

**Oregon**  
**Alternate Method Ruling No. 93-27**  
**MUD SILL EMBEDDED IN FOUNDATION**

**Requested By:** PPPI MANUAL REVIEW COMMITTEE AND THE  
STRUCTURAL ENGINEERING & LATERAL FORCE COMMITTEE

**QUESTION**

Request a ruling approving an alternate method of construction to permit a treated mud sill to be embedded in a foundation.

**APPLICABLE CODE SECTION**

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

**BACKGROUND**

The Structural Code Advisory Board ruled in 1980 that a mud sill embedded on two sides of a foundation wall would be an approved alternate method.

The OTFDSC and OSSC require wood sills which rest on concrete or masonry foundations to be pressure treated, foundation grade cedar or redwood.

The original PPPI-3015 illustration indicates that a 55# felt moisture barrier can be used to protect the untreated decking and/or subfloor located above the foundation and allows the use of a 2x3 pressure treated (or equal) sill plate embedded in the concrete. To ensure that the anchor bolts are effective, a minimum of 1-1/2 inches of concrete coverage is required around the anchor bolt. The sill plate is preferably placed on the exterior side of the foundation wall to allow for direct bearing of the wall above and provide proper connection of the wall to the foundation. However, the optional location on the interior side of the foundation wall is also permitted.

**FINDINGS**

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

**DISCUSSION & CONCLUSION**

The use of an approved pressure treated wood mud sill plate embedded flatwise in the top of a concrete foundation wall per the following is an acceptable alternate method:

1. The pressure treated wood is a 2x3 or equivalent and is installed on either the exterior or the interior side of the concrete foundation wall.
2. A 55# felt moisture barrier shall be installed across the full width of the top of the concrete foundation wall, including the top of the embedded wood sill plate.
3. The embedded plate is anchored to the foundation according to the applicable provisions in the OTFDSC Figure R-303 or the OSSC Section 2907(f) while maintaining, to the greatest extent feasible, adequate concrete cover of 1-1/2 inches. In order to maintain proper concrete cover, it may be necessary to angle the anchor bolts.

Interpretive Ruling 93-27 replaces PPPI-3015.

(signed September 6, 1995)

John A. Talbott, P.E., Chair  
Building Codes Structures Board

The recommendations and findings of the Building Codes Structures Board are accepted and the conclusions are adopted.

(signed September 7, 1995)

Joseph A. Brewer III, Administrator  
Building Codes Division

RES C I N D E E D