

Life Safety  
Fire Risk Assessment

# Action Plan Technical Guidance

## A. CONSTRUCTION

### A.01. COMPARTMENT WALLS

- A.01.01 Compartment walls should be provided in line with guidance in the “Internal Fire Spread” section of the Approved Document B relevant to your location. See links in the Riskmonitor FRA Legislation & Standards Links document.
- A.01.02 Compartment walls should be provided in line with guidance provided in Building Bulletin 100; Design for Fire Safety in Schools.
- A.01.03 Compartment walls in buildings containing flats should be constructed as follows: a) Every wall separating a flat from any other part of the building b) Every wall enclosing a refuse storage chamber. The compartmentation should extend through the roof space to roof level and satisfy guidance provided in the “minimum periods of fire resistance” section of the Approved Document B relevant to your location. See links in the Riskmonitor FRA Legislation & Standards Links document.
- A.01.04 Compartment walls in institutional buildings, should be located to satisfy the requirement of progressive horizontal evacuation. The compartmentation should extend through the roof space to roof level and satisfy guidance provided in the “minimum periods of fire resistance” section of the Approved Document B relevant to your location. See links in the Riskmonitor FRA Legislation & Standards Links document.
- A.01.11 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited. It is also important to ensure that where different types of fire stopping methods are required then the materials and types are compatible with each other.
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### A.02. COMPARTMENT FLOORS

- A.02.01 Compartmentation floors should be provided in line with guidance in the “Internal Fire Spread” section of the Approved Document B relevant to your location. See links in the Riskmonitor FRA Legislation & Standards Links document.
- A.02.02 Compartmentation should be provided in line with guidance provided in Building Bulletin 100; Design for Fire Safety in Schools.
- A.02.03 In buildings containing flats every floor should be constructed as compartment floors; The compartmentation should satisfy Table A2 of Approved Document B with regards to the minimum periods of fire resistance necessary.
- A.02.04 In Institutional buildings all floors should be compartment floors. The compartmentation should satisfy Table A2 of Approved Document B with regards to the minimum periods of fire resistance necessary.
- A.02.05 All floors in a residential building should be constructed as compartment floors. The compartmentation should satisfy Table A2 of Approved Document B with regards to the minimum periods of fire resistance necessary.
- A.02.06 The penetrations between floors require fire stopping to provide adequate Fire Resistance/Compartmentation. Reparation by a qualified/approved person is recommended

### A.03. SEPARATION OF SPECIAL RISKS

- A.03.01 Separate the room with fire-resisting walls and doors in accordance with B3 and Table A1 of Approved Document B.
- A.03.08 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.03.09 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.03.11 The partitions enclosing kitchens including any hatches should be constructed with materials that provide a half hour standard of fire resistance.

- A.03.12 The partitions enclosing areas of fire hazard, including any shutters and hatches, should be constructed with materials that provide a half-hour standard of fire resistance.
- A.03.13 The partitions enclosing areas of fire hazard, including any shutters and hatches, should be constructed with materials that provide a one-hour standard of fire resistance.
- A.03.14 The partitions enclosing areas of fire hazard, including any shutters and hatches, should be constructed with materials that provide a half-hour standard of fire resistance.
- A.03.15 The partitions enclosing areas of fire hazard, including any shutters and hatches, should be constructed with materials that provide a one-hour standard of fire resistance.
- A.03.16 In this regard the rooms indicated should be enclosed with materials that provide half hour fire resistance.

#### A.04. SEPARATION OF ANCILLARY ACCOMMODATION

- A.04.01 Car parks should be separated from other occupied areas with fire-resisting construction affording a minimum of half hour standard of fire resistance.
- A.04.02 The partitions enclosing engineering installation rooms, including any hatches, should be constructed with materials that provide the required period of fire resistance.
- A.04.03 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.04.04 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.04.05 The partitions enclosing storage areas, including any shutters and hatches, should be constructed with materials that provide a half hour standard of fire resistance.
- A.04.06 Car parks should be separated from other occupied areas with fire-resisting construction affording a minimum of a one-hour standard of fire resistance.
- A.04.07 Either separate the store from the retail area with materials that afford half hour fire resistance or provide an automatic fire detection system to give early warning of a fire.
- A.04.08 Enclose all ancillary accommodation affecting means of escape, with materials that afford half hour fire resistance. Doors should be FD30 standard and kept locked.

#### A.05. LIFT CONSTRUCTION

- A.05.01 Enclose vertical shafts for hoists and services throughout their height with materials that provide a half hour standard of fire resistance
- A.05.02 Enclose vertical shafts for hoists and services throughout their height with materials that provide for a one-hour standard of fire resistance.
- A.05.03 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.05.04 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.05.05 A lift well connecting separate compartments should be contained within a protected shaft to satisfy the requirements of B3 of Approved Document B.
- A.05.10 Where the lift well is not contained within the enclosures of a protected stairway, the lift entrance should be separated from the floor area on every storey by a protected lobby.
- A.05.11 The lift continues to the basement level in a building served by a single stair. The lift shaft should not continue to basement level in this situation.
- A.05.12 Ensure appropriate maintenance schedules are in place to accord with BS:EN81-20 and BS:EN81-72 and record outcomes of tests.

#### A.06. SHAFTS & HOISTS FOR SERVICES

- A.06.01 The chutes could be fitted with lids that provide the requisite level of fire resistance, alternatively, discontinue the use of the chute or relocate it outside the stairway and/or protected lobby to the stairway.
- A.06.02 Refuse chutes should be separated from the remainder of the building by fire-resisting construction in accordance with Table A2 of Approved Document B.
- A.06.03 Rooms containing refuse chutes or for the storage of refuse should be approached either directly from the open air or by way of a protected lobby with not less than 0.2m<sup>2</sup> of permanent ventilation.
- A.06.04 Fire stopping to the required standard to be undertaken by competent persons using the correct material for the application
- A.06.05 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- A.06.06 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.

#### A.07. CAVITY BARRIERS

- A.07.01 A full specialist survey is advised to determine the adequacy of cavity barriers and other methods required to support Fire separation of concealed spaces.
- A.07.02 Provide cavity separation in voids in accordance with B3 and Table 13 of Approved Document B.
- A.07.03 Provide cavity separation in voids in accordance with B3 and Table 10 of Building Bulletin 100; Design for Fire Safety in Schools.
- A.07.06 Cavity barriers should be provided or re- instated/repared within critical areas as identified in the risk improvement plan.
- A.07.07 Cavities should be checked to ensure the necessary barriers are in place and that they are not compromised.
- A.07.08 The inspection carried out was non-intrusive. Cavities should be checked to ensure the necessary barriers are in place and that they are not compromised.
- A.07.09 It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.

#### A.07. INSULATED CORE PANELS

- A.08.01 In a building with a storey 18 metres or more above ground any insulation product, filler material used in the external wall construction should be of limited combustibility, as defined in Table A7 of Approved Document B.
- A.08.02 Ensure that where openings have been made for doors/windows and/or openings they have been effectively sealed with appropriate fire-resisting materials to prevent exposure of the inner core. A specialist inspection must be carried out.
- A.08.04 The building is less than 18m in height so there are no requirements as such at time of visit. This may alter under future guidance, and may then need to be reviewed accordingly

#### B. MEANS OF ESCAPE

##### B.01. SURFACE SPREAD OF FLAME

- B.01.01 Where protected routes are provided the surface spread of flame classification should be determined or obtained from a verified specialist inspection/or from records held.
- B.01.02 Replace the wall or ceiling linings with materials that provide a Class 3 rating or apply a proprietary treatment that would cause the existing lining to achieve the same standard.

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- B.01.04 Replace the wall or ceiling linings with materials that provide a Class 1 rating or apply a proprietary treatment that would cause the existing lining to achieve the same standard.
- B.01.05 Replace the wall or ceiling linings with materials that provide a Class 0 rating or apply a proprietary treatment that would cause the existing lining to achieve the same standard.
- B.01.06 Displays should be no more than 20% of the overall vertical surface area or covered with glass or an appropriate non-flaming material that will satisfy the Class 0 requirement.
- B.01.07 This must be managed locally, and the surface spread of flame potential kept within acceptable limits. We also recommend that the amount of display material is either reduced to 20% of the available vertical wall space within corridors/sections of corridors/stairways, or that the displays are covered with glass, non-flaming PVC or a similar transparent substance, which will meet the Class 0 requirement.

#### B.02. TRAVEL DISTANCE TO STOREY EXITS

- B.02.01 Provide an additional escape route that will either reduce the distance of the single direction of travel to the nearest storey exit or provide an acceptable alternative route.
- B.02.02 This could be achieved by revising the layout of the corridor or floor space; upgrading the fire alarm and detection, reduce the risk of fire, provide training to staff, restrict the occupants, or by a combination of these and other measures.

#### B.03. TRAVEL DISTANCES WITHIN ROOMS

- B.03.01 Provide an additional escape route that will either reduce the distance of the single direction of travel to the nearest exit or provide an acceptable alternative route.
- B.03.02 This could be achieved by revising the layout of the room or floor space; upgrading the fire alarm and detection, reduce the risk of fire, provide training to staff, restrict the occupants, or by a combination of these and other measures.

#### B.06. FIRE RESISTANT CORRIDORS

- B.06.01 Extend the corridor partitions up to the underside of the structural floor above, or to an imperforate suspended ceiling, with materials that provide the requisite degree of fire resistance.
- B.06.02 Any fire resisting glazing used should be of a type that provides insulation. Doors should be of a minimum FD20S standard and fitted with positive self-closing devices. As an alternative to providing the requisite degree of fire separation all rooms on to the dead-end portion of corridor, together with the corridor itself, should be provided with an automatic smoke detection system so that on actuation of any detector an alarm will sound throughout the entire area. Systems installed to BS:5839 Pt 1 or BS:5839 Pt 6 would satisfy this requirement.
- B.06.03 In this instance the protection should afford a minimum of 30 minutes fire resistance. Any fire resisting glazing used should be of a type that provides insulation. Doors should be of a minimum FD20S standard and fitted with positive self-closing devices. As an alternative to providing the requisite degree of fire separation all rooms on to the dead-end portion of corridor, together with the corridor itself, should be provided with an automatic smoke detection system so that on actuation of any detector an alarm will sound throughout the entire area. Systems installed to BS:5839 Pt 1 or BS:5839 Pt 6 would satisfy this requirement.
- B.06.04 The provision of installing sub-dividing self-closing fire doors and any necessary associated screens in a corridor that connects two or more exits is to effectively protect the escape corridor from the ingress of fire and smoke and to provide an alternative escape route for the occupants.
- B.06.05 Provide two sets of FD20S doors to separate alternative exits from dead end corridors. The doors should be fitted with positive self-closing devices. Any void above this sub-division should be fitted with cavity barriers on the line of the sub-division of the storey. The doors should be minimum FD20S fire doors and fitted with positive self-closing devices. Vision panels are required in doors

that sub-divide corridors. The vision panels should provide the same degree of fire resistance as the door.

- B.06.06 Sub-divide the storey with fire-resisting construction passing through the line of the sub-division of the corridor. Any void above this sub-division should be fitted with cavity barriers on the line of the sub-division of the storey. The doors should be minimum FD20S fire doors and fitted with positive self-closing devices. Vision panels are required in doors that sub-divide corridors. The vision panels should provide the same degree of fire resistance as the door.
- B.06.07 Sub-divide the storey with fire-resisting construction passing through the line of the sub-division of the corridor. Any void above this sub-division should be fitted with cavity barriers on the line of the sub-division of the storey. The doors should be minimum FD20S fire doors and fitted with positive self-closing devices. Vision panels are required in doors that sub-divide corridors. The vision panels should provide the same degree of fire resistance as the door.
- B.06.08 Ensure all doors and partitions in service corridors provide a minimum of half an hour fire resistance. The doors should be FD30 standard and fitted with positive self-closing devices or kept locked shut.
- B.06.09 Ensure all doors and partitions in service corridors provide a minimum one-hour standard of fire resistance. The doors should be FD60 standard and fitted with positive self-closing devices or kept locked shut.
- B.06.10 Ensure all doors and partitions forming corridors serving different occupancies provide a minimum of half an hour fire resistance. The doors should be FD30 standard and fitted with positive self-closing devices.
- B.06.11 Provide appropriate fire stopping around the pipework and/or other services that penetrate the fire-resisting wall(s). It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- B.06.12 Provide appropriate fire stopping around the pipework and/or other services that penetrate the fire-resisting wall(s). It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- B.06.13 Partition the void above the fire door(s) with materials that provide hour fire resistance. The partition should continue to the underside of the floor/ roof.
- B.06.14 Fire-resisting construction should be maintained to a height of 1.1 metres from deck level. Any doors breaching this construction should be an FD30S door set fitted with a positive self-closing device.
- B.06.15 Ensure all doors and partitions in corridors serving sleeping or residential accommodation provides a minimum of half an hour fire resistance; all doors should be a minimum of FD 30S and be fitted with positive self-closing devices.

#### B.07. DOORS FOR ESCAPE

- B.07.07 Revolving doors should be provided with a monitored failsafe system for opening doors if the mains supply fails, or they fail safe to the open position in the event of a power failure and/or on actuation of the fire alarm.
- B.07.11 Provide a manual override device adjacent to the electronic door and clearly indicate its presence
- B.07.15 Provide a level platform at least the width of the door. It may be necessary to provide a ramp to/from the platform if used for disabled access/egress.
- B.07.16 The door should preferably be recessed. If not achievable, a notice should be placed internally and training provided, to warn potential users of the step down.
- B.07.17 The door should be fitted with one approved emergency exit device only. Where a second fastening is fitted it must either be removed, or a robust management procedure implemented and monitored, to ensure that secondary locks are always disabled when occupied.

## B.08. FIRE DOOR STANDARDS & MAINTENANCE

- B.08.01 Replace the door with one which provides the required standard of fire resistance. The door should be fitted with a positive self-closing device or in the case of a cupboard kept locked shut.
- B.08.06 Replace the door with one which provides the required standard of fire resistance. The door should be fitted with a positive self-closing device or in the case of a cupboard kept locked shut.
- B.08.09 A robust planned preventative inspection programme should be put in place by which fire door inspections are scheduled and carried out regularly to a satisfactory standard before the door fails in terms of functionality and/or compliance. The frequency of inspection can be determined by assessing the risk relative to the frequency of use of the doorway. By considering which doors are most frequently used and most critical to the fire safety of the building it may be appropriate for doors to be classified for different PPM regimes and frequency of inspection.
- B.08.10 A specialist fire door survey should be arranged to ensure where fire doors are fitted, they will perform as intended in a fire.
- B.08.11 Partition the void above the fire door(s) with materials that provide fire resistance to the same standard as the (doors). The partition should continue to the underside of the floor/ roof.
- B.08.12 The transom above the door should comprise materials offering the same fire resistance as that required of the doorset/partition of which it forms a part. Either confirm compliance or replace.
- B.08.13 Confirm with the manufacturer/supplier that the glazing within the door/side panel is of the fire resisting type and to the required standard.
- B.08.20 The door should receive suitable attention to enable it to swing freely. Ensure the maximum gap at the base of the door is not greater than 3-5mm and does not compromise its purpose.
- B.08.21 The lock will need to be replaced/door repaired to achieve the required standard of fire resistance or the doorset replaced to the required level of fire resistance
- B.08.22 The door may need to be replaced unless a competent person repair to the door is achievable and acceptable.
- B.08.23 Unless the warp can be taken out of this door, it is likely to require replacement with a doorset to the same fire resisting standard
- B.08.25 Self-closing devices must be properly installed and connected to ensure they fully close the door. Defective devices should be repaired or replaced
- B.08.26 Consider holding open heavy use corridor doors, on automatic door closing devices, linked to the fire alarm system via automatic detection.
- B.08.27 The door should be fitted with an electromagnetic hold open device. An L5 automatic fire detection system with smoke detectors either side of the door that on operation will activate the closing mechanism, should be installed.
- B.08.28 The floor plate is deemed by the manufacturer to be an integral part of the unit. We recommend that one is fitted.
- B.08.29 We recommend that door closers are adjusted such that they are manageable for the occupants, or the doors are fitted with electromagnetic hold open devices
- B.08.30 The system of door closing requires attention to ensure that the doors always close properly, however they are released.
- B.08.31 It is important that both leaves close to effectively seal the opening in case of fire. The smaller leaf should be fixed shut when not in use or fitted with a self-closing device in common with the larger leaf
- B.08.32 Each door should be hung on the appropriate type of hinges specified by the manufacturer using the requisite number of screws. They must be maintained in good condition
- B.08.35 Remove wedges hooks, doorstops etc from doors and inform staff of the importance of maintaining fire doors closed shut. As an alternative to keeping the doors closed, they may be fitted with approved type, automatic hold open devices which operate on actuation of the fire alarm and detection system.
- B.08.37 Competent installer to revisit and reduce the gap between the door and the frame/threshold to ensure the gap does not exceed 3-5mm subject to location of the door

**B.09. STAIRWAY PROTECTION (INTERNAL)**

- B.09.01 The stairway(s) should be provided where necessary, with appropriate fire resistance; protected lobbies or corridors; a smoke control system or pressure differential system; or any other necessary features and advice should be sought from a specialist.
- B.09.02 Enclose the protected stairways throughout their height with materials that provide a half hour standard of fire resistance. Doors onto the staircase should be of FD 30S standard and fitted with positive self-closing devices.
- B.09.04 Provide appropriate fire stopping around the pipework and/or other services that penetrate the fire-resisting wall(s). It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- B.09.05 Enclose the cupboard or storeroom with materials that provide a half hour standard of fire resistance. The door should be of FD 30S standard and be kept locked shut when not in use.
- B.09.06 No cupboard/storeroom should open directly onto a single stairway. Take the cupboard/storeroom out of use and keep door locked.
- B.09.07 Either reduce the fire loading in the reception area to below 10m<sup>2</sup> or fully enclose the reception area with materials that provide a half hour standard of fire resistance. The door onto the stairway from the reception area should be of FD 30S standard and fitted with a positive self-closing device. Exit from the stairway should be independent of the reception area.
- B.09.08 Fully enclose the reception area with materials that provide a half hour standard of fire resistance. The door should be of a FD 30S standard and fitted with a positive self-closing device. Exit from the stairway should be independent of the reception area.
- B.09.09 Either remove the ignition source and any combustible materials present or enclose the toilets with materials that provide a half hour standard of fire resistance. The door should be a FD 30S and fitted with a self-closing device.
- B.09.10 Fit automatic hold open devices on the doors to the stairway. Automatic smoke detectors (Category L5 system, BS:5839 Pt:1) linked to the fire alarm system should be provided either side of the door to activate the door mechanism in the event of a fire.
- B.09.12 The stairway should be separated at basement level by a protected lobby. Each set of doors should be FD 30S standard and fitted with positive self-closing devices.
- B.09.13 Provide access to the stairway via a protected lobby or protected corridor. Each set of doors should be FD30S standard and fitted with positive self-closing devices.  
Alternatively it will be acceptable to provide single fire door protection to the stair subject to the provision of automatic fire detection within the staircase and rooms onto the staircase, installed in accordance with BS:5839 Pt:1
- B.09.14 Stairways in buildings over 18 metres should be approached by way for a protected corridor or lobby at all levels, except the top storey. The doors should be FD30S standard and fitted with a positive self-closing device.
- B.09.15 Enclose the protected stairways throughout their height with materials that provide a half hour standard of fire resistance. Doors onto the staircase should be of FD 30S standard and fitted with positive self-closing devices.
- B.09.16 If the stair serves an enclosed car park or place of special fire hazard it should be approached by way of protected lobby or protected corridor should have not less than 0.4 m<sup>2</sup> permanent ventilation or be protected from the ingress of smoke by a mechanical smoke control system.
- B.09.17 If the stair serves an enclosed car park it should be approached by way of protected lobby or protected corridor should have not less than 0.4 m<sup>2</sup> permanent ventilation or be protected from the ingress of smoke by a mechanical smoke control system.
- B.09.18 Increase the width of the final exit to enable a maximum evacuation flow rate equal to or greater than that from the storey exit and stair combined.
- B.09.19 An automatic opening vent to open air which is linked to a smoke detector, at all levels, should be provided within the access corridor/stair head as the most cost-effective option.

- B.09.20 It should be ensured the installation meets the requirements of the Pipelines Safety Regulations and the Gas Safety (Installation and Use) Regulations.
- B.09.21 The stair should be constructed of materials of limited combustibility in the following instances; (a) If it is the only stair serving the building or part of the building, unless the building is of two or three storeys and serves a flat or office; (b) If it is within a basement storey; (c) It serves any storey having a floor level more than 18 metres above ground or access level; (d) If it is an external stair with a floor more than 6 metres above ground level.  
Materials of limited combustibility are defined in Appendix A of Approved Document B.
- B.09.22 Helical stairs used by members of the public should be designed to comply with BS:5395- 2 Type E.

#### B.10. FIRE RESISTANT CORRIDORS

- B.10.01 Either increase the width of the existing staircase, provide additional protected stairways, or limit the numbers of persons on that floor in accordance with Approved Document B of the Building Regulations
- B.10.02 Provide additional protected stairways to ensure safe evacuation of persons from the upper floor. The provision should accord with Approved Document B of the Building Regulations.

#### B.11. ACCOMMODATION STAIRWAYS/ESCALATORS AND/OR LIFT CONDITIONS

- B.11.01 Either provide a downstand, at least 500mm deep and made from non-combustible materials, around the head of the escalator/accommodation stair at each level (the downstand will form a smoke reservoir in the early stages of fire), or enclose the escalator/accommodation stair at its head with materials providing a half hour standard of fire resistance. Doors onto the stairway should be FD 30S standard and fitted with a positive self-closing device
- B.11.02 Doors onto the lift should provide a half hour standard of fire resistance and be fitted with smoke seals to prevent the products of combustion affecting escape routes.

#### B.12. ESCALATORS

- B.12.01 The use of escalators as an engineered solution alternative escape route, or method to support safe evacuation, should form part of the written fire escape strategy for the premises, as this is not a usual solution which should inform relevant persons such as the fire service

#### B.13. EXTERNAL STAIRWAYS

- B.13.01 The external stairway(s) should be provided where necessary, with appropriate fire resistance; protected from the elements where required (<6m) to avoid slip hazards; and from being affected by fire or smoke from adjacent openings made fire-resistant.
- B.13.02 External stairways deteriorate over the years due to exposure to the elements. Confirmation, by a competent person, is required to ensure it is fit for its intended use.
- B.13.03 Replace all openings within 1.8 metres of the stairway with materials that provide a half hour standard of fire resistance. Doors should be of the FD 30 standard and other than on the top floor be fitted with a positive self-closing device. Windows should be in frames and fixed shut.
- B.13.04 All doors opening onto the external stairway, except that which provides access to the uppermost level, should be fitted with a positive self-closing device.
- B.13.06 Protect stairway from adverse weather conditions, or ensure policies are put in place to facilitate its use at all material times.
- B.13.10 As the route is enclosed, persons must pass close to the building. All openings within 1.8 metres of the route must be constructed of materials that provide a half hour standard of fire resistance, up to a height of 1100mm above the ground. Doors should be of an FD 30 standard and be fitted with a positive self-closing device. Windows should be in frames and fixed shut

### B.15. FLAT ROOF ESCAPE ROUTES

- B.15.02 Define the route and provide with barriers in accordance with BS:6180.
- B.15.05 It should be ensured that the route across the flat roof is available for use at all times the premises are occupied.
- B.15.06 Enclose the route with suitable materials to facilitate its use in adverse weather conditions or ensure policies are put in place to ensure it can be used at all material times.
- B.15.07 A flat roof is not an accepted alternate escape route in this instance. Provide an alternative escape route that complies with Approved Document B.
- B.15.08 A flat roof is not an accepted alternative escape route in this instance. Provide an alternative escape route that complies with Approved Document B.

### B.16. MULTI-OCCUPIED ESCAPE

- B.16.02 Ensure the building is protected by a minimum of a Category L3 automatic fire alarm system conforming to BS:5839 Pt:1
- B.16.03 Either ensure all doors and partitions onto the corridors provide a minimum of half an hour fire resistance. The doors should be FD30 standard and fitted with positive self-closing devices, or provide a Category L3 automatic fire alarm system installed to BS:5839 Pt:1
- B.16.04 Protection to the means of escape should be afforded in line with B1 of Approved Document B to the Building Regulations.

### B.17. EXTERNAL ESCAPE ROUTES

- B.17.02 It must be ensured that defined external exit routes do not discharge into enclosed areas from which no further exit can be made. All doors or gates on the route to the assembly point must be available to users whenever the building is occupied.
- B.17.03 As the route is enclosed, persons must pass close to the building. All openings within 1.8 metres of the route must be constructed of materials that provide a half hour standard of fire resistance, up to a height of 1100mm above the ground. Doors should be of an FD 30 standard and be fitted with a positive self-closing device. Windows should be in frames and fixed shut.
- B.17.04 Cut back vegetation and instigate a preventative maintenance procedure to avoid recurrence.
- B.17.05 External routes should have appropriate surfaces, which do not present a slip, trip or fall hazard to users.
- B.17.06 Regular inspections of the external routes should take place to ensure they're always availability, especially in the summer months.

### B.18. DISABLED PERSONS EVACUATION

- B.18.01 Ensure the means of escape strategy for the building consider the needs of disabled people. Develop specific Personal Emergency Evacuation Plans (PEEP's) for all relevant persons.
- B.18.02 The emergency plan must be developed in conjunction with employees with special needs, taking their views and specific requirements into account.
- B.18.03 A 'buddy system' should be implemented such that in the event of an emergency evacuation of the premises, a nominated person or persons will, where appropriate, offer discrete support to disabled employees.
- B.18.05 All staff that may be called upon to manage the escape strategy for persons with special needs should receive training in the procedures.
- B.18.06 All staff that may be called upon to assist the disabled to negotiate stairways in the event of an evacuation should receive training and be practiced in the procedures.
- B.18.07 Refuges should be provided on each storey above or below the access storey that provides a temporary safe waiting area for disabled people who need assistance to use the stairway. Refuges may be located in compartments, corridors or protected stairway provided there is sufficient space available.

- B.18.09 Re-site the wheelchair space to ensure the width of the escape stairway is not unduly reduced.
- B.18.11 If lifts are required to evacuate disabled persons, they should comply with the recommendations contained in Annex G of BS:9999
- B.18.12 A system of two-way communication should be provided in each refuge area to ensure effective communication exists between the relevant floors and the person responsible for managing the evacuation of the premises.
- B.18.13 Increase the audibility of the fire alarm or supplement the normal signal with one that is more suitable for people with a hearing impairment.
- B.18.14 Increase the levels of general illumination to meet the needs of people with a visual impairment utilising the building.
- B.18.15 Increase the size of fire safety signs to meet the needs of people with a visual impairment utilising the building.
- B.18.17 Improve or replace the ramps so that they are suitable for use by persons with ambulant difficulties.
- B.18.18 Re-assess the emergency plan for the premises, to take account of the needs of the potential to receive visitors who have special needs.
- B.18.19 Ensure the means of escape strategy for the building consider the needs of disabled people. Develop specific Personal Emergency Evacuation Plans (PEEP's) for all relevant persons.
- B.18.20 The emergency plan must be developed in conjunction with employees with special needs, taking their views and specific requirements into account.
- B.18.21 There is a requirement for persons in the premises who have disabilities, that may affect their ability to evacuate the premises in an emergency, to be offered a Personal Emergency Evacuation Plan (PEEP). The individuals have the right to refuse the offer of such plan. Where this occurs, we recommend that a suitable record is made.

## B.19. ASSEMBLY POINTS

- B.19.02 The Emergency fire plan and fire action notices should describe where the assembly points are located and if not known to occupants, they may need to be physically identified with appropriate signage.
- B.19.04 It is important that a roll call is established at the assembly point to confirm that all occupants of the premises have evacuated in an emergency

## C. SIGNS & NOTICES

### C.01. SIGNS COMPLIANCE

- C.01.01 Replace non-compliant fire signage with signs that comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.
- C.01.02 Replace signs with ones of adequate size to conform to the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.
- C.01.03 No Further Guidance Necessary
- C.01.04 Signs mounted above doors should be at a height of between 2.0m and 2.5m above the floor. Signs on walls should be mounted between 1.7m and 2.0m above the floor. Mounting heights greater than 2.5m may be used for hanging signs, e.g. in large open spaces or for operational reasons, but care should be taken to ensure that such signs are both conspicuous and legible. In such case larger signs may be necessary. Signs should be sited at the same height throughout the escape route, so far as is reasonably practicable.

**C.02. SIGNS FIRE DOORS**

C.02.01 Fire door(s) should be provided with a "Fire Door Keep Shut" sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.



C.02.02 Fire door(s) should be provided with a "Fire Door Keep Locked" sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.



C.02.03 Provide an "Automatic Fire door(s) Keep Clear" sign on the outward face of the door. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.



C.02.04 Provide "Fire Shutter - Keep Clear" sign on the outward face of the shutter. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.



**C.03. SIGNS DIRECTIONAL**

C.03.01 Directional fire exit signs, to the current British Standard, should be positioned at each change of direction or part of the escape route where the exit door or doors are not readily visible to persons using the escape route. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



C.03.02 Directional fire exit signs, to the current British Standard, should be positioned at each change of direction or part of the escape route where the exit door or doors are not readily visible to persons using the escape route. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.

C.03.03 Sufficient and appropriate directional fire exit signs to be provided to allow persons to identify fire exit routes from any part of the premises. Where necessary the signs should be suspended from the ceiling.

**C.04. SIGNS FIRE EXIT**

C.04.01 Fire exit door(s) should be provided with a "Fire Exit" sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



C.04.02 The door(s) should be provided with "Fire Exit Keep Clear" sign on the external face in accordance with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.05. SIGNS EXIT FASTENINGS**

C.05.01 Fire exit door(s) fitted with a panic bar should be provided with a "Push Bar to Open" sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499 and BS:EN ISO 7010.



C.05.02 Fire exit door(s) fitted with a push pad should be provided with a "Push Pad to Open" sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



C.05.03 Provide "Turn to Open" sign on doors with thumb turn devices.



C.05.04 Provide a notice to indicate how to operate the locking system



**C.06. FIRE ACTION NOTICES**

C.06.01 Fire action notice(s) should be adjacent break glass call points and in staff areas.

C.06.02 Complete detail information in the relevant positions on the fire action notices.

C.06.03 Amend Fire Action notices to reflect the overall emergency plan.

C.06.04 Amend Fire Action notices to reflect the action to be taken in case of a fire.

C.06.05 Fire routine notices within a multi occupied building should reflect the overall emergency plan. The plans within each occupancy should complement each other. It is the responsibility of the person in charge of the building to ensure there is synergy with the fire action plans for each occupancy.

C.06.06 Ensure Fire Action notices are the same and reflect the overall emergency plan.



**C.07. REFUGE AREA SIGNS**

C.07.01 Provide "Disabled Refuge Point" sign(s) indicating the location and any guidance.



**C.08. LIFT SIGNS**

C.08.01 Provide a suitable sign indicating that lifts should not be used in the case of fire. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.

C.08.02 Provide a suitable sign indicating that lifts should not be used in the case of fire. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.09. COOKING RANGE SHUTDOWN SIGN**

C.09.01 Provide a “Cooker Shut Down” sign



**C.10. PORTABLE FIRE FIGHTING SIGNS**

C.10.01 An appropriate sign should identify fire-fighting appliances. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.11. PORTABLE FIRE FIGHTING SIGNS**

C.11.01 Ensure dry/wet riser systems are provided with an appropriate sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.12. FIRE ALARM CALL POINT SIGNS**

C.12.01 Indicate the manual fire alarm call points identified within the report by an appropriate sign(s). Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.13. FIRE FIGHTING LOBBY SIGN**

C.13.01 Ensure that any firefighting lobby is indicated by an appropriate sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.



**C.14. RISK AREA SIGN**

C.14.01 Provide “Flammable Storage” sign



## D. PORTABLE FIRE FIGHTING EQUIPMENT

### D.01. FIRE EXTINGUISHER/BLANKET PROVISION

- D.01.01 Additional numbers/types of fire extinguishers should be provided as indicated within the report or on plan (as applicable)
- D.01.02 The extinguishers indicated within the report or on plan (as applicable) are not necessary to meet the minimum requirements of the legislation and may be removed.
- D.01.03 Extinguishers should be re-sited to the position(s) indicated in the report or on plan (as applicable).
- D.01.04 Fire extinguishers should be fixed on a wall bracket with the carrying handle between 1 – 1.5 metres from floor level, dependent on the size of the extinguisher. Alternatively, they may be stored on a stand which has been designed for the purpose of securing their location
- D.01.05 The risks of using dry powder extinguishers should be assessed. It is necessary that anyone who may have to operate this type of extinguisher receives training from a competent person in how to do so and is aware of the precautions to be taken in such use.
- D.01.06 Replace extinguishers with ones that conform to BS:EN3. The extinguishers should be installed and serviced by a member of an appropriate approved body.
- D.01.07 Fire blankets should be provided in areas as described within this report or on plan as applicable

### D.02. FIRE EXTINGUISHER/BLANKET PROVISION

- D.02.01 Fire extinguishers should be serviced in line with BS:5306:Pt3/BS:6643. A competent person should service portable extinguisher(s), within acceptable timescales.
- D.02.02 Records of tests for all extinguishers should be kept in line with BS:5306-3.

### D.03. USE OF FIRE FIGHTING EQUIPMENT

- D.03.01 It is necessary that anyone who may have to operate a fire extinguisher receives training from a competent person in how to do so and is aware of the precautions to be taken in such use.
- D.03.02 Reinforce the Company Policy and train accordingly. Ensure appropriate records of training are kept.
- D.03.03 It is recommended that the hose reels are replaced with a sufficient number and type of portable fire extinguishers which are more suitable for this type of premises

## E. FIXED FIRE SAFETY SYSTEMS

### E.01. FIRE SUPPRESSION SYSTEMS

- E.01.01 The fire suppression system's maintenance and servicing provider should ensure that servicing and maintenance records are updated as required by the client.
- E.01.02 A suitable suppression system should be installed and maintained by a member of an approved body. For dwellings and residential buildings, BS:9251. Sprinkler systems for residential and domestic occupancies - Code of practice, should be applied.
- E.01.03 A suitable suppression system should be installed and maintained by a member of an approved body. For dwellings and residential buildings, BS:9251. Sprinkler systems for residential and domestic occupancies - Code of practice, should be applied.
- E.01.04 For non-residential buildings or dwellings and residential buildings outside the scope of the relevant technical standard, the requirements of BS:EN 12845, including the relevant hazard classification together with the special requirements for life safety systems should be applied
- E.01.05 Discharge heads require examination by a competent person to ascertain their adequacy for use in an emergency.
- E.01.08 The suppression system should be tested in accordance with the manufacturer's instructions to ensure ongoing functionality.

- E.01.09 Ensure appropriate maintenance schedules are in place to accord with BS:9251 and record outcomes of tests.
- E.01.10 Ensure appropriate maintenance schedules are in place to accord with BS:EN 12845 and record outcomes of tests.
- E.01.11 Fire stopping to be carried out by competent persons (FIRAS) using materials that are suitable for the purpose

#### E.02. SMOKE CONTROL SYSTEMS

- E.02.01 The smoke control system's maintenance and servicing provider should ensure that servicing and maintenance records are updated as required by the client.
- E.02.02 A smoke control system should be installed in accordance with BS:7346.
- E.02.03 Ensure appropriate maintenance schedules are in place to accord with BS:7346 and record outcomes of tests.
- E.02.04 Smoke ventilation should be provided from basement areas without external doors or windows. Ventilation should be provided in line with B5 of Approved Document B.
- E.02.05 Smoke ventilation should be provided from enclosed car parks. Ventilation should be provided in line with B3 of Approved Document B.

#### E.03. PRESSURISATION SYSTEMS

- E.03.01 The pressurisation system's maintenance and servicing provider should ensure that servicing and maintenance records are updated as required by the client.
- E.03.02 A commissioning test is recommended on completion of the refurbishment, to ensure the leakage paths are unaffected and the pressurisation system operates in accordance with its design specification.
- E.03.03 A commissioning test is recommended on completion of the refurbishment, to ensure the leakage paths are unaffected and the pressurisation system operates in accordance with its design specification.

#### E.04. RISING MAINS

- E.04.01 The rising main's maintenance and servicing provider should ensure that servicing and maintenance records are updated as required by the client.
- E.04.02 Arrange for testing and maintenance in accordance with BS:9990. Record outcomes appropriately.
- E.04.03 It is important that adequate fire stopping is carried out by a competent person using the correct materials for this application
- E.05.01 Provide signs indicating the instructions for the use of the suppression system
- E.05.02 Provide signs indicating the instructions for the use of the suppression system
- E.05.03 Provide signs indicating the instructions for the use of the smoke control system

### F. BUILDING MANAGEMENT SERVICES

#### F.01. VENTILATION SYSTEMS

- F.01.01 Provide appropriate fire stopping around the ductwork that penetrates the fire-resisting wall(s). It should be ensured that only products tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- F.01.04 Air handling ducts should be protected using one or a combination of the methods;  
(a) Thermally actuated fire dampers (not suitable for escape routes or kitchens); (b) Fire-resisting enclosures; (c) Protection using fire-resisting ductwork; (d) Automatically actuated fire and smoke dampers triggered by smoke detectors (not suitable for kitchens).

- F.01.05 In residential buildings Air handling ducts should be protected by Automatically actuated fire and smoke dampers triggered by smoke detectors.
- F.01.06 It must be ensured that maintenance is carried out in line with manufacturer's instructions. Records to be kept

#### F.02. DUCTED HEATING SYSTEMS

- F.02.02 It must be ensured that maintenance is carried out in line with manufacturer's instructions. Records to be kept

#### F.03. KITCHEN EXTRACT SYSTEMS

- F.03.02 Provide appropriate fire stopping around the ductwork that penetrates the fire-resisting wall(s). It should be ensured that only products that provide the required standard of fire resistance when tested to the relevant parts of BS:476 are used and the installers are FIRAS accredited.
- F.03.05 It must be ensured that kitchen extract systems are maintained in accordance with manufacturer instructions and/or the policy of the organisation. Records to be kept.

### G. FIRE ALARM SYSTEMS

#### G.01. FIRE ALARM

- G.01.01 The fire alarm category should be upgraded to to comply with the recommendations laid down in Annex A of BS:5839 Pt1.
- G.01.02 A routine for raising the alarm in the event of fire must be established, this may be simply by shouting 'Fire – Evacuate the building' or by a simple rotary gong or klaxon.
- G.01.03 A fire alarm system should be installed to comply with the recommendations laid down in Annex A of BS:5839 Pt1.
- G.01.04 Provide electro-mechanical fire alarm, Category 'M' conforming to BS:5839 Pt1
- G.01.05 Upgrade system to BS:5839 Pt 1, Category L1.
- G.01.06 Upgrade system to BS:5839 Pt 1, Category L2.
- G.01.07 A competent person to confirm that the fire alarm system complies with BS:5839-Pt1 Category L1/L2, when safe to do so.

#### G.02. CERTIFICATION

- G.02.01 Obtain the servicing organisation's documentation confirming the installed fire alarm category as a record.

#### G.03. FIRE ALARM CALL POINTS

- G.03.01 Additional fire alarm call points are required in the positions indicated to comply with to BS:5839: Pt 1 and BS:EN 54-11. Call points should be fixed 1.4 metres above floor level, a lower mounting height may be necessary where there is a high likelihood that the first person to raise the alarm will be a wheelchair user.
- G.03.02 Call points must be readily available and accessible at all material times. Materials or furniture obscuring the call points must be removed.
- G.03.03 The call points indicated are not easily seen. Provided an appropriate sign. Signs to comply with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS:5499, BS:EN ISO 7010.

#### G.04. ACCIDENTAL ACTIVATION

- G.04.01 The break glass points should be protected with covers that conform to BS:5839: Pt 1

#### G.05. AUTOMATIC FIRE DETECTORS

- G.05.01 Increase the number of detectors in the areas indicated to meet the minimum provision recommended by BS:5839 Pt 1.
- G.05.02 A suitable automatic fire detection system conforming to BS:5839 Pt 1 should be provided.
- G.05.03 A suitable automatic fire detection system conforming to BS:5839 Pt 6 should be provided.
- G.05.04 Upgrade automatic fire detection system to conform to BS:5839 Pt 1.

#### G.06. FUNCTIONALITY OF FIRE DETECTORS

- G.06.01 Replace the smoke (or heat) detector head to ensure correct functioning of the automatic fire detection system.
- G.06.02 A competent should inspect the detector(s) indicated to ensure the detector(s) is functional.
- G.06.03 Ensure a clear space of at least 500mm is preserved in all directions around and below every fire detector.
- G.06.04 No Further Guidance Necessary
- G.06.05 Remove storage to ensure a clear space of at least 500mm is preserved in all directions around and below every fire detector.
- G.06.06 Remove the covering unless essential work is ongoing around the detector which may otherwise actuate it. Remove the covering as soon as work is complete and before leaving the vicinity

#### G.07. HEARING IMPAIRMENT

- G.07.01 A competent person should assess the audibility level of the alarm. The sound levels should be; (i) 65 db(A). This may be reduced to 60db(A) in stairways, enclosures of not more than 60m<sup>2</sup>; (ii) Where the sound pressure levels of background noise is greater than 65 db(A), the sound pressure should be at least 5 db(A) above background noise; (iii) Not less than 75db(A) at the bedhead where the system is intended to rouse persons from sleep, this may be reduced in buildings providing Residential Care; (iv) Not greater than 120 db(A) at any normally accessible point
- G.07.02 A visual signal indicating a fire situation should be incorporated into the system for the areas indicated and comply with BS:5839 Pt 1 and BS:EN 54-23. The visual alarm signal should flash at a rate within the range of 30 to 120 flashes per minute. Visual alarm signals should be white or red with a mounting height of not less than 2.1 metres.
- G.07.03 Visual alarm signals should be provided in all areas where the sound levels exceed 90db(A). The visual alarm signal should flash at a rate within the range of 30 to 120 flashes per minute. Visual alarm signals should be white or red with a mounting height of not less than 2.1 metres. The visual alarm should comply in all respects with BS:5839 Pt 1 and BS:EN 54-23.

#### G.10. STAFF AWARENESS

- G.10.01 Staff should be trained in all aspects of the fire alarm system, the control and indicating equipment together with the means for summoning the Fire and Rescue Service.
- G.10.02 An individual should be appointed to carry out the following duties; (a) Ensuring that the Control and Indicator Panel is checked at least once every 24 hours to confirm that there are no faults on the system; (b) Ensuring that arrangements are in place for testing and maintenance of the system by a competent person; (c) Ensuring that the system logbook is kept up-to-date and is available for inspection by any authorized person; (d) Ensuring that all relevant occupants of the protected premises are instructed in the proper use of the system; (e) Ensuring that appropriate action is taken to limit the rate of false alarms; (f) Ensuring that a clear space of at least 500 mm is preserved in all directions around and below every fire detector, and that all manual call points remain unobstructed and conspicuous; (g) Establishing a liaison between those responsible for changes in, or maintenance of, the building fabric (including redecoration, etc.) to ensure that the work does not unnecessarily compromise the protection afforded by the system; (h) Ensuring that, when changes are made to the system, record drawings and operating instructions are updated; (i) Ensuring that, where necessary, a suitable zone plan is displayed and is

kept up-to-date;

(j) Ensuring spare parts are held within the premises, six frangible elements and appropriate tools for manual call points, unless there are less than twelve manual call points in the protected premises in which case only two spare frangible elements with appropriate tools need be held.

#### G.11. FIRE ALARM MAINTENANCE

- G.11.01 The system should be tested in accordance with BS:5839 Pt 1.
- G.11.02 Every week a manual call point should be operated during normal working hours. The weekly test should be carried out at approximately the same time each week. A different call point should be used each week so that all manual call points are tested over a prolonged period. The results of the weekly test should be recorded in the logbook.
- G.11.03 If an automatically started emergency generator is used as part of the standby power supply, it should be started up once each month by simulation of failure of the normal power supply and operated on-load for at least one hour.
- G.11.04 The system should undergo an annual test by a competent fire alarm engineer in line with BS:5839 Pt 1. The test may be carried out over the course of two or more service visits during each twelve-month period. The results of the annual test should be recorded in the system logbook.

#### G.11. MAINTENANCE RECORDS

- G.12.01 The logbook should be kept on site (or, in the case of multi-site operators, a central location), readily accessible. It should detail all tests relating to the fire alarm system. Detail to accord with BS:5839 Pt 1 or Part 6 as applicable. The fire alarm and detection system maintenance and servicing provider should be approached to provide a copy of/ or availability to the servicing and maintenance records if required.
- G.12.02 A system logbook should be maintained with the following information; (a) The name(s) of the member(s) of the premises management to whom responsibility for the fire detection and fire alarm system is delegated; (b) Brief details of maintenance arrangements (c) Dates and times of all re alarm signals (regardless of whether the signal is a false alarm or is initiated as the result of a test, re drill or genuine re); if the re alarm signal has resulted from the operation of a manual call point or re detector, the device and its location should be recorded; (d) Causes, circumstances surrounding and category of all false alarms; (e) Dates, times and types of all tests; (f) Dates, times and types of all faults and defects; Dates and types of all maintenance (e.g. service visit or non-routine attention).

#### G.13. FIRE SERVICE RESPONSE

- G.13.01 A procedure must be established, and the means provided to summon the Fire Service in the event of fire. In any area specifically designated as that from which the Fire and Rescue Service is to be summoned in the event of an emergency, the fire alarm signal should not be so loud as to interfere with telephone speech.

#### G.14. UNWANTED FIRE ALARM

- G.14.01 A record of false alarms should be kept. Detail to accord with BS:5839 Pt 1. The user should record the following details relating to the false alarm; (a) Date and time; (b) Identity and location of device (if known); (c) Category of false alarm (if known); (d) Reason for false alarm (if known); (e) Activity in the area (if the reason for the false alarm is unknown); (f) Action taken on the cause of alarm; (g) Whether the Fire and Rescue Service were called; (h) Whether the Fire and Rescue Service attended; (i) The person responsible for recording the information.
- G.14.02 In relation to the level of false alarms the following recommendations should be considered; (a) In systems that incorporate more than 40 automatic fire detectors, the user should instigate an in-depth investigation by suitable specialists if, in any rolling period of 12 months, either: (i) the average rate of false alarms exceeds one false alarm per 20 detectors per annum; or (ii) Three or more false alarms are initiated by any single manual call point or automatic re detector (or detector location). (b) In

systems that incorporate 40 or less automatic fire detectors, an in-depth investigation should be instigated by the user if, in any rolling 12-month period, three or more false alarms occur.

#### G.15. UNWANTED ACTIVATIONS

G.15.01 Management should take effective action to reduce the instance of false alarms to an acceptable level. In relation to the level of false alarms the following recommendations should be considered; (a) In systems that incorporate more than 40 automatic fire detectors, the user should instigate an in-depth investigation by suitable specialists if, in any rolling period of 12 months, either: (i) The average rate of false alarms exceeds one false alarm per 20 detectors per annum; or (ii) Three or more false alarms are initiated by any single manual call point or automatic re detector (or detector location). (b) In systems that incorporate 40 or less automatic fire detectors, an in-depth investigation should be instigated by the user if, in any rolling 12-month period, three or more false alarms occur.

#### G.16. FALSE ALARM ACTIVATION

G.16.01 Only authorised persons who have been trained in and understand the circumstances under which fire alarm panels could be reset, should be allowed to silence, and reset them.

#### G.17. FALSE ALARM ACTIVATION

G.17.01 Within the fire policy for the premises the RP should identify when or not, a fire call challenge is to be made. That is, when the alarm activates, a challenge is made by nominated and properly trained person(s) to seek to try and identify - is there actually a fire or not - rather than just automatically call 999. Call challenging [reduces] the number of false alarms attended by the Fire Service.

### H. GENERAL & ESCAPE LIGHTING

#### H.01. STANDARD OF EMERGENCY LIGHTING

H.01.01 An emergency escape lighting system conforming to BS:EN 1838 and BS:5266 Pt 1 should be provided.

H.01.02 Where occupants are expected to remain in the building on mains power failure the emergency escape lighting system should incorporate an automatic test system.

H.01.03 A minimum duration of 3 hours should be used for emergency escape lighting if premises are not expected to be evacuated immediately in the event of a supply failure, such as (a) Sleeping accommodation; Places of entertainment; (b) Non-residential premises used for treatment or care; (c) Non-residential public premises.

H.01.04 All common escape routes should be provided with escape lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.

#### H.02. NUMBER OF LUMINARIES

H.02.01 The existing system requires to be checked by a competent person, as it does not appear to provide the requisite levels of illumination. The horizontal illuminance on the floor along the centre line of escape route up to 2 metres in width should not be less than 1 lx.

H.02.02 The system requires to be checked by a competent person, as it does not appear to provide the requisite levels of illumination. The horizontal should not be less than 0.5 lx at the floor level of the area to be protected.

H.02.03 Escape lighting should be provided in the high-risk task areas indicated. The illuminance levels should not be less than 10% of the average of the normal lighting at the location of the point of risk. The time taken for the escape lighting to activate should not be more than 0.5 seconds.

H.02.04 The areas indicated require to be fitted with essential luminaries as required by BS:EN 1838 and BS:5266 Pt 1. Escape lighting should be provided in open areas, defined escape routes, high risk task areas, and points emphasis including; (a) Near each exit door intended to be used in an emergency;

(b) Near stairs so that each flight of stairs receives direct light; (c) Near any other change in level; (d) Externally illuminated escape route signs, escape route direction signs and other safety signs needing to be illuminated under emergency lighting conditions; (e) At each change of direction; (f) At each intersection of corridors; (g) Near to each final exit and outside the building to a place of safety; (h) Near each first aid post; (i) Near each piece of fire-fighting equipment and call point; (j) Near escape equipment provided for disabled people; (k) Near refuges and call points, including two-way communication systems and disabled toilet alarm call position; (l) Near manual release controls provided to release electronically locked doors as recommended in BS:7273-4. Near in this context is within 2 metres.

- H.02.05 External areas require provision of an emergency lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.
- H.02.07 The following specific locations should be provided with the minimum levels of illuminance indicated; (a) Kitchens – 15 lx; (b) First Aid rooms – 15 lx; (c) Treatment rooms – 50 lx; (d) Refuges – 5 lx; (e) Plant rooms – 15 lx; (f) Fire alarm control and indicating equipment – 15 lx; (g) Reception areas – 15 lx; (h) Panic fastenings – 5 lx
- H.02.08 Confirm with the system installer that the system does conform to BS:5266 Pt 1 and BS:EN 1838, throughout the premises.
- H.02.09 Each emergency lighting system should have an appropriate means for simulating failure of the normal supply for test purposes (e.g. manual isolating device or automatic testing). The test facility should be able to be used for both monthly short tests and annual full duration tests. The test facility should be protected from unauthorized operation.
- H.02.10 The risk of occupants being in total darkness in the event of failure of individual emergency lighting luminaires should be minimized by ensuring that illumination from at least two luminaires or emergency exit signs with a usable downward light element is visible in: (a) Each room (open areas) requiring emergency lighting; and (b) The escape route. This should be determined on the basis that all doors will be shut; however, glazed panels allowing sufficient illumination from an adjacent part of the escape route might be acceptable.

### H.03. CORRIDORS

- H.03.01 Escape corridors must be fitted with suitable emergency escape lighting.

### H.04. AREAS OVER 60m2

- H.04.01 The open plan area requires provision of an emergency escape lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.

### H.05. TOILETS OVER 8m2

- H.05.01 Toilets greater than 8m2 require provision of an emergency lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.

### H.06. STAIRWAYS

- H.06.01 The stairway requires provision of an emergency escape lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.
- H.06.03 Moving stairways and walkways should be illuminated as if they were part of an escape route. The system should conform to BS:EN 1838 and BS:5266 Pt 1.

### H.07. EXTERNAL EXITS

- H.07.01 Emergency escape lighting should be provided on external escape routes back to the nominated assembly point/place of safety

#### H.08. WINDOWLESS ESCAPE LIGHTING

H.08.01 Underground and windowless accommodation should be provided with an escape lighting system that conforms to BS:EN 1838 and BS:5266 Pt 1.

#### H.09. CONDITION

H.09.01 Lenses of emergency escape lighting units that have become discoloured and/or opaque will need to be replaced to provide compliant lighting levels.

H.09.03 Reposition the escape luminaire(s) indicated to the normal height of 2m.

H.09.04 Engage a Competent Person to ensure compliance with BS:5266 Pt 1 and BS:EN 1838.

H.09.05 A competent person to inspect the functionality of the lighting unit.

#### H.10. MAINTENANCE

H.10.01 A routine testing and servicing procedure must be set up to ensure the emergency escape lighting system is adequately serviced or maintained

H.10.02 The emergency lighting system requires to be tested in accordance with BS:5266 Pt 1. Functional testing should be checked at least every month with testing for full rated duration being performed on each luminaire annually. The results of tests and any repair should be recorded in the logbook.

H.10.03 The system is acceptable, but it does rely on contractors carrying out the testing and maintenance, and then providing accurate and up to date records in a timely manner. The contractors need fully appreciate their essential part in this. Any required additional guidance should be given

#### H.11. MAINTENANCE RECORDS

H.11.01 The emergency escape lighting maintenance and servicing provider should ensure appropriate maintenance and servicing records are kept; whatever type is/are directed by the client. This should accord with Annex J of BS:5266 Pt 1

H.11.02 A logbook should be maintained which contains details of emergency escape lighting maintenance and servicing.

H.11.03 This matter will need to be confirmed and records updated accordingly by the responsible person.

#### H.12. GENERAL LIGHTING

H.12.01 Extend the general lighting to cover all escape routes.

H.12.02 Extend the general lighting to cover external areas indicated on plan. Switching for the lighting should be inside the final exit door and marked "External Light Switch".

H.12.04 A switch should be provided inside the final exit door to illuminate final exits.

H.12.05 Provide a sign with the legend, "Light switch for external lighting" adjacent to the switch.

### I. FIRE SAFETY MANAGEMENT

#### I.01. POLICY SUITABILITY

I.01.01 It is necessary to have a Fire Safety Policy. It is an important part of your management system for compliance under the Regulatory Reform (Fire Safety) Order 2005. This simple policy should be used in conjunction with the "Fire Risk Assessment", and the "Fire Safety Evacuation Procedures". The policy should be signed by the most senior person in your company. It will demonstrate the company's commitment to ensuring the safety of employees, and of any visitors to the company's premises, from the dangers of fire. A Fire Policy should be prepared that details; (a) Legal and contractual responsibilities; (b) A general policy statement; (c) Responsibilities of key individuals who have responsibility for implementing the policy; (d) Responsibilities of employees; and (e) Responsibilities of persons other than employees. The Fire Policy should contain methods whereby information is given to the employees and other relevant persons in relation to their safety whilst on

the premises such as; 1) The risk of harm from fire identified by the relevant risk assessments; 2) The fire safety measures necessary to control these risks; 3) The procedures to be followed in the event of fire; 4) The identity of persons nominated to implement these procedures; 5) The risks notified to the Responsible Person (RP) by other RPs. This can be displayed on a notice board or distributed by other means until all hazards/risks are removed.

- I.01.02 The Fire Safety Policy should be reviewed at regular intervals and signed off by the Responsible Person.

#### I.02. APPOINTED PERSONS

- I.02.01 One or more competent persons should be appointed to carry out any of the preventive and protective measures required by the Regulatory Reform (Fire Safety) Order (you can nominate yourself for this purpose). A competent person is someone with enough training and experience or knowledge and other qualities to be able to implement these measures properly.
- I.02.02 Although some assistance is provided by nominated persons there are some shortfalls, as indicated within the COMMENTS section.

#### I.03. EFFECTIVE FIRE PLAN

- I.03.01 An emergency plan should be prepared, and staff and fire marshals appraised of the procedures adopted. The purpose of an emergency plan is to ensure that the people in your premises know what to do if there is a fire and that the premises can be safely evacuated. The emergency plan should be based on the outcome of your fire risk assessment and be available for your employees, their representatives (where appointed) and the enforcing authority.
- I.03.02 An emergency plan should be prepared, and staff and fire marshals appraised of the procedures adopted.
- I.03.03 Guidance indicates that the Fire Service must not be relied upon to attend and assist evacuation procedures at premises such as this. Emergency plans should be able to function efficiently and fully, independent of Fire Service assistance, using only the staff on duty at any given time. As a priority, the emergency plan for the premises should be tested under 'worst case scenario' conditions, to ensure that the evacuation objectives can be readily achieved. Any deficiencies identified should be addressed as a priority.

#### I.04. FIRE WARDENS

- I.04.01 Fire Wardens are necessary to implement the company's evacuation policy and should be nominated to assist with it in case of fire/ emergency evacuation.
- I.04.02 Fire Wardens are a vital part of the company's evacuation procedure and their training should be relevant and sufficient to support the emergency fire/evacuation plan(s) and the fire policy.
- I.04.03 It will be necessary to train additional Fire Wardens, to assist in case of evacuation of the premises

#### I.05. APPOINTED PERSONS

- I.05.01 The appointed person(s) must be capable of undertaking the tasks given to them.
- I.05.02 Ensure the appointed person(s) have sufficient knowledge and understanding of the organisation, the principles of fire risk assessment, fire prevention, fire safety legislation and standards.
- I.05.03 Provide the persons appointed with any necessary information and support them to carry out their tasks efficiently.

#### I.06. RESPONSIBILITIES

- I.06.01 Management must be made aware of the fire safety features with which the premises are provided and of the fire risk assessment for the premises.
- I.06.02 Employees must be made aware of the risks identified by the risk assessment carried out, the preventative measures in place and how these measures will protect them if a fire breaks out.

- I.06.03 Employees must co-operate to ensure the workplace is safe from fire and its effects and must not do anything that will place themselves or other people at risk.
- I.06.04 Employees must be made aware of risks and information contained in the safety data sheets associated with dangerous substances.

#### I.07. CONTRACTORS-VISITORS

- I.07.01 It is essential to inform non-employees, such as temporary or contract workers, of the relevant risks to them, and provide them with information about who are the nominated competent persons, and about the fire safety procedures for the premises.
- I.07.02 It is required to provide the employer of any person from an outside organisation who is working in the premises (e.g. an agency providing temporary staff) with clear and relevant information on the risks to those employees and the preventive and protective measures to be taken. Also provide those employees with appropriate instructions and relevant information about the risks to them.
- I.07.03 Contractors must be aware of the preventative fire safety measures with which the premises are provided. A work control system should include clear lines of responsibility communicated to contractors; a permit system that considers the risks to relevant persons; logging and work control audit processes; and routine checking and supervision.

#### I.08. COOPERATION

- I.08.01 The responsible person must coordinate emergency plans and ensure that they do not conflict with each other. This could include:(a) Coordinating an emergency plan; (b) Identifying the nature of any risks and how they may affect others in or about the premises; (c) Identifying any fire-prevention and protection measures; (d) Identifying any measures to mitigate the effects of a fire; and (e) Arranging any contacts with external emergency services and calling the Fire and Rescue Service.

#### I.09. ESCAPE ROUTE INSPECTIONS

- I.09.02 The combustible materials stored in escape routes must be removed.
- I.09.03 Combustible material left near the building, which constitutes a potential fire hazard, must be removed
- I.09.04 The materials obstructing the escape route(s) must be removed immediately.
- I.09.05 The materials obstructing the fire exit(s) must be removed without delay. The fire exit(s) must be made available for use at all material times.
- I.09.06 Rearrange the furniture and contents to ensure escape routes are available at all material times.
- I.09.07 Remove combustible storage/items and maintain the protected stairway as a 'sterile' route.
- I.09.08 Ensure that all escape corridors are free from obstruction.
- I.09.09 The floor covering requires repair or replacement.
- I.09.10 The loose mats should be removed from the escape route and taken back into the flat(s) where they do not constitute a trip hazard. The escape route should be kept clear of such hazards

#### I.10. PARENT OR GUARDIAN AWARENESS

- I.10.01 Before a young person is employed, a parent should be provided with clear and relevant information on the risks to that child identified by the risk assessment, the measures in place to prevent/protect them from fire and inform any other responsible person of any risks to that child arising from their undertaking.

#### I.11. ENFORCEMENT

- I.11.01 Every effort must be made to implement the findings contained within the Enforcement Notice within the timescales recommended.

## I.12. COORDINATION WITH F&RS

- I.12.01 A nominated individual should be tasked with meeting the Fire and Rescue Service in an emergency. This can be delegated to one of the trained Fire Marshals for the site. Information should be readily available that may assist the Fire Service in the performance of their duties, this may include (a) The location of the fire based on the fire alarm panel or reports from the Fire Marshals. (b) The evacuation has been carried out in full, or: (i) Location of any persons trapped or needing assistance. (ii) Location of any disabled persons. This information is based on the reporting back of the Fire Wardens. (iii) Last known locations of persons missing. (c) Location of Maps, Plans, drawings and alternative entrance and exits. (d) Special Hazards or risks

## J.01. STAFF TRAINING

### J.01. INDUCTION

- J.01.02 All staff should be given information and instruction as soon as possible after they are appointed and regularly after that. Make sure you include staff who work outside normal working hours, such as contract cleaners or maintenance staff. The information and instructions you give must be in a form that can be used and understood. They should take account of those with disabilities such as hearing or sight impairment, those with learning difficulties and those who do not use English as their first language. The information and instruction you give should be based on your emergency plan and must include: (a) The significant findings from the fire risk assessment; (b) The measures that you have put in place to reduce the risk; (c) What staff should do if there is a fire; (d) The identity of people you have nominated with responsibilities for fire safety; and (e) Any special arrangements for serious and imminent danger to persons from fire.

### J.02. BASIC AWARENESS

- J.02.01 Fire awareness training should be given at regular intervals or immediately when there is a material change to the fire risk assessment.
- J.02.02 Adequate fire safety training should be provided to the staff. The type of training should be based on the particular features of the premises and should:(a) Take account of the findings of the fire risk assessment; (b) The emergency procedures employed within the premises; (c) Take account of the work activity and explain the duties and responsibilities of staff; (d) Take place during normal working hours and be repeated periodically where appropriate; (e) Be easily understandable by your staff and other people who may be present; and (f) Be tested by fire drills.
- J.02.03 As a minimum all staff should receive training about: (a) The items listed in the emergency plan; (b) The importance of fire doors and other basic fire-prevention measures; (c) Where relevant, the appropriate use of firefighting equipment; (d) The importance of reporting to the assembly area; (e) Exit routes and the operation of exit devices, including physically walking these routes; (f) General matters such as permitted smoking areas or restrictions on cooking other than in designated areas; and (g) Assisting disabled persons where necessary. Training is necessary: (a) When staff start employment or are transferred into the premises; (b) When changes have been made to the emergency plan and the preventive and protective measures; (c) Where working practices and processes or people's responsibilities change; (d) To take account of any changed risks to the safety of staff or other relevant persons; (e) To ensure that staff know what they have to do to safeguard themselves and others on the premises; (f) Where staff are expected to assist disabled persons; and (g) If a member of staff may take on the role of duty manager.
- J.02.04 Develop and implement a Hazardous Substance Training Policy

### J.03. EMERGENCY PLANNING

- J.03.01 The emergency fire plan for the premises must be known to all staff and their training and understanding of it must be kept up to date.

#### J.04. EVACUATION

- J.04.01 Staff expected to undertake the role of fire marshals (often called fire wardens) would require more comprehensive training. Their role may include: (a) Helping those on the premises to leave; (b) Checking the premises to ensure everyone has left; (c) Using firefighting equipment if safe to do so; (d) Liaising with the fire and rescue service on arrival; (e) Shutting down vital or dangerous equipment; and (f) Performing a supervisory/managing role in any fire situation. Training for this role may include: (a) Detailed knowledge of the fire safety strategy of the premises; (b) Awareness of human behaviour in fires; (c) How to encourage others to use the most appropriate escape route; (d) How to search safely and recognise areas that are unsafe to enter; (e) The difficulties that some people, particularly if disabled, may have in escaping and any special evacuation arrangements that have been pre-planned; (f) Additional training in the use of firefighting equipment; (g) An understanding of the purpose of any fixed firefighting equipment such as sprinklers or gas flooding systems; and (h) Reporting of faults, incidents and near misses.
- J.04.03 A competent person should train additional fire marshals.
- J.04.04 Fire marshals/wardens require training from a competent person.

#### J.05. EVACUATION DRILLS

- J.05.01 Evacuation drill should be carried out once every 6 months.

#### J.06. CONTRACTORS

- J.06.01 Site contractors should be made aware of the fire safety, preventative measures provided in the building and the arrangements for evacuation in the event of fire.

#### J.07. TRAINING RECORDS

- J.07.01 An up-to-date record of all staff fire training records should be maintained, to include detail of the type of training given, to which the records should relate.
- J.07.02 Maintain appropriate records detailing the type and content of any training delivered.
- J.07.03 Update your logbook with dates of training, as an addition to any personal records that are necessary to be maintained, the latter indicating type of training to which the records relate

#### J.08. EXTINGUISHER TRAINING

- J.08.01 It is recommended that staff in this premises are trained in the use of firefighting equipment
- J.08.02 It is necessary that anyone who may have to operate a fire extinguisher receives training from a competent person in how to do so, and is aware of the precautions to be taken in such use.

#### K. DANGEROUS SUBSTANCES

##### K.01. USE OF HAZARDOUS LIQUIDS

- K.01.03 Suitable arrangements must be made for the safe disposal of flammable/combustible materials.

##### K.02. STORAGE OF HAZARDOUS LIQUIDS

- K.02.01 Flammable liquids must be used and stored in accordance with guidance outlined in Health and Safety Guidance, HSG 51.

##### K.03. USE OF FLAMMABLE GASES

- K.03.01 Use of compressed gases in welding, cutting, and related processes should follow HSG 139.

#### K.04. STORAGE OF FLAMMABLE GASES

- K.04.01 Liquefied Petroleum Gas must be used and stored in accordance with recommendations laid down in LPG guidance document LPG A. Cop 7 and/or BCGA Code of Practice 44.
- K.04.02 Acetylene cylinders must be used and stored in accordance with recommendations laid down in BCGA Code of Practice 44.
- K.04.03 Oxygen cylinders should be stored in a suitable store which contains no sources of ignition, oil and grease and be labelled externally by suitable signage.
- K.04.04 We recommend that the locations of oxygen cylinders within the premises are available to the Fire Service within a Premises Information Box

#### K.05. FLAMMABLE SOLIDS

- K.05.11 Notice boards with a surface spread of flame potential are permitted in classrooms, but these should not extend more than 2.5M without having a break between them of not less than 0.4M and should be located away from possible sources of ignition. This must be managed locally, and the surface spread of flame potential kept within acceptable limits. We also recommend that the amount of display material is either reduced to 20% of the available vertical wall space within corridors/sections of corridors/stairways, or that the displays are covered with glass, non-flaming pvc or a similar transparent substance, which will meet the Class O requirement.
- K.05.12 Where electrical installations are located within storerooms it should be ensured that any storage is at least 1000mm clear of the installations

#### K.07. EXPLOSIVE ATMOSPHERES

- K.07.01 Appoint a competent person to conduct a DSEAR assessment as soon as possible and replace electrical equipment if necessary

#### L. IGNITION SOURCES

##### L.02. FIXED ELECTRICAL EQUIPMENT

- L.02.01 Fixed electrical equipment should be maintained in accordance with manufacturer's instructions. Records should be available to support this.
- L.02.02 Appropriate testing must be carried out on fixed electrical equipment. Records should be available to support this.

##### L.03. PORTABLE ELECTRICAL EQUIPMENT

- L.03.05 The serial numbers and model types are to be checked against the manufacturer's database to ensure that they are not included on any safety alert.

##### L.04. MAINS ELECTRICAL SUPPLY

- L.04.04 In single stair buildings, meters located within the stairway should be enclosed within a secure cupboard that is separated from the escape route by fire-resisting construction.
- L.04.05 We recommend that this is pursued with the utility company that has installed the meters, to confirm that appropriate standard is in place
- L.04.06 Repair or replace defective light fittings

##### L.05. EXTENSION LEADS

- L.05.01 Ensure extension leads are used accordance with manufacturer's instructions.
- L.05.02 It is recommended that the premises electrical installation is extended by the installation of additional sockets as extension leads are prone to be used incorrectly and as such are a potential

source of ignition. If retained, they should be replaced with an extension lead fitted with a surge protector, leads should not be longer than 15 metres and they should be used in accordance with the manufacturer's instructions.

**L.08. GAS SUPPLIED SYSTEMS**

- L.08.04 A means of automatically shutting off the fuel supply in the event of a fire should be provided. This should include an emergency shut-off push-button at the entrance to the boiler room.
- L.08.08 It is important that up to date records are kept of maintenance of gas heating systems/appliances

**L.14. DELIBERATE IGNITION**

- L.14.01 Assess the site and then consider any measures that need to be taken to reduce or eliminate the potential for arson
- L.14.02 Develop and then implement an arson policy based on a reduction/elimination policy