

# Drama Theatre

**Sydney Opera House**

## **Technical and Production Information Drama Theatre**

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# Technical and Production Information

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## Enquiries

Venue & Event Sales

T: +61 2 9250 7393

E: [venuehire@sydneyoperahouse.com](mailto:venuehire@sydneyoperahouse.com)

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# 1 Introduction

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The Drama Theatre (DT) is located on the ground floor in the north-western corner of Sydney Opera House, beneath the Concert Hall.

The venue is served by the Western Foyer, which is accessed via the Western Broadwalk.

The Western Foyer is shared by the DT, The Studio and Playhouse and offers unmatched views across the harbour to the Sydney Harbour Bridge. The northern end of the shared foyer space is dedicated to the DT.

The venue auditorium seating is designed to create unobstructed sightlines from all positions, with the 544 seats made of white birch timber veneer, upholstered in orange wool.

Equipped with a partially computerised flying system, this medium-sized proscenium arch theatre is as well suited for experimental performances as it is for more traditional productions of drama, dance, musical and spoken-word.

It is intended that this document is read in conjunction with the SOH Event Guide.

## 1.1 List of Acronyms

|     |                               |
|-----|-------------------------------|
| BOH | Back of House                 |
| CP  | Central Passage               |
| DT  | Drama Theatre                 |
| EWP | Elevated Work Platform        |
| FOH | Front of House                |
| GR  | Green Room                    |
| HC  | House Curtain                 |
| JST | Joan Sutherland Theatre       |
| LD  | Loading Dock                  |
| OP  | Opposite Prompt (Stage Right) |
| PS  | Prompt Side (Stage Left)      |
| SM  | Stage Manager                 |
| SMD | Stage Manager's Desk          |
| SOH | Sydney Opera House            |



## 2 Risk Management

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In NSW, if you conduct a business or undertaking, you are legally obliged to manage certain risks. In particular, you must:

- Identify and eliminate risks to health and safety, or, if that is not practicable, then minimise those risks so far as is reasonably practicable; and
- Ensure the health and safety of your own workers, AS WELL AS ensure that other workers' or persons' safety is not put at risk by work carried out as part of your business or undertaking.

Work health and safety obligations in NSW are non-transferable and concurrent. This means that:

- Each business or person with safety obligations must comply with their WHS requirements; and
- If more than one business or person has a duty under the law, then they must comply to the extent that they can influence or control the safety matter.

Please refer to the SOH Event Guide.

### 2.1 Emergency Exits

In addition to the doors located on each side at the rear of the venue auditorium, emergency exits are located at each side of the stage, immediately downstage of the proscenium.

Although these lead to backstage areas, they are available for use by members of the audience as well as performers in the event of an emergency situation.

In order to keep these emergency exits clear, no technical equipment or scenic elements may be set on the extreme sides of the forestage or in the stairwells. A clear exit path must be maintained at all times.

### 2.2 Smoke Management System

The smoke management system includes a smoke curtain located above the seats in row E of the auditorium. In the event of the fire alarm system being triggered, this curtain will automatically drop from the ceiling, stopping 2.1m above the floor.

The smoke curtain is designed to contain any smoke and allow patrons to leave the venue without undue delay.

At the same time the emergency panic lighting will automatically switch on and the smoke exhaust fans located at the top of the stage tower will start to extract smoke from the venue. Make-up air (sourced from outside the building) will be delivered via a duct, which is located on PS of the stage floor, immediately downstage of the proscenium.

#### **Special conditions associated with the Smoke Management System:**

- No technical equipment or scenic elements may be set in front of the air supply duct on PS of the stage.
- To ensure that the make-up air can replace the air that is extracted from the stage tower, there must always be at least 15m<sup>2</sup> of open space between the auditorium and the stage at the proscenium.
- If full size wrapping drapes or cycloramas are to be used, they must be free to move upstage to allow for the movement of air.



- Before a scaffold is installed for access to the FOH lighting bar that is adjacent to the smoke curtain, arrangements must be made with SOH Fire & Safety to isolate the smoke curtain to avoid situations where the curtain could drop onto the scaffold and be damaged.
- No cables may be installed that will interfere with the travel path of the smoke curtain. Any cables installed along the side of the auditorium must either use the special conduit paths above the curtain on the side walls or cross the path of the curtain below the guides that are mounted on the side walls.



### 3 Venue Access

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The route from the main SOH Loading Dock (LD) to the venue is as follows:

- LD to JST lift 21
- JST lift 21 to JST Dock
- JST Dock to Central Passage
- Central Passage to DT Dock / Corridor

The venue has a small scenery dock in Central Passage (CP). The stage is located one level (-2.75m) below CP. Scenery is carried down a narrow, carpeted corridor from CP to the venue.

There is a 90° turn through a double door (2.25m wide x 2.80m high) onto an electrically operated platform elevator down to stage level.

The lift travel limit is approximately 200mm above the stage floor. A portable ramp is used to roll off to stage level. Please discuss your scenery dimensions as early as possible.

| Scenery Hoist Specifications |                   |
|------------------------------|-------------------|
| Width                        | 2.80m             |
| Depth                        | 2.50m             |
| Speed                        | 101mm/s constant  |
| Load Capacity                | 1,520kg in motion |

Exclusion zones are enforced in the DT corridor during loading times, and all crew must wear high visibility clothing and safety boots when traveling between the LD and the venue.

