

Produce the Perfect Paving Slab

- An Overview





How to produce the perfect concrete paving slab

Top Tips

- Use a good mould with good support
- Use the correct release agent for the job
- Use the correct materials (concrete and admixtures)
- Mix Correctly
- Correct Vibration
- Store your finished product correctly

Overview

To produce the perfect concrete paving slab, follow the steps below:

- 1. You need the perfect concrete mix this takes time to achieve as your materials will produce different results depending on the materials used. Start with something like a 300 cement content in the summer and a 350 in the winter, or a 4:2:1 mix, 4 aggregate (4-10mm gravel) 2 course sand and 1 part cement, the aggregates used will affect your concrete greatly, this is why you need to experiment to get the right mix, that can only be done by you.
- 2. Add plasticiser (be careful not to overdose) and pigment if desired.
- Consistency of mix ensure that your mix is the same every time. (Assuming you have found the perfect mix – you can make slight exceptions for warmer and cooler temperatures or Winter/Summer more or less cement)
- 4. Use the right mould. Make sure the mould you are using is strong, flexible and has a taper some moulds may have negative taper,
- 5. make sure these are very flexible!
- 6. Use a frame to support your mould.
- 7. Once your mould is set up, spray with release agent, a good release agent should have a high coverage rate per ltr and be non solvent. – Do not use things like diesel oil – these may damage your moulds and produce stains on your concrete.
- 8. Some Precasters will add steel at this point be sure not to add the steel before spraying your release agent, to ensure you do not waste your release agent and to ensure the steel is properly encased.



- 9. Pour your concrete in the mould if well plasticised the concrete should flow into the mould easily covering each corner until the desired height is archived, then add around another couple of mm to the desired height as the concrete level will drop after vibration, use a doser to ensure perfect amounts every time.
- 10. Vibrate the concrete in the mould and frame on a vibration table until only a small amount of air is escaping remember that over vibration is better than under vibration it may take a few goes to ensure your perfect vibration time.
- 11. Now leave to dry preferably for 28 days.... 24 48 hours is usual, some precasters will demould earlier, but really you shouldn't be demoulding less than 24 hours after the concrete has been poured.
- 12. Demould At best use a vacuum suction machine to lift the concrete out of the mould, but realistically in most precast works, use a soft thick rubber matt and demould onto the matt.
- 13. Wash Wash the mould out using a rag and water (this should be enough) and start the whole process again.
- 14. Seal Some precasters seal their paving slabs especially if they have been pigmented. This will bring out the colour and should mean you get more for your pavers, but this is down to preference.
- 15. Storing Concrete paving slabs are out store them on a pallet with plastic spacers separating them ensuring the concrete is not rubbing against themselves.

