

FAQ For Stamped Concrete

What is stamped concrete?

- Much of the Stamped concrete that we see now has been installed for several decades. Tools are made from molds, most are a two-part rubber system. While concrete is still in a plastic state the tools are used to make both textures and patterned imprints into the concrete.

How much concrete can be stamped at one time?

- Crew size, experience, & weather conditions all play a part in this equation, for a 400-600 S/F pour a 3-4 man crew should work.

How many types of stamps are there?

- 100's of patterns: slate, stone, tile, cobblestone, brick, and even wood. Several sizes, shapes, textures allow for an almost endless selection of tools; seamless patterns also allow for specialty saw cuts, and border tools add contrast.

How many stamps will it take to do a job?

- We recommend a full row to span the widest area and at least three to begin a row back. Two flex stamps should also be used in areas where a solid stamp cannot fully layout on the surface.

What is a flex stamp?

- Flex stamp is made to bend or flex very easy. They are for use around both edges and walls where access is difficult they are made to bend in half therefore the term flex stamp.

What type of sub grade should the stamped concrete be placed on?

- The sub-grade should be both well compacted and well drained prior to pouring. This ensures that the pour will be even in depth this can help ensure even set times for imprinting. A crushed stone base will work well.

What type of reinforcement should be used?

- Use what is designed for your project. We feel that rebar is a much better option than wire mesh and should be chaired up to the proper depth in your pour. We also feel the use of fiber mesh will be a benefit to stamped concrete as a secondary reinforcement only.

How should I pour and place stamped concrete?

- The concrete will need to carry loads imposed and with stand conditions it will be exposed to.

What about release for stamping tools?

- Yes, you will need a release agent, two types can be used. Powdered release agents come in 30 colors and are applied to the surface, a 40LB pail will cover about 1000 S/F. The slab must be washed off and dry before a sealer can be applied.
- Liquid release agents allow you to see the work better and do not require washing before a sealer is applied. A 5 gallon bucket will allow for around 1000 S/F of stamping.

Will stamped concrete crack?

- Yes, stamped concrete is no different than that of normal concrete. Provide proper joint spacing, if saw cuts are used cut $\frac{1}{4}$ of slab thickness and within 24 hours of placement. Using of border tools can be used to 'hide' cuts and tooled joints. The use of fiber mesh can also help in crack control.

How much water can be added to a load of concrete?

- Adding 1 gallon of water will increase the slump about 1" per cubic yard. It could also decrease compressive strength by 200-300 PSI & increase the potential for shrinkage about 10%; you could also waste as much as $\frac{1}{4}$ bag of cement and affect the final durability of the concrete. ***Take caution when adding water to colored concrete, extra water can affect the tinting strength of color.***

Coloring of stamped concrete how is it done and what are the methods?

Several methods can be used.

- Integral color - This method comes in either powder or liquid and is added to the concrete truck prior to pouring. A predetermined amount is added to each cubic yard of concrete to provide color throughout the mix.
- Color hardener - This method is broadcast over the surface of the concrete then troweled in. By doing this the surface PSI is increased. This method makes it easy to apply one or more colors. Coverage is around 100 S/F per 60LB of hardener.
- Acid or water-based stains - these also provide highlight colors on stones and cures or sealers will need to be removed before applying.

I see some jobs with many color schemes how is this done?

- Again, several methods can be used. Two of the more effective methods we have found are use of two or more colors of release powder, (this can be achieved by both liquid and dry applications) and the use of two or more color hardeners.
- Water based stains and acid stains may also be used according to manufacturer's directions.

Should stamped concrete be sealed?

- Yes, sealing allows for easier cleaning of the concrete, it will also provide increased protection when the concrete is exposed to freeze-thaw cycles. It also provides a thin film which can protect from oil & grease and greatly reduce pop outs and scaling.

Is sealer permanent?

- No, concrete will need to be resealed. Weather, traffic, and other elements it is exposed to will determine how often you should reseat.

Which sealer is the best?

- The intended use will determine the best sealer for the job. This is the main reason we offer several sealers. So we offer several water-based, solvent based, urethanes, and our polyaspartic system. DCS will only offer sealers that can provide a quality wear surface and that is non-yellowing.

Note: Knowledge of mix designs and ACI accreditation are highly recommended by our company. Use of air entrainment and not overworking the surface is a must in a freeze thaw climate