flood with clean water for at least 15 minutes. Seek medical advice. **INHALATION:** May cause asthmatic symptoms or breathing difficulties if inhaled. Remove from contaminated area and seek medical advice.

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

Disposal: Empty foils maybe disposed of in local landfill or according to local authority regulations. Do not dispose of down drains or local waterways.

Spills/leaks: Absorb with sand or soil. Collect and seal in properly labelled container and dispose of according to local, regional or national guidelines.

Fire: If involved in a fire use water fog/fine water spray, alcohol resistant foam, standard foam or dry agent such as carbon dioxide or dry chemical powder.

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

APTC Proflex Fire PU is fire test certified to AS1530:2014 & AS4072:1:2005(2016). Jensen Hughes fire test report available upon request.

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.