

Amvic Ireland ICF system offers a fast-build energy-efficient solution for house builders

Amvic Ireland is an Irish-owned company that has been operating out of Ireland for over 17 years, with production facilities in Dublin and a new state-of-the-art plant in Longford, increasing its capacity to meet future growth in the market. It also has a UK-based presence.

Amvic Insulated Concrete Formwork ICF is a simple, cost-effective and fast method of construction for high-performance homes and buildings. It is used all over Ireland and the UK for large-scale housing and apartment developments, one-off housing, extensions, healthcare, commercial and industrial units.

The Amvic ICF system is certified by NSAI IAB and The BBA for buildings up to 6 stories.

THE AMVIC ICF SYSTEM

The Amvic ICF system consists of modular interlocking, flame-retardant expanded polystyrene (EPS) building blocks (graphite enhanced) for permanent formwork for constructing in-situ concrete walls. Each block or form is based on two EPS panels with recycled polypropylene connectors moulded into the polystyrene panels and spaced 150/200mm vertically. The surfaces of the forms are marked with lines showing the location of the connectors.

The panels are castellated top and bottom, like Lego, and fit together to form a shuttering system for concrete walls.

The forms are easily cut on site to the construction dimensional requirements, resulting in a system as flexible as traditional construction methods. Wall openings or ducts for service penetrations can be positioned within the formwork before concrete pouring.

Concrete is pumped into the space between the panels one full storey at a time. When set, the concrete wall is capable of supporting building structures up to six storeys. The polystyrene remains in place to act as the thermal insulation for the building.

The Amvic ICF system can be used to construct almost any type of building, including residential developments at scale, self-build homes and extensions, basement and earth-sheltered development, commercial units, healthcare units and industrial buildings. Amvic recently completed a six-storey apartment block.

ENERGY EFFICIENCY

The standard Amvic ICF 300 block system forms the structural basis to achieve an A2 BER Rating. The new Amvic 350 block system, with a u-value of .16 W/m²K, performs close to passive-house standard and is being used in several passive house developments.



BENEFITS OF AMVIC ICF SYSTEM

The benefits of the Amvic ICF system include short lead times from order to site, fast build times, typically less than 2% waste, and no requirement for wet trades. Amvic ICF formwork is light and easily handled, simplifying on-site material handling, with resulting safety and cost benefits.

Party walls constructed using Amvic ICF easily comply with the requirements of Part E of the Building Regulations, demonstrating sound reductions of 56dBa as standard.

Any external finish can easily be accommodated, including brick, stone, render or cladding. There is no drying time required for structural walls. The interior of units is dry as soon as the roof, doors and windows are installed. All internal finishings can be easily completed, with electrical and plumbing chasing groove cut in the face of Amvic ICF block using a hot knife to depth of chase for cables conduit and water gas pipes.

Gypsum board can be screwed directly

to Amvic ICF wall to embedded webs at 150/200mm centres.

AMVIC IRELAND CLIENTS

Amvic Ireland's clients include Glenveagh Homes, Sisk Living, D-RES, Cannon Kirk, Clancy Homes and KPH Developments, to name a few. The company has also supplied social housing through developers for Approved Housing Bodies Cluid Housing and Tuath Housing.

Over the years, Amvic has developed long-standing relations with clients, where their design and engineering teams know and understand the system. Once a schedule is agreed upon, Amvic Ireland can deliver the formwork to site as required within a matter of weeks.

To learn more about Amvic ICF systems, visit www.amvicireland.com or phone 01 899 1883. For residential schemes/developments, email cillian@amvicireland.com. For technical queries, email Alan@amvicireland.co