

Batichanvre

Specially formulated mortar, based on NHL 3.5, for mixes with hemp. (Hempcrete)

Mixing:

Mixing in paddle mixers	Mixing in drum mixers
Introduce the hemp and sand. While turning, spray with water mist until the hemp is damp (color changes). Introduce Batichanvre and continue to spray until homogeneous mix is obtained. Total mixing time is about 5 to 10 minutes	Introduce about 35 liters (about 9 gallons) of water and the Batichanvre. Mix for 3 to 5 minutes to obtain a milky paste with no lumps. Add the loose hemp and mix for about 5 minutes to obtain the required mix, add the rest of the water. The completed mix should be rather dry and lean. Total mixing time is about 8-10 minutes.

Wall construction:

Build forms to allow for the required thickness of the final render/plaster. Wood posts should be covered with a minimum thickness of 2-1/2". Place the mortar in layers of 4" to 6" and compact before next layer is applied. Proceed in vertical sections of 3 feet maximum. Allow a minimum of 30 minutes before proceeding to the next level or before removing forms.

Application of render/plaster:

The bonding strength of the Hempcrete must be 0.3 MPa (40 psi) in order to receive a plaster coat. Allow a minimum of 30 days of Hempcrete curing / drying before plastering.

Dosage: 1 bag Batichanvre (25 kg) + 3.5 to 4.5 cubic feet of hemp hurds.

Technical data:

Density of cured Hempcrete:	22 to 26 lbs /cu ft (350 to 420 kg / m ³)
Elasticity Moduli:	>2,200 psi (>15 MPa)
Compressive Strength (28 days):	87 to 100 psi (0,6 to 0,7 MPa) depending on compression
Thermal conductivity:	0.55 to 0.69 BTU (IT) (0.08 to 0.10 W.m ⁻¹ K ⁻¹)
Thermal resistance (1' wall):	20 to 25 R value (3.5 to 4.4 m ² KW-1)
Vapor Permeability:	1.5 10 ⁻¹¹ SI perm
Expansion / Shrinkage:	1 to 5 mm / meter depending on compaction

The above details are given for information purposes only. Final dosages and application should be checked with our technicians. The Factory reserves the right to alter specifications.