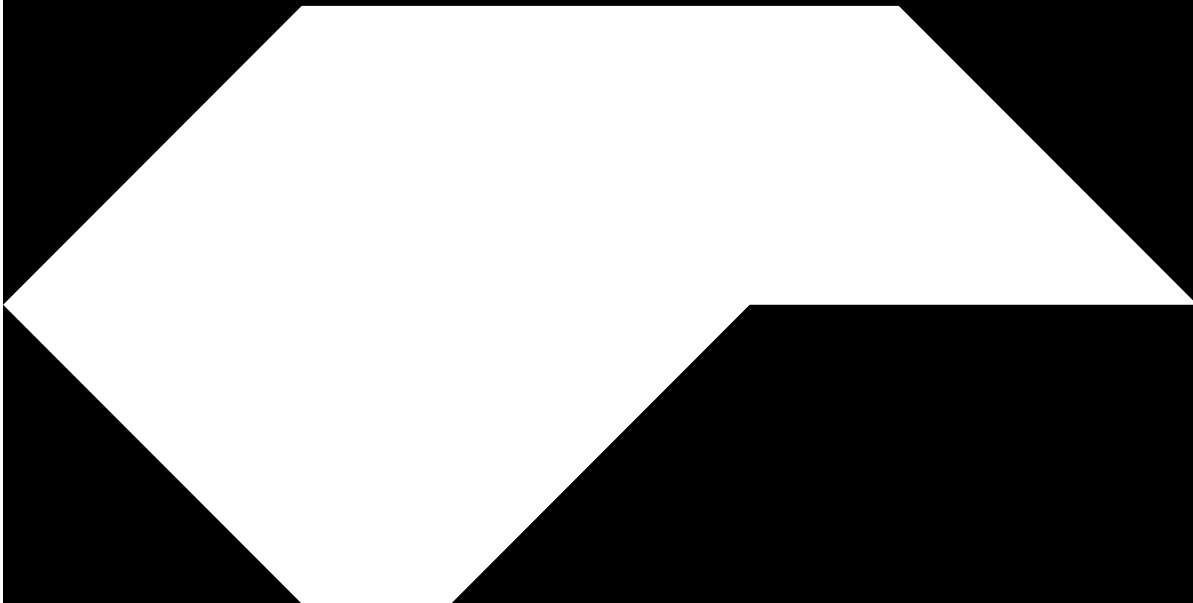


**factory
international**

Format Specific Fire Risk Assessment

**Hall Standing Concerts and Events
September 2023**



Contents

1. Introduction	3
2. Supporting Details	3
2.1 Relevant Legislation	3
2.2 Responsibilities	3
3. General Information	4
3.1 The Installation	4
3.2 Risk Profile	5
3.2.1 OCCUPANCY CHARACTERISTICS	5
3.2.2 Fire Growth Rate	5
3.2.3 Event Risk Profile	6
3.3 Event Layout	7
3.4 Travel Distances	8
4. Event Occupancy Numbers	9
4.1 Floor Space Factors	9
4.2 Fire Escapes	9
4.2.1 Stalls	12
4.2.2 Circle	12
4.2.3 Artis Exit from Standing Stage	12
5. Identified Fire Hazards	13
5.1 Event Specific Factors	13
5.2 Stage Atmospherics	14
5.3 Scenic Structures	15
5.3.1 Stage Drapes	15
5.4 Electrical Installations	15
5.4.1 Artist or Guest Power	15
6. Arrangements for Evacuation	16
6.1 Steward Positions	16
6.1.1 In the event of an Evacuation	17
7. Staff Training	17
8. Pre Opening Checks	18

1. Introduction

The Regulatory Reform (Fire Safety) Order 2005 places responsibility on individuals within an organisation to carry out risk assessments to identify, manage and reduce the risk of fire. Factory International has a building wide Fire Risk Assessment, and associated policies & procedures.

In order to identify, manage and reduce any risks of fire that are due to performance activity (including visual arts, and corporate events) an event specific risk assessment is carried.

This document should be filled out in conjunction with The Fire Strategy document produced by WSP (Ref - MF-WSP-XX-XX-RP-YD-03-0004 dated April 2023).

This document should only be used for events happening inside Factory International or within the immediate vicinity of the building (public realm and associated squares).

2. Supporting Details

2.1 Relevant Legislation

- Regulatory Reform (Fire Safety) Order 2005

2.2 Responsibilities

Responsible Person	Paul Moore		
Event Space	The Hall		
Assessor:	Paul Moore		
Date of Fire Risk Assessment	17 th September 2023		
<i>(This risk assessment should be reviewed annually or at such earlier time as there is reason to suspect that it is no longer valid or there has been a significant change in the matters to which it relates.)</i>			
Subsequent Review Dates			
Reviewed by		Date	
Reviewed by		Date	
Reviewed by		Date	

3. General Information

3.1 The Installation

Brief Description of the Installation	This risk assessment covers general usage of the Hall as a single room, with a standing audience. Events covered by this risk assessment have minimal scenic elements, only stage atmospherics have been assessed in relation to special effects. Typical use cases covered by this risk assessment include: Music Concerts Conferences and Presentations Talks Comedy DJs Staging elements need to conform to those describes in the Brief details of construction below. Events covered by the risk assessment need to have no more than 100 people on stage (including technical staff)
Approximate floor area: (m²)	Stage area is 195M² Stalls standing area is 320 M² Stalls Standing Capacity : 914 Circle Seating Capacity : 640
Is the Space Sub Divided? (If yes, describe the nature of the subdivisions)	No
Brief details of construction: (Main structures and elements within the space)	The stage itself is the HOAC staging system that is integral to the venue (including the orchestra pit lift). Over stage are lightning & sound trusses. The stage is backed by a black wool surge drape. For some shows this will have a Fast Fold Projection screen directly in front of it. Show specific risers are placed on top of the stage, from steel deck (steel frame with an plywood top) 900mm in front of the stage is a crowd control barrier rated to EN 13200
Event Type:	Music Concert or Presentation
Event Mode:	H – Fully seated Hall, Warehouse as a separate Mode

3.2 Risk Profile

BS 9999 is a risk-based document and requires a risk profile to be established to provide a basis upon which fire safety measures are developed. The risk profile is a function of the occupancy characteristic and the fire growth rate for the building.

3.2.1 OCCUPANCY CHARACTERISTICS

This document is concerned with events accessed by members of the public that will be unfamiliar with their surroundings; as such an occupancy characteristic B (awake and unfamiliar with the building) will be applied for the overall building risk profile.

Note: spaces that can only be accessed by staff (e.g. plant rooms) will be classified as occupancy characteristic A (awake and familiar with the building).

3.2.2 Fire Growth Rate

BS 9999 defines the fire growth rate as the rate at which it is estimated that a fire will grow. BS 9999 places the fire growth rates in the following categories:

- Slow (1) – evenly distributed low-level fire load, small discrete packets of fuel or material of limited combustibility.
- Medium (2) – Evenly distributed low to mid-level fire load comprising of a mix of combustible materials.
- Fast (3) – Stacked combustibles (on or off racking shelving but excluding high rack storage), some small quantities of materials other than materials of limited combustibility (or where larger quantities are stored in separate fire-resisting enclosures), process, manufacturing or storage of combustible materials.
- Ultra-fast (4) – Medium to large quantities of materials other than materials of limited combustibility, high racked storage, flammable liquids and gases or where rapid uncontrolled fire growth could occur.

As described in Section 3.1, the building can accommodate a wide range of events meaning that the fire growth rate may vary from one event to another.

However, for most of these events, a slow (1) or medium fire growth rate (2) is considered a reasonable rate. The Warehouse and the Theatre being very large spaces provided with smoke ventilation, a fast fire growth rate is unlikely to occur.

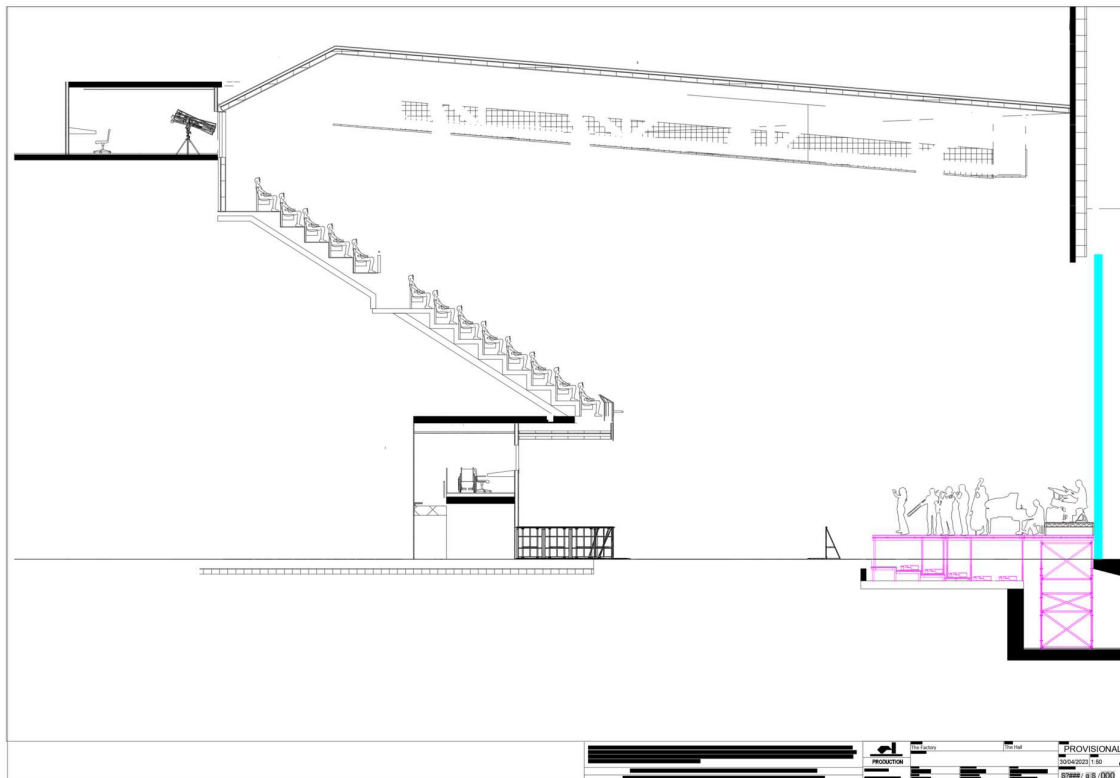
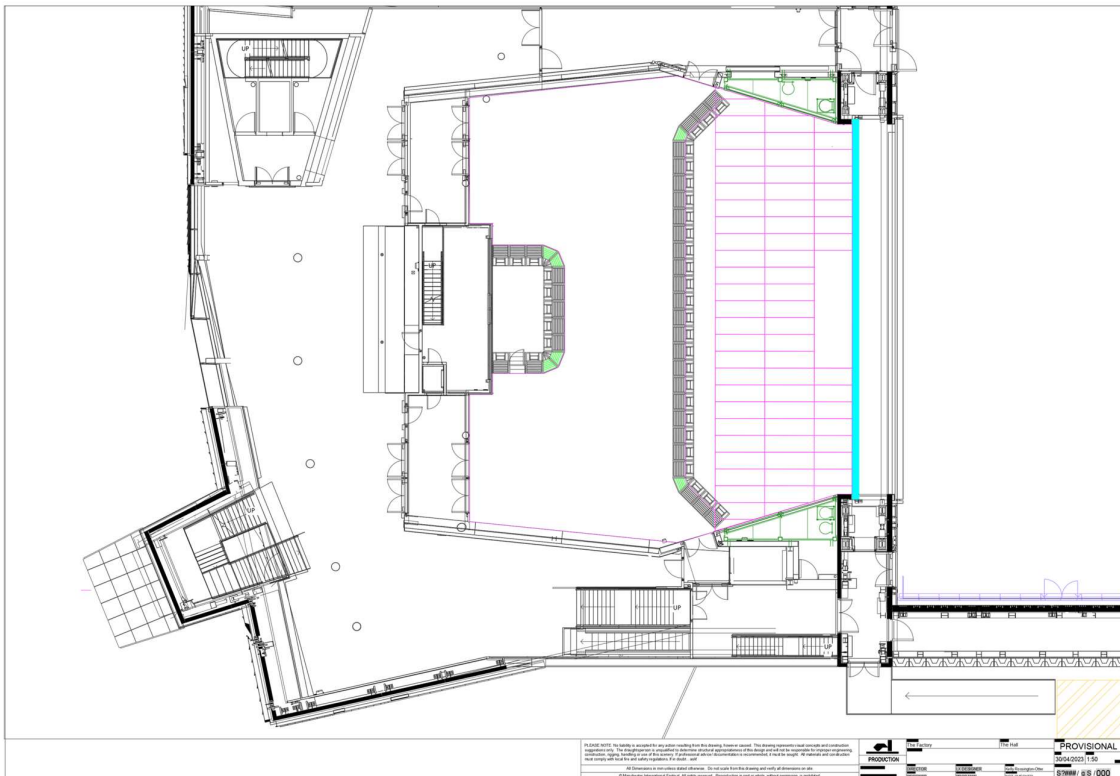
Rooms potentially containing a high fire risk such as places of special fire hazard will be classified as fire growth rate 3 (fast) and enclosed within a fire-resisting enclosure.

3.2.3 Event Risk Profile

Based on the above, it is proposed to apply a risk profile B2 as the overall building risk profile (as this is applicable to the majority of areas). The Warehouse and Foyer have both additionally been considered with a B3 risk profile (as well as B1 and B2) to capture any events that may be managed by Factory International in the future where there is a potentially higher fire growth rate.

Using the information above, and knowledge of the elements being installed for the event, what is the risk Risk Profile associated with this event.	B2 The staging elements are of minimal combustibility, however they are in the same room as the audience.
---	---

3.3 Event Layout

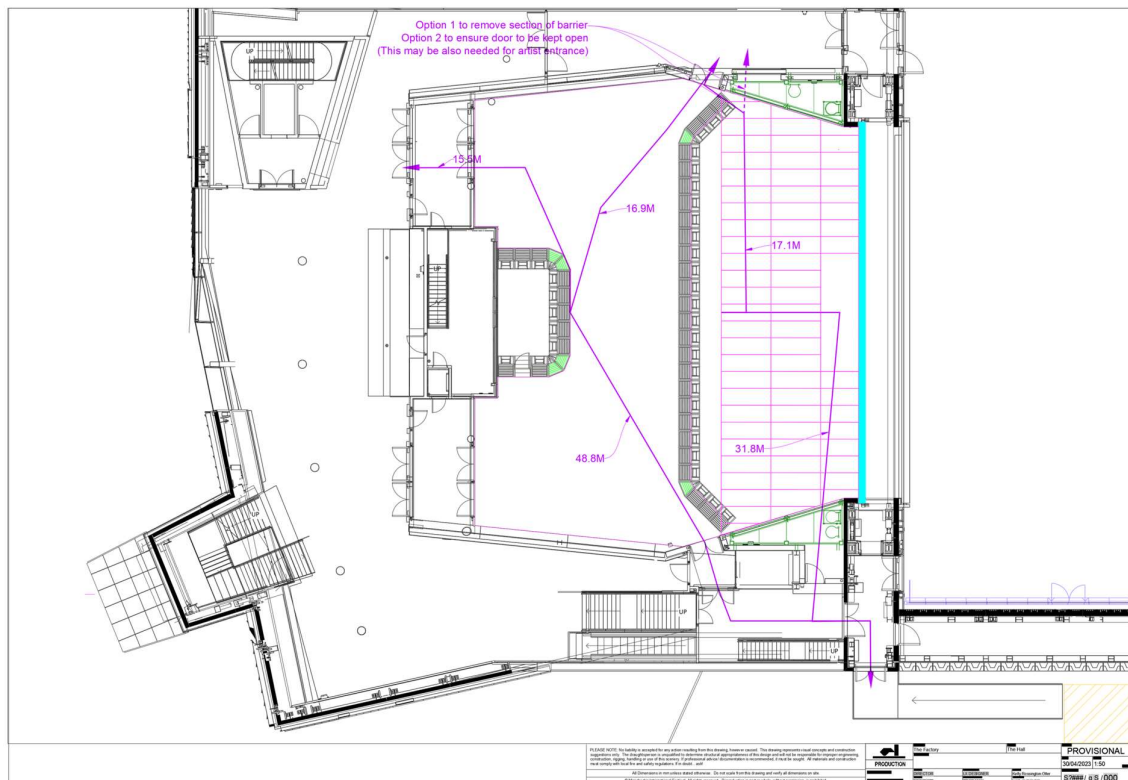


3.4 Travel Distances

Travel distances vary with the risk profile (as per the table below). Travel distances will comply with the recommendations of Section 16.4 of BS 9999 and will be measured to the nearest storey exit, to outside or to a separate compartment.

Risk Profile	Maximum travel distance (m)	
	One Direction	More than One Direction
B1	24M	60M
B2	20M	50M
B3	16M	40M
Area with seating in a row	15M	32M
A3 (Plan areas)	18M	45M
A2 (Staff Areas)	55M	22M

Can all positions in the Event Travel in More than one Direction?	Yes
If any positions have only one direction of escape, what is the maximum travel distance?	N/A
If any positions have more than one direction of escape, what is the maximum travel distance?	48.8
Risk profile the Travel Distance is compatible with	B2
Is this compatible with the risk profile of the event?	Yes



4. Event Occupancy Numbers

4.1 Floor Space Factors

In the stalls the available floor space for audiences is 320M² with a space factor of .35M² this gives a stalls capacity of 914 in the stalls.

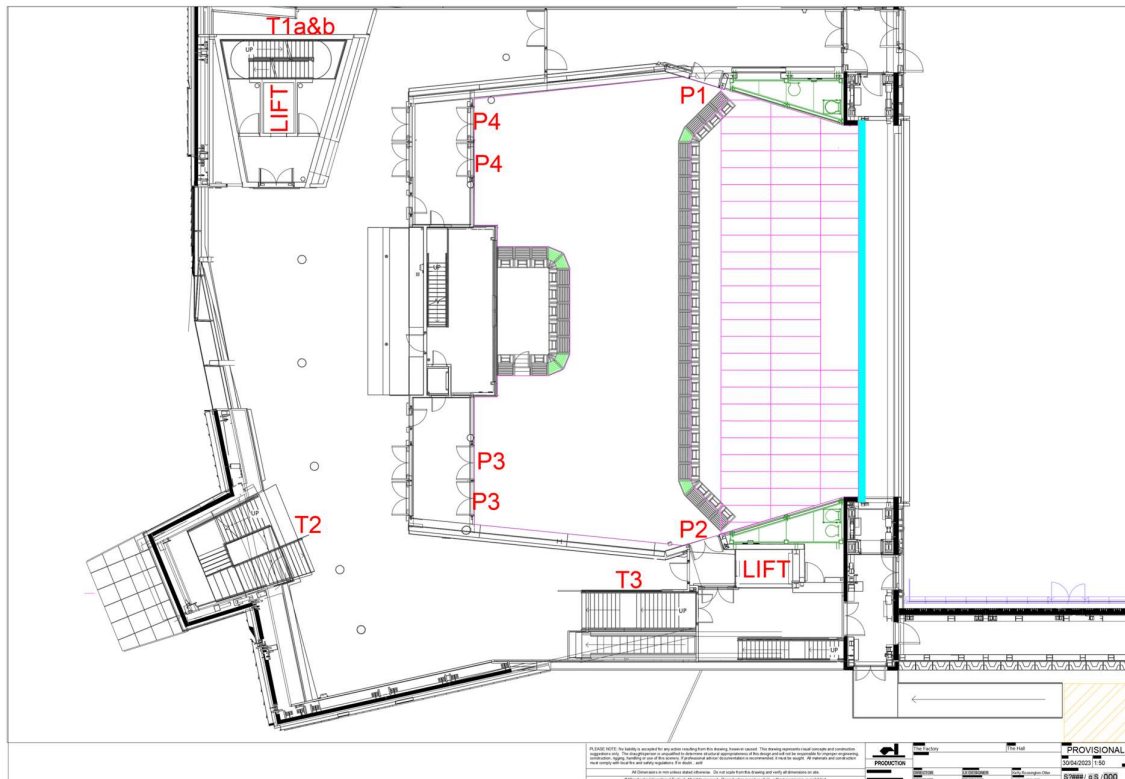
Due to the number of configurations a fully standing floor would have a capacity by floor space of 1458 this would reduce to 1420 by fire escape for a B2 risk profile (see below)

The circle is fully seated with no modifications and therefore remains at 640.

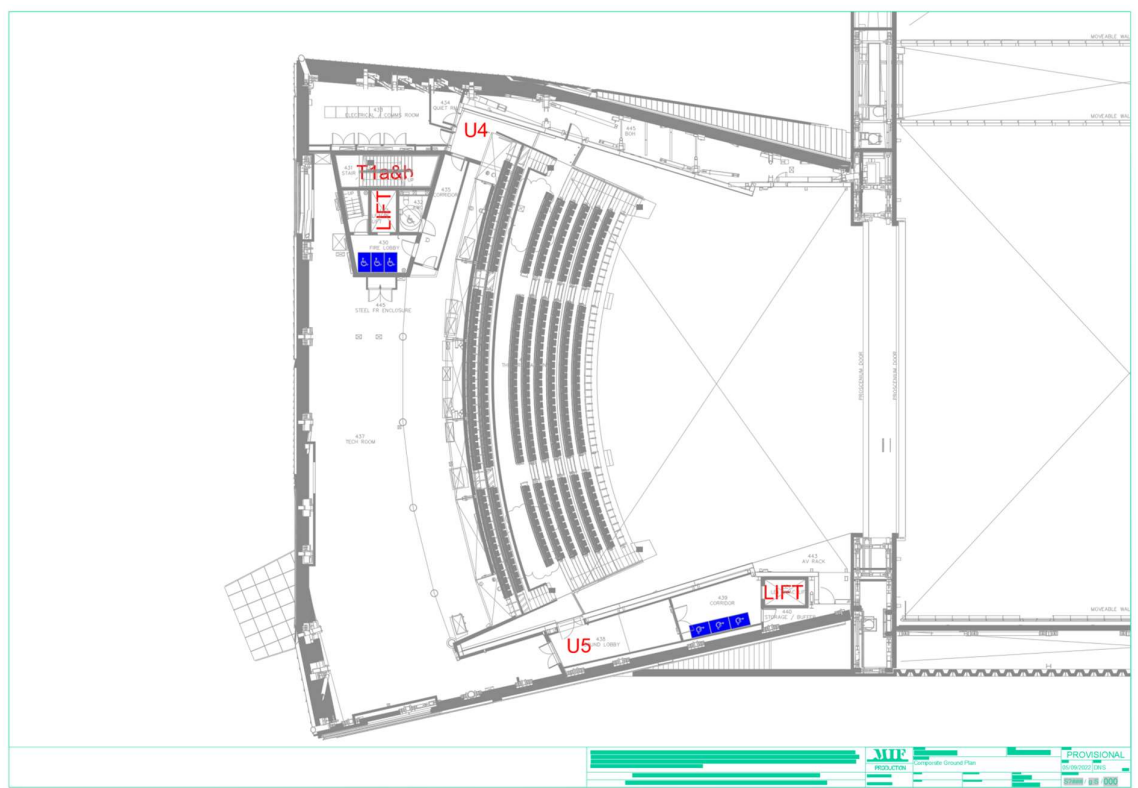
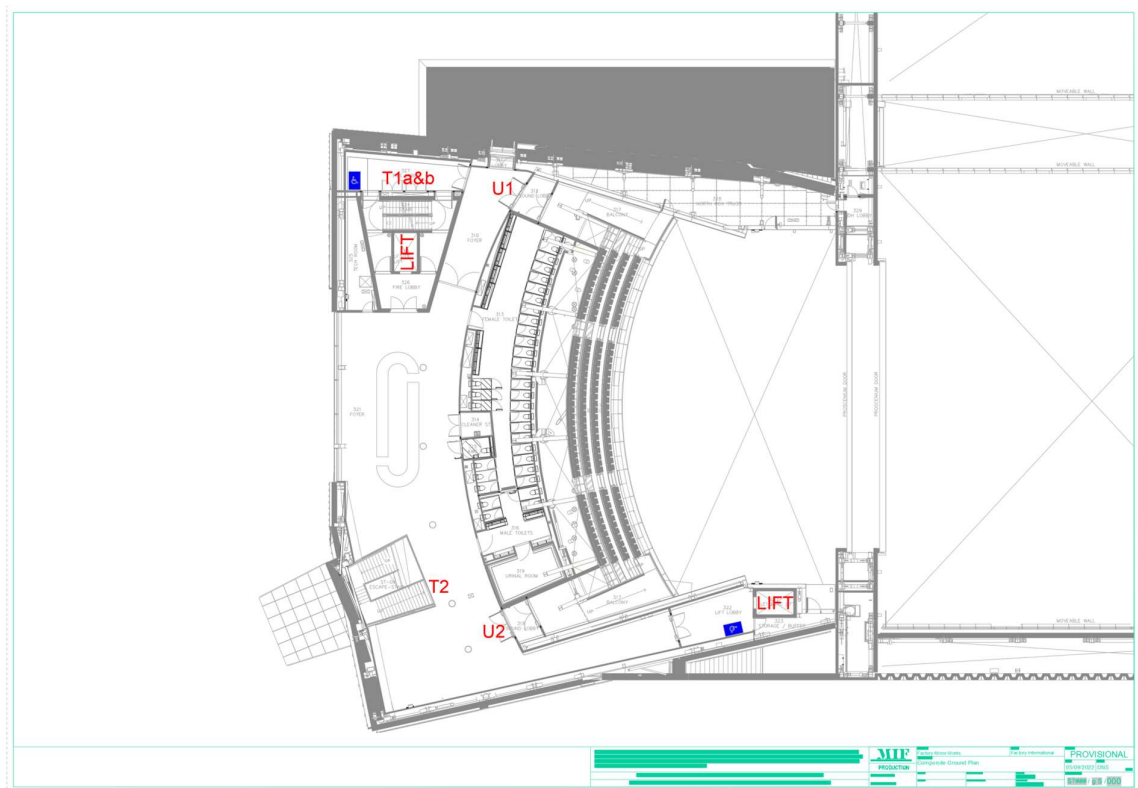
Therefore we are well within the available capacity of the room.

4.2 Fire Escapes

The image below shows the fire escape locations, overlaid on the event layout.



The layouts for the circle are extracts from the WSP Fire strategy report and do not change with event layout.



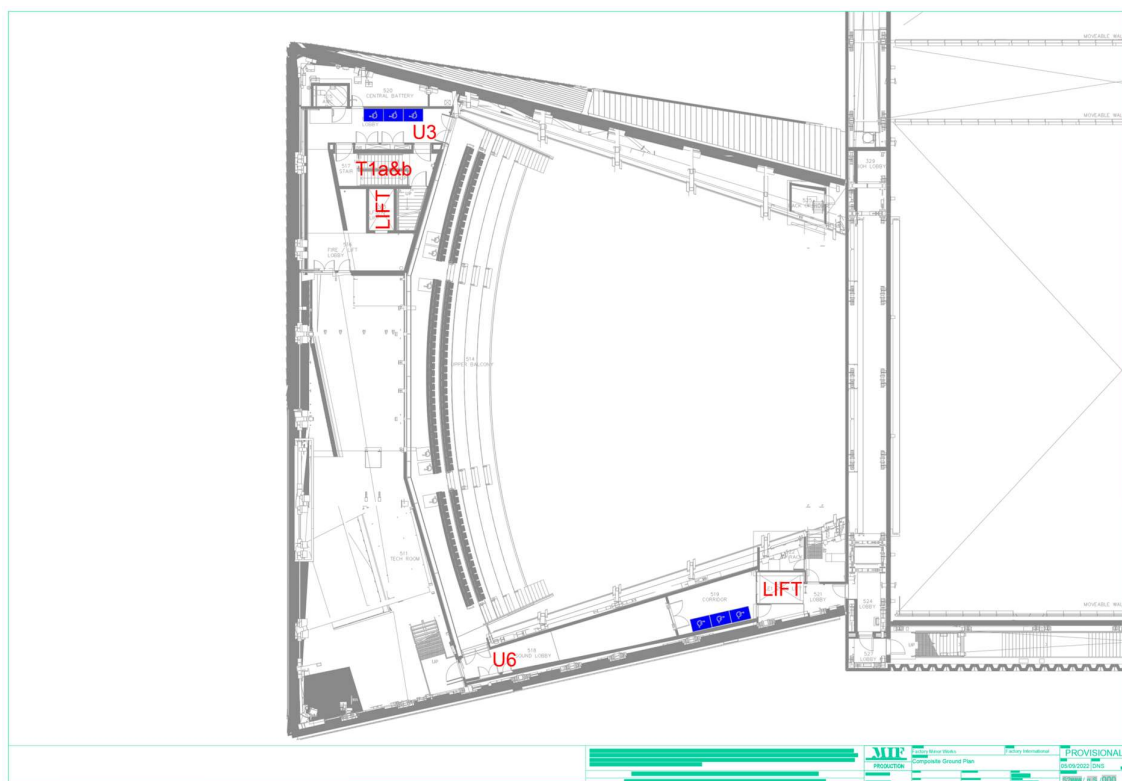


Table 6-32 of the WSP Fire Strategy Report indicated the Hall capacity for seated events. For the seated music events the risk profile category to B2 as outlined in section 3.2.3 above.

Table 6-32: Theatre - Flat floor, Means of Escape Capacity

Exit		B1				B2			
Number	Clear Width	mm/p	Capacity	Total	Occupancy	mm/p	Capacity	Total	Occupancy
P1	1.51m	2.4	629	2508	1,840	3.3	457	1823	1,420
P2	1.51m	2.4	629			3.3	457		
P3	2x1.50m	2.4	1250			3.3	909		
P4	2x1.50m	2.4	1250			3.3	485		

4.2.1 Stalls

Audiences for the stalls are limited to 914. From the table above it is evident that we have a capacity of 1420

- The largest contingent of artists is for Desi Factory with Zack Knight / Ezu / Bambi Bains / Bobby Friction DJ set less than 20 including guests

4.2.2 Circle

The circle capacity is as per the building design with no variations at 640.

4.2.3 Artis Exit from Standing Stage

With the standing stage configuration the stage is separated from the audience via the crowd control barrier. In order to give artists more than one direction for a fire escape additional consideration needs to be given to the stage right exit (Adjacent to the lorry lift).

Where artists are using the stage right loading door as an artist entrance this will be also used as an additional fire escape. When this is in use an additional temporary emergency exit sign will be installed indicating stage passage. This will be a non maintained unit.

Where artists are not using the stage right loading door as an artist entrance then on section of crowd control barrier will be removed allowing the use of exit P1. In this scenario the temporary emergency exit sign must be removed to avoid confusion by the artist.

These options can be seen on the travel distance diagram in section 3.4 above.

5. Identified Fire Hazards

Factory International uses the Association of British Theatre Technicians, Technical Standards for Places of Entertainment as its reference approved code of practice for temporary installations.

Items such as fabrics used for scenic construction should be durably flame retardant, or treated and maintained with a flame retarding product. Wooden structures should be a Class 1 (BS 476-7) spread of flame.

Scenic installations may require additional fire detection and/or additional emergency lighting (both non maintained lighting and directional emergency exit lighting). Additional Fire Fighting Equipment may also need to be added.

Arson and or unwanted disposal discarding of smoking materials. Stewards and security will regularly patrol and ensure that all areas are inspected prior to the event.

Domestic and wilful forms of arson and arson driven from political activists are also considered within this risk assessment and whilst politically based disruptions are not expected, we will ensure all staff are made aware of any intelligence we are given, which could increase the risks and measures are taken to mitigate are taken in conjunction with the local authorities.

5.1 Event Specific Factors

Does the installation include any of the following effects. If so complete additional risk assessments in the sections below.

Pyrotechnics including fireworks	No
Firearms (e.g. blank firing pistols)	No
Explosives and highly flammable substances	No
Real flame	No
Smoking	No
Lasers	No
Stage Atmospherics	Yes
Cooking	No
Compartmentalisation of the Space	No

5.2 Stage Atmospherics

The music performances use stage atmospherics (haze, stage smoke and occasionally low smoke. Stage atmospherics themselves present no additional fire risk (anything that present any additional fire risk will be covered under pyrotechnics or an additional section if more appropriate).

Stage atmospherics do however trigger a false activation in smoke detection either in an individual smoke head or a respirating detection system. In order to run stage atmospherics during a performance, rehearsal, or lighting programming session, a sequence of smoke detectors is isolated by the fire panel.

Isolation should be activated at the latest possible moment and only when stage atmospherics are being used.

During the running of stage atmospherics all stewards, food & beverage staff, and core technical team take on the role of fire wardens.

When calling for isolation, the Duty Lx for the space radios through to the Operational Control Room (OCR) calling for smoke isolation in the Hall. When the relevant smoke detection has been successfully isolated the OCR then radios back to confirm the safe use of stage atmospherics. The OCR then repeats this instruction over the Front of House radio channels to broadcast the change of status.

Once stage atmospherics have been finished with, the Duty LX radios through to the Operational Control Room to enable smoke detection. If not already running, the OCR may turn on the Air Handling to speed up evacuation of atmospherics in the space. The Smoke detection can be enabled once the stage atmospherics have cleared. Once enabled the OCR broadcasts this status on both the Technical and Front of House Radio Channels.

5.3 Scenic Structures

5.3.1 Stage Drapes

Upstage of the playing area is a Black Wool Surge Drape. This is manufactured from J&C Joel Wool Serge 565 (Full data sheet can be found in the appendices). This is treated to BS5867 Part 2 Type B

The Projection screen is Flex White CI from AV Stumfl and is fire rated to EN 13501-1 (Full data sheet can be found in the appendices).

5.4 Electrical Installations

Electrical elements within a production or artwork installation should connect to Factory International's facilities panels via a *plug and play* system and with tested equipment. Populate this section with any unusual elements introduced as part of the event delivery, including and stage practical's, custom wiring, artworks with electrical components.

5.4.1 Artist or Guest Power

Any third party equipment brought into the space will require a valid PAT test certificate. Provision can be arranged in advance for Factory International to PAT test third party equipment where necessary.

6. Arrangements for Evacuation

In this section detail out the event specific variances from the standard building wide evacuation schedule. Include steward locations and any event specific evacuation routes or exits removed from use.

6.1 Steward Positions

Steward positions are in our standard locations with no variations required for these events.

Position (Door)	Location	Duties
P1a	Stalls Front House Left	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
P1b	Stalls Front House Left	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
P2a	Stalls Front House Right	Welcome, managing access tickets into row K of the stalls, Audience Monitoring. – In room fire warden (Door P2 is not used for general access & egress)
P2a	Stalls Front House Right	Welcome, managing access tickets into row K of the stalls, Audience Monitoring. – In room fire warden (Door P2 is not used for general access & egress)
P3a	Stalls Rear House Right	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
P3b	Stalls Rear House Right	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
P4a	Stalls Rear House Right	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
P4b	Stalls Rear House Right	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
U1	Front Circle House Left	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
U2	Front Circle House Right	Welcome, Ticket Scanning, General Ingres, Audience Monitoring – In room fire warden
U4	Mid Circle House Left	Welcome, managing access tickets into row H of the Circle, Audience Monitoring. – In room fire warden
U5	Mid Circle House Right	Welcome, managing access tickets into row H of the Circle, Audience Monitoring. – In room fire warden
U3	Rear Circle House Left	Welcome, managing access tickets into row N of the Circle, Audience Monitoring. – In room fire warden
U6	Rear Circle House Right	Welcome, managing access tickets into row N of the Circle, Audience Monitoring. – In room fire warden

6.1.1 In the event of an Evacuation

The stewards default to the following positions in the event of an evacuation.

Position (Door)	Location	Duties
P1a	Stalls Front House Left	Evacuate Audiences to Stairs T1a&b via door P1
P1b	Stalls Front House Left	Evacuate Audiences to Stairs T1a&b via door P1
P2a	Stalls Front House Right	Evacuate Audiences including access users to outside via final exit to viaduct
P2b	Stalls Front House Right	Evacuate Audiences including access users to outside via final exit to viaduct
P3a	Stalls Rear House Right	Evacuate Audiences to Stairs T12via door P3
P3b	Stalls Rear House Right	Evacuate Audiences to Stairs T12via door P3
P4a	Stalls Rear House Right	Evacuate Audiences to Stairs T1a&b via door P4
P4b	Stalls Rear House Right	Evacuate Audiences to Stairs T1a&b via door P4
U1	Front Circle House Left	Evacuate Audiences to Stairs T1a&b via door U1 Asist access users to refuge point at rear of stalls (via U1)
U2	Front Circle House Right	Evacuate Audiences to Stairs T2 via door U2 Asist access users to refuge point at rear of stalls (via U2)
U4	Mid Circle House Left	Evacuate Audiences to Stairs T1a&b via door U1 Asist access users to refuge point at rear of stalls (via U4)
U5	Mid Circle House Right	Evacuate Audiences to Stairs T2 via door U2 Asist access users to refuge point at rear of stalls (via U5)
U3	Rear Circle House Left	Evacuate Audiences to Stairs T1a&b via door U3 Asist access users to refuge point at rear of stalls (via U3)
U6	Rear Circle House Right	Evacuate Audiences to Stairs T1a&b via door U3 Asist access users to refuge point at rear of stalls (via U6)

In the event of an exit being out of use, where safe to do so, Stewards should maintain position and direct audiences away from the unused exit (using their presences to stop audiences ignoring the command).

7. Staff Training

7.1 Induction, all staff will undergo suitable and sufficient training to fully understand their role as a steward and fire marshal.

7.2 All staff will be trained in the correct selection and use of Extinguishers and be aware of their locations.

8. Pre Opening Checks

- 8.1 All exit routes will be inspected and confirmed clear of obstructions.
- 8.2 All final exits and fire exits are unlocked.
- 8.3 Refugee intercoms have no reported defects.
- 8.4 FFE is in place and serviceable.