colour choices

choose colour with confidence and creativity

Resene
Total Colour System

Colour your home with **Resene**
the paint the professionals use

Resene
Flourish

contents

Left: Upper wall and small vase in Resene Quarter Surrender, lower wall in Resene Hypnotic, table in Resene Half Carefree, short candlestick and tall vase in Resene Sublime and tall candlestick in Resene Quarter Stack.

welcome

Choosing a precise paint colour from small printed samples has always been difficult.

The colour looks okay but what will it look like once the entire room is painted? Subtle differences that may seem unimportant on colour charts are glaringly obvious once the colour is painted onto a wall. Many people who are confident and assured about most aspects of their lives lose all confidence when trying to mix and match colours.

This book aims to help you understand paint colour and how to use it by not only showing examples but also delving into the science of colour. Paint isn't just about the effect of the colour it's tinted to, but also about the technology of the paint itself - its gloss level, its composition, and added technologies that overcome particular problems.

You can find a huge range of colour tools online on the Resene website, www.resene.com. With services from colour chart and testpot ordering to a Resene colour swatch library, decorating inspiration gallery, palette generator, project guides and lots of great hints and tips on selecting colour, you'll find everything you need to design your next colour scheme.

Resene colour experts are also available to give free advice online or you can book a Resene colour consult in-store or online by going to www.resene.com/colourconsultant.

The more knowledge you have about colour and its influence on your living environment, the better placed you will be to choose colours that will be right for you. Colours generally work best when related to their surroundings, with the final result of a successful colour scheme being one of harmony, visual order and a feeling of continuity.

While you might draw inspiration and ideas from others, you should always follow your own instincts. Your home, your colours!

Happy decorating!

the Resene team

Resene
Alabaster

confidence **with colour**

Avoid paint paralysis with our handy 8-step colour guide.

Colour is a truly magical property. It can transform an environment, create a style, set a mood and alter perceptions. Colour is very personal and an expression of our creativity.

Resene offers all customers a selection of valuable aids to enable you to choose the right colours for you. And of course, Resene ColorShops and resellers are available to provide helpful and professional advice on colour selection.

1 Get inspired

Even if you already know what colours and styles you like, start a file of photos that catch your eye. Don't over-think it, just collect what appeals. When you have a decent-sized collection, look for common elements. You could also collect photos of things you really dislike to help you avoid those in your new scheme.

Visit your local Resene ColorShop and pick out the cards from the Multi-finish and Whites & Neutrals collections that you're instinctively drawn to. Together with your collected images, you'll soon see a pattern emerge. It might be that your choices are all light and casual, or all luxe and moody. You need to love it. There's no point painting your home in jewel tones

Left: Does a rich, luxe look appeal? Try jewel colours like Resene Altas (green), Resene Zinzan (blue; try Resene Bunting for another option) and Resene Avenger (purple; try Resene Blackcurrant for another option). The floor is Resene Colorwood Greywash, and the art is made of wallpaper – design 358000 from the Resene Wallpaper Collection.

if no-one in the family likes jade, ruby or amethyst. The best homes are decorated with the owner's personality in mind.

Use a grey paint colour viewfinder (get one free from your Resene ColorShop) to isolate colour on the paint chart you are viewing. If you look at all the colours together, the colours will affect one another and you won't get a true feeling of each individual colour.

Top tip: With all the decorating styles and choices available it's easy to be overwhelmed and lose direction. A simple but effective way to stay on course is to choose a few words that describe how you want your home to be and feel. Emotive words, like welcoming, decadent or casual. Use five words maximum. Then with every decision and purchase, ask yourself if it fits the words. That way, you won't end up with 'orphans' in your scheme.

Select colours that reflect the mood you are trying to create. For example, if you want to develop a calm atmosphere consider using greens and blues and steer clear of bold high energy reds. If high energy is what you desire, a palette of reds, oranges and yellows will brighten your room and encourage activity.

2 Use a starting point

A starting point can mean a few things. The first is to start with the most limited or most expensive material. So in a kitchen, choose the benchtop first, then the flooring. Finally, choose the Resene paint colour for the cabinetry and walls that best ties together all these elements.

Few of us have the luxury of starting from scratch, so figure out what will be staying – the flooring, the sofa, the kitchen? Or outside, it may be the roof and joinery.

Use a moodboard to help create a colour scheme. The background is Resene Inside Back, the bowl is Wishlist, the A4 colour swatches are Resene St Kilda and Resene Flintstone, while the board is a paint effect of various colours.

Another kick-starter is to use a favourite painting, wallpaper, curtain fabric or a recently purchased cushion as the starting point for a scheme. You can already see that the colours work together so draw them out and use them on the walls and trims. Note the proportions the colours are used in, and mimic that in your colour scheme. An artwork or fabric is usually seen at a distance so rather than get microscopic about the colours within the piece, stand back for an impression of the colour.

You might use the style of your home or the setting, whether it's rural, urban or coastal to influence your decorative choices.

Furniture, pictures and ornaments absorb and reflect colour in different ways affecting the final colour you see. It is always best to view colours in a fully furnished room to get a true picture of how the finished scheme will look. If you are forced to develop a colour scheme using an empty room as a base, start by determining how much of the wall surface will be visible after furnishings are added to the room.

Top tip: If you love the colours in a fabric or artwork, load a photo of it into the online Resene Colour Palette Generator and it will suggest some Resene colours for you to help get you started. See www.resene.com/palettegenerator.

3 Be room-appropriate

When selecting colours consider lighting, what the room is used for, who spends the most time using the room, adjacent room colour schemes, whether you want to change perceptions of the room shape or size, what kind of mood you want to create, and any existing furniture or furnishings that will be part of the finished colour scheme.

If you have already selected other room furnishings, bring samples with you when choosing your paint colour.

You may even wish to follow the fabric pattern to balance the colour palette for the room. There should be some relationship between that and the newly decorated room to provide continuity.

Always keep in mind when developing a colour scheme who will be using the space the most. There is no point using bright orange because it is in fashion if the entire family dislikes the colour. The best homes are decorated with the owner's personality. Nature lovers may prefer greens and blues to bright reds, while a vibrant owner may prefer bright and bold feature areas that reflect their bubbly personality.

Colour can have a huge impact on how a room feels. Warm up a cool room by painting it in warm colours such as creams and reds. Or cool down a hot room by painting it soothing blues and greens.

If an important feature of your home is a sea view or landscape panorama you may like to bring the colours you see outside into your home's colour scheme to provide a natural link between the two. If you want to highlight the view, choose a lighter colour palette. If you want to distance the view make your interior colour scheme more contrasting against the exterior.

Paint awkward shapes the same colour as the rest of the room. This will help them to blend in.

Some colours suit some rooms. A bright turquoise feature wall with yellow polka dots may not be appropriate for a living room but it would be a lot of fun in a child's room.

A soft grey could look gorgeous in a modern master bedroom matched with crisp white linen, a textured white duvet and a thick and fluffy rug whereas a soft grey in a tiny, south-facing child's room matched with a bold and colourful bedspread could leave the soft grey looking cold and weak in contrast.

Top tip: If you like changing your environment, the best idea may be to use a neutral colour scheme and provide accents through replaceable items, such as cushions and flowers. This will enable you to change the mood of the room with a simple change of the accent items.

4 The right proportions

When you're using a number of colours together, vary the proportions. Using them in equal proportions will give the room an unsettled feel and make the colours feel far too intense.

Use the 60:30:10 principle – 60 is the main colour (for most of the walls, and perhaps some furniture and a rug), 30 is the secondary colour that supports the main colour (for example, a feature wall, drapes and linens) and 10 is the accent colour (cushions, lamps and accessories; it could also be a bold paint colour used on a splashback).

Most colour schemes are improved by the addition of accents, the final touches that can make a room come to life. Avoid using the same accent colour in too many places or too many accent colours in one room – sometimes subtlety gives the best result.

If you want bold colour, but still want a cohesive look try a tonal recipe made up of 'related' colours – those that sit next to each other on the colour wheel. So green, turquoise and blue is a tonal related scheme. Or, varying shades of green from turquoise to leafy yellow-greens.

A soft tonal scheme has walls painted in Resene Duck Egg Blue and floor in Resene Inside Back with accents in various greens such as Resene Half Evolution and Resene Passport.

A more classic approach to a tonal scheme is to use a colour in varying strengths or shades, such as charcoal through to dove grey. Stick to the 60:30:10 rule. Or use colours from the Resene Whites & Neutrals collection where colour families and variants are already chosen for you.

If you're opting for a neutral colour scheme, choose a colour family and then vary the strength from full to double, and quarter to half strength. This will help to add extra interest to the colour scheme. The Resene Whites & Neutrals collection has up to six strengths of each colour and is an easy way to get started on a neutral colour scheme.

No matter what colours you like, successful colour schemes have one thing in common – balance. Try to use no more than two to three principal colours with touches of other accent colours to lift the scheme. Sometimes it pays to start with a simple scheme of two colours and an accent, then introduce other colours into the room as you gain confidence. If you are a novice decorator you may prefer to keep to one colour type (monochromatic) or select related colours (harmonious) to ensure a balanced scheme.

A good balance of tones is employed in the best colour schemes. If you think of a newspaper clipping, the most interesting pictures are those that have a good balance of light, mid and deep tones. Aim for a balance across the different tones to ensure your scheme is visually interesting.

One of the simplest ways of carrying a theme throughout your home is to use a common colour palette. Choose a selection of colours for the entire home and then use different combinations of those colours in each room. The commonality of the colours will link the entire scheme together.

<p style="visibility:hidden"></p>

Top tip: If you're keen on using a range of colours or have elements that are colourful (like a patterned wallpaper), one way of tying these together is to add a good dose of an 'achromatic'. That's black or white, or colours close to them, such as charcoal, pale grey or cream.

5 Understanding colour

When choosing colours keep three things in mind:

Colours look different when
• In different types of light
• Next to different colours
• Depending how much there is of the colour

Muted colours are easier to live with but that doesn't mean everything has to be pale. A deep charcoal blue can add drama but it's a very easy colour to use and accessorise.

The mistake most of us make is to not go 'grey' enough. What you thought was going to be a smoky blue turns out icy blue on your wall. Check the examples below and you'll see that Resene Duck Egg Blue is quite grey, compared to Resene Quarter Frozen.

Most decorators find pale neutrals or pastels easy to use – colours that have quite a bit of white in them. So instead of grass green, you would have soft sage. Instead of brown, it would be beige. Instead of banana yellow, it would be pale lemon, or muddy it up for a soft ochre. The common element, white,

between all these colours means that you can successfully combine any pastels into a colour scheme. The addition of clean white also means that most pastels appear soft and fresh.

Most of us instinctively know that bright colours are more in-your-face and therefore not as relaxing. These might be best limited to small features, such as a feature wall, furniture, artwork, splashback and accessories. Or use intense hues in areas that are occupied for short periods, such as hallways, bathrooms and entrances. Or on your front door.

If you're introducing a new colour to an existing scheme, it may be affected by other colours already in the room. If your room is full of blue accents, a new off-white will tend to reflect some of the blue tones. Dark blue placed next to white will seem much darker than if it is next to another dark colour.

If you think a colour you are looking at on a Resene colour chart may be too dark for your interior, choose a lighter colour. Colours will look more intense when they are painted onto a large indoor area. How much there is of a colour affects how you see it. When used in large quantities or in a small room, strong colours will appear even stronger and more intense. If in doubt use a shade lighter than your original choice.

When painting outside, the opposite rule applies – if in doubt, choose a darker Resene colour as the sun will make the colour seem lighter.

Surface textures also change the way you perceive colour. Smooth surfaces reflect light and heavily textured surfaces absorb light. The same colour painted in a gloss acrylic paint on a wall will look lighter than the same colour in a heavy woven carpet.

Resene Eighth
Thorndon Cream

Resene
Duck Egg Blue

Resene
Quarter Frozen

6 Gloss or matt?

The gloss level of the paint will affect how it looks. Matt surfaces absorb light and will appear darker than glossy reflective surfaces. Dark colours look velvety and rich in a matt finish – try Resene SpaceCote Flat. Light colours and glossy finishes help make a room appear larger, while darker colours, heavier textures and matt finishes help make the room seem cosier.

Resene SpaceCote Low Sheen or Resene Zylone Sheen are normally recommended for walls while Resene Lustacryl gives a good tough, semi-gloss finish for trims. For more of a gloss contrast you can use Resene Enamacryl on trims.

Like gloss level, the colour paint you use will also show surface defects to varying degrees. Darker colours accentuate surface imperfections, while lighter colours soften the effects of any surface irregularities by absorbing less light. Special paint effects or wallpaper can be used to hide minor surface defects.

If you have painted a wall with paint and find the sheen level is too flat or glossy, you can apply Resene SpaceCote Clear (low sheen) or Resene Concrete Clear flat, satin or gloss to adjust the sheen level.

Left: Blue is perennially popular. The main wall here is Resene Zinzan (try Resene Bunting for another option), the rear wall and sideboard are Resene Biscay (bottom) and Resene Half Dusted Blue. The floor is Resene Chalk Dust (try Resene Half Bianca for another option), the front of the cabinet is Resene Breathless and the coffee table is Resene Bunting.

7 Lighting

Check and select colour under the actual lighting conditions of the space to be painted to avoid disappointment. Colours may look different under natural and artificial light. Consider when you use the room the most and select your colour under those lighting conditions.

Colour will also look darker on a ceiling surface than on the wall. Likewise, window walls will appear darker as they don't receive direct light. White and off-white paint colours are usually the safest as they distort less under various types of light.

8 Test, test and test again

Once you have narrowed down your colour choices, use Resene testpots to confirm your scheme – the cost is minimal compared to the time and money you will waste if you have to repaint a wall you don't like.

Using your Resene testpot apply two coats onto a piece of A2 card, leaving a border around it so the colour isn't influenced by anything else. When the paint is dry, pin your colour to the wall and view it in daylight and artificial light, moving it around different areas of the room and folding it into the corner of the room for a true feel of the finished effect. Check how it looks in lighter areas as well as shadowy spots. You can also roll the card with the painted surface on the inside, then look down into the tube to get the effect of the colour as it might appear on all of the walls.

