

GENERAL NOTES

1. THE CONTRACTOR MUST CHECK ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

2. ANY DISCREPANCIES MUST BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DESIGNER

3. ALL WORK MUST CONFORM TO CURRENT BUILDING REGULATIONS, BRITISH STANDARDS & CODES OF PRACTICE AND NHBC STANDARDS

4. THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH ALL RELEVANT DESIGNER, ENGINEER OR SPECIALIST DRAWINGS AND SPECIFICATIONS

5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS STATED OTHERWISE

6. ALL MATERIALS ARE TO BE USED AND INSTALLED IN STRICT COMPLIANCE WITH THE RELEVANT MANUFACTURER'S RECOMMENDATIONS

7. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY TEMPORARY SUPPORT TO THE BUILDING AND ANY ADJACENT STRUCTURES

components suitable for the application and in compliance with Approved Document J, BS EN 1457, BS EN 1857 and manufacturer's details.

The space between the liners and surrounding masonry to be filled with a suitable insulating concrete breckfill.

Combustible material should be at least 50mm from the chimney soffit or 200mm from the inner surface of the flue.

FLUES FOR WOOD BURNING STOVES

Flue to be fitted in compliance with Approved Document J BS EN 15287, BS EN 1443, BS EN 1806 and manufacturer's details.

All installations must include compliance to the following:

- Flue to be a minimum diameter 150mm or as manufacturer's details
- Flue to have the same diameter as that of the appliance and no smaller than recommended by the manufacturer and at least the size shown in table 2 Approved Document J
- Flue to be continuous and adequately supported throughout its length
- Number of Joints in the flue to be kept to a minimum
- Flue to have no more than two offsets and these offsets to be no greater than 45°
- Ensure only proprietary manufacturers offset components are used
- single skin flue pipes must be at distance minimum three times their diameter away from combustible materials or appropriately heat shielded with cement based fire board
- Combustible material should be at least 200mm from the inner surface of the flue
- A suitable register plate must be fitted
- A suitable gudge to be provided where a twin wall flue passes through a roof space or cupboard placed no closer than 50mm to the flue
- Any flue within a void should be provided with appropriate means of access for inspection (min 300 x300mm access panels)
- Flue should be smoke tested. Also test for spillage on completion
- Flue to be checked on completion to show that it is free from obstructions.

Factory-made fire block chimneys are to be constructed in compliance with paragraphs 1.29 to 1.30 of Approved Document J and applicable to manufacturer's details.

Factory-made metal chimneys are to be constructed in compliance with paragraphs 1.42 to 1.47 and diagrams 13 & 14 of Approved Document J, BS EN 1856 and applicable to manufacturer's details.

The space between the liners and surrounding masonry to be filled with a suitable insulating concrete breckfill.

Flue and combustible flue liners must be jointed with fireproof mortar.

Installer to provide a commissioning checklist on completion of the works.

OUTLETS FROM FLUES (Non easily ignited roof coverings only)

The top of the flue pipe should terminate: a. at least 140 - 150mm above the highest opening (i.e. windows or ) 1000mm above openings- 600mm above any adjoining or adjacent building that is within 2300mm measured horizontally
- At least 1000mm above flat roofs
- At least 2300mm (horizontally) from the roof surface
- Or Where the flue is within 600mm (horizontally) above the ridge the flue should extend at least 600mm above the ridge.

HEARTHES AND FIREPLACES FOR WOOD BURNING STOVE (with recess)

Heath to be constructed in non-combustible material of minimum 200mm thickness, lined with suitable fire bricks.

Heath to be constructed in non-combustible material minimum 125mm thickness with no combustible material within 250mm.

Hearth to have projections extending outwards from the sides of the hearth and the edges of the jambs and extending forwards at least 500mm from the front of the jambs.

Heath also to extend 150mm outwards (to the side) and at least 150mm from the front and extend forwards at least 300mm from the front of the appliance. Stoves to be 50mm minimum away from walls.

Boundary of hearth to be visually apparent.

