

# 2009 IRC Q&A: Building and Energy Provisions

## SECTION R305 CEILING HEIGHT

**R305.1 Minimum height.** Habitable space, hallways, bathrooms, toilet rooms, laundry rooms and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134mm).

**Exceptions:**

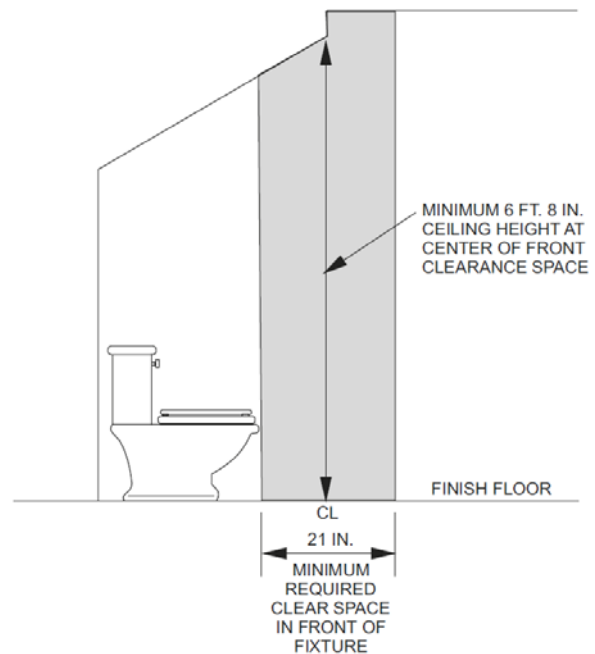
1. For rooms with sloped ceilings, at least 50 percent of the required floor area of the room must have a ceiling height of at least 7 feet (2134 mm) and no portion of the required floor area may have a ceiling height of less than 5 feet (1524 mm).
2. Bathrooms shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) at the center of the front clearance area for fixtures as shown in Figure R307.1. The ceiling height above fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a minimum ceiling height of 6 feet 8 inches (2032 mm) above a minimum area 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

**Q:** When finishing off a basement into living space, such as a recreation room or sleeping room, what is the required minimum clearance under HVAC ducts?

**A:** The minimum ceiling height needed for habitable space according to Section R305.1 is 7 feet, 0 inches. This measurement is taken from the finished floor to the finished ceiling. Depending on the location and width of the ductwork, the bottom of the ductwork may be considered part of the finished ceiling. [3-124]

**Q:** We need to clarify our understanding with regard to half bathrooms under stairways. We understand that the minimum ceiling height is 7 feet except where permitted to be 6 feet, 8 inches under Exception 2 of Section R305.1. Could you confirm that at no point in a bathroom or toilet room ceiling is the ceiling height allowed to be less than 6 feet, 8 inches?

**A:** As stated in Exception 2, the area above the bathroom fixtures may be less than 6 feet, 8 inches provided the fixtures are usable. This provision intends to accommodate installation of a water closet or lavatory under a sloped ceiling. The minimum ceiling height of 6 feet, 8 inches is measured at the center of the 21-inch clearance space in front of the water closet or lavatory. As indicated in the general requirements of Section R305.1, the minimum ceiling height for the other areas of bathrooms and toilet rooms is 7 feet. A shower or tub equipped with a showerhead needs a minimum ceiling height of 6 feet, 8 inches above a minimum area 30 inches by 30 inches at the showerhead. See Figure 3-126. [3-126]



**Ceiling Height at Bathroom Fixtures**  
Figure 3-126