#### **( KEEGAN**PRECAST B PRECAST TWIN WALL & FLOOR PRODUCTS

# Product Name

KB Wall© [320mm - 500mm thick]

### • Product Description

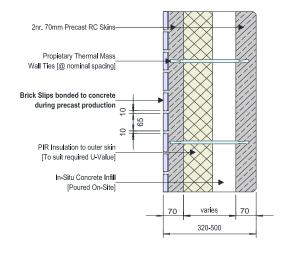
The Keegan Precast Ltd. KB Wall© system is designed in reinforced concrete. The concrete wall section can replace the full wall construction of a traditional wall. The wall consists of a **Brick Slip** within the 70mm reinforced outer skin of concrete, an 80-280mm layer of insulation, a min 80mm void and a 70mm inner skin.

The wall will handle and be erected exactly as a normal twin wall with all "Tie' details as standard twin wall. The 80mm void will be filled on site to



achieve the full monolithic construction of the reinforced concrete wall. The insulation will give a U value of min 0.25 W/m<sup>2</sup>C. Minimum wall thickness will be 300mm. Thicker walls can be accommodated and higher U Values on request.

# Manufacturing



All of the necessary reinforcement required for the wall to work in its final case is cast into the wall panels in the factory. The wall panel arrives on site as two 70mm concrete panels, & the **Brick Slip** cast into the outer skin with a layer of insulation cast in between the skins. The skins are held together by the pultruded carbon fiber [Thermomass] ties to provide a gap of not less than 80mm. Single panel sizes will be up to a maximum height of 3.5m and length of 7.0m with larger panels being designed and manufactured on an individual basis. If the height has to be greater than 3.0m the panel can be turned through 90° and the length can then be used for the height required. This will result in more vertical joints being visible as the width cannot be more than 3.5m.

A further limit of the panel size is the maximum bar size able to be placed automatically during the manufacturing process. This is 14mmØ. Designs carried out are therefore subject to this upper limit of bar size. Finished Panels will have a standard steel mold finish of Class C (Paint ready). All exposed edges have a 10x10mm chamfer.

# Site Erection

On site, the KB Wall<sup>©</sup> units are lowered over a line of starter bars set into the concrete base slab. Placement of these bars is by the main contractor and must be by agreement with Keegan Quarries Ltd. To ensure the correct placing and aligning of the KB Wall<sup>©</sup> a gap of 10mm is detailed between the units in all cases. This joint will remain once the units have been placed and concreted. All of the horizontal and vertical panel/panel, panel/floor joints will have a steel mesh placed down their center prior to the core being filled with concrete. The core is filled with an approved concrete and will be filled up in meter lifts. The first meter is poured and vibrated to fix the panel to the starter bars. The second meter is then placed. The loose bars from the floor slab above are then placed with the necessary tie bars projecting down into the wall core and then the final meter is placed in conjunction with the floor slab Insitu topping.