



Southwest Washington Chapter of ICC

This construction detail is accepted as meeting the minimum standard of construction as based upon the 2003 IRC / WAC 51-51 requirements and is accepted in the following regional jurisdictions

Cities of; Camas, Centralia, Kalama, Ridgefield, Castle Rock, Vancouver, Washougal, Winlock, Woodland, Longview, Battle Ground,
Counties of; Clark, Cowlitz, Skamania, Lewis

TABLE R401.4.1
 PRESUMPTIVE LOAD-BEARING VALUES OF
 FOUNDATION MATERIALS^a

CLASS OF MATERIAL	LOAD-BEARING PRESSURE (pounds per square foot)
Crystalline bedrock	12,000
Sedimentary and foliated rock	4,000
Sandy gravel and/or gravel (GW and GP)	3,000
Sand, silty sand, clayey sand, silty gravel and clayey gravel (SW, SP, SM, SC, GM and GC)	2,000
Clay, sandy clay, silty clay, clayey silt, silt and sandy silt (Cl, ML, MH and CH)	1,500 ^b

For SI: 1 pound per square foot = 0.0479 kN/m².

- a. When soil tests are required by Section R401.4, the allowable bearing capacities of the soil shall be part of the recommendations.
- b. Where the building official determines that in-place soils with an allowable bearing capacity of less than 1,500 psf are likely to be present at the site, the allowable bearing capacity shall be determined by a soils investigation.

* Note that 1 500 PSF is assumed unless a geotech report is submitted substantuating greater soil bearing values.

R401.2 Requirements. Foundation construction shall be capable of accommodating all loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Gravel fill used as footings for wood and precast concrete foundations shall comply with Section R403.

R401.3 Drainage. Surface drainage shall be diverted to a storm sewer conveyance or other approved point of collection so as to not create a hazard. Lots shall be graded so as to drain surface water away from foundation walls. The grade away from foundation walls shall fall a minimum of 6 inches (152 mm) within the first 10 feet (3048 mm).
 Exception: Where lot lines, walls, slopes or other physical barriers prohibit 6 inches (152 mm) of fall within 10 feet (3048 mm), drains or swales shall be provided to ensure drainage away from the structure.

R401.4 Soil tests. In areas likely to have expansive, compressible, shifting or other unknown soil characteristics, the building official shall determine whether to require a soil test to determine the soils characteristics at a particular location. This test shall be made by an approved agency using an approved method.

R401.4.1 Geotechnical evaluation. In lieu of a complete geotechnical evaluation, the load-bearing values in Table R401.4.1 shall be assumed.

R401.5 Compressible or shifting soil. When top or subsoils are compressible or shifting, such soils shall be removed to a depth and width sufficient to assure stable moisture content in each active zone and shall not be used as fill or stabilized within each active zone by chemical, dewatering, or presaturation.

R401.4.1 tbl 2/04

General Foundation Requirements

DWG BY LGN