WOOD IN HIGH WINDS & EARTHQUAKES

WOOD STRUCTURES BEND AND FLEX

WOOD CONSTRUCTION IS WIND-RESISTIVE

FEMA finds wood-frame dwellings stand up to winds well over 100 MPH.

HURRICANE CHARLEY

was the strongest recorded tropical storm in Florida’s history. After the storm there was no observed structural damage to wood-frame buildings that conformed to the 2001 Florida building code standards.

“The new wood-frame houses built to code earned high marks for structural integrity, even in areas where 3-second wind gusts hit 150 MPH.”

FEDERAL EMERGENCY MANAGEMENT AGENCY

WOOD CONSTRUCTION IS SEISMIC-RESISTIVE

In California, 80% of the 400 million square feet of public schools are wood-frame. Following the NORTHridge EARTHQUAKE, most of the damage that caused school closures was repairable and not life threatening. This was expected because:

“Wood-frame design ... is very resistant to damage regardless of the date of construction.”

EQUE SUMMARY REPORT, NORTHridge EARTHQUAKE

MASS TIMBER’S LIGHTWEIGHT ADVANTAGE

Forces in an earthquake are proportional to the structure’s weight. Because mass timber is substantially lighter than steel or concrete, it has inherent advantages in wind and seismic events.

Research and building code development have proven that mass timber structures can meet or exceed the most demanding earthquake and seismic requirements.

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MULTI-STOREY PERFORMANCE

A 6-storey wood building standing on the world’s largest shake table in Japan, resisted a major Maximum Considered Earthquake—or a 1 in 2,500-year earthquake—with minimal damage.

RESEARCH & RESOURCES

Get the latest wind and seismic information and research:

- Think Wood Research Library
- Insurance Institute for Business and Home Safety Earthquake Testing
- US Geological Survey Earthquake Catalog
- American Wood Council: Code Conforming Wood Design
- WoodWorks: Designing for Wind Resistance, Designing for Earthquakes

Learn more about how wood is the natural choice for resilient buildings. Visit ThinkWood.com/resilient.