



# Fire Safety Strategy Report for KOKO, Camden Town

# Reference: S17033412 Issue No: 02

# **Revision History**

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# **Client Details**

| Client:         | TowerEight  |
|-----------------|---|
| Client Address: | 1 Fellmongers Path, London Bridge, London SE1 3LY |
| Project:        | KOKO, Camden Town                                 |

# Validity

This report is produced on the basis of the information and experience available at the time of preparation. It is applicable to the above-mentioned project only in accordance with the client's instructions. It is only valid provided no other modifications are made other than those for which a formal opinion has been sought and given by Bureau Veritas UK.

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# **1** Introduction

#### 1.1 Description

Archer Humphryes Architects are designing the refurbishment works to KOKO nightclub located in Camden Town, London. This report will cover the fire safety strategy for the refurbished areas only, and not the existing nightclub areas where no works are taking place.

The existing building is Grade II listed and spans from sub-basement level, basement and ground to a fourth floor roof terrace. The proposed works consist of the follows;

- Sub-Basement convert two existing storages in cold room, include a water storage plant room with water boosting in the existing Koko storage, create a new sub-basement with storage and Koko production office
- Basement create a new basement for wine cold room and walk in fridge and freezer. Rearrange the existing storage
- KOKO Private Members Venue (first to third floor) providing dining, lounge bar, library and areas for members, guests, artists, crews etc. At third floor there will be a suite.
- The Hope and Anchor (ground floor level) providing sales areas, bar, dining with and an open kitchen.
- Dome (fourth floor) replacement of the rooftop water tank into an accessible dome, providing a bar and function area for members, guests, artists, crews etc.
- The Rooftop Lobby (fourth floor) replacement of the fourth floor rooftop plant area into an accessible rooftop lobby, providing access to all the adjacent terrace areas.
- The Flytower the first floor stage, second floor gallery and third floor theatre space opens into a large triple height space flytower enclosed by a canopy structure.
- Rooftop additional escape routes from the outdoor, private terrace areas and as part of the refurbishment works for the dome.
- Members Staircase additional staircase included as part of the refurbishment works, serving all upper and lower floor levels.
- KOKO Staircase part refurbishment of the staircase on third floor level.

#### 1.2 Purpose of Report

The objective of this report is to present a fire safety strategy that satisfies the functional requirements of the Building Regulations 2010 whilst maintaining an acceptable level of life safety, protection of adjacent property and adequate provisions for fire service intervention. British Standard 9999: 2017 has been used as the baseline guidance document for this development in order to demonstrate compliance with the functional requirements of Part B of the Building Regulations 2010. This document will, therefore, act as the basis of discussions between the design team and Approval Authorities, in order to obtain approval in principle for the design in respect to fire safety compliance.

#### **1.3 Sources of Information**

This report is based on information and drawings provided by Archer Humphryes Architects. Drawings are tabulated below.

#### Table 1: Sources of Information

| Description                | Drawing Number    | Date     |
|----------------------------|-------------------|----------|
| Proposed Sub Basement Plan | AHA/KKC/GA/098 BV | 02.11.18 |
| Proposed Basement Plan     | AHA/KKC/GA/099 BV | 02.11.18 |
| Proposed Ground Floor Plan | AHA/KKC/GA/100 BV | 02.11.18 |
| Proposed First Floor Plan  | AHA/KKC/GA/101 BV | 02.11.18 |
| Proposed Second Floor Plan | AHA/KKC/GA/102 BV | 02.11.18 |
| Proposed Third Floor Plan  | AHA/KKC/GA/103 BV | 02.11.18 |
| Proposed Fourth Floor Plan | AHA/KKC/GA/104 BV | 02.11.18 |

Images of the drawings included in this report are for concept purposes only and looks to address and illustrate objectives in gaining compliance with the Building Regulations Part B. Therefore updates to the images within the report will not be made unless the fire safety concept to the updated drawings compared those previously given has changed.

# 1.4 Design Team / Client Confirmation Required

Further information / confirmation is required by the Design Team / Client and approvals from Building Control, these have been provided in the following colours throughout the report:

- **'Blue'** Information / confirmation is required.
- 'Purple' Approvals is required.

In any case, the fire strategy report should be read in full by all relevant parties.



#### **Statutory Requirements** 2

# 2.1 The Building Regulations



Figure 1: Part B of The Building Regulations

#### 2.2 Guidance

The refurbishment works of the office spaces within the building constitutes as a "material alteration" under the Building Regulations 2010 or the Building Regulations applicable to the time of when the existing building was designed. Therefore, provided that the works do not produce a less compliant design to that of the existing situation/condition of the current arrangements, existing non-compliances to current standard do not need to be rectified by the works. However, it is recommended where possible amendments are made such that any existing non-compliances are addressed and brought in line with current regulatory standards.

Compliance with the Building Regulations will normally be achieved for a assembly and recreation building by adopting a design approach that follows the recommendations within BS 9999:2017 and supplementing this with fire engineering solutions when necessary to ensure that the key fire safety objectives for the design are achieved. However in this case, the works for this existing office building will be assessed using the guidance BS 9999:2017 as a baseline, where the overall aim of the works will be to maintain the existing standard of fire safety and where possible improve upon this standard.

It should be noted, where in any case fire engineering is used; this should be treated as a design risk as acceptance from the approval authorities is required.

# 2.3 The Regulatory Reform (Fire Safety) Order 2005

Once the building is completed and occupied, the Regulatory Reform Order (RRO) becomes the controlling fire safety legislation. It is necessary, among other things, under this order for the owner/occupier of the building to carry out and maintain as fire safety assessment. The building's management team will also be responsible under this order to ensure that the building's fire safety provisions are appropriately managed, maintained and tested over the whole life of the building.

## 2.4 Construction, Design and Management Regulations

Projects undertaken within the UK are subject to the requirements of the Construction, Design and Management Regulations (CDM).

This report defines the strategy for meeting the functional and performance requirements for fire safety in the finished building. Where any conclusions or recommendations have been arrived at which specify particular materials, products or forms of construction these will have been assessed, in accordance with CDM Regulation 9 (Duties for Designers). In the event that these involve significant residual risks or health and safety critical assumptions, this information will be made available, to the Principal Designer. Where the architect or other consultants use the standards put forward in this report to specify works, they are understood to be competent in alerting the Client, Principal Designer, Contractor and Building Occupiers of CDM issues.

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## 2.5 Regulation 38

Regulation 38 of the Building Regulations requires that the fire safety information in respect to a 'relevant building' should be passed to the 'responsible person' upon completion of the work or when the building is first occupied (whichever is earlier).