THE INSTALLATION CHECKLIST, TESTING AND NOTICE PLATE

On completion of the works ensure compliance with the following:

- Checklist from Approved Document J
- Appendix A to be completed and given to owner and Building Control body
- Flue should be smoke tested and tested for spillage
- A notice plate to be completed and permanently fixed within the room above the hearth and flues are fitted in compliance with Approved Document J

WOOD BURNING STOVE

Ensure the wood burning stove is installed by an APHC, HETAS, NAPIT or NICEiC accredited specialist in compliance with Part J. Supply an installation certificate for the stove and provide alarm and provide ventilation to ensure the necessary combustion air and to prevent the depletion of oxygen in the room. There must not be an extract pipe from the stove to the room above the stove. A notice plate giving operating and maintenance instructions must be provided and fixed in an obvious place and the Part J installation certificate must be completed and a copy given to Building Control.

NEW MASONRY CHIMNEY (masonry density greater than 1500kg/m³)

Chimney height should be no greater than 4.5 times chimney width (measured from the highest point of intersection with the roof section).

Chimney masonry chimney to be constructed using external quality frost resistant brick or dense block, a minimum 100mm thick, built off suitable foundations (wall thickness increased to 200mm where it separates another fire compartment or another dwelling). A DPC to be provided 150mm above ground level. Appropriate weathering to be provided including DPC tray and code 5 lead flashings 150mm above chimney and roof abutment.

Chimney to be terminated with a proprietary aluminium cap to match the internal flue sizes. Line chimney with manufactured flue liners and

building. Precautions to be in place to prevent stored water stored exceeding 100°C. Hot water vessels, the WC to meet the requirements of Diagram 1.3 of Approved Document M.

In a two or three storey dwelling with one or two bedrooms, the WC to be fitted with a not self resting energy cut out to instantly disconnect the power supply.

Outlets from domestic hot water storage vessels to be fitted with a line valve to prevent water temperatures exceeding 60°C. All pipes carrying hot water to be insulated where they pass through unheated spaces. Hot water storage systems to be provided with a self venting label. Relevant certificates for the heating system i.e. Benchmark certificate, and commissioning certificates for fixed building services are to be given to the building owner and a copy provided to Building Control on completion.

APPROVED DOCUMENT R

Physical infrastructure for high-speed electronic communications networks

Building to be equipped with high-speed-ready in-building physical infrastructure, up to a network termination point for high-speed electronic communications networks.

2000mm above floor level. There are to be devices capable of delivering broadband speeds greater than 30 Mbps can be installed. A suitable position for at least one network termination point should be provided for dwelling as well as a suitable access point

SERVICES AND CONTROLS

Consumer units to be mounted so that the switches are between 1500mm and 1450mm above floor level.

Switches, sockets, stopcocks and controls to have their centre line between 450mm and 1200mm above floor level. There are to be devices capable of delivering broadband speeds greater than 30 Mbps can be installed. A suitable position for at least one network termination point should be provided for dwelling as well as a suitable access point

PART O - SECURITY

Confirmation required that all doors and windows are to be installed in accordance with the advice stated in PAS24:2012 or alternatively comply with the requirements set out in Approved Document Q – Appendix B.

Doors to be manufactured to a design that has been shown by test to meet the requirements of British Standard publication PAS PAS24:2012 or alternatively comply with the requirements set out in Approved Document Q – Appendix B.

Doors to be fitted with a viewer, door chain and mechanically fixed as the manufacturer's installation guide.

The door set should be manufactured from solid or laminated timber with a minimum density of 500kg/m³.

Any panel in the door must be a min15mm thick and suitably secured in place

The smaller dimension of the panel must be no larger than 250mm in height or width.

Main front doors should be fitted with multipoint locking system.

Windows:

Any part of a window or doorway, which is within 2m vertically of an accessible level surface such as the ground or basement level, or an access balcony, or windows within 2m vertically of a flat or sloping roof (with a pitch of less than 30 degrees) that is within 3.5m of ground level should be secure windows in accordance with paragraphs 2.2 and 2.3 of Approved Document Q.

ROBUST CONSTRUCTION DETAILS

Robust construction details to be provided for all party walls. Before works commence on site building control to be given:

- Robust construction practice certificates.
- The unique reference number issued by Robust Details.
- A valid notification of approved details published by Robust Details Ltd.
- The references of the design details.
- A report of where the details are to be used.

FIXED EXTERNAL LIGHTING

External light fittings to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide.

Pre-completion testing to be carried out on the external lighting to ensure:

- a. lamp capacity not greater than 100 lamp-watts per light fitting and provided with automatic movement detecting devices (PIR) and automatic daylight sensors ensuring lights shut off automatically when not required.
- Or
- b. lamp efficacy greater than 45 lumens per circuit-watt; fitted with manual controls and automatic day light cut-off sensors so that lights switch off when daylight is sufficient.

