



Precasting Outdoors

- Precast

ARMCON
CERTAINTY: IN CONCRETE

Concrete Production Outdoors

Producing concrete can be a challenge in itself, especially when you add in the outdoor elements. You need to protect the concrete as much as you can from the elements so here is a check list to help you do just that.

- If you can use shelter – If you are precasting outdoors the first thing you can do is protect the wet concrete from the elements, so even if it's a tarpaulin or small shelter then set it up and protect your wet concrete from precipitation. This will stop extra water entering the concrete or the mix and weakening the concrete.
- If it's less than 5°C then don't produce concrete – some say don't produce in less than 3°C but I would argue that if you can see your breath then don't.
- Protect your concrete from the wind, choose as sheltered spot as possible, and cover the concrete once poured to ensure that the concrete doesn't dry and crack in the wind. Wind will dry the top surface of the concrete.
- Protect your concrete from the sun – the sun can dry your concrete out too quickly and as a result make it crack and break.
- Make sure the concrete has the best chance of curing – concrete will cure best at room temperature in the shade. Any colder and the whole process slows down, any warmer and the process speeds up and can create a dusty and cracked mess of concrete. So make sure that the concrete can cure as well as possible.
- If cold protect it with a thermal blanket and if possible warm it up (if cold) to start with, after that let it cure properly. Any protection is better than none. So even a tarpaulin and straw can help if needs be.
- Pour the concrete at the warmest part of the day to give it the best chance possible. So precast around lunch time when it is warmest so that the curing process can have the best chance to get going.
- Use admixtures such as retarders – to slow the curing process down, and accelerators to speed it up as and when you need it.

- There is no such thing as frost proofing for WET concrete, you cannot pour in less than 3°C. Air entrainer exists that will protect the concrete once it has been poured and hardened from the cold. But not whilst wet. There is currently no product that can allow you to pour safely in less than 3°C.