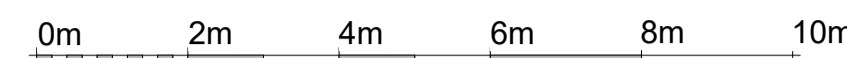


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VISUAL SCALE 1:50 @ A1



VISUAL SCALE 1:100 @ A1

NEW AND REPLACEMENT WINDOWS

New and replacement windows to be double glazed with 16-20mm argon gap and soft coat low-E glass. Window Energy Rating to be Band B or better and to achieve U-value of 1.4 W/m²K. The door and window openings should be limited to 25% of the extension floor area plus the area of any existing openings covered by the extension. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape. Windows to be fitted with trickle vents to provide adequate background ventilation in accordance with Approved Document F.

NEW AND REPLACEMENT DOORS

New and replacement doors to achieve a U-value of 1.4W/m²K. Glazed areas to be double glazed with 16-20mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations. Insulated plasterboard to be used in reveals to abut jambs and to be considered within reveal soffits. Fully insulated and continuous cavity closers to be used around reveals. Windows and door frames to be taped to surrounding openings using air sealing tape.

SAFETY GLAZING

All glazing in critical locations to be toughened or laminated safety glass to BS 6206, BS EN 14179 or BS EN ISO 12543-1 and Part K (Part N in Wales) of the current Building Regulations, i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

ESCAPE WINDOWS

Provide emergency egress windows to any newly created first floor habitable rooms and ground floor inner rooms. Windows to have an unobstructed openable area that complies with:
 - minimum height of 450mm and minimum width of 450mm.
 - minimum area 0.33m².
 - the bottom of the openable area should be not more than 1100mm above the floor.
 The window should enable the person to reach a place free from danger from fire.

SUSPENDED BLOCK AND BEAM FLOOR

To meet min U value required of 0.18 W/m²K
 Remove top soil and vegetation, apply weed killer – provide 50mm concrete ground cover if required by BCO.
 The underside of beams not less than 150mm above the top of the ground. PCC beams to be supplied and fixed to beam manufacturer's plan, layout and details (details and calculations to be sent to Building Control and approved before works commence). Minimum bearing 100mm onto DPC and load bearing walls. Provide concrete blocks to BS EN 772-2, wet and gravel all joints with 1:4 cement/sand mix. Provide double beams below non-load bearing partitions. Lay 1200g DPM/radon barrier, with 300mm laps double wetted and taped at joints and service entry points using radon gas proof tape, over beam and block floor. Lay floor insulation over DPM, 90mm Celotex GA4000 applied as a rigid material. 25mm insulation to continue around floor perimeters to avoid thermal bridging. Lay 50g separating layer over insulation and provide 75mm sand/cement screed over and prepare for floor finishes as required. The top surface of the ground cover under the building shall be above the finished level of the adjoining ground.
 Ventilation - Provide cross-ventilation of the under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500mm² per metre run of perimeter wall or 500mm² per square metre of floor area, whichever is the greater. Sleeper walls shall be of honeycombed construction or have provision for distribution of ventilation.

FULL FILL CAVITY WALL

To achieve minimum U Value of 0.18 W/m²K (actual U Value achieved 0.17 W/m²K)
 20mm two coat sand/cement render to comply to BS EN 13914-1 with waterproof additive on 100mm lightweight block. 0.15 W/m²K, e.g. Celcon solar, Tapite Standard. Full fill the cavity with 90mm Celotex Thermacast Cavity Wall 21 as manufacturer's details. Inner leaf to be 100mm lightweight, 0.15 W/m²K, e.g. Celcon solar, Tapite standard. Internal finish to be 12.5mm plasterboard on dabs. Walls to be built with 1:1.6 cement mortar. Vertical joints in the board must be staggered and all joints lightly butted. All details including corner and junction to be as relevant BBA certificate. Location to be assessed for suitability of insulation boards. 10mm cavity to be provided if required.