- 1. This regulation applies where building work:
  - a. Consists of or includes the erection or extension of a relevant building; or
  - imposes a requirement in relation to the work.
- 3. In this regulation:
  - with reasonable safety;
  - will apply after the completion of building work;
  - c.
  - d. 2005

A suggested but not exhaustive list is given below:

- This fire strategy report.
- Management information proposed as part of this fire strategy report.
- schedules and operational details.
- O&M Manuals for building systems, including commissioning information and certification. •
- Any information related to facilitating the evacuation of disabled occupants where applicable.



b. Is carried out in connection with a relevant change of use of a building, and Part B of Schedule 1

2. The person carrying out the work shall give fire safety information to the responsible person not later than the date of completion of the work, or the date of occupation of the building or extension, whichever is the earlier.

a. "Fire safety information" means information relating to the design and construction of the building or extension, and the services, fittings and equipment provided in or in connection with the building or extension which will assist the responsible person to operate and maintain the building or extension

b. A "relevant building" is a building to which the Regulatory Reform (Fire Safety) Order 2005 applies, or

A "relevant change of use" is a material change of use where, after the change of use takes place, the Regulatory Reform (Fire Safety) Order 2005 will apply, or continue to apply, to the building; and

"Responsible person" has the meaning given by article 3 of the Regulatory Reform (Fire Safety) Order

Active (Fire Alarm Systems, emergency signage and lighting, fire curtains, dry risers etc.) and Passive (compartmentation, fire doors, cavity barriers etc.) Fire Protection System details with relevant maintenance

#### **Risk Profile** 3

The risk profile is a measure of the potential for fire risk to people, property and business continuity. This reflects the occupancy characteristics and the fire growth rate for the building, and is derived as described within the subsequent sections below.

#### 3.1 Occupancy Characteristic

The majority of KOKO is open to the public and thus is expected to have occupants who are awake and unfamiliar with the building and therefore will be defined by occupancy Characteristic B. However, areas which are for staff only are to be treated as those occupants who are awake and familiar with the building and therefore defined by occupancy Characteristic A.

#### 3.2 Fire Growth Rate

For plant areas, a fire growth rate of Fast (Category 3) is applicable.

For all other parts of the building, a fire growth rate of Medium (Category 2) is applicable.

Kitchens are considered a place of special fire hazard requiring 30 minutes of fire resisting construction. It is proposed to provide localized suppression systems in lieu of fire resisting construction. This permits the relaxation of fire growth rate in accordance with Clause 38 of BS 9999: 2017.

#### 3.3 Risk Profile

The risk profile for various areas of the building is tabulated below.

Table 2: Risk Profiles

| Accommodation                           | <b>Risk Profile</b> |
|---|---------------------|
| KOKO Guest Areas                        | B2                  |
| Kitchens, Back of House and Staff Areas | A2                  |
| Plant                                   | A3                  |

## 3.4 Minimum Criteria and Additional Benefits

No additional benefits have been proposed as part of this fire strategy.

# 4 Means of Warning & Escape

# 4.1 Evacuation Strategy

Due to the perceived condition of the existing passive fire protection measures to heritage buildings, during an emergency, the building should operate a simultaneous evacuation strategy, whereby the entire building will evacuate on the activation of the fire alarm system. The reasons for this are as follows;

- measures (compartmentation, fire stopping, cavity barriers etc.).
- To minimise any risk that hot/cold smoke can pose to occupants in the building. •
- to occupants likely to be under the influence of alcohol.

The fire alarm system for any inner rooms e.g. basement level freezer rooms will be required to be on a single-stage.

The fire alarm system to the remaining building can be "two-stage" to reduce the risk of false alarms (provided this is an extension to the current KOKO evacuation arrangement), if a single smoke detector activates, only that room/area will be evacuated on the first stage. An investigated period of 1-3 minutes will then begin, to allow staff/security/fire wardens to investigate whether the alarm is a confirmed fire.

The remainder of the building will then be evacuated simultaneously when one or more of the following occurs:

- A second detector activates;
- A heat detector activates:
- The investigation confirms that there is a fire;
- A manual call point is operated;
- The investigation time elapses without confirmation or cancellation.

It should be noted that the activation of a single manual call point or a second detector will be seen as a confirmed fire and cause the building to evacuate on activation of the fire alarm.

#### 4.2 Fire Detection & Alarm Systems

#### **Table 3: Fire Detection and Fire Alarm System**

| Accommodation                           | Minimum Acceptable System | Recommended System |
|---|---------------------------|--------------------|
| KOKO Guest Areas                        | Μ                         | L2                 |
| Kitchens, Back of House and Staff Areas | Μ                         | L2                 |
| Plant/Ancillary                         | L2                        | L2                 |

1) Alarm systems should be designed and installed in accordance with BS 5839: Part 1, with manual call points.

2) Sounders should be provided on terraces and interlinked with detection in the access room/s.

Type A (direct operation) manual call points, designed in accordance with BS EN 54-11;2001 and installed in accordance with BS 5839-1: 2013, should be located at all storey exits.

In addition to audible alarms, visual alarms devices (VADs) should be provided to isolated areas such as lavatories, terrace areas and plant rooms etc. The visual alarm devices must comply with BS EN 54 part 23; 2010.

All inner rooms should be provided with means of warning such as sounders, doors or walls with adequate vision panels. The access rooms will be provided with appropriate fire detection systems. An example of where this occurs is the first floor level plant room which is an inner room off of an open kitchen area.

When the fire alarm is activated, the lifts should descend to the ground floor. If the fire is at ground floor level, the lift should park on the first floor. In any case, the lift should be out of service in an emergency.

All doors on escape routes fitted with a lock or fastening should be readily operated, without the use of a key and without having to manipulate more than one mechanism. Where the door is likely to be used by more than 60 persons, panic hardware complying with BS EN 1125 should be installed on the side approached by persons making their escape. All electrically powered locks should automatically unlock on actuation of the fire alarm system.

The fire alarm cause and effect should be developed by the M&E consultants as the design develops.



Due to the age of the building, there will be concerns in relation to the existing building's fire safety measures similar concern is put on any other building of this age. These namely are regarding passive fire protection

Reducing the delay in pre-movement times, as overall time of evacuation are already expected to be slower due

#### 4.3 Suppression Systems

There are no existing automatic water fire suppression systems (AWFSS) within the building and it is not proposed nor is it required to install any AWFSS within the building as part of the refurbishment works.

# 4.4 Emergency Lighting & Signage

Emergency lighting will be provided in all escape routes, in accordance with BS 5266: Part 1 and 7. Escape and other fire safety signage will be provided in accordance with the recommendations of BS 5499: Part 1.

Emergency lighting will be provided to the following areas:

- All internal circulation areas, open plan areas greater than 60m<sup>2</sup> in area and any windowless accommodation;
- At every storey exit and exit door from the building. •
- External escape routes and external areas in the immediate vicinity of exits;
- In all escape stairs to ensure that, each flight receives direct light. Lighting to escape stairs should be on a separate circuit from that supplying other parts of the system;
- All plant rooms;
- Close to (typically within 2m of) all fire safety, or other safety equipment;
- All toilet accommodation greater than 8m<sup>2</sup> in area; and
- At any changes in floor level and any changes in direction of escape routes.

Every escape route will be distinctively and clearly marked by emergency exit signage of adequate size.

