

HerbCrete

Carving Core Mix™

Basic mixing instructions for bucket mixing

HerbCrete Core Mixes™ are designed to mix with Type I or Type II Portland cement and an appropriate aggregate to produce a high-quality stucco. If rapid set is needed, then Type III Portland cement may be used, but the working time is greatly reduced. If working in an area where sulfate resistance is needed, Type IV or Type V may be used.

Materials List



Stucco Sand

3 gallons of loose damp well graded sand (see pg. 2)

Cement

1 Gallon
Well tapped to densify.

HerbCrete

Carving Core Mix™
One Bucket Size Bag

Water

About 3/4 gallon

Pigment (optional)

Instructions

Add to your bucket in the following sequence

Step	Ingredient	Quantity
1	Water	3/4 gallon
2	Sand	One Gallon
3	HerbCrete	One Bag of Carving Core Mix™
4	Pigments	As specified
5	Portland cement	1/2 Gallon
6	Water	To make a workable paste
7	Portland Cement	1/2 Gallon
8	Sand	2 Gallons
9	Water with sand	To maintain a workable paste

Keep Reading For Detailed Instructions

Potentially deleterious additives

Do not add any admixtures, magic potions, or other components to any mix containing Carving Core Mix. Stucco Core Mix is not designed for mixing with mortar cements, masonry cements, plastic cements, or blended cements.

Producing a white or pastel stucco

Carving Core Mix is the whitest high-quality stucco concentrate available. To produce a white stucco, blend Carving Core Mix with white Portland cement and the whitest sand available. For a pastel color, add weighed amounts of pigment to the mixer when the Carving Core Mix is added.

If the color of the carved masterpiece is not a concern, the more affordable option will be using gray Portland Cement.

Water usage

The amount of water used will vary based on the condition and gradation of the sand.

These instructions are based on using loose, damp sand.

Sand

Use a good grade of stucco sand meeting the requirements of ASTM C 897. If that is not available, then use a good grade of masonry sand meeting the requirements of ASTM C 144. These should be used in loose damp condition.

If you want fine detail in your carving, use a 60 to 70 mesh sand.

If using loose-damp sand, use approximately 3 one-gallon containers of sand.

If using dry sand, use approximately 2.4 one-gallon containers of sand.

Mixing Bucket-Sized Batches of Stucco Core Mix

Each bag of Carving Core Mix is designed to be mixed with one gallon of white or gray Portland Cement. Works perfectly with the HerbCrete Bucket Mixing System.

Use the 6 gallon HerbCrete plastic bucket with easy screw top gamma seal lid and a drill mounted mixing bit. A Jiffy Mixer is probably the most efficient and causes the least splashing. These instructions are for mixing the bucket-sized batches.

Components to be used

- Approximately one gallon of water
- One gallon of Portland Cement
- One convenient size bag of Stucco Core Mix™
- Three gallons of loose damp sand or two and a quarter gallons of dry sand

Special Mixing Instructions

If you are going to add pigment, add it after the Carving Core Mix. Add half a gallon of Portland cement.

If the paste is starting to get slightly stiff, add additional water in small, measured increments (i.e. ½ cup) be sure to measure the amount of water that is added.

Continue adding small increments of water and sand until all of the sand has been added.

Add water, slowly, until the mix is an appropriate consistency for troweling or spraying.

Mix for 3 to 5 minutes to ensure contents are thoroughly mixed. Over-mixing can entrain excess air and weaken the stucco.

Measure the water used and for the following batches add all of the water needed except for two cups when you start the batch.

The mixing process

Add to your bucket and mix in the following sequence

Step	Ingredient	Quantity
1	Water	3/4 gallon
2	Sand	One Gallon
3	HerbCrete	One Bag of Stucco Core Mix™
4	Pigments	As specified
5	Portland cement	1/2 Gallon
6	Water	To make a workable paste
7	Portland Cement	1/2 Gallon
8	Sand	2 Gallons
9	Water with sand	To maintain a workable paste

Applying Carving Core Mix

Carving Core Mix can be either trowel applied, or sprayer applied.

Follow standard techniques for applying.

- After the first coat, also called the scratch coat, has been applied, the surface needs to be prepared to receive the 2nd coat, also called the brown coat. Traditionally a scratch tool has been utilized to cut grooves into that first coat. Testing has shown that back dragging the trowel over the stucco produces a surface that is as conducive to bonding the next coat as scratching does. The back dragging also opens up the stucco surface and allows it to breathe. This reduces hairline cracks. If you slicked the first coat down with the trowel there would not be much mechanical bond between the first coat and the second coat.
- Back dragging with the trowel also allows the applicator to cut down high spots on the wall. This results in a flatter-finished wall. A scratch tool does not allow for cutting down the high spots.
- Due to conditions of the substrate, it is possible that the first coat of stucco can crack. A vast majority of the plastic shrinkage cracking that will occur will take

place within 48 hours. If you delay applying the second coat for 48 hours, any cracking that has occurred in the first coat will not telegraph through.

- The second coat is the carving coat. It may be spray or trowel applied and may be applied up to 1.5 inches thick. As soon as it is applied, it may be troweled to provide basic contours for the design which will be incorporated into the wall.
- After the carving coat has dried so it forms granules or powder when carved, not muddy clumps, the carving process should start. The carving process involves digging out, scraping, and troweling to obtain the desired profile. Pigments can be applied during the carving process or after the carving process. The pigments can be sprayed on or dabbed on with a damp sponge,
- After the carving core mix has hardened, additional pigment highlights may be added.

Beware, efflorescence will occur under some circumstances. If the stucco was mixed with extra water or if the sand contains efflorescence-causing salts, **and** the carving coat was applied within 7 days of the scratch coat, efflorescence may occur..

Curing Carving Core Mix

All stucco needs to be cured, not just Carving Core Mix.

The basic curing process is simple:

- moisten the wall often enough so that the stucco does not dry out and dehydrate before it has had an opportunity to cure.
- The easy way to determine whether you are successful is to observe the color of the stucco. If it remains the rich gray color of freshly applied stucco, it has plenty of moisture.
- If the color fades, and what had been a rich gray color becomes a pale gray color, the stucco has dried out. This stops the chemical curing of the stucco.
- Do not use a hose to wet down a wall, it can lead to erosion of the stucco, instead use a Hudson type sprayer and add just enough water to keep the surface moist.

This curing process should be maintained for about 48 hours. Remember, you are not trying to add water to the stucco. You were trying to maintain surface conditions so the stucco does not dehydrate.