

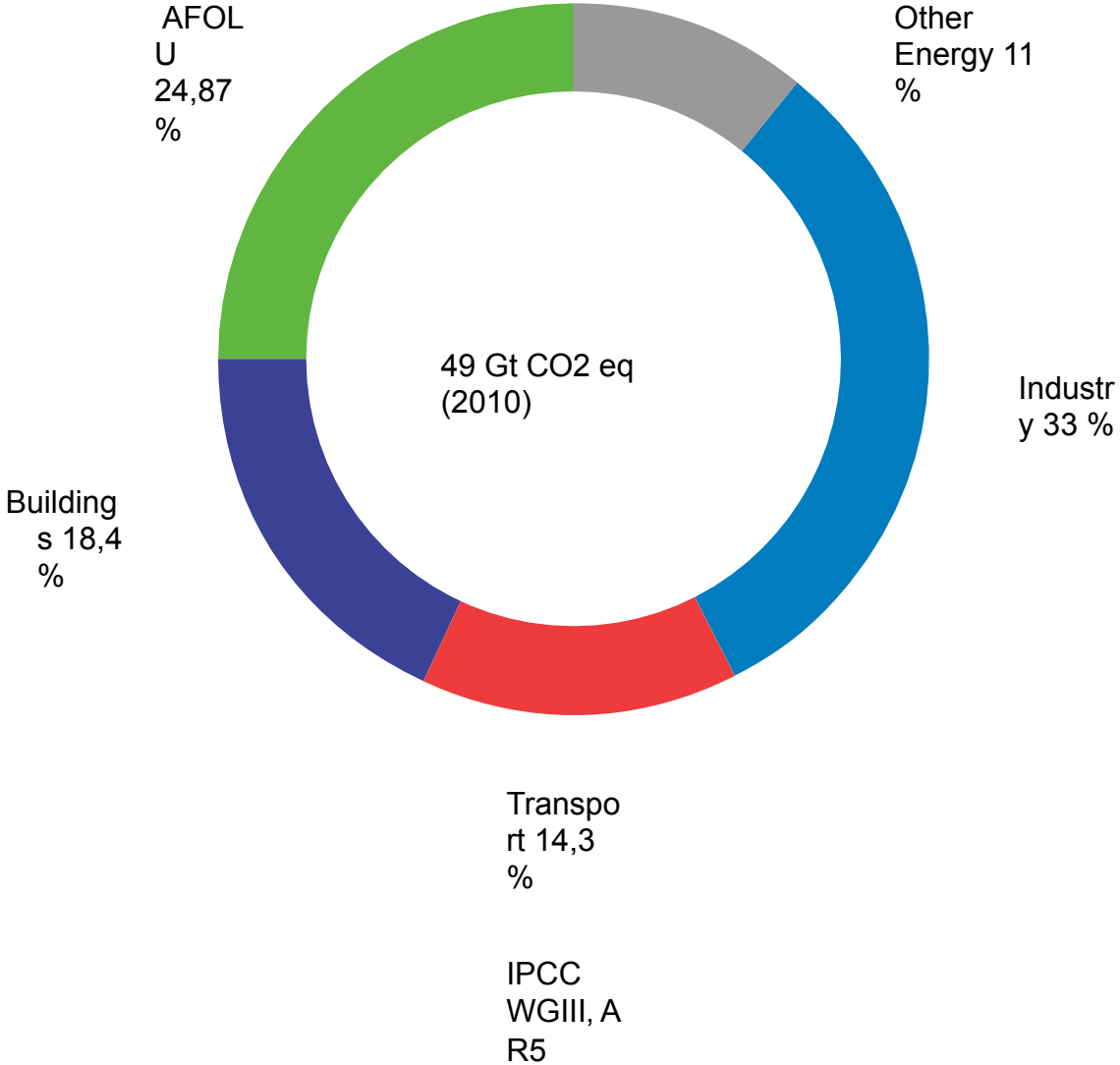
be

baumschlager eberle  
architekten

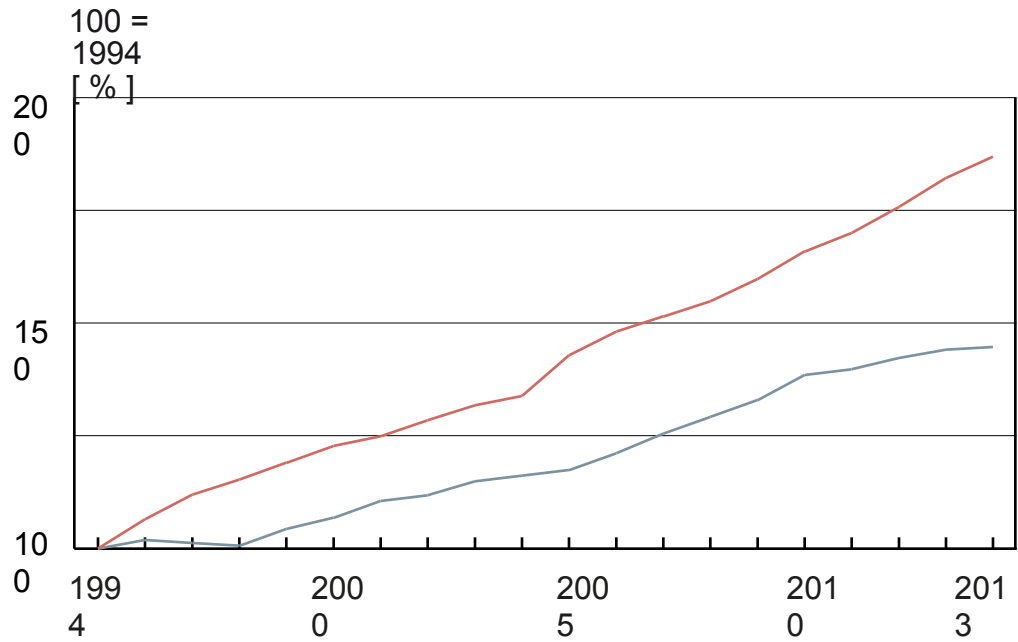




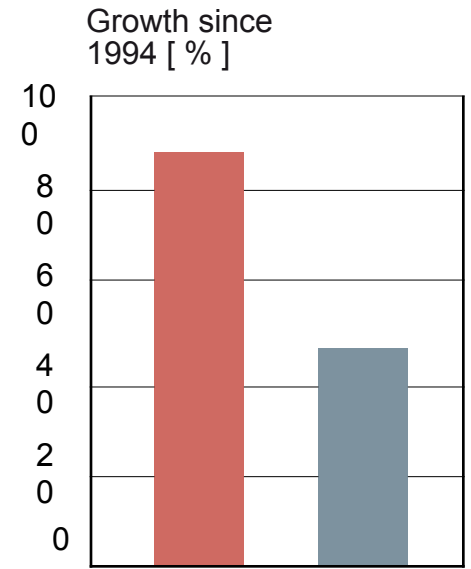