TRENCH FOUNDATION

Provide 650mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2010 Building Regulations A1/2 and BS 8004 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions or difference in soil type be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

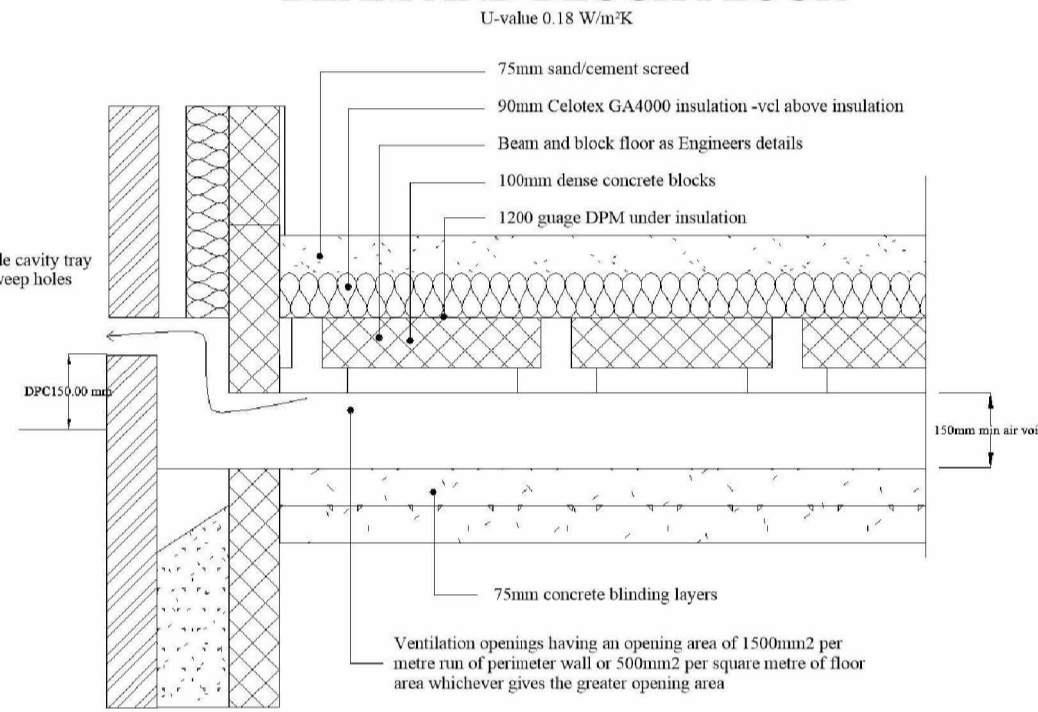
WALLS BELOW GROUND

All new walls below ground to be constructed using blockwork compliant with BS EN 771 and suitable for below ground level or semi engineering brickwork. Walls to be built using 1:4 masonry mortar mix or equal approved specification to BS EN 1996-1-1. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill (150mm below damp course) laid to fall to weepholes.

