WOOD MEASURES UP

Building codes protect health, safety and welfare by creating safe buildings and communities. The International Building Code allows the use of wood in a wide range of building types, including those taller than 5 stories.

Wood-frame assemblies can resist fire up to 2 hours, if the right materials and construction methods are used.

In a fire test, a 7 inch thick wall of cross laminated timber (CLT) lasted 3 hours and 6 minutes in a fire—over 1 hour longer than code requirements.

PROTECTING LIFE & PROPERTY

Fire departments are required to control fires in non-sprinklered buildings almost 3 times more often. Fires in sprinkler-protected buildings were smaller and contained to one room 96.2% of the time.

Fire safety and protection can include:
- Firewalls
- Gypsum encapsulation
- Sprinklers
- Fire detectors and evacuation plans

WOOD CHARS & PROTECTS

When wood is exposed to fire, the outer layer burns and creates a protective charring layer that acts as insulation and delays the onset of heating for the unheated, or cold layer below. This process of charring allows timber elements to achieve a level of inherent fire resistance.

RESEARCH & RESOURCES

Get the latest fire information and research:
- Think Wood Research Library
- Underwriters Laboratories (UL) Fire Resistance Directory
- National Design Specification® (NDS®) for Wood Construction.® Chapter 16 (IBC 722.1)
- US Gypsum Fire Resistance Design Manual GA-600 (IBC 721.1)
- Intertek Directory of Listed Products

Find these links and learn more about how wood construction creates buildings that endure. Visit ThinkWood.com/fire