Concrete Colour Palette 2017/2018

Through Colour, Comes Life! CCS Concrete Colour Palette



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.



Three tones of black to choose from



A pathway where CCS Gothic Blue was used



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

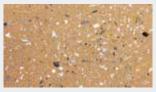
By varying the quantity added to each cubic metre of concrete, further tonal differences or contrasts can be generated on your project.

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.





A LESSY CO

TROWELLED SURFACE FINISH WITH CCS CARAMEL

EXPOSED AGGREGATE FINISH WITH CCS CARAMEL

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.

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.

	RICH PIGMEN						
© CONCRETE COLOUR SYSTEMS Better colours and coatings	CCS BLUE GUM	1 bag/m³	CCS GHOST GUM	1 bag/m³	CCS SILK	2 bags/m³	
CCS SMOKEY BLUE 1 bag/m ³	CCS JAZZ	1 bag/m ³	CCS ONYX 44	1 bag/m ³	CCS APOLLO	2 bags/m ³	
CCS GOTHIC BLUE 2 bags/m ³	CCS ZEUS	2 bags/m ³	CCS BLACK 44	2 bags/m ³	CCS PEWTER	2 bags/m ³	
CCS VOODOO 87 2 bags/m ³	CCS STALLION	2 bags/m ³	CCS OBSIDIAN	2 bags/m ³	CCS PEBBLE	1 bag/m ³	

Suggested Specification

Grey concrete is to be integrally coloured with Concrete Colour Systems CCS <u>< colour name ></u> by adding <u>< 1 or 2 ></u> pre-formulated bags (refer to quantity nominated under colour swatch) per cubic metre of 25 or 32MPa concrete. 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 the concrete to completely dry.

Application of Sealer (Specifier to nominate if a penetrating or surface coating sealer is desired) Coat concrete with _ < CCS Stain Block / Stainblock Enricher / Streetscape > _ penetrating sealer.

(refer to sealer page and nominate your preferred sealer)

Alternatively

Coat concrete with < CCS Hi-Build Enduro / Decrathane / Armourthane > surface coating sealer.

(refer to sealer page and nominate your preferred sealer)

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.concretecoloursystems.com.au

BLENDS FOR FULL DEPTH COLOUR

CCS POMPEI ASH	1 bag/m ³	CCS SUNDANCE	2 bags/m ³	CCS PAPERBARK	1 bag/m ³	CCS ECHIDNA	1 bag/m ³
CCS DROVER'S DUST	1 bag/m ³	CCS KALGOORLIE	1 bag/m ³	CCS DRIFTWOOD	1 bag/m ³	CCS RHINO	1 bag/m ³
CCS LIZARD SKIN	2 bags/m ³	CCS CARAMEL	1 bag/m ³	CCS BILBY	1 bag/m ³	CCS CACTUS	2 bags/m ³



When choosing a colour for a project, we strongly recommend you use a physical, true to life colour card. The colours within the colour card are small swatches with genuine colour matched concrete brushed onto them. When viewing colours digitally, each computer screen will show the colour slightly different because they all have unique colour profiles so a digital swatch isn't a true representation of the actual colour.

To request a true to life colour card please call 1800 077 744 or email helpline@concretecoloursystems.com.au to request assistance.

CCS WALNUT 2 bags/m³

ED CONCRETE





OFF WHITE CEMENT COLOUR



CCS SNOW 1 bag/m³ IN OFF WHITE CEMENT



 CCS LIGHT PEACH
 1 bag/m³

 IN OFF WHITE CEMENT

CCS BUTTERSCOTCH 1 bag/m³ IN OFF WHITE CEMENT

CCS DAFFODIL 2 bag/m³ IN OFF WHITE CEMENT

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

The formulation of this premium sealer is unique and is designed to penetrate to greater levels than the above two CCS sealers. It is ideal for dense concrete surfaces and natural stone such as travertine, granite and sandstone.

Depiction of the subtle effect that 'penetrating' sealers have on surface colour.



These examples show the same coloured concrete before (far left) and after treatment with each of the three penetrating sealers.

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.