VENTILATED FLAT ROOF

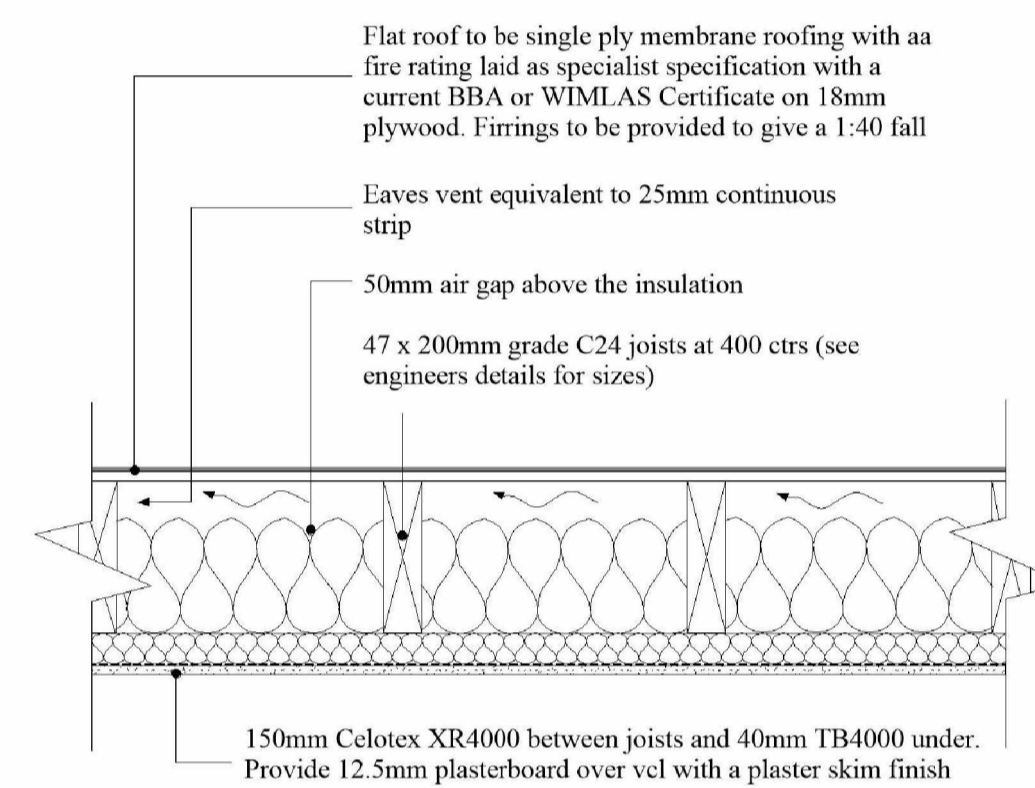
(Imposed load max 1.0 kN/m² - dead load max 0.75 kN/m²)
 To achieve U value of 0.15 W/m²K
 Flat roof covering to be single ply roofing membrane with aa fire rating as specialist specification, with a current BBA or WIMLAS Certificate on 18mm exterior grade plywood, laid on firings to give a 1:40 fall on 47 x 200mm grade C24 joists at 400 ctrs, max span 4.55m (see Engineer's details for sizes). Cross-ventilation to be provided on opposing sides by a proprietary eaves ventilation strip equivalent to 25mm continuous with fly proof screen. Flat roof insulation is to be continuous with the wall insulation but stopped back to allow a continuous 50mm air gap above the insulation for ventilation. Insulation to be 150mm Celotex XR4000 between joists and 40mm TB4000 under joists. Provide 12.5mm plasterboard over vapour barrier to the underside of the insulation. Plasterboard to be fixed joists and finished with a plaster skim. Provide cavity tray where roof meets existing wall. Provide restraint to flat roof by fixing using of 30 x 5 x 1200mm ms galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall. THIS IS A GENERAL GUIDE BASED ON NORMAL LOADING CONDITIONS FOUND IN DOMESTIC CONSTRUCTION. IT IS YOUR RESPONSIBILITY TO ASSESS YOUR DESIGN TO ASCERTAIN WHETHER ENGINEER'S DETAILS/CALCULATIONS ARE REQUIRED. PLEASE REFER TO THE TRADA DOCUMENT - SPAN TABLES FOR SOLID TIMBER MEMBERS IN FLOORS, CEILINGS AND ROOFS FOR DWELLINGS OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.

