

Generco Floor #4, Type 4C 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. Generco 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 other available panel types.

4. Type Identification

The following tables depict the quality aspects of Generco Floor #4, Type 4C.

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5. Typical Physical and Mechanical Properties.

Physical Description ^①	Typical Values	Unit
Generco Floor #4	Type 4C	
Weight	.74	p.s.f.
Overall Thickness	.400	in.
Skin Thickness	.016/.010	in.
Facing Alloy	7075T6 Clad	n/a
Nominal Core Density	6.0	p.c.f.
Length • Nominal 96", 120", 144"	Up to 192	in.
Width • Nominal 48", 60", 72"	Up to 72	in.

Panel Strength • Test Method	Typical Values ^③	Unit
Generco Floor #4	Type 4C	
Stabilized Compression • MIL-STD-401	900	p.s.i.
Long Beam Bending • MIL-STD-401 (20 in. Span, 1/4 Point Loading)	220	lb.
Facing Stress (20 in. Span, 1/4 Point Loading)	25,000	p.s.i.
Deflection at 100 lbs. (20 in. Span, 1/4 Point Loading)	.45	in.
Climbing Drum Peel • Standard Condition	30	in-lb/3 in. width
Flammability • FAR25.853(a) App. F, Part I (60 Sec. Vertical Ignition)	15	sec. ext.
Panel Shear • MIL-STD-401 (12 in. Span, 1/4 Point Loading)	170	lb.

- ① Panels are available in other thicknesses, widths, lengths and core densities per customer request.
2. Qualifications and Approvals:
Generco Floor No. 4, Type 4C meets the requirements of DAC S4929905
- ③ Values listed represent theoretical averages to be expected. Prospective users should evaluate the material to determine if material is suitable for the users' specific requirements. User assumes all risk and responsibilities for any loss or damage caused by or resulting from the use of any information contained within this product bulletin.