

# PERFORMANCES

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The Department for Territory  
and Geological Resources of the Politecnico  
in Turin and the Ceramic Centre in Bologna

have carried out some physical and  
mechanical tests on **MONOLITE IPERGRES®**  
samples with these results:

STRUCTURAL PROPERTIES	VALUE
Density (weight for unit of volume g/cm <sup>3</sup> ) - DIN 51064	2.17
Weight H20 mm Worktops per Square meter (+/- 5%)	43.50
Weight H28 mm Worktops per Square meter (+/- 5%)	44.80
Weight H38 mm Worktops per Square meter (+/- 5%)	48.50
DIMENSIONAL PROPERTIES AND QUALITY GLAZED SURFACE	
Dimensional and geometrical properties - UNI EN ISO 10545 - 2 / DIN 12916	Compliant
Colour stability to Light and UV rays - UNI EN ISO 10545 - 16	Maximum
MECHANICAL PROPERTIES	
Determination of moduls of rupture and breaking strength - EN ISO 10545 - 4	
• Average breaking load (N)	16,114
• Average breaking strength (N)	14,649
• Average Modulus of rupture (N/m <sup>2</sup> )	43.10
Flexural strength after frost resistance test (EN 100 - MPa)	40.60
Determination of impact resistance by measurement of coefficient of restitution EN ISO 10545 - 5	0.80
MECHANICAL PROPERTIES OF THE GLAZED SURFACE	
Determination of resistance to surface abrasion (UNI EN ISO 10545 - 7) Abrasion Stage PEI	5 Maximum
Hardness according to Mohs - DIN EN 101	6
THERMAL PROPERTIES	
Linear Thermal Expansion coefficient (10 <sup>-6</sup> °C <sup>-1</sup> ) - UNI EN ISO 10545 - 8	6.5 - 7.0
Thermal Shock Resistance - UNI EN ISO 10545 - 9	OK
Crazing Resistance - UNI EN ISO 10545 - 11	OK
Frost Resistance - UNI EN ISO 10545 - 12	OK
Thermal Resistance (exposure up to 10 Hrs.)	up to 900 °C
CHEMICAL RESISTANCE	
Determination of Chemical Resistance of glaze surface - UNI EN ISO 10545 - 13	OK Maximum
Determination of stain resistance - UNI EN ISO 10545 - 14	OK Maximum
SAFETY PROPERTIES	
Releasing of Dangerous Substances, skid resistance - UNI EN ISO 10545 - 15	
Pb	0.00
Cd	0.00
Behaviour in Fire (Combustible material) - DIN EN 13501 - 1 - Euroclass A1	NO
Radiation Hygiene Certificate	OK