



Latham Australia has independent testing carried out by a NATA accredited laboratory

Latham Silicon Carbide inserts for Treads have been independently tested by The University Of New South Wales Optics & Radiometry Laboratory School of Optometry and Vision Science, a National Association of Testing Authorities (NATA) accredited facility in accordance with Appendix B of AS 1428.1-2009 (specifically Clause B3 Measurement of Luminance Contrast – Laboratory) for dry and wet applications.

Instrument used

Spectrophotometer calibrated by a NATA Accredited Calibrating Authority, which complies with Clause B3.2 of AS 1428.1-2009.

Method

Eleven measurements were made on the tread section (aluminium or brass retainer) and the infill of each sample and the mean value calculated. The total area of each sample was determined along with the area of tread (retainer) and infill. The mean luminous reflectance of each sample was then determined from the sum of mean luminous reflectance of each component, as a proportion of the area as calculated above. Measurements are made in wet and dry states.

Results for Latham Aluminium Super Visual Asbraloy Aluminium Tread Striped Inserts

Colour Description	Dry Luminance Reflectance Value	Wet Luminance Reflectance Value
All Black Latham Suregrip™ Insert (Striped)-	5.00%	4.34%
All White Latham Supagrit™ Insert (Striped)-	45.76%	46.58%



Results for Latham Aluminium Asbraloy Aluminium Tread Striped Inserts

Colour Description	Dry Luminance Reflectance Value	Wet Luminance Reflectance Value
Black Latham Suregrip™ Insert (Striped)-	28.99%	28.89%
Teal Latham Supagrit™ Insert (Striped)-	31.19%	31.94%
Blue Latham Supagrit™ Insert (Striped)-	32.01%	32.91%
Brown Latham Supagrit™ Insert (Striped)-	32.75%	32.30%
Terracotta Latham Supagrit™ Insert (Striped)-	34.18%	33.55%
Teak Latham Supagrit™ Insert (Striped)-	35.75%	35.26%
Cactus Green Latham Supagrit™ Insert (Striped)-	36.16%	36.02%
Blue Grey Latham Supagrit™ Insert (Striped)-	37.11%	40.17%
Silver Grey Latham Supagrit™ Insert (Striped)-	37.70%	37.67%
Buff Latham Supagrit™ Insert (Striped)-	40.81%	41.48%
Safety Yellow Latham Supagrit™ Insert (Striped)-	41.14%	40.40%
Off White Latham Supagrit™ Insert (Striped)-	50.17%	48.26%
Lumo Glow in the Dark Latham Supagrit™ Insert (Striped)-	51.62%	53.06%



Results for Latham Aluminium Asbraloy Aluminium and Asbrabronz™ Brass Tread, Solid 50mm Inserts

Colour Description	Dry Luminance Reflectance Value	Wet Luminance Reflectance Value
Black Latham Suregrip™ Insert (Solid 50mm)-	4.45%	3.69%
Brown Latham Supagrit™ Insert (Solid 50mm)-	6.19%	8.63%
Blue Latham Supagrit™ Insert (Solid 50mm)-	7.51%	7.73%
Terracotta Latham Supagrit™ Insert (Solid 50mm)-	8.33%	8.05%
Cactus Green Latham Supagrit™ Insert (Solid 50mm)-	11.58%	11.01%
Teak Latham Supagrit™ Insert (Solid 50mm)-	2.31%	12.02%
Teal Latham Supagrit™ Insert (Solid 50mm)-	15.49%	14.74%
Blue Grey Latham Supagrit™ Insert (Solid 50mm)-	16.71%	18.44%
Silver Grey Latham Supagrit™ Insert (Solid 50mm)-	18.71%	16.61%
Buff Latham Supagrit™ Insert (Solid 50mm)-	21.15%	21.35%
Safety Yellow Latham Supagrit™ Insert (Solid 50mm)-	22.69%	22.20%
Off White Latham Supagrit™ Insert (Solid 50mm)-	36.56%	36.01%
Lumo Glow in the Dark Latham Supagrit™ Insert (Solid 50mm)-	38.75%	39.08%



Designs and specifications subject to change without notice.



Luminance Contrast Testing of Latham Tread Insert Infills

Results for Latham Solid Brass Asbrabronz Tread Striped Inserts

Colour Description	Dry Luminance Reflectance Value	Wet Luminance Reflectance Value
Black Latham Suregrip™ Insert (Striped)-	18.66%	17.76%
Brown Latham Supagrit™ Insert (Striped)-	19.55%	22.59%
Terracotta Latham Supagrit™ Insert (Striped)-	20.92%	20.41%
Blue Latham Supagrit™ Insert (Striped)-	21.56%	22.94%
Cactus Green Latham Supagrit™ Insert (Striped)-	24.02%	23.04%
Teak Latham Supagrit™ Insert (Striped)-	24.18%	24.29%
Teal Latham Supagrit™ Insert (Striped)-	25.86%	25.47%
Blue Grey Latham Supagrit™ Insert (Striped)-	26.44%	28.36%
Silver Grey Latham Supagrit™ Insert (Striped)-	27.25%	25.42%
Buff Latham Supagrit™ Insert (Striped)-	27.52%	26.68%
Safety Yellow Latham Supagrit™ Insert (Striped)-	30.57%	30.53%
Off White Latham Supagrit™ Insert (Striped)-	37.67%	38.75%
Lumo Glow in the Dark Latham Supagrit™ Insert (Striped)-	40.82%	40.31%



Results for Latham Rufazel™ Stair Treads and Strips

Colour Description	Dry Luminance Reflectance Value	Wet Luminance Reflectance Value
Black Latham Rufazel™ Product-	3.85%	3.14%
Yellow Latham Rufazel™ Product-	45.76%	46.58%



Determination of Luminance Contrast.

