

Passivhaus Member Exclusive: Overheating

Date: 26 February 2021

Time: 11:00-12:30

Location: Online

Cost: FULLY BOOKED Free to attend - PHT member exclusive



FULLY BOOKED

The event will be recorded and made available to all members shortly after the event has completed.

PHT Member exclusive event to discuss the latest tools and developments on reducing overheating risks and ensuring summer comfort in Passivhaus buildings.

So, we need some headroom ...

Key Indicators - how much headroom do we have?

- 1 Percentage time above 25°C
- 2 Solar gain limit
- 3 Glazing area as a proportion of TFA
- 4 Glazing Aperture
- 5 Heating Load vs Heating Demand
- 6 Domestic Hot Water losses
- 7 Daytime air change rate from windows
- 8 Nighttime air change rate from windows
- 9 Daily Temperature Stroke
- 10 Thermal Mass

Key Indicators

Too much glazing or too little shading

- 100% glazing ratio
- 100% shading ratio
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- 100% glazing ratio
- 100% shading ratio

Internal gains too high

- 100% internal gains
- 100% internal gains
- 100% internal gains

Over reliance on window ventilation

- 100% window ventilation
- 100% window ventilation

Insufficient cooling for thermal mass

- 100% cooling
- 100% cooling

Stress Tests

- 1 Reduce window daytime ventilation ratio to 20%
- 2 Reduce window nighttime ventilation ratio to 20%
- 3 Remove all temporary shading
- 4 Increase occupancy to 30% of floor area
- 5 Use fewer climate data (3°C) and/or less biased model

PHT MEMBER EXCLUSIVE

FULLY BOOKED

Email invites will be sent shortly to all members of the Trust. More details coming soon. If you would like to get involved, learn more about how to become a member and the many benefits [here](#).

Keep engaged with the conversation. Follow [@PassivhausTrust](#) #PHTmembers

Further Information

Designing for Summer Comfort in the UK, Passivhaus Trust, 2015

Summer comfort in a warming climate - John Palmer, 2020 UK Passivhaus Conference presentation

Overheating and unexpected outcomes from PHPP - Passivhaus Homes, 2020 UK Passivhaus Conference presentation