



# International Log Builders' Association

*Enhancing the Tradition through Education and Research*

## **Glossary of Log Building Terms**

**Anchor Bolt:** A steel bolt, which is embedded in the concrete foundation of a structure and used to anchor the sill plate.

**Angle Brace:** Any timber bracing a corner at an angle across that corner. Also called a knee brace.

**Angle Iron:** An L shaped length of steel frequently used to support masonry over a window or door opening.

**Base Course:** The first or bottom course of masonry blocks, or logs in a wall (sill logs).

**Beam:** A main horizontal member used to support vertical loads.

**Bearing Wall:** A wall supporting a vertical load.

**Bird's Mouth (Cut):** A V shaped notch cut into the base of a rafter that allows the rafter to sit flat on the wall or the plate.

**Blue Stain:** A blue or grey discolouration in sapwood caused by mildew infection.

**Buck:** A vertical board fastened to the ends of log sections at the window or door openings to secure them in place and to which the window or doorjamb is fastened.

**Butt Joint:** A joint made by fastening two logs together without overlap. The two members are square cut and joined at the flat surface.

**Cambium Layer:** A formation of cellular tissue, which lies between the wood and the bark of a tree. When this is left intact and the bark is removed, it will dry to a shiny dark finish.

**Cantilever:** A structural member supported on one end but extending beyond its support on the other end.

**Cat Face:** An indentation on the surface of a tree, usually caused by injury at some earlier date.

**Caulking:** Material used to seal the joints between logs or between windows and walls, doors and walls, etc.

**Checking:** A surface crack in a log caused by drying.

### **Chinked Structure:**

A building designed to use chinking material between the lateral lengths of the log work.

**Chinking:** Either the material or the process by which gaps between logs are filled.

**Collar Tie/Collar Beam:** A horizontal timber, which ties two opposite pairs of rafters together near the middle to reduce sagging or spreading.

**Cope:** A notch in a log that is cut and rounded to fit over another log.

**Corbel:** A short horizontal timber supporting a girder.

**Countersink:** To cause the head of a bolt or spike to be below the surface of the wood into which it is embedded.

**Course of Logs:** One layer of logs around the house perimeter.

**Cove:** A shallow, round shaped groove cut into the underside of a log.

**Crown Post:** A central vertical post that connects the collar tie to the bent plate.

**Dead Load:** Weight that a structural member is supporting by the weight of the structure. Does not include snow, wind, furniture, people, cars etc...

**Diagonal:** Reaching from corner to opposite corner at an angle.

**Dormer:** A window or a smaller roofed area protruding from a sloping roof.

**Dowel:** Wooden peg used to hold two pieces of wood together.

**Eave:** The lower or bottom edge of a roof that projects beyond the face of the walls.

**Eave Soffit:** The underside of the eave.

**Expansion Joint:** A joint, which permits expansion without doing damage to the structure.

**Fascia:** The trim board that usually covers the exposed ends of rafters or overhang.

**Flashing:** Weatherproof stripping used to seal joints between masonry and wood framing or log work, and masonry and roofing.

**Floor Joists:** The heavy beams that support the flooring.

**Framing:** The network of lumber in a building that will be covered by finish material.

**Gable:** The triangular portion at the top of a wall enclosed by the roof at the ends of the house.

**Gable End:** The wall in a house that has a gable roof.

**Gable Roof:** A sloping roof that forms an 'A' shape.

**Gambrel Roof:** A roof with one slope steeper than the other.

**Girder:** A horizontal structural member that supports joists.

**Girt:** A major horizontal timber that connects posts.

**Grain:** Direction of cellular arrangement in wood.

**Half-Lap:** A type of joint in which two timbers are lapped or let into one another.

**Header:** Horizontal members between vertical posts which add support.

**Heart Wood:** The wood in a tree, which extends from the middle of the trunk outward towards the sapwood.

**Hip:** The sloping ridge of a roof formed by two intersecting roof slopes.

**Hip-Rafter:** The rafter that forms the hip of a roof.

**I-Beam:** A steel beam with a cross section that makes it resemble the letter I.

**Jack Rafter:** A short rafter that extends from the roof ridge to a valley rafter or from the wall plate to a hip rafter.

