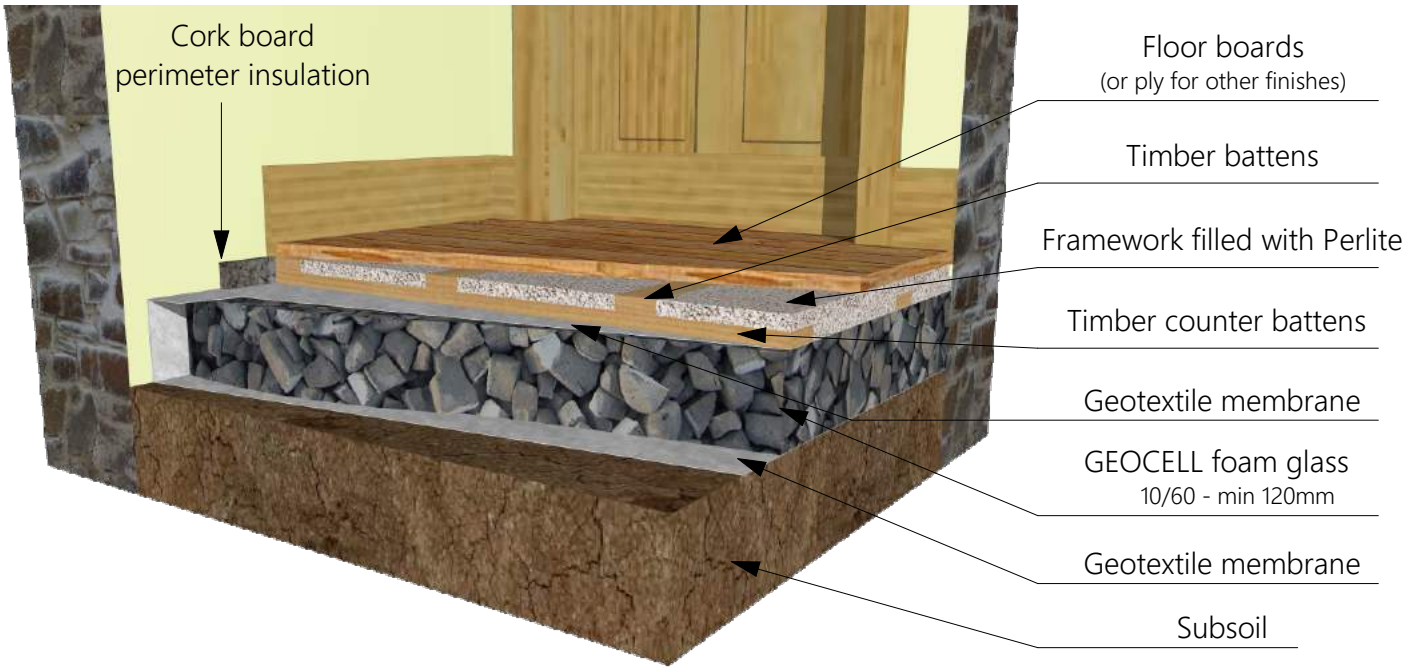

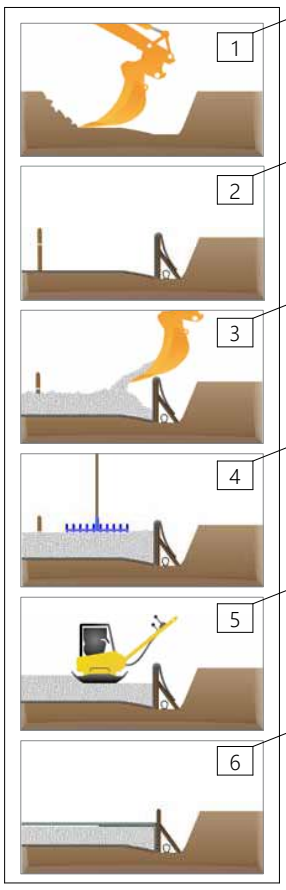

When the existing floor has been removed, excavate (if required) to the depth as calculated by Eden Hot Lime Mortar Ltd, taking care not to undermine foundations. Accurately level and compact the surface, variations in levels can significantly increase material consumption.

NOTE - Please consult a specialist for high water table/ground water issues as additional drainage maybe required.

Once level, lay the geotextile membrane over the soil, overlapping joints. Ensure the geotextile laps up the walls far enough to fold back onto the GEOCELL foam glass.

Prior to filling the area with GEOCELL, install marker posts to indicate the finished level after compaction. Allow a compaction ratio of 1.3:1 by measurement, e.g. Loose fill to 195mm and compact to 150mm. GEOCELL bags can then be emptied manually or with mechanical assistance within the floor area.

Rake the GEOCELL level ensuring an even fill depth is achieved. Should the compacted fill depth exceed 300mm height, the installation must take place in multiple layers.

Once the loose GEOCELL has been leveled, compaction can be undertaken with a light vibration plate with strong drive (~80 - 120kg, approx frequency 100Hz, centrifugal force <18kN). Alternatively a medium weight, non-propelled or self-propelled roller, running weight <7.5t, static line loads ~ 20kg/cm, approx frequency 65Hz.

Compaction is finished when the target level is reached, further compaction will increase material consumption. Remove posts and level off.
Fold back the excess geotextile around the edges over the compacted GEOCELL, then lay the second layer of geotextile, again lapping up the wall.

7 Timber counter battens can now be laid over the surface, spaced evenly to provide adequate support for the next layer of battens. Pack the battens as required to create a level surface, then fix the battens into place creating a secure timber framework.

8 Cork insulation should now be positioned around the perimeter walls to the depth of the framework, these will prevent cold bridging and protect the framework from any moisture. These are supplied in 1000mm x 500mm sheets and will need to be cut on site.

9 The Perlite can now be poured in to fully fill the voids between the counter battens and battens, it's free flowing so should find it's way to fill the areas. Once filled, brush over the top of the battens leaving the Perlite level with the top of the timbers.

10 If installing underfloor heating, clips (not supplied) can be fixed to the battens/joist to support the the under floor heating pipes. The pipes would be sunk into the Perlite, leaving the top of the pipes level with the top of the battens directly below the floor finish.

Coverings:
Floor boards can be fixed directly onto the timber battens, other finishes like floating floors, parquet or carpet would need a ply base fixed down to the battens first. Tile finishes may also be possible onto the ply base, these must be fixed used a suitable flexible tile adhesive.

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