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Wood Framing Roof Support During Hurricane

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Abstract : Failures of the wood framing structures are among the most common types of wind damage in densely populated regions. Many researchers have recently focused on finding a solution to save wood-framed buildings during tornadoes and hurricanes. Previous studies have shown wood-framed buildings are under uplift during the hurricane, which causes the failure in the roof. Numerous recent studies have identified that bracing, connection and fasteners have a large impact on the resilience of wood-framed buildings. In this paper, the common failures in wood-framed buildings are reviewed, and the bracing and connection to prevent damage under hurricanes are presented.

Keywords : roof failures. residential and commercial structures, hurricane, tornadoes, building codes
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