GOING FORWARD IS THE RESPONSIBILITY OF THE COMPANIES EMPLOYED BY THE CLIENT RECOMMEDNATIONS: THE OWNER MAY NEED TO OBTAIN CONSENT FROM LOCAL WATER AUTHORITY TO BUILD OVER OR NEAR ANY SEWERS WITHIN THEIR PROPERTY.

CDM REGULATIONS 2015 – ANY HEALTH AND SAFETY CONTRACTUAL WORK AND MAINTENANCE GOING FORWARD IT THE RESPONSIBITY OF THE COMPANIES EMPLOYED BY THE CLIENT.

ALL WORKS CARRIED OUT IN ACCORDANCE WITH SECTIONS AND NOTES. COPYRIGHT RESERVED. ALL DIMENSIONS TAKEN AS APPROVED BY CLIENT. DRAWING TAKEN AS APPROVED BY CLIENT

DO NOT SCALE OR CONSTRUCT FROM THESE DRAWINGS. ALL DIMENSIONS ARE TO BE CHECKED ON

ANY EXISTING STRUCTURE EXPECTED TO SUSTAIN ADDITIONAL LOADS OR CHANGE IN LOAD CONDITIONS TO BE EXPOSED AND ASSESSED FOR ADEQUACY AND REPAIRED OR REPLACED AS NECESSARY.

IF APPLICABLE UNDERSIDE OF NEW FOUNDATIONS TO BE A MIN 1.00M FROM GROUND LEVEL AND SIZES ARE BASED UPON A GROUND BEARING PRESSURE OF 105Kn M2. BOTH THE GROUND BEARING PRESSURE AND DEPTH OF NEW FOUNDATIONS ARE TO BE AGREED WITH B/I ON SITE BEFORE FOUNDATIONS CAST.

PLEASE BE AWARE THAT ANY TREES WITHIN 25M OF THE EXTENSION MAY REQUIRE A DESIGNED FOUNDATION.

ALL ITEMS, NOTES, DIMENSIONS AND GENERAL DESIGN CONTAINED ON THIS DRAWING ARE FOR **GUIDANCE PURPOSES ONLY.** 

NOMINATED BUILDER OR PERSON RESPONSIBLE FOR THE PROJECT SHOULD MAKE A THOROUGH CHECK PRIOR TO COMMENCEMENT OF WORKS AGAINST SITE, DRAINAGE SERVICE DRAWINGS, CURRENT BUILDING REGULATIONS. BRITISH STANDARDS AND CODES OF PRACTICE

ANY STEELWORK BELOW DPC LEVEL TO BE PROTECTED AGAINST CORRISON WITH 50MM CONCRETE SURROUND BELOW GROUND LEVEL AND 2 COATS BITUMEN UP TO DPC LEVEL

## CE marking to BS EN 1090 is now a legal requirement

Since July 2014, structural steelwork and aluminium fall under the Construction Products Regulation (CPR), which means aluminium or structural steel CE marking must be secured to show compliance with EN 1090-1 (the harmonised European standard that applies to structural metalwork). This covers any structural component that has been designed and fabricated to meet the BS EN 1991 series of standards (Euro code 3 and 9) for steel and aluminium structures in buildings. And you now need to show that they comply with BS EN 1090-1.

STRUCTURAL ENGINEERS CALCULATIONS TO BE CHECKED BY CLIENT/BUILDER BEFORE WORK COMMENCES AND TO TAKE PRECEDENCE OVER INFORMATION ON DRAWING ALSO BE ADVISED WHERE A 203MM WIDE BEAM ( OR SIMILAR) IS SUPPORTING A CAVITY WALL ABOVE IT WILL BE NECESSARY TO PROVIDE A 10MM PLATE (THE WIDTH OF THE WALL ABOVE) WELDED TO THE TOP

PERMISSIBLE STRESS ON OLD MASONARY TO BE AGREED WITH BUILDING INSPECTOR ON SITE. (BRICKWORK TO BE 15Nmm2 IN 1:1:6 MORTAR)

THE ORIGNATOR (WESTLEIGH DESIGN) WILL NOT ACCEPT ANY LIABILITY FOR MISTAKES THAT COULD OCCUR

NOTE 1: YOUR ATTENTION IS DRAWN TO THE PARTY WALL ETC. ACT 1996, WHICH REQUIRES YOU TO SERVE NOTICE ON YOUR NEIGHBOUR IF YOU INTEND TO ALTER, AFFECT OR WORK IN CLOSE PROXIMITY TO A PARTY WALL OR BOUNDARY.

