





## PLAN VIEW OF GARAGE.

## The Concrete Garage Base

Why do I need a concrete base? Can't I use paving blocks or slabs, or just put it on tarmac?

The design of the concrete prefabricated building with panels bolted together requires a strong concrete raft base. Any movement in the base will cause the garage to move, and will invalidate the product guarantee. WE WILL NOT BUILD ON TARMAC, PAVING BLOCKS OR SLABS OR GRAVELLED SURFACES.

Responsibility for the concrete base is the customer's responsibility.

The old saying, "a building is as good as its foundations", is as true for your concrete sectional garage as it is for any other type of building. The better the specification of the base, the more peace of mind you will have in the future, if you skimp on the base, you may regret it later!

## Concrete hase design

Your concrete base needs to be designed properly to be strong enough not to crack or sink over the lifetime of your garage. A typical concrete sectional garage will weigh between 3 and 4 tons.

Your garage base should be designed to suit the soil on your site. For instance, if the soil is clay, with the likelihood of movement in the future, you will need to reinforce it, and probably make the raft thicker. If your building is over 30sq m, you will need to gain approval from your local control office, who will require to inspect and approve your concrete garage base plans.

You should thicken the edges of the base to a depth to suit the ground conditions. The thickness of the concrete in the base will also depend on the soil conditions. The concrete mix design should be suitable for a garage base – speak to your supplier and tell them what the concrete is intended for so they can provide the correct mix. A minimum concrete thickness of 100mm (4") is normally recommended, laid over at least the same thickness of well compacted clean hardcore. The hardcore should be "blinded" with sand if you are going to lay a damp proof membrane (dpm), normally 1200g polythene sheet. Steel reinforcement mesh will further strengthen your base, your local agent or local builder will advise.

If you intend to store items in your garage once it has been built, we recommend the inclusion of a dpm. Without the dpm there is no guarantee that damp will not spread into the building. Don't forget that the base will need time to "go off" or cure, before we can build on it, allow at least a week, more in winter.

The concrete base should be Square. The garage is a rectangle, and needs to sit on a base about 75mm (3") larger all round. When setting out your base, make sure that the shuttering is square. To make sure your base is square, measure the diagonals AD and BC – they should be the same. If not, adjust your shuttering until they are – your base will be Square.

The external dimensions should be 150m (6") larger (75mm each side and front and rear) than the size of the building you have bought. If in any doubt, seek advice and confirmation of the size of your building from either the company or from your local agent.

The concrete base should be Level. There must be no slope from side to side, back to front or front to back. If the base isn't level, we will not be able to build your garage properly, and the Leofric 10 year guarantee may be invalidated if we do build it.

If we are able to build your concrete garage on the unlevel base, it will be difficult for you to lay the necessary concrete fillet, there could be a gap under the up and over door, the roof may not fit properly. If the fall is to the rear, you may well get puddles forming at the back of the garage.

If the base is too far out of level, we will have to abort the delivery, and it will cost at <u>LEAST £250</u> as a redelivery charge, and potentially delay redelivery of your building for at least 3 to 4 weeks.

The concrete base should be Flat. If the base is not flat, the panels will not fit together properly, the roof won't fit and if the problem is too bad, we may have to abort the delivery, with the additional redelivery cost.

The base must be Higher than the surrounding area. It should stand out of the ground by at least 25mm (1"). If not, water will stand on the base and will leak under the panels. If the ground slopes down to the base, you should ideally dig out the ground for 150mm (6") around the base, and dig out a trench 150mm (6") deep, backfilling with gravel or pea shingle, after retaining the existing ground. Don't forget to take into account surrounding ground levels when you position your personnel door – if the ground is higher than the base, it will catch as you open it..... Obvious when you think about it, bit late when you have built the garage!

If your concrete garage is at the bottom of a sloping drive, you need to put in a gulley to take rainwater away to a suitable drain. We can provide a timber weather bar to help prevent water getting under the up and over door, but in the event of a sloping driveway, a gulley is essential.

So, your base should be designed to suit your local conditions. It should be Strong enough, Flat, Square and Level, Higher than surrounding ground and 150mm (6") larger than the building size (external dimension).

Finally, your concrete base should be Positioned properly. Don't forget that the up and over door can project up to 1220mm (4ft) in front of the building when it is being opened, so position the base so the door doesn't foul a wall or other building when you open it. A standard 1981mm (6'6") up and over door projects 910mm (3ft). We need access around the building to construct it.

PLEASE LOOK UP! Trees, buildings etc can overhang, branches and gutters can affect the positioning, just because it fits on the base, doesn't mean it will fit at eaves height!

Don't position the building too close to other buildings or walls, as this can form a water trap – always specify gutters on your garage to minimise the potential for water leaking into your garage.

Allow for guttering on your building if you order it – add in 150mm each side (apex) or 125mm to the length

If you are using a local builder to carry out the base works for you, please give him this before he starts work.



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Project:

Standard Base Construction Detail.

 Drawn:
 Scale:
 Date:

 R.N.J
 1:10
 01/03/2012

 Dwg No:
 Rev:

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