# Direct and Indirect CO2 Emissions



# Housing Costs and Average Income

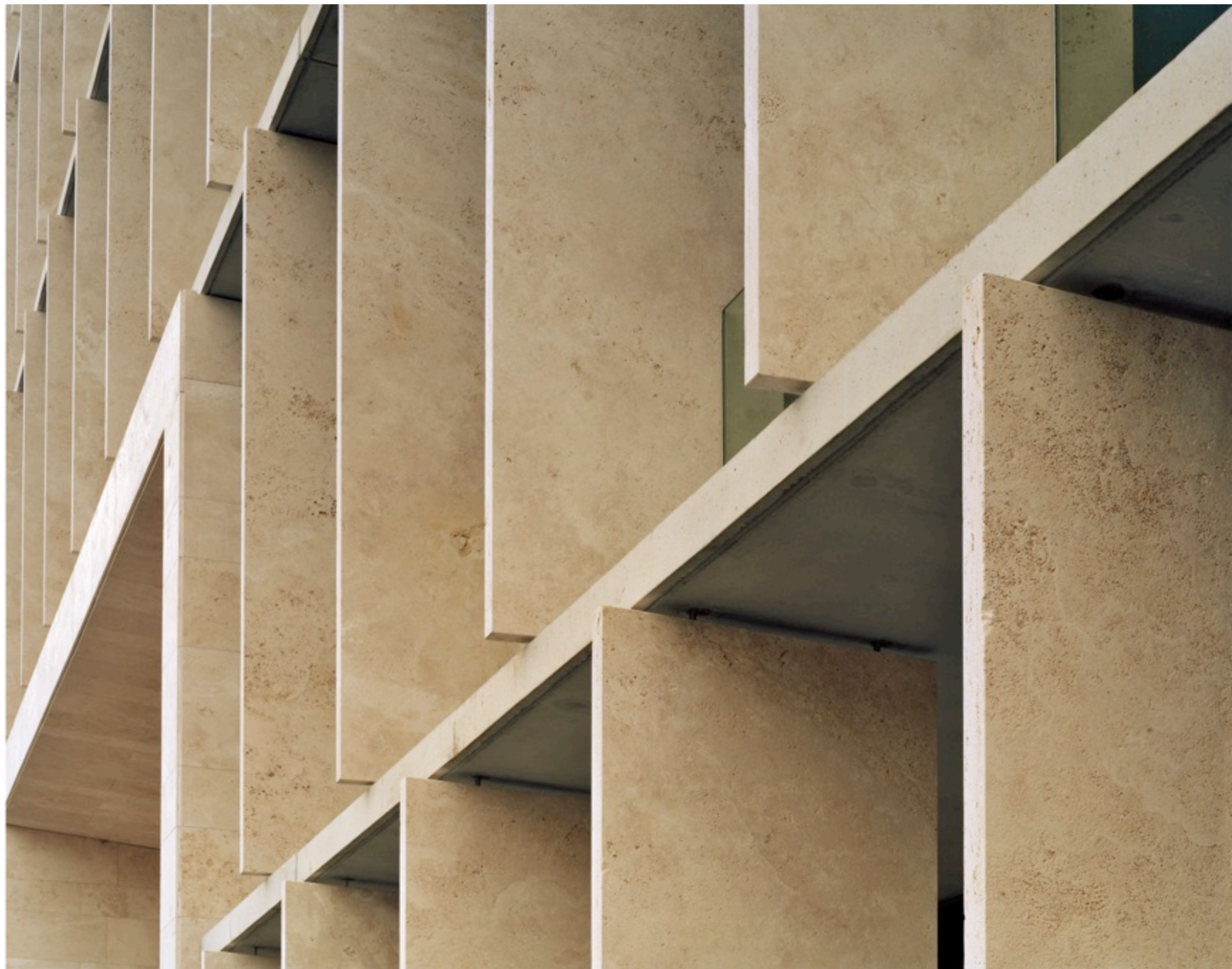


— growth of housing costs  
— growth of average income



■ growth of housing costs  
