

Table S1. Principles for the temperature exceedance calculation.

- Mezzanine
- Glass percentage facade: 80 [%]
- U -value glazing: 0.94 [W/(m².K)]
- G - value glazing: 0.26 [-]
- G - value glazing + sun protection: 0.14 [-] (sun blind slats in the cavity)
- LT value glazing: 0.60 [-]
- Person occupancy: 1 person at 80 [W/10 m²]
- Installed lighting power: 10 [W/m²]
- Heat emission equipment: 10 [W/m²]
- Plenum space function: negative pressure
- Infiltration rate: 0.3 [m³/(h.m³)]
- Mechanical ventilation rate: 2.7 [m³/(h.m³)]
- Minimum inlet temperature: 16.0 [°C]
- Fan and duct heating: 1.5 [°C]
- Inlet temperature: outside temperature
- Working hours: 09:00 to 17:00
- Minimum indoor temperature: 22.0 [°C] during working hours
- Minimum indoor temperature: 15.0 [°C] after working hours
- Blinds operated during working hours: if $Q_{\text{transmitted sun}} \geq 120$ [W/m²]
- No sun blind after working hours
- Additional ventilation through facade (during working hours): if $T_i > 24$ °C, $T_u > 16$ °C, $(T_i - T_u) > 1$ K
- Additional ventilation through facade (after working hours): none

- Net opening glass outer side of the facade: 0.2 [m²/m]
- Net opening glass inner side of the facade: 2.08[m²/m]
- Type of opening outer side of the facade: flaps (opening angle: 15 degrees)
- Type of opening inner side of the facade: tilt window (opening angle: 15 degrees)
- Surface gap under door: 0.005 [m²]
- Night/weekend ventilation: none
- Inner walls: Metal Stud
- Floor construction (top-bottom):
 - project carpet
 - 36 mm plasterboard (incl. water tubes)
 - 50 mm screed
 - 200 mm concrete floor
 - Plenum space
 - 50 mm mineral wool
 - 18 mm plasterboard (incl. water tubes)