

*The First Pyramid Based on the Golden Mean
From The Acoustical Industry's Leading Innovator*

Pyramidal shaped ceiling units redirect portions of the incident sound energy into different directions. While redirection is not true diffusion, the pyramidal shape offers a moderate amount of acoustic control, preventing excessive harshness and flutter and providing more uniform sound distribution. RPG Golden Pyramid has an offset center based on the geometric Golden Rule. This offset center provides both visual interest and better acoustic performance. Constructed of heavy, fiber reinforced gypsum, the RPG Golden Pyramid offers superior acoustic performance over the lightweight gel-coat replicas provided by other manufacturers. An added benefit is the Class-A fire rating.

Problem and Solution

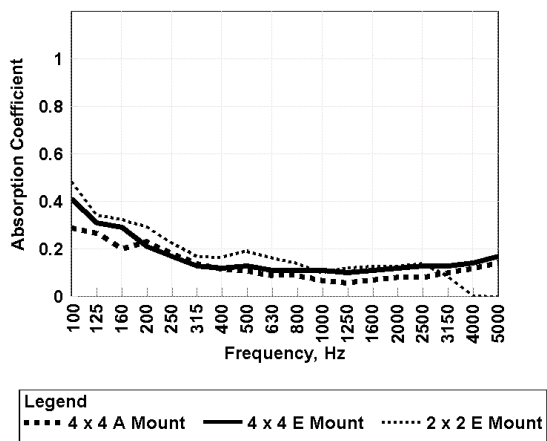
Problem

Sound absorptive acoustic ceiling tile (ACT) is commonly overused in rooms where people need to understand speech or listen to music. A low-cost but effective ceiling treatment that prevents acoustics problems while simultaneously distributing sound to the far reaches of the room is needed.

Solution

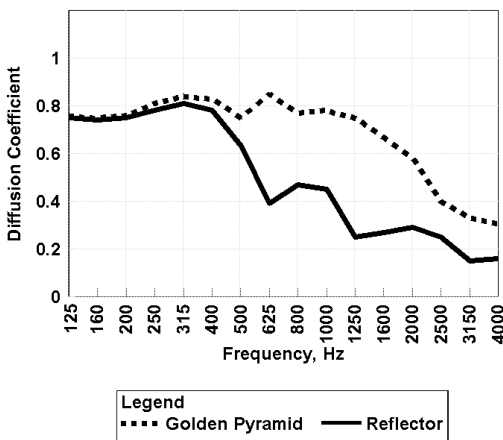
To address this problem, RPG developed the Golden Pyramid, made of fiber reinforced gypsum. The Golden Pyramid fits easily into a standard, metal, T-bar, ceiling grid and is Class-A fire rated. Acoustically, the Golden pyramid redistributes sound across the room, aiding uniform listening and preventing acoustic problems such as flutter with the floor below.

Performance Specifications



Absorption

The Fiber Reinforced Gypsum fabrication is rigid and non-diaphragmatic, as opposed to conventional thermoformed plastic pyramids. Therefore, the Golden Pyramid™ exhibits very low absorption, as indicated, for a 4'x4' unit in both A and E mounts and for a 2'x2' unit in E mount.



Diffusion

The Golden Pyramid™ is essentially a redirector of sound, as opposed to a reflection phase grating, providing reflection from each triangular face. It offers broad bandwidth wide angle scattering. The graph illustrates the average diffusion coefficient (1 is ideal) for all angles of incidence. Compared to a flat reflecting panel, the Golden Pyramid™ maintains uniform diffusivity as a function of frequency, above the diffraction limit.

Installation

The Golden Pyramid™ can be suspended in a T-bar grid. Because of the asymmetrical golden mean shape, the units can be oriented in three way (inset right) forming a two dimensional scattering array.

RPG Acoustical Systems, LLC.
99 South Street, Passaic, NJ 07055
973-916-1166 | info@rpgacoustic.com



All in one orientation

FEATURES

- Golden rule geometric sound redirection
- Solid fiber reinforced gypsum construction
- Custom paint colors
- Can be oriented uniformly or randomly
- Easy and fast to install

BENEFITS

- The golden mean proportions offer an aesthetic appearance and provide optimal re-direction of incident sound
- Solid fiber reinforced gypsum construction minimizes diaphragmatic absorption
- The Golden Pyramid™ can be finished in any desired color
- The asymmetrical golden mean design allow orientation in three directions for interesting visual patterns
- The 2'x2' and 4'x4' units install easily in standard 15/16", heavy duty, T-bar grid systems

APPLICATIONS

Worship Spaces, Auditoriums, Band Rooms,
Choral Rooms, Music Practice Rooms,
Cafeteriums, Multi-Purpose Rooms

SPECIFICATIONS

- Sizes: 23 5/8" x 23 5/8" x 8 1/8"
47 7/8" x 47 7/8" x 12"
- Shipping Weight: 7 lbs (2' x 2'), 20 lbs (4' x 4')
- Standard Finish: White Paint (Custom colors available)
- Fire Rating: Class-A



Units mounted opposed to one another.



Units rotated 90° relative to one another.