NOTE 2: ALL ELECTRICAL WORK REQUIRED TO MEET THE REQUIREMENTS OF PART P (ELECTRICAL SAFETY) MUST BE DESIGNED, INSTALLED, INSPECTED AND TESTED BY A PERSON COMPETENT TO DO SO. PRIOR TO COMPLETION THE LOCAL COUNCIL NEEDS TO BE SATISFIED THAT PART P HAS BEEN COMPLETED WITH. THIS WILL REQUIRE AN APPROPRIATE BS761 ELECTRICAL INSTALLATION CERTIFICATE TO BE ISSUED FOR THE WORK BY A PERSON COMPETENT TO DO SO.

FOUNDATIONS: Foundations to be of size and depth to suit site conditions. FOUNDATION DEPTHS SUBJECT TO ANY TREES WITHIN THEIR LOCATION AND DEPTHS TO BE TO BUILDING INSPECTOR'S SATISFACTION. Minimum 600mm wide and taken down to a minimum depth of 1m with 600mm minimum depth of concrete. Foundations to be taken down to invert level of any adjacent drains and within 1m of such drain runs. Foundation concrete should be composed of cement to BS 12:1978 and fine/coarse aggregate conforming to BS 882:1983 in proportions of 50kg of cement to not more than 0.1m of fine aggregate and 0.2m of coarse aggregate. Concrete Grade C35.

CDM REGULATIONS 2015 - ANY HEALTH AND SAFETY CONTRACTURAL WORK AND MAINTENANCE SOLID FLOORS: Solid ground floor slab to consist of 150mm well consolidated hardcore, 50mm blinding,150mm concrete slab with layer of A192 mesh, . 1200 gauge damp proof membrane (to be contiguous with new damp proof course), 100mm Celotex GA4000 or equivalent floor insulation laid to manufacturers specification. Vapour barrier to be provided. 75mm sand cement screed. Screed to be reinforced with plastic or fibre glass particulars before laying. U value 0.18W/m2k. A 25mm upstand of insulation must be provided around the perimeter of floors, including where the floor slab touches outside wall (usually at door thresholds). Provide air ducts to ventilate any suspended floors via air bricks at external walls.

> CAVITY WALL: Walls (cavity) below dpc level to be two leaves of semi-engineering bricks with 100mm cavity between, as shown on drawing (cavity not to be filled with concrete above 225mm below dpc). Above dpc level to be 112mm brickwork outer leaf and then 100mm thermolite shield block inner leaf plus 42.5mm PIR(Celotex) and 12.5mm plasterboard with 100mm cavity between both. Cavity filled with100mm drytherm 32 cavity batts, all to achieve U value of U Value 0.18 W/m2k. The cavity wall insulation must be taken down below damp course level, finishing at the same level as the underside of the floor slab insulation. The cavity wall insulation and roof insulation must meet at the top of the wall (the detail used must also allow ventilation to be maintained if appropriate). Cavity wall insulation must be carried up to the full extent of gable walls. Vapour control layer required to warm side of wall insulation on internal skin. Where the cavity to the masonry walling is between 76mm and 100mm the wall ties must be spaced not less than 750mm horizontally and 450mm vertically. Two leaves tied together with patient stainless steel cavity wall vertical twist type ties or equivalent must be used in cavities 76mm or greater. All wall ties should comply with BS1243:1978. Wall ties at openings to be no more than 300mm vertical spacing within 225mm of reveals. Tray dpc to be provided over lintels. Blocks laid 1:1:6 mortar mix with brick-tor or similar mild steel reinforcement to every third course of block work. Provide proprietary movement joints at max 6m distance. Walls to have a 12mm lightweight plaster internally. Cavities should be closed with insulated cavity closures designed for purpose at all

## FINISHES: MATERIALS USED IN THE CONSTRUCTION OF THE PROPOSED EXTENSION TO MATCH THOSE OF THE MAIN DWELLING.

**NEW WALLS:** Damp proof courses to be lead core or other similar approved, lapped to a minimum 150mm at all joints and to be contiguous with dpm at 150mm above external ground level. Lintels (unless otherwise stated) to be Catnic steel lintels with 90mm mineral fibre insulation to inner void giving U-value of at least 0.18 W/m²k. Catnic lintels to have minimum 150mm end bearings. All wall and ceiling linings to be plasterboard and plastered to give Class A of surface spread of flame. Lead flashing to be provided at all roof and wall abutments. Lead flashing to be minimum Code 5. Lead to be let into mortar course a minimum 150mm above roof level. New walls secured to existing with furfix or similar connector. The strapping should be of a galvanised mild steel or similar and have a minimum cross section of 30mm x 5mm. Straps should be a minimum of 1m long and be spaced at not more than 2m centres. Suitable noggings must be used to support the entire length of the strap. Tray dpc provided to any cavity wall/roof abutment.

