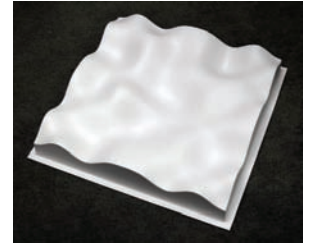


Waveform *Harmonix™-G*

2D Diffusion



Application of T-bar mounted absorptive and reflective ceiling systems have been a traditional approach to acoustical control. However, sound can also be controlled using diffusion. RPG pioneered the sound diffusion market over 25 years ago, with a range of number theoretic diffusing products. The tradition continues with the introduction of a new entry into the T-bar mounted acoustical ceiling market, the Waveform Harmonix-G. RPG utilized its patented Shape Optimizer and aperiodic modulation technology to provide an interesting and modern contoured surface that has the appearance of a bas relief sculpture. The center of each panel is asymmetric, however, the sides are identical. Therefore, this unique acoustically optimized asymmetric shape, offers the opportunity to create an unlimited range of surfaces, determined only by the orientation of adjacent panels. The Harmonix-G is fabricated from non-combustible glass reinforced gypsum for safety and economy and designed to provide optimal coverage with minimal low frequency diaphragmatic absorption. This provides uniform coverage, due to optimal diffusion, lack of periodicity effects, due to aperiodic modulation and good low frequency support. Add beauty and

*Optimized Compound Curvature GRG Ceiling Tiles
From The Acoustical Industry's Leading Innovator*



improved acoustical performance to your room with Harmonix-G.

The Sound of Innovation™

Problem and Solution

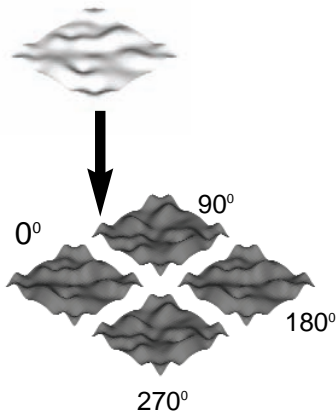
Problem

An “acoustic ceiling” has come to mean absorptive mineral or fiberglass tiles. Exclusive use of only mid-high frequency absorption in the ceiling cannot optimize the acoustics of spaces where music is to be enjoyed or speech is to be understood. The industry needed a complementary sound diffusing tile for these applications.

Solution

The Waveform Harmonix-G™ is the first cost-effective, non-combustible GRG, molded 2D sound diffusor that offers uniform mid-high sound diffusion and minimal low frequency diaphragmatic absorption to provide optimal coverage with good bass support.

Performance Specifications

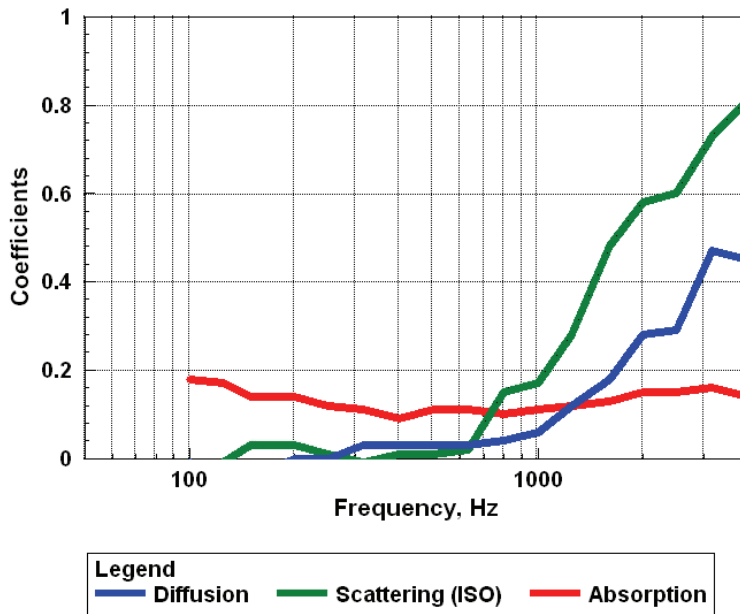


Aperiodic Modulation of a Single Asymmetric Base Shape

RPG's patented Aperiodic Modulation of a Single Asymmetric Base Shape allows the creation of wide area coverage seamlessly with a single asymmetric base shape (top), thus minimizing periodicity effects. This is possible, because the asymmetric central shape, determined by the architect or acoustician, morphs to identical sides, which have a zero gradient, allowing adjacent tiles to seamlessly transition without discontinuity in any orientation (middle) forming a larger aperiodic array (bottom 4x4 array).

Performance

The graph below illustrates the random incidence diffusion, scattering and absorption coefficients for the Harmonix-G.



FEATURES

- Acoustically optimized shape
- Unique asymmetric core with identical sides
- Seamless tiling in any orientation
- Non-combustible
- Factory finished
- T-bar installation
- Fabricated from glass reinforced gypsum
- Non-diaphragmatic
- Embedded metal loops

BENEFITS

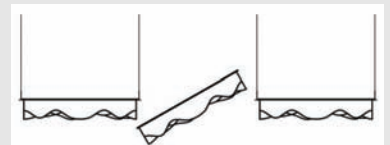
- Optimized shape ensures uniform coverage
- RPG provides optimal arraying and tilting to ensure uniform coverage and eliminate guess work in the field
- RPG's patented (6,772,859) aperiodic modulation of a single asymmetric base shape allows modulation to minimize periodicity effects
- Adjacent panels seamlessly tile in either direction for wide area coverage in a T-bar grid
- Non-combustible GRG ceiling tile can be used in all applications requiring a Class A rated material
- Panels are factory finished and ready for installation
- Light weight ceiling tile installs quickly and easily in standard 15/16" T-bar
- Harmonix-G offers mid-high frequency diffusion and is not diaphragmatic
- Two embedded metal loops can be used for seismic safety connections (suspension hardware and ceiling anchors not provided)

APPLICATIONS

Auditoriums, Rehearsal rooms, Performance and Worship Spaces, Studios and Control Rooms.

SPECIFICATIONS

- Panels: Tegular dimensions 22 7/8" x 22 7/8" x 4"; Overall dimensions 23 3/4" x 23 3/4"
- Weight: 13 lbs
- Thickness: 1/8" GRG
- Panel damping with low density fiberglass recommended in the field (not supplied)
- Finish: Matte white paint



Installation

The Harmonix-G installs in a tegular mount in a standard 15/16 T-bar grid. Modules can be oriented in any direction and the perimeter topology will be identical.