

Advanced Energy Efficient Renovation of Buildings (ccem-retrofit)

Scope of project

The ccem-retrofit project is based on national and international research and development projects that are collaborating to promote and improve cost effective low energy renovation of existing buildings. The project focuses on typical apartment blocks representing approximately 40 % of the European dwelling stock. It concentrates on:

- Minimising the primary energy consumption (in the range of 30–50 kWh/(m²·year) for heating, cooling and hot water, per gross floor area),
- Optimising the integration of solar energy use,
- Improving electrical building components and control functions
- Increasing living comfort by better space use,
- Assuring good thermal and acoustical comfort, good indoor air quality and daylighting conditions, and
- Assuring a fast, high quality and cost-effective construction process.



Multi-family house in Zurich-Hoengg. The building was not only insulated with prefabricated elements, the old balconies have been replaced by larger ones in front of the building and are now used as living room extensions. In addition, the unused roof space has been replaced by an attractive apartment (Architect: Beat Kaempfen, Zurich).

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