



INCLUSION HOUSING - STANDARD SPECIFICATION

New Build Property April 2023

Property Name and Address			
No of PD Apartments		No of LD/BC apartments	
Developer		Care Provider	
Inclusion Housing Representative			

1.0 INTRODUCTION

1.1 This specification provides guidance on the standards expected for new build projects and will form part of the Agreement for Lease discussions.

1.2 The purpose of this document is to confirm the design parameters and identify the quality of products to be used in homes which provide various forms of care and support needs. This document is to be used as a guide for developers when preparing the design and build packages however Inclusion Housing must sign off all contractor and developer's proposals prior to entering into contract.

1.3 All components/styles and colours specified within this document are to be used as a guide to the component quality and type expected by Inclusion Housing, however similar products may be presented for agreement.

1.4 The building shall comply with all access requirements for DDA in terms of internal and external egress/ circulation. Where specified accessible WC's, shower rooms, common areas shall comply to part M of the building regulations. Externally there must be a contrast between paths, parking and other garden areas and tactile edging to steps / cross overs, access to all external communal areas must meet with the guidance set out in the Supporting Housing Provider charter. Recommended gradients for approaches to comply with Part M of the building regulations. The threshold to the main entrance door must be level to the surrounding surface.

1.5 The provision of studio flats/ apartments or bedsits where you must pass through the kitchen/lounge to access the bedroom is not suitable for supported living. For the avoidance of doubt all shared Accommodation must include comprehensive en-suite accommodation and a minimum double bedroom size of **>11sqm (excluding en-suite)**.

Tenants receiving care and support will generally need assistance of some kind to evacuate in a fire situation. To provide adequate means of escape within a supported living environment the staff must be able to respond to the activation of a fire detector in an occupants' accommodation and be able to safely enter and assist the occupant in evacuation. This would be difficult and potentially dangerous for the staff if they need to pass through the areas that are on fire and of greatest risk (kitchen/ lounge).

Because of this scenario it is paramount that bedrooms should be lobbied from the lounge/kitchen areas and access is directly achievable to the exit door of the accommodation. This would facilitate staff being able to access the bedroom area without the need to pass directly through the kitchen/lounge.

Where staff office/sleep in accommodation is provided this will include fridge, facilities for tea/coffee making, toilet as a minimum. Additional facilities may be agreed between developer and support provider depending specific care requirements, but these must be agreed between all parties at design stage.

Inclusion Housing will not accept layouts that do not meet the above requirements or the installation of a misting system within the high risk room as a workaround to this issue.

1.6 Any variations to the agreed final plans and specification included in the Agreement for Lease must be agreed in writing by Inclusion Housings representative.

1.7 All new build/refurbishment schemes must achieve the highest possible energy rating with the minimum acceptable being a “C” rating.

2.0 GENERAL DESIGN STANDARDS.

2.1 Regulation and Guidance Documents.

- NFCC Specialised Housing Guidance
- Technical Housing Standards (Nationally Described Space Standard)
- Approved Structural Warranty Provider
- The Current UK Building Regulations
- The Planning Act 2008
- The instructions and recommendations of the manufacturers of the materials used
- Current Fire Regulations.
- All Relevant British Standards
- Construction Design Management Regulations 2015 (CDM2015)
- DDA Standards
- NICEIC Guidance

2.2 Prohibited Materials

The contractor/developer shall not permit the use of the following prescribed materials:

- External Cladding of any kind (unless formally agreed in writing and provision of full technical specification).
- Concrete cement containing calcium chloride as a setting agent.
- Urea Formaldehyde foam or materials which release formaldehyde in quantities which may be hazardous with reference to the limits set by the Health and Safety Executive.
- Polyisocyanurate in situations where it would be incompatible with adjacent materials.
- Polyurethane foam in situations where it would be incompatible with adjacent materials.
- Asbestos of any Colour.
- Aggregates for use in reinforced concrete which do not comply with BS 882:1983 and/or aggregates for use in reinforced concrete which do not comply with BS 8110:1985.
- “Clay board”, “Clay master” or similar void forming lost shuttering.
- “Mundic” blocks i.e. blocks manufactured using crushed mine waste called “Mundic”.

- Any materials containing CFCs must be avoided except refrigerants which should be R22 type.
- Calcium Chloride in admixtures for use in reinforced concrete.
- Any other deleterious materials advised by Inclusion housing.

2.3 Site Investigation/Preparation

All works shall be designed and undertaken in accordance with all site investigations carried out. These shall be used for the basis of the structural and civil engineering design which shall be carried out by a suitably qualified and competent Consulting Engineer.

2.4 Foundations and Sub Structure Masonry

Foundations and substructure masonry shall be constructed in accordance with Structural Engineer's design and specification.

2.5 Ground Floors

To be in accordance with Architectural and Structural Engineer's details.

2.6 External Walls

Walling type make up and appearance are to be agreed with the planning authority and presented to Inclusion Housing for comment.

2.7 Internal Walls and Partitions

Internal wall construction may be a mixture of lightweight partitions and blockwork. All internal walls to comply with current building regulations. Apartments designed for occupants with physical disabilities to be provided with a knockout panel within the stud wall between bedroom and bathroom to allow for the future installation of ceiling track between rooms. Additional noggins to be included in partitions where fixtures and fittings or the like are to be located now or in the future. All bathroom walls must be constructed to include adequate reinforcement to ensure all future aids and adaptations can easily be installed.

2.8 Upper Floors

Apartments shall be designed in order for the structure to be capable of supporting future track and hoist loads in allocated areas, this design shall be undertaken by a specialist manufacturer who will be required to provide a collateral warranty for the design.

2.9 Roof

Roof design shall be carefully considered to avoid an increased likelihood of failure due to complicated detailing. Consideration should be given to using maintenance free components in inaccessible areas. Dry fixed ridges, cloaked verges, UPVC or 'Glasal' type fascia's and soffits can be used. All pitched roofs including porches are to have gutters to be fixed in accordance with manufacturers recommendations.

The design of the roof structure shall be carried out by a specialist roof truss manufacturer. Structural calculations and a collateral warranty will have to be provided by the specialist manufacturer.

Subject to planning approval interlocking roof tiles are to be used. All roof tiles are to be fixed in accordance with the Manufacturer's instructions with a layer of breathable membrane supplemented by a strip of hyload DPC quality material at eaves and dressed into gutters.

All flashings shall be lead flashings and shall be a minimum of 1.8mm Code 4 adequately chased and wedged to brickwork. Alternative substitutes such as Ubiflex lead free flashing may be considered.

All roof spaces and soffit voids shall be insulated with insulation quilt or similar approved to meet Building Regulations requirements. All pitched roofs will be vented in accordance with the Building Regulations and BRE recommendations. In addition to further reduce the risk of condensation, all roofs are to have cross ventilation by means of soffit or over fascia vents and ridge vents. All roof ventilation to have fly mesh protection.

Ventilation requirements will be clearly detailed on drawings where insulation had to be placed at rafter level; an air path of at least 50mm wide shall be maintained by placing an inert board between insulation and sarking where other than solid insulation is to be used. Refer to BRE 'Thermal Insulation: Avoiding Risks'. Extract fans/vent pipes where passing through roof voids, will be lagged to prevent condensation. Vent piping shall be fixed with straight runs from fan to roof. The area around any service equipment shall be boarded out to allow safe access in the roof space.

2.10 Ceiling Finishes

Ceilings to underside of softwood joists are to be plasterboard with skim finish to British Gypsum recommendations. Moisture resistance plasterboard to be provided to ceilings in all bathroom/shower room areas below the roof void.

2.11 Staircase

Staircase construction shall comply with current Building Regulations including all designs of balustrades and handrails.

2.12 Lift Installation

Where required the lift is to be a minimum 6-person capacity and comply with lift standards "EN81-20 & 50. The lift is to be Gearless and supplied on an open protocol basis with auto dialer fitted as standard. Proposals for the make and model of lift are to be presented to Inclusion Housing at the earliest opportunity. All warranties related to servicing must be signed up to by the developer, IH will not enter into any servicing agreements with lift manufacturers.

2.13 Windows

All new windows to be minimum A rated and to comply with current Building Regulations and noise mitigation requirements. All ground floor windows shall be fitted with key operated locks and anti-jemmy device. All upper floor windows shall incorporate child restrictors within the hinge. All elements including ironmongery is to be guaranteed a minimum of 10 years. Fixing of windows to be carried out by either through frame fixing or where this is not possible due to the position of the cavity, internally fitted fixing clips may be used. Please note that Blinds/curtains must be provided on all non-standard windows such as full height (type and color to be agreed by IH).

2.14 External Doors (to the Blocks)

Entrance Door to Apartment Blocks are to be high quality incorporating secure and robust opening devices (automatic where PD apartments are provided and Mag Lock where no PD is provided). These are to be operated on a code or fob system linked to an access control system controlled in the staff office area and sleep over room. The access control system must be linked into the Fire Alarm system. All external doors (including apartments) must have internal thumb turns)

2.15 Post Boxes

Provision must also be made for communal post boxes (A4 flat) design to be agreed by IH.

3.0 internal Finishes

3.1 Internal Doors

Internal entrance doors to apartments are to be FD30s flush oak veneered door and frame. Key access with suited lock, Portfolio Durador / Fireshield FD30 by Premdor or similar approved.

Ironmongery

- Surface mounted door closer.
- Aluminium Round Bar Handle - From Eclipse Range 50mm Rose Latch Furniture - Handles.
- Lock - Sat 45/45 Euro Cylinder & Turn with 63mm Euro Profile sashlock.
- Latch - Satin Chrome 63mm Latch.
- Door Viewer.
- 1.5 pairs 100mm (performance ball race) steel butt hinges.
- "Fire Door Keep Shut" sign.
- Doorstop fitted to floor or skirting where door opens against a wall.

Internal Doors within Apartments are to be flush oak veneered door and frame. Portfolio Durador / Standard Core by Premdor or similar approved. Shared accommodation to have Key Access with internal Thumb Turn installed on all tenants rooms.

Ironmongery

- Aluminium Round Bar Handle - From Eclipse Range 50mm Rose Latch Furniture - Handles.
- Latch - Satin Chrome 63mm Latch.

- 1.5 Pair of 75mm (performance ball race) steel butt hinges
- Door stop fitted to floor or skirting where door opens against a wall.

Internal Doors to Store Rooms / riser cupboards are to be FD30s flush oak veneered door and frame. Key access. Portfolio Durador / Fireshield FD30 by Premdor or similar approved.

Ironmongery

- Surface mounted door closer.
- Aluminium Round Bar Handle - From Eclipse Range 50mm Rose Latch Furniture - Handles.
- Lock - Sat 45/45 Euro Cylinder & Turn with 63mm Euro Profile sashlock.
- Latch - Satin Chrome 63mm Latch.
- 1.5 pairs 100mm (performance ball race) steel butt hinges.
- “Fire Door Keep Shut” sign.
- Door stop fitted to floor or skirting where door opens against a wall.

Internal Door to Offices are to be FD30s flush oak veneered door with vision panel. Key Access with internal Thumb Turn. Ply Flush 3G / Fireshield FD30 by Premdor or similar approved

Ironmongery

- Surface mounted door closer.
- Aluminium Round Bar Handle - From Eclipse Range 50mm Rose Latch Furniture - Handles.
- Lock - Sat 45/45 Euro Cylinder & Turn with 63mm Euro Profile sashlock.
- Latch - Satin Chrome 63mm Latch.
- 1.5 pairs 100mm (performance ball race) steel butt hinges.
- “Fire Door Keep Shut” sign.
- Door stop fitted to floor or skirting where door opens against a wall.

Internal Doors within Circulation Corridors are to be FD30s flush oak veneered door with vision panel. Vision panel to be glazed with Pilkington Pyrodur to requirements of building regulations.

Ironmongery

- Surface mounted door closer.
- Push / Pull plates.
- 1.5 pairs 100mm (performance ball race) steel butt hinges.
- “Fire Door Keep Shut” sign.
- Door stop fitted to floor or skirting where door opens against a wall.

3.2 Wall & Ceiling Finishes

Traditional plasterboard and skim coat. Additional studding for rigidity is required to partitions receiving wall tiling which shall also have moisture resistant plasterboard fitted in “wet areas”. All bathrooms to receive moisture resistant plasterboard throughout.

Consideration must be given to wall finishes at lower levels for PD apartments and communal areas, hard wall two coat plaster or alternative impact resistant solution must be presented for approval by Inclusion Housing.

3.3 Tiling

All tiling to bathrooms to be from the Pocolanosa Contract Range. Three Samples to be provided for choosing by IH. Shower area to be fully tiled to 300mm beyond the length and width of the shower tray or shower enclosure. Window cills in Bathrooms to be fully tiled and tile trim to be used throughout where necessary. All tiled areas to be fully sealed with a silicone mastic in a Colour to complement the chosen tiles. Aqua panels will be considered but the use of these must be approved by Inclusion Housing.

3.4 Skirtings and Architraves

Skirting's shall generally be MDF with a chamfered profile, (min. 16 x 94 mm). Skirtings in bathrooms and kitchens to have clear silicone sealant joint with vinyl floor coverings or molded plastic seam welded to the floor covering. Architraves shall be MDF with a chamfered profile to match the skirting (19 x 69 mm). Full (minimum 19 x 69mm) architraves shall be achieved around all door frames/casings (especially at heads where storey-height frames are fixed), and architraves shall be wide enough to cover any plaster shrinkage.

3.5 STORES AND CYLINDER CUPBOARDS

All cylinder cupboards or full height storage cupboards are to be lockable and have softwood slatted shelving where possible.

3.6 Internal Floor Finishes

Vinyl floors and skirting should be durable, with a hardwearing and slip resistant surface resistant to attack and picking.

Sheet carpets, sheet vinyl or linoleum with impervious backing may be used for user areas in bedrooms corridors and lounges. This should be fully bonded to the floor.

All internal floor finishes are to be laid in accordance with manufacturers written instructions. The contractor/developer must ensure the soundness of the floor prior to and preparation bases (under-lay, screed or ply-wood) being installed. Sub-floor should be of a moisture content appropriate to the floor finish and manufactures written instructions. floor finishes should be as follows:

Location Specification: -

- | | | | |
|---|--------------|---------------------------------|-------------|
| • | Entrance | Polysafe Fx wood Non-slip vinyl | Oak finish |
| • | Corridors | Polysafe Fx wood Non-slip vinyl | Oak finish |
| • | Lounge | Danfloor, Equinox range | Dakota Grey |
| • | Dining | Polysafe Fx wood Non-slip vinyl | Oak finish |
| • | Any Communal | Danfloor, Equinox range | Dakota Grey |

• Bedroom	Danfloor, Equinox range/Polysafe	Oak finish
• En-Suite & bath	Altro Marine Gull	T2 0813
• Kitchen	Altro Stronghold	30
• Staff Offices	Polysafe Fx wood Non-slip vinyl	Oak finish
• Staff Tea point	Altro Stronghold	30
• Staff WC	Altro Marine Gull	T2 0813
• Training Rooms	Office Grade Carpet Tiles (Anti-Static)	
• Staircase	Equinox with Aluminum Nosing's	Marsh Honey
• Stores/Comms	Altro Stronghold	30
• Plant Rooms	Concrete Sealer Paint	Red OR Grey

3.7 Painting and Decoration

A decoration schedule must be agreed with IH prior to commencement on site. All products must be applied to a sound surface and prepared in accordance with manufacturers written instructions. Finishes should be as follows:

Location	Specification	Colour
• Walls	Dulux Diamond finish	White
• Ceilings	Dulux Diamond finish	White
• Bathrooms & Kitchens	Dulux Specialised Paint	White
• Staff Areas	Dulux Diamond finish	White
• Training Rooms	Dulux Diamond finish	White
• Staircase	Dulux Diamond finish	White
• Woodwork	Dulux Satin Wood	White

3.8 Kitchen Fittings (Learning Disabilities / Mental Health)

Units to comply with the British Standard BS 6222-2:2009 (Domestic kitchen equipment. Fitted kitchen units, peninsular units, island units and breakfast bars. Performance requirements and test methods) level H. All kitchen Layouts must be agreed in writing by IH prior to ordering.

Kitchen to be supplied from the Howdens Greenwich Range the exact unit requirements will be determined from the layouts provided by the developer but must provide adequate storage space and a lockable cupboard or have a purpose made lockable medicine cabinet. below is an example of basic requirements.

- Stainless Steel Splash back to Hob (W600mm x H705mm)
- Chrome Effect T Bar Handle
- Lamona Touch Control Induction Hob (Black)
- Lamona Single Fan Oven
- Lamona Stainless Steel 60cm Chimney Extractor (without filters)
- Lamona Compact Single Bowl Sink
- Lamona Chrome Arno Single Lever tap

- 500mm Drawer Pack with cutlery tray
- Tall Fridge Freezer 50/50 split from Hotpoint or similar Approved (fixed to wall). If shared accommodation the developer must provide a larger fridge freezer where three or more tenants are sharing.
- Under counter washer / dryer machine fitted and plumbed in by Hotpoint or similar

3.9 Kitchen Fittings (Physical Disabilities)

Units to comply with the British Standard BS 6222-2:2009 (Domestic kitchen equipment. Fitted kitchen units, peninsular units, island units and breakfast bars. Performance requirements and test methods) level H. All kitchen Layouts must be agreed in writing by IH prior to ordering.

Kitchen to be supplied from the Howdens - Inclusive Range The exact unit requirements will be determined from the layouts provided by the developer but must provide adequate storage space and a lockable cupboard or have a purpose made lockable medicine cabinet. below is an example of basic requirements.

- Lamona Chrome Arno Single Lever Tap
- Lamona Compact Single Bowl Inc flexible waste kit
- Lamona Side Opening Oven L- Opening to suit
- Lamona Induction Hob
- 500mm Silver Cutlery Tray - Standard
- Lamona Deluxe Conventional Ext S/S
- Handle Operation Rise & Fall System - 3m Rise and fall worktop system ACK8512
- Standard 600mm Wide Pull down shelf HYH1323
- Tall Fridge Freezer 50/50 split from Hotpoint or similar Approved
- Under counter washer / dryer machine fitted and plumbed in by Hotpoint or similar

3.10 Wet Room Fittings - (Learning Disabilities / Mental Health)

- Level access Shower area with all falls laid to furthest corner of room (away from door)
- Ideal Standard Alto Eco Close Coupled WC Pan with
- Ideal Standard Alto 50cm Basin and semi pedestal with
- two taps holes and pillar taps
- Alto Washbasin Pillar Taps
- Alto EV Exposed Thermostatic Shower Kit
- Shower Rail and Curtain /or screen may be fitted to be agreed by IH.
- Toilet roll holder
- Access panels must be provided to allow easy access for repairs and maintenance of all fittings.

3.11 Wet Room Fittings (Physical Disabilities)

- Level access Shower area with all falls laid to furthest corner of room (away from door)

- Contour 21 back to wall rimless raised height WC pan with horizontal outlet.
- Group low level cistern 6 litre single flush syphon side supply and internal overflow, cp lever (fittings reversible)
- Contour 21 seat no cover, top fixing hinges and retaining buffers Plastic one-piece offset
- Contour 21 37cm hand rinse washbasin right hand tap hole no overflow or chain stay hole,
- Contour 21 washbasin mixer thermostatic 1 hole, single sequential long lever, copper tail
- Contour 21 grab rail straight 60cm long x 35mm diameter
- Contour 21 grab rail straight 45cm long x 35mm diameter Contour 21 hinged support rail 80 x 35mm diameter, Doc M
- Toilet roll holder for Contour 21 hinged arm rail
- Contour 21 back support rail for 75cm projection WC, 40 x 22 x 35mm diameter
- Access panels must be provided to allow easy access for repairs and maintenance of all fittings.

3.12 Staff Facilities

Staff Office

To include 2 x 1000mm Wall Units for File Storage, Worktop Style Desk to One wall, Shelf for CCTV Equipment. Dado Trunking incorporating 4 double sockets and 4 Telephone Point Connectors (wired separately). Small Bowl Sink with Base Unit with small Wall unit above for Brew Station, Small Under counter fridge.

Glazed Vision Panel to Office to be Minimum 600 x 500mm and fitted with Solid 1 Hour Fire-resistant Timber frame and 12mm 60/0 Pyrobelite Glass to manufacturer's Instructions and recommendations. All to achieve minimum 60 minutes' fire resistance.

Staff Bedroom

To accommodate single bedroom and ensuite facilities to include shower tray and cubicle, wash hand basin and WC. Towel Ladder type rail.

3.13 Communal Facilities

Communal Rooms

For all shared accommodation the developer will provide large communal furnishings (sofa, chairs, and dining table & chairs) and communal window coverings.

For self-contained accommodation with any form of communal area communal furnishing is to be provided by the developer and depending on the elevation/ window design and exposure communal area window coverings must be provided.

4. M&E requirements

4.1 Electrical Installation

The electrical installation is to comply with the latest edition of the Regulations issued by the Institution of Electrical Engineers and Local Electricity Board Regulations and shall comply with the Electrical Equipment (Safety) Regulations. Test certificates must be provided upon completion.

Suppliers

IH currently has a national supply contract with energy angels and to ease the transfer of accounts following handover the initial installation of meters can be arranged directly with them. All supplies must be on a daily tariff and have a domestic status - **not business**.

Central contact ask@energyangels.co.uk Tel 01902 585 500.

IH Account Contact: - Sonia Sahota csm@angels-group.co.uk

Meters and consumer units

Individual supplies must be provided to all units, no sub meters or pre-payment meters will be accepted. Separate supplies must be provided for landlord/communal areas - under no circumstances should the supply be taken off a flat.

The Consumer Unit shall be conveniently located considering the accessibility of user group. Unit to be wired using RCCD's in 'split box' arrangement and MCB's. Evidence must be provided to confirm that all meters have been correctly registered and clearly marked ensuring the correct meter corresponds to the correct address.

Lighting

LED Lighting to be provided to all areas. Bathrooms shall be fitted with a min 330mm diameter opal diffuser multiple LED ceiling light to meet the required lux levels. Bathroom fittings to have an IP65 rating. Lighting in all common areas is to be separately circuited. External lighting must be Adjustable/dimmable to prevent surrounding areas being affected by light pollution.

Power Circuits

The following is the minimum electrical provision requirements of the Inclusion Housing for the rooms specified.

- Lounge 4 Double sockets and a 2-socket combination electrical/data plate adjacent to the TV location.
- Bedroom 3 double outlets
- Hall 1 double outlet
- Kitchen 4 double outlets in addition to: Switched electrical cooker control with terminal at low level plus single socket outlet Fridge/freezer outlet Washing Machine Appliance spurs.

- Spurs to kitchen must be switch operated from above worktop level with switch/neon indicator / multi grid serving the fused spur outlet below worktop. All switches are to be engraved accordingly.
- Bathrooms and shower room fittings to be enclosed type switched from outside the room.
- All walk-in store cupboards to have an LED light fitting switched from outside with the store with a neon indicator switch.

Fixing heights for sockets switches and other electrical outlets is to be as detailed in the “Mounting Heights of Electrical Equipment in Dwellings” available at www.niceic.org.uk.

4.2 Mechanical Ventilation

All mechanical ventilation shall comply with Part F of the Building Regulations and be of a type that provides continuous ventilation.

4.3 Fire Safety

The specialist shall allow for the design, supply, delivery, wiring, installation, connection, testing and commissioning of the complete fire alarm and detection system to the development in accordance with the Clients Risk Assessment, BS5839, BS9999, Building Regulations Approved Document Part B, the Local Fire Prevention Officer, Local Building Control and this Performance Specification as briefly described below. The specialist is to be BAFE accredited for the design, installation and commissioning & handover. It shall be the responsibility of the specialist to ensure that the overall scheme obtains approval from the responsible bodies, Building Control and Local Fire Prevention Officer.

In supported living premises the nature of the occupants requires support for a variety of reasons and in many cases these persons would not be suitable for occupancy without support and as such the most imperative support would be if a fire occurs. Inclusion housing will require all developers to formally instruct Surety Fire Solutions to undertake and produce a bespoke fire strategy for each development. The fire strategy is to be shared with Inclusion Housing at the earliest convenience. The recommendations of the Fire strategy are to be fully implemented as part of the specification as necessary. IH will not accept any fire system that has any form of subscription to third parties (Nimbus etc.). if the developer uses an alternative supplier to carry out the fire strategy then Inclusion Housing will instruct a Fire Risk Assessment prior to handover and the developer will complete all actions identified prior to handover.

The use of the premises for supported living creates the need to increase detection within each unit as standard. Heat detection is not as responsive as smoke detection so a combined heat and smoke detector should be fitted wherever possible. As a minimum smoke/heat detection is required in each room inclusive of lobbies and lounge/kitchens, staff accommodation and communal stores. The smoke/heat detector should be located as far away from the cooking facilities as possible to reduce any potential false alarms. The increasing coverage of smoke/heat detection, incorporating additional detectors will facilitate early fire detection.

For effective evacuation there needs to be a mechanism for staff to be alerted if a detector activates. Therefore, hand held alerters/pagers are required. This enables the staff to respond immediately and assist the occupants of the apartment. If a detector activates it should sound at the panel and on the hand held alerters/pagers.

A 3-minute delay should be programmed into the alarm system to allow the staff to investigate an activation, if after 3 minutes the alarm has not been cancelled, then the alarm should go into full alarm and a controlled / phased evacuation should be implemented.

The fire alarm system should be designed in line with the Fire Risk Strategy and allow for all Recommendations within the FRA.

The fire alarm panel shall be completely open protocol, with all system codes made available to the Client. The installation of a fire panel, which can only be maintained by the manufacturer or authorised Specialist will not be accepted.

Interface Units shall be provided to signal to other items of equipment such that they operate in safe mode in the event of a fire condition and shall include but not be limited to:

- Door closer transformer/power supply units for door hold open devices.
- Swing free door closer transformer/power supply units (including those to apartment entrance doors)
- Automatic/powered doors
- Plantroom control panel
- Warden call system (via DECT handsets)
- Door entry system
- Lifts
- Kitchen gas solenoid valve (if applicable)
- Induction loop systems
- Fire/Smoke Dampers/Smoke extract system
- Fire curtains (if applicable)
- Laundry gas solenoid valve (if applicable)
- Sprinkler System (if applicable)

The specialist is responsible for the liaison with all other Specialist Sub-Contractors to confirm the number and location of interface units required.

Systems are likely to include.

- Fire panel to accommodate zoning.
- Magnetic hold open devices linked to fire panel to be fitted on all scheme with PD units.
- Mains operated heat detectors installed in Kitchens.
- Mains operated smoke alarms with separate circuit battery back up in all other rooms in accordance with Building regulations/Fire strategy.
- Handheld alerters/pagers

- All emergency exit signage to be LED
- Fire blankets to all kitchen areas
- FFE to staff offices/plant rooms and riser cupboards.
- Break glass devices shall be provided with anti-tamper covers to reduce potential for false alarms.

Sprinkler Systems

Inclusion Housing require all new build schemes to have the inclusion of a sprinkler system costed and considered. The developer / contractor must present a fully costed option to Inclusion Housing for discussion and formal appraisal.

4.4 Access Control / Assistive Technology

The access control system shall be operated via electronic keypads on the door secure side and electronic keypad / heavy duty push to exit / emergency exit break glass units on the internal side. The Electrical Sub-Contractor shall allow to coordinate with the ironmongery package to ensure all required fittings are supplied. Access controlled doors shall be linked to the fire alarm system to fail safe open during a fire alarm situation.

The door access control and intercom system shall be capable of being interfaced with the data network to allow control and monitoring of the system both remotely and from any part of the building.

A Tunstall Communicall Version IV to be installed (or similar approved) Two-way speech Warden call points shall be provided to each apartment which shall communicate with the Warden call panel within the Ground Floor Office.

DDA requirements must be considered when fitting the units.

The Warden Call system must be capable of being interlinked with the Fire Alarm system for the purpose of raising a call when activated. The Electrical Sub-Contractor shall obtain full wiring diagrams for the system and shall include for all power supplies, cables, containment and conduit etc., to provide a fully operational system. System to be able to add specific additional features on dependent on the requirement of each tenant.

Warden Control System to comprise generally of (as a minimum):-

- DECT system and two portable DECT handsets for staff to make and receive alarm calls (this must also be connected to the office line to enable calls via the public network).
- Speech Modules in apartments, staff office and sleep over room.
- Warden Call/Door entry Panel at the main entrance to enable visitors to contact staff via the DECT handsets.
- Ceiling pull switches in PD bathrooms
- Housing Services Portal management application to run on a Windows tablet (this is to be supplied and installed within the office)

4.5 CCTV



To be installed by National Security Inspectorate (NSI) GOLD standard specialist with BS EN ISO 9000:2008 accreditation, membership of the British Security Industry Association (BSIA) and with Security Industry Authority (SIA) Approved Contractor Status (ACS). The CCTV system design shall ensure the CCTV covers all entrances/ exits, lift and car park and this is to be agreed with Inclusion Housing and included in the developer's proposals. The CCTV shall be capable of being interfaced with the data network to allow control and monitoring of the system both remotely and from any part of the building.

Cameras

Colour 3-megapixel, full 1080p high definition, progressive scan, wide dynamic range, H.264/MJPEG, infra-red cameras to 0.9 lux with tamper alarm, privacy masking and Smart Codec (ROI encoding).

Housings for Cameras

Each external camera shall be vandal resistant enclosed within weatherproof dome housing to a minimum rating of IP65. The housings shall incorporate a thermostatically controlled integral heater designed to prevent condensation within the housing during extreme weather conditions.

Recording

The recording of the system shall be by the use of a 16 channel, D1 Digital Video Recorder (DVR) with minimum 400 Frames per Second, H.264 Compression and a minimum of 2 terabyte disk space. The DVR shall have a facility for additional cameras to be connected to it for future spare capacity and shall contain a network card to enable Ethernet connection for remote viewing via the data network or via secure log in remotely through a web browser. Selectable recording rates, 5No. internal HDDs, 2No. external SATA ports for HDD expansion units, built in DVD drive and coaxial control compatible (Pelco C) to be included.

The recording and control equipment shall be located in the Ground Floor Office. Monitor 19" 16:9, 220cd/m², (Wide Quad-HD) Resolution back lit LCD monitors with HDMI

19" 16:9, 220cd/m², (Wide Quad-HD) Resolution back lit LCD monitors with HDMI shall be provided in the Ground Floor Office and in the sleep over room attached flush to the wall.

4.6 Telephone / WI-FI / Internet / TV

Each Lounge and Staff Office to have a BT Main Supply from which Internet and Wi fi can be sourced and purchased by others. All apartments to have a BT Main Supply from which a home telephone / internet can be sourced and purchased by others.

There will be provision for Sky TV or similar to all accommodation including the Lounge. A terrestrial digital TV Aerial will also be provided to each apartment and linked to a central aerial provided and fixed. Boosters / Amplifiers to be provided so that tenants can plug in and use the TV. Tenants will be responsible for any Freeview or Digital TV subscription.

4.7 Plumbing Instalation



The whole of the plumbing works is to be executed in accordance with the requirements of the Local Water Authority and local Bye-laws, and remote switching “Sure stop” must be fitted to all Incoming mains. Evidence must be provided to confirm that all meters have been correctly registered and clearly marked ensuring the correct meter corresponds to the correct address. Developer must also carry out a full drain clean and provide a CCTV survey of the site drainage on completion of all works / handover.

Cold Water System Description

Mains cold water services shall serve all outlets and equipment described in the room data sheets and architectural information, and for the domestic hot water generation system. All cold-water outlets shall be connected to mains cold water. It is anticipated that the mains water provided to the points of connection will be delivered at an adequate pressure to meet the hot and cold-water demand.

New water services are to be provided throughout the premises to suit the proposed layouts, all pipework will be insulated as required, to meet all current Building Regulation requirements.

On sites where there are issues with water pressure within the general area, the contractor/developer is required to provide boosted water services to feed all appliances. The booster shall be sized to meet the maximum instantaneous demand of the development.

Hot Water System description

Hot water services shall serve all outlets and equipment described in the room data sheets and architectural information. Domestic hot water shall be generated directly from the incoming cold-water mains as appropriate for the specific development. Where Gas appliances are selected to generate heat hard wired Carbon Monoxide Alarms must be installed. Individual supplies must be provided to all units, no sub meters or pre-payment meters will be accepted. Separate supplies must be provided for landlord/communal areas - under no circumstances should the supply be taken off a flat. Evidence must be provided to confirm that all meters have been correctly registered and clearly marked, ensuring the correct meter corresponds to the correct address.

Gas Suppliers

IH currently has a national supply contract with energy angels and to ease the transfer of accounts following handover the initial installation of meters can be arranged directly with them. All supplies must be on a daily tariff and have a domestic status - **not business**.

Central contact ask@energyangels.co.uk Tel 01902 585 500.

IH Account Contact: - Sonia Sahota csm@angels-group.co.uk

To reduce standing heat losses from the system and minimise tank/vessel maintenance requirements extensive hot water storage is not recommended. Limited storage may be provided to assist availability at peak times, and assist reduce the peak load presented to the

heating installation. Hot water will be stored at 60°C, with a minimum temperature of 50°C in the distribution network.

Local Thermostatic Control Valves (TMV's)

To reduce the likelihood of injury from very hot water, local thermostatic control of water temperature shall be provided to each hand wash outlet and shower. Blending valves meeting the requirements of the TMV 3 scheme shall be provided. To reduce the maintenance burden, the TMVs must be located on a position that is easily accessible and the number of valves shall be minimized with distribution pipework configured to allow more than one outlet to be served from each blending valve. Shower valves shall be selected to provide 0.10 litre/sec of water at 40°C.

Space heating

The selection of the type of space heating energy source will be determined by the contractor/developer to suit, as applicable, the following criteria:

- Energy Rating of the structure
- Running Cost
- Suitability
- Part L
- Durability
- Longevity
- Fuels Available
- Configuration of the building served

Space heating shall be provided to all areas as detailed in the Room Data Sheets. Dependent upon the type of building under consideration the following options can be considered by the contractor/developer to be a compliant solution. Where Gas appliances are selected to generate space heating hard wired Carbon Monoxide Alarms must be installed.

Option 1 - Underfloor Heating

Underfloor Heating shall be provided of appropriate material, configuration, layout and output. Manufacturers commissioning procedures in respect of drying out of floor screeds shall be strictly adhered to.

Manifolds serving underfloor systems shall be positioned at discrete coordinated locations in adjacent ancillary spaces, served from the CT LPHW system. Secondary circulating pumps shall be provided at all manifolds.

Heating loops within the floor shall be co-ordinated with any electrical/data distribution such that all services can be accommodated within an agreed zonal height of 250mm including thermal insulation and floor finish.

Secondary flow and return temperatures to underfloor heating circuits shall be selected for comfort conditions and protection of floor finishes.

In the event that supplementary heating in addition to underfloor heating is required to any area, steel column type radiators shall be provided at locations to be agreed.

Option 2 - Low Surface Temperature Radiators

The location of all emitters shall be co-ordinated with the architectural, structural, electrical and furniture designs to ensure discreet installation and full, even distribution of heat within the spaces. Where mechanical ventilation is provided a proportion of, or the full heating load, may be met from the ventilation system reducing the need for emitters in the space.

Particular attention will be paid to spaces containing large glazed areas close to seated occupants. Supplementary trench heating or low-level perimeter heating may be appropriate to counter potential down-draughts and to offset the cold radiant effect of the glazing.

Any areas visited by 'at risk' persons shall be provided with low surface temperature (LST) radiators in accordance with the Building Regulations E.g. Accessible WC's.

Mounting brackets factory-finished to the same colour as the radiator shall be provided where brackets will be visible, and shall be of appropriate type for the location (eg wall or floor mounting) and compatible with architectural finishes of the adjacent surfaces. Any areas where the radiators will be visible from outdoors through glazed elements, shall receive slim depth horizontal panel radiators, with floor mounting brackets.

All radiators are to be supplied and handed over free from rust or other corrosion, with undamaged factory finish.

The contractor/developer is to make allowance for the accommodation of linear expansion of each radiator and installation procedures shall be undertaken accordingly.

Thermostatic Radiator Valves (Where applicable)

All radiators shall be fitted with TRV's, those in publicly accessible or transient areas being of the lockable tamperproof kind. TRV's shall be selected to operate against the design differential pressures at their location in the system and to avoid noise disturbance.

4.8 Roads, Car Parking and Footpaths

The Developer shall provide all external hard paving to roadways, car-parking areas, pedestrian areas, including all kerbs and edgings, including lighting and surface water drainage designed by the Developer's competent Structural Engineer in accordance with the findings and recommendations of the site investigation and in accordance with approved planning permission.

Parking spaces, road junctions, pedestrian crossings and road directional signage shall be marked out by the Developer in reflectorized thermoplastic paint as indicated on the approved drawings and site plan and to current Building Regulation Approved Documents.

Where appropriate, flush kerbs to be utilised for paved areas to avoid trip-hazards and aid deliveries and wheelchair circulation. All footpaths should be a minimum of 1200mm wide and

dropped kerbs should be incorporated to all pedestrian crossings and disabled parking positions with suitable tactile paving in accordance with current building regulation approved documents.

