

Luminance Contrast Product Compliance Report

Report Number: KORB-SAMPLE-0001

Company: Sample Client

Project: Sample Project

SAMPLE REPORT – illustrative example. Client details removed; figures are from a genuine Korb assessment.

Introduction to Luminance Contrast Testing

Luminance contrast testing is provided as an element of ensuring your project complies with the disabled access requirements for visually impaired people. There are a large number of people who are visually impaired but are still able to distinguish variations in shade of colour. Section 23 and 24 of the Disability Discrimination Act seeks to ensure that people with a disability have equal access to premises, goods, services and facilities. The Building Code of Australia (BCA) and Australian Standards for access and mobility (AS1428.1) requires that certain surfaces have sufficient luminance contrast allowing the visually impaired to distinguish one surface from another.

Luminance Contrast Testing for TGSIs

Tactile Ground Surface Indicators (TGSIs) are designed to assist vision impaired people with safer navigation of the built environment through visual and sensory stimulus. Sufficient luminance contrast of surfaces can visually warn people of impending hazards such as kerb ramps, stairs, bus stops and railway station platform edges and also aid pedestrians traverse stairs. As per Australian Standards AS1428.4, a luminance contrast is required for TGSIs to their surrounding substrates. The degree of luminance contrast is dependent on whether the TGSi is; an integrated TGSi (30%), discrete TGSi (45%) or composite TGSi (60%).

Luminance Contrast Testing for Stair Nosings

Stair nosings are designed to improve visibility at the leading edge of each step, assisting people with vision impairment to safely navigate stairs. As per Australian Standards AS1428.1, stair nosings shall have a luminance contrast of not less than 30% to the stair tread and the stair riser. This ensures the edge of each step is clearly distinguishable to aid safe passage.

Statement of Confidentiality & Non-Disclosure

This report has been prepared in accordance with the agreement between the Client and Korb Pty Ltd. Within the limitations of the agreed scope of works, the assessment undertaken within this report has been performed in accordance with generally accepted practices, and using a degree of expertise consistent with professional and consulting practices.

Test Methodology

Testing is conducted as per the test method AS/NZS 1428.1 Paragraph E3.3, Procedure.

Determination of Luminance Contrast

The luminance contrast (C) of two surfaces shall be calculated using the following equation:

$$C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25) \text{ (Bowman-Sapolski equation)}$$

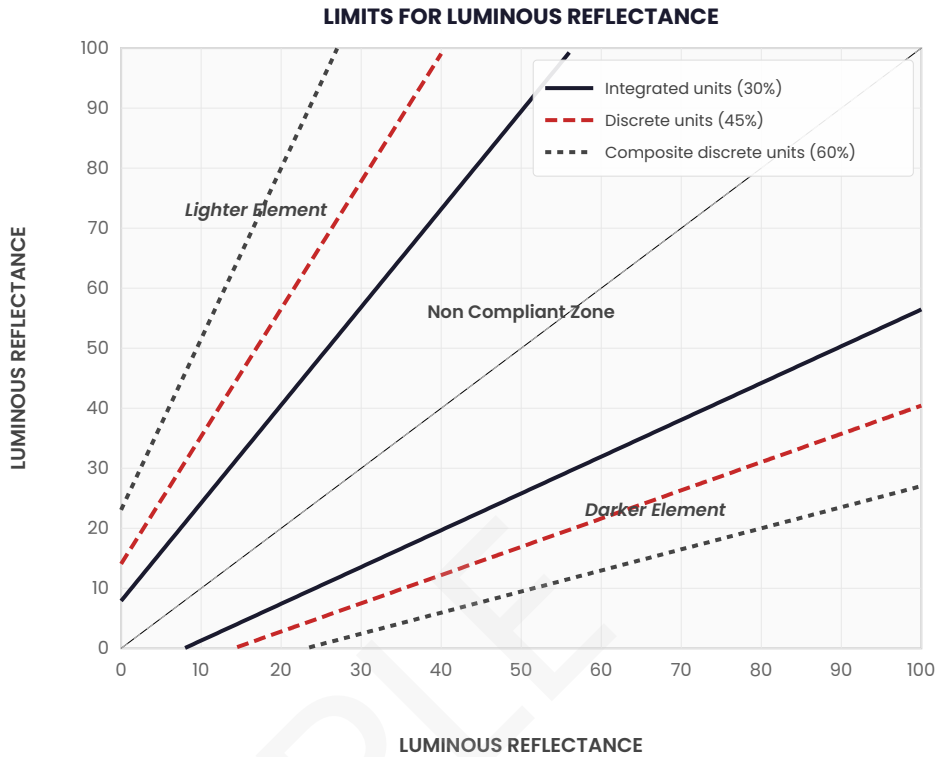
Where Y_1 and Y_2 are the luminous reflectance values of the two surfaces.

$$\text{Integrated Units: } C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25) \geq 30$$

$$\text{Discrete Units: } C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25) \geq 45$$

$$\text{Composite Discrete Units: } C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25) \geq 60$$

$$\text{Stair Nosings: } C = 125 (Y_2 - Y_1) / (Y_1 + Y_2 + 25) \geq 30$$



Average LRV's for Samples Tested

The following tables show the dry and wet LRV's recorded by the Korb team on 26/05/2026. The respective average LRV values for these samples has been determined as prescribed within AS/NZS 1428.4.1-2009 Design for access and mobility.

SUBSTRATE TEST SAMPLE(S)

Polished Stone

| | M1 | M2 | M3 | M4 | M5 | M6 | M7 | M8 | M9 | M10 | AVG LRV |
|-----|------|------|------|------|------|------|------|------|------|------|-------------|
| Dry | 7.74 | 9.48 | 8.26 | 7.03 | 5.70 | 5.55 | 8.81 | 6.40 | 6.99 | 5.20 | 7.12 |
| Wet | N/A | | | | | | | | | | |

Light Stone

| | M1 | M2 | M3 | M4 | M5 | AVG LRV |
|-----|-------|-------|-------|-------|-------|--------------|
| Dry | 51.89 | 55.00 | 52.95 | 53.53 | 52.27 | 53.13 |
| Wet | N/A | | | | | |

Engineered Timber

| | M1 | M2 | M3 | M4 | M5 | AVG LRV |
|-----|-------|-------|-------|-------|-------|--------------|
| Dry | 27.73 | 27.87 | 25.79 | 25.50 | 25.24 | 26.43 |
| Wet | N/A | | | | | |

Product LRV's & % Luminance Contrast Requirements

| Test Sample | LRV (Dry/Wet) | % Luminance Contrast Requirement |
|---|---------------|----------------------------------|
| Nouvel Classic Black Warning TGSi | 5.38 / 4.77 | 45% |
| Nouvel Classic Brass Warning TGSi | 56.6 / 51.06 | 45% |
| Nouvel Classic Stainless Warning TGSi | 53.97 / 50.11 | 45% |
| Tadao Aluminium Corrugated 10x50mm SM Heritage Nosing | 4.6 / 4.13 | 30% |
| Tadao Aluminium Corrugated 10x50mm SM Champagne Nosing | 12.26 / 11.75 | 30% |
| Tadao Aluminium Corrugated 10x50mm SM Black Nosing | 2.22 / 2.22 | 30% |
| Tadao Aluminium Corrugated 10x50mm SM Silver Nosing | 40.19 / 39.43 | 30% |

Results

The tables below detail the LRV results based on the substrate test and LRV information for the prospective products.

