



**Manufacturer and Retailer
of Hot Lime Mortar and Lime Insulation**

GEOCELL FLOOR SYSTEM

- Carefully dig the old floor out, being careful not to start move the foundation stones, if they are sticking into the room dig into the room at a 45 degree angle.
- Ideally you need a minimum of 150mm of compacted geocell -195mm loose, ideally if you can get over 220mm compacted the better.
- Do not compact the soil floor
- Set up a spinning laser to get your depths correct.
- Lay the geotextile membrane on the floor and go up the walls with it
- Try to keep the geocell bags upright, put a sheet around them on the floor, then two people hold a sheet approx. 2msq and a third person split the bag from the top, the geocell should then fall into the sheet.
- Tip the geocell into the room, if you are going above 300mm of geocell you will need to compact the floor twice, under 300mm once over with the whacker plate should suffice.
- Use a medium size whacker plate -100kg, make sure you get a good firm floor, and level, otherwise you could easily be putting 120mm of lime screed down.
- Once firm, the membrane up the wall fold over on top of the geocell, then put another membrane over the geocell and up the wall again- 150mm minimum
- If putting UFH in lay the egrid mesh on top of the membrane, put some weights in the corners to keep the mesh in place, then lay UFH pipes into clip rails and use cable ties to fix to the mesh.
- Depending on foundation stones, you can put cork boards around the external perimeter walls, use a saw/ small grinder to cut the boards down to 100mm depths.
- Lime screed, set the laser up to do a 100mm lime screed.
- 4 people should manage about 25msq /day, ideally you have 3 mixers going, belle mixers can mange but the Baron Mixers are far superior- quicker & safer and make a better mortar.
- Mix 2.5 sharp sand, 1 part nhl – either 3.5 or the 5, this is done via buckets, make sure you are using equal measures throughout. Firstly mix the sand and lime dry so it gets a good mix before adding water. Add water slowly andkeep adding water when necessary. Add fibre for the last few minutes, the mortar should be in the mixer for 20 minutes, don't make it too wet, the mortar should be able to make a ball if put into your hands and not fall apart.
- Mortar should be tipped in each corner when you start at one end and levelled off with a plastic float via the laser, work your way back, if not finished at end of day finish with a 45 degree angle where you can rejoin next day. If putting a stone floor on top leave it quite open pore texture so bedding mortar can stick to it easily.
- There's a good chance you will be able to walk over the screed the following day, but ideally lay a board over so you do not damage the screed and lift it of an evening.
- Calculations needed: to get a loose depth times the compacted depth by 1.3
- For the lime quantities times the msq by 1.4 to obtain quantity to get a 1.:2.5 ratio