

The Cooling Conundrum

Checklist for passive measures for cooling buildings

Active cooling of buildings harms the climate and the environment. But there are alternatives. And it can even be avoided altogether.

This checklist is an extract from the knowledge module "The Cooling Conundrum". You can find more information here: wissensstiftung.eu/en/knowledge-nuggets/cooling-conundrum

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Checklist for passive measures for cooling buildings

Active cooling of buildings should be avoided as far as possible and, if possible, only natural refrigerants or natural cooling sources should be used.

- Sensible building orientation with regard to solar radiation
- Use of shading from neighbouring buildings and trees
- External sun protection through overhangs and/or external sun protection systems
- Appropriate thermal insulation
- Appropriate proportion of window areas
- Reduction of internal loads due to electrical appliances and lighting
- Greenery in the exterior and/or façade area
- Light-coloured façades and roofs
- Provide night cooling
- Passive or free cooling
- Plan to increase and utilise the building's activatable storage mass
- Methods without climate-damaging refrigerants for dissipating heat (cooling by cooling tower, groundwater, waste heat utilisation, air wells)
- Adapted comfort standards