

HOW-TO Stepping Stones

This guide has been written and compiled for the home handyperson. Following these instructions will help you achieve an excellent result that you will be proud of.

However, for a truly professional finish, we suggest you contract a professional landscaper to do the job for you. The method followed in this guide is used by many professional landscapers but many will have their own individual variations or in some cases completely different approaches. Please remember, this is not the only method for building a fence, just the method we have found to offer the greatest balance of cost and labour.

DISCLAIMER:

The contents of this publication are intended as a general guidance only. Specifications are subject to change without notice. Centenary Landscaping Supplies cannot accept any liability whatsoever in respect to the content of this publication or the work performed using these methods. If you are unsure always seek the advice of professionals.

Tools

- String line and pegs
- Spirit level
- Tape measure
- Wheel barrow
- Square mouth shovel
- Trowel

Materials

- Paving choice, we recommend a 400mm paver such as Euro Stone from Adbri Masonry.
- Mortar mix (or sand/cement)
- Weed control matting
- Decorative pebble

Before you start your stepping stone project, make sure you consider the following:

- The fall of the land. If your pathway is down the side of the house, ensure the area is adequately drained away from the foundations. Simply placing stepping stones and pebbles over a poorly leveled space, doesn't fix the problem.
- The start and finish height. If the land is sloping quite substantially over a short distance, you may need to consider small retaining options to lift the height and terrace the land.
- The distance between steps and stone placement. The best way to do this is to walk around 10 comfortable steps measuring from the starting point though to the last step. Divide the length by 10 to get a good average step length. For example, if your comfortable step was 600mm and you are using a 400mm paver, there will be a 200mm gap between each paver.



STEP ONE Choosing the pavers

There are many paving options on the market in all shapes, sizes and colours. When choosing a stepping stone option, consider your existing paved surfaces around the home. Many pavers come in a range of sizes, so you may be able to get the perfect stepping stone option in a matching colour. Otherwise, check out the huge range of both feature steppers and pavers available at the Centenary Landscaping Supplies yard or Online.

The best paver size for stepping stone is 400mm. They comfortably fit an adult foot and when laid with pebble in between create a good sense of scale. There are also a large variety of more natural looking options available from bush rock type slabs to flagstone sandstone. All of which make a perfect stepping stone option, but regardless of choice, application remains fundamentally the same.

STEP TWO Measuring & Calculations

Using the method outlined above, determine how big your step is followed by how large the gap between each paver will be. Once you have the measurement you can then determine how many pavers you will need for the length of your pathway. We recommend between 100mm and 200mm between each paver. This allows for a comfortable step and plenty of space for pebble or ground cover plants in between. Check out the table below to help determine how many pavers you'll need for your path.

Every step is different and what is comfortable to one person may not be for another. Take your time to measure and lay out your stepping stone to get a comfortable step distance.

Generally, 1 bag of premixed mortar will adequately bed 3-4 400mm square paving slabs.

Paver Size	Step Length	Gap Between Pavers	Pavers Per 5 metre path
400mm	500mm	100mm	10 pavers (1.6m ²)
400mm	600mm	200mm	8.33 pavers (1.33m ²)
400mm	700mm	300mm	7.14 pavers (1.14m ²)

STEP THREE Layout the pavers

Knowing your rough measurements calculated in step 2, layout the pavers by placing them on the ground to ensure you're happy with their location and spacing. This is where you can make some small adjustments by squeezing the pavers closer and slipping in an extra, or pushing them further and reducing the amount.

Set up your string line running the full length of the area. Ideally, you'll want the line to be around 1mm above the finished height of the paver as to not disrupt the line and approximately 60mm above the height of the earth to allow for 20mm of bedding mortar and a 40mm paver. Remove sufficient earth or material to accommodate this and grade the area away from the foundations or towards an already installed drainage system.

STEP FOUR Bed the pavers

Many people opt to lay their pavers directly on the bare earth or on sand (similar to a solid paving base). Tempting as this may be, you will be setting yourself up for more work later on when the pavers move around or discolour. The very best method of laying stepping stones is on a wet mortar base. Using mortar under the pavers does five key things. Mortar allows the pavers to adhere to the earth, it gives the pavers a more solid and stable base, allows the pavers to be levelled, keeps them square and reduces moss, mold and mildew growth.

Once the area is leveled and graded with a string line strung across for easy reference, start by laying your first paver on a wet bed of mortar. Use a hand trowel or shovel to place the mortar allowing sufficient height for the paver.

Bed paver in the mortar using the string line as a guide. If the paver sits too high, use a rubber mallet or hand to apply firm pressure and bed the paver down. Once at the desired height, level the paver across the length and width and to the neighbouring paver using a spirit level. If required, you can remove the paver and correct the mortar bed to improve levels or height. If you get a paver wrong, don't panic! The mortar will take up to 24 hours to fully dry and it will stay workable for at least an hour, so there is plenty of time available to get the paver in place with perfection. Remove and replace as many times as you need to be satisfied with the result. Continue along the length of the path repeating the above steps until you reach your last paving slab.



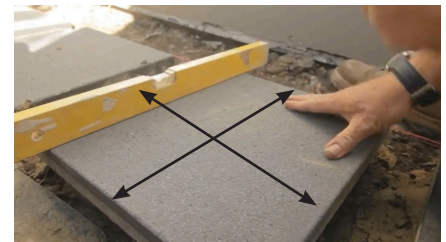
Mix mortar in a wheelbarrow using a 5:1 sand to cement mix.



Spread thin layer of mortar for paver to bed on.



Place paver applying force to aid in bedding.



Level paver across both planes using a level.

STEP FIVE Haunching

Haunching simply refers to the mortar or concrete 'skirting' that borders a paver or paved area. It is an effective addition designed to prevent lateral movement. When used on stepping stones, it will really anchor your pavers in place. Simply run excess mortar around the perimeter of each paver, either as you go or at the end using your trowel. Bring the mortar halfway up the side of the paver to get good adherence.

STEP SIX Finishing

Allow the mortar to dry either over-night or over the course of the following week in preparation for the next weekend. For gravel and pebble pathways, measure the total area and subtract the area occupied by the paving slabs. For example, if the area is 10 metres long by 1 metre wide ($10 \times 1 = 10\text{m}^2$) and you have 10 x 400mm square stepping stones ($0.16 \times 10 = 1.6\text{m}^2$), the total area you will need to cover with pebbles will be 8.4m^2 ($10\text{m}^2 - 1.6\text{m}^2$). Multiply this by the depth of the area to determine the volume required. If the 40mm paving slab was laid on a 30mm mortar bed then the depth required would be 70mm (0.07m).

If the area is to be used as a garden, use a similar method to determine the volume of soil and mulch (or pebble mulch) required. Allow a depth of at least 30-50mm for the top layer of mulch and fill the remaining area with soil for planting.

STEP SEVEN Cleaning

Occasionally, when laying paving slabs with mortar, it can get a little messy! Accidental drops of mortar on concrete pavers can be hard to remove if not tended to instantly. In this case, use specialist cleaning products (light acids) designed to react with mortar residue. This process is best carried out before plants have been installed.



Haunching the sides of the pavers.



Spread pebbles in between paving slabs.