

Tredsafe have now carried out several LRV tests in accordance with AS1428.1 Design for access and mobility – tactile indicators Part 4.1 Appendix E was undertaken to obtain the Tredsafe insert surface Luminance Reflectance Values. All building products denoted as a surface require an LRV. The LRV is strictly a Light Reflectance measurement taken from the surface of the stated product. The results were as follows:

Product	Code	Material	Mean Luminance	
			DRY	WET
1. Safety White	101	PVC Insert	49.9	48.7
2. Safety Yellow	102	PVC Insert	22.4	21.0
3. Safety Green	103	PVC Insert	9.0	8.5
4. Safety Red	104	PVC Insert	9.1	7.6
5. Safety Blue	105	PVC Insert	10.8	9.9
6. Neutral Black	106	PVC Insert	4.6	3.5
7. Charcoal Grey	107	PVC Insert	6.3	5.2
8. Light Grey	108	PVC Insert	22.7	21.0
9. Rich Brown	109	PVC Insert	9.2	8.5
10. Putty	110	PVC Insert	19.8	19.0
11. Royal Blue	111	PVC Insert	5.1	4.0
12. Burgundy	112	PVC Insert	5.5	5.1
13. Mid Grey	113	PVC Insert	11.5	10.6
14. Jade Green	114	PVC Insert	6.8	5.1
15. Night Glow	115	PVC Insert	immeasurable	immeasurable
16. Super Night Glow	116	PVC Insert	45.2	45.5

*Actual test reports available on request.

Luminance Contrast Defined

The definition of Luminance Contrast in accordance with the AS/NZS Standard 1428.1 is ‘The light reflected from one surface or component, compared to the light reflected from another surface or component’. It is not measured by the difference in the colour contrast (Background vs Foreground) but the difference in the light reflective properties of each colour.

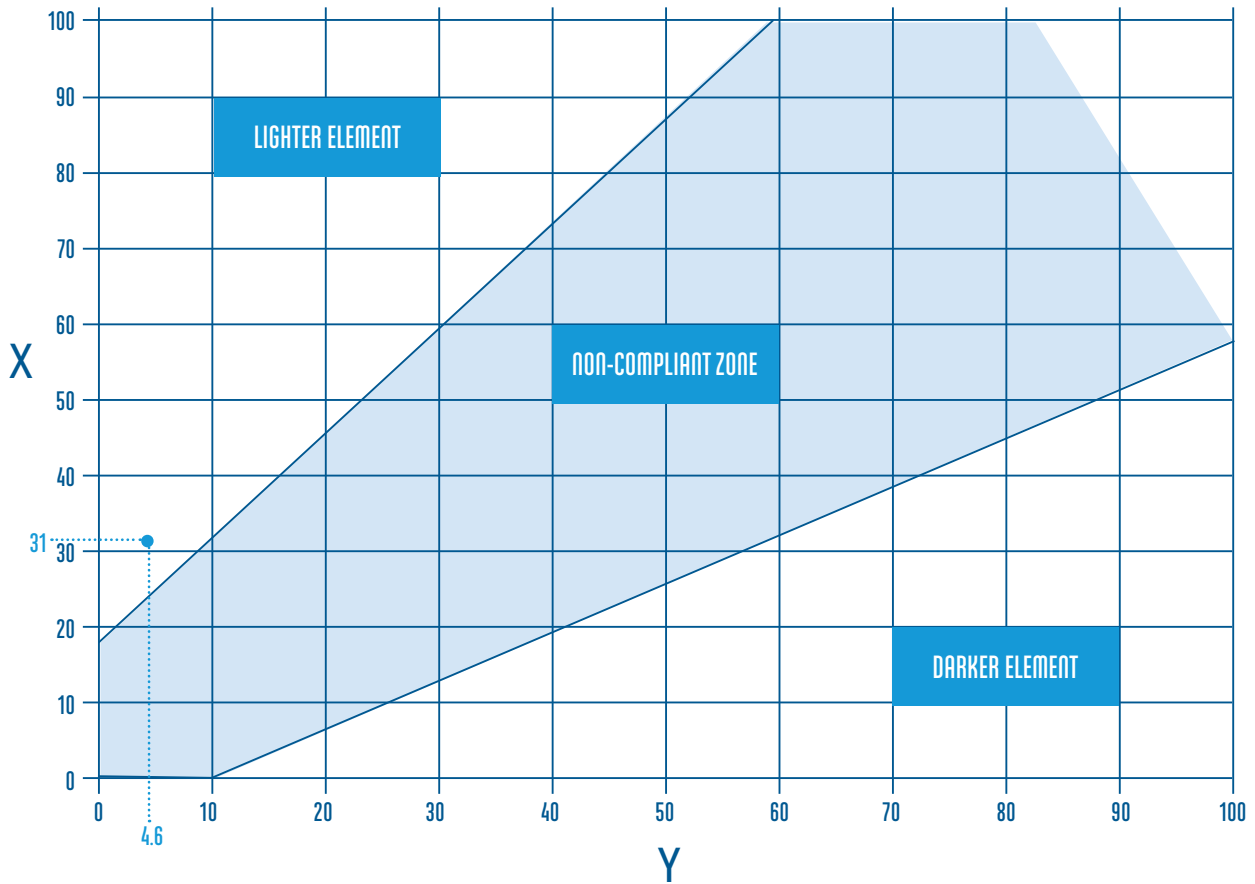
Luminance Contrast Strip (Insert) Defined

The Luminance Contrast Strip provides a visual marker identifying that the tread / riser intersection is evident and not obscured by similar products and colours (Blending in).

The strip in accordance with AS1428.1 requires a luminance contrast of at least 30% with respect to the background material or substrate (see chart overleaf).

The Luminance Contrast Strip must be a minimum of 50mm and 75mm maximum. It cannot be set back from the Tread / Riser. Any luminance strip must be no further set back than 15mm from the front of the stair nosing.

AS1428.1 Luminous Graph



NOTE: Luminous reflectance of building elements must lie outside the shaded area. Of the 2 elements the lighter element is to be above the shaded area and the darker element is to be below the shade area.

If we take our Tredsafe Neutral Black stair nosing insert with a Mean Luminance DRY value of 4.6 and locate it on the Y axis and the lighter element being the Light Grey Concrete of Mean Luminance Dry value of 31** inserted on the X axis, we find that the Black Insert on Grey Concrete substrate is well within the compliant zone (as per example shown in graph) and suitable for use in stairwells according to AS1428.1 in both NZ and Australia.

** Mean LRV for Light grey Portland concrete taken from figures quoted on an LRV website. Tredsafe is not responsible for testing of actual Background substrate LRV and the mean luminance value should be available from the concrete manufacturer.