

Geneerco Floor #8, Type 1 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

Geneerco Floor #8, Type 1 series is a non-metallic acoustic core bonded sandwich panel. This panel offers excellent acoustic absorption properties, light weight, high performance, high resistance to heat transfer, corrosion resistance, flame retardancy, and cost effectiveness in one bonded sandwich panel with fiberglass faces.

This sandwich structure has been specifically developed for use in aircraft cabin interiors such as ceilings, partitions, overhead storage and utility racks. This sandwich structure works well in similar applications which require sound absorption, light weight and structural rigidity. Due to its excellent environmental resistance, Geneerco Floor #8, Type 1 is particularly well suited to marine and other corrosive surroundings as well.

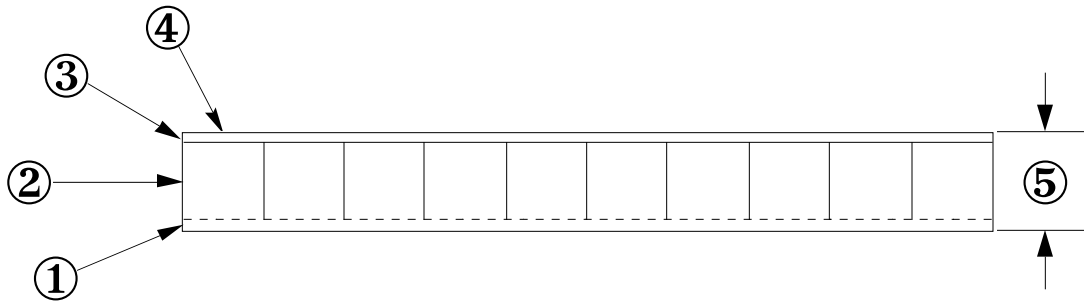
3. Performance

Geneerco Floor #8, Type 1 sandwich structures are suitable for many applications and installations that require quality products at a competitive in-place cost.

4. Class Identification

Class is based on total thickness and glass fabric style. The following figure shows typical panel configurations. The following tables depict the quality aspects of Geneerco Floor #8, Type 1 product line.

Generco Floor #8, Type 1 Sandwich Structures



- ① Fiberglass screen
- ② Acoustic core, consisting of glass fiber filled Nomex[®] honeycomb, 1/4 cell, 2.0 lb. density prior to fiber fill
- ③ One ply of glass fabric, style as follows:
 181 style for Class A, B and E
 128 style for Class C, D and F
- ④ Polyvinyl fluoride film (moisture barrier)
- ⑤ Thickness per Table 1
- 6. Epoxy resin system

Table 1: Typical Physical Properties

Physical Description	Typical Values						Unit
	Class A	Class B	Class C	Class D	Class E	Class F	
Generco Floor #8, Type 1							
Weight	.24	.26	.21	.23	.35	.32	p.s.f.
Overall Thickness	.250	.375	.250	.375	.500	.500	in.

Table 2: Typical Mechanical Properties

Panel Strength		Typical Values						Unit
Generco Floor #8, Type 1		Class A	Class B	Class C	Class D	Class E	Class F	
Flatwise Tensile Strength		80	80	80	80	80	80	p.s.i. ^③
Peel Strength ^①	Screen Side	12	12	12	12	12	12	in-lb/3 in. width ^③
	Back Side	18	18	15	15	18	15	
Long Beam Flexure ^②	Screen Side Up	-	32	-	29	-	-	lb. ^③
	Screen Side Down	-	70	-	59	-	-	

- ① Peel strength shall not include the force required to bend the adherent. This force shall be determined after the peel test in the same test fixture and shall be subtracted from the total load obtained.
- ② MIL-STD-401, 18 in. span, 9 in. double point loading.
- ③ Values are minimum average with no single value less than 80% of average on all test values.
- 4. Conforms to the requirements of LAC C-28-1382.