



  
**ein stone**  
Earth's Art and Splendour that's Surreal



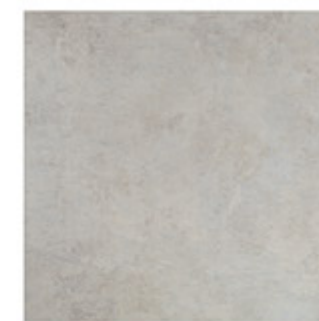
## ... Of Art from the Earth

From the beginning of time, natural stones have added a sense of grandeur and beauty of great splendour to architectural masterpieces and living spaces all over the world. These stones contain natural veining and colour that portrays their uniqueness and attraction.

Veins contained in stones have distinct shapes and are in fact, caused by crystals of minerals carried by fluids over time. This makes for intricate patterns in rich fine-lined structures that contribute to the overall beauty of our series of tiles which are suitably named VEIN STONE.

# public area

commercial malls • offices • public halls • walk ways • shop lots • reception lobbies • showrooms



GSV | 04 • GREY



GSV | 02 • BROWN





## ... Of Colours that Appeal

A range of beautiful shades that has the effect of opening limited spaces and alternatively, narrowing vast areas and creating interesting contrasts to make the environment a stunning picture of luxurious living or functional working pad.

Let VEIN STONE enhance the splendour of your living and interior architecture with a beauty so surreal, it awe-inspires. After all, it is a Gift of Art from the very Earth we live.

# private area

living areas • bathrooms • dining areas • wet kitchens • dry kitchens • study rooms • bedrooms

