

# Characterization of room acoustic treatments

Due Date: 2024-11-14

Document all your work in your post on the course website.

During this exercise, you will become familiar with everyday acoustic elements (reflecting, absorbing, diffusing elements), simple room acoustic estimations and the tools for them.

Regarding the documentation: Please choose a suitable form of discussion, be it textual or photographic or based on sketches (e.g. views and floor plans).

## Instructions

- Visit your rooms again and discuss the following points.
- Where are acoustically effective elements (absorbers, reflectors, diffusors) located?
- How are they designed (approx. areas, materials, presumed absorption properties in the high-frequency range, mid-frequency range, low-frequency range)?
- Which furnishings could favor the diffuse reflection of sound?
- Is there anything special to note about the geometry of the room (concave, convex surfaces, extended parallel surfaces, etc.)?
- Which surfaces are particularly sound-reflecting?
- How are the absorbers positioned (rather clustered or limited to one area, or balanced over the room surfaces)? Is this arrangement acoustically suitable or are the measures simply positioned 'where there's some space'?
- What is the visual impact of the acoustic measures, how are they integrated into the architectural language of the space?