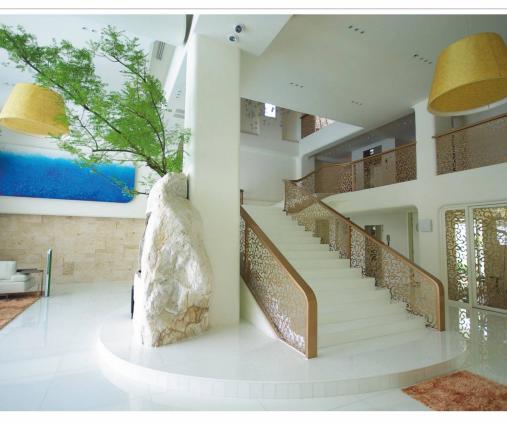
NANO CRYSTALLIZED GLASS





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NANO CRYSTALLIZED GLASS

Much like ordinary glass, Nano Crystallized Glass is made of natural materials and is chemically inert.

However, that is where the similarity ends. Close packing of its particles ensures that Nano-crystallized Glass is much harder than its ordinary form or even when compared to standard crystallized glass. In addition, it has near zero water absorption, is 100 percent recyclable and is completely radiation free. Due to its nearly pure white color - a natural by-product of its manufacturing process - it is quickly gaining popularity as an excellent substitute for white marble.



MANUFACTURING PROCESS

Nano-crystallized glass is manufactured from a blend of natural materials that is 75 percent silica and 25 percent other natural minerals. The mixture is poured into a mould to form either a slab or a tile, and it is heated to a temperature ranging from 1,550 degrees Celsius to 1,800 degrees C. for 24 to 26 hours. The high temperatures and the length of time align the molecules of the glass on a nanoscopic scale, which it retains upon cooling and hardening.





FEATURES AND BENEFITS

BETTER THAN NATURAL STONE

Nano Crystallized Glass has uniform structure, higher density, more strength and impact toughness than Natural Stone, making it more durable and less prone to damage. It has a perfectly smooth surface unlike Natural Stone, which has slight crack-lines.

EASY TO MAINTAIN

Nano Crystallized Glass' near zero water absorption quality ensures no dirt, pollutant or stain enters its surface. A perfectly smooth surface makes cleaning and maintaining it fairly easy.

HIGHLY MALLEABLE

Nano Crystallized Glass can be bent and deformed to shaped tiles, such as columns, arc plates and curved plates.



SUPERIOR RESISTANCE

Nano Crystallized Glass has superior resistance to acid, alkali and other corrosive elements than Natural Stone, thus ensuring it doesn't change color, lose its lustre and strength even when exposed to extreme weather conditions.

RADIATION FREE

All radiation emitting and harmful elements are extracted during the manufacturing process of Nano Crystallized Glass, making it a modern, safe and environment-friendly material.

NANO MOLECULAR STRUCTURE

Its nano-level molecular structure forms a fiber structure with high density. Close packing of the particles gives it a unique feature of high impact resistance, which makes the processes of cutting, drilling, carving and polishing easy to carry out.

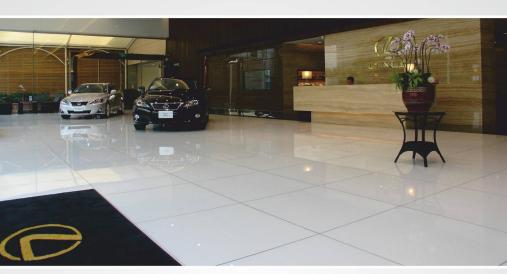


TECHNICAL SPECIFICATIONS

PROPERTIES

Density (g/cm³)	2.68
Water Absorption (%)	0
Bending Strength - (Mpa)	107
Compressive Strength - (Mpa)	904
Mohs Hardness - (Msh)	6.5

Acid Resistance - (1% H ₂ SO ₄ , %)	0.03
Alkali Resistance - (1% NaOH, %)	0.01
Impact Toughness - (kj/m³)	6.5
Glossiness Reflection (%)	95
Radioactivity	No



OUTDOOR APPLICATIONS

Nano Crystallized Glass, with its unique qualities of near zero water absorption, high strength and resistance to corrosion makes it ideal for outdoor applications. In addition, it can be processed and installed easily.

INDOOR APPLICATIONS

In addition to having most advantages of Natural Stone, the problem of temperature change that plagued crystallized glass has been resolved in Nano Crystallized Glass, making it perfect for interior wall cladding, floor laying, basins, counter tops and other indoor applications.