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Modeling and experimental validation of an algorithm for simulation of hysteresis effects in phase change materials for building components.

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Highlights

- An algorithm for the simulation of thermal hysteresis in PCM in *EnergyPlus*TM is presented
- The algorithm is validated by comparison with experimental data.
- Simulations and experimental validation with different codes, with and without PCM hysteresis are presented.
- Simulation reliability is sometimes limited, especially for incomplete phase change process
- Conventional characterisation techniques might be insufficient for input data for simulation

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