TEKNO®
construction chemicals

Teknorep 530

Natural Hydraulic Lime Based Injection Mortar

Product Description	It is an injection mortar developed for historic masonry structures containing pozzolanic lime and micronized carbonate.It does not contain cement and soluble salts (alkalis, sulfates, chlorides and nitrates).
Areas of Usage	• Restoration of lost transport capacity of stone, brick or foam walls, • Restoration or strengthening of historic masonry structures, • Repair of cracks of domes and vaults, • Foundation of existing historical masonry walls, • Filling large spaces, • On the walls in sulfuric environments, • It is especially used for repairing and strengthening cracks.
Features and Benefits	• Easy to implement. It can be injected easily and effectively using low pressure pumps, syringes or thin needles. • Cement does not contain additives and dissolved salts (alkalis, sulfates, chlorides or nitrates), it does not deteriorate over time. • It can be used in places containing sulphate. • High adhesion strength. • Breathable, high water vapor permeability. • It adapts perfectly with brick, stone and tuff material without disturbing the wall and moisture permeability properties of the wall. • It provides controlled expansion preventing plastic shrinkage without causing harmful expansion.
Application Instructions	Surface Quality: surfaces should be clean, smooth, stable, free from all kinds of dust, oil, dirt, rust, mould oil, detergents, etc. Weak parts on the surface should be removed. Surface Preparation: absorbent surfaces should be wetted in advance, but should not remain water puddles and drops. Cracks less than 5 mm: according to the crack width, depth and ambient conditions, the cracks should be opened with the appropriate intervals (35-45 cm) surprised by both sides of the plane. These holes should be opened with a depth of about 45 angle with the crack planet o pierce the crack plate and pass to the other side. Dust and free particles should be removed by keeping the air in the holes opened and plastic packets should be trapped and squeezed inside. Cracks greater than 5 mm: According to crack width, depth and environmental conditions, pneumatic hoses should be installed with appropriate intervals (70 - 90 cm) within the crack. Free air in the crack must be removed with compressed air. Mixing: The amount of water required (16 kg of kraft bag for 5 liters of water) is placed in a clean mixing bucket with the help of scale and TEKNOREP 530 Injection Mortar is added slowly and with a 400-500 rpm mixer for about 4 minutes. mixed.

Application Notes / Restrictions

- In outdoor applications, the sun should be protected from rain and frost for the first 3 hours. reaction times are affected by ambient and ground temperatures.
- The reaction times are shortened in the hot place, and the cold place is prolonged.
- During the application of the product, work clothes must be worn and appropriate glasses and masks must be used in accordance with the occupational health and safety regulations.
- Injection mortar prepared is pre-emptied of dust and parts and plastered with TEKNOREP 510/520 repair mortar for 48 hours after injection machine is injected.
- After application, it should be protected against adverse weather conditions such as direct sunlight, severe wind, high air temperature (above + 35ºC), rain and frost. The product should be cleaned with water and detergent before it gets cured.
- Immediately after application, equipment should be cleaned with water before curing. After the product has hardened, it should be cleaned by mechanical methods

Technical Data

General Information	
Material Structure	A special blend of natural hydraulic lime based.
Appearance	White coffee
Shelf Life	12 months in dry place in unopened packaging.
Package	16 kg kraft bag
Application Information	
Implementation Process	Min. 30 minutes
Application Ground Temperature	(+5°C) - (+35°C)
Average Grain Size	0,1-0,15 mm
Fluidity (DİN CUP 6)	initially < 28 seconds After 20 minutes, < 40 seconds
Performance Information	
Deflexion Strength	> 2,5 N/mm² 7 days
Compressive Strength (EN 1015-11)	> 7 N/mm² 7 days > 13 N/mm² 28 days M10
Water Vapor Permeability (EN 1745)	15/35 μ
Capillary Water Absorption (EN 1015-18)	0,2 kg m^{-2} $dk^{-0,5}$
Bond Strength	>0,15 N/mm²
Reaction to Fire	A1

Consumption Table

Teknorep 530	Mixture Density (kg/litre)	1 mm/1 m² Powder Consumption (kg)	Amount of Mixture Water (litre)
16 kg kraft bag	1,90	1,45	~5

Technical data are approximate values obtained from the laboratory study of Tekno Construction Chemicals for finished products obtained at +20°C air temperature and 50% relative humidity.