BEAM AND BLOCK FLOOR



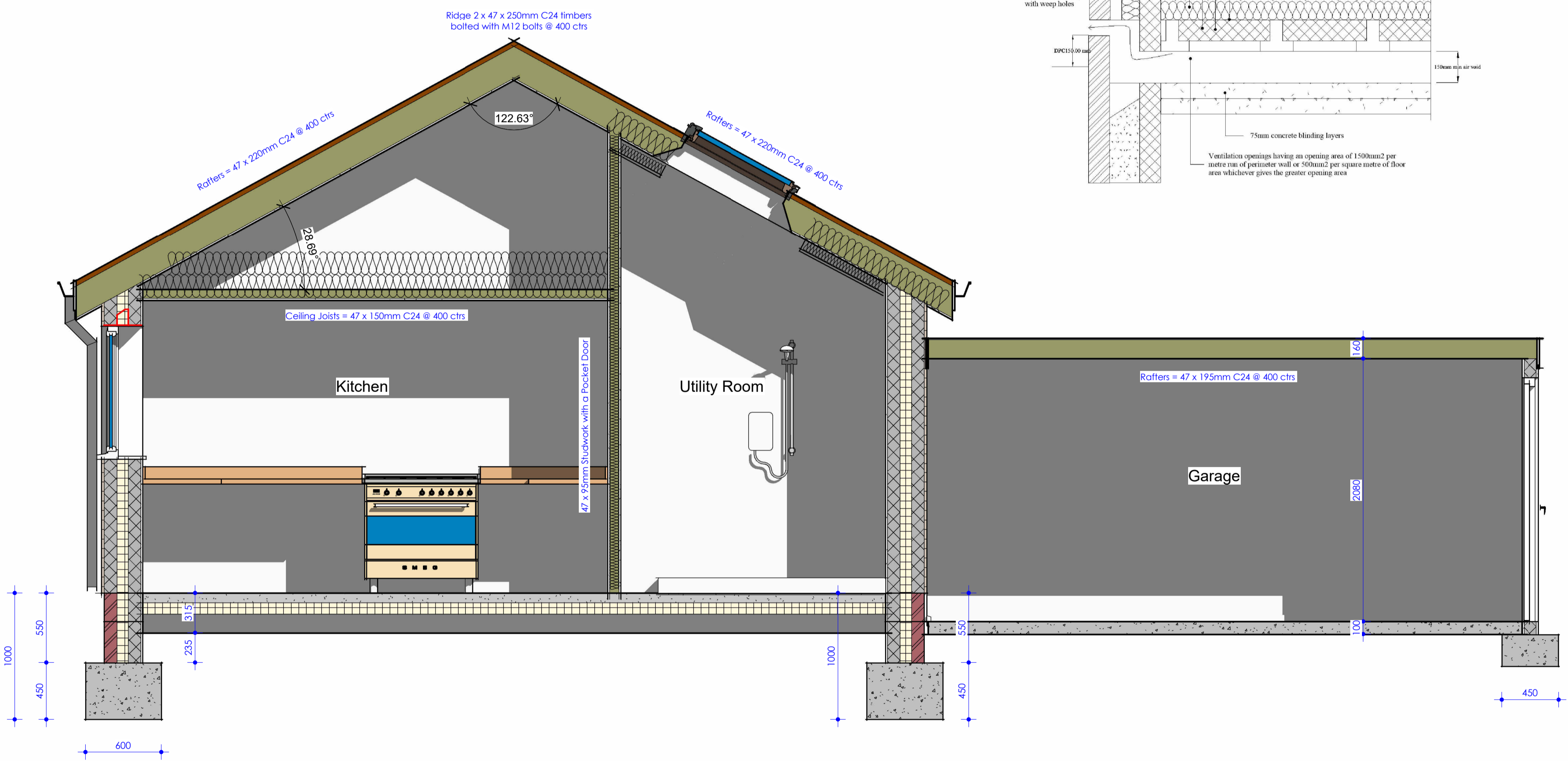
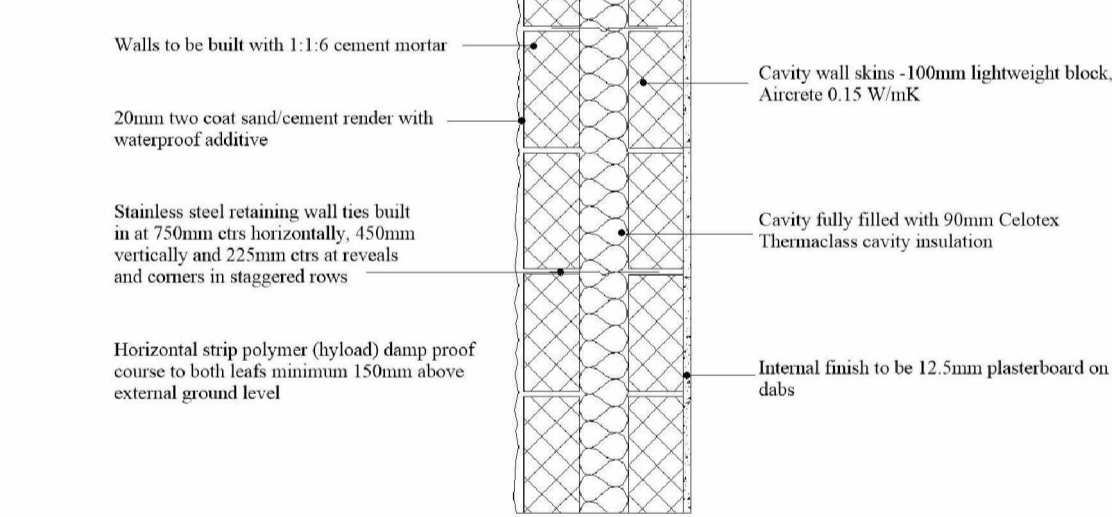
COLD FLAT ROOF

