

# Fire Risk Assessment for Hightide 2022

<b>Venue:</b>	 <p><b>HIGH TIDE</b> BOURNEMOUTH BEACH</p>				
<b>Risk assessment undertaken by:</b>	<b>Paul Budden – Wessex Safety Services</b>	<b>Signed:</b>	<table border="1"> <tr> <td data-bbox="1692 987 1955 1040"><b>Date:</b></td> </tr> <tr> <td data-bbox="1692 1040 1955 1122">March 2022</td> </tr> </table>	<b>Date:</b>	March 2022
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March 2022					
<b>Responsible Person:</b>	<b>Simon Smith – Event Director</b>	<b>Signed:</b>	<table border="1"> <tr> <td data-bbox="1692 1122 1955 1159"><b>Date:</b></td> </tr> <tr> <td data-bbox="1692 1159 1955 1229"></td> </tr> </table>	<b>Date:</b>	
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# Fire Risk Assessment Protocol

## Introduction

This fire risk assessment is a systematic and structured assessment of the fire risk in the premises for the purpose of:

- expressing the current level of fire risk;
- determining the adequacy of existing fire precautions; and
- determining the need for, and nature of, any additional fire precautions.

Any such additional fire precautions required are set out in the Control measures, which forms part of the documented fire risk assessment. The objective of the fire action plan is to set out measures, which will ensure that the fire risk is reduced to, or maintained at, a tolerable level.

In carrying out the fire risk assessment, WSS will consider the following:

**Fire prevention measures** - measures to prevent the outbreak of fire.

**Fire protection measures** - design features, systems, equipment or structural measures to reduce danger to people and property if fire occurs.

**Components of fire safety management** - task(s) carried out by a defined individual or individuals with appropriate powers and resources to ensure that the fire safety systems (passive, active and procedural) within the building are working properly at all times.

The following methodology details WSS's fire risk assessment process, which comprises nine steps (and is based on PAS 79 Fire Risk Assessment – Guidance And A Recommended Methodology).

Step 1 - to obtain relevant information about the building, the processes carried out in the building, and the occupants of the building.

Step 2 - fire hazard identification and the determination of measures for the elimination or control of the identified fire hazards.

Step 3 - to make a (subjective) assessment of the likelihood of fire. This will be based primarily on the findings of Step 2 above. However, the assessment of the likelihood of fire will also take into account any relevant information obtained in Step 1 above.

Step 4 - to determine the physical fire protection measures, relevant to the protection of people in the event of fire.

Step 5 - to determine relevant information about fire safety management.

Step 6 - to make a (subjective) assessment of the likely consequences to the occupants in the event of fire.

Step 7 - to make an assessment of the fire risk and to decide if the fire risk is tolerable. The fire risk is assessed by combining the likelihood of fire and the consequences of fire (see below).

Step 8 - to formulate a fire action plan to address shortcomings in fire precautions in order to reduce the fire risk.

Step 9 – to determine the fire risk assessment periodic review period / date.

### Fire Risk Assessment

WSS and the Event Manager will identify the fire hazards on the site and its associated activities. For all the identified hazards, we have created control standards and during the visit we will make judgments as to how far you are complying (or not) with the control standards (See Fire Risk Assessment). These judgments are made by assessing your existing control measures in place and determining whether they are satisfactory or not.

Where your existing controls are considered by WSS fire consultant to be unsatisfactory i.e. you are not complying with the control standard, WSS will detail advice to help you either remove the hazard or reduce the risk through improving the level of control. (Fire Safety Action Plan).

### Fire Risk Assessment Definitions

This fire risk assessment rating has been determined by deciding on the likelihood of fire and the likely consequences of fire. (See table below).

Likelihood of Fire	Classification of Fire Risk Likely Consequences of Fire		
	Slight Harm (1)	Moderate Harm (2)	Extreme Harm (3)
Low (Unlikely) (1)	Trivial Risk (1)	Tolerable Risk (2)	Moderate Risk (3)
Medium (Possible) (2)#	Tolerable Risk (2)	Moderate Risk (4)	Substantial Risk (6)
High (Likely) (3)	Moderate Risk (3)	Substantial Risk (6)	Intolerable Risk (9)

### Risk Level

**Trivial:** No action is required and no detailed records need be kept.

**Tolerable:** No major additional controls required. However, there might be a need for improvements that involve minor or limited cost.

