

Indoor Thermal Resilience in Irish Schools, Office and Healthcare Buildings

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SUMMARY

There is an increasing need to consider and evaluate the effect of existing ambient warmth on current low energy buildings to determine if current guidelines and standards are robust or resilient in the face of projected future warming. Thus far there is a lack of empirical evidence from low energy non-residential spaces where resilience metrics are seldom explored. The purpose of this presentation is to present the status on overheating from over 30 different low energy non-residential buildings located in Ireland. The dataset includes data schools, office and educational buildings and healthcare buildings that were monitored over at least one cooling season between 2021 and 2023. The work will consider not only traditional overheating metrics but will also consider this overheating in the context of resilience metrics that have been adopted from previous work. The outcomes are expected to feed back into the future of non-residential building design in Ireland.

KEYWORDS

Overheating, data, low energy buildings, resilience

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