■ growth of average income



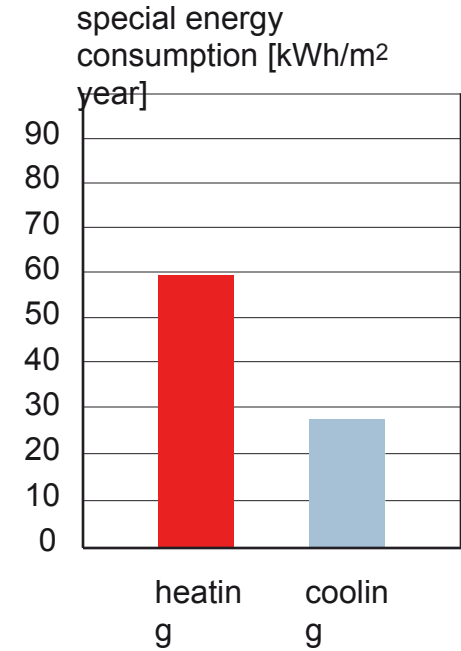
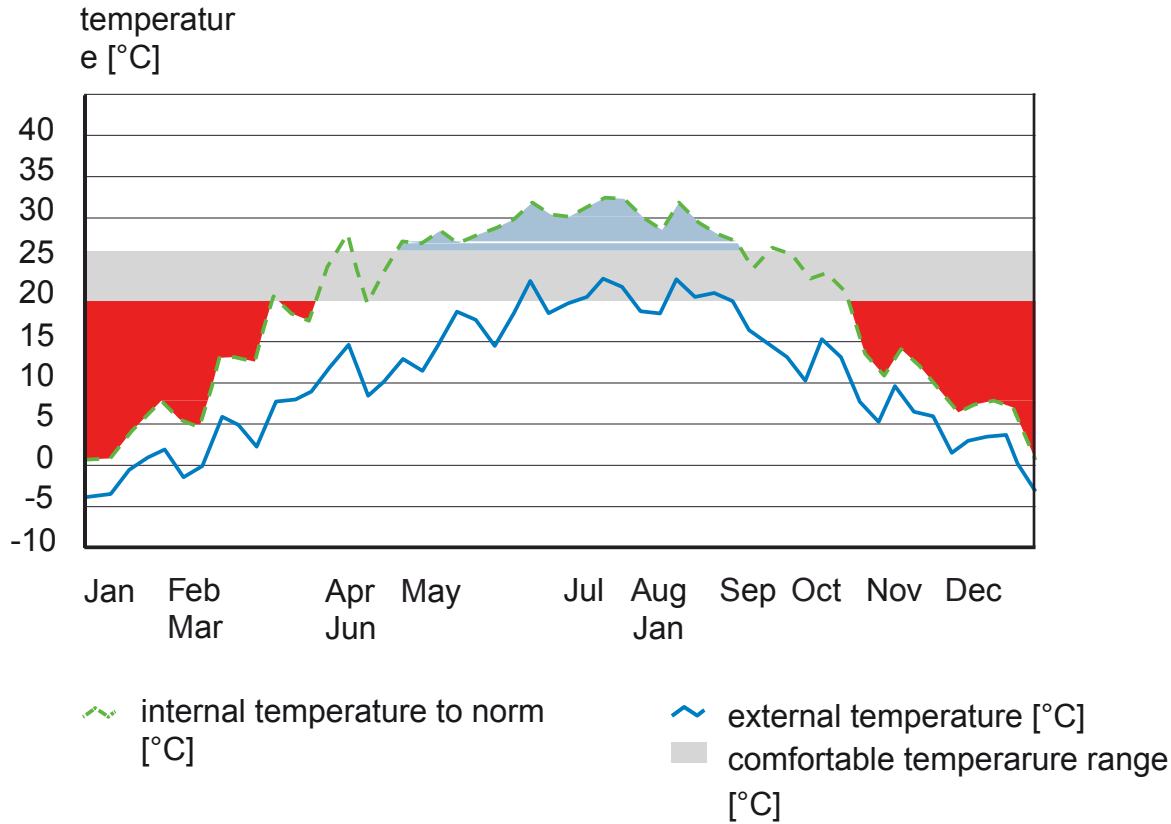




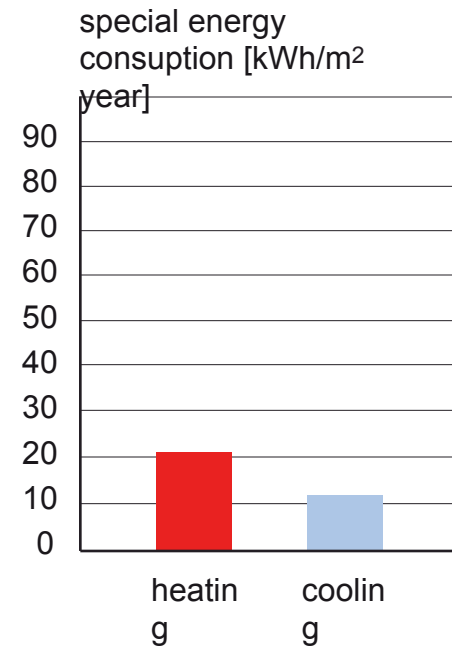
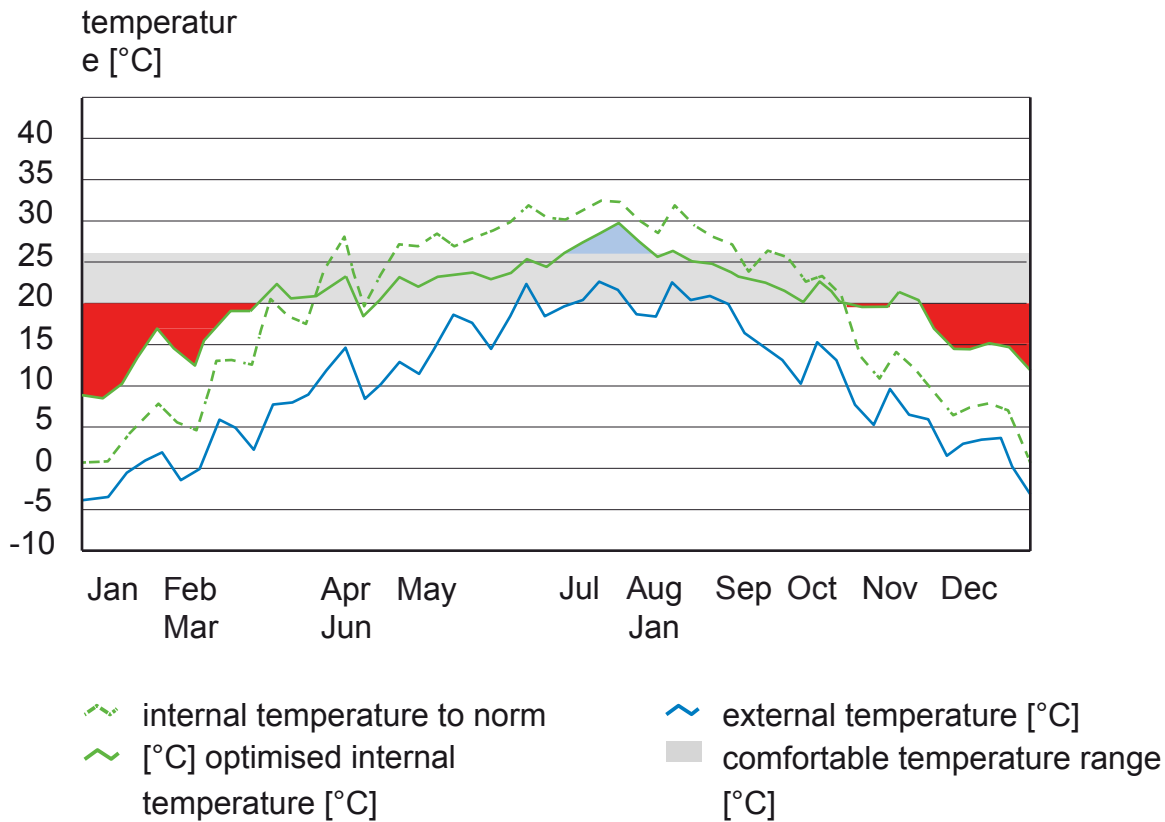