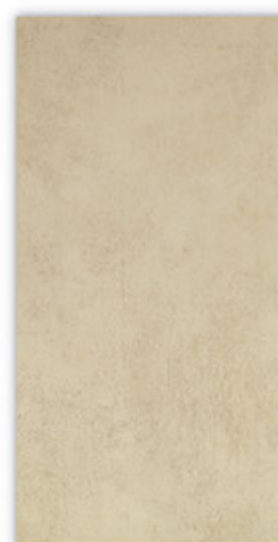


GSV | 03 • BLACK



GSV | 01 • BEIGE



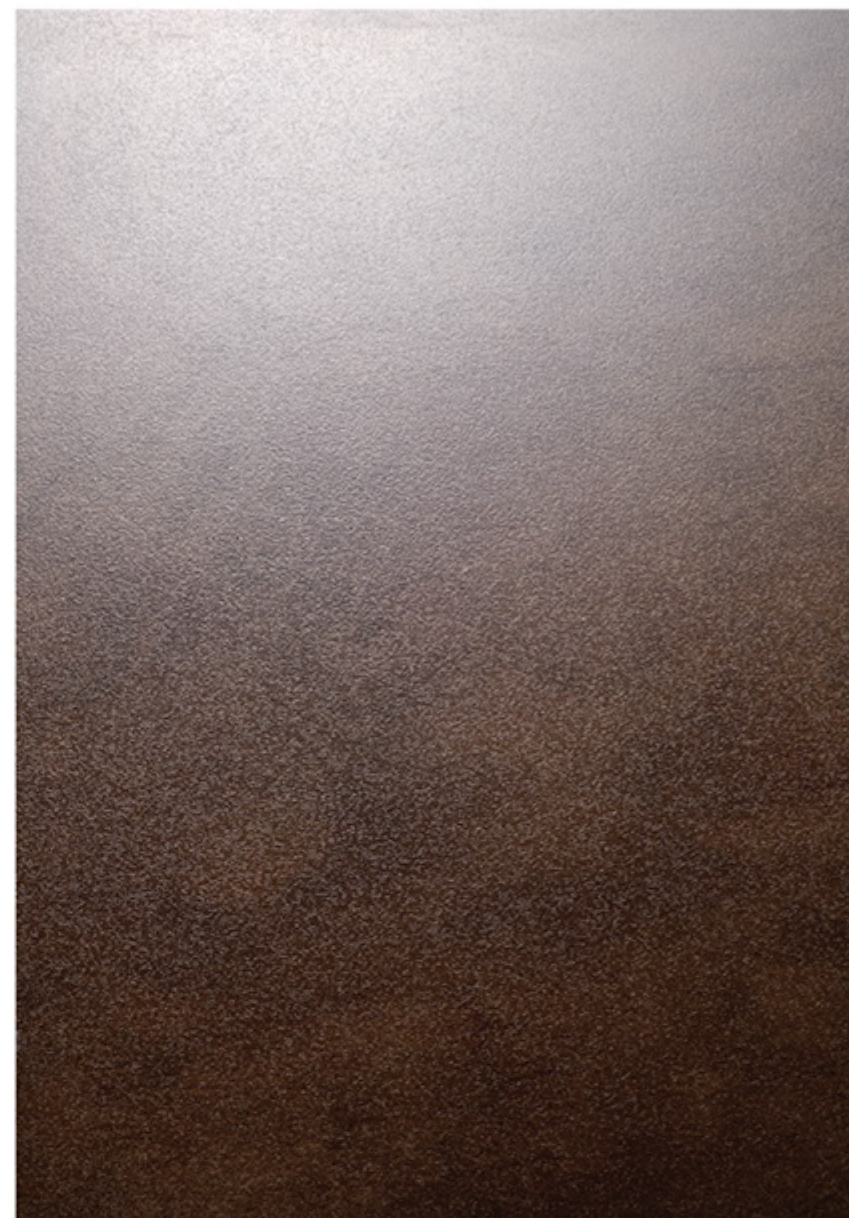


60x60 cm (Matt / Lappato)

30x60 cm (Matt / Lappato)

GSV | 01 ◦ BEIGE

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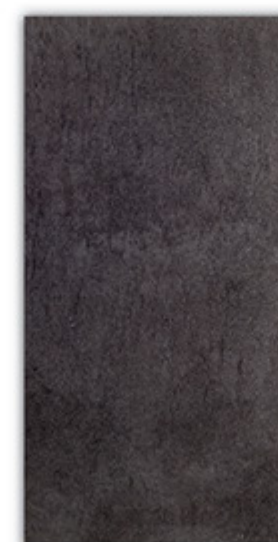


60x60 cm (Matt / Lappato)

30x60 cm (Matt / Lappato)

GSV | 02 ◦ BROWN

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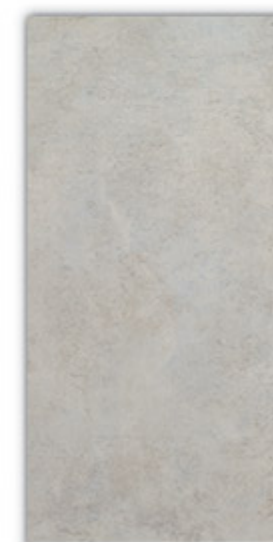


60x60 cm (Matt / Lappato)

30x60 cm (Matt / Lappato)

GSV | 03 ◦ BLACK

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60x60 cm (Matt / Lappato)

30x60 cm (Matt / Lappato)

GSV | 04 ◦ GREY

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# 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/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>	≥ 35 N/mm <sup>2</sup>
Deep Abrasion	MS ISO 10545 - 6	mm <sup>3</sup>	≤ 175 mm <sup>3</sup>	≤ 160 mm <sup>3</sup>
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)





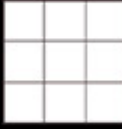
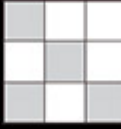
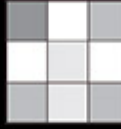
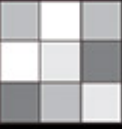
Each different tiles series are produced to meet different performance requirements. For specific product technical performance, please request from Niro Granite sales team or their agent or distributor.

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.

## SHADE AND TONALITIES

 <b>UNIFORM</b> FROM TILE TO TILE	 <b>SLIGHTLY NOTICEABLE</b> FROM TILE TO TILE	 <b>MODERATELY NOTICEABLE</b> FROM TILE TO TILE	 <b>DISTINCTLY NOTICEABLE</b> FROM TILE TO TILE
 <b>V1</b> Uniform from tile to tile 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.	 <b>V2</b> Slightly noticeable from tile to tile 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.	 <b>V3</b> Moderately noticeable from tile to tile The range of colours and tones within the same shade is moderately noticeable from tile to tile. Clearly distinguishable differences in design or pattern.	 <b>V4</b> Distinctly noticeable from tile to tile 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 of other tiles. Final installation can be unique.

