



# Upgrading heritage escape route doors

## Mounting of glass, protective boards and ceiling lists

**Older wooden escape route doors are often a weak point in the fire safety in apartment buildings. This report presents possible solutions for mounting of glass, protective boards and sealing lists when upgrading older wooden escape route doors with a cultural heritage value .**

These types of doors normally have a thickness of 45-50 mm, with glass on the upper part, and a thinner wooden door-panel on the lower part. For antiquary reasons the interventions on the doors should be as little intrusive and as reversible as possible.

Different solutions for mounting of fire rated glass, gypsum boards and ceiling lists are shown in the report. The main conclusions are:

- Glass must have fire resistance EI 30, and be

securely fastened with steel frames or steel clips

- Heavy use of doors implies mounting of 12,5 mm robust gypsum boards

- Both expanding lists and silicone gaskets must be mounted to stop cold and hot smoke

- The area between the door frame and the wall must be sealed using mineral wool and expanding fire sealant

The solutions given in this report are preliminary solutions and will later be used as basis for small-scale and full-scale testing.

You may find the full FRIC report here:

[https://www.researchgate.net/publication/348591300 FRIC WP 433 Rehabilitated escape route doors - Mounting of glass boards and sealing lists](https://www.researchgate.net/publication/348591300_FRIC_WP_433_Rehabilitated_escape_route_doors_-_Mounting_of_glass_boards_and_sealing_lists)

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