

HERBERGER THEATER CENTER

222 EAST MONROE PHOENIX, AZ 85004

CENTER STAGE FACILITIES AND EQUIPMENT INFORMATION

Architectural Design: Hunt, Needles, Tamen, and Bergendorf, Phoenix, AZ
Theatrical Consultant: George Thomas Howard and Associates, Hollywood, CA
Opening date of facility: July 19, 1989

President: Richard A. Bowers
Vice President of Operations: Mark Mettes
Technical Director: Randy Levine



Center Stage: Proscenium Theater

Orchestra and loge:	436
Orchestra Pit:	37
Balcony:	<u>328</u>
TOTAL SEATING CAPACITY:	801

STAGE FLOOR:

Resiliently mounted subfloor consisting of two (2) layers of 5/8" plywood, is covered with flat-grain, tongue and grooved, 33/32" Northern Hard Maple, and stained black. Any attachments to the stage floor must be approved by the CENTER Technical staff. The majority of the stage floor can be trapped. Trap area is 36'-0" deep starting 5'-2" up stage of plaster line, and 56'-0" wide on center. Contact the CENTER's Vice President, Technical and Support Services if you need to use floor traps.

STAGE DIMENSIONS:

PROSCENIUM:

Proscenium width is adjustable via sliding proscenium portal pieces on either side of the stage. Height is adjustable via the Grand Teaser.

Height (maximum)	26'-6"
Width (maximum)	44'-0"
(minimum)	30'-0"

STAGE CENTER LINE TO:

Arbor pit/locking rail	37'-6"
S.R. column face	68'-6"
Edge of wood/concrete floor	45'-6"
Company switch	53'-0"

STAGE DIMENSIONS Cont.:

***NOTE:** Dimensions from the plaster line to F.O.H. locations are made from a point 6 feet above stage level on the center line.

PLASTER LINE TO:

Back of house orchestra (sound control booth)	58'-3"
Back of house balcony	73'-9"
Balcony rail on center line	42'-6"
D.S. edge of orchestra lift	12'-10"
D.S. edge of apron (on center line)	4'-6"
U.S. column face	47'-8"
Last fly line	46'-6"
First F.O.H. lighting beam position	45'-0"
Second F.O.H. lighting beam position	54'-0"
Lighting control booth window	76'-0"
Box boom top	31'-0"
Box boom bottom	28'-0"

STAGE LEVEL TO:

House floor	-3'-6"
Roof beams over S.R. wing	27'-0"
Fly gallery	31'-0"
Electric gallery	43'-0"
Loading bridge	56'-0"
Gridiron	64'-0"
Bottom flange of roof beam	72'-0"

HOUSE CENTER LINE TO:

Box boom	32'-0"
House sidewalls at widest point	38'-0"
Crown cove	29'-0"
Anti-proscenium light slot	25'-0"

NOTE: If direct access to the stage from the house is needed by actors or audience members, arrangements must be made with CENTER Technical Staff prior to tickets going on sale.

ORCHESTRA PIT LIFT:

- 1) Orchestra pit is a fixed speed hydraulic lift manufactured by Gagnon LaForest, Inc.
- 2) Operating stations are on the pit and at the stage right anti-pro lighting slot adjacent to lift.
- 3) Lift area is approximately 320 square feet designed to sustain a static or lowering load of one-hundred-fifty (150) pounds per square foot, plus the seating wagons. Lifting load is rated at 125 pounds/sq. foot plus seating wagons. Live load rating is 125-pounds/sq. foot.
- 4) Lift deck is same composition as stage floor.
- 5) Three (3) seating wagons containing a total of thirty-seven (37) seats store under the house at traproom level. These wagons are for use on the orchestra lift and are included in the total seating capacity for the house.
- 6) Fixed lift stops are as follows:
 - A) Stage level
 - B) House level
 - C) House level minus the height of the seating wagon
 - D) Orchestra pit level
 - E) Trap room level
- 7) Travel time from Trap room to Stage Level is approximately 60 seconds.

LOADING DOCK/RECEIVING BAY:

- 1) Loading dock and receiving bay is located on the west side of the building just south of Van Buren Avenue on Second Street.
- 2) Loading dock is at stage level and can accommodate two (2) 48' trailers.
- 3) Loading Dock doors open into receiving bay area directly adjacent to the stage.
- 4) Receiving bay enters theater at upstage right wing.
- 5) A freight elevator in the receiving bay services the trap room.
- 6) The "Broadcast Van Box" in the loading dock has thirty-two (32) balanced mic level tie lines and twelve (12) line level tie lines to the patch bay in the sound booth. Both A and B channels of intercom are also available, with four (4) jacks for each channel.
- 7) There is no on site parking.
- 8) A 5" conduit system travels from the "Broadcast Van Box" to upstage right. This system is utilized in getting cable from the production van into the theater. Once at the upstage location the system branches out to several locations. Other locations upstage of the proscenium are upstage left, downstage right and left and at the various gallery levels. Locations downstage of the proscenium both onstage and in the house are also available. If an audience will be present during the event being taped, the local fire code will require the conduit system be used to enter the building, cross the proscenium, and for access into the house.

LOADING DOCK AREA DIMENSIONS:

Dock doors (overhead rolling)	8'-0"w X 12'-0"h
Dock height	3'-8"h
Receiving bay	18'-0"w X 23'-0"h
Stage doors (from receiving bay)	7'-8"w X 11'-10"h
Receiving bay ceiling height	12'-6"h

STAGE RIGGING:

NOTE: DUE TO LOCAL FIRE REGULATIONS THE SAFETY CURTAIN MUST NOT BE OBSTRUCTED IN ANY MANNER WHICH COULD PREVENT ITS DEPLOYMENT AND COMPLETE CONTACT WITH THE STAGE FLOOR.

NOTE: ALL SCENERY, PROPS, STAGE DRESSING, COSTUMES AND ALL OTHER FLAMMABLE MATERIALS MUST BE FLAME PROOFED. RANDOM TESTING OF ARTICLES WILL OCCUR. ABSOLUTELY NO BARE OR UNPAINTED WOOD WILL BE ALLOWED AS PART OF YOUR SCENERY.

- 1) Stage rigging consists of sixty-seven (67) single purchase counterweighted line sets plus one Grand teaser, a Grand Drape and the safety curtain. There are also two (2) side-masking tabs, which run perpendicular to the plaster line. Tabs are single purchase counterweighted lines.
- 2) An arbor well below stage level allows for full batten travel from deck to grid. Lattice track mounted sets do not come into deck.
- 3) Arbor capacity is 1,500 pounds.
- 4) Locking rail is located stage left, at stage level. There is a steel double pin rail at the fly gallery and electric gallery on both sides of the stage.
- 5) See attached line set schedule.

ELECTRICAL:

NOTE: DUE TO POWER RESTRICTIONS THE TOTAL CONNECTED LOAD TO THE THEATRICAL LIGHTING SYSTEM SHALL NOT EXCEED 3,500 AMPS. THE COMPANY SWITCH IS PART OF THIS SYSTEM AND MUST BE FACTORED INTO THE TOTAL CONNECTED LOAD, IF USED.

- 1) Center Stage theatrical, house lighting, and lobby lighting systems are fed from a single transformer providing 500 KVA, 120/208, 3 phase, 5 wire service.
- 2) Two (2) company switches are available down stage right. Each switch is fused at 600a, 120/208v., 3 phase, 5 wire. Please check for availability of tie in lugs, as these are buss bar type disconnects.
- 3) All F.O.H. and grid circuits go through the "F.O.H INTERRUPT PANEL" located down stage right at stage level, allowing road show control of these circuits.
- 4) Control system is a soft patch, dimmer per circuit for the 20 amp circuits. 50 amp circuits must be "hard patched" to 6Kw dimmers at the "F.O.H INTERRUPT PANEL," as well as soft patched to a control channel.
- 5) Control console is a STRAND 550, controlling COLORTRAN I Series dimmers. The dimmer room is located on the stage right electric gallery.
- 6) All 20 amp theatrical lighting circuit connectors are stage pin with ground.
- 7) Circuits for electrics are multi-cables, which come from the stage right electric gallery. There are circuits for six (6) "standard" electrics, each using six (6) multi-cables with six (6) circuits per cable. Each cable has a multipin connector, which plugs in on the electric gallery, and a fan out with female pig-tails which ties on to the batten. Cable lengths are staggered to correspond to their position on the electric. Thirty six (36) boom drop circuits are also available on each side of the stage, from twelve (12) multi-cable fan outs with six (6) circuits each. Circuit identification is marked on all cables.
- 8) All six (6) house electrics locations are double-piped 26" apart.
- 9) There are 3-phase 120v/208v receptacles in various locations onstage. These require a NEMA L21-30 plug. This receptacle will deliver 120 volts per phase, and 208 volts configured delta.

