



**Through Colour,
Comes Life!**

CCS Concrete Colour Palette



**CONCRETE
COLOUR
SYSTEMS**
Better colours and coatings

GENERATING GREAT PROJECT OUTCOMES

In partnership with the leading concrete manufacturers and specifiers, CCS has provided the colour component to iconic projects around Australia since 1994. With excellent pigments and comprehensive technical support, concrete suppliers and specifiers know that they can rely on CCS to generate great project outcomes.

Please contact the CCS team if you require advice on any aspect of creating highly appealing decorative concrete.



High strength pigments made to endure

Only pure, high-tint strength, long lasting pigments are used to create CCS Pigment Concentrates.

CCS Pigments consist of blends of synthetic iron oxides, titanium dioxides, chrome oxides and cobalt aluminium with maximum resistance to UV light and the aggressive alkaline conditions in concrete. They are manufactured in accordance with a Quality System certified to ISO 9001 and conform to the relevant world standards for pigments.



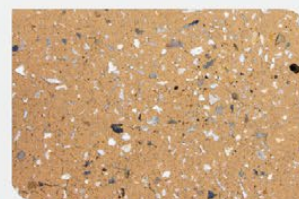
Mix and match different surface finishes for contrast and greater interest

When the concrete surface is purposely removed in creating honed or exposed aggregate finishes, the sands and stones used in the mixture have a significant bearing on the final coloured appearance.

Consequently a relatively easy way to create greater contrast whilst using a single pigment colour, is to vary the surface finish.



TROWELLED FINISH



EXPOSED AGGREGATE

This effect is demonstrated above where the same colour was used to create a trowel finish on the left, and on the right – where the surface was subsequently exposed.

Three tones of black to choose from



A pathway where CCS Gothic Blue was used



CCS GOTHIC BLUE



CCS ZEUS



CCS BLACK 44

CCS offer the choice of an elegant blue black, a warm brownish black tone and a neutral shade.

By varying the quantity added to each cubic metre of concrete, further tonal differences or contrasts can be generated on your project.

Access special colours with CCS

The CCS colour lab is equipped to provide custom concrete colours for architectural requirements. Simply forward us a sample of your desired colour outcome (such as paint swatch, tile or paver), and our technicians will match it for you.

Due to production equipment limitations, please note that there is a minimum order requirement of 500kg of pigment (suitable for approximately 500m² of concrete) for 'special' colours.



A sample drawer from the library of custom colours at the CCS laboratory.



CCS BLUE GUM 3%



CCS GHOST GUM 3%



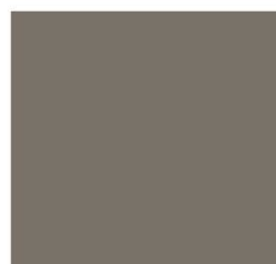
CCS ALPINE 6%



CCS SMOKEY BLUE 3%



CCS JAZZ 3%



CCS ONYX 44 3%



CCS APOLLO 8%



CCS GOTHIC BLUE 6%



CCS ZEUS 6%



CCS BLACK 44 6%



CCS PEWTER 6%



CCS VOODOO 87 8%



CCS STALLION 8%



CCS OBSIDIAN 8%



CCS BOULDER 3%

Suggested Specification

Grey concrete is to be integrally coloured with Concrete Colour Systems CCS < insert colour name > at the dose rate of _____ % (refer to swatch) per cementitious content. Create surface texture using a broom (or nominate alternative finish). Cure with Australian Standards compliant CCS Slab Clad R curing compound or a used wet hessian cloth. At the completion of the curing period, remove dirt and remnants of the curing compound with CCS HD Degreaser. Rinse, allow to dry completely and then coat with CCS _____ penetrating or CCS _____ film forming sealer (refer to sealer guidelines within this colour chart to choose an appropriate sealer). All CCS sealers should be applied in accordance with the product technical data sheets.

For more information regarding the placement of coloured concrete, please refer to our "Guidelines for Integrally Coloured Concrete" available at www.concretcoloursystems.com.au

