

The Teresa Lozano and Joe R. Long Center for the Performing Arts
Michael and Susan Dell Foundation Hall
Technical Specifications



For Questions concerning Technical Specifications, please contact 512.482.0800
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Seating and House Capacity:

Orchestra:	530 Seats
Orchestra Pit:	112 Seats
Parterre:	499 Seats
Mezzanine:	620 Seats
Balcony:	681 Seats
Total:	2442 Seats

All levels are wheelchair and handicap accessible.
Assistive listening devices are available upon request.

Stage Dimensions

Proscenium Opening:	54'-0" wide x 32'-0" high (Width and height of proscenium is flexible using the hard portal legs and hard portal border on linesets 1 and 2 as a false proscenium)
Stage Depth:	52'-6" deep
Hard Portal Border:	60'-0" wide x 20'-0" high
Hard Portal Legs:	14'-0" wide x 35'-6" high
House Curtain:	60'-0" wide x 20'-0" high
Orchestra Pit Depth:	17'-0" deep
Stage Floor to Trap Room Floor:	10'-4"
Stage Height from Orchestra Floor:	3'-11"
Stage Floor to Gridiron:	84'-4"
Stage Floor to Roof Support Beams:	93'-6"
Stage Floor to Fly Gallery Lock Rail:	28'-0"
Stage Floor to Mid-Level Gallery:	48'-0"

Stage Floor to Mid-Loading Rail: 70'-0"
Stage Floor to Upper-Loading Rail: 78'-0"

Counterweight Fly System

The Dell Hall Stage has a double purchase counterweight fly system with a locking rail and two loading rails located stage left. The locking rail is equipped with white and blue index lights as well as rope lights used for cue lights. There is a pin rail equipped with belaying pins for spot-line rigging at the mid gallery position. A fire curtain and dedicated house curtain are both motorized and are immediately upstage of the proscenium.

Total number of manual line-sets with truss battens: 71
Batten Length: 72'-0"
Batten Travel: 78'-0"
Batten Height at Deck Level (Bottom Chord): 3'-8"
Batten Height at Deck Level (Top Chord): 4'-10"
Arbor Height: 15'-0"
For Line Set Schedule See Pages 10 through 13.

Concert Shell

Ceilings: There are five Wenger Diva Series acoustical cloud ceilings with white finish. They are hung on dedicated manual counterweight linesets with taller arbors. Each ceiling includes nine ETC Source Four PAR light fixtures. Each panel is eight inches deep.

Towers: There are twelve Wenger Diva Series free-standing acoustical towers with a cherry finish. Each tower is self-supported and movable. They are available as back and side walls. When deployed the towers are approximately 12'-0" wide and 30'-0" high.

Softgoods

The following softgoods are available in-house.

Description	Quantity	Height	Width
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House Curtain	1	36'-0"	60'-0"
Black Velour Borders	6	12'-0"	70'-0"
Black Velour Legs	12	40'-0"	16'-0"
Black Velour Tabs	10	40'-0"	10'-0"
Black Velour Bi-Part Traveler	1	40'-0"	70'-0"
Cyclorama	1	38'-0"	70'-0"
Black Scrim	1	38'-0"	70'-0"
White Scrim	1	38'-0"	70'-0"
Rear Projection Screen	1	40'-0"	70'-0"

House Curtain

The House Curtain is made of 24 ounce velour and is rigged to guillotine on a dedicated winch assisted arbor drive line set. The House Main Curtain does not travel.

Variable Acoustics

The Hall is equipped with a variable acoustic system designed by Jaffe Holden Acoustics. The system uses a series of motorized Venetian style banners and tracked curtains to alter the acoustics of the room. This enables the room to become more 'live' or 'dead' depending on the needs of the event. The curtains are 25 ounce velour with 100% fullness.

Stage Floor

The stage floor, in order of construction, includes a resilient neoprene rubber vapor barrier, sleepers, 2 layers of ¾" plywood, and is topped with ¼" masonite. It has a flexible trap area located in the center of the stage. The trapped portion of the stage begins 6'-8" upstage of the plaster line, is 59'-0" wide, extends 22'-9" upstage, and is on the centerline.

A full-stage black Harlequin Cascade Marley Vinyl dance floor with a sub floor is available. Contact The Long Center for more information.

Orchestra Pit Lifts

The Orchestra pit consists of two platforms raised and lowered on Spiralift columns. They can be set on-level with the Orchestra seating section to allow more seating, used as a full or half orchestra pit at basement level, or set on-level with the stage to be used as an apron.

Unit Static Load:	150 pounds per square foot
Static Load Capacity:	87,600 pounds
Unit Lifting Load:	50 pounds per square foot
Lift Load Capacity:	29,200 pounds
Lift Speed:	10 feet per minute

Loading Dock

The loading dock area has two loading dock doors: (1) 20' wide x 8' high and (1) 8' wide x 8' high. They are located on the south end of the Long Center and will accommodate three semi-tractor trailers simultaneously. Two of the spaces are equipped with molded dock bumpers and powered recessed dock levelers that compensate for the differences in height between truck bed and loading dock. A dock plate is available for the third space. The delivery and service yard is shared with the Palmer Events Center. The Long Center must coordinate all deliveries and trucking in advance.

Green Room

The green room/performers lounge is equipped with audio and video monitors. It accommodates up to 50 people.

Dressing Rooms

There are in total nine dressing rooms for the cast and performers with an additional four star dressing rooms. All are equipped with audio monitors with independent volume controls. Video monitors for a stage view are available at these locations.

Dressing Rooms	Location	Capacity
4 - Large	Basement Level	10
1 - Large	Basement Level	20
3 - Medium	Orchestra Level	6
2 - Star	Stage Level	1
1 - Medium	Stage Mezzanine Level	6
2 - Star	Stage Mezzanine Level	1

Laundry Rooms

Laundry facilities are available at the basement level. There are three household size washing machines and three household size dryers. The room has six 20-amp circuits for washers and six 30-amp split phase circuits for dryers.

Concert and Theatrical Lighting

The Hall is equipped with a first class lighting system including 2400 Watt high rise dimmers dedicated to the house lights and concert lighting circuits. This technology insures the quietest operation from the house and concert lighting by preventing filament noise during concert performances.

House Lighting Positions

The following lighting positions are available downstage of the plaster line

Position	Distance from Stage Edge	Height from Stage Floor
Far Catwalk & Followspot Booth	93'	66'
Mid Catwalk	70'	67'
Near Catwalk	47'	67'-3"
Apron Catwalk	14'-3"	46'
Balcony Rail	88'	36'
Mezzanine Rail	83'	17'-3"
High Box Boom SL	16'-6" to 11'-3"	36' to 28'-8"
Medium Box Boom SL	16'-6" to 11'-3"	22' to 14'-9"
Low Box Boom SL	16'-6" to 11'-3"	7'-9" to 0'
High Box Boom SR	16'-6" to 11'-3"	36' to 28'-8"
Medium Box Boom SR	16'-6" to 11'-3"	22' to 14'-9"
Low Box Boom SR	16'-6" to 11'-3"	7'-9" to 0'

High Orchestra Box HR	54' to 27'-8"	42'-9"
Medium Orchestra Box HR	54' to 27'-8"	26'-9"
Low Orchestra Box HR	54' to 27'-8"	18'
High Orchestra Box HL	54' to 27'-8"	42'-9"
Medium Orchestra Box HL	54' to 27'-8"	26'-9"
Low Orchestra Box HL	54' to 27'-8"	18'

Stage Lighting Positions

There are no dedicated electrics or lighting battens. Over-stage circuits are available at grid height and dropped down on six-circuit Socapex cables. Dimming circuits and Ethernet ports are distributed throughout the facility. Ten 50lb boom bases and ten 21'-0" pipes with ring tops are available to be configured as needed.

Lighting Control

- 1 ETC Eos Control System with 4000 Outputs
- 1 Wireless Eos Remote Focus Unit
- 1 Flying Pig Systems Road Hog Full Boar
- 636 2400 Watt ETC Sensor Dimmers
- 18 6000 Watt ETC Sensor Dimmers
- 54 2400 Watt ETC Sensor High Rise Dimmers
- 42 2400 ETC Non Dimmable Circuits
- 12 Portable 2-Port DMX Nodes

Lighting Fixture Inventory

- 12 ETC 5-degree Source Four ERS with 750-watt lamp
- 20 ETC 10-degree Source Four ERS with 750-watt lamp
- 28 ETC 14-degree Source Four ERS with 750-watt lamp
- 36 ETC 19-degree Source Four ERS with 750-watt lamp
- 72 ETC 26-degree Source Four ERS with 750-watt lamp
- 58 ETC 36-degree Source Four ERS with 750-watt lamp
- 24 ETC 50-degree Source Four ERS with 750-watt lamp
- 12 ETC 15-30 degree Source Four Zoom ERS with 750-watt lamp
- 12 ETC 25-50 degree Source Four Zoom ERS with 750-watt lamp
- 48 ETC Source Four PAR with 750-watt lamp
- 18 Fresnelite 8" with 2000-watt lamp
- 15 L&E Runt 4-cell Cyc fixture with 750-watt lamps
- 12 L&E Zip Strip 40-cell Cyc lights with 75-watt MR-16 lamps
- 24 Wybron 4" Coloram IT Gel Scrollers
- 3 Lycian Model 1293 Follow Spots with 3000-watt Xenon lamp
- 16 High End System Studio Command 1200

Cue Light System

- 1 Leon Audio 14-channel master control unit located at SM Panel
- 1 Leon Audio 14-channel portable master control unit
- 14 Leon Audio QLS-B Mk3 cue light station

Connection jacks for cue light stations are available throughout Dell Hall. The fly rail is permanently equipped with three colors of rope light that are used for fly cue lights. There is a maximum of 14 cue lights with this system

Theatrical Audio Systems

Every decision that went into the design and construction of The Long Center was driven by acoustics. Painstaking measures and a no-compromise attitude were adhered to ensure pristine acoustics and immaculate audio quality. The HVAC system of the room is noise less as the vents are low volume and hidden under the seats. The HVAC air handlers are also spring mounted to the floor away from Dell Hall. The Concert Lighting system uses High Rise Dimmers to prevent filament noise from the light fixtures.

Loud Speakers

The permanent loud speakers in Dell Hall are manufactured by Eastern Acoustic Works. The main components are hidden in the proscenium in a left-center-right configuration. The other components are distributed throughout the hall. The system utilizes QSC amplifiers.

Location	Quantity	Speaker Model	Amplifier Model
Center Cluster Array–Top Tier	4	EAW KF737P Custom	QSC CX902/1102
Center Cluster Array–Bottom Tier	3	EAW KF730P	QSC CX902/1102
Side Towers - Top Tier	2	EAW MQM1343e Custom	QSC CX302/702
Side Towers - Middle Tier	2	EAW MQM1364e	QSC CX302/702
Side Towers - Middle Tier	2	EAW LF1410 Custom	QSC CX902
Side Towers - Bottom Tier	2	EAW MQM1394e	QSC CX302/702
Side Towers - Sub Woofers	4	EAW LF1815 Custom	QSC CX1102
Orchestra Box Fills	6	EAW UB12Se	QSC CX254
Front Fill	8	EAW UB52–JHA Custom	QSC CX404
Under Mezzanine	8	EAW UB52	QSC CX404
Under Balcony	6	EAW UB