

Glossary of Key Terms

Bio-Based Building Materials: Risks, Benefits & Compliance

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- **Bio-Based Building Materials:** Materials derived from natural, renewable resources such as plants, fungi, and agricultural byproducts.
- **Carbon Sequestration:** The process by which materials, particularly growing plants like trees and hemp, absorb and store carbon dioxide from the atmosphere.
- **Hempcrete:** A composite material made from hemp fibres (shiv), lime, and water, used primarily for insulation and non-load-bearing walls.
- **Mycelium-Based Materials:** Building materials created from cultivated fungal networks, often used for insulation, panels, and non-structural elements.
- **National Construction Code (NCC):** Australia's primary technical document for building and plumbing design and construction.
- **Deemed-to-Satisfy (DTS):** A pathway under the NCC where materials or construction methods are considered compliant if they meet predefined standards or are listed in referenced documents.
- **Performance Solution:** An alternative compliance pathway under the NCC used when a material or method does not fit the DTS framework, requiring documented evidence to prove it meets or exceeds the required performance.
- **CodeMark Certification:** A voluntary, third-party certification scheme in Australia and New Zealand that certifies building materials as compliant with the NCC.
- **WaterMark Certification:** A mandatory certification scheme for plumbing and drainage products in Australia, ensuring they meet safety, quality, and performance requirements.

- **NatHERS (Nationwide House Energy Rating Scheme):** A rating system used in Australia to assess the thermal performance of residential buildings.
- **Whole-of-Home Efficiency:** An approach under the NCC that considers the energy efficiency of a home as a complete system, including the building envelope, services, and renewable energy sources.
- **Fire Resistance Level (FRL):** A measure of a building element's resistance to fire, expressed in minutes for structural adequacy, integrity, and insulation (e.g., 60/60/60).
- **Cross-Laminated Timber (CLT):** An engineered wood product consisting of layers of timber boards glued together at right angles, used as a structural element in buildings.
- **Laminated Veneer Lumber (LVL):** An engineered wood product made from thin layers of wood veneers glued together, used for structural beams, headers, and rafters.
- **Glulam (Glued Laminated Timber):** An engineered wood product made by gluing together individual laminations of dimensional lumber, used for structural beams and arches.
- **Circular Economy:** An economic model that aims to keep resources in use for as long as possible, extracting the maximum value from them whilst in use, then recovering and regenerating products and materials at the end of each service life.