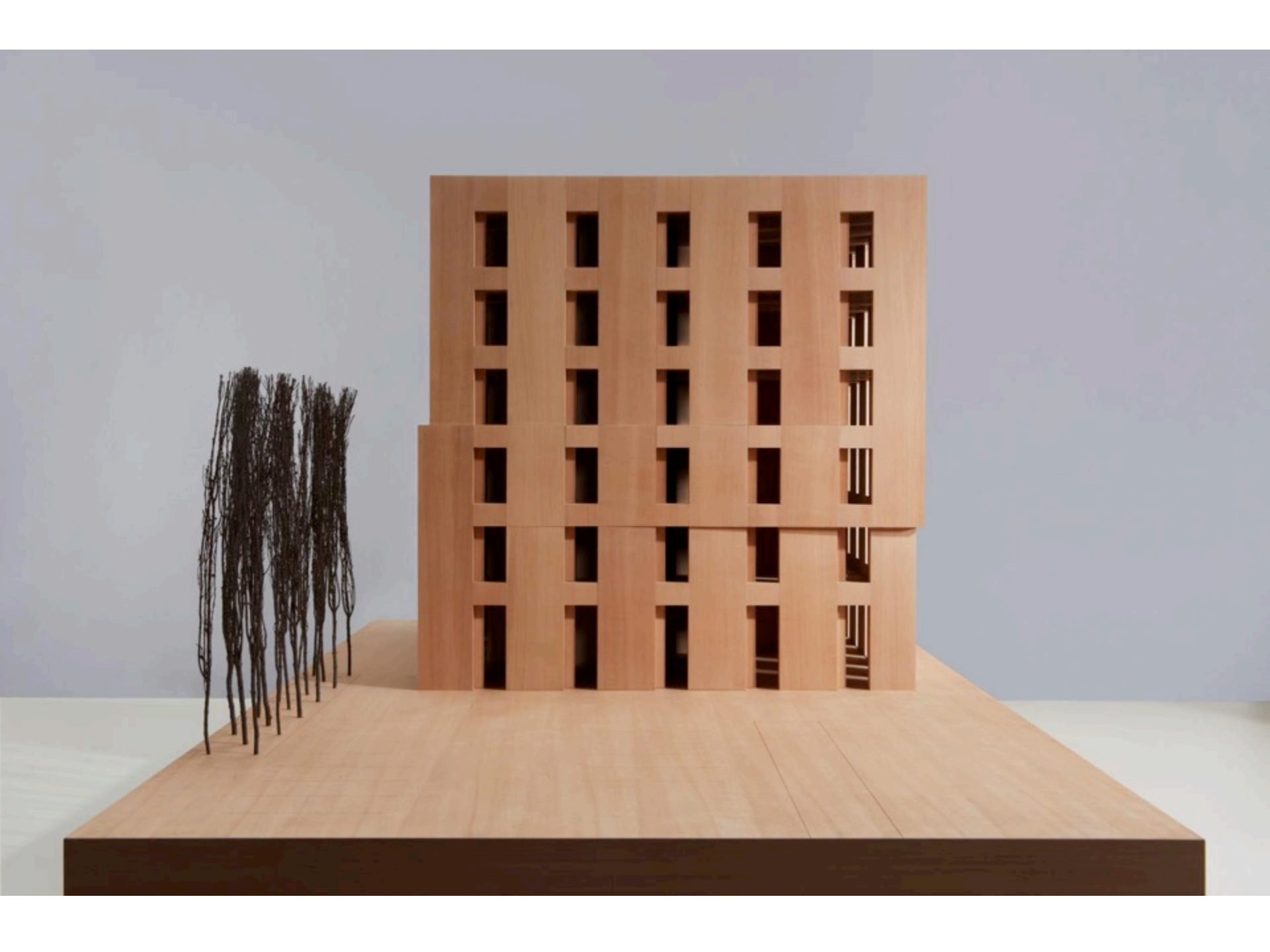


# Building According to Standard

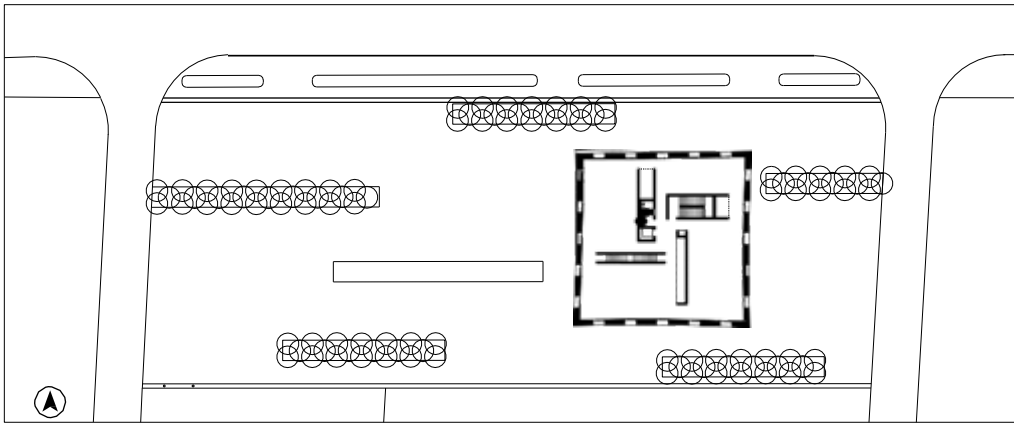
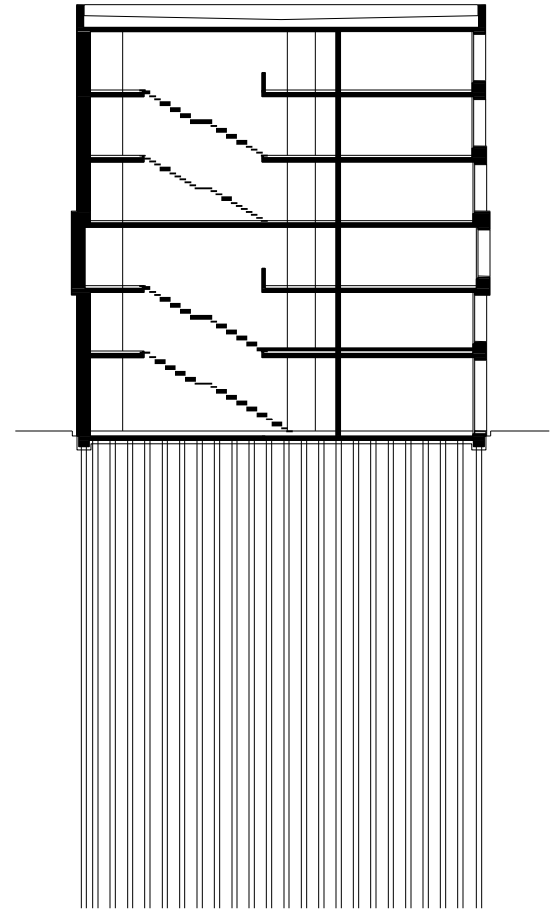
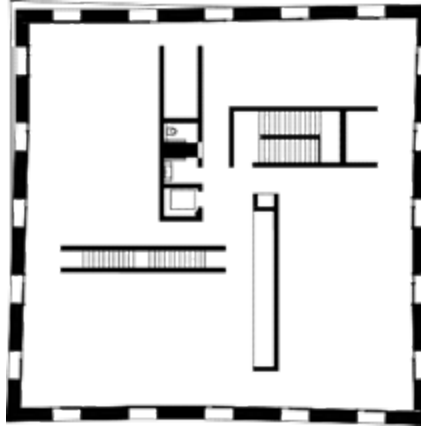
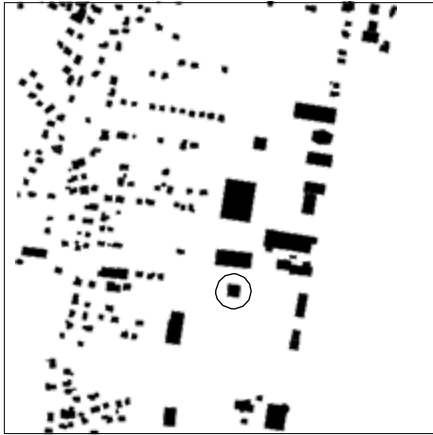


