



#### **Foundations**

All concrete used in foundations to be grade C30  
 Foundations are to be 600mm wide x 300mm deep and to extend to at least 1000mm below GL, or as directed by the Building Inspector.  
 Where foundations cross or are close to existing drainage services the foundations to be taken down below the invert level of the pipe. If pipes cross the foundations a concrete lintol is to be placed over to bridge the pipe.  
 Provide rocker pipes either side of the wall and a 50mm space between masonry and pipe with flexible seal.

#### **Radon Barrier**

Where a Radon Barrier is required 2000g visqueen with all joints taped and all penetrations thro sealed is to be used in lieu of 1200 g visqueen. This is to continue through the external leaf with tray dpc.  
 For category 1 land fill sites use gas membrane such as Monarflex or similar.

#### **Lintols**

Lintols to be "Catnic" unless noted otherwise.  
 End bearing for lintels to be 150 mm.

#### **Joinery**

All internal joinery is to be softwood. All internal doors are to be 838mm wide with a minimum clear opening of 775mm

#### **Electrical Installations.**

All installations to be subject to certification under the "competent persons scheme"  
 A certificate shall be supplied on completion of all electrical works  
 Lighting - 1 in 4 to be low energy.

#### **Main Roof design**

Roof to main extension to be Sandtoft 20/20 interlocking concrete tiles (suitable for 20.5 degree pitch with 100mm head lap) in colour to match existing laid in accordance with the manufacturers instructions on 50 x 25 battens and a layer of Tyvek fully breathable felt.

Trussed rafter duo-pitch roof at 450mm maximum centres with a minimum of 300 mm rockwool to horizontal ceilings in the roof spaces not used for storage with 150mm between joists and 150 mm over joists at 90 degree. 100mm rigid insulation to sloping ceilings (Min thermal conductivity 0.023W/mK) with a minimum of 50mm air gap to sloping ceilings and 25mm rigid insulation to underside of rafters. (Min thermal conductivity 0.023W/mK). 12.5mm plasterboard and skim finish to ceiling. Provide 10mm continuous ventilation at eaves level via fascia board. Ventilation provided eaves to eaves.

All wall plates are to 75 x 100 and strapped down to wall with 100 x 900 "Bat" M305 straps or similar approved at 1.00 metre centres and 0.40 metres from every corner. Straps are to be nailed to wall plate and plugged and screwed to wall with 5 No. screws.

External Gable walls to be strapped to rafters with 100 x 1200 long L shaped 30 x 5 straps at 2.0m centres and 0.40m from ridge and eaves..

Fascia Boards and Soffits to be timber or pvc to match existing, provide air vents as described.

All flashing in Code 9 lead.

#### **First Floor**

50 x 175 C16 floor joists at 450c/c with herringbone strutting at mid span. 22 mm T&G floor grade particle board {EN 312-5} screwed to joists or 22mm T&G floorboards {BS 1297} 100mm insulation quilt between joists.  
 Joists to be supported on external walls via joist hangers with lateral restraint type every 2.00m. Where supported on an internal wall they are to be built into the wall. Where floor spans parallel to external wall provide 100 x 1200 long L shaped 30 x 5 straps at 2.0m centres. Ends of joists where built in to be treated. Ceilings are to be 12.5mm plasterboard and skim.

#### **Mechanical air extraction.**

New ventilation to W/C and En-suite to have a minimum extraction rate of 15 l/sec wired to light pull cord with min 15 minute over run.

All mechanical ventilators are to be ducted to outside air.