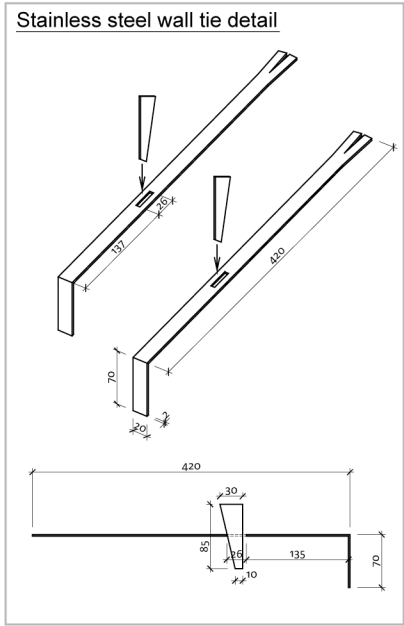


These foundations are specifically designed to be cement free. **There must be no deviation from these details without written agreement from Straw Works Ltd.**



Base Plate construction:
1no. 50 x 100mm C16 sawn untreated larch or douglas fir laid flat to outside on slate in NHL3.5 lime mortar, 1no. 50 x 150mm C16 sawn untreated softwood laid flat to inside on Foamglas slab with 50 x 100mm C16 sw timber noggins.

32mmØ hole drilled through noggins to receive hazel pins. Noggins to be at centres to suit overall strawbale sizes and bale plan layout.

Spaces between noggins to be filled with LECA or RFG loose fill to provide insulation and moisture control

30mm Lime Render: finished with Beek Full Colour Silicate Paint
loose weave hessian mesh attached to outer baseplate and laid 100mm into lime render

GROUND FLOOR TOP OF SCREED ▽

Oak drip render stop: 30x30mm oak render stop with drip mould

Outer Leaf: 215 x 102 x 65mm engineering brick laid with NHL3.5 hydraulic lime mortar; mix ratio 3:1 sharp well graded sand : NHL

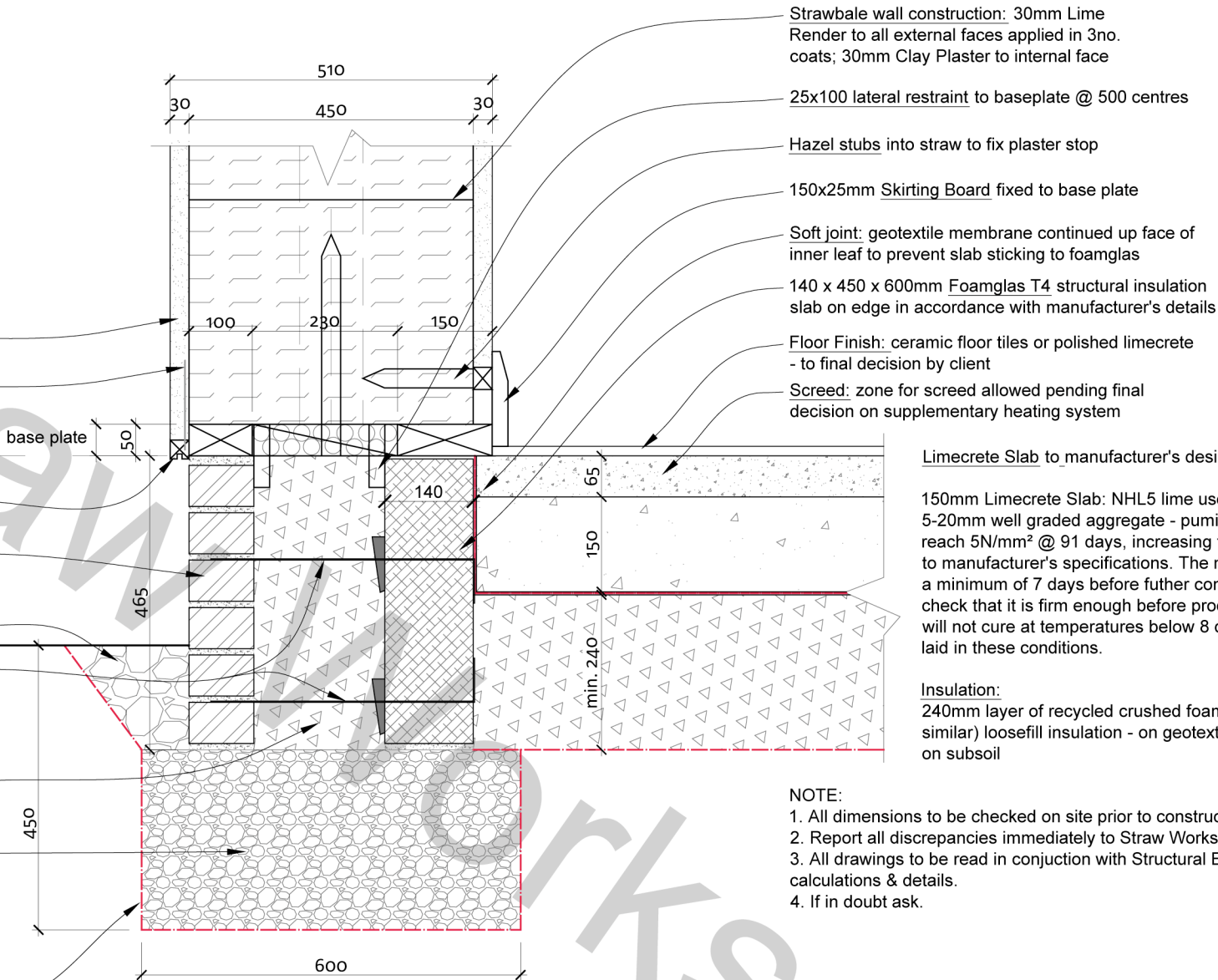
200mm free-draining gravel trim around perimeter

