

# DiamondCRETE

## “Mixing Instructions”

### Mixing Instructions

DiamondCRETE is very easy to mix and needs no additional reinforcement. If you follow these instructions, you will find it easy and fun to make garden stones for all kinds of uses.

### Materials Needed

- DiamondCRETE Water at room temperature
- Pair of rubber kitchen gloves for mixing by hand
- Two buckets large enough to hold the amount you are mixing
- Two measuring cups - one for dry mix and one for water
- Contact paper to hold your glass in place
- Mold
- Petroleum jelly or mold release

1. Prepare your mold by using a petroleum jelly or mold release product to lightly coat the mold. This will prevent the DiamondCRETE from attaching to the mold and allow it to be removed easily.
2. Place your glass with the top of the glass down so it is stuck to the contact paper so that it will be upside down in the mold. Place the contact paper with your glass in the prepared mold. Make sure that backside of the glass is facing up when you place it in the mold. This will mean the side you want to show on the top of the stone will be facing the bottom of the mold.
3. Pre-measure the DiamondCRETE using the dry measuring cup. Shake the cup to level the measurement. Place all the dry DiamondCRETE in one bucket. If you are mixing the DiamondCRETE colors, do so at this time in the powder form and hold back some of the mixed dry powder for filling any air holes after the stone is removed from the mold.
4. Pre-measure the water in the following way: 2 ounces per each dry cup of DiamondCRETE you are using. Pour approximately two-thirds of the water in the other bucket and hold back some of the water as you may not need to use it all.
5. Wearing rubber kitchen gloves is recommended while mixing DiamondCRETE. Add some of the dry DiamondCRETE mix to the water and stir vigorously. By adding the dry mix to the water it will mix easier and it will also help you to add the correct amount of water. Keep adding DiamondCRETE to the water until it becomes so dry that it is difficult to mix, then add small amounts of water (drops at a time) and continue mixing until you have all the dry mix in and the consistency is that of a thick malt/milkshake.

You may not need all of the pre-measured water so DO NOT PUT IT IN! The light pigments (Antique White or Powder Blue) require less water than do the dark pigments (Charcoal). TOO MUCH WATER IN THE MIX WILL WEAKEN YOUR STONE AND CAUSE PROBLEMS DURING SETUP, CURING AND AS THE STONE AGES. TOO MUCH WATER IS THE MOST DAMAGING THING YOU CAN DO TO THE STONE. If you put too much water in the mix as you are mixing you can add additional powder to get the consistency of a thick malt/milkshake. You may end up with more DiamondCRETE than you need for the particular mold you are pouring, but the stone will be stronger and will have less chance of damage as it ages.

6. Once the mixture has reached the right consistency of a thick malt/milkshake continue mixing vigorously, putting energy in to the mixing, for about 2 to 5 minutes. You may use a drill motor with a mixing blade to get the energy in to the mixing. This will help to activate the chemicals in the stone to make setup faster and the stone stronger. If the mixture starts to heat up, pour immediately.
7. As you pour this thick malt/milkshake mixture into the mold, it is recommended that you do so gently. Using one hand to pour through will help keep the glass from moving. Place your hand with fingers open close to the glass in the mold and allow the DiamondCRETE mixture to pour gently into and through your hand into the mold. Tap gently for about 30 seconds on the edge of the mold or on the table to release the air bubbles.
8. DO NOT MOVE THE MOLD DURING THE SETUP TIME (green stage). Moving the mold may cause unseen fractures in the stone, which will become evident as the stone ages. If you think you might have to move the mold during this time, place it on a solid board (bread board) to move it.
9. Clean up your buckets while your stone is setting up. DO NOT RINSE IN THE SINK. DiamondCRETE will set up in your plumbing and clog your pipes. Use a garden hose outside or keep a large (5 gal) bucket close by your mixing area to rinse the buckets and other tools. You can let it dry in the bucket and crack it out later but this method does not clean the bucket as well as rinsing it in a large bucket or with the hose.
10. DiamondCRETE stones may be removed from the mold in about an hour depending on the temperature and humidity of the area you are working in. You may leave the stone in the mold longer (up to 5 to 6 hours) but it is not recommended to leave it in over night. Correctly mixed DiamondCRETE will go through three stages during setup. It will be cold, wet and soft in the beginning, turning warm to hot and damp during setup and finally in the harden stage will feel cool to cold and drier. At this stage it is ready to be removed gently from the mold.
11. Turn the mold upside down and the stone should slip easily out of the mold. If it does not, gently press in the center of the mold to release the stone.

12. Remove the contact paper from the top of the stone and clean the DiamondCRETE from the top of the glass. Check for air bubbles, which might have left some pinholes in the stone. Using the remaining dry mixed powder and a small amount of water, make a paste. A small container such as a paper cup works well for this step. Apply the paste (grout) to the pinholes and smooth. Wipe clean with a paper towel. Filling these pinholes prevents water from setting in the stone and later causing the stone to crack.
13. Place your stone on pencils, wood blocks or a vented shelving unit to allow airflow around the entire stone. The stone needs to cure in a warm room (approximately 65 to 70 degrees) for 28 days to be sure all of the water has evaporated from the stone.
14. It is important to seal your stone with a good concrete/masonry or tile sealer. Follow the instructions on the bottle. Seal all sides, top and bottom with two coats to insure maximum coverage.