

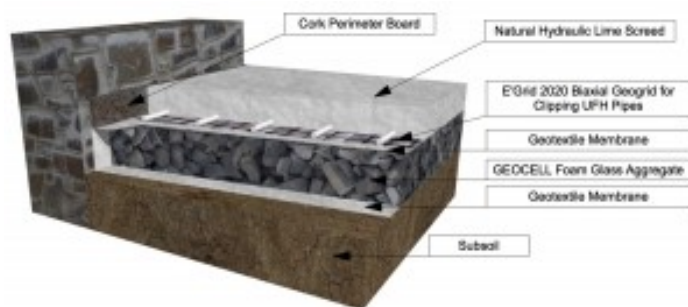
Limecrete Floor Systems

Limecrete Floor Systems

A fundamental issue facing owners of traditional properties is how to bring them up to modern standards with regard to heating, insulation, air-tightness and freedom from damp. Homes and workplaces need to be functional spaces where people can live and work comfortably. Increasingly, they also need to be energy efficient, satisfying the ever-growing demand for carbon reduction while retaining their distinctive character.

Building Regulations require floors of most buildings to have high levels of insulation, high compressive strength as well as impermeable barriers to prevent moisture migration. The Building Regulations are absolute for new dwellings and are also used as the goal for existing traditional buildings. However, regulations can be a little more flexible for old buildings if there are justifiable reasons not to conform.

Where a new floor slab is to be created, one option is to use a slab based on lime ([Limecrete](#) or [Glasscrete](#)) which is breathable, rather than OPC (Ordinary Portland Cement), which is virtually impermeable. A lime floor can be designed to meet modern insulation requirements and can incorporate under-floor heating (UFH).



Preventing ground water penetration requires including some form of capillary break. This can be achieved using an

impermeable damp-proof membrane (DPM) and would usually include an additional petrochemical-based insulation layer.

Our approach uses recycled foam glass (Glasscrete floor) or expanded clay aggregate (Limecrete floor) as loose-fill sub base. These are more durable and environmentally friendly compared to insulation materials made from petrochemicals. Furthermore, due mainly to the open pore structure of these aggregates, they have low capillary attraction to moisture.

Guidelines

It is important to match the design of the limecrete to the needs of the building. Factors include the type of construction for both floor and walls, floor area and groundwater levels.

We can advise on the thickness of each component of the floor system for your specific project.



Mike Wye Limecrete and Glasscrete® are 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.

[This website details the buildup of the various limecrete flooring options available. Use the menu above to navigate or click here for the Mike Wye & Associates website.](#)