

SOPRA PLUG

Description

SOPRA PLUG is a dry powder that is mixed with clean water to provide an ultra-rapid setting plugging mortar for active water leaks in concrete and masonry.

Recommended Uses

SOPRA PLUG is used to stop water leakage or seepage under pressure through cracks, joints and holes in the concrete or masonry. Where normal repair mortars would not bond, **SOPRA PLUG** is used in the following applications:

- Stopping water leakage through defects of substrate
- Sealing of construction joints in underground structures
- Sealing construction joints, cracks in reservoirs and other water retaining structures
- For rapid anchoring of bolts and plates
- Sealing around pipe penetration
- Sealing of structures where rapid water use is required

Features and benefits

- Ultra rapid setting, immediate plugging of leaks
- Expands as it cure ensuring a permanent watertight seal
- Requires the addition of water only
- Very high early strength
- Chloride free mortar
- Do not promote corrosion in steel reinforcement
- Sets in approximately 60 seconds, after mixing

Standards Compliance

SOPRA PLUG satisfies the requirements of EN 1504-3; Initial Type Testing.

Packaging

SOPRA PLUG is available in 1 kg pail, 5 kg pail and 25 kg bags

Storage

SOPRA PLUG has a shelf life of 12 months. Store in a dry place, away from direct sunlight.

Properties

Appearance	Grey powder
bulk density	1350kg/m ³
Wet density	2250 kg/m ³

Technical Information

SOPRA PLUG was tested in accordance to BS EN 191-1 (method of testing cement).

Compressive strength @ 25°C (N/mm ²)	
Age	Results
30 mins	12.7
1 day	29.6
7 days	42.4
28 days	49.2

Flexural strength @ 25°C (N/mm ²)	
Age	Results
30 mins	2.1
1 day	5.9
7 days	6.1
28 days	6.4

Setting time @ 25°C & 50% R.H (mins)	
Pot life	drying
1-1.5	3-4

Any change in temperature and humidity would affect the pot life and drying time.

Application Instructions

a) Surface preparation

The surface of the substrate must be strong and clean of any contaminations such as oil, grease, rust and curing compounds. Existing cracks and spaces should be cut into a V shape with a minimum width of 20mm at the surface for optimum result.

b) Mixing

First place the water in a clean pail. Slowly add **SOPRA PLUG** with your hand into the water and continuously mix for 30-60seconds depending on mixing method to achieve a uniform and lump free consistency. **SOPRA** recommends to use 1 part water to 3 part powder. It is recommended to mix small amounts in order to decrease waste materials as this product has a very fast setting characteristics.

c) Application

I. Construction Joint Sealing

Open the construction/cold joint with minimum 20 mm width and depth or until reaching the well compacted concrete. Remove any unwanted materials such as wires, wooden wedges or similar materials from the surface. Fill the joint appropriately with **SOPRA PLUG**.

II. Active Water Leaks Repair

Take the mixed **SOPRA PLUG** with your hand and shape it into a conical shape. After that apply it to the leaking area in one step while pushing lightly on the material for at least 1 min. After the material hardens, slowly take your hand away. If the space is too large to be filled in one time, then repeat this process by going from the edges of the space to its center.

During application **SOPRA PLUG** will heat up, which is normal condition during high chemical reactions.

d) CLEANING OF TOOLS

Tools and application equipment should be cleaned with water immediately after use. Hardened material can only be mechanically removed.

Precautions

SOPRA PLUG is non-hazardous material. It should not be swallowed or come in direct contact with skin or eyes. Suitable protective glasses and gloves should be worn during application. In the case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice if irritation occurs. When contact with skin occurs, wash off immediately with clean water and soap. If swallowed, seek medical emergency immediately, do not induce vomiting.

Technical Support

Sopra provides on-site assistance and consultation services on projects if required. Technical Datasheets on other **Sopra** products and guidance on their use are available on request or on our website.

Warranty

The information relating to the application and end-use of **Sopra** products, are provided in good faith based on **Sopra's** current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with **Sopra** recommendations. In practice, the differences in substrates and actual site conditions are such that no warranty in respect of sale for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must do their test to insure that the product is suitable for the intended application and purpose. The company reserves the right to change the properties of its products without prior notice.