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Bringing innovation to the surface.™

10th February 2016

To Whom It May Concern,

Re: Recommended Light Reflectance Values (LRV).

The significance of Light Reflectance Values is now being recognized by the building industry.

When paint is exposed to sunlight it absorbs and reflects radiant heat (as well as UV light). It's not only radiant heat warming up the paint film that is the problem. Damage is caused by temperature changes (i.e. from hot sun to cloudy sky) causing the paint film to go through a process of heating up then cooling down again resulting in changes in dimensional stability of the timber substrate. Increases in the core temperature of the timber substrate can also cause resins to mobilise and leach through the paint film. This is known as resin bleed.

The other factor to consider is UV light, the other part of the sun's spectrum. When UV light hits the paint film it causes the release of free radicals that can damage the surface.

Light paint colours with a high light reflectance (and therefore a high LRV) allow less free radicals to be released, which means the paint film and substrate will last longer. Correspondingly dark colours with a lower light reflectance allow more free radicals to be absorbed therefore causing more damage to the surface and resulting in reduced life for the paint film.

Taking the above into consideration, PPG recommend choosing a colour with an LRV of 45 or higher for use on all KLC timber products coated with PPG 839 alkyd primer.

Yours Sincerely

Craig Douglas
Territory Manager
PPG General Industrial Coatings