



**BUILDING THE FUTURE**

## **BUY MONTANA WOOD GLOSSARY**

### **BEAM**

Large dimensional lumber used in horizontal applications.

### **BIOENERGY**

Renewable energy from natural, biological sources.

### **BIOMASS**

Living or recently dead organisms and any byproducts of living things. Living biomass takes in carbon during growth and releases it when used for energy, resulting in a carbon-neutral cycle that does not increase atmospheric concentration of greenhouse gases.

### **BIOMASS FEEDSTOCKS**

Locally generated biomass. Examples of feedstocks include: forestry materials such as logging slash, bark, sawdust or other milling waste; agricultural waste such as wheat straw, or corn leaves, stems and cobs; and woody energy crops switchgrass, miscanthus, non-food sorghum, willow, and hybrid poplar.

### **BIOPHILIA**

A term that refers to the phenomenon in which humans feel more relaxed in a natural environment. A growing body of research shows visible wood in a building has positive effects on health, well-being, and productivity.

### **BIOPHILIC DESIGN**

The incorporation of natural elements in the built environment to improve human health and reduce stress response.

### **CERTIFIED FOREST**

A certified forest is enrolled in a voluntary system that promotes sustainable forest management assessed by an independent third party.

### **CROSS-LAMINATED TIMBER**

Fire-resistant prefabricated engineered wood panels capable of replacing concrete and steel in floors, walls and ceilings. Made of dimensional lumber, which may be produced by smaller trees. Several layers of kiln-dried lumber are stacked in alternating directions and bonded with structural adhesives to form solid rectangular panels. Structural and dimensional stability is increased by the orthogonal bonding method.

Panels range in size and can be as big as about 12 feet by 60 feet. A CLT panel has at least 3 layers and may have 7 or more. Custom cutting by computer in prefabricated patterns reduces construction waste and increases the speed of building construction.

## **DBH**

Diameter at breast height is the standard for measuring trees' diameter. DBH refers to the tree diameter measured at 4.5 feet above the ground.

## **ENGINEERED WOOD PRODUCTS**

Structural wood products manufactured by bonding together wood strands, veneers, lumber or other forms of wood fiber to produce a larger composite unit with superior performance characteristics. These high performance building components achieve predictable to standardized specifications with the efficient use of natural resources. (Learn more at [apawood.org](http://apawood.org).)

## **FORESTER**

Foresters protect, conserve and manage forests and forest resources for public and private use. The goal of the forester is the sustainable management of a healthy forest of growing trees. These professionals may serve a variety of objectives including conservation, biodiversity, tree harvest, outdoor recreation, water quality, carbon sequestration and reduction of wildfire risk.

The DNRC employs numerous foresters across the state, including state trust land foresters, good neighbor foresters, and service foresters. These men and women help manage our public forests and provide expertise to private landowners.

Sixteen service foresters are employed by the Montana Department of Natural Resources and Conservation to provide expertise and assistance to private timberland owners, communities and educators. They can provide forest related information and resources to the public for various topics, such as soils, water, invasive species or wildlife management.

## **FORESTRY**

Forestry is the science, art and practice of protecting, conserving and managing forests. The field of forestry is crucial for the environment as well as for communities and economic benefits.

Over the past century, forestry has evolved from practices that focused on timber values to approaches deeply rooted in ecology, science and principles of sustainability ([awc.org](http://awc.org) "Why using wood from North American forests is a sustainable choice").

## **GOOD NEIGHBOR AUTHORITY**

A program expanded under the 2018 Farm Bill, the Good Neighbor Authority allows the USDA Forest Service to enter into agreements with state forestry agencies to do critical management work to keep forests healthy and productive. DNRC good neighbor foresters work to deliver this program of work.

## **GLULAM**

Glu-laminated timber (GLT) is a large, strong structural member manufactured by joining smaller pieces. Glulam is typically built with the wood grain all on the long axis. It may be large columns or beams rather than panels like CLT. Glulam may also be produced in curved shapes such as arches. It can be used for longer spans, heavier loads and more complex shapes than concrete or steel. Yet it is 1/10th the weight of steel and 1/6th the weight of concrete. Glulam timbers are used for many types of residential and commercial construction.

## **LAMINATED STRAND LUMBER (LSL)**

A composite of wood strand elements with wood fibers primarily oriented along its length, where the least dimension of the wood strand elements is 0.10 inch (2.54 mm) or less and their average lengths are a minimum of 150 times the least dimension of the wood strand elements. LSL is one of several structural composite lumber (SCL) types.



## **LAMINATED VENEER LUMBER (LVL)**

A composite of wood veneer sheet elements with wood fibers primarily oriented along its length, where the veneer element thicknesses are 0.25 inch (6.4 mm) or less. LVL is one of several structural composite lumber (SCL) types.

## **LEGACY TREES**

A term used for large trees from the pre-settlement era in managed forests. These trees have exceptional conservation value and may become future snags providing valuable wildlife habitat.

## **MACHINE STRESS-RATED LUMBER (MSR)**

MSR is softwood dimensional lumber with tested and documented structural design values. Machine grading allows the strength and stiffness of the wood to be predicted, making it suitable for engineered applications where low variability is needed. Learn more at [msrlumber.org](http://msrlumber.org).

## **MBF**

Abbreviation for thousand board feet, a standard unit of lumber and log volume.

## **MMBF**

Million board feet (thousand thousand board feet).

## **NAIL-LAMINATED TIMBER (NLT)**

The dimensional lumber that forms NLT is joined with nails rather than adhesives.

## **NIPF**

Non-industrial private forest.

## **POST**

A vertical timber, which may be round or milled to have square dimensions.

## **RENEWABLE**

A natural resource is renewable if it can be naturally replaced at the rate at which it is consumed.

## **SAF**

Society of American Foresters. The mission of SAF is to advance sustainable management of forest resources. SAF believes that the use of renewable, recyclable, and biodegradable forest products from public lands is necessary to sustain functional ecosystems, meet societal material needs, and achieve public revenue objectives.

## **SILVICULTURE**

The art and science of managing the establishment, growth, composition, health and quality of forests and woodlands to meet the needs and values of landowners and society on a sustainable basis. An alternate definition is applied forest ecology.

## **SOFTWOOD**

A term describing trees with needle-shaped or scale-like leaves—conifers and evergreens, such as pine, cedar, spruce, fir, etc. Also refers to the wood or lumber from a coniferous tree.

## **STRUCTURAL COMPOSITE LUMBER**

Structural composite lumber (SCL) is a family of engineered wood products typically used for rafters, headers, beams, joists, studs, or columns. These products are created by layering wood veneers, strands or flakes with moisture-resistant adhesive. The resulting blocks of material outperform conventional lumber in load-bearing strength.

## **SUSTAINABLE FORESTRY INITIATIVE (SFI)**

A comprehensive set of conservation and forestry practices; delivered as a third party certification designed to ensure that future generations of Americans will enjoy the same abundant forests and wildlife. <https://www.sfiprogram.org/>

## **SUSTAINABLE FORESTRY**

The stewardship and use of forested lands with planned management to maintain biodiversity, productivity, regeneration capacity, and overall forest health now and in the future.

## **TIMBER**

Timber is defined as the wood of growing trees suitable for structural uses.