

**ANNENBERG CENTER FOR THE  
PERFORMING ARTS  
HAROLD L. ZELLERBACH THEATRE  
TECHNICAL SPECIFICATIONS**

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**ANNENBERG CENTER FOR THE PERFORMING ARTS  
ZELLERBACH THEATRE  
Technical Specifications**

**General Information**

The Zellerbach Theatre is the largest of three performance venues at the University of Pennsylvania's prestigious Annenberg Center. This internationally renowned proscenium theatre seats up to 957 and accommodates a wide variety of events including corporate meetings, broadcast events, theatre, music, dance, receptions and whatever else your imagination can conjure. Reflecting our status as an Ivy League performing arts center, we boast unparalleled production values coupled with a substantial technological infrastructure. The Zellerbach is the ideal venue for your next important event.

**Technology Connectivity**

The Zellerbach as well as the entire Annenberg Center has been fortunate enough to address the new technological needs for video presentation and live T.V production. Throughout the spaces in the building are numerous data and voice lines.

**Stage Dimensions:**

Proscenium Height to Audio Cluster Masking	32'- 0" (9.75M)
Standard House Masking Height	24'- 0" (7.32M)
Proscenium Width-adjustable from min	32'- 0" (9.75M)
max.	60'- 0" (18.29M)
Standard House Masking Width	40'- 0" (12.19M)
Smoke Pocket Line to Back Wall	33'- 6" (10.21M)
Standard House Stage Depth	32'- 6" (9.90M)
Smoke Pocket Line to Apron Edge at Centerline:	
With No Thrust	2'- 3" (.69M)
With Partial Thrust	11'- 9" (3.58M)
With Full Thrust	21'- 6" (6.55M)
Stage Height from Audience Seating	+3'- 0" (.91M)

**House Distances:**

Smoke Pocket Line to Control Booth	76' - 0" (23.16M)
Smoke Pocket Line to Balcony Rail	64' - 0" (19.51M)
Smoke Pocket Line to #4 Catwalk	66' - 0" (20.12M)
Smoke Pocket Line to #3 Catwalk	58' - 0" (17.68M)
Smoke Pocket Line to #2 Catwalk	47' - 0" (14.33M)
Smoke Pocket Line to Projection Booth	73' - 6" (22.40M)
Projection Booth to Movie Screen	84' - 0" (25.60M)
Balcony Rail to Cyc	94' - 0" (28.65M)

**Seating:**

Orchestra Seating:	761 Seats
Balcony Seating:	200 Seats
Total- all ADA platforms/no mix/no thrust	932 + 6 WC and 8 companion
Total- 1 ADA platform/no mix/no thrust	961 + 2 WC and 3 companion
Total- 1 ADA platform/Audio Mix/no thrust	893 + 2 WC and 3 companion
Upstage Lift	-23 seats
Downstage Lift	-33 seats
Audio Mix	-12 seats

**Support Rooms:**

- 4 Small Dressing Rooms(#1-#4) 2 persons
- 4 Large Dressing Rooms(#5-#8) 5 persons
- Wardrobe Room-Washer, Dryer, Steamer, Ironing Boards
- Green Room-Refrigerator, Sink, Stove available
- Visiting Production Office-Private space with phone line & internet

***PLEASE NOTE:***

***All dressing rooms, Wardrobe and Green Room serve all 3 venues at the Annenberg Center.***

**LIGHTING CONTROL SYSTEM:**

Dimmers: Strand Century CD80 Dual Dimmer Modules  
181- 2.4kw. dual dimmer modules w/ 11 dual non-dim  
modules.

Console: ETC Obsession II version 4.2

Accessories: Full Tracking Backup  
Remote Focus Unit  
Remote Monitors

Additional Power 2-400 Amp 3 Phase Service Boxes 1 level below stage  
Accessed through USR points

1-100 Amp 3 Phase Service located on DSL Prosc. wall

**LIGHTING INSTRUMENT HANGING POSITIONS:**

**AUDITORIUM CEILING:** 3 Catwalks/ ceiling slots plus 20 porthole positions  
over stage thrust

CATWALK #1- 12 upstage and 8 downstage porthole openings

CATWALK #2- Ceiling slot w/ 14 individually circuited  
permanently hung units.

CATWALK #3- Ceiling slot w/ 24 individually circuited  
permanently hung units.

CATWALK #4- Ceiling slot w/ 32 individually circuited  
permanently hung units.

**BALCONY POSITION:** Hanging pipe on balcony seating façade

Balcony Rail - 12 individually circuited permanently hung units.

**PROSCENIUM SPLAY:** 2 Vertical Hanging pipes stage right and stage left of stage apron.

Proscenium Slot #1 Left- 9 individually circuited permanently hung units located behind adjustable proscenium panels stage left.

Proscenium Slot #1 Right- 9 individually circuited permanently hung units located behind adjustable proscenium panels stage right.

Proscenium Slot #2 Left- 6 individually circuited units permanently hung units located over forestage exit doors stage left.

Proscenium Slot #2 Right- 6 individually circuited permanently hung units located over forestage exit doors stage right.

*Note: The Proscenium Slot #2 position is compromised by hanging P.A. speakers.*

**OVER STAGE:** 5 Single purchase counterweighted line sets permanently equipped with circuit stage pin connectors on pipes 60' in length.

#1 Electric Pipe- Lineset #2 - 3'- 8" upstage of plaster line w/ 36 circuits

#2 Electric Pipe- Lineset #13 – 10'- 1" upstage w/ 36 circuits

#3 Electric Pipe- Lineset #24 – 17'- 3" upstage w/ 24 circuits

#4 Electric Pipe- Lineset #32 – 22'- 2" upstage w/ 24 circuits

#5 Electric Pipe- Lineset #41 – 29'- 1" upstage w/ 7 permanent cyc units

## **ZELLERBACH THEATRE LIGHTING INVENTORY**

<u>INVENTORY</u>	<u>UNIT TYPE</u>	<u>LAMP</u>	<u>COLOR SIZE</u>
84	Altman Shakespeare S6-10 10° Ellipsoidal Unit	HX601 575w	12" x 12"
32	Altman Shakespeare S6-20 20° Ellipsoidal Unit	HX601 575w	6.25" x 6.25"
80	Altman Shakespeare S6-30 30° Ellipsoidal Unit	HX601 575w	6.25" x 6.25"
32	Altman Shakespeare S6-40 40° Ellipsoidal Unit	HX601 575w	6.25" x 6.25"
12	Altman Shakespeare S6-50 50° Ellipsoidal Unit	HX601 575w	6.25" x 6.25"
20	Altman Ellipsoidal 6x12 Axial Unit	EHG 750w	7.5" x 7.5"
24	Altman Ellipsoidal 6X9 Axial Unit	EHG 750w	7.5" x 7.5"
20	ETC S-4 PAR Unit	HPL 575w	7.5" x 7.5"
20	Altman PAR64 Unit	Nar.,Med., Wide 1000w	10" x 10"
7	Altman 4-Cell Sky Cyc Units	FFT 1000w	11.5" x 10.25"

# Zellerbach Theater Sound System

## General Description

### 1. Theater House System

**Speakers:** Consists of three clusters – left, center and right. The outside clusters consist of **two (2) CBA R-2T** loudspeakers with a **triple R-2T central cluster**. Stage left and stage right are equipped with a **CBA ML-18 sub bass** loudspeaker.

**Crossovers:** Each cluster has a designated crossover equipped with time offset correction and custom equalization cards for the CBA R-2T.

**Amplification:** The loudspeaker has the following power driving each crossover band path:

L.F. (sub-bass)	1200-Watts	Maximum
M.F.	1800-Watts	Maximum
H.F.	600-Watts	Maximum

All amplifiers are Carver with CBA modifications, factory installed and tested by CBA bench technicians.

