

Colour contrast for the visually impaired

Colour

According to Dulux it depends on three factors hue, light reflectance value and chroma.

● Hue

- Gives the colour family
e.g. RR Magenta through to Red.
- There are eight colour families which represent the spectrum.

RR: Magenta through to Red

YR: Red through to Orange

YY: Orange through to Yellow to Lime

GY: Lime through to Green

GG: Green through to Turquoise

BG: Turquoise through to Blue

BB: Blue through to Violet

RB: Violet through to Magenta

- Within each hue there is a scale from 00-99 as the colour moves from one hue to the next (this is shown by the number 50 in the example below)

● Light reflectance value (LRV)

- Indicates the lightness or darkness of a colour.
- The higher the LRV the lighter the colour.
(this is shown by the number 17 in the example below)

● Chroma

- Is the intensity of the colour.
- The higher the number the more intense the colour will be.

The Dulux notations

Dulux has exclusive notations which describe colours using the three factors. For example

50RR 17 / 372
Hue LRV Chroma

Part of the design requirement is that the LRV between the two surfaces is greater than 30 points (most paints fall within the range 04 to 83)

Paint manufacturers can supply tables that define the minimum colour contrast thresholds required to assist visually impaired people.

Approved Document.

Definitions

0.29. Contrast Visually

When used to indicate the visual perception of one element of the building, or fitting within the building, against another means that the difference in light reflectance value (LRV) between the two surfaces is greater than 30 points.

British Standard 8300: 2002

9.1.1 Visual characteristics

Colour difference can help people with visual impairments to distinguish objects and surfaces if the colours of adjoining surfaces are chosen either for different amounts of light the colours reflect or for the different intensity of colours chosen. The use of colour from different parts of the spectrum (colour of a different hue) is less suitable than combinations chosen for both colour (chroma) and luminance contrast (LRV) because there are people who are insensitive to differences in hue.

Luminance contrast (LRV) is more important than colour contrast (hue) in helping visually impaired people distinguish between different surfaces.

The colour (chroma) and luminance (LRV) of the wall should be noticeably different from that of the ceiling and floor.

Note: Surfaces with different luminance can be distinguished from one another by people who are colour blind.

Komfort's View

Glass Partition Manifestation

Komfort have surveyed a number of people to compare the 'K' Series glass vinyls (on a white background) against colours within the Dulux trade colour palette to assess the nearest visual colour match. The Dulux colour notation code of the nearest visual match has been applied to the 'K' Series vinyl.

'K' Series Glass Manifestation Vinyls

Red	16YR 18/587
Orange	68YR 28/701
Yellow	39YY 68/634
Green	70GY 22/546
Light Green	30GG 49/211
Light Blue	74BG 61/206
White Frost	10BB 73/032
Mid Blue	52BB 15/410
Violet	41RB 24/309

Use the Dulux colour and contract design guide to find the complimentary background colour to the 'K' Series glass manifestation vinyls.

For more information on Colour and Contrast visit the Dulux website www.duluxtrade.co.uk