Passive indoor conditioning of supermarket with wood

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Aim, material and methods

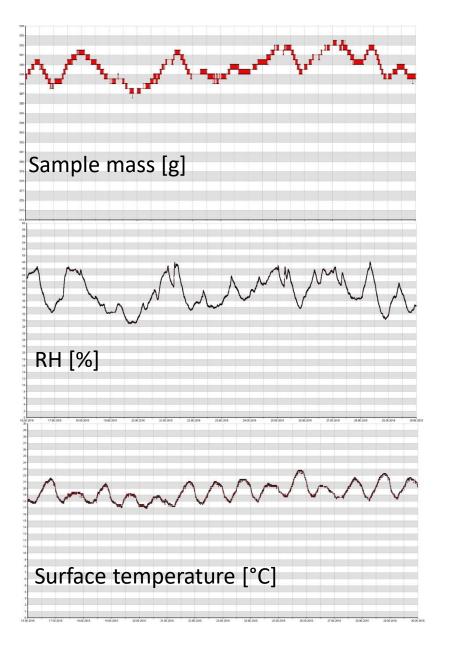
- Identify effect of untreated wood interior on indoor environment in a supermarked
- Supermarked built according to DIN 3701 (2012)
- Sensors to measure CO₂, T, RH, amount of inflow air, weight change and surface temperature of wooden samples





Results

- Amount of water absorbed by wooden interior equals 24l/ day
- → Desorption energy equivalent to 17 kWh cooling energy per day
- Clear influence of indoor conditioning effect during summer operation
- Adaptation of ventilation system necessary to obtain maximum effect of indoor conditioning by wood





See you at the poster!

For detailed questions on other results and activities in this field of research, please contact:



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