



Acoustical Advice You Can Provide



What are the customer's expectations?

Do they want to improve recording quality by lessening room reflections?

- This is a room acoustics problem, proceed to next page.

Do they want their neighbors/spouse to stop calling the police?

- This is an isolation problem.
- Nicely explain to the customer that acoustical foam will not solve their problem.
- Ask if they have read Acoustics 101 – available from www.auralex.com free of charge.
- Have them contact Auralex Technical Support (1-800-959-3343) for more information.
- We will refer them back to Sweetwater for the sale.

Note: The customer may need both.



Size of room

Specifically length (l), width (w), & height (h)

- If room is larger than about 25'x25' (or >600 ft²), have them contact Auralex Technical Support (1-800-959-3343).
- To calculate area of room, multiply length by width (l x w). For example, a 14'x10'x8' room has an area (footprint) of 140 ft² (14x10).
- To calculate area of treatable surface, use $(l + w) \times 2 \times h + (l \times w)$. For example, an 12'x8'x9' room has a treatable area totaling $(12 + 8) \times 2 \times 9 + (12 \times 8) = (20 \times 2 \times 9) + 96 = 360 + 96 = 456$ ft²

About "Optimum Room Dimensions"

- Some publications recommend "Optimum Room Dimensions" or "Ratios".
- This is because of Axial and Tangential Mode build-up if room dimensions are multiples of each other (e.g., 16'x16'x8').
- Many project studios are built in existing rooms that usually haven't been designed "optimally".
- Reassure the customer that even if the room they're using is 9'x9'x9', Auralex products can be used to significantly counter the ill effects brought on by coinciding room modes.

Odd-shaped Rooms

- Rooms with angled walls or with extremely odd shapes (e.g. L-shaped) should be referred to Auralex Technical Support (1-800-959-3343).



Existing Surface Finish Materials

- Examples include drywall, concrete, wood paneling, etc.
- If the ceiling is acoustical tile, remember to omit the ceiling from any treatment suggestions.
- Carpet is **NEVER** a recommended acoustical treatment. Carpet is an acceptable floor material, **not** an acceptable wall material due to its non-existent absorption below 1000 Hz.
- Tubetak Adhesive should attach Auralex Studiofoam products to any clean, dry surface. If the surface is textured, recommend more Tubetak to ensure the customer has enough to hang all of their Studiofoam, LENRDs, etc.
- Recommended adhesive usage
 - 1 Tubetak per 32 ft² of product (Treat LENRDs as 64 ft²)
 - OR
 - 1 Foamtak per 96 ft² of product.
- Either can be used for adhesion to normal painted drywall walls.
- Tubetak is recommended for ceiling installations.



Treatment of Different Rooms

Project Studio

- Often used for tracking and mixing.
- LENRD Bass Traps for the top half of each vertical corner.
- At least one (1) box of 2" Studiofoam to "spot treat" the walls.
- At least two (2) boxes of Sunburst-360, stand-mounted absorbers to move from place to place in the room for different applications.
- Roominators™ Kits also applicable.

Drum Booth

- LENRD Bass Traps in each vertical corner from ceiling to floor.
- 50% to 75% coverage of walls with 4" Studiofoam.
- 25% to 50% coverage of ceiling with T'Fusors.

Isolation Booth

- LENRD Bass Traps in the top half of each vertical corner.
- 75% coverage of walls and ceiling with 2" Studiofoam.
- Sometimes diffusion on the ceiling is appropriate – usually only for ceiling heights 9' or higher.



Tracking Rooms

- Varies depending on type of music being recorded.
 - LENRD Bass Traps from the ceiling to the floor in each vertical corner.
 - In general, 2" Studiofoam for between 30% and 50% of the walls
- AND
- Diffusion on the ceiling (usually 25% to 50% coverage).

Control Room

Live-End/Dead-End or "LEDE" Approach

- Applicable for ensemble recordings such as choir, orchestra, jazz band, etc.
- Use LENRD Bass Traps from ceiling to floor in each vertical corner (if necessary cut to fit).
- 75% to 100% coverage of the walls and ceiling with 2" Studiofoam around the mix position to absorb early reflections.
- Mix 2" Studiofoam (Wedges, Pyramids or Metro) and T'Fusors (or Metro Diffusers or MiniFusors) on the rear walls and ceiling (normal suggestions – 25% coverage with each).

Tom Hidley/Philip Newell Approach

- Applicable for electronic and solo recordings such as rock band, pop, rap, hip-hop, jazz soloists, vocal talents, video over-dubs, country, etc.
- LENRD Bass Traps in each vertical corner from ceiling to floor (if necessary cut to fit).
- 75% to 100% coverage of all walls and ceiling with 2" Studiofoam (Wedges, Pyramids or Metro).



If you experience any requests that are out of the ordinary, please refer them to Auralex Technical Support (1-800-959-3343). We can provide them with a list of suggested treatments and we will refer them back to Sweetwater for the sale.

OR

To get the ball rolling even quicker, with your customer's help, fill out the Personalized Room Consultation Form and fax it to us at 317-842-2760 with a clear drawing on a separate page (perhaps have the customer fax this to you). Important things to include:

- All room dimensions *including* ceiling height (you'd be surprised how many people forget).
- Existing or planned surfaces of walls, ceiling and floor.
- Current or planned furniture/equipment layout.
- Your name and number (not the customer's).