**Joinery:** Connecting timbers by means of woodworking joints.

**Joint:** Any place where two or more timbers meet.

**Joists:** Horizontal, parallel timbers used to support the floor, ceiling, or roof.

**Joist Hanger:** A metal support for the ends of joists.

**Kerf:** The groove left in a piece of wood by a saw cut.

**King Post:** A vertical support that transfers weight from the ridge beam to the end walls or the joists.

**Knee Brace:** A small timber that is framed diagonally between a post and beam.

**Lag Screw:** A heavy screw for wood with a bolt head.

**Lateral Groove:** A longitudinal groove cut into the underside of a log enabling that log to fit over the top of another log.

**Load Bearing:** Carrying the weight of a structure.

**Loft:** The second floor in a home where the roof forms both its ceiling and walls usually associated with houses possessing a cathedral ceiling.

**Mortise:** A square or rectangular slot cut into a log, timber, or board into which another member, usually called a tenon, will fit.

**Mortise and Tenon Joint:** A joint in which a projection (tenon) of one timber is inserted into a slot (mortise) of another timber.

**Moisture Content:** Percentage by weight of water in wood.

**Newel:** The bottom post to which a stair railing is attached. Also post supporting sections of railings.

**Notch:** A recess cut into a log to accept another log intersecting it at an angle.

- **Blind Notch:** A notch that does not extend completely through a log.
- **Boxed Lapped Notch:** A notch cut squarely into part of each timber
- **Dovetail Notch:** Log ends cut into a fan appearance resembling a dove's spread tail.
- **Half Dovetail Notch:** Log end where one side only is sloped.
- **Mitered Lapped Notch:** Notch that has a 45-degree slope on the sides of the square notch.

- **Round Notch:** A notch in which the profile of the log exhibits the shape of a partial circle on the underside.
- **Round Sheep's Head Notch:** Same as a Sheep's Head Notch except that the outer cuts retain a round shape.
- **Saddle Notch:** Notch that is triangular in profile.
- **Sheep's Head Notch:** A notch with sloped sides partially cut out of each log.
- **Square Notch:** Has the appearance of a round notch on the exterior but inside has a square interlocking lap.

**Notching:** The art of cutting a notch into logs.

**Outrigger Beam:** A log which sits atop a cantilevered logs on the eave walls and is parallel to and extends out beyond the plate logs. It is to this beam that the roof framing is attached.

**Overhang:** That part of the roof that extends beyond the outside wall.

**Peg:** A wooden dowel of oak, locust or other woods.

**Piece-en-Piece:** A style of building in which vertical support posts form the main structure of a home with short lengths of logs forming the wall panels in sections between the posts.

**Pitch:** The slope or angle of a roof. Also, the hardened sap of a coniferous tree.

**Plate-Log:** The log at the top of the wall that supports the roof.

**Post and Beam:** A style of building that uses vertical posts supporting horizontal members and beams.

**Purlins:** A roof support log reaching from end to end of the structure and placed in line between plate log and the ridgepole. Usually, it is used to support rafters.

**Rafter:** A structural member, usually dimensional lumber that supports a roof.

**Rafter Truss:** A triangle of two rafters and a horizontal brace. Several of these make up a roof sub-structure.

**Ridge Beam:** A horizontal timber at the peak of the roof to which rafters are attached. Also called a ridge board, ridge piece, or ridgepole.

**Roof Pitch:** Inches of rise per 12" of roof run.

**Roof Truss:** A network of structural members that form a rigid support for the roof.

**Round of Logs:** One layer of logs around the entire perimeter of the house.

**Saddle:** The lower cut in a notch and saddle joint. The log is cut on an angle on each side so that the surface almost comes to a point at the top of the log.

**Sapwood:** The outer layer of wood in a tree that is nearest to the bark.

**Scarfed:** A cut at a long angle in the direction of the timber.

**Scribe:** The process of cutting one log to match the contours of another for a tight log-to-log fit.

**Scribe-Fit:** A building featuring tight log-to-log joinery.

**Screw Jack:** A device that may be adjusted to allow for the settlement in log walls.

**Settling:** Loss of wall height by shrinkage and compression.

**Shed Roof:** A sloping roof of a single plane.

**Sill Log:** The base log that sits upon the foundation.

**Sills:** Horizontal members that form the base of window and door openings.

**Soffit:** the underside of the roof overhang.

**Splice:** A joint of two logs end to end.

**Spline:** A narrow wooden strip placed into grooves cut into two adjoining surfaces of a log wall.

**Taper:** The amount of change in the diameter of a log from the butt end to the top end.

**Truss:** Structural members assembled into a rigid frame.

**Through-Bolting:** Threaded rod of various length used as a tensioning device in log walls, post and beam joinery and some timber frames.