

**CDM REGULATIONS 2015 – ANY HEALTH AND SAFETY CONTRACTURAL WORK AND MAINTENANCE GOING FORWARD IS THE RESPONSIBILITY OF THE COMPANIES EMPLOYED BY THE CLIENT
RECOMMENDATIONS: THE OWNER MAY NEED TO OBTAIN CONSENT FROM LOCAL WATER AUTHORITY TO BUILD OVER OR NEAR ANY SEWERS WITHIN THEIR PROPERTY.**

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**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 SITE**

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 OF THE BEAM.

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.

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 with 100mm 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 openings.

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.

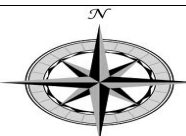
STRUCTURAL TIMBERS: to be treated with approved timber preservatives and to be grade C24. Floor joists etc. must be set on joist hangers (and not built into the wall itself).

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 area). 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/m²k.) 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.

NOTE: WINDOWS AND GLAZED DOORS SHOULD BE FENSA APPROVED

WESTLEIGH DESIGN



**PROPOSED SINGLE STOREY FRONT EXTENSION, INTERNAL ALTERATIONS AND ROOM IN THE ROOF
INCORPORATING A SIDE DORMER
MR S BEADLE 19A CUMBERLAND AVENUE WELLING DA16 2PT
REF:111023/SPECIFICATION NOTES**

ABOVE GROUND DRAINAGE: Plumbing 100mm dia PVC S&VP with 100mm dia. branch to WC pan, 38mm dia. waste to bath/shower, kitchen sink and 32mm dia. waste to wash hand basin. 32mm basin waste to be increased to 40mm over 1.7m in length up to a maximum of 3m. Combined waste pipes to be 50mm dia. Wastes greater than 2.5m in length to be increased to 50mm dia. Appliances to have 75mm deep seal traps. S&VP to terminate 900mm above top of nearest adjacent window with balloon guard. Wastes from ground floor appliances (except WC) to discharge to back inlet gully with pipes discharging below grating level but above water level. All waste pipes to be connected to S&VP on vertical section and below swan-neck to meet Approved Document H1. S&VP should be extended 900mm above the top of the top floor windows within 3 metres.

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.

CEILING – 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.

STEEL WORK: Steel work to be encased to provide 30 minute fire resistance in accordance with the Board Manufacturers recommendations to include frame work and boarding. Steel work to structural calculations. Steel beams to be encased with two layers of 12.5mm plasterboard fixed to 50mm x 25mm timber cradle with 7mm of gypsum plaster. Steel beams to rest on concrete padstones minimum end bearing of 225mm Twin beams to be diaphragm bolted together with spacers at 900mm centres. Steel Grade 43. All steel beam bottom flanges bolted to top of padstones using 2No. M12 dia. bolts each end. Where the Engineer designs a single steel beam to support a 225mm or 300mm wall a 20mm steel plate to be bolted or welded to either the top flange (internal beam) or bottom flange (external beam) where picking up outer masonry brick or block skin.

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.

SOUND REGS FOR NEW STUD WALLS – To comply with Approved Document E (Sound Insulation) the partitions to bedrooms and bathrooms should be clad with two layers of plasterboard each side of timber or metal studs, each layer of a mass of 10 Kg/m² (wall type A) or, alternatively, (wall type B) a single layer of plasterboard of mass 10 Kg/m² each side with a minimum of 25mm mineral wool (mass 10 Kg/m²) suspended in the cavity. 12.5mm wallboard does not meet a mass of 10 Kg/m². Use 15mm wallboard, gyptic Soundbloc (12.5mm), Gyproc wallboard TEN (12.5mm), Lafarge E check Wallboard (12.5mm), or similar

NEW SINGLE STOREY PITCH ROOF TO EXTENSION – Please note to obtain a 15 degree pitch on a single storey roof may impact on a first floor window which then may need raising or replacing with a smaller one.

LOW PITCH TILING Use Centuarion low pitch tiles suitable for pitch of 10 degrees.

TILING: Roof tiling on 58mm by 25mm treated soft wood battens on Tyvek Breathable Felt onto rafters, (size as indicated on plans). Ceiling joists (size as indicated on plans) secured to rafters and wall plates. (except vaulted ceiling – see separate note). Ventilation to be provided at the top and bottom of the roof slope to ensure full cross ventilation. Allow for 25mm air space behind facia. (U value 0.15w/m²K).

ROOF INSULATION – Main Roof 400mm insulation. . Maximum U-value of pitched roof (insulation at ceiling level) to be 0.15W/m²k.