# Optimized Building









0

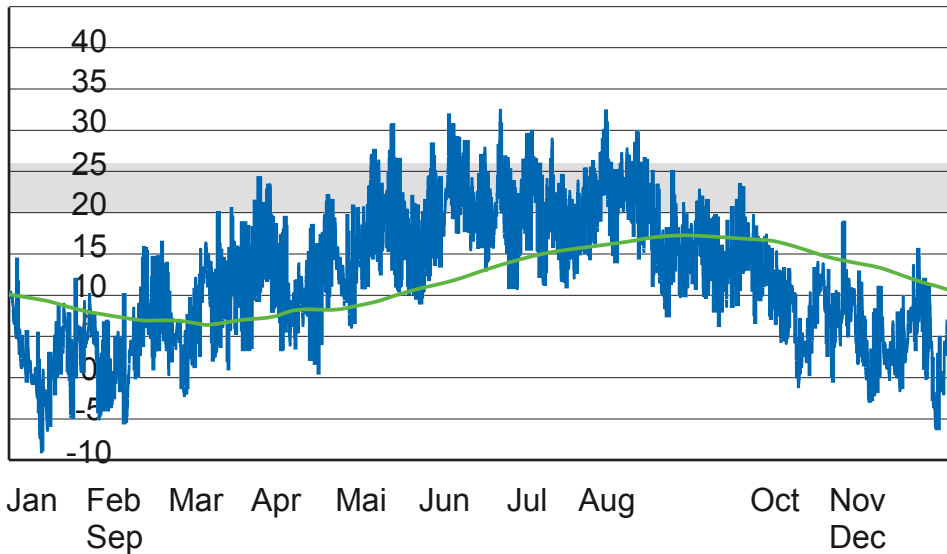
10m

Regelgeschoss und  
Schnitt

# Heat Capacity

## External and internal temperature of the empty building

temperature [°C]



