

## **Colour contrast and luminance contrast**

In these Design Notes you will find the phrases ‘contrast visually’ and ‘visual contrast’.

To contrast visually means to look different, so that an item can be distinguished from its surroundings, ideally even by most visually impaired people. In these Design Notes, we suggest providing visual contrast so that for example a door handle can be recognised against the background of the door.

Visual contrast can be achieved by differences in colour, luminance, or both.

Differences in colour are obvious to people with adequate vision, but are not clear to many visually impaired people.

Luminance, or the amount of light a surface reflects, is compared by measuring differences in light reflectance value (LRV).

The benefits of a marked difference in luminance are so great compared to a difference in colour alone, that most guidance documents only suggest the need for a contrast in luminance.

## **Achieving good visual contrast**

Luminance is measured by light reflectance value (LRV), on a scale of 0 (totally black) to 100 (perfect white). Whilst the extremes of the scale are never in practice reached, the scale can be used to demonstrate a reasonable level of contrast, by achieving a difference of at least 30 points between adjacent objects.

A difference of around 20 points may still be acceptable, particularly where the difference is between two large areas.

There would be no disadvantage in also providing colour contrast.

## **Measuring light reflectance values**

Specialist equipment is needed, and would not commonly be used on site.

The LRV can be approximated to an acceptable degree by use of colour swatches or panels of colour samples on which the LRV is stated. The LRV of many products can be obtained from the manufacturer.

## **Where visual contrast might be beneficial**

There are many locations where visual contrast can be beneficial. Some are mentioned in these Design Notes.

By way of example, the following locations are referred to in Building Regulations Approved Document M: -

- Between ramp surfaces, and landings.
- Between ramp kerbs, and ramps or landings.
- Between handrails, and their backgrounds.
- Between entrances to buildings, and their surroundings.
- Between door furniture, and doors.
- Between manual controls for powered doors, and their backgrounds.
- Between manifestation to glazed doors and screens, and their backgrounds.

- Between guard rails provided for projections into lobbies corridors and passageways, and their backgrounds.
- Between door frames, and doors.
- Between the leading edges of internal doors which are not self-closing nor likely to be held open, and their surroundings.
- Between walls of corridors and passageways, and ceilings.
- Between walls of corridors and passageways, and floors.
- Between exposed edges of sloping sections of corridors and passageways, and surroundings.
- Between signs indicating the floor reached for lifting device, and their surroundings.
- Between lifting device call and control buttons, and their surrounding face plate.
- Between the surrounding face plates to lifting device call and control buttons, and the surrounding surfaces.
- Between doors to passenger lifts or lifting platforms, and adjoining walls.
- Between audience and spectator seating, and their surroundings.
- Between lighting pull cord bangles and their backgrounds.
- Between face plates to switches outlets and controls, and their backgrounds.
- Between sanitary accommodation fittings and grab bars, and background wall and floor finishes.
- Between sanitary accommodation wall finishes, and floor finishes.

This guide is produced by the Access Officers of Brighton & Hove City Council, Eastbourne BC, Hastings BC, Lewes DC, Rother DC and Wealden DC