

Hempcrete

Mixing of Hempcrete:

Hemp can be mixed with NHL 5, to create Hempcrete to be used in wall forms. We recommend the forms have a minimum cavity width of 8".

First mix the lime putty mortar, NHL 5.0 and water to create a slurry then add the Hemp. Use the following ingredient ratios and instructions as a guide. Individual applications recipes and methods may vary depending on the hempcrete form, workability and installer preferences.

Always follow guidelines of keeping the hempcrete damp for three days after installation. (Hemp plaster and hempcrete will take a long time to dry therefore be careful that not too much water is added the first three days, mist just enough to keep the surface from drying to fast)

Gather ingredients:

1/2 five gallon bucket of Premixed lime putty mortar Approx 5 gallons of water (the less water the better) Two firmly packed five gallon buckets of Hemp Shiv One Bag - NHL 5.0

Mix ingredients:

Add ingredients into a wheelbarrow, mixing pan or mechanical mixer.

Step 1: Add premixed lime putty mortar and thoroughly mix with one gallon of water until all lumps are gone.

Step 2: Add the entire bag of NHL 5.0 and add five gallons of water until it is thoroughly wet and all lumps are gone (the drier the mix the better).

Step 3: Add the two five gallon buckets of hemp shiv.

Step 4: Mix together until Hemp is totally wet and thoroughly mixed.

Step 5: Let mixture set for 10-20 minutes

Step 7: Add additional water very sparingly as needed to achieve a mixture acceptable for workability but as dry as possible.

Step 8: Transfer this hempcrete mix into the premade form. Gently compact to ensure that the form cavity has been totally filled.

Step 9: Remove the form as soon as the mixture has set enough to be self supporting. It is important the form be removed as soon as possible so the drying process can begin.

Notes:

We suggest using premixed lime putty mortar as this adds the needed sand as well as extra free lime into the mix. You also can just use ½ bucket of sand in place of the premixed lime putty mortar. Try not to make the mix too wet as it will take longer to dry out.

Adding a mix of coarse and finishing hemp along with the sand will also help with the "bell curve" requirements for a good mixture.

Because hempcrete and hemp plaster take a long time to dry, we recommend applying a 3/8" thick layer of lime plaster to the surface to act as a poultice to help speed the drying process. Keep in mind that the hemp mixture may shrink back and develop cracks which in turn will crack the lime plaster. Compressing these cracks as it dries is important.

For a finish on the hemp plaster you could use Monolys, Tadelakt, Lime Putty plaster or NHL plaster. Do not install the final top coat until the base coat has completely dried.