

A Study on the the calculation of the linear thermal transmittance of wall-window joint based on infrared thermography

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Abstract

This paper is a study on a quantitative evaluation of linear thermal transmittance of the thermal bridge through window-wall joint based on infrared thermography. The purpose of the work is to check the possibility of deducing the linear thermal transmittance from the thermal images. Therefore, this study presents a methodology to match measured thermal images and simulation results. By iteratively finding out the adequate joint thermal properties in simulation using the reference thermal images, the obtained simulated case can be used to derive the linear thermal transmittance of wall-window joint under steady-state calculation.