



## ALUMAT<sup>®</sup> ACP TECHNICAL DATA SHEET

- 1.The panel thickness of ACP is 4mm
- 2.The coating of the painting for ACP is two sides PVDF
- 3.The aluminum skin thickness is 0.3MM in two sides
- 4.The core material for laminating the ACP is standard Polyethylene Core

Also ,with performance of the PVDF coating as below:

Inspection gist	inspection standard: GB/T 17748-1999	inspection result
Size tolerance	length:±3mm	0mm<L<2mm
	width:±2mm	0mm<W<1mm
	thickness: ±0.2mm	0.01mm<T<0.07mm
	diagonal: ≤5mm	2mm
	fringe no straight: ≤1mm/m	0.5mm/m
	warp: ≤5mm/m	2mm/m
Face	orderliness, no drum froth、flaw、 pull wound、 chromatism	passed
Coating thickness	≥25 um	28um
Gloss deviation	≤5	3
Pencil hardness	≥HB	3HB
Coating pliability T	≤2	0
Adhesion	cross test Grade 1	Grade 1
Impact- resistance 50kg.cm	no paint peeling and cracking	no paint peeling and cracking
Wearing- resistance L/um	≥5	8
Boiled water-resistance	no change for 2h	no change
Taint-resistance	≤15%	2.44%
Acid-resistance	Infuse 5% HCL(v/v) on face for 48h no change	no change
Alkali-resistance	Infuse 5%NaOH(m/m) on face for 48h no change	no change
Oil-resistance	Infuse 20# engine oil on face for 48h no change	no change
Solvent-resistance times/mm	swabbing ≥100 no bottom exposed	no bottom exposed
Wash-resistance	≥10000 no change	no change
Chromatic aberration	≤3.0	1.29
Surface density kg/m <sup>2</sup>	fixed value±0.5	5.6
Bending strength MPa	≥100	135.7
Flexural modulus MPa	2.0x10 <sup>4</sup>	2.98x10 <sup>4</sup>
Transfixion resistance KN	≥9.0	10.8
Cut intensity MPa	≥28.0	33.2
Peel-back strength at 180℃ N/mm	≥7.0	7
Difference in temperature-resistance	-40℃-80℃ 20 cycles no change	no change
Temperature of Heat Deformation ℃	≥105	121.6
Coefficient of Heat Expansion ℃	≤4.00x10 <sup>-5</sup>	3.00x10 <sup>-5</sup>