Outside of load-in / out times the corridor is a thoroughfare for all northern offices and cannot be completely closed off.



## 4 Venue Dimensions

### 4.1 Stage Description

The tormentors (side walls) of the proscenium arch are adjustable, giving an adjustable opening width from 12.20m to 13.74m. A 250mm thick load bearing concrete wall divides the main stage from the rear stage.

| Dimension | Details               | Distance                     |
|-----------|-----------------------|------------------------------|
| Width     | Stage extension       | 14.6m downstage              |
|           | Apron                 | 12.8m upstage                |
|           | Rear stage opening    | 12.4m                        |
|           | Proscenium            | 12.2m to 13.7m               |
| Depth     | Apron to last fly set | 11.3m DSC to Line #26        |
|           | Rear stage            | 4.4m centre line             |
|           | Stage extension       | 2.7m                         |
| Height    | Proscenium            | 4.7m                         |
|           | Maximum drift*        | 10.2m*                       |
|           | Stage                 | +1.0m above auditorium floor |

\*There is no grid in the fly tower. A solid concrete ceiling sits approximately 400mm above the maximum drift. There are no penetration points and this space includes concrete beams and steel support structures.

Dimensions are approximate and critical measurements should be confirmed on site.

### 4.2 Stage Floor

|                 |  |
|-----------------|--|
| Surface         | 50mm Oregon timber, overlaid with a 9mm Weathertex sheeting, painted black |
| Stage Rake      | 0 degrees (flat)   |
| Maximum Loading | 7.5kPa (500kg/m <sup>2</sup> ) – distributed                               |
|                 | 4.5kN (450kg) - concentrated   |

### 4.3 Stage Plans

Stage plans are available at [sydneyoperahouse.com](http://sydneyoperahouse.com)

Scale plans can be requested through SOH Event Operations as PDFs or as Vectorworks files.

Email [techspec@sydneyoperahouse.com](mailto:techspec@sydneyoperahouse.com) or through your SOH Production Manager. Uncontrolled copies can be found in the appendices of this document.



