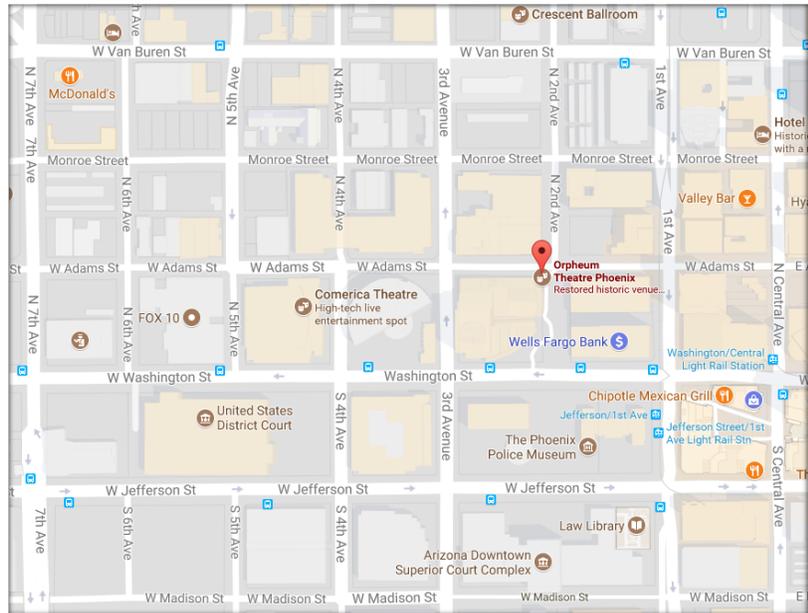
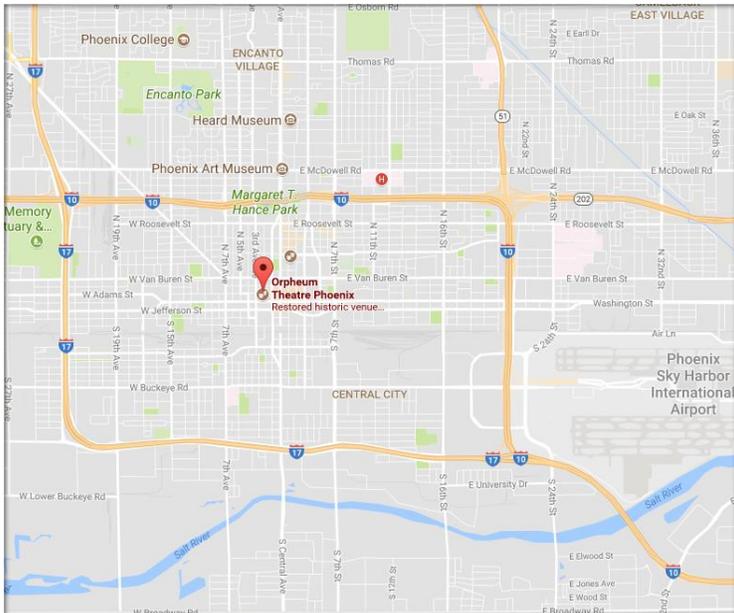




Orpheum Theatre

Technical Specifications



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Orpheum Theatre

Technical Specifications

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The Orpheum is located at:
203 W Adams, Phoenix AZ 85006

You can do a virtual walk thru at:

<https://www.google.com/maps/place/Orpheum+Theatre+Phoenix>

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Technical Specifications

ROOM SPECIFICATIONS:

Relevant Measurements

- ⊕ Height of Gridiron: _____ 66' 11³/₄" (stage to bottom of grid)
- ⊕ Proscenium Opening: _____ 50'-0" Wide X 26'-0" High
(Top Curved - Lowest Point = 15' 5 ³/₄"
- ⊕ Projection/Lighting Booth to show curtain _____ 87'
- ⊕ Lip of Balcony to show curtain _____ 85'-4"
- ⊕ FOH audio mixing position to front of pit lift _____ 83'
- ⊕ FOH audio mixing position to front of stage _____ 92'-4"
- ⊕ FOH audio mixing position dimensions _____ 10' Wide X 7'6" Deep
- ⊕ Width of Stage: South Wall to Fly Rail _____ 96'
- ⊕ Fire Line to Rear Column _____ 44' 9";
- ⊕ Working Area: _____ 45' Wide X 25' High X 40' Deep; 1,800 Sq. Ft.
- ⊕ Normal working Opening _____ 46' wide
- ⊕ Working Depth Including Forestage: _____ 39' 7"
- ⊕ Width of Orchestra Lift (upstage side): _____ 42' 2"
- ⊕ Floor loading may not exceed 125lbs per Sq. Ft.
- ⊕ A loading door separates the loading dock with the back stage hallway 12' tall 11'0" wide
- ⊕ There are two truck bays; the East bay is dedicated for Orpheum use, the West bay belongs to City Hall and with prior arrangement may be available for use. Bays are equipped with adjustable dock plates. The loading dock is sloped downward.
- ⊕ The loading door between the hallway and the stage located upstage right is 12' tall, 9' wide.

Stage Equipment

Equipment at no charge:

(labor costs apply for set-up & strike.)

- (15) Monroe Platforms 4'x8'(8"/16" leg height)
- (15) Monroe Platforms 4'x8'(16"/24" leg height)
- (5) sections of 3 row Choral Risers
(W/ optional 4th row & rear railing.)
- (40) Music stands & Music stand lights.
- (2) Rosewood Lecterns W/ built-in gooseneck lamps.

Equipment available for rent:

- (1) Steinway Model L Grand Piano
- (2) Steinway Upright Model K Pianos
- (1) 15'X20' Front Projection Screen W/ 8' bottom skirt (not suitable for rear projection)
- (2) Lycian 1290 2k Xenon Follow Spots
- (2) Lycian 1275 1200w HMI Follow Spots
- (6) Channels of Shure QLXD Wireless Microphones
- Harlequin Reversible Marley Floor (Gray/Black) (5 rolls, 6'6³/₄" W x 60' L)

Company Switches (Stage Right Wall)

- (2) 400amp/leg - 3phase/ 5wire - 120/208vac(double neutral)
 - Bare Tale or Cam Lok Connectors
- (1) 200amp/leg - 3phase/4or5wire/Ground Isolated 120/208vac
 - Bare tale connections only

Soft Goods & Rigging

(See pg. 6 for line-set schedule)

- ⊕ Show portal & curtain: dark red velour
- ⊕ (7) Sets of legs
- ⊕ (7) Border Curtains
- ⊕ All black velour (except show curtain & portal)
- ⊕ Cyclorama (leno filled scrim) white
- ⊕ (1) Black sharkstooth scrim
- ⊕ (1) White sharkstooth scrim
- ⊕ Speaker traveler curtain - black velour
- ⊕ Rear traveler curtain - black velour
- ⊕ (40) Single purchase counterweight batten sets 63' Long
- ⊕ (5) Electric lighting pipes
- ⊕ (3) Traveler curtain line sets - 76' long
- ⊕ (2) Side tab pipes
- ⊕ Locking rails stage left at stage level and fly floor 30'-0"
- ⊕ Pin rails on left and right at 30'-0"