BLEND S FOR FULL DEPTH COLOUR



CCS PEBBLE

3%



CCS SUNDANCE

6%



CCS DRIFTWOOD

4%



CCS PISTACHIO

3%



CCS POMPEI ASH

3%



CCS KALGOORLIE

3%



CCS BRAZIL NUT

3%



CCS ECHIDNA

3%



CCS DROVER'S DUST

3%



CCS CARAMEL

4%



CCS BILBY

3%



CCS RHINO

3%



CCS LIZARD SKIN

6%



CCS KALAHARI

3%



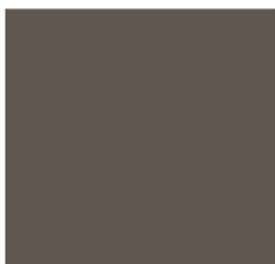
CCS MULBERRY

4%



CCS IGUANA

3%



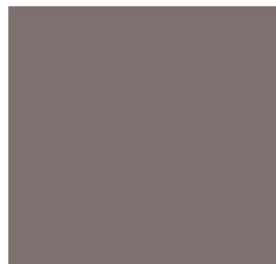
CCS WALNUT

6%



CCS PRAIRIE

3%



CCS GRAPE

6%



CCS CACTUS

6%

ED CONCRETE



CCS CITRUS CREAM 3%



CCS TERRACOTTA 6%



CCS ARTICHOKE 3%



CCS CORK 3%



CCS CANVAS 3%



CCS BRICK RED 6%



CCS MOSS GREEN 6%



CCS MOCHACHINO 3%



CCS BEE'S WAX 3%



CCS RUBY 6%



CCS KAKADU 6%



CCS DESERT SAND 3%



CCS GOLDEN BRONZE 4%



CCS REDWOOD 6%



CCS JUNGLE 6%



CCS RATTAN 4%



CCS LIMESTONE 3%



CCS CHOCOLATE 6%



CCS COBALT BLUE 3%



CCS HONEYCOMB 4%



OFF WHITE CEMENT COLOURS



CCS SNOW
IN OFF WHITE CEMENT 4%



CCS BUTTERMILK
IN OFF WHITE CEMENT 3%



CCS PINE NUT 4%



CCS RAFFIA BEIGE 6%

Please note that due to space limitations at concrete plants, 'off-white' concrete is only available from a small number of concrete plants.

How to use this Colour Card

Each of the enclosed colour swatches were meticulously matched to real life samples of concrete.

The percentage printed under each colour swatch depicts the quantity of pigment (measured by weight to total cementitious content per cubic metre of concrete) that is necessary to generate that colour.

A richer, deeper colour can be achieved if the % dose rate is increased.

A less colourful appearance will result if a lower % dose rate is used than the one nominated.

By specifying the colour together with its nominated dose rate, the concrete producer can reliably reproduce that colour.

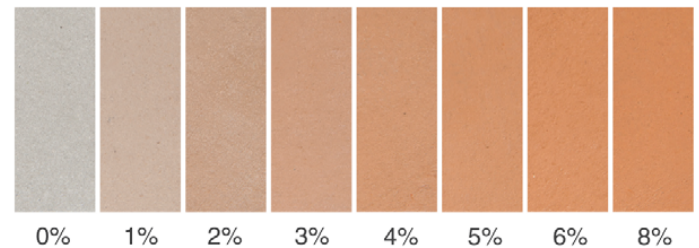
What is the optimal pigment additive rate per cubic metre of concrete?

Due to the greyiness of cement, pigment dose rates need to be sufficient to 'overpower' the grey cement tone.

Dark pigment colours achieve this effect at a lower dose rate than pastel and cream colours.

Hence if you wish to achieve and maintain a rich cream or lightish tone concrete over the course of its life, then it is necessary to use a dose rate around 6%.

The more earthy colours can be achieved with dose rates of 3-4% or to create a rich vibrant colour – with dose rates of 6-8%.



This chart illustrates the differences in colour that result from using the CCS Caramel pigment at different dose rates

Create a site sample where colour tone is absolutely important

The enclosed swatches were accurately matched, however variations in colour between swatches and the actual concrete colour achieved on your job can occur due to differences in finishing techniques, curing methods, environmental conditions, the type and slump of concrete as well as the raw materials used.

Where an exact match is essential, representative job samples using the intended raw materials, finishing techniques and sealers should be completed by the awarded contractor and then inspected and approved once the sample has cured for 14-28 days.

For more information regarding the placement of coloured concrete, please refer to our 'Guidelines For Integrally Coloured Concrete', available at www.concretecoloursystems.com.au.

PROTECT AND ENHANCE YOUR PROJECT WITH A CCS SEALER

Specify the *Penetrating Sealers* where a natural raw look is desired.

Alternatively, specify a *Surface Coating Sealer* for full surface protection and a deeper colour enhancement.



PENETRATING SEALERS FOR RETAINING THE RAW NATURAL LOOK



CCS Stainblock Enricher – water based

Provides the best of all worlds. It provides great resistance to oil and water, enhances the colour, but doesn't alter the slip resistance of the surface texture.



CCS Streetscape – water based

A more economical version of CCS Stain Block without any colour enhancing properties.



CCS Stain Block - for optimum penetration

Formulated to penetrate into dense concrete surfaces and natural stone such as travertine, granite and sandstone.



NO SEALER

CCS STREETScape

CCS STAINBLOCK ENRICHER

Examples of the effect the sealer has on the surface colour.

SURFACE COATING SEALER



CCS Armourthane

A very tough, high solids solvent based polyurethane. It provides excellent wear and chemical resistance on all light commercial flooring type applications.



CCS Decrathane Gloss

A water based version of CCS Armourthane, with a reduced effect on surface colour enhancement.



CCS Hi-Build Enduro Acrylic Sealer

An all purpose economical sealer with good gloss retention. Best suited to residential type applications or on commercial jobs, where a low cost, relatively simple surface protection is required.



