

## House & Home

### Glossary

**adobe:** a natural building material made from sand and clay and water held together by sticks, straw or manure, which is shaped into bricks using frames and dried in the sun. Adobe structures are extremely durable and account for some of the oldest existing buildings in the world.

Related Terms:

**latillas:** small branches used as ceiling planking, made of Aspen, pine or cedar.

**lintel:** wooden beam bridging window or door openings.

**nicho:** small shelf carved into a wall.

**stucco:** final cement color coat plastered in the exterior of an adobe-style building.

**vigas:** round logs used as ceiling beams, either shaved or raw.

**corbel:** short sculpted beam lying on top of a post or wall.

**canale:** a roof spout that carries water off a flat pueblo roof.

**green building:** also known as **green construction** or **sustainable building** refers to a building's structure and building process that is environmentally responsible and resource-efficient throughout a building's life-cycle.

Related Terms:

**daylighting:** this refers to the use of natural light to provide light in a building, through the use of windows, a sun roof, and orientation of the building/house for optimal sun saturation

**grey water:** this is the wastewater from sources such as dishwashing or washing machines, and can be used for subsurface irrigation, or if treated, for non-potable purposes, like flushing toilets and washing cars. Rainwater collectors are used for similar purposes. Sustainable homes often have systems in place to use/recycle water in this way.

**deconstruction:** is a method of harvesting what is commonly considered "waste" in old construction and reclaiming it into useful building material.

**VOCs:** or volatile organic compounds, refer to the toxins that are present in many interior finish products like, linoleum floors, paints, stains, wall papers, carpets, and other materials used to finish the interior of a house. These gases can have a detrimental impact on occupants' health, comfort, and productivity. A green building/house would use construction materials with low or no VOCs emissions and would use ventilation systems that would improve the indoor air quality through filtration and ventilation.

**post-and-girt architecture:** (Also known as post-and-beam) Post-and-beam framing is a traditional system of wood-frame construction, in common use into the 19th century, in which the skeleton of the house is formed from heavy posts (vertical members) and beams (horizontal

members). Because suitable metal fasteners were not available, early post-and-beam frames were held together by mortise-and-tenon joints chiseled out of the ends of the massive structural members. Failure of these joints is generally what brings down an old post-and-beam structure. Today, much stronger post-and-beam frames can be built using various types of nailed or bolted metal connectors.

Related Terms:

**bay:** section of a framed building between principal supporting posts.

**bent:** post and plate, or post and girt assembly. Posts are mortised into the plate or end girt making a U-shaped section of the house frame.

collar beam: horizontal timber connecting principal rafters below their apex and above their base.

**girt:** a main horizontal timber placed between the wall plate at the top and the sill at the bottom.

**joist:** one of a number of horizontal timbers supporting a floor or carrying a ceiling.

**lath:** narrow timber (1 to 2 inches in width) used in a partition as a base for plaster, or on rafters to support the roof covering.

**plate:** horizontal timber on top of the wall frame, supporting the rafters.

**post:** strong vertical timber that is part of the main framework of a building.

**purlin:** horizontal timber that ties together the principal rafters and supports the common ones.

**rafter:** timber set at an angle, and that support laths under the roof covering

**sill:** the bottommost horizontal timber resting on the footings or the ground into which the posts are mortised; wooden horizontal base of a window or door frame.

**stud:** smaller vertical timbers set between posts in the framework of the building

**Wampanoag wetu:** the mat-covered *wetu*, the Wampanoag word for house, was a round or oval house that was designed to be easily dismantled and moved in just a few hours. They were made out of sticks of red cedar and grass. They are also known as **birch bark houses** or **wigwams**. These small houses were usually 8-10 feet tall. Wigwams are made of wooden frames which are covered with woven mats and sheets of birch bark. The frame can be shaped like a dome, like a cone, or like a rectangle with an arched roof. Once the birch bark is in place, ropes or strips of wood are wrapped around the wigwam to hold the bark in place. Video about Wetu: <http://www.youtube.com/watch?v=ATImwlherol>

**balloon framing:** Balloon framing is a system of wood-frame construction, first used in the 19th century, in which the studs are continuous from the foundation sill to the top wall plate. Floor structures (one, two, or more) are hung from the studs. Balloon framing, which replaced post-and-beam construction, was made possible by the availability of structural lumber sawed to uniform sizes. A balloon frame, which is held together entirely by nails, could be erected faster than a post-and-beam frame, with the use of less-skilled labor; and the end result was stronger and more apt to be square and plumb. Balloon frames have one serious drawback: unless fire stops are installed at the level of every floor, the stud spaces form what are essentially chimneys from cellar to attic, greatly accelerating the spread of fire.

