

THIS DRAWING IS COPYRIGHT AND MUST NOT BE REPRODUCED WHOLLY OR IN PART WITHOUT PRIOR PERMISSION. Insulslab SFRC Foundation Installation Methodology. Described below is a method of construction to utilise the INSULSLAB form of waffle slab foundation in conditions where the foundation is supported at shallow depth directly by the underlying soils. For piled foundations using INSULSLAB method of construction to utilise the

General Notes.

Insulslab foundation to be placed on minimum 150mm Type 2 granular material to be compacted in accordance wit he specification. All soft spots to be excavated to competent formation and

An soft spors to be excavated to competent formation and back filled with compacted Type 2 granular material. 2. All works to be undertaken in accordance with the recommendations contained within the geotechnical report and NHBC Standards. Where trees are present, ground conditions may require the placing of an additional hardcore Contained in the require the placing or an additional nancoor bed under the whole area to overcome the influence of trees/shrinkable soils in accordance with the NHBC Standard Chapter 4.2 and 4.5. 3. For depths of sub-base required beneath edge beams refe

re protected by a patent. Online technical data and ordering nformation can be found on the website <u>www.insulslab.com</u> 5. Slab to be cured under a spray application of curing /

Where ground levels have been adjusted to suit site set-or

equirements, it has been assumed that infill / regrade naterial has been suitabilty engineered and consolidated in order to achieve a minimum ground bearing capacity of

For all general details and sections see drawing No. 100 ror ali general details and sections see drawing No. 100.
 8. For on site setting out of units, orientation / handing and co-ordination, see Architects detail drawings and relevant site setting out drawings by others.
 9. For all finished ground levels and slab levels, see

Architects / Set-out drawings by others. 10. For setting out of all services, drainage and utilities see Architects and specialists detail drawings.

Specification for Concrete and Fibres

3 The concrete grade to be a C30 / 37 - C35 with a maximu water cement ratio of 0.55 using super-plasticiser. All admixtures used should be from the same manufacturer and

aling solution. Permaban Pro-Seal or similar.

50kN/m²

he local materials

1. Excavate to reduce general level to suit site layout o sections The Insulsiab pods have a load bearing requirement and

Set the plot out as normal, ensuring that you have a completed 'CONSTRUCTION ISSUE' drawing showing the Insulslab foundation layout and the standard details drawing.

3. Excavate to reduce general level to a depth of 600 mm below top of slab level over the pod area and 675mm under edge beams and party walls. Sub-base should be prepared using methods 2, 3 or 4 from table 6/4 of the Specification of Highway Works Volume 1 Series 600 Earthworks and in accordance with NHBC recommendations. Additional fill may also be necessary to ensure that all topsoil, degradable material and soft spots are removed.

Position, excavate & install all services and drainage entries. The accuracy of this operation is paramount, as correction of inaccuracies is very difficult.

5. Place granular hardcore and compact to a level 550mm below top of slab level. Compaction with a Wacker plate or

below top of slab level. Compaction with a Wacker plate or trench roller to the hardcore in the trenches or a larger twin drummed roller to the whole of the formation ares is acceptable. Tolerances on top of the finished sub-base should be within +10/-20 mm with an average of -5 mm.

1. The concrete mix shall follow the recommendations as noted in the Arcelon/Mittal Sheffield Ltd. BBA Certification 12, 4894 product sheet 2 "Arcelon/Mittal - Insulsab foundation system for housing applications using SFRC" page 3, Table 1 6. Install 100 thick insulation under all edge / internal beams Concrete Specifications along with the following mix design uide lines. These are to be considered together and neither

guide lines. These are to be considered together and neithe is to be considered complete without the other. 2. Concrete mix design shall be based on the use of 20mm aggregate. Other aggregate sizes or blends may be used or further review by ArcelorMittal in conjunction with the Set up and install the first stage edge shutter on top of the horizontal edge insulation to the perimeter of the plot (alternatively an "all in one" edge shutter can be used for onolithic pour) readymix supplier and only formal written confirmation from ArcelorMittal. The proportions will depend on the gradation of

8. Fill in between the Edge and internal insulation with granular hardcore and compact

9. Install a minimum 1200g dpm, or gas membrane as required by the site investigation, to whole area extending 300 to 500mm beyond the edge of the shutter.

admixtures used should be from the same manufacturer and used as per manufacturers instructions. 4. Permitted cement type shall be Portland cement or blends of up to 20% replacement using GGBS or PFA. This corresponds to the following cement types to BS EN 197-1: CEM I, CEM II/A-S OR CEM II/A-V. Minimum cement quantit 10. Starting from one corner of un-cut pods, the pods must b placed to the prescribed layout, completing all full pods before installing the cut-pods as required. Widened internal o be 320kg/m³. 5. The slump shall be between 180 and 230mm (S4 type beams should be separate by spacers in order to minimise The skump shall be between 180 and 230mm (34 type EN206 / B38500) at the time of delivery. The addition of water on site is prohibited, except where the additional water is allowable water remaining from the original batch target. Any water added to the concrete shall be recorded on the delivery tickst.
 The fines content shall be approximately 50% by weight of the total aggregate content. Total fines content shall be

11. Hyrib is to be installed and fixed in position across face of nternal ribs/beams in order to contain initial pour to edge

12. Timber bracing is required from the top of the pod to the shutter in corner locations and every perimeter pod during concreting to ensure no lateral movement occurs. These are removed when the concrete reaches the top of the pods. Reinforcement to be cast into the first stage pour to provide a shear connection between the two nours

13. The concrete is to be placed to the outer toe section first 10. The conclusion is to be placed to the outer to escution may of the two stage pour, prior to installing the remaining concrete to the full height in the usual manner. (The concret can either be pumped or placed directly)

14. Once set, the lower shutter can be stripped and installed to form the second shutter. The foundation is then ready for the internal ribs, slab, beams and remaining external beam t be completed. Sacrificial bar or blocks may be introduced to support the second stage pour shutter.

