

## **“When is a room... not a room?”**

### **MINIMUM ACOUSTIC TREATMENT (MAT) for REVERBERATION**

We are endless supporters of Architects, Interior Designers and Office Interior Planners, without their vision and decorative talents commercial office space and the designed world we live in, might still be the dismal and dreary boxes of the past.

But it is not enough to simply name a room on a blueprint, floor plan, or door – and then have that room actually be – what it is named.

We believe that form and function must work hand-in-hand in commercial office space and the designed spaces we work, live and play in. We’ve found that form alone will always require acoustic remediation.

From our knowledge and experience in 100% of the rooms we are asked to ‘fix’, we have found that a specific percentage of the walls and ceilings will require acoustic treatment to control reverberation.

Without control, the daily use (or intended use) of a given space will be severely compromised.

A boardroom that sounds like you are in a warehouse – is hardly a boardroom...!

A teleconference room, where both sides of a speakerphone conversation are unintelligible – is hardly a teleconference room...!

Private offices, where the closed-door conversations of executives are clearly audible in the hallway – is hardly a private office...!

A reception area, where both the receptionist and the visiting party must almost touch noses to be understood – is hardly a welcoming reception area...!

A restaurant or cafeteria, where everyone, at every table, must project their voice (if not yell) to be heard by their companion – is hardly a relaxing atmosphere...!

A performance room (whether live music or theatre), where the performance is unintelligible due to reverberation – is hardly a performance room...!

Need I go on?

These rooms may well have been envisioned to be the intended name on the door, blueprint or floor plan – but due to Value “Engineering”, and/or poor (none existent?) acoustic considerations and planning - they rarely live up to the door nameplate.

When is a room... not a room...?

This is not an existential mind game – it’s just common sense!

Design for the eye alone will always require some amount of acoustic “fixing” and therefore cost. We consider these additional costs to a client after the design phase unfair, unreasonable and unprofessional.

Look around you; office space today is usually constructed using a limited pallet of only five materials; /1/ drywall, /2/ glass, /3/ cheap ceiling tile, /4/ stone floor tile, or /5/ industrial carpet glued to the concrete slab.

Drywall, glass, and stone floor tile, have a typical NRC of around 0.05 – 0.10.

Carpet glued directly onto a concrete floor slab has a typical NRC of around 0.25.

Cheap ceiling tile (>75% of commercial space) has a typical NRC of around 0.40.

The Noise Reduction Coefficient (NRC) measures how absorbent a material is;  
0.0 being 100% reflective  
1.0 being 100% absorbent  
The higher the number, the more absorbent the material is.

Drywall, stone floor tile, and glass are all nearly perfect acoustic reflectors.

Sound produced in an office or boardroom for example, that has;  
2 walls of drywall  
1/2 wall of exterior glass  
1/2 wall of hallway glass  
And a floor of stone tile  
Will have a substantial reverberation time! This isn't opinion or a sales pitch - it's a fact!

**Its just physics... if you don't like this fact, find another Universe".**

Unfortunately many Interior Designers, Office Planners, Value "Engineers", and clients often don't like this factual answer. To these we say, "Please, find another Universe".

In this Universe, the laws of physics are immutable. There is no magic material that will control sound and give you the look of a glass wall. There just isn't...!

There is a material that is 100% clear – as a matter of fact clearer than glass – that we can place in front of glazing to reduce it's reflectivity, there are numerous materials that can be a substitute for drywall, that look great but have absorbency as a quality, there are high quality ceiling tiles that actually are 'acoustic' – but for this information you'll need to hire us.

Now that..., that was a sales pitch...!

Peter Harper  
AcoustiGuard-Wilrep Ltd.  
[www.acoustiguard.com](http://www.acoustiguard.com)