**Moderate:** It is essential that efforts are made to reduce the risk. Risk reduction measures should be implemented within a defined time period. Where medium risk is associated with consequences that constitute extreme harm, further assessment might be required to establish more precisely the likelihood of harm as a basis for determining the priority for improved control measures.

**Substantial:** Considerable resources might have to be allocated to reduce the risk. If the building is unoccupied, it should not be occupied until the risk has been reduced. If the building is occupied, urgent action should be taken.

**Intolerable:** The building (or relevant area) should not be occupied until the risk is reduced.

Event Name:	HighTide		Date:	1 <sup>st</sup> – 2 <sup>nd</sup> July 2022	Venue:	Bournemouth Beach
(1) Activity / Area of Concern	(2) Hazards Identified	(3) Persons at Risk	(4) Current Risk Factor	(5) Actions to be Taken to Minimize each Risk		(6) New Risk Factor (high, medium or low)
Sources of Oxygen						
Highide Festival – Event site including the external Area.	Outbreak of Fire, detecting the outbreak of fire	Members of the public especially people with disabilities and children effected by the event/ staff / event participants / contractors/suppliers	Moderate 2 x 2 = 4	The main source of oxygen for a fire is in the air around us. In an enclosed marquee the natural airflow through doors, windows and other openings. Some chemicals (oxidising materials). Oxygen gases used by the medical Team.		Tolerable 1 x 2 = 2
Fire Protection, Detection and warning						
Highide Festival – Event site including the external Area.	Outbreak of Fire, detecting the outbreak of fire	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate 2 x 2 = 4	Marshalls, stewards, SIA and event personnel to keep a watch for any outbreak of fire. Event in open air so no AFD can be used. Mobile concessions assessed as per their own separate Fire Risk Assessment. Each concession to complete the CFPO Fire risk assessments for trades/food outlets as appropriate and any significant hazards highlighted and managed accordingly. FFE situated at a central point for Traders as per the site plan.		Tolerable 1 x 2 = 2
Structural Measures						
Highide Festival – Event site including the external Area.	Fire from generators, food concession, death, smoke inhalation, burns and personal injury	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate 2 x 2 = 4	Staff, stewards, SIA badged and event personnel to keep a watch for any outbreak of fire.  Structures erected via an approved marquee company and a stage company providing wind and extreme weather management plans.		Tolerable 1 x 2 = 2

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<b>Sources of Fuel</b>					
Highide Festival – Event site including the external Area. .	Fire from generators, food concession, death, smoke inhalation, burns and personal injury	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate $2 \times 2 = 4$	<p>Staff, stewards, SIA badged and event personnel to keep a watch for any outbreak of fire.</p> <p>Regular waste collections from all areas of the event.</p> <p>Contained skips placed out side of the main event structures at a pre-determined location (normally the promenade area)</p> <p>All structures meet the following Fire retardant capabilities/ standard: BS 7837:1996 or BS 5438, tests 2A and 28 or BS 7157; or French Standard NFP 92503, performance level B1; or Italian Standard UNI 9174, Performance Level MS; or USA Standard NFPA 701, Large Scale Test.</p> <p>Fully flame-retardant documentation of lining fabric to BS 5867: Part 2, fabric type B.</p> <p>Generator has a double skin facility and is placed on the sand away from a temporary structure with a spill kit and dry powder extinguisher. The connecting fuel line is secure and operated by a competent person only.</p> <p>Refuelling of lighting towers to take place on a daily basis by a competent person via a fuel delivery.</p> <p>Textiles and soft furnishings, such as hanging curtains, stage drape, scrim scenery and banners are to be of a flame retardant material as detailed above.</p>	Tolerable $1 \times 2 = 2$

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<b>Site &amp; Structures Occupancy</b>					
Highide Festival – Event site including the external Area.	Smoking during event, Crowd crush injuries and crowd related issues including pinch points and safe access and egress.	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate $2 \times 2 = 4$	Marshalls, stewards, SIA and event personnel to keep a watch for any outbreak of fire. Fire watch at the end of the event Crowd crushing and management addressed in Event safety plan and Risk assessment. Adequate number of exits/entrances as per the ingress plan. Event set capacity of 10,000 – monitored through pre sold tickets and staff/contractors. There will be a self-imposed cap of 8,500 with anticipated ticket sales reaching 6,000.  Structures comprise of the following:  Temporary Structures:  12m x 12m – 1 10m x 15m – 1 30m x 20m – Stage 1 12m x 15m – Stage 2	Tolerable $1 \times 2 = 2$

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<b>Means of Escape</b>					
Ingress, Egress, evacuation and general movement around the Event	Not being able to escape in the event of a fire Blocked escape routes, not suitable alternative escape routes crush, death, smoke inhalation, burns and personal injury	Members of the public especially people with disabilities and children / staff / event participants / contractors	Substantial 3 x 2 = 6	<p>Stewards, SIA and event personnel to keep a watch for any outbreak of fire.</p> <p>Primary escape route through the main entrance as detailed on the site plan. This will be a general admission entrance and a VIP Entrance.</p> <p>Secondary means of escape are highlighted on the site plan and dotted around the site all open area leading to a place of safety on either the beach or promenade.</p> <p>All escape routes kept clear of rubbish and blockages, checked prior to opening and monitored throughout the event.</p> <p>Fire Warden (Event safety manager) to co-ordinate the Emergency Evacuation – assisted by hand held tannoy from the main screen iaw the event safety plan.</p>	Moderate 2 x 2 = 4

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<b>Emergency and Escape Lighting</b>					
Escape from the event in darkness, poor light and through smoke.	Not being able to see the escape routes in the event of a fire, crush, death, smoke inhalation, burns and personal injury	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate $2 \times 2 = 4$	<p>Lighting towers placed at the main entrance, emergency exits throughout escape routes and assembly points.</p> <p>Generators managed by a competent person throughout the event.</p> <p>SIA personnel carry torches to assist in the safe evacuation of personnel.</p> <p>All Marquee's to be supplied with maintained 1 hr battery backup Emergency escape lighting in accordance with BS 5266 Part 1 – lighting to include 'Green running man' and placed in accordance with the site plan.</p>	Tolerable $1 \times 2 = 2$
<b>Fire Fighting Equipment</b>					
Highide Festival – Event site including the external Area.	Smoke inhalation, burns and personal injury, not being able to control any small outbreak of Fire	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate $2 \times 2 = 4$	<p>Fire Extinguishers in place for all generators and Food concessions.</p> <p>Firefighting media deployed throughout the event site as per the site plan.</p> <p>All Fire Extinguishers are in date for annual testing and are serviceable will be placed by the relevant hazards and checked prior to the event opening.</p> <p>Frontline security staff trained in the safe use of FFE.</p>	Tolerable $1 \times 2 = 2$



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<b>Signs and Notices</b>					
Means of escape not highlighted	Smoke inhalation, burns and personal injury, not being able find the escape route	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate $2 \times 2 = 4$	<p>Escape route's manned by security staff and signed accordingly.</p> <p>All Marquee's to be supplied with maintained 1 hr battery backup Emergency escape lighting in accordance with BS 5266 Part 1 – lighting to include 'Green running man' and placed in accordance with the site plan.</p> <p>Security and key event staff to wear Hi-Vis jackets to be easily seen when assisting in the event of an evacuation. Event will have clear unambiguous signage.</p>	Tolerable $1 \times 2 = 2$
<b>Housekeeping</b>					
LPG in use from the Food concessions.	Fire from incorrect use of LPG, build-up of combustible materials, cooking in the campsite.	Members of the public especially people with disabilities and children / staff / event participants / contractors	Substantial $3 \times 2 = 6$	<p>Food concession using LPG is covered by separate Fire Risk Assessment LPG and area of risk to be monitored maximum of 2 cylinders per concession. Waste bins and bags provided to prevent the build-up of rubbish. Clean site maintained on all access roads, escape routes around the site.</p> <p>A designated maintenance team are tasked throughout the event to continually clear refuse areas and rubbish bins to ensure that such waste does not build up and pose as a fire risk.</p>	Moderate $2 \times 2 = 4$

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<b>Sources of Ignition</b>					
Food concession, Smoking, generators and lighting.	Electrical fault, inclement weather	Members of the public especially people with disabilities and children / staff / event participants / contractors	Moderate	<p>Cooking and catering appliances and equipment (including and especially barbecues). There are a number of catering units on site for the event to facilitate refreshments for the number of visitors on site. Fire risk assessments have been completed by all vendors on site and a fire extinguisher is to be present on each of the units. This control shall be checked by an external Health and Safety advisor</p> <p>Smoking paraphernalia, e.g. cigarettes, matches and lighters.</p> <p>The event site has the provision of smoking bins and designated smoking areas which can be communicated to visitors should any concern for fire risk be seen by someone smoking.</p> <p>No Hot processes, e.g. welding by workers and/or contractors during the event live with any Hot works being subject to a permit during the build/break phase.</p> <p>All electrical equipment in use by The event has been sufficiently PAT tested to ensure that it is safe to use. Should there be any concerns over equipment safety, PAT testing equipment is available on site to re-test equipment on site.</p> <p>All traders/vendors are required to have PAT tested equipment and up to date PAT testing as part of their own risk assessment for the event.</p> <p>Should there be any concerns over a trader/vendors piece of equipment then they shall be asked to cease using the equipment or the museum can conduct a PAT test on site. Hot surfaces and obstruction of equipment ventilation, e.g. generator grills.</p>	Tolerable $1 \times 2 = 2$

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			2 x 2 = 4	<p>Vendors using hot equipment are required to issue a fire risk assessment in advance of the event. All generators on site are to be positioned in an open area free of any obstruction and fenced off from the public.</p> <p>Deliberate ignition, i.e. arson.</p> <p>Event Control Note; The event has a no tolerance policy to acts of anti-social behaviour and operate a code system in which staff can report any acts of such behaviours. This would include arson.</p>	

## Occupancy calculations:

### High Tide Festival

Reference: Purple Guide - Open Air Events

#### Total Capacity.

Total Area in m2	9,337	11, 671 m2 - 20 % for useable space - 20%					
Floor Space Factor	0.5						
Calculated Occupancy Levels	18,674						
Actual Agreed Occupancy Levels	10,000						
Risk Level	Low						
Escape Time	8						
Exit Flow rate	62						
Total Exit width in m	37.649						
Minimum No of exits in Units	35.856						
Size of Exits in m	10	10	4	13.2	7	3	47.2
No of Exits Required	3.59	3.59	8.96	2.72	5.12	11.95	Total Exit Capacity
Total No of Occupants for exit width	4,960.00	4,960.00	1,984.00	6,547.20	3,472.00	1,488.00	23,411.20
	Exit 1 - Stage Right Exit	Exit 2 - Stage Left	Exit 3 - Stage Right	Exit 4 - Main Entrance 1	Exit 4 - Main Entrance 2	Exit 6 - Exit towards the Sea	

Occupancy per Exit - 1	Discounted	Next to the Stage
Occupancy per Exit - 2	4960	
Occupancy per Exit - 3	1,984	
Occupancy per Exit - 4	Discounted	Main Entrance
Occupancy per Exit - 5	3,472	
Occupancy per Exit - 6	1,488	
	11,904	

## Notes

1. These calculations are based on previous events and look at maximum occupancy calculations, prior to the event opening the actual agreed occupancy levels will be agreed due to the addition of furniture.
2. The Main marquee is used as a main throughput to the main area and during the evening changes into a staged entertainment area with more static crowd.
3. The Arena will be used for an evacuation from any of the structures in the event of an emergency.
4. Event Capacity is 10,000 (9,999 licence) maximum.

Site Map:

