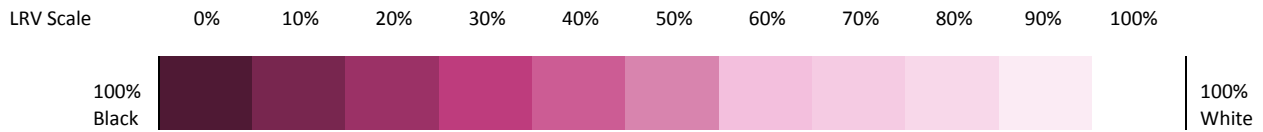


LIGHT REFLECTANCE VALUE What is it?



Light Reflectance Value (LRV) is the total quantity of useable and visible light reflected by a surface in all directions and at all wavelengths when illuminated by a light source.

LRV is a measurement that tells you how much light a colour reflects, and conversely how much it absorbs.

LRV runs on a scale from 0% to 100%. Zero assumed to be an absolute black and 100% being an assumed perfectly reflective white. An absolute black or perfectly reflecting white do not exist in our everyday terms. The average blackest black has a LRV of approximately 5% and the whitest white is approximately 85%. Some yellows can measure up into the 80's or 90's as well.

Using reflectance values

Reflectance is the proportion of light that a surface reflects compared to the amount of light that falls on that surface. Dark, matt and/or textured surfaces absorb a lot of light and have low reflectance values. Light, glossy and/or smooth surfaces reflect most of the light that falls on them and have high reflectance values.

The reflectance value of an individual colour indicates the amount of light and heat that individual colour will reflect. Black has a reflectance value of zero and absorbs all light and heat. Surfaces low in reflectance values are generally very dark and can get very hot (such as the black leather seats in a car). On the other hand, white has a reflectance value of nearly 100 and keeps a building light and cool. All colours fit between these two extremes. A colour with a reflectance value of 60 (which means it reflects 60% of the light that falls on it) will reflect more light than a colour with a reflectance value of 30 (which means it reflects 30% of the light that falls on it).

Colours with high reflectance values such as white will generally last longer than darker colours with low light reflectance values because the light colours reflect some of the sun's harmful energy while the dark colours absorb most of it.

Be mindful if considering using very low reflectance colours on unstable substrates as they can cause warping of the surface.

Substrates such as FC Sheeting (Blueboard) and EPS (Polystyrene) generally have a recommended minimum reflectance value of 40%.