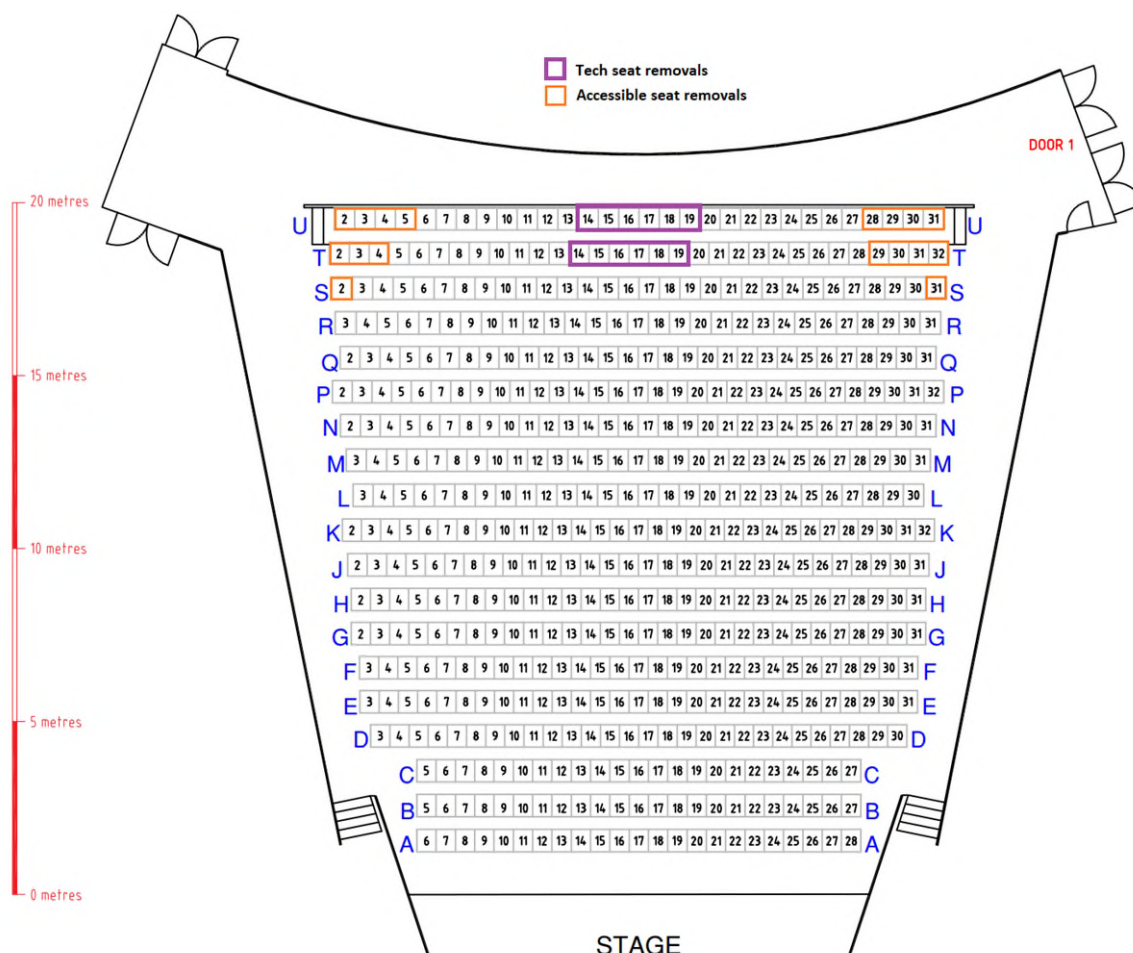


## 4.4 Auditorium Seating

The maximum seating capacity in the venue is 544, continental style. There are four wheelchair positions, two each side at the rear of the auditorium, with associated companion seats for each. If these positions are required, seats must be removed from rows T and U and the venues capacity is reduced by up to 14 seats (if all four wheelchair positions are used).

If the stage extension is required, rows A, B and C are removed and the seating capacity is reduced to 475.

Entrance to the auditorium is via one main door from the Western Foyer.





## 5 Staging

### 5.1 Flying System

The venue has a combination of electric winch sets and manual double-purchase counterweight sets that may only be operated by authorised SOH staff.

The electric sets are controlled by the State Automation State Vi flying system.

The stage extension and the scenery hoist are operated from separate control panels.

There are limitations in the height of pieces to be flown due to the low stage drift.

| Fly System Dimensions                |       |
|--------------------------------------|-------|
| Height of fly tower from stage floor | 10.5m |
| Main stage drift                     | 10.1m |
| Rear stage drift                     | 8.0m  |
| Height under 1st fly gallery         | 5.5m  |
| Width between fly galleries          | 18.8m |

#### 5.1.1 Control, Speed and Loading

There are 13 power operated lines (plus 4 upstage / downstage panorama bars, and the house curtain) and 12 manual rope-operated double purchase counterweight lines.

There are also three hand-winch lines in the up-stage area.

| Control Type   | Line Designation   | Speed & Loading                                      |
|----------------|--|--|
| Power Operated | 2, 4, 6, 8, 10, 13, 15, 17, 19, 21, 23, 25, 26<br>PS Pan 1&2, Op Pan 1&2 | Varying speeds up to 1000mm/sec, max load 350kg each |
|                | House Curtain (HC)   | Varying speeds up to 1100mm/s, max load 1,000kg UDL  |
| Manual Rope    | 3, 5, 7, 9, 11, 12, 14, 16, 18, 20, 22, 24                               | Max load 250kg each                                  |
| Hand-winch     | W1, W2, W3   | Max load 500kg each                                  |

#### 5.1.2 Head Battens

All head battens are straight steel, 17m long. A 1.5m length of batten can be removed from each end of lines 2 - 24.

The batten profile is rectangular in section, measuring 100mm high x 50mm wide.

Lines 25 and 26 have a parabolic curve and are 17.6m long.



### 5.1.3 Permanent Truss

#### 12A Truss

A 14m long, 400mm box-truss is hung on 4 x 500kg chain motors between lines 12 and 13, with a max loading of 750kg. It is not suitable for fly cues.

#### Up-stage Truss

The most up-stage rigging position in the venue is a 16m run of Global A34 box truss that is suspended from four chain motors. It is located 2.0m upstage of W3 winch line and has a fixed speed of 400mm/s and 750kg WLL of UDL.

The truss has a top trim of 7100mm to its bottom cord and a centre to centre measurement of 300mm. It is suspended from the centre and outboard positions from a set of 5 collared eyebolts fixed to the ceiling of the venue, with each eyebolt having a 250kg WLL.

### 5.1.4 House Curtain

The black velour house curtain hangs inside the proscenium on a slight parabolic curve and is operated from various remote positions by the State Automation flying system.

The house curtain is an inherent component of the venue and any production that wishes to move it from its natural position must allow for this in the production schedule and submit a hanging plot that provides an alternate powered line for it to be stored on.



## 5.2 Fly Plot

| Line     | Type         | Max Loading | Distance to Apron Edge (mm) | Additional Information                     |
|----------|--------------|-------------|-----------------------------|--|
| HC       | Motor        | 1,000kg     | 2320                        | Black velour, 9000 x 5000                  |
| 2        | Motor        | 350kg       | 4080                        |  |
| 3        | Hand         | 250kg       | 4330                        |  |
| 4        | Motor        | 350kg       | 4595                        |  |
| 5        | Hand         | 250kg       | 4835                        |  |
| 6        | Motor        | 350kg       | 5110                        |  |
| 7        | Hand         | 250kg       | 5350                        |  |
| 8        | Motor        | 350kg       | 5600                        |  |
| 9        | Hand         | 250kg       | 5830                        |  |
| 10       | Motor        | 350kg       | 6120                        |  |
| 11       | Hand         | 250kg       | 6370                        |  |
| 12       | Hand         | 250kg       | 6610                        |  |
| 12A      | Chain Motors | 750kg       | 7100                        | 400mm Box Truss, Not suitable for fly cues |
| 13       | Motor        | 350kg       | 7500                        |  |
| 14       | Hand         | 250kg       | 7740                        |  |
| 15       | Motor        | 350kg       | 8000                        |  |
| 16       | Hand         | 250kg       | 8250                        |  |
| 17       | Motor        | 350kg       | 8500                        |  |
| 18       | Hand         | 250kg       | 8750                        |  |
| 19       | Motor        | 350kg       | 9010                        |  |
| 20       | Hand         | 250kg       | 9260                        |  |
| 21       | Motor        | 350kg       | 9520                        |  |
| 22       | Hand         | 250kg       | 9770                        |  |
| 23       | Motor        | 350kg       | 10010                       |  |
| 24       | Hand         | 250kg       | 10270                       |  |
| 25       | Motor        | 350kg       | 11070                       | Curved Bar                                 |
| 26       | Motor        | 350kg       | 11350                       | Curved Bar                                 |
| W1       | Winch        | 500kg       | 12530                       | Not suitable for fly cues                  |
| W2       | Winch        | 500kg       | 12730                       | Not suitable for fly cues                  |
| W3       | Winch        | 500kg       | 12930                       | Not suitable for fly cues                  |
| PS Pan 1 | Motor        | 350kg       | n/a                         |  |
| PS Pan 2 | Motor        | 350kg       | n/a                         |  |
| OP Pan 1 | Motor        | 350kg       | n/a                         |  |
| OP Pan 2 | Motor        | 350kg       | n/a                         |  |

