



Fragment Incorporated DOO
Dr Dragiše Mišovića 169
32000 Čačak, Srbija

Dear Sir/Madam,

At your request, we have carried out testing of the Fragment panels. The panels were 3 cm thick with one polished surface.

Method of work:

Before testing, the samples were cut to the required dimensions using a water-cooled diamond saw and then conditioned for 24 hours at a temperature of 25 ± 0.5 °C and relative humidity of $60 \pm 2\%$. Compressive strength was tested according to EN 1926:2010. Flexural strength was tested according to EN 12372:2009. Scratch resistance was evaluated by determining hardness according to the Mohs scale. Specific gravity was determined according to EN 1936:2007. Water absorption was measured according to EN 13755:2009, while freeze–thaw resistance was determined in accordance with EN 12371:2010. Thermal shock resistance was tested according to ISO 10545-9:2013, while fire resistance and static coefficient of friction were determined according to ASTM E84 and ASTM C-1028 standards.

Characteristic	Value
Compressive strength	39 – 47 MPa
Flexural strength	6.8 – 7.4 MPa
Scratch resistance	7.5 glass / 4.5 matrix
Specific gravity	2.495 g/cm ³
Water absorption	0,87 %
Freeze–thaw resistance	0,2 %
Thermal shock (300 °C)	Passed
Fire resistance	Class 1A Flame spread index 0 Flame contribution 0 Smoke density index 0
Static coefficient of friction	0.72 in dry state / 0.63 in wet state

Belgrade
28.01.2022.

An expert opinion was provided by

Dr Maja Marković

Director


Dr Đorđe Janačković