## **Accepted Manuscript**

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R. Escandón, S. Silvester, T. Konstantinou

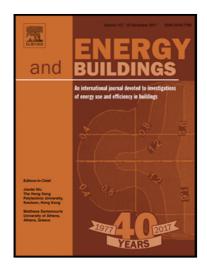
PII: S0378-7788(17)33835-5

DOI: 10.1016/j.enbuild.2018.03.079

Reference: ENB 8465

To appear in: Energy & Buildings

Received date: 24 November 2017 Revised date: 21 February 2018 Accepted date: 30 March 2018



Please cite this article as: R. Escandón, S. Silvester, T. Konstantinou, Evaluating the environmental adaptability of a nearly zero energy retrofitting strategy designed for Dutch housing stock to a Mediterranean climate, *Energy & Buildings* (2018), doi: 10.1016/j.enbuild.2018.03.079

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## ACCEPTED MANUSCRIPT

Evaluating the environmental adaptability of a nearly zero energy retrofitting strategy designed for Dutch housing stock to a Mediterranean climate.

R. Escandón<sup>1\*</sup>, S. Silvester<sup>2</sup> & T. Konstantinou<sup>3</sup>

<sup>1</sup> Instituto Universitario de Arquitectura y Ciencias de la Construcción, Escuela Técnica Superior de

Arquitectura, Universidad de Sevilla, Av. de Reina Mercedes 2, Seville (41012), Spain.

<sup>2</sup> Faculty of Industrial Design Engineering, Delft University of Technology, NL-2628 CE Delft, The

Netherlands.

<sup>3</sup> Faculty of Architecture and the Built Environment, Delft University of Technology, Julianalaan 134,

2628 BL Delft, The Netherlands.

\* Corresponding author e-mail: rescandon@us.es

Abstract

Users' behaviour and indoor climate are two leading aspects that must be taken into account if

we want the retrofitting of the housing stock to contribute to CO<sub>2</sub> reduction, comfort

improvement and reduction of living costs. The integrated facade module evaluated in this

paper, which constitutes an approach to zero energy renovation, includes a preliminary study for

the identification of target occupants and their characteristics and requirements that will guide

the design decisions. The proposed strategy primarily focuses on the case of social rental multi-

family housing stock in the Netherlands, but should provide insights in the application of the

concept in Europe. This paper presents the analysis of the adaptability of this solution to the

Mediterranean climate, taking into account the specific characteristics of the occupants of this

climatic zone.

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