



Physical Mechanical Characteristics Natural Stone

Marble (varies by stone)

Compressive Strength: 1115-1542 (kg/cm²)
After freezing: 955-1321 (kg/cm²)
Ultimate tensile strength: 155-202 (kg/cm²)
Coef. Thermal expansion: 0-0.072 (mm/mcmoc)
Water absorption: 0-0.35 (%)
Impact test / min fall height: 0-75 (cm)
Frictional wear test: 0-5.9 (mm)
Bulk density: 2700-2860 (kg/cm³)

Granite (varies by stone)

Compressive Strength: 1425-2501 (kg/cm²)
After freezing: 1365-1990 (kg/cm²)
Ultimate tensile strength: 116-145 (kg/cm²)
Coef. Thermal expansion: 0.0062-0.0073 (mm/mcmoc)
Water absorption: 0-0.4 (%)
Impact test / min fall height: 0-61 (cm)
Frictional wear test: 0-3.5 (mm)
Bulk density: 2603-2623 (kg/cm³)

Quartzite (varies by stone)

Compressive Strength: 1170-1900 (kg/cm²)
After freezing: 926-1720 (kg/cm²)
Ultimate tensile strength: 202 (kg/cm²)
Coef. Thermal expansion: 0.0016 (mm/mcmoc)
Water absorption: 0.43 (%)
Impact test / min fall height: 0-80 (cm)
Frictional wear test: 0-0.47 (mm)
Bulk density: 2583-2661 (kg/cm³)

Onyx (varies by stone)

Compressive Strength: 940-1760 (kg/cm²)
After freezing: 930-1640 (kg/cm²)
Ultimate tensile strength: 102-125 (kg/cm²)
Coef. Thermal expansion: 0-0.005 (mm/mcmoc)
Water absorption: 0.15-1.3 (%)
Impact test / min fall height: 0-30 (cm)
Frictional wear test: 0 (mm)
Bulk density: 2430-2550 (kg/cm³)

Travertine (varies by stone)

Compressive Strength: 940-1132 (kg/cm²)
After freezing: 148-1131 (kg/cm²)
Ultimate tensile strength: 0-141 (kg/cm²)
Coef. Thermal expansion: 0.-0.0049 (mm/mcmoc)
Water absorption: 0-29 (%)
Impact test / min fall height: 0 (cm)
Frictional wear test: 0-2437 (mm)
Bulk density: 0-2447 (kg/cm³)

Limestone (varies by stone)

Compressive Strength: 1170-2060 (kg/cm²)
After freezing: 926-1879 (kg/cm²)
Ultimate tensile strength: 102-165 (kg/cm²)
Coef. Thermal expansion: 0-0.004 (mm/mcmoc)
Water absorption: 0.2-0.6 (%)
Impact test / min fall height: 0-34 (cm)
Frictional wear test: 0 (mm)
Bulk density: 2652-2670 (kg/cm³)