#### 4.5 Occupancy

The occupancy levels have been assumed to be low for all plant/ancillary areas whilst the main accommodation areas, occupancy levels have been provided by the architect as tabulated below.

| Table 4: Occupancy Levels |                 |                  |            |  |  |
|---------------------------|-----------------|------------------|------------|--|--|
| ŀ                         | Area            | Occupancy Levels |            |  |  |
| Sub-E                     | Basement        | 8 pe             | ople       |  |  |
| Basen                     | nent Floor      | 8 pe             | ople       |  |  |
| Ground Floor              |                 | 158 people       |            |  |  |
| First Floor               |                 | 122 people       |            |  |  |
| Second Floor              |                 | 142 p            | 142 people |  |  |
| Third Floor               |                 | 54 people        |            |  |  |
|                           | Dome            | 50 people        |            |  |  |
| Fourth Floor              | Sky Lobby       | 80 people        | 215 people |  |  |
|                           | Private Terrace | 45 people        |            |  |  |

Note: Any unit/area that is provided with only a single exit will need to be restricted to 60 people maximum within that unit/area.

# 4.6 Horizontal Evacuation

#### 4.6.1 Travel Distances

The maximum applicable travel distance in accordance with BS 9999:2017 is shown in the table below.

#### **Table 5: Travel Distance Requirements**

| Zone                          | <b>Risk Profile</b> | Two-way Travel <sup>(1)(2)(3)</sup> | One-way Travel <sup>(1)(2)</sup> |
|-------------------------------|---------------------|-------------------------------------|----------------------------------|
| KOKO Guest Areas              | B2                  | 37.5m                               | 15m                              |
| Back of House and Staff Areas | A2                  | 55m                                 | 22m                              |
| Plant                         | A3                  | 45m                                 | 18m                              |

Note:

- 1) The maximum values stipulated apply where exact travel distances are known and internal layouts provided.
- 2) for the consumption of alcoholic beverages.

3) Two-way travel is achieved when the point of divergence (for which two-way travel is permitted) is 45° apart. Analysis of the provided design indicates compliance with the travel distance requirements of BS 9999: 2017.

#### 4.6.2 Inner Rooms and Access Rooms

The general requirement for inner rooms is as follows;

- 1) The occupancy capacity of the inner room does not exceed 60 (30 where the occupants require assistance escaping);
- 2) The inner room is not a bedroom;
- 3) The inner room is entered directly from the access room;
- 4) The escape route from the inner room does not pass through more than one access room;
- 5) allowable one-way travel distance;
- 6) room:
- 7) One of the following arrangement is made:

  - enable occupants of the inner room to see if a fire has started in the outer room; or
  - alarm inaudible.

Inner room scenarios that deviate from Item 6 of the aforementioned requirements is noted for plant rooms accessed by way of the open kitchens. The kitchens are proposed to be provided with localised cooker-hood suppression systems and a single stage fire alarm protocol to prompt immediate evacuation and mitigate risks associated with the deviation.

The MEP Store, Liguor Store and Beverage Store located on sub-basement level accessed from the cold room is considered an inner room and therefore will be on a single stage fire alarm protocol prompting immediate evacuation. Furthermore, these rooms are infrequently accessed by staff who are awake and familiar with the building allowing for faster response to alarms and more efficient way-finding in an emergency situation.



Advisable 25% reduction in travel distance limits considered due to areas of the premises containing provisions

The travel distance from any point in the inner room to the exit(s) from the access room does not exceed the

The access room is not a place of special fire hazard and is in the control of the same occupier as the inner

a) The enclosures (walls or partitions) of the inner room stop at least 500mm below the ceiling; or

b) A suitably sited vision panel not less than 0.1m<sup>2</sup> is located in the door or walls of the inner room, to

c) The access room is protected by an automatic smoke detector that either operates an alarm that is immediately audible in the inner room, to a sound pressure level in accordance with the minimum recommended in BS EN 54-23 in the inner room if the ambient noise levels are so great as to make an

# 4.6.3 Dead end corridor

Clause 16.3.11.1 requires protected corridors for dead end corridor exceeding 2m. The sub-basement and basement contains dead end corridors of approximately 12m and 10m, respectively.



Figure 2: Sub-basement - Dead end corridor situation requiring fire rated construction



Figure 3: Basement - Dead end corridor situation requiring fire rated construction

It is proposed to provide 30 minutes of fire resisting construction to these corridors.

Analysis of the provided design indicates compliance with the dead end corridor requirements of BS 9999: 2017.

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# 4.6.4 Exit Width Requirements

Any room serving less than 60 occupants can be provided with one exit with a minimum clear width of at least 800mm.

Where floors are expected to have more than 60 occupants they should have more than one exit, with the doors opening in the direction of escape, and a clear width representative of the occupancy.

The following tables provide guidance as to door width calculations as per BS 9999;

Table 6: Cumulative Door Width Requirements

| Zone  | Risk Profile |          | Profile Minimum Door Width Per Pers |     |  |
|---|--------------|----------|-------------------------------------|-----|--|
| KOKO  |              | B2 4.1mm |                                     |     |  |
| Table 7: Occupancy Limit for 800mm < x < 1050mm Door Requirements |              |          |                                     |     |  |
| Zone Risk Profile Minimum Occupancy                               |              |          |                                     |     |  |
| КОКО  |              | B2       |                                     | 122 |  |

Note:

1) A single largest exit is discounted due to the potential fire blocking an exit, on this basis it is advised exits should be located remote from each other such that a single fire scenario does not take out multiple exits.

Following the aforementioned methodology gives the following tabulated results for the available exits proposed;

#### **Table 8: Exit Width Calculations**

| Level                 | Expected C                | Dccupancy                 | Final Exits Required <sup>(4)</sup> |                 | State of Compliance |
|-----------------------|---------------------------|---------------------------|-------------------------------------|-----------------|---------------------|
| Sub-Basement<br>Floor | 5 people <sup>(2)</sup>   |                           | 1 x 800mm                           |                 | Acceptable          |
| Basement Floor        | 5 peo                     | ple <sup>(2)</sup>        | 1:                                  | k 800mm         | Acceptable          |
| Ground Floor          | 117 people <sup>(1)</sup> |                           | 2 x 800mm                           |                 | Acceptable          |
| First Floor           | 152 people <sup>(1)</sup> |                           | 2 x 1050mm or 3 x 800mm             |                 | Acceptable          |
| Second Floor          | 151 people <sup>(1)</sup> |                           | 2 x 1050m                           | nm or 3 x 800mm | Acceptable          |
| Third Floor           | 70 pe                     | ople <sup>(1)</sup>       | 2x                                  | x 800mm         | Acceptable          |
|                       | 50 people <sup>(1)</sup>  |                           | 1 x 800mm                           | 2 x 1050mm      |                     |
| Fourth Floor          | 90 people <sup>(1)</sup>  | 215 people <sup>(1)</sup> | 1 x 1050mm                          | OR              | Acceptable          |
|                       | 45 people <sup>(1)</sup>  |                           | 1 x 800mm                           | 3 x 800mm       |                     |

#### Note:

1) As specified by the client.

- 2) to staff only.
- should be located remote from each other such that a single fire scenario does not take out multiple exits.
- 4) Storey and final exit not less than 850 mm where unassisted wheelchair access is necessary.

For the purposes of this report, the width of a doorway is the clear width of the opening between the door leaf and frame (or projecting building hardware or the width between two opening door leaves in the case of double doors) assuming that the door leaf is free to open 90 degrees or more,

Analysis of the provided design indicates compliance with exit width requirements of BS 9999: 2017.



It is assumed there to be low occupancy levels within the back of house areas due to being accessed provided

3) The single largest exit is discounted due to the potential fire blocking an exit, on this basis it is advised exits

# 4.7 Vertical Evacuation

The minimum stair widths calculation for the refurbished building is based on the following:

- Staged - simultaneous evacuation is proposed throughout the building.
- The appropriate risk profile for stair widths are given to those occupants for which it predominantly serves i.e. upper floors being classed as a B2 risk profile.
- The occupancy level is as given on Table 4.
- Where stairs are not lobbied there is a requirement to discount a stair.
- Due to the complex nature of the staircase arrangement, for ease, a summary is given as follows;
  - Fourth Floor Three available staircases: Members Stair accessed from the Sky Lobby Members stair lobby, KOKO Stair accessed from the open stair descending into the third floor level KOKO stair lobby, and Fire Escape Stair accessed from the open stairs descending from the Private Terrace and the Dome.
  - 0 Second and Third Floor- Three available staircases: Members Stair, KOKO Stair and Fire Escape Stair
  - Sub-Basement, Basement and First Floor Two available staircases: Members Stair and KOKO 0 Stai

Staircase widths are calculated using the calculated or expected occupancy by using the staircase width multiplied by the minimum width of stair per person served over a total number of floor levels taken from Table 13 in BS 9999. The following section gives a more thorough overview of the vertical evacuation requirements.

The staircase width requirements are summarised in the table below.

| Table 9: Sta | aircase Width | Requirements | and | Calculations |
|--------------|---------------|--------------|-----|--------------|
|--------------|---------------|--------------|-----|--------------|

| Levels Served  | Available Stairs  | Minimum stair<br>width per person | Levels<br>Served | Expected<br>Occupancy | Width                 | State of<br>Compliance |
|--|-------------------|-----------------------------------|------------------|-----------------------|-----------------------|------------------------|
| First to Fourth (P2)                                   | KOKO Stair        | 2.9mm                             | 4                | <b>F</b> 22           | 1090mm <sup>(1)</sup> | Acceptable             |
| First to Fourth (B2)                                   | Members Stair     | 2.9mm                             | 4                | 533                   | 1200mm <sup>(1)</sup> | Acceptable             |
| Second to Fourth (B2)                                  | Fire Escape Stair | 3.4mm                             | 3                | 411                   | 1000mm <sup>(1)</sup> | Acceptable             |
| Sub-Basement to<br>Basement (A2 and A3) <sup>(3)</sup> | KOKO Stair        | 4.0mm                             | 2                | 10                    | 1200mm <sup>(2)</sup> | Acceptable             |
|  | Members Stair     | 4.0mm                             | 2                | 16                    | 1200mm <sup>(2)</sup> | Acceptable             |

#### Note:

- 1) Where downward travel is necessary, the minimum staircase width should be 1000mm in accordance with BS 9999.
- 2) Where upward travel is necessary, the minimum staircase width should be 1200mm in accordance with BS 9999.
- 3) Risk Profile A3 is considered due to being the worse case risk profile.

#### 4.7.1 Existing KOKO Stair – 1090mm

Upper Levels - The existing staircase measuring 1090mm has the occupancy capacity to accommodate the expected number of occupants.

Lower Levels - The minimum requirement for a new stair is 1200mm driven by the requirements within BS 9999. The existing stair is not subject to significant modification. Based on the low occupancy of the lower levels, the current arrangement satisfies Building Regulations Part B1.

#### 4.7.2 Proposed Members Stair – 1200mm

The proposed staircase has the occupancy capacity to accommodate the expected number of occupants.

#### 4.7.3 Existing Fire Escape Stair – 750mm (small exit door within the staircase route)

The minimum requirement for a new stair is 1200mm driven by the requirements within BS 9999. The existing stair is not subject to significant modification. stair width per person of 3.4mm over the 3 upper levels served, the occupancy level from second to top floor should be limited to 220 people (750mm / 3.4mm per person).

Analysis of the provided design indicates compliance with stair width requirements of BS 9999: 2017.

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## 4.8 Final Exits and Final Exit Widths

Final exit widths from the members stairs should at least wide as the stair it serves

Merging flow must be considered for the final service entrance door as there is potential merging from escaping occupants from the stage area.

unlikely.

Analysis of the provided design indicates compliance with final exit requirements of BS 9999: 2017.

#### 4.9 Disabled Evacuation

The areas where disabled refuges are required to comply with Building Regulations Part B are as follows;

Members Stair / Stair lobby,

1400mm x 900mm. The refuge area should not impact on the flow of occupants using the stairs and the means of escape from occupants on the respective floor level.

accordance with BS 5839-9 and should consist of Type B outstations which will communicate with a master station located at a suitable position at ground floor level (e.g. a management office can be a suitable position within the building).

appropriately resourced response, tailored to the individual needs of the disabled person and the specific features of the building. This plan will also need to consider the evacuation of disabled visitors.

bound occupants.

understood that not all disabled occupants require physical assistance.

Analysis of the provided design indicates compliance with the disabled evacuation requirements of BS 9999: 2017.



- However, from the generous dimensions and multiple routes for exit from members corridor it is evident that merging is
- The provisions governed within BS 9999 Annex G should be followed. The refuges should have a minimum area of
- The refuge should also include an Emergency Voice Communication System (EVC). This should be installed in
- When the building is operational, it will require producing a personal emergency evacuation plan (PEEP) to ensure an
- The plan should ensure that reliance is not placed upon the fire service for the evacuation of disabled and wheelchair
- Note: Staff will need to be available to offer assistance to disabled individuals evacuating if required. However, it is

#### Internal Fire Spread 5

#### 5.1 Wall and Ceiling Linings

The interior wall and ceiling surfaces in a building may have a significant influence on how fast a fire may develop.

Building Regulations requires that internal linings shall adequately resist the spread of flame over their surfaces and, if ignited, have either, a heat release rate or a rate of fire growth, which is reasonable in the circumstances.

It is particularly important that in circulation spaces, where the rapid spread of fire is most likely to prevent occupants from escaping, the surface linings are restricted, by making provision for them to have low rates of heat release and surface spread of flame.

All new internal surfaces finish or internal linings as part of the refurbishment works should satisfy the following classifications given in the table below, when tested under either the National classifications, in accordance with BS 476 or under the European classifications in accordance with BS EN 13501-1:2002.

| Location   | National Class | European Class                    |
|--|----------------|-----------------------------------|
| Small room of area not exceeding 30m <sup>2</sup> in non-residential areas | 3              | D-s <sub>3</sub> , d <sub>2</sub> |
| Other Rooms  | 1              | C-s <sub>3</sub> , d <sub>2</sub> |
| Circulation Spaces   | 0              | B-s <sub>3</sub> , d <sub>2</sub> |

Note:

1) When a classification includes 's3, d2' this means that there is no limit on the production of smoke or flaming droplets/particles.

The new surface linings of the walls and ceilings should generally conform to the classification recommended above for the appropriate location. However, parts of walls in rooms may be of a lower class but not lower than Class 3 (or European Class D-s3, d2) provided that the total area of those parts in any one room does not exceed one half of the floor area of the room, subject to a maximum of 60m<sup>2</sup> in non-residential areas.

Note: The above provisions do not apply to the upper surfaces of floors and stairs and exclude door and window frames, architraves, skirtings, picture rails and fixed furniture.

#### Internal Fire Spread (Structure) 6

Where new structure is to be provided, or existing structural protection is to be replaced it is recommended that this satisfies the current codes of practice, i.e. 60 minutes fire resistance.

The elements that support only a roof is excluded from the definition of elements of structure, unless the roof performs the function of a floor i.e. a roof terrace. On this basis the floor supporting the roof terrace along with any elements of structure supporting these areas should be fire rated to not less than 60 minutes.

The proposed fire ratings for various new structures as part of the refurbishment works for the building are detailed in the table below.

Table 11: Fire Resistance Requirements For Proposed Refurbishment Works (Where Applicable)

| Part of the Building                                | Minimum provisions when tested to the relevant<br>part of BS 476 (minutes) |           |                      | Method of Exposure       |
|---|--|-----------|----------------------|--------------------------|
|   | Load bearing capacity  | Integrity | Insulation           | ·                        |
| Structural Frame, Beam or Column                    | 60   | N/A       | N/A                  | Exposed faces            |
| Load bearing Wall                                   | 60   | N/A       | N/A                  | Each side separately     |
| Roofs   |  |           |                      |                          |
| Any part forming an escape route <sup>(1)</sup>     | 60   | 60        | 60                   | From underside           |
| External Walls                                      |  |           |                      |                          |
| Any part more than 1000mm from                      | 60   | 60        | 15                   | From Inside the building |
| the relevant boundary <sup>(2)</sup>                |  |           |                      |                          |
| Any part adjacent to an external                    | 60   | 60        | N/A                  | From inside the building |
| escape route  |  |           |                      |                          |
| Enclosure   |  |           |                      |                          |
| <ul> <li>Upper level escape stairs/stair</li> </ul> | 30   | 20        | 20                   | Each side separately     |
| lobbies//lifts/risers                               | 50   |           |                      | Each side separately     |
| Protected Shafts <sup>(3)</sup>                     |  |           |                      |                          |
| <ul> <li>Basement stairs/lifts/risers</li> </ul>    | 60   | 60        | 60                   | Each side separately     |
| Fire Resisting Construction                         | As par Section 6.2   |           | Each aide congrately |                          |
| Ancillary accommodation                             | As per Section 6.2   |           | Each side separately |                          |
| Cavity Barriers                                     | N/A  | 30        | 15                   | Each side separately     |

#### Note:

- 1) Should any risers penetrate compartment floors these should be enclosed in 60 minutes or fire stopped appropriately.
- 2) Excluding permitted unprotected areas.
- 3) Protected Shafts are defined as those of which breach compartment floors.

#### 6.1 Compartmentation

In following the methodology whereby having the situation not made any worse than what is present for the building. If compartment floors are present, they will need to be maintained and made good of any deficiencies on site.

In line with Table 30 of BS 9999, as the building is less than 18m in height the area restrictions of a floor plate to any given level should be limited to 8000m<sup>2</sup>. The current arrangement does not exceed this requirement and therefore is acceptable. However, compartment floors are required to be provided due to the third floor level sleeping risk and the risk that occupants present are likely being under the influence of alcohol. Compartment floors are also considered for limiting external fire spread as per Section 7.2.

There is a requirement under current guidance of BS 9999 to separate the basement levels from the upper levels, in this case by at least a 60 minute compartment line. Therefore, as part of the refurbishment works, any new penetrations/shafts from ground to basement floor level should be by ways of a 60 minute compartment line. This is inclusive of stairs/risers/lifts etc.



# 6.2 Ancillary Accommodation

#### **Table 12: New Ancillary Accommodation**

| Area              | Minimum Fire resistance (minutes) |
|-------------------|-----------------------------------|
| Store rooms       | 30                                |
| Cleaner's stores  | 30                                |
| Locker rooms      | 30                                |
| Plant rooms       | 60                                |
| Kitchens          | 30                                |
| Refuse/bin stores | 60                                |

# 6.3 Fire Doors

#### **Table 13: New Fire Door Requirements**

| Location                 | In accordance with BS 476-22 | In accordance with BS EN 1634-1 |
|--------------------------|------------------------------|---------------------------------|
| Third Floor Suite        | FD60S                        | E60Sa                           |
| Into protected stairs    | FD30S                        | E30Sa                           |
| Into escape stairs/lobby | FD30S                        | E30Sa                           |
| Lift doors               | FD30                         | E30                             |
| Riser doors              | FD30                         | E30                             |
| Ancillary accommodation  | Same rating as the w         | all for which it is fitted to   |

All fire doors on escape routes should be self-closing or on a hold open device. Where a hold open device is used, these should deactivate upon detection of the alarm system. Doors to ancillary accommodation, risers and places of special fire hazard should be kept locked shut and provided with appropriate signage.

Fire doors are designated by reference to their recommended performance (in minutes) for integrity only, and whether they need to retard the passage of smoke at ambient temperature. The need to include insulation as part of the specification is dependent on the function of the door. For example, reference FD30 is to a door that should achieve not less than 30 minutes integrity when tested in accordance with BS 476-22 or BS EN 1634-1.

Vision panels should be provided where doors on escape routes subdivide corridors, or where any doors are hung to swing both ways

Fire rated lines are advised to be taken around the rear of ensuites/bathrooms due to being categorised as a low fire risk and thus allowing the omission of any fire doors to these areas.

## 6.4 Concealed Spaces

To remove a route for smoke and flame spread through concealed spaces within the building, fire resisting barriers should be placed at regular intervals and at joints within construction where there is the potential for unseen fire spread (this includes floor and ceiling voids).

The guidance as follows pertains to any new construction and areas affected as part of the refurbishment works.

Figure 14 shows where cavity barriers should be provided. Cavity barriers should be provided to close the edges of cavities, including around openings.

Cavities that may exist above or below partitions because enclosures are not carried to full storey height or, (in case of the top storey) to the underside of the roof covering should be either:

- Fitted with cavity barriers on the line of the partitions; or •
- For cavities above the partitions, enclosed on the lower side by a fire resisting ceiling which extends throughout . the building, compartment or separated part.

The table below shows the maximum dimensions for undivided concealed spaces:

| Table 14: Maximur | n Dimensions | of | Cavities |
|-------------------|--------------|----|----------|
|-------------------|--------------|----|----------|

| Location                   | Class of Surface Exposed | Max Dimension in any direction |
|----------------------------|--------------------------|--------------------------------|
| Between a roof & a ceiling | Any Class                | 20m                            |
| Any other cavity           | Class C-s3,d2 / Class 1  | 20m                            |
|                            | Any Class                | 10m                            |

This should be achieved through utilisation of 30 minute fire resistant elements (i.e. 30 minutes integrity and 15 minutes insulation) which have been tested in accordance with the relevant part of BS 476.

need only to be placed on the line of enclosing walls/partitions of any room with, provided that:

- The cavity barriers are no more than 40m apart; and
- The surface of the material/product exposed in the cavity being Class 0 or Class 1 (national class) or Class Cs3, d2 or better (European Class).
- The "single room" definition can be applied to corridors, provided that cavity barriers are located above the walls enclosing the corridor and over any sub-dividing doors/partitions in the corridors.
- If the walls of the corridor and/or over the sub-dividing doors run to the underside of the slab then no additional • barriers should be required.

Cavity barriers may be formed by the following methods:

- Steel at least 0.5mm thick;
- Timber at least 38mm thick;
- Polyethylene sleeved mineral wool or mineral wool slab (both require to be under compression when used in cavity barrier construction); or
- Calcium silicate, cement based or gypsum plaster boards at least 12mm thick.

All cavity barriers should achieve an integrity rating of 30 minutes fire resistance and an insulation rating of 15 minutes fire resistance.

Compartment walls should be carried the full storey height and therefore, cavity barriers should not be located above compartment walls.

All cavity barriers should be tightly fitted to rigid construction and, where possible, mechanically fixed into position. Where ductwork penetrates a cavity barrier, it should be provided with an automatic smoke/fire damper as required.

its actuation mechanism.



**Figure 4: Cavity barrier Locations** 

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- Where a single room exceeds 20m in any direction, cavity barriers within the ceiling void (and within any floor voids)

- Adequate means of access should be provided to allow inspection, testing, and maintaining of both the fire damper and

## 6.5 Protection of Openings and Fire-stopping

Any new services breaching the compartment walls/floors and fire resisting elements will require to be appropriately fire stopped around the perimeter of the pipe or duct to ensure that the integrity of the element is not compromised. Pipes that pass through a fire separating element, should meet either of the following provisions;

- **Proprietary seals** Provide a proprietary sealing system which has been shown by test to maintain the fire resistance of the wall, floor or cavity barrier,
- **Restricted pipe diameter** Where a proprietary sealing system is not used, fire stopping may be used around the pipe, keeping the opening as small as possible. The nominal internal diameter of the pipe should not be more than the relevant dimension given in the the table below.

Table 15: Maximum Nominal Internal Diameter of Pipes Passing Through Compartments

|   | Pipe material and maximum nominal internal diameter (mm) |   |                    |  |  |
|---|--|---|--------------------|--|--|
| Situation   | Non-combustible material                                 | Pb, Al, Al alloy,<br>uPVC, fibre cement | Any other material |  |  |
| Structure enclosing a protected shaft which is not a stairway or lift | 160  | 110                                     | 40                 |  |  |
| Any other situation   | 160  | 40                                      | 40                 |  |  |

• Sleeving – A pipe of lead, aluminium, aluminium alloy, fibre cement or uPVC, with a maximum internal diameter of 160mm, may be used with a sleeving of non combustible pipe as shown in the figure below. The opening in the structure should be as small as possible and provide fire stopping between the pipe and structure. The sleeve should extend by no less than 1000mm either side of the structure.



Figure 5: Fire Stopping Methods

#### 6.6 Ductwork

Where new air handling ducts pass through compartmentation or fire rated enclosures the integrity of these compartments should be maintained. There are three basic methods:

- Method 1 Protection using fire dampers;
- Method 2 Protection using fire resisting enclosures;
- Method 3 Protection using fire resisting ductwork;
- Method 4 Automatically actuated fire and smoke dampers triggered by smoke detectors.

Note: Methods 1 and 4 are not suitable for ductwork serving kitchens.

If dampers are the chosen form of stopping smoke and flame spread the type of damper required would be fire dampers. The fire damper should meet the fire integrity criterion for not less than 60 minutes when tested in accordance with BS 476 Part 20, BS EN 136 Part 2 or BS ISO 10294 Part 2.

Any air transfer grilles required as part of the ventilation system should not be provided within compartmentation. Air transfer grilles located in any fire hazard rooms should be provided with both fire and smoke containment. Any transfer grilles fitted in fire doors will need to be accompanied by a test certificate provided by the door manufacturer.

Fire dampers are required as per above, however where any breach protected escape routes / lobbies these would need to be both fire / smoke dampers.



#### 7 **External Wall Construction – Surface Flame Spread**

As the refurbishment works will affect the external wall, the external surfaces of the walls should be constructed in order to adequately resist the spread of fire across the facade of the building. Any new external surfaces in accordance with BS 9999 for a B2 risk profile should be Class 0 (National Class) or Class B-S3, d2 or better (European Class). Profiled or flat steel sheet at least 0.5mm thick with an organic coating of no more than 0.2mm thickness is also acceptable.

It is recommended that any new insulation product, filler material (not including gaskets, sealants and similar) etc. used in any new external wall construction should be of limited combustibility or non-combustible.

# 7.1 Roof Coverings

Roof coverings refer to the external material layers, not the roof structure as a whole. The table below describes the separation distances according to the type of roof covering as described in BS 9999.

|   |                        |                | 0 1 0                     |                           |                           |
|---|------------------------|----------------|---------------------------|---------------------------|---------------------------|
| Designation of Covering<br>Part of Roof | of Roof or             | Minimum        | Distance from any         | Point to Relevan          | t Boundary                |
| National Class                          | European<br>Class      | Less than 6 m  | At Least 6m               | At Least 12 m             | At Least 20 m             |
| AA, AB or AC                            | B <sub>ROOF</sub> (t4) | Acceptable     | Acceptable                | Acceptable                | Acceptable                |
| BA, BB or BC                            | C <sub>ROOF</sub> (t4) | Not acceptable | Acceptable                | Acceptable                | Acceptable                |
| CA, CB or CC                            | D <sub>ROOF</sub> (t4) | Not acceptable | Acceptable (1)(2)         | Acceptable <sup>(2)</sup> | Acceptable                |
| AD, BD (or CD <sup>(2)</sup> )          | E <sub>ROOF</sub> (t4) | Not acceptable | Acceptable <sup>(1)</sup> | Acceptable                | Acceptable                |
| DA, DB, DC (or DD <sup>(2)</sup> )      | F <sub>ROOF</sub> (t4) | Not acceptable | Not acceptable            | Not acceptable            | Acceptable <sup>(1)</sup> |

**Table 16: Roof Covering Spacing** 

**Note (1):** Acceptable on buildings if part of the roof is no more than  $3m^2$  in area and is at least 1500mm apart from any other similar section of roof, with roof between the parts covered with a material of limited combustibility

**Note (2):** Not acceptable on any buildings with a volume of more than 1500m<sup>3</sup>

# 7.2 Space Separation between Neighbouring Buildings

The majority of unprotected openings (glazing) are either being retained or replaced in an equal manner. However, some unprotected openings may be larger than what currently exists. On this basis, a space separation assessment is required as detailed below.

The Enclosing Rectangles method from BR 187 has been used to determine if external fire spread is an issue to neighbouring buildings. The methodology in which the worst case compartment is considered where glazing is shown (assuming the remaining wall construction is protected), in addition a compromise made between compartment size and distance to site boundary line/adjacent building or to the point of half way along a public road is also considered. These results have been tabulated on the following tables.

**Table 17: External Fire Spread Calculations** 

| Elevation      | Compartment<br>Dimension (h x w) | Enclosing<br>Rectangle (h x w) | Req. Boundary<br>Distance for 100%<br>unprotected area | Available<br>Boundary<br>Distance | Unprotected [Area]<br>Allowed (m <sup>2</sup> ) |
|----------------|----------------------------------|--------------------------------|--|-----------------------------------|---|
| Bayham Place   | 3.0m x 20.0m                     | 3m x 21m                       | 4.5m   | 3.5m                              | 80% [48m²]                                      |
| Bayham Street  | 3.0m x 30.0m                     | 3m x 30m                       | 4.5m   | >4.5m                             | 100%  |
| Crowndale Road | 3.0m x 54.0m                     | 3m x 60m                       | 5.0m   | >5.0m                             | 100%  |

Note: In line with Section 6.1, compartment floors are included in the calculations. **Table 18: Fire Spread Results** 

| Elevation      | Results  |
|----------------|--|
| Bayham Place   | A maximum of 48m <sup>2</sup> of elevation for each floor level can be unprotected. Remainder to be fire rated (60mins integrity, 15mins insulation) |
| Bayham Street  | 100% of the elevation can be unprotected   |
| Crowndale Road | 100% of the elevation can be unprotected   |

The design team should ensure the proposed amount of unprotected areas for the elevation overlooking Bayham Place is limited to 48m<sup>2</sup>.



#### Access & Facilities for the Fire Service 8

#### 8.1 Fire Service Access

The building is located in a build up area in the city of London (Camden) and the proposed refurbishment work will not affect the existing fire service access strategy. Therefore, the current fire service access provisions comply with Part B of the Building Regulations in which access is granted via Bayham Place, with adjacent public roads and entry points into the building.

As the public roads for Fire Service vehicles to reach the entrance of the building is as per existing, it is assumed they conform to the requirements in the table below.

| Min. Width |                             | Min              | Min. Turning Circle |              | Min                 | Min                  |  |
|------------|-----------------------------|------------------|---------------------|--------------|---------------------|----------------------|--|
| Appliance  | of Road<br>between<br>Kerbs | Gateway<br>Width | Kerb to<br>Kerb     | Wall to Wall | Clearance<br>Height | Carrying<br>Capacity |  |
| Pump       | 3.7m                        | 3.1m             | 16.8m               | 19.2m        | 3.7m                | 12.5 tonnes          |  |

**Table 19: Vehicle Access Road Specification** 

#### Note:

Dead end fire service access roads may be up to 20 meters long without being provided with a turning bay (A 1) fire service vehicle should not have to reverse further than 20m).

There is no proposed changes made in affecting the current fire service perimeter access as part of the refurbishment works and thus the current arrangement is acceptable.

## 8.2 Fire-fighting Shafts

There are no existing fire-fighting shafts within the building and there is no requirement to provide for one under current guidance. On this basis it is not proposed to provide fire-fighting shafts within the building as part of the refurbishment works

## 8.3 Dry Riser

Due to the introduction of the suite on third floor level presenting a sleeping risk, and in providing a better situation for the fire service during their operations. It is proposed to include a new dry rising main within the protected Members Stair lobby. The inlet to the dry riser will be accessed on the elevation overlooking Bayham place and will be within 18m and visible from an appropriate fire appliance parking location.

#### 8.4 Basement Smoke Ventilation

The proposed sub-basement is measured to be greater than 3m below the adjacent access level requiring natural ventilation equivalent to 2.5% of the floor area. It is proposed to re-purpose existing pavement lights on Crowndale Road and Bayham Street to achieve the required ventilation area.

Cross flow between the two re-purposed pavement lights is achieved via utilisation of the existing KOKO sub-basement to create a route for air, essentially allow it to act as a large plenum.

On arrival, fire service personnel break out the re-purposed basement lights and open the door between the existing and proposed basement to activate natural smoke clearance driven by buoyancy of the high temperature smoke.





The situation within the existing sub-basement, which originally had no ventilation, is now provided with a means for smoke clearance as a result of the re-purposed pavement light on Crowndale Road and thus improving the existing situation.

This has been agreed in principle with Building Control.

#### 8.5 Fire Hydrants

Given the fact that the building is existing, and is located in built up area of London, it has been assumed that the existing provisions for the fire service access, fire hydrant locations and water supplies for fire fighting are adequate and that no additional provision is necessary.

In general, the existing fire fighting strategy and provisions should be maintained throughout the building



Figure 6: Sub-basement – Basement smoke ventilation scheme

# 9 Management Level

The fire strategy assumes that there will be appropriate fire safety management of the premises when in use. BS 9999: 2017 recommends that this building should have Level 2 management level. This requires conformity with requirements of legislation (i.e. RRFSO: 2005).

#### 9.1 Management Requirements

Effective arrangements should be put in place to manage all aspects of fire safety in the premises and the details of those arrangements need to be recorded, e.g. within a fire safety management plan. The arrangements should include the following key areas:

- Development of a suitable emergency procedure;
- Staff training plan and appropriate staffing levels for the occupancy;
- Maintenance contracts for essential fire safety systems and equipment;
- Schedule of in-house checks and tests;
- Display of appropriate fire safety notices and signs;
- Communications arrangements;
- Liaison with the fire service;
- Fire prevention, including control of works on site (e.g. hot work permits);
- Contingency plans;
- Preparation of personal emergency evacuation plans (PEEPs) for staff, occupants and visitors as necessary. To
  ensure an appropriately resourced response, tailored to the individual needs of the disabled person and the
  specific features of the building. This plan will also need to consider the evacuation of disabled visitors.
  - Individual PEEP for disabled people who are regularly on the premises Following discussions with the individual, a plan can be developed for their specific needs which should contain details of how they will evacuate the premises.
  - PEEPs for visitors to the premises who will make themselves known to staff visitors who are likely to require assistance in the event of an evacuation should be encouraged to make themselves known to staff.
  - The plan should ensure that reliance is not placed upon the fire service for the evacuation of disabled and wheelchair-bound occupants.

