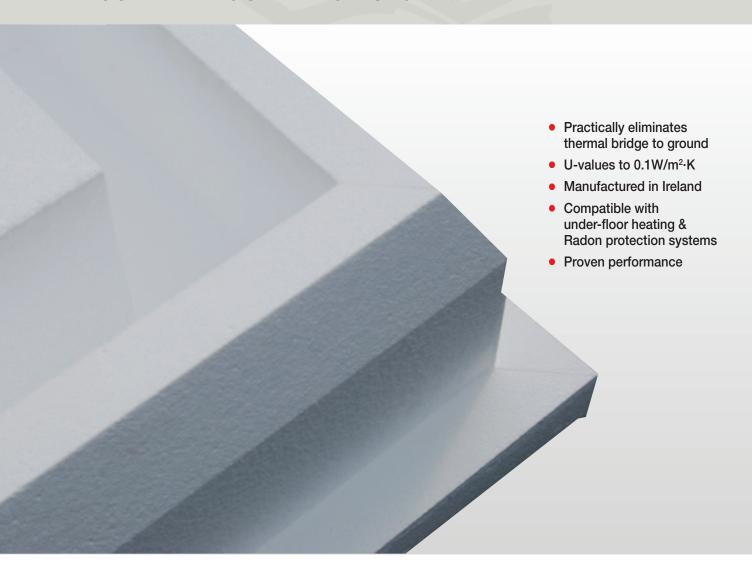
# Insulation

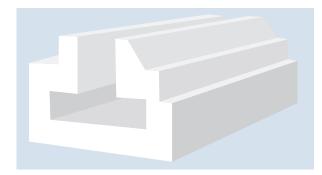
# **Aero**ground<sup>™</sup> INSULATED FOUNDATION SYSTEM





### **Product Details**

Drawing on over 50 years experience of providing homeowners in Ireland with innovative EPS insulation solutions, both *Kingspan* **Aero**bord® and Springvale are, once again providing industry leading energy conservation systems. Insulated raft foundations are gaining in popularity in Ireland, they are particularly suited to low energy or passive house standard projects.

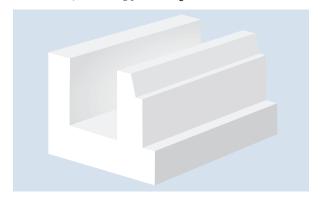


Our designs regularly deliver U-values as low as 0.1W/m²·K. Insulated Raft foundations are suitable for use with Timber or Steel Frame, Insulated Concrete Form or Block construction methods. Building, literally on three unique properties of EPS; high compressive strength combined with extremely low water absorption and excellent insulating values, the load bearing walls and floor slab of your building sit on top of the insulating layer practically eliminating heat loss to the ground.

*Kingspan* **Aero**ground<sup>™</sup> is manufactured in Ireland. Insulated raft foundations are generally installed by an experienced contractor. However, training programs can be organised for new contractors. Please contact us for further information.

# The Kingspan **Aero**ground system includes the following components:

- **1.** Ring Beam Shuttering profile (Bespoke designs for each individual projects)
- 2. Ring Beam to Slab ties (U-Sinus ties)
- 3. Ring Beam joiners (Steel Combs)
- 4. Release membrane
- 5. Support chairs for Ring Beam & steel mesh
- 6. Insulation fixing nails
- 7. 100mm layers of *Kingspan* **Aero**ground<sup>™</sup> floor insulation.



# Installation



1. Strip site and lay compacted hardcore compacted in layers (18-35 mm grade 505). Incorporate Radon sump and pipework.



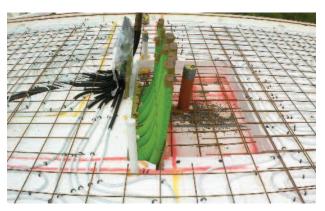
2. Place gas membrane / dpm. Seal all joints ends to one meter all around building and slope away from the structure. Lay 3-8 mm stone blinding up to 50 mm deep. Set out corners.



**3.** Continue placement of ring beam profiles. Trim profiles as necessary to achieve a tight fit. Join profiles with galvanised steel combs.



**4.** Place first 2 layers of floor insulation sheets over the remaining foundation. Overlap sheets to achieve continuity of insulation. Fit Kingspan **Aero**ground<sup>™</sup> internal load bearing insulation according to floor plan.



7. Install reinforcing steel mesh according to design.

The underfloor heating system can be installed at this stage.



**5.** Install U-Sinus ties through the ring beam profiles and place steel reinforcing according to supplied design.



**8.** Insulated foundation system is now completed and ready to take ring beam and concrete slab.



**6.** Install final layer of Kingspan **Aero**ground floor insulation. Secure with insulation fixing nails.

# **Contact Details**

#### **Customer Service**

For quotations, order placement, details of despatches and general enquiries.

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