For exterior schemes, move the painted card around different walls, checking it in sun and shade.

Remember

Choosing the colour is only half of the job. You also need to choose the right Resene paint so your colour works well and looks good for many years to come.

Paint is your most versatile medium and may be easily changed when you feel the need for a new look. Once you have decided and applied your colour scheme, make sure you take a note of the colours used for future reference. Resene have developed an interior/exterior colour scheme page so that you can keep this important information in one handy location. Copies of this colour scheme page are available online from www.resene.com/int-colour-scheme.

Never rush into a colour scheme, as you will only regret hasty choices later. Give yourself time to learn about your colour likes and dislikes and develop these into a personalised scheme.

One of the simplest ways of carrying a theme throughout your home is to use a common colour palette. Choose a selection of colours for your entire home and then use different combinations of those colours in each room. The commonality of the colours will link the entire scheme together.

As with everything in life, the more colour schemes you create over your lifetime of decorating, the more confident you will become. And, if worse comes to worse and you just can't stand your new colour scheme, you can always paint over it!

Resene
Comfort Zone

Light, stimulating the retina of the eye, is what creates our perception of colour.

Without light there is no colour, and light reflects how we see colour. Because colour is so powerful we tend to look for rules for its use, but there are no hard and fast rules. How you use colour is a very individual and creative choice, but understanding how colour works will help you use it more effectively.

Left: The walls are papered in design RD3360 from the Resene Wallpaper Anaglypta Collection, then painted in Resene Albescent White. The floor is Resene Double Biscotti, the sideboard is Resene Desperado, the peg stools are Resene Rumour Has It and Resene Entourage, the bowl on the floor is Resene Ayers Rock and the vases are Resene Calibre and Resene On Track.

Resene
Rock Spray

Properties of colour

Hue: Hue is pure colour – any primary, secondary or tertiary colour that is unmixed with black or white. It can be another name for colour.

Intensity: This is the brightness or dullness of colours. Less intense colours (blue) have a calmer effect and are easier to live with than the more intense colours (red). Intense colours are often used as highlights and contrast.

Light reflectance value: This is the degree of lightness or darkness of a tint, shade or tone. White has the highest light reflectance value and black the lowest.

Shade: A shade is the pure colour (hue) with black added. This new colour has a lower light reflectance value (is darker) than the original hue.

Tint: A tint is the pure colour (hue) with white added. This new colour has a higher light reflectance value (is lighter) than the original hue.

Tone: This is pure colour (hue) with grey added. This new colour is a softer variation of the original.

Warm and cool colours

Cool – Blues and greens can introduce a cool mood into a room. The level of coolness will depend on the intensity of the colours. Cool colours may also be used to change the appearance of a room, pushing back walls and furnishings and making the room appear more spacious. They look best in a room with a sunny exposure, where the colours counteract some of the strength of the direct sun. They should be avoided in shaded rooms.

Warm – Warm colours, such as red and apricot, have an opposite effect, closing in the walls of a room. If the room is large, its dimensions seem decreased. Warm colours look their best in a not so bright room with southern light, so that the bright effect of the sunny colours is not too overbearing.

Left: Walls in Resene Road Trip (try Resene Cement for another option), floor in Resene Colorwood Bark wood stain, fireplace in Resene Dark Side (try Resene Indian Ink for another option), ladder, basket and picture frame in Resene Truffle, side table and round tray in Resene Gumboot, coffee table in Resene Castaway on Resene FX Crackle Glaze, tall vase in Resene Castaway and logs in Resene Calibre, Resene Castaway, Resene Entourage and Resene Alpaca.

Right: Walls in Resene Coriander, vanity in Resene Colorwood Black Pepper wood stain, floor in Resene Colorwood Walnut wood stain, stool in Resene Paddock, and slatted bathmat in Resene Seaweed, Resene Scaramanga, Resene Secrets and Resene Coriander.

Guidelines for using colour

Nature conditions us to expect balance and harmony. It offers us guidelines for the use of colour and provides us with some basic principles.

The darkest value at our feet   e.g. forest floor
The medium level at eye level   e.g. tree trunks
The lightest value above us   e.g. sky

Consider carefully before deviating from these natural guidelines. Use the most intense hues and values in areas occupied for short periods of time, such as formal dining rooms, hallways, staff lunchrooms, laundries and entrances. Avoid monotony and treat the eye and psyche to at least a moderate variety. Visual stimulus or relief is vital. Harmonious colour selections are created by a pleasing relationship of the three dimensions of colour: hue, intensity and value.

Most colour schemes are improved by the addition of accents, the final touches that can make a room come to life. Avoid using the same accent colour in too many places or too many accent colours in one room – sometimes subtlety gives the best result.

Using correct proportions of colour ensures that your scheme will be aesthetically pleasing. A touch of contrasting colour may be lively and exciting but too much can become uncomfortable. On the other hand, too much moderation produces dullness. Personal taste and preferences are the most important considerations in choosing a colour scheme.

Think of colour as a chameleon:
• It changes depending upon accent colours.
• It is influenced by adjacent colours.

Resene
Ottoman

Colour balance

When a colour dominates its immediate surroundings in terms of hue, intensity or value, it may create imbalance. If we visualise colour in terms of weight, we can readily imagine that an area of dominant colour is 'heavier' than an equal area of subordinate colour. In developing a balanced colour scheme, it is important to take into account the 'weight' of each colour.

These two colours (1) have the same intensity, but the blue colour is darker in value. Even if equal areas of both colours are used, blue will be dominant.
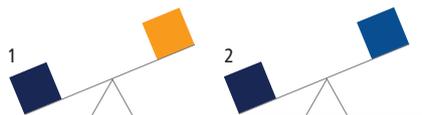
If two colours have the same value (2), they may still be unbalanced if there is a difference in intensity of colour. Here the darker colour dominates.

Proportion, contrast and effects with colour

Use colour to create an illusion. Colour can highlight the good features of a room and camouflage defects. Different colours affect the way we view a room. Warm colours, such as yellows and reds, tend to advance and make the walls seem closer. They are therefore a good choice for large, uninviting rooms you want to make more intimate and welcoming. Cool colours, such as greens and blues, tend to recede and make the walls seem further away. This makes them a good choice for small, narrow rooms that you want to seem more spacious.

The way you combine colours can also significantly alter your perception of a room.

Wall from bottom in Resene Blue Moon, Resene Frozen, Resene Breathless and Resene Solitude. Deck in Resene Woodsman Iroko, bench seat in Resene Smitten, and pots in Resene Freefall and Resene Skydiver.

For example...

Use a strong colour on the lower part of the walls, from picture rail down, and a lighter colour above and over the ceiling. This will make the room appear more enclosed.
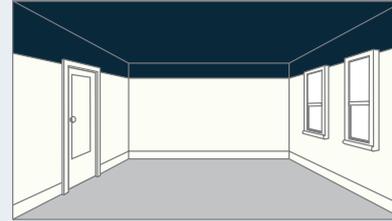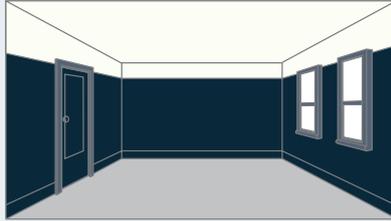
Lower a ceiling visually by painting the ceiling and the walls above the picture rail in a deep tone. Paint the walls, from the picture rail down, a light colour.

A dark colour on ceiling and walls down to dado height, with a lighter colour on the lower part of the walls to match the floor, changes a room's proportions.
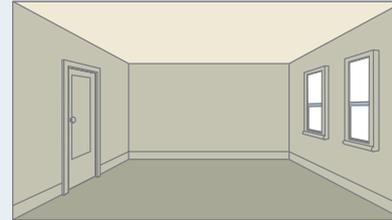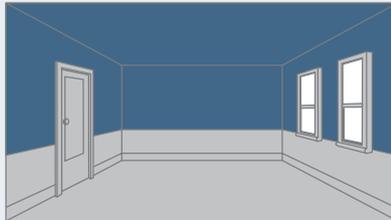
To give the feeling of airiness and space, paint the walls to match the floor and use pale, cool colours.

Make a room look wider by painting the floor and ceiling in a similar colour and the walls in a lighter colour.
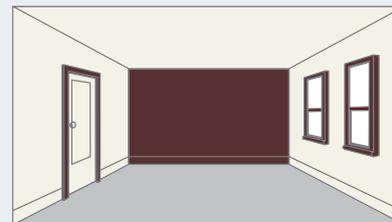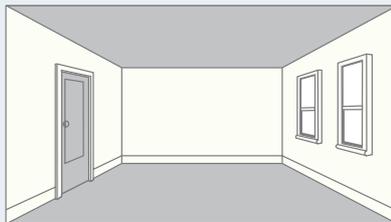
A warm, deep colour on short end walls with a lighter colour on the adjoining longer walls will help make a long, narrow room appear more evenly proportioned.

Resene
Solitude

Create colour harmony with a colour wheel

The best way to create colour harmony is with a colour wheel. The wheel was developed from the colour spectrum and helps decorators and designers co-ordinate colour and develop different types of schemes. The twelve hue wheel is divided into the three colour areas below:

1. Primary colours

Red	Yellow	Blue
Resene Red Berry	Resene Turbo	Resene Optimist

2. Secondary colours

Orange	Violet	Green
Resene Hyperactive	Resene Blackcurrant	Resene Crusoe

3. Tertiary colours

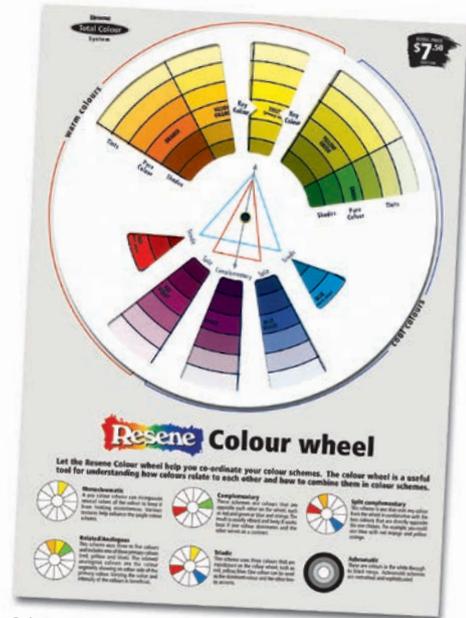| Red orange	Yellow orange	Yellow green	Blue green	Blue violet	Red violet
Resene Red Red Red	Resene Pizza	Resene Lima	Resene Retro	Resene Violent Violet	Resene Dynamite

Colour wheels are available for purchase from your Resene ColorShop.

Monochromatic

A one-colour scheme can incorporate several values of that colour to keep it from looking monotonous. Various textures can help enhance the single colour scheme.

Resene Jalapeno

Resene Dust Storm

Resene Rouge
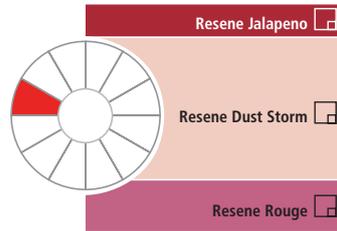
Related/analogous

This scheme uses three to five colours and includes one of the three primary colours. The related/analogous colours are the colour segments showing on either side of the primary colour. Varying the value and intensity of the colours is beneficial.

Resene Moonbeam

Resene Apache

Resene Citron
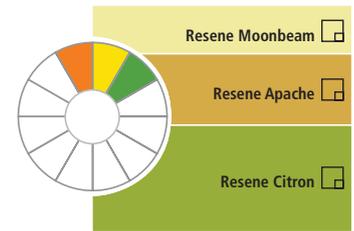
Complementary

These schemes use colours that are opposite each other on the wheel, such as blue green and red orange. The result is usually vibrant and lively. It works best if one colour dominates and the other serves as contrast.

Resene Sea Green

Resene Burnt Crimson
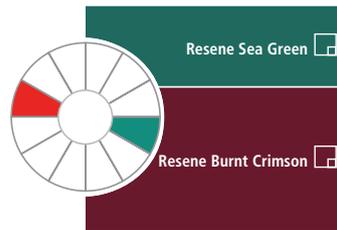
Triadic

This scheme uses three colours that are equidistant on the colour wheel, such as red orange, yellow green and blue violet. One colour can be used as the dominant colour and the other two as accents.

Resene Licorice

Resene Mexican Red

Resene Sushi
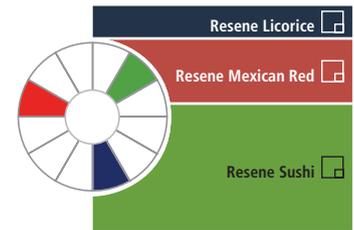
Split complementary

This scheme is one that uses any colour from the colour wheel in combination with the two colours that are directly on either side of the colour opposite the one chosen, such as blue and violet with yellow orange.

Resene Siesta

Resene Wild Thing

Resene Sea Nymph
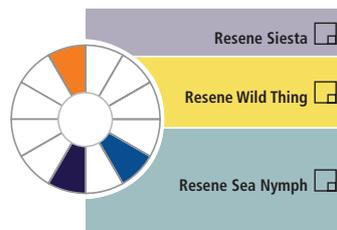
Achromatic

These are colours in the white through to black range. Achromatic schemes are restrained and sophisticated.

Resene Blackout

Resene Zulu

Resene Archive Grey
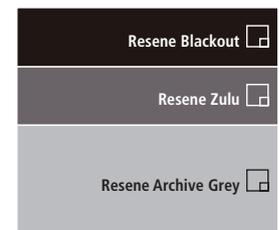
Understanding Resene Total Colour System codes

The Resene Total Colour System codes follow a format of **B63-084-258**, enabling specifiers and decorators to make direct comparisons on three attributes between multiple colours. The first letter or letters tells you what colour group the colour is from:

B = Blue, BR = Brown, G = Green, M = Metallics, N = Neutral, O = Orange, R = Red, V = Violet, Y = Yellow.

The first digits denote the colour's luminance, with 0 being approximately black and 100 being approximately white.

