

Treated Wood and the 2006 International Residential Code

The International Residential Code recognizes the problems inherent in certain applications and the effectiveness of properly treated wood in enduring those situations. For some applications, the code requires treated wood; for others it allows either pressure-treated wood or a wood classified as naturally resistant to decay. The following excerpts are references to treated wood taken from the 2006 International Residential Code.

Chapter 3 BUILDING PLANNING

SECTION R319

PROTECTION AGAINST DECAY R3 19.1 Location Required.

Protection from decay shall be provided in the following locations by the use of naturally durable wood or wood that is preservative-treated in accordance with American Wood-Preservers' Association (AWPA) U1 for the species, product, preservative and end use. Preservatives shall be listed in Section 4 of AWPA U1.

1. Wood joists or the bottom of a wood structural floor when closer than 18 inches or wood girders when closer than 12 inches to exposed ground in crawl spaces or unexcavated area located within the periphery of the building foundation.
2. All wood framing members that rest on concrete or masonry exterior foundation walls and are less than 8 inches from exposed ground.
3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the ground unless separated from such slab by an impervious moisture barrier. The ends of wood girders entering exterior masonry or concrete walls having clearances of less than 0.5 inch on tops, sides and ends.
4. Wood siding, sheathing and wall framing on the exterior of a building having a clearance of less than 6 inches from the ground.
5. Wood structural members supporting moisture-permeable floors or roofs that are exposed to the weather, such as concrete or masonry slabs, unless separated from such floors or roofs by an impervious moisture barrier.
6. Wood furring strips or other wood framing members attached directly to the interior of exterior masonry walls or concrete walls below grade except where an approved vapor retarder is applied between the wall and the furring strips or framing members.

R3 19.1.1 Field Treatment.

Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated in the field in accordance with AWPA M4.

R3 19.1.2 Ground Contact.

All wood in contact with the ground, embedded in concrete in direct contact with the ground or embedded in concrete exposed to the weather that supports permanent structures intended for human occupancy shall be approved pressure preservative-treated wood suitable for ground contact use.

R3 19.1.3 Geographical Areas.

In geographical areas where experience has demonstrated a specific need, approved naturally durable or pressure preservative-treated wood shall be used for those portions of wood members that form the structural supports of buildings, balconies, porches or similar permanent building appurtenances when such members are exposed to the weather without adequate protection from a roof, eave, overhang or other covering that would prevent moisture or water accumulation on the surface or at joints between members. Depending on local experience, such members may include:

1. Horizontal members such as girders, joists and decking.
2. Vertical members such as posts, poles and columns.
3. Both horizontal and vertical members.

R319.1.4 Wood Columns.

Wood columns shall be approved wood of natural decay resistance or approved pressure preservative-treated wood.

Exceptions:

- 1. Columns exposed to the weather or in basements when supported by concrete piers or metal pedestals projecting 1 inch above a concrete floor or 6 inches above exposed earth, and the earth is covered by an approved impervious moisture barrier.*
- 2. Columns in enclosed crawl spaces or unexcavated areas located within the periphery of the building when supported by a concrete pier or metal pedestal at a height more than 8 inches from exposed earth, and the earth is covered by an impervious moisture barrier.*

R319.2 Quality Mark.

Lumber and plywood required to be pressure preservative-treated in accordance with Section R319.1 shall bear the quality mark of an approved inspection agency that maintains continuing supervision, testing and inspection over the quality of the product and that has been approved by an accreditation body* that complies with the requirements of the American Lumber Standard Committee treated wood program.

R3 19.2.1 Required Information.

The required quality mark on each piece of pressure preservative-treated lumber or plywood shall contain the following information:

1. Identification of the treating plant.
2. Type of preservative.
3. The minimum preservative retention.
4. End use for which the product was treated.
5. Standard to which the product was treated.
6. Identity of the approved inspection agency.
7. The designation "Dry," if applicable.

R319.3 Fasteners.

Fasteners for pressure preservative and fire-retardant-treated wood shall be of hot-dipped, zinc-coated, galvanized steel, stainless steel, silicon bronze or copper. The coating weights for zinc-coated fasteners shall be in accordance with ASTM A-153.

Exceptions:

- 1. One-half-inch diameter or larger steel bolts.*
- 2. Fasteners other than nails and timber rivets shall be permitted to be of mechanically deposited zinc-coated steel with coating weights in accordance with ASTM B-695, Class 55, minimum.*

SECTION R320

PROTECTION AGAINST SUBTERRANEAN TERMITES

R320. 1 Subterranean Termite Control Methods.

In areas subject to damage from termites, methods of protection shall be by chemical soil treatment, pressure preservative-treated wood in accordance with the AWPA Standards listed in Section R3 19.1, naturally termite-resistant wood or physical barriers (such as metal or plastic termite shields) or any combination of these methods.

R320. 1.1 Quality Mark.

Lumber and plywood required to be pressure preservative-treated in accordance with Section R320.1 shall bear the quality mark of an approved inspection agency which maintains continuing supervision, testing and inspection over the quality of the product and which has been approved by an accreditation body that complies with the requirements of the American Lumber Standard Committee treated wood program.

R320. 1.2 Field Treatment.

Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated in the field in accordance with AWPA M4.

R320.3 Naturally Resistant Wood.

Heartwood of redwood and eastern red cedar shall be considered termite resistant.