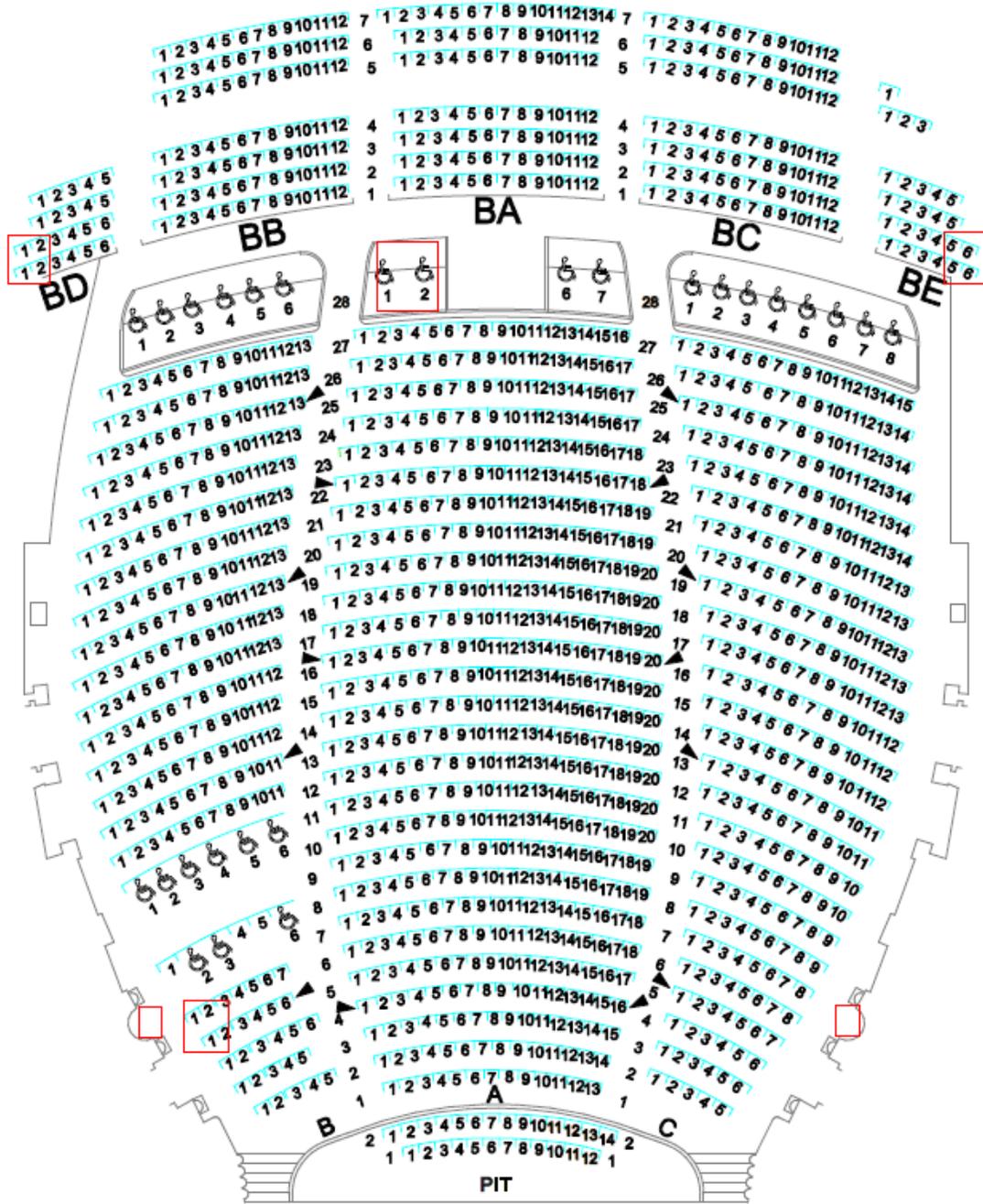
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Orpheum Theatre

Technical Specifications



Main Floor: 1036

Balcony: 302

Total Seats: 1338

Pit Seats: 26

Total Seats W/ Pit: 1364

Areas inside red boxes are preapproved locations for Video Cameras, and Production Equipment. Please inform your production coordinator if you are planning on using one of these locations.

