



San Juan County
Community Development & Planning

135 Rhone Street, P.O. Box 947 Friday Harbor, WA. 98250
(360) 378-2354 (360) 378-2116 Fax (360) 378-3922
cdp@sanjuanco.com | www.sanjuanco.com

POLICIES/PROCEDURES/INTERPRETATIONS

Ceiling Height in Front of and Above Plumbing Fixtures

René M. Beliveau
Deputy Director/Chief Building Official

Issued 04/23/2008
BP-2008-04_CeilingHt-Plumbing

ISSUE: How shall the provisions of Section R305.1 of the IRC relative to the minimum ceiling height in front of and above plumbing fixtures be interpreted and applied?

ANALYSIS: Section R305.1 (Minimum Height) of the IRC states:

Habitable rooms, hallways, corridors, bathrooms, toilet rooms, laundry rooms and basements shall have a ceiling height of not less than 7 feet (2134 mm). The required height shall be measured from the finish floor to the lowest projection from the ceiling.

Exceptions:

1. Beams and girders spaced not less than 4 feet (1219 mm) on center may project not more than 6 inches (152 mm) below the required ceiling height.
2. Ceilings in basements without habitable spaces may project to within 6 feet, 8 inches (2032 mm) of the finished floor; and beams, girders, ducts or other obstructions may project to within 6 feet 4 inches (1931 mm) of the finished floor.
3. For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet (2134 mm) and no portion of the required floor area may have a ceiling height of less than 5 feet (1524 mm).
4. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) over the fixture and at the front clearance area for fixtures as shown in Figure R307.1. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2036 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

Section R305.1 of the IRC contains the minimum ceiling heights for habitable rooms and other occupiable spaces. It does not contain minimum heights for other useable but non-habitable or non-occupiable spaces.

This section generally requires a minimum of 7 ft ceiling height for the habitable and/or occupiable spaces. There are four exceptions to this minimum height requirement.

Exceptions 1 and 2 are self explanatory and not relevant for this analysis.

Exception 3 allows for reduced heights in slope ceiling areas.

Exception 4 allows for a reduced height above and in front of plumbing fixtures; while still requiring the overall room to comply with the other the minimum ceiling height requirements.

In sloped ceiling areas, it may occur that a plumbing fixture installed in the area encompassed by the area defined by Exception 3 would not comply with the minimum requirements of Exception 4.

Exception 4 requires a minimum of 6'8" over a fixture and at the front clearance area of a fixture. However, it does not stipulate whether the minimum clearance is required over the entire fixture or simply at any point over the fixture. Additionally, it specifically allows for a reduced height above showers or tubs in all but the 30" X 30" area at the shower head.

It should also be stated that the minimum ceiling height requirements of Exception 4 to Section R305.1 are not contained within the IBC and not applicable to dwelling units constructed under that code. These minimum ceiling height requirements over fixtures are therefore not considered to be health, life safety, or sanitation based requirements.

POLICY: It is determined that the intent of Exception 4 to Section R305.1 of the IRC is simply to allow for a reduced ceiling while helping assure the usability of plumbing fixtures. The following interpretations are consistent with the intent of this section and are established to clarify the requirements and application of this section.

1. The 6'8" minimum ceiling height required for the front clearance area of a fixture shall be determined as follows:
 - a. For fixtures not requiring or allowing entry or standing within the fixture, the minimum ceiling height in the front clearance area shall apply to the entire width of the fixture. The remaining area of the front clearance area of the fixture shall comply with the other controlling limits prescribed by Section R305.1 and its Exceptions 1, 2, and, 3
 - b. For fixtures requiring or allowing entry or standing within the fixture, the minimum ceiling height in the front clearance area shall apply only to a minimum of 30" along the length of a tub, shower, or other fixture requiring or allowing entry or standing within the fixture. The remaining area of the front clearance area of the fixture shall comply with the other controlling limits prescribed by Section R305.1 and its Exceptions 1, 2, and, 3

2. The 6'8" minimum ceiling height required over a fixture shall be determined as follows:
 - a. For fixtures not requiring or allowing entry into or standing within fixture, the minimum height over a fixture shall only apply to a single point over the fixture. The remaining area over the fixture shall comply with the other controlling limits prescribed by Section R305.1 and its Exceptions 1, 2, and, 3.
 - b. For fixtures requiring or allowing entry into or standing within fixture, the minimum height over a fixture shall only apply to an area at least 30" by 30" at the point of entry and shower areas. The remaining area over the fixture shall comply with the other controlling limits prescribed by Section R305.1 and its Exceptions 1, 2, and, 3.