



Technical Data Sheet

Introduction

Limix are limestone-based wall and floor tiles manufactured under extremely high pressure to achieve properties similar to marble. No chemical binder or resin is used to create its durable solid state. The proprietary technological process allows for various customized effects, colors and textures.

Technology



Mixing raw materials (main components: slaked lime, calcium carbonate)



Adding components for custom design tiles (optional)



Putting mixed powder into mold



Pressing with high pressure in vacuum (2 ton / cm²)



Curing with Carbon Dioxide captured during the production of slaked lime

Measurement

Floor tiles

400 x 400 x 15mm (15.75" x 15.75" x 0.6")

600 x 600 x 18mm (23.6" x 23.6" x 0.7")

Wall tiles

400 x 400 x 10mm (15.75" x 15.75" x 0.4") | (23.6" x 23.6" x 0.5")

600 x 600 x 12mm

Wall blocks

150 x 150 x 60mm (5.9" x 5.9" x 2.4")



Width/length of tiles: 600(400)mm ± 0.5mm

Curve/twist: within 2mm

Chamfer: trimming (wall tiles), C1 mm (floor tiles)

Custom sizes: available upon request

Physical properties

Specific gravity: 1.9-2.2 g/sg cm Water absorption ratio: 0.5%

Bend breaking load: 90N/cm (10mm), 280N/cm

Comprehensive strength: 360 kg/sq cm

Abrasion resistance: 0.016 q

Hardness (Moh's Hardness Test): 7 (quartz) Slip resistance (BPN): 41 (wet), 62 (dry) Heat conduction: 1.84 kcal/m x h x °C Thermal expansion: 4-5 10-6/ °C Thermal conductivity: 5.2 x 10⁻³ Upper temperature limit: 600 °C

Dowel Area Fixed Physical Strength Test (30mm

thick):

Applicable standard and test location: JASS 9T 201 Japan Testing Center for Construction Materials

Methodology and results: A dowel pin was embedded in the side of the test body tile with the use of an adhesive and a plate was connected to the dowel pin. The plate was then pulled and the amount of load that produced failure was recorded. Result: both formed and freshly cut surfaces showed failure at a load of about 100 kgf / dowel pin.

Shock test (Hard Ball Drop Test):

Applicable standard and test location: BS 1281 U.K. Standards. Performed at Japan Tile Testing and **Engineering Association**

Methodology and results: A hard ball having a diameter of 19 mm, specific gravity of 7.85 and a mass of 28.35 was dropped on the test body fro ma height corresponding to the thickness of the test body (741mm for this test) and the test body was then checked for any resulting damage. Result: no damage indicated.

Frost damage resistance:

Applicable standard and test location: JIS A 5209 of Japan Tile Testing Association

Methodology and results: One test cycle consisted of eight hours at -20°C, six hours in water at normal temperature and then eight hours at -20 °C. Duration: 10 cycles. Result: no abnormalities detected.

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Methodology and results: One test cycle consisted of eight hours at -20°C, six hours in water at normal temperature and then eight hours at -20°C. Duration: 10 cycles. Result: no abnormalities detected.

* For more details please refer to Comparative Benchmark or contact us at:

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