

**PLUG** 

- Rapid set with permanent high bond strength
- Chlorinated and salt-water resistant
- Durable and cost-effective

- Non-toxic and Non-flammable
- Single component and easy to apply

# PRODUCT DESCRIPTION:

Pro-Struct 548 Plug is a fast-setting hydraulic cement that stops active leaks in concrete and masonry structures. Mixed with water, it is easy to apply, quickly developing high bond and compressive strength and is resistant to oil, gas, fresh and salt water, sulphates, grey and sewage water. The product is recommended for active leaks or flowing water and can be applied on new or existing concrete, mortar, brick and their grout lines, or any other surface to which cementitious products can bond.

#### USFS:

- Plugging all types of water leaks / seepage in cementitious substrates, above or under water
- Sealing leaking concrete pipe joints and manhole rings.
- Crack filler in reservoirs, treatment plant and secondary containment structures
- Leak repairs to tunnels, below ground parking decks, lift shafts, sea wall structures

## **PACKAGING & COVERAGE:**

1 and 5kg Plastic re-sealable buckets

1kg will yield 0.5 litres and plug a 2 metre cavity, 10mm wide and 25mm deep.

5kg will yield 2.5 litres and plug a 10 metre cavity, 10mm wide and 25mm deep.

## SHELF LIFE:

One year in original unopened packaging when stored in dry conditions. High humidity will reduce shelf life.

## **TYPICAL PERFORMANCE RESULTS:**

Age	Compressive Strength (MPa) (ASTM C109)
30 Minutes	5
1 Day	20
3 Days	23
7 Days	30
28 Days	34

TYPICAL PROPERTIES		
Colour	Grey / Brown	
Application Temperature	+5°C	
Setting Time	+60 Seconds	
Trafficable	After 5 minutes	
Loading	After 1 hour	
Tools	Rubber gloves / pointing trowel	
Flashpoint	Non-flammable	
Storage Life	1 Year	

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# APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

# PLACEMENT GUIDELINES

## SCOPE OF WORK (BOQ):

Apply Pro-Struct 548 Plug into prepared surfaces to a minimum depth of 25mm, compacting to seal cavity.

#### **SURFACE PREPARATION:**

- 1. All horizontal and vertical surfaces in contact with Pro-Struct 548 Plug shall be sound and free from oil, grease, laitance, soil, algae and other contaminants.
- 2. Open cracks or holes by cutting back to a minimum depth of 25mm to sound material.
- 3. Cut back to a dovetail joint, do not use a "V" cut.
- 4. Remove all contaminated and loose material.
- 5. Pre-soak the surface with clean water prior to placement.

### MIXING:

Pre-condition Pro-Struct 548 Plug to 20 to 25°C. If surface temperatures are low, use warm water for mixing. Mix product with clean water to a stiff consistency that can be formed into a ball without crumbling and retains its shape when squeezed. When working conditions are under 4°C, the product will have a slower set than normal. For hot weather working conditions, it is recommended that cool or iced water be used to slow set the desired rate.

Do not mix more material than can be placed in 2 minutes.

## **APPLICATION:**

With a gloved hand, form a plug and force into the crack or hole with maximum pressure. Hold in place using a wooden float until plug has set before mixing another plug.

For cracks or holes with considerable water pressure, use temporary bracing or framework to hold Pro-Struct 548 Plug until material fully reaches set and can withstand water pressure.

#### **WET CURING:**

After the patch has set, keep surfaces damp with a water mist for 10 minutes and protect from wind and rapid evaporation for 3 hours after application.

# **SPECIAL CONDITIONS:**

- Never exceed the water content which will allow the product not to be a stiff ball consistency. The material is not a plaster. Pro-Struct 526 Five Star Waterproofer is used as a waterproof plaster.
- For cold weather patching, keep materials warm (approximately 22°C). For hot weather patching, use cold water to extend the working time and keep materials in a cool, dry place.
- Substrate shall be free of frost and ice.
- The required patch must be protected from freezing for a period of 3 hours after placement.

#### PRECAUTION:

Contains cementitious material and crystalline free silica. Take appropriate measures to avoid breathing dust. Avoid contact with eyes and contact with skin. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Immediately call a physician. Wash skin thoroughly after handling. Keep product out of reach of children. PRIOR TO USE, REFER TO THE MATERIAL SAFETY DATA SHEET.

CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NON-FERROUS TOOLS AND TO WEAR CONDUCTIVE AND NON-SPARKING SHOES.





StonCor Africa (Pty) Ltd Co. Reg. No. 1996/001848/07 Tel: +27 (0) 11 254 5500 Website: <a href="www.stoncor.co.za">www.stoncor.co.za</a> E-mail: stoncorsa@stoncor.com