

Limecrete Floor (the original)



The original Limecrete Floor is a modern interpretation of a traditional solid lime or gypsum floor that can still be seen in many historic or well preserved older homes.

Mike Wye & Associates offer an option for an insulated floor using an insulating clay aggregate. This can be incorporated into the slab rather than using sand and in its coated form it can be used as an effective loose lay material below the slab to help prevent capillary action pulling moisture from the ground.

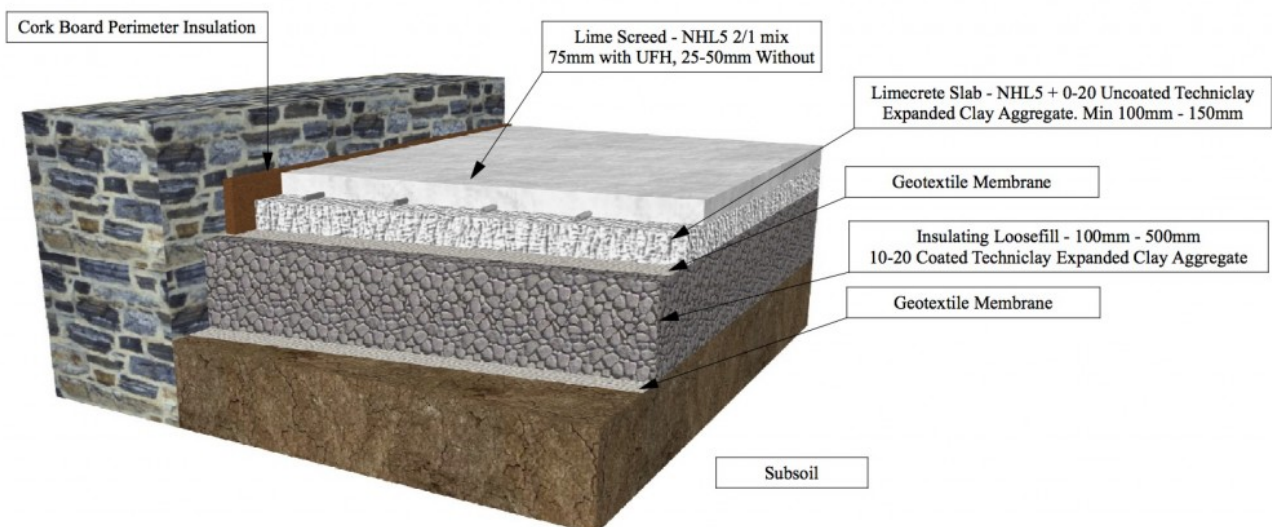
Limecrete offers a number of advantages:

- Increased vapour permeability, which is important in older properties.
- Hydraulic lime is more environmentally friendly compared to cement.
- It can be designed to meet the insulation requirements of Building Regulations.
- ☐ Natural and environmentally friendly.

PLEASE NOTE: THE MAJORITY OF LIMECRETE FLOOR SYSTEMS NOW USE FOAM GLASS AGGREGATE AS THE SUB-BASE ([SUCH AS OUR GLASSCRETE FLOOR](#)).

LIMECRETE FLOORS USING CLAY AGGREGATE CAN STILL BE BENEFICIAL FOR SMALL PROJECTS OR WHERE A WACKER PLATE CANNOT BE USED.

Example Specification



1. Levelled and compacted ground.
2. Layer of geotextile membrane.
3. 100 mm-500 mm layer of loose fill 10-20 mm coated clay

insulation.

4. Layer of geotextile membrane.
5. 100 mm-150 mm Limecrete slab, 3 parts un-coated clay aggregate 1 part NHL5 (by volume) with 30 mm Cork Board to external perimeter walls.
6. 75mm screed of 2 parts aggregate 1 part NHL5 (to bed heating pipes if included).
7. 25 mm-50 mm bedding mortar, 2 parts aggregate to 1 part NHL5 (if laying flagstone, tile floor finish). Grout with same mix (changing sand grade and colour if required).