The second set of digits denotes the saturation of the colour or how far from grey the colour is. That is, the lower the number the more grey in the colour, the higher the number the cleaner the colour is. For example, Resene Black (black) has a value of 000 while Resene Turbo Y84-198-087 (bright yellow) has a value of 198.

The last set of digits tells you where the colour sits on a wheel of colour of 0 to 360 degrees. This allows you to place multiple colours into a sequence and determine the relative positioning of colours.

By comparing multiple colours using the Resene Total Colour System codes you can establish whether a colour is greyer or cleaner, brighter or darker and where they sit on a colour wheel.

Resene
Half Grey Chateau
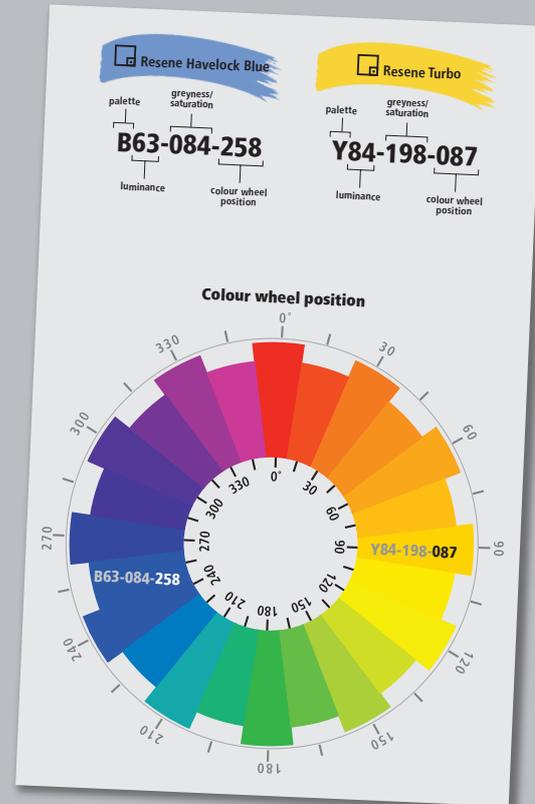
Where colour groups lie

R   (Red)   =   357-39 inclusive
O   (Orange)   =   40-69 inclusive
Y   (Yellow)   =   70-90 inclusive
G   (Green)   =   91-204 inclusive
B   (Blue)   =   205-284 inclusive
V   (Violet)   =   285-356 inclusive
N   (Neutral) =   Saturation of 0-8
BR (Brown)   =   Luminance of 0-39, saturation of 4-10
                   or luminance of 40-80, saturation of 4-25
M   (Metallic) =   Colours derived from metallic tones

Luminance

Luminance is a brightness measure and describes the amount of light that is reflected from a flat, painted surface. Luminance is an indicator of how bright the paint will appear. Luminance decreases when adding grey or black paint to either a pure colour or lighter hues of a colour.

Saturation

Saturation means purity and refers to the intensity of a specific hue (colour). It is based on the colour's purity; a highly saturated hue has a vivid, intense colour, while a less saturated hue appears more muted and grey. With no saturation at all, the hue becomes a shade of grey.

The purest colour is achieved by using clean undiluted colour. If the intensity drops the saturation also drops.

To desaturate a colour in a paint system you can add tints of white, grey, black or the hue's complementary (opposite) colour.

Luminance

Less luminance

Less luminance

100 — Pure colour (maximum Luminance)   100

Same luminance factor

0

Less luminance

Less luminance

0

0   60   0   60

Greyness/Saturation
To desaturate a clean colour add tints of grey or black

100% clean colour

To desaturate use less colour or add grey tints

15% added grey

10% colour

15% added grey
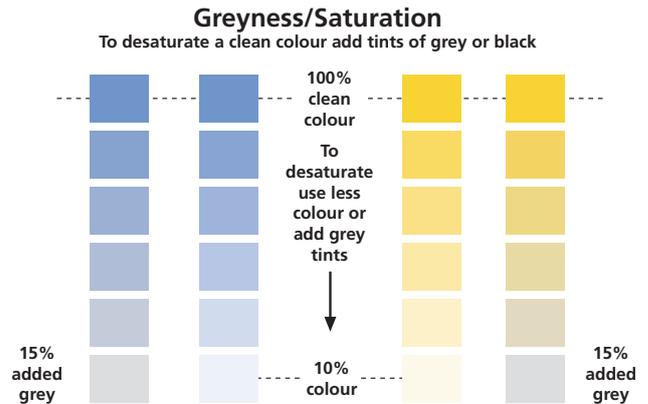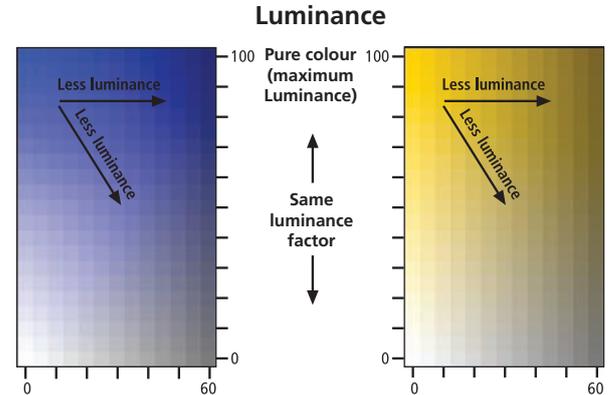
Sheen to suit

The Resene Total Colour System provides a huge variety of colours available in different gloss levels to suit all applications.

Gloss paints have a highly reflective smooth surface and are easier to clean than paints with less surface smoothness.

They are ideal for areas exposed to heavy traffic or heavy use, especially where fingerprints, grease or grime are common. Colours tinted into high gloss paints appear cleaner and more intense than colours tinted into flat paints. Due to their highly reflective appearance, gloss paints tend to highlight surface imperfections. If the surface to be painted is marred or irregular, it is best to select a paint with less sheen.

Full gloss 85-100%, gloss 60-84%: **Resene Hi-Glo, Resene Enamacryl, Resene Super Gloss.**

Semi-gloss paints have a slightly glossy appearance that is not as highly reflective as that of gloss paints. These types of finishes offer good stain resistance and are easy to clean. Paints with a semi-gloss appearance are excellent for use on many of the same areas as gloss paints. They are ideal for walls and woodwork that is subject to wear and on weatherboards and exterior cementitious surfaces.

Semi-gloss 31-59%: **Resene Sonyx 101, Resene Lustacryl, Resene Lusta-Glo.**

Satin paints tend to impart more warmth and depth to surfaces than do flat paints. They are more stain resistant than flat paints, but less stain resistant than semi-gloss and gloss paints. 20-30% gloss.

Low sheen paints are the most popular finish for interior broadwall areas and an ideal choice where some sheen is desired and good cleaning properties are necessary, such as in living areas, hallways, bedrooms and playrooms. Occasionally, these types of paints are used for ceilings, however, their slight sheen will tend to highlight surface imperfections. Outside low sheen finishes are most commonly used over timber, concrete and plaster surfaces.

Low sheen 3-19% gloss: **Resene SpaceCote Low Sheen, Resene Zylone Sheen, Resene Lumbersider, Resene X-200.**

Flat paints diffuse light, so they tend to conceal surface imperfections better than paints with higher sheen levels making them a good choice for general use on walls and ceilings, especially those that are dented or rough. Colours appear muddied and darker in a flat finish than in a glossier finish. 'Flat' finishes have a micro rough texture that may trap dirt and make cleaning more difficult than higher sheen paints. It is wise to use flat paints only in areas that do not tend to get dirty.

Flat/matt less than 2%: **Resene SpaceCote Flat, Resene Ceiling Paint.**

Left: Main wall in Resene Baltic Sea, side wall in Resene Ditto, fireplace in Resene Stonewashed, floor in Resene Colorwood Smokey Ash wood stain, coffee table legs in Resene Triple Napa and plant pot in Resene Quarter Napa.

Matching tones and gloss level

When choosing neutrals, one quick way to create a colour scheme is to choose strengths of the same colour, such as full strength on the walls, double strength on the doors (helps to hide fingermarks) and eighth or quarter strength on the ceiling. Vary the sheen level surface to surface to accentuate the colour differences. Try Resene SpaceCote Low Sheen on walls, Resene Lustacryl semi-gloss waterborne enamel on trims and joinery and Resene SpaceCote Flat on ceilings.

Like gloss level, the colour paint you choose to use will also show surface defects to varying degrees. Darker colours accentuate surface imperfections, while lighter colours soften the effects of any surface irregularities by absorbing less light.

This doesn't mean you can't use gloss paints and dark colours inside... however if you wish to use either you will need to take extra care to ensure wall surfaces are smooth and well prepared to minimise the appearance of surface imperfections. Use Resene Broadwall Surface Prep & Seal over new paperfaced plasterboard to provide a smooth surface ready for painting. If you plan to use dark colours, use a flat or low sheen paint. If you would like a gloss finish, consider using a light colour to minimise the appearance of surface defects.

Resene
Nero

using colour

Walls in Resene Escape and Resene Zinzan (rear; try Resene Bunting for another option). Floor in Resene Colorwood Rock Salt wood stain, shelf unit in Resene Soapstone with a door in Resene She'll Be Right and feature shelf in Resene Hope. Coffee table in Resene Zinzan.

A room by room guide to selecting colour

Bathrooms

Bathrooms are one of the smallest rooms in the house and are generally cluttered with towel rails, basins and showers/baths. While this can make them a decorator's nightmare, it also means you can afford to be a little more courageous with colour. If your original colour choice doesn't work, you can repaint a small bathroom quickly.

Avoid using too many colours if your bathroom feels small. Instead, paint a dado on the bottom third of each wall in your chosen colour and paint the remaining two-thirds in white. Blues and greens being tranquil and clean are popular choices for bathrooms. Being cool colours, they can also make a small bathroom appear more spacious.

Below: Walls in Resene Hermitage and Resene Quarter Cararra.

Bedrooms

When selecting colours for bedrooms it is important to choose colours that are conducive to sleeping. You are also likely to spend more time looking at the ceiling than you would in other rooms.

As a general rule you should avoid using very bright colours and save them for other parts of your home. Most light and pastel shades are ideal for bedrooms. Blue is a popular colour choice for bedrooms because of its soothing qualities. However, if you have trouble getting up in the morning, you may wish to add an invigorating accent to get you out of bed.

Below: Walls in Resene Rascal (try Resene Half Rickshaw for another option), floor in Resene Unwind and bedside table in Resene Mozart.

Dining rooms

Separate dining rooms tend to be reserved for special occasions so they are a good opportunity to experiment with colour that you might not be brave enough to use elsewhere. Red stimulates the appetite and is a good choice for dining rooms. Combined with gold cutlery, a dramatic air of formality will result. Midnight blue or aubergine and gold are also dramatic colour schemes for night-time dining.

Remember, in any dining room the table will be the focal point.

Below: Rear wall in Resene Tana, front wall in Resene Half Perfect Taupe, floor in Resene Soulmate, skirting in Resene Quarter Merino, coat stand in Resene Hot Toddy and chair in Resene Tussock.

Family rooms

Family rooms call for a tough durable finish that can take the inevitable wear and tear. Families tend to spend a lot of time in this part of the home, so a bright uplifting colour scheme is recommended. Use one or two dominant colours and add accents for interest.

Choose mid tone colours that will minimise the appearance of finger marks, animal fur and general light scuffing. Avoid using very dark or very light colours. Use patterned curtains and furnishing fabric in place of plain fabrics.

Below: Left wall in Resene Marathon (try Resene Wavelength for another option), right wall in Resene Awash and stairwell in Resene Alabaster.

Kitchens

The kitchen is where you will tend to spend a lot of time, especially if you are the main chef in your household. Make sure you are comfortable with your chosen colour scheme. Bright, invigorating colour schemes can boost energy levels when you have a lot of cooking and cleaning to get through. As kitchens are dominated by cabinetry, benches and the floor, treat these elements as the starting point for your colour scheme.

The appearance of colours in the kitchen will depend on the properties and textures of each of the surfaces. Glossy surfaces, such as laminated cabinetry, will reflect more light and look different to low sheen painted walls, so it is important to be careful when trying to match colours in different materials. Sometimes it is better to select a tone lighter or darker rather than trying to create an exact colour match.

Left: Cabinets in Resene Washed Green with shelf in Resene Scandal and walls in Resene Buttery White. **Above:** Cabinets and walls in Resene Quarter Sea Fog.

Living rooms

Today's living rooms are often open spaces that link through to dining and kitchen areas. Knowing where to start and finish the colour scheme between each part of an open plan space can be very difficult. There are two techniques that you can use:

• Paint a feature area in an area between the two adjoining rooms or spaces to create a natural colour break.
• Use a progression of colours, then paint a unifying colour throughout the spaces and accent with the other progressional colours.

Living rooms are the ideal place to create focal points or feature areas. Traditionally fireplaces acted as the focal point of most living rooms. If you don't have a fireplace, select a focal point for your room and decorate around that. The focal point may be a feature area, lounge suite or similar.

As living rooms are usually subject to less wear and tear than family rooms, you can choose light and dark colours if desired.

Remember no matter what room you are painting, artificial lighting can be used very successfully to complement your colour scheme and it is worth reviewing your lighting plan prior to painting.

Right: Walls in Resene Rascal (try Resene Half Rickshaw for another option), floor in Resene Quarter Sandspit Brown, sideboard in Resene Gumboot, shelf in Resene Half Biscotti, and side tables in Resene Dusted Blue and Resene Spanish White.

Hallways and entrances

First impressions count! As hallways and entrances are transition areas and you spend only a short amount of time in them, you can usually afford to be a little more adventurous. Ideally hallways should be treated as linking spaces to help give continuity to your interior colour scheme.

To make a long hall look shorter, paint the end wall a vibrant warm shade. To make a hallway look longer, paint the end wall a light cool colour. Colour can provide a bridge between adjoining areas. It can be difficult to change colour when adjoining spaces are viewed together, so a feature area of colour may be a good way to create a natural colour break. When visualising a hallway or entrance colour scheme, leave the doors of adjoining rooms open so that you can see how the hallway will work as the focal point.

Right: Walls in Resene Gull Grey, door in Resene Daredevil, bench seat in Resene Sunflower, and floor pattern in Resene Gull Grey and Resene Cod Grey.

top tip

If you wish to paint each side of a door different colours, take care when painting the edges, as the edges of the door will be visible when the door is left ajar. We recommend you paint the opening edge of the door the same colour as the face of the door that opens into the room, and paint the hinged edge to match the other face. This way when the door is left open, the colour of the visible edge and the face of the door are continuous from whichever room they are viewed.

Resene
Sunflower

Wall from top: Resene Spindle (sky), Resene Mischka (left hill), Resene Freestyling (right), Resene Santas Grey (right), Resene Mamba (right), Resene Hammerhead (left, behind sofa), Resene Casper (sea). The floor is in Resene Ivanhoe.

Making a feature of it

Inject colour with a feature area. Redecorating an entire room can be time-consuming, so if all you want is a quick way of changing the mood of a room without redoing the entire colour scheme, designate yourself a feature area and start painting!

A feature area is simply one wall or area picked out as an accent by painting it in a different manner to the rest of the space. If you have a predominantly neutral colour scheme, a feature area is the perfect opportunity to add a splash of colour without overpowering the rest of the room scheme that you have worked hard to achieve. While feature areas are most commonly used as a highlight in a neutral schemed room, they can also be used to define space in open plan areas rather than having expanses of the same colour for the entire area.

There are no hard and fast rules to selecting the right area for your feature – after all, you are the one who has to live with it. An easy way to select a feature area is to stand in the middle of the room and choose a dominant wall, preferably one with interesting angles, curves, a fireplace or lighting.

It is generally best to avoid walls with windows and doors, as these will distract attention from the feature you are creating.

Feature areas may be created by simply overcoating the space with an accent colour in a low sheen or flat finish. You can select a favourite colour or use existing furnishings as inspiration and select a feature colour from room curtains, furniture, artworks or floor rugs.

You don't have to limit your feature to the walls. Consider whether a feature ceiling, floor, furniture or another focal point will best suit your plans. Outside a feature area could be your front door, a garden feature or window trim and architectural details.

If you are looking for something a little more unique, be a bit more adventurous and experiment with a sparkling Resene FX Metallic finish, a light Mediterranean style finish such as Resene Sandtex or a completely personalised Resene Paint effects finish.

A feature area will have a dramatic effect on the whole space – a metallic feature can add sizzle, a deep red feature area depth and warmth, and a Resene Sandtex feature area can add a natural textured earthy touch.

Remember, a dark colour will make the feature area advance and appear closer, while a lighter shade will make the wall recede and appear further away. If you want to make a long room appear squarer, paint the far wall in a dark colour to draw the wall into the room.

As colours are influenced by other room colours and lighting, it is always best to trial your chosen colour using a Resene testpot in the actual area you are planning to paint. View the painted swatch at different times of day to ensure that you like the colour as it changes from day to night.

It only takes a few litres to create a feature area, which means it can be easily changed to suit your mood, the season or a change in decorating plans. Don't be afraid to allocate one wall or area as a permanent feature area and change it regularly as your tastes and colour trends develop.

Feature areas are designed for you to experiment with colours, so make the most of the blank canvas – after all you can always repaint if you don't like the first colour you choose.

Right: This plank paint effect is created with a basecoat of Resene Inside Back, over-brushed with Resene Stromboli, Resene Gulf Stream and Resene Half Opal. The floor is in Resene Inside Back, the coffee table legs are in Resene Half Gravel and the top is in Resene Alabaster. The side table is painted in Resene Bianca, the planter basket in Resene Billabong and the bowl in Resene Wishlist.

Resene
Zumthor

Personalise with paint effects

A freshly painted wall looks beautiful but what if you're after something just a little different. Or you'd like to upcycle some furniture and a straight paint finish might look a little plain?

Paint effects allow you the freedom to capture a mood, create an ambience and transform the mundane into something special. Some techniques also have the practical benefit of disguising less-than-perfect surfaces. In fact, imperfections in the surface can add to the overall impact of the effect.

There are a number of specialty Resene products to help you create useful and beautiful surfaces.

- Metallic paints from the Resene Special Effects and Metallics range from classics like pewter and gold, through to brightly coloured hues.
- Resene Colorwood Whitewash and Resene Colorwood Greywash for an easy-to-achieve and durable washed effect.
- Resene Paint Effects Medium is a tintable acrylic medium that allows you to easily create unique paint effects, while still enjoying the benefits of lower odour and easy clean up in water. It dries more slowly than standard paint so you have longer to work on the effect.
- Resene Resitex or Resene Sandtex are also good basecoats for paint effects as the texture adds an extra dimension to the effect.
- Resene FX Crackle gives an aged crackle effect.
- Resene FX Pearl Shimmer gives a soft shimmery sparkle to any paint colour.
- Resene Blackboard Paint and Resene Chalkboard Paint for a chalkboard finish.

• Resene Magnetic Magic and Resene Write-on Wall Paint to create noticeboards and play areas.

This is just a taste of the options available. There are many others for you to try!

When creating a paint effect, the key thing to remember is that there are no hard and fast rules about what you should do. Spend time getting the effect right by trialling different colours and application techniques until you are happy with the finished look. Then use your trial area as a reference board for the whole project. Wall sockets, skirting boards and door frames should be masked off so that the effect may be continued right to the edge.

Mix and match techniques, colours, textures and surfaces. The only limit is your imagination. See the *habitat plus – paint effects* booklet for paint effects ideas for your home.

Left: Create a watercolour wall with Resene testpots in Resene Castaway, Resene Gunsmoke, Resene Martini, Resene Silver Chalice and Resene Double Alabaster.

Right: A fat-bottomed boat painted in Resene Blackboard Paint. The wall is Resene Dreamer and the flags are Resene Dali, Resene Surfs Up and Resene Get Reddy.

Resene
Sazerac

colour *by compass*

Why does the same colour look so different in different rooms of your home?

The trend to use one colour throughout a house as an 'anchor' neutral has been going strong for some years. But why does that one colour look so different in different rooms? It's all to do with which direction the room faces: north, south, east or west.

Colour is not equal, unchanging and well behaved. This is why colour responds to the axis of light and why it looks totally divine in some rooms… and horrible in others. It also explains why at certain times of the day the colour morphs into a monster and bears little resemblance to the colour we have carefully chosen. Natural light is not equal, unchanging and well behaved either. We can know intellectually that the walls, the ceiling and sometimes the floor have been painted in exactly the same colour. But late in the afternoon, the low westerly sun is throwing light and shade across the floor and washing the walls. Suddenly, the colour on the floor appears different from the ceiling, and from the window walls where the shadows are deeper. The far wall glows with reflected sunlight. The light has changed. The colour has changed. Colour is never, ever static.

In bright daylight, yellow (and any colour that has a larger amount of yellow in it) will be seen at its best, appearing to be brighter even than pure white. At twilight, blue-green colours come into their own, and at nightfall, orange

and red appear to be more intense. In south-facing rooms used during the day, use warm mid-toned colours. No amount of pale tints or white will make these rooms appealing because the natural light aspect is cool, grey or sour. Try Resene Biscotti.

Cooler, denser colours will always work best in north-facing rooms. Because of our propensity for huge windows and skylights that allow plentiful sun (and glare) any bright, red, orange or yellow colours will only accentuate the heat and appear far brighter. Try Resene Half Lemon Grass for a lovely restful ambiance or Resene Emerge, a grey-green sea foam hue. Complex neutrals work best in east-facing rooms illuminated by the white light of early morning. Because easterly light is so cool and clear, it may emphasise greens and blues. Green will be seen to be very green and blues may reflect more teal. The walls in east-facing rooms will be shadowy from mid-morning onwards. Try Resene

Half Spanish White which stays light even when the sun passes and doesn't develop too much green undertone. Or try Resene Half Tea.

West-facing rooms that receive the sun's low rays will suit mid-toned muted colours as the rosy natural light will enhance cream, beige and taupe until they turn peach or terracotta. Any deep reds will look far brighter and orangy. Blue walls may turn drab. Deeper colours will alter the least. Try Resene Chapta And Verse, a colour that warms up and gains a sunset glow. Or Resene Ming which flashes blue, green and warm grey.

Using one colour throughout

If you want to use the same neutral colour throughout your home, vary its strength to cater for the different light qualities of each room. This is very easy to do with a monochromatic colour palette from the Resene Whites & Neutrals range. South and north-facing rooms usually work better with deeper versions of a colour while east and west rooms are better with the lighter variants. Accenting with colourful accessories (and mirrors where rooms are not blessed with light) can change how a colour is seen and help it be 'forgiven' if it doesn't look as good as it does within another space.

If you want to use a true white on the walls, try soft furnishings in soft greys, charcoals and blacks, and metallic silver or pewter tones as this helps draw the eyes away from walls, keeping the scheme from looking too cold or lacking in personality.

Exceptions to the light rule

In rooms where natural light is filtered through trees growing close to the house, a green cast may appear in any colour you use. Light reflecting through opaque glass will diffuse/soften any colour. The same colour seen in a room with floor to ceiling picture windows will intensify. In tropical countries, bright colours are doubly enhanced and appear well balanced. Colours often can't be transplanted to another climate successfully. Think of that bold-coloured shirt or dress that was fabulous on holiday but lurks sadly at the back of your wardrobe once you're back home. In cold countries, natural light is filtered through layers of mist and cloud. Natural colours in these countries are grey based. Bolder reds, oranges and yellows appear softer and less intense.

When we turn the lights on in the evening, our colour undergoes another change. At night, an incandescent light source will make a yellow or cream coloured wall glow, but will turn beautiful blues and lavender walls grey.

Extremely bright glary rooms may benefit from a flat (matt) paint finish, such as Resene SpaceCote Flat. Very dim rooms, and hallways, may benefit from low sheen or higher sheen paint finishes.

Test your colours

The best way to see how colours react in different rooms is to test them. Using Resene testpots, paint your chosen colour onto a piece of A2 card (available from Resene ColorShops) leaving an unpainted border around the edges so your eye focuses on the reality of the colour. Move the card from wall to wall and from room to room. Watch how it changes not only with the light but against other colours in the room. To see how one colour will look on all four walls, roll the A2 card so the colour is on the inside, then look down into the cone to see how the colour will intensify once it is on all walls.

Resene
Rice Cake

Wall in Resene Blue Bark, moons in Resene FX Nightlight glow-in-the-dark paint with various colours brushed on top.

From natural to artificial, from bulb to fluorescent, how do different kinds of light affect the way we perceive colour?

Have you ever wondered why your stunning new chocolate brown jumper suddenly adopts an off-putting muddy hue when you try it on in front of your bedroom mirror? Or why the red wall in your lounge looks burnt orange at night?

And why your Resene ColorShop staff will advise you to paint your testpot of colour onto a piece of card or firm paper and move it about the room you intend to paint so that you can see it under different lights? Also, to view your sample at night under artificial light as well as during the day?

To understand the intricacies of colour, the first thing to remember is that we can only see different shades if they are illuminated. In order for them to be anything other than degrees of black and white, light has to hit the surface and be reflected back.

The brightness of that light is measured in units called lumens – the more lumens, the brighter the light. One lumen is equivalent to one lux, which is the brightness of four full moons. Humans need a quarter of a lux to be able to see at all.

In the daytime, under the bright light of the sun, we see the world around us reflected in combinations of the three primary colours of light: red, green and blue. All shades are created from these three hues. When equal amounts of red, blue and green are reflected, the brain perceives the result as white; when they are absent, we get black.

While red, yellow and blue are the primary colours for items like paint, the primary colours of light include red and blue but replace yellow with green.

Natural versus artificial

In an ideal scenario, 'true colour' is the shade closest to that reflected directly by the sun, which contains the full spectrum of the rainbow. We can achieve this by using as much natural light as possible in our living, working and commercial spaces.

There are numerous artificial light sources available to us today, with many more in the process of being developed. These are used to compensate for lack of natural light or to achieve deliberate colour effects. As a general rule of thumb, warm light (pink, red, yellow…) accentuates warm colours, while cold light (blues, greens, white, grey…) enhances colder tones.

The FACE rules

It's easy to identify what you need the light to achieve, by following the FACE rules. They are:

F stands for function. What do you want to achieve with the light? Do you want to bring out the best in the colours of your interiors and sofa cushions? Do you want to light up an entire sports field? Does the light have to be practical, for example, in a study?

A for ambience. This is particularly important in hotels or restaurants, where you want to create a certain atmosphere to draw in customers; or in retail, to make merchandise look appealing and expensive. Or, perhaps you want to create a relaxed mood in a casual living area. Cool, blue light will enhance an indoor pool, while warm pinks will set the scene in your meditation room.

C for comfort. Do you see a glare? Does the light feel too hot?

E for economy. In other words, what is the most affordable lighting solution for your needs?

Artificial light sources

Incandescent light, which Thomas Edison invented around 1879, is where an electrical current heats a thin filament in the bulb, and so produces light. Halogen lights are a type of incandescent but have a more directed light so are better for task lighting.

Pros: Incandescent light bulbs have perfect colour rendering, are cheap to produce and work well on alternating or directing a current. They are commonly used in households, commercial setups, portable lighting, for decorative purposes and in advertising lighting.

Cons: Incandescent lighting is hideously expensive as a lot of power is required to produce the energy – one light bulb only lasts roughly 1000 hours. The heat it generates makes them too hot to touch and so they are dangerous in certain situations.

Incandescent light bulbs are gradually being replaced in many applications by sources that produce more light but use less electricity, such as fluorescent lighting.

Fluorescent lighting uses electricity generated through gas discharge – in a nutshell, a tiny amount of mercury in a phosphor-lined glass tube emits ultraviolet (U.V.) light. The phosphor absorbs the U.V. light and re-emits it as light the human eye can see.

Pros: Compact fluorescent lamps are super energy efficient – they produce a quarter of the heat per lumen of an incandescent light bulb and last about six times longer (about 6000 hours).

Cons: To the conventional eye, fluorescents sometimes seem too bright and appear to make colours look unnatural and garish. To combat this, opt for the yellow-tubed fluorescents (such as 'warm white') instead of pure white ones, or an extremely low wattage lamp. Also, fluorescent light cannot be used in dimmers.