CAVITY TRAYS to be provided over air bricks venting existing suspended floors and over lintels in external cavity walls with stopped ends and weepholes. Cavity trays at abutment of roofs and adjacent cavity wall also to have lapped and sealed joints stopped ends and weepholes and be linked with the upstands flashing.

CAVITIES being cut continuous at vertical abutment of new and existing cavity walls or a vdpc inserted on the line of the cavity through the full thickness of the existing brickwork. Where the cavities cannot be cut continuous a vdpc should be provided behind the blockwork lapped to two coat bitumen to the existing wall full height and approx. 1m horizontally.

**STRUCTURAL TIMBERS:** to be treated with approved timber preservatives and to be grade C24. Floor joists etc. must be set on joist hangers (and not built into the wall itself).

WINDOWS: All windows to be double-glazed and of a size not less than 10% of the floor area of each room. Window openings to provide a minimum of 1/20th of the floor area of each room. Ensure rooms have purge ventilation in accordance with Approved Document F(1/20th of the floor area for windows opening 30° or more, otherwise 1/10th of floor ares). Glazing in timber or plastic frames - double glazing with 16mm gap and a 'soft' low E coating or double glazing with 16mm air gap. Argon filled and soft low E coating. (U value 1.4W/m<sup>2</sup>k.) Trickle vents should be located a minimum of 1.7m above finish floor level. Means of escape window frame to be minimum 450mm wide by minimum 750mm high. Bottom of window to be no higher than 1100mm above ground level.

# POSITION AND HEIGHT OF ALL WINDOWS TO BE CHECKED BY CLIENT/BUILDER BEFORE **CONSTRUCTION COMMENCES.**

**EXTERNAL DOORS** should achieve the required area weighted average U-values specified in New Table. Doors (50% glass) – U-value=1.4 W/m²k or, centre pane U-value = 1.4 W/m²k. Glazing in relevant positions should comply with the requirements of Approved Document i.e safety glass.





PROPOSED DETACHED GRANNY ANNEX IN THE REAR GARDEN ANCILLARY TO MAIN BUILDING MR A JIBODU 87 WICKHAM STREET WELLING DA16 3DE **REF:151223/SPECIFICATION NOTES** 

## NOTE: WINDOWS AND GLAZED DOORS SHOULD BE FENSA APPROVED

**DRAINAGE:** All underground drains to be of underground quality PVC pipes (e.g. Hunter-Marley etc) bedded and surrounded in 150mm peashingle to manufacturers recommendations. Large radius bend at base of S&VP's. Drains passing through walls/foundations to be bridged with precast RC lintels. Where drainage passes through substructure a 50mm air space to be provided all around the drain in accordance with AD H diagram 7. Manholes to have a minimum internal size of 600mm x 450mm with 150mm thick concrete base (concrete mix 1:2:4) Walls to be 225mm thick class B semi-engineering bricks (mortar mix 1:3) with fair faced brick-work internally and flush pointed. Vitrified clay main straight channel and branches benched in sand /cement 1:3 trowelled smooth (external manholes to have galvanised mild steel cover and frames). Fall of drains to be min. 1:40. All new drainage and sanitary pipework, including layout, materials, bedding/surround etc. must be discussed and approved on site by a Building Control Surveyor prior to installation. Air and running tests will be required on completion of works.

**RAINWATER** disposal to be by 100mm half round PVC gutter with 75mm dia. PVC down pipes connected to 100mm dia. Hepsleeve or similar drain run, bedded and surrounded in 100mm of peashingle discharging into soakaway sited at least 7m from any building. Soakaway to be size and depth to suit ground conditions. Soakaway construction to be 100mm concrete base with honeycomb brick walls (no gap greater than 25mm) with 150mm reinforced concrete lid

CEILINGS – 12.5mm foil backed plasterboard to be provided to ceilings with 7mm plaster skim.

**BACKGROUND VENTILATION** to the new room(s) is required to comply with Part F Table 1.7 (equivalent areas) and provided to habitable rooms by means of controllable and secure ventilation opening having a total area of not less than 8,000 mm² located to avoid drafts (trickle ventilator) hit or miss ventilator. Open Plan Kitchen/Diners to have minimum of 3 trickle vents in a room (8000mm² each) Part F Table Para.1.52. Background ventilation to bathroom and utility room to give 4000 mm² as above. Existing Home Ventilation Guide required to be given to the homeowner by the builder to explain how to use and ventilate efficiently.

**VENTILATION:** Mechanical ventilation to be provided to bathroom/shower room having an output of at least 15 litres/second ducted direct to external air. Mechanical ventilation to be provided to kitchen and utility room having an output of at least 60 litres/second ducted direct to external air.

