

Building Type

Commercial Hotel

Space type

Lobby & Lounge

Location

New York, NY



Acoustics Elevated

Enhance Sound Clarity with AcoustiBuilt®

The Challenge

Excessive reverberation caused by hard surfaces like drywall, marble, and glass created poor acoustic conditions in the Marriott Marquis® hotel lobby and lounge.

Custom Acoustical Report from Armstrong®

An acoustical study of the hotel's lobby and lounge revealed that replacing drywall ceilings with the AcoustiBuilt seamless acoustical ceiling system reduced reverberation time by over 80%, significantly improving sound quality and comfort. These enhancements brought acoustic performance well within the preferred target range, enhancing sound clarity and overall comfort in the space.



The Solution

Installing the AcoustiBuilt seamless acoustical ceiling system significantly reduced reverberation time, improving the hotel's acoustic comfort while maintaining the smooth, monolithic visual of drywall.

Acoustical Report Highlights

The original drywall ceilings and hardsurface finishes which resulted in excessive reverberation — measured in at 4.26 seconds in the lobby and 3.18 seconds in the lounge. These values far exceeded the recommended reverberation time range for such spaces, which should ideally fall between 0.6 to 1.4 seconds.

AcoustiBuilt ceilings reduced the reverberation time to 0.66 seconds in the lobby and 0.55 seconds in the lounge—an 85% and 83% improvement, respectively. These results demonstrate that with the correct acoustic analysis, you can significantly enhance speech clarity, reduce noise, and contribute to a more comfortable and inviting environment for hotel guests and staff. The seamless aesthetic of AcoustiBuilt also offers a clean monolithic visual without compromising acoustic performance.

armstrongceilings.com/acoustibuilt



Lobby

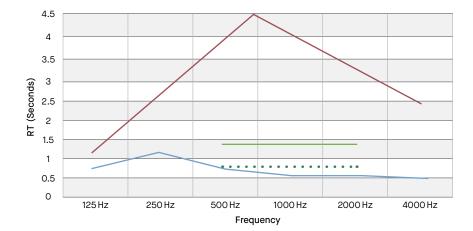
Conditions

Room: Estimated Area of 2900 SF Average Ceiling Height 14'

Surface finishes:

- · Floor: Marble
- · Walls: Drywall & Glass
- · Ceiling: Drywall (baseline)

Ceiling/Deck Treatment	Drywall	AcoustiBuilt
Amount (SF)	2900 SF	2900 SF
Doverharation Time (DT)	4.26 soconds	0.65 soconds



Lounge

Conditions

Room: Estimated Area of 1500 SF Average Ceiling Height 12'

Surface finishes:

- · Floor: Vinyl
- · Walls: Drywall & Glass
- · Ceiling: Drywall (baseline)

Ceiling/Deck Treatment	Drywall	AcoustiBuilt
Amount (SF)	1500 SF	1500 SF
Reverberation Time (RT)	3.18 seconds	0.55 seconds

