



Mid-Rise Wood Constructions: Investigation of Water Penetration Through Cladding and Deficiencies

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Material: Light Frame (Lumber+Panels)

Application: Wood Building Systems

Topic: Moisture
Wind

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Research Status: Complete

Summary:

The objectives of this work include the following:

- Conduct a series of water entry tests over a wide range of simulated wind pressure and WDR loads to measure the water entry rate passing the cladding through deficiencies located in a fibre cement cladding system; A1-100035-03.3 2
- Use the test results to develop correlations for determining the percentage of water entry rate through deficiencies as a function of pressure difference across the assembly and water spray rate onto the cladding surface;
- Analyze the water entry data for the NBC stucco cladding for high wind pressures obtained in a previous study (see [3] for more details) and applicable for mid-rise and taller buildings and thereafter develop a correlation to determine the percentage of water entry rate as a function of wind pressure and WDR for absorptive claddings.

Online Access: Free

Resource Link

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