

How to calculate how much turf you need

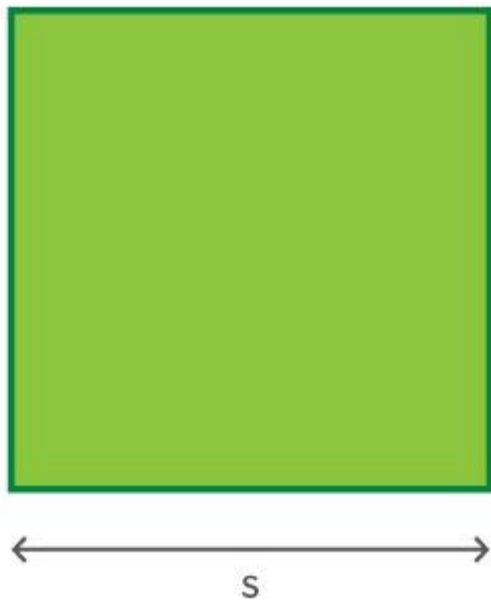
Armed with our easy step by step method, calculating how many square metres of turf you need to order should be a simple exercise.



1. Get a piece of paper and sketch out the areas to be turfed.
2. Break up the areas into basic shapes such as squares, rectangles and circles. See our full list below.
3. Measure each area and write down your measurements.
4. Calculate how many square metres are in each area using the easy formula below.
5. Add the totals together.
6. Order extra! For simple areas like a rectangle, order 5% extra. For more complex irregular areas, order 10% extra. This will allow for any slight miscalculations. It's better to have some turf left over than run out.

Calculating the area of different shaped areas

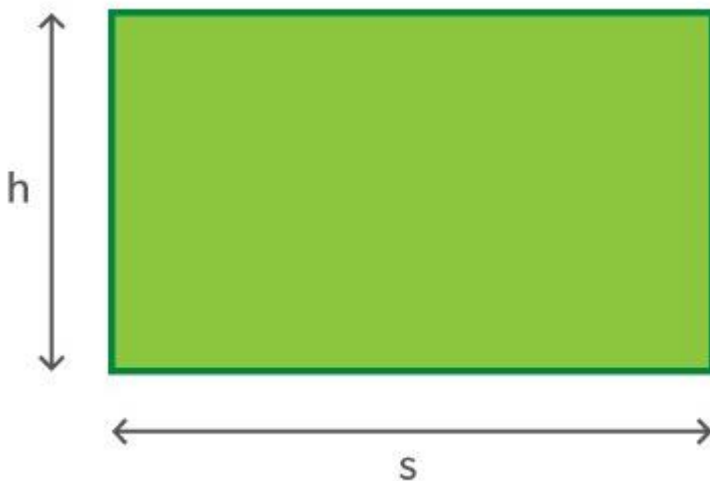
Square



Measure one side of the square, then multiply it by itself (area = $s \times s$)

Example – If the width of the square is 4 metres: $4m \times 4m = 16m^2$

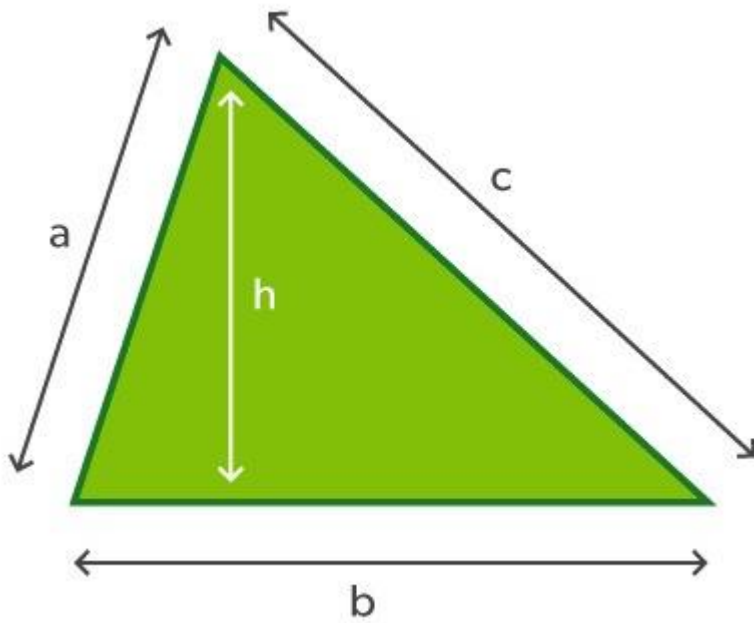
Rectangle or oblong



Measure the height and width of the square, then multiply them together (area = $w \times h$)

Example – If the height is 4 metres and the width is 6 metres: $4m \times 6m = 24m^2$

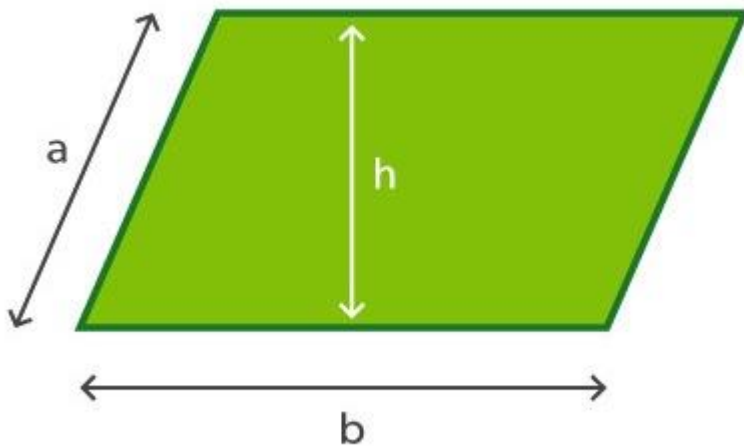
Triangle



Measure the height and base, then multiply the height by half of the base (area = $\frac{1}{2}b \times h$)