EXTERNAL SURFACE WATER DRAINAGE

Drainage of paving areas to be carried out in accordance with BS 5687:1983 and Approved Document M.

Hand surfaces around the building should be provided with a proprietary non slip permeable surface laid in accordance with the manufacturer's details and in accordance with BS5677:1, to allow adequate drainage.

Or

provided with a non slip surface and cross fall of 1:40 – 1:60 draining away from the building (for a minimum of 500mm) to a suitable drain or gully.

Paths, driveways and other narrow areas of paving should be free draining away from any adjacent paved area to a pervious area such as grasslands or to a suitable soakaway.

WATER EFFICIENCY

The estimated water consumption not to exceed 125 litres per person per day in accordance with Approved Document G2 (or 110L per-person if required by the planning conditions) . Water efficiency to be calculated using the Water Efficiency Calculator for New Dwellings' or from the list of fitting from the 'Table of fittings' in ADG to comply with Part G. The results submitted to building control before works commence on site.

Water calculation to be in compliance with Code for Sustainable Home Level 3/4 as stipulated by the local Planning Authority. Example calculation below:

WC : 5 (dual flush)

Baths (excluding kitchen taps) : 4

Bathtub : 180

Shower : 8

Kitchen sink taps : 6

Washing machine : 1 (25 not supplied)

Dishwasher : 1.25 (not supplied)

Water recycling : 0 (not supplied)

Predicted per capita consumption (Code) : 103.28

COLD WATER SUPPLY

There must be a suitable installation for the provision of a wholesome water supply in accordance with Approved Document G3. Cold water supply to be provided to washbasins, bidets, baths, WCs, showers, any place where drinking water is drawn off and to any sink provided in areas where food is prepared.

Supply of cold water to comply with section 67 of the water industry act 1991 and the Water Supply Regulations 2000.

HOT WATER SUPPLY

Any boilers, washbasins, bidets, baths and showers to be provided with adequate hot and cold water supply in accordance with Approved Document G3. Washbasin with hot and cold water supply to be provided in or adjacent to the bathroom.

Supply of hot water to be provided to any area where food is to be prepared.

HOT WATER STORAGE SYSTEMS

Hot water storage systems should be designed and installed in accordance with BS 15287:2006. Hot water vessels, cisterns etc and must be adequately supported.

Any hot water storage system including any cistern or other vessel shall incorporate precautions to ensure suitable pressure relief and that any discharge from any safety devices is safely conveyed to where it is visible but will not cause harm to persons in or in the vicinity of the vessel.

CONTROL OF WATER TEMPERATURE

Hot water storage systems should be designed and installed in accordance with BS 15287:2006. Hot water vessels, cisterns etc and must be adequately supported.

Any hot water storage system including any cistern or other vessel shall incorporate precautions to ensure suitable pressure relief and that any discharge from any safety devices is safely conveyed to where it is visible but will not cause harm to persons in or in the vicinity of the vessel.

HOT WATER STORAGE SYSTEMS

Hot water storage systems should be designed and installed in accordance with BS 15287:2006. Hot water vessels, cisterns etc and must be adequately supported.

Any hot water storage system including any cistern or other vessel shall incorporate precautions to ensure suitable pressure relief and that any discharge from any safety devices is safely conveyed to where it is visible but will not cause harm to persons in or in the vicinity of the vessel.

UNION ENTRANCE STOREY

WC to be provided within the entrance storey

On commencement of the works, Building Control to be given documentation to confirm consideration has been given to the technical, environmental and economic feasibility of using high-efficiency alternative systems such as decentralised energy supply systems based on energy from renewable sources where available, renewable sources and heat pumps.

PIPEWORK THROUGH WALLS

Where pipework passes through external walls 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 EXISTING WALLS ARE SUITABLE FOR DWELLINGS OR ASK YOUR BUILDING CONTROL OFFICER FOR ADVICE.

TRADITIONAL BALUSTRADES

Provide balustrades to balcony min 1100mm in height and capable of resisting at least the horizontal force given in BS 6180:2011. No openings in any balustrading should allow the passage of a 100mm sphere and children should not readily be able to climb the guarding.

TANKED PROTECTION (on entire ground floor, on all external walls up to 450mm above ground level and on the internal entire half brick single skin external walls)

Sika® Damp-proofing Slurry polymer - cement based waterproofing system.

