



# **INSULSLAB SFRC**

HIGH QUALITY FOUNDATION SYSTEM

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Insulslab SFRC is a high quality foundation system that is suitable for use on a wide range of soil types. When compared to traditional methods of concrete foundation production for new housing developments such as beam and block and raft foundations, Insulslab SFRC is quicker to install, more environmentally friendly, offers high thermal performance and significant cost savings.

The Insulslab SFRC system is based on a type of raft foundation which comprises a number of interlocking polystyrene pods, forming a substantially rigid 'waffle' shaped slab. Steel fibre reinforced concrete, manufactured by ArcelorMittal, is poured over the top to form the Insulslab SFRC foundation.



## DESIGN

The Insulslab SFRC system is simple to design. The General Arrangement Drawings i.e. layout for the foundation, will be produced by the developer's engineer. The structural calculations for the steel fibre reinforced concrete will be produced by ArcelorMittal.

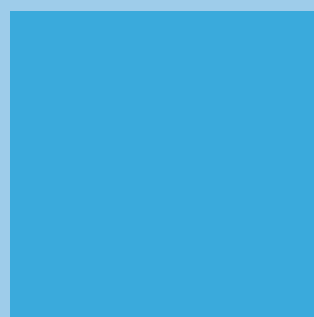
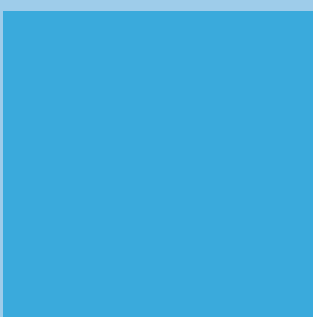
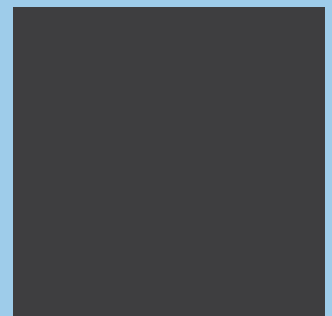


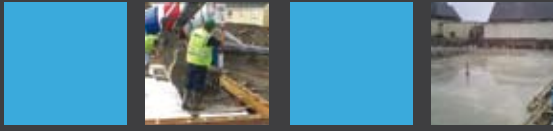
## ARCELORMITTAL

ArcelorMittal



ArcelorMittal is the only UK manufacturer of steel fibres and the largest steel producer in the world with a total of 116 million tonnes of crude steel being produced over the globe.





# SUBSTANTIAL BENEFITS FOR THE DEVELOPER & GROUND WORKER

- Simplicity of construction.
- Increased speed of construction enabling quicker completion times, better cash flow and minimising of labour costs.
- No requirement for detailing traditional reinforcing, resulting in significant savings on design.
- Increased profit margin. The system is cost effective with savings of approximately 33% when compared to a traditional raft foundation and approximately 25% when compared to a beam and block foundation.
- ArcelorMittal's product liability insurance covers the design of the steel fibre reinforced concrete within the raft.
- Insulslab SFRC complies with relevant Building Regulations when correctly specified and constructed.
- Insulslab SFRC is BBA and NHBC/LABC approved and is recommended by the BRE.
- Due to the increased speed of construction, site storage, cabins and other preliminaries are minimised.
- The rigid 'waffle' slab reduces the risk of adverse affects of ground movement on the superstructure, helping to minimise call backs.

## Furthermore:

### ■ The steel fibre reinforced concrete provides:

- Excellent impact strength.
- Edge protection.
- Enhanced resistance to abrasion.
- Improved fatigue endurance.
- Improved shrinkage and crack control.
- Increased tensile, compression, shear and flexural strength.
- Improved flexibility after matrix failure.
- Improved bearing capacity.

### ■ Insulslab SFRC contributes positively to Health & Safety:

- The system is safer to install as there are fewer trenches with associated risks.
- There is little or no mesh/ rebar being stored or handled helping to reduce the risk of injury.
- Less stores helps minimise site traffic.
- Manual handling is minimised throughout construction.

### ■ Insulslab SFRC is a sustainable foundation system:

- Capable of achieving between 0.10-0.25 W/m<sup>2</sup>K thermal performance.
- The shallow foundation system requires minimal excavation and therefore reduces waste disposal.
- The system complies with Part L of the Building Regulations without requiring an additional layer of insulation and screed.

See back page for your local stockist.



**FOR SALES ENQUIRIES:**

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0114 285 6492

Email: [technicalservices@insulslab.com](mailto:technicalservices@insulslab.com)

[www.insulslab.com](http://www.insulslab.com)

INSULSLAB SFRC is available from the following stockists:



[www.sheffins.co.uk](http://www.sheffins.co.uk)



[www.warren.co.uk](http://www.warren.co.uk)



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