



Kandidatarbete  
Examenskod ACEX10



Source: Cornaro et al. A new method for the thermal characterization of transparent and semi-transparent materials using outdoor measurements and dynamic simulation. *Energy Build* 2015;104:57–64. doi:10.1016/j.enbuild.2015.06.081.

## Dare2Test window glazings

**Windows are essential parts of building envelopes. They provide daylight and fresh air to the indoor environment, and allow visual contact with the surrounding while acting at the same time as weather and sound barriers.**

This project aims at developing an elementary experimental setup for teaching purposes, where (future) students can test and demonstrate some basic thermal and visual performances of window glazing. If you choose this project, your tasks will be:

1. To choose, together with your group mates, 2-3 performances of the window glazing that you would like to test/demonstrate experimentally.
2. To design and build a simple yet sufficiently accurate experimental setup for your experiments. It could be anticipated as a test box of i.e. polystyrene, with one or several openings for the placement of glazing system like the ones shown in the figure. The box should be developed in a scale that is convenient for moving around yet sufficiently large for the installation of necessary measuring devices. It should be possible to use the entire setup both indoors and outdoors.
3. To develop a booklet with instructions on how to perform the experiments of your choice, collect and process the measured results (by hand calculations) to proof a specific window glazing performance.

### Target group of students

TKSAM Civil engineering  
TKTFY Applied physics  
TKMAS Mechanical engineering

### Group size

3-4

### Special requirements

Students interested in learning or improving experimental skills

### Suggestion from

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### Can the project be duplicated?

Yes