**Equalization:** Four (4) channels of 1/3 octave equalization for left, right and center.

**Mixer:** Allen & Heath GL-2400-24

### 2. Portable Monitor System

**Speakers:** Consists of four (4) **CBA R-1TP** passive two-way loudspeakers. This speaker is similar in appearance to the R-2T but is equipped with a 12”cone, 1”driver and passive network.

**Crossovers:** Consists of two (2) **Rane AC-22** Active Crossovers

**Amplification:** Consists of two (2) **Carver PM-900** and two (2) **Carver PM-300** amplifiers, which will drive 450 watts per channel into 4 ohm.

**Equalization:** Consists of two (2) **Rane ME-15** Graphic Equalizers

The Zellerbach Sound System has been designed, engineered and installed by Clair Brothers Audio Systems Inc.

*\*The Allen & Heath GL-2400-24 was added after the installation.*

## **Zellerbach Theater Sound System Equipment List**

### **House System:**

#### **Qty. Description**

- 7 CBA R-2T 2way, Bi-amplified Loudspeakers with 12” and 2” Transducers
- 3 Carver PM-1200 Mid and Low Frequency Amplifiers
- 2 Carver PM-600 High Frequency Amplifiers
- 2 Electro-Voice XEQ-3 Crossover for the Left Cluster and the Right Cluster
- 1 Electro-Voice XEQ-2 Crossover for the Central Cluster
- 3 EV/CBA Custom Crossover EQ Cards for the R-2T
- 2 CBA ML-18 Sub-Bass Loudspeakers
- 8 Jensen Input Transformers
- 1 Allen & Heath GL-2400-24 Mixer

### **Portable Monitor– Side Fill System:**

- 4 CBA R-1TP 2way, Passive Loudspeakers with 12” and 1” Transducers
- 2 Carver PM-900 Portable Monitor Stereo Amplifiers
- 2 Carver PM-300 Portable Monitor Stereo Amplifiers
- 2 Rane AC-22 Active Crossovers
- 2 Rane ME-15 Graphic Equalizers

### **Communication:**

- Clear Com Intercom system
- Dressing Room Audio monitors
- Dressing Room Paging
- Stage video monitor

## **Annenberg Center Floating Audio Equipment Inventory**

This equipment is not permanently housed in one theater. It is available on a per-request basis through the Sound Supervisor.

- 2 Cassette Players
- 1 CD Player
- 1 CDR Player
- 1 Mini Disc Player
- 4 Direct Boxes w/out patch cable
- 2 SM 57 Microphones
- 10 SM 58 Microphones
- 3 PCC 160 Microphones

**Annenberg Center  
Projection Equipment**

**Zellerbach 35mm Projection:**

**Projector:** Two **(2) Simplex XL**

**Lamp:** 4000watt each

**Lensing:** 1.85 (image 22'H x 30'W)

2.39 (image 22'H x 50'W)

**Screen;**

**Manufacturer:** **Technikote Corporation**

**Size:** 22'h x 50'w

**Type:** XR – 171

**Hanging Position:** Line Set 16

**Distance from screen to projection window:** 89'

**Audio:**

**Processor:** One **(1) Panastereo Cinema Sound Processor**

**Amplifier:** Two **(2) QSC ISA-450**

**Speaker:** Three **(3) Altec A-7** (Left, Right & Center)

**Video Equipment**

LCD Projectors:

One (1) **Mitsubishi X 500U** 3700 lumen

One (1) **Sanvo PLC-XP20N** 2000 lumen

**Rear Projection Screens:**

One (1) 12 x 16 Rear Projection Screen W/ Dress Kit

One (1) 16 x 21 Rear Projection Screen W/ Out Dress Kit (Theatrical Legs and Borders used)

**Front Projection Screens:**

Studio Theater – One (1) 10'h x 14'w

Zellerbach Theater – One (1) 22'h x 50'w

**Playback Equipment:**

One (1) **SMF 251 - Analog Way Smart Fade** Switcher

One (1) **AIWA** VHS/VCR (NTSC&PAL)

One (1) **Morantz Pro** DVD Player

One (1) **Dell** A/V Computer

Two (2) VGA 100' cables

**Zellerbach Theatre Fly System:**

**Line Sets:** 43 single purchase counterweight line sets  
with 7 lift lines per set  
Downstage sets on 7" centers/Upstage 9"  
1 Motorized winch line set

**Battens:** White Painted Steel Pipe 1½"(3.8CM) in diameter  
64'(19.50M) in length for non-electric battens  
60'(18.29M) in length for electric battens  
Arbor capacity – 1100lbs.(498.95kg)

**Heights:** 88'-5"(26.97M) to Grid  
74'-6"(22.70M) to Loading Bridge  
35' - 4"(10.77M) to Locking Rail Floor

**ANNENBERG CENTER  
ZELLERBACH THEATRE SOFT GOODS INVENTORY**

4	-	Black Velour Borders:	70'-0" width	X 14'-6" height (No Fullness)
5 Pair	-	Black Velour Legs:	11'-10" width	X 38'-6" height (No Fullness)
1	-	Black Velour Drop: (Blackout Drop)	56'-0" width	X 38'-6" height (No Fullness)
1	-	White Cyclorama Drop:	60'-0" width	X 40'-0" height
1	-	Black Scrim:	50'-0" wide	X 30' -0" height
1	-	White Scrim	50'-0" wide	X 30' -0" height

**PERMANENT MASKING**

Dark Red Orange Main Drape  
Manual Guillotine

65'-0" wide X 50'-0" height  
w/ fullness

Black Velour Covered Framed Portal: Opening variable from 36' to 52' width

Header: 65' width X 25' height

Legs: 12'width X 38' height

Black Velour Side Tabs: 22' width X 38'-6" height  
Located 33'-6" SR & SL of center

Black Velour Backdrop with Fullness: 66' width X 38'-6" height  
Lineset #46

**ANNENBERG CENTER  
ZELLERBACH THEATRE  
STANDARD HOUSE MASKING:**

Portal Opening: 40' width X 24' height

Line Set #	-	Piece		
9	-	#1 Border	Trim:	24'-0"
10	-	#1 Legs	Opening:	40'-0"
18	-	#2 Border	Trim:	24'-0"
19	-	#2 Legs	Opening:	40'-0"
28	-	#3 Border	Trim:	24'-0"
29	-	#3 Legs	Opening:	40'-0"
37	-	#4 Border	Trim:	24'-0"
38	-	#4 Legs	Opening:	40'-0"
39	-	House Black Scrim		
45	-	House Cyclorama		
46	-	Black Velour Backdrop		

ANNENBERG CENTER

Production: \_\_\_\_\_

ZELLERBACH THEATRE

Date: \_\_\_\_\_

HANGING PLOT

Line Set	Distance Upstage from Smoke					
Number	Pocket	Hanging Piece	Opening	High Trim	Low Trim	Notes
PH	2'-0"	PORTAL HEADER				PERMANENT-DOES NOT STRIKE
PL	2'-9"	PORTAL LEGS				PERMANENT-DOES NOT STRIKE
2	3'-8"	#1 ELECTRIC				PERMANENT RACEWAY PIPE
3	4'-3"					
4	4'-10"					
5	5'-5"					
6	6'-0"					
7	6'-7"					
8	7'-2"					
9	7'-9"					
10	8'-4"					
11	8'-11"					
12	9'-6"					
13	10'-1"	#2 ELECTRIC				PERMANENT RACEWAY PIPE
14	10'-8"					
15	11'-3"					
16	11'-10"	MOTION PICTURE SCREEN				PERMANENT-DOES NOT STRIKE
17	12'-5"	ELECTRIC WINCH SET				PERMANENT-DOES NOT STRIKE

ANNENBERG CENTER

Production: \_\_\_\_\_

ZELLERBACH THEATRE

Date: \_\_\_\_\_

HANGING PLOT

Line Set	Distance Upstage from Smoke					
Number	Pocket	Hanging Piece	Opening	High Trim	Low Trim	Notes
18	13'-0"					
19	13'-7"					
20	14'-2"					
21	14'-9"					
22	15'-4"					
23	15'-11"					
24	16'-6"	#3 ELECTRIC				PERMANENT RACEWAY PIPE
25	17'-1"					
26	17'-8"					
27	18'-3"					
28	18'-10"					
29	19'-5"					
30	20'-0"					
31	20'-7"					
32	21'-2"	#4 ELECTRIC				PERMANENT RACEWAY PIPE
33	21'-9"					

ANNENBERG CENTER

Production: \_\_\_\_\_

ZELLERBACH THEATRE

Date: \_\_\_\_\_

HANGING PLOT

Line Set	Distance Upstage from Smoke					
Number	Pocket	Hanging Piece	Opening	High Trim	Low Trim	Notes
34	22'-4"					
35	22'-11"					
36	24'-1"					
37	24'-8"					
38	25'-3"					
39	26'-9"					
40	27'-6"					
41	28'-3"	#5 ELECTRIC				PERMANENT-DOES NOT STRIKE
43	29'-9"					
44	30'-6"					
45	31'-3"					
46	32'-0"	BLACK BACKDROP				PERMANENT-DOES NOT STRIKE

## **LOADING DOCK INFORMATION:**

### **Access:**

The loading dock and freight elevator are located at the rear of the building on 37<sup>th</sup>. Street. At the corner of 37<sup>th</sup> and Walnut streets, one turns left and proceeds to driveway on the left hand side at the rear of the building. Vehicles should back to loading dock to unload freight there and then loaded into freight elevator to travel down to stage level.

### **Loading Dock:**

25'- 0" width by 20'- 0" depth  
The dock is +4'- 0 1/4" above street level

### **Freight Elevator:**

10'- 0" width by 25'- 0" length by 12'- 0" high  
Weight capacity is 19,000 lbs.

## **PARKING INFORMATION :**

**Parking Garage #30 – 38<sup>th</sup>. and Walnut**  
Attendant payment 6am-11:30pm

**Parking Garage #40 – 40<sup>th</sup>. and Walnut**  
Machine payment-24 hrs.

## **Directions**

### **From New York/ Northeast:**

- Take NJ Turnpike South to Exit 7A
- After exit, pick up I-195 West
- Then pick-up I-295 South to I-95 South
- Follow I-95 South into Phila.
- Take exit for I-676 West(Vine Street Expressway)
- Follow I-676 West to I-76 East(Schuylkill Expressway)
- Prepare for left lane exit in ¼ mile at South Street
- At light at top of exit ramp, turn right
- At 33rd. St, first street past stadium, turn right and prepare for next left turn
- Turn left onto Walnut Street
- The Annenberg Center is on the left at 37<sup>th</sup>. and Walnut Street
- Turn left at 37<sup>th</sup>. Street for loading dock at rear of building

### **From South:**

- Take I-95 North to Exit 11/ “291 West to I-76”
- Follow 291 West over Platt Bridge
- At 26<sup>th</sup>. Street ,291 West flows directly into I-76 West
- Follow I-76 West 3 miles and prepare for left lane exit at South Street(Exit 40)
- At light at top of exit ramp, turn left
- At 33rd. St, first street past stadium, turn right and prepare for next left turn
- Turn left onto Walnut Street
- The Annenberg Center is on the left at 37<sup>th</sup>. and Walnut Street
- Turn left at 37<sup>th</sup>. Street for loading dock at rear of building

### **From West/Northwest:**

- Take Pennsylvania Turnpike to Exit 24, Valley Forge Interchange
- Pick-up I-76 East(Schuylkill Expressway)
- Follow I-76 East 17 miles to South Street Exit(Exit 40) prepare for left lane exit
- At light at top of exit ramp, turn right
- At 33rd. St, first street past stadium, turn right and prepare for next left turn
- Turn left onto Walnut Street
- The Annenberg Center is on the left at 37<sup>th</sup>. and Walnut Street
- Turn left at 37<sup>th</sup>. Street for loading dock at rear of building

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