Stainless steel wall tie: s/s wall tie inserted through Foamglas into brick outer leaf mortar joints at 600mm centres; Foamglas restrained by s/s wedge. 3no. ties per Foamglas block: 2no. at top, 1no. at bottom

Cavity Fill: with recycled crushed foamglas (rfg eg technopor or similar) loosefill insulation

Gravel trench foundation: 600mm wide gravel strip footing onto natural clay formation minimum 450mm below ground level; angular, well graded granular material subject to Structural Engineer's approval, mechanically compacted in maximum 200mm layers. Use sharp edged gravel of non-water soluble natural local stone.

Geotextile membrane lining to trench



Limecrete Slab to manufacturer's design and specification:

150mm Limecrete Slab: NHL5 lime used in a 1:3 mix with a 5-20mm well graded aggregate - pumice or LECA or similar (to reach 5N/mm² @ 91 days, increasing thereafter), mixed and laid to manufacturer's specifications. The mix should be left to cure for a minimum of 7 days before further construction works begin, but check that it is firm enough before proceeding. Note: Limecrete will not cure at temperatures below 8 degrees and should not be laid in these conditions.

Insulation:
240mm layer of recycled crushed foamglas (rfg eg technopor or similar) loosefill insulation - on geotextile membrane laid directly on subsoil

NOTE:
1. All dimensions to be checked on site prior to construction.
2. Report all discrepancies immediately to Straw Works Ltd.
3. All drawings to be read in conjunction with Structural Engineer's calculations & details.
4. If in doubt ask.

These foundations are designed specifically to deal with moisture build up in walls by the use of sensible design and natural materials. Moisture build up is caused either by rising damp, or by moisture collecting at the base of walls over long periods of time. Recycled foamglass (technopor or similar), Foamglas blocks, slate, engineering brick, and many types of stone prevent rising damp because they are non-porous materials that do not allow moisture to wick upwards from the ground. The use of these materials in combination with breathable mortars such as lime and clay means that there is no need to use a plastic damp proof course. The self-draining design, in combination with no waterproof membranes ensures that any potential build up of moisture can dissipate safely away into the earth.