

RPG DIFFUSOR SYSTEMS, INC.

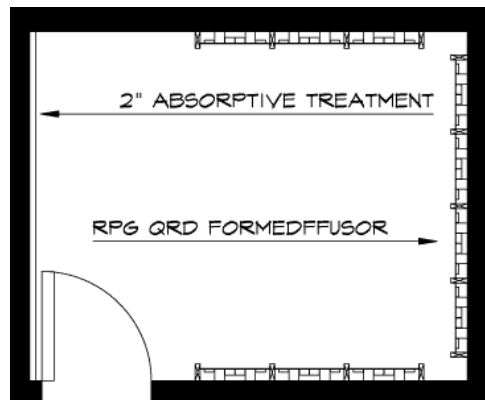
RPG encourages the use of Acoustic Consultants that can provide a full scope of services including Room Acoustics, Sound Isolation, Noise Control, A/V System Design & Specifications, etc. To find an Acoustic Consultant in your area or one that specializes in a particular type of project, contact the National Council of Acoustic Consultants (www.ncac.com).

MUSIC PRACTICE ROOM (INDIVIDUAL)

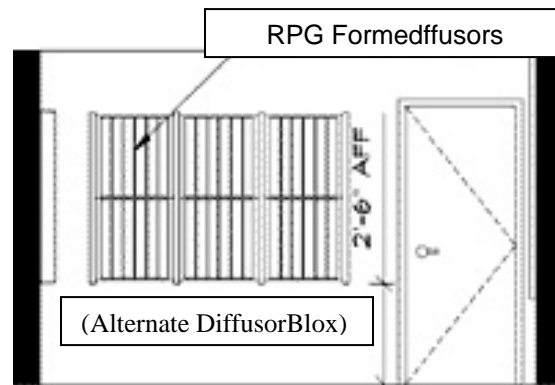


Music Practice Rooms utilizing RPG Formedfussors and RPG BAD Panels on the walls and RPG Omniffusors in a standard 15/16" T-bar ceiling grid.

The primary acoustic goals for an individual Music Practice Room are control of harshness off the walls and ceiling that are so close to the musician, prevention of flutter echo between the parallel surfaces (horizontal and vertical) and good support back the musicians so that they can hear themselves and critique their own playing or singing technique. These goals can be achieved by using a mixture of sound diffusive and sound absorptive treatment over and around the musician.



Music Practice Room Plan



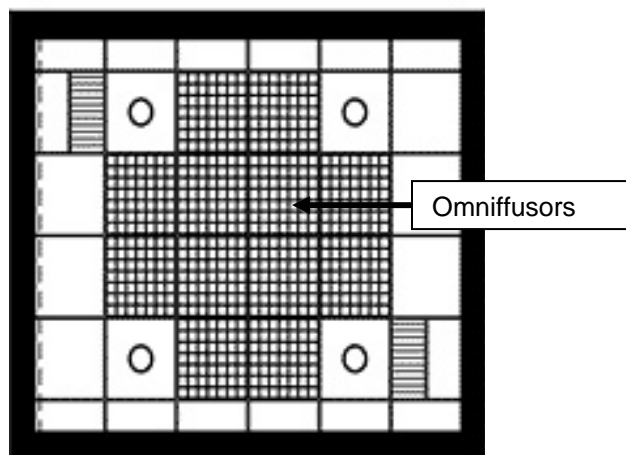
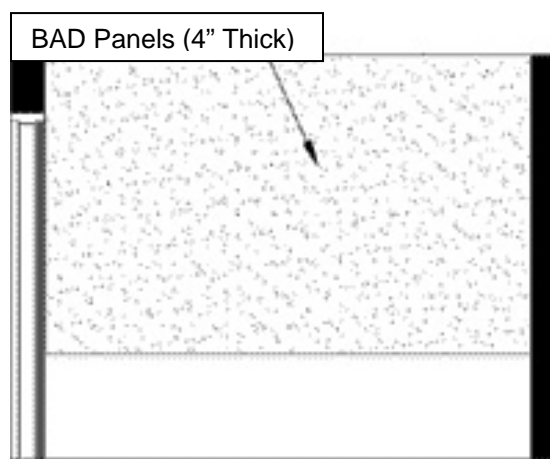
Corridor Elevation (Opposite and adjacent walls similar)

Diffusor systems to enhance the acoustics of critical listening and performing environments



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*Reflected Ceiling Plan**Short Wall (Opposite Wall Diffusive)*

Ceiling

For economical reasons, the ceiling of a Music Practice Room is typically a standard 15/16" T-bar suspended ceiling grid (even if a gypsum board sound isolation ceiling occurs above it). The central portion of the ceiling (equating to approximately 50% of the total ceiling area) should be made sound diffusive by using 2' x 2' modular lay-in sound diffusers such as RPG's *Omniffusors* (preferable), *Formedffusors* (acceptable) or *Golden Pyramids* (minimal). These diffusers will prevent harshness off the ceiling and flutter with the floor by spreading the sound energy spatially and temporally. The remaining ceiling area should be acoustic ceiling tile (ACT) with a high Noise Reduction Coefficient of NRC-0.75 or higher.

Walls

The walls of the Music Practice Room should be a combination of sound diffusion and sound difforsorption (mid frequency absorption and high frequency diffusion). Approximately 30% of the total wall area should be sound diffusive. This can be accomplished economically using RPG *DiffusorBlox* (slotted and painted) or when gypsum board walls are planned, by using RPG *Formedffusors*. When budget allows, consider upgrading the wall finishes to RPG wooden *QRDs* or *Diffractals*. The diffusive treatment is most effective between 2'-6" and 6'-0" above the floor. Approximately 30% of the total wall area should be made sound difforsorptive by using RPG BAD Panels (2" thick if on gypsum board, 4" thick if on concrete block.) Remaining wall area can be painted gypsum board or block.

Caution

Avoid square and rectangular proportioning of 1:1 and 1:2 in both section and plan. Good dimensions for an individual Music Practice Room are 12'-0" long by 10'-0" deep by 9'-0" high. Do not believe that slight angles in the side walls (trapezoidal shaped rooms) prevent flutter echo. Wall treatment is still required. Making Music Practice Rooms irregular shapes simply complicates the plan and increases construction cost.

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