The range of variation in the year is max. 8 °C

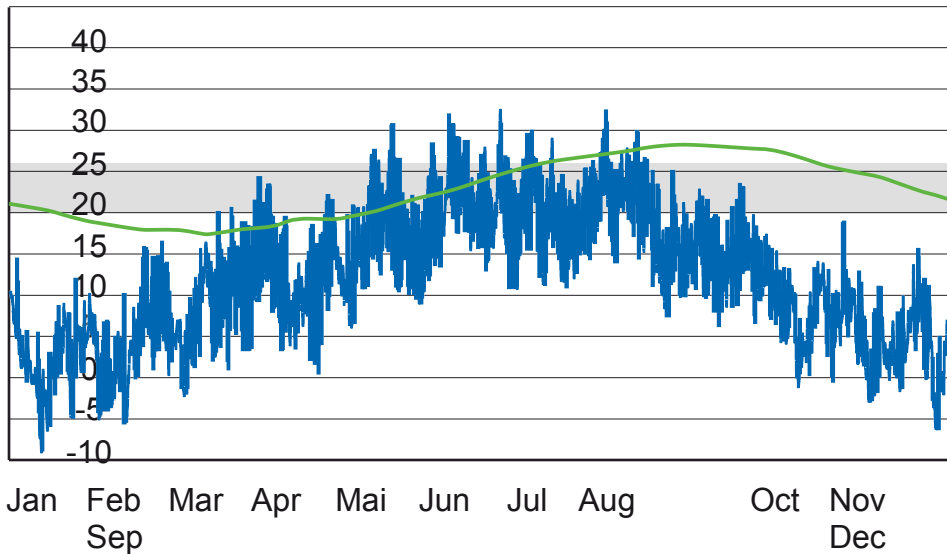
- ~ internal temperature
- ~ [°C] external temperature [°C]
- comfortable temperature range [°C]

# Heat Capacity



## External and internal temperature of the used building without any control system

temperature [°C]



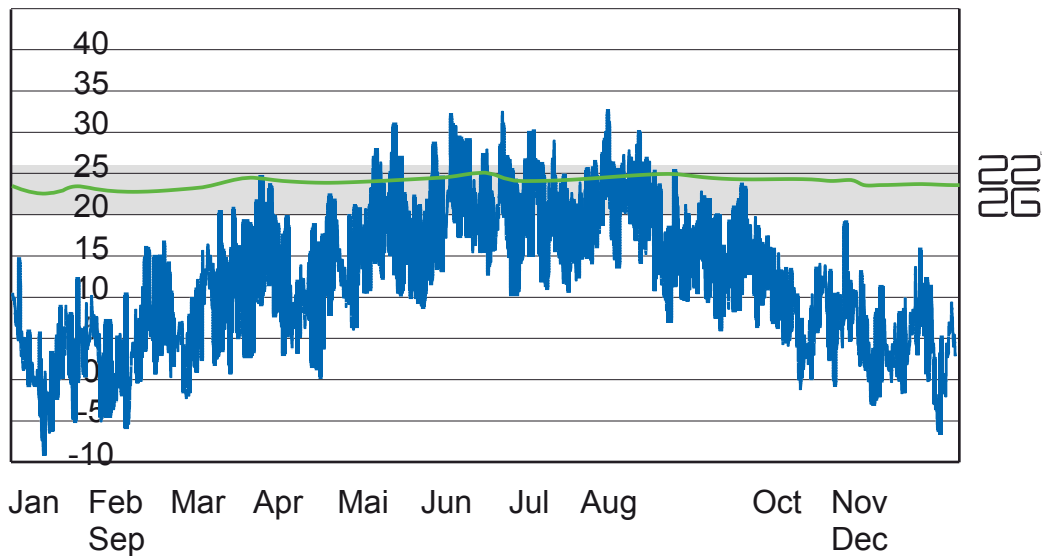
The building without the Control
System is cooled to 18 ° C
and
heated to 28 ° C

~ internal temperature  
~ [°C] external temperature [°C]  
■ comfortable temperature range [°C]





temperature  
[°C]



