## **Accepted Manuscript**

Cool Roofs: High Tech Low Cost solution for energy efficiency and thermal comfort in low rise low income houses in high solar radiation countries

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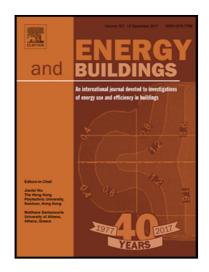
PII: \$0378-7788(17)33743-X DOI: 10.1016/j.enbuild.2018.07.005

Reference: ENB 8674

To appear in: Energy & Buildings

Received date: 14 November 2017

Revised date: 16 May 2018 Accepted date: 3 July 2018



Please cite this article as: Maria Kolokotroni, Emmanuel Shittu, Thiago Santos, Lukasz Ramowski, Adeline Mollard, Kirkland Rowe, Earle Wilson, João Pereira de Brito Filho, Divine Novieto, Cool Roofs: High Tech Low Cost solution for energy efficiency and thermal comfort in low rise low income houses in high solar radiation countries, *Energy & Buildings* (2018), doi: 10.1016/j.enbuild.2018.07.005

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#### ACCEPTED MANUSCRIPT

### Highlights

- Cool roofs can improve thermal comfort of low income households near the equator
- Experimental results in Jamaica confirm improvements
- Energy models were developed for Jamaica, Ghana and Recife-Brazil
- Internal ceiling surface temperatures are reduced on average by 3.2 5.5 °C

Cooling demand reduction is similar at 190 kWh/m<sup>2</sup>/year

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