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Orpheum Theatre

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General Policies & Procedures:

↪ General notes

- A Production Coordinator will work with you to assess your production needs, and provide estimates for Stagehand Labor, Production Services Support hourly costs, Equipment rental costs, Stage Door Guard, and Loading Dock Security Guard costs.
- There must be a Production Services staff member on site to direct and supervise work OF ANY KIND.
- City of Phoenix staff will not perform repair work on client equipment, except where life safety is involved or to prevent property damage.
- You are liable for any damages that occur in the course of your occupancy of the building.
- Phone lines, and internet access may be arranged, contact your production coordinator for more information.
- **Additional building rules and regulations can be found in the facility guide provided with your contract.**

↪ Food & Parking

- See the Facilities Guide provided with your contract for catering requirements and guidelines.
- Parking in Downtown Phoenix can be limited at times. Parking meters are active every day of the week from 8am until 10pm. Meter rates may vary with event activity. See: <http://www.downtownphoenix.com/map> for up to date parking and major event info.
- There are a number of parking garages with rates that vary with downtown event activity.
- Arrangements can be made for trailer parking at an offsite, fenced yard. Ask your production coordinator for details, and maps.

↪ Stage House:

- All scenery, backdrops, fabric etc. must be treated with flame retardant. A current stamp, or sewn on certification must accompany all goods. Goods without certification will be subject to open flame testing.
- Any pyrotechnic, or open flame effects of any kind, must be cleared by your assigned Production Coordinator and our on-site Fire Marshal at least two weeks prior to your event.
- City ordinance does not permit smoking **anywhere** in the building.
- You may not block the fire curtain, exits, fire extinguishers or fire hose cabinets at any time.
- Technical equipment may NOT be placed so as to interfere with accessible seating.
- You are required to fill all holes drilled in the stage floor. Drilling of holes requires approval of Orpheum Theatre Technical staff
- The stage is required to be left "Broom Clean". Excessive dirt may require the stage to be wet mopped at your expense after load out.
- Personnel Lifts must be operated as described by the manufacturer.
- Hard hats are required for anyone onstage while riggers are working at height. The City of Phoenix does not furnish Personal Protective Equipment to clients.

↪ Lighting & Sound

- The only positions for lighting and sound consoles in the house are at the rear of the house, under the balcony, or in the control booth.
- Some of our lighting instruments and drapery may be moved to accommodate your show. You will be required to restore them to their original position at the close of your show. Focusing lighting instruments or hanging lighting equipment on some of the house lighting positions requires a rigger.
- The Phoenix Convention Center's preferred audiovisual contractor can assist you with your audiovisual needs and equipment at the Orpheum Theatre. Contact your Production Coordinator for details.

↪ Auditorium

- Accessible seating areas may not be used for technical equipment at any time. Camera locations and any other temporary gear locations must be approved by your production coordinator.
- **Nothing** may be placed in the aisles.
- We do not allow food or beverages on the stage or in the house. (Water bottles with closable lids only.)
- Multi-cables or control cables run to rear of the house must go through the road show raceway under the floor. Length required is approximately 250'. Installation of cables requires approval of the Orpheum Theatre Technical Staff.
- We will **not** accept any deliveries prior to or after your contracted rental period. All equipment must be removed from the building immediately following your last performance or meeting.

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House Lighting Inventory & System Information

(see also Orpheum House Lighting Plot Drawing for additional detail)

Lighting Fixtures

- (242) Source 4 Ellipsoidal Bodies
 - (172) with 575w lamp bases,
 - (70) with 750w lamp bases (10°)
- (322) Total number of Source 4 Barrels
 - (27) Source 4 Ellipsoidal 10° Barrels
 - (103) Source 4 Ellipsoidal 19° Barrels
 - (117) Source 4 Ellipsoidal 26° Barrels
 - (63) Source 4 Ellipsoidal 36° Barrels
 - (12) Source 4 Ellipsoidal 50° Barrels
- (50) Source 4 PAR Bodies with 575w lamp bases
 - VNSP, NSP, MFL, WFL lens kits for each unit.
- (109) Strand 6" Fresnels 750w
- (15) Strand Dual Cell CYC Lights 1.5kw
- (10) 4 Color 8' Altman Zip Strips (MR16 EYC lamps)

FOLLOWSPOTS:

(additional rental and labor fees apply)

- (2) Lycian 1275 (1200 watt HMI) ceiling slot
- (2) Lycian 1290 (2K Xenon) Projection/Lighting Booth

Control & Distribution

- Control: A Closed lighting network with a 1gigabit throughput backbone, and wireless access point in the house connects:
 - (2) GIO 6k Consoles are running v2.6.1 (Updates will be installed at our discretion as they become available.)
 - (5) ETC Net3 Gateways
 - one is permanently installed in the Lighting Booth, and one in the FOH/Cove Position
 - (3) are portable
 - Ethernet lines allow for Gateways to be installed temporarily DSL, DSR and Balcony Rail.
 - (1) Nexus7 tablet utilized as a wireless remote
 - (1) RVI (Remote Video Interface) with (2) 21" widescreen monitors
- DMX Patch Bay located in lighting booth connects each lighting position with 5wire DMX cable, via three 4 port Opto-Isolating splitter units.
- (480) house circuits powered by Strand CD80sv Dimmers.

All Lighting instruments must be restored according to the House Hang Light Plot.

Contact your Production Coordinator for a copy of the House Hang Light Plot. We can provide you with a house show file for the GIO consoles compatible with ETC's EOS offline editor software. A Nomad network dongle is available to enable your laptop to connect to the primary console via wire or Wi-Fi. A Lightwright 5 file with the house hang is also available upon request.

Hanging plot and inventory is subject to change without notice



Audio Equipment & System Information

Console

- Yamaha PM5D-RH (48 channel)
- (2) Yamaha RIO 3224-D 32 inputs x 24 outputs
- (1) Waves One Server with basic plug-ins
- (4) Cisco Network Switches

Speakers

Center Cluster

- (3) EAW JF-560z
- (2) EAW JF-260z
- (4) JBL 18" subs (custom enclosure)

Stage Mains - Left and Right

- (8) EAW JF-560z
- (2) EAW SB-1000

Amplifiers

Crown Macrotech Amplifiers

Playback

- (2) Tascam CD-01U player
- (1) Tascam CD-RW2000 player
- (2) Tascam MD-801R minidisk player

Audio Lines

- (82) House microphone lines
- (1) 40x8 Line ground isolated Whirlwind house snake w/splitter

Stage Monitors

- (4) EAW SM200iH left 2way bi-amp
- (4) EAW SM200iH right 2way bi-amp
- (4) Ramsa WS-A200 side fill speaker

Microphones

- (1) Sure Beta 52a
- (10) Shure SM58
- (11) Shure SM57
- (2) Shure Beta 58a
- (1) Shure Beta 57a
- (6) Shure Beta 87a
- (8) Shure SM 81
- (3) Shure Beta 91
- (6) Shure QLXD wireless* with
*(6) Lavalier or (6) Handheld
available at additional cost
- (4) Crown PCC 160
- (3) Sennheiser E604
- (10) Sennheiser 421
- (3) AKG 414
- (7) AKG D409
- (2) Beyerdynamic M88

Direct Boxes

- (10) Countryman DT85

Intercom (Clear Com)

- (1) 4 channel Clear Com system
With an SB704 base station with headsets, speaker stations, and wired belt packs.

For further information contact your Production Coordinator
Inventory is subject to change without notice.



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Technical Specifications

RIGGING SYSTEM - LINE SCHEDULE

LS	Distance to Pro	Description
0*	0'-8 1/4"	Fire Curtain
1*	1'-0"	Red Show Valance
2	1' 8"	Red Show Legs
3*	2'-4"	Red Show Curtain
4	3'-4"	
5	4'-1"	Border Curtain
6	4'-7"	Leg Set
7*	5'-10"	1st Electric Pipe
8	6'-10"	
9	7'-6"	
10	8'-2"	
11	8'-10"	Border Curtain
12	9'-6"	Leg Set
13*	11'-0"	2nd Electric Pipe
14	12'-2"	Blackout No Fullness
15*	13'-4"	Black Traveler (speaker curtain)
16	13'-8"	
17	14'-2"	
18	14'-10"	Border Curtain
19	15'-6"	Leg Set
20*	17'-0"	3rd Electric Pipe
21	18'-6"	
22	19'-2"	
23	19'-10"	
24	20'-6"	