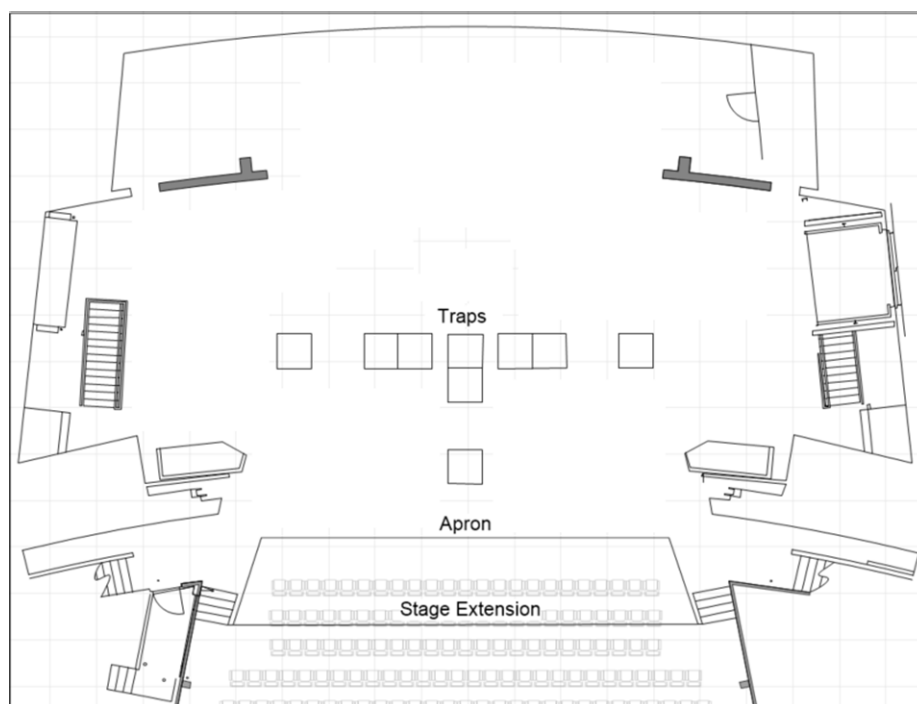


### 5.3 Stage Traps

There are nine stage traps across the stage area as shown on the plan below. Actor's carriages are not supplied, and you will need to bring these as part of your stage set if required.

Use of the traps and any carriages or stage machinery you bring into the venue require a detailed and targeted Risk Assessment.

Access to the traps is via a 1.78m wide crossover tunnel which extends under the stage from PS to OP, and branches downstage to the orchestra pit.



### 5.4 Stage Extension

Three separate platforms can be moved as one or as individual units. Movement is by means of self-locking screw jacks that can be locked at any position between stage level (+1.00m) as a stage extension and storage level (-1.20m).

At 0m, which is the default setting for the venue, the platforms form part of the auditorium floor on which rows A and B sit. The platforms are covered in dark blue carpeted floor panels to match the auditorium floor. These can be removed by arrangement.

The use of the platforms in the stage extension position requires the removal of rows A, B and C from the stalls. These seats must be removed from sale therefore this decision should be made before tickets go on sale.

| Stage Extension Dimensions |                                    |
|----------------------------|------------------------------------|
| Downstage Width            | 14.6m total across three platforms |
| Upstage Width              | 12.8m total across three platforms |
| Depth                      | 2.7m                               |
| Load Capacity              | 500kg/m <sup>2</sup> each platform |



## 5.5 Compressed Air

Compressed air is available from a central plant at 690 KPA (100 PSI) with outlets located on each side of the stage.

## 5.6 Standard Staging Equipment

The following equipment is included within the venue hire costs:

| Element           | Equipment             | Allocation | Details                     |
|-------------------|-----------------------|------------|-----------------------------|
| General Furniture | Card Table            | 3          | 830 x 830mm Square Top      |
|                   | Trestle Table         | 2          | 1800 x 750 Top              |
|                   | Vinyl Chair           | 10         |                             |
|                   | Black Screen          | 4          |                             |
| Wardrobe          | Wardrobe Rack (large) | 7          |                             |
|                   | Wardrobe Rack (small) | 7          |                             |
|                   | Desk Unit             | 2          | Portable with mirror/screen |

## 5.7 Elevated Work Platform (EWP)

The venue EWP allocation is as below. All operators must be licenced.

| Equipment   | Allocation |
|-------------|------------|
| Uplift UG30 | 1          |



## 5.8 Additional Staging Equipment

The following sections of equipment can be utilised by your production at an additional cost, subject to the requirements of the other venues.