DIMMERS:

- (712) 2.4Kw
- (9) 6.0Kw

CIRCUIT DISTRIBUTION:

	<u>20amp</u>	<u>50amp</u>
F.O.H.		
First beam	75	
Side catwalks	10	2
Second beam	105	
Side catwalks	12	
Balcony rail	40	4
Crown coves	24	
Box booms	20	
Anti-pro slots	48	
Light booth	6	3
Orchestra pit lift	2	
STAGE:		
S.R. electric gallery	214	6
S.R. boom drop circuits	36	
S.L. boom drop circuits	36	3
S.R. floor pockets	18	
U.S. floor pockets	24	
S.L. floor pockets	18	
Grid (Terminal strip connector)	16	
Traproom	<u>8</u>	
TOTAL:	712	18

ELECTRICAL Cont.:

INSTRUMENTS:

A)	<u>Instrument inventory</u>	<u># of Fixtures</u>	<u>Wattage</u>
	5 Degree Source Four Ellipsoidal	4	575
	10 Degree Source Four Ellipsoidal	38	575
	19 Degree Source Four Ellipsoidal	70	575
	26 Degree Source Four Ellipsoidal	100	575
	36 Degree Source Four Ellipsoidal	78	575
	50 Degree Source Four Ellipsoidal	8	575
	12 Degree Colortran Ellipsoidal	5	1,000
	20, 30, 40 Degree Colortran Ellipsoidal (Variable)	20	1,000
	6" Colortran Fresnels	30	750
	Source Four Pars (with WFL, MFL, NSP & VNSP lenses)	75	575
	8' Altman Zip Strips (MR16)(4 circuit)	6	75
	Two-Light Strand Iris Cyc Unit	18	1,000
B)	Unless arrangements have otherwise been made, all on-stage lighting equipment will be on storage racks: i.e. stripped electrics. Selected F.O.H. positions will have a limited number of equipment stored on them during strike.		

AUDIO:

CONSOLE:

Yamaha PM1D with an expanded DSP 48 channels plus 8 stereo channels and 32 outs that can be configured as groups, aux, or matrix feeds.

PLAYBACK:

- (2) Tascam MD-801R Mini-disk player/recorders
- (1) Denon DN-C680 CD Player
- (1) Tascam 122 MK II Cassette Player

CLUSTER:

A Left, Center, Right cluster with discrete sub woofer system. Components include EAW JF-560 speakers and SB-250 sub woofers. The system runs full range through Ashly Protea digital processors with a separate send to the sub system and is powered by Crown K2 amplifiers.

- (1) Left Cluster JF-560 speakers
- (2) Center Cluster JF-560 speakers
- (1) Right Cluster JF-560 speakers
- (2) Sub woofers SB-250 speakers
- (1) Ashly Protea Digital Processors
- (5) Crown K2 amplifiers
- (17) Under Balcony delay speakers
- (1) Crown Com-Tech 210 70.7 v amplifier

SURROUND SOUND SYSTEM:

There is a 6-channel surround sound system on the lower level of the theater and a 6-channel surround system on the upper level of the theater. Each of the speakers is an EAW-CR72 and each level is powered by a 6-channel Crown CP660 amplifier.

SPECIAL EFFECTS & FOLDBACK SYSTEM:

This is a dry line speaker system with eight (8) channels of amplification patchable to outlets located throughout the theater and on the stage. Four (4) Crown K2 amplifiers provide power for a full inventory of monitor speakers.

Four (4) EAW JF-560 speakers are patchable from two (2) designated amplifiers for use as Left and Right Mains. These speakers and amplifiers use the same patchbay as the Effects / Foldback system.

MONITOR SPEAKERS:

- (2) JBL 4699b Speaker Cabinets with 1" horn, 10" mid cone, 18" low cone
- (2) JBL 4735 Speaker Cabinets with 1" horn, 10" mid cone, 18" low cone
- (2) Turbosound TXD-12M 12" 2-Way monitor wedges with a 12" LF driver and a 1" HF compression driver on a 70 x 40 HF horn.