LS	Distance to Pro	Description
25	21'-2"	Border Curtain
26	21'-10"	Leg Set
N/A		Stage Left Side Tab
N/A		Stage Right Side Tab
27*	23'-4"	4th Electric Pipe
28	24'-10"	
29	25'-6"	
30	26'-2"	Border Curtain
31	26'-10"	Leg Set
32	27'-6"	Black Scrim
33	28'-2"	White Scrim
34	28'-10"	
35	29'-6"	
36	30'-2"	
37	30'-10"	
38	31'-6"	
39	32'-2"	Border Curtain
40	32'-10"	Leg Set
41*	34'-4"	5th (Cyc) Electric Pipe
42	35'-10"	
43	36'-6"	
44	37'-2"	
45	37'-10"	Border Curtain
46*	38'-10"	Rear Traveler
47	39'-8"	
48	40'-4"	Cyclorama

- **NOTES:** The above hang will be restored at the end of your event, at your cost. Rigging system guidelines and operating procedures are available upon request from your production coordinator.

- Grid Height: 66'11 1/4"
- Electrics battens trim to 45' & are 62' long.
- Normal Batten length is 63'2"
- *76' Battens - goods and tracks may **not** be moved.
- LS 1 Valance & LS 2 Legs: Red Velour with 75% fullness.
- Show Curtain: Red Velour with 75% fullness.
- LS 6,12,19,26,31,40 Legs: black velour tied with fullness.
- LS 5,11,18,25,30,39,45 Border: Black velour with no fullness
- LS15 Black Traveler (Speaker curtain): Black velour with 75% fullness.
- LS14 Blackout Black velour with no fullness.
- LS 32 (Black),LS 33(White) Sharkstooth Scrim
- LS 46 Rear traveler curtain: Black velour with 75% Fullness.
- Side Tab pipes have a curtain track hung on them, but no goods. Two pairs of legs from storage are available for this.
- LS 48 Cyclorama is a white Lino-filled Scrim.

STAGE and GRID IRON LOADING INFORMATION

- Max point load at the lift line gird channels (Wells): 2000lbs. Points must attach to both girds.
- Max point load at any other point using spreader pipe on top of the extruded grating and spanning at least two gird support channels: 640lbs
- Roof Live Load (Reducible) 20psf
- Stage Floor Live Load: 125psf
- Assembly areas Live Load: 100psf
- Sidewalk Live Load: 125psf
- Catwalks: 40psf
- All rigging points must be approved by your production coordinator two weeks prior to event load-in.

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Staffing Guidelines

Phoenix Convention Center and Venues primarily, but not exclusively, use members of the stagehands union (I.A.T.S.E.) to provide technicians to staff theatrical events. We abide by the current wages, terms and conditions as set by the I.A.T.S.E. local. However, we are using and have used persons who are not members of the stagehands union. We are NOT a union house and have no contract with the stagehands union. Union membership is NOT a requirement to work on shows or equipment and systems at the Phoenix Convention Center and Venues.

Clients are free to use whatever personnel they wish to handle and operate their OWN equipment. Phoenix Symphony Hall and Orpheum Theatre systems and equipment must be operated, repaired, or maintained only by competent, qualified* persons who are approved by the Production Services Manager or a designated representative.

Minimum crew staffing levels are determined solely by the number of technicians to provide a safe and professionally appearing production. However, clients may have as many additional technicians as they wish. As dictated by the preceding two paragraphs, these technicians may be a combination of technicians approved by the Production Services Manager and client-supplied technicians. House positions will still be required if approved alternate, client provided operator personnel is utilized.

