

## White Lion Fire Safety Note

# Arden Fire Health and Safety

## Introduction

The purpose of this fire safety note is to give an overview of the White Lion restoration project in relation to fire safety.

The following information will demonstrate compliance with Part B Volume 2 of the Building Regulations, The Regulatory Reform (Fire Safety) Order 2005, British Standards, and relevant Codes of Practice.

## **Building Regulations Part B Volume 2**

#### B1 Means of Warning and Escape

The current design and specification meets the requirements of B1 in relation to means of escape as follows:

Compartmentation lines between floors provides 60 minutes of fire resistance as required due to the sleeping risk.

Vertical compartmentation lines provide 60 or 30 minutes of fire resistance where required.

Fire doors on escape routes are to FD30 or FD30s rating where required. All fire doors are noted as self-closing with the exception of cupboards or similar which do not require self closers as they will be kept locked shut.

The fire alarm system design meets the requirements of BS5839-1 with smoke or heat detection installed as required, alarm sounders in place and where required flashing beacons to alert those with hearing impairments.

Emergency lighting system design is to the required standard covering all escape routes, high risk work areas, protected stairs, exit points and external areas by exit points.



Final exit points will be fitted with fastenings which can be operated with one hand and in one motion such as a push bar release. Final design of the fastenings have yet to be determined.

Internal exit route doors will, wherever possible, be hinged to open in the direction of travel. Guest room doors will open inwards to the rooms to avoid fouling escape routes.

A refuge area for disabled guests is included in designs and is located on the 1<sup>st</sup> floor. A two way communication system will be installed with speech modules located in the refuge area and at the front of the premises to allow for fire and rescue service communication with those located in the refuge area.

Although not strictly fire related, alert systems, should be in designs so that users of the accessible rooms are able to summon for assistance in the event of a fall or other incident. This should take the form of pull cords which are linked to an alarm.

As there may be disabled guests and no on-site staff during the night further consideration is required to establish if the fire alarm system should be linked to an Alarm Receiving Centre (ARC) or to local Fire and Rescue Services. In addition it would be preferable to have a local resident on call 24/7 as the site will not be staffed.

In relation to disabled guests a robust management procedure will be required to ensure that guests are not put at increased risk from the affects of fire.

## **B2** Internal Fire Spread (linings)

As a general rule of thumb modern paints are water based and do not increase surface spread of flames.

Timber beams in the structure of the building are not inherently detrimental to spread of flame or fire loading.

The timber flooring is not considered a significant risk as a fire alarm system which meets BS5839-1 L1 mitigates this by providing early warning.

Soft furnishings should meet BS7176 (non-domestic standard) and any curtains or similar should be fire retardant.

In summary the current designs meet the requirements of B2 although the requirements of BS7176 should be kept in mind as the project progresses.

## B3 Internal Fire Spread (structure)

Current design are not required, at this stage, to detail the methods and materials to be used for fire stopping of penetrations to compartment walls and ceilings.

However the compartmentation structure are designed to provide 60 minutes fire resisting between floors, 60 minutes fire resisting walls in vertical lines where required and 30 minutes fire resisting in all other areas as required.

Fire doors are FD30s or FD30 depending on location and are to the required standard. The installation of fire door sets does not form part of this stage in design but will be accounted for during contractor discussions.



## B2 and B3

Current designs include a fire misting/suppression system in order to further reduce the risk of fire spread via internal linings and structure and to enhance life safety and preservation of the historic nature of the building.

## **B4 External Fire Spread**

The building is detached and sufficient distance away from the nearest building so as not to give rise to any specific or significant risk to other buildings in the area.

There are no buildings in the area that would be significantly at risk from a fire at the premises e.g. petrol station.

The potential for external surface fire spread due to materials used is limited and not considered a significant risk. The external materials of the building are predominantly rendered brick.

Should a significant fire event occur it is likely that this would have a devastating impact on the local community due to the fact that the pub restoration is a community project.

In order to reduce the potential for a significant fire event all necessary precautions will be taken to keep the risk level of such an event as low as is reasonably practicable. This will be achieved by ensuring correct materials are used in construction, fire alarms systems are in place to give early warning and a misting system will be in place to reduce potential fire spread.

# **B5** Access and Facilities for the Fire Service

Accessibility for the fire and rescue service is clear and unhindered to the front of the premises with fire appliances able to be located within approximately 20m from the front entrance which is well within the maximum distance of 35m.

The nearest fire hydrant is located in the road outside the pub

There are no additional water facilities, such as rivers, in the local area that could be utilised for fire fighting.

There is no specific risk, above and beyond that of any other fire, to fire and rescue services in the event of attendance. The premises, once in operation, will not have any substances or undertake any activities that will give rise to any abnormal fire risk.

Although the premises will not be staffed out of hours fire and rescue services will be able to gain access to the premises at all times. Additionally it is proposed that a local resident will be on call at all times to liaise with the fire and rescue service on attendance.

There will be no specific facilities provided for fire and rescue services e.g. dry rising mains. This is considered appropriate given the size, use and location of the premises.

# Legislation, British Standards and Codes of Practice Referenced

BS5839-1 Code of Practice for the Design, Installation, Commissioning and Maintenance of Systems in Non-Domestic Premises

BS5266-1 Code of Practice for the Emergency Lighting of Premises

BS5306-3 and BS5306-8 Fire Extinguishing Installations and Equipment on Premises

BS7176 Furniture- Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites

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