NO SEALER

CCS ARMOURTHANE

CCS DECRATHANE

CCS HI-BUILD ENDURO

Examples of the effect the sealer has on the surface colour.



A COATING WHERE RAPID RETURN OF FLOOR TO SERVICE IS REQUIRED



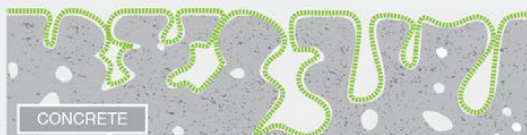
CCS Rapid Floor Polyaspartic Sealer

This 87% solids, extremely tough, low odour product is purpose designed for coating commercial floors where return to service time is paramount. The product is tack free within 45 minutes of application, it can be walked on after three hours and the floor can be returned to pedestrian service by the next day.



THE PHYSICAL DIFFERENCE BETWEEN A 'PENETRATING' AND A 'SURFACE' SEALER

The penetrating sealers 'sink' into and cover the inside of the pores of the concrete.



MICROSCOPIC CLOSE UP OF CONCRETE SURFACE
USING A PENETRATING SEALER

A film forming sealer covers the whole surface area.



MICROSCOPIC CLOSE UP OF CONCRETE SURFACE
USING A FILM FORMING SEALER

POPULAR SURFACE FINISHES FOR CREATING OR ENHANCING THE CHARACTER AND FEEL OF DECORATIVE CONCRETE



ROCK SALT

A pitted or 'volcanic stone' look is created with CCS imprint mats or by adding 10mm grains of rock salt to the wet surface.



HONED CONCRETE

Removes the surface layer by grinding, revealing a smooth, high end, polished concrete finish.



TEXTURED IMPRINT MATS

Large stamping mats that can be pressed into wet concrete to create unique patterns and designs.



POLISHED CONCRETE

The concrete surface is mechanically honed and then polished using fine abrasives. The surface result is extremely smooth, glossy and reflective.



COVING TROWEL

The use of a coving trowel to finish concrete creates a timeless surface to areas requiring additional texture.



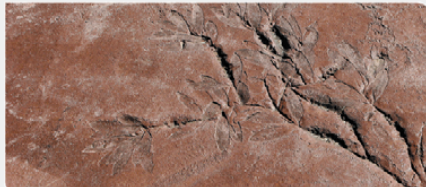
SAW CUTS OR GROOVED LINES

Create geometric patterns with grooved joint lines in wet concrete, or by cutting the surface with a concrete saw once it has cured.



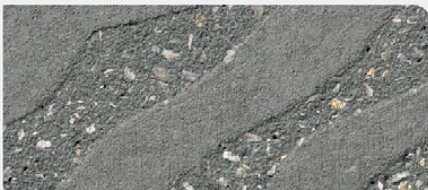
MACHINE TROWEL

A smooth, 'polished' appearance. Please note that this technique may create slight variations in colour and will not show aggregate.



ARTISTIC CREATIONS

Objects such as plants can be placed in wet concrete and removed once it has cured, to leave beautiful base relief imprints.



SAND BLASTING

Ideal for embedding symbols, logos or unique patterns, this method removes the top layer of the cured concrete to reveal a sandy finish.



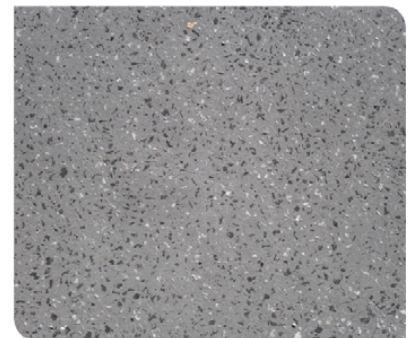
BROOM FINISHES

Broom finishes create a textured, lineal appearance for areas requiring additional surface texture.

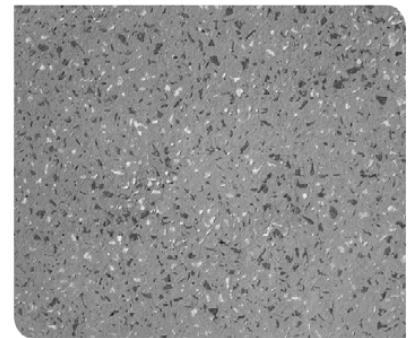
Specify your preferred level of aggregate 'exposure'

By applying one of the two types of CCS Pro X-Pose immediately after trowelling wet concrete, you can achieve a predictable and repeatable level of 'aggregate exposure'.

A 'sandpaper' type finish can be achieved with CCS Pro X-Pose 0.5mm, while greater aggregate exposure similar to light sandblasting can be achieved with CCS Pro X-Pose 1.0mm.



CCS Pro X-Pose 0.5mm coarse sandpaper finish



CCS Pro X-Pose 1.0mm light sandblasted finish



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YOUR CONCRETE SUPPLIER IS: