

Buildair conference Oct. 2009 Berlin

Treatment of envelope airtightness in the EPB-regulations: some results of surveys of the IEE-ASIEPI project.

A. Tilmans, D. Van Orshoven, P. D'Herdt, P. Wouters¹
F.-R. Carrié, G. Guyot²
M.E. Spiekman³

¹ *BBRI, Belgian Building Research Institute,
Avenue P. Holoffe 21, BE-1342 Limelette, Belgium*
Tel ++ 32 2 655 77 28 Fax ++ 32 2 653 07 23 E-mail: Antoine.Tilmans@bbri.be

² *CETE de Lyon, Centre d'Études Techniques de l'Équipement de Lyon
46 rue St Théobald, BP 128, 38081 L'Isle d'Abeau Cedex, France*
Tel ++33 4 74 27 51 61 Fax ++33 4 74 27 52 52
E-mail: Remi.Carrie@developpement-durable.gouv.fr

³ *TNO, Netherlands Organisation for Applied Scientific Research
Van Mourik Broekmanweg 6, NL 2628 XE Delft, Netherlands*
Tel ++ 31 15 276 35 15 Fax ++ 31 15 276 3023 E-mail: marleen.spiekman@tno.nl

ABSTRACT

One of the topics studied in the European ASIEPI project (www.asiepi.eu) is the way envelope airtightness is dealt with in the EPB-regulations of the Member States. To this end, a number of surveys have been made among the participating countries. Also a quantitative comparison on a sample building has been performed. The results of this study are used in the development of an instrument to compare the energy performance requirement levels among the Member States. The results illustrate that the different national EPB-calculation methods show different tendencies, revealing sometimes diverging underlying philosophies. Notably the concept and numeric figures of a default value are different. As well as the treatment of very good airtightness: in some methods the stimulus to do better than a certain threshold value becomes very small or is nil. In other countries the incentive remains proportional all the way to the limit value of perfect air tightness. All these observations will be illustrated and explained in the paper.