



## Measuring Guide

In order to get an accurate estimate on what your staircase will cost, your jobsite will need to be measured. Usually a Curtis salesperson can measure, however, using this guide, you can take a few measurements that will really speed up the process.

## Terminology

There are four main components that need to be considered when measuring a staircase: Rise, Run, Width, and Headroom.

- Rise-** The distance from the finished level of one floor to the finished level of the next floor
- Run-** The horizontal travel of a stair. A unit of run or tread run is the distance of travel for each step excluding the tread nose.
- Width-** The desired width of the finished staircase or tread. It can be measured from Stud to Stud, Sheetrock to Sheetrock, etc.
- Headroom-** The distance between the ceiling and staircase at their closest point

## Determining Rise

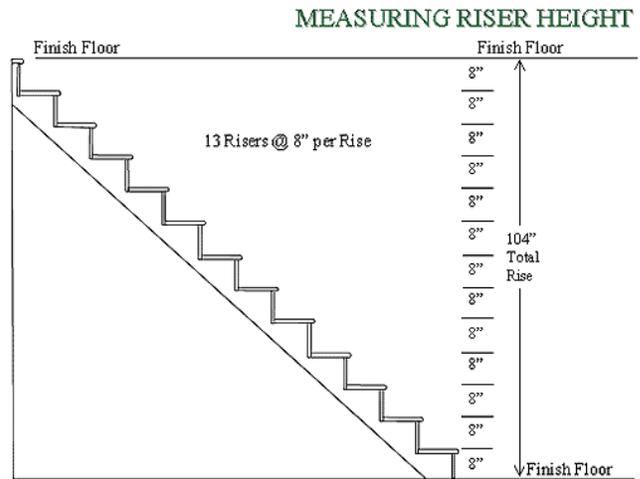
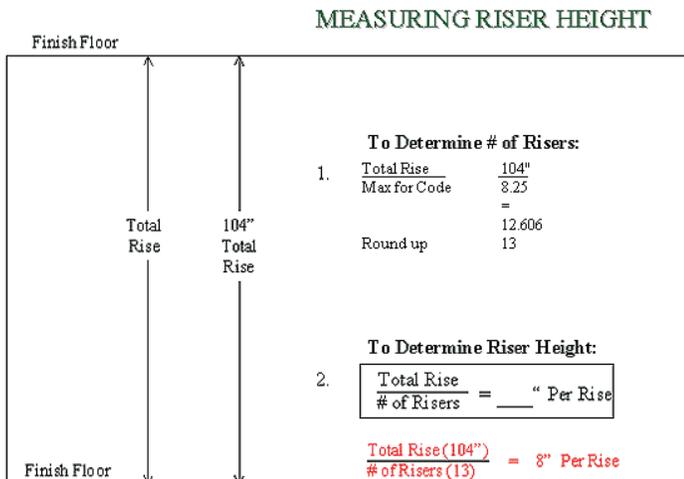
To determine the number of risers in the staircase take the total height between floors, in inches, and divide by 8.25. We use 8.25 in this example because New York State Code limits the maximum height of a riser to 8.25 inches. Be sure to check the code in your area for maximum riser height and use this number in place of 8.25.

For our example, let's say the distance between the floors is 104". To determine the number of risers, divide by 8.25 to come up with 12.606. This number must ALWAYS be rounded up to the next whole number, 13 in this case. This is the number of risers in the staircase.

Once you've determined the number of risers, you need to determine riser height. Take the total rise measurement (104 inches) and divide by the number of risers (13).

**104 / 13 = 8**

Stairs are cut to the nearest 1/16". In this particular example the riser height is exact. If it didn't you would simply round to the closest 1/16"





## Determining Run

In a straight staircase, there will always be one fewer stair tread than riser. This is to account for the additional rise needed to meet up with the top floor. Using this rule of thumb to refer back to the previous example of the 104" floor to floor 13 rise staircase, there will be 12 treads.

Similar to risers, various areas have minimum depths in order to meet building code. For example, the minimum tread depth for New York State is 9". Be sure to check your local building codes when determining run.

