

# Susan Brotman Auditorium

# **TECHNICAL INFORMATION**

For a complete inventory of theatrical equipment, contact McCaw Hall's Production Manager @ (206) 733-9720.

Please see Support Personnel Rates on page 17 for all technical personnel charges. Stage Technicians are represented by IATSE Local 15, and have jurisdiction over all work in the stage area and over all City-owned theatrical equipment within the building. Sound Operators are represented by IBEW Local 46 and have jurisdiction over all City-owned sound and video equipment within the building. Your Event Service Representative will arrange for all event labor.

# **Seating Capacity**

- 2953 including 62 pit seats. For more detail see patron services info from your ESR.
- See pages 19-22 for details and ADA info.
- See pages 23-27 for seating charts.

# **Stage Dimensions**

- Proscenium: 60' wide x 35' high
- Grid Height: 100'
- Stage is 3'6" above house floor
- Depth: apron edge to plaster line 4'10.5"
- Depth: apron edge to main drape 6'
- Depth: apron edge to back wall 74'
- Depth: plaster line to upstage electric's catwalk 60'
- First balcony rail to plaster line 84'
- U-Shaped electrics catwalk located on stage left, stage right and upstage; clearance stage floor to underside of catwalk is 40'
- Lock rails at stage level and at 40' catwalk.
- Two loading galleries.

Stage Right Wing: (measured from proscenium opening)

- 14' to electrics catwalk overhead
- 19' to locking rail

Stage Left Wing: (measured from proscenium opening)

- 17'6" to electrics catwalk overhead
- 24' to SL wing curtain
- 80' wide x 40' high motorized wing curtain to mask scenery handling area. Black velour (no acoustic isolation)

Scenery Handling Area Stage Left:

- 70' deep x 75' wide (including 600 sq. ft. scenery lift) Stage Floor Trapped Area:
- 42'10" deep x 25'10" wide with two levels of trap rooms (Pit Level and Lower Level). Trap panel sizes vary, most are 6' x 8'. Consult Production Manager for specifications and availability.
   Stage Floor:
- Black dyed and sealed maple; rated load is 250lbs. per square foot

#### Orchestra Pit

Two curved lift platforms

- US lift: 9'1" deep at CL x 67' wide
- DS lift: 6'10" deep at CL x 70'-7" wide
- Each section can be set at: Stage Level to expand apron, Auditorium Level for audience seating, Pit Level as flat floor or two-tiered Pit.
- Orchestra capacity 90
- The 3'6" high wall between the pit and the audience has two
  doors which open to allow audience to enter when set as
  audience seating. This wall also has fill speakers concealed in it.

#### **Power**

Stage Area:

- Upstage Right, 2 each 400A disconnects. Additional available if house lighting system is not in use.
- Downstage 50' Off Left 200A, audio technical power panel
- Downstage Left 100A, audio technical power for mixing console
- Six 60A 3 phase Hubbell pin and sleeve receptacles spread around stage

Electrics Catwalk:

- 2 400A disconnects
- 3 300A disconnects

FOH Catwalk:

- 2 200A disconnects
- 2 60A 3 phase Hubbell pin and sleeve receptacles

Scenery Handling Area:

- 200A disconnect, audio technical power
- 200A disconnect for tools/motors
- 200A disconnect for lighting

Stage Level Loading Dock:

• 400A disconnect

Lower Level Loading Dock:

• 200A 3 phase 5 wire disconnect 208Y/120 VAC

# **Loading Docks**

Access to loading docks is via Gate 7 at the intersection of 4th Avenue and Republican St. See map on page 18.

Stage Level Loading Dock: 500 sq. ft loading dock with two levelers and two bays

- Two load-in roll doors 10' wide x 12' high ea.
- Distance from load-in to stage = 138', straight push
- Capacity for two trucks
- 2,600 sq. ft. receiving space
- See Power, above.

Lower Level Loading Dock: one bay for broadcast trucks and buses. See Power, above.

# Susan Brotman Auditorium TECHNICAL INFORMATION

# **Parking**

The following parking options MUST be arranged in advance with your Event Service Representative.

Stage Level Dock: One bus or truck, plus 4 personal vehicles can remain on the stage loading dock during a performance for best access to stage.