U-value 0.15 W/m²K



FULL FILL CAVITY WALL

U-value 0.17 W/m²K



Single Power Socket	FIRE Fire Alarm Panel	Distribution Board
Double Power Socket	SS Shaver Socket	Smoke Detector
Cooker Point	SP Speaker Point	Heat Detector
Unswitched Fused Spur	TV TV Aerial Point	Carbon Monoxide Detector
External Power Socket	FB Floor Box	Extract fan
Telephone Point	FS Floor Socket	Underfloor heating control
Cat 6 Data Point	PE Passive Extract	
Extract Vent	ME Mechanical Extract	

Wall Structure Key:

	Cavity Wall: Render
	Cavity Wall: Face Brick
	Block Work: 100mm
	Studwork Wall: 75mm
	Metal Frame: 70mm
	Solid Brick Wall: 215mm
	Solid Block Wall: 215mm
	Structural Opening
	Walls Removed

Please note:
 All drawings are for the purposes of planning only unless marked for construction.

All builders to site measure to confirm measurements.

Report all discrepancies to the person named below, do not proceed without instruction.

BRO take no responsibility should any drawing/s unless specified are used for building purposes and measurements aren't checked on site.

All drawings remain the property of BRO Architecture

Drainage Key

S	Storm Drainage
MH	Manhole
FD	Foul Drainage
SVP	Soil Vent Pipe
GP	Gulley Pot
RWP	Rainwater Pipe
AD	ACO Drain

Ducting Colour & Use

Red	Electric cable
Yellow	Gas Pipe
Blue	Water pipes
Green	Data/Comms
Grey	BT
Purple	Security - Cameras
Orange	Garden Lighting non Security

A1

1 Sectional View
 1 : 25

DRAWING NUMBER
B1-0

BRO ARCHITECTURE
 DESIGNING YOUR DREAMS
 Mobile: 07508 856621
 Website: www.broarchitecture.co.uk
 E-mail: info@broarchitecture.co.uk

CLIENT
Mr & Mrs Booth
 SITE ADDRESS
**53 Nutwell Road Worle
 BS22 6EW**

PROJECT NAME
Proposed Side Extension

DRAWING NAME
Proposed Sectional View

DATE	23rd Sept 23	REV	
DRAWN BY	SH	SCALE (@ A1)	1 : 25
CHECKED BY	Client	PROJECT NUMBER	SH/BRO/220923-GB