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Temperature stabilization using salt hydrate storage system to achieve thermal comfort in prefabricated wooden houses

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Highlights

- A phase change material (PCM) comprising salt hydrates were placed in well-sealed impermeable bags.
- The PCM stabilized the temperature in the prefabricated wooden house, achieving thermal comfort.
- Back-ventilated wall integration is the best position for thermal coupling to the inner room.
- The results of the temperature simulation showed that use of the PCM allows energy saving.

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