Mechanical ventilation to be provided to kitchen incorporated in cooker hood having an output of at least 30 litres second ducted to external air. Mechanical ventilation to be provided to WC compartment having an output equivalent to 3 air changes per hour with 15min. overrun connected to light switch and ducted direct to external air.

Suitable background ventilation must be provided to all new rooms. Background ventilators must be reasonably secure, adjustable and be a high level, typically being at least 1.7m above the floor level. All new habitable rooms must be provided with background ventilation with a minimum equivalent area of 8000mm² and all other rooms 4000mm² equivalent area.

**FLOOR JOISTS** supported on external walls and not built in joist hangers to be restraint type. Where walls are parallel to the joist direction suitable 30x5mm galvanised mild steel straps should be provided built in at maximum 2m centres and taken over a minimum of 3No joists with timber noggin support beneath the full length of the strap.

**GLAZING:** Safety glazing being provided in doors and adjacent side panels to a height of 1500mm in addition to where below 800mm. The glazing in windows within 800mm of the floor where the external ground level is in excess of 600mm below the floor level the glazing should be toughened/laminated and non openable.

**ROOF TIMBERS** - to be strapped down to masonary with suitable holding down/vertical with restraint straps 1m in length and at a maximum of 2m centres. All to B I satisfaction. Maximum U-value of pitched roof (insulation at ceiling level) to be 0.16W/m²k

**FLAT ROOF LIGHTS** The proposed roof lights to be installed and weathered in strict accordance with the manufacturers recommendations.

**WARM ROOF:** (U value 0.15W/m²k) Roof to be covered with fibre glass application to manufacturers recommendations on 18mm board on Kingspan Thermaroof TR27 150mm thick. Provide vapour control barrier to flat roof. Ply/USB boarding over firring pieces giving a fall of 1:60 nailed to joists size as indicated on plans. (Minimum size 150mm x 50mm). Underside of joists covered with 12.5mm thick plasterboard and plaster skim. Roof covering to achieve B Roof (t4) within 6 metres from boundaries. The external surface of the flat roof covering to achieve a half hour fire resistance and a Class O or Class A-A resistance to surface spread of flame.

<u>ALARMS</u>: A suitable main powered, battery backed-up fire detection and alarm system must be provided to new and existing circulation spaces. If an existing non-mains detection system already exists then this system must be upgraded. All to BS 5839 – Part 6:2020.

The alarm system must be fitted with an audible or visual monitoring device or is connected to the lighting sub-circuit. The reason for this is that if the lighting circuit trips off this will be investigated and repaired quickly, where as if a separate circuit is used for the smoke detection system this may not be noticed and any battery backup my have run down completely thus giving no early warning protection.

Detector heads should normally be positioned in circulation spaces, (at least one) heat detector in the kitchen.

Manufacturers details of the detectors must be provided to clarify the maximum number of detector heads the system can accommodate.

Detectors must be sited: within 7.5m of a room; be ceiling mounted and be at least 300mm from any wall or light fitting unless manufacturers details are provided indicating alternate positioning; the sensor in the detector head is between 25 and 600mm below the ceiling (25 and 150mm for heat detectors).

The detector must be positioned so that it is accessible for routine maintenance. Must not be fitted over / near heaters or air-conditioning outlet, places likely to suffer from steam, condensation, fumes, extremes of heat or cold.

A Part P installation and commissioning certificate must be provided for the detection system prior to the works completion.

Details of the detection system and how it is to be maintained must be included as part of the building maintenance manual.

The occupier should be provided at job completion with written documentation on the use and maintenance of the fire alarm system.

#### **NEW U-VALUES TABLE AS OF JUNE 2022**

THERMAL ELEMENT	NEW U-VALUE
New Floor	0.18 W/m²k
New Cavity Walls	0.18 W/m²k
Timber Frame Walls	0.18 W/m²k
Pitched Roof (Flat Ceiling)	0.15 W/m²k
Pitched Roof (Vaulted Ceiling)	0.15 W/m²k
Flat Roof (Cold Deck)	0.15 W/m²k
Flat Roof (Warm Deck)	0.15 W/m²k
Retained roof Up Grades	
Flat Roof	0.16 W/m <sup>2</sup> k
Flat Ceiling	0.16 W/m <sup>2</sup> k
Vaulted	0.16 W/m <sup>2</sup> k
Windows	1.4 W/m²k
External Doors > 60% Glazing	1.4 W/m²k
	Band C
Other External Doors	1.4 W/m <sup>2</sup> k
	Band B
Roof Light	2.2 W/m <sup>2</sup> k