THERE ARE THREE EXCEPTIONS TO PROVISIONS OF THESE GUIDELINES:

1. "Yellow Card" shows: These are productions where the touring promoter, NOT the local promoter, has signed an agreement with the union to exclusively use members of I.A.T.S.E. at each venue in which they perform. The contract between the touring promoter and the local promoter normally require them to abide by this agreement. Staffing levels, and certain other conditions, are set by the terms of this agreement and the road crew normally communicates crew calls directly to the I.A.T.S.E. local.
2. Production companies' signatory to the MASTER COMMERCIAL INDUSTRIAL agreement: A number of the national commercial industrial production companies have signed an agreement with the union that, on a nationwide basis, sets wages, terms and conditions for the stagehands which they employ. This enables them to bid on jobs without having to know the specifics of any local union's wages, terms and conditions. Additionally, since these shows typically are performed in more than one city, it enables the production company to determine crew costs in advance. The Phoenix I.A.T.S.E. local is required to abide by the provisions of this "MASTER" agreement as is the production company. Crew calls are normally communicated directly to the I.A.T.S.E. local by the production company.
3. The local production company has signed an agreement with the stagehands local to provide stage labor for its production.

Note: By law, the Phoenix Convention Center and Venues are not allowed to be involved with the relations between a union and any group with which it contracts. Even in these three instances, we may prevent unqualified persons from operating city equipment and systems. The only things normally affected in these three instances are staffing levels, wages, terms, conditions and the required use of union personnel.

*Qualified person is defined as:

A person who demonstrates training, experience and skill in a particular technical area or areas (electrician, audio engineer, rigger, flyman, etc.). Additionally, such person will have trained on and be familiar with the operation manuals, guidelines, safe and proper operating practices, and when applicable, emergency procedures related to Symphony Hall and Orpheum Theatre systems and equipment.

One who is capable of identifying existing or predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective action to eliminate these hazards.



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Orchestra Lift Procedures and Guidelines

Maximum lifting load: 12,400lbs

Static load capacity of 38,750 lbs.

All loads must be evenly distributed

- 1) Lift is to be operated only by qualified personnel knowledgeable in its operation, safety features, and these guidelines.
- 2) Lift SHALL NOT be operated with any safety interlock or safety feature bypassed or defeated.
- 3) NO ONE is to enter or exit the lift while it is in motion.
- 4) NO ONE is to stand within 18" of the edge of the lift while the lift is in motion.
- 5) NO ONE shall be permitted to hang arms or legs over the edge of the open pit, or sit on the edge of the open pit when the lift is below stage level.
- 6) The lift shall be operated only with all pit wall partition panels in place. The only exception to this is during the installation or removal of the seat wagon.
- 7) Operator must be in constant, unobstructed visual contact with the lift while the lift is in motion.
- 8) When the presence of an operator on the lift will interfere with a performance (or final dress rehearsal) the remote operator must have constant visual contact with the entire lift. A minimum of one spotter in constant headset communication with the operator is required. Production Services technical staff will require additional spotters and/or safety measures deemed necessary. A spotter on stage level will also be required while the pit lift is used to transport stage equipment to and from the lower level trap room.
- 9) Performers and/or stage production crew on a moving pit lift shall remain stationary until pit lift comes to a complete stop.
- 10) Equipment, scenery, props, risers, and similar items are not to be placed, stored, or set so that they are supported by both the stage and the lift.
- 11) When lift is in the lowered position, the pit area is to be secured at house level with all pit wall partition panels securely in place.
- 12) When the lift is in the lowered position four (4) feet or more below stage level or is set as an orchestra pit, the pit area is to be secured at stage level with Orchestra Pit Safety Barrier (safety rails and weighted bases). The Safety Barrier will be installed by Client's production support crew on the stage level following the manufacturer's instructions and guidelines, at Client's expense.
Exceptions: During final dress rehearsals and performances, the Orchestra Pit Safety Barrier may be removed by Client's production support crew. This exception is for the duration of said rehearsal or performance only.
- 13) Following any performance or final dress rehearsal when the lift is in the lowered position, a Maximum of twenty (20) minutes shall be allowed for the client's production support crew to fully restore the Orchestra Pit Safety Barrier. The pit area opening shall be constantly attended by a minimum of one authorized spotter on stage level until the Safety Barrier is put back into place.
- 14) While the lift is in the lowered position, non-production personnel and event patrons will not be allowed on stage until Orchestra Pit Safety Barrier is fully installed.