All access routes should be free from obstructions and be adequately lit to meet the aims and objectives of the Disability Discrimination Act, Building Regulation Approved Documents and Good Practice Guidelines.

External Lighting.

Where flood lighting is fitted to the external areas of the build, full consideration should be given to the potential impact of the effect this may have on neighboring properties.

- All light fittings should be of an adjustable type enabling them to be adjusted up and down on the fitting bracket
- Light fittings should be fitted to the minimum height required to provide sufficient coverage and enable ease of maintenance
- Light fittings should be installed so that the arc of the light does not go beyond the boundary of the property

All external lighting whether adopted or unadopted is to be designed and positioned to avoid any interference or excessive glare to bedrooms and other habitable room windows. Care must also be taken to ensure all external lighting does not have an adverse impact on the recording capabilities of the CCTV system.

External Signage / Furniture and Landscaping

Each property should have level access from the lounge or communal area to a dedicated secure external garden designed to facilitate appropriate observation. This garden should be of sufficient size to allow all to use it at one time and should not be used as a smoking area.

When designing and constructing the external areas the following should be taken into account:

- Building design rather than anti-climb devices should prevent unauthorized access to roof areas from the secure garden.
- Doors, garden furniture and equipment, light fittings, posts, and CCTV fixings must be secure and not provide a climbing aid.
- Materials used for hard landscaping should not be easily misused or removed.
- Lighting cover for external areas within the secure perimeter should be sufficient to see any movement.

Suitable site perimeter fencing shall be installed to ensure all areas are fully secure. Where practically possible, Independent site boundaries must be established on all sites. Fencing should be robust (close panel wooden fencing) and be a minimum of 1.8 m in height. Lower fencing and more open boundary treatments are acceptable to the front of the property however individual site proposals must be approved by Inclusion Housing.

There must be secure fencing and gated access to all communal external gardens, patios and external multi-function spaces. In addition, deliveries, bin-stores and service routes must be capable of being separated from external communal facilities where possible.

The contractor/developer shall provide foundation bases and general external furniture to include the following:

- Standard bollards / handrails to protect escape routes or any vulnerable points;
- External litter bins - Subject to size of site
- Cycle stands (Covered)
- Grit Bins
- Lockable Bin-Store (Developer to include for provision of bins)
- External water supply for Landscaping (Lockable)
- Site muster point signs
- Scheme name plate

Bin stores to be manufactured from 2.0m high s/w treated close boarded fence panels fixed to concrete posts. Heavy duty timber gates with galvanized steel heavy duty ironmongery and hinges. Gates to be lockable with stays provided. Brushed concrete base to bin store laid to minimal falls with trapped gully for wash down purposes. Level thresholds should be provided throughout to assist the everyday use of wheeled bins.

The contractor/developer shall procure an attractive scheme of soft landscaping and the planting scheme shall be designed to provide an immediate attractive appearance to the site and to provide all year-round interest and Colour and all flower beds must be treated with anti-weed matting and bark chippings. The soft landscaping works shall comply with the satisfactory Planning consent.

On new developments the contractor/developer to provide on-going maintenance from completion for a minimum period of 12 months, including a replacement of any dead plants.

5. General Liaison

5.1 Inclusion Housing Site Visits

The contractor/developer shall allow reasonable site access and attendance at site meeting for all Inclusion Housings representatives as appropriate.

5.2 Programme:

The contractor/developer shall produce and agree a proposed programme of design and construction in respect of the Works. The contractor/developer shall keep IH informed of progress of construction in accordance with the agreed programme.

5.3 Approvals



The contractor/developer shall request approval for any amendments to the detailed design drawings and specifications attached to the agreement for lease.

5.5 As Built Drawings / Health & Safety File

The contractor/developer will be required to prepare and submit all as built and maintenance information required for the Health and Safety File. The information will be required in digital and hard copy format. Any drawings are also to be submitted on a CD in AutoCAD & DXF format.

All certification shall be provided prior to handover for all systems provided under the contract, these shall be included in the O+M manuals at handover.

5.6 Snagging & Completion

The developer must provide a minimum 4 weeks' notice of handover in writing to the development manager.

The contractor/developer shall clean the Works thoroughly inside and out including removal of all splashes, deposits, efflorescence, rubbish and surplus materials and shall ease and adjust all moving parts of any new works, e.g. the doors, windows etc. Ensure all elements of the works are snagged by each trade contractor/developer and then the person in charge of the site before offering the work for completion to Inclusion Housing.

Inclusion Housing shall inspect and survey the works jointly with the contractor/developer prior to lease completion. Any defects with the works shall be rectified by the contractor/developer prior to signing of the lease; where this is not possible a programme and method statement for rectification will need to be agreed with Inclusion Housing.

2.32 Security at Completion

Leave the Works secure with all accesses locked. Account for and adequately label all keys and hand over to Inclusion Housing with itemised schedule, retaining duplicate schedule signed by Inclusion Housing as a receipt.

2.33 Making Good Defects

The contractor / developer will make arrangements with Inclusion Housing and give reasonable notice of the precise dates for access to the various parts of the Works for purposes of making good defects. The contractor / developer will Inform Inclusion Housing when remedial works to the various parts of the Works are completed. The contractor / developer will also provide full contact details for defect reporting to Inclusion Housing, this must include 24-hour cover, or an alternative agreed in writing with Inclusion Housing. Defects must be completed in line with IH repairs timescales.