ROOF TIMBERS - to be strapped down to masonry 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

VELUX ROOF LIGHTS where Velux roof lights or similar are to be inserted the pitch of the sloping roof to be a minimum of 15 degrees to accommodate proprietary flashings. . All velux windows to be top hung and fully opening. Use Forticrete Low Pitch Roof Window System for pitches as low as 10°. Velux roof light not to exceed 150mm above the roof plane. U value 0.16W/m²k

ROOF VENTS to be provided above and below velux roof lights where used on vaulted roof structure to each and every void. Roof rafters to be doubled up adjacent Velux roof lights. Double trimmers to top and bottom of Velux roof lights.

WARM ROOF: (U value 0.15W/m²k) Roof to be covered with fibre glass application to manufacturers recommendations on 18mm board on Kingspan Thermarof TR27 150mm thick. Provide vapour control barrier to flat roof. Ply/USB boarding over furring 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.

LOFT All doors leading to escape shaft (staircase enclosure) to be FD 20 doors and fire resisting frames and fitted with intumescent strips. When forming a loft if the ground floor ceiling to the hallway does not have a half hour fire resistance then this ceiling will need to be upgraded to comply.

LOFT FLOORS: To maintain the fire resistance of the ceiling/second floor either the boarding to the floor should be maintained to the eaves or the back side of the dwarf walls, should be upgraded to 30 minutes fire resistance.

The first floor ceiling is required to meet Approved Document E for sound insulation.

EXTERNAL DORMER CONSTRUCTION: Form timber frame Treated Grade C24 bottom timber sole plate of 150 x 50 bolted with chemical anchors to brickwork outer skin. All vertical timbers posts of 150 x 47 sawn timbers @ 600 crs. with 2 No. at openings reveals and corners bolted together with M10 dia. bolts and connectors @ 400 crs. Horizontal noggins and diagonal cross bracing of 150 x 47 sawn timbers. . For timber / timber connections use propriety gang nail mild steel connectors. Roof joists strapped down to timber stud with propriety galvanized straps. Rafters doubled up to support side of dormer cheeks. Cover externally with 12mm external quality plywood with bitumised breather paper. External frame insulated with 100mm Celotex (GA4000) between studs and overlay with 50mm Celotex (GA 4000) and 12.5mm plaster-board (U Value 0.18W/m²k). Vertical tiling to match existing on 50mm x 25mm tanalised battens. Dormer cheeks within 1m of the boundary to achieve a 30-minute fire resistance. Apply 12mm fireline board/superlux/masterboard to both sides of cheek. Breatherable membrane provided. Tiles fitted to dormer cheeks to be plain.

NEW SLOPING SKILLING ROOF - Tiling on battens on breather membrane – air space – 100mm GA 4000 celotex placed between rafters – lined beneath with 45mm GA 4000 celotex across Insulation plus 12.5mm Gyproc Duplex plasterboard to achieve U Value of 0.15 W/m²k. No recessed lighting in sloping ceiling.

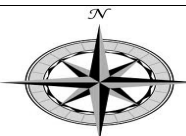
NEW INSULATED STUDWORK WALLS - Loft space between flat ceiling, roof lines & studwork wall – 90mm Celotex tuff-R zero ODP insulation placed between studwork timbers – 12.5mm Gyproc Duplex plasterboard. U Value 0.18W/m²k.

FLOOR: To have 25mm tongue and groove soft wood boards secured to floor joists (size as indicated on plans or moisture proof boarding to BS7331.

PROPOSED STAIRCASE: IT IS REALLY IMPORTANT FOR THE STAIRCASE MANUFACTURER TO GO TO SITE TO CHECK OUT ALL DIMENSIONS AND SITE DETAILS BEFORE CONSTRUCTION. Staircase to be a minimum 750mm clear width with treads and risers as indicated on plans giving a maximum pitch of 42° unless stated otherwise on the plan. Minimum headroom of 2mtres measured vertically from pitch line (joining nosings). Handrail to be provided to one side of staircase securely fixed 900mm above pitch line. Exposed edges of staircase and landings to be protected by balustrading not less than 900mm high. Landings to be minimum 700mm square. No gap in balustrading, treads or risers to be greater than 100mm. Turns to the stairs to maintain a 50mm tread at the inner edge of each step adjacent newel post. **ANY STAIRCASE NOTWITHSTANDING ANY OTHER INFORMATION GIVEN TO BE NO MORE THAN 42° PITCH**

AUTOMATIC SMOKE DETECTION SYSTEM: To be fitted:- BS5839 on independent circuit with battery back up. Detectors to be fitted/positioned a) in hallway near front door b) on each landing.

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NEW U-VALUES TABLE AS OF JUNE 2022

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

