

TECHNICAL SPECIFICATIONS

DESCRIPTION	STANDARD TEST	MEASUREMENT UNIT	ISO STANDARD REQUIREMENT	NIRO GRANITE
Length & Width	ISO 10545 -2	mm	±0.6% Max	±0.30% Max
Thickness	ISO 10545 -2	mm	±5.0% Max	±5.0% Max
Sides Straightness	ISO 10545 -2	mm	±0.5% Max	±0.25% Max
Rectangularity	ISO 10545 -2	mm	±0.5% Max	±0.25% Max
Flatness: a) Centre Curvature	ISO 10545 -2	mm	±0.5% Max	±0.20% Max
b) Edge Curvature	ISO 10545 -2	mm	±0.5% Max	±0.20% Max
c) Warpage	ISO 10545 -2	mm	±0.5% Max	±0.20% Max
Surface Quality	ISO 10545 -2	One Major Area of Tiles	≥ 95% free from visible defect	Comply
Water Absorption	ISO 10545 -3	Mass	≤0.5%	≤0.20%
Breaking Strength	ISO 10545 -4	N	≥ 1300 N	≥ 1300 N
Modulus of Rupture	ISO 10545 -4	N/mm ²	≥ 35 N/mm ² Individual ≥ 32 N/mm ²	≥ 35 N/mm ² Individual ≥ 32 N/mm ²
Abrasion Resistance				
a) Deep Abrasion for unglazed tiles	ISO 10545 -6	mm ³	≤ 175 mm ³	≤ 160 mm ³
b) Surfaces Abrasion for glazed tiles	ISO 10545 -7	Visual Check	Manuf. to state abrasion class, cycle and passed	≥ PEI 3 (Dependent on product type)*
Crazing Test (glazed tiles)	ISO 10545 -11	Visual Check	No Sign of Crazing	No Sign of Crazing
Frost Resistance	ISO 10545 -12	Visual Check	Required	No Visible Crack
Chemical Resistance				
a) Low concentrations	ISO 10545 -13	Visual Check	Manuf. To State	Class A Class B (For Polished Tile)
b) Household chemicals and swimming pool salts	ISO 10545 -13	Visual Check	≥ Class B	Class A Class B (For Polished Tile)
Stain Resistance				
a) For unglazed tiles	ISO 10545 -14	Visual Check	Manuf. to State	≥ Class 3
b) For glazed tiles	ISO 10545 -14	Visual Check	≥ Class 3	≥ Class 3
Slip Resistance (Excluding Polished, Lappato and Matt Satin finishing)	AS/NZS 4586 App. A	P0 to P5	Manuf. to State	Wet Pendulum ≥ P2 (Dependent on product type)*

* Refer to test report for specific test result.

<p>Uniform from tile to tile</p> <p>The range of colours and tones within the same shade is relatively uniform from tile to tile. Minimal to no difference among pieces from the same production run.</p>	<p>Slightly noticeable from tile to tile</p> <p>The range of colours and tones within the same shade is slightly noticeable from tile to tile. Clearly distinguishable differences in design or pattern with similar or slight change in colour tones.</p>	<p>Moderately noticeable from tile to tile</p> <p>The range of colours and tones within the same shade is moderately noticeable from tile to tile. Clearly distinguishable differences in design or pattern.</p>	<p>Distinctly noticeable from tile to tile</p> <p>The range of colours and tones within the same shade is distinctly different from tile to tile. Random colour differences from tile to tile, so that one tile may have totally different colors from that on other tiles. Final installation can be unique.</p>

Each different tiles series are produced to meet different performance requirements. For specific product technical performance, please request from Niro 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.



SIRIM
CERTIFIED TO MS ISO 9001
Registration No. AP1 0008



SNI ISO 15004:2015
LSPV 1024-1204

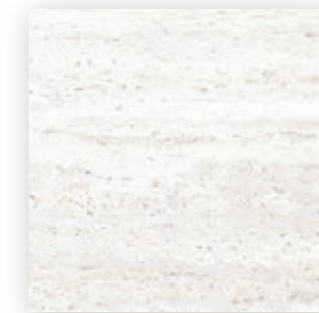
NIRO CERAMIC INDONESIA



Travertino



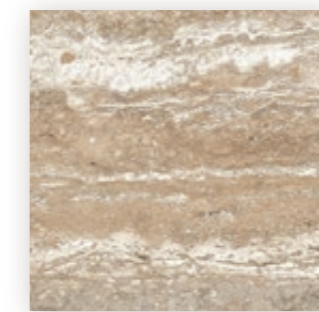
TRAVERTINO GTV01 Ivory 60x60cm matt



GTV01 Ivory



GTV02 Creme



GTV03 Noche

SPECIFICATION

SIZE

60x60cm
60x120cm

THICKNESS

9.8mm (for size 60x60cm)
11.2mm (for size 60x120cm)

SURFACE

Matt

NUMBER OF FACES

10 Faces (for GTV01, GTV02 size 60x60cm)
8 Faces (for GTV01, GTV02 size 60x120cm)
Randomized (for GTV03)

SUITABLE FOR

Floor, Wall

SHADE VARIATION

V3 | Moderately noticeable from tile to tile (for GTV01, GTV02)
V4 | Distinctly noticeable from tile to tile (for GTV03)

RECTIFIED

Yes

APPLICATION



LIVING
AREA



DINING
AREA



BATHROOM



DRY
KITCHEN



WET
KITCHEN



COMMERCIAL
INDOOR



TRAVERTINO GTV02 Creme 60x60cm matt

*) Colour reproductions in this printed piece may vary from actual tile colors.
Please view actual tile samples before making a decision.