Light-emitting diodes (LED). This is expected to be the most practical light source in the years to come. Generated by a semi-conductor, it's the light you see in flashlights and cell phones.

Pros: LEDs are five times as power-efficient as fluorescent lighting but there is a catch – at present, the microchip inside the LED light only emits light in one direction. It doesn't reflect it back, which means it doesn't allow us to see colour. The solution is to design lenses that go on top of the LED and disperse the light.

When light tricks our sight

Most of us will have experienced the navy sock/black sock scenario. You take a pair of apparently black socks out of the drawer, then realise later that one of them is actually blue. Don't worry, it doesn't mean you're colour blind – it's a common phenomenon called sample metamerism.

The reason for the optical illusion is that the wavelength emission between various light sources, such as incandescent and fluorescent light, differs. Incandescent light bulbs emit very few short blue wavelengths, which makes it hard to tell whether a colour we see in such light is dark blue or black. Fluorescent light, on the other hand, emits more short-wavelength light, and so it's easier to distinguish the two colours.

On the flipside, you can also have two identical colour samples that look vastly different when viewed under different lights. This phenomenon, called illuminant metamerism, explains how retailers (or homeowners) can use light to present their product (or your interiors) in the most flattering light.

There are various other 'metamerisms'. One is observer metamerism – the fact that individuals perceive colour slightly differently. Another is geometric metamerism – the different appearance of colours when seen from different angles, distances and light positions. Did you know that one reason men and women often see colour differently is that the distance between a woman's eyes is usually slightly less than a man's?

Metamerism also affects the way we view paint colour charts, which is why Resene uses actual Resene Environmental Choice approved paint on many of its colour charts, such as The Range fandeck series. The next time you have a colour chart and a testpot that you think don't match, try wandering outdoors – you'll often find they are a perfect match and it is just the interior lighting that is making them appear different.

Wherever possible, it is best to develop a lighting plan at the same time as your paint scheme. For example, if you decide to paint any of the rooms in a dark colour, you are likely to need more lighting than if your walls were pale and would therefore reflect the light.

Resene
Seachange
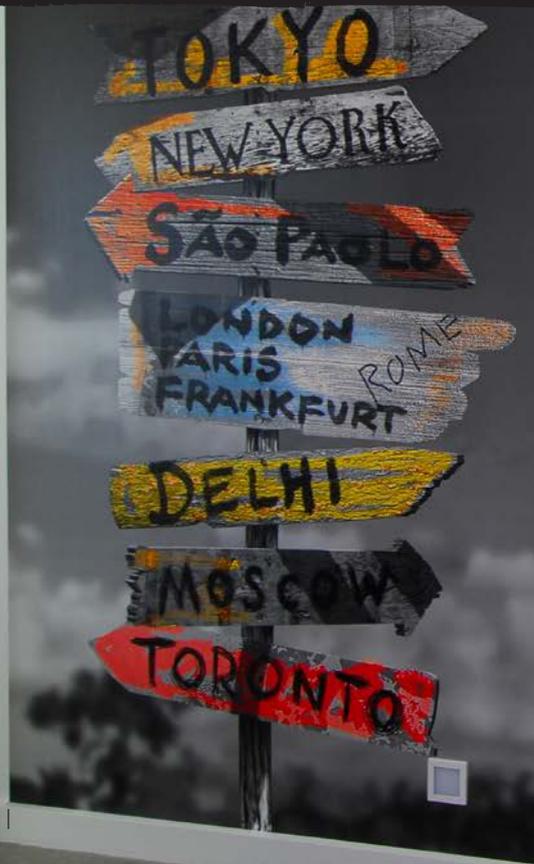
colour *contrast*

Feature wall in Resene Smitten with remaining walls in Resene Alabaster.

Use of contrast colours can help people use and navigate a space.

Red is typically associated with signals such as hot (tap), stop (traffic light or stop sign) or an emergency (fire alarm). Green typically means go (traffic light, exit signs).

Colours can be used for specific levels in a carpark or floors of a building to make it easier for people to remember which floor they started from. Colour can provide a trail through a building and is often used in hospitals to lead patients and families in the right direction. At night, glow-in-the-dark paints, like Resene FX Nightlight, can provide a contrast against the dark and assist with navigation when normal colours are no longer visible.

Common areas to use contrasts are where adjoining surfaces meet that people have to navigate… think floor meets wall, door frame meets door, contrasts to mark the edges of paths or contrasts on stair edges to help make it easier to see where the levels change.

Beware of overwhelming a space with too many contrasts. If there is too much contrast within a surface and within adjacent surfaces, it can be very tiring for the eyes and the contrasts can start to compete with each other. Ensure you allow at least some areas of uninterrupted same colour space. This will make the contrasts more striking and easier for those using the room to identify. If you're set on a striking design or pattern, keep it to one area with plain adjacent spaces.

Always consider your lighting, both natural and artificial, when planning your colour and surface finishes. Place lighting throughout a space to avoid over-lit areas or areas in shadow and make the most of natural light opportunities for spaces that will be commonly used during the day. Consider contrasting switchplates for lighting so they are easy to see against the wall. At night glow-in-the-dark paint can be used to highlight key areas.

Changing levels, such as going up and down stairs or up and down a sloping path, tend to be associated with higher risk. Ensure colour contrasts are used to help show the changes in level and provide contrasting colour handrails wherever possible to assist with navigating these areas. Marking the stair edge with white or contrasting paint helps reduce the risk of falling. Outside consider using a product such as Resene Non-Skid Deck & Path where the colour can provide a visual contrast and the grit finish can provide extra friction for foot traffic, especially in wet weather.

As well as using contrasting colours, you can also use lighting and varying gloss levels and textures to help differentiate surfaces. Flat or low sheen walls will contrast more against semi-gloss or gloss doors than against lower sheen finishes. Be careful of using too much lighting as glare can make it harder to see colour contrasts and can tire the eyes.

For many it is easier to see the difference between two different hues – e.g. blue and yellow – than it is to see differences between one colour in two strengths – e.g. light and dark. If you are relying on the same hue in different strengths for contrast, ensure there is sufficient contrast to be easily seen in lower light situations, such as on an overcast day with the lights turned off when people may still be navigating the space without the need for artificial lighting. Any colour has the ability to be a contrasting colour, when paired up with the right contrast.

Contrasts don't need to be garish nor just black and white. Look for colours that the main users of the space would naturally enjoy and then contrast with different hues or bolder or lighter colours to provide adequate contrasts that will work for those who need them without resulting in clashing colours for those workers and visitors to the space who may not need to rely on the colour contrasts. Chosen well, colour contrasts should enhance the space for all users.

LRV (Light Reflectance Value) works on a 0-100% scale and are a measure of what the colour looks like. So if you need a contrast of 30% LRV then you need to choose two colours that have a LRV difference of +30% LRV, such as one colour with 40% LRV and one with 70% LRV to give the required colour contrast difference of 30% LRV.

However if you have an LRV change of 30 you could end up with a dark green and a lighter green, which wouldn't necessarily be enough contrast for someone who is colourblind. Ideally as well as a strength difference, you would also use contrasting colours (e.g. yellow with blue), different sheen levels and good lighting to help emphasise the colour contrast.

You can use Resene colour codes to help identify colour differences. e.g. for the Resene colour code B54-058-237, the '54' is the luminance (which is similar in many ways to LRV), the middle part '058' is the saturation and the '237' is the position on the colour wheel. Each of those elements can be used to compare colours to add additional contrast.

LRVs only normally apply to solid colour finishes not stained finishes so if you are comparing stains you would need to visually check there is sufficient contrast. If comparing two surfaces from different suppliers that will be used side by side and need to be contrasting you may need to check how they are measured or do a visual check to ensure they provide sufficient contrast.

In the case of Resene you can view the reflectance value for each colour in our online colour library, www.resene.com/colour – this gives you a quick reference to what colours of various LRV values look like.

Colour blindness

Colour blindness, or colour deficiency as the experts like to call it, is a condition in which certain colours cannot be distinguished and is most commonly due to an inherited condition. It is caused by a malfunction of the retina which converts light energy into electrical energy that is then transmitted to the brain.

The conversion of light is accomplished by two types of photo-receptor cells in the eye's retina: rods and cones. The cones are responsible for colour vision. Each contains visual pigments sensitive to wavelengths of light – red, green and blue.

Most people can match all colours of the spectrum by mixtures of only these three fundamental colour sensitivities. The huge variety of colours we perceive comes from the cone cells response to different compositions of wavelengths of light. Defects in colour vision occur when one of the three cone cell colour coding structures fails to function properly. One of the visual pigments may be present and functioning abnormally. Or it may be absent altogether.

The cones with the blue are almost always normal, so blue deficiencies are very rare. It's the red/green spectrum that's usually affected by the colour channels.

The condition is far more prevalent in men than women, with only 0.4 percent of European females being colour deficient. That's because the condition is linked to the X chromosome. Women have two X's. If women have one good X, then there's no problem. Because men only have one X, they are more likely to get the colour deficiency.

For most people with colour blindness, it can be frustrating and occasionally dangerous, depending on the severity of the condition. Traffic lights are not so bad because colour blind people get to know the position of the colours. But sometimes caution lights – when there is just one light that could be red or green – can cause a problem.

Several tests are available for colour blindness. The most common is the Ishihara test, featuring circles of dots appearing randomised in colour and size. Within the pattern are dots which form a number or a shape that is visible to those with normal colour vision. If someone is not colour deficient, the colours of the dots are clearly different. The test doesn't rank severity, however.

Until recently it was thought that if you were colour blind, you were stuck with it for life. However a professor who worked with Dr Ishihara, the Japanese man who created the original test for colour blindness, has developed his work further. After many years of study he has come up with a new lens that can help significantly. The lens works by separating the peak absorbencies of the cones, taking out the light in the middle. There's a tint in the lens which absorbs some light but a mirror coat reflects targeted rays of light. It refines the different light allowed through.

Thanks to optometrist Molly Whittington.

Resene
Pearl Lusta

Test yourself

The most common test for colour blindness is the Ishihara test. Within these patterns are dots which form a number visible to those with normal colour vision. Can you see them?
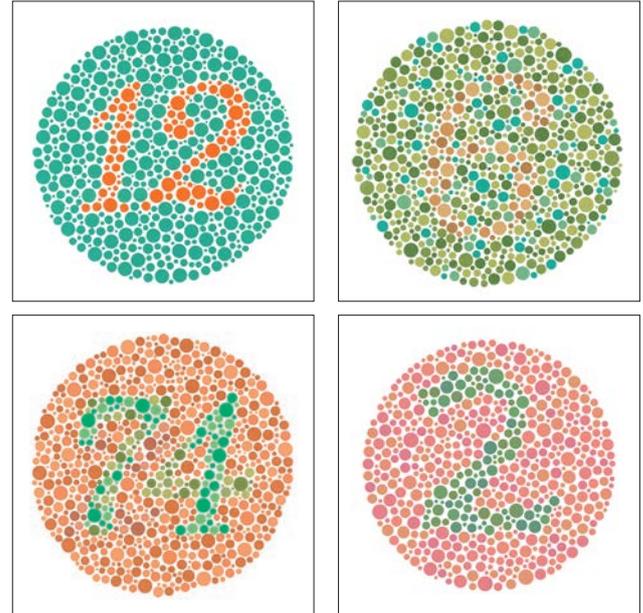
Clockwise from top left you should see 12, 6, 2 and 74.

colour *personality*

Science has long recognised that colour affects our behaviour and the way we feel.

After all, it's the first thing we register and that we use to help assess the things around us, such as whether certain foods, such as blue ones, might be poisonous, for example.

To understand these responses, we need to look at how colour works. Essentially, when the light reflected from coloured objects strikes the retinas in our eyes, the wavelengths are converted into electrical impulses. These pass into the part of the brain that rules our hormones and endocrine system, which are instrumental in regulating our moods. Unconsciously, then, our eyes and bodies constantly adapt to these stimuli, influencing our impulses and perceptions.

While the scientific study of colour is as old as time, the study of colour's effects on our psyche is only about a century young.

Even until only about two decades ago, the common perception was that, because our response to colour is subjective, it must also be unpredictable. Why, for example, did people respond differently to the same shade?

It was leading UK colour psychologist Angela Wright who, by studying colour harmonies and the often unconscious thought processes related to them, developed a means of predicting our responses to colour with remarkable accuracy.

It's called the Colour Affects System and works on two levels: The psychological properties of each of the 11 basic colours; and the roles that variations in tones, hues and tints can play in achieving a desired psychological effect. A key factor in this, Angela recognised, is that it is not one colour that triggers our responses, but a combination of the millions of colours, hues, tones and tints the human eye can distinguish. For example, a grey sky over a summer cornfield will evoke quite a different emotion than will a grey winter's sky downtown. Therefore, there are no wrong colours per se, but different colour schemes do prompt different responses.

To apply colour psychology successfully, Angela also recognised the need to match the individual's personality with the appropriate tonal colour family. There are four of these, each reflecting nature's patterns, and every shade can be categorised into one of them. Once we have made this connection, she says, we can create colour combinations that will help turn our homes into spaces that reflect and support the personalities of those living there. Even if very different characters live together in one house, the right colour palette can ease tensions and help create harmony.

Resene
Onahau

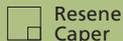# The four personality types and their tonal families

Spring

Resene Onahau

Personality type: These people are spirited, energetic, motivated, charming and eternally young. They are never dark or heavy, and usually work in people professions, such as the media, entertainment or caregiving. They have a natural affinity for the young and love the outdoors, and are clever, but not interested in heavy academic debate. On the downside, they can be single-minded, do too many things at once and be superficial.

Matching colours: Warm, clear colours, sometimes bright. They need stimulus as well as ease, so their ideal palette will include soft cream, peach or turquoise, as well as brighter scarlets, cobalt or sky blues, and emerald greens and pure yellows. Supporting neutral colours include light camel, French navy and light, warm greys.

Summer

Resene Sweet Corn

Personality type: Cool, calm, collected, gentle and internally motivated. Their humour is subtle and they loathe vulgarity. They enjoy creating order out of chaos and keeping peace, have a great sense of touch and often have an analytical nature. They make good diplomats, artists, musicians and doctors. On the flipside, they can seem aloof and unfriendly.

