# COLOUR MATCHING GUIDE

## **OUR SERVICE TO YOU**

BC Coatings provides an extensive colour matching service to our customers. Our colour matching labs have the latest advanced colour matching and testing equipment and our highly qualified and trained staff ensure only the best product leaves the factory.

BC Coatings guarantees a 24 hour turnaround (From the time paint is ordered to completion of paint being made, please be aware that you may not receive your paint in 24 hours depending on our delivery schedule).

There are many problems that may occur that may hinder us from matching your colour correctly. This booklet will help you understand many of the technical difficulties we face and the best way to order your colour to minimise errors.

BC Coatings can match:

- Samples that are sent to us (wood panels, glass, wet samples)
- · Most paint company colours ie. Dulux, Taubmans etc
- Most Pantone colours (see page 19)
- Most Metallic colours

## Light base colours

When we make light base colours we use a pre-filled base white which is then tinted by a Corob machine. It is then shaken up, sprayed out and dried. When the sample is dry it is then sent into a lab to be checked with the use of a Spectrophotometer and colour matching software.

The Spectrophotometer takes a 'photo' of the colour sample and compares it to a pre-defined 'standard' of the colour we are matching, if the sample has a delta E (colour difference) reading greater than 0.3 it is considered a 'fail' and has to be adjusted via the colour matching software.

If the sample has a delta E reading less than 0.3 it is considered a pass, a final visual check of the colour is made, then sent to the customer, along with a swatch of the passed sprayout.

### Deep base colours

When we make deep base colours we weigh all tinters listed on the formula manually using a scale, it then follows the same process as light base colours.



## HOW LIGHT CAN EFFECT

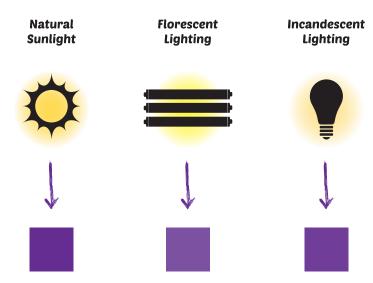
## THE WAY YOU SEE COLOUR

### Metamerism

In colorimetry, metamerism is a perceived matching of the colors that, based on differences in spectral power distribution, do not actually match. Colors that match this way are called metamers.







When we see colour, we are actually seeing a reflection of light on a given object, light hits the object and the object will either reflect or absorb wavelengths of light.

For example, when we see a blue object, the object is reflecting the blue wavelengths and absorbing the rest. All wavelengths can also be absorbed (showing us black) or reflected (showing us white).

All artificial lights are different and project different wavelengths of light which results in a colour that may look different when viewed under alternate lighting conditions.

For example, a colour may look different under white lights when compared under yellow lights or outside in natural daylight.

This interaction is called metamerism. Metamerism can also be caused by the tinters used to match a particular colour e.g. we are trying to match a customer sample with the tinters we have, the tone of our tinters may be different to the tinters used in the paint which is on the sample.

When we match colours, the Spectrophotometer is set to the 'Daylight 65/10' standard, which simulates 'daylight' conditions.

If we ever experience metamerism issues when matching a colour we always visually check it outside in daylight and adjust it accordingly.

Checking these types of colours outside creates a bias for artificial lighting as we don't know what lighting conditions the product will be viewed in.

# ORDERING YOUR COLOUR



The best way to ensure the best possible outcome for your colour match is to ensure you are ordering the correct colour.

There are many paint companies who have the same colour name as other companies. There are also some paint companies who have updated their colour range and have improved or changed a colour but kept the name the same. This means that colours may be slightly different from colour book to colour book. This can make ordering your colour difficult especially if your customer has not given you all the relevant information.

Below you will see several versions of the colour "Off White".

| OFF WHITE<br>Dulux - SW1E7<br>World of Colour /<br>Series 2 | OFF WHITE<br>Haymes - 4058W                   | OFF WHITE<br>Interpon - MA226A         |
|---|---|--|
| OFF WHITE<br>Taubmans                                       | OFF WHITE<br>Dulux - PN1E3<br>World of Colour | OFF WHITE<br>Wattyl<br>Colour Designer |

<sup>\*</sup>This is not an accurate depiction of these colours, rather an example of variations of colours that share the same name

If for any reason you are unsure of some of the details of your colour and want to ensure a reliable match and you have a sample of the intended colour, it is always best to send in a sample so we can match from it directly.

