

Stair Nosing Luminance Contrast Compliance Guide (LRV)

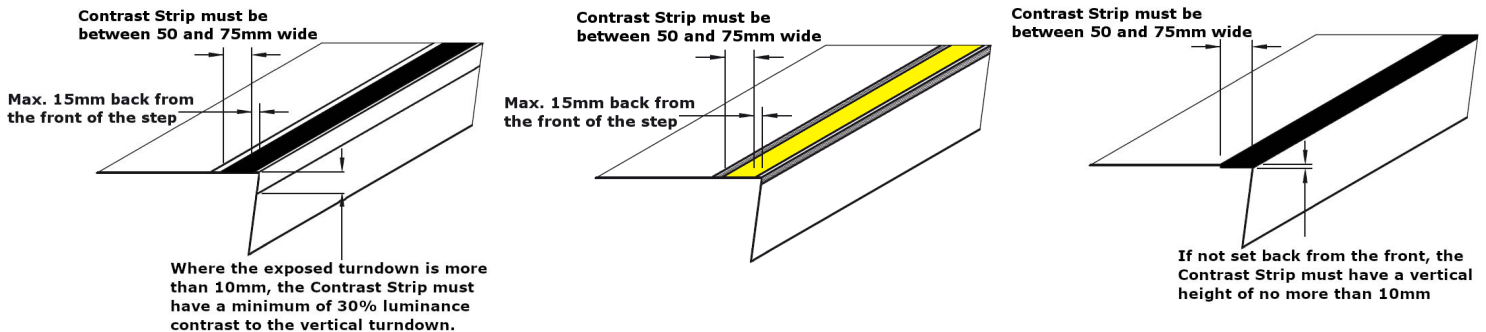
This document is intended to be used as a guide only. It is the responsibility of the customer to confirm the suitability of a product for their requirements before purchasing. This guide is not comprehensive and is only intended to give a preliminary overview of the standard and how it applies to stair nosings.

Luminance Compliance Overview

Australian standard AS1428.1-2021 "Design for access and mobility Part 1: General requirements for access-New building work", section 8.1 "Stair Construction", is one part of a broader standard which is used to increase accessibility for people with vision and mobility impairments.

Some of the requirements of this standard are:

- The contrast strip must always have at least 30% luminance contrast to the background
- The single contrast strip (not multistrip) shall be of a continuous colour
- The contrast strip needs to be between 50mm and 75mm wide
- The contrast strip can be set no more than 15mm back from the front of the step
- If the contrast strip is against the front of the step; it must have a vertical height of no more than 10mm
- If the exposed turndown is more than 10mm, the contrast strip must have a minimum of 30% luminance contrast to the vertical turndown as well as to the background



LRV Test Results

Testing was conducted according to AS 1428.1-2009 Appendix B. Some variation in results can be expected depending on the testing environment, testing equipment, light source, and sampling production batch. Multiple measurements were taken for each sample and then averaged to give the results below. Best efforts were carried out in order to ensure the results are representative of the products at the time of testing; however some aspects of product manufacturing are outside of our control and therefore we do not guarantee that there won't be some variation in production batches. LRV stands for "Luminous Reflectance Value" and measures the amount of light being reflected from a surface.

Product Tested	LRV (Dry)	LRV (Wet)
Rubber Insert – Black (RB)	3.04	3.23
Rubber Insert – Grey (RG)	16.24	17.89
Rubber Insert – Yellow (RY)	47.91	45.50
Fibreglass FRP – Black (FB)	5.41	3.81
Fibreglass FRP – Grey (FG)	20.43	19.92
Fibreglass FRP – Yellow (FY)	33.12	24.76

Product Tested	LRV (Dry)	LRV (Wet)
Serrated Aluminium* – Natural Anodised (ANA)	38.40	41.70
Serrated Aluminium* – Black Anodised (ABA)	2.19	2.13
Exposed Turndown** – Natural Anodised	49.71	49.28
Exposed Turndown** – Black Anodised	3.10	2.74
Exposed Turndown** – Gold Anodised	59.97	60.01

Dry luminance contrast between exposed turndown and contrast strip insert:

	RB	RG	RY	FB	FG	FY	ANA	ABA
Exposed Turndown – Natural Anodised	75.03%	46.00%	1.83%	69.12%	38.47%	19.23%	12.50%	77.24%
Exposed Turndown – Black Anodised	0.24%	37.04%	73.69%	8.62%	44.64%	61.30%	66.35%	3.76%
Exposed Turndown – Gold Anodised	80.86%	54.01%	11.34%	75.46%	46.89%	28.42%	21.85%	82.86%

Wet luminance contrast between exposed turndown and contrast strip insert:

	RB	RG	RY	FB	FG	FY	ANA	ABA
Exposed Turndown – Natural Anodised	74.26%	42.57%	3.94%	72.78%	38.96%	30.95%	8.17%	77.13%
Exposed Turndown – Black Anodised	1.98%	41.50%	72.98%	4.24%	45.06%	52.43%	70.13%	2.55%
Exposed Turndown – Gold Anodised	80.43%	51.17%	13.90%	79.09%	47.76%	40.14%	18.06%	83.03%

Notes:

* "Serrated Aluminium" LRV test results are currently compatible for 'ASTA.5003a' and 'ASTA.5010a' profiles

** "Exposed Turndown" LRV test results are currently compatible for 'ASTA.7337a' and 'ASTA.7537a' profiles

** "Exposed Turndown" LRV test results are only required when the exposed turndown is greater than 10mm.