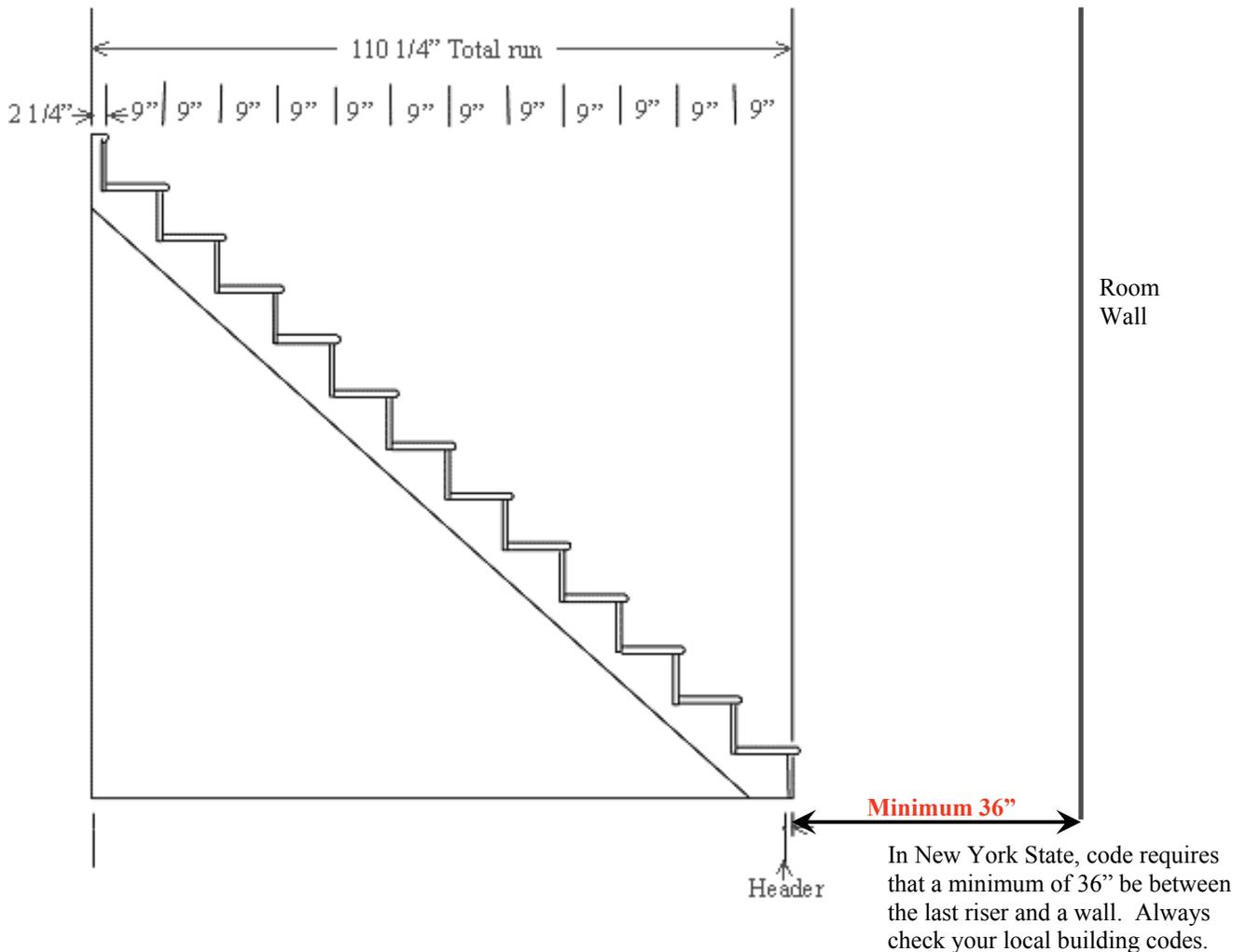
To find the total run of the example staircase, you take the number of treads (12) and multiply it by the tread depth (9"). If your code is different, use your code's tread depth.

$$12 * 9 = 108"$$

You must now add 2.25" or 1.75" for nosing and riser thickness. Most stairs will be 2.25".

$$108" + 2.25" = 110.25"$$

The total run of this staircase is 110.25".





