Loss Prevention Consultancy: Heritage Fire Risk Assessment

Notes on Using this Form to Undertake a Fire Risk Assessment

1. The process of undertaking a fire risk assessment is intended to disclose the likely levels of risk relating to the building and its contents. The outcome is measured as a Risk Score read off a 60 square matrix. In this system, scores are assessed as follows:

   Up to 9 = Low risk
   10 – 39 = Normal risk
   40 or more = High risk
2. Work your way through the questions, in Part A most of these relate to 'negative' items while in Part B, points are allocated for positive things such as good fire safety management.
3. When the assessment is complete, double the points scored for Part A and deduct the total from the Part B score and the number remaining indicates the Risk Score.
4. The score and grading can be used to prioritise risk improvement work as well as to indicate where serious hazards to properties might lie.
5. Questions 1 –3 refer to the materials from which the property is constructed. Higher points are scored where buildings are constructed from more combustible materials.
6. Questions 4 and 5 relate to the way in which fire can be spread internally. Obviously, properties with wood paneled corridors will be likely to spread a fire faster than undecorated plastered corridors. 'Fuel Loading' is the term used to describe an assessment of the likely amount of material in a building which could burn. In this assessment we are trying to estimate this as either low or high. Sparsely furnished rooms with wooden furniture (think Stuart) offer much lower fuel loads than rooms with a great much contents and upholstered furniture (think late Victorian). The highest score would be for a room with paintings. books or drapery over much of its wall surfaces, heavy wall paper and with more than a few upholstered pieces of furniture.
7. Compartmentation (Question 4) relates to how well the rooms/spaces will retain smoke and heat if there is a fire. Most historic buildings were constructed with little deliberate compartmentation but this may be present by virtue of the design of the building. The most important features are doors and even the oldest ill-fitting door will provide some measure of protection. Up to 30 minutes fire resistance may be provided by some 18th or 19th century doors (for example where the door is at least 25mm thick) provided they fit well in their frames and are latched shut
8. Question 22 deals with the suitability of exit routes. This is a complex issue which needs information on the following criteria. An initial assessment can be made and this can be tested against the variables. For example, if it is clear that the time to evacuate a proposed concert audience of 200 is unacceptably high then the same calculation could be made with fewer people or more staff

   Numbers of persons likely to be present
   What they are doing – eg sitting. listening to a concert or standing, drinking alcohol looking at paintings
   Location of room (eg height above ground)
   Distance/s to escape routes in room in which people are assembled
   Width of doorways/staircases on escapes routes
   Likelihood of smoke entering escape route
   Steepness of staircase
   Presence of exit signs and emergency lighting
   Travel distances to open air or place of safety
   Whether building has an automatic fire detection and alarm system
   Numbers of trained staff present to aid evacuation
9. Question 23 deals with Housekeeping. This is relatively simple to assess – a property will be described as having poor standards of housekeeping of any of the following are observed:

   Storage of combustibles in a boiler room or electrical cupboard
   Excessive storage of combustibles in service corridors or rooms
   Large quantities of combustibles in attics

Date of Inspection: **Location:** **Report No**

Post Code: **Telephone**

Person/s Accompanying:

Occupancy: Open to Public/Retail/Catering/Special Events/Letting Apartment/s

Nearest Fire Station: **Brigade:**

Resident Manager: **Max Visitor Numbers:**

Purpose of Inspection: Statutory/Insurance/Risk Improvement/Property/Repeat

Cultural Property Factors (A-D)	**Rating (A highest = + 4)**
Cultural Significance of Building	_____
Cultural Significance of Contents	_____

A. Fire Risks (See Notes on Page 1)

(Composites score highest)

1. Construction _____

Other (4)
Timber (3)
Brick (2)
Stone (1)

2. Roof _____

Other (4)
Thatch (3)
Tile (2)
Slate (1)

3. Internal Finishes of Corridors/Escape Routes _____

Highly embellished or over-furnished (3)
Wood Paneling (2)
Other (1)
Plain/Bare walls (0)

4. Structure and Compartmentation _____

Unstopped shaft/s	☐(1)
Open staircase/s, full height	☐(2)
Unstopped voids	☐(1)
No fire separation between floors	☐(1)
Doors offer no fire/smoke resistance	☐(2)

5. Interior Finishes _____
Non combustible surfaces (0)
Low combustibility of surfaces (1)
Moderately combustible surfaces (2)
Very combustible surfaces (3)

6. Furnishings/Fuel Load _____
Little furniture/contents (0)
Moderate furnishings (1)
Much upholstered furniture (2)
Very high fire load (3)

7. Internal Arrangements _____
Small rooms (0)
Larger rooms (1)
Very large open spaces (2)
Open spaces extending through one or more floors (3)

8. Ceilings Height _____
Low ceilings up to 2 (0)
Ceilings from 2 – 3m (1)
Ceilings above 3 - 4m (2)
Ceilings above 4m (3)

9. Ignition Sources (One point except as shown) _____
Open fires (One point per fireplace) ☐
No fire-guards (One point per fireplace) ☐
Naked flames (including candles) ☐
Evidence of frayed wiring ☐
Widespread use of extension leads/adaptors ☐
Damaged electrical equipment ☐
Smoking permitted ☐
Cooking ☐
Deep fat frying (2 points) ☐
On-going contractor presence (2 points) ☐
Accommodation Staff (1 point) or let (2 points) per flat ☐
Wiring more than 30 years old (3 points) ☐
Fuses rather than MCBs (2 points) ☐

10. Exposure Fire Threat _____
No nearby risks (0)
Moderate nearby risks (1)
High nearby risks (2)
Wildfire/Forest fire area (3)

11. Arson Risk _____
Low arson risk (0)
Moderate arson risk (2)
High arson risk (3)
Recent unexplained small fires/break-ins (4)

12. Previous Fire History _____
Few/no previous fires (0)
Previous fires of some size (1)

13. Unoccupied In any twelve-month period for: _____
< 72 hours (0)
72 hrs – 7 days (1)
> 1 week (2)
> 1 month (3)

Part A Risk Score: ☐

Part B. Fire Safety Measures

14. Detection and alarms
None (0)
Single smoke alarm (0) _____
> 2 Interlinked.mains smoke alarms (2)
Automatic fire detection in principal rooms (3)
Automatic fire detection in all rooms (4)
Fully compliant fire detection system (6)
Air sampling system (Bonus: 2)
Redcare or equal connection to central station (Bonus: 1)

15. Automatic Suppression Systems _____
Water curtain/sparge pipes (1 point)
Partial protection (2)
Full protection (9)

16. Smoke Control _____
None = 0
Leaded panels = 1
Manual = 2
Automatic = 3

17. Fire Equipment (hoses/extinguishers) _____(Maximum 5)

0 = not present
1 = Adequate provision
2 = All correctly located

Fire Blankets ☐
Portables ☐
Hose reels ☐
Internal Hydrants ☐
Dry/wet riser ☐

18. Facilities for the Fire Service _____(Maximum 6)

(1 point for each)

Good access to all parts of building exterior ☐
Hardstanding for appliances ☐
External Hydrants ☐
Good Secondary Water Supply (2) ☐
All hydrants marked ☐
Property signed from main road ☐
Good all weather access (2) ☐

19. Exit/Safety Signs

No signs = 0 _____
Temporary signs = 0
Old signs/Partial signs = 2
Fully compliant signage = 3
Assembly point signs = 1

20. Emergency Lighting _____

None = 0
Partial = 1
Full = 2

21. Exit Routes _____

Shared exit route/s via other properties = -2
Apartment/s exit through other parts of building - 2
Obstructed or unclear = -1
Clear but long or difficult = 0
Clear and available = 2
Bonus: Disability access compliance = 2

22. Routes Adequate for Numbers (See Note 8) _____

No = 0
Yes = 1

23. Housekeeping Standards (See Note 9) _____

Major issues = -2
Hazardous = -1
Poor = 0
Adequate = 1
Good = 2

24. Management Bonus Points (+1 each) _____(Maximum 5)

Record keeping of fire matters	☐
Staff Training	☐
Fire Drills/Exercises	☐
Maintenance of fire equipment	☐
Hot Work Controls	☐
Liaison with Fire Brigade	☐
Wiring inspected and tested regularly	☐

25. Fire Places and Flues (Only if open fires are used) _____

Chimney lined (No = -1 Yes= +1)
Chimney inspected and swept annually (No = -1 Yes = 1)
Fireguard of adequate size in place (=+1)

26. **Lightning Protection** _____(Maximum 3)

None = -1
In place but in need of maintenance/repair = 1
In good condition = 2
Recently tested = 1

B. Total Fire Safety Score: ☐

Deduct Box A score from Box B: total remaining:

Up to 9	= Low risk
10 – 39	= Normal risk
40 or more	= High risk

Other Information

Compliances (Y/N)

Fire Certificate (71 Act)	_____
Other Licences (State)	_____
Disability Access Compliance	_____
Fuel Tank(s) bunded and compliant	_____
Photogrammetric Survey Complete	_____

Other Risk Assessments Carried Out

Management Regulations	_____
Workplace Regulations	_____

DSEAR _____
COSHH Assessments _____
DDA Compliance _____

Is there a 'Lone Worker' issue ? _____ **Has this been addressed ?** _____

Listed Building: (State Grade) _____

Name of Person/s Carrying Out Inspection:_____

Date Report Completed:_____ Proposed Reinspection Date:_____

Report Number:_____

Observations/Comments/Recommendations