

REHERARAL ROOM - ACOUSTICAL GOALS:

The rehearsal room will be a flexible space with excellent Room Acoustics for rehearsals, while also accommodating recitals, lectures, and receptions at the highest quality level that budget allows. The various spaces in the office wing will have acoustics that are designed to support their functions well.

Isolation targets aim at providing a high level of isolation between the rehearsal room and the officewing, and from the exterior to the rehearsal room. On occasion, low levels of outside noise may be slightly audible within the rehearsal room. Within the office wing we aim for reasonable speech privacy and minimal disturbance.

Noise Control efforts will target a range of background noise levels, from virtually silent for the rehearsal room to comfortably normal for much of the office building. In all cases, we will pursue a balance of low, mid, and high frequency sound that is pleasant and free of tonal character.

REHEARSAL ROOM ACOUSTICS - GENERAL:

The rehearsal room captures a large volume (40' x 48' x 33'+) to prevent sound building up to uncomfortably loud levels and to allow music to linger with a moderately long reverberation time. Room surfaces are shaped to sustain sound while avoiding flutter (high frequency trapped between parallel surfaces) and preventing an excessive buildup of sound in the lower 7' of the room, where the musicians and listeners will be. Some additional texturing of the walls provides more random scattering of sound, to further soften harshness. A simple, modestly curved ceiling provides clean communication within an ensemble while preventing fluttery buildup between the floor and ceiling. Clerestory and narrow windows cut into some of the corners of the room provide additional levels of diffusion.

For louder uses and uses where speech clarity is important, we are providing adjustable acoustic absorption. This currently takes the form of hinged doors that open to expose absorption, movable banners, and loose upholstered chairs. In addition, there is some fixed absorption to provide basic control of loudness and reverberation, even when the room is empty. Balancing the high cost of movable absorption and the moderate cost of fixed absorption against the needs for loudness control and reverberation control is an ongoing process. Our current approach is to allow the room to range from quite reverberant (few people, movable absorption stored) to slightly reverberant (room full of people, movable absorption exposed). The limitations inherent to this approach are that the room will not be suitable for very loud musical forces (such as a percussion ensemble) and that anyone giving a lecture will have to take care to speak clearly or will need an audio system that does not throw sound randomly into the room.







