

Update on Resilient cooling and indicators from the IEA EBC Annex 80

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1 INTRODUCTION

The growing challenges of climate change, urbanization, and increased energy demand have underscored the critical need for sustainable and resilient cooling solutions in buildings. In response to this pressing global issue, the International Energy Agency's Energy in Buildings and Communities (IEA EBC) Annex 80 was initiated to address the multifaceted aspects of resilient cooling in the built environment. Annex 80 seeks to provide valuable insights into resilient cooling systems and their indicators, offering a pathway towards a more sustainable and adaptable future.

2 COOLING STRATEGIES

IEA EBC Annex 80 – Resilient Cooling of Buildings – has identified 16 cooling strategies that may contribute significantly to the resilience of buildings against heatwaves. Ventilative Cooling is one of them.

In the Annex deliverables these 16 strategies are described in well-structured Technology Profiles.

In the work of Annex 80, resilience has been defined as the qualities of;

- **Resistance** – The ability of a building to keep normal performance even under disruptive events.
- **Robustness** – The degree of a building's ability to keep emergency performance under disruptive events.
- **Recovery** – The character of a building in getting back to normal performance after a disruptive event.

The contribution in the Topical session will pre-present the Technological Profiles, namely the one of Ventilative Cooling, including the contributions of ventilative cooling to the resilience of a building.

3 ACKNOWLEDGEMENTS

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