SUBSTRATE 1: POLISHED STONE

DRY CONDITIONS

| Product Name | Product LRV | Substrate LRV | Contrast | Pass/Fail |
|---|-------------|---------------|----------|-------------|
| Nouvel Classic Black Warning TGSi | 5.38 | 7.12 | 5.79% | FAIL |
| Nouvel Classic Brass Warning TGSi | 56.60 | 7.12 | 69.72% | PASS |
| Nouvel Classic Stainless Warning TGSi | 53.97 | 7.12 | 68.03% | PASS |
| Tadao Aluminium Corrugated 10x50mm SM Heritage Nosing | 4.60 | 7.12 | 8.57% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Champagne Nosing | 12.26 | 7.12 | 14.49% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Black Nosing | 2.22 | 7.12 | 17.82% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Silver Nosing | 40.19 | 7.12 | 57.18% | PASS |

Wet testing not required for this substrate.

SUBSTRATE 2: LIGHT STONE

DRY CONDITIONS

| Product Name | Product LRV | Substrate LRV | Contrast | Pass/Fail |
|---|-------------|---------------|----------|-------------|
| Nouvel Classic Black Warning TGSi | 5.38 | 53.13 | 71.47% | PASS |
| Nouvel Classic Brass Warning TGSi | 56.60 | 53.13 | 3.22% | FAIL |
| Nouvel Classic Stainless Warning TGSi | 53.97 | 53.13 | 0.80% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Silver Nosing | 40.19 | 53.13 | 13.67% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Black Nosing | 2.22 | 53.13 | 79.20% | PASS |
| Tadao Aluminium Corrugated 10x50mm SM Champagne Nosing | 12.26 | 53.13 | 56.52% | PASS |
| Tadao Aluminium Corrugated 10x50mm SM Heritage Nosing | 4.60 | 53.13 | 73.32% | PASS |

Wet testing not required for this substrate.

SUBSTRATE 3: ENGINEERED TIMBER

DRY CONDITIONS

| Product Name | Product LRV | Substrate LRV | Contrast | Pass/Fail |
|---|-------------|---------------|----------|-------------|
| Nouvel Classic Black Warning TGSi | 5.38 | 26.43 | 46.31% | PASS |
| Nouvel Classic Brass Warning TGSi | 56.60 | 26.43 | 34.92% | FAIL |
| Nouvel Classic Stainless Warning TGSi | 53.97 | 26.43 | 32.67% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Black Nosing | 2.22 | 26.43 | 56.40% | PASS |
| Tadao Aluminium Corrugated 10x50mm SM Silver Nosing | 40.19 | 26.43 | 18.78% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Champagne Nosing | 12.26 | 26.43 | 27.80% | FAIL |
| Tadao Aluminium Corrugated 10x50mm SM Heritage Nosing | 4.60 | 26.43 | 48.70% | PASS |

Wet testing not required for this substrate.

Conclusion

Korb Pty Ltd has performed Luminance Contrast Tests on the applicable substrates against our products as per AS/NZS 1428.4.1:2009. The following is a summary of the compliant product options for each substrate tested:

Polished Stone

DRY CONDITIONS

- **Nouvel Classic** Brass Warning TGSi – 69.72% contrast (meets 45% requirement)
- **Nouvel Classic** Stainless Warning TGSi – 68.03% contrast (meets 45% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Silver Nosing – 57.18% contrast (meets 30% requirement)

Wet testing not required for this substrate.

Light Stone

DRY CONDITIONS

- **Nouvel Classic** Black Warning TGSi – 71.47% contrast (meets 45% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Black Nosing – 79.20% contrast (meets 30% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Champagne Nosing – 56.52% contrast (meets 30% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Heritage Nosing – 73.32% contrast (meets 30% requirement)

Wet testing not required for this substrate.

Engineered Timber

DRY CONDITIONS

- **Nouvel Classic** Black Warning TGSI — 46.31% contrast (meets 45% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Black Nosing — 56.40% contrast (meets 30% requirement)
- **Tadao Aluminium** Corrugated 10x50mm SM Heritage Nosing — 48.70% contrast (meets 30% requirement)

Wet testing not required for this substrate.

Should you require anything further, please feel free to contact us on; info@korb.au or 1300 00 KORB (5672)

Report Information

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Date: 26/05/2026

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