

# Technical Specifications

**ALUPEX<sup>®</sup> A2**  
NON-COMBUSTIBLE COMPOSITE PANEL

physical . mechanical . thermal

## PHYSICAL PROPERTIES

S. NO	PROPERTIES	TOLERANCE	STADARD	UNIT	THICKNESS: 4mm	ALLOY SERIES AL-3003 **
1	Panel Thickness		...	mm		4 mm
2	Skin Thickness	.+ 0.02	...	mm		0.5 mm
3	Weight	.+ 0.5	...	kg/m <sup>2</sup>		upto 7.80
4	Standard Width	.+ 2.0	...	mm		1250, 1500 & 2000
5	Length	.+ 4.0	...	mm		upto 6000 mm
6	Bow	.+ 0.5	...	%		
7	Squareness	Max 5	...	mm		
8	Panel Thickness	.+ 0.3	...	mm		3, 4 & 6

## FIRE BEHAVIOUR PROPERTIES

FIRE BEHAVIOUR	FR CLASSIFICATION	SECTION NUMBER	CORE	DOCUMENT NUMBER	TESTING AGENCY
9	EN13501-1 Class A2 s1 do	ACP	Non Combustible	13355-2280	APPLUS SPAIN
10	EN13501-1 Class A2 s1 do	CORE	Non Combustible	13355-2281	APPLUS SPAIN
11	ASTM E-84 Class A	CORE w/o skin	Non Combustible	QJ064-3	THOMAS BELL WRIGHT
12	ASTM D1929 Self Ignition Temp	ACP - 490 °C	Non Combustible	G 4872	INTERTEK USA
13	ASTM D1929 Self Ignition Temp	CORE - 530 °C	Non Combustible	G 4872	INTERTEK USA
14	EN13501-1 Class A2 s1 do	CERTIFICATE	Non Combustible	TBW0300152	THOMAS BELL WRIGHT
15	NFPA 285 PASS	CERTIFICATE	Non Combustible	TBW0300151	THOMAS BELL WRIGHT
16	ASTM E119 3 Hrs FR	CERTIFICATE	Non Combustible		THOMAS BELL WRIGHT
17	CAVITYBARRIER Class A1 s1 d0	DCD APPROVED	Non Combustible	LAMATHERM	SIDERISE - UK

## MECHANICAL PROPERTIES

18	Tensile Strength	ASTM D638	Mpa	44.6
19	Modulus of Elasticity	ASTM D638	Mpa	28049
20	Elongation	ASTM D638	%	5.77
21	Flatwise Compression	ASTM C365	Mpa	132.55
22	Flexural Modulus	ASTM D790	Mpa	7589
23	Flexural Elasticity/ Bending Stress	ASTM C393	Mpa	125
24	Alloy	AA	.....	3003
25	Temper	AA	....	H16
26	Modulus of Elasticity Aluminium	AA	Mpa	70,000
27	Tensile Strength of Aluminium	AA	Mpa	172
28	0.2% Proff Stress Aluminium	AA	Mpa	155
29	Elongation Aluminium	AA	%	5
30	Climbing Drum Peel Test ( 8hrs boiling water )	ASTM D1781	Nmm/mm	266.94
31	Linear Thermal Expansion	EN 1999 1-1	mm/m @ 100°C	2.4

## SURFACE FINISH PROPERTIES

32	Type/Finish / Coat	.....	.....	PVDF / FEVE
33	Gloss @60°C	ECCA T2	%	20-45 / 20-80
34	Adhesion	AAMA 2605		No Adhesion Loss
35	Pencil Hardness	ECCA T4	.....	min HB

## ACOUSTICAL PROPERTIES

36	Sound transmission Loss (Rw)	ISO 10140	dB	28
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## THERMAL PROPERTIES

37	Thermal resistance R	ASTM C 518	M <sup>2</sup> K/W	0.17
38	Heat Deflection	ASTM D648	Deg C	> 250
39	Temperature resistance		°C	-50....+100