



Product Data Sheet

FRP System
Frequency Response Panel System

High Frequency Panel Equalizer



Superior Design Performance & Flexibility

The tunable FRP (Frequency Response Panel) System provides outstanding acoustical performance for high quality listening environments. FRP panels are a family of specially engineered acoustic panels designed to respond to “room-effect” anomalies, within only a 2.5” system depth. Targeted panel locations are typically determined from an in-depth analysis of the listening environment. There are five types of FRP panels available:

1. **High Frequency Equalizer (1.25”)**
2. **Bass Equalizer (1.25”)**
3. **Broadband Bridge Equalizer (2.25”)**
4. **Extended Bass Equalizer (2.25”)**
5. **FRP Diffuser (2.25”)**

The Problem

Typical acoustic panel treatments tend to over

absorb the mid and high frequencies, which sounds lifeless, and under address the low frequencies, which sounds slow & muddy. Non-engineered treatments lack control of flutter echo and first order reflections, resulting in poor tonality, soundstage and intelligibility.

The Solution

The FRP family of panels provides the flexibility to target and treat the specific acoustic needs relative to the room’s optimal frequency response. The result is a linear, wideband room response that sounds controlled and natural.

Application Standards

The following sound absorption coefficients for FRP High Frequency Panel Equalizer were derived from tests conducted in accordance with ASTM C423 on a Type A mounting from an accredited NVLAP test facility.

Frequency (Hz)	FRP 1.25” Thick High Frequency Equalizer
50	0.01
63	0.05
80	0.03
100	0.00
125	0.07
160	0.13
200	0.14
250	0.20
315	0.31
400	0.44
500	0.64
630	0.70
800	0.77
1000	0.84
1250	0.83
1600	0.85
2000	0.92
2500	0.89
3150	0.91
4000	0.95
5000	0.94
6300	0.94
8000	0.93

Physical Property Data

Panel Thickness: 1.25” (32mm)
 Panel Size: 24”x 48” (610mm x 1219mm)
 Panel Composition: One side rigid fiberglass board with mat finish, other side has gypsum board surface treatment.
 Panel Weight: 1.3 lbs/sq.ft. (6.3 kg/m)
 Color: Black
 Fire Resistance: ASTM E 84; Class A*
 Noise Reduction Coefficient: NRC .65
 Average Sabine Absorption Coefficient: SAA 0.63

Installation Procedure

FRP panels are easily installed onto both wall and ceiling gypsum board substrates. Type W gypsum screws are recommended to secure the panels, making sure each panel is fastened properly to the wall or ceiling substrate.

Design Considerations

Proper location of the High Frequency Panel Equalizer panel within the listening environment is critical to achieving excellent and well-balanced acoustics within the space. It is recommended that a number of room acoustic parameters be evaluated prior to installation to determine final locations and coverage. Keep product safe and dry during shipping, storage, and installation.

The FRP advantage:

- FRP system is effective down to 63 Hz. with only 2.5” of depth
- Controls room modes, first order reflections, reverberation times and flutter echo in a linear, tunable fashion
- Conceals with an acoustic stretch fabric system
- Fitted on-site by professional installers

*The surface burning characteristics of these products have been determined in accordance with ASTM E 84. This standard should be used to measure and describe the properties of materials products or assemblies in response to heat and flame under a controlled laboratory condition and should not be used to describe or appraise the fire hazard or fire risk of materials, products or assemblies under actual fire conditions.