

THEATRE  
**ROYAL**  
GLASGOW

**ATG** AMBASSADOR  
THEATRE  
GROUP

# The Theatre Royal Glasgow

## Technical Specifications



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**Information for Visiting Companies**

On your arrival at the Theatre you will be issued with a file containing further information on our policies. If, however, you require any further information prior to your arrival please don't hesitate to contact Tie Macbeth, Operations Coordinator (0141 352 8209 / [tciemacbeth@theambassadors.com](mailto:tciemacbeth@theambassadors.com)) or a member of the Technical Management team (details overleaf).

Glasgow Theatres Limited (The King's Theatre and Theatre Royal, Glasgow) is a company managed by Ambassador Theatre Group.

The King's is Glasgow's largest theatre. Originally seating 2,500 (but 1,785 today) it was built in 1904 by the greatest and most prolific of British theatre architects, Frank Matcham (1854-1920), who from 1879 to 1920 designed over 150 theatres, many of which have subsequently disappeared. Matcham built the King's for Howard and Wyndham, a nationally influential theatre management that began at the Theatre Royal, Edinburgh in 1851. The King's was Howard and Wyndham's third Glasgow theatre, built in only nine months at a cost of £50,000 (about £3.5million today). The local council bought the theatre in 1967 and in 2002 Ambassador Theatre Group took over the management of this beautiful theatre.

The present Theatre Royal is the fourth building in Glasgow to bear that name. The first burnt down (Queen St 1804 – 1829), the second was demolished (Dunlop St 1840 – 1868) to make way for the railway. The Royal Charter was then taken to an existing Music Hall, which was burnt down in 1879 – out of the ashes arose the present Theatre Royal from the eminent theatre architect Charles John Phipps and it opened in 1880.

In 1891 theatre impresarios Howard & Wyndham bought the theatre but it was burnt down in 1895. CJ Phipps was re-engaged and it is this 1895 auditorium that survives to this day, most recently refurbished in 1997.

Between 1956-74 the Theatre Royal became the home of Scottish Television when they sold it on to the new Scottish Opera Company for £1. The Ambassador Theatre Group took over the management of the Theatre Royal from Scottish Opera in March 2005, having already taken over the running of the King's Theatre (Frank Matcham 1904) from Glasgow City Council since October 2002.

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We look forward to welcoming you to Glasgow. Please take the time to read through the information contained in this manual and if you have any questions, please don't hesitate to contact Tie Macbeth, Operations Coordinator (0141 352 8209 / [tiemacbeth@theambassadors.com](mailto:tiemacbeth@theambassadors.com)) or a member of the Technical Management team.

### **Contact Information**

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## Stage Specifications – The Theatre Royal

### Measurements

|  |   |
|--|---|
| Proscenium opening                         | 10.36m                                    |
| Proscenium height                          | 8.53m (House border usually set at 7.05m) |
| Stage Rake                                 | No Rake                                   |
| Depth from Apron to Setting Line           | 1m  |
| Height from Auditorium to stage            | 1m  |
| Distance from Proscenium wall to back bar  | 12.14m                                    |
| Distance from Proscenium wall to back wall | 12.8m                                     |
| Height from stage to under fly floor       | 8.2m                                      |
| Height from stage to fly rail              | 9.85m                                     |
| Distance between fly floors                | 16.50m                                    |
| Rear Dock                                  | 10m x 10m                                 |
| Setting line to back counterweight bar     | 11.71m                                    |
| Grid Height                                | 17.75m                                    |
| Stage left wing                            | 2.44m                                     |
| Stage right wing                           | 1.82m                                     |
| Bar width (60mm Gas Pipe)                  | 15.13m                                    |
| Bar spacing                                | 0.2m                                      |
| Maximum bar weight                         | 400kg                                     |
| Stage Width                                | 21.10m                                    |

The Theatre Royal stage has a proscenium opening of 10.36m with a standard descending steel safety curtain on its back face. The House Tabs are red velour with a centre overlap. They fly rather than wipe.

The flying system has 47 counterweight sets. 1-35 are single purchase and 36-47 double purchase. Sets 1 and 2 are downstage of the LX bridge and are only suitable for flat pieces (gauzes and cloth). The maximum bar weight on any single set is 400kg.

The stage surface is flat and painted matt black. Lightweight fixing into the surface with screws is permitted. Wing space is restricted at around 2m each side. Upstage there is a scenery dock, which leads to a small side dock and eventually to the car park Get In. Car Park, Get In and stage are all on the same level. The storage dock will not always be completely clear but access through to the stage is always possible.

We can provide a full set of black serge legs and borders. We also have a number of black serge masking flats.

Flying at The Theatre Royal is operated from Stage Right; medium to fast movement of the house tabs requires two men to operate. Access to the grid is from the fly floor and only in-house technical staff and riggers are permitted access to this area. There are various rigging points in the grid area, if you require these please contact our Stage Manager prior to your visit to discuss requirements.

### **Stage Inventory**

4 x Borders

5 x Legs (sizes)

1 x Half tabs

1 x Full black

1 x White filled gauze Cyclorama

1 x Grey full width BP screen

4 x pair's wool hard masking flats

1 x Black Gauze (This must be booked prior to your arrival and a small charge will apply)

1 x White filled cloth (This must be booked prior to your arrival and a small charge will apply)

2 x Tallescope (Medium and Large).

1 x 1t fork lift

### **Orchestra Pit**

The orchestra pit at The Theatre Royal can accommodate up to 90 musicians. The front section is a lift which can be moved between stage level and the pit space under the stage area. There are no auditorium seats on the pit lift at any time, to extend to the large format rows AA and BB are removed at a loss of 42 seats.

### **Wardrobe**

2 x Washing Machine

2 x Tumble Dryer

1 x Spinner

1 x Iron Board

1 x Iron

## Dressing Rooms

The Theatre Royal has 11 dressing rooms available. They accommodate as follows:

|                       |                |   |                       |
|-----------------------|----------------|---|-----------------------|
| F 1                   | 4 people       | normally used as wig room   | First floor           |
| F 2                   | 4 people       | Shower only   | First floor           |
| F 3                   | 2 people       | Shower and Toilet   | First floor           |
| F 4                   | 4 people       | Shower and Toilet   | First floor           |
| F 5                   | 3 people       | Shower and Toilet   | First floor           |
| S 4                   | 4 people       | Can be used as a company office – Telephone point and shower                  |                       |
| S 5                   | Large Studio   | Can be used as a dressing room for extra cast and crew or additional wardrobe |                       |
| S 6                   | 18 people      | Shower only   | 2 <sup>nd</sup> floor |
| S 7                   | 8 people       | Shower only   | 2 <sup>nd</sup> floor |
| S 8                   | 6 people       | Shower showers with S9  | 2 <sup>nd</sup> floor |
| S 9                   | 17 people      | Shared showers with S8  | 2 <sup>nd</sup> floor |
| Company Office        |                | Directly next to DSL entrance   | Ground floor          |
| Male orchestra room   | 70 Lockers     |   |                       |
| Female orchestra room | 40 lockers     |   |                       |
| Orchestra green room  | accommodate 90 |   |                       |

## Electrical Specifications

### LIGHTING SPECIFICATIONS : Permanent Rig

#### **Front of House:**

06 x Patt. 293 2kw (roof slot)  
18 x Cantata 11/26 1.2kw (Upper side slips)  
06 x Cantata 11/26 1.2kw (Lower side slips)  
08 x Strand SL 15/32 600w (boxes)  
04 x Strand SL 25/53 600w (Boxes)  
02 x Juliat 'Korrigan' Follow spots 1200w HMI (slips)

#### **Proscenium booms: not Rigged**

10 Quartet PC c/w barn doors 650w + 3m to + 6m)

#### Flexible Rig

04 x Patt. 243 c/w barn doors 2kw  
04 x Strand Cadenza c/w barn doors 2Kw  
36 x Cantata PC c/w barn doors 1.2kw  
10 x Quartet PC c/w barn doors 650w  
02 x Cantata 26/44 1.2kw  
04 x Cantata 18/32 1.2kw  
10 x Strand Brio 18/30 600w  
06 x Strand SL 15/32 600w  
02 x Strand SL 25/53 600w  
40 x PAR Cans (mixture of CP60, CP61 and CP62) 1kw  
10 x Coda 4 cyc units 500w  
06 x Doughty stands (+ 1.25m to + 2.75m)  
04 x Bench stands (+ .135m)  
01 x ZR22 DMX Smoke Gun  
01 x Techno Fog  
01 x Le Maitre Neutron Hazer

#### Control

ETC EOS.

#### Dimmers & available power

302 way EC90 dimmers (228 x 3Kw; 50 x 6Kw; 24 ND)  
18 ways of Tempus dimmers (2kw.) on PS Flyfloor  
DMX 512 / Shownet distribution ring to most areas  
DMX 512 input at Prompt Corner Temporary Power Supplies  
300 amp 3ph +N + E Powerlok/bare end DSPS  
32 amp 3ph +N + E Ceeform (32a) DSPS  
32 amp 3ph +N + E Ceeform (32a) DSOP  
60 amp 1ph +N + E Ceeform (63a /32a/16a) DSPS RCD protected  
60 amp 1ph + N + E Ceeform (63a) Lx workshop off back pit  
125 amp 3ph +N +E Camlock/Ceeform (63a/32a) Side Dock

#### Communications and Cue Lights

Strand Techpro Cans system (Can be linked into in prompt corner)  
Outputs in all corners, fly floors and FOH  
6 Belt packs and headsets available

### **Cue Lights**

11 Ways of patchable cue lights on the prompt desk

### **Tie Lines and Cable Runs**

20 Way Multicore run to the rear of the stalls

8 way XStage Tie line

20 way Tie line to Lighting desk position in dress circle

### **Audio**

02 x Celestion Cxi 1221

02 x Celestion substation 15 Driven by : Yamaha P2200 Power Amps

06 x Celestion CX1 821 Speakers (2 per level) Driven by :Yorkville CR5 Power Amp

02 Tannoy Lynx (pair per side) Driven by :Yorkville CR5 Power Amps

01 Alan & Heath MixWizard 14:4:2

04 Yamaha MS60S Powered Speakers

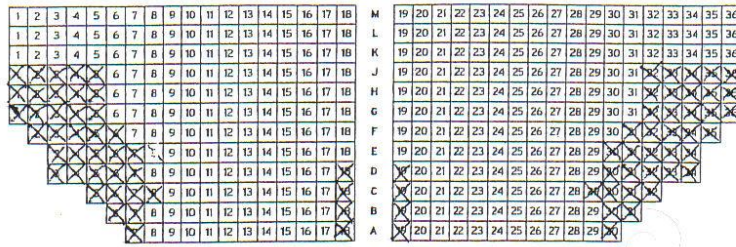
01 Tascam Minidisc player

01 TEAC CD Player

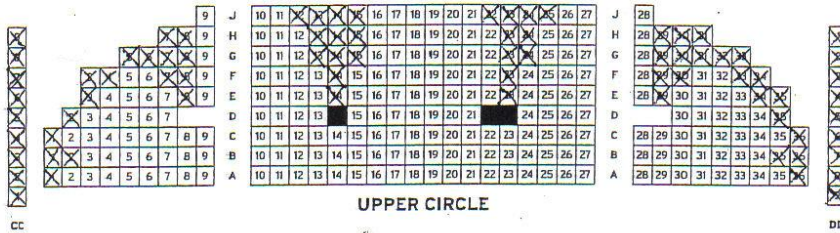
04 Trantec Lapel Radio Mic's

04 Trantec Handheld Radio Mic's

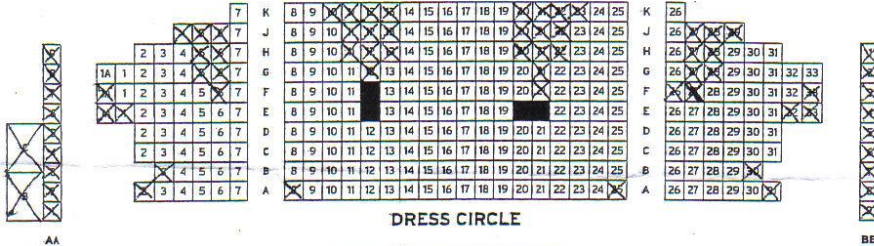
There is multicore laid to the rear of the Stalls comprising of 16 feeds and 4 returns.



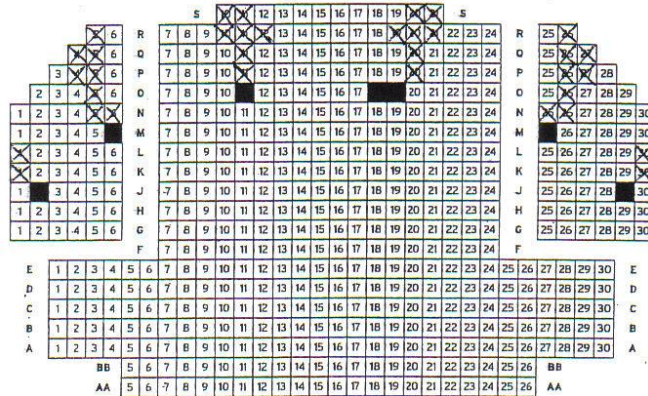
BALCONY



UPPER CIRCLE



DRESS CIRCLE



STALLS

# THEATRE ROYAL GLASGOW

The crosses on the plan show restricted view seating at The Theatre Royal



## **Health and Safety**

**Prior to arrival at The Theatre Royal the following documentation must be received by our technical staff:**

- **Production rider (4 weeks in advance of performance)**
- **All risk Assessments**
- **Method statements**
- **Hanging plot detailing weights of flying pieces**
- **Details of all certification with regards to the production**

Please also be aware that any rigging that arrives without a stamped SWL will not be able to be used. Glasgow Theatres Ltd has the right to refuse to hang or fit up any equipment brought into the building that does not have the correct certification. All touring electrical equipment must be PAT tested, under no circumstance should any portable electrical appliance be used in the building without being so. Our electrical department can arrange PAT testing for you however a charge will apply.

The correct PPE must be worn at all times. All visiting staff must adhere to in-house health and safety guidelines, the Duty Stage Manager/Chief Electrician has the right to remove any member of visiting company staff from a working area who is not complying. More details on these requirements can be obtained from either the Stage Manager or Chief Electrician.

Prior to arrival in the building a signed copy of the Fire Evacuation procedure must be signed by the Company Manager (or his equivalent). A copy of this can be found on page 11 of this document.

Access to the building must be arranged prior to it being granted. Rehearsal/maintenance calls should be called prior to your arrival at the venue. Any request for calls with less than 48 hours notice will result in calls being charged at double time in line with our local union agreement, these calls cannot be guaranteed.

The Duty Stage Manager/Duty Chief Electrician has the right to stop any performance by whatever means necessary in the event of an emergency situation arising.

## EVACUATION PROCEDURE FOR VISITING COMPANIES

The visiting company manager is responsible for providing a signing in sheet for the visiting company. This must be given to stage door staff when they first arrive on site. The Company Manager must ensure that all visiting staff sign in/out when they enter and leave the building.

The Theatre Royal Fire Alarm System does not have a phase one/phase two system and automatically sounds.

The fire alarm system comprises a continuous alarm sounding coupled with the following recorded message and flashing beacons (lights).

“ATTENTION PLEASE, ATTENTION PLEASE. THIS IS AN EMERGENCY. PLEASE LEAVE THE BUILDING BY THE NEAREST AVAILABLE EXIT.”

This is the alarm signal and means that the building must be evacuated. All persons must proceed immediately to the muster point where the Company Manager is responsible for taking a role call and reporting the status to the Stage Door Keeper.

**The Muster Point is located behind the bus stop on Hope Street across from stage door.**

No one may re-enter the building until given clearance to do so by the Duty Manager/Designated Person who will be given the all clear by the fire service.

Should an incident occur during a performance:

- 1 Resident Stage Manager/Chief Electrician/designated deputy will turn on stage working light.
- 2 Resident Stage Manager/Chief Electrician/designated deputy checks the safety curtain line is clear and lowers the safety curtain.
- 3 Visiting DSM Checks the location of the incident on the prompt corner mimic panel and assist the resident stage manager in evacuation of company members from the stage
- 4 Technicians evacuating from the Flyfloor assist in the evacuation of artists from dressing rooms
- 5 If orchestral musicians are in the pit, the visiting orchestra manager ensures evacuation of the orchestra pit and takes a roll call of the orchestra at the muster point.
- 6 All visiting Company staff should assemble at the muster point identified on the muster point diagram.
- 7 The visiting Company/Stage Manager should take a roll call, delegated as appropriate.
- 8 The result of this call should be communicated to the Duty Theatre Manager or the Stage Door keeper, if it is safe to do so.
- 9 No staff should re-enter the theatre until the all clear has been given by the Fire Brigade and subsequently the designated member of Theatre Royal staff

### **Responsibilities of the Tour/Company Manager**

Ensuring that no touring vehicle obstructs a fire escape.

Ensuring that no member of the visiting company causes the obstruction of any means of escape or means of raising the alarm.

Ensuring that all members of the visiting company are conversant with the evacuation procedure.

Ensuring that the evacuation procedure is followed.

Taking a role call of the visiting company and reporting to the Duty Manager or Designated Person.

Ensuring that no member of the visiting company re-enters the building until the fire service has given clearance to the Duty Manager.

### **PPE Policy – Visiting Companies**

As of Sunday 25<sup>th</sup> July 2010 the following requirements must be adhered to by all technical staff at both The Kings Theatre and The Theatre Royal, Glasgow.

#### **Safety boots must be worn:**

- At all times while working in technical areas. (The only exception to this is when there is absolutely no risk to staff – e.g. when working a performance where there are no trucks moving or the need to manually handle heavy objects)

#### **Safety helmets must be worn under the following circumstances:**

- The decision has been taken at group level that all ATG and ATG(v) theatres must now enforce the wearing of hard hats for all local and visiting staff from the start of a fit up/get in until the stage area is 'cast ready' and for the entire de-rig/get out. This decision covers the following technical areas:
- Truck/Stage/Orchestra Pit/Auditorium (until all FoH rigging is complete)/Street and Loading Bays.

#### **High Visibility Jackets**

- Any staff required to work on the public highways (pavements/roads) must wear a high visibility jacket. These are available for all resident staff

All staff should visually check PPE for signs of damage before and after each use, any signs of wear and tear/damage must be reported to a full time member of staff.

It is a breach of health and safety to tamper with or hide any piece of PPE. Anyone found doing so will be subject to disciplinary action.

### **PPE Equipment Policy**

#### **Harnesses**

- Must be worn where there is a risk of falling while working at height.

#### **Bump Caps**

- Bump caps are provided in GTL venues for staff working at height, these must be worn while working on access equipment and rigging at height.

Safety boots must be worn unless you are told otherwise by the duty Stage Manager/Chief Electrician, failure to arrive for work without them will result in you being denied access to the building until you retrieve them. Payment for shifts under this circumstance will start from the time you arrive back in the building.

**Please sign the attached declaration to confirm that you have read and understood the company policy on PPE equipment.**

## Tallescope Safe System of Work

### 1. Training

It is **recommended** that at least one of the personnel involved in the operational use of the Tallescope has received accredited training and hold proof of competency from an approved training body and/or the person carrying out work activities in the basket must have received accredited training and hold proof of competency from an approved training body.

### 2. Prior to use

Prior to use, a visual inspection should be carried out on the Tallescope, the following key items must always be checked:

- All four wheels turn freely.
- All four brakes work.
- All four leg extension locks work.
- Both end braces are locked in position.
- Base platform is fitted on ladder side of base.
- Both outriggers are fitted (one either side).
- Both outriggers extension clips are fitted and locate.
- Both outrigger extension feet move freely.
- All four ladder base upright locks locate and hold.
- Both ladder extension hooks locate on rungs and lock.
- Ladder extension line is in good order and runs through correct pulleys.
- Ladder extension moves up and down smoothly.
- Lifting basket rail is fitted and locates on latch.
- Tool bag is empty of all objects and is secured to a pulling line.

Once the Tallescope has been visually checked the following checks should be made to the working environment:

- The area should be checked that it is as clear as possible of all obstructions (nuts, bolts, battens and tools). Any other personnel in the working area should be informed and made aware of Tallescope use.
- Revolve operators and elevator operators must be made aware of Tallescope use and cease any conflicting activity. Isolate stage machinery where possible.
- If there is a noisy environment and communication is difficult and not clear then radio communication should be used.
- Light levels must be sufficient and may be increased during movement to ensure good visibility.

A **formal annual thorough inspection** of the Tallescope is recommended; the manufacturer's instructions are regarded as a minimum standard.

Visual checks against a checklist should be made at regular intervals.

### 3. Raking the Tallescope

Once the Tallescope is on the working area a minimum of four people are required to rake the Tallescope.

- The Tallescope must be unoccupied and any tools and fixtures and fittings removed from the basket.
- Four staff should be positioned, one upstage, one downstage and one on each corner that is to be adjusted.
- Check that all four brakes are on and the ladder is not extended.
- Unlock the leg extensions that are to be adjusted.
- The person on the downstage edge should lift the Tallescope at the centre (one hand on the horizontal rail the other above head height on the ladder) The person on the upstage edge should brace the scope from going too far.
- The extensions should run freely and the Tallescope should be levelled by using the levelling bubble at the centre of the base.
- Once level lock both extension locks firmly.
- Check the level of the scope once again.
- Then set the outriggers in position and take off the brakes.

### 4. Anti-raking the Tallescope

Once the Tallescope is on the working area a minimum of four people are required to anti-rake the Tallescope.

- The Tallescope must be unoccupied and any tools and fixtures and fittings removed from the basket.

- Four staff should be positioned, one upstage, one downstage and one on each corner that is to be adjusted.
- Check that all four brakes are on, the ladder is not extended and the outriggers are folded back.
- The person on the downstage edge should lift the Tallescope at the centre slightly (one hand on the horizontal rail the other above head height on the ladder) The person on the upstage edge should brace the Tallescope from going too far.
- Unlock the leg extensions that are to be adjusted.
- The extensions should run freely and the Tallescope should be gently allowed to drop forward until all leg extensions are equal.
- Once level, lock both extension locks firmly.
- Check the level of the Tallescope once again.
- Then set the outriggers in position and take off the brakes if the Tallescope is to be used or return it to its storage area.

## 5. Tallescope manning levels

### Static

- On a flat surface with someone in the basket, one supervisor (who does not participate in moving the Tallescope), two people at the base - one either end, with outriggers floating a **maximum of 10mm** off the floor.
- On a raked surface with someone in the basket, one supervisor (who does not participate in moving the Tallescope), three people at the base - one at either end and one at the lower side of the raked surface, with **outriggers feet set firmly on the floor**.

### Mobile - On a FLAT surface with someone in the basket:

- **As of July 28<sup>th</sup> 2010, until further notice, it is not recommended to move the Tallescope if the basket is occupied.** It is recommended that the person in the basket descends the mast prior to moving, and ascends when the Tallescope is stationary. This should be repeated each time the Tallescope is moved. It is important to take appropriate measures to avoid fatigue of the person climbing the mast i.e. use extra personnel, take appropriate rest between ascents.
- One supervisor (who does not participate in moving the Tallescope), two people at the base - one either end, with outriggers floating a **maximum of 10mm** off the floor.
- The long axis must be aligned with the direction of travel.
- The person in the basket must wear a helmet (for example meeting BS EN 397 with a chinstrap) or a bump cap (meeting BS EN 812)
- The people at the base, moving the Tallescope must wear hard hats (in accordance with ATG's Health & Safety Policy).
- The person on the leading end of the Tallescope should look up at the basket to ensure that there is nothing to obstruct or catch the basket while it is moving.
- The person at the rear of the Tallescope should be looking behind the leading operator to see that the path of travel is clear and free from obstruction.

### Mobile - On a RAKED surface with someone in the basket:

- **The Tallescope must never be moved on a rake if the basket is occupied.**

## 6. Lifting a tallescope onto a stage or raised platform

- Check that the basket is empty.
- Drop the mast to the horizontal position where possible, this helps to keep the centre of gravity low and aids balance while lifting.
- The staffing level can vary depending on the height of the lift but enough people must be used to ensure the stability of the Tallescope.
- Where possible one end of the Tallescope should be on the ground.
- One person should call the lifting manoeuvre

## 7. Tallescope General Guidelines

- Extreme caution should be taken when moving a Tallescope sideways across a raked stage.
- Never stand on kick boards or any basket rails.
- Never sit on the side of the Tallescope with someone at the top.
- Never stand inside the base while it is moving.
- Never go over a trap door without checking it is strong enough to take the load and then observe extreme caution when doing so.
- Observe extreme caution spanning a gap on the stage or other working areas.
- Never have one end on a moving truck, revolve stage or elevator and the other on fixed flooring without the operator/s of the stages knowing there is Tallescope activity.
- Never use packing, rostra or shims to gain height or level.



**Declaration**

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**Evacuation Procedure for Visiting Companies**

I have read the evacuation procedure for visiting companies and understand my responsibilities.

Signed .....  
Name .....  
Production .....  
Date .....

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**Glasgow Theatres Limited's PPE Policy**

I have read the PPE policy and understand my responsibilities.

Signed .....  
Name .....  
Production .....  
Date .....

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**Tallescope Safe System of Work**

I have read the Tallescope Safe System of Work policy and understand my responsibilities.

Signed .....  
Name .....  
Production .....  
Date .....

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**Please sign and return to: Tie Macbeth, Operations Coordinator, Glasgow Theatres Limited**

c/o Theatre Royal  
282 Hope Street  
Glasgow  
G2 3QA

Email: tiemacbeth@theambassadors.com  
Fax: 0141 332 4477  
Tel: 0141 352 8209

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