NB. 11-13 x 25 kg bags NHL5 to 1 m³ clay aggregate will cover 100 m² at 10 mm depth

Documentation

- [Limecrete Method Statement](#)
- [LABC Limecrete Certificate](#)
- [LABC Limecrete System Fact Sheet](#)



Mike Wye Limecrete is an LABC registered floor systems.

LABC represents all local authority building control teams in England and Wales. Members work cooperatively with building owners, home owners, architects, plan drawers, developers building contractors and other professionals to ensure buildings are safe, healthy and efficient to meet the standards set by the building regulations.

DESIGN & QUOTE SERVICE

Need material quantities and insulation U-values? We take the necessary information and will work it out for you.

We will calculate all the design information you need for your floor, thicknesses, insulation values etc using our accredited design programme. As well as providing quotations, including delivery, for all the components.

Please enter your details below with a short message and we will contact you to discuss your requirements. Alternatively, you can call us on [01409 281644](tel:01409281644)

Your Name (required)

Your Email (required)

Phone Number (required)

Short message (optional)

Please click the box to let us know you're not a robot
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Materials

Lightweight insulating clay aggregate – [click here for prices](#)

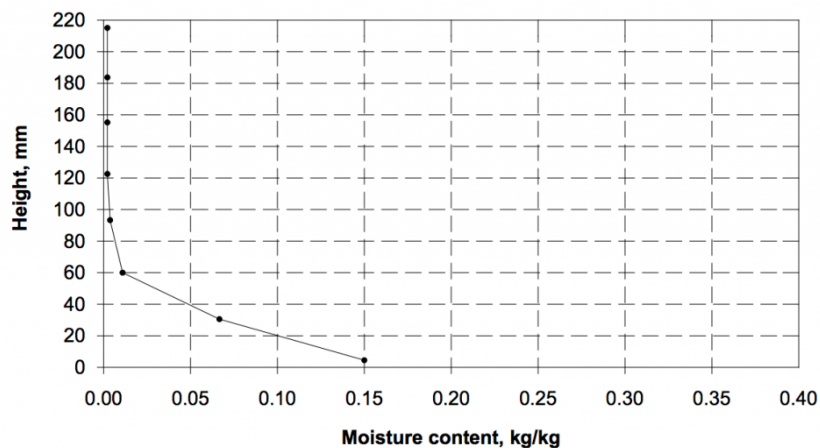
Expanded clay aggregate consists of lightweight, porous, ceramic granules formed by expanding special clay at high temperatures.

The coated version of the aggregate is free-draining and has negative capillary action, good load-bearing properties and good thermal qualities ($k = 0.10 \text{ W/mK}$), and is used as an insulating layer below the limecrete slab. This is a vital

part of the build-up of a limecrete floor, offering an effective vapour permeable barrier to excessive moisture levels.

The un-coated aggregate is mixed with NHL5 to form a limecrete slab.

The graph below shows represents simple test on moisture absorption and forms the basis for a minimum of 120 mm of loose fill material for an effective capillary break.



Water suction height above water surface and moisture content in kg/kg for the individual layers

Geotextile Membrane – [click here for prices](#)

Use vapour permeable, geotextile membrane as a separating layer in limecrete floor.

Supplied as a 4.5 m x 50 m roll for large projects or sold by the linear metre for the majority of domestic floors.

Cork Board Insulation – [click here for prices](#)

Use 30 mm Cork Board for perimeter insulation along the external walls in the screed layer.

Natural Hydraulic Lime – [click here for prices](#)

Secil NHLs have been available since 1891 and have made a huge contribution to the construction market in Portugal. Secil and Mike Wye & Associates have joined forces to provide Portuguese natural hydraulic limes to the UK.

We believe these will offer an excellent and cost effective option for those wanting to use powdered hydraulic limes in their work. Secil NHL5 is fast setting and ideal for limecrete floors whether used with sand aggregates or insulating aggregate such as 'light expanded clay aggregate'.

NHL Documentation:

[NHL brochure \(PDF format\)](#)

[Product sheet \(PDF format\)](#)

[Health and Safety Sheet \(PDF format\)](#)

[Technical sheet](#)

Use NHL5 for limecrete floor systems.