## **Accepted Manuscript**

Title: Determination of optimum insulation thickness for building walls with moisture transfer in hot summer and cold winter zone of China

Author: Xiangwei Liu Youming Chen Hua Ge Paul Fazio Guojie Chen Xingguo Guo

PII: \$0378-7788(15)30335-2

DOI: http://dx.doi.org/doi:10.1016/j.enbuild.2015.10.021

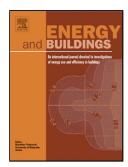
Reference: ENB 6215

To appear in: *ENB* 

Received date: 8-7-2015 Revised date: 13-9-2015 Accepted date: 10-10-2015

Please cite this article as: X. Liu, Y. Chen, H. Ge, P. Fazio, G. Chen, X. Guo, Determination of optimum insulation thickness for building walls with moisture transfer in hot summer and cold winter zone of China, <i>Energy and Buildings</i> (2015), http://dx.doi.org/10.1016/j.enbuild.2015.10.021

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.



## ACCEPTED MANUSCRIPT

Determination of optimum insulation thickness for building walls with moisture

2	transfer in hot summer and cold winter zone of China
3	Xiangwei Liu <sup>a</sup> , Youming Chen <sup>a, *</sup> , Hua Ge <sup>b</sup> , Paul Fazio <sup>b</sup> , Guojie Chen <sup>a, c</sup> , Xingguo
4	Guo <sup>d</sup>
5	a College of Civil Engineering, Hunan University, Yuelushan, Changsha, Hunan,
6	China 410082
7	b Centre for Zero-Energy Building Studies, Department of Building, Civil and
8	Environment Engineering, Concordia University, 1455 de Maisonneuve Boulevard
9	West, Montreal, Quebec, Canada H3G 1M8
10	c College of Mechanical Engineering, University of South China, 28 Changsheng
1	South Road, Hengyang, China 421001
12	d School of Civil Engineering and Architecture, Nanchang University, 999 Xuefu
13	Road, Nanchang, China 330031
14	
15	a* Corresponding author: Youming Chen,
16	Tel/ Fax: +86-731-88823515, E-mail: <u>ymchen@hnu.edu.cn</u>
17	
18	Abstract:
19	The buildings are exposed to the hot-humid climate with high temperature and
20	humidity in hot summer and cold winter zone of China. Moisture transfer and
21	accumulation within exterior walls have notable effect on the cooling and heating
22	transmission load. Finally, it will influence the thickness of insulation. In this paper, a

1

## Download English Version:

## https://daneshyari.com/en/article/6731062

Download Persian Version:

https://daneshyari.com/article/6731062

<u>Daneshyari.com</u>