

# Garden Steps

Unfortunately, most people do not have a level yard or garden. Instead of dreading the slope of your land, why not enhance your yard or garden with creative, safe, garden steps? When done correctly, garden steps will visually connect two or more areas in your landscape.

## Step 1:

Determine the rise and distance. You can do this by driving a stake where the top step will be and directly below where the bottom step will be. From the top stake, stretch a string held perfectly level (check with a level line) over the bottom stake. Measure the vertical distance from the ground to the string and then measure the length of the string. These 2 measurements will give you the change in grade. For example, if the vertical rise is 3' and the horizontal distance is 12' you know your steps must rise 3' within the space of 12'.

## Step 2:

Determine the size of each rise and tread. Keep in mind that fluctuation in rise to tread ratio should occur only when broken by a landing or walkway. People should not have to change stride when walking your steps. A comfortable step-way has a ratio of  $2 \times \text{rise} + 1 \text{ tread} = 25''\text{-}27''$ .

## Step 3:

Excavate the area. Start at the lowest point, making sure that it is level and solid. Set and pin the first riser, making sure it is level. Now set and pin the two tread runners, making sure they are level. The runner must be several inches past the next riser to support the next runner. Repeat these steps until you have the completed step-way.

## Step 4:

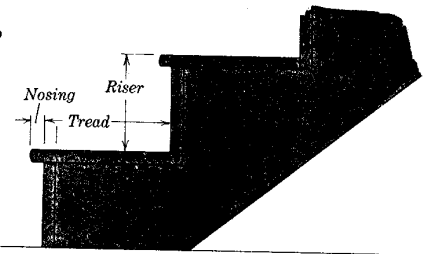
Fill in the steps with sand or stone dust and tamp thoroughly.

## Step 5:

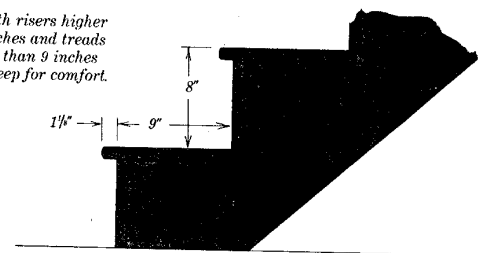
The treads can be made of brick, flagstone, paver blocks, or even gravel. Some suggestions: Most stepways should be four feet wide for walking comfort. Consider using materials that compliment others in your landscape. Be aware of slippery materials. Your pins should be 1/2" diameter and 12" into solid ground when anchored.

### Riser-to-Tread Ratio

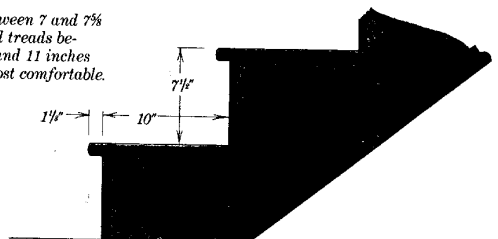
For proper ratio, add riser height to tread length. The sum should equal between 17 and 18 inches.



Stairs with risers higher than 8 inches and treads narrower than 9 inches are too steep for comfort.



Risers between 7 and 7 1/2 inches and treads between 10 and 11 inches are the most comfortable.



Risers lower than 6 inches and treads wider than 11 inches are too flat, uncomfortable, and unsafe.