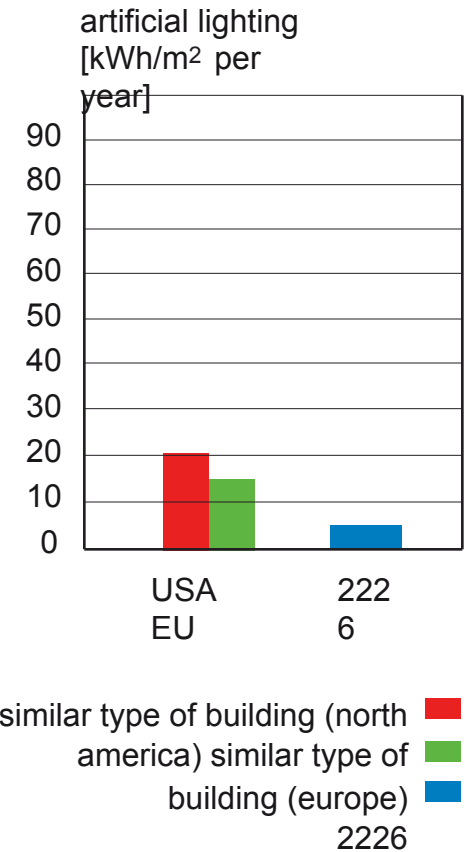
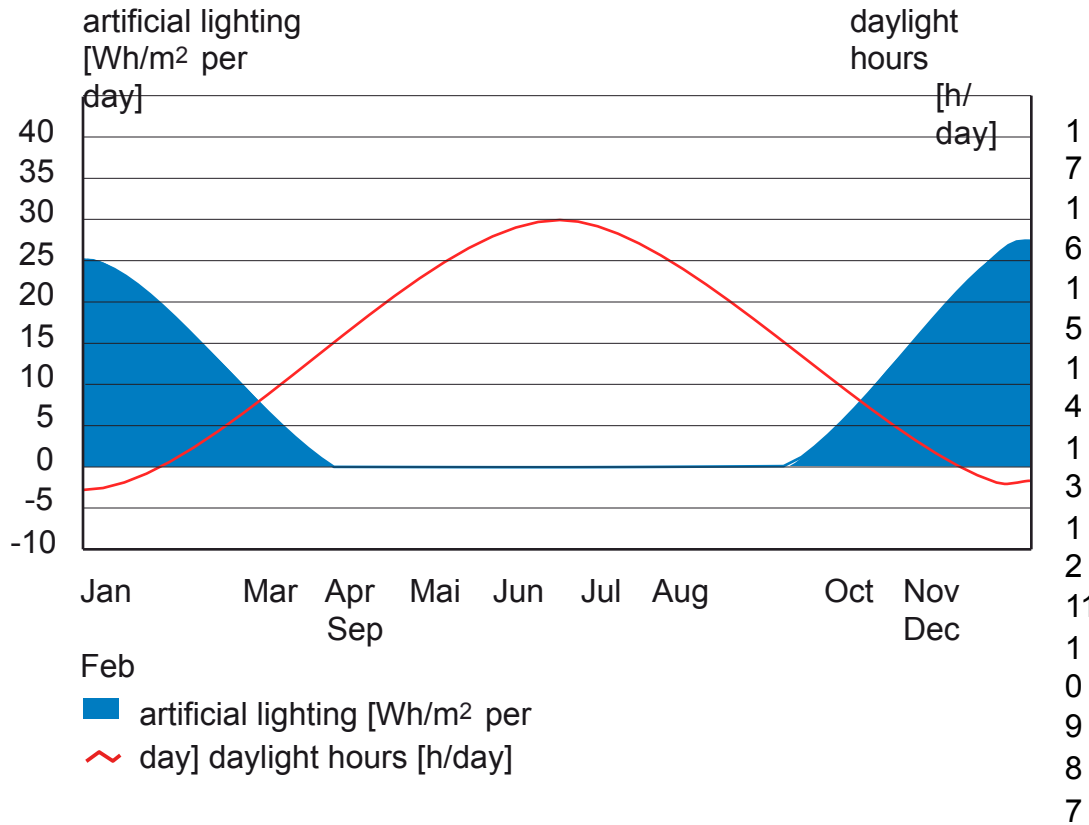
Self-Determination
5 Star Hotel
Humidity 40%
Daylight
Natural Fresh Air
Odor

~ internal temperature      ■ comfortable temperature range  
~ [°C] external temperature [°C]

# Control by Software



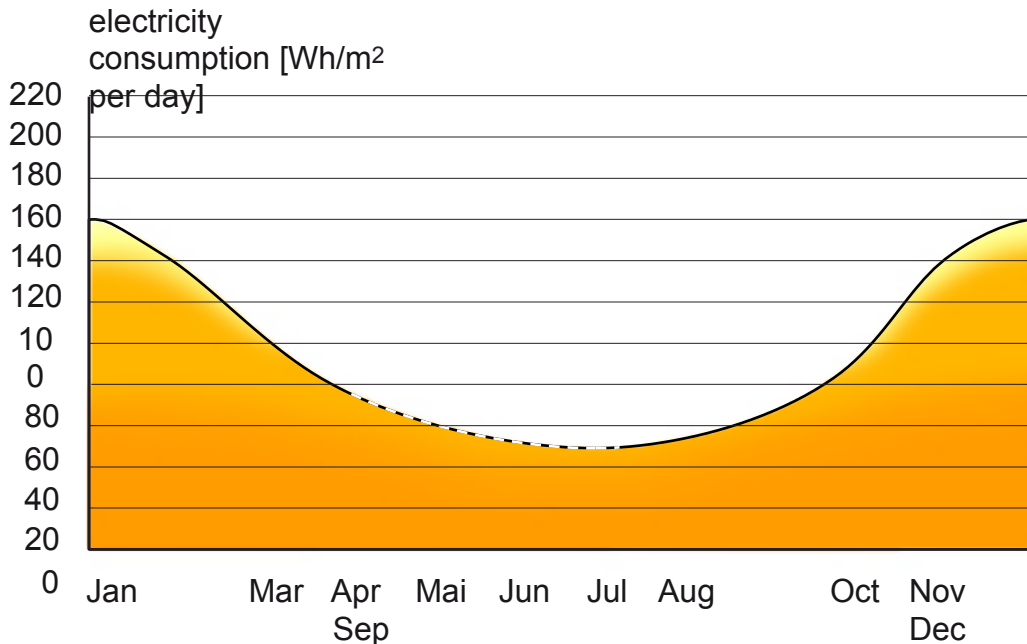
# Artificial Lighting vs. Daylight Hours





