

Classification of Opaque Exterior Walls of Buildings from a Sustainable Point of View

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Abstract : The envelope is one of the most important elements when one analyzes the operation of the building in terms of sustainability. Taking this into consideration, this research focuses on setting a classification system of the envelopes opaque systems, crossing the knowledge and parameters of construction systems with requirements in terms of sustainability that they may have, to have a better understanding of how these systems work with respect to their sustainable contribution to the building. Therefore, this paper evaluates the importance of the envelope design on the building sustainability. It analyses the parameters that make the construction systems behave differently in terms of sustainability. At the same time it explains the classification process generated from this analysis that results in a classification where all opaque vertical envelope construction systems enter.

Keywords : sustainable, exterior walls, envelope, facades, construction systems, energy efficiency

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