MICROPHONES:

- (5) Shure SM-58
- (5) Shure SM-57
- (2) Shure SM-87
- (2) Shure SM-58B
- (2) Shure SM-57B
- (4) Shure SM-81
- (6) Shure SM-94
- (3) Crown PCC-160

PRODUCTION COMMUNICATION:

A complete two (2) channel Clear-Com system is available with permanently mounted stations at all standard production positions as well as numerous individual outlets located throughout the theater.

PAGING AND PROGRAM:

A complete 70.7-volt monitor system provides audio program and paging to all dressing rooms, hallways, and production areas as well as the theater lobby.

ASSISTIVE LISTENING SYSTEM:

A two (2) channel listening system is available, providing two (2) receiver selectable channels of program through a Sennheiser SI-1013 FM modulator and control unit, and using four (4) SEI-1019 array radiator panels.

ADDITIONAL ACCESSORIES:

The following equipment is shared by both theaters and is available on a first come, first served basis. Please contact CENTER Technical Staff about reservation of this equipment.

- (3) Shure SM-91 Boundary Microphones
- (2) Shure SM-96
- (3) AKG CK-9 Shotgun Microphones
- (2) AKG 414
- (2) Sennheiser MD 421
- (2) Beyer M88-TG
- (2) Barcus-Barry XL4000
- (6) Shure L4 Wireless Microphone systems w/ lavaleirs and belt packs (fee for this item)
- (10) Microphone stands w/ booms
- (3) Countryman 85 DI
- (3) JBL Control 10 monitor speakers
- (2) Anchor 1000 powered "hot spots"
- (3) White 1/3 oct graphic equalizers
- (3) Yamaha 2031 1/3 oct graphic equalizers
- (3) Alesis Midiverbs
- (2) Lexicon LXP-1 Multi-effects processor
- (2) Lexicon LXP-5 Multi-effects processors

DRESSING ROOMS:

NOTE: All dressing rooms are on stage level. Ceiling heights in dressing rooms and hallways are 8'-6". Six, ten and twelve person dressing rooms share toilet and shower facilities in adjacent area.

- A. (2) Two person dressing rooms with bath
- B. (2) Six person dressing rooms with wash basin
- C. (1) Ten person dressing rooms with 2 wash basins
- D. (2) Twelve person dressing rooms with 2 wash basins

OTHER PRODUCTION SUPPORT FACILITIES AVAILABLE:

- 1) One rehearsal room: 40'-0" X 56'-0", at stage level with the same flooring as the stage. Door size: 6'-0" h X 7'-10"w. Requires additional contract for use.
- 2) A crew room with complete bath on stage level.
- 3) Wardrobe/Laundry room with sink, washer and dryer, and refrigerator on stage level. Door opening: 6'-4"h X 7'-10"w. Room: 16'-6" X 20'-0".
- 4) Prop room with sink. A Dutch style door opens onto the stage in the crossover behind cyc. Door opening: 3'-0"h X 7'-10"w. Room: 8'-0" X 10'-0".

OTHER PRODUCTION SUPPORT EQUIPMENT AVAILABLE:

- 1) Pianos:
The CENTER has two (2) seven (7) foot Steinway Grand pianos. These are used in both Center Stage and Stage West on a first come, first served basis. Tuning services must be contracted by the CENTER at users expense. Use of pianos and tuning must be contracted in advance. There is a use fee associated with piano use.
- 2) Followspots:
The CENTER has two (2) Lycian 1290 XLT Long Throw followspots located in the Lighting Booth. Each has a XENON 2K lamp. The spots can accommodate up to six (6) gels, each being industry standard 9" in diameter. There is a use fee associated with followspot use.

