

# idi Commercial II

## Case Study

Location: Newspaper office building

Area of concern: Space between CEO office and boardroom

Additional information: Noise usually travels through spaces at several different points. Controlling only one point is like trying to save a sinking boat by patching only one hole when 10 holes exist. You must be thorough to ensure effective results.

Questions to ask client:

- Please describe the problem.
- Does the wall go all the way up to the deck and is it sealed airtight? Does it just go up to the dropped ceiling? Are there any penetrations through the wall?
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- Could the noise be going around the wall? Are there any air gaps? Under the door? At the perimeter of the wall? At the window mullion? Etc?
- What materials are used in the space(s)?
- What are your confidentiality needs?

Client feedback:

- The CEO is distracted by noise from the boardroom when there are meetings in progress. There are also confidentiality issues.
- The wall does not go up to the deck, it ends at the dropped ceiling.
- There are no penetrations other than the door.
- The noise could be going around the wall by means of the door.
- The materials used in this space are carpet, painted drywall and acoustic tile on the ceiling. There are two return air ducts about two feet apart, separated only by the wall.
- Confidentiality is an issue to some degree, but not a security problem.

Evaluation: In this particular project, there was a door and a window between the two spaces and the ceiling did not go up to the deck. To improve the acoustics, an upgraded sealer was added to the doors and a flexible, vinyl barrier was placed on top of the ceiling above the two spaces (since the wall could not be extended to the deck). Creating a completely confidential space is very difficult and extremely expensive. Since confidentiality was an issue, but not a security matter, this improvement proved successful.

If further improvements were needed, the next step would be to install a sound masking system.

Further comments: In another office space, where complete confidentiality was essential, a very expensive door was installed. This door had an STC rating of 65, but the surrounding walls had an STC rating of 50. In this case, the walls served as the weakest point, rather than the door. It's important to note that the isolation quality of an assembly is dictated by the weakest element of the assembly.

For more information on Sound Transmission Class, visit [STCratings.com](http://STCratings.com).