

Setting a post

Cement Australia has prepared this project guide to help you set posts using concrete with confidence. We hope it is useful, but we recommend you obtain expert advice confirming the suitability of the concrete product for your proposed application.

Tools you will need:

- Spirit level
- Tape measure
- String line
- Post shovel or long handled shovel
- Shovel
- Measuring jug
- Hose or bucket
- Hammer
- Wheelbarrow or concrete mixer
- Spray marker paint
- Rod for tamping

Materials you will need:

- Bags of 20kg concrete product
- Posts
- Drainage material: gravel
- Clean water
- Timber supports
- Timber stakes
- Double headed nails for easy removal

Recommended products

For timber fence posts, you can use any of the Cement Australia 'just add water' concrete products - just follow the instructions below. For setting letterbox posts, clotheslines or uprights (stirrups) please see the individual project instructions. For steel or aluminium posts, please ensure that your posts are sealed according to the manufacturers' recommendations to prevent corrosion occurring.



Concrete Mix

Hardens within 24 hours, can be finished to a smooth surface





NEW Extra Strength Concrete Mix 50MPa

Hardens within 24 hours, can be finished to a smooth surface



Post Set Concrete

Hardens in 24 hours, cover surface with earth for a neat finish



Rapid Set Concrete

Hardens within 15 minutes, ideal for use where the surface won't be left visible

Before you get started

- Use the [Calculator](#) to estimate how many 20kg bags you will need
- Read the [Hints & Tips](#) section
- Ensure you have any relevant approvals or permits
- Ensure there are no pipes or services below the ground; contact Dial Before You Dig on 1100 or via their website www.1100.com.au for advice on the locations of submerged pipes and cables.



- Setting posts one at a time is a good idea, but make sure all your posts are braced and ready

if using [Rapid Set Concrete](#).

- [Rapid Set Concrete](#) will harden in 15 minutes or even faster on a hot day. Be prepared to complete your project quickly. Take the time to read these instructions carefully before getting started.

Safety

Before you begin any project, please ensure you protect yourself with the following:



BOOTS



FACE MASK



GLOVES



GOGGLES



LONG PANTS
& SLEEVES

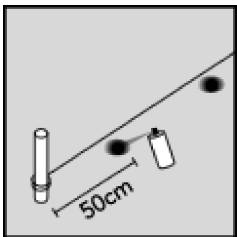


TEAM LIFT

Look after yourself properly

- Protect your skin and eyes. Cement based products are alkaline and can cause burns to exposed skin or eyes.
- When working outdoors, be [SunSmart](#) - Slip on some sun-protective clothing – Slop on sunscreen - Slap on a hat - Seek shade - Slide on some sunglasses.
- All 20kg bags of cement products require 2 people to lift them safely. Always follow safe lifting procedures to avoid injury. So you will need a friend to help you handle the 20kg bags and to assist with setting the posts.

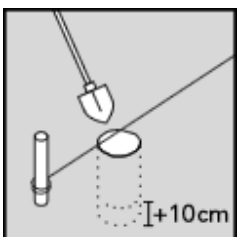
How to set posts using concrete



STEP 1: MARK OUT THE POST POSITIONS

Place a stake at each end of where the posts are going to be erected and run a string line 5 cm above the ground in line with the posts. Mark out the location of each post hole using spray paint.

Tip: Place the end stakes 50cm beyond where the end posts are to be set so it is easy to dig the holes without impacting on the string line.



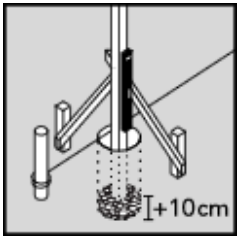
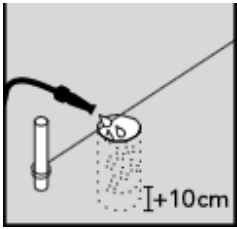
STEP 2: DIG THE HOLE(S)

Dig your post hole(s) adding a 10cm depth to allow for gravel to be placed under the post for drainage.

Refer to our simple [Calculator](#) to work out how much concrete product you will need.

STEP 3: SOAK THE HOLE(S)

Pre-soak the hole thoroughly with clean water and allow the water to drain into the soil.



