

## From the Ground Up

**With developers under increasing pressure to deliver highly energy efficient buildings without significantly increasing build costs, Andrew Orriss, Insulslab SFRC, explains how modern and fully integrated foundation systems can help address this challenge by contributing to a 'Fabric First' approach 'from the ground up'.**

Insulslab SFRC is a fully integrated and super insulated foundation system which delivers the foundation up to ground floor level, without the need for a topping screed. In doing so, Insulslab SFRC forms part of the building fabric with expanded polystyrene (EPS) insulation fundamentally integrated into system design. This enables the ground floor build-up to deliver superior levels of thermal performance as compared with alternative techniques such as traditional, deep trench and pile foundations.

Easily achieving very low U-Values of around 0.10 – 0.12W/m<sup>2</sup>k, depending on P/A ratio, Insulslab SFRC provides an effective solution to the energy efficiency challenge but importantly, combines this with an efficient installation process which results in both time and cost savings on-site.

### Breaking New Ground

From a groundworks perspective, Insulslab SFRC helps increase the efficiency of foundation construction as the system requires only minimal excavation and no trenches. Once the ground is prepared, interlocking EPS pods are simply laid in place to form a rigid waffle shaped slab, with steel fibre reinforced concrete (SFRC) then poured on top to deliver the foundation up to ground floor slab level.

BBA-approved, Insulslab SFRC has already been adopted by a number of national housebuilders and major contractors where speed of build is a priority or challenging ground conditions are encountered. The system also helps to minimise the amount of spoil to be removed from site and reduces health and safety risk as there is less steel rebar to manoeuvre during construction.

### Supporting Adoption

To underpin the increased adoption of Insulslab SFRC, a new Approved Installer Network has been launched to provide access to a team of fully trained, highly efficient and extremely competitive ground engineers who are qualified to work with the Insulslab system.

To achieve Approval, ground engineers will need to undertake a comprehensive induction with Insulslab and SFRC manufacturer, Arcelormittal. Following on from this theory based workshop, a series of on-site inspections must be completed with Approval reviewed annually.

Whilst an Insulslab SFRC technical engineer attends the start of all new developments where the system is used, the new Approved Installer Network will remove the vulnerability of on-site training at the start of each project.

### Gaining Ground

As a fast-track method of construction which supports sustainable insulation targets, Insulslab SFRC continues to be adopted as a preferred foundation technique by leading developers in both the commercial and residential sectors. To learn more about how Insulslab SFRC could deliver sustainable, time and cost benefits to your development, please visit [www.insulslab.com](http://www.insulslab.com) or email [sales@insulslab.com](mailto:sales@insulslab.com)