

CLEANING & MAINTENANCE

Our products are non porous (due to their high quality raw materials, stringent production parameters and state of the art technology), hence any dust or deposited waste cannot penetrate the surface.

For most cases only a damp cloth is sufficient for cleaning.

Regular cleaning highlights the aesthetic features of the surface and gives it exceptional shine.

For highly aggressive cleaning caused by some common food and substances follow the table below.

TYPES OF STAIN	CHEMICAL PRODUCT	EXAMPLE
Grease	Alkaline - Solvent	Detergent
Oil	Solvent	Ammonia, Backing Soda
Ink	Oxidant - Solvent	Alcohol, Liquid Bleach, Nail Paint Remover
Rust	Acid	Hydrochloric Acid, Vinegar, Red Harpic
Lime	Acid	Descaling Reagent, Hydro Chloric Acid
Cement	Acid	Hydro Chloric Acid
Wine	Alkaline	Ammonia, Liquid Bleach
Coffee	Alkaline - Solvent	Ammonia, Liquid Bleach
Rubber	Solvent	Alcohol, Thinner
Plaster	Acid	Hydro Chloric Acid
Candle Wax	Solvent	Alcohol, Thinner
Iodine	Oxidant	Liquid Bleach
Blood	Oxidant	Liquid Bleach
Ice Cream	Alkaline	Liquid Bleach

Note: It is recommended that any kind of stain needs to get clean immediately / as soon as possible.

PACKING DETAILS

SIZE	THICKNESS	TILES / BOX	WEIGHT	COVERAGE AREA / BOX
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1200x1200 mm	9mm	2 Pcs.	60 kg	2.88 Sq Meter / Box
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TECHNICAL SPECIFICATION

CHARACTERISTIC	STANDARD AS PER ISO13006:2012/ EN14411 Gr.Bla	STANDARD AS PER IS15622:2017 Gr.Bla	MEAN VALUE OF GEOGRES	TEST METHOD
<b>Regulatory Properties</b>				
Deviation in length and width	± 0.50 %	± 0.10 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Deviation in thickness	± 5.00 %	± 5.00 %	± 4.00 %	ISO 10545-2 & IS 13630-1
Straightness in side	± 0.50 %	± 0.10 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Rectangularity	± 0.60 %	± 0.10%	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface flatness Central Curvature	± 0.50 %	± 0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface flatness Edge Curvature	± 0.50 %	± 0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface flatness Warpage	± 0.50 %	± 0.50 %	± 0.10 %	ISO 10545-2 & IS 13630-1
Surface Quality	> 95% defects free	> 95% defects free	> 95% defects free	ISO 10545-2 & IS 13630-1
Small Color Difference	ΔE < 0.75	N.A.	No Change	ISO 10545-16
Glossiness (With Nano Polished)	As per Manufacturer	As per Manufacturer	> 90**	Gloss Meter 60°
Glossiness (Without Polished)	As per Manufacturer	As per Manufacturer	7° < GLOSS < 14°*	Gloss Meter 60°
Glossiness (Satin)	As per Manufacturer	As per Manufacturer	15° < GLOSS < 25°*	Gloss Meter 60°
<b>Structural Properties</b>				
Water absorption	≤ 0.50 %	≤ 0.080 %	≤ 0.050 %	ISO 10545-3 & IS 13630-2
Bulk density	> 2.00 g/cc	Min. 2.20 g/cc	> 2.28 gm/cc	DIN51082 & IS 13630-2
<b>Massive Mechanical Properties</b>				
Modulus of rupture	Min. 35.0 N/mm²	Min. 35.0 N/mm²	Min. 37.0 N/mm²	ISO 10545-4 & IS 13630-6
Breaking strength thickness <7.5	Min. 700.0 N	Min. 700.0 N	Min. 1000.0 N	ISO 10545-4 & IS 13630-6
Breaking strength thickness ≥7.5	Min. 1300.0 N	Min. 1300.0 N	Min. 1600.0 N	ISO 10545-4 & IS 13630-6
<b>Surface Mechanical Properties</b>				
MOH'S hardness	Min. 4	Min. 5	Min 4**	EN 101 & IS 13630-13
Surface abrasion resistance-Glossy #	As per Manufacturer	Min. Class II	Min. Class 2 / Min. Class II	ISO 10545-7 & IS 13630-11
Surface abrasion resistance-Matt #	As per Manufacturer	Min. Class II	Min. Class 3 / Min. Class II	ISO 10545-7 & IS 13630-11
<b>Thermal Hygrometric Properties</b>				
Moisture expansion	Max. 0.06	Max. 0.02	NIL	ISO 10545-10 & IS 13630-3
Thermal expansion(COE) at 100°C	As per Manufacturer	Max. 7.0 x 10 <sup>-6</sup>	Max. 6.0 x 10 <sup>-6</sup>	ISO 10545-8 & IS 13630-4
Thermal shock resistance	Min. 10 Cycle	Min. 10 Cycle	Min. 10 Cycle	ISO 10545-9 & IS 13630-5
Crazing Resistance at 7.5 Bar	As per Manufacturer	Min. 4 Cycle	Min. 6 Cycle	ISO 10545-11 & IS 13630-9
Impact resistance(COR)	As per Manufacturer	Min. 0.55	Min. 0.55	ISO 10545-5 & IS 13630-14
Frost resistance	As per Manufacturer	As per Manufacturer	Frost Proof	ISO 10545-12 & IS 13630-10
<b>Chemical Properties</b>				
Resistance to Staining Glazed	Min. Class 3	Min. Class I	Min. Class 4/Min. Class I	ISO 10545-14 & IS 13630-8
Resistance to Household Chemicals &Swimming Pool Salts Glazed	Min. Class GB	Min. Class AA	Min. Class GA/Min. Class AA	ISO 10545-13 & IS 13630-8
**Resistance to Low Concentrate Acidand Alkalis Glazed	As per Manufacturer	As per Manufacturer	Min. Class GLB***/Min. Class A***	ISO 10545-13 & IS 13630-8
**Resistance to High Concentrate Acidand Alkalis Glazed	As per Manufacturer	As per Manufacturer	Min. Class GHB***/Min. Class A***	ISO 10545-13 & IS 13630-8
<b>Safety Properties</b>				
Skid resistance(DCOF-DRY)	As per Manufacturer	As per Manufacturer	> 0.40	ISO 10545-17
Slip resistance(DCOF){ R value }##	As per Manufacturer	As per Manufacturer	N.A.	ISO 10545-17
Determination of Lead & Cadmium Release for Glazed Tiles	As per Manufacturer	N.A.	Dose not yield Pb & Cd	ISO 10545-15
Fire Resistance	As per Manufacturer	As per Manufacturer	Fire Proof	N.A.

\* Glossiness 90% with nano technology  
\*\* Without nano technology (Unpolished Vitrified tiles)  
\*\*\* Except Hydrofluoric Acid & it's compound  
# Glaze tiles Intended for use on floor  
## As per customer requirement