

Accepted Manuscript

The potential impact of low thermal transmittance construction on the European design guidelines of residential buildings

Eugénio Rodrigues, Marco S. Fernandes, Nelson Soares, Álvaro Gomes, Adélio Rodrigues Gaspar, José J. Costa

PII: S0378-7788(18)31050-8
DOI: <https://doi.org/10.1016/j.enbuild.2018.08.009>
Reference: ENB 8745



To appear in: *Energy & Buildings*

Received date: 6 April 2018
Revised date: 28 June 2018
Accepted date: 5 August 2018

Please cite this article as: Eugénio Rodrigues, Marco S. Fernandes, Nelson Soares, Álvaro Gomes, Adélio Rodrigues Gaspar, José J. Costa, The potential impact of low thermal transmittance construction on the European design guidelines of residential buildings, *Energy & Buildings* (2018), doi: <https://doi.org/10.1016/j.enbuild.2018.08.009>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- The U -value impact on the thermal performance of residential buildings was analyzed
- 96 000 buildings were randomly generated and evaluated using dynamic simulation
- Six geometry-based indexes were correlated with the buildings performance
- Low U -values can increase energy consumption in warm and moderate climates
- Adequate U -values allow designers to explore new building forms and window designs

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/11030182>

Download Persian Version:

<https://daneshyari.com/article/11030182>

[Daneshyari.com](https://daneshyari.com)