

CCS Colour Hardener

DESCRIPTION

CCS Colour Hardener is a pre-mixed, ready to use product designed for application as a dry shake over freshly floated concrete.

It consists of a processed blend of synthetic iron oxides, chrome oxides and titanium dioxide pigments, specially graded washed silica quartz aggregate, fresh Portland cements and surface conditioning agents.

CCS Colour Hardener is in accordance with a Quality Assurance system to Australian Standard AS3902.

UV resistant pigments used in the product to ensure vibrant long lasting concrete surface colours, also comply with the World Pigment Standard BS1014.

RECOMMENDED USES

- Driveways and pathways
- Patios and garages
- Roads
- House interiors and factory floors.

PACKAGING

CCS Colour Hardener is available in 20kg paper sacks with plastic liner

FINISHES

CCS Colour Hardeners have been formulated for use in the following finishes:

Stencil Pave

There are 19 stencil designs in the CCS range including brick, cobble and tile. A plastic coated stencil is applied to the surface of fresh concrete. CCS Colour Hardener is then applied in two coats at the rate of 20kg per 10m². When the concrete is firm, the stencils are removed to leave a grouted brick, cobble or tile effect.

Pattern Concrete

CCS Colour Hardener is applied to fresh concrete in two coats and then covered with a CCS Coloured Release Agent. Special textured tools are used to imprint a design in the fresh concrete surface.

Coloured Floors and Driveways

CCS Colour Hardener is applied to the surface of fresh concrete in two applications and is trowel finished.

COLOURS

There are 11 standard colours in the range. Please refer to the CCS Stencilpave and CCS Pattern Stamped Concrete brochures for actual colour hues.

<u>Beige's</u>	Sandy Beige Almond Oatmeal
<u>Browns</u>	Sandstone
<u>Grey/Blacks</u>	Shale Grey Storm Grey Charcoal Black
<u>Terracottas</u>	Terracotta Dark Terracotta
<u>Reds</u>	Brick Red

APPLICATION RATE

The rate of application depends on the service conditions the floor will be exposed to. Recommended rates are as follows:

- Domestic driveway, paths and car parks with vehicular traffic under 3 tonnes - 2-2.8kg/m²
- Public roadways and industrial hard stands - 3.3kg/m²
- Busy shopping footpaths and malls with heavy pedestrian traffic - 4kg/m²

Surfaces finished with CCS Colour Hardeners at the recommended rate have a significantly longer serviceable life than plain grey concrete.

Refer to the table below.

Surface	Minimum 28 day Abrasion Index Standard as per MA 20	Average Abrasion Index Of Surface Finished with CCS Hardener*	Result
Driveways, car parks with vehicular traffic under 3 tonnes	1.2	2.98	Exceeds Standard
Foothpaths	1.2	2.98	Exceeds Standard
Public roads and industrial hardstands	1.5	2.98	Exceeds Standard
Busy shopping footpaths and malls with heavy pedestrian traffic	2.0	2.98	Exceeds Standard

*Results of tests by Queensland University of technology conducted in accordance with Appendix D – MA 20 Abrasion Test, Specification for Concrete Segmented Paving Units. Surfaces were finished with CCS Hardener at the rate of 2kg/m².

STRENGTH

Typical Compressive Results of tests conducted on crushing cubes made from CCS Colour Hardener reveal the following typical strengths:

1 Day	28 MPa
3 Days	45 MPa
28 Days	up to 79 MPa

Summary: High early and long term strengths ensure a strong abrasive resistant surface finish is achieved.

SUGGESTED SPECIFICATIONS Pattern Stamped Concrete

- The concrete shall be coloured with CCS Colour Hardener at the rate of one 20kg bag per seven to 10 square metres.
- CCS Release Agent shall be applied to all concrete surfaces to be imprinted with the textured mat.

- After three days, wash off excess CCS Release Agent. Once dry, the slab should be sealed with two (2) coats of CCS Hardseal Acrylic Sealer.

For Stencil Pave Concrete

- After screeding and floating has been completed, apply the CCS Stencil to the surface.
- Apply CCS Colour Hardener at the rate of one 20kg bag per seven to 10 square metres.
- Apply a coat of CCS Same Day Sealer on the day of the pour. Apply two coats of either CCS Hardseal Advance, CCS Hi Build Enduro or CCS Hardseal Matt when concrete has cured sufficiently (7-21 days).

For further information consult the **Material Safety Data Sheet** and read the product label carefully before use. **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, inexpert 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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