Geneerco Floor #4, End Grain Balsa Sandwich Structures

1. Background

General Veneer Manufacturing Co. has been supplying lightweight materials and products to the aircraft and aerospace industry for over 50 years. With the advent of the wide body commercial airplane, new materials were required to meet their specific needs. We were among the first to use these new materials in production and have continued to develop new configurations.

2. Product Introduction

Balsa wood, one of the oldest core materials, is again being used in sandwich structures. Because of its high impact resistance and high compressive properties, End Grain Balsa core panels have exhibited good resistance to heel damage and provide long service life. End Grain Balsa floor panels are still widely used by most airlines and airframe manufacturers. A large stock of balsa wood is available in all densities from General Veneer Manufacturing Co.

3. Performance

Research and development testing on fatigue properties indicate a long service life can be expected. Geneerco flooring is suitable for many applications and installations that require quality products at a competitive in-place cost.

Please contact General Veneer Manufacturing Co. for more information regarding physical and mechanical properties of specific panel types.

4. Type Identification

Listed in the following table are some of the combinations currently being manufactured and used throughout the aircraft and aerospace industry. Other products are available for specific applications.

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Type⑤	Top Face		Bottom Face		Thickness①	Weight②
	Thickness	Description	Thickness	Description		
1	.020	2024 T3	.012	2024 T3	.410	.95
2	.020	7075 T6	.012	7075 T6	.410	.95
3	.050	7075 T6	.063	7075 T6	.750	2.31
4	.016	7075 T6	.010	7075 T6	.400	.65③
5④	.035	Geneerco Epoglass	.023	Geneerco Epoglass	.430	1.07
6④	.035	Geneerco Epoglass	.023	Geneerco Epoglass	.500	1.12
7	.020	2024 T3	.010	2024 T3	.400	.80
8	.016	2024 T3	.010	2024 T3	.400	.66③
9	.016	7075 T6	.010	7075 T6	.400	.65③
10	.016	7075 T6	.010	7075 T6	.375	.63③
11	.025	2024 T3	.010	2024 T3	.375	.774
12	.012	Titanium	.005	Titanium	.375	.667
13	.016	2024 T3	.010	2024 T3	.375	.700③
14	.023	Geneerco Epoglass	.020	Geneerco Epoglass	.400	1.05
15	.032	7075 T6	.032	7075 T6	1.000	1.740
16④	.035	Geneerco Epoglass	.023	Geneerco Epoglass	.400	1.12
17④	.040	Geneerco Epoglass	.020	Geneerco Epoglass	.400	1.10
18④	.035	Geneerco Epoglass	.020	Geneerco Epoglass	.400	1.10
19	.020	2024 T3	.016	2024 T3	.375	.90
20	.020	2024 T3	.016	2024 T3	.250	.80
21④	.035	Geneerco Epoglass	.020	Geneerco Epoglass	.670	1.18
22	.010	2024 T3	.010	2024 T3	.250	.64
23	.016	7075 T6	.012	7075 T6	.400	.95
24						
25						
26	.040	2024 T3	.040	2024 T3	.500	1.65

① Other thicknesses are readily available
② Pounds per square foot
③ Six pounds per cubic foot wood (Normal 8-10 PCF)
④ Fire retardant - meets FAA specification FAR 25.853
⑤ On aluminum faced types, add “B” for Bare, or “C” for Clad to the end of the type number. (example: Floor #4, Type 1C)