Steven Klein's Sound Control Room, Inc. www.soundcontrolroom.com

Important Considerations







Office: (818) 788-1238

Fax: (818) 788-1442

E-Mail: inform@soundcontrolroom.com

I have been involved with studios, production and building my whole life.











Here are important items, most people miss or ignore.

Each topic could use all the time I have, so I cannot give detailed explanations. Recognize your mistake and don't repeat it, or best yet, don't make one of these mistakes.





1. OLD WOOD

New wood contains water, which causes the wood to react, encasing nails and screws. This gives the attachment strength. Old wood cannot encase attachments. Nails and screws will not have the strength to hold the heavy weight requirements of studio construction. Imagine putting a nail in a rock.



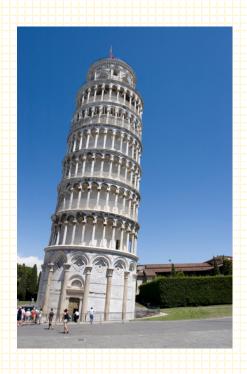


2. WATERPROOFING

Many garages and accessory buildings have bare uncovered walls. Water is not an issue because moisture can evaporate, so the interior seems dry. Also, many slabs, like garage floors, are built level with the surrounding damp soil. The difference between the humidity outside and the dryness of air-tight walls attracts moisture which may not evaporate.

Result = mold, termites, cracks.





3. STRUCTURAL ENGINEERING

This is not intuitive. Structural engineers are required specialists particularly in seismic and extreme weather regions. Studio construction must be heavy and rigid. Many times, builders over build, this wastes money. Many times, builders under build, which may be dangerous or cost more to retrofit later. Protect your investment and consult with an engineer.

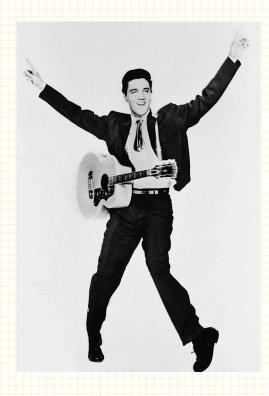




4. INCONGRUENT METHODS

Everything is inter-related. Mistakes like over building walls with a weak door, floor or ceiling. Another common blunder, building an equal or lesser partition in front of an existing partition mistakenly believing "room within a room" nonsense.





5. INCONGRUENT METHODS PART II Mr. Bass has left the building.

Or, placing bass traps in a raised foundation bedroom. Misunderstanding and improper use of bass traps is epidemic. Go outside of the studio – What do you hear? If you answered "BASS" how in the world are you going to "trap" what isn't there?





6. DOOR WEAKNESS

<u>Placement</u>; the last place to put a door is in the corner.

<u>Types</u>; Many patio sliders are poor choices or over-priced. I do my best to move clients to alternative choices. Though, a \$30,000 slider may be a nice touch.

<u>Hardware</u>; paying for sophisticated seals then installing with inexperienced handyman or do-it-yourselfers.





7. INABILITY TO EXCEED YOUR EXPERIENCE

This is a truth we all have to deal with. Very often research involves finding and using information that only agrees with your experience. So even when we are in pursuit of more sophisticated knowledge, one can easily dismiss other points of view. It takes direct, concentrated effort to exceed your experience. I often say, find a source or someone you respect and stick with them.





8. POOR ROOM RATIOS OR INAPPROPRIATE USE OF SHAPE

SHAPE is often misunderstood and mistakenly executed. Contemporary designers would rather have a rectangle with proper ratios for a control room.



Quoted from: *F. Alton Everest, Master Handbook of Acoustics.

"The popularity of rectangle rooms is due part to economy of construction, but it has its acoustical advantages. The axial, tangential, and oblique modes can be calculated with reasonable effort and their distribution studied. For a first approximation, a good approach is to consider only the more dominate axial modes, which is a very simple calculation. Degeneracies (mode pile-ups) can be spotted and other room faults revealed."





9. SELF EDUCATION

Acoustics is not an intuitive science; it is a very complex subject. Nonetheless all people are sensitive to sound and acoustics leading to a superficial understanding. I repeatedly see complex problems addressed with simplified solutions as well as simple problems expanded to fit complex and costly remedies.

I encourage increasing ones knowledge. The wiser you are the more likely you are to ask the right questions. However without widespread experience odds are you will waste resources and opportunities.