BS and BBA certificate in accordance with BS 8102: 1990 to give a protection level of grade 3 (suitable for concrete, renders, brickwork and blockwork structures as detailed in BBA certificate).

Ensure that all materials and products are compatible. Assess structure for suitability of tanking system and ensure substructure is free of water. All materials and products must be examined for defects and repaired in accordance with manufacturer's details if required. All retaining elements are to be detailed by a Structural Engineer.

All materials and products should be installed by a competent contractor strictly in accordance with the manufacturer's recommendations. BS 8102 and BBA certificate.

EXTERNAL STEPS FORMING PART OF AN ADDITIONAL ROUTE

Steps to have a rise of between 150mm and 170mm and a going of between 280mm and 420mm, suitable tread nosings and with a minimum clear width of 900mm. Top, bottom and where necessary, intermediate landings to be provided with a minimum length of 900mm.

Steps to have graspable nosings of 850mm-100mm above the pitch line of the flight and extending beyond the top and bottom nosings.

CAR PARKING

At least one level standard parking bay that can be widened to 3.3m to be provided. Parking bay to have a suitable ground surface and with step free access.

DROP OFF POINT

A level drop off point with suitable ground surface to be provided close to the entrance of the dwelling.

Drop off point to have a dropped kerb, be a minimum of 1000mm wide, be reasonably flush with the adjoining ground and have a maximum gradient of 1:12.

PRINCIPAL PRIVATE ENTRANCE

Entrance to have a level external landing (covered for a minimum width of 900mm and a minimum depth of 600mm and 1200mm above ground level and depth of 1200mm).

Lighting to be provided which uses fully diffused luminaires activated automatically by a dusk to dawn sensor or by photocell lighting.

Doors to have a minimum clear opening width of 800mm and a minimum 300mm nib to the leading edge of the door. The extra width created by this nib to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be maximum of 200mm (if a porch) or 100mm (if a doorway).

Doors to be constructed in accordance with 1500mm apart and the is at least 1500 between door swings).

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

OTHER EXTERNAL DOORS

Other external doors to have a minimum clear opening width of 850mm. A minimum 300mm nib to be provided to the leading edge of the door and the extra width created by this nib is to be maintained for a minimum distance of 1200mm beyond it.

The depth of the reveal on the leading side of the door to be a maximum of 200mm.

The threshold is an accessible threshold - Entrance door to have an accessible level threshold provided with a weather bar (maximum height 15mm) with suitable drainage channel. Landings to have a fall of 1:40 - 1:60 away from the door. Principal entrance door to have a minimum 775mm clear opening between the door leaf and doorposts.

Control to be given documentation to confirm consideration has been given to the technical, environmental and economic feasibility of using high-efficiency alternative systems such as decentralised energy supply systems based on energy from renewable sources where available, renewable sources and heat pumps.

BACKGROUND AND PURGE VENTILATION

Background ventilation - Controllable background ventilation via trickle vents to BS EN 13141-3 within the window frame to be provided to new habitable rooms at a rate of min 5000mm³/h, and to kitchens, bathrooms, WCs and utility rooms at a rate of 2500mm³/h.

Purge ventilation - New windows/rooftlights to have operable area in excess of 1/20th of their floor area, if the window area is more than 30" or 1/10th of their floor area if the window opens less than 30".

Internally doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision to be in accordance with the Domestic Ventilation Compliance Guide.

EXTRACT TO BATHROOM

Bathroom to have mechanical vent ducted to external air to provide min 15 litres / sec extraction. Vent to be connected to light switch and have 15 minute overrun if no wind in room. Internal doors should be provided with a 10mm gap below the door to aid air circulation.

Ventilation provision in accordance with the Domestic Ventilation Compliance Guide.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL LIGHTING

Interim energy efficient light to be fitted as calculated in the DER and in compliance with the Domestic Building Services Compliance Guide. Provide low energy light fittings not less than Code 5 lead and last according to the Development Association. Flashings to be provided to all jambs and below window openings with welded upstands. Joints to be welded min 150mm and least be dressed 200mm under joints. etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

400mm c/s max span 3.22m or as Structural Engineer's details and calculations. Underside of joists to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm² and incorporating steel strands to BS 5896 to support loadings ascribed to BS 5977 Part 1.

For other structural openings provide proprietary insulated steel linings suitable for spans and loadings in compliance with Approved Document A