HERBERGER THEATER CENTER CENTER STAGE LINE SET SCHEDULE

Page 1 of 2

<u>SET #</u>	<u>BATTEN LOCATION</u>	<u>BATTEN LENGTH</u>	<u>REMARKS</u>
SC	0'-3"	48'-4"	SAFETY CURTAIN
Lattice Track			
TEASER	1'-3"	52'-0"	GRAND TEASER Lattice
Track			
ACT	1'-11"	52'-0"	GRAND DRAPE Lattice
Track			
1	2'-8"	60'-0"	#1 LEG
2	3'-2"	52'-0"	
3	3'-8"	52'-0"	
4	4'-2"	52'-0"	#1 ELECTRIC
5	4'-9"	60'-0"	
6	5'-2"	52'-0"	
7	5'-8"	52'-0"	
8	6'-3"	52'-0"	
9	6'-8"	52'-0"	
10	7'-2"	60'-0"	#1 TRAVELLER (Black)
11	7'-9"	52'-0"	
12	8'-2"	52'-0"	
13	8'-9"	52'-0"	
14	9'-2"	52'-0"	
15	10'-2"	52'-0"	#2 BORDER
16	10'-10"	52'-0"	
17	11'-2"	60'-0"	#2 LEG
18	12'-2"	52'-0"	#2 ELECTRIC
19	13'-2"	60'-0"	
20	13'-8"	52'-0"	
21	14'-2"	52'-0"	
22	14'-9"	52'-0"	
23	15'-3"	52'-0"	
24	15'-9"	52'-0"	
25	16'-3"	52'-0"	
26	16'-9"	52'-0"	
27	17'-3"	60'-0"	#2 TRAVELLER (Blue)
28	18'-4"	52'-0"	
29	18'-9"	52'-0"	#3 BORDER
30	19'-3"	52'-0"	
31	19'-9"	60'-0"	#3 LEG
32	20'-9"	52'-0"	#3 ELECTRIC

<u>SET #</u>	<u>BATTEN LOCATION</u>	<u>BATTEN LENGTH</u>	<u>REMARKS</u>
33	21'-9"	52'-0"	
34	22'-3"	52'-0"	
35	22'-9"	52'-0"	
36	23'-3"	52'-0"	
37	23'-9"	52'-0"	
38	24'-3"	52'-0"	
39	24'-9"	52'-0"	
40	25'-3"	60'-0"	#3 TRAVELLER (Black)
41	26'-4"	52'-0"	
42	26'-10"	52'-0"	
43	27'-3"	52'-0"	
44	27'-9"	52'-0"	#4 BORDER
45	28'-3"	52'-0"	
46	28'-9"	60'-0"	#4 LEG
47	29'-9"	52'-0"	#4 ELECTRIC
48	30'-9"	52'-0"	
49	31'-3"	52'-0"	
50	31'-9"	52'-0"	
51	32'-9"	52'-0"	
52	33'-3"	52'-0"	
53	34'-4"	52'-0"	
54	34'-9"	60'-0"	BLACKOUT
55	35'-9"	52'-0"	WHITE SCRIM
56	36'-9"	52'-0"	#5 BORDER
57	37'-3"	52'-0"	BLACK SCRIM
58	37'-9"	60'-0"	#5 LEG
59	38'-9"	52'-0"	#5 ELECTRIC
60	39'-10"	52'-0"	
61	N/A		
62	40'-9"	52'-0"	#6 BORDER
63	41'-3"	52'-0"	#6 LEG
64	US/DS	42'-2"	STAGE RIGHT TAB
65	42'-9"	52'-0"	#6 ELECTRIC
66	US/DS	42'-2"	STAGE LEFT TAB
67	43'-9"	60'-0"	#4 TRAVELLER (Black)
68	44'-3"	52'-0"	
69	44'-9"	52'-0"	SWEEP MASKING move w/line 70 (DS)
70	US/DS	26'-6"	SWEEP MASKING move w/line 69 (US)
71	N/A		
72	46'-3"	52'-0"	SEAMLESS CYC

**Center Stage
Soft Goods Schedule**

TYPE	PIECES	DIMENSIONS	FULLNESS	COLOR
Grand Teaser	(1)	52'-0"w X 18'-0"h	100%	Blue
Act Curtain	(2)	28'-6"w X 30'-0"h	100%	Blue
Masking Borders	(1)	52'-0"w X 12'-0"h	0%	Black
Masking Legs	(2)	16'-6"w X 30'-0"h	0%	Black
Travellers	(2)	32'-6"w X 27'-0"h	50%	Black (1 Blue)
Side Tabs	(5)	12'-0"w X 30'-0"h	25%	Black
Elec. Safety Borders	(1)	52'-0"w X 2'-10"h	0%	Black
Scrim	(1)	60'-0"w X 30'-0"h	0%	Black
Scrim	(1)	60'-0"w X 30'-0"h	0%	White
Seamless Cyc	(1)	56'-0"w X 30'-0"h	0%	Natural

The 'PIECES' category reflects standard PER PIPE inventory.