## Ordering from a colour chart

When ordering from a paint company's colour fandeck, colour chart or colour swatch, you will need to quote:

| Brand Name | Colour Book     | Colour Name | Colour Code |
|------------|-----------------|-------------|-------------|
| Dulux      | World of Colour | White Duck  | PN1B7       |

## Ordering a colour you have previously ordered

The great thing about ordering your colour from BC Coatings is that we keep record of all the colours you have ordered from us. If you require additional paint from a particular job, you can quote the job number to ensure we match the same colour.

You can also quote the date the colour was last ordered and we can replicate the same colour from that date.

# HOG BRISTLE DULUX WORLD OF COLOUR - PN1E7 BC POLY

Line Number: Gloss Level: Litres: Job #: Date: VC800 Satin 2 774822 24/6/19

## **Different strengths**

Sometimes you may need to order a weaker strength of a particular colour. Sometimes paint companies have these half or quarter strength colours in their range, if not, our colour matching team can adjust the formulas.

\*All colours created in this fashion require customer approval be we can proceed.

| HOG BRISTLE | HOG BRISTLE ½ | HOG BRISTLE 1/4 |
|-------------|---------------|-----------------|
| PN1E7       | PN1F7         | PN1C2           |
|             |               |                 |

#### **Pantone Colours**

The Pantone Color Matching System is largely a standardised color reproduction system used mostly for print using the CMYK process.

Pantone colours are also called PMS colours and have names like pictured here. When ordering a Pantone colour, it is vital to give the correct colour number.

Pantone fandecks are created by layering coloured ink over a white background. The inks are transparent which causes the white background to produce a very clean colour.

The tinters we use to make colours with are quite opaque (non-transparent) and we rely on our own white to "clean" the colour up when trying to match a Pantone colour but this generally doesn't work and results in a dirty / milky look.

We've achieved good matches on Pantone colours in the past by making a transparent colour using tinters and clear and then spraying that colour over white but it's not a practical option for customers as they need to apply the transparent colour in layers over time until they achieve the right colour.

The transparent colour becomes deeper as more coats are put on, one too many coats and the colour can become too dark.

#### **BC Colours**

BC Coatings have a lovely range of colours including metallic colours. Ask us to send you out our metallic chart.

## **Printed charts**

Be aware that some colour charts are printed and we are unable to provide an accurate match to these charts.



### Checking your Pantone colour before usage is a must!

#### **Gloss Levels**

State the correct gloss level when ordering using the below as a guide:

| Matte | Satin | Semi-gloss | Full Gloss |
|-------|-------|------------|------------|
| 10%   | 30%   | 60%        | 100%       |

## Samples we can match

BC Coatings can accurately match many samples such as wood, glass and wet samples. We cannot accurately match to printed charts or a colour that was printed off the Internet. Some metallic samples may also be difficult to match.

## Providing your sample

You can drop a sample into our office or we can arrange for a pick up (which may incur a small fee).

When supplying your sample, you may send us an order for the sample with all relevant information or you can submit all relevant details on the back of the sample.

| Product | Gloss Level | Quantity | Colour Name |
|---------|-------------|----------|-------------|
| UT900   | Satin 30%   | 2L       | Smith 2567  |

When your colour match is complete, we will send the sample back to you with your paint.



### **Metallic Samples**

Some metallic samples can be problematic to match. Sometimes the metallic sample can have a multi-coloured or pearl effect which is difficult to replicate and sometimes to get the same effect, the customer will have to use a 3 step process which involves spraying a base colour, spraying a pearl and then spraying a top coat of clear.

Sometimes we are able to replicate the metallic effect using our automotive paint system which can be quite effective as it contains an extensive range of pearls and metallic finishes.

This solution may not always result in a 100% perfect match, but it gives the customer a simpler solution than having to apply multiple layers to achieve one finish.

Metallic colours can also be requested to be made as a solid colour and vice versa. In these situations we encourage the customer to pick a colour themselves from a colour chart which they think represents the colour they are after.

Everyone interprets colour differently and we recommend the customer chooses the colour themselves.

## Glass samples

If your glass sample is painted on the back of the piece of glass, we can easily match the colour. However if your glass sample needs to be matched through the glass, you will need to provide an extra piece of glass representative of the glass which is to be painted (the colour matching is done visually which takes more time, this will incur an extra fee).

## Wet samples

If you require paint to be matched from within a can, simply supply us with a small amount of paint (200ml or so) and we can match it for you.





Phone your order **1300 222 628** 



SMS your order SYD: 0487 800 090 MEL: 0416 964 857



Email your order

SYD: orders@bccoatings.com.au

MEL: orders\_vic@bccoatings.com.au



Fax your order SYD: (02) 9729 2279 MEL: (03) 9706 6563