15. When the placement is completed, level carefully and finish by bull float or skip float in order to improve flatness an to hide visible fibres under the superficial mortar. If required the slab may be finished by power, bull or skip floated.

STATUS PRELIMINARY

 Apply a spray application of curing & sealing membrane such as Permaban Permaseal or similar approved. 17 Strike the shutter and place aside for re-use

18. The DPM is then lapped up the outside vertical face of th toe. The horizontal and inside vertical face of the toe is painted with two coats of RIW LAC or similar.

19. The vertical insulation is then placed against the outside face of the toe and backfilled against

20 The contractor shall record and retain on site all concret mix delivery tickets for onward submission to the statutory body for their approval.

Where ground levels have been raised / adjusted, it is assumed that a suitable engineered material has been laid and consolidated in order to achieve a minimum ground bearing pressure 50kN/m²

> Hatched areas Hatched areas nsulsiab Pod denotes pour one of two stage pour

denote insulslab pods cut on site to suit. Insulslab Foundation Layout

Example Housetype DM AW Δ١Λ A1 - 1:25 SCALE DATE Nov 2012 43 - 1.50 **P1** INS12-0000 01

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DATE B AMENDMENTS

150kg/m³ fines graded at or below 200 µ. Please refer to the

radation to be used when investigating the suitability of the

equired sieve curve analysis for optimum aggregate

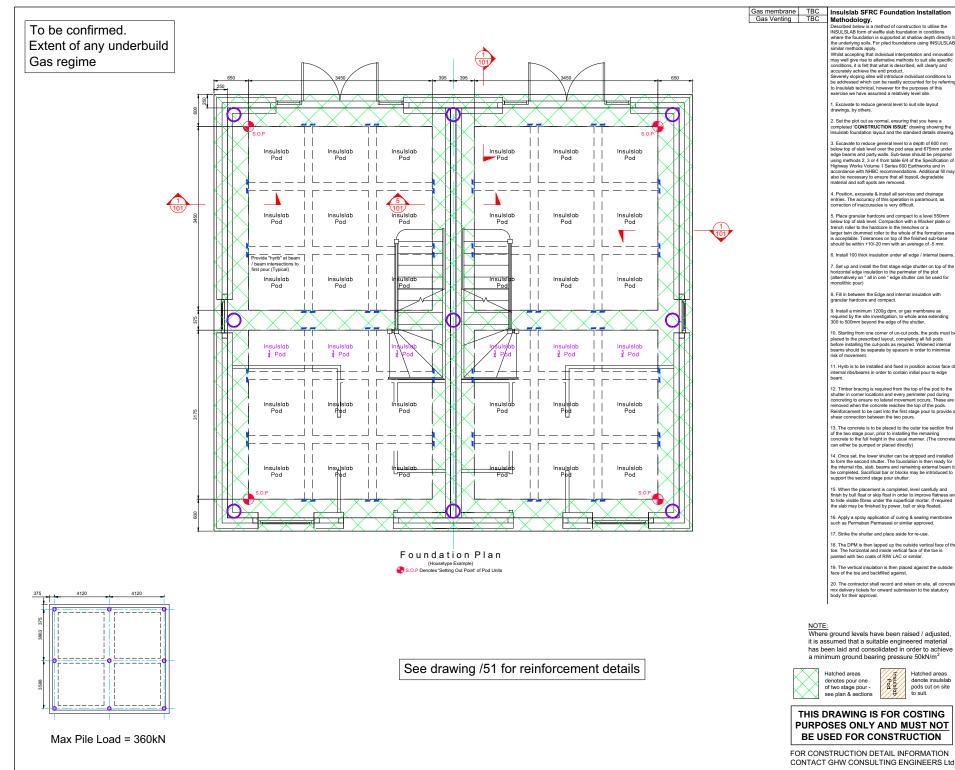
INSULSLAB SFR

12-2999

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New Development

www.insulslab.com



TBC TBC Insulslab SFRC Foundation Installation Methodology.

method of construction to utilise the

Described below is a method of construction to utilise the INSULSLAB form of waffle slab foundation in conditions where the foundation is supported at shallow depth directly by the underlying soils. For piled foundations using INSULSLAB similar methods apply. Whilst accepting that individual interpretation and innovation

may well give rise to alternative methods to suit site specific conditions, it is felt that what is described, will clearly and conductors, it is tell that what is described, will clearly and accurately achieve the end product. Severely sloping sites will introduce individual conditions to be addressed which can be readily accounted for by referring to Insulslab technical, however for the purposes of this xercise we have assumed a relatively level site

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NOTE: Where ground levels have been raised / adjusted, it is assumed that a suitable engineered material

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nsulslab Foundation Layout Example Housetype

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TO CONFIRMATION AND CO-ORDINATION WITH ARCHITECTS DRAWINGS AND SPECIALISTS INF LOADS

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radation to be used when investigating the suitability of the

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B AMENDMENTS STATUS

PRELIMINARY

DATE

12-2999

AW

P1

INSULSLAB SFR

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New Development

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> DATE Nov 2012

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