### 5.8.1 Masking

The following cloths are allocated to the venue at additional cost:

| Element  | Equipment             | Allocation | Details             |
|--|-----------------------|------------|---------------------|
| Masking  | Leg                   | 10prs      | Black, 4350 x 7250  |
|  |                       | 1pr        | Black, 3000 x 7500  |
|  |                       | 1pr        | Black, 2000 x 7500  |
|  | Border                | 6          | Black, 18000 x 3000 |
|  |                       | 4          | Black, 18000 x 2000 |
|  |                       | 4          | Black, 18000 x 1250 |
|  | Border (Side Masking) | 1          | Black, 7250 x 3000  |
|  | Smother               | 1          | Black, 16000 x 7250 |
|  |                       | 2          | Black, 18000 x 5000 |
|  |                       | 1          | Black, 14000 x 7500 |
|  | Tabs                  | 3prs       | Black, 8800 x 7500  |
|  |                       | 1pr        | Black, 8000 x 7500  |
| Additional masking may be allocated upon request |                       |            |                     |

### 5.8.2 Additional Equipment

The following equipment can be can be utilised by your production at an additional cost:

| Element        | Equipment           | Details                 |
|----------------|---------------------|-------------------------|
| Rostrum        | Megadeck 1.2 x 2.4m | Carpeted                |
|                | Megadeck 1.0 x 2.0m |                         |
|                | Megadeck 1.0 x 1.0m |                         |
|                | Megadeck Legs       | 200 / 400 / 600 / 800mm |
| Floor Covering | Black Carpet        |                         |
|                | Vinyl               | Black or White          |
|                | Sprung Dance Floor  |                         |



| Element              | Equipment                | Details                         |
|----------------------|--------------------------|---------------------------------|
| General Furniture    | Card Table               | 830 x 830mm Square Top          |
|                      | Trestle Table            | 1800 x 750 Top, Various Colours |
|                      | Cabaret Table            | 600mm or 900mm Round Top        |
|                      | Vinyl Interlocking Chair | Black, Padded                   |
| Orchestral Furniture | Padded Orchestral Chairs | Height Adjustable               |
|                      | Music Stands             |                                 |
|                      | Conductors Stand         |                                 |
|                      | Base Spike Board         |                                 |
|                      | Cello Riser              |                                 |
| Cloths               | Sharkstooth Gauze        | Various                         |
|                      | Filled Cloth             | Various                         |
|                      | Push-up Drapes on Poles  | Black, Various sizes            |
|                      | 2m Book Flat Masking     | Black or Grey, Padded           |
|                      | 1.3m Book Flat Masking   | Black, Padded                   |
| Rigging              | 1T Chain Block           | 7m chain                        |
|                      | 1/2T Chain Block         |                                 |
|                      | Tail Pipe                | 20-25mm, various lengths        |
|                      | Mini Quad Truss          | 100mm, various lengths          |
|                      | Tri Truss                | Various lengths                 |
|                      | Box Truss                | Various lengths                 |





## 6 Lighting

### 6.1 Standard Lighting Equipment

The following equipment is included within the venue hire costs:

#### 6.1.1 Control

The lighting system is controlled by an ETC EOS Ti console in the control room, with an ETC Gio @5 console running as a tracking back-up. Both consoles have 24K channels and use an ELC DMX over Ethernet system for DMX distribution.

An EOS Net3 Remote Video Interface is installed on stage in PS corner and an ETC Nomad Puck is available for use with designer's monitors at the production desk in the auditorium.

An ETC Pad (remote control unit) is available for rigging and focussing sessions on stage.

#### 6.1.2 Data

SOH has an ELC DMX over Ethernet system. It utilises sACN to distribute an almost infinite number of DMX universes. In the venue, it appears in the Control Room, Dimmer Room, stage area, and in the auditorium. Some points have permanently installed Ethernet to DMX nodes, and extra nodes can be installed on request.

External network devices must be approved by SOH prior to installation onto the network. Alternate protocols such as ArtNet are not permitted to run on the House network. Please advise if protocols other than sACN are required

#### 6.1.3 Power

All general and dimmed electrical power supplies are 240V AC @ 50 Hz.

Additional 3-phase supplies (415V AC) are available with Wilco pattern 5-pin connectors (or with a distribution board at an additional cost).

#### 6.1.4 Dimmers

The 240 Bytcraft IDS Ultra Quad dimmers rated at 5kW and fitted with 25A circuit breakers and 72 HPC dimmer or switch circuits rated at 2.5kW and fitted with 10A circuit breakers.

