How to Recognize a Hanging Wall:

When framing a wall on a slab concrete basement floor (right), it is necessary to build a "hanging" wall. On the left is a standard wall built in a basement with a structural wood floor. The 2x4 studs extend completely from the bottom plate (attached to the floor) to the top plate (attached to the ceiling). On a concrete slab floor, the wall hangs from the top plate, with a gap between the framing and the bottom plate. A spike keeps the wall lined up over the bottom plate. If the floor heaves or sags, the gap will get smaller or larger, but there will be no impact on the upper floors. If this gap did not exist and the floor heaved, the entire house would be affected by the upward movement of the framed wall. If a basement is "fully" finished, you can usually still find exposed framing in the furnace room. In some cases, the gap can be found at the ceiling instead of at the floor. Either way works.



Standard framing on structural wood floor over crawl space.



Hanging wall on concrete slab floor.