Lower Level Loading Dock: One bus can park at the lower loading dock. Access to stage is via elevator and a separate door guard is required.

4th Avenue: Room for up to three buses. Good access to backstage, no shore power.

Mercer St. Garage: Up to seven parking permits per day in the Mercer St. Garage are included with full facility rent. No oversize vehicles.

# Stage and Sound Labor Quick Guide

This is not an all-encompassing description of the Stage Department's employee agreement, but includes answers to FAQs. Stage Crew are represented by IATSE Local 15, working under contract with City of Seattle.

Contact your ESR for current rates.

- All work calls involving a crew require a Stage Lead. There are usually two Stage Leads onsite at all times; a House Steward and Electrician.
- Sound Operators are IBEW Local 46, and operate all House sound equipment.
- Grip rates apply to all general labor.
- Intermittent rate applies to:
  - All workers (except stage leads) during show rehearsals and performances.
  - Forklift drivers, Genie lift bucket work, heavy equipment operators, truck loaders, spot operators.
- Rigger Rate applies to:
  - All rigging work.
  - All scaffolding work above 6 feet; workers must wear fall protection.
  - o All boom lift work; workers must wear fall protection.
  - All truss work, focusing truss lights and truss spotlight operators.
- Four hour minimum. Work period of 5 hours without a meal break is allowed and often used.
- Pay is on the ½ hour. The exception is after a meal break, employees come back to work for one hour minimum.
- If a break of more than two hours occurs, a second 4 hour minimum is applicable.
- Overtime rate applies after 8 hours or on City holidays.
- Meal penalties are after 5 hours at twice current rate until broken. If a half hour break is given a catered meal must be provided.
- No premium pay for work between midnight and 8am or on weekends
- Generally, spotlight ops work show only and not the out.

#### **Elevators**

Scenery Elevator

- Scenery lift located in SL wing, 14'11" x 36'3"
- Weight capacity 33,000lbs. dynamic load / 83,000lbs. static load
- Moves scenery/equipment from Lower Level to Stage Level

Elevator 5 - Passenger Elevator

- · Located in stage left scenery handling area
- Access to stage level, lower level loading, orchestra pit, front of house lobby levels, kitchen
- 5'8"w x 8'5"d x 7'5"h. Door 4'w x 7'h

Elevator 6 - Freight and Passenger Elevator

- · Located in stage right dressing room hallway
- Access to Stage Door entrance, lower level, orchestra pit, stage level, Rehearsal Hall
- 8'8"w x 9'4"d x 9'4"h. Door 6'w x 7'h

#### Lifts and Ladders

- Two Genie lifts AWP-40S, DC, working ht. 46'6"
- One Forklift (Must be arranged in advance.)
  - o 3000 lbs. lifting capacity, forks are 41"long, 2"high/4"wide
  - o 6428 lbs. vehicle weight
- Lots of ladders

#### **Platforms**

Please consult with your ESR about your staging needs. Platforms and choral risers are available from the main Seattle Center inventory, in addition to McCaw Hall platforms.

#### **Pianos**

- One Steinway B Grand, 7', refurbished in 2003. Also used in Lecture Hall. Suitable for pit piano use and non-classical ensemble use onstage.
- One Steinway Upright Grand, rehearsal quality.
- See Equipment and Services addendum for rates, page 16.
- Additional instruments may be rented from outside vendors.

## **Soft Goods**

Main Drape:

- Red, with jewels, 100% fullness 25 ounce velour
- Vertical travel (guillotine)
- Motorized with variable speed control
- Off-stage edge wire guided, split on center for paging

Qty in stock	Masking:	Dimensions	Included with rental	Available at additional cost
- 1	Full-stage traveler - black velour, 50% fullness, w/track	2 @ 41'6" x 45'	Not Included	One @ \$250
1	Blackout drop, split, sewn flat	2 @ 40' x 40'	Not Included	Pair @ \$150
2	Blackout drop, sewn flat	80' x 50'	Up to one	One @ \$150
8	Pairs of legs - black velour	16' x 45'	Up to 4 pairs	Four pair @ \$50 / pair
7	Borders - black velour	80' x 16'	Up to four	Three @ \$25 each
2	Scrims - black & dark blue, cotton sharkstooth	80' x 50'	Not Included	Two @ \$250 each
I	White Rear Projection screen / cyc	64' x 36'	Not Included	One @ \$250
1	Dalite Screen, front or rear, with dress kit (4:5 ratio)	16' x 20'	Not Included	One @ \$600
I	Truss framed rear projection screen (16:9 ratio)	22.5' x 40'	Not included	One at \$950

# Susan Brotman Auditorium Rigging System

- Counterweight rigging by Clancy, standard single purchase system, 112 line sets on 6" centers (batten lengths 80").
- First line set is 1'9" upstage of plaster line, and is 1' downstage of the Main Drape. The second line set is 3'8" upstage of the plaster line. Line sets continue at 6" on center.
- Grid Ht.100' above stage floor.
- Lock rails at stage level and on 40' catwalk. Two loading galleries.
- Fire Curtain is a framed metal 'wall', 9" thick, 3" upstage of the plaster line.

# The plane of the fire curtain must remain clear.

- Thirty computer-controlled spot winches (Stage Technologies Nomad System) upstage for use independently or in conjunction with conventional counterweight system.
- There is no rigging (motorized or counterweight) in the extreme upstage 9' of the stage, due to electrics catwalk overhead.
- Front of House: nine sound/light rigging slots over apron, running upstage to downstage, 4000 lbs. point load typical.



# Susan Brotman Auditorium LIGHTING SYSTEM

Auditorium Rental includes first 100 conventional theatrical lights, ETC Obsession control console and complete dimming system. Request the full Production Guide from your Event Service Representative for rental costs on equipment not included with the facility rental. Some equipment requires additional staffing. Check with your ESR for availability of lighting equipment for your show and incremental staffing that may be required.

Lighting Fixture Inventory					
311	Source 4 bodies, new in '03, 750W				
39	50° barrels				
60	36° barrels				
163	26° barrels				
133	19° barrels				
12	14° barrels				
101	10° barrels				
12	5° barrels				
24	Source Four Zoom, 15-30 degree, 750W				
60	Source Four PAR, 750W				
50	Strand 8" Fresnels, mix of 1kW and 2kW				
4	5kW Fresnel Arri Studio 5000 Theatre, w/barn door, snoot				
4	4kW HMI Arri Daylight Compact Theatre Fresnel				
4	Wybron shutter dowser for HMI's				
2	Wybron power supplies				
8	Selecon Aurora 3-way flood, TkW per cell				
8	Selecon Aurora 3-way cyc, TkW per cell				
18	4-cell Cyclorama ground row lights Aurora Selecon, 1kW per cell, 2 cuts per sheet				
7	laneros, 4-cell, IkW per cell				
20	Altman Zipstrips, 3 circuit, 750W per cir, 30 cells, 6'6" long				
48	Sidearms				
8	Pipe Booms with 50 lb. Base, 12' tall				
Lots	Pattern holders, donuts, drop in iris, color frames, safety cables				
Scrollers					
36	Wybron Colorams with S4 and S4PAR mount plates, stock scrolls				
7	Wybron power supplies				
4100	Feet of signal cable for scrollers				
3	Road case for Scrollers (12 units each)				
	Consult Production Manager for stock color scroll info				
Intelligent Lighting					
10	Martin Mac 2000 Performance				
6	Martin Mac 2000 Profile				
8	Martin Mac 2000 Wash				
Lot	signal cable for Martin gear				

Lighting Positions and House Hang							
Lighting Position	House hang	Throw dist.*	Angle*				
Box Boom I, HR and HL	14) 19° Source 4s, each	50'	46°				
Box Boom 2, HR and HL	10) 10° Source 4s, each	64'	40°				
Box Boom 3, HR and HL	6) 10° Source 4s, each	75'	34°				
Bridge	24) 19° Source 4s 24) ETC S4 Zoom 15-30	59'	52°				
Ist Tier Rail	none	87'	5°				
2nd Tier Rail	none	114'	13°				
Followspot booth	See Followspot info	158'	20°				

\*to 6' above stage, at main drape line

#### House Hang

Please see above chart for info on our FOH hang.

