

# **Fire Safety Risk Assessment for Treowen, Wonastow, Monmouth, NP25 4DL**

## **Record of significant findings**

### **Scope of Risk Assessment**

This fire safety risk assessment only covers the use of Treowen as sleeping accommodation.

It does not cover the use of Treowen as a venue for Civil Weddings and Partnerships nor any booking for which Treowen is at any time during the booking a place of work e.g. corporate and educational bookings and any booking during which caterers, entertainers, etc. are employed at any time during the booking. There is a separate fire safety risk assessment that covers such uses of Treowen.

A written fire safety risk assessment is not required by R.A. & J.P. Wheelock, the partnership operating Treowen, as employers because they have less than five employees.

### **Constraints of a listed building**

The aims of this fire risk assessment are:

- To identify the fire hazards.
- To reduce the risk of those hazards causing harm to as low as reasonably practicable.
- To decide what physical fire precautions and management arrangements are necessary to ensure the safety of people in the premises if a fire does start.

Treowen is a Grade I listed building. It is therefore appropriate to select those physical fire precautions that will have least impact on the historic fabric and appearance of the building if they can achieve the same degree of safety for people as more intrusive ones. The common physical fire precautions at an appropriate level for a building such as Treowen in order of increasing impact on the building are:

- firefighting equipment
- fire alarm system
- protecting stairways and escape routes and restricting the spread of fire
- emergency lighting and signs

so they will be considered in that order.

There are powder fire extinguishers on every floor on both staircases. There is a fire blanket next to the range in the kitchen. These are considered sufficient as there are no trained staff on site to operate firefighting equipment as the house is let on a self-catering basis. Emergency lighting to illuminate firefighting equipment is considered inappropriate since in the event of a fire, particularly at night, the safe evacuation of visitors would be the first priority in the absence of trained staff on site.

Treowen is equipped with a fire alarm system conforming to BS 5839, Part 1: Category P1.

The spiral staircase is adequately protected with fire resisting construction; all the doors leading off the spiral staircase have automatic closers and provide a half-hour fire resistance; the spiral staircase discharges to a place of safety: it is therefore a protected stairway.

The main staircase is adequately protected with fire resisting construction; the structure of the main staircase includes the cupboard under the stairs on the ground floor and the Priest's Hole between the ground and first floors as both of these spaces have smoke and heat detectors they do not compromise the protection of the main staircase as escape route; all the doors leading off the main staircase have automatic closers and provide a half-hour fire resistance; the final exit from the foot of the main staircase is either through the Banqueting Hall or the Scullery. The Banqueting Hall has a suspended floor with a ceiling below providing a half-hour fire resistance. The Scullery has a solid stone floor.. The route through the Scullery is therefore the preferred escape route. These two escape routes are separated by fire doors between the Scullery and the Cellar and the Dining Room and between the Dining Room and the Banqueting Hall and the Kitchen. The internal window between the Banqueting Hall and the Nursery is protected by safety glass with half hour fire resistance.

All the final exit doors have lever handles on the inside which unlock the doors without the need for a key.

Emergency lighting and signs are the most intrusive of fire safety precautions in a listed building. The safest staircase as the escape route from all the bedrooms will depend on the location of the fire. Signs on these floors are potentially dangerous as visitors need to decide which is the safest escape route given the location of the fire. Signs may direct visitors towards rather than away from the fire. A fire action plan and a torch are provided in each bedroom explaining the alternative escape routes from that room.

The final exit from the spiral staircase is the entrance to Treowen most used by visitors so does not need signing. The escape route from the foot of the main staircase is either through the Scullery or the Banqueting Hall and may depend on the location of the fire. Signs at this point may result in visitors thinking they have to use a compromised escape route when in fact they have to make a choice. The final exits are obvious from the access rooms and do not need signing.

On the ground floor the only room with a prominent door that does not provide a means of escape is the Dining Room. The door leading to the cellar from the Dining Room does not provide a means of escape and is inherently dangerous as it opens directly onto the cellar steps without a landing. This door should be kept locked whenever the house is occupied.

The lighting on both staircases, the Scullery, the Banqueting Hall and the area linking the first floor bedrooms and the bathrooms switches automatically to separate battery powered back up for each location in the event of a power failure. All the bedrooms are equipped with torches.

## **1. Identify fire hazards**

### **1.1. Sources of ignition**

- 1.1.1. Cooking equipment
- 1.1.2. Electrical wiring
- 1.1.3. Electrical appliances
- 1.1.4. Naked flames
  - 1.1.4.1. Candles
  - 1.1.4.2. Open fires
- 1.1.5. Smokers' materials

## **1.2. Sources of fuel**

- 1.2.1. Alcohol, cooking oils
- 1.2.2. Furnishings

## **1.3. Sources of oxygen**

- 1.3.1. Natural airflow
- 1.3.2. Fan assisted convector in Long Drawing Room. This recycles air drawn from the room through a fireproof casing in the adjoining shower room so does not provide an additional source of oxygen in the room.

## **2. People at risk**

- 2.1. Up to 50 visitors

## **3. Evaluate, remove, reduce and protect from risk**

### **3.1. Evaluate the risk of the fire occurring**

- 3.1.1. Cooking equipment: visitors may not be familiar with the kitchen; cooking oils, alcohol and packaging are possible sources of fuel.
- 3.1.2. Electrical wiring: fault could cause fire in unoccupied rooms and voids between floors and ceilings.
- 3.1.3. Electrical appliances: fault could cause fire in unoccupied rooms.
- 3.1.4. Naked flames
  - 3.1.4.1. Candles: potential source of ignition if not safely positioned away from flammable materials and draughts.
  - 3.1.4.2. Open fires: potential source of ignition if left unattended and unguarded.
- 3.1.5. Smokers' materials: potential source of ignition.

### **3.2. Evaluate the risk to people from a fire starting in the premises**

- 3.2.1. visitors unfamiliar with the kitchen and fire safety measures could be a fire risk to themselves and others.
- 3.2.2. A fault in the electrical wiring could cause a fire in an unoccupied room and present a hazard if not detected.
- 3.2.3. A fault in an electrical appliance could cause a fire in an unoccupied room and present a hazard if not detected.
- 3.2.4. Naked flames
  - 3.2.4.1. visitors unaware of the potential hazard of candles may position them unsafely.
  - 3.2.4.2. visitors unaware of the potential hazard of open fires may leave them unattended and unguarded.
- 3.2.5. Smokers may not dispose of cigarette ends etc. safely.

### **3.3. Remove and reduce the hazards that may cause a fire**

- 3.3.1. Fire safety instructions are provided for visitors using the kitchen.
- 3.3.2. The electrical installation is inspected periodically in accordance with BS 7671.
- 3.3.3. Electrical appliances are inspected in accordance with The IEE Code of Practice for In-service Inspection and Testing of Electrical Equipment.
- 3.3.4. Fire safety recommendations are provided for the temporary responsible person hiring Treowen and they are made aware of their legal duties.
- 3.3.5. Safe smoking recommendations are provided at all entrances to the house

### **3.4. Remove or reduce the risks to people**

- 3.4.1. Fire detection and warning systems

There is a fire alarm system conforming to BS 5839, Part 1: Category P1.

#### 3.4.2. Fire fighting equipment

There are powder fire extinguishers on every floor of both staircases. There is a fire blanket next to the range in the kitchen.

#### 3.4.3. Escape routes

The level of risk in the premises is regarded as normal. Uneven treads on stairs and changes of level between rooms increase travel times on escape routes. Ceiling heights of about 4 metres and an open well staircase provide greater time between activation of the fire alarm and smoke affecting people. Sparse furnishing and generally low flammability construction reduce the speed of fire spread. Largely traditional materials in furnishings reduce density and toxicity of smoke. The house is divided in two by a masonry spine wall. All storage areas are kept locked when the house is occupied.

The FSRA guide for sleeping accommodation states that spiral stairways are acceptable only in exceptional circumstances. As the house is let as a single unit all visitors are at least acquaintances, if not friends and relations, so will assist each other in an emergency and ensure that everyone gets to a place of safety. The spiral staircase has four flights of eleven steps separated by large half landings. The spiral staircase is 2.4 metres in diameter, the minimum recommended is 1.5 metres. With these exceptional circumstances it is considered adequate as an escape route for up to 50 people.

The spiral staircase is a protected stairway and all the bedrooms are within 35 metres, the suggested travel distance for a normal fire risk area with more than one escape route, of the final exit from the spiral staircase.

The main staircase provides a second protected escape route. However not all the bedrooms are within 35 metres, the suggested travel distance for a normal fire risk area with more than one escape route, of the final exit from the main staircase.

The occupancy of Treowen should not exceed 50 to ensure the adequacy of the escape routes..

#### 3.4.4. No signs are considered necessary or desirable for the reasons detailed above in “Constraints of a listed building”.

#### 3.4.5. Emergency lighting which is fit for purpose is provided on all escape routes.

#### 3.4.6. Installation, testing and maintenance

A record of regular checks, periodic servicing and maintenance of the fire alarm system, fire extinguishers and emergency lighting is maintained.

## 4. Record, plan, instruct and train

### 4.1. Record the significant findings and action taken

4.1.1. Fire safety recommendations are given to the temporary responsible person hiring Treowen and they are made them aware of their legal duties (See appendix 1 for text and appendix 2 for plan).

4.1.2. A record is kept of regular checks, periodic servicing and maintenance of the fire alarm system, fire extinguishers and emergency lighting.

### 4.2. Emergency plans

4.2.1. There is an emergency plan for the temporary responsible person hiring Treowen (See appendix 1 for text and appendix 2 for plan).

## 5. Review

This fire risk assessment will be reviewed if the monitoring of its implementation or a material change in the premises indicates that a review may be necessary.

July 2018

## **Emergency plan for the Temporary Responsible Person at Treowen, Wonastow, Monmouth**

### **As the responsible person you have legal duties with regard to the safety of everyone in the house**

#### **1. On your arrival you should ensure that you and your visitors:**

- 1.1. Know the fire alarm control panel is by the entrance to the house from the car park
- 1.2. Realise that all doors with automatic closers are fire doors and must not be propped open
- 1.3. Know there are fire extinguishers on all floors on both staircases
- 1.4. Know what visitors and staff, if any, should do if they discover a fire
- 1.5. Know how the evacuation of the premises should be carried out
- 1.6. Know where visitors and staff, if any, should assemble after they have left the premises
- 1.7. Can identify the key escape routes and exits
- 1.8. Are aware of the arrangements for fighting fire
- 1.9. Keep all escape routes clear of obstructions and combustibles
- 1.10. Are aware of the need to position candles safely away from combustible materials, draughts and escape routes
- 1.11. Only light open fires in the Banqueting Hall, Oak Room, Dining Room and Long Drawing Room and ensure that any fires are guarded when unattended

### **If you are holding a function at Treowen which involves the employment of anyone then you have further duties**

#### **1. Before the function you should decide in conjunction with any staff employed**

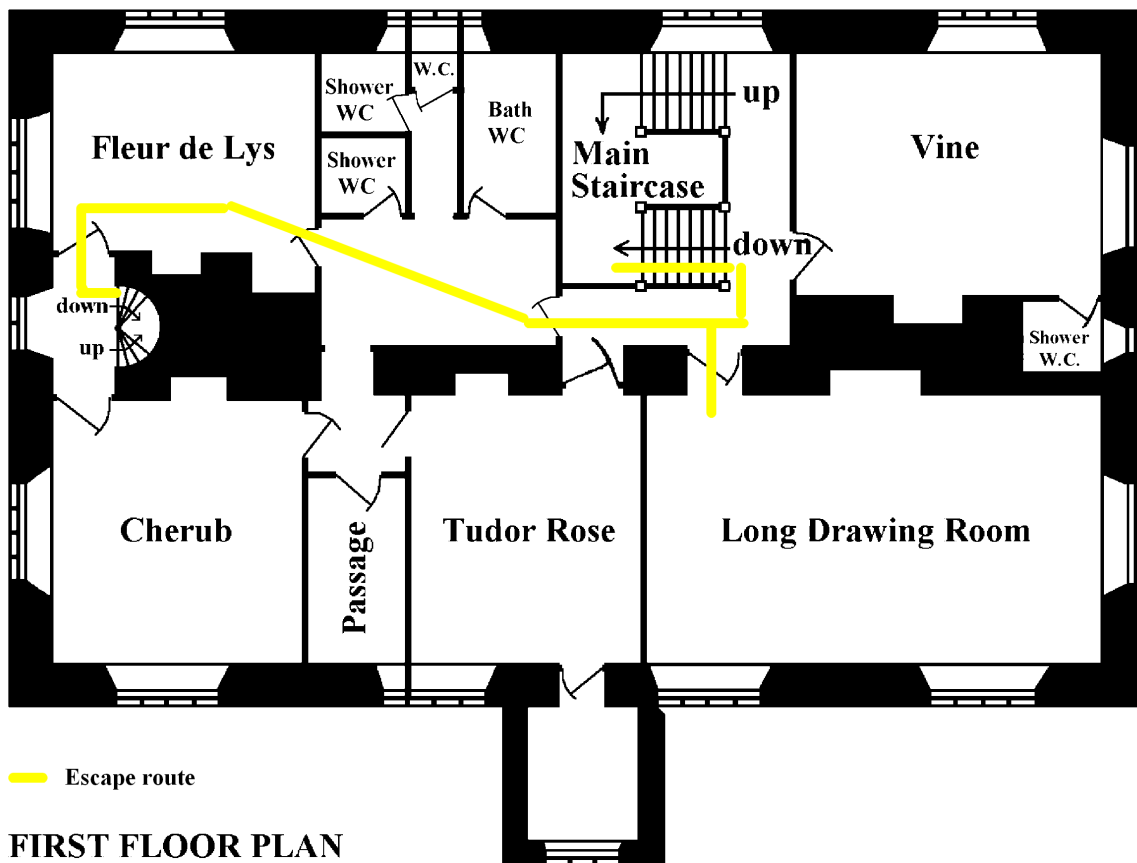
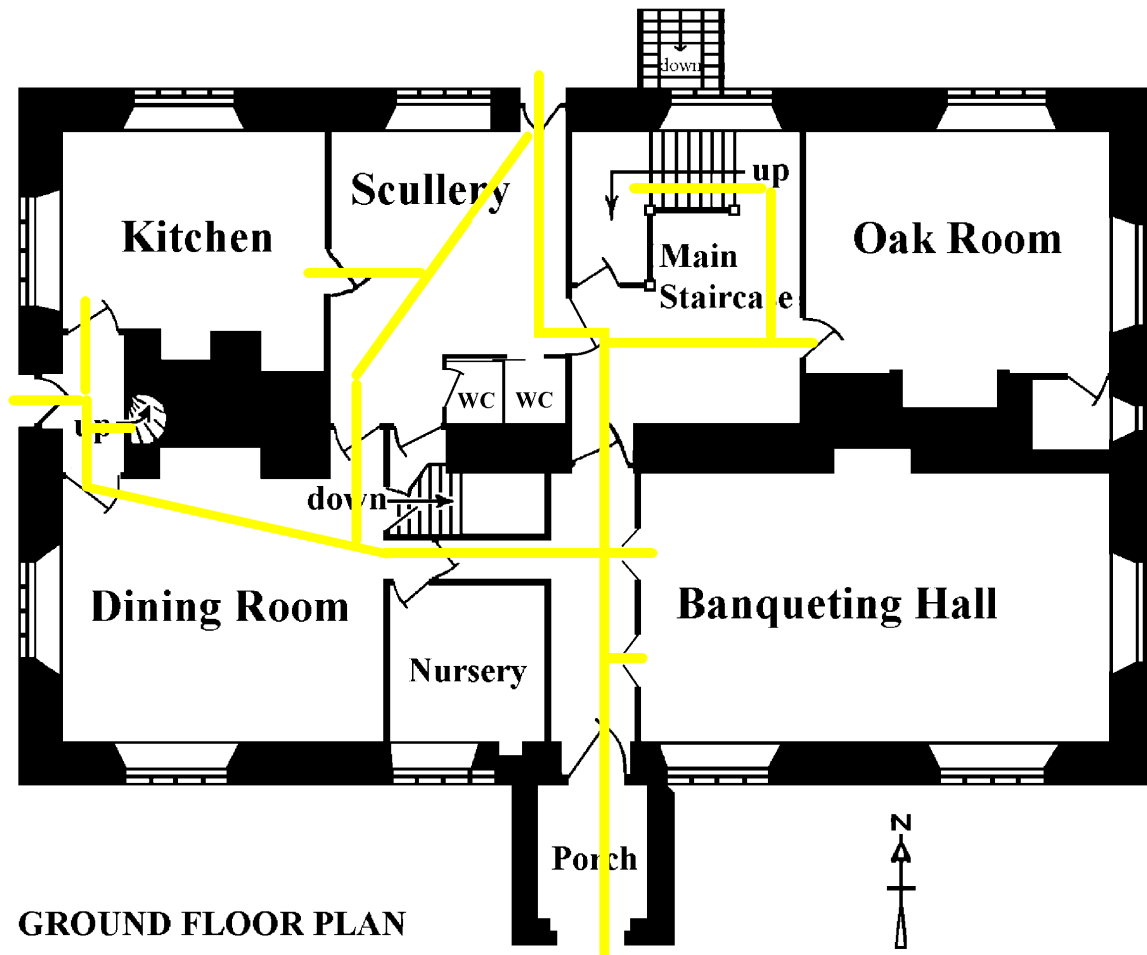
- 1.1. The arrangements for fighting fire
- 1.2. The duties and identity of staff and visitors who have specific responsibilities if there is a fire
- 1.3. Who will ensure that access to the building for the fire and rescue services is not obstructed
- 1.4. Who will be responsible for calling the fire and rescue services
- 1.5. The arrangements for means of escape for those especially at risk, such as disabled persons and children
- 1.6. The plans to deal with people once they have left the premises, especially children

#### **2. At the start of the function you should notify all those present about:**

- 2.1. The legal prohibition of smoking on the premises
- 2.2. The emergency warning signal from the fire alarm
- 2.3. Who is supervising and how to identify them
- 2.4. The location of exits and escape routes
- 2.5. The location of muster points

#### **3. During the function you should ensure that:**

- 3.1. Escape routes and exits do not become blocked
- 3.2. The prohibition on smoking is adhered to
- 3.3. Where naked flames are present that combustible material is kept clear and that all open fires are guarded when unattended
- 3.4. Rooms do not become overcrowded
- 3.5. Noise levels cannot drown out the fire alarm
- 3.6. The limit on the number of visitors is observed



— Escape route

0 10 20 30 40 50 60 70 80 Feet

0 5 10 15 20 Metres