Build Up

External Masonry Cavity Wall
Masonry Outer Leaf ($\lambda = 0.77$)
Dense Concrete Block Inner Leaf $\lambda \leq 1.33$ W/mK
Partial Fill Insulation
Beam and Block Floor
Lightweight Floor Block
150mm Insulation Below Screed (0.022W/mK)

1. Insulation to be secured firmly against the inner leaf of the cavity wall.
2. Continue the cavity insulation at 225mm below the top of the concrete.
3. The R-value of the perimeter insulation should be at least 0.8 m²K/W.
4. Ensure that the floor insulation is tightly butted against the external wall.
Calculated $\psi$-values

<table>
<thead>
<tr>
<th>Inner leaf blockwork</th>
<th>Dense Concrete Block $\lambda \leq 1.33$ W/mK</th>
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</thead>
<tbody>
<tr>
<td>Cavity Insulation</td>
<td>$\psi$-value W/mK</td>
</tr>
<tr>
<td>50mm $\lambda=0.022$</td>
<td>0.154</td>
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<tr>
<td>100mm $\lambda=0.022$</td>
<td>0.159</td>
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</tbody>
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Points to Watch

- Ensure cavities are kept clean of mortar snots and other debris during construction.
- Damp proof membrane / air barrier should be lapped to damp proof course and plaster stop bead.
- Any service penetrations through the damp proof membrane / air barrier should be suitably sealed.
- Sub floor ventilation to be in accordance with manufacturers recommendations. A cavity barrier type sleeve should be used through the cavity.
- The wall insulation installed must be considered fit for purpose below the wall dpc in relation to water absorption.