

Geneerco Floor #3, Types 41, 42 and 44 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

Aluminum honeycomb core is still one of the most widely used floor panels. In addition to floor panels, this core is used extensively throughout the aircraft industry. Many combinations of core densities and face materials enable the designer to specify panels to meet a wide variety of requirements.

Geneerco Floor #3, Types 41 and 42 are aluminum honeycomb cores bonded with uni-directional fiberglass reinforced faces, they both offer a light weight, high performance, flame retardancy, and cost effectiveness in a single bonded sandwich panel.

Geneerco Floor #3, Type 44 combines the light weight of Type 41 with the strength of Type 42 into a versatile dual density panel. Utilizing the combination of both core densities, panels can be configured to meet the specific needs of the customer

3. Performance

Research and development testing on fatigue properties indicate a long service life can be expected, particularly with the heavy density honeycomb core. Geneerco Floor #3, Types 41, 42 and 44 are qualified to BMS 4-23 Types I, II and IV.

4. Type Identification

The following tables depict the quality aspects of Geneerco Floor #3, Types 41, 42 and 44.

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5. Typical Physical and Mechanical Properties

Physical Description ^①	Typical Values			Unit
	Generco Floor #3	Type 41	Type 42	
Weight	.55	.64	.55/.64	p.s.f.
Overall Thickness	.400	.400	.400	in.
Skin Thickness	.015	.015	.015	in.
Nominal Core Density	5.0	9.0	5.0/9.0	p.c.f.
Length • Nominal 96", 120", 144"	Up to 192	Up to 192	Up to 192	in.
Width • Nominal 48", 60", 72"	Up to 72	Up to 72	Up to 72	in.

① Panels are available in other thicknesses, widths, lengths and core densities per customer request.

Panel Strength • Test Method	Typical Values			Unit
	Generco Floor #3	Type 41	Type 42	
Stabilized Compression • MIL-STD-401	750	1400	750/1400	p.s.i.
Long Beam Bending • MIL-STD-401 (20 in. Span, 1/4 Point Loading)	235	240	230	lb.
Deflection at 100 lbs.	.85	.80	.85	in.
Climbing Drum Peel	35	40	35	in-lb/3 in. width
Flammability • 60 Sec. Vertical Ignition	10	10	10	sec.
Panel Shear • MIL-STD-401	500	800	500	lb.
Impact	40	60	40/60	in-lb