



WORKS of GLASS

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Flash Crete for Stepping Stones

- **What happened to cause my stone to crumble and seem to dissolve?**

Flash Crete to water, as with other cement mixes, is critical. Too much water will cause a stone to crumble. The directions say, approximately 2 oz of water to each cup of Flash Crete and APPROXIMATELY is the KEY WORD. The light pigments use less water than the dark pigments.

Therefore, pre-measure your water based on the formula and hold back about one-third of the water while mixing. When the mixture becomes very dry and hard to mix add a drop or two of water at a time until the mixture is the consistency of a thick malt/milkshake and all of the Flash Crete has been added. You may not need to use all of the water to get this consistency so DO NOT ADD IT.

Another solution may be in the mixing of the Flash Crete. Some use a hand drill motor with a mixing blade attached. At **Works of Glass** we just mix by hand. Mix vigorously for 2 to 5 minutes in order to activate the chemicals in the product. This combined with the proper consistency will give your stone strength.

- **A white frost or coating has appeared on the stone making the color appear faded. What can I do to get the color back?**

Flash Crete is colored with natural pigment, which does not fade. This white frost or coating is efflorescent, which is salt and minerals that attach to the stone from water evaporating. This can come from minerals or salt in the water you are using mixing the stone or from sprinklers in your yard or rainwater. If this has occurred, it may be removed by using a tile or masonry cleaner such as a phosphoric acid cleaner (follow the instructions on the bottle) or Muriatic acid diluted with water. For a more natural cleaner, try vinegar and water mixture. Remember to reseal your stone before placing outside or on a tabletop.

- **Why is my stone cracking?**

A stone can crack coming out of the mold... or at a later date if the mold is moved during the set-up time. Moving the stone while in its green stage will cause unseen fracturing which becomes evident as the stone ages.

If it cracks coming out of the mold, try leaving the stone in the mold longer the **next time**. Sometimes a very thin stones can crack easily while being removed from the mold due to them still being in a green stage. Once again, this can be corrected by allowing a little more curing time in the mold. Another reason for a stone cracking could be water, which got sealed into the stone and the stone being in extreme cold/freezing temperatures, which can cause expansion and contraction.

Always allow a stone to cure in approximately a 70-degree room for 28 days to make sure all the water has evaporated. Then seal to stone using two coats of a good concrete/masonry or tile sealer.

- **Can I mix other cements with Flash Crete to save money?**

In 1 word...NO. You have just gone through a lot of time and expense to make your stone...don't try to go cheap now.

- **If I use too much water, what will happen to my stone?**

The water amount to Flash Crete, as with conventional concrete, is critical. However, the dark pigments absorb more water than the light pigments do. Therefore, you need to pre-measure your Flash Crete and figure the ounces of water needed based on the number of cups of dry mixture you are using. Then, hold back approximately one-third of the water to be added as needed during mixing. Place two thirds of the water in a mixing bucket and add the Flash Crete to the water. Mixing vigorously and continue adding Flash Crete and small amounts of water until all Flash Crete has been used and a thick milkshake consistency is obtained. **YOU MAY NOT NEED ALL THE WATER YOU PRE-MEASURED SO DO NOT PUT IT IN THE MIX.**

- **Do I need to put reinforcement in garden stones?**

If it is vigorous mixed and has the correct consistency (pouring into the mold like a thick malt/milkshake), Flash Crete needs no reinforcement. However, reinforcement is always necessary with conventional concrete. Pig wire is best as chicken wire may buckle under pressure.

- **How do I know when a stone is ready to come out of the mold?**

A Flash Crete stone may be removed from the mold in about an hour depending on the temperature and humidity of the area you are living and working in. A cool/damp basement may cause the mix to set up slower. Correctly mixed Flash Crete will go through three stages in setting up.

It will be cold, wet and soft in the beginning, turning warm to hot and still damp during setup and finally in the harden stage will be cool to cold and feel less damp or somewhat dry. At this stage it is ready to be removed gently from the mold. You may leave the stone in the mold longer (up to 5 or 6 hours) but it is not recommended to leave it in over night.

- **Do I have to let my stone cure and for what length of time?**

All concrete has a curing time of approximately 28 days. It is recommended that you cure your stones in an area, which is approximately 70 degrees to be sure all of the water is evaporated. Set your garden stone on pencils, wood blocks, etc to allow for airflow around the entire stone. This will help to keep water from being trapped in the stone, which later can cause cracking.

- **What causes the air holes in the stone?**

Air is mixed into the mixture while you are mixing the Flash Crete and water. If you tap gently on the table or board on which the mold is setting, this will help release some of the air, which causes the small pin holes in the top of the stone. **DO NOT PICK UP THE MOLD AND DROP IT** as you might a cake batter. Remember, moving the mold can cause unseen fractures in the stone, which

will become evident as the stone ages, so be somewhat gentle in the tapping and no more than 30 seconds of tapping is needed.

- **What do I do about the air holes, which are left in the top of my stone after I remove it from the mold?**

You must remember to hold back a small amount of Flash Crete powder to use as grout to fill the air holes. If you have mixed in colorant, mix the colors in dry form and then hold back a small amount of the dry powder for grout so that the color will match exacting. Mix the dry powder to a very thick consistency, looking like a paste, and simply fill the air holes by rubbing it in. Take a soft rag and remove the excess. Filling the air holes will prevents water from setting in and causing damage to the stone.

- **Do I need to seal my garden stone?**

It is recommended that you seal your stone to protect it from stains and water being reabsorbed. A good Tile & Stone Penetrating Sealer, which is not, water-based last the longest in extremely damp/wet climate. A water-based concrete and masonry sealer may be used, but you may need to reseal the stones each year depending on your climate. Follow the instructions on the bottle and seal all sides of the stone completely. Two coats will insure a better seal. Be sure you have properly cured the stone for the amount of time required before you seal it. If you seal water in the stone, it may crack in extreme temperatures or freezing weather.

- **Can I leave my stones outside all year?**

Works of Glass advice is NO. After I go through all that work to make my beautiful stone...I am not willing to take the chance that it can withstand the winter. Remember...we live in IOWA!

- **Our water has a lot of minerals and/or salt in it. What should I do to prevent efflorescent (the white frost) from appearing?**

Efflorescent can appear when the stone is in the setup stage or during the curing stage or even after it is in use. You may use distilled or bottled water to mix with the Flash Crete to prevent this problem during the set up and early curing stages. A concrete/masonry or tile sealer will prevent the efflorescent from appearing after the stone has cured and you have it in the yard. A good sealer will cause any water to run off the stone and not leave the minerals behind.

- **I noticed a light froth or bubbly layer on my stone as it was setting up. What caused this and will it harm the stone?**

The light froth or bubbly layer on the stone as it is setting up in the mold comes from too much water in the mix and may weaken the stone. Be sure to completely cure the stone in a warm environment for 28 days and give it two coats of a good sealer. This will protect the stone the best. Perhaps consider using it as a tabletop where it will not be subjected to as much moisture as laying it on the ground. Next time hold back some of the water and make sure you mix the Flash Crete to a thick milkshake consistency.

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