**studs:** long, vertical 2" x 4"s for the exterior walls. These long "studs" extend uninterrupted, from the sill on top of the foundation, all the way up to the roof.

**sill:**(1) In a wood-frame house, the sill is a wooden member that rests on top of the foundation (and, per today's building codes, is anchored to it by bolts). In post-and-beam construction, the bottom ends of posts rest on the sill; in a balloon frame, the bottom ends of studs and the ends of floor joists; in a platform frame, the ends of floor joists only. (2) The fixed horizontal member of a window frame, below the sash, is also called a sill.

**clapboard:** Clapboards are thin, narrow boards of tapering cross-section applied horizontally as siding on wood-frame houses. Each clapboard overlaps the one below, so that no joints are exposed to the weather. Aluminum and vinyl siding in use today typically imitate clapboards.

**dormer:** A dormer is a window housed in a gable or similar structure affixed to the sloping part of a roof, providing natural light and ventilation to the rooms beneath the roof. Since such attic or garret rooms have traditionally been used for sleeping, the dormer gets its name from the French verb *dormer*: to sleep.

**platform framing:** Platform framing has been the most common system of wood-frame house construction since the middle of the 20th century. In platform framing, the first structure built on top of the foundation is the first floor. The builders then use this floor as a platform on which to fabricate the first tier of stud walls. These are then erected and the next floor platform built on top of them, and so on, until finally the roof joists and rafters are put in place atop the final tier of walls. Advantages of this system over the earlier balloon-framing system are: smaller and cheaper pieces of lumber can be used in the walls; there is always something solid on which to stand while erecting the next higher part of the building; the walls can be fabricated down on the platform, which increases safety and reduces labor cost; and no added fire-stopping is necessary because each floor platform encloses the stud spaces above and below.

**stud:** In balloon-framing and platform-framing systems of wood construction, studs are the vertical structural members in the walls. The studs transmit vertical forces (loads) from the roof and/or floor above to, ultimately, the foundation of the house. The studs also provide something to which to attach the exterior wall sheathing and interior wall finish (e.g., lath and plaster or sheetrock).

**rafter:** Rafters are the structural members that support the roof sheathing to which the outer covering of the roof (shingles, etc.) is attached. Typically, rafters slope down from a central ridge or peak to the top plates of either two (gable roof) or all four (hip roof) of the exterior walls. When the lower ends of the rafters project beyond the exterior walls, they form the roof overhang, or *eaves*.

**gable roof:** A roof in which two opposite sides are supported by sloping rafters, the walls of the other two sides being extended upward in an inverted-V shape conforming to the slope of the rafters, is known as a gable roof. The majority of American houses have gable roofs.

**tenement:** The term "tenement" originally referred to tenancy and therefore to any rented accommodation. The New York State legislature defined it in the Tenement House Act of 1867 in terms of rental occupancy by multiple households, as:

*Any house, building, or portion thereof, which is rented, leased, let, or hired out to be occupied or is occupied, as the home or residence of more than three families living independently of one another and doing their own cooking upon the premises, or by more than two families upon a floor, so living and cooking and having a common right in the halls, stairways, yards, water-closets, or privies, or some of them.*

**sod house:** or "soddy" was a corollary to the log cabin during frontier settlement of Canada and the United States. The prairie lacked standard building materials such as wood or stone; however, sod from thickly-rooted prairie grass was abundant. Construction of a sod house involved cutting patches of sod in rectangles, often 2'x1'x6" (600x300x150 mm) long, and piling them into walls. Builders employed a variety of roofing methods. Sod houses accommodate normal doors and windows. The resulting structure was a well-insulated but damp dwelling that was very inexpensive. Sod houses required frequent maintenance and were vulnerable to rain damage. Stucco or wood panels often protected the outer walls. Canvas or plaster often lined the interior walls.