Infrared Thermography Applications for Building Investigation

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Abstract : Infrared thermography is a modern non-destructive measuring method for the examination of redeveloped and non-renovated buildings. Infrared cameras provide a means for temperature measurement in building constructions from the inside, as well as from the outside. Thus, heat bridges can be detected. It has been shown that infrared thermography is applicable for insulation inspection, identifying air leakage and heat losses sources, finding the exact position of heating tubes or for discovering the reasons why mold, moisture is growing in a particular area, and it is also used in conservation field to detect hidden characteristics, degradations of building structures. The paper gives a brief description of the theoretical background of infrared thermography.

Keywords: infrared thermography, examination of buildings, emissivity, heat losses sources

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