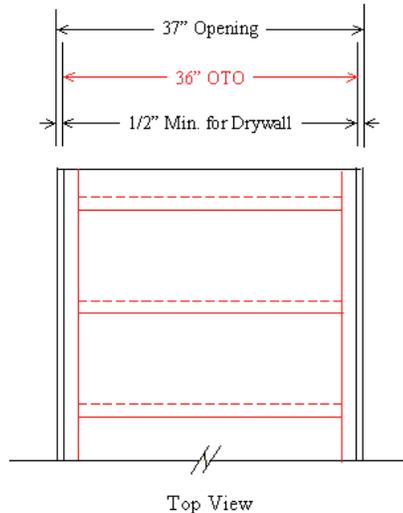
## Width

This attribute is one of the easiest stair attributes to determine. Codes usually provide a minimum width. Before undertaking any stair project it is imperative that you verify all codes with your local building inspector to ensure you are installing a safe staircase. When installing a staircase with a landing, the width of the landing detail will determine the width of the stairs.

The following picture will give you an idea of how to measure your stairwell for width.

### MEASURING WIDTH OF STAIR

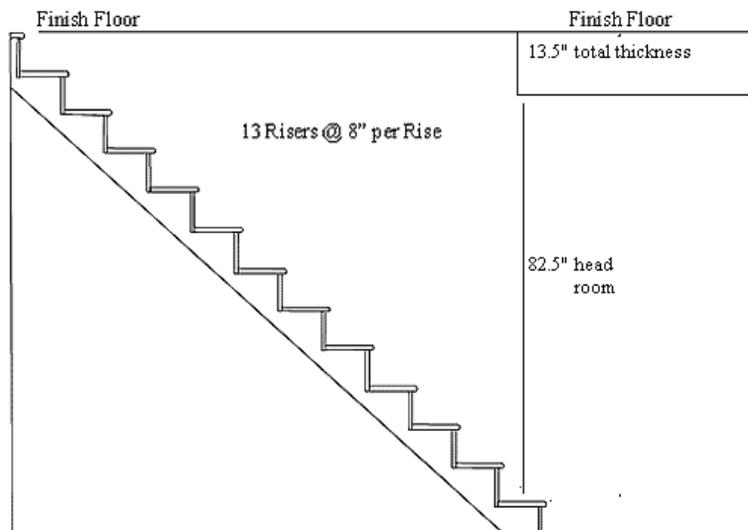
OTO is short for Out-to-Out or the measurement from the outside of one side of the staircase to the outside of the other.



The maximum width of the staircase in this diagram is 36". Due to wall variation, stairs should be ordered 1/4" less than the actual maximum dimension. In this example the out to out dimension would be 35-3/4".