Dimmer outlet distributions:

| Position                  | Allocation                     |
|---------------------------|--------------------------------|
| FOH patch panel           | 96 (72 x 5kW / 24 x HPC 10A)   |
| Stage area patch panel    | 180 (132 x 5kW / 48 x HPC 10A) |
| Houselights               | 7                              |
| Rehearsal and work lights | 3                              |
| Perches                   | 24                             |
| Stage floor               | 48                             |



### 6.1.5 Non-Dimmed Units

Special 5kW rated switched units are available to supply non-dimmed power to the venue. These are controlled by DMX or manual switch from the venue lighting control room.

Non-dimmed unit allocations:

| Position        | Allocation                                 |
|-----------------|--|
| FOH patch panel | 6 units (duplicated backstage)             |
| Stage area      | 12 units (including 6 duplicated from FOH) |

### 6.1.6 House Lights

The main house lights are warm white LED fixtures. There are incandescent lights over the aisles and rear crossover. The house lights can be controlled by the lighting desk or a manual fader system on a highest-takes-precedence basis.

### 6.1.7 Overhead Lighting Battens

All scenery battens are capable of being used as lighting bars. 2m long sections of pre-wired bars are available and can be clamped to the head batten. Multicore cables run off to the OP gallery to connect with dimmers via the stage area patch panel.

Please refer to section **5 Staging** for details on battens and load capacities.

### 6.1.8 Lighting Positions

| Area           | Position                     | Notes   |
|----------------|------------------------------|---|
| Front of House | FOH Audience Bar*            | Over row D  |
|                | FOH Orchestra Bar & Moon Bar | Over fore-stage   |
|                | FOH Niches                   | Each side FOH   |
|                | FOH Booms                    | Each side in fore-stage entrances and proscenium                    |
| Stage Area     | Portal Bridge                | Fixed double-deck lighting bridge with spot bar fixed underneath    |
|                | Portal Bridge                | The crossover has a handrail suitable for rigging pipe and lanterns |
|                | Portal Bridge                | Circuits here connect with dimmers at the stage area patch panel    |
|                | Stage Galleries              | Double galleries at the same level as the bridges                   |
|                | Perch Lighting Positions     | Suitable for onstage booms and followspots                          |

\*Requires the installation of a mobile scaffold tower to access the position for rigging and focusing. Please allow time in your production schedule for SOH staff rostered to your event to assemble and disassemble this scaffold.



## 6.2 Additional Lighting Equipment

The following equipment is dedicated to the venue and can be utilised by your production at an additional cost:

| Lamp Type  | Allocation                   |
|--|------------------------------|
| ETC S4 19° 750w  | 12                           |
| ETC S4 26° 750w  | 40                           |
| ETC S4 36° 750w  | 36                           |
| ETC S4 50° 750w  | 12                           |
| Strand SL15/32   | 40                           |
| Strand SL23/50   | 30                           |
| Selecon 1.2kW Fresnel  | 48                           |
| Selecon Arena 10" 2kW Fresnel                                | 20                           |
| Strand Harmony P.C   | 16 (no barn doors available) |
| 4-Unit cyc / ground row                                      | 40                           |
| Additional lamp and effects stock are available upon request |                              |

### 6.2.1 Followspots

For an additional cost, followspots can be installed in the Interpreters' Booths at the rear of the auditorium, in the niches each side of the auditorium closer to the stage, or on the onstage perch lighting positions.

### 6.2.2 Music Stand Lights

24V LED scone lights are available to fit music stands at an additional cost.



## 7 Sound & Audio Visual

### 7.1 Standard Sound Equipment

The following equipment is included within the venue hire costs.

#### 7.1.1 Loudspeaker System

The venue has a permanently installed D&B Audiotechnik loudspeaker system:

| Component                             | Equipment                | Allocation |
|---------------------------------------|--------------------------|------------|
| Main Left - Right FOH                 | D&B Audiotechnik Q7      | 2          |
| Subs Left – Right                     | D&B Audiotechnik J-INFRA | 2          |
| Orchestra Bar and Orchestra Delay Bar | D&B Audiotechnik E12d    | 10         |
| Front Fill                            | D&B Audiotechnik E6      | 5          |
| Surrounds                             | D&B Audiotechnik E8      | 12         |

#### 7.1.2 Mixing Console

##### Control Booth Position

A Midas Pro 1 Console is permanently installed in the control booth to cater for small to medium sized events.

There are 48 channels of Midas DL431 pre-amplifiers installed.

##### Stalls Position

Mixing consoles can also be positioned in the rear of the auditorium with the removal of 16 seats in the centre of rows T and U.

#### 7.1.3 System Processing and Routing

System processing is performed by the installed amplifiers and a D&B DS100 signal engine. Signal distribution to these devices is over a Dante Network.



## 7.2 Additional A/V Equipment

The following equipment can be utilised by your production at an additional cost.

