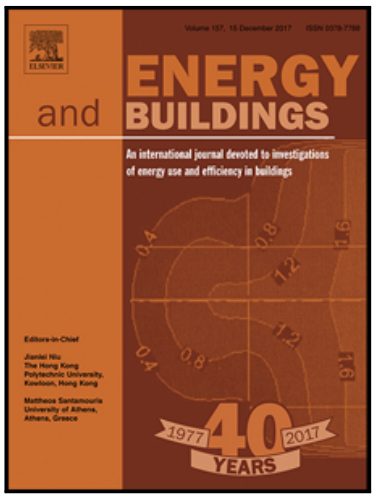

Improving the quality of building spaces that are planned mainly on loads rather than residents: Human comfort and energy savings for warehouses

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Highlights

- A study on building spaces emphasizing work efficiency only is proposed to improve both thermal comfort and energy efficiency.
- New strategies are required to improve the quality of warehouses in keeping with growth of warehouse industry.
- The FIS and ANN algorithms are developed to optimize amount of air and its temperature for space heating and cooling.
- A real-time detection of thermal comfort modifies the ANN signals to mitigate increases in thermal dissatisfaction.
- A proposed model improves thermal comfort and energy use intensity in warehouses by 4.4% and 6.4%, respectively.