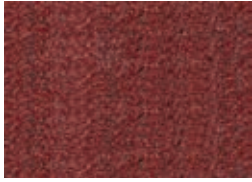



AS 1428.1-2009 under Appendix B (informative) sets out the method to determine the minimum Luminance Contrast between 2 adjoining surfaces by using their luminous reflectance values. The Standard refers to the Bowman-Sapolinski Equation (An Improved Metric for Visual Differentiation using Colour-modified Clinical Eye Charts, Redeemer Baptist School North Parramatta Australia Sapolinski, J., August 2009.).

Minimum Luminance Contrast Requirement in accordance with AS 1428.1-2009 to achieve 30% luminance contrast between the tread and the surrounding floor finish.

Colour	Profile Detail	Dry Luminance Value	Wet Luminance Value	Combined Wet/Dry Lower Limit to Achieve 30% Luminance Contrast*	Combined Wet/Dry Upper Limit to Achieve 30% Luminance Contrast*
Asbraloy Striped Silicon Carbide Mineral Inserts With Visible Aluminium Frame					
Sparkling Black		28.99	28.89	12.87	55.19
Brown		32.75	32.30	14.96	61.33
Blue		32.01	32.91	14.78	61.59
Terracotta		34.18	33.55	15.72	63.66
Cactus Green		36.16	36.02	17.24	66.89
Teak		35.75	35.26	16.77	66.22
Teal		31.19	31.94	14.28	60.01
Blue Grey		37.11	40.17	17.91	73.44
Silver Grey		37.70	37.67	18.25	69.41
Buff		40.81	41.48	20.17	75.57
Safety Yellow		41.14	40.40	19.92	75.02
Off White		50.17	48.26	24.74	89.75
Lumo Luminescent		51.62	53.06	26.80	94.47
Asbraloy and Asbrabronz Solid 50mm Full Abrasive Silicon Carbide Mineral Insert					
Sparkling Black		4.45	3.69	N/A	15.16
Brown		6.19	8.63	N/A	21.98
Blue		7.51	7.73	N/A	20.51
Terracotta		8.33	8.05	0.10	21.49
Cactus Green		11.58	11.01	1.91	26.79
Teak		12.31	12.02	2.53	27.98

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Colour	Profile Detail	Dry Luminance Value	Wet Luminance Value	Combined Wet/Dry Lower Limit to Achieve 30% Luminance Contrast*	Combined Wet/Dry Upper Limit to Achieve 30% Luminance Contrast*
Asbraloy and Asbrabronz Solid 50mm Full Abrasive Silicon Carbide Mineral Insert					
Teal		15.49	15.19	4.47	33.17
Blue Grey		16.71	18.44	5.40	37.98
Silver Grey		18.17	16.61	5.34	37.54
Buff		21.15	21.35	8.12	42.73
Safety Yellow		22.69	22.2	8.77	44.92
Off White		35.67	35.16	16.71	66.09
Lumo Luminescent		38.75	39.08	18.91	71.66
Asbrabronz Striped Silicon Carbide Mineral Inserts With Visible Brass Frame					
Sparkling Black		18.66	17.76	6.05	38.34
Brown		19.55	22.59	7.14	44.75
Blue		21.56	22.94	8.0	45.33
Terracotta		20.92	20.41	7.67	42.03
Cactus Green		24.02	23.30	9.50	47.09
Teak		24.18	24.29	9.98	47.53
Teal		25.86	25.47	10.77	50.09
Blue Grey		26.44	28.36	11.37	54.17
Silver Grey		27.25	25.42	10.74	52.36
Buff		27.52	26.68	11.51	52.80
Safety Yellow		30.57	30.53	13.87	57.77
Off White		37.67	38.75	18.25	71.12
Lumo Luminescent		40.82	40.31	19.87	74.50
Super Visual All White and All Black Profiles					
All Black		5.00	4.340	N/A	16.05
All White		45.76	46.58	23.21	83.89
Rufazel Full Abrasive Industrial Nosing					
Yellow		51.33	51.12	26.49	91.64
Black		3.85	3.14	N/A	14.18

*Upper and lower limits are luminance reflective value that the surrounding flooring must be outside of to achieve the 30% contrast. Flooring luminance reflectance must be below the lower limit or above the upper limit.

It is important to note that this Appendix B of AS 1428.1-2009 is Informative, Standards Australia publication Standardisation Guide 003: For Standards and Other Publications, has the following definition for the term informative.

***Informative** is a term used to describe an element (clause, note or appendix) of a Standard that gives additional information, recommendations and/or guidelines, i.e. is of a non-mandatory nature. Where a Standard contains both mandatory and informative elements, the informative material is usually aimed at explaining the mandatory requirements and helping the user to understand and comply with the Standard.*

A copy of the full NATA Accredited Testing Facilities Results are available by contacting Latham Australia.



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