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Durable Pultruded Composites: A Myth or Reality?

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Extended Abstract

Several decades ago, composites were introduced to the construction industry with claims of superior long-term performance compared to traditional materials such as steel, timber, masonry, and concrete. While composites do offer better durability if designed, fabricated, maintained, and repaired correctly, concerns have been raised regarding their ability to withstand the test of time. Over the last two decades, failures of composite structures have been reported, primarily due to durability issues. This lecture investigates the reality of durable pultruded composites by examining previous studies, analyzing a recent case study, and discussing critical factors that influence their durability. The lecture concludes with an assessment of the current state of the industry and future research directions. The findings of this study offer valuable insights for engineers, architects, and construction professionals who are contemplating using pultruded composites in their projects.