

# Is your level level and your square square?

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How can you be sure your level is level or your square is square? Flip the level  
Place the level on any table. It doesn't even need to be a level table. Take a close look at where the bubble comes to rest. It does not need to be in the middle, just note where it really lands. Then rotate the level end for end, putting it back down in exactly the same spot on the table. The bubble should be in exactly the same position as before. If it is not, then your level is not level. Years ago we could loosen and adjust the position of the vial to get it level, but with cost cutting, few levels are adjustable today. If you don't want to buy a new level, tape a shim to one end. How much tape or shim? Enough so that when you turn it end for end the bubble lands in exactly the same place.  
Flip the square  
For the square, check the edge of a table or a board to be sure that it is straight. Use the edge of the square, or a string line. The manufactured edge of a piece of plywood is usually quite straight. Then hook your square over the edge and draw a line on the counter along the other leg. Then flip the square over so that the edge on the leg is now along the edge pointing in the opposite direction. Draw another line on the counter. If the lines are perfectly parallel, then the square is square. If not, some squares can be loosened and adjusted, but most cannot. A carpenter's square, like in the photos actually can be adjusted by stretching the metal with a centre punch. If the angle is less than 90 degrees, put the punch about a quarter of an inch away from the inside corner of the square and give it a good whack with the hammer. This will expand the metal and open the square. If it is measuring more than 90 degrees, do the same thing about a quarter inch in from the outside corner. Go slowly and punch hard but with a few little dimples on both sides of the square you can usually bring it back to a good dead on 90 degrees.

**Keywords:**

Layout, Levels, Squares, Tools