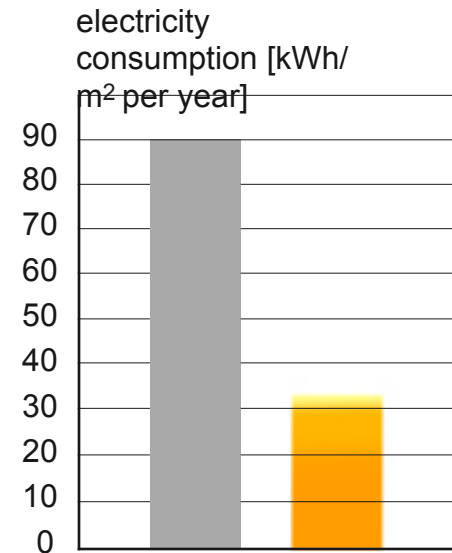


# Overall Consumption of Electricity



Feb

- operation energy (elevator, server, outdoorlight, coffee machine, refrigerator, plotter, copier, artpieces, etc...)
- ec cause to daylight diversification (incl. work at night, dysregulation)
- ec cause to CO<sub>2</sub> and temperature controll

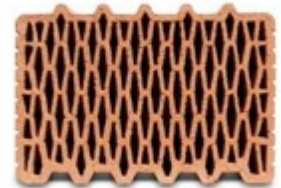
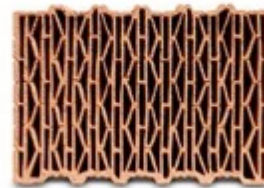
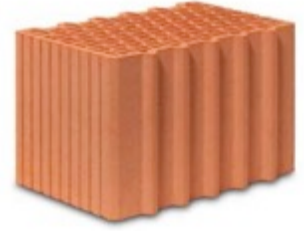


- ec [Wh/m<sup>2</sup> per day] measuring VKW ( 08/13 - 03/14 ) ~
- ec [Wh/m<sup>2</sup> per day] calculated ( Apr - Jul ) - -
- similar type of building ■

## The Ceiling



# The Brick



POROTHERM 38 H.i  
N+F

POROTHERM 38  
N+F

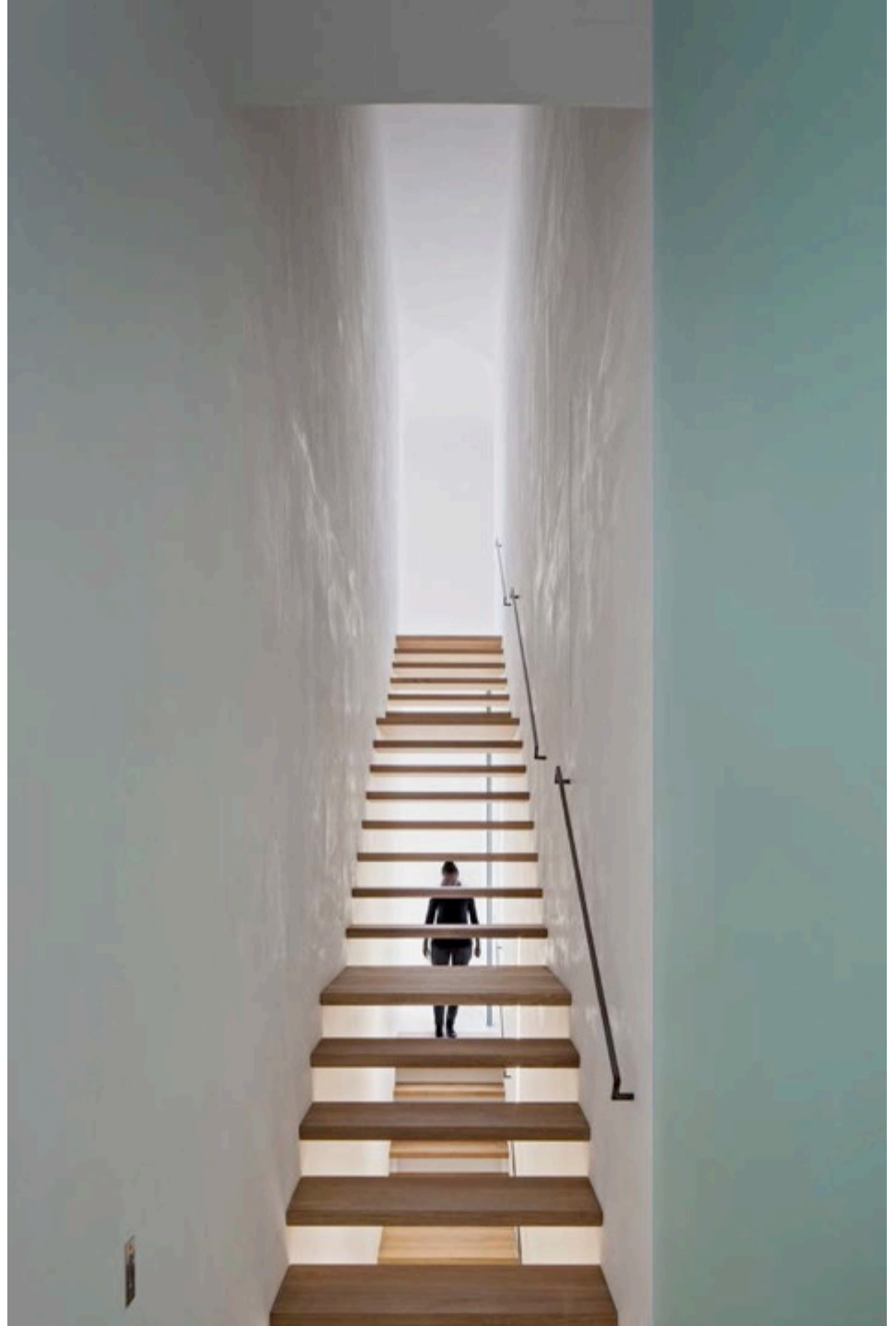


## The Finery



















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