## KORE PASSIVE SLAB

#### WHAT IS THE PASSIVE SLAB

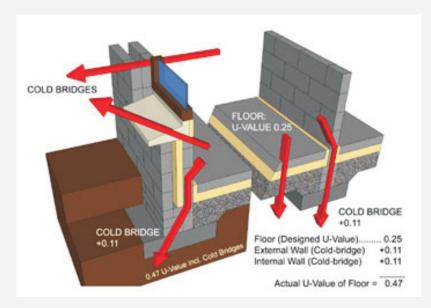
The Passive Slab is an Insulated Foundation System that is PassiveHaus approved to deliver the lowest U-value available on the market and eliminates the critical wall to floor cold bridge. Expanded Polystyrene is used to wrap the foundation of the building ensuring there is no thermal break between the wall and the foundation.

The structural strength of the Passive Slab results from the combination of Expanded Polystyrene (EPS 300), concrete and steel. The Passive Slab is suitable for use when building a Traditional Block, Insulated Concrete Formwork and Timber Frame house.



# UNKING house

#### Heat Loss at Junctions with Traditional Foundation



Thermal Bridging (Cold Bridging) occurs at the different junctions of a building where there is a thermal break in the insulation layer. Thermal bridging accounts for 15% of the heat loss from a traditional built house, with the percentage heat loss increasing the more the walls and floors are insulated. The cold bridge essentially gets colder, increasing heat loss from underfloor heating, condensation, fungus and mould growth.

#### Why Use the Passive Slab

Lowest U-values available.

Eliminate critical wall -floor Cold Bridge.

Reduce underfloor heating heat loss through rising walls from 65% to 12%.

Price is comparable with the traditional strip foundation.

Concrete quantity is reduced by 50%, reducing the bill and the carbon footprint.

The Passive Slab G element can take loads up to 350kn/m (35tonne/linear meter).

Suitable for all ground conditions.

Passive Slab easily accommodates the radon barrier

Risk of condensation, fungus and mould growth behind the skirting board is eliminated.

The thermal capacity of KORE EPS will not diminish over time and it is unaffected by water. Our EPS will insulate for a lifetime.

#### Passive Slab Application

Traditional Cavity Wall Full Filled with KOREFill Bonded Bead

KORE Insulated Concrete Formwork System

Traditional Block Build insulated with KORE External Insulation

Timber Frame Construction

KORE and Viking House give a full technical service to clients that install the Passive Slab System.

### INSTALLING THE PASSIVE SLAB



Compress 18-35mm Stone in Layers



Limestone binding used to level off



Install 1st layer of Ringbeam element



Install 1st Layer KORE EPS 100 Silver



Install 2nd Layer KORE ESP 100 Silver



Insulate around pipes



Install Radon Barrier



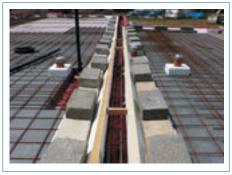
Install Steel in Ringbeam



Ensure full Radon Coverage



Install steel mesh & UF Heating Pipes



Pour concrete into Ringbeams



Pour the Concrete Floor





