

Espocem

HYPERFLUID SHRINK-PROOF STRUCTURAL TECHNICAL MORTAR FOR HIGH RESISTANCE ANCHORAGE



DESCRIPTION

Mortar composed of high resistance hydraulic binders, selected aggregates, high cohesion strength fibres, synthetic resins and special fluidizing and expansive additives. Fluid consistency and excellent workability enable its use on intricately formed spaces. Strong adhesion to concrete, high mechanical resistance, good impermeability, resistance to carbonation and the chemical aggression of nitrates, sulphates and chlorides. Resistant to freeze-thaw cycles.

USE

Suitable for fastening foundation bolts in concrete, anchoring machine tools by casting below the machine base, for precision anchoring of metallic carpentry, for the rigid joints filling between prefabricated elements.

SPECIFICATIONS

Precision fastening and anchorage, filling and fixing of metal elements on concrete structures should be done by applying structural mortar with a fluid consistency, with high mechanical resistance and controlled expansion (such as ESPOCEM by COLMEF S.r.l.), to apply in maximum thicknesses of 6 cm per coat. To fill large volumes, add 20 - 30 % of fine gravel with a 6-10 mm granulometry. Consumption 19 kg/m² per cm of thickness.

TECHNICAL DATA

Appearance:	grey powder
Apparent specific weight (g/cm ³):	1.3
Maximum granulometry (mm):	2.5
pH of mix:	≥ 12
Application temperature:	from +5 °C to +35 °C
Mixing ratio:	around 3.2 litres of water per 20 kg of powder
Specific weight of mix (g/cm ³):	2.2
Initial setting:	around 90 min
Final setting:	about 3 hours
Strengthening of mix:	180 %
Pot life of mix:	around 60 min
Waiting time between one coat and another:	3 hours
Thickness applicable per coat:	10 - 60 mm
Consumption:	19 kg/m ² per mm of thickness

PACKAGING

20 kg bag

FINAL PERFORMANCE

	Compression:	Flexure:
- after 24 hours (MPa):	≥ 30,0	≥ 5,0
- after 7 days (MPa):	≥ 55,0	≥ 8,0
- after 28 days (MPa):	≥ 70,0	≥ 9,0
Compressed elastic module at 28 days (GPa):	≥ 27	
Adhesion on concrete at 28 days (MPa):	≥ 2,0	
Free expansion in plastic phase:	≥ 0,3 %	
Pull-out strength at 28 days (N/mm ²):	≤ 0,5	

Tests performed at 23 °C - R.H. 50% in the absence of air ventilation