## **TUFFTEX**

## Your Guide to

- -Colour Specification
- -LRV
- -Warranty

Incorporating global standards of Light Reflectance Values (LRV), this guide will assist you in making informed decisions of colour(s) for:

**TUFFTEX Architectural Coatings** 

**TUFFTEX Specialty Finishes** 

**TUFFmouldings** 

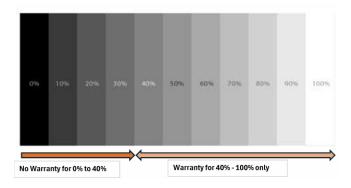
**TUFFWALL** 

-including alternative substrates and building systems.

# Colour and Light Reflectance Values (LRV)

Light Reflectance Value (LRV) is the measurement of direct sunlight and heat a surface reflects in comparison to the amount it absorbs. For example, black has a LRV value of close to zero as it absorbs almost all light and heat, with virtually no reflective capacity.

LRV is a particularly important factor for consideration when building in Western Australia.



#### We all love dark colours but...

Dark colours, though aesthetically pleasing and popular - absorb significantly more heat.

The compounding impact of this heat causes stress and can result in cracking, blistering and other negative outcomes in both surfaces and substrates.

### TUFFTEX recommendations:

For substrates such as lightweight or panelised building systems, a minimum LRV of 40 is recommended.

For any coloured exteriors such as renders and texture, a minimum LRV of 40 is recommended.

#### **Texture & Render Colour**

Light, glossy and smoother surfaces reflect higher amounts of light and therefore have a higher LRV.

Dark colours increase thermal stresses, resulting in larger amounts of movement, breakdown of chemical bonds and therefore accelerate colour fade.

#### **Substrate**

Regardless of substrate choice, the colour choice will have flow on effects including contraction and expansion of the substrate.

Low LRV colour choices place stress on the render and texture which in turn stresses the underlying substrate.

The negative effect of low LRV colour choice in design and building is widely known and therefore good design and consideration is paramount for cost effectiveness, longevity, and energy savings.

The flow on effects of a dark colour choice is determined by other variables also, such as:

- design
- geographical location
- orientation of elevations
- position of expansion/construction joints
- building materials....and more.

Therefore, in considering the impact of LRV for maintenance and warranty, talk to TUFFTEX for guidance and advice. Though TUFFTEX offers colour warranty for LRV 40+, there are exceptions – contact TUFFTEX for more information.

For LRV, substrates and specific warranty information, see the following tables and contact TUFFTEX for advice on your project.