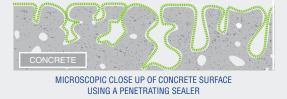
Depiction of the more noticeable effect that 'surface coating' sealers have on surface colour.



These examples show the same coloured concrete before (far left) and after treatment with each of the three surface coating sealers.

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

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



CONCRETE

A surface coating sealer covers the whole surface area.

MICROSCOPIC CLOSE UP OF CONCRETE SURFACE USING A SURFACE COATING SEALER

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.



CCS CONCRETE SEALERS



How to use this colour card in order to receive your nominated concrete colour

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

All you need to do is advise your concrete producer, builder or decorative concrete placer which CCS Colour you desire – and refer them to this colour card.

The concrete producer will liaise with CCS to arrange for the necessary number of bags of the nominated colour to be delivered to the concrete plant closest to your job site.

The concrete producer will add these bags (typically 9-12kg in weight) to a special concrete mix recipe designed for decorative concrete.

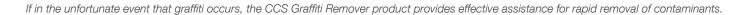
The pre-weighed and pre-formulated bags of CCS Pigment will be added to the concrete mixer at the plant in the ratio as listed under the colour swatch (either one bag or two bags per cubic metre depending on the intensity of the colour).

Once mixing is completed, the coloured concrete will then be delivered to your job site for laying by an experienced decorative concrete placer.



CCS Graffiti Guard provides excellent resistance to the staining of graffiti on walling or façade applications. Water based, low odour and purpose designed for decorative concrete, it provides a relatively natural looking coating which has a minimal impact on the raw aesthetic of concrete.





Disclaimer on possible variations between colour swatches and final concrete colour

The enclosed colour swatches were accurately matched to laboratory manufactured concrete samples using the prescribed addition rate of bags of CCS Pigment per cubic metre of concrete. Whilst every care is taken to accurately produce this colour chart, Concrete Colour Systems cannot guarantee the final colour outcome on site. Concrete Colour Systems colour chart and all available marketing tools are provided to demonstrate a guide of the final colour.

As coloured concrete is an applied finish, variations in colour between the colour swatches and the actual concrete is to be expected. Coloured concrete is a result of raw materials used to produce concrete (cement, supplementary materials, sand, admixtures, aggregates, and water content) as well as other variables including placement, finishing techniques, curing and weather conditions. Some of these materials are naturally occurring and may change in colour or properties over time. The key reason being the variations in the colour of local sands, aggregates and cement that is unique or native to the location of your concrete company in the various states of Australia. Other critical reasons include finishing techniques used to place the concrete and environmental conditions when the coloured concrete is placed.

Coloured pre-mix, pre-cast, masonry, or concrete products should be placed by experienced decorative contractors. Please view previous projects from your chosen contractor to ensure you are satisfied with their skill.

Consequently, when it is essential that the final colour be determined before installation, a representative job site sample should be prepared prior to the start of the actual job. The site sample should be created using the intended raw materials, finishing techniques and desired sealer by the preferred contractor. This sample should then be reviewed and approved once the sample has cured for 14 -28 days.

Further information on best practice placement, how to minimise naturally occurring efflorescence and protective sealers can be obtained from the CCS Helpline.

Further information

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





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.



TEXTURED IMPRINT MATS

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



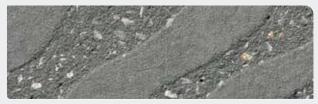
COVING TROWEL

The use of a coving trowel to finish concrete creates an attractive and durable finish for areas requiring extra traction and a rustic look.



MACHINE TROWEL

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



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.



helpline@concretecoloursystems.com.au www.concretecoloursystems.com.au

TECHNICAL HELPLINE 1800 077 744 FOR ALL STATES

DIRECT NUMBERS FOR KEY DESPATCH CENTRES

BRISBANE SYDNEY MELBOURNE 07 **3412 81** 02 **9677 10** 03 **9311 92**:



HONED CONCRETE

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



POLISHED CONCRETE

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



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.



ARTISTIC CREATIONS

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



BROOM FINISHES

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

YOUR CONCRETE SUPPLIER IS: