

THE ORACLE
READING

Fitout Technical Guide



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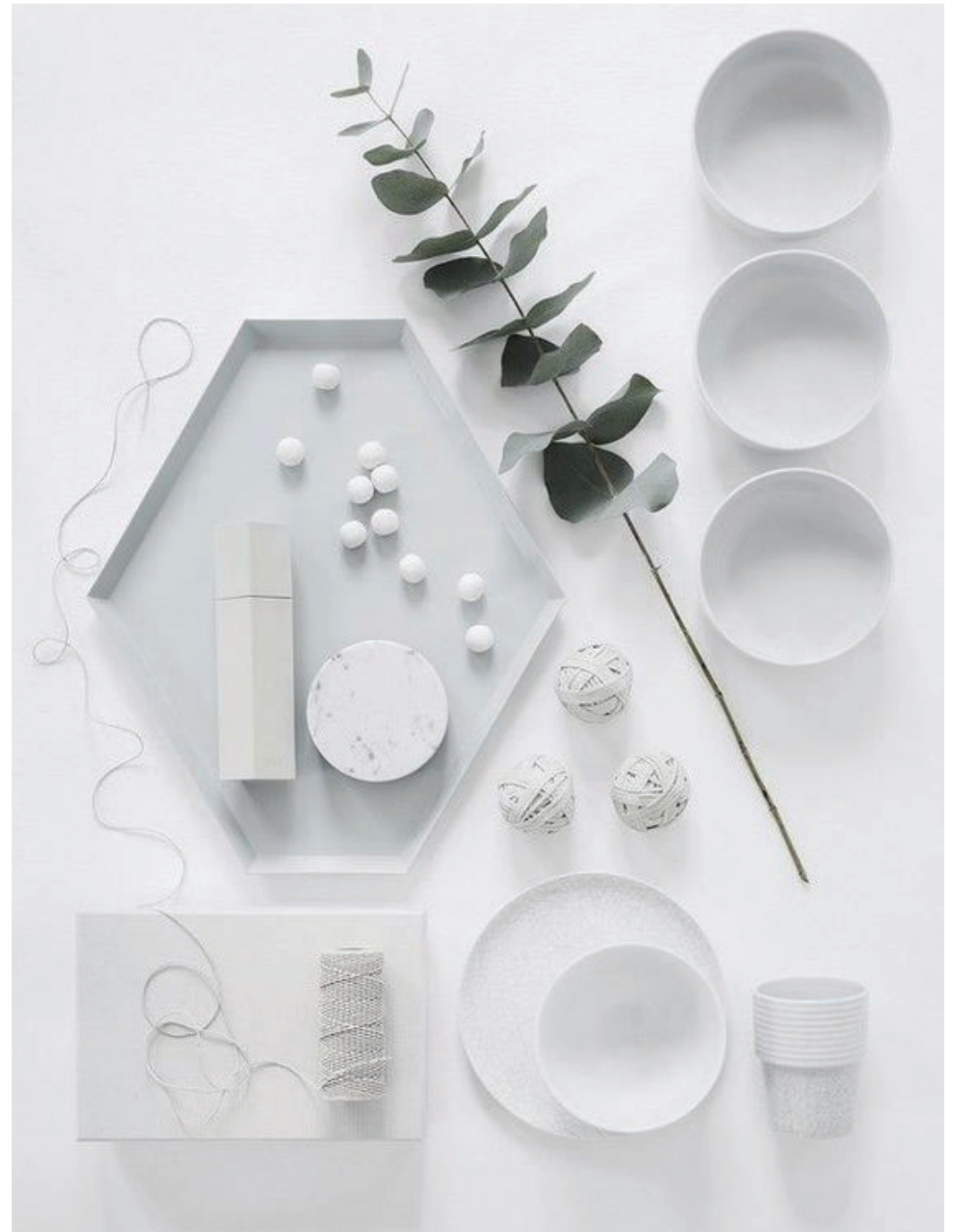
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01

Introduction



Statutory Approvals

1. Reading Borough Council is the recommended authority for Building Control approvals as they have full knowledge of the particular circumstances found at The Oracle. If an Approved Inspector is employed, the Retailer is responsible for ensuring that they are fully informed about the fire strategy and other circumstances at The Oracle.

2. Reading Borough Council Building Control will liaise with Fire and Environmental Authorities. However, it is the Retailer's responsibility to seek and obtain all necessary statutory approvals for their demise.

The Retailer will not be allowed to commence fitout without Building Regulations plans approval. If approval is given via an Approved Inspector and further evidence found by local BCO, then action will be required to be justified.

The Retailer will not be allowed to trade from the demise without a Building Regulations Completion Certificate.

3. It is the Retailer's responsibility to make contact with the Building Control Officer.

4. Planning Consent and Advertising Consent are required for new shopfronts and signage on units with external frontages.

5. There are a number of specific points, which have been agreed with Reading Borough Council. These points are not to be varied without agreement by Building Control:

- Retailer is required to provide a lobby at rear of the unit at where shop units face on to dead end service corridors and where shop units face on to service corridors which also form primary mall escapes.
- Access for the disabled must be provided by the Retailer, including ramps and staircases suitable for ambulant disabled and lifts as necessary.

Insurance Requirements

Before entry to the Centre, the Retailer must provide certification of the following:

a) Public Liability in the sum of not less than £10m in respect of any one claim.

b) Employer's liability (Compulsory Insurance Act 1969) not less than £10m in respect of any one claim.

c) In advance of the commencement of shopfitting on site, the Retailer should provide details of their public liability cover including:

- i Insurer:
- ii Policy No.
- iii Renewal Date.
- iv Evidence of Premium Payment.
- v Limit of Indemnity.

The Retailer should immediately inform the Retail Delivery Manager of all potential or actual claims, then inform all relevant parties.

In the event of any damage to the Landlord's property and/or loss of revenue as a result of the contract works, the Public Liability policy shall provide indemnity to the Landlord.

d) All risks on the contract works in progress including unfixed materials for the total reinstatement value including an allowance for professional fees.

e) Any works which involve the alteration of the current sprinkler system would need to be referred to the Landlord's insurers prior to any works taking place on the system. Please refer to the retail delivery manager for the insurers requirements and provide details of the works and drawings in accordance with Section 03 Sprinklers.

f) Professional Indemnity (required for the Retailer's Designer only) in the sum of not less than £10m in respect of any one claim, unless agreed otherwise with the Landlord.

Insurance of the Structure

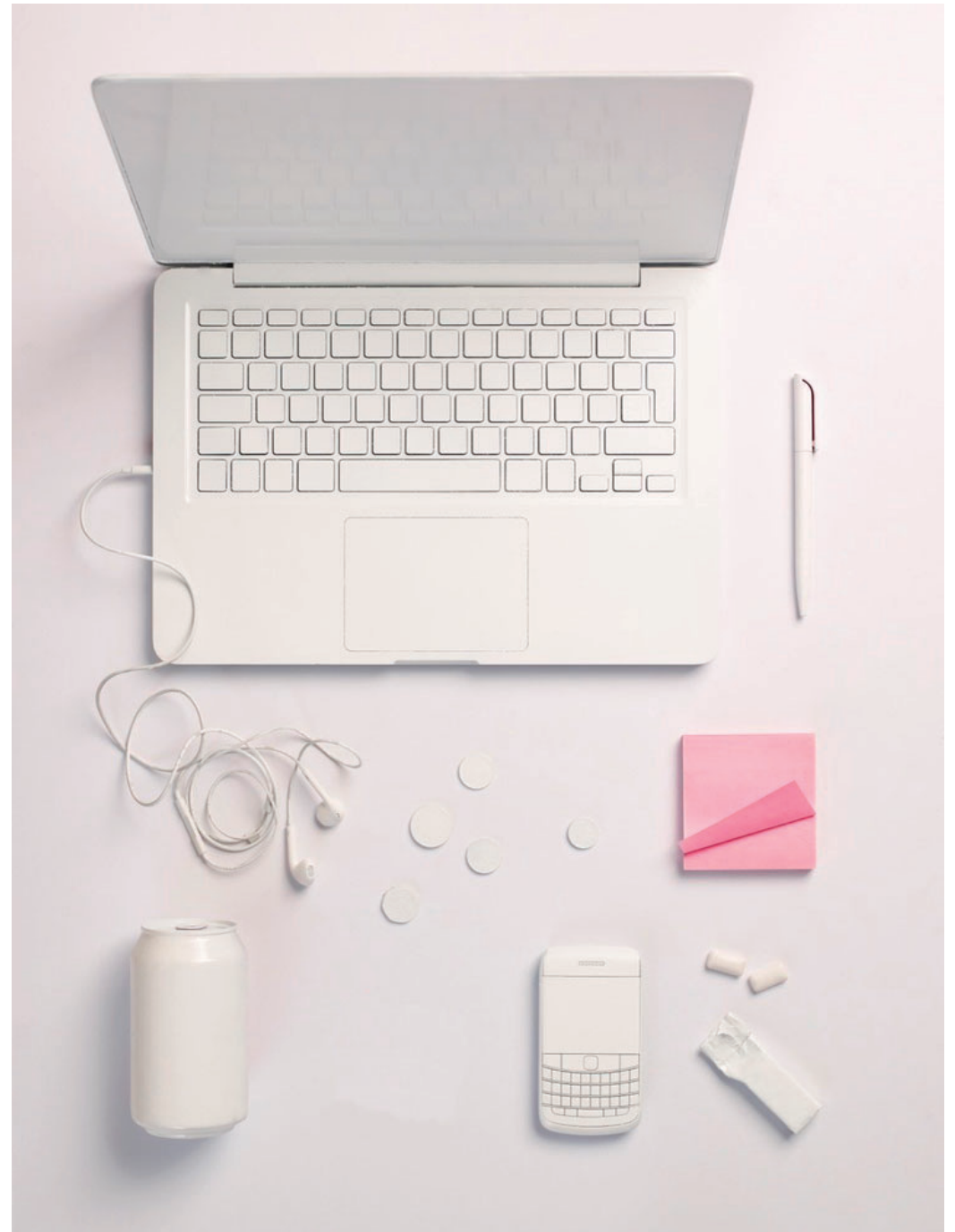
The Landlord will insure the structure (whether under construction or practically completed).

The Landlord's insurance provides cover for the Landlord only and will not extend to include the Retailer and/or their contractor.

The Retailer must ensure that their fitout contractor is aware that the existing structure is a third party risk and the contractor's public liability insurance is extended to include this additional risk.

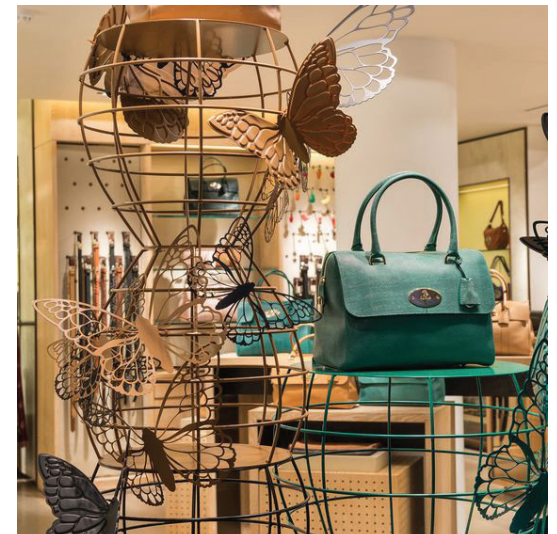
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Landlord's Provision



Introduction

The information provided in this part of the guide provides details relating to the design, construction and specification of the shopping centre and individual units. It sets out the extent of the Landlord's provision of services and fabric and describes the interface with Retailer's demised areas. Shop fitting designs must take account of, and integrate with the building fabric and specification so the integrity of each component part is maintained.



Unit Construction & Specification

Floors

Riverside Units

- **Suspended in situ reinforced concrete slab.**
- **7.5kN/m2 loading.**
- **2 hour fire rating.**

Upper and Lower Mall Units

- **Generally reinforced concrete/metal deck composite slabs on steelwork beams.**
- **5kN/m2 loading plus 1.8kN/m2 for screed/ finishes.**
- **2 hour fire rating.**

Mezzanine Levels

- **Lightweight or Precast Hollow Core Concrete Slabs, with loading up to 5kN/m2, subject to finalizing structural design.**
- **Half hour fire rating.**

Concrete floors are tamped in readiness to receive the Retailers floor finish.

Retailer must ensure regularity between unit and mall / service corridor floor levels, (where there is a level difference between the unit and the corridor, concrete ramps will be provided.)

The Retailer to provide suitable finish to mezzanine areas and provide access staircase, including means of escape as necessary.

Proposed openings in floor slab must be agreed with the Landlord and undertaken by the Landlord at the Retailer's expense. Locations should be established with the Landlord's design team.

Walls

Unit Division Walls

- **Generally plasterboard stud partitions (some are blockwork).**
- **Two hour fire rating.**

Service Corridor Walls

- **7N struck finish aerated concrete blockwork.**
- **140mm or 190mm thick.**
- **Two hour fire rating.**

External Walls

- **Internal leaf – 7N struck finish aerated concrete blockwork 140mm thick).**
- **Stability posts and head restraint angles protected to half hour fire resistance.**

No fixing to unit block walls permitted (apart from lateral restraints). Retailers must ensure and demonstrate sound insulation between units is adequate for the purpose of the particular trade to be carried out.

Please note security mesh has not been included within dry wall construction. If Retailers have a high security risk or concern the Retailer will have to make appropriate provisions.

Fire stopping and for integrity to service corridor walls and unit party walls must not be altered or removed. Modifications to partitions within units and fire protection to the steel work must be agreed in advance by the design consultants.

Unit Construction & Specification

Columns, Beams and Soffits

All columns and structural beams in external walls and within units are mainly enclosed in plasterboard to give two hours fire resistance. No alterations or fixings to columns and encasements will be permitted (other than fixing of shop fronts).

Except below mezzanines the soffit is profile metal decking designed to receive proprietary fixings. Only fixings designed for the floor will be allowed.

Below mezzanine floors the soffits are of lightweight construction or precast hollow core concrete slabs. Fixings into these soffits must be approved by Landlord prior to installation. No shot fired fixings allowed. Min 30 mins fire resistance to be maintained at all times.

Cinema and MSCP area floors are in lightweight concrete and therefore a secondary grid will be required.

Doors and Lobbies

- Fire resisting doors are provided to access service corridors/loading bays and as a means of escape. (Lobbies will be required to the service corridor at Retailers cost.)
- Specific details relating to door configurations in individual units are available from Centre Management.
- Rear doors to shop units are one hour fire resisting, FD60S, solid core, MDF faced primed ready for painting on the inside by the Retailer.
- Door frames are in hardwood and painted. Door furniture will consist of a cylinder rim night latch, zinc plated steel lift-off hinges, surface mounted bolts on double doors and the requisite "Fire Door" notices.
- Where there is no lobby, the Retailer is to confirm requirements with Building Control.

Plant Areas

- Louvred areas of aluminium construction are provided where plant is to be located within units at mezzanine level.
- Dedicated roof areas are provided where plant is to be located at roof level.
- Openings in the walls which form the boundary to British Telecom to the north of the centre are limited by Part B4 of the Building Regulations.
- Retailers may apply for additional openings up to a maximum of 0.1m².
- Any openings not utilized by the Retailer must be blanked off, including behind louvres.

Windows

- All shopfront or display windows will be the responsibility of the Retailer.
- Windows in external walls, other than shopfront or display windows must be as per the Landlords shell specification and will be to match existing.

Foul Drainage

Generally, a light weight 100mm diameter cast iron discharge pipe will be located within or adjacent to each unit fitted with single branch and boss connections as low as practical to the slabs. Depending on location a ventilation pipe connection may be left at high level. Where units are located at the lowest level, capped connections will be left at structural slab level.

Where applicable, the Retailer will be responsible for grease treatment/interception to protect the below ground drainage system.

Water

Shop units will be connected to the Landlords boosted cold water distribution system. The minimum pressure at the connection to each unit will be 1.0 bar.

The following Retailers are responsible for arranging their own direct mains cold water supply with the supply authority: Department Store A & B, L12, L13, R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, R11A, R12, R13, R14, R15, R15A, R16, R17A, R17B, R18, R19, R20, R21, R22 and U25.

The distribution pipe work will be installed with an end of line draw off point in a Landlord's area which will be in daily use.

Retailers will provide pulse enabled sub-meters located immediately outside their demise that can be easily accessed and read by the Landlord.

Water distribution installations by the Retailers must be in accordance with Thames Water Utilities requirements, the Water Regulations and the relevant British Standards.

All domestic services pipework and fittings fitted within a tenancy to be chlorinated by Retailer in accordance with BS6700 and HSE Guidance notes ACOP L8 and HSE (G)70. (Prevention or Control of Legionella).

Satisfactory documentary sterilisation system evidence to be provided to Landlord before Retailer is permitted to make final connection to the Landlord's services.

Electricity

The Retailer's electricity supplies shall be individually metered by the Retailer's chosen service provider. (Meters are located in centralised metering positions generally adjacent to Southern Electric substations at Riverside level.

The supply cabling generally of XLPE/SWA/LSF construction is provided by the Landlord from a dedicated fused switch within the centralized meter room terminating at the back of each unit in an appropriately rated isolator.

Each Retailer shall be responsible for the connection of an electricity supply and connection of meters, etc. and for compliance with the utility company's requirements.

Each Retailer should negotiate with their chosen electricity supplier directly.

Gas

A natural gas supply is available via the supply utility for department stores, large shop units and Riverside restaurants only.

Retailers should make their own arrangements for final connections from the mains and the installation of a pulse enabled meter which will be housed in the Retailer's demise.

Any gas supply installed by the Retailer must be completely in accordance with National Grid requirements, the Building Regulations and British Standards.

Telephones and Data

British Telecom (BT) has dedicated frame rooms at Riverside Level. The Landlord will provide multi-core CW1308 telecom cables and an independent BT cabling network. These emanate from central distribution frames located within the Riverside level frame rooms, terminating at the rear of the Retailer's unit at local distribution points (DP) for Retailer use.

Service Connections

Provided by the Landlord

Sprinklers

Sprinklers within units will be installed by the Retailer and will comply with the LPC regulations, BS EN 12845:2015 and the Landlord's Sprinkler System Drawing Approval Guide.

Supplies to units will incorporate a Landlord monitored stop valve with electronic test point. Each Retailer will install a water flow switch immediately after the stop valve.

The Retailer will install interface cabling from the flow switch to a position adjacent the Landlord's fire alarm system interface (FAI) and will employ the Landlord's fire alarm system specialist to terminate and configure final connections onto the Landlords system.

Fire Alarms

A defined cause and effect strategy will be adhered to by all fire and life protection installations within the Oracle. It will be the responsibility of each Retailer to provide and install standalone fire alarm and detection systems within their demise.

The Landlord provides a dedicated fire alarm interface point (FAI) at the rear of each Retailers unit for connection of Retailers standalone systems.

The Retailer's fire alarm system will be fully compatible with the Landlords fire alarm system and will provide and receive controlling inputs and outputs from the Landlords FAI.

Voice evacuation system (VES)

A defined cause and effect strategy will be adhered to by all fire and life protection installations within the Oracle.

It will be the responsibility of the each Retailer to extend the Landlord's voice evacuation systems (VES) within their demise.

The Landlord provides a dedicated VES interface at the rear of each Retailers unit for connection of Retailers systems.

The Retailer's VES will be fully compatible with the Landlord's VES.

Lighting Installations

Mall lighting has been designed as an integral part of the architectural design to provide a decorative, interesting, functional and compliant installation.

Toilet area lighting provides a service luminance of 150 lux by means of compact source fluorescent fittings. Service corridors lighting provides a service luminance of 150 lux by means of compact source fluorescent fittings.

Plant room and ancillary area lighting provides a standard service luminance of 150 lux by means of high efficiency standard fluorescent batten fittings. Electrical switch rooms and lift motor rooms provide a standard service luminance of 200 lux by means of high efficiency standard fluorescent batten fittings.

Emergency Lighting

Emergency lighting in Landlord's areas comply with BS5266-1.

Fire Detection

A comprehensive fire alarm system is installed generally in accordance with BS 5839 Part 1 to all Landlord's areas with a central control panel located within the Management Control Room. Provision is made for the connection of the Retailer's fire alarm system into the main Landlord's system via an interface unit located within the service corridor at the rear of each unit.

Public Address System

A central public address system is installed to provide zone fire alarm alert and evacuation announcements, taped music/advertising and manual announcements from the Management Control Room and remote strategic locations.

Closed Circuit Television (CCTV)

Closed circuit television systems have been installed to monitor the public areas, escape routes and service areas together with peripheral external areas and car parks.

Small Power

Socket outlets and power supplies have been installed throughout the public and service areas for display, cleaning and maintenance purposes.

Sprinklers

Sprinklers have been generally provided to Ordinary Hazard III including life safety recommendations in accordance with the requirements of BS5306-2 Building Control.

Escalators, Lifts and Staircases

Retailers are not permitted to fix any services to escalator soffits. Lift capacities and dimensions are available from Centre Management and must be adhered to at all times. Lift LC01 is sized to accommodate shopfitting works. No other lift is to be used.

Lightning Protection System

The Landlord provides a comprehensive lightning protection network BS EN 62305. Retailers are required to bond their plant to the centre's existing lightning protection system.

Generally

Retailer's are advised that in some instances Landlords' services are routed through units. The Retailer must inspect on site to ascertain the location, disposition and size of services. The Retailer must:

- Maintain adequate access to the services
- Not interfere with the services
- Not fix to the services

Where a two hour access panel is located in the Retailer's unit on the bulkhead the Retailer shall allow access periodically to allow the Landlord to remove these panels for access to the ductwork.

Drawing Information from the Landlord

Drawing information from Landlord

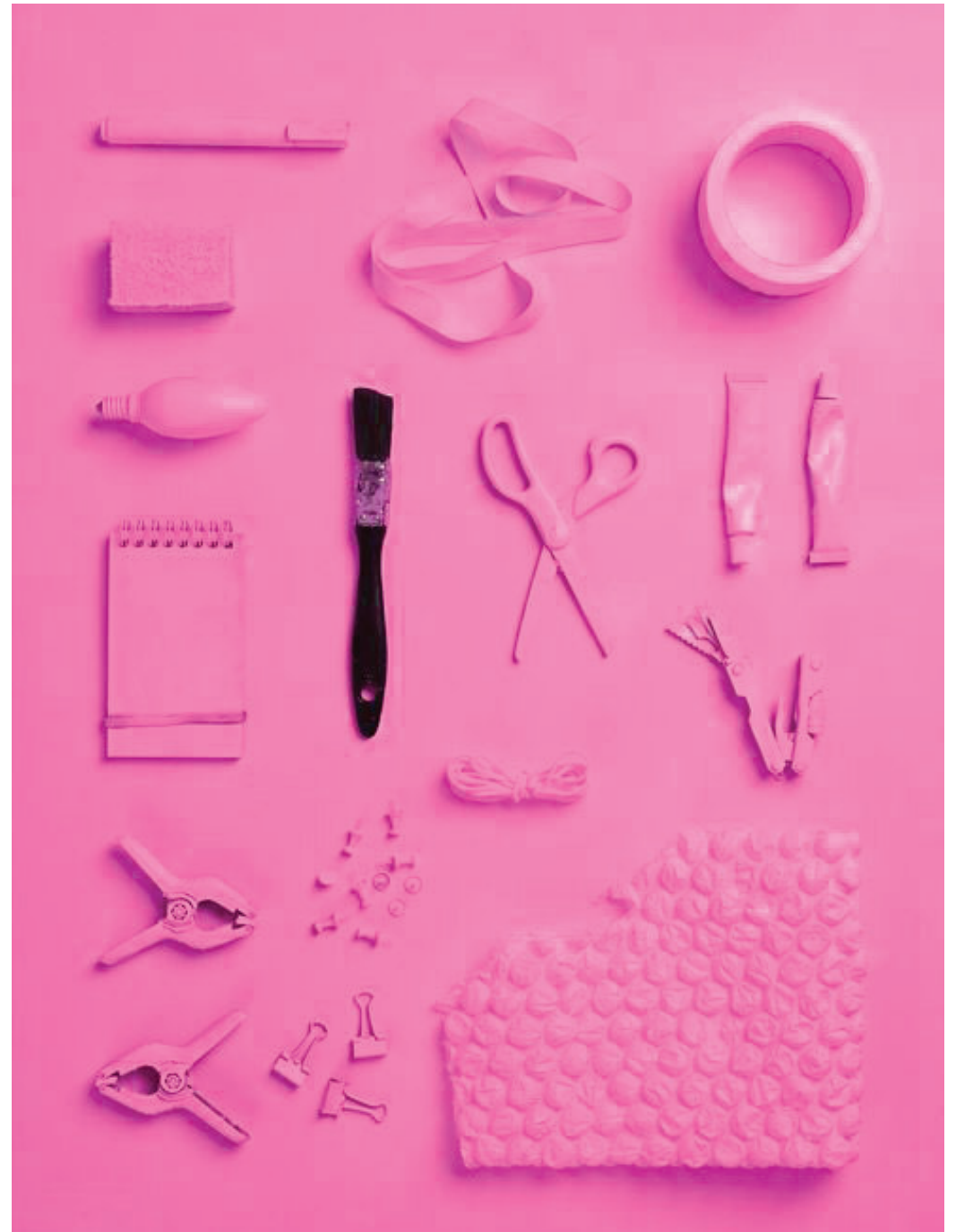
There are no Landlord's drawings included in this document. The Retailer's Design Team is to contact The Oracle Centre Management to view the existing H&S file.

Whilst every care will have been taken in the preparation of the H&S File, accuracy cannot be guaranteed. Retailers must undertake their own investigations, inspections, surveys and enquires.

Queries/Further Information Required

Please submit any queries or requests for further information that may be required to the specific specialist, copied to the Retail Delivery Manager.

Shopfitting Criteria



Introduction

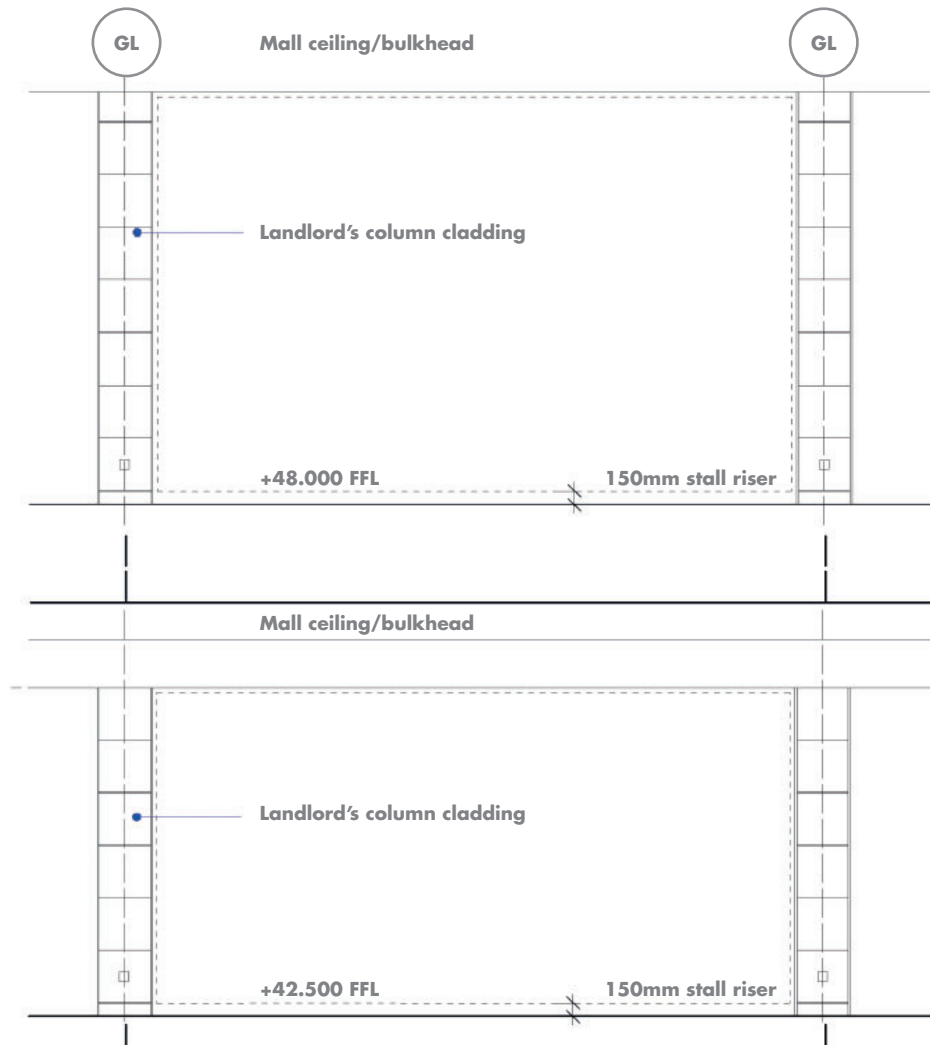
The criteria presented in this Guide are intended for use by all Retailers, including those who have a nationally recognisable shopfront design. The objective of the Landlord is to achieve a high level of design and quality, diversity and individual expression for Retailer's shop fitting.

The following sections have been written to focus on units with Mall presence. Where a unit has no Mall presence or has external shop fronts, the Retailer is advised to discuss the particular requirements with the Retail Delivery Team.

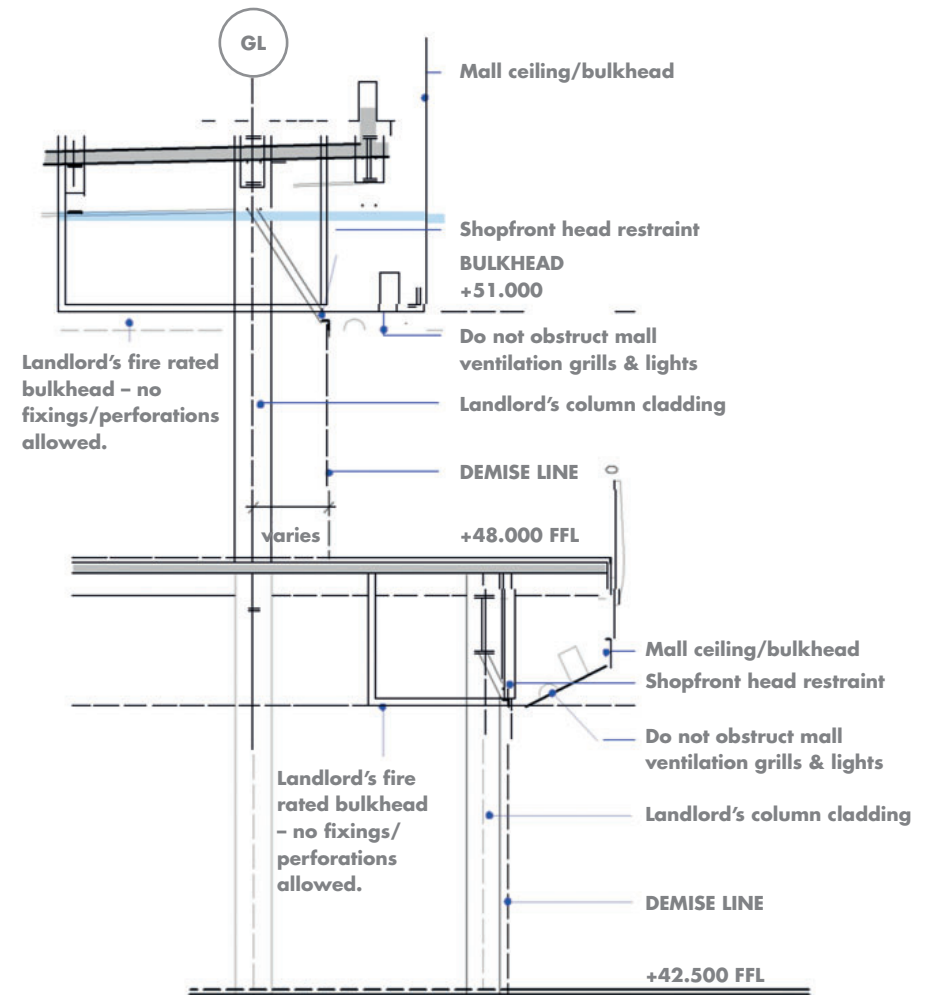


Shopfront Interface Details

Typical Elevation in Main Mall

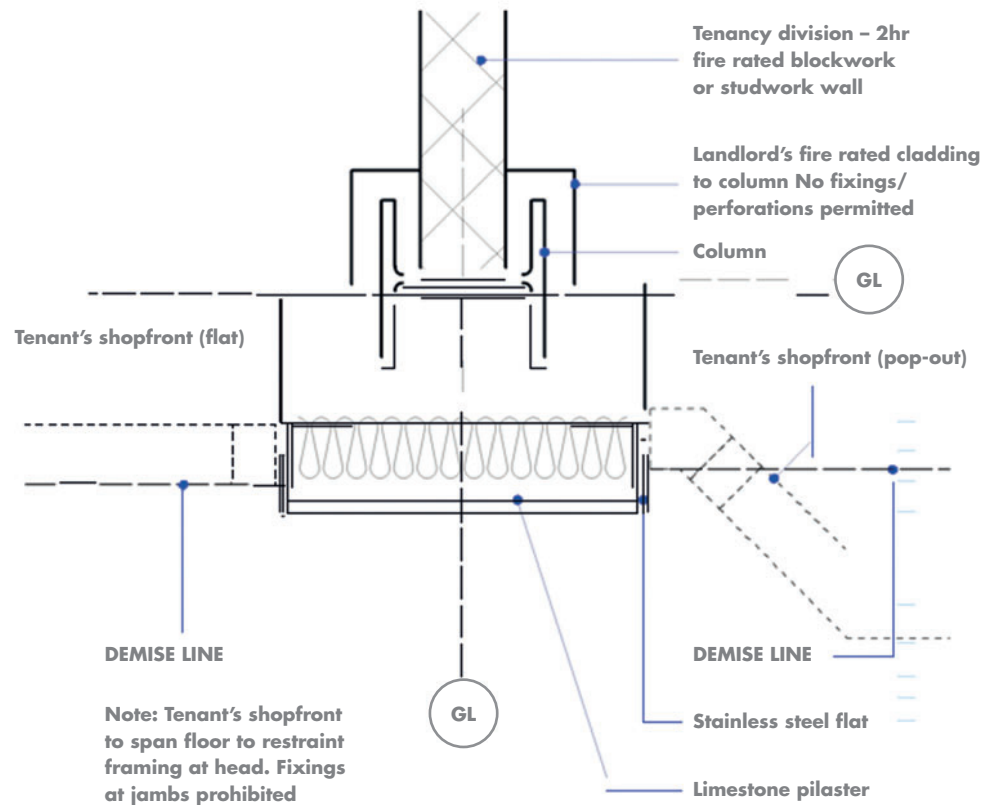


Typical Section Through Main Mall

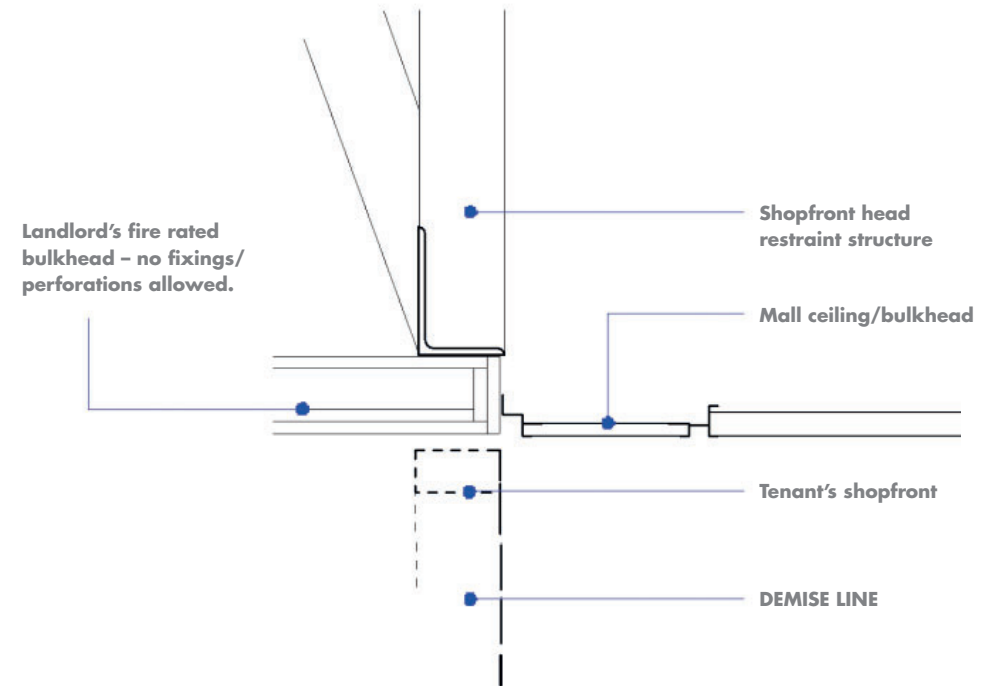


Shopfront Interface Details

Typical Pilaster at Tenancy Division in Main Mall



Typical Shopfront Head Detail



Minimum Retailer Requirements

Shopfronts, Signage and Fascias

All shopfronts in the Centre will be of the highest achievable design quality and are to meet the design criteria set out in the Fitout Design Guide.

- Shopfronts to units on the Upper Mall level are necessarily taller than in many shopping centres due to height allowance for a mezzanine level. The Retailer is encouraged to engage a shopfront specialist to incorporate the full height in their design.
- Exciting and imaginative design approaches will always be encouraged.
- Transparent shop front permitting views to the rear of the unit will be incorporated.
- A variety of planes in shop fronts to promote a three dimensional feel will be encouraged.
- Shop fronts should not emphasise the linear form of the malls.
- Consider imaginative positioning and geometry of display windows/ frontages.
- The standard High Street aluminium shop front framing design will not be permitted.
- All elements of the shop front are to have Class O surface spread of flame.
- Shop fronts shall not project in front of the unit demise line.
- Fascias and graphics must be designed to a high standard.
- Signage should respect and complement the atmosphere of the centre.
- Fire alarms, burglar alarms, etc., must not be located on the shop frontage.
- Retailers should provide a recessed fireman's switch discreetly mounted within the shop front where required.
- Internal shops will not erect signage on the external facade of the building.
- Shop front proposals must identify how smoke barriers are to be incorporated, where necessary refer to the section on Smoke Control.
- No projecting signs will be permitted.
- Rear Signage – signboard and ironmongery for rear service access shall be as the Centre's specification.
- Any shutters or grilles installed to shopfronts should comply with BS EN 13241:2003+A2:2016 and DHF-TS-012-2019-Code-of-Practice. They should be finished to a high quality with high vision through or by agreement perforated. All shutters must be regularly cleaned, serviced and maintained.

Please refer to the typical Landlord structure interface details shown overleaf.

Existing Shopfitting

Retailers who retain existing shop fitting elements including services when they take over a unit will be responsible for their full compliance with the Landlord's requirements and any statutory regulations.

Minimum Retailer Requirements

The Retailer shall not interfere with the fabric or structure of the building in any way, whatsoever, without the prior written approval of the Landlord. Work to the fabric includes, but is not confined to the laying of screeds, alterations, connection to services, the cutting of chases, small diameter holes and the like.

The Retailer shall not interfere in any way with the integrity of fire barriers (dividing walls/floor between the Unit and adjacent units or adjacent Landlord areas), structural fire protection, smoke curtains, fire protection services or protected escape routes. Specifically in the case of the external (rear) wall of each unit, while the Retailer may be permitted to make openings in the wall for passage of services, these openings must be adequately fire-stopped to maintain the 2 hour integrity of the unit wall construction. In seeking approval for such services penetrations, or for other works which may affect the integrity of fire barriers around the unit (e.g. external walls, dividing walls, floors, wall between unit and services corridor), the Retailer shall submit proposed details of fire stopping/fire resisting construction with supporting fire test documentation as part of the Building Regulation Submission.

Surface Spread of Flame

All materials facing the Mall circulation routes must comply with the European classification for fire spread Class B-s3,d2 (old National Class 0), except shopfront framing as provided for in BS9999.

All surfaces within the units must comply with Euro Class C-s3,d2 (old National Class 1).

The Retailer shall ensure the fitout does not obstruct Landlord services, access panels, vents, outlets, etc.

Environmental Policy

Retailers should comply with "Hammerson Plc" Environmental Policy and Management. Retailers should be encouraged to improve their environmental ambitions.

The Retailer should demonstrate the consideration of the usage of sustainable products as part of their fitout proposals.

The usage of re-cycled products from sustainable sources and an environmentally friendly waste disposal strategy would be encouraged. Please see Hammerson Tenant's Sustainability Guide and Requirements.

New Shopfront and Interior

The following requirements are all subject to the Landlord's approval and must comply with all Building Regulations and other statutory authority requirements.

Glass

All shopfront glazing must comply with BS 6262. Laminated glass is preferred to toughened glass as it retains its form when fractured. However toughened glass may be required for smoke control where applicable. All toughened glass should be heat soaked to BS EN 14179.

Shopfront Stability

Shopfront glazing must be designed within the maximum deflection criteria of BS 6180, under horizontal imposed loads as set out in BS6399-1. The maximum permitted deflection is 25mm. This will determine the thickness of glass used and in the majority of cases, frameless joints in glazing will require support fins or equivalent.

Manifestation

Manifestation is required to shopfront glazing in accordance with Building Regulations Part M.

Frameless glass doors and reveals

Frameless glass doors and reveals must have appropriate manifestation for partially sighted.

Minimum Retailer Requirements

Staircases

All staircases should be elegantly designed with carefully detailed balustrades and must comply with current Building Regulations, including Part M for ambulant disabled staff and public.

Balustrades

Balustrades to staircases and galleries should be designed to accommodate appropriate loadings from BS 6399-1, Table 4. Bolted or edge fixed glass infill panels should be designed in accordance with BS 6180.

Where frameless 'structural glass' balustrades are required, laminated safety glass to BS EN 12543 should be used, comprising one pane of glass and one pane of heat-strengthened glass.

Monolithic annealed or toughened glass should not be used. The clamping detail at the base of the balustrade should be carefully designed and details submitted to the Landlord's Structural Engineer for comment.

Access and facilities for the disabled

Building / shop fitting work must comply with Approved Documents M Access Facilities for the Disabled and the Equality Act 2010. A level access will be required into all shops and a staircase suitable for ambulant disabled persons, lifts and WC facilities depending on the size, location and configuration of the particular shop unit.

Wheelchair accessible cashier points

Cashier counters should include suitable sections designed for use by wheelchair using customers.

Wheelchair refuges

Where indicated on the Letting Plans, the Retailer is to provide a wheelchair refuge within the unit in accordance with BS9999. Arrangements for providing intercoms to refuges if required by Building Control are to be discussed with Centre Management.

Audio reinforcement

Approved audio loops should be incorporated into cashier counters with the appropriate signage. Staff should have the facility to turn down the volume of PA systems while serving customers with hearing difficulties.

Lifts

To comply with current part M of the Building Regulations.

Walls /partitions

Must adhere to the required fire rating and Class 1 surface spread of flame requirements. Stability posts and head restraint angles must be protected to half hour fire resistance. No fixing to unit blockwalls permitted (apart from lateral restraints). Stud wall structure to be fixed down to slab.

Doors

Maintain fire rating and means of escape purposes. Incorporate relevant statutory, means of escape, safety signage and emergency exit ironmongery. Include for a lobby at the rear of the unit where required.

When occupying a unit that was previously fitted out by another Retailer, new tenants must ensure that the existing locks are changed for security and insurance purposes.

Fire exit doors

Fire exit doors from retail areas should not be mirror faced and should be readily identifiable, internal fire exit doors must incorporate a vision panel to Building Regulations Part M requirements.

Lobby

Where required by Building Control, the Retailer is to provide a fire rated lobby within the demise, as protection to the rear service corridors. Ensure all penetrations for services are fire stopped and the fire escape route is kept clear at all times.

Ceilings

Imaginative ceiling design is encouraged, plus the ceiling facing the mall should comply with the requirements given in Design Guide. Integrate with smoke control requirements as set out in the Fire Strategy and with the mall ceiling height.

Minimum Retailer Requirements

If there is a solid ceiling in the unit, access hatches must be installed to all ceiling void spaces to ensure access for maintenance/repair to any services including lighting transformers.

If there is a solid ceiling in the unit, access hatches must be installed to all ceiling void spaces to ensure access for maintenance/repair to any services including lighting transformers.

Lighting

Exciting and inspirational lighting design is encouraged. Comply with CIBSE Guide, Codes of Practice and Document L of the Building Regulations. LED lighting should be used where ever possible.

No naked fluorescent or cold cathode tubes will be allowed in the mall without prior approval from the Landlord.

Lighting for halo illumination and coving should be continuous, even and concealed. No neon or cold cathode is permitted.

Projections will be permitted as long as no visual disturbance is caused.

Lighting to units should be between 200 and 1400 lux in shop display windows and 1000 1400 at entrance

Sufficient lighting to be incorporated for safety purposes for out of hours use.

Emergency lighting will comply with BS5266-1.

All mall kiosks must install only ELV lighting.

Colour Contrast

Retailers should incorporate suitable colour contrast into their designs to assist partially sighted customers and staff navigate around the unit.

Acoustics

The fit out of the unit shall be constructed such that the Retailer can operate with the required internal reverberant noise levels without exceeding any Local Authority noise emission criteria and not exceeding any noise intrusion criteria imposed by other adjacent or nearby occupiers.

Should the Retailer operate substantially outside of permitted noise levels to the extent that noise disturbance is expected to be experienced outside of the unit, the Retailer will be required at their own cost to install sound insulation measures to reduce the noise levels experienced externally down by the corresponding amount. The Retailer must confirm this to the Landlord before fitting out commences.

The Retailer should ensure that it provides some form of surface treatment to mitigate the impact noise from footfall.

Compliance with Noise Levels Externally

In accordance with the Local Authority's requirements, maximum plant emission levels should be set to control fixed building services plant to an acceptable level and retailers are to ensure that proper precautions are taken in plant design and fixing to avoid undue structural and airborne noise transmission at all times.

The Retailer will be responsible for designing their internal layout in such a way as to prevent noise breakout exceeding the Local Authority criteria. Door lobby spaces should be provided to combat noise breakout when any external doors are opened.

Finishes

Must be to the high standard commensurate with the centre as a whole.

Deleterious Materials

A list is available upon request.

Rear Signage

A Landlord's specified signboard will be positioned on the rear door to the service corridor for rear service access.

Services to be Provided by Retailers

Foul Drainage

Retailers shall be responsible for the installation of foul drainage systems within their demise, all to be appropriately suspended.

The Retailers shall protect Landlord's systems from blockage or damage. Any damage caused shall be made good at the expense of the Retailer in whose unit it originated.

All new installations and Sanitary Accommodation shall meet all Building Regulations and Health requirements.

Where applicable, the Retailer will be responsible for grease treatment/interception to protect the below ground drainage system.

Tenant must ensure design allows for routine access into Landlord's drainage stacks and must not be obstructed or boxed in unless suitable access arrangement is provided.

Water

Retailers shall apply for a water supply from the water supplier or Landlord and provide a pulse enabled water meter for installation, on the valved water connection located in the service corridor at the rear of the shop units.

Retailers shall be responsible for installation of a water distribution system from the metered connection and within their demise.

The Retailer's installation shall be in accordance with The Water Regulations. All Domestic Services pipework and fittings fitted within a tenancy shall be chlorinated by the Retailer in accordance with BS6700 and Health and Safety guidance note ACOPL8 & MSE(G) (Prevention or Control of Legionella).

Satisfactory documentary evidence of the sterilisation system must be provided to the Landlord before the Retailer will be permitted to make final connection to the Landlords service.

In order to reduce the risk of exposure to Legionella as required by the Health and Safety at Work Act 1974 (HSWA), the Retailer shall carry out a water risk assessment prior to opening and this must be maintained for the duration of the occupancy. Please visit the HSE website <https://www.hse.gov.uk/legionnaires/what-you-must-do.htm#identify> to understand the requirements.

Maintenance Access

In certain units, the Retailer will be required to provide access to services – rodding to soil and rain water pipes, fire damper reset hatches and smoke mechanical ventilation dampers and motors. The Retailer's fitout design must allow safe access to these positions.

Electricity

Retailer's installation to include mains distribution and switchgear fed from the main incoming supply isolator, comprising of all circuit wiring, switching, lighting and any specialist equipment required.

All Retailer's electrical installations shall comply with:

- NICEIC regulations
- Health & Safety at Work Act
- Current Building Regulations

All cabling shall be carried out in low smoke and fume rated cabling. Flying leads greater than one meter will not be permitted.

All cabling must be contained in:

- a) Conduit (metal) or
- b) Trunking or
- c) Tray (metal) with cabling supported at a suitable pitch

Units are designed to accommodate electrical loadings of 120W/m² of retail floor space and 50W/ m² of mezzanine storage space. It will be the Retailers responsibility to provide installations which are designed to operate within these constraints. Any request for the provision of a larger electrical supply must be accompanied by a complete loading schedule.

The Retailer must meet the costs of providing upgraded supplies. The upgrading of supplies to Retailers units will be carried out by the Landlords nominated contractor.

Services to be Provided by Retailers

Lightning Protection

The Retailer must earth their exposed plant to the Landlord's Lightning Protection system in accordance with BSE1062305 and provide certification.

Gas

Retailers should make their own arrangements for final connections from the mains and the installation of a pulse enabled meter which will be housed in the Retailer's demise. The Retailers shall extend the gas service left terminated either in the meter room or in the service corridor adjacent to those units provided with gas. The Retailers installation shall be by a Gas Safe registered installer in accordance with the requirements of the Gas Safety Regulations and National Grid requirements.

The Retailer will be responsible for the installation, if necessary, of any emergency gas solenoid shut off valves. The Retailer shall apply for a gas supply and meter.

Telephone and Data

Telephone cabling has been provided by BT.

The Retailers must obtain Landlord's approval and any necessary wayleaves prior to a service provider carrying out the installation work.

Audio Systems, Public Address and Voice Alarm

Audio systems within the unit must not exceed a sound pressure of NR45 at the shopfront.

Where the Retailer provides and installs a separate stand alone public address or voice evacuation system as part of the fit out works, then the system shall be designed to allow control from the Landlords main system.

The interconnection between the Landlords and Retailer systems shall be via an interface unit located at the rear of each unit.

The Retailer's public address installation shall interface with the Landlord's system such that in event of a fire condition the Retailer's non-essential broadcasts are silenced via the Retailer's fire alarm system.

Where the Retailer has provided a full voice evacuation system then the Landlord's system shall silence any broadcasts in favour of the Landlord's pre-recorded emergency and evacuation messages via the Retailers amplification equipment.

Wi-fi

The Landlord recognises that many of its occupiers may wish to employ wireless technologies and all occupiers are to comply with the Landlord's Fair Use Wi-fi policy which details the requirements and guidelines to assist the occupier in deploying wireless systems successfully, whilst being a good neighbour and not impacting other services.

The primary aim of this is to improve the co-existence and performance of wireless systems at the respective premises, for the benefit of all Retailers and customers.

The Retailer must not install or operate any equipment or antenna outside of the leased premises, unless permitted by the Landlord.

Wireless access points must use internal antennas only or the standard antennas provided with the equipment if the seating area is exposed to the elements. Any exceptions must be brought to the attention of, and approved by, the Landlord.

Unless operational necessity is required, Retailers must "hide" (not "broadcast") all SSIDs (wireless names), except for those SSIDs which may be offered for use by the Retailer's customers. This is to reduce the number of SSIDs listed in all Wireless devices and is intended as a convenience to all customers and members of the public. SSIDs that are not hidden for operational reasons, must all start with the prefix Z to place them at the bottom of the available Wi-Fi listing.

The access points must be installed at least THREE meters from the entrance (or placed at the rear of the unit if less than 3m) in order to limit Wireless bleed impacting other occupiers and/or the Landlords' Wireless services.

Kiosks/remote seating areas/RMU spaces are requested to manage the signal strength of the access point(s) ensuring the wireless service is not broadcast outside of Kiosks/remote seating area/RMU spaces by more than TWO metres.

Services to be Provided by Retailers

The Landlord will have the right to request remediation if tenants, actions fall outside of the Policy. Should remediation work not be completed, then the Retailer will be given notice to bring back in line with the policy within 14 working days. If remediation is not completed within the above timeframe the Landlord will instruct for a site audit to be completed at the Retailer's cost.

It is recommended that Retailer's operational Wi-Fi is turned off outside of operational hours in order to lower the cyber security risk.

Retailer Plant Areas

Each Retailer is responsible for the supply and installation of all heating, ventilation and cooling systems to meet statutory requirements and maintain comfort conditions within their demise. The Retailer's installed roof top plant must meet the following noise suppression requirements as adopted by the Landlord:

1. Air handling units 45db measured at 3 metres from source.
2. Heat rejection plant 45db measured at 3 metres from source.
3. Supply and exhaust fans 45db measured at 3 metres from source.

No air is to be taken from or discharged into the mall (except for kiosks).

The Retailer must ensure its services are only installed in the designated areas.

The Retailer shall not modify or penetrate the roof finish. Retailers' plant shall be bolted to paving slabs within the Retailer plant area on the roof. The use of padstones or raised concrete plinths must be agreed with the Landlord prior to work commencing.

Concrete bases must allow the roof to drain as designed and must be of a depth so that mechanical fixings do not penetrate the asphalt below.

Air supply and extract ducts, cables and pipework from the unit to roof mounted plant must be routed via the dedicated riser and fully weathered at roof level.

Retailers shall ensure that unused ducts are sealed with a permanent weather proof cover compatible with the Landlord's roof finishes.

The colour and appearance of plant will be controlled in exposed locations to the Landlord's satisfaction.

Sprinklers

The Retailer shall install a sprinkler system within their demise from a connection provided by the Landlord.

All sprinkler contractors are to either be Certified or Registered to Loss Prevention Standard (LPS) 1048 and be ISO 9001 Quality Assurance certified.

The installation must comply with the LPC regulations, BS EN 12845:2015 and the Landlord's Sprinkler System Drawing Approval Guide. Please note the Landlord's areas are generally designed to meet BS 5306 Part 2 Ordinary Hazard Group III.

The installation of the sprinkler is to be completed and approved before combustible materials are delivered to the unit.

The Retailer must provide all relevant test certificates prior to connection onto the Landlord's system.

Charging up of shop unit sprinkler installation is to be carried out under the supervision of the Landlord/Centre Management and following notice in advance of this date. The Fire officer must be notified. Under no circumstances is the Retailer to operate the isolating valve located in the corridor.

The Retailer shall employ the Landlord's sprinkler specialists to provide the necessary attendance during the 'charging up' of the shop unit sprinkler installation.

Sprinkler supplies to shop units will incorporate a monitored stop valve. Each Retailer shall install a water flow switch after the stop valve, connected into the retail unit interface box, so that the fire alarm system will know the location of an activated sprinkler system. The Retailer shall be responsible for installing a test point drain facility within their demise.

Services to be Provided by Retailers

Quick response sprinkler heads shall be utilised, therefore concealed heads must not be used.

The Retailer is encouraged to integrate the range pipework within the fitting-out and to minimise the amount of exposed pipework visible in retail areas. This is particularly relevant to void areas behind the shopfront and under open plan staircases.

High temperature (286 degree) sprinkler heads are to be used in kitchen areas to avoid false activations.

Fire Alarms

Retailer's units shall be protected by a standalone fire detection and alarm systems in accordance with BS5839 Part 1 and BS9999, category L1/P1, which shall be provided and installed by the Retailer.

All installations are to be Loss Prevention Council (LPC) approved and to be undertaken by an LPC or BAFE approved installer to LPS 1014.

The Retailer's system must be compatible with the Landlord's system and shall interface with the central system to provide alarm indication monitoring and central control of zoned alert and evacuation alarms.

The Retailer will provide a fire alarm interface within the service corridor at the rear of each unit to allow for interconnection between the Landlord's and Retailers' systems. Provide a zoned diagram or floor plan adjacent to the fire alarm panel.

The Retailer shall provide a test certificate for the system before connection to the Landlord's interface unit will be allowed.

The Retailer shall provide a water flow switch to monitor sprinkler installation within the unit. The flow switch shall be connected to the Landlord's fire alarms interface unit via the Retailer's own fire alarm panel.

The following interfaces shall be provided:

- Retailer to Landlord
- Landlord to Retailer
- Fire alarm signal
- Fire Emergency Alert Signal
- Retailer Fire System Fault
- Fire Alarm Evacuate Signal
- Retailer Fire System Test
- Retailer Fire Alarm Reset Signal
- Sprinkler System Activated Voice Alarm Signal
- Sprinkler System Fault Audio Input

Final connections and commissioning of the systems interface shall be carried out by the Landlord's Specialist Contractor at the Retailer's cost. The Retailer must give fourteen day's notice to complete these works.

The Retailers fire alarm system will be fully compatible with the Landlord's fire alarm system and will provide and receive controlling inputs and outputs from the Landlord's FAI as follows:

Outputs from Landlord's FAI to Retailers panel

1. Silence Retailers fire alarm sounders.

Inputs to Landlord's FAI from Retailers panel

1. Retailer's fire alarm system fault
2. Retailers fire alarm system alarm

Voice Evacuation System

It will be the responsibility of each Retailer to extend the Landlord's voice evacuation systems (VES) within their demise complying fully with the relevant British Standards and the British Fire Protection Code of Practice for the Design, Installation and Systems Association Servicing of Voice Evacuation Systems Associated with Fire Detection Systems.

The Retailer's voice evacuation system (VES) will achieve a minimum sound pressure level of 10dB above typical ambient noise level of 65dB.

The Retailer will provide automatic shut down to noise generating equipment, such as music systems, upon the broadcast of VES messages.

The Landlord provides a dedicated VES interface at the rear of each Retailers unit for connection of Retailers systems.

The voice evacuation system will be fully compatible with the Landlord's voice evacuation system.

Services to be Provided by Retailers

The Retailer will install twin fire rated VES speaker circuit cabling to a position adjacent the Landlord's VES interface unit and will employ the Landlord's VES specialist to terminate final connections onto the Landlord's system.

Provide a zoned diagram or floor plan adjacent to the fire alarm panel.

Smoke Control

The Fire Strategy includes the requirements for smoke control in the centre. Due cognizance of this must be taken by the Retailer in the design of their unit: full compliance is a requirement of the Landlord. The report may be obtained from the Retail Delivery Manager or Centre Management.

The Retailer shall include smoke barriers (if necessary) in accordance with the Building Regulations and the Fire Strategy and shall install a smoke detection installation within the unit.

The mall is provided with a mechanical and natural smoke extraction system complying with the principles contained in the BRE report 'Design principles for smoke ventilation in enclosed shopping centres'. The smoke control zones will correspond with the mall evacuation zones.

The majority of shop units are permitted to ventilate smoke from the unit into the mall although certain MSU's require their own ventilation system in accordance with the Fire Strategy.

CCTV Systems

All occupiers (including mall kiosks) who wish to install their own CCTV systems must firstly carry out a Data Protection Impact Assessment (DPIA) ensuring that they have considered public privacy issues and matters such as how long they will keep any recordings, procedures to be formatted if they have any Subject Access Request (SAR's) for the material which may emanated from the police or members of the public.

It may be required to register with the ICO (information Commissioners Office) and pay a data protection fee <https://ico.org.uk/for-organisations/data-protection-fee/>

All installations must comply with the Home Office Surveillance Camera Code of Practice which details that the system will need to be proportionate, registered and that clear signage needs to show that it is in use and the reasons for its instillation. All occupiers must put in place their own maintenance package which should include updates and licenses.

Cameras are not be allowed pan to cover areas of the centre and the cameras must be fitted with 'nannies' to protect the material that would be captured relating only to the Retailer's premises.

Connection of Retailer's Services to Landlord's Systems

Connection of the services installation to Landlord's systems will not be allowed without first having forwarded to the Landlord's Retail Delivery Manager all relevant test certificates and consequently receiving written approval to proceed from the Landlord's Retail Delivery Manager.

Means of Escape

Consultation with relevant statutory authorities is essential. All statutory fire, means of escape and safety signage required by Building Control within the unit is the responsibility of the Retailer.

Under the Fire Strategy the primary means of escape from shop units is via the Mall; with secondary escape to the rear. The primary means of escape from the upper levels of units is via an escape corridor at that level.

Services to be Provided by Retailers

General

The Tenants shall seek and obtain all necessary statutory approvals for his demise.

- The Tenant shall ensure that if a Specialist Contractor is employed that they are fully aware of the fire strategy and other circumstances within the site complex.
- The Tenant will not be permitted to commence fitout without Building Regulations Approval where required.
- The Tenant will not be permitted to trade from the demise without a Building Regulations Completion Certificate.
- Tenant concept designs shall be submitted for review by the Landlord's retail delivery Manager for comment.
- Tenant Final designs shall be submitted for review by the Landlord's retail delivery Manager for final approval.

Pre-Start Activities

The Tenant shall prepare and provide the following information prior to commencement of any site activities:

- Health and Safety plan including: Fire Risk Assessment, Site specific Method Statements and Risk Assessments for main and sub-contractors works.
- Written confirmation of insurance details. (Public Liability Insurance & Employer's Liability (Compulsory Insurance Act 1969).
- Confirmation that CDM regulations have been complied with.
- F10 notification (if applicable) to HSE.
- Building Regulations approval.
- 24 hour contact list and project directory
- Scope of works.

Specific Requirements for Restaurant Retail Units

Fat, Oil & Grease (FOG) and Food & Solid Waste Management Specification

The term FOG is used to define material which is either liquid or solid, composed primarily of Fat, Oil and Grease from animal and vegetable sources. It is generated by the preparation and cooking of food and serving of dairy based drinks and subsequent plate scraping and pot/ware washing. FOG and food/solid waste must be treated, reduced and removed from the wastewater in any area in which it is generated to avoid it entering the Landlord's drainage system.

Kitchen wastewater is complex, with components that float and sink, added to which is the issue of differing water temperatures of the discharge, plus the rate of discharge and impact of detergents. Effective FOG removal is also affected by the residence and contact time within the recovery equipment, so by maximising the time that a system has to work on the wastewater will improve the effectiveness of the FOG recovery.

OVERVIEW

For sites involved in the preparation and/or sale of food and/or drinks, it is mandatory that FOG trapping and/or recovery equipment is fitted to cover all sources of contamination in the wastewater leaving the demise to prevent fat, oil and grease (FOG) from entering the Landlord's drainage system.

Additionally, all sources of wastewater from kitchen/preparation areas which are not identified as 'FOG contamination points' or protected by suitable FOG management systems, must be protected with in-line food/solid waste filters to prevent food and solid waste from entering the Landlord's drainage system.

FOG trapping equipment shall be fitted to cover all lines which will be used for conveying kitchen wastewater. Once installed the equipment shall be maintained to a high standard by a specialist licensed contractor and service records shall be kept on site for auditing by the Landlord and any representative of the landlord permitted to complete FOG reviews. In addition, site staff shall be trained to check the equipment on a daily basis to ensure its full operating efficiency is maintained.

Owing to the design of the drainage and the usage, discharge of any FOG into the Landlord's drainage system will not be permitted. If this does occur the Landlord will seek to recover costs for any blockages, contamination or damages which arise from FOG discharged from unprotected lines in addition to imposing remedial works within the Tenant's demise prior to permitting food preparation operations to recommence.

FOG SCHEME APPROVAL, SITE EVALUATION & FOG AUDIT

Any item of equipment in a food service operation, including those that do not have a direct water connection, has the potential to contribute to FOG entering the drainage system and so must be taken into consideration

when designing a robust FOG management scheme. This shall include (non-exhaustive list):

- Combination ovens, Steamers & Rotisserie ovens
- Wok cooking stations
- Dish and pot washer machines
- Washing machines – where greasy cloths/clothes are cleaned
- Sinks
- Floor gullies* – receiving wastewater from floor cleaning regime
- Beverage equipment – where dairy product or coffee residue are sent to drain
- Ventilation system (including cooker hoods, soot abatement and spark arrestor hoods) incorporating a drain for water wash down.

*Note

Floor gullies receiving FOG from the cleaning regime or residue from bratt pans, boiling pans/kettles, ovens, cookers etc. are not permitted unless they discharge into a grease recovery unit, this may require addition of in-ground/in-slab pumps; note this is subject to prior agreement with the Landlord. Floor gullies shall have lockable covers to prevent misuse and capture any food particulate.

Specific Requirements for Restaurant Retail Units

The kitchen designer shall ensure that all areas of the kitchen which can generate FOG are identified early in the design process. Consideration shall be given for how the FOG will be removed from the wastewater, based on the drainage connections that are available to the Tenant's demise and route through the kitchen.

An independent FOG scheme review shall be carried out on behalf of the Landlord at the design stage and following a review of plans, the minimum FOG management requirements will be set out. FOG management plans must be approved prior to implementation and store opening. A FOG scheme verification survey will be carried out before trade commences. The survey will determine the selection and location of FOG management equipment within the kitchen, compliance with the legislation and Landlord lease agreements and the maintenance procedures and training in place. The cost of the audit shall be borne by the Tenant. The audit shall be carried out by the Landlord's approved FOG audit consultant.

Once trading the landlord may at any time, with adequate prior warning, request an independent FOG consultant to complete FOG scheme reviews to ensure effective operation of equipment and sustained maintenance procedures. This may form part of the quarterly tenant inspection process and any areas identified as requiring improvement will be highlighted for remedial action, which must be completed within 30 days.

Equipment Solutions

FOG best management practices will typically involve a combination of product types to maximise the removal and treatment of FOG prior to discharge of wastewater to the drains. Care and professional advice should be taken when combining discharges into a common FOG management device, as combining for example a plate scrape sink waste with a dishwasher waste could result in the hot emulsified water from the dishwasher reducing the effectiveness of the FOG management device to separate the grease. Additionally, the FOG management device selection for hot waste discharges (i.e. dishwashers) shall be carefully selected to allow sufficient residency time for the waste to cool and grease to separate prior to the wastewater discharging to drain.

The equipment types and their recommended applications are as follows:

Passive grease separators:

A passive grease separator/grease trap is a passive device which works by slowing the water flow rate allowing the FOG to rise to the surface. The FOG is retained within the unit by baffles, whilst food waste drops to the bottom of the tank and wastewater flows away to drain.

Sizing of this type of unit is dependent on the residence time required for the wastewater to cool and water flow rate to slow sufficiently for the FOG to rise to the surface. This type of unit requires regular cleaning out, servicing and maintenance by licensed contractors to deal with the waste product.

Grease removal units (GRUs):

A grease removal/recovery unit is an automated, mechanical grease trap. It is installed at source directly on the appliance(s) discharge pipework. It works by skimming the FOG from an internal tank/chamber that contains the wastewater and automatically discharges the FOG content into an external container for manual disposal.

The sizing of the unit will impact on the permitted inflow. Additionally, where the wastewater discharge is of high temperature the unit shall be sized for adequate residency time to allow the wastewater to cool sufficiently. Where discharges are laden with detergents from sinks and dishwashers, the ability of the GRU to separate the FOG shall be carefully selected to allow it to cool and provide sufficient residence time; the respective GRU shall also not receive any FOG laden discharge from any other devices.

Biological/bacterial based dosing systems:

Bioremediation is the use of micro-organism metabolism to remove pollutants in the wastewater. Biological or bacteria-based dosing systems use cultures designed to biologically break down the FOG in the drainage system.

The use of this type of system as a primary source of FOG treatment is not permitted by the Landlord. The reason being that it is based around treating the FOG which has already been discharged into the Landlord's drainage system.

Specific Requirements for Restaurant Retail Units

In addition, the effectiveness of the rate at which the micro-organisms can act on FOG are affected by the drainage network layout, temperature, pH, detergent, wastewater flow rate and subsequent level of micro-organisms in the wastewater and the amount of time that they get to act on the FOG.

However, the use of biological dosing in a multiple equipment configuration shall be permitted and encouraged where they are utilised as the second component of FOG treatment to grease separators and removal units. Used in this manner the potential to prevent and/or treat any residual FOG entering the Landlord's drainage is improved.

In all cases specialist advice must be sought on the correct sizing and location of all FOG recovery devices to suit the wastewater discharge volumes, temperatures, types and locations.

FOG CONTAMINATION POINT SUMMARY (NON-EXHAUSTIVE)

Sinks

Where sinks are connected to drain and serve as pot/pre/dish wash:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process

Combination Ovens

Where combination ovens are connected to drain:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process
- Solid trays must be used when cooking with an additional solid tray placed at the bottom of the oven to catch any dripping/spitting FOGs. The waste FOGs caught in these trays must be disposed of in the correct manner

WOK Cooking Stations

Where WOK Cooking Stations are connected to drain:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process

Dishwashers and Washing Machines

Where dishwashers and/or washing machines are connected to drain:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process

- The GRU shall serve only the associated dishwasher machine and not be connected to discharges from other appliances or sinks unless written performance assurance is provided by the manufacturer and at the consent of the Landlord

Where dairy products are identified as the main source of FOG waste e.g. cafés; dishwashers used for cleaning equipment/utensils are permitted for discharge in to a suitably sized passive grease trap if sufficient residence time for natural separation and additional capacity to offset any negative impact of a high temperature and/or pump waste discharge are provided. Guidance should be sought from a specialist and the Landlord's appointed FOG management consultant must approve plans.

Rotisserie Ovens

Where rotisserie ovens are connected to drain:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process

Where there is no connection to drain and an internal FOG collection tray is used in-place of a drainage connection, full training and guidance should be provided to operators to ensure understanding on how the waste should be disposed of.

Specific Requirements for Restaurant Retail Units

Food Waste Digesters

Where food waste digesters are connected to drain:

- Tenant must install suitably sized FOG management device(s) to protect Landlord's drainage system – there maybe a requirement to install a break tank/passive grease trap before discharging into a secondary FOG management device to assist with solids settlement and to prevent system failure
- Staff training shall be advised on best management practices to ensure staff are well trained in how to manage FOG produced during the cooking process

Floor Gulleys/Floor Drains

Where the use of floor gutters/floor drains are permitted within the unit, operators shall not be permitted for drainage of any FOG laden wastewater, unless by prior agreement with the Landlord and the following criteria are adhered to:

- Floor gutters/floor drains used to dispose of mop water laden with FOG or used to dispose of any other FOG contaminated effluent shall only be permitted where a grease separator/removal unit can be installed below the floor level or if provision for a pump unit to take the waste in to a GRU can be made; this shall be by prior agreement with the Landlord only
- Floor gutter/floor drains shall be fitted with security gratings to prevent unauthorised access to the gutter and fitted with a cover to capture food particulate and debris

Extraction Canopies

Where ventilation extract canopies are fitted, the tenant shall ensure:

- Where extraction canopy filters have removable filters that allow in-house maintenance/cleaning, the Tenant shall ensure this practice is carried out in areas where adequate grease management equipment is in place
- If filters are cleaned in a dishwasher the Tenant shall ensure suitably sized grease removal units are installed
- Where water wash hoods are connected to drain (i.e. for soot and spark arrestor removal), the Tenant shall install suitably sized grease recovery/grease removal units to protect Landlord's drainage system

FOOD/SOLID WASTE CONTAMINATION POINT SUMMARY (NON-EXHAUSTIVE)

Preparation Sinks

All preparation sinks shall have in-line food waste filters installed to prevent solid waste entering the Landlord's drainage.

Potato Rumlbers/Peelers

All potato rumblers/peelers connected to drain shall have in-line food waste filters installed to prevent solid waste and starch from entering the Landlord's drainage.

Coffee Machines

All coffee machines with a connection to drain shall have in-line coffee grounds filter installed to prevent solid waste entering the Landlord's drainage.

RESTRICTIONS

Food Waste Disposal Units/Macerators

The use of food waste disposal/macerator systems to dispose of food waste or other to Landlord's drainage will not be permitted.

SIZING, PERFORMANCE & MAINTENANCE

All FOG separators/removal units installed shall have a 98% efficiency rating (98% FOG removal rate). The Landlord will if necessary take effluent samples for laboratory analysis to monitor contamination levels if the performance of the installed equipment is found to be a problem in use.

Passive grease separators/grease traps – Sizing, Performance & Maintenance

Sizing

For single bowl sinks, size grease separators/grease trap to minimum of 75% capacity of bowl volume. For multiple sinks connecting to a passive grease separator, apply a 2/3rds equation as a minimum – capacity of the grease separator should be no smaller than 66% (2/3rds) of combined sinks volume.

Sizing for connection to other items such as combi ovens, wok stations etc., will follow the same principles, ensuring the operational capacity is sufficient to manage the incoming effluent volume. Where an accurate figure cannot be provided, an indicative figure should be used to reflect the maximum potential discharge over the course of 1-minute drainage period (at peak discharge).

Specific Requirements for Restaurant Retail Units

All passive grease separators/grease traps must be easily accessible for in-house/staff maintenance/operational review; therefore, any system must have quick release fixings for internal access.

Plans for sizing should be submitted for Landlord and/or landlords FOG consultant for review and approval.

Maintenance

Maintenance shall be in line with manufacturers' guidelines; but be no less than quarterly by a licensed contractor. Service records detailing contractor name, date of visit, waste removed and details of where the waste is being disposed of must be left on site for inspection after each visit.

Additionally, weekly in-house skimming shall be carried out, with a log of times and dates kept – where in-house maintenance is not completed, contractor maintenance must be increased to weekly to cover the shortfall.

Managed passive grease separators/grease traps – Sizing, Performance & Maintenance

Sizing

For single bowl sinks, size passive grease separators/grease trap to minimum of 75% capacity of bowl volume. For multiple sinks connecting to a passive grease separator, apply a 2/3rds equation as a minimum – capacity of the grease separator should be no smaller than 66% (2/3rds) of combined sinks volume.

Sizing for connection to other items such as combi-ovens, wok stations etc., will follow the same principles, ensuring the operational capacity is sufficient to manage the incoming effluent volume. Where an accurate figure cannot be provided, an indicative figure should be used to reflect the maximum potential discharge over the course of 1-minute drainage period (at peak discharge).

In any case, additional operational volume should be considered to allow for increased FOG retention capability.

All managed passive grease separators/grease trap must be maintained by a specialist contractor ensuring a full unit exchange (waste removed from site) or waste removal/tankering (waste removed from site). Systems relying on in-house maintenance e.g. bagged waste removal, are not permitted.

All managed passive grease separators/grease trap must be easily accessible for operational review, monitoring and auditing purposes.

Plans for sizing should be submitted for Landlord and/or landlords FOG consultant for review and approval.

Maintenance

Maintenance shall be in line with manufacturers' guidelines; but be no less than monthly by a licensed contractor. Service records detailing contractor name, date of visit, waste removed and details of where the waste is being disposed of must be left on site for inspection after each visit.

GREASE REMOVAL UNITS (GRU'S) – SIZING, PERFORMANCE & MAINTENANCE

Sizing:

The following calculations should be followed when sizing for a suitable grease removal unit:

Determine flowrate/volume of wastewater to be treated – for sinks, the capacity of each bowl must be determined (sink bowl dimensions h x w x d mm) and an operational loading (~25%) should be applied to determine the actual drainage loading. Depending on number of connections and other factors, either a 1 or 2-minute drainage period must be carefully selected. The actual drainage loading divided by the drainage period provides an indicative flowrate. An example of this sizing formula is included below.

Table – Procedure for sizing Grease Removal Units (Example)

	Details/Action	Calculation
Determine Overall Capacity/Volume	Double Bowl Sink (Sink Bowl Dimensions – h x w x d)	2 x 600x450x300mm = 162 Litres
Apply Operational Loading Reduction	~25% (x 0.75)	162 Litres x 0.75 (operational loading reduction) = 121.5 Litres
Select Drainage Period	2-Minute Drainage Period (÷ 2)	121.5 Litres ÷ 2 minutes = 60.75 Litres Per Minute
Convert to Litres Per Second	Litres Per Second (÷ 60)	60.75 Litres ÷ 60 (Seconds) = 1.02 (L/ps)
Output		1.02 L/ps (minimum requirement)

Specific Requirements for Restaurant Retail Units

Sizing for connection to other items such as combi ovens, wok stations etc., will follow the same principles, ensuring the grease removal unit has a sufficient operational flowrate to manage the incoming effluent. Where an accurate figure cannot be provided, an indicative figure should be used to reflect the maximum potential discharge over the course of 1-minute drainage period (at peak discharge).

Sizing for dishwashers/potwashers and/or washing machines must be carefully considered – a separate grease removal unit is recommended for each connection. To determine the discharge rate, the dishwashers/potwashers and/or washing machines tank capacity must be determined as specified by the manufacturer. No operational loading should be applied, and the drainage period must not exceed 1-minute to allow for pumped, high temperature discharge to be effectively treated.

All Grease Removal Units must have an automated FOG removal function.

Plans for sizing should be submitted for Landlord and/or landlords FOG consultant for review and approval.

Maintenance

Maintenance shall be in line with manufactures' guidelines; but no less than quarterly maintenance by a licensed contractor. Service records detailing contractor name, date of visit, waste removed and details of where the waste is being disposed of must be left on site for inspection after each visit.

Additionally, daily in-house maintenance shall be carried out, with a log of times and dates kept.

Maintenance Overview

Where minimum specialist/contractor maintenance frequencies have been stated, these are intended to ensure minimum levels of fat, oil and grease management are upheld. Actual maintenance levels will be dictated by several factors, which in some circumstances could mean increased maintenance frequencies. Factors which may impact on maintenance frequency are typically; volumes of trade, cooking activity/cuisine offering and best management kitchen practices.

USER TRAINING

Tenants must ensure that operators of FOG management equipment have been trained on the daily/weekly/monthly requirements of the system in-place. Tenants must ensure that the disposal of any waste FOG is conducted in accordance with waste management guidelines (see below). Evidence of training must be recorded and kept on site for inspection.

WASTE DISPOSAL

Material removed from FOG management equipment is considered to be hazardous waste and must be disposed of correctly. There are additional legal requirements that govern the disposal of FOG waste and the Tenant has a responsibility to ensure that their licensed contractor is acting in compliance of the law and the site requirements.

Service records should be ready for inspection at all times and detail time & date of service visit along with details of how much (litres) waste was removed and where the waste was taken.

KITCHEN GOOD PRACTICE (BEST MANAGEMENT PRACTICES)

All kitchen staff should be provided with training to understand the requirements for preventing FOG from entering the Landlord's drainage system. In addition, nominated staff should be responsible for ensuring the FOG removal equipment is operational and maintenance schedules adhered too. Plates should be dry wiped to remove FOG prior to being placed in the dishwasher.

NON-COMPLIANCE

It is the responsibility of the Tenant to ensure that all sources of contamination are prevented at source and before entering the Landlord's drainage system. Where there is not one common drain connection it may be a requirement to install multiple systems to protect the drainage.

The Landlord and/or the FOG consultant shall carry out regular FOG audits to identify any sources of contamination, the Tenants grease management equipment in-place and maintenance procedures.

Specific Requirements

for Restaurant Retail Units

The routine inspections will involve:

- Checking all FOG contamination lines are protected
- Checking all Food/Solid waste contamination lines are protected
- Checking correctly sized equipment is installed
- Checking performance (operational review)
- Checking daily/routine maintenance is carried out
- Checking contractor maintenance records

The Landlord will be working with all tenants to ensure that compliance with the above specification can be met. If during a routine inspection it is identified that the Tenant is operating outside of the Landlord's designated specification, Tenants will be notified in writing informing them of the actions required to bring the site into specification. A time frame for these additional measures will be agreed, however this must be completed in a time frame less than 30 days.

REFERENCES

Legislation

The following legislation shall be complied with:

- UK Water Industry Act 1991
- Approved Document H – Drainage and Waste Disposal of the Building Regulations 2002 (incorporating 2015 amendments)
- Centralised passive grease separators to be designed and installed in compliance with BS EN1825-1 & BS EN1825-2
- Environmental Protection Act 1990
- Food Safety & Hygiene Regulations 2013 & European Regulation (EC) No. 853/2004*
- Construction Products Regulations (CPR) requirement under the Scope of harmonised European standards (hEN's) for CE marking

*Relates to ensuring grease is not allowed to build up and that premises and equipment are cleaned regularly to remove grease and dirt. The routine inspections will involve:

Specific Requirements for Restaurant Retail Units

Requirements for Retail Tenant Kitchen Ventilation Systems

Kitchen Extract ductwork has been shown to be a contributory factor in the spread of fire due to the build-up of combustible deposit (fats, oils and grease) on the internal surfaces of the ductwork.

Flame or high temperature can ignite grease causing fire to spread through the system; this can ignite surrounding materials along the ductwork path and transfer fire to adjacent sections of a building, potentially causing major building destruction, significant business interruption and threat to persons within the property.

Accumulated grease deposit also provides a hygiene hazard, can lead to foul odour and pest infestation.

APPROVAL OF TENANT KITCHEN EXTRACT SYSTEMS

A3 Tenants are required to install kitchen extract systems that do not provide nuisance through unwanted cooking odours or noise. The control of grease and odour emissions is of paramount importance to ensure that the environment throughout the property is not compromised by a conglomeration of odours produced by individual food operators, which potentially may lead to cross-contamination of air systems.

The systems shall ensure that the risk of in-duct fire and fire spread due to grease build up and combustible deposit within the extract systems is controlled and maintained to an acceptable level and in line with insurance obligations.

Where the Tenant proposes to deviate from what is contained within this document such as an automated chemical mist system, they shall provide the rationale for the deviation prior to the detailed design stage of the project. The rationale shall be based upon industry standard recommendations and risk assessment methodologies. The following documentation may be used for these purposes:

- DEFRA, Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems (risk assessment methodology)
- FPA, Recommendations for fire risk assessment of catering extract ventilation
- Revo Servicing Food and Beverage

Where a risk assessed approach is proposed by the Tenant this shall be subject to approval from the Landlord.

To minimise the risk of kitchen-related fires and in compliance with the recommendations of insurers, the Landlord will engage a specialist to carry out a review of the kitchen extract proposals and inspect the installation during and at completion. There is a fee associated with this work chargeable to the Tenant.

The extract system design shall be reviewed at each design stage by the Landlord's specialist and the Tenant shall revise their proposal to address the comments raised and re-submit proposals. Upon completion of the kitchen extract system and prior to opening (regardless of whether a risk assessed approach has been followed) the Tenant shall provide a certificate of conformity. The certificate shall include a statement from the installing contractor that the systems have been installed in accordance with the approved design submission; that all relevant standards and safety standards have been adhered to; and a statement from the Tenant that the necessary ongoing maintenance procedures are in place. A set of As Installed drawings shall accompany the certificate clearly identifying the access hatches for cleaning within the ductwork. Upon receipt of the certificate of conformity the Landlord's delivery manager shall arrange for an inspection by the Landlord's representative of the Tenants kitchen extract system. Upon successful approval of the installed system and accompanying documentation, by the Landlord's representative, the Tenant will be allowed to put the system into use.

GENERAL REQUIREMENTS

The Tenant shall design and install a kitchen extract system compliant with BESA Specification for Kitchen Ventilation Systems BESA DW/172. Internal surfaces of the kitchen extract systems should be free of irregularities, all of which make grease accumulation more likely and cleaning more difficult. The design shall include adequate access panels of sufficient number, quality and size to enable unrestricted safe access for regular cleaning and inspection of all internal surfaces and in-line components.

Specific Requirements for Restaurant Retail Units

The design will include access panels either side of every bend or riser and at a maximum spacing of 1.5m in the horizontal ductwork, to facilitate manual cleaning. Access panels will be provided in sufficient number, quality and size, to enable unrestricted access for regular cleaning and inspection of the internal surfaces and in-line components. As a minimum, all access panels shall be in accordance with the requirements of BESA DW/144, BESA DW/172 & BESA TR/19.

Do not use turning vanes or fire dampers within kitchen extract systems. Volume control dampers should be avoided or kept to a minimum; where installed across extract systems, the damper blades shall be fabricated from stainless steel. The operating mechanism shall be outside the airstream and be capable of withstanding the higher air temperatures associated with kitchen extract systems.

Provide panels that are at least the same thickness of material as the ductwork and which are grease tight, using a heat-proof gasket or sealant, without projection into the ductwork. Locate access panels on the top or sides of horizontal ducts, at least 40 mm from the underside of the duct.

Access panels should be of 'quick release variety' and should be rectangular or square. Oval access panels are not acceptable.

Where ductwork is concealed within ceiling voids or builder's work shafts, ensure that adequate access is provided within the builder's work fabric, to provide easy access to the ductwork cleaning panel.

The tenant shall inspect and clean all kitchen extract system ductwork in accordance with minimum guidelines set-out in BESA TR/19. Note, the Landlord reserves the right to stipulate a minimum cleaning frequency for grease extract ductwork systems as per the requirements of our insurers, which may be a higher frequency of cleaning than set out in TR/19 recommendations.

Do not use flexible joint connections within a kitchen extract ventilation system.

Install fire rated ductwork systems, where required, that have been tested in accordance with BS 476-24 for:

- Fire inside (type B) rated for stability, integrity and insulation for the same period of time as the compartment through which the duct passes
- Additionally, ductwork tested for fire outside (type A) and the internal surface of the ductwork within the compartment meeting the insulation criteria

The exhaust system serving the Tenant demise shall be designed and commissioned to ensure the restaurant as a whole is under a negative pressure, and allow for make-up air rate of 85%, of the exhaust quantity to prevent migration of odours and/or heat to other premises or to public areas.

SYSTEM COMPONENTS

Canopy grease filters shall comply with LPS 1263, as required within BESA Specification for Kitchen Ventilation Systems BESA DW/172 and be of non-combustible construction. Primary canopy filters should be Baffle type filters; mesh filters should not be used as primary canopy filtration. Mesh filters provide no barrier to flame and should not be used where exposed to naked flames or where there is high risk of flash fire due to grease or carbon deposit accumulating within the filter matrix.

Filtration plant shall be located within the Tenant's demise, either within or after the hood to ensure that the maximum run of ductwork is protected. The Tenant shall install an Ultra Violet technology system, to cover and serve all odour and/or grease producing appliances. In line UV filtration is not advisable due to potential contamination of UV bulbs with grease and or debris inhibiting functionality of the equipment.

Specific Requirements for Restaurant Retail Units

Any vertical riser should be fully accessible for manual cleaning or made suitable for chemically cleaning or abseil i.e. straight runs of ducting with no obstructions and access at the top and base. Spiral ductwork is not recommended across a kitchen extract system however where spiral ducting is to be used it must be tightly wound, fully sealed and suitable for kitchen extraction. Ductwork located outside of the Tenant's demise shall be two hour fire and temperature certified. Where the Landlord has provided kitchen extract ductwork for the Tenant to connect to, the Tenant is not permitted to alter the Landlord ductwork unless approved and with work carried out by the Landlord's contractor.

The extract fan shall be located at roof level to ensure the extract system is under a negative pressure and prevent migration of odour. The fan unit selected shall be suitable for kitchen extraction and be fully accessible for cleaning, with the motor & wiring out of the airstream to minimise the risk of ignition. Inspection panels are to be installed along the ductwork before and after all in-line components across the system. This is to facilitate improved access for cleaning and survey across this section of the system. Extract Fan design should allow for thorough cleaning of impellor blades and internal surfaces of fan housing without the need for dismantling.

Where noise attenuators are used, these should include removable panels to allow for thorough cleaning of the unit and incorporate a protective membrane to protect the acoustic media from grease impregnation.

To minimise the risk of nuisance grease, smoke and cross-contamination of odour that could be drawn back into the building, discharge terminals should be positioned vertically and as high as possible above the building. The system should be designed for an exit velocity which ensures air is dispersed to atmosphere effectively.

KITCHEN SUPPLY AIR

Where a kitchen supply air system is provided it shall be installed in accordance with DW172 Section 6. The supply system should be positioned as to not obstruct safe access to the kitchen extract system.

APPROVED FILTRATION SYSTEMS

Two types of Tenant filtration plant are acceptable;

- Passive three stage filtration system (such as Halton Pollustop or equivalent approved system) including
- An electrostatic precipitator filtration system (with UV in the extract canopy) together with a pre-filter and HEPA filter upstream of the ESP, plus activated carbon filtration downstream of the ESP close to the point of discharge.

Tenant's filtration proposals will require details to be submitted to the Landlord for consideration and approval. A Passive system shall consist of a three stage filtration system to reduce airborne particulate (smoke) to minimum 0.3 micron size. The filters shall be designed to remove cooking odours, smoke and grease from the discharge air and be supplied, installed and maintained by the Tenant.

The filtration system shall include pre-filter (bag), HEPA filtration to 0.3 microns, and activated carbon filter to adsorb any residual ozone. The system shall be designed to ensure the discharge level of ozone does not exceed 0.06ppm as recommended by 'The World Health Organisation.'

An ESP system shall consist of a unit with a series of anode collection tubes each enclosing a central charging cathode rod, without charged 'dead spots' and designed for high capture efficiency in hot, wet, oily, smoke laden and humid cooking conditions. The ESP shall be selected to eliminate smoke in the extract air, with a collection efficiency of 99% at 1 µm and 90% at 0.1 µm. The Ultra-violet odour control unit shall be fitted within the Tenant's kitchen extract canopy within their demise, positioned in the restaurant kitchen extract hood(s), to cover and serve all odour and/or grease producing appliances. Ozone generation shall control the grease and odour production. The filtration system shall reduce airborne particulate (smoke) to minimum 0.3 micron size and designed to remove cooking odours, smoke and grease from the discharge air and be supplied, installed and maintained by the Tenant. The filtration system shall include pre-filter (bag), HEPA filtration to 0.3 microns, and activated carbon filter to adsorb any residual ozone and odours. The activated carbon filtration shall be selected for a minimum residence time of between 0.4 to 0.8 seconds. The system shall be designed to ensure the discharge level of ozone does not exceed 0.06ppm as recommended by 'The World Health Organisation.'

Specific Requirements for Restaurant Retail Units

These filtration systems shall report filter life status via SMS and/or GSM connection, and shut down the extract fan immediately if filter overload warning is ignored. Additionally if any filter panels are removed the extract fan shall be prevented from operating.

Tenants' plant shall not exceed specified noise and vibration limits for the site and local authority limitations.

Drawings of the ductwork, canopy UV system and wiring schematic illustrating the interlock system must be submitted to the Landlord or his representative for approval.

Where the Tenant extract ductwork is routed outside the retailers demise and it has not been provided by the Landlord it shall be high-pressure tested to DW144 class C standard throughout and shall have a one hour fire rated and temperature rated certificate. Results of the pressure tests shall be submitted to the Landlord and included with the certificate of conformity. Extract ductwork shall also be 'grease tight' and where waterwash hoods are used, or extract provided from steam-laden extract air from dishwashers, ductwork shall be to DW172 requirements. Where Tenants utilise wood burning pizza ovens and/or wood burning ovens/grilles/barbecues a dedicated (independent) twin wall insulated flue with bolted connections shall be used discharging at roof level. The flue shall be manufactured to BS EN 1856-1 and constructed from 0.71mm 316 inner liner fully seam welded, 0.71mm 304 outer casing with an annulus of insulation, compacted with mineral wool to a high density of 128Kg/m³, to a thickness suitable to achieve the maximum limiting surface temperature required.

Components shall be assembled by means of a fully integral flange with spigot location and sealed V-band jointing system. This system shall have a 4 hour rated certificate. The flue shall be installed laid to fall to drain at 1 degree minimum and pressure tested to 1000Pa for 1 hour.

The control system shall incorporate:

- Interface control panel
- UV control panel integrated into the canopy
- UV healthy/maintenance required interlock
- Extract fan interlock on/off switch interface
- Cooking range power/main gas solenoid interlock
- Emergency knock off button/interlock
- Fire alarm and interlock
- Fire suppression interlock
- Landlords Controls/BMS interlocks
- Make up air interlock

The performance of the Tenants Ultra Violet technology and Three Stage Filter system must be sufficient to:

- Substantially reduce all cooking smells generated by Tenant's cooking appliances.
- Prevent the migration of odours, smoke and/or convected heat from the Tenant's demise.
- Prevent the passage of grease into the Tenant's and Landlord's ductwork.

- Prevent residual ozone, above 0.06 ppm escaping to atmosphere.

KITCHEN CANOPY/HOOD FIRE PROTECTION

All exhaust hoods shall be protected by an approved automatic fire detection and fixed fire suppression system installed in accordance with the requirements of the LPCB and the Landlord's property insurers.

The fixed fire suppression system must be linked to the unit's fire alarm system and interfaced with the Landlord fire alarm interface panel.

Where wood-fired bakery ovens, barbecues fired with charcoal or wood, and water heaters fired with biomass are provided as part of the kitchen fit out, a smoke, grease and soot filtering and spark arrestor system shall be provided. The system shall be an extract hood cold water mist / water wash based system located directly at the point of extract from the source within the extract hood. It shall be fitted with automatic water flow control to minimise water consumption when not required. An alarm shall be raised on water flow failure, with automatic shut down where practicable.

A Carbon Monoxide sensing system shall be installed in the kitchen/restaurant space local to the charcoal/wood/biomass fired equipment. This sensing system shall enable the ventilation system in the space, to ensure that no build-up of carbon monoxide gases occurs during unoccupied (and occupied) periods.

Specific Requirements

for Restaurant Retail Units

KITCHEN INTERLOCK CONTROLS

The system shall be configured so that should the extract fan or a UV lamp fail then the gas/cooking supply shall be disabled. The control system shall be interfaced with the fire alarm.

The UV unit lamps shall be monitored for failure and interlocked with the cooking supply/gas solenoid so that if the operating efficiency of the UV lamps drop by 10% the gas or electric supply will shut down and remain isolated until the system is returned to 100% efficiency. A notice period of not more than 24 hours (cooking time) shall be permitted between UV failure and supply shut down for repairs. A minimum 30% redundancy in the number of lamps is recommended.

A differential pressure switch or similar approved, across the Tenant's extract fan shall be interlocked with the cooking supply/ gas main supply solenoid valves so that the supply remains off when the extract fan is not operating.

The interface panel and the motor control panel shall be interlocked with the fire alarm such that in the event of a fire alarm signal all plant shuts down.

A differential pressure switch shall be installed across the filtration plant which shall be interlocked with the main gas solenoid valve or the electrical supply so that the gas/ electric supply remains off when the filtration plant is not operating.

MAINTENANCE REQUIREMENTS

Maintenance requirements are subject to the intensity of use and type of cooking & therefore frequency of cleaning and filter replacement shall be adjusted to suit. The Tenant shall ensure the following minimum levels of maintenance are adhered to. It is recommended that the tenant appoints an LPCB Approved cleaning contractor in line with Loss Prevention Standard 2084 (to latest issue and all amendments).

DUCTWORK

The following are the Maximum Grease Deposit Levels as set out in BESA Guide to Good Practice Internal Cleanliness of Ventilation Systems TR/19

Wet Film Thickness Test Measurement

Average of 200microns across Kitchen Extract System

Any single measurement above 500microns i.e. 'hot spots'

Required Action

Complete system cleaning required

Urgent Local Clean Required (i.e. specific attention to problem areas)

The below table sets out the minimum frequency with which full system cleaning of ductwork should be undertaken. Based on the findings of the Landlord's on-site inspections, the Landlord reserves the right to stipulate a minimum cleaning frequency for grease extract ductwork systems as per the requirements of our insurers, which may be a higher frequency of cleaning than set out in TR/19 recommendations. Failure to comply with such requirements can invalidate the building insurance policy.

Minimum Frequency of Ductwork Cleaning (as set out in BESA Guide to Good Practice Internal Cleanliness of Ventilation Systems TR/19.):

	<u>Frying time</u>	<u>Minimum clean frequency</u>
Heavy Use	12-16 hours per day	2-3 Monthly
Moderate Use	6-12 hours per day	6 Monthly
Low Use	2-6 hours per day	12 Monthly

The canopy and canopy/extract plenum is an area of higher fire risk and consideration should be given to more frequent cleaning in accordance with insurers' requirements.

Specific Requirements for Restaurant Retail Units

The Landlord requires regular evidence of system status, to ensure that maintenance requirements are being adhered to and that ductwork is being cleaned to the specified standards of frequency and quality. Cleaning operations shall be done in line with the frequencies indicated above, and post-clean wet film thickness tests should not exceed 50 µm and should be representative of the entire system. Any access issues which impede cleaning must be highlighted. The Landlord shall employ a specialist to assess the standards of work carried out by the Tenants contractor.

Post-clean, duct cleaning contractors must provide a report that includes the following elements in line with requirements set out in Loss Prevention Standard 2084: Issue 1.0 (a copy of this report should be available on site for inspection):

- The system(s) cleaned
- Pre-clean measurements
- Post-clean measurements
- Pre and post clean photographic records
- Additional works carried out (if any)
- COSHH data on any chemicals used
- Recommendations for future cleaning requirements
- A sketch or schematic of the system indicating access panel and testing locations and highlighting any un-cleaned/inaccessible areas with an explanation as to why the area could not be accessed/cleaned
- A certificate summarising the cleaning works completed.

Solid Fuel Cooking

Solid fuel oven flues and associated ductwork generally require more regular maintenance. The canopy and canopy/extract plenum is an area of higher fire risk and consideration should be given to more frequent cleaning in line with manufacturer's recommendations and in accordance with insurers' requirements

NB Where solid fuel cooking (BBQ, Wood Burning Ovens etc. fired with charcoal or wood) is undertaken robust procedures must be in place to ensure stations are safely shutdown at the end of service. Even when cooking has finished, floating embers may represent a significant fire hazard if BBQs/Ovens are not shut down in a safe manner.

Canopy

Canopy Grease filters – Daily clean

Canopy Plenum and Channels – daily clean

Canopy UV equipment - quarterly clean, replace lamps after 8000 hours of operation or more frequently if required.

Pre- filter (Bag) - quarterly clean or when remote monitoring indicates dirty filter

HEPA filter – Change 6 monthly or when indicated as dirty via the monitoring system

Activated carbon filter – Change annually or when indicated as dirty via the monitoring system

The Tenant shall provide the Landlord and Insurance Team a maintenance report on a quarterly basis detailing checks undertaken, defects noted and works carried out. The report shall note the differential pressures across the filtration systems and compare against manufacturer's recommended operating and maximum levels. Maintenance checks and cleaning / replacement of filters shall be increased as necessary to ensure odour control system works effectively.

Misc.

The Tenant shall provide a run on timer facility for the kitchen extract fan, variable between 0 and 30 minutes, to allow the extract fan to run on in the event of a fire alarm activation and plant shut down within the unit. The kitchen extract fan shall also be provided with a fireman's override switch for 'Hand, Off, Auto', located adjacent to the Tenant's fire alarm panel.

Specific Requirements

for Restaurant Retail Units

Gas Service:

- The Tenant shall be responsible for the provision of a pulse enabled gas meter from the shipper, and shall ensure the gas connection is available to suit his programme.
- All gas installations shall be procured by the Tenant, in accordance with GAS SAFE regulations, and be carried out by a registered specialist subcontractor.
- The Tenant shall ensure that gas installations are provided with all statutory line diagrams and safety notices.
- The Tenant shall ensure that all gas service pipelines shall be painted in Canary Yellow to BS 08C35. Pipeline ID bands shall be fitted.
- The Tenant shall ensure that a manual gas isolation valve is provided outside his demise in a location agreed with the Centre Management, and the Fire Officer.
- The Tenant shall ensure that a solenoid shut off valve is provided, and interlinked with the unit fire alarm system and ventilation air proving controls system. The Tenant shall ensure that all gas consuming equipment is suitable use with the installed solenoid valve.
- The Tenant shall be responsible for the full testing and certification of the gas installation to his demise, and shall supply to the Landlord suitable certification.

Gas conversion chart for information:

Gas loads

m3/hr	kW	Btu/hr
10	107	365,766
15	161	548,650
20	214	731,533
25	268	914,416
30	322	1,097,299
35	375	1,280,182
40	429	1,463,066
50	536	1,828,832

Water Services:

- The Tenant shall be responsible for the extension of mains cold water from the pulse enabled Unit Water Meter. All installations shall be carried out by a competent Sub-Contractor.
- All water fittings shall be WRAS compliant.
- The Tenant shall ensure that his installation is chlorinated prior to use. The Tenant shall furnish the Landlord with a Certificate of Chlorination prior to commencement of trading.
- The Tenant shall note that if the mains water is provided from the local water authority mains supply the Landlord does not guarantee that any particular minimum pressure will be available. Where mains cold water supplies shall be derived from a Landlord's boosted mains water system the maximum service pressure available will generally be 1Bar. In all cases the Tenant shall satisfy himself of the mains water pressure available to his demise.
- Interruptions of supply will not be the Landlord's responsibility where mains cold water is derived directly from the local water authority's supplies.

Positive Places

Our sustainability vision is to create retail destinations that deliver net positive impacts economically, socially and environmentally. Positive Places is our strategy for making that happen (<http://sustainability.hammerson.com/>).

In 2017 our sustainability vision became even more ambitious, with a bold new objective to become net positive for carbon, resource use, water and socio-economic impacts by 2030. This will include impacts from both landlord and tenant controlled areas and also our development and fit out impacts.

To deliver on this bold new objective, we have to design, build and manage our retail destinations in a way that is good for the communities in which they operate; for those they employ; and for our environment. All whilst ensuring we provide a robust and thriving economic environment for our customers and investors. We therefore expect each Tenant to adopt a best practice approach to both fit out and operation of their unit to contribute towards this net positive objective. As a minimum we expect each Tenant to meet the requirements set out in the Hammerson Sustainability Requirements for Retailer fit outs.

Energy Management

All fit outs undertaken by the Tenant must achieve at least a D rated Energy Performance Certificate (EPC). The Landlord will produce the EPC for all new lettings unless otherwise agreed with the Tenant but in order to achieve statutory MEES compliance, the fit out will be checked in conjunction with the Hammerson EPC Impact Assessment Requirements. The Tenant will still need to demonstrate that their unit complies with Part L of the relevant Building Regulations in force at the time.

Generally, most retail has a quite specific energy profile; electrically biased. There is little heating demand within a common retail environment whilst the majority of the electrical demand results from the lighting and refrigeration (where applicable) installations.

Within retail, lighting electrical loadings, in terms of W/m²/100lux have the single most significant impact upon energy performance, the EPC rating and Building Regulations compliance. As such, whilst each shop fit should be individually analysed for meeting the EPC target stipulated above and Part L compliance, retail shop fit designers should review lighting design strategies to ensure that the most efficient lamp selection, lighting levels, controls, etc.. are instigated, targeting the lowest possible loading densities.

Regulatory Requirements for Energy Performance

Lighting systems:

100 lm/W average efficacy for all general sales floor lighting and back of house areas
25 lm/W average efficacy for display lighting
Fully controlled for dimming, occupancy, daylight, time-switching controls.

Air Source Heat Pumps:

Minimum efficiencies

Cooling (air conditioned) minimum SEER/SSEER 4.5/3.6

Cooling (mixed mode) minimum SSEER 2.7

Fully controlled for on/off zone control, time, room air temperature, outdoor fan operation, defrost (external heat exchanger), room thermostats.

Centralised air conditioning systems:

Specific fan power:

Central balanced mechanical ventilation system with heating and cooling 1.6 w/l/s

Central balanced mechanical ventilation system with heating only 1.5 w/l/s

Test results to show limited air leakage from ventilation ductwork

Heat recovery where feasible for supply/extract systems
–minimum dry heat recovery efficiency for heat exchangers 80%.

Variable speed controls of fans and pumps, controlled via multiple sensors and demand control (mechanical ventilation only).

Local extract units 0.3 w/l/s

Boiler systems:

95% minimum seasonal efficiency for single or multiple boiler systems

Fully controlled for zone specific time and temperature demand (floor area is > 150m²), weather compensation.

Hot water services:

Minimum thermal efficiencies:

Gas fired > 30 kW output - 90%

Gas fired < 30 kW output - 73%

If system includes a tank heat losses should not be greater than specified with non-domestic HVAC guide 2013

Fully controlled for automatic thermostat, high limit thermostat shut off primary flow if system temperature too high, time control.

Best Practice Operation and Maintenance

Significant energy and water cost savings can be achieved through efficient management. The Tenant is responsible for the efficient operation of services which they installed.

As part of this, the following is expected:

- Commissioning at completion and for the first 12 months of operation of all HVAC plant, lighting, controls, refrigeration, and BMS.
- Production of a simple Building User Guide (and/or contribution to the one produced by the Landlord for the whole site), which should be provided to staff. This should explain in simple, non-technical terms the operation of HVAC and lighting installed by the Tenants, taking account of all staff likely to interact with it – i.e. Facilities Manager to part-time staff.
- Incorporate ease of use into the design and controls strategy e.g. 'last person out' switch for all non-essential lighting and services, located at the exit.
- Monitor energy and water usage. Where utilities are provided by the landlord, automatic consumption data will be made available where possible. Where Tenants procure their own utilities, readings should be taken at least monthly and consumption performance analysed and compared with monthly and annual trends and evidence should be made available of measures taken to reduce consumption. This data should be made available to Hammerson on request.

Savings of 5–10% should in most cases be easily achievable through low or no capital cost measures, increasing bottom line profits for the Tenant.

Hammerson Metering Requirements

Electricity: Meter Performance Specification

MID/Ofgem Approved - 2014/32/EU

Class 1 Accuracy

Dial positioned to enable reads

Electricity: Suggested Meter

Full Size Meter

- Elster A1140 3 Phase - CT Operated or Whole Current meter

- Elster AS230 Single Phase Whole Current meter

Panel/DIN mounted Meters

- Panel Mount - Schneider Electric PM5111 MID

- DIN Mount - Schneider iEM3255

Gas: Meter Performance Specification

MID Approved - 2014/32/EU

Dial positioned to enable reads

Mechanical Pulsed Output

Gas: Suggested Meter

Diaphragm Gas Meters

- Elster BK-GXX (Where X is the size of meter required)

Water: Meter Performance Specification

Mechanical Pulsed output

MID Approved - 2014/32/EU

WRAS Approved

Dial positioned to enable reads

Water: Suggested Meter

Elster V100 water meters

Best Practice Water Management

A pulse enabled water meter must be provided to the water supply to each unit, and Tenants will be billed according to consumption. Tenants are encouraged to monitor water consumption (e.g. monthly) and identify opportunities for reducing water usage; monitoring should also ensure early detection of unusual consumption (e.g. leaks), all contributing to improving profit margins.

Refer to the Hammerson Sustainability Requirements for further guidance.

Best Practice Materials Selection

Retailers should consider waste reduction, environmental impact, and well-being of staff and customers in the selection of materials for building elements (walls, roofs etc.) and finishes:

- Low VOC paints and finishes.
- Timber to be Forestry Stewardship Council (FSC) certified; consider ISO 14001 (or equivalent) certification for suppliers of other products e.g. glass, steel, flooring.
- Reduction of fitout waste e.g. on-site damage, off-cuts, over-ordering, and rework. This may require procurement arrangements such as resource efficiency incentives for contractors rather than lump sum fees, as well as take-back agreements with suppliers. Designers should also be encouraged to consider resource efficiency e.g. modular design, re-usable elements. These measures should in return bring cost savings in materials purchase and waste disposal.

Case studies are available from WRAP (www.wrap.org.uk) on construction waste reduction, high recycled content materials, and possible procurement routes. The BRE's Green Guide for Materials (www.bre.co.uk/greenguide) and Green Book (www.greenbooklive.com) provide guidance on the environmental impact of materials and products, respectively.

Best Practice Waste Management

The Tenant should include sufficient waste storage space for recyclables and general waste, before their transport to the service yard or central waste store for collection. The following waste streams should be accommodated as a minimum:

- Paper
- Cardboard
- Glass
- Batteries
- Printer cartridges
- Waste of Electric and Electronic Equipment, including IT equipment, light bulbs
- Oil and food waste (food retail). Where such a scheme is in place, Tenants may be required to segregate food waste for on- or off-site composting or energy-from-waste schemes. This will be highlighted to the Tenant as part of the lease agreement process.

Centre management do not provide a complete waste disposal service and Retailer should request information on the current provision available.

Retailers are encouraged to consider the reduction of packaging in their products and activities and to provide waste and recycling figures for the Hammerson Environment Coordinator.

Case studies are available from WRAP (www.wrap.org.uk) on packaging reduction and resource-efficient product design.

Health & Safety

General

a) The Construction (Design Management) Regulations 2015 (CDM) apply to construction work and where the work includes demolition and where the project is notifiable.

b) The Retailer (as client under CDM) shall appoint both a Principal Contractor and Principal Designer to assist in their respective roles.

c) Where access to the Retailer's demise is via the Shopping Centre Malls, the controls imposed by Centre Management must be observed by all those employed by or representing the Retailer. Access to the Retailer's demise is to be the responsibility of the Retailer's Principal Contractor as required by CDM.

d) Where applicable the Retailer shall ensure that the HSE is notified of their work.

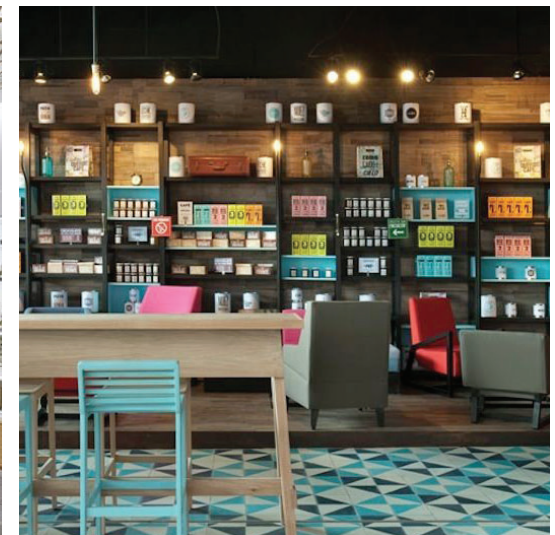
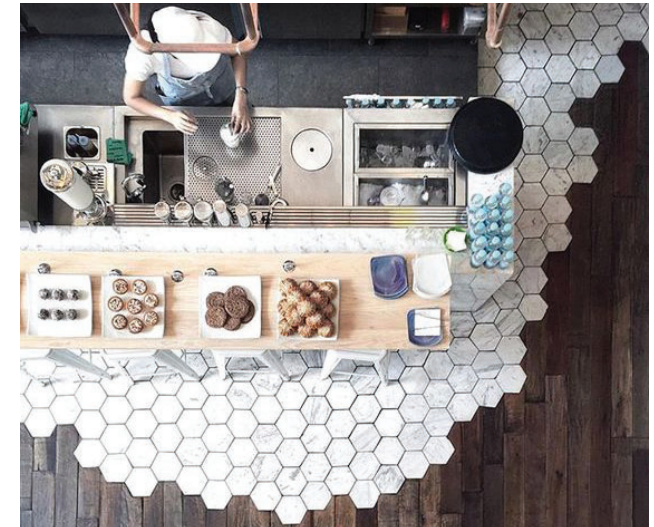
e) The Landlord will be able to provide relevant information from any available Health and Safety Files or O&M Manuals in its possession, to enable the Retailer to provide important pre-construction health & safety information relevant to the principal contractor.

The Oracle Health and Safety File

The Construction (Design and Management) Regulations 2015 requires the client to take reasonable steps to ensure that, after the construction phase, the information in the Health and Safety file is:

a) kept available for inspection by any person who may need it to comply with the relevant statutory provisions; and

b) revised as often as may be appropriate to incorporate any relevant new information (including information specified in the Control of Asbestos Regulations 2012).



CDM & Retailer's Fitout

The Landlord's Responsibilities

CDM requires a transfer of relevant Health and Safety information. The Landlord will provide the Retailer with access to any existing Health and Safety Files for the unit concerned, together with access to the Oracle Health and Safety File.

The Retailer's Responsibilities

- a) The Retailer is responsible for providing the Principal Designer, Designers and Principal Contractor with all the relevant information concerning the structure of the demised area that is already in their possession, or which it is reasonable to obtain, and any other relevant information that is required to assist them to fulfil their duties and obligations under CDM.
- b) When appropriate under CDM, the Retailer shall appoint a Principal Contractor to carry out shopfitting work. It is the Retailer's responsibility to ensure competence.
- c) The Retailer shall ensure that the HSE is notified of any works as required under the regulations.
- d) The Retailer shall ensure that construction work does not commence on site until their Principal Contractor has produced a developed construction phase Health and Safety Plan that complies with CDM. Even if the project is not notifiable, the contractor will be required to provide detailed method statements.

Format for Health & Safety File

Retailer's Health and Safety File for Completed Works

The Retailer shall, on completion of shopfitting works and before Consent to Trade is issued, issue to the Retail Delivery Manager two copies of a Health and Safety File for the works in hard copy and electronic file transfer format, including DWG and pdf format drawings.

The Retailer's Health and Safety File for the works will need to contain the following:

1.0 Introduction

- 1.1 Purpose
- 1.2 Advice to the Client
- 1.3 Register of CDM Work

2.0 Nature of the Project

- 2.1 Scope of Work
- 2.2 Project Directory

3.0 Structure, Equipment and Maintenance Facilities

- 3.1 Residual Hazards
- 3.2 Key Structure Principles
- 3.3 Hazardous Materials
- 3.4 Removal of Installed Plant and Equipment
- 3.5 Equipment for Cleaning or Maintaining Structure

4.0 As-Built Drawings and Information

4.1 Architectural

- Interior design/graphics/architectural 1:50 plan of layout including levels/make up to floor and compartmentation.
- 1:50 and 1:20 shopfront including sections, profiles, decorations and fire barrier above shopfront/ceiling.
- 1:20 sections and elevations.
- Description of all finishes.
- Samples of all shopfront and entrance finishes clearly labelled.
- Photograph of signs, similar shopfronts and detailed construction drawings of signage.
- 1:1 and 1:5 details of junctions with Landlord's wall and floor finishes and adjacent premises.
- Details clearly indicating the construction of partitions, their fire rating, staircases, ceilings and doors (with appropriate fire ratings and vision panels) where appropriate.
- Details of balustrades to staircases and voids, with verification of the required lateral loadings.
- Cavity barriers in ceilings and wall linings or other voids at 20m centres.

4.2 Structural

- Plans, sections, calculations and details of openings to be formed and any infilling to existing openings.
- Any variation required of the Landlord shell.
- Details of any fixings into the structure.
- Weights and loadings of make up floors.
- Structural verification of shopfront design exceeding 3.6 metres high.
- Identification of any structurally significant variations to existing/as built drawings that Oracle's Structural Consultant may not be aware of (following site survey).

4.3 Mechanical

4.3.1 Sprinklers

- Integration of sprinklers and all services in ceiling void.
- Section through ceiling void.
- Plan to show details of stock racking layout/design/specification and height within storage area and positioning in relation to sprinkler heads.
- All sprinkler drawings, to be provided self certifying LPCB1048 approved sprinkler contractors.
- Confirmation of drain down facilities in accordance with current regulations, flow switch location and zone check location.

4.3.2 Heating, Air Conditioning and Ventilation

- Plan of equipment on roof or within unit including sections, dimensions, weights, proposed support details and clear space around equipment required.
- Details of any service penetrations within the unit that pass through Landlord finishes and roofs.
- Toilet and kitchen ventilation layouts that pass through Landlord finishes and roofs.
- Technical specification, including full vibration and noise figures, to comply with current regulations and centre requirements.
- Details of trims and weather proofing of any penetrations through roof or external envelope of building.
- Shut down procedure for fire alarm link.

4.4 Electrical

4.4.1 Electrical Power, Lighting, Emergency Lighting

- Power distribution, layout, loading per phases and method of staggered start.
- Reflected ceiling plan.
- Type of fittings and levels of illumination.
- Manufacturer's specifications details and sales literature.
- Emergency lighting plan.

Format for Health & Safety File

4.5 Significant Services

4.5.1 Fire Alarms

- **A fire alarm drawing showing location of panels by LPS 1014 or BAFE accredited company.**

- **Procedure manual.**

4.5.2 PAVA

4.5.3 Fire Strategy

4.5.4 Means of Escape

4.5.5 Smoke Control Systems

- **Details of any smoke curtains and smoke vents.**

4.5.6 Gas Detection (catering units)

4.5.7 Signage

4.6 Other

4.6.1 Water and Drainage

- **Toilets and staff catering areas.**
- **Layout and sections including water supply and drainage pipework layout.**
- **Water meters to be installed outside in service corridors, in easily accessible location. Show position.**

4.6.2 Grease Traps and Dosing Systems

5.0 Contractor Manuals

5.1 Fabric

5.1.1 Shopfront

5.1.2 Shutters

5.1.3 Entrance Doors

5.1.4 Entrance Flooring

5.1.5 Main Flooring

5.1.6 Wall finishes

5.1.7 Ceiling finishes

5.1.8 General Doors

5.1.9 Non Electric Signage

5.2 Services

6.0 Testing and Certification

6.1 Architectural

6.2 Structural

6.3 Mechanical

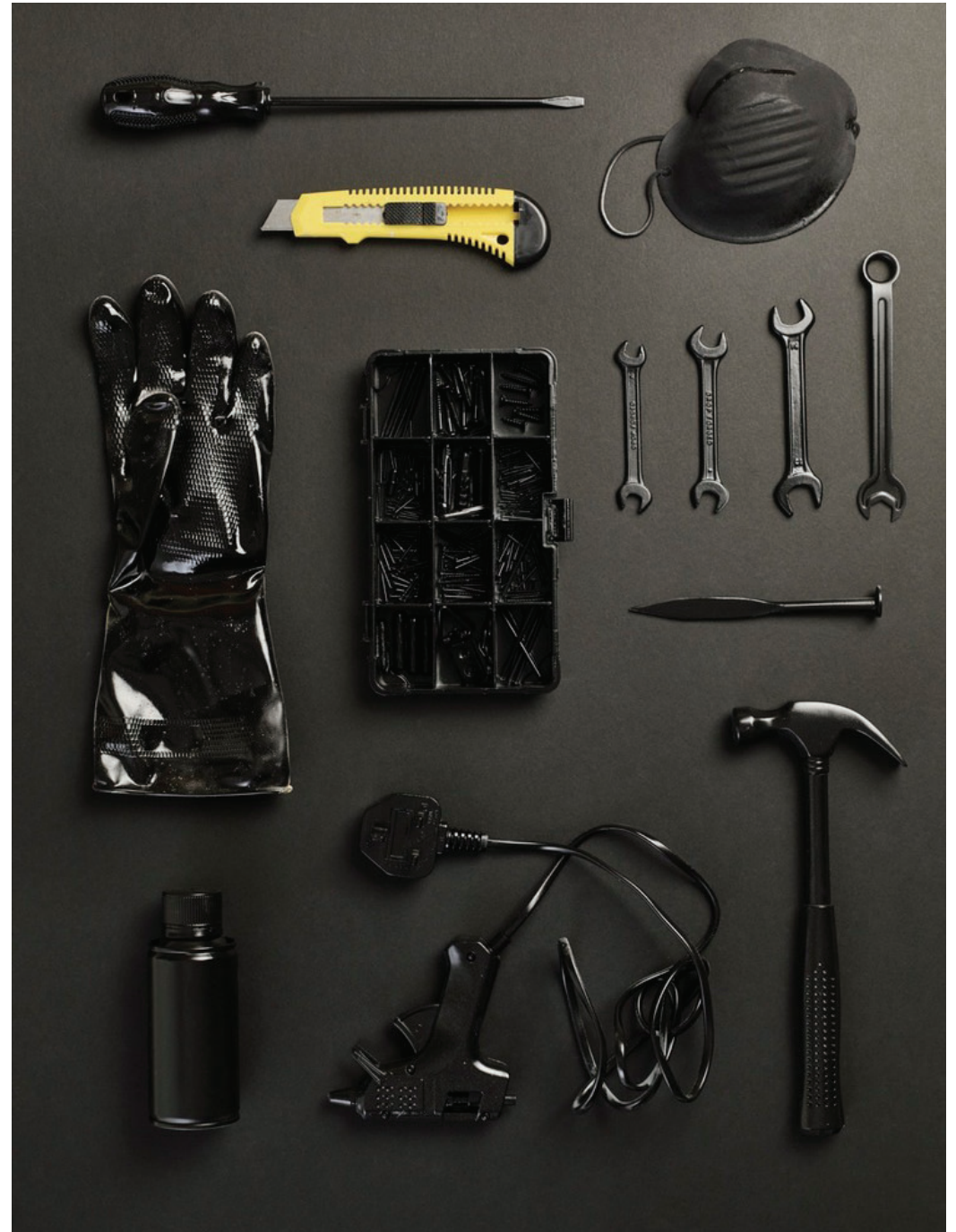
6.4 Electrical

6.5 Significant Services

6.6 Other

05

Site Constraints & Commissioning



1. Introduction

The purpose of this document is to enable the efficient and effective management of all Retailers during the fitting out of the shop units thus ensuring the safe and timely execution of the works to the benefit of all parties.

This section sets out the principal guidelines applicable to Retailer's fitting out contractors.

It is supplementary to the other essential information detailed within the shopfit pack.

Management of the fitting out phase is the responsibility of the Centre Management team.

The Oracle is a large and complex development and has many interfaces with the public and adjoining businesses and its City Centre location makes it sensitive in terms of environmental impact.

It is therefore vital that fit-out contractors comply with agreed routes for access and deliveries, including arrangements for traffic, parking and vehicle holding.

The Landlord will impose a strict regime on all aspects of working methods and fit-out contractors who fail to comply will be removed from site.

Retailers are responsible for ensuring that their designers, their fitting out contractors, sub-contractors or agents are aware of the contents of this document and comply with the same.

It is imperative that the guidelines set out in this section are observed to prevent difficulties arising between the Retailer's fitting out contractors and other Retailers during the fitting out works.

All works and working methods must comply at all times with all relevant statutes, legislation and statutory regulations.

2. Contact Details/Project Directory

The Project Directory (including The Oracle Technical Manager and Retail Delivery Partner single-point-of contact details) can be found in the Appendices.

A detailed 24-hour contact list is to be provided by each of the Retailer's fitting out contractors and circulated to the Retail Delivery Manager Workman and Centre Management.

As a minimum, these contact lists must include details for the following:

- Foreman
- Contracts Manager
- First Aid
- Principal Designer
- Building Control/Approved Inspector

Details of contractors will be retained by the Centre's security team

At least 24 hours' notice is required before arrival except in case of emergency. This is subject to approval of a risk assessment and method statement for the work to be carried out.

On arrival, please report to the Service Yard entrance where you will then be directed to Technical Services (during trading hours) or the Control Room (out of hours).

On arrival you will be briefed on:

- Fire/evacuation signals and the procedure to be followed
- Location of fire/evacuation assembly areas
- Location of amenities
- Access routes and loading bay details
- Smoking policy

It is the foreman's responsibility to ensure that all contractors working on-site are fully conversant with the site constraints.

The following information must be displayed on the rear service door of the unit during the shopfitting works :

- Retailer's trading name
- Retail unit number
- Name and address of shopfitting contractor
- 24-hour contact telephone number for shopfitting contractor
- Warning notices if any authorised flammable or dangerous materials are stored within the Retail unit.

3. Site Organisation

CONDITION SURVEY

The Retailer must take condition photos of the shop unit prior to works on site, including back of house, front of house, all adjacent Landlord's marble/granite and roof areas.

The Retailer must forward a copy of the condition survey to the Retail Delivery Manager Workman and Centre Management.

The Retailer's shopfitter is responsible for any new damage in the Landlord areas.

Hoarding

FIRE RATING TO HOARDING

Hoarding must be 1 hour fire resistant with a Class 0 surface spread of flame from both sides.

A fire-rated hoarding is not required for units facing onto Riverside or Minster Street.

FIRE ESCAPE

The hoarding must include an emergency FD60 escape door.

A vision panel is required. This can be covered during the day, but left clear over night or when no other persons are present on site.

Temporary fire detection/alarm, and fire patrols, are required throughout the fitout period.

FINISH TO HOARDING

The requirements are to be a minimum of:

- Hoardings must be neatly taped and jointed
- Have 150mm skirting
- Painted finish before the installation of graphics
- Have lifestyle graphics to make shoppers aware of their future presence and date of opening
- Graphics must be issued to Retail Delivery Partner appended to the Retailers R2 submission
- Contractor signage is not permitted on the hoardings

LOCATION OF HOARDING

The hoarding must be sited no more than 1m from the shop front line and, to prevent blocking visibility of trading neighbours, should be kept as tight as possible and with chamfered edges.

The Contractor must protect the Landlord's marble/granite pilasters and all other Landlord areas adjacent to the hoarding.

The hoarding must NOT be removed, extended or dismantled without the consent of the Landlord.

The door is not to be used as a means of entry/exit to and from the unit during the fit-out period and it should be kept closed at all times (excepting those units without rear access).

The door must be a flush fitting, with flush fitting ironmongery, no architraves and clearly indicated from the inside.

Timing

The Retailer must agree with the Retail Delivery manager Workman and Centre Management the timing, location and method of support for the hoarding and when it is moved to install the shop front.

The Retailer will be held responsible for any damage to the common parts.

Hoarding work is to be executed out of trading hours.

Temporary work is to be left neat, tidy and safe.

Alterations to the hoarding may only be carried out if the sprinkler installation has been completed and the sprinklers are fully commissioned and on-line. If this is not achievable then a secondary hoarding is to be recessed inside the shopfront line to provide full fire protection.

The hoarding shall not be removed until such time as the sprinklers and fire/smoke detectors and fire alarm have been commissioned and tested, and are fully operational and integrated with the Landlord's system.

In any event the removal of the hoardings must not be carried out without the Landlord's consent.

Retailers are reminded that there is frequently need to install large equipment and/or large sheets of glass which require the removal of the hoarding. Consideration for this should be taken into account in the construction.

Contractor's Conduct

CONTRACTOR IDENTITY PASS

Shopfitters must ensure all tradesman have a contractors identity pass. Contractors may be removed from site if no identity pass can be supplied when requested by Oracle Centre Management/Security.

PPE

All tradesman must wear the appropriate PPE (Personal Protective Equipment) as required within their H&S plan. PPE must be worn in Oracle common areas, service yard, corridors, etc.

Tradesman must not access the mall wearing PPE.

PPE signs must be visible on site.

NO RADIOS

No radios, CD players or personal stereos are permitted on site.

NO SMOKING

The Oracle is a no-smoking shopping centre. Places to smoke includes outside of The Oracle

No smoking signs must be visible within the unit. No alcohol or non-prescription drugs consumption of any type will be tolerated. If any contractor is seen consuming alcohol or drugs on-site, or is believed to be under the influence thereof, they will be asked to leave site immediately.

NO SWEARING

No swearing on site and public places.

ENVIRONMENTAL AND SAFETY

Operational and safety maintenance procedures must be complied with for plant and machinery at all times.

No explosive, flammable or dangerous materials may be used or stored anywhere on site, or incorporated in the fit-out works, without prior written consent from the Landlord.

Contractors must comply with all COSHH and CDM regulations.

Contractors must not contaminate the environment or any water courses during the works. Under no circumstances are materials to be discharged into the River Kennett or Holy Brook or any Landlord drainage.

Retailers must comply at all times with all environmental guidelines imposed by the Local Authority.

EXISTING SERVICES

Main services are terminated in the service corridors and it is the responsibility of the Retailer's fitting out contractor to provide all necessary works to connect them. The existing internal telephone line is to be maintained in the new shop-fit (any strip-out/damage is at Retailer's cost).

The Oracle supplies the water into the unit.

TEMPORARY SERVICES

The Landlord will not provide any new temporary services into the Retailer's unit, although there will be water within the vicinity of the Retailer's unit.

If the Retailer wishes to install a generator then this should be agreed in advance with Centre Management

The Retailer shall endeavour to make application for his permanent services as soon as is practical after occupation.

The Retailer's contractor will not be allowed to make use of the Landlord's services including hose reels and power points in the Malls and service corridors.

The Landlord requires close liaison with all other contractors to prevent disruption to the progress of work in all areas.

Access

SITE ACCESS

All contractors are to enter and leave the site via the service yard.

Access to the shop units must be made via the appropriate stair/lift core and service corridors and through rear entrance points.

The nature of the service road access demands lorries to be rigid flatbed, short wheel base and non-articulated with height not exceeding 4.1m.

SERVICE YARD

Contractors may bring their vehicles into the 24 hour service area for a maximum period of 20 minutes for loading and unloading only providing 24hours notice has been given to Centre Management or The Service Yard Manager.

If they are still parked after this time without reason or permission the vehicle will be clamped.

If the vehicle is deemed to be causing an obstruction or nuisance then the vehicle will be removed.

Where large vehicles are used i.e. articulated vehicles, then times for such parking are to be agreed locally with Centre Management.

UNIT

Prior to access to the unit, the appointed site foreman must sign in at the The Oracle Control Room with names of all other tradesmen working on site that day. The site foreman must also have a visitors book for all visitors on site.

Access to the unit must be made through the back door (via the service corridor).

PLANT AREA

Access to the plant area is restricted by location and time of day. Work in such areas may only be carried out once Centre Management have approved the method and timing and issued an appropriate work permit.

MALL ACCESS

Unless in conjunction with the erection of the hoarding or the erection of a shop front no work will be permitted in the malls.

It is envisaged that access along the Mall and Riverside North and South bank may be required for delivery and installation of the permanent shop front. If so, the timing and method of access shall be agreed by Centre Management.

Work will only be allowed outside of normal opening hours therefore no work may be carried out on the Riverside between the hours of 8am and 3am the following day as the pubs, restaurants and nightclubs will be trading between these hours.

Work may not take place on the malls between the hours of 8am and 8pm daily.

There is an '18 hour route' through the Centre, details of which can be provided by Centre Management.

No work may take place on this route between the hours of 6am and 1am the following day.

No entry to the malls for smoking or refreshments will be permitted, the shopfitting contractor is responsible for providing these facilities.

Should the Retailer's fitting out contractor, after due permission has been obtained from Centre Management, require access across the mall, Riverside and concourse areas, this will be on the strict understanding that all and full protective measures required are observed and applied by the Retailer's fitting out contractor.

The Retailer will be held liable for any damage caused by the Retailer (or their fitting out contractor) to the Landlord's structure, finishes and plant.

Contractors should use goods lifts only, NOT customer lifts.

Landlord's Access

Centre Management is to have access to the unit at all times during the fitting out works in order that they can inspect the works, progress and conduct.

In addition, the Retail Delivery Team is to have access in order carry out safety monitoring and a final inspection at the end of the works to confirm compliance with the approved designs.

The Retailer will also allow access to the Landlord, on reasonable notice, for the purpose of rectifying any defect, or any work in connection with the completion of another phased section of the works, or for any works in connection with maintenance, commissioning and testing of services.

COMPOUND

The retail unit is the site compound. No additional space will be given to the shopfitter unless agreed by Centre Management.

Plant deliveries must be notified to, and agreed in advance by, Centre Management.

Temporary hoardings/scaffolding/fencing to comply with BS1722-18, HSG151 and BSEN 12811-1:2003

The contractor is solely responsible for the integrity and clear access of service corridors and relevant loading bays.

On arrival, all deliveries must be moved immediately into the unit or remote storeroom.

Any materials left obstructing corridors, lift lobbies or loading bays will be removed by Centre Management and any costs incurred deducted from the shopfit deposit.

DELIVERIES

Deliveries are encouraged to be made between 1pm and 7am to prevent hold-up of deliveries to trading units. Larger, more difficult items will require access arrangements to be agreed by Centre Management. No materials may be transferred via the mall or along the Riverside during trading hours and out of hours transfers must be authorised by Centre Management

VEHICLE PARKING

Vehicles under 2.1m may use the undercover car park, otherwise external car parking is available (£6 daily rate for at both for contractors).

Vouchers can be purchased from the Service Yard

There is no parking in the service yard between the hours of 7am and 3pm. After 3pm parking will be at the discretion of the Control Room.

The Oracle will not be responsible for any damages and break-ins to contractor's vehicles.

Asbestos Removal Contractor's vehicles must be unmarked with no visible advertisements.

Security

CENTRE

The Landlord reserves the right to search either persons or vehicles leaving the development.

The security of the centre is managed by The Oracle Shopping Centre through CCTV and patrolman, 24 hours a day and 7 days a week.

The Oracle will not be responsible for the security of the Retailers' units.

UNIT

The Retailer's fitting out contractor will be entirely responsible for the internal security arrangements of his own fitting out operations.

This includes prohibiting unauthorised access by the public.

The Retailer's fitting out contractor's security procedures must be to the satisfaction of Centre Management and must be agreed prior to the commencement of the fitting out works.

Any additional temporary doors and locks at the Landlord's interfaces are to be provided by the Retailer's fitting out contractor.

Retailers remain responsible for all materials and property brought on site.

Centre Management can accept no responsibility for loss or damage to the shopfitters or their agent's property or injury to personnel whilst on site.

For safety and security reasons it is essential that Centre Management are informed of all personnel remaining on-site outside the Centre's trading hours.

Site Waste Management Plan (SWMP)

The Site Waste Management Plans Regulations came into force on 6th April 2008 with a view of minimising the amount of waste generated from the construction industry.

A SWMP is required to be completed by the Client/main Contractor on any construction sites with a estimated cost value >£300,000 net prior to commencement of construction.

For contracts >£500,000 additional reviews are required during the process.

PREPARING AN SWMP

SWMPs are now included on the supplementary list of information that may be required by Building Control before they validate an application.

For projects estimated at between £300,000 and £500,000, the SWMP should contain record of:

- Types of wastes removed from the site.
- Identity of the person who removed the waste.
- Site that the waste was taken to.

For projects estimated over £500,000, the SWMP should contain all of the above plus:

- Identity of the person removing the waste.
- The waste carrier registration number of the carrier.
- A copy of, or reference to, a written description of the waste.

- Environmental permit or exemption held by the site where the material was taken. Within three months of the end of the project, the principal contractor must review the plan and record reasons for any differences between the plan and what actually happened.

ALL PROJECTS

Refuse and surplus materials must not be allowed to accumulate.

No refuse may be stored outside the unit or deposited elsewhere on site.

The Retailer is entirely responsible for removing from site rubbish and it may not, under any circumstances, be put into the Landlord's compactors or bins.

The contractor must clean all areas adjacent to the unit and any other areas which, in the opinion of Centre Management, have been soiled by the shopfitters.

No waste materials are to be flushed down toilets or drainage gullies.

Any remedial work associated with the above activities will be charged to the Retailer.

SKIP LOCATION

Centre Management will, by prior arrangement, assign a space in the appropriate service yard for the Retailer's contractor to provide their own skip.

The Retailer's fitting out contractor must remove all waste from the site and not place any in the Centre's waste bins or compactors.

REMOVAL FROM SITE

The skip must be taken away when full.

The Oracle will not be responsible for the misuse of the skip by other Retailers.

Centre Management will advise on the size of skips allowed within the service yard. Skip sizes are to be agreed with Centre Management depending on the level of usage of the service yard.

There are large wheeled refuse bins at various locations around the centre.

Contractors are prohibited from using these and any other refuse transport devices.

Any subsequent damage will be chargeable at the full replacement cost.

Waste not removed at the end of any contract will be disposed of by the Centre, and the cost for this taken off of any shopfit deposit

SKIP DELIVERIES

Skips may only be delivered between the hours of 3pm and 7am on weekdays. If a skip is delivered after 3pm on a Friday it may remain in place until 7am the following Monday.

Centre Management use a skip hire company called RC Collard who can be contacted on 01252 844688. This information is provided for assistance only and should not be construed as a recommendation nor do Centre Management take any responsibility for the quality of the service provided by this company.

SIGNBOARDS

No contractors signboards on hoarding or in the public view are allowed.

ACCREDITED VISITORS

All visitors must sign in to the contractor's visitors book before entering site.

Centre Management may make site visits to ensure works are being carried out in accordance to The Oracle site constraints.

Centre Management and the Technical Architect will visit site prior to completion to check for conformity to the approved designs and quality of construction.

ADDRESS

(Your shop name and The Oracle unit number) The Oracle Shopping Centre, Reading RG1 2AH

The Retailer's unit number shall be confirmed at the pre-start meeting.

Working Hours

TRADING HOURS

The Centre is open for trade during the following hours:

Mon-Fri	09:30 – 20:00
Sat	09:00 – 19:00
Sun	11:00 – 17:00

Public holidays are subject to notification and change.

WORKING HOURS

24hr working hours are permitted, however noisy/disturbing works are to cease/commence at least an hour before/after the trading hours above.

CONTROL OF NOISE AND DISTURBANCE

All noisy works are to be undertaken 'out of hours'.

Noisy/disturbing works are to cease/commence at least an hour before/after the trading hours above.

NEIGHBOURS

We encourage shopfitters to speak to the neighbouring units and forward the name and telephone number of site foreman/contracts manager.

Issues which may concern them are:-deliveries, service corridor access, programme duration and noisy works.

Precautions must be made to ensure no damage to adjoining neighbours or cause disruption, e.g. Noise, water penetration etc.

Permit to Work/ Hot Works Permit

Permits are required for the following works or locations:

- Hot Works, welding, brazing, cutting and soldering.
- Spark producing processes e.g. grinding
- Mall areas access including hoarding erection and removal
- Common Areas
- Roof Access anywhere on the roof area
- Confined spaces, ducts, tunnels, pits, sewers, drains and any location with restrictions to movement, ease of escape, ventilation or dangers of gas.

Any contractor failing to comply with the permit to work requirements will not be permitted to return to the site.

Permits to work will be issued by Centre Management upon receiving bespoke RAMS and a copy of a valid public liability insurance certificate pertaining to the specific contractor conducting the works.

48 hours' notice is required for granting of permits.

The method statement and risk assessment shall include the contractor's name (and names of all those involved), address, speciality, contact telephone and fax numbers, mobile telephone number, and hours of working.

If work involves the generation of smoke, heat, fumes or dust, Centre Management will isolate automatic detectors in the area affected.

No works may commence until a Hot Works Permit has been issued and commencement has been approved.

EMERGENCY PROCEDURES

On hearing an alarm, please obey the instructions given over the PA system.

Observe fire routes and instructions from the Centre staff and do not obstruct any fire equipment.

Report any damage and first aid incidents to the Control Room.

Fire Regulations

Fire extinguishers to Centre Management's and Fire Officer's satisfaction must be provided immediately inside the hoarding at all times during the shopfitting works.

All fire-fighting equipment must be kept free of obstruction and all escape routes are to be kept clear.

The fit out contractor must comply with the JCoP on the protection from Fire of Construction Sites and Buildings under Renovation 9th edition.

Miscellaneous

SHOP ALERT

The Centre has a Landlord's Shop Alert System installed in every unit. Within each store there is a Shop Alert keypad fitted. The keypad consist of alpha numeric keys and an LCD display. This is a part of the Centre's crime detection/prevention and life safety systems. So consideration must be given for its location when a store is refitted.

The Retailer is responsible for the costs of decommissioning, removal, installation and re-commissioning the system. The Retailer is responsible for the costs incurred for repairs if the unit suffers any damage.

GREASE TRAPS

Grease traps must be installed in any unit trading as a restaurant, café or bar. They must be sized to suit the maximum capacity of the drainage system.

CRANES

Mobile cranes provided by the Retailer's shopfitting contractor for the delivery of any large items may only be used by prior arrangement and with no less than five working days' notice to Centre Management.

Access routes and positions will be defined by Centre Management.

All crane certification and permits are to be made available for inspection prior to commencement.

A full method statement must be submitted within the five days' notice period, detailing how the lifting operation will be carried out and how the Landlord's finishes will be protected during the operation.

All cranes for off-loading and distribution must be capable of travelling on the Highway without special permission and must run on pneumatic tyres.

SHOPFRONTS

The fire rated bulkhead across the mall shopfronts must not be penetrated or have fixings to it. Shopfront head fixings etc. are only to be made to the designated steel plate zone in the fire rated bulkhead.

4. Contract Management

The Retailer's contractor must follow procedures in order to preserve Life & Building Safety. This section sets out essential undertakings the Retailer must provide before fit-out work commences.

All Retailers' fitting out contractors must attend the Centre Management's Pre-Start Meeting prior to commencement of works on site.

Statutory Regulations

We recommend Retailers use the local Building Control Team (Reading Borough Council Building Control) due to their location, experience and understanding of The Oracle.

It is the Retailer's responsibility to submit information to Building Control for Building regulations approval. A Full Plans Application will be required for major works to the unit.

Reading Borough Council Building Control will correspond with you or your agent on any additional information or amendments that may be required and on receipt of details showing compliance, a Passing of Plans Notice will be issued.

The Retailer should advise Building Control key dates i.e. date of when final inspection is required. A copy of the Final Certificate and a list of any snagging items identified by Building Control must be submitted to Centre Management and Retail Delivery Manager (R4).

Alternatively, Retailers may appoint an Approved Inspector for Building Control approval. The Retailer must provide contact details of their Approved Inspector to Centre management and the Retail Delivery Manager. The above notifications still apply.

Retailers must provide Fire Risk Assessment prior to Trading.

The Landlord's Responsibilities under CDM

The Landlord will provide the Retailer with access to any existing Health and Safety Files for the unit concerned, together with access to The Oracle Health and Safety File.

Information held on file will reflect the information provided by Retailers at the date of the project to which the file relates and should not be relied upon as a source of up to date information.

Information in Health and Safety Files prepared by others in respect of shop fit-out activities may also be inaccurate or may omit details of later works.

The Landlord has no responsibilities under CDM for Retailer's shop fitting works.

However, the Landlord reserves the right to view and comment on any design and or works that fall under CDM regulations.

All shop fitting works are subject to Landlords approval and the approval system.

The Retailer's Responsibilities under CDM

For all notifiable projects, the Retailer shall appoint a Principal Designer and a Principal Contractor.

The Retailer is responsible for providing their Principal Designer and Principal Contractor with all the relevant information concerning the structure that is already in their possession or which it is reasonable to obtain in order to assist them.

The Retailer shall ensure that the Health and Safety Executive (HSE) receive a form F10 for notification of their works.

H & S Plan

The Retailer shall ensure that construction work does not commence on its site until it is satisfied that its Principal Contractor has produced a Construction Phase Health and Safety Plan that complies with the CDM Regulation requirements, together with appropriate welfare facilities.

Fire Plan

It is the shopfitters responsibility to provide a fire plan and the display of it on site.

The fire plan must be submitted to Centre Management for approval.

Fire assembly points will be advised by Centre Management.

Risk Assessments

For works carried out at The Oracle. All Risk Assessments must be issued to the Retail Delivery Manager Workman and Centre Management.

Method Statements

Shopfitters must provide bespoke Method Statements for works carried out at The Oracle.

All Method Statements must be issued to the Retail Delivery Manager Workman and Centre Management for approval. A full method statement is required if any wet trades are to be used.

If sanction is granted, all mixing must take place within the Retailer's unit.

No materials may be washed down the drains and adjacent finishes must be protected.

No pumping of sand and cement for screed will be allowed.

Ongoing H&S Plan

The H&S Plan must be maintained and kept up to date, and be available on site for inspection at all times.

Health and Safety File

At the completion of the fitting out work, the Retailer must hand a completed Health and Safety File to the Retail Delivery Manager and Centre Management before the unit is allowed to open for trade. A hard copy and an electronic version of the File will be required. The electronic version must be issued by electronic file transfer (not disc or USB device) to comply with Hammerson data transfer requirements. The File shall comply with CDM Regulations (2015).

The format of the Health and Safety File must be as follows:

1.0 Introduction

1.1 Purpose

1.2 Advice to the Client

1.3 Register of CDM Work

2.0 Nature of the Project

2.1 Scope of Work

2.2 Project Directory

3.0 Structure, Equipment and Maintenance Facilities

3.1 Residual Hazards

3.2 Key Structure Principles

3.3 Hazardous Materials

3.4 Removal of Installed Plant and Equipment

3.5 Equipment for Cleaning or Maintaining Structure

4.0 As-Built Drawings and Information

4.1 Architectural

- Interior design/graphics/architectural 1:50 plan of layout including levels/make up to floor and compartmentation.
- 1:50 and 1:20 shopfront including sections, profiles, decorations and fire barrier above shopfront/ceiling
- 1:20 sections and elevations
- Description of all finishes
- Samples of all shopfront and entrance finishes clearly labelled
- Photograph of signs, similar shopfronts and detailed construction drawings of signage.
- 1:1 and 1:5 details of junctions with landlords wall and floor finishes and adjacent premises

- Details clearly indicating the construction of partitions, their fire rating, staircases, ceilings and doors (with appropriate fire ratings and vision panels) where appropriate.
- Details of balustrades to staircases and voids, with verification of the required lateral loadings.
- Cavity barriers in ceilings and wall linings or other voids at 20m centres.

4.2 Structural

- Plans, sections, calculations and details of openings to be formed and any infilling to existing openings.
- Any variation required of the Landlord shell.
- Details of any fixings into the structure.
- Weights and loadings of make up floors.
- Structural verification of shopfront design exceeding 3.6 metres high.

- Identification of any structurally significant variations to existing/as built drawings that Oracle's Structural Consultant may not be aware of (following site survey)

4.3 Mechanical

4.3.1 Sprinklers

- Integration of sprinklers and all services in cell void.
- Section through ceiling void
- Plan to show details of stock racking layout/design/ specification and height within storage area and positioning in relation to sprinkler heads.
- All sprinkler drawings, to be provided self certifying LPCB1048 approved sprinkler contractors
- Confirmation of drain down facilities in accordance with current regulations, flow switch location and zone check location

4.3.2 Heating, air conditioning and ventilation

- Plan of equipment on roof or within unit including sections, dimensions, weights, proposed support details and clear space around equipment required
- Details of any service penetrations within the unit that pass through Landlord finishes and roofs.
- Toilet and kitchen ventilation layouts that pass through Landlord finishes and roofs.
- Technical specification, including full vibration and noise figures, to comply with current regulations and centre requirements
- Details of trims and weather proofing of any penetrations through roof or external envelope of building.
- Shut down procedure for fire alarm link

4.4 Electrical

4.4.1 Electrical Power, Lighting, Emergency Lighting

- Power distribution, layout, loading per phases and method of staggered start.
- Reflected ceiling plan
- Type of fittings and level elimination
- Manufacturer's specifications details and sales literature
- Emergency lighting plan

4.5 Significant Services

4.5.1 Fire Alarms

- A fire alarm drawing showing location of panels by LPS 1014 or BAFE accredited company
- Procedure manual

4.5.2 PAVA

4.5.3 Fire Strategy

4.5.4 Means of Escape

4.5.5 Smoke Control Systems

- Details of any smoke curtains and smoke vents.

4.5.6 Gas Detection (catering units)

4.5.7 Signage

4.6 Other

4.6.1 Water and Drainage

- Toilets and staff catering areas
- Layout and sections including water supply and drainage pipework layout
- Water meters to be installed outside in service corridors, show position.

4.6.2 Grease Traps and Dosing Systems

5.0 Contractors Manuals

5.1 Fabric

5.1.1 Shopfront

5.1.2 Shutters

5.1.3 Entrance Doors

5.1.4 Entrance Flooring

5.1.5 Main Flooring

5.1.6 Wall finishes

5.1.7 Ceiling finishes

5.1.8 General Doors

5.1.9 Non Electric Signage

5.2 Services

6.0 Testing and Certification

6.1 Architectural

6.2 Structural

6.3 Mechanical

6.4 Electrical

6.5 Significant Services

6.6 Other

5. Programme

FIT-OUT CONTRACT PERIOD & DATES

The Retailer must state the start, finish dates and duration of works, at the pre-start meeting.

The Retailer must advise the Retail Delivery Partner and Centre Management if there are any delays to the programme or date for completion.

The connection of Retailer's services to Landlord's systems and commissioning of all life safety systems (sprinklers, fire alarms and emergency lighting) must be completed to the Landlord's satisfaction before the unit is handed over to the Retailer for merchandising.

Shopfront works must also be completed before the hoarding may be dismantled, and in any case, the Retail Delivery Manager Workman and Centre Management's approval must be sought before the hoarding can be removed.

It is the shopfitter's responsibility to contact the Centre's nominated Fire Alarm Interface Contractor who will make the final connection to Landlord's interface (we advise a minimum of one week notice).

PROGRAMME OF WORKS

The Contractor/Retailer is responsible for their programme.

The programme must be issued to the Retail Delivery Manager Workman and Centre Management for information only; it is the Retailer's responsibility to inform the Retail Delivery Manager Workman and Centre Management of any changes to the programme.

A schedule of deliveries must also be issued to Centre Management. It is the Retailer's responsibility to seek approval for major deliveries, work outside the demised area, permits to works, etc. in a timely manner.

6. Statutory Approvals

BUILDING CONTROL APPROVAL

We recommend that Retailers use the local Building Control Team (Reading Building Control) due to their location, experience and understanding of The Oracle.

Approved Inspectors must be familiar with the building and must carry out on-site inspections of the completed work.

Retailers must forward a Building Control Approval (Conditional Passing of Plans Notice) prior to start on site.

A Building Control Officer must inspect the unit prior to the unit starting to trade and issue a Building Control Completion Certificate. Without the Building Control sign off, the Retail Delivery Manager Workman and Centre Management will not issue the form L4 'Consent to Trade' to the Retailer.

FIRE OFFICER COMMENTS

Fire Officer comments on the fitting out design drawings will be sought by local Building Control or the Retailers Approved Inspector. These comments must be incorporated into the fitting out works.

FIRE RISK ASSESSMENT

The Retailer must carry out a Fire Risk Assessment (FRA) in accordance with the Regulatory Reform (Fire Safety) Order, prior to occupation. A copy of the FRA must be issued to the Retail Delivery Manager Workman and Centre Management before Consent to Trade is granted.

7. Finance

Shopfit Approval Fees:

The Retailer will meet the costs incurred by the Landlord in the approval of its proposals. Costs are calculated from a range of fees depending on the extent of the works. The Landlords managing agents will confirm and invoice the appropriate fee, which must be paid prior to any shopfitting works commencing on site.

Deposits against damage and the provision of as built records will be taken prior to commencement on site, and released when all items on the Consent to Trade form and the snagging works have been completed. The deposit will only be accepted from the retailer/occupier, it may not be paid by the fit out contractor.

INSURANCES

Before any works take place, the Retailer must confirm in writing that their nominated Contractor is insured with insurers approved by the Landlord in respect of:

(a) Public Liability to the sum of not less than £10m in respect of any one claim.

(b) Employer's liability (Compulsory Insurance Act 1969) to the sum of not less than £10m in respect of any one claim.

(c) In the event of any damage to the Landlord's property and/or loss of revenue as a result of the contract works, the Public Liability policy shall provide indemnity to the Landlord.

In advance of the commencement of shopfitting on site, the Retailer should provide details of their public liability cover including:

- Insurer.
- Policy No.
- Renewal Date.
- Evidence of Premium Payment.
- Limit of Indemnity.

The Retailer should immediately inform Centre Management of all potential or actual claims.

(d) All risks on the contract works in progress including unfixed materials for the total reinstatement value including an allowance for professional fees.

SHOPFIT DEPOSIT

The Retailer is required to provide a shopfit deposit prior to works starting on site. The Retail Delivery Manager will advise the Retailer the sum of money to be payable. The deposit will only be accepted from the retailer/occupier, it may not be paid by the fit out contractor.

The shopfit deposit will be released upon:

(a) Submission of hard and electronic copies of the final Health & Safety File to Centre Management, including:

- As-built Drawings
- Operation & Maintenance Manuals
- Material Safety Data Sheets
- Copies of all Certification as per R4

(b) Submission of as-built drawings to the Retail Delivery Manager. One hard copy and an electronic version will be required. The electronic version must be issued by electronic file transfer (not disc or USB device) to comply with Hammerson data transfer requirements.

(c) Completion/exchange of Lease Agreement with Hammerson or their agents.

(d) Completion of all snagging/defect rectification works.

(e) Payment of all appropriate cost/fees to Hammerson/Workman/Landlord's Contractors

8. Commissioning

An essential part of the fitting out works is the connection of Retailer's services to the Landlord's supplies.

Please refer to the section on Commissioning in this document.

This section outlines The Oracle's commissioning procedures and requirements and will advise which Centre contractor's must be used to interface Retailers' systems to landlord systems (and the associated fee).

Please note that the final connection and witness testing of landlord's supplied or interfaced services will not be instigated unless:

- The appropriate application form is completed
- All information requested is received
- All fees for connection are paid

9. Consent to Trade

Retailers must give notice that their fitout is nearing completion. A Landlord inspection will take place and any defects will be notified to the Retailer.

All required Commissioning Certificates must be provided by the correct sub-contractors before Consent to Trade will be granted.

The Retailer must also ensure that their nominated Principal Designer provides a Health & Safety File including Operational & Maintenance Manuals in the correct format to be issued to the Retail Delivery Manager and Centre Management.

10. Any other Business

An essential part of the fitting out works is the connection of Retailer's services to the Landlord's supplies.

Commissioning

Fire Alarm Connection Procedure

Please note that it is advisable for the sprinkler and alarm connections to be carried out by the specialist contractors at the same time on the same day. Retailers must manage these timings themselves.

WHO	WHAT	WHEN
1. Retailer	Completes Fire Alarm installation within Retail unit to L1 standard and gives Landlord's specialist contractor a minimum 1 week's notice to carry out final Landlord's system interface connection/commission works. The commissioning must be completed prior to Consent to Trade is issued.	To suit Retailer's fitout programme.
2. Retailer	Retailer's Fire Alarm Contractor provides interface cables to Landlord's interface box at rear of unit (ensuring link to sprinkler flow switch is made if applicable) for final connection by Landlord's Fire Alarm contractor. Retailer's Fire Alarm Contractor terminates interface cables into Landlord's interface box at rear of unit (ensuring link to sprinkler flow switch is made) for final connection by Centre Management's Fire Alarm contractor.	Upon completion of item 1.
3. Retailer	Completes application for connection and submits to Landlord's contractor together with: • The agreed payment. • A Fire Alarm completion certificate as required by LPS 1014 or BAFE completed by an NICEIC registered contractor including confirmation that the Retailer's Fire Alarm is compatible with the Landlord's Control Panels and detectors. Accepting both Evacuate & Alert VFC signals and transmitting Fire and Fault signals to the Landlord's System.	Upon completion of item 2. Note: Copies of the above certificates are to be issued to Retail Delivery Manager.
4. Retailer/Landlord's Contractor	The Retailer is responsible for the co-ordination and confirmation of the mutually agreed time for final connection of Fire Alarm interface cables. Specialist to connect and prove that systems are correctly interfaced and connected. Including test on sprinkler flow switch (if applicable, sprinkler contractor must be in attendance) and the shut down of any Tenant's Music/PA system. Retailer's Fire Alarm contractor to be in attendance.	Upon completion of item 3.
5. Landlord's Contractor	Landlord's specialist contractor will issue a certificate confirming Retailer's Fire Alarm system is connected to the system and is fully interfaced and functioning correctly. Note: Specialist certificate to form part of the R4 submission.	Upon completion of item 4.
6. Retailer	All actions above will have to occur prior to the Retailer being allowed to open for trade.	

Commissioning

Sprinkler Connection Procedure (where applicable)

WHO	WHAT	WHEN
1. Retailer	Completes Sprinkler installation within unit demise. The Retailer's installation is NOT to be connected to the Landlord's system without authorisation from Centre Management.	To suit fitout programme.
2. Retailer	Back fills sprinkler system against closed Landlord's monitored isolating valve to a water pressure of 8 bars.	Upon completion of item 1.
3. Retailer	It is a requirement that the Retailer carries out Hydraulic test on installation to at least 15 bar for at least 1 hour.	Upon completion of item 2 or after sprinkler installation is complete.
4. Retailer	Completes application for connection form and submits to together with: • LPCB LP 1048 Certificate of Conformity. • Sprinkler system Hydraulic test certificate. • Provides evidence, issued by the Retailer's insurer, confirming the installation has been approved and is acceptable to the insurer. Note: Copies of the above certificates are to be issued to the Retail Delivery Manager.	Upon completion of item 3 or after hydraulic test is satisfactory.
5. Retailer	Retailer is to co-ordinate Landlord's sprinkler contractor to open the retail unit's isolating valve on a date to be mutually agreed between the Retailer and Specialist Contractor. The Retailer's sprinkler contractor is to be in attendance. It remains the Retailer's responsibility to manage the opening of the valve. The Retailer is to ensure adequate notification is given to the Landlord/Centre Management on what date the valve is to be opened (so the fire alarm interface can be taken 'off watch' to prevent false alarm). Sprinkler isolating valves are not to be opened during centre trading hours to prevent incidental pressure changes in the main sprinkle system and setting off sprinkler demand pumps causing an evacuation of the centre.	Upon completion of item 4.
6. Landlord's Contractor	Landlord's Specialist contractor issues certificate confirming Retailer is connected to the Landlord's system and the valves are open. Note: Specialist certificate to form part of the R4 submission.	Upon completion of item 5.

Commissioning

Cold Water Connection Procedure

WHO	WHAT	WHEN
1. Retailer	At handover from Landlord to Retailer the Meter reading will be taken and the transfer of ownership forms will be completed and submitted to Southern Water by the Retailer. From this handover date any usage and standing charge will be the responsibility of the Retailer.	At handover date as defined in the Agreement for lease.
2. Retailer	Completes Domestic Water Supply installation within unit demise. The Retailer's installation is NOT to be connected to the Landlord's system without authorisation.	To suit fitout programme.
3. Retailer	Completes application for connection form and submits form to Centre Management together with: • Certification confirming pipework is sound and free from leaks. • Certification confirming Retailer's system has been chlorinated in accordance with BS 8558 • Issues certificate confirming installation conforms to all water supply Bylaws. • Takes reading of water meter and issues reading to Retail Delivery Team.	To suit fitout programme.
4. Retailer	Demonstrates to Centre Management location of non-return valve (preferred locating in service corridor at high level).	Upon completion of item 2.
5. Retailer	Upon receipt of authorisation, connects Retailer's pipework to Landlord's system and open valve.	
6. Retailer	Turns on water supply, it is the Retailers responsibility to ensure all taps and valves within the unit are closed or off to ensure no flooding occurs.	At the request of the Tenant.
NO PAYMENT REQUIRED BY RETAILER		

Note: Unauthorised connection to the Landlord's system or opening of the isolating valve may result in injury to personnel, damage to the Landlord's valves, switches, pipework, pump sets or water supplies and may invalidate the Landlord's chlorination certificate. Any costs for rectifying damage will be charged to the Retailer.

Commissioning

Foul Drainage Connection Procedure

WHO	WHAT	WHEN
1. Retailer	Completes Foul Drainage installation within retail unit.	To suit Retailer's fitout programme.
2. Retailer	Undertake air test and ensure this is witnessed by Building Control Officer. Test is to cover all pipework from top of stack through to lowest cleaning/rodding point.	Upon completion of item 1.
3. Retailer	Completes an application for connection form and submits to the Retail Delivery Manager together with: • A certificate confirming installation is complete and test has been witnessed by Building Control.	Upon completion of item 2.
4. Retailer	Upon receipt of authorisation, the Retailer connects unit drainage system to Landlord's system.	Upon OK from Retail Delivery Manager – Item 2.

Commissioning

Electricity

WHO	WHAT	WHEN
1. Retailer	It will be the Retailer's responsibility to ensure they have installed their own meter as per the terms to ensure they can commission and open for trade. Single Phase a) Retailer installs mains isolating switch and tails (provide board if required). b) Retailer applies to Southern Electric with Minor Works NICEIC Certificate (copy to Retail Delivery Manager also) c) Southern Electric attends to insert fuses and install cables/meter. Three Phase a) Landlord provides supply cable and service (no meter or fuses). b) Retailer installs main isolating switch, tails and board. c) Retailer applies to Southern Electric with Minor Works NICEIC Certificate (copy to Retail Delivery Manager also). d) Southern Electric attends to insert fuses and meter.	To suit Retailer's fitout programme.
2. Retailer	Retailer to confirm to the Retail Delivery Manager that their permanent power has been made live.	

Note: Step-down transformers are to be provided by the Retailer at their cost to ensure an 110V electrical supply is used for all shop fitting works. The use of 240V tools is strictly prohibited.

Commissioning

Gas

WHO	WHAT	WHEN
Note	Gas is only available to select units, to be agreed prior to start on site. Tenants with a gas supply should contact their supplier for meter connection requirements. Tenants systems include all pipework from the meter to the unit and all gas systems within.	To suit Retailer's fitout programme.

Telephone

WHO	WHAT	WHEN
1. Retailer	Application for telephone connections is to be made by the Retailer directly to required supplier (containment trays are provided to Landlord's corridors only). Obtain consent from Centre Management for any works outside the Retailer's demise. A Permit to Work will be required.	To suit Retailer's fitout programme.

Commissioning

BCO Approval Procedure

WHO	WHAT	WHEN
1. Retailer	Carries out design and fitout of retail unit ensuring the design is compliant in all respects with Building Control requirements. Issue copies of fitout/design drawings to BCO as required.	To suit Retailer's fitout programme.
2. Retailer	Invites BCO to inspect the retail unit and advises Retail Delivery Manager.	To suit Retailer's fitout programme.
3. Retailer	Issues BCO certificate to Retail Delivery Manager.	Upon completion of items 1 and 2.

Earthing to Plant Area and Lightning Protection

WHO	WHAT	WHEN
1. Retailer	The Retailer will be required to tie in to the lightning protection system on the Centre's roof area, to the satisfaction of Centre Management.	To suit Retailer's fitout programme.

Details of Documentation Required to Achieve Consent to Trade Status

The Retailer **MUST** issue the following documentation before a 'Consent to Trade' notice (L4) can be issued by the Retail Delivery Manager:

- Building Regulations Completion Certificate
- Fire Risk Assessment
- Fire Alarm Design, Installation, Commissioning and Acceptance Certificates to BS5839
- Functional test records proving correct operation of fire alarm, control and tripping functions
- Emergency Lighting Completion Certificate, including signed declarations of Design, Installation and Verification to BS5266
- Electrical Installation Certificate for the Design, Construction, Inspection and Testing of the electrical installation (NICEIC format) to BS7671
- Sprinkler System Hydraulic Test Certificate to BS EN 12845
- Sprinkler contractor's LPCB LPS 1048 Certificate of Conformity
- Smoke extract commissioning certificate (if applicable)
- Compliance with BS EN 378:2016 (refrigerant escape)
- LPCB LPS 1048 Certificate of Conformity (where applicable)
- Certification confirming Water By-Laws are satisfied.
Certificate of Chlorination for the Retailer's Domestic Water System
- Connection to Oracle Intranet live, and induction held with centre Management
- Foul Drainage Building Regulations Compliance Certificate (witnessed by BCO – where applicable)
- Copy of Statutory requirement of Licensing Acts (if applicable)
- Any other Statutory Certification (e.g. Utility Service Providers) as may be required
- Health and Safety File (including as built drawings)
- Confirmation that all Landlord's accounts have been settled

All certificates should be attached to the R4 Form.

Certification Required for Connection to Landlord Supplies

The certificates listed below marked * must be issued within a minimum of 48 hours before connection to the Landlord's system is carried out.

- * Retailer's Fire Alarm commissioning certificate
- * PA /VA completion certificate
- * Sprinkler system commissioning certificate, (Retailer's contractor)
- Electrical installation completion certificate & inspection certificate (by NICEIC Contractor)
- Emergency lighting completion certificate
- Pipework test certificate
- * Drainage system completion certificate (showing pipework test witnessed by BCO)
- * Water services completion & Chlorination Certificate (Where applicable)
- IT data wiring completion certificate

Note: The Retailer should apply for connection minimum 5 working days before connection is required.

Applications will be processed subject to unit inspection.

It is the Retailer's responsibility to issue, in advance, all payments for charges levied for connection to the Landlord's system.

Contacts

These contacts represent the key consultants involved in the retail delivery process at Oracle Shopping Centre.

Landlord

The Oracle Limited Partnership
Kings Place
90 York Way
London N1 9GE

T: 020 7887 1000

Landlord's Head of Retail Design and Delivery

Hammerson plc
Kings Place
90 York Way
London N1 9GE

Judith Kelly

T: 020 7887 1134

M: 07795 005462

E: judith.kelly@hammerson.com

Cost Recovery Agents and Retail Delivery Partner

Workman LLP
Minton Place
Station Road
Swindon SN1 1DA

Luke Hardcastle

T: 0117 980 6209

M: 07590 976296

E: luke.hardcastle@workman.co.uk

The Oracle Management

The Oracle Shopping Centre
Management Suite
Reading RG1 2AG

Gary Clifford - Technical Services
Coordinator

T: 0118 965 9000

F: 0118 965 9045

E: gclifford@theoracle.com

Retail Design Consultant

Beyond London
4a King Street
Hammersmith
London W6 0QA

Rachel Griffiths

T: 020 8846 3881

E: rachelg@beyondlondon.com

Structural Engineer

Pell Frischmann Consultants
5 Manchester Square
London W1A 1AU

Andrew Norrie

T: 020 7486 3661

F: 020 7935 2589

E: anorrie@pellfrischmann.com

Fire Alarm Interface Contractor

Thames Valley Fire (UK) plc
Unit 59/69 Queens Road
High Wycombe HP13 6AH

Mat Page

M: 07557 003082

E: mpage@lsfiregroup.co.uk

The Oracle Sprinkler Contractors

Hall & Kay Fire Engineering
Unit E
Silwoord Park
Ascot
Berkshire SL5 7PW

Kay Cassidy

T: 01344 203800

DD: 01344 203843

E: kay.cassidy@hkfire.co.uk

Building Control

Reading Borough Council

Building Control Office

Civic Centre

Reading

Berkshire RG1 7TD

Graham Pearce

T: 0118 939 0545

F: 0118 958 9770

E: graham.pearce@reading.gov.uk

Royal Berkshire Fire and Rescue Services

Headquarters

103 Dee Road

Tilehurst, Reading

Berkshire RG30 4FS

T: 0118 959 0510

W: rbfrs.co.uk

Fire Safety

Jeremy Gardner Associates Limited

11 Riseborough Street

London SE1 0HF

Ben Atkinson

T: 020 7202 8484

E: ben.atkinson@jensenhughes.com

Utilities

Electricity

Southern Electric

PO Box 6009

Basingstoke

Hampshire RG21 1ZD

T: 0845 744 4555

Gas

National Grid

W: www.nationalgrid.com

Water

Thames Water PLC

Operations

Kew Business Centre

Kew Bridge Road

Brentford

Middlesex TW8 0EE

T: 0845 9200 800

Telecommunications

BT Telecom Sales Enquiry

T: 0800 800 152