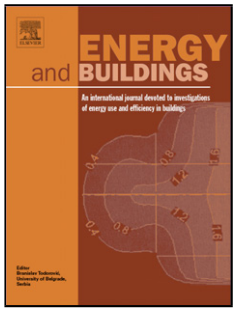

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PII: S0378-7788(17)30059-2
DOI: http://dx.doi.org/doi:10.1016/j.enbuild.2017.01.017
Reference: ENB 7291

To appear in: *ENB*

Received date: 13-6-2016
Revised date: 15-11-2016
Accepted date: 7-1-2017

Please cite this article as: Francesca Stazi, Federica Naspi, Giulia Ulpiani, Costanzo Di Perna, Indoor air quality and thermal comfort optimization in classrooms developing an automatic system for windows opening and closing., Energy and Buildings http://dx.doi.org/10.1016/j.enbuild.2017.01.017

Title

Indoor air quality and thermal comfort optimization in classrooms developing an automatic system for windows opening and closing.

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Highlights

- Environmental parameters triggering users' actions on windows were assessed
- An automatic system for windows opening was developed to achieve IEQ in a classroom
- The system was driven by an adjusted version of Humphreys' adaptive algorithm
- The algorithm was adapted including CO_2 concentration and reducing the dead band
- The system guarantees low CO_2 levels, thermal comfort and users' satisfaction