## Headroom

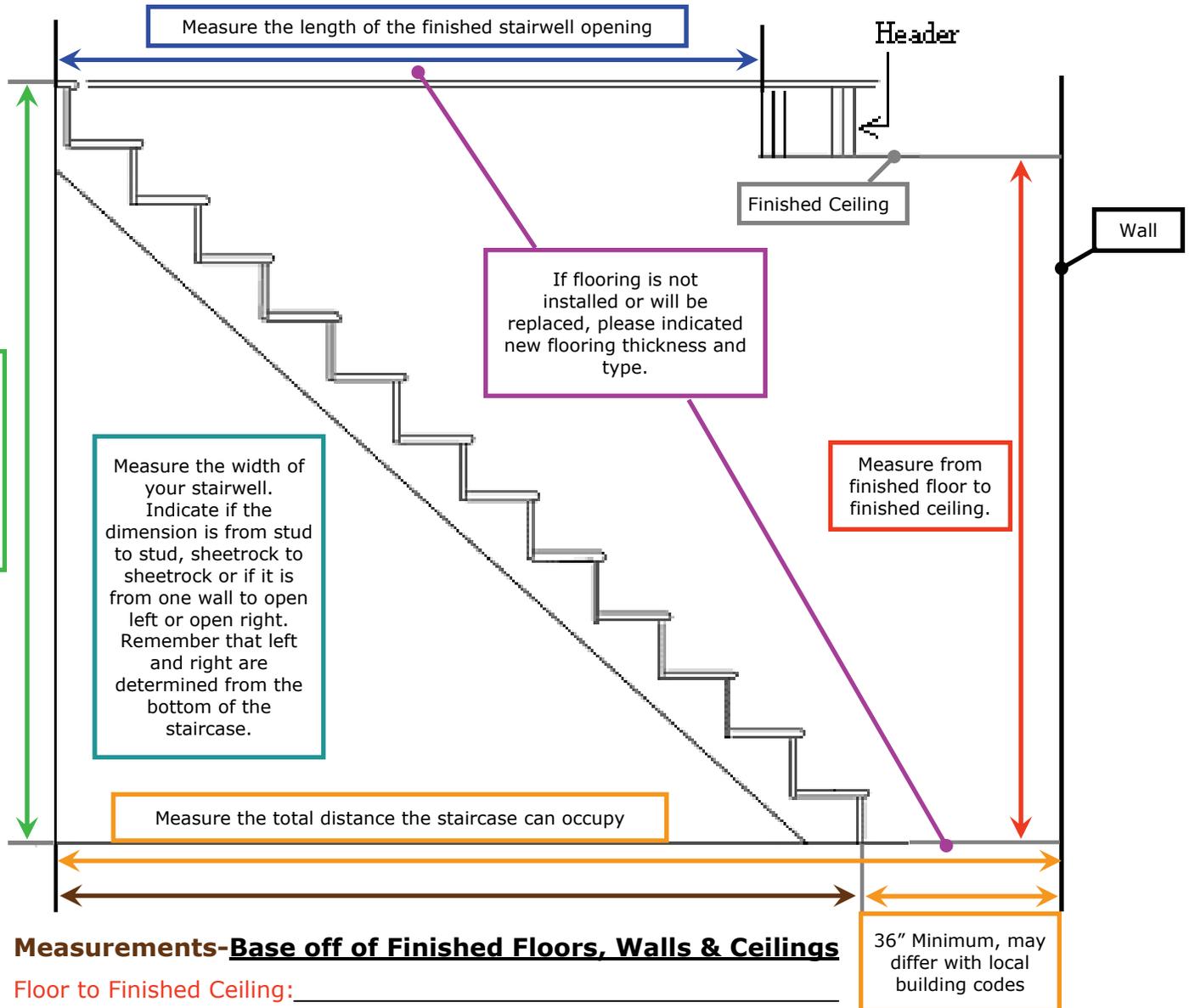
Headroom is the final consideration that your Curtis Salesperson will want to discuss with you. Headroom is a measurement of the distance between the ceiling and staircase at their closest point. In New York State, the minimum allowable headroom is 80". If you have any question as to whether or not you will have headroom issues, please discuss this with a Curtis Salesperson. See the picture below for a graphical representation of Measuring headroom.





## Measuring Worksheet

If you are interested in getting a quote on stairs, use the following worksheet to get some simple measurements for our stair experts. With these measurements and a short discussion, our salespeople will be able to get you a close cost estimate. Many Curtis Lumber locations offer jobsite measuring services and have access to a custom stair shop. Please call your local Curtis Lumber for more information on the stair services offered there.



### Measurements-Base off of Finished Floors, Walls & Ceilings

Floor to Finished Ceiling: \_\_\_\_\_

Floor to Floor: \_\_\_\_\_

Length of Stairwell Opening: \_\_\_\_\_

Total Stair Distance Available\*: \_\_\_\_\_

Flooring Type and Thickness: \_\_\_\_\_

Width of Stairwell: \_\_\_\_\_

Comments: \_\_\_\_\_

\*Be sure to check with your local building codes to determine what minimum distance is required between the end of the staircase and a wall. In New York State, 36" is the minimum.

**For custom stairs, our experts will come to your jobsite to give you an estimate. Be sure to stop into your local Curtis Lumber to speak with our on staff stair experts.**