

**Oregon**  
**Interpretive Ruling No. 93-28**  
**PROTECTION OF WOOD IN CONTACT WITH BELOW-GRADE CONCRETE**

Requested By: PPPI MANUAL REVIEW COMMITTEE

**QUESTION**

Do concealed stud and furring materials touching below grade concrete basement walls need to be pressure treated?

**APPLICABLE CODE SECTIONS**

1993 Oregon Structural Specialty Code (OSSC), Section 2516(c)3, 5,7 and One and Two Family Dwelling Specialty Code (Dwelling Code), Section R-309.1.

**Section 2516(c)3. Plates, sills and sleepers...**

All foundation plates or sills and sleepers on a concrete or masonry slab, which are in direct contact with earth, and sills which rest on concrete or masonry foundations, shall be treated wood or foundation redwood. all marked or branded by an approved agency. Foundation cedar or No.2 foundation redwood marked or branded by an approved agency may be used for sills in territories subject to moderate hazard. where termite damage is not frequent and when specifically approved by the building official. In territories where hazard of termite damage is slight, any species of wood permitted by this code may be used for sills when specifically approved by the building official.

**Section 2516(c)5. Girders entering masonry or concrete wall**

Ends of wood girders entering masonry or concrete walls shall be provided with a 1/2-inch air space on tops, sides and ends unless approved wood of natural resistance to decay or treated wood is used.

**Section 2516 (c)7. Wood and earth separation.**

Protection of wood against deterioration as set forth in the previous paragraphs for specified applications is required. In addition, wood, used in construction of permanent structures and located nearer than 6 inches to earth shall be treated wood or wood of natural resistance to decay, as defined in Section 2502(a). Where located on concrete slabs placed on earth, wood shall be treated wood or wood of natural resistance to decay. Where not subject to water splash or to exterior moisture and located on concrete having a minimum thickness of 3 inches with an impervious membrane installed between concrete and earth, the wood may be untreated and of any species

**Dwelling Code, Section R-309.1 (7):**

Wood furring strips or other wood framing members attached directly to the interior of exterior masonry or concrete walls below grade except when an approved vapor retarder is applied to the interior of the exterior wall.

**BACKGROUND**

OSSC sections noted above address plates, sills and sleepers, girders entering masonry, or concrete walls and wood and earth separation for protection of wood members. However, nothing addresses vertical framing members in contact with concrete.

Polk County has attempted to meet the apparent intent of the code by requiring all concealed studs and furring materials touching below grade concreted basement walls to be pressure treated material or spaced

out ½ inch, which enables installation of required insulation and finish wall coverings. There have been challenges to the County's alternative.

Reference: SCAB minutes 12/2/80

Originally Approved by: Jane F. Huston, Director of Commerce

## **FINDINGS**

This interpretation is authorized by ORS 455.060, Rulings on Acceptability of Materials, Designs or Methods of Construction and Attorney General's Opinion OP-5208 issued October 1, 1981, advising the statute permits authoritative interpretations of existing code requirements.

The Dwelling Code appears to address this issue clearly, but the *OSSC* is still in need of clarification.

## **DISCUSSION AND CONCLUSION**

Use of either pressure treated wood members for vertical framing members in contact with below grade concrete, installation of an approved vapor barrier or spacing out 1/2 inch from below grade concrete all concealed stud and furring materials meet the intent of the *OSSC* and are acceptable methods of protecting wood construction. Interpretive Ruling 93-28 replaces PPPI-3016.

(signed July 21, 1993)

John Talbott, Chairman  
Structural Code Advisory Board

The recommendations and findings of the Structural Code Advisory Board are accepted and adopted.

(signed July 30, 1993)

Michelle J. Patterson for  
Gary J. Wicks, Administrator  
Building Codes Agency