

Etna Lava Stone

Petrographic name of the stone (EN 12407): Basalt

Standard	Test description	Unit of misure	Mean value
EN 1936	Apparent density	Kg/m ³	2785
EN 1936	Open porosity	%	4,9
EN 13755	Water absorption at atmospheric pressure	%	0,8
EN 1925	Water absorption coefficient by capillarity	g/m ² * s ^{0,5}	9,8
EN 14157	Determination of abrasion resistance	mm	16,5
EN 14158	Rupture energy	Joule	7
EN 14231	Determination of the slip resistance by means of the pendulum tester(Wet)- polished	C Scale	22
EN 14231	Determination of the slip resistance by means of the pendulum tester(Dry)- polished	C Scale	74
EN 14231	Determination of the slip resistance by means of the pendulum tester(Wet)- bush hammered	C Scale	72
EN 14231	Determination of the slip resistance by means of the pendulum tester(Dry)- bush hammered	C Scale	84
EN 13364	Breaking load at a dowel hole Dowel Diameter: 6mm Standard deviation(Mpa): 275,4 Variation coefficient: 0,12	MPa	2390
EN 13364	Breaking load at a dowel hole Dowel Diameter: 8mm Standard deviation(Mpa): 555 Variation coefficient: 0,19	MPa	2908,2
EN 1926	Compressive strength Standard deviation(Mpa): 9,89 Variation coefficient: 0,05	MPa	196,9
EN 12372	Flexural strength under concentrated load Standard deviation(Mpa): 0,6 Variation coefficient: 0,05	MPa	12,9
EN 12371	Frost resistance, compressive strength Standard deviation(Mpa): 6,34 Variation coefficient: 0,03	MPa	186,1
EN 12371	Frost resistance, flexural strength Standard deviation(Mpa): 1,0 Variation coefficient: 0,08	MPa	12,4
EN 14066	Resistance to ageing by thermal shock Dynamic modulus of elasticity- before cycles E _{ao} extensional E _{ao} flexural	MPa MPa	13775 16333
EN 14066	Resistance to ageing by thermal shock Dynamic modulus of elasticity- at the end of the cycles E _{ao} extensional E _{ao} flexural	MPa MPa	13857 16793
EN 14205	Determination of knoop hardness	MPa	3564

N.B.: data supplied by the manufacturer