

Public Abstract

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Department:Mechanical & Aerospace Engineering

Degree:MS

Title:FAILURE OF TRANSPARENT POLYMER COMPOSITE
LAMINATED GLASS PANELS UNDER IMPACT LOADING

Historically, windows and other facilities during hurricanes have experienced significant damage exposing the occupants and the building envelope to uncomfortable and dangerous conditions. A new approach to the design of window glass panels with hurricane damage resistance has been carried out in this research work. This has been achieved by developing transparent laminated glass panels with a strong interlayer in between them. The interlayer provides a higher strength, stiffness and damage resistance. The panels have been evaluated by conducting different tests under hurricane conditions.