Example – If the height is 9 metres and the base is 10 metres: $9m \times 5m = 45m^2$

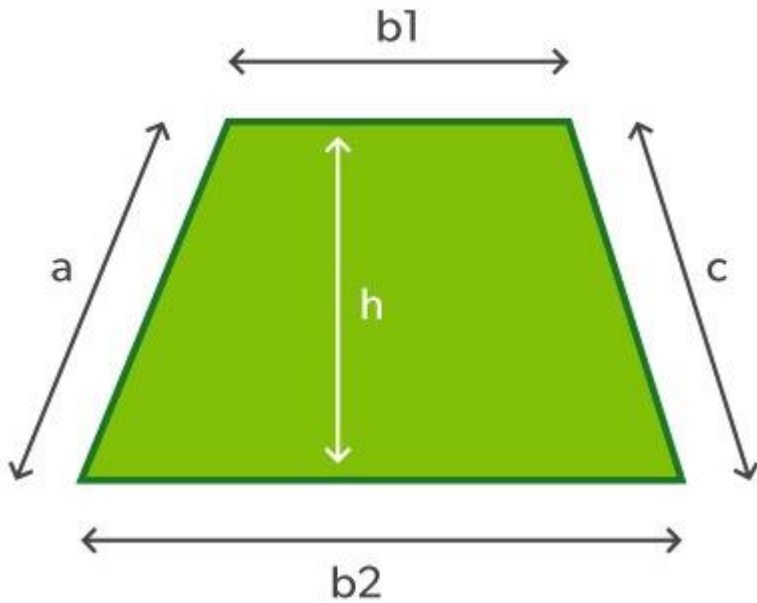
Parallelogram



Measure the height and base, then multiply together (area = $b \times h$)

Example – If the height is 5 metres and the base is 8 metres: $5m \times 8m = 40m^2$

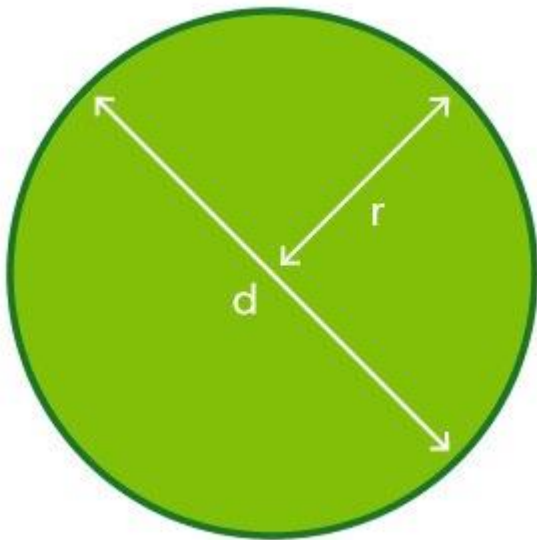
Trapezoid



Measure the height and the top and bottom edges. Add the top and bottom edges together ($b_1 + b_2$). Divide this figure by 2. Multiply by the height. (area = $\frac{1}{2} (b_1 + b_2) \times h$)

Example – If the top edge (b_1) is 5 metres and the bottom edge (b_2) is 9 metres, and height is 6 metres: $5m + 9m = 14m$. $14 \div 2 = 7$. $7 \times 6 = 42m^2$

Circle

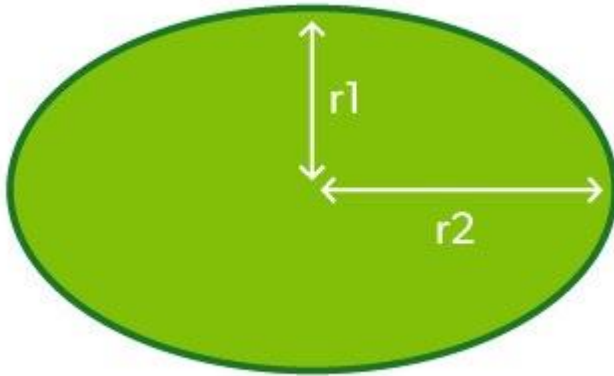


d = diameter, r = radius

Measure the diameter of the circle, then divide this by two to calculate the radius. Multiply the radius by itself, then multiply the total by 3.14. (area = $r \times r \times 3.14$)

Example – If the diameter is 12 metres, the radius will be 6 metres; multiply 6 metres by 6 metres, then multiply the total by 3.14: $6 \times 6 = 36$. $36 \times 3.14 = 113.04m^2$

Ellipse or oval



Measure the width and height of the oval, then divide each measurement by two to calculate r_1 and r_2 (area = $r_1 \times r_2 \times 3.14$).

Example – If r_1 is 3 metres and r_2 is 5 metres: $3m \times 5m = 15m$. $15m \times 3.14 = 47.1m^2$

Calculating the volume of turf underlay

Materials such as soil and sand are measured and ordered in cubic metres and tonnes. To calculate the volume of material required, first work out the area in square metres, and then multiply by the depth to get the cubic metres. Typically you might need 100mm or 150mm of turf underlay (0.1 or 0.15 metres).

Example 1 – You have a rectangle measuring 10m x 6m and need to add 100mm of turf underlay soil. $10m \times 6m \times 0.1m = 6m^3$.

Example 2 – You have a circular area with a diameter of 14 metres and a radius of 7 metres, needing 150mm of soil. The area is $7m \times 7m \times 3.14 = 153.86m^2$. The volume is $153.86m^2 \times 0.15m = 23.079m^3$, rounded down to $23m^3$.