McCaw Hall does not have a house hang over the stage. Each event is responsible for hanging and clearing the lighting for its event. We make every effort to facilitate cooperation between clients' needs to minimize expenses. Please consult your ESR or the McCaw Hall Production Manager for more info.

#### **Lighting Control Consoles**

2 ea. ETC EOS Ti Consoles control stage dimmers, scrollers, moving lights, over an ETC Net3 data network.

Lighting booth located orchestra level House Center. Secondary lighting control SR.

# FOH Console location for shows traveling with production

Flat floor section, 8' x 5', in back row of orchestra level, house left of light booth. Approx. 16' from sound mix.

#### **Dimmers**

ETC Sensor AF Dimmer Racks

- 960 20A stage dimmers hardwired dimmer per circuit.
- Portable 6kW dimmer packs are available.
- Circuit distribution over the stage is via multi-cables.

#### **Followspots**

3 Lycian I 290 XLT Xenon follow spots in follow spot booth located above Second Tier. Throw distance to center stage: I 70'. Spots can hit first I 2 rows of audience seating.

#### **Mix Positions**

All positions have cable paths from stage and loading docks

- House Center Mix, 80' from center stage, 200' cable path to stage left mix, in front of balcony overhang. Kills 21 seats, plus 18 view obstructed seats (39 seats total).
- Mini Mix, for lectures, located in Dress Circle, kills 4 seats.
- Stage left monitor mix.

#### Consoles

- 2 Yamaha PMID control surfaces
  - o The PMID includes all processing and effect functions.
- 2 Yamaha PMID Mix engines. 96 inputs, 80 outputs total.
- I (one) Yamaha OIV96 portable mixing console for small events

# **Auditorium Speaker Systems**

- All speakers are from the JBL Custom Shop, Venue Series Long throw systems – I x 2", I x horn loaded 10", 2 x 14" Down-fill systems – I x I", I x horn loaded 8", I x 14"
- Seven three way discreet systems built into the proscenium arch:
  - Three clusters in the top of the arch, each with long throw and down fill components. Left, Center, Right panning ability.
  - Two clusters in each side of the proscenium, upper and lower,
  - $\circ$  plus LF and Subwoofers. LF = 2 x 15", Subs = 2 x 18"
  - o All systems discretely controllable.
- Maximum SPL at mix before clipping = 110dB SPL-A.
- Delay and fill systems include:
  - o Above and below balconies
  - o Pit rail fills
  - o Stage lip fills for seated orchestra pit
  - o 32 surround/effects speaker plug boxes throughout house
  - o Surround/effects speaker plug boxes throughout stage
- Additional matching center speaker cluster is available to rig downstage of the proscenium for performances that play on the forestage pit lift. Required for lavalier mic use on the pit lifts.

### **Stage Monitor and Effects Systems**

- Eight monitor wedge mixes are available, plus two side-fill mixes.
- Additional mixes for in-ear monitors are available.
- II (eleven) JBL Custom Shop TTM129 12" x 2" wedge monitor speakers, including cue.
- 2 JBL Custom Shop 3-way I x 18", I x horn loaded 10", I x 2" side-fill monitor speaker systems
- 2 JBL Custom Shop single 18" monitor system sub-woofers Onstage effects speakers available, various types
- Electrics gallery and pin rail monitor systems, 48 JBL Control 25AV

#### **Amplifiers**

- Crown MacroTech 600, 1200, 3600 for main systems
- Crown MacroTech 3600x1200 wedge monitor amps with DSP
- Crown MacroTech 3600 and 1200 side-fill system amps
- Lab Gruppen C Series for fill, effects and page/program systems
- Crown IQ and Lab Gruppen NomadLink amplifier monitoring

#### **Processing**

• BSS Soundweb London processors throughout. 4 units for the PA, and 3 for paging and program distribution.

#### Microphone split

• XTA active 4 way - 56 channels

#### **Microphones**

 Large inventory including – Shure UHF wireless, and wired mics from Neumann, Microtech Gefell, Sennheiser, EV, Audio Technica and Shure.

