

Humidity absorption performance of Limix

The tests were conducted on tiles manufactured with Limix technology developed by Tagawa Sangyo Co., Ltd., which were tested for their humidity and moisture absorption performance. All materials consisted of slaked lime, calcium carbonate, diatomaceous earth and proprietary natural components, without any chemical resin or thermal process during manufacturing.

Humidity measuring equipment: Temperature Humidistat, which can control temperature within 10°C - 50°C range and humidity within 15% - 95%.

Test procedures

The test samples were exposed for five days to environment that changed from dry to humid and back to dry; with the transition results measured.

Day 1: Dry environment: 24 hours at 22±2°C and humidity of 46±3%.

Day 2: Humid environment: 24 hours at 22±2°C and humidity of 92±3%.

Day 3: Dry environment: 24 hours at 22±2°C and humidity of 46±3%.

Day 4: Humid environment: 24 hours at 22±2°C and humidity of 92±3%.

Day 5: Dry environment: 24 hours at 22±2°C and humidity of 46±3%.

Test results

The absorbed and released moisture were measured to determine humidity absorption capacity of the materials, as shown below.

Material tested	Thickness, mm	Humidity absorption capacity, g/m ²
Limix tiles (standard)	10	39.2
Limix tiles with 20% eggshells	10	65.3
Limix tiles with 50% eggshells	10	74.0
Limix tiles with 10% diatomite	10	117.5
Limix tiles with 20% diatomite	10	229.3
Limix tiles with 30% diatomite	10	316.8
Lumie tile (for Lumie CUBE)	10	158.3

Tagawa Sangyo Co., Ltd.

1924 Yugeta, Tagawa city, Fukuoka Pref., 826-0041 Japan

Tel: +81-947-44-2240 | Fax: +81-947-44-8484

info@shikkui.com | <http://www.shikkui.com>