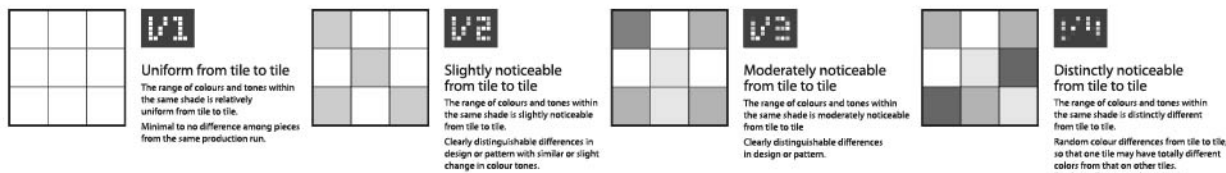


TECHNICAL SPECIFICATIONS

Description	Standard Test	Measurement Unit	ISO Standard Requirement	NIRO GRANITE
Length & Width	MS ISO 10545 - 2	mm	± 0.5% Max	± 0.25% Max
Thickness	MS ISO 10545 - 2	mm	± 5.0% Max	± 2.50% Max
Sides Straightness	MS ISO 10545 - 2	mm	± 0.5% Max	± 0.25% Max
Rectangularity	MS ISO 10545 - 2	mm	± 0.6% Max	± 0.30% Max
Flatness: a) Centre Curvature b) Edge Curvature c) Warpage	MS ISO 10545 - 2 MS ISO 10545 - 2 MS ISO 10545 - 2	mm mm mm	± 0.5% Max ± 0.5% Max ± 0.5% Max	± 0.25% Max ± 0.25% Max ± 0.25% Max
Surface Quality	MS ISO 10545 - 2	One major area of tiles	≥ 95% free from visible defect	Comply
Water Absorption	MS ISO 10545 - 3	Mass	≤ 0.5%	≤ 0.25% Max
Modulus of Rupture	MS ISO 10545 - 4	N/mm2	≥ 35 N/mm2	≥ 35 N/mm2
Deep Abrasion	MS ISO 10545 - 6	mm3	≤ 175 mm3	≤ 160 mm3
Surface Abrasion PEI ASTM C1027	MS ISO 10545 - 7	Visual Check	Manuf. to State Abrasion Class, Cycle Passed	Min PEI 3
Crazing Test	MS ISO 10545 - 11	Visual Check	Not Applicable for porcelain tiles	Not Applicable
Frost Resistance	MS ISO 10545 - 12	Visual Check	Required	No Visible Crack
Chemical Resistance (Low Cons.)	MS ISO 10545 - 13	Visual Check	Manuf. to State	Max Visible Change On Cut Side
Chemical Resistance (Household/Swimming Pool)	MS ISO 10545 - 13	Visual Check	Max Visible Change On Cut Side	Max Visible Change On Cut Side
Stain Resistance	MS ISO 10545 - 14	Visual Check	Class 3 Min	Class 3 Min
Coefficient of Friction AS/NZS 4586-1999 App.D.	MS ISO 10545 - 17	Manuf. to State	Manuf. to State	Oil /Wet Ramp (R9 Min)



Each different tiles series are produced to meet different performance requirements. For specific product technical performance, please request from Nirol Granite sales team or their agent or distributor.

Colour Variations: Since the colour reproduction in this printed piece will vary from the actual tile colours, final selection should be made from tile samples. Colour, shade and glaze variations may exist due to the inherent characteristics of porcelain tile.

Due to the low porosity of porcelain tiles, an Improved High Performance Cementitious adhesive in accordance to BS EN 12004 & ISO 13007-1 is highly recommended for proper installation. Products that meet this standard are available amongst leading adhesive manufacturers. Please seek expert advice from adhesive manufacturers for proper selection and application.



NIRO CERAMIC INDONESIA

f Niro Granite Indonesia @nirograniteid Niro Granite Indonesia



GRAY WOOD





GRAY WOOD GGW02 Aspen 15x90cm



GRAY WOOD GGW04 Cypress 15x60cm

COLOURS



MAGNOLIA GGW01

15x60cm, 15x90cm • Structured



HICKORY GGW03

15x60cm, 15x90cm • Structured



ASPEN GGW02

15x60cm, 15x90cm • Structured



CYPRESS GGW04

15x60cm, 15x90cm • Structured



REDWOOD GGW05

15x60cm, 15x90cm • Structured

SIZE, SURFACE AND FEATURES

Size & Working Size 15x60cm (14.7x59.7) & 15x90cm (14.7x89.7)		Surface STRUCTURED
Application WALL & FLOOR	Rectified YES	Shade Variation V3



* **V3: Moderately noticeable from tile to tile**

The range of colours and tones within the same shade is moderately noticeable from tile to tile