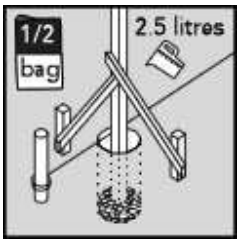
STEP 4: POSITION THE POST

Place 10cm of gravel in the hole for drainage. Position your post in the centre of the hole, ensuring that it is vertical using the spirit level and square to the string line.

For wooden posts, brace in position using timber supports nailed to the post. Secure the supports into the ground with timber stakes and re-check the vertical alignment.

For metal posts, ask your friend to hold the post steady in position whilst you add the concrete.

IF YOU ARE USING RAPID SET CONCRETE

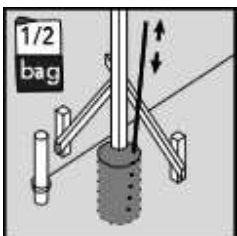


STEP 5: FOR RAPID SET CONCRETE - ADD WATER & HALF THE CONCRETE

Accurately measure 2.5 litres of clean water per 20kg bag and add the water to the hole. Immediately pour in half the bag of Rapid Set Concrete making sure that it is evenly distributed around the post.

Tip: Check and re-check that the post is exactly vertical otherwise your finished fence will be out of alignment.

[Watch this video to see how to it's done.](#)



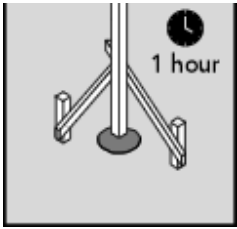
STEP 6: FOR RAPID SET CONCRETE - TAMP WELL & ADD THE REST

Tamp the product around the post using a rod to remove any air pockets. Add the remaining half bag of product and tamp again. Add small amounts of water only if required to ensure that the mix is completely moistened. Should you need more concrete for the hole, immediately repeat the process with another bag.

Tip: Tamping is essential to remove air pockets and achieve solidly set posts every time.

STEP 7: FOR RAPID SET CONCRETE - REMOVE SUPPORTS AFTER 1 HOUR

The product will harden initially in 15 minutes. Allow the Rapid Set Concrete



to harden for at least 1 hour before removing the bracing supports. It is recommended to wait for 24 hours before affixing anything to the post.

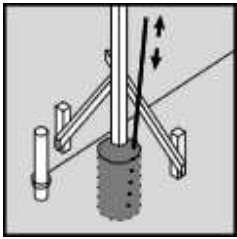
IF YOU ARE USING CONCRETE MIX OR POST SET CONCRETE



STEP 5: FOR CONCRETE MIX OR POST SET CONCRETE - MIX CONCRETE & WATER

In a non-porous vessel, such as a wheelbarrow, add the Concrete Mix no more than 2 bags at a time. Add exactly 2.5 litres of clean water per bag of Concrete Mix and mix thoroughly remembering that excess water ruins good concrete.

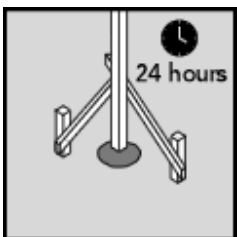
[Watch this video to see how to it's done.](#)



STEP 6: FOR CONCRETE MIX OR POST SET CONCRETE - ADD CONCRETE & TAMP WELL

Add the correct amount of the mixed concrete to the hole, filling the hole to just below the ground surface. Tamp the product around the post using a rod to remove any air pockets. Should you need more concrete for the hole, immediately repeat the process with another bag.

Tip: Tamping is essential to remove air pockets and achieve solidly set posts every time.



STEP 7: FOR CONCRETE MIX OR POST SET CONCRETE - REMOVE SUPPORTS AFTER 24 HOURS

Allow the concrete to harden for at least 24 hours before removing the bracing supports. Wait for 3 days before affixing anything to the post.

Hints & tips

- For fence paneling, always ensure that the positions of the posts are the correct distance apart and mark out any gate positions in advance. A good way to do this is to lay out the materials – posts, rails, gates and panels - on the ground square to the string line in the proposed position.
- When setting a large number of posts, consider renting a mechanised post hole auger and a concrete mixer to make the job a lot easier and quicker.
- If setting timber posts use timber that is pre-treated to resist wet rot & termite attack.

- Always clean your equipment right away especially when using Rapid Set Concrete. Once concrete hardens, it is very hard to remove.