

Mechanical ventilation systems for Italian school buildings retrofit

Abstract: The mechanical ventilation systems have a main role in order to guarantee a proper Indoor Air Quality and thermal comfort between the occupants, and well-being certification protocols have already been created to ensure a healthy and productive indoor space. Moreover, due to the COVID – 19 pandemic most of facility managers and political decision makers are providing for installing mechanical ventilation systems in their buildings, to reduce the infection risk via airborne. In developing the thesis, the performances of different mechanical air distribution systems suitable for the Italian school buildings retrofit will be assessed, using proper simulation tools. The results could be used as guidelines for selecting the most suitable system based on the considered school building typology and context.

- Possibility to involve supervisors from the same scientific field of DENG <https://www.energia.polimi.it/>
- Required: good knowledge of English, familiarity with Excel and propensity to use simulation energy models.