



PREMIER INN

**GENERIC SPECIFICATION FOR
A TURNKEY DEVELOPMENT**

September 2007 Edition
Revision 13.9.07
Revision 1.10.07

NOTE:

**ON RECEIPT OF ANY CHANGE ORDERS FROM THE
WHISDOM PROPERTY WEBSITE, DEVELOPER'S
PROJECT MANAGER TO CONSULT WITH PREMIER INN
PROJECT MANAGER FOR CONFIRMATION OF
INSTRUCTION PRIOR TO ANY IMPLIMENTATION OF
CHANGE ORDER**

SECTION ONE - GENERAL REQUIREMENTS

1.1 Scope of document

1.1.1 This document, together with all enclosures referred to herein and the following lease drawings, sets out and illustrates the minimum requirements for a typical Solus Premier Inn.

1.1.2 This document should be read in conjunction with the following:

- Lease drawings
As annexed to the Agreement for Lease
- Agreement for Lease
- Premier Inn Technical information as displayed on www.whisdom.co.uk as at 1 October 2007 together with the changes listed in the New Change Notifications List and the Addendum both annexed to this document

1.2 Premier Inn Consultants

1.2.1 Whitbread plc will appoint relevant consultants as advisors who may be contacted to seek clarifications of any areas of uncertainty.

1.2.2 For the purposes of this document any reference to Premier Inn is to be deemed to include all consultants and agents that may be appointed by Premier Inn for the project.

1.3 Premier Inn documentation

1.3.1 All documentation provided by Premier Inn is to be regarded as confidential. The developer must take all necessary measures to ensure that documentation remains confidential and is only used for procurement of the Works. All documentation must be returned to Premier Inn on completion.

1.4 Premier Inn Model requirements

1.4.1 The accommodation provided by the developer shall be in accordance with the documents referred to in paragraph 1.1.2. No changes or additions to the contents of Whisdom after 10 June 2008 will require to be considered by developer's design team.

1.4.2 Any deviation from the agreed layouts as shown on the Lease drawings shall be made in accordance with clauses 4.1.2.1 and/or 7.1.2 of the Agreement for Lease.

1.4.3 At the date of the Agreement for Lease the specification on Whisdom as at 1 October 2007 together with the changes listed in the Addendum to this document will become fixed. Any changes after 10 June 2008 will have to be followed through via a Change Order.

1.5 Schedule of accommodation to be provided

The shell is to be purpose designed to comply with the layout shown on the approved drawings and Building Regulations.

Not less than 45 Number of "Standard" bedrooms with en-suite bathroom

Not less than the minimum of one Number of Wheelchair accessible bedrooms with en-suite wheelchair accessible bath or shower rooms per twenty bedrooms

1.6 Gross internal areas

1.6.1 The shell is to provide the following minimum gross internal areas:

Insert gross internal areas as agreed with developer - as per approved drawings.

Note - gross internal areas are to be measured from the inner face of the finished external wall ie the inner face of the plasterboard lining.

1.7 Storey heights

1.7.1 As necessary to provide clear and unobstructed heights for:

See approved drawings.

1.8 Planning approval

1.8.1 The developer will be responsible for obtaining full planning approval for the hotel and retail development, and for ensuring the discharge of any conditions attached to that approval which are not of a continuing nature or are the responsibility of the occupiers.

1.8.2 Plant and waste area as detailed on Planning Consent drawings.

1.8.3 The developer will be responsible for obtaining the full approval of any other Statutory Authority that may be required for the hotel development and for paying all fees and charges in connection with that approval.

1.8.4 The developer is to notify Premier Inn of any conditions relating to the statutory consents and approvals that may affect Premier Inn fit out works in any way.

1.8.5 The Developer will be responsible for obtaining planning approval for external signage.

1.9 Building regulations approval

1.9.1 The developer will be responsible for obtaining full building regulations approval for the developer's works and for providing, within 10 working days, a completion notice for those works signed by an approved building regulations inspector.

1.9.2 The developer will be responsible for making all consultations with the Fire Officer and any other relevant bodies. The developer shall prepare the Fire Strategy in respect of the Fire Detection System, and shall otherwise consult with Premier Inn in relation to the preparation generally of the Fire Strategy for the management of the development prior to start of construction.

- 1.9.3 The developer will be responsible for ensuring that the layout design of the hotel, as detailed on the lease drawings, complies fully with current building regulations relating to means of escape
- 1.9.4 Building regulations Part L (2006 edition)
The developer will be responsible for showing compliance of the developers works with Part L (2006 edition) through the building modelling solution. Premier Inn will provide the developer with all relevant details of the mechanical and electrical fit out and operation as required to allow the developer to show compliance. The developer is not to use or substitute any other values for the fit out without prior agreement with Premier Inn.
- 1.9.5 The developer will be responsible for carrying out air testing of the building prior to handover to demonstrate compliance with the relevant requirements of the building regulations current at the time of commencement of the shell works.
- 1.9.6 The developer will be responsible for carrying out sound testing in the building prior to handover to demonstrate compliance with the relevant requirements of the building regulations current at the time of commencement of the shell works and Premier Inn's specific acoustic requirements detailed in this document.

1.10 Standards

- 1.10.1 The developer will be responsible for ensuring that the developer's works are carried out and completed in accordance with all current legislation, British Standards, European Standards and Codes of Practice, and any particular standards specifically agreed between the developer and Premier Inn.

1.11 Warranties

- 1.11.1 The developer will provide collateral warranties in an agreed format for all consultants and contractors with design responsibility.

1.12 Professional Indemnity Insurance

- 1.12.1 Any consultant or contractor with design responsibility must be required to maintain appropriate professional indemnity insurance for a period of twelve years following completion of the works.

1.13 Programme

- 1.13.1 The developer will provide Premier Inn with a pre and post contract programme as soon as is reasonably practicable.
- 1.13.2 The developers programme must show the following items:
- a) Date for completion of the sample bedroom and bathroom
 - b) Services live dates to include gas, water, electricity, telephones and drainage
 - c) Inspection dates for each area of the development with sufficient time for making good snagging items
 - d) Dates for installation/fixing of directly supplied and supply and fix items

- e) Critical dates for approval/comment by Premier Inn of samples, drawings and information as detailed under item 1.14
- 1.13.3 The developer will advise Premier Inn of any delays and provide full information in respect of any extensions of time granted under the building contract.
- 1.13.4 The developer will provide Premier Inn with an assessment of building contract progress and an updated programme if requested.
- 1.13.5 The developer will confirm to Premier Inn an expected Date for Completion 12 weeks before that date is due, to enable Premier Inn to be ready to accept handover fully resourced.

1.14 Information to be provided by the developer

- 1.14.1 The developer is to provide Premier Inn with the following information in accordance with an agreed information release and approval schedule or as reasonably requested by Premier Inn:
 - Planning approval notices and copies of the approved drawings
 - Written confirmation from the local authority planners that all planning conditions requiring submission and approval of supplementary information have been discharged
 - Designer risk assessments and hazard summaries
 - Detailed construction programme
 - Copies of all architectural and engineering working drawings, including:
 - General arrangement plans, sections and elevations at a minimum scale of 1:100.
 - Detail sections through external walls, roof and floors at a minimum scale of 1:20 detailing all external facing materials and roof coverings.
 - Drawings detailing setting out of the site and building including all internal partition walls, lift shaft, riser ducts etc
 - Background noise survey carried out over a 48 hour period by acoustic consultants detailing the prevailing acoustic environment.
 - Soil investigation report and contamination survey
 - On mixed use schemes details of the extent of each demise
- 1.14.2 See also information requirements relating to handover - Item 1.18.4

1.15 Premier Inn approvals

- 1.15.1 Where comment or approval is required from Premier Inn or its consultants a minimum of 5 working days shall be allowed from receipt of the details or sample.
- 1.15.2 Drawings and production information:
The developer is to submit for approval/comment 3 copies of the detailed working drawings for the development. All working drawings to comply with Building Regulations and Statutory Approvals.

1.16 Information to be provided by Premier Inn

- 1.16.1 The developer is to issue a schedule of all information required from Premier Inn to facilitate the design and construction of the developer's works and is to allow reasonable timescales for the provision of such information.

1.17 Items supplied by Premier Inn and fixed by developer

- 1.17.1 The developer must make due allowance in his programme for coordinating delivery of the items to be supplied by Premier Inn and fixed by the developer. The principal items are as follows although the developer will be required to fix other items to be advised:

Carpets
Cavalier Carpets
Tel 01254 268000

Hairdryers & Kettles
King UK Ltd
Tel 01788 530025

F & B Light fittings

1.18 Fixtures and fittings supplied by Premier Inn but installed prior to Practical Completion

- 1.18.1 The developer must allow for coordinating and for access and attendance for Premier Inn's tradesmen, together with welfare facilities and insurance of goods installed prior to Practical Completion. All programmes prepared shall identify all items noted as supplied and installed by Premier Inn prior to Practical Completion. Attendance shall include disposal of all packaging.
- 1.18.2 The principal items to be installed prior to Practical Completion are as follows but the developer should be aware that other minor items, to be advised, will be required.

CCTV installations

Intruder Alarm System

Computer systems, telephone systems and equipment

Cellar cooling
City Technical
Tel 0141 6131119

Music installation
DMX Music
Tel 01689 882200

Telephone installations
Ashland Communications
Tel 01942 221122

Till installations
Alphanumeric Communications
Tel 01483 425505

Safes
Insafe
Tel 0800 5263888

Internal and external signage
Ashleigh Signs
Tel 0113 2828292

1.18.3 The following items will be installed after Practical Completion

Beds & Mattresses, sofa beds, loose furniture
Hypnos Ltd
Tel 01844 342233

Bottle Coolers
Autonumis
Tel 01666 502641

Curtains, nets/blinds
Panaz
Tel 01282 696969

Catering equipment
Gratte Brothers
Tel 01438 750022

Note - refrigeration and other fixed and loose catering equipment is supplied by other suppliers but it is Gratte Brother's responsibility to coordinate and manage the installation of the other equipment and the developer will need to liaise only with Gratte Brothers in this respect.

Washing machine and tumble dryer
Miele

Tel 0845 3302660

1.19 Inspection of developer's works

- 1.19.1 The developer will arrange necessary meetings with Premier Inn representatives and consultants to enter and inspect the premises if required subject to reasonable notice of such visits having been given.
- 1.19.2 Any inspection carried out by Premier Inn or their agents will not modify, release or diminish the liability of the developer and their agents under any agreements.

1.20 Practical completion and handover

- 1.20.1 The developer will provide Premier Inn with a minimum of ten working days notice of the date of Practical Completion for the works.
- 1.20.2 Each room, corridor and other area is to be inspected prior to Practical Completion and an inspection sheet completed. Once the defects recorded on the inspection sheet are made good the developer shall notify Premier Inn to this effect. Should Premier Inn or its representatives discover that the defects recorded have not been made good and further inspections be required the developer will be required to meet the proper and reasonable cost of such additional site visits.

1.20.3 The following information is to be provided by the developer at handover in a format to be agreed with Premier Inn:

Operation and maintenance manuals

Sound test report demonstrating compliance with required standards

Lift Certification

Emergency lighting certification

Fire alarm certification

Electrical installation certification

The following information is to be provided by the developer within 2 months of handover in a format to be agreed with Premier Inn:

Health and safety file for the building

As built drawings

Certification of decontamination/remediation where any such works have been carried out

CCTV survey of all underground foul and surface water drainage within the site

Building regulations completion certificate from an approved building regulations inspector

Air test report demonstrating compliance with required standards

Commissioning certificate for automatic entrance doors

Commissioning certificate for linen chute

Fire test certification for all fabrics and floor coverings in so far as provided by the developer

Fire test certification for all fire rated doors, screens and glazing

Certification for any intumescent paint application

1.20.4 Practical Completion will only be certified after an inspection jointly carried out by the developer and Premier Inn and/or their appointed consultants.

1.20.5 The Statement of Practical Completion may include a snagging list as agreed between the developer and Premier Inn, which will contain an agreed programme for rectification of the snagging items.

1.21 Defects liability period

1.21.1 The defects liability period for the developer's works will be 12 months from the date of issue of the Practical Completion Certificate.

1.21.2 For defects arising during the defects liability period -

see Agreement for Lease (clause 16)

1.22 Variations and additional works

- 1.22.1 The process for dealing with variations and additional works as may be requested by Premier Inn is detailed in the Agreement for Lease. Please refer to clauses 7.6 and 9.

1.23 Deleterious Materials

(Please refer to the Agreement for Lease, clause 7.7)

1.24 Site sign boards

- 1.24.1 Subject to agreement with the contractor and an agreed suitable location, the developer will allow Premier Inn to erect temporary signs. All subject to relocation during the construction period.

1.25 Services

- 1.25.1 The developer is responsible for all costs associated with the mains services connections, including connection costs, metering costs and infrastructure costs (including charges levied by utilities providers and any ancillary costs, such as the construction of meter rooms, housings or substations)
- 1.25.2 As is noted from the location of the plant rooms to rear of the property, it may be necessary for services to pass through Premier Inn's demise.

SECTION TWO - DETAILED REQUIREMENTS

2.1 Maintenance and Design life

- 2.1.1 The developer is to ensure that the building is designed to minimise future maintenance requirements
- 2.1.2 Design life to be in accordance with British Standards
- 2.1.3 The developer is to provide copies of all warranties, certificates and guarantees demonstrating compliance of relevant elements.

2.2 Roof

The developer is to design and construct roofs complying with the following:

- 2.2.1 Roof coverings are to have a design life of 15 years and require no planned maintenance for a minimum period of 10 years.
- 2.2.2 The developer is to install a certified fall restraint system to provide safe access to any flat roof areas and external plant areas for the purposes of maintenance and repair.
- 2.2.3 Rainwater down pipes are to be external to the building wherever possible. Any internal pipes will be shown on the building control plans.
- 2.2.4 The developer is to form all openings and install flashings as may be required for kitchen extraction and ventilation equipment and any other equipment which forms part of the Premier Inn works, on the condition that a suitable detailed plan highlighting the location of the extract is provided in strict accordance with the programme of works.

2.3 External walls

The developer is to design and construct external walls complying with the following:

- 2.3.1 External facing materials are to be durable and requiring minimal maintenance.
- 2.3.2 Acoustic performance will be achieved, but this is not conditional upon the use of vertical/horizontal cavity barriers.
- 2.3.3 The developer is to form all openings as may be required for kitchen extraction and ventilation equipment and any other equipment which forms part of the Premier Inn works.

2.4 Windows

The developer is to install all windows, screens and curtain walling as detailed on the lease drawings.

- 2.4.1 Wherever possible we will comply with the following, subject to planning and historic buildings consent.

Bedroom windows:

- Size 1200mm wide x 1350mm high
- Cill height is to be at 900mm AFFL
- Openable with an opening area equivalent to 1/20th of the floor area of the bedroom
- Fully reversible opening action to permit safe cleaning of both faces of the glass from inside the building
- Opening controls to be located between 800 and 1000mm AFFL and to be easily operated without using both hands simultaneously
- Ironmongery to include a clearly visible, lockable and tamper proof, opening restrictor to limit the maximum clear opening at any point to 100mm. It must not be possible to override the restrictor without the aid of a key.
- Frames to be aluminium or pvc requiring minimal maintenance
- Glazed with sealed double glazed units with low emissivity glass.
Note - glass thicknesses may need to be enhanced to achieve required level of sound reduction as identified by the acoustic report
- Trickle ventilators to be incorporated to provide 8000m² free air space per bedroom.
Note - trickle vents may need to be acoustically rated to achieve required level of sound reduction as identified by the acoustic report

2.4.2 Reception, Bar/restaurants glazed screens:

- Aluminium framed screens with a polyester powder coat finish
- Glazed with double glazed units with low emissivity and toughened glass

2.5 Main Entrance Doors

2.5.1 The developer is to install 2 sets of automatic sliding entrance doors and side screens to form the customer entrance lobby, subject to planning.

2.5.2 Doors and screens are to be aluminium framed with a polyester powder coat finish.

2.5.3 Glazing is to be toughened to comply with building regulations requirements for safe breakage.

2.5.4 Door control switches are to be routed to the reception desk.

2.5.5 One set of the doors is to be linked to an external key card reader

2.6 External doors

2.6.1 The developer is to install all external doors and doorsets.
Doors and doorsets are to be steel or aluminium with polyester powder coat finish and are to include all glazed panels, ironmongery etc

2.7 Floors

2.7.1 The developer is to provide structural floors to an agreed tolerance on levels and finish suitable to receive floor finishes.

2.7.3 All floors are to achieve both airborne and impact sound reduction in accordance with building regulations and the Premier Inn's acoustic requirements as listed in this document

2.7.4 The floors are to be designed to carry the following loadings:

- Plant room, lift motor rooms 7.5kN/m²
- Bedrooms 2.0kN/m²
- Bedroom corridors 3.0kN/m²
- Ground floor 5.0kN/m²

2.7.5 The developer is to form all holes through floors as may be required for kitchen extraction and ventilation equipment and any other equipment which forms part of the Premier Inn works.

2.8 Internal Walls

2.8.1 All internal walls are to achieve airborne sound reduction in accordance with building regulations and the Premier Inn's acoustic requirements as listed in this document.

2.8.2 The developer is to form all openings through internal walls as may be required for kitchen extraction and ventilation equipment and any other equipment which forms part of the Premier Inn works.

2.9 Staircases

2.9.1 The developer is to provide all staircase flights, to agreed levels, tolerances and finish, suitable to take floor coverings and finishes directly.

2.9.2 Escape stairs are to be sited and to be of adequate width so as to provide simultaneous means of escape in accordance with the requirements of the current building regulations for a hotel with a population capacity based on 4 persons per standard bedroom, 2 persons per wheelchair accessible bedroom and 1 person per 1.0m² of bar/restaurant area.

2.10 Lifts

2.10.1 The specification for the passenger lift installation will be assessed by Premier Inn on the number of bedrooms and the number of storeys that accommodation is arranged over to ensure that waiting times are within guidelines.

2.10.2 Lift installations are to comply with EN81-70 in respect of access for the disabled

2.10.3 Passenger lift cars are to be fitted with electronic locking system card readers linked to the lift operating system. Card system as specified for para 2.12.1 below.

2.10.4 Where a fire fighting lift is required the lift installation and operation is to comply with BS EN81-72

2.10.5 The requirement for a Goods Lift will be determined by Premier Inn in consideration of methods of delivery, height of hotel, level at which Cellar, Kitchen, Principal Linen Rooms are located.

2.10.6 Goods lift specification to be generally as passenger lifts with robust finishes

2.11 Linen Chute

2.11.1 A linen chute is to be provided serving all floors. The chute is to be located within the linen rooms with access doors at all floors, terminating in the ground floor linen room with a deceleration/sorting table.
Linen chute to be minimum 600mm diameter

All linen chute doors to be 2 hour fire rated, self closing with lockable handle, electronically interlinked.

2.11.2 Linen chute to be supplied and installed by:

Hardall International Ltd
34 Clarke Road
Mount farm
Milton Keynes
MK1 1LG

2.12 Electronic Door locks

2.12.1 Premier Inn to specify electronic keycard locking system to be installed to the following doors:

Bedrooms
Linen/cleaners rooms
Store rooms
Staff room
Ground floor reception to main stair(s) door
Offices
Comms room
Plant rooms
Lift motor room
Beer Store
Staff External Entrance door
Linen External door
Kitchen External door
Plant room(s) external door

2.12.3 Remote access controller to be provided externally on the main entrance doors in conjunction with an intercom, and linked to the electronic sliding door control system.

2.12.4 The developer is to provide all control/cutting equipment.-subject to a cap of £10,000.

2.13 CCTV

2.13.1 CCTV system to be designed and installed by Secom to Premier Inn specification and approval:

System to include:

Ganz Digital Hard Disk Recorder with a minimum 640Gb hard drive per 16 camera systems to ensure 1 frame per camera per second is recorded at SVHS equivalent quality (17kb frame size) and that images from all cameras are stored for a minimum 31 days before being re-written. The unit shall be located in the Travel Inn Office.

The HDR shall have the facility for remote access via ISDN or ADSL

Fixed colour Cameras (Internal) and fixed colour/mono (external)

14" Colour Monitor Unit for reception, TI office, Restaurant office and bar.

Lockable fan-assisted metal cabinet containing Hard Disk Drive

LSFOH cabling fully contained within a proprietary basket tray and conduit system (by main contractor)

Developer to allow for attendance

2.14 Intruder Alarm

- 2.14.1 Zoned Intruder alarm system to be designed and installed by Secom to Premier Inn specification and approval:

System to include:

Control panel and equipment
magnetic door reeds to all external doors
PIR detectors
panic attack alarms to offices and reception desk
2 No 200m panic attack belt clips
internal warning device
external warning device
Redcare signalling equipment

Developer to allow for attendance

2.15 Acoustic performance

This criteria to apply at night only (23.00 - 0.700 hours) and to regular events.

- 2.15.1 The developer is to provide all acoustic and vibration requirements relevant to the works as may be required pertaining to external noise break-in. This will include any measures to address flanking sound as required by Part E of the building regulations.
- 2.15.2 Requirements shall be in accordance with good criteria for bedrooms given in British Standard BS8233: 1999 as follows: -

General Noise	L_{Aeq}	30dB
Individual Noise Events	L_{Amax}	45dB

- 2.15.3 In addition all other areas of the hotel shall achieve an internal background sound level of L_{Aeq} 45dB.
- 2.15.4 The developer shall be responsible for providing ventilation openings within the building envelope. All such openings shall achieve the stated criteria for noise
- 2.15.5 The developer shall be responsible for providing a 'empty shell' structure that when rated in accordance with BS EN ISO 717:1997 will achieve the following airborne sound insulation.

Location	D_{nTw} dB
Room to room	50 dB
Room to corridor (excluding door)	50 dB
Room to restaurant/kitchen	55 dB
Room to other tenancy	60 dB

Room to other Tenancy to apply to separation between hotel and retail user in the basement to 1st floors of the building.

In addition: -

- Noise levels inside bedrooms shall not exceed NR20 L_{10} from activities associated with any other tenancy and will apply to night only (23.00 - 07.00)

- All separating floors shall be capable of an impact sound reduction of L_{nTW} 60 dB when tested with carpeting.

2.15.6 The construction of the floor in guest rooms and corridors must be designed to give a 'solid feel' and details are to be agreed with Premier Inn. Floors are to have a natural frequency greater than 4Hz.

2.16 Drainage

2.16.1 The developer is to provide all surface and foul drainage, including all connections into the existing drainage infrastructure, provision of soakaways, pumping stations and treatment plants and is to obtain all approval and make all payments in respect of these works.

2.16.2 The foul water drainage is to be designed to accommodate a peak flow of litres/second.

2.16.3 The specific details of any pumping stations and treatment plants, including alarms, back up systems and maintenance requirements are to be agreed with Premier Inn.

2.16.4 Floor gullies to be provided in beer store and internal refuse stores.

2.17 Python Ducts

2.17.1 Two 150mm service ducts. Complete with draw wires and easy bends are to be installed by the developer between the beer store and the front section of the bar servery. The exact positions to be agreed with Premier Inn

2.18 External Signage

2.18.1 The developer will be responsible for ensuring that suitable grounds for fixing of the external signs and floodlighting on the building are provided as part of the external wall and roof constructions, subject to planning, listed buildings and other statutory restrictions.

2.18.2 Developer to provide all necessary power cables, switching etc to sign locations

2.19 Cooling to Bedrooms, bar/restaurant, reception and back of house

2.19.1 The developer is to provide cooling to all bedrooms, bar/restaurant, reception, offices and staff room in accordance with the requirements of the PTI M&E Specification.

SECTION THREE - DEVELOPER (D) / TENANT (T) RESPONSIBILITIES MATRIX

The following sheets set out the developer (D) / Tenant (T) responsibilities for all areas of a typical Solus Premier Inn: All fixtures and fittings supplied by the Tenant will be delivered to site in strict accordance with the building programme.

Developer attendance means allowing a Tenant's contractor access to the site during the main contract, subject to satisfactory notice.

	SUPPLY	FIX	NOTES
ENTRANCE LOBBY			
JOINERY			
Doors 2 x pairs automated sliding	D	D	Linked to fire alarm & Vingcard
Skirting	D	D	
Glazed screens	D	D	
FINISHES			
Ceiling	D	D	
Wall	D	D	
Floors	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Tariff board	T	D	
Mat well & frame	D	D	
Sign: tariff board	T	D	
Audio intercom	D	D	
Night porter call button	D	D	
FOYER			
JOINERY			
Information shelf	D	D	
Reception desk	D	D	
Signage boards	T	T	
Doors/frames/architrave/ironmongery	D	D	
Glazed screens	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor - hardflooring	D	D	
Floor - carpet	T	D	Underlay by developer
Naplocks	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Cooling equipment	D	D	
Internet desk	D	D	
Corner guards	D	D	
Vending machine	T	T	
Speakers for music system	T	T	Developer attendance
LIFT LOBBIES			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	Linked to fire alarm/door system
Skirting	D	D	
FINISHES			

Ceiling	D	D	
Wall	D	D	
Floors - carpet	D	D	Underlay by developer
FIXTURES/FITTINGS & EQUIPMENT			
Tariff board	T	D	
Audio intercom	D	D	
Night porter call button	D	D	
LIGHTING & ELECTRICAL			
Disabled refuge communications	D	D	
RECEPTION (COUNTER & BEHIND)			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Hardflooring	D	D	
Floor coverings - carpet	T	D	Underlay by developer
Naplocks	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Desk/counter	D	D	
Info panel	T	D	
Chairs	T	T	
Till systems	T	T	
Sign: Welcome	T	D	
Hearing loop equipment	D	D	
LIGHTING & ELECTRICAL			
Panic alarm system	D	D	
Hearing loop system	D	D	
OFFICE			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Desks	D	D	
Shelving	D	D	
Notice boards	D	D	
First aid box	T	T	
Telephone handset and control box	T	T	Developer attendance
Safe	T	T	Developer attendance
Key cabinet	D	D	
Door wedges	D	D	
Working safe notice	T	D	
LIGHTING & ELECTRICAL			
MALE & FEMALE WCS			

JOINERY			
Door/frame/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
WC suites/cistern & lever	D	D	
Washbasins/wastes/taps	D	D	
Vanity units	D	D	
Urinals (gents)	D	D	
WC cubicles	D	D	
Mirrors	D	D	
Hand driers	D	D	
Toilet roll holders	D	D	
Soap dispensers	D	D	
Vending Machines	T	D	
LIGHTING & ELECTRICAL			
WC LOBBIES			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
LIGHTING & ELECTRICAL			
PH WC			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Soap dispenser	T	D	
Paper towel dispenser	T	D	
Toilet roll holder	D	D	
Mirror	D	D	
WC fitting	D	D	
WC seat	D	D	
WHB	D	D	
Waste	D	D	
WHB taps	D	D	
Sanitary encasement system	D	D	
Grab rails	D	D	
Hinged support rail	D	D	
Back support	D	D	

LIGHTING & ELECTRICAL			
Alarm pull cord	D	D	
FOOD & BEVERAGE			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
Dado rails	D	D	
Ceiling features	D	D	
Drinks shelves	D	D	
Screens/partitions	D	D	
Waiter stations	D	D	
Fixed seating & upholstery	D	D	
Wall features	D	D	
FINISHES			
Ceiling/bulkheads	D	D	
Walls	D	D	
Floors - carpets	T	D	Underlay by developer
Floors - hard floorings	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Pictures/bric-a-brac	T	T	
Tables, chairs, sofas, bar stools	T	T	Attendance by developer
LIGHTING & ELECTRICAL			
Wall lights	T	D	
Ceiling lights	T	D	
Specialist equipment	T	T	Attendance by developer
BAR SERVERY			
JOINERY			
Servery counter	D	D	
Back bar fitting	D	D	
Shelving	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floors	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Bar counter unit stainless steel framing	D	D	
Wash basin	D	D	
Bottle coolers	T	T	Attendance by developer
Beer supply equipment	T	T	Attendance by developer
Security grille	D	D	
Specialist equipment	T	T	Attendance by developer
LIGHTING & ELECTRICAL			
KITCHEN			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	

Floors	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Kitchen equipment	T	T	Attendance by developer
Extract canopy	T	T	Attendance by developer
Extract duct to external termination	D	D	
Fire fighting equipment	T	D	
COMMS ROOM			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
LIGHTING & ELECTRICAL			
STORE ROOMS			
JOINERY			
Doors/frames/architrave/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Shelving	D	D	
LIGHTING & ELECTRICAL			
STAFF ROOM			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floors	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Mirrors	D	D	
Coat hooks & rail	D	D	
Lockers	T	T	
Sink unit, taps, waste	D	D	
Kitchen units and worktop	D	D	
Tables, chairs	D	D	
Noticeboard	D	D	
LIGHTING & ELECTRICAL			
STAFF WCS & LOBBY			

JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floors	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Soap dispensers	T	D	
Paper towel dispenser	T	D	
Toilet roll holders	D	D	
Mirrors	D	D	
WC fittings	D	D	
WC seats	D	D	
WHBs	D	S	
Wastes	D	D	
WHB taps	D	D	
Grab rails	D	D	
Hinged support rails	D	D	
Lockers	T	T	
WC cubicle partitions and doors	D	D	
LIGHTING & ELECTRICAL			
MAIN STAIRS & LANDING			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
Balustrade	D	D	
Handrails	D	D	
Dado rail/pattress	D	D	
FINISHES			
Ceiling	D	D	
Walls above Dado	D	D	
Walls below Dado	D	D	
Floor - landings & stairs - carpet	T	D	Underlay be developer
Nosings and edge trims	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Disabled refuge communications	D	D	
LIGHTING & ELECTRICAL			
Heater	D	D	
BEDROOM CORRIDORS			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
Dado rail	D	D	
FINISHES			
Ceilings	D	D	
Walls above Dado	D	D	
Walls below Dado	D	D	
Floor - carpet	T	D	Underlay by developer
FIXTURES/FITTINGS & EQUIPMENT			
Roof access hatch	D	D	

LIGHTING & ELECTRICAL			
STANDARD BEDROOM			
JOINERY			
Window board	D	D	
Curtain rail batten	D	D	
Ceiling bulkhead	D	D	
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Ceiling bulkhead	D	D	
All walls	D	D	
Floor	T	D	Underlay by developer
Naplocks	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Door stop	D	D	
Spyhole	D	D	
Wall mirror	D	D	
Wardrobe/grooming tower	D	D	
Bedhead with shelves	D	D	
Desk	D	D	
Picture	T	D	
Fire procedure notice	D	D	
TV	T	T	
Curtain track	T	T	
Curtains	T	T	
Shears & wire taut	T	T	
Bed with truckle beds	T	T	
Coffee table	D	D	
Tub chair	T	D	
Desk chair	T	D	
Sofabed	T	D	
LIGHTING & ELECTRICAL			
Bulkhead lights	D	D	
Ceiling light fitting	D	D	
Bedhead lights	D	D	
Desk mirror lights	D	D	
Electrical sockets	D	D	
Telephone socket	D	D	
TV aerial point	D	D	
Kettle	T	D	
Hair dryer	T	D	
Multi criteria detector	D	D	
Alarm sounder	D	D	
Alarm beacon	D	D	
Room heater/cooler unit & spur	D	D	
Room thermostat	D	D	
Consumer unit	D	D	
STANDARD BATHROOM			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Bath panel	D	D	
Vanity unit	D	D	
Skirting	D	D	

FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
Naplock	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Door stop	D	D	
Robe hook	D	D	
Towel rail	D	D	
Mirror	D	D	
Shower curtain rail	D	D	
Shower curtain	D	D	
Toilet roll holder	D	D	
WC	D	D	
WC cistern	D	D	
Washbasin	D	D	
WHB captive plug	D	D	
Chain hole stopper	D	D	
WHB taps	D	D	
Tap heads	D	D	
Bath	D	D	
Bath waste	D	D	
Shower taps	D	D	
Shower riser	D	D	
Shower head	D	D	
Soap dispensors	D	D	
LIGHTING & ELECTRICAL			
Ceiling light fitting	D	D	
Bulkhead downlighter	D	D	
Shaver point	D	D	
Extract fan & duct	D	D	
Alarm Beacon	D	D	
ACCESSIBLE BEDROOM			
JOINERY			
Window board	D	D	
Curtain rail batten	D	D	
Ceiling bulkhead	D	D	
Doors/frames/architraves/ironmongery	D	D	
Skirting	D	D	
FINISHES			
Ceiling	D	D	
Ceiling bulkhead	D	D	
All walls	D	D	
Floor - carpet	T	D	Underlay by developer
Naplocks	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Door stop	D	D	
Spyhole	D	D	
Desk	D	D	
Wall mirror	D	D	
Wardrobe/grooming tower	D	D	
Bedhead with shelves	D	D	
Pelmet to sliding door	D	D	
Picture	T	D	
Fire procedure notice	D	D	
TV	T	T	
Curtain track	T	T	

Curtains	T	T	
Shears & wire taut	T	T	
Bed	T	T	
Desk chair	T	D	
LIGHTING & ELECTRICAL			
Bulkhead lights	D	D	
Ceiling light fitting	D	D	
Bedhead lights	D	D	
Desk mirror lights	D	D	
Electrical sockets	D	D	
Telephone socket	D	D	
TV aerial point	D	D	
Kettle	T	D	
Hair dryer	T	D	
Multi criteria detector	D	D	
Alarm sounder	D	D	
Alarm beacon	D	D	
Room heater/cooler unit & spur	D	D	
Room thermostat	D	D	
Consumer unit	D	D	
Alarm call system	D	D	
DISABLED BATHROOM			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
Bath panel	D	D	
Vanity unit	D	D	
Duct framing and tops	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Bulkhead	D	D	
Floor	D	D	
Naplock	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Door stop	D	D	
Robe hook	D	D	
Mirror	D	D	
Shower curtain rail	D	D	
Shower curtain	D	D	
Soap dispensers	D	D	
Toilet roll holder	D	D	
Towel rail			
WC	D	D	
WC cistern	D	D	
WHB & vanity unit	D	D	
WHB captive plug	D	D	
Chain hole stopper	D	D	
WHB taps	D	D	
Tap heads	D	D	
Bath & bath panel	D	D	
Bath waste	D	D	
Shower taps	D	D	
Shower flex hose	D	D	
Shower head	D	D	
Grab rails	D	D	
Bath transfer seat	D	D	
LIGHTING & ELECTRICAL			

Ceiling light fitting	D	D	
Bulkhead downlighter	D	D	
Shaver point	D	D	
Extract fan and duct	D	D	
Alarm pull & notice	D	D	
Alarm beacon	D	D	
SHOWER ROOM ALTERNATIVE			
See layout drawing for variations to fittings, etc.			
LINEN STORES			
JOINERY			
Doors/frames/architrave/ironmongery	D	D	
Skirting	D	D	
Base unit	D	D	
Worktop	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
Naplock	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Linen racking	D	D	
Shelving	D	D	
Washing machine	T	D	
Tumble dryer	T	D	
Dishwasher	T	D	
Johnson cleaning unit	T	T	
Notice board	D	D	
Sink unit and taps	D	D	
Linen chute	D	D	
LIGHTING & ELECTRICAL			
Heater	D	D	
INTERNAL ESCAPE STAIR			
JOINERY			
Doors/frames/architrave/ironmongery	D	D	
Skirting	D	D	
Staircase & baluster	D	D	
Stair handrails & newel caps	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor & stairs	D	D	
Nosing	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Sign: Fire Door Keep Shut	D	D	
Extinguisher pattress	D	D	
Fire extinguishers	T	D	
LIGHTING & ELECTRICAL			
PLANT ROOM			
JOINERY			

Door/frame/architrave/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
DRY GOODS STORE			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Wall	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Racking - 4 tier	T	D	
BEER STORE			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Wines & spirit cage	D	D	
Belfast sink	D	D	
Shelving	D	D	
Cellar equipment	T	T	Attendance by developer
GLASS WASH			
JOINERY			
Door/frame/architrave/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	
Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
Sink base unit	D	D	
Sink top complete	D	D	
Shelving	D	D	
Worktop	D	D	
Glasswasher	T	T	Services & waste by developer
BIN STORE			
JOINERY			
Doors/frames/architraves/ironmongery	D	D	
FINISHES			
Ceiling	D	D	
Walls	D	D	

Floor	D	D	
FIXTURES/FITTINGS & EQUIPMENT			
CCTV SYSTEM	T	T	Attendance by developer
MUSIC SYSTEM	T	T	Attendance by developer
VINGCARD	D	D	
INTRUDER ALARM SYSTEM	T	T	Attendance by developer
FIRE ALARM & DETECTION SYSTEM	D	D	
TELEPHONE SYSTEM	T	T	Attendance by developer
INTERNAL SIGNAGE			
Internal directional signage	T	T	
Bedroom numbers	T	T	
Elec supply to illuminated signs	D	D	
EXTERNAL SIGNAGE			
Signs, banners, totems	T	T	Attendance by developer
Grounds etc for fixing of signs	D	D	
Elec supply to illuminated signs	D	D	
FIRE FIGHTING EQUIPMENT			
Fire extinguishers	D	D	
Fire blankets	D	D	
Fire procedure notices	D	D	
Pattresses	D	D	
LIGHTING			
Decorative F & B fittings	T	D	
All other light fittings	D	D	
Emergency lighting	D	D	
TV/RADIO			
TV aerial	T	T	Attendance by developer
FM Aerial	T	T	Attendance by developer
Satellite dish	T	T	Attendance by developer
Amplification & racks	T	T	

BUILDING SERVICES REQUIREMENTS

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1. INTRODUCTION

1.1 General Scope of Mechanical Works

This Specification of Mechanical Requirements generally relates to the design, supply, installation and commissioning of all new mechanical services and associated controls required for the Premier Inn development. A competent mechanical and electrical designer shall be employed to determine all of the facilities required.

The works shall comprise the whole of the labour and unless otherwise indicated, all materials necessary to form a complete installation, and such tests, adjustments and commissioning as are prescribed and as may otherwise be required to give a complete working installation.

Works shall include, but not be restricted to, the design, supply, installation, commissioning and setting to work of the following:

- The mains cold water supply.
- The mains cold water storage system.
- The hot water generating system.
- The water pumping systems.
- The hot and cold water distribution system.
- The gas distribution system.
- Sanitary ware, wastes and above ground foul water drainage.
- Ventilation systems, fans & controls.
- Calculating the Space Heating & Cooling demands for the Property
- Controls wiring of all Mechanical Plant.
- The inspection, testing, commissioning and certification, of all the various elements of the mechanical installation.
- The supply of all operating and maintenance instructions on manufacturer's literature.

1.2 General Scope of Electrical Works

This Specification of Electrical Requirements generally relates to the design, supply, installation and commissioning of all new electrical services and associated controls required for the proposed development.

The work shall comprise the whole of the labour and unless otherwise indicated, all materials necessary to form a complete installation, and such tests, adjustments and commissioning as are prescribed in subsequent clauses and as may otherwise be required to give a complete working installation to the satisfaction of the Engineer.

Works shall include, but not be restricted to, the design, supply, installation, commissioning and setting to work of the following:

- The mains installation.
- The low voltage sub mains distribution system.
- The complete small power & lighting systems.
- The dimming and switching systems.
- The building illumination and car park lighting system.
- The emergency lighting systems.
- The fire alarm and detection system.

- The Ventilation Fans & Controllers.
- The electric heating.
- The Wiring of supplies for all Mechanical Plant.
- The inspection, testing, commissioning and certification, of all the various elements of the electrical installation.
- The supply of all operating and maintenance instructions on manufacturer's literature.

The IEE Regulations, 16th Edition Standards shall be deemed the Industry Standard for the purpose of these works. Where there is doubt, the Electrical Contractor shall consult with Ce² in the first instance.

1.3 Design Parameters

1.3.1 Internal Design Conditions

- Guest Bedroom Summer: Comfort cooling only is provided to Guest Bedrooms governed by the limitations of the installation approved by PTI.
- Generally cooling is aimed at achieving 22°C in rooms at outside design conditions. Direct Solar radiation through glazing has been ignored on the basis that curtains would be drawn during the daytime.
- Bedroom Winter: The room heat losses will be calculated using CIBSE data. Generally heating is aimed at achieving 23°C in rooms at outside ambient of -4°C (minus 4°C).

1.3.2 DHW & CWS Systems

DHW design consumption shall be 150 litres/room per day at 60°C, plus a suitable allowance for the Catering Kitchen usage. DHW storage and generation shall be sized to supply 50% of the total usage during a 1½ hour period each morning and 50% of the total usage during a 2 hour period in the evening.

DHW must be available at all times (day and night), with equipment having built-in redundancy. The design maximum waiting time for DHW shall be 5 seconds to customer bedrooms and 10 seconds to all other areas.

Cold water storage shall be provided to a minimum of 125 litres per bedroom, with the actual amount of storage agreed with local water supply company. Design water usage shall be based upon 400 litres per day (total for both DHW & CWS).

2. INCOMING SERVICES

2.1 Gas Installation

A new natural gas supply shall be provided from the local gas network to the new gas meter position. The new supply will be suitably rated to adequately serve all appliances, plant and equipment and shall be terminated with a suitably sized gas company meter.

A new gas mains service shall be extended from the new meter installation to provide a complete gas distribution system to serve the Catering Kitchen, Water heaters and mechanical plant. A solenoid operated gas shut-off valve shall be fitted to the Catering Kitchen supply and shall be linked to the fire detection system.

All gas pipework shall be sized to comply with the maximum pressure drop requirements, based upon the minimum dynamic pressure provided at the meter by the gas supplier.

2.2 Mains Water Installation

A new mains water supply will be provided from the local water company network to the new water meter position. The water main shall be extended from the meter position to provide a distribution network within the hotel. At the point of entry, a suitably sized main isolation valve and drain valve, to comply with local water company Byelaws, shall be installed.

The new supply will be provided to cater for all Domestic Hot Water (DHW) and Cold Water Service (CWS) requirements of the hotel. A packaged water treatment system shall be provided at the point of entry to the building.

If required by Building Control, a dry riser system shall be installed to assist fire fighting.

2.3 Electrical Installation

A new LV electrical mains supply will be provided from the local electrical company to a designated main distribution panel, incorporating all necessary over current protection devices and mains switch. The new main will be suitably rated to adequately serve all lighting, heating/cooling, appliances, plant and all other equipment.

A new adequately sized mains splitter board (MCCB) shall be installed at the incoming mains position. The board shall be equipped with a main incoming isolator and single and three phase MCCB's of appropriate ratings, to feed sub-mains and final circuit distribution boards and isolators supplying large fixed loads. An earth bar shall be mounted adjacent to the incoming mains distribution board and shall consist of a copper bar 25mm wide x 6mm thick and not less than 150mm long to allow connection of the building steel work if appropriate, incoming services and the Electricity Supply Company earth terminal. Equipotential bonding shall be provided from the main earth bar to the electrical installation and all other required items (including ventilation ducting, catering kitchen equipment, service pipes, sinks, etc).

3. MECHANICAL INSTALLATION

3.1 DHW & CWS Installation

Hot water will be generated by means of a number of direct gas fired hot water heaters or hot water calorifiers depending on the outcome of the Council's Sustainability Assessment. These shall come supplied with equipment required for the complete operation of the water heaters, including; pressure relief valves, expansion vessel, Correx anodes, etc. The Correx anode shall be wired and connected to a local switched fused spur (neon).

Generally each gas fired water heater shall be individually flued and installed in accordance with the manufacturers instructions. The gas fired water heaters shall supply hot water to all outlets at the same nominal pressure as that of the cold service (via the booster set).

Hot and cold water and cold water only (where required), shall be piped to all proposed points of use. These shall include all points of use on each floor, including all hotel bedroom pods, showers, basins, customer toilets and all back of house areas.

Also included will be all necessary double check valves, non-return valves and Reduced Pressure Zone (RPZ) valves, which may be required to comply with water bylaws.

A new variable drive booster pump set will be provided to supply boosted water to the CWS distribution system and the DHW system via the water heaters. This supply will provide all the requirements of the hotel, including bedrooms, public toilets, catering kitchen, restaurant and bar areas and mechanical services plant.

Mains cold water pipework, cold water distribution pipework and domestic hot water distribution pipework will be installed using light gauge copper tube. All concealed pipework will be suitably insulated to the most recent standards.

3.2 Heating and Cooling

Guest Bedrooms

The Guest Bedrooms will be heated and cooled using an approved VRF (Variable Refrigerant Volume) system. The required VRF system is detailed later in this specification, together with details of the refrigerant volume limitations and control systems. The specific design and control parameters and the routing of refrigerant pipework shall be subject to approval by PTI.

Public Areas

The Entrance, Reception and Restaurant areas will be heated and cooled by means of suitably sized packaged Air Handling Units (AHU). The tempered air from the AHU's will be ducted through to specific air supply grilles in each area. The number and arrangement of the grilles shall be determined to provide optimum air flow and temperature control of each area.

If external, the AHU shall be positioned such that it cannot be directly viewed from hotel bedrooms and shall be fitted with anti-vibration mountings to minimise any noise break-in. The AHU shall be fitted with heating and cooling coils, frost protection circuit, filter section incorporating disposable panel filters and fan section.

The temperature control of the air supplied via the AHU shall be adjustable from an agreed position at Reception. Supplementary heating (via recessed and/or surface mounted electric fan units) will be provided in the entrance area and adjacent to opening doors/high heat loss areas as required.

Other floor areas which typically have relatively small heat loads (i.e. public toilets, linen room, office and staff rooms) shall be heated using independent electric panel heaters or fan units as required. The heating system will not include any LPHW radiators.

3.3 Ventilation

Guest Bedrooms

Air shall be extracted from each Guest Bath/Shower Room at the nominal rate of 16 l/s from either a centralised ducted system or utilising individual extract fans to each room. The central system shall operate continuously with the extract ductwork routed through service risers to the central extract fan/s position.

Where individual bathroom extract fans are selected, these should be designed to operate individually from the local lighting circuit. The designer must take into account the noise attenuation between bathrooms and so all systems must be baffled to prevent sound or sight transmitting.

Public Toilets

A ducted extract system will be installed to serve the Public Toilets. The ducted system will be located to allow ease of maintenance and prevent transmitting of sound and discharge to outside via an in-line extract fan and wall mounted louvre. Nominally 10 air changes per hour shall be achieved, with make up air drawn from surrounding areas and supply air grilles.

Restaurant Areas

Fresh air will be supplied to the restaurant and reception areas via the AHU system detailed earlier. This plant shall provide all of the fresh air requirements of these areas via a galvanised steel ductwork system (operating on low velocity to minimise noise levels).

A separate extract system shall be installed to operate in conjunction with the supply air system. Air from selected areas of the restaurant shall be extracted either through centralised duct system or through a high level soffit grilles around the reception floor construction. The extract system shall be speed controlled from an agreed position within the staff areas. The extract system shall be designed to achieve a slight positive pressure within the public areas (to minimise draughts).

Kitchen Ventilation

Only the ductwork from the kitchen area shall be provided. The ducting system shall be designed to prevent any steam, cooking smells, etc from entering the public areas (restaurant, reception, etc) or any of the guest bedrooms.

Other Extract Systems

Small extract systems will also be installed to ventilate the Linen Room, Staff Areas, Office and other small stores as required. Generally make-up air will be drawn from surrounding areas via undercut doors. Similarly ventilation shall be provided to bedroom corridors and lift landings. Where specific rooms have a high anticipated heat gain (i.e. PABX/computer room) ventilation alone may not provide suitable conditions. In these circumstances a dedicated cooling unit will be provided, sized to prevent over-heating.

3.4 Drainage Systems

A suitable drainage system shall be designed to adequately drain from all positions, with the drainage being free-flowing and disposal of waste water being quick and effective. Typically the guest bath/shower rooms will be collected vertically (single stack system) using 110mm diameter PVC pipework and joined into the below slab foul drainage network. The drainage system will be vented to atmosphere at high level as appropriate.

Foul drainage from the public toilets and staff areas shall be connected directly into the below slab network. Drainage from the Catering Kitchen will be connected to the below slab foul drainage network.

Trapped floor gullies will be provided as required to the Catering Kitchen, Preparation Area, Cool Store and Bin Store. The floor gullies shall be connected to the below slab foul drainage network.

The condensate from the bedroom fan coil units (if installed) will be routed to connect into the waste system.

3.5 Control Systems

Automatic controls will be 'Simple' stand-alone, (none BMS type). Where a VRF or similar system has been employed, this will be controlled via an externally mounted air temperature sensor. The temperature control of individual bedrooms shall be controlled individually via simple room thermostats as described earlier.

The Public Area Packaged Air Handling Units will be controlled by means of a wall-mounted thermostat and associated time switch.

4. ELECTRICAL INSTALLATIONS

4.1 Electrical Distribution & Switching

General

A perforated steel cable tray/basket containment system shall be installed to form the main containment structure for all horizontal electrical, data, IT, telephones, TV and security cabling requirements. The containment shall be routed at high level and hidden from view through the public and back of house areas to the main electrical riser positions. Containment is to be within accessible suspended ceiling voids and service risers. Containment shall be provided for both the main power distribution and the distribution of ESLV cables (IT, data, telecoms, security, etc).

Sub main cables are to be of XPLE SWA/LSF type; clipped or zip-tied to the main containment tray-work infrastructure. Individual SWA main cables may be clipped directly to the building structure using purpose made SWA cleats.

A complete earthing and bonding system shall be provided as required by BS 7671 (17th edition of the IEE wiring regulations). The systems main disconnection bar shall comprise a copper bar on MEM limited type 10 BMD insulated supports. The location of the main disconnection bar shall be within the electrical switch room. The earthing installation shall comprise of all conductors, conduits, trunking, cross bonds and separate individual circuit protective conductors to form the complete system.

Main equipotential bonding conductors shall be taken to all incoming gas and water service pipework, main HVAC plant and associated ventilation ductwork, structural steelwork and the lightning protection network (the latter subject to approval by the Regional Electricity Company).

Bedroom Distribution

Each guest room is served by a dedicated 4 way SP&N RCD protected MCB board, located at high level within the guest room entrance lobby. An alternative electrical supply arrangement from larger distribution boards located within local linen rooms/stores would be acceptable subject to prior approval.

The Guest room MCB board will provide final sub-circuits to the guest room and will nominally be categorised as follows:

- 1 no. 20A Type B MCB - 1 no. radial circuit
- 1 no. 6A Type B MCB - Lighting circuit
- 1 no. 16A Type B MCB - Power supply for Guest room heating/cooling unit.
- 1 no. 16A Type B MCB - spare

General Floor Areas

Public and Back of House service corridors shall be switched via local grid switches, or via occupancy detection (subject to prior approval). Emergency test facility for these areas is to be located within local electrical distribution cupboards.

Individual switches located within each room are to serve offices and Back of House service rooms. Emergency test facilities are to be located adjacent to the individual room light switch.

Light switching to the reception, bar, restaurant areas is via a multi-gang grid switch assembly containing standard on/off switches. Each zone of lighting shall be served with a dedicated switch line, allowing a set switching procedure to be implemented. This switching arrangement will allow an element of control of the preferred lighting levels at given times throughout the day and evening. The Reception and Restaurant areas switch assemblies shall be fully engraved and located within the main reception office. Emergency test facilities are to be located within the main distribution cupboard.

4.2 Lighting

Bedrooms

The bedroom installation shall be carried out in accordance with the latest **ID3 specifications and Data Sheets.**

Comment [m1]: We need a copy of these specifications and data sheets.

Corridors

Generally corridor lighting applications shall be installed utilising PVC/ PVC twin & earth type cabling routed at high level through corridor dry lining partition walls and/or ceiling structure. The lighting layouts are to be in accordance with the PTI bedroom corridor standards.

Comment [m2]: We need a copy of these standards

Small power to corridor and associated areas shall be installed utilising PVC/PVC twin & earth cabling concealed within corridor dry lining partition walls and/or ceiling structure. Circuitry for corridor general purpose power socket outlets is to emanate from the local distribution board.

Ancillary Areas

Lighting to linen rooms, storage areas and lift lobbies are to be via surface mounted galvanised steel conduits, or utilising PVC/PVC twin & earth cabling concealed within corridor dry lining partition walls and/or ceiling structure. However within each lift lobby the installation is to be concealed within suspended ceiling and/or dry wall construction.

Linen rooms, storage rooms and service lift lobbies are to be provided with luminaires and accessories in accordance with the current PTI specifications.

4.3 External Lighting

Nominally 1 no. power supply for PTI signage are to be provided, installed within the building fabric and made ready for final connection by specialist signage contractors subject to Planning approval.

4.4 Emergency Lighting

Emergency lighting will be designed and installed in accordance with BS5266: Part 1 and draft European requirements. The emergency lighting system shall comprise a mixture of self-contained, non- maintained and maintained luminaires with integrated battery packs and inverter units.

All emergency luminaires shall have a standby operation of 3 hours, with their associated charger units able to suitably recharge within 24 hours. Testing facilities shall be key switches located adjacent to local distribution boards for tests to large areas such as Main Reception, Restaurant / Bar area, bedroom corridors and staircases. For tests to isolated areas such as offices, linen rooms and WCs test facilities shall be installed within the local lighting switch plate

Provision shall be made to provide all final exits, corridor fire doors & direction changes to fire exit routes with illuminated directional exit luminaires.

Emergency lighting to guest corridors is to be by way of converted 3-hour maintained versions of the general corridor luminaires. The emergency inverter packs are to be located inside the adjacent bedroom within the electrical services cupboard,

4.5 Fire Detection System

The Fire Detection System shall be an Open Protocol, microprocessor based, multi loop addressable system design to give an L1 classification.

The fire alarm control and indication panel shall be provided within the reception area. The system shall comprise manual and automatic detection devices together with electronic sounders wired on separate circuits. Combined smoke/heat detectors with integral sounder units shall be provided throughout the premises including guest bedrooms.

The complete installation shall comply with BS 5839 Part 1. All equipment shall be from an open protocol manufacturer certified by the British Standard Institute. The control and indication panel shall incorporate LED indication and liquid crystal display together with a buzzer for fire and fault warning. The panel shall also be complete with a printer, back-up battery and charger system. The battery and charger system shall be provided in accordance with BS 5839 Part 1 2002.

A magnetic door release system is to be provided to each fire door within the bedroom corridor areas, including family room corridor doors. Fire doors to staircases are not required to be permanently held open. The system shall be installed using PVC/PVC cabling, generally routed through the bedroom corridor cable bulkheads and dry line partitions. Operation of the system shall be via relay units located within the electrical intake position of each bedroom floor and shall be activated on operation of the building fire detection system. A separate master release switch shall be provided in the main office to allow remote release of fire doors.

4.6 Telephone System

A complete telecommunications cabling infrastructure is to be provided utilising **Category 5E** cabling and shall be installed in accordance with the client's Cat 5E specifications.

Generally the cabling is to be zip tied to a cable tray network routed throughout the building, maintaining the required separation distances. The principal cable ways providing lines to each bedroom shall be situated within the bedroom vertical service risers.

Generally 1 no. **Cat 6** cable shall be installed from each guest room and routed down to the reception floor ceiling void. Cables shall be progressively collected and routed to the hotel

Comment [m3]: This contradicts the 3rd paragraph where Cat 6 cabling is required, we need confirmation which is correct.

Comment [m4]: This contradicts the 1st paragraph where Cat 5E cabling is required, we need confirmation which is correct.

PABX room. Provision must also be made for an additional 20 no. ancillary lines for services to the Office, Main Reception desk and Administration areas. A complete telephone assignment schedule shall be produced in accordance with the client's specific requirements.

Within the hotel PABX room, all final termination and testing of cabling infrastructure including the supply of all outlet plates is to be carried out by the electrical contractor. The complete system cabling infrastructure is to be designed by the electrical contractor and approved by the client's system specialist.

4.7 TV System

TV systems will be installed in the form of co-axial cables to each bedroom and to selected positions in the Bar and Lounge areas. Connection of the cables to the head end unit at roof level (T.B.C.) will be carried out by Specialists.

A complete UHF/VHF distribution infrastructure shall be provided consisting of individual CT167 or CT100 coaxial cables, as appropriate, which shall emanate from the respective bedroom service riser splitter unit, to each bedroom coaxial cable outlet. These splitter units shall, in turn, be served from the main amplification and distribution equipment located at roof level (T.B.C.). All associated interconnecting coaxial cabling shall be generally retained to cables trays both at roof level and within the bedroom service risers.

The complete system cabling infrastructure is to be designed by the electrical contractor and approved by the client's system specialist. The electrical contractor is to supply and install all final co-axial outlet points within bedrooms and Public areas. Allowance shall be made to provide TV feeds to the cafe & staff areas, final positions of which are to be advised.

4.8 Distress Alarm Systems

A complete disabled distress alarm system is to be installed providing coverage to each Special Needs (SN) bedroom and each public accessible toilet. Each SN bedroom is to be provided with 1 no. call point located on the bedroom headboard, this to be complete with plug in extension cord.

Within each SN bedroom shower pod, 1 no. pull-cord detector shall be provided facilitating the WC and shower tray. In the main corridors, above each SN bedroom entrance door a distress indication light will be situated.

To each public SN toilet a pull cord type call point is to be provided.

The distress alarm control panel is to be fully addressable and will be situated at a specified position within the main back office. This is to control a remote visual display panel, which is to be located at the Reception desk. From the above control panel, multi-core ELV security type cabling is to be routed utilising the cable tray network to service all above call point applications.

A dedicated communication system is to be provided to link each SN refuge area to the central panel, located within the reception area. At each refuge position there is to be a 2-way radio speaker which, during emergency situations is to provide direct voice contact to the central panel. The SN communication system cabling shall be fire protected throughout its length. The fire protection may be either steel conduit and/or specific fire rated cabling.

4.9 Ancillary Systems

Paging System

An electrical supply dedicated to the paging system will be terminated to a Fuse Spur unit at a position agreed with the appropriate specialist.

Video Surveillance

An electrical supply dedicated to the video surveillance system will be terminated to a Fuse Spur unit at a position agreed with the video surveillance specialist.

Comment [m5]: The extent of the electrical attendances, containment etc has to be confirmed

Staff Security System

The staff security system should automatically, when activated, dial a security company who shall advise the police. Activation is generally by under counter buttons located at the Reception and at the Bar. The complete system will be installed by a Specialist Company. An electrical supply dedicated to the security system will be terminated to a Fuse Spur unit at a position agreed with the security specialist.

Comment [m6]: The extent of the electrical attendances, containment etc has to be confirmed

Smoke Ventilation

Dedicated fire fighting stairs are not required at this project and therefore automatic smoke ventilation will not be required.

HVAC Equipment

Sub-main distribution power supply cabling shall be provided to all main mechanical H.V.A.C. plant and equipment isolation devices in association with mechanical contractor's requirements. All associated interconnecting controls wiring, equipment and devices shall be provided and installed by the mechanical H.V.A.C. controls specialist.

5. VRF COOLING INSTALLATION

5.1 General

The VRF (variable refrigerant flow) systems are to be installed on all new build and new branded Premier Inn sites.

The VRF system is a multi split air conditioning system which utilises an air cooled condensing unit supplying a defined number of indoor units. The system will be capable of simultaneously heating and cooling.

To determine the number of individual systems, the refrigerant content of each system must be calculated in accordance with EN 378 - 1. This requirement must be adhered to in order to negate the need for gas leak detection.

Once the design has been completed and the number of systems has been confirmed, careful consideration must be given to the location of the external plant, local controllers and the routing of refrigerant pipe work. All external plant creates noise and for this reason all external units shall be located in such areas as not to cause disturbance to both occupants of the hotel and surrounding neighbours.

5.2 External Units

The external unit shall have at least one inverter controlled hermetic scroll compressor capable of controlling the compressor in 1Hz increments. The coils shall be capable of

being divided up into sections (20, 30, 50, 70, 80, 100%) so as to allow the capacity of the external unit to match the demand capacity of the indoor units it is linked to

Additional sub-cooling will be provided by a Heat Interchange Circuit (HIC) which will improve refrigerant distribution and control with electronic expansion valves.

The refrigeration process of each unit shall be maintained by pressure and temperature sensors which will control solenoid valves, bypass valves and check valves. A 4-way valve will control the heating or cooling mode by means of reversing the cycle of refrigerant and changing the operation mode of the external unit (condenser to evaporator and vice versa).

Each external unit shall have a discharge pipe which will supply either high pressure liquid, high pressure gas or a mixture of both dependant on the mode of the indoor units. Refrigerant return to each external unit will be via one suction pipe. Both pipes shall be insulated.

The external unit will require a 3phase 415V mains fed supply and have a starting current of no more than 10amps.

5.3 Internal Units

Indoor units shall each be complete with heat exchanger unit comprising copper tubing with aluminium fins. A linear expansion valve shall control the flow of refrigerant through the heat exchanger which shall be controlled via two pipe thermistors and a return air thermistor. This arrangement will be capable of controlling the variable capacity of the indoor unit between 25% and 100%.

The indoor units shall be void mounted units constructed from galvanised steel plate and partially insulated with closed cell expanded polyurethane foam. The unit shall be suspended from the underside of the upper floor slab above via suitable anti-vibration hangers/mounts.

Air will be discharged from the unit by a forward curved centrifugal fan horizontally out of the front of the unit. A suitably sized transition piece of duct work shall be fixed directly to the unit spigot via flexible connection and in turn fix directly to the rear of the diffuser within the bulkhead. The diffuser will generally be positioned centrally to the fascia of the bulkhead. The transition piece will be so shaped to reduce the amount of turbulent air caused by sharp angles in the duct work.

The return air shall be brought in through the rear of the unit and shall be via a linear type grill located directly beneath the return air spigot. The grille will be fixed into the suspended ceiling and will not be connected to the unit itself.

Access to the units PCB controller, refrigerant pipe work connections and condensate connection and tray will be required. All the aforementioned items are generally located on the same side of the unit. It is therefore imperative that the location of the access hatch in respect to these items is carefully considered. A minimum clearance of 250mm from the face of the PCB controller and the adjacent edge of the access hatch is maintained for suitable access without the need to remove the unit from its hangers.

The electrical supply to the indoor units shall be via a switched fuse spur with red neon indicator which shall be located within the void in an easily accessible location which can be switched from the access hatch.

A condensate line shall be installed to each indoor unit. Each condensate drain shall rely on gravity where possible and shall maintain a fall of 1:80 minimum. Condensate drains shall be generally routed back towards the bedroom entrance door and penetrating the

bathroom wall in line with the bathroom bulkhead. The connection to the SVP within the service riser shall be made at high level complete with trap.

5.4 Changeover Box

The master changeover box shall be connected to the external unit via a high pressure and low pressure pipe. The box shall also include a gas/liquid separator, which will separate high pressure liquid and high pressure gas. A brass header pipe with three solenoid valves for each distribution port shall distribute the correct phase of refrigerant to each indoor unit.

5.5 Controls

The controller shall be hard wired and mounted to the bedroom wall in an agreed position. It will be manufactured in ABS plastic with an LCD display and will be to an agreed colour.

The controller will be capable of switching on/off and altering the set point and mode of the unit. The controller will also be capable of displaying fault codes and following functions for each unit:

1. On/off
2. Mode selection - switches between cool/dry/auto/fan/heat
3. Temperature setting
4. Fan speed setting
5. Permit/prohibit function - a number of functions can be prohibited to prevent tampering via a higher level system controller
6. Error indication
7. Test run function - allows each unit to be operated in test mode

5.6 Log Books & Warranty

Full commissioning Log Books shall be supplied by the Manufacturers Commissioning Engineer. These shall be fully completed and included with the main installation and operation manuals prior to handover. In addition, copy pages shall be returned to the Manufacturer in order that the installation is logged and warranty honoured.

Warranty will be in accordance the Manufacturer's conditions provided maintenance is carried out to a proven satisfactory level and also that the installation shall be undertaken by an approved installation contractor