

ALUMINUM DATASHEET (RAW)

EN AW-5005 [Al Mg1]: panel thickness 1.0 – 4.0 millimeter
 EN AW-5754 [Al Mg3]: panel thickness 5.0 – 10.0 millimeter

MATERIAL SPECIFICATIONS		MECHANICAL PROPERTIES					
Material designation	State	Thickness [mm]	Tensile strength Rm [MPa]		Yield strength Rp0.2 [MPa]		Elongation at break A _{50mm} [%]
			Min	Max	Min	Max	
EN AW-5005 [Al Mg1]	H14/24	1.0 – 4.0	185	-	165	-	2
EN AW-5754 [Al Mg3]	H22	5.0 – 10.0	190	230	110	-	18

CHEMICAL COMPOSITION [%]													
		Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Ga	V	Other	
		Individual	Total										
EN AW-5005 [Al Mg1]	Min	-	-	-	-	0.50	-	-	-	-	-	-	-
	Max	0.30	0.7	0.25	0.20	1.10	0.10	0.25	-	-	-	0.05	0.15
EN AW-5754 [Al Mg3]	Min	-	-	-	-	2.65	-	-	-	-	-	-	-
	Max	0.40	0.40	0.10	0.50	3.60	0.10	0.15	0.15	-	-	0.05	0.15

THICKNESS TOLERANCES ON DIMENSIONS ACCORDING TO DIN EN 485-3											
	EN AW-5005 [Al Mg1]						EN AW-5754 [Al Mg3]				
PANEL THICKNESS [mm]	1	1.5	2	2.5	3	4	5	6	8	10	
TOLERANCES [mm]	0.06	0.06	0.08	0.1	0.1	0.1	0.8	0.8	0.8	0.8	

The thickness tolerances on dimensions are only determined on whole panels (per meter).

FLATNESS TOLERANCES ACCORDING TO DIN EN 485-4											
	EN AW-5005 [Al Mg1]						EN AW-5754 [Al Mg3]				
PANEL THICKNESS [mm]	1	1.5	2	2.5	3	4	5	6	8	10	
± [%] at length dMax/L	0.4	0.4	0.4	0.4	0.4	0.4	1.1	1.1	1.1	1.1	
± [%] at width dMax/W	0.6	0.6	0.6	0.6	0.6	0.6	1.3	1.3	1.3	1.3	

The flatness tolerances are only determined on whole panels (per meter).

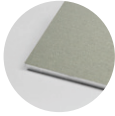
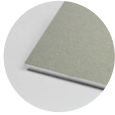
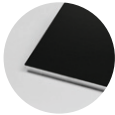
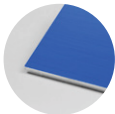
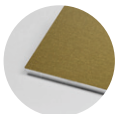
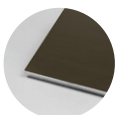




TECHNOLOGICAL PROPERTIES
<ul style="list-style-type: none"> - Very good machinability - Very good corrosion resistance (sea water/weather/SCC (stress corrosion cracking)) - Contact with foods according to DIN EN 602 - For use in temperatures up to max. 248 °F (120°C) in permanent operation

The data are with reference to the initial state of the raw sheet prior to anodisation. They are based on our supplier's specifications.

ALUMINUM

Available colors and thicknesses

Front Panel Express, 5959 Corson Avenue South, Suite I, Seattle, WA 98108, US

Material		EN AW-5005 [Al Mg1]						EN AW-5754 [Al Mg3]			
Raw sheet thickness [mm]		1	1.5	2	2.5	3	4	5	6	8	10
	Raw										
Color anodized		in addition approx. 12 – 18 µm layer thickness									
	Natural			●	●	●	●				
	Black										
	Blue										
	Gold										
	Bronze										
	Green										
	Red										
	Brushed Natural			●		●					
	Brushed Black										



Availability: In Stock



Also available with rear side that has conductive passivation

ALUMINUM

Manufacturing related information



Front Panel Express, 5959 Corson Avenue South, Suite I, Seattle, WA 98108, US

SURFACE QUALITY			
		EN AW-5005 [Al Mg1]	EN AW-5754 [Al Mg3]
RAW	Front side	May exhibit irregularities (such as small scratches or small impacts)	
	Rear side	May exhibit traces of processing	
	Recommended for	Technical applications	Technical applications
ANODIZED	Front side	Guaranteed to be free of scratches	May show traces of processing and a deviating anodised layer thickness
	Rear side	May exhibit traces of processing	
	Recommended for	Decorative and technical applications	Technical applications

MACHINABLE PANEL DIMENSIONS											
		EN AW-5005 [Al Mg1]					EN AW-5754 [Al Mg3]				
PANEL THICKNESS [mm]		1	1.5	2	2.5	3	4	5	6	8	10
SURFACE	Minimum [mm]	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10
	Maximum [mm]	100 x 250	130 x 350	285 x 1100 <i>BRUSHED</i> 285 x 1024	500 x 1100	800 x 1100 <i>BRUSHED</i> 800 x 1024	800 x 1100	800 x 1100	800 x 1100	800 x 1100	800 x 1100

MANUFACTURING TOLERANCES
<i>Our manufacturing tolerances are +/- 0.1 mm.</i>