

TECHNICAL SPECIFICATION

UNGLAZED VITRIFIED TILES				
All characteristics tested are in compliance with Indian Standards Specifications IS 15622:2006 and International Standards Specifications ISO 13006:2012, Group B Ia, Dry-Pressed Ceramic Tiles				
CHARACTERISTICS	ISO 13006:2012 (E ≤ 0.5%) N≥15 cm	IS 15622:2006 (E ≤ 0.08%) S>410 cm ²	SWASTIK Value	Test Method ISO 10545: Part 1-17 IS 13630:2006 Part 1-15
Deviation in Length and width, in %	±0.6	±0.1	±0.05	ISO 10545-2 IS 13630-Part 1
Deviation in Thickness, in %	±5	±4	±4	
Deviation in Straightness of Sides, in %	±0.5	±0.1	±0.05	
Deviation in Rectangularity, in %	±0.5	±0.1	±0.1	
Deviation in Surface Flatness, in %	±0.5	±0.2	±0.15	
Surface Quality	Min. 95%	Min. 95%	Min. 97 %	Lab Method
Glossiness*	N.A.	N.A.	≥55 for W/o Nano ≥ 90 for Nano	
Water Absorption, % by mass	E ₁ ≤0.5%, ind max. 0.6%	Avg. ≤ 0.08, Ind. Max. 0.1	Avg. ≤ 0.05, Ind. Max. 0.07	ISO 10545-3, IS 13630-Part 2
Bulk Density, in (g/cc)	—	2.2 Min.	2.3 Min.	IS 13630-Part 2
Modulus of Rupture, in N/mm ²	35, ind min. 32	Avg. 47 N/mm ² , Ind. Min. 44	Avg. 47 N/mm ² , Ind. Min. 44	ISO 10545-4, IS 13630-Part 6
Breaking strength, in N	>7.5 thickness: 1300, Min.	>7.5 thickness: 1500, Min.	>7.5 thickness: 2000, Min.	ISO 10545-4, IS 13630-Part 6
Scratch hardness of surface (Moh's scale)	N.A.	6, Min	6, Min, Unpolished Tile	IS 13630-Part 13
Resistance to deep abrasion of unglazed tiles (removed volume in mm ³)	Max. 175	100, Max	100, Max	ISO 10545-6, IS 13630-Part 12
Co-efficient of Linear Thermal Expansion from ambient temperature to 100°C (K ⁻¹)	Test method available	6 x 10 ⁻⁶ K ⁻¹ , Max	6 x 10 ⁻⁶ K ⁻¹ , Max	ISO 10545-8, IS 13630-Part 4
Thermal Shock Resistance	Test method available	10 Cycles, min	10 Cycles, min	ISO 10545-9, IS 13630-Part 5
Frost Resistance	Required	Required	100 Cycles, Min.	ISO 10545-12, IS 13630-Part 10
Moisture Expansion in mm/m	Test method available	N.A.	≤0.05	ISO 10545-10
Impact Resistance	Test method available	Required	>0.7	ISO 10545-5, IS 13630-Part 14
.Coefficient of friction • Tiles intended for use on floors COF class 1: dynamic < 0.4; static < 0.5 COF class 2: dynamic ≥ 0.4; static ≥ 0.5	Manufacturer to state COF class: wet & dry	N.A.	COF class 1: dry static > 0.42 Unpolished Tile	ISO 10545-17
Resistance to staining: Unglazed tiles	Test method available	N.A.	Class 4 (Hand Cleaning with weak cleaning agent)	ISO 10545-14
Resistance to household chemicals and Swimming pool water cleaners except to cleaning agents containing hydrofluoric acid and its compounds: Unglazed tiles	Minimum UB	Required	Class AA	ISO 10545-13, IS 13630-Part 7
Resistance to low concentrations of acids and alkalis: Unglazed tiles	Manufacturer to state classification.	Required	Class AA	ISO 10545-13, IS 13630-Part 7
Resistance to high concentrations of acids and alkalis (with the exception of hydrofluoric acid and its compounds) : Unglazed tiles	Test method available			
Small Color Differences	Plain coloured tiles only where required UGL:ΔE<1.0	N.A.	ΔE≤0.75	ISO 10545-16

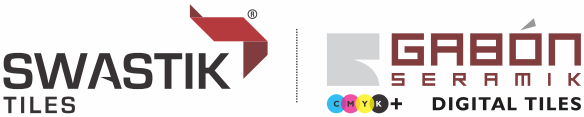
PACKING DETAILS

SIZE	NO. OF TILES	AREA	
600mm x 600mm	4 pcs./box	15.50 sq. ft	1.44 sq. mtr.