### 7.2.1 Audio

| Equipment  | Model   |
|--|---|
| Mixing Consoles  | Midas Pro X<br>Midas Pro 2<br>Midas Pro 1   |
| Stage Monitors   | D&B Audiotechnik M4<br>D&B Audiotechnik Y-SUB<br>D&B Audiotechnik V series line array.<br>D&B Audiotechnik V-Sub<br>D&B Audiotechnik V10P<br>D&B Audiotechnik Y10P<br>D&B Audiotechnik Y7P<br>D&B Audiotechnik E8 |
| Radio Microphones –<br>Belt-packs<br>(Shure Axient Wireless<br>System) | <u>AXT 100 Belt Packs:</u><br>DPA 4066<br>DPA D:Fine<br>DPA D:Fine 66<br>DPA 4061<br>DPA 4080<br>DPA 6066   |
| Radio Microphones –<br>Handhelds<br>(Shure Axient Wireless<br>System)  | <u>AXT 200 Handhelds:</u><br>Shure KSM9<br>Shure Beta 58<br>Shure SM58  |
| Shure In-Ear Monitors  | Stereo PT10T dual wireless transmitters<br>P10R wireless body-pack receivers<br>SE425 earpieces   |
| Wired Microphones  | SOH have a wide range of microphones from brands such as Sennheiser, Shure, AKG, DPA, Beyer and Neumann and offers a variety of packages to suit  |
| Additional Playback  | MacBook Pro running QLab  |



### 7.2.2 Video Replay

The Sound & AV department has a range of playback options and switchers. SOH vision equipment is shared between all venues and its use in the DT is subject to availability and will incur additional charges.

| Equipment       | Model   |
|-----------------|---|
| Switchers       | Barco Image Pro                                   |
|                 | Blackmagic Design ATEM 2 M/E Production Studio 4K |
| Vision Playback | MacBook Pro                                       |
|                 | Sound Devices Pix 270i                            |

### 7.2.3 Projection and Video Monitors

There are a number of options available for projector placement within the venue, including front and rear projection. Please note that in order to facilitate projection, truss and a screen must be rigged.

| Element        | Equipment   |
|----------------|---|
| Projectors     | Barco HDX 14k   |
| Screens        | Stumpfl 7.3m x 4.1m (24ft x 13.5ft) 16:9 ratio FastFold |
|                | Stumpfl 6.1m x 3.4m (20ft x 11.3ft) 16:9 ratio FastFold |
|                | Stumpfl 4.8m x 2.7m (16ft x 9ft) 16:9 ratio FastFold    |
|                | Stumpfl 3.6m x 2.1m (12ft x 7ft) 16:9 ratio FastFold    |
| Video Monitors | LCD 75"   |
|                | LCD 55"   |
|                | OLED 17"  |



## 8 Communications

### 8.1 Stage Manager's Desk

A Stagetec Stage Manager's Desk (SMD) is located in Prompt Corner. The desk is fully programmable, includes four broadcast-quality show relay screens, a telephone, two integrated Riedel Artist communications panels and dynamically assignable tactile LED buttons.

The SMD controls audio and video relay to both FOH and BOH spaces, and can be used to broadcast live or pre-recorded announcements to backstage or foyer spaces.

There is an automatic message stacking facility to prevent conflict with other venues when announcements are simultaneously sent from other venues to common areas of the building, such as the Green Room (GR). Features include dynamic allocation of paging, program audio relay, cue lights, and foyer bells.

FOH functions are generally managed by the Theatre Manager from a touch screen in the foyer, however these functions are also accessible at the SMD.

### 8.2 Show Relay

A colour image of the venue stage is distributed to the SMD, lighting control, sound control, GR, some dressing rooms, and venue foyers. The SM has pan, tilt, and zoom control of the long-view camera. A low-light camera is also permanently installed and sends vision to the SMD.

Longview and low-light feeds can be sent to most areas of the building by arrangement and can be sent to the Recording Studio for archival recordings (Refer to SOH Event Guide for further details on archival).

### 8.3 Headset Communications

A Riedel Artist wired intercom system operates across all venues. Permanent talkback stations are available in lighting and sound control locations, and wired headset tie lines are installed at all regular operating positions.

A Riedel Bolero wireless beltpack system is fully integrated with the Riedel Artist wired intercom system, and is included within venue hire costs as per the below table:

| Equipment  | Allocation | Details           |
|--|------------|-------------------|
| Wireless Beltpack Comms  | 12         | Riedel Bolero BBP |
| Additional units may be provided upon request at a per unit charge |            |                   |



## 9 Production Desks

SOH are able to provide production desk equipment in the auditorium as part of the venue rental, with costs for labour to install or remove.

Standard set-up for this venue:

| Equipment   | Allocation | Details  |
|---|------------|--|
| Production Desk   | 2          | Set-up in row L in stalls, Operators in row M      |
| Comms Panel   | 4          | Riedel DCP1016                                     |
| DELEC Panel   | 1          | Links to SM system, enables BOH calls & cue lights |
| Phone   | 1          | Avaya IP phone                                     |
| Additional units may be provided upon request, pending availability.<br>In the event of SOH stock exhaustion, costs may be applied. |            |  |





## 10 Backstage Facilities

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### 10.1 Dressing Rooms

The venue is assigned ten dressing rooms. Five rooms located one level above the stage can accommodate up to six artists each and include en suite bathrooms.

The other five dressing rooms are located on a mezzanine two levels above the stage and are suitable for two to four artists each. The mezzanine level has separate shower and toilet facilities which are shared by artists using the five dressing rooms.

Lockers in the dressing rooms are fitted with a staple and hasp. In order to lock a locker, Hirers should bring their own padlocks. Lockers must be cleared at the conclusion of the hiring period, or at the end of each day if other hirers will be using the venue between your sessions. Your SM will inform you if this is required.