DEFINITIONS

Final Dress Rehearsal – A final rehearsal of a stage show before opening to the public. All scenery should be built and painted, properties and costumes complete, lights focused and gelled, and the entire show ready for a final run-through with cast and crew to qualify as a dress rehearsal.

Orchestra Pit Safety Barrier – Safety Rail 2000 system which includes; safety rails and one hundred and eight pound (108lb) bases distributed at the designated points across the leading edge of the orchestra pit.

Pit Wall Partition Panels – A series of removable panels separating the house section from the orchestra pit.

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General Safety Requirements

- Staff, clients, contract labor and all others working in or entering City of Phoenix Convention and Phoenix Convention Center & Venues Facilities shall at all times adhere to all Federal, State, and Local Laws, regulations, and standards related to safe working conditions and practices. Work being performed shall be done so in accordance with all applicable OSHA (federal),
- ADOSH (state), American National Standards Institute (ANSI), National Fire Protection Association (NFPA) standards, guidelines, local fire regulations, any applicable consensus standards, industry recommended practices and Department and Division safety policies and requirements. Equipment shall only be operated in accordance with the manufacture's written recommendations.
- Of special note are the following Items: if you are bringing any chemicals into the theatres or onto City of Phoenix property (this includes, but is not limited to, fog or haze fluid, spray or other kinds of paint, costume and shoe dyes) you must supply the Production Coordinator with the Material Safety Data Sheet (MSDS) in advance of the move-in.
- Use of pyrotechnics or open flame requires a permit from the Phoenix Fire Department. Other types of similar effects may also require a permit. This permit must be applied for no later than two weeks before the event. Pyrotechnic effects require an operator licensed by the City of Phoenix. Licenses issued by other jurisdictions are not acceptable.
- Per NFPA70 blocking of fire exits, egress routes, fire extinguisher cabinets and fire alarm panels is not permitted at any time. Obstruction of the Theatre fire safety curtains is not permitted at any time. Fire doors are not to be blocked open using stage weights, wedges or similar objects.
- Hard hats shall be worn whenever there is the possibility of injury from falling objects.
- Fall Protection: The Orpheum Theatre has specific fall protection plans for the areas having a fall hazard. Suitable fall protection equipment shall be used whenever a fall hazard exists. All types of industrial trucks shall be operated in accordance with posted regulations. The house does not provide harness to non-city personnel. You may use your own, or have your employer provide one for you.

Fork Lifts:

- Forklifts are to be operated only by trained, qualified personnel.
- Speeding, reckless driving, riding on the forks or riding other than in a seat is not allowed.

Personnel Lifts:

- Personnel lifts are to be operated only in accordance to the manufacturer's recommendations.
- Personnel lifts are to be operated only by authorized, trained and qualified personnel.
- Personnel lifts shall not be operated without the outriggers, when part of the lift system, and must be installed in accordance with the manufacturer's requirements.
- Personnel lifts are not to be moved horizontally with personnel in the raised basket when not allowed by the manufacturer.
- The stage floor is rated for 150lbs per square foot.
- Additional plywood sheeting may be required for heavy equipment such as fork or Scissor Lifts.

NOTE: City of Phoenix equipment shall be operated only by persons authorized to do so by Production Services staff.

**If you have any questions, contact your
Production Coordinator, we are here to assist you.**

To request an alternative format of this publication, contact us at
1-800-282-4842 (voice) or 602-495-5048 (TTY).

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