General Note : All technical specifications in this catalog are for premium grade material only.

Disclaimer : SWASTIK reserves the right to delete & amend either totally, any of the colors, shapes, size, reference and other technical specification contained in this catalog at any time. The colors shown in this catalog are purely illustrative and limited to printing process, please refer actual sample before final selection. please verify the details given in this catalog for any typographical error before any purchase.

Shade & size variation is an inherent property of ceramic tiles. All complains need to be reported within 10 days of purchase in writing. Always follow instructive to avoid complains due to improper method of application.



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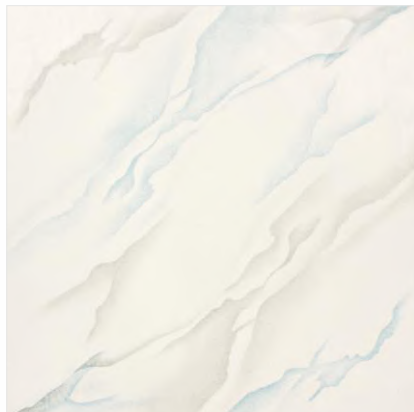


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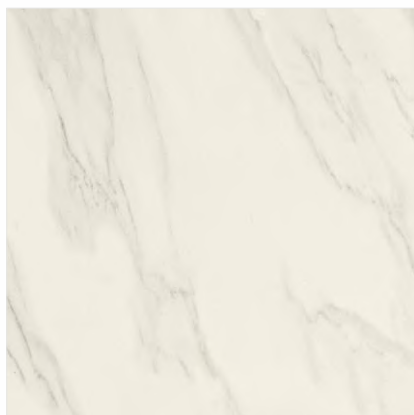
VITRIFIED TILES
600x600mm

www.swastiktiles.in

SUPER NANO SERIES - GLOSSY



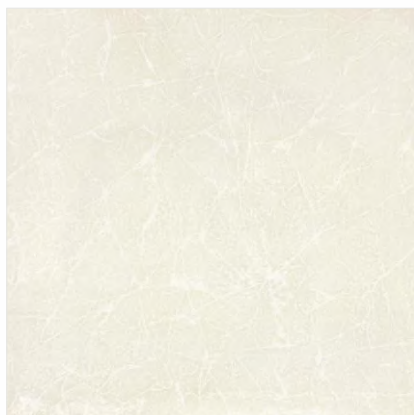
ONISTA (N)



DORIAN (N)



BURBERRY (N)



TRAVENTO (N)



Tiles Shown : ONISTA (N)

SUPER NANO SERIES - GLOSSY



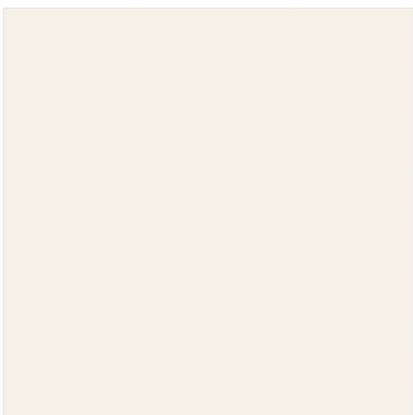
SRN - 115



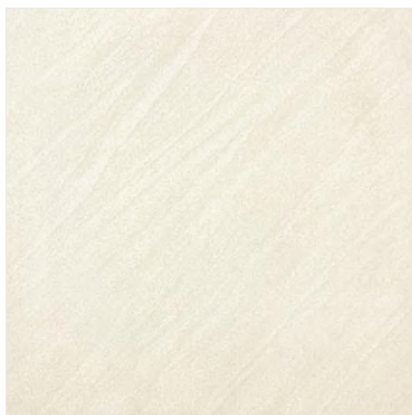
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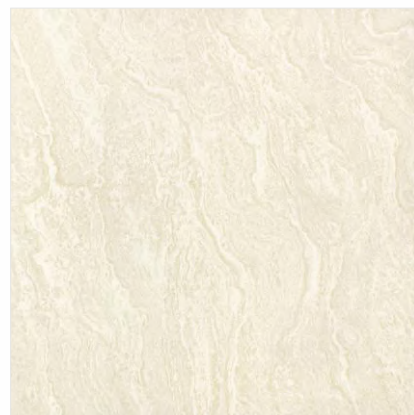
SE - 203 (N)



SRN - IVORY



SE - 204 (N)



SR - 16 (N)



Tiles Shown : SRN-115