# **Independent Lobby Systems**

- The Grand Lobby and several other function rooms have separate ceiling speaker systems featuring Yamaha OIV96 mixers.
- These systems also interface with the main auditorium systems.

#### Infrastructure

- Microphone, Line level, and Video tie lines throughout the building.
- Copious cable passageways from loading docks to stage and house positions.

Intercom: 8 channels of Clear-Com available with full inventory of headsets, beltpacks and biscuits. Twelve UHF dual-channel wireless units are available.

Assistive Listening: Sennheiser infrared system with 65 headsets including 8 neck loop hearing aid compatible units.

Audio Description Booth located Orchestra Level house left.

Backstage monitor system in all hallways, dressing rooms and performer lounges w/ priority paging.

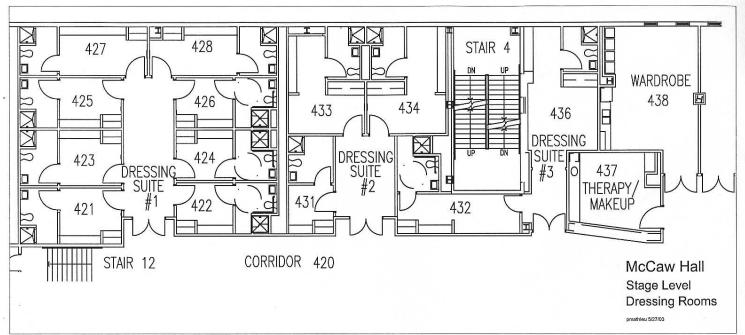
# **Remote Recording Locations**

- Orchestra Level audio booth house right
- First Tier broadcast booth house left
- Cable access and power at both loading docks

#### Video

- Camera locations: First Tier rail, projection booth, or follow-spot booth. Depending on lighting control needs, the best camera location is at the back of the orchestra level, house left of the light booth. Cable path 200' to stage.
- In-house video tie lines to most areas for composite signal routing
- Permanent monitors in FOH areas for monitoring stage or support of local programming
- Portable monitor inventory for stage monitor use
- · Color and infrared cameras available for stage monitoring
- Contact ESR for projectors, switchers, etc.
- Limited ability to route HD-SDI signals over coax.

See Power Section, page I for Audio Technical Power disconnects.



# **Dressing Rooms**

Stage Level: 13 principal dressing rooms located stage right, capacity I-4 each, includes: make-up counter with lights and outlet strip, private restroom with shower, wardrobe rack, direct stage access, phone line. Consult your ESR to activate phone lines.

Lower Level: (not shown): 5 chorus dressing rooms, capacity 15-20 each (94 stations total), includes: dressing station, restroom with showers, make-up counters with lights and outlet strips, wardrobe racks, wire baskets for storing personal items, phone line. Consult your ESR for availability.

#### Wardrobe

Stage level wardrobe room adjacent to principal dressing rooms, with 2 washers, 2 dryers, a steamer, ironing board and iron, work tables, racks.

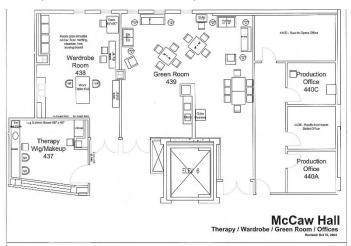
#### **Production Offices**

Rooms 440A and 440C: Two offices at stage level. I 00 sq. ft. each, with table, chairs, phone and data lines (consult your ESR). Additional production office spaces possible. Consult your Event Service Representative.

# Additional Artist/Crew Spaces

#### Stage Level

- Green Room, 900 sq. ft. with sink, refrigerator, microwave. Best backstage catering location.
- Props room with sink, refrigerator, microwave and stove. Good for backstage catering support.
- Therapy or Make-up room with ice machine, make-up mirrors/counters, and space for massage table.
- Crew room located stage left.



#### Orchestra Pit Level

- Musicians lounge
- Musicians changing rooms (men's/women's)

#### Rehearsal Hall Level (inquire re availability)

- 54' x 78'. Rehearsal Hall with private restrooms, elevator access and acoustical isolation. 20' high ceiling. Resilient dance floor
- Six private coaching rooms adjacent to Rehearsal Hall with acoustical isolation.