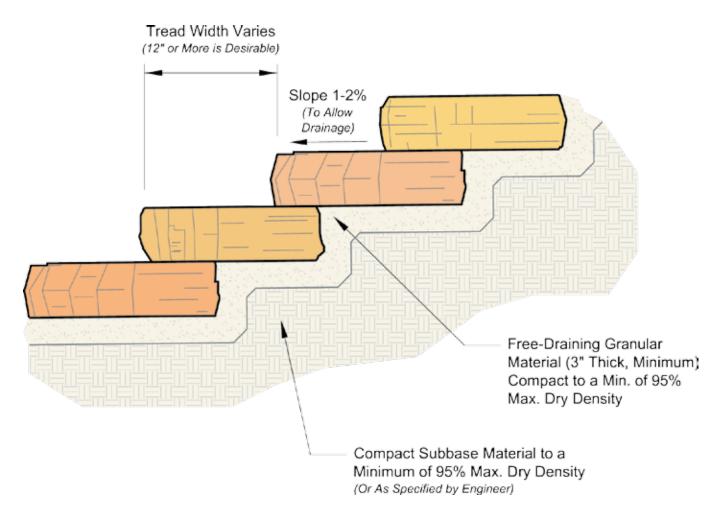
Begin the step installation process by measuring the total rise required and calculating the number of steps to be used. Each step has a $5^{1/2^{\circ}}$ or 7" rise, but should be sloped approximately $1/2^{"}$ such that the back of the step is higher than the front of the step. This slope will facilitate surface water drainage. With appropriate sloping, the net rise of each step is 6" or $7^{1/2^{\circ}}$. Divide the total rise by 6" or $7^{1/2^{\circ}}$ to get the number of steps required.

Next, **calculate the tread width**. Generally, when the grade allows, a 12" or wider tread is desirable. To calculate the tread width, divide the total allowable horizontal run minus the width of the top step, by the number of steps minus one. The one less will account for the top step.

Consider the following example:

Total rise = 42", Total horizontal run = 108", Width of top step = 24", Rise of steps = $5^{1/2"}$, Number of steps = $42" \div 6"/Step = 7$ Steps Tread Depth = $(108"-24") \div (7-1) = 14"$ Tread Depth



Excavate and grade the area for the first step. Steps should be placed on at least 3" of free draining soil, such as sand or peastone. Compact soil to a minimum of 95% Standard Proctor.

Place step with either forks or straps using a small excavator or skid-steer to lift the piece into place. Practice safe handling procedures during this process. **Fill behind each step** with free draining soil and compact to 95% standard proctor. Remember to slope fill to allow for proper drainage when next step is placed. Continue placing steps in this manner until finish grade is reached.

- This drawing is for reference only.
- Block size and placement shown are for reference only. Individual steps will vary with installation pattern.