Note: The above list is not intended to be exhaustive, only to highlight some key areas

## 9.2 Fire Safety Manual

A Fire Safety Manual should be created to contain design information and operational records. The design information forms the basis of an ongoing history document to which additional material is added when the building is occupied and at regular intervals thereafter. The fire safety manual should;

- Provide a full description of the assumptions and philosophies that led to the fire safety design, including explicit assumption regarding the management of the building, housekeeping and other management functions;
- Provide the nature of the fire safety planning, construction and systems designed into the building, and their relationship to overall safety and evacuation management;
- Provide documentation produced at the design stage to describe the use of the various protection systems in each type of incident and the responsibilities of the staff;
- Provide a continuously updated record of all aspects of the building and the building users that affect its fire safety.





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revision / date / amendments





#### CONSTRUCTION

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| KOKO + Hope & Anchor + B<br>Camden, London | iayham Place       |
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| Proposed Sub Basement Plan                 | 1:100 # AL 02:11:4 |
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| drawing title<br>Proposed Basement Plan | 5cole dote<br>1:100/8 AL 02:11.3 |  |
|---|----------------------------------|--|
| roposed bosement han                    | drawn checks<br>FR/PD DA         |  |
| drawing number<br>AHA/KKC/GA/099 BV     | revisión                         |  |



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drawing number AHA/ KKC /GA/100 BV



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drawing number AHA/ KKC /GA/100 BV



OVERLAY CROSS

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This drawing is to be read in conjunction with the Architect's specification, bills of quantities / schedules, structural, mechanical & electrical drawings and all discrepancies are to be reported to the architect. Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.

revision / date / amendments

Generally, service risers should be enclosed in 60 minutes for penetrations between basement levels and ground. And 30 minutes for upper levels.



ECTV 8AR T : +44 (0) 20 7251 8555

| KOKO + Hope & Anchor -<br>Camden, London | + Bayham I     | Place            |  |
|--|----------------|------------------|--|
| drawing title                            | Scole          | date<br>(2.11 is |  |
| Proposed Fish Root Fight                 | drown<br>FR/PD | checker<br>DA    |  |
| drawing number<br>AHA/KKC/GA/101 BV      | revision       | revisión         |  |



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CROWNDALE ROAD

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electrical drawings and all discrepancies are to be reported to the archited. Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.

revision / date / amendments



OVERAT CROSS

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A STREET

#### LEGEND

|        | Proposed Works  |
|--------|---|
|        | Existing Building Fabric KOKO née<br>Camden Palace Theatre (1900) |
|        | Existing Building Fabric<br>Hope & Anchor (approx, 1850)          |
|        | Existing Building Fabric<br>Bayham Place (from 1875)              |
|        | Existing Modern Building Fabric<br>Bayham Place (from 2006)       |
|        | Building Fabric to be demolished                                  |
|        | Demolition of Flooring / Elevation / Wall                         |
|        | Proposed Excavation   |
|        | Remove and retain in alternate location                           |
|        | Retain and protect existing                                       |
|        | Retain, make good, ease and adjusted                              |
| -      | Means of escape Route   |
| -+     | Private Members Route   |
| -      | Koka Customer Route   |
| +      | Public Route  |
| -      | Artist Route  |
|        | Proposed Riser  |
| r_     | Proposed Risers Above   |
| M.4-06 | Room Number   |
| D4-02  | Door Number   |
| W4-(15 | Window Number   |
|        | Hope & Anchor Demise  |
|        | Koko Demise   |
|        | 1 Bayham Street & 65 Bayham<br>Place Demise                       |
| _      | Blue Roof   |
|        | Original brickwork exposed  |
| 02     | 2.11.18   |
| (      | /)  |



#### CONSTRUCTION

Archer Humphryes Architects

| Basem  | ent               |
|--------|-------------------|
| Centre | House             |
| 142 Ce | ntral Street      |
| Londo  | I. United Kingdom |
| ECIV 8 | IAR               |
| T:+44  | (0) 20 7251 8555  |
|        |                   |

| project litte                                |                                  |
|--|----------------------------------|
| KOKO + Hope & Anchor +                       | Bayham Place                     |
| Camden, London                               | 199                              |
| drawing title<br>Proported Second Floor Plan | Scole date<br>1:100/#AI 02:11.38 |
| hoposed second hoor hun                      | drawn checked<br>FR/PD DA        |
| drawing number<br>AHA/KKC/GA/102 BV          | revisión                         |



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CROWNDALE ROAD

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electrical drawings and all discrepancies are to be reported to the architect. Do not scale from this drawing. Dimensions are in millimetres unless otherwise stated.

revision / date / amendments



Archer Humphryes Architects

| Basement                 |     |
|--------------------------|-----|
| Central House            |     |
| 142 Central Street       |     |
| London, United Kingdo    | in. |
| ECIV 8AR                 |     |
| T - add (0) 20 7251 8555 |     |

| KOKO + Hope & Anchor +<br>Camden, London   | Bayham Place        |
|--|---------------------|
| Proposed Third Floor Plan  | 1:100/8 AL 02:11.18 |
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| 1 of 845-58 first contract of a contract   | FR/PDI DA           |



CROWNDALE ROAD

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revision / date / amendments

#### LEGEND

|           | Proposed Works  |    |
|-----------|---|----|
|           | Existing Building Fabric KOKO née<br>Camden Palace Theatre (1900) |    |
|           | Existing Building Fabric<br>Hope & Anchor (approx. 1850)          |    |
|           | Existing Building Fabric<br>Bayham Place (from 1875)              |    |
|           | Existing Modern Building Fabric<br>Bayham Place (from 2006)       |    |
|           | Building Fabric to be demolished                                  |    |
|           | Demolition of Flooring / Bevation / Wal                           |    |
|           | Proposed Excavation   |    |
|           | Remove and retain in alternate location                           |    |
|           | Retain and protect existing                                       |    |
|           | Retain, make good, ease and adjusted                              |    |
|           | Means of escape Route   |    |
| -         | Private Members Route   |    |
|           | Koko Customer Route   |    |
|           | Public Route  |    |
|           | Artist Route  |    |
|           | Proposed Riser  |    |
| P1        | Proposed Risers Above   |    |
| R.M. 4-06 | Room Number   |    |
| D4-02     | Door Number   |    |
| W4-05     | Window Number   |    |
|           | Hope & Anchor Demise  |    |
|           | Koko Demise   |    |
|           | l Bayham Street & 65 Bayham<br>Place Demise                       |    |
| -         | Blue Roof   |    |
|           |   |    |
| 02        | 2.11.18   |    |
|           | $\mathcal{O}$   |    |
|           |   | 8m |
| CC        | NSTRUCTION  |    |
| Arci      | her Humphryes Architects  |    |

Bouement Centrol Nouse 142 Centrol Steet London, United Hingdom EC IV 8AR 1: +44 (0) 20 7251 8555

| KOKO + Hope & Anchor +<br>Camden, London   | Bayham Place                     |
|--|----------------------------------|
| drawing life<br>Proposed Fourth Floor Plan | scole dote<br>1:100 @A1 02.11.18 |
| rioposed rouninioornan                     | FR/PD DA                         |
| chowing number<br>AHA/KKC/GA/104 BV        | revision                         |

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