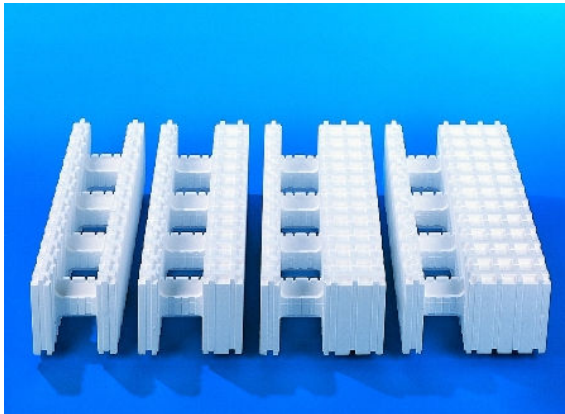


INSULATED CONCRETE FORMWORK (ICF)

Following our involvement with a complex apartment building constructed using ICF we have developed specialist design knowledge of this method of construction which allows us to provide innovative technical guidance on its structural uses.

Insulated Concrete Formwork is made up from large hollow lightweight polystyrene blocks which lock together without intermediate bedding materials to provide a formwork system into which concrete is poured. The concrete provides the structural strength for wall construction while the polystyrene blocks provide the thermal insulation (excellent U values are achieved which range from 0.3 down to 0.11 W/m² K).



The system can be used for superstructures generally without the need for reinforcement. Occasionally we incorporate steel fibres to enhance the structural strength of the concrete. We have also completed numerous schemes involving basement construction which has combined the use of reinforcement and steel fibres to provide an efficient structural solution.



We have carried out structural design and provided advice on numerous schemes for both domestic and commercial buildings across the country. Our detailed understanding of the structural behaviour of the system allows us to design economic solutions which, combined with the other benefits of ICF make for an attractive overall construction package.

The pictures above show an ICF project under construction and the original completed apartment building which saw our first involvement with ICF.