THE USE OF INFRARED THERMOGRAPHY TO STUDY ENGINEERED CEMENTITIOUS COMPOSITES

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Summary. In general in civil construction, non-destructive testing using infrared thermography have basically been used in situations that involve electrical conduits or mechanical wear that normally generate heat. In the specific case of materials, its application to metal study is well documented, however there are few works in the literature studying thermography on concrete, and usually these are limited to utilizing thermography to inspect cracks and locate water infiltration in prefabricated concrete structures. In this way, this work evaluates the active infrared thermography method’s potential to detect changes in engineering cementitious composites macrostructure as well to estimate its thermal properties. The results show that thermography is able to detect changes in macrostructure and sensitive to temperature differences of the constituents of concrete.