



Oriental Construction Material

Professor in Manufacturing Mgo Products

Material Safety Data Sheet

Compressive Strength	~20 MPa (3,000 PSI)
Impact Resistance	> 6 kJ/m ²
Tensile Strength	> 5.5 MPa
Density (Specific Mass)	~1000 Kg/m ³ (+/-<2%)
Moisture Absorption	~26% maximum saturation (slow absorption rate)
Moisture Content	~6%
Water Vapour Diffusion	~28 / 35
Specific Heat	~930 J/kg
Thermal Conductivity	~0.44 W / mK
Modulus of elasticity	~6045 N/mm ²
Flexibility UNI E 12372	~20.1 N/mm ² maximum 12mm x 1220 x 2440 = 10 N/mm ²
Surface Alkalinity	~10 Ph
Thermal Expansion Hot/Cold	0,01 mm/mC (from temp +20C to -20C)
Expansion in Water	less than < 0.02% from ambient to saturation
Freeze / Thaw - UNI EN 520	100 cycles without notable effects
Frost Resistance	no water drops form on surface
Combustibility / Fire Ratings	non-combustible / 12mm exceeds 1 hr fire rating
Dimensional tolerance	thick 0.2mm / width 2mm / length 3mm / Sq. 3mm
Toxicity Pollutants Heavy Metals - UNI EN 12457-2	Below measurable levels of test instruments
Asbestos Analysis	Absent - not measurable
Formaldehyde Analysis	Absent - not measurable
Sound Attenuation (9mm)	tested design ASTM E90 = STC 48, 50, 55, & 60
Color	Slate Grey and Chalk White
Surface texture	smooth one side; uniform machine textured back
Basic Compounds	(MgO)+(natural silicates)+(glass fibre)+(wood fibre)