

Determination of dimensions according to EN 14509:2015

The test samples were conditioned for min. 16 hours at $(23 \pm 2) ^\circ\text{C}$ and $(50 \pm 5) \%$ relative humidity prior the tests were performed.

Item	Length, mm	Width, mm	Thickness, mm	Flatness, mm	Squareness, mm	Straightness, mm
ALUFAS FR	2400	1240	4,04	0,0	0,0	0,0

Determination of hard body impact resistance according to EOTA TR 001:2003

Item	Hard body impactor	Energy E, Nm	Criteria	Place of impact	Failure
ALUFAS FR	Steel ball 1 kg	10	Serviceability	Center	No
			Safety		
ALUFAS FR	Steel ball 0,5 kg	6	Serviceability	Center	No
			Safety		

Determination of soft body impact resistance (50 kg) according to EOTA TR 001:2003

Item	Energy E, Nm	Criteria	Place of impact	Failure
ALUFAS FR	120	Serviceability	Center	No
	700	Safety	Center	No

Determination of flexural stress according to EN ISO 178:2011

The test samples were conditioned for min.16 hours at $(23 \pm 2)^\circ\text{C}$ and $(50 \pm 5)\%$ relative humidity prior the tests were performed. 10 pcs of test samples of the following dimensions were tested: length 80 mm, width 8 mm and thickness 3 mm. The span of the supports was 64 mm and the testing rate was 2 mm/min.

Item	Force, N	Flexural stress σ_f , MPa
ALUFAS FR	11,6	15,1

Thermal conductivity coefficient according to EN 12667:2001

The test samples were conditioned for min. 16 hours at $(23 \pm 2) ^\circ\text{C}$ and $(50 \pm 5) \%$ relative humidity prior the tests were performed. A heat flow meter testing device was used for the test. It consists of a heating unit and cooling unit with a single sample and a single heat flow meter. Measurement was performed for $10 ^\circ\text{C}$ mean test temperature.

Item	Density ρ , kg/m ³	Mean temperature, $^\circ\text{C}$	Thickness, mm	Thermal conductivity coefficient λ , W/(m·K)
ALUFAS FR	1670	10,0	10,1	0,6169

Sound reduction index according to EN ISO 10140-2 and EN ISO 10140-4

Size of test opening: 1,87 m²

Mass per unit area: 4,6 kg/m²

Temperature: 20,4 $^\circ\text{C}$

Air humidity: 41 %

Source room volume: 59,2 m³

Receiving room volume: 52,6 m³

Frequency f, Hz	R 1/3 octave, dB
50	29,8
63	22,7
80	19,3
100	19,3
125	13,2
160	16,5
200	17,2
250	16,9
315	18,9
400	22,3
500	24,4
630	26,3
800	27,5
1000	29,5
1250	30,7
1600	31,5
2000	32,8
2500	33,4
3150	31,4

4000	27,7
5000	28,8