Matching colours: Cool and subtle; sometimes dark, but never heavy, such as maroon, raspberry, rose pink, grapefruit and sage green. Good neutrals to support them include taupe, dove grey and cool navy.

Autumn

Resene Caper

Personality type: Like summer people, they are externally motivated, but are fiery, intense, strong and possibly flamboyant. They have a rigorous sense of justice and environmental awareness. Careers include ones that dig beneath the surface, such as police officers, psychiatrists and investigative journalists. Physical comfort is a must, which is why they can't stand flimsy furniture.

Matching colours: The preferred colour palette is off-beat and devoid of pure primary colours. Examples include tomato, burnt orange, olive green, terracotta and aubergine. Supportive neutrals are most shades of brown.

Winter

Resene Stack

Personality type: Most winter personalities are internally motivated, objective, super-efficient, confident and abhor clutter. They often pursue careers in government, finance, film or theatre, or the medical professions. On the negative side, they can appear elitist, cold and uncaring.

Matching colours: In winter, natural colours are far and few between, hence the winter personality will often wear black all winter and white all summer. The thing is, they can actually pull it off. Colours that work well with black are dramatic hues like jade green, royal purple and lemon yellow. Supportive neutrals are black, white and clerical grey.

To find out what season you are, try out the Resene Colour personality game at
www.resene.com/colourpersonality

pink

Positive – Pink soothes, rather than stimulates. In fact, research shows it can reduce anger – hence its use in prisons. A nurturing colour with a childlike appeal, it is a good choice for a young girl's room, especially when combined with lavender.

Negative – Can smack of inhibition, emotional claustrophobia and physical weakness.

Pink is a fairly polarising colour; you tend to either love it or hate it. Mostly considered a girly colour, pink has recently become more gender neutral, particularly in dusky, biscuit tones, like Resene Bone. Subtle use of pink can bring warmth and rosiness to a room. Used in moderation, pink is an uplifting colour. But used too much, and it can become sickly.

Painting a feature wall or a piece of furniture is a great way to embrace the colour. Cushions, wallpaper and rugs are devices to weave in pink tones without going overboard. If you're still wary of committing to pink, start with flowers – an arrangement is less likely to appear too gaudy, and gives you a chance to decide if you like the colour in your home.

From bubble gum to magenta
Pink is a hugely varied colour, from palest rose and nude blush through bubble gum and crimson to screaming hot pink. It also carries a wide spectrum of connotations: pale

pink, like Resene Cupid, denotes purest girly prettiness, while hot pink, like Resene Disco, shouts out gaudy and passionate. The in-between pinks, like Resene Hopbush, are youthful and fun. In the Western world, this colour suggests feminine energy, romance and love.

If you team pink with lighter neutrals, you will achieve a softer, more romantic vibe, while darker combinations can make pink appear more dramatic. Pale pinks, like Resene Pale Rose, are calming while deeper shades are more like red because they get the heart racing.

When light reflects off pink walls, it makes you look rosy and healthy – cheaper than a high-tech face cream! In fact, early-20th-century designers used to line lamp shades in pink silk to cast a pink glow and warm up a woman's face, making her look younger.

Right: Walls in Resene Smitten. **Far right:** Walls in Resene Pot Pourri.

Resene Lipstick

Resene Hopbush

Resene Bone

Resene Cupid

Resene Pale Rose

pink partners

If you want to use pink but don't want to overdo it, here are some good colour combinations:

- Pink and green go particularly well together. Try pale eggshell pink with pale apple green
- Candy pink and black or charcoal, or mid-pink and white
- Pink and gold for a luscious look
- Pink and turquoise for a Moroccan twist
- Pink and other warm shades like yellow and tangerine for summery appeal

Resene
Disco

red

Positive – Red represents physical courage, strength, warmth, energy and excitement. It raises our blood pressure, stimulates appetite and tends to make us lose track of time. Pure red is powerful, and so is best used as an accent, such as one red signature wall.

Negative – When misused or overused, red can trigger aggression.

The colour red seems to be a perennial favourite at this end of the world. Maybe it's the saturated, strong quality of our light, or the brightly flowering pohutukawa and wattle trees to which we've grown so attached.

For such a strong colour, red comes in many, many varieties – from magenta like Resene Candy Floss with its pink undertones, through true reds like Resene Bright Red, to deep ox-blood, like Resene Dynamite. It's a hue associated with passion, energy and a healthy appetite. Red stimulates activity, increases blood pressure and heart rate, making it the highest energy colour.

Beware! Although it's a passionate colour, beware of using too much red in the bedroom – it could increase your pulse rate and stop you getting a good night's sleep. The best option might be to have it as a statement wall behind the bed, so you'll see and enjoy the colour when you're in the room but it won't be overpowering. Or use terracotta or burnt orange instead.

Red also represents the passion of anger and war, and is often seen in uniforms and national flags. It's a highly visible colour, used in stop signs, on fire engines and also in advertising to attract attention and stimulate your senses.

Add more black to red and it becomes sophisticated and mellow, reminiscent of red wine, velvet curtains and Oriental rugs. Add white and, of course, it becomes pink.

In interiors, red has often been used as a feature wall, a backdrop of strong colour at one end of a room. It's a good solution for those who find red too overpowering on all their walls.

Red is traditionally used in areas where food is eaten. It stimulates appetite, so restaurants love it – and at home, we can do the same in our dining rooms.

Right: Feature wall in Resene Flame Red. **Far right:** Feature wall in Resene Salsa, side wall in Resene Unwind.

Resene
Candy Floss

Resene
Dynamite

Resene
Pohutukawa

Resene
Bright Red

did you know...

That a red wall around a fireplace or on a chimney breast gives a feeling of warmth, even if the fire's not lit, and a red front door or entrance lends a feeling of luxury and opulence?

Resene
Monza

orange

Positive – Orange is warm, passionate, sensual and fun. The brighter shades are cheerful and tend to stimulate the appetite, making them ideal for kitchens and dining rooms, where they also create a comfortable, cosy atmosphere.

Negative – Feelings of deprivation, most likely when orange is combined with black. Frustration, immaturity and lack of intellectual values.

Happy, fun, sassy, playful, optimistic and energetic. Orange is such an irrepressibly cheerful colour that it makes most of us smile. Some people are not so keen on its in-your-face exuberance, but orange as an interior colour is very useful, particularly in burnt or terracotta tones, like Resene Fire. Because orange is such a strong colour, it has often been reserved for use as an accent for feature walls and splashbacks. But there are many ways to include its brightness in your home.

From peach to pumpkin
Orange is a hugely adaptable colour: it starts at soft peach, like Resene Porsche, then ranges through coral, melon to carrot, then goes on to deeper shades of terracotta and rust. It transcends the seasons, too. In its pale bright form, like Resene Consuela, it's a peppy spring and summer shade, but turn it pumpkin and it becomes quite autumnal and wintry.

Orange looks great with all forms of blue – turquoise, teal, ice-blue, true blue, slate blue – as blue sits opposite orange on the colour wheel. As with any scheme based on the use of complementary colours, make sure you get the saturation and balance of colours right.

Orange has a cool retro appeal that goes with mid-century-style interiors. It's also a good colour to use in children's rooms if you don't want to fall into the unisex stereotypes of pink or blue. Make sure you tone it down a little though, or orange's stimulating power will keep the kiddies awake.

You can go all out in the kitchen though, where orange's warmth can be channelled to create a inviting social space. Avoid orange in hot sunny rooms as it may make the room seem unbearably warm.

Right: Wall in Resene Rumour Has It (try Resene Alert Tan for another option). **Far right:** Wall in Resene Whizz Bang.

Resene
Tango

Resene
Hampton

Resene
Porsche

Resene
Consuela

Resene
Fire

try these colour combos

- Burnt orange and teal for a sophisticated take on a retro scheme

- Orange and charcoal for urban edginess

- Pale pumpkin and icy blue

- Bright orange and hot pink for something racy and fun

- A two-tone orange scheme of soft golden orange and deep gingery orange

- Terracotta and rust tones for rustic or ethnic interiors

Resene
Clockwork Orange

yellow

Resene
Gold Dust

Positive – Yellow is the colour of optimism, confidence, extraversion, emotional strength, friendliness and creativity. It tends to make people feel happy and energetic. Buttery shades of yellow are easier to live with.

Negative – Too much yellow or the wrong tone can prompt irrational behaviour. It can also induce fear, depression and anxiety.

Happy, sunshiny yellow – it's the colour of spring and summer, of warmth and cheeriness. It brings a bit of brightness into your life and makes you smile.

Yellow is one of the most vivid colours in the spectrum, so it can be a scary colour to use. Like road signs and highlighters, yellow is difficult to miss. Uplifting in a cold room, yellow may be overpowering in a sunny one. While intense daffodil yellows may be a bit much on all four walls of a room, there are many yellow-based colours that look amazing.

Deep dusky yellow: These yellows are a bit muddied and stretch from soft straw tones to deeper mustard and ochre hues like Resene Hacienda. Such saturated colours lend sophisticated warmth to a room, and look fantastic in older homes with a heritage bent. You can give these colours an acidic edge by adding a touch of green for sharp urban interiors and team them with charcoal or black. Or add some red for a spicy saffron yellow that looks great in ethnic-inspired interiors.

Soft lemon yellow: Another easy shade to live with, pale lemony yellows, like Resene Pale Prim, impart a bright, welcoming look to any room. They look great with clear whites and fresh greens, and suit country-style or French-style interiors.

Custard yellow: Creamier yellows, like Resene Moonbeam, haven't been seen much in interiors; our paler neutrals have tended more towards stone tones. If you deepen custard yellow a little for a warm, tropical-banana yellow, it becomes a lovely colour for a child's room. Or if you're feeling really brave, go '70s retro and use it with brown!

Yellow metals: Copper, gold and brass metallics have been strong in interiors in recent years. Check out the Resene Metallics and special effects range for colours like Resene Gold Dust.

Right: Lower wall in Resene Wild Thing; upper wall in Resene Black White. **Far right:** Exterior in Resene Moonbeam.

Resene
Moonbeam

Resene
Wild Thing

Resene
Half Dutch White

Resene
Hacienda

create beautiful things

top tip

When used on the walls of a room, yellow is a colour that reflects off itself so the look of it intensifies even more. If in doubt, choose a softer, creamier yellow. Yellow can also become acidic quite quickly so unless that's the look you're after, veer towards creamier, more wheaten tones.

Resene
Pale Prim

green

Resene
Conifer

Resene
Pale Leaf

Resene
Highball

Positive – Green is at the centre of the colour spectrum so represents harmony, balance and peace. It soothes and relaxes, and is therefore also a healing and reassuring colour. Olive and sage greens have a neutral, timeless character so are popular office colours.

Negative – Green can elicit boredom, stagnation and blandness.

This colour has had the most profound change in status in decades, if not centuries. Green. This word now carries the weight of all matters eco-friendly on its shoulders. It's a colour that is harmonious and restful, symbolic of new life and hope.

Green also has obvious botanic alliances and allusions, whether they are realised in a bright floral fabric or elegantly stylised palm-leaf wallpaper.

Soothing green is ideal in high-stress areas such as hopitals, schools and workplaces. We are comfortable living with green due to its prevalence in the natural environment, making it an easy colour to use anywhere indoors. Lighter hues are great for living rooms and bathrooms to promote a relaxing environment, while mid greens give a clean accent to kitchens and dining areas.

Green is a versatile colour, too.

- Cleaner, lime greens like Resene Conifer. Use these bold tones as a feature wall or when colour-blocking. Nice and strong, they suit boys' bedrooms and Asian-inspired schemes. Truer greens go well with the primary colours of red and yellow, as well as crisp whites.

- Acid greens like Resene Karma are tangy and edgy, they go well with charcoal and green-based creams, and perhaps even palest icy blue.

- Pale and interesting greens, soft sages and apples, like Resene Pale Leaf. These restful colours are perfect in bedrooms and look amazing with a natural scheme of pale timbers: there's no finer way to exude eco-chic.

- Emeralds and jades, like Resene Deep Sea. These strong, rich colours have an edge of decadence and eastern mysticism.

- Swampy greens like Resene Paddock. These deeper colours and other dark sludgy greens suit heritage decors that feature dark antiques, brocades and leather.

Green is often seen as a cool colour and the best way to warm up a green is, perversely, to add either black to form a soft and smoky green, or blue to make it more of a sea-foam tone.

Right: Walls in Resene Spanish Green. **Far right, top:** Upper wall in Resene Yucca; lower wall in Resene Middle Earth. **Far right, bottom:** Wall in Resene Leap Year (try Resene Deep Sea for another option) with vines in Resene Feijoa, Resene Summer Green and Resene Ottoman.

Resene
Paddock

Resene
Deep Sea

Resene
Secrets

blue

Positive – Blue is the colour of intelligence. Strong hues denote clear thought; lighter ones, mental focus. It improves productivity, and so might be a good choice for a study. Certain shades of blue relax, soothe and make us feel calm. Blue is also considered to be clean, and so works well in bathrooms and laundry areas.

Negative – Blue can exude coldness and aloofness. In kitchens, it is sometimes less desirable, possibly because of our primitive instinct to avoid blue foods – in fact, it can act as an appetite suppressant.

So you thought blue was just for the boys? Think again. Apparently it's the least gender-specific colour around. It's also one that inspires a feeling of trustworthiness, sincerity and peacefulness. It stands proudly for moderation and dependability, which is why many uniforms are blue and why more conservative institutions often choose it as their branding colour.

Blue often gets a bad rap as a cold colour but depending on the shade, blue can be very welcoming and soothing, especially in dark inky tones or in soft eggshell shades. Because of its calming qualities, it's a great colour in sunny rooms, and in pale versions, it will 'open up' a room, making it appear more spacious. It's a popular choice for bedrooms.

Blue is a classic choice for bathrooms because of its feeling of cleanliness (there's a reason most packaging for cleaning products is blue).

Combinations to try:

- Soft grey blues, like Resene Duck Egg Blue, used with palest sand tones for a bachy, seaside feel.
- Retro teals, like Resene Blumine, with other zingy brights against a background of cleanest white or deepest black. Unapologetic and fun.
- Deep blue, like Resene Indian Ink, for a rich and sophisticated living room, teamed with soft metallic coppers, or even pops of mustard and blush.
- Pretty vintage blues, like Resene Time Out, teamed with antique white and pretty sorbet shades.

Right: Walls in Resene Indian Ink. **Far right, top:** Walls in Resene Jordy Blue. **Far right, bottom:** Wall in Resene Bermuda Grey.

Resene Blumine

Resene Time Out

Resene Duck Egg Blue

Resene Takaka

Resene Quarter Frozen
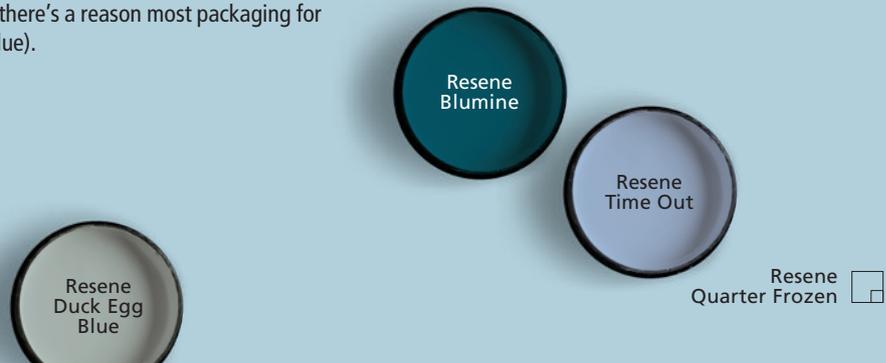
purple

Positive – Purple is the colour of royalty. It is opulent and often associated with mystery and spiritual awareness, vision, luxury, authenticity, truth and quality. Saturated, dark purple can add a powerful punch to a room, while as a lavender tint, it's popular with little girls.

Negative – Excessive use can create an introverted aura, and pitching it wrongly can scream decadence, suppression and inferiority, or appear cheap and nasty.

Purple is a fearless colour, the colour of royalty, luxury and glamour. Unlike its close cousins, red and blue, purple can inspire nervousness in home decorators. It's a powerful colour, even in its softer forms of mauve and lilac, so many of us are wary of using it.

Purple gives a level of richness few other colours can achieve. A true violet purple is certainly strong but if you add some deep red, you get eggplant and mulberry colours, which are easier to deal with. If you add grey to mauve-purple, you end up with soft lavender tones. The key to using purple is to get just the right tone and amount. Try these combinations:

Purple with aged gold tones: Rich purples, like Resene Enigma, look great with any metallic tones. If you use glass and silver or chrome, you'll end up with a blingy lusciousness that exudes an air of nightclub glamour. If you pair purple with tarnished golds and bronzes, a room will take on an aged, regal feel, reminiscent of Renaissance Italy. (Think ornate mirrors and crushed velvets as key accessories.) Timber has similar amber tonings to gold so it also looks good alongside purple, whether you use it on the floor or through furniture.

Deep purple and charcoal: This combination gives a room a lush, witty, urban look. Charcoal can be quite masculine and serious, but purple gives the scheme a playful, sensuous twist.

Spicy shades and purple: Clear purples and aubergines, like Resene Daisy Bush and Resene Fandango, are seen in Moroccan and Indian-inspired décor schemes. To follow their lead, put a few rich, spicy tones – like orange, pink or turquoise – alongside purple for a playful, vibrant scheme that's not too eye-jangling.

Provençe pairings: Team soft greyed lavenders, like Resene Poet, with eggshell blues and dusky creams for a dreamy, French-inspired interior.

Right: Walls in Resene Sugar And Spice. **Far right:** Walls in Resene Gun Powder and drawers in Resene Chapta And Verse.

Resene Daisy Bush

Resene Enigma

Resene Fandango

Resene Deluge

Resene Poet

growing up

Purple has become a go-to colour for older girls who don't want to be surrounded by pink. Purple bedrooms are popping up everywhere and will take girls safely from toddler-hood through their teen years.

Resene
Covert

grey

Resene Mine Shaft

Resene Half Surrender

Positive – Grey can enhance creativity, so it's a good office colour. As a neutral, it provides an unobtrusive and stylish background for all sorts of colour combinations and furnishings in all kinds of looks.

Negative – Used excessively, grey can exude a lack of confidence and fear. Pure grey can be suppressive and depressing.

Grey is a wonderfully versatile neutral, and as such, it morphs with fashion trends, appearing as a warm 'greige' (grey-beige) one decade, and a crisp Scandi dove grey the next. In any depth, it's synonymous with style and a certain urbane sophistication – whether it's a silvery off-white or a deep, grunty charcoal.

Silvery grey: Tones such as Resene Half Surrender appear luminous in a well-lit space. They are serene and whimsical, and look stunning with other greyed-off pastel colours. Warm soft greys with pale timber and textures.

Mid grey: This hue has a calming effect. True grey can be too cool for many people's liking, so adding a smidge of another colour will change its character. You can go warmer by adding a bit of brown to achieve a greige colour like Resene Half Friar Grey.

Storm grey: There's a big move towards greys with a touch of blue or green, like Resene Bounty or Resene Emerge. These slaty tones in their darker forms are smoky and moody. In paler forms, they are beachy and casual. A warmer twist to this palette is the purple-greys which are rich and warm.

Charcoal grey: Elegant and restful, charcoals like Resene Mine Shaft look superb with creamy whites and shots of bold colour.

Grey combos to try:
• Mid greys with terracotta or ochre. Rich spicy browns to warm up the grey.
• Silver-grey and white with touches of deep charcoal or black.
• Turn the above combination on its head: go for charcoal walls with white accessories.
• Grey with orange, either deep, burnt forms or tangerine.
• Grey with pinky purples.

Right, top: Cabinets in Resene Half Rakaia. **Right, bottom:** Walls in Resene Gravel. **Far right:** Walls in Resene Nocturnal.

Resene Emerge

Resene Half Friar Grey

Resene Bounty

Resene Half Concrete

white

Positive – Visually, white heightens our perception of space, so it's ideal for small rooms. Representing hygiene and cleanliness, it's also a popular choice for kitchens and bathrooms. Other traits include purity, simplicity, sophistication and efficiency.

Negative – Can indicate sterility, coldness, barriers, unfriendliness and elitism, and can make warm colours look garish.

White is white is white – right? Wrong. When you're decorating, there's white (which you can buy as Resene White), and there are a slew of other 'whites' or off-whites, with touches of yellow, green, brown or grey turning them to alabaster, chalk, ivory, cream.

Our search for just the right white is what makes the Resene The Range Whites & Neutrals collection so popular. With their yellow base, Resene Spanish White and Resene Pearl Lusta have the ability to lift a room and warm it visually. They and their varying strengths still take out many of the top places in the Resene's most popular paint colours each year. Conversely, colours like Resene Sea Fog and Resene Alabaster have a cooling effect.

Using white
Whites and off-whites pick up on other elements in the room. If you have lots of greenery out the window, expect your walls to take on a green look. Use a strong blue rug or furniture, and your walls will pick up on that.

Different parts of the room also reflect light differently. An off-white used under a window will look darker than the same colour used on the opposite wall. An off-white used on the ceiling will look much darker than the same colour on a wall because there is less light reflected. Use a half strength of your wall colour on your ceiling for balance.

The paint sheen level can also affect the way the colour looks. A flat paint will make the colour look muddier and denser, while a gloss finish will make it look cleaner and brighter.

Deciphering whites
On the Resene Whites & Neutrals fandeck, beneath each paint swatch is the name and a code. Codes that start with Y for yellow or B for brown describe warmer whites, good for cool, south-facing rooms. Cool whites have G for green and N for neutral (which means black, or rather grey once you put it with white). Use cooler whites to take the visual heat out of north-facing rooms.

Right: Walls in Resene Rice Cake. **Far right:** Walls in Resene Ecru White.

Resene Pearl Lusta

Resene Sea Fog

Resene Alabaster

Resene Spanish White

It can be tricky to see the undertones in white. To help you see the differences, view the large A4 drawdown swatches at your local Resene ColorShop and slip a piece of printer paper under each sample. This will help you compare how the sample looks vs white, and will highlight the undertones in the paint colour.

Resene
Black White

brown

Resene
Tea

Resene
Korma

Positive – Brown is associated with seriousness, warmth, nature, reliability and support. It is a soothing, comfortable colour and wears well, so it's ideal for a family room. Combined with shades like pale blue or fuchsia, browns can also be exciting and ooze sophistication. They work well with spicy or warm colours, too, and you'll find a shade that'll work well in most rooms.

Negative – Picking it wrong gives an impression of lack of humour and sophistication, and heaviness.

Before you hurry to turn the page, wait – give brown another chance. The word may conjure up images of dowdy old-fashioned rooms decked out in shades of dingy brown. But given a pinch of grey or a twist of gold, brown can be a wonderful colour with which to paint your walls.

In fact, let's not call it brown. Try these descriptive tags and brown turns from yuck to yum: cocoa, chocolate, leather, cinnamon, sepia, nut, russet, rust and mahogany.

Brown is generally thought of as a masculine colour that promotes feelings of strength and stability. It's comfortable, warm, approachable and reassuring.

Nutty and warm
Many an interior scheme has been built on tonal colour schemes, using varying strengths of one of the gorgeous pale neutral browns from the Resene Whites & Neutrals collection. Resene Tea (described as a complex river-

boulder beige) always ranks high on Resene's list of most popular colours. This type of 'greige' (grey beige) colour is hugely versatile and useful in interiors. And of course, one of our most-loved decorating materials – timber – is brown. So we're actually quite used to seeing this colour not only in our homes, but also in nature.

Add yellow for boot-leather tones and tawny browns, like Resene Korma, or add black for dense rustic browns, like Resene Lignite. Tobacco browns, like Resene Sandal, work well with traditional interiors, especially for more intimate spaces like bedrooms and studies. Or add a squeeze of orange for rust-browns and terracottas that have more warmth and zing.

Right: Walls in Resene Mondo. **Far right:** Walls in Resene Road Trip (try Resene Cement for another option) and floor in Resene Colorwood Bark wood stain.

Resene
Sandal

Resene
Lignite

Resene
Alamo

Resene
Stonehenge

some combinations to try

- Brown and ice-blue or dusky teal
- Tonal colour schemes based on varying strengths of the same brown
- Tawny brown and green, two of the most prevalent colours in nature
- Leather browns and terracotta with texture
- Mid brown with creamy vanilla white

Resene
Oilskin

black

Resene
Swamp

Positive – Black can be timeless and glamorous. It is also the colour of emotional safety, efficiency, substance and excellence. Psychologically, black creates protective barriers, as it totally absorbs all the other colours of the spectrum.

Negative – Black represents oppression, coldness, seriousness and weight. It makes rooms seem smaller, too.

We may be known for our love of black clothing, but it seems we also love this colour on our homes. It's a brave person who paints their interiors in black, but the colour – or at least its many subtle shades from the Resene paint palette – regularly pops up in living rooms, bedrooms and even bathrooms. Black is smart, sophisticated, dramatic, masculine, moody and urbane.

As with any dark colour, black will make a room appear smaller and more enclosed. It's superb for a room that's more likely to be used in the evening, such as a media or TV room, or a bedroom. Well-planned lighting can heighten the effect of black, by casting a wash of soft light over a wall. Not all blacks are created equal. Some have a touch of brown like Resene Bokara Grey, some a touch of green like Resene Swamp, or blue, like Resene Bastille. Ask a staff member at your local Resene ColorShop to decipher the numbered code underneath the colour swatch.

Black started showing up on exteriors a while ago. Black lends a crisp contemporary edge to modern architecture, or a romantic cast to bungalows and cottages, especially when teamed with white architraves and joinery.

Beware! If a dark colour is to be used on the exterior of a house, consider using a Resene CoolColour version of the colour, which reflects more of the sun's heat to keep the paint and surface cooler.

Chalk it up with blackboard paint
The ultimate practical black finish is Resene Blackboard Paint. Paint an entire wall in a child's room, the back of a kitchen island bench, or frame up part of a wall as a more traditional-style blackboard. Add another dimension by painting Resene Magnetic Magic underneath so you can use it as a magnetic noticeboard as well.

Right, top: Walls in Resene Nero. **Right, bottom:** Resene Blackboard Paint. **Far right:** Walls in Resene Colorwood Pitch Black wood stain.

Resene
Bastille

Resene
Bokara Grey

Resene
All Black

An extreme colour such as black often calls for an extreme finish – choose an absolute matt finish, such as Resene SpaceCote Flat, to appear velvety and luscious. A high-gloss finish gives a feeling of glamour and helps reflect light.

common *mistakes*

Walls in Resene Quarter Fuscous Grey.

Choosing paint colours can be tricky sometimes. Here's a list of common colour mistakes... and our advice to help you.

1 Fear of strong colour and getting started

Many of us say that we like strong colour but when it comes to painting our walls, we choose off-white. Is it the fear of frightening future buyers of our homes that scares us into safety? Don't let it – who wants a house that looks like everything else on the market? Well-used strong colour is hugely memorable.

A painted wall is easily and cheaply changed so if you do have a lapse in colour judgement it's easy to try something else. Resene has many tools available to help you make your decisions, like testpots and A4 paint swatches (known as drawdowns), to help minimise the chance of making a mistake before you buy the paint. Maybe ease yourself in gently by painting a feature wall in strong colour first.

2 Too matchy-matchy

Don't assume that even if you choose the most neutral of neutral paint colours, you should use it on every surface imaginable – the walls, trims and ceiling. You'll end up with a bland result and if you have chosen a cool white, you'll feel like you're living inside a chilly bin. There is a vast array of interesting neutrals in the Resene Whites & Neutrals collection. The colours are handily grouped in variants, ie half, quarter and double etc strengths of the same colour. An effective scheme can be created by using, for example, a full strength of a colour on the walls, a triple strength on a feature wall, a half strength on the trims and a quarter on the ceiling.

Don't just paint all of the walls white while the kids are young or you're waiting to renovate. If you consciously choose white walls, be sure you have fabulous furniture as white will silhouette the furniture in a way no other colour will. Creams or taupes are far more forgiving.

3 Going too clear and bright

Paint colours fall roughly into two styles – muddy and clear. Most successful schemes are based on muddied, muted colours as they are softer on the eye and easier to live with. You might make the assumption that the 'leaf green' you're keen on is quite bright, but look closer and you'll see that most leaf greens are quite greyed and dusky. You're probably after sage, not mint; olive not emerald. Likewise with sea blues, or earth browns.

The exception is a trend for jewel tones where deep clear colours may be the hero: navy sapphire, ruby red, regal purple or jade green. Clear, bright colours are best kept as accents.

4 Highlighting ugly details

If your skirting is skimpy or you have ugly doors, don't highlight them by painting them a different colour to the walls in a neutral or tonal scheme. Use a gloss change instead (such as gloss Resene Enamacryl or semi-gloss Resene Lustacryl). It will appear slightly paler as the gloss reflects more light, but it won't draw attention to itself.

If you have a low ceiling height, painting the skirting and scotia in a different colour will create two horizontal lines, sandwiching the space and making the ceiling feel even lower.

5 Scatter-gun colour selection

Keep your colour palette under control. Use one accent colour, or subtle variants of it, in one space and not a whole cacophony of them. A good rule of thumb for an accent colour is to keep it to about 10% of the scheme.

6 Choosing a bright colour from a small paint chip

Use a Resene testpot! Look at the colour painted in the biggest size you can in the room and with all the furnishings. Paint the colour on a piece of card and prop it up behind the sofa, hold it next to the curtains, check it with the carpet. Do this in both the day and night light. A seemingly intense neutral can wash out to nothing on an exterior house wall that's blasted by the sun. And green or yellow can be overpowering in a bright room when the colour is bounced back on itself from the walls.

7 Getting Resene 'colour' tinted into a non Resene paint

Resene tinters and paint are unique so only Resene paint will give you true colour rendition. If you have a Resene colour tinted into another brand of paint, you'll be in for a nasty non-matching surprise.

Resene also has all sorts of clever additives and paint technologies to make sure your paint, and the colour it carries, has a longer-lasting better-looking life. For example, there's the Resene Kitchen & Bathroom range, Resene Fly Deterrent and Resene CoolColour for exteriors to name a few. Ask staff at your Resene ColorShop for more details.

Resene
Hawkes Blue

colour *technology*

Keeping colour cooler

Ever thought a house or building would look great painted in a sleek, dark colour – then had to shelve plans for fear of the heat damaging the substrate or the building getting unbearably hot in summer?

Resene CoolColour technology makes painting exterior surfaces in dark colours both easier and safer. It can be used on all sorts of exterior materials and applications, from weatherboards and concrete to windowsills. A Resene CoolColour looks like a normal colour but thanks to special pigment technology it reflects more heat, so it doesn't get as a hot as a standard colour would.

When looking at the role paint can play in temperature control in buildings it comes down to colour. The ability of white to reflect visible light extends through the infra-red and, because of this, white surfaces remain relatively cool to touch, even in direct sunlight. The opposite is true of black and dark colours, which absorb light in this infra-red area, resulting in significant heat build-up in the surface. As the emissivity of paints is not particularly good, the surface heat is conducted into the substrate and then radiated into the building.

Right: Fence in Resene CoolColour All Black, concrete tiles in Resene Bleached Grey concrete stain, pallet table in Resene Dauntless with planter on top in Resene Chenin. Other pots in Resene Dauntless, Resene Java and Resene Dali.
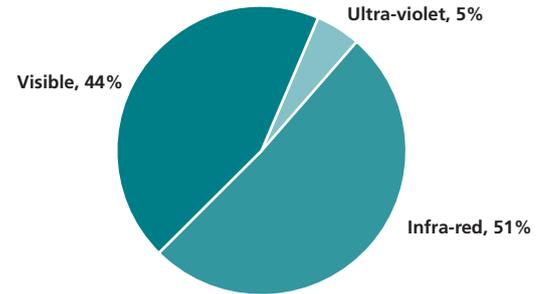
Resene
Half Kumutoto

Sunlight energy is made up of 44% visible light, 5% ultra-violet light and 51% infra-red light.

Traditionally light reflectance values have been used to define what colours are suitable for heat prone substrates, however visible light reflectance values only measure a proportion of the light and ignore the effects of ultra-violet and infra-red light. Total Solar Reflectance (TSR) values take into account all three forms of light to give a better measure of the reflectance of the colour. A Resene CoolColour uses pigments that reflect more of the sun's energy resulting in the same visible light reflectance value as the standard colour but a considerably higher Total Solar Reflectance value.
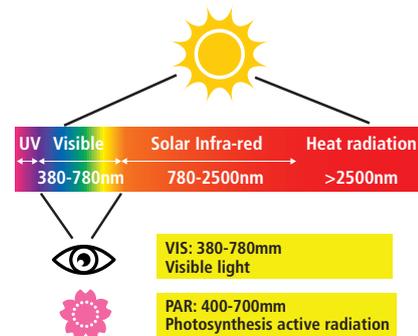
The solar spectrum includes infra-red radiation that Resene CoolColour pigments are designed to reflect. Replacing the standard black pigment that absorbs all infra-red with a Resene CoolColour black pigment reduces the heat absorption. Some blues, greens and reds are transparent to infra-red radiation so are best used with Resene Quick Dry or Resene Galvo-Prime to reflect infra-red that passes through these hues.

In terms of technology, the Resene CoolColour effect can also be seen in plants. Most plants have leaves of a very high chroma green. If those leaves reached the same temperature when exposed to solar radiation as those of a similarly coloured paint they would shrivel and die. The fact they don't is because that pigment – chlorophyll – absorbs what it needs from the visible range to photosynthesise but reflects the infra-red range, keeping the plant cool.

Energy distribution of sunlight

Ultra-violet, 5%

Visible, 44%

Infra-red, 51%

A Resene CoolColour™ uses pigments that reflect more of the sun's energy than normal pigments.

UV	Visible	Solar Infra-red	Heat radiation
	380-780nm	780-2500nm	>2500nm

VIS: 380-780mm
Visible light

PAR: 400-700mm
Photosynthesis active radiation

Over the past decades, there have been vigorous efforts to create heat resistant pigments in the ceramics industry, as most tints break down at the very high temperatures under which ceramics are fired. Novel ways were discovered of doping refractory metal oxides of titanium, zirconium, chromium, and so on, with other metal ions to produce a wide selection of high temperature colours. The behaviour of these mixed oxides were examined under infra-red and the results showed an ability to withstand a range of very high temperatures. Focusing on this aspect, further refinements were made to maximise this for use in various commercial applications.
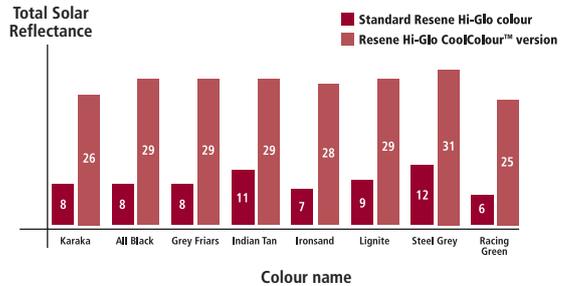
Using these findings Resene took the very popular roofing colour Karaka and incorporated into it these new infra-red reflecting pigments. Comparing the new blend against traditional coatings over a five minute standard Resene test revealed a 12°C drop in temperature. The 12°C difference can make a tremendous difference to the stresses exerted on the substrate and can have a telling effect on its stability and heat gain.

When it comes to roofs, having a darker shade in winter will not make much difference to how hot your roof – and home or building will get – as when it is cold they will be cold too, however in summer it will make a difference as to how hot your home or building will get by reflecting heat away from the building.

Reflectance spectral curves for Resene Karaka Coolcolour™ versus Resene Karaka
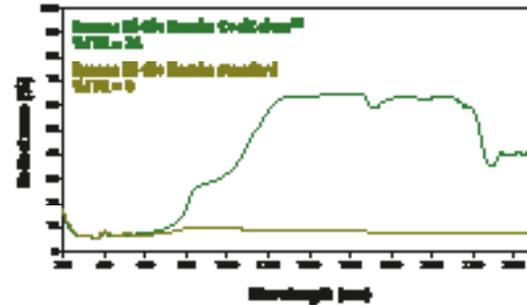
Total Solar Reflectance for Resene Hi-Glo Coolcolour™ versus standard colour

Total Solar Reflectance

■ Standard Resene Hi-Glo colour
■ Resene Hi-Glo CoolColour™ version

| Colour name	Karaka	All Black	Grey Friars	Indian Tan	Ironsand	Lignite	Steel Grey	Racing Green
Standard	8	8	8	11	7	9	12	6
CoolColour	26	29	29	29	28	29	31	25

Colour name

First developed for high gloss roof coatings, Resene CoolColour is now available in a range of paints and stains. These include Resene Lumbersider low sheen, Resene Sonyx 101 semi-gloss, Resene Hi-Glo gloss, Resene Summit Roof satin/semi-gloss, Resene Enamacryl gloss waterborne enamel, Resene Super Gloss enamel, Resene Lustacryl semi-gloss waterborne enamel, Resene SpaceCote Flat waterborne enamel, Resene X-200 waterproofing membrane, Resene AquaShield mineral effect, Resene Waterborne Walk-on paving paint, Resene Non-Skid Deck & Path, Resene Waterborne Woodsman wood stain, Resene Woodsman Decking Oil Stain and Resene Woodsman wood oil stain.

Resene CoolColour technology works best in dark shades most prone to heat build-up, including popular colours such as Resene Nero, Resene Karaka and Resene Napa. A wide range of Resene CoolColour hues are now available – see colours marked with a CC on Resene colour charts or view the list online on the Resene website in the Resene colour library. Check with your Resene ColorShop or representative to see if a Resene CoolColour is right for your project.

Resene
Nero

Resene
New Denim
Blue

Resene
Karaka

Although it may be hard to believe, these two colours behave the same in test procedures. The test procedure involves fixing thermocouples onto the backs of these panels (ensuring a good thermal contact); shining an infra-red light onto the painted side of the panels and plotting the temperature rise of the panels on the thermocouples.

The grey panel is a standard coating. The black panel uses Resene CoolColour pigments. The black Resene CoolColour panel has the same infra-red (heat) absorption as the standard paint finish on the grey panel, demonstrating the reflective benefits of Resene CoolColour technology.
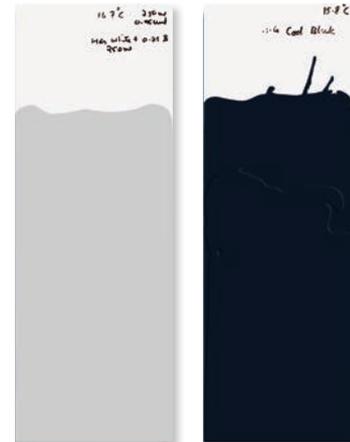
Tinting

We all know how it works. You agonise over the colour charts and then settle on the ideal shade. You watch as the Resene ColorShop professional measures the perfect combination of colour into the can and locks it into that frenetic mixing machine, where it shudders itself into the blend you were after.

Most Resene paint consists of a tone colour, which is then tinted with measured units of colourants, depending on the final required shade. There are limits to how much tinter you can add to each tone. If you fall under that limit, you can affect the opacity of the paint and make it more difficult to get a good, even finish. If you go over the limit, you can interfere with its film-forming properties and therefore its longevity.

The rule of thumb is that tinters affect paint durability, so the less tinter you use, the longer the colour will last. Colours are formulated to be tinted from certain tones. If you try to tint a colour from a tone it's not designed for, while you might be able to get the correct shade, chances are you will have over-tinted it and it will fail faster.

So, don't try getting a dark colour tinted into a white paint – it may save you money today, but it will turn out a false economy when you have to repaint earlier than usual.

Every paint company uses different tinters to make up their colours. To capture the true essence of the colour you like, you really need to buy it tinted into the brand of paint it was developed for.

You can also add depth of colour by using tinted undercoats beneath the topcoat, but the same criteria apply.

Paint quality also has a bearing on the tinting issue. High quality paints use more concentrated tinters, so the paint keeps its colour and integrity for longer. Good quality tinters provide good coverage too, so that you only usually need to apply two topcoats to get the shade you want, whereas it may take more coats of a lower grade paint to give you a true colour. High quality paints also tend to have more complex colourways and will change subtly in changing lights.

Certain individual colours also tend to be less durable than others, due to the make-up of their colourants. Bright oranges, yellows and reds still tend to fade faster than other shades. The best colours for longevity are the earthier tones, which are made from oxide tinters.

If you do get offered a significantly cheaper price for the same colour in another brand, beware! Not only will the colour not truly match the original, the paint will almost certainly not last as long and therefore not represent the best value in the long-term. The most expensive part of a paint job, in terms of money and time, is the painting, not the paint itself, so it makes sense to invest in a high quality product at the start, get it tinted properly, and minimise maintenance and repainting further down the track.

get decorating

Try out your favourite colours
Resene testpots are the best way to try out your colour choices.
Available at Resene ColorShops and Resene resellers, or order
online at www.resene.com/testpots.

Thousands of Resene colours are also available as
A4 screenprinted swatches, known as drawdowns.
You can order these from the Resene website,
www.resene.com/drawdowns, or browse through
the in-store library of swatches at Resene ColorShops
and Resene resellers.

Find your nearest Resene ColorShop or Resene reseller
Simply visit www.resene.com/colorshops or call
0800 737 363 (NZ) or 1800 738 383 (Australia).

Find the right paint for your project
See the Resene Recommended paint systems brochure for the right
paints to use on your home projects, inside and out. Pick up a free
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Get more inspiration
For gorgeous home projects, themes and more colour
ideas, go to www.habitatbyresene.com.

For more paint and decorating ideas, how to projects
and videos, visit the Resene website www.resene.com.

Remember you only get authentic Resene colours when you use Resene tinters in Resene paint bases. Resene decorative tinters with no added
VOCs and the true Resene colour formulations are unique and only available from Resene. So make sure you insist on genuine Resene products
and tinters for your project.

Resene
Cararra

Resene

the paint the professionals use

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