### 10.2 Rehearsal Rooms

There is no rehearsal space dedicated to the venue. Rehearsal space is very limited across SOH.

### 10.3 Wardrobe, Laundry and Kitchen Facilities

The venue is equipped with a kitchen/office space and laundry facilities including a dishwasher, hot water urn, filtered water tap and fridge/freezer.

Venue laundry allocation:

| Equipment                           | Allocation |
|-------------------------------------|------------|
| Electric clothes dryer              | 1          |
| Top loading clothes washing machine | 2          |
| Upright electric drying cabinet     | 1          |

### 10.4 Storage Space

Storage space on SOH site is very limited. If short term storage is required, it may be possible for certain equipment to be left in the DT dock area.



## 11 Protection of Building Surfaces

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Appropriate measures must be taken to ensure the protection of all SOH building fabrics and surfaces, including wood, granite, glass, ceramics, concrete and bronze.

Prior consultation and approval is required for any plans to attach to or penetrate building surfaces.

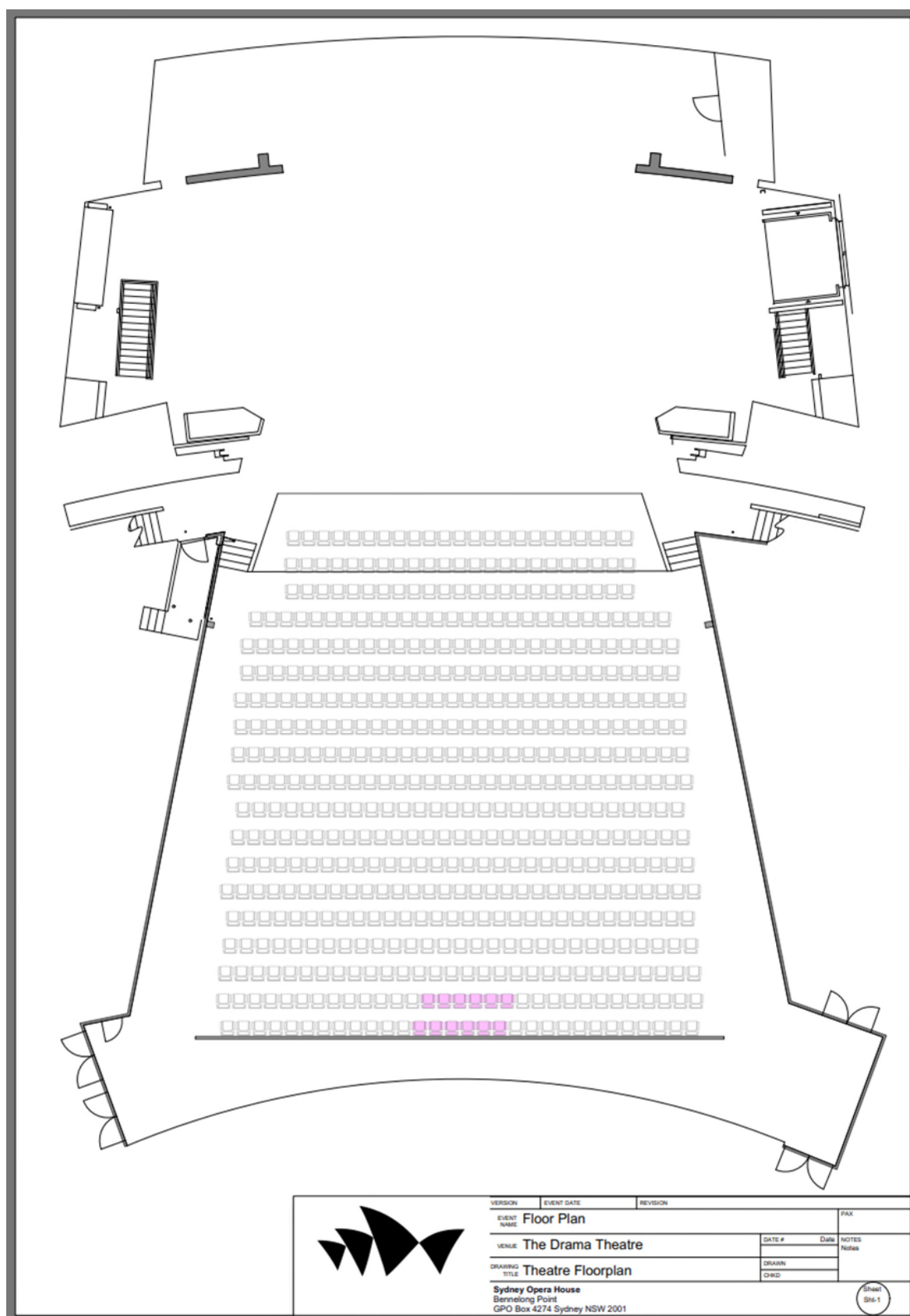
You must provide suitable rubber pads, plywood sheets or plastic to protect all building surfaces including but not limited to floors, walls, chairs and ceilings.

The use of paints or chemicals on SOH building surfaces or fixtures is prohibited. Similarly, any use of water, soaps or cleaning fluids of any kind must be pre-approved by Building Operations.



## 12 Appendices

### 1.1 Venue Plan – Full Stage and Auditorium





## 1.2 Venue Plan – Section

