

CCS Pattern Concrete Guidelines

DESCRIPTION

CCS Pattern Concrete is new concrete that has been colour topped with CCS Colour Hardener and CCS Release Agent then textured to achieve the appearance of brick, slate, stone or wood.

PREPARATION

1. Place, screed and float concrete.
2. Request the concrete producer to supply a special pattern concrete mix. Such a mix will normally consist of a smaller aggregate with a maximum size of 10mm.
3. Quantities of concrete ordered should be in proportion to the people available to lay it. For the second load, delay arrival so that you have sufficient time to complete the screeding and floating of the first load as well as applying at least the first application of CCS Colour Hardener.
4. Using specially textured polyurethane mats creates the actual pattern impression. There are 25 different textured mat designs in the CCS range for applicators to purchase or hire.
5. Each colour mat has its own unique texture and design so that a contrasting random and unique texturing effect is achieved across the concrete surface.

SET UP

Clear plastic should be used to protect brickwork, pipes and windows from being discoloured by the pigments used in the CCS Colour Hardeners and CCS Release Agents.

APPLICATION OF COLOUR HARDENER

CCS Colour Hardener is specially formulated to colour and enhance the strength and durability of concrete.

It should be applied to the surface of the concrete at a rate of 20kg per 10m² in three applications. Approximately 60% of the material should be applied in the first coat, 30% in the second application and the remaining 10% is used to touch up any grey spots that may still remain.

The material should be applied in an even manner.

Ideally, trestles should be used so that the applicator can apply the CCS Colour Hardener evenly over all parts of the surface. Space limitations on the job site, however, may mean that the colour hardener is applied by hand from the perimeter of the concrete. If so, the contractor should cast the material by hand parallel to the surface. Do not cast CCS Colour Hardener in clumps.

1. Approximately 60% of the CCS Colour Hardener should be applied in the first coat. The colour hardener should completely cover the surface.
2. This coat of colour hardener should be left on the surface to allow it to absorb the moisture from the concrete slab beneath it. As the colour hardener absorbs the water, it will gradually darken.
3. When this occurs, the contractor should use a bull float to float in the first coat.
4. Only one or two passes should be sufficient to float in the first coat.
5. A second application of colour hardener using approximately 30% of the total amount is then applied to cover any remaining grey areas where the first coat missed.

6. The surface should then be steel trowelled.
At this point the second load of concrete should be placed, screeded and floated.

APPLICATION OF RELEASE AGENT

When the first load of concrete has dried sufficiently to support the applicators weight, CCS Coloured Release Agent should be cast over the surface so that a thin but complete covering is achieved.

CCS Coloured Release Agent acts as a bond breaker between the concrete and the texture mat but it also imparts colour into the concrete to give the dual colouring effect. Method of application can be done by hand or using the head of a brush.

IMPRINTING THE TEXTURE

The CCS Texture Mats are then applied to the surface.

1. To ensure an imprint is achieved the mats should be tamped using foot pressure, or if the concrete is harder, with a tamper.
2. All points of the mat should be tamped evenly to ensure even imprinting
3. The super flex mat is bent to whatever extent is necessary to print in areas where the more rigid mat won't fit.
4. A small hand tool is used to flatten out any concrete squeeze ups that may have been caused by the two mats pressing against each other. A small roller is then used to smooth out the affected area.
5. It is important that too much pressure is not applied to the roller otherwise the release agent colour will be impregnated into the concrete leaving a stain where the roller was used. While one applicator uses the tools the other applicator in the team should be colouring and preparing the second load of concrete.
6. Ideally, ten mats and a super flex should be used to enable the applicator to go from one side of the driveway to the other without having to lift the mats. If this is not feasible then six mats and a floppy may be sufficient.

WASH DOWN

1. After the concrete has had sufficient time to cure, the CCS Release Agent should be removed using water pressure. Ideally a minimum of three days should expire from the completion of stamping to the time of release agent removal. This period may need to be extended in colder climates.
2. Three main methods of Release Agent removal are used – either using a rotary floor cleaner, hose or a gurney water pressure cleaner.
3. The excess release agent should be first hosed off. Using the rotary floor cleaner, the operator then walks at a brisk speed to remove the topcoats of release agents.
4. The operator can control the amount of contrasting colour (or Release Agent) that he has into concrete by limiting or extending the period that the rotary scrubber is used.
5. If the scrubber is not used, the release agent should be removed with water pressure. If the applicator wishes to remove even more of the coloured release agent, then they can mix a **very mild** solution of hydrochloric acid and water, (e.g. no more than one part acid to 20 parts water should be used). The concrete should be wetted first.
6. The applicator should then dip a brush or broom into the solution and then scrub the area where the release agent is to be removed. This should be immediately hosed again to ensure that the acid solution doesn't remove more of the release agent than is required.

SEALING

After a minimum of three days, thoroughly wash the concrete, using a high-pressure water blaster and clean household water.

All concrete surfaces must be thoroughly dry before applying the sealer.

First Coat of Sealer

Using CCS Solvent 100, thin the first coat (refer to previous chart).

CCS Hardseal should be applied using a quality solvent resistant bristle broom head.

Allow a minimum of six hours between coats. For best results, allow 24 hours before applying the second coat.

Second Coat of Sealer

Stir thoroughly and apply as above, however thinning is not required.

CLEAN UP

Wash all equipment thoroughly in CCS Solvent and allow to dry.

CURING

Curing time depends on the temperature. The sealer is usually touch dry in 20 minutes at 25 ° Celsius. The concrete can usually be walked on after 24 hours. Allow seven days before parking on the coating sealers.

For further information consult the relevant product data sheets and Material Safety Data Sheets, and read the product label carefully before use. **Product data sheets Material Safety Data Sheets** are available by phoning **1800 077 744**.

Please Note:- The information given in this data sheet is based on our current knowledge of the product when properly stored, handled and applied. We cannot guarantee that the product will be suitable, effective or safe when used for any purpose other than its stated uses.

To the extent that it is lawful, we exclude warranties implied by law and limit our liability to the cost of replacing the product. We accept no responsibility for loss or injury caused by improper use, incompetent preparation, inexperienced or negligent application, or ordinary wear and tear.

Service or advice given by our staff should not amount to responsibility for the project - since the owner, or their contractor (and not River Sands), is responsible for procedures relating to the application of the product.



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