

Review Article: ETFE: New Sustainable Material

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Abstract

ETFE, a synthetic fluoropolymer, has been widely used in the construction industry for a few decades and is gaining more popularity due to its versatility. This article aims to review the applications of ETFE foils in buildings as a sustainable construction material. According to literature reviews found that using of ETFE in construction can reduce the amount of raw material used, reduce building time, and reduce building costs. ETFE cushions also provide highly light-transmittance, less weight and more thermal insulation compared to glazed roofing. Examples of built projects and applications of ETFE foils are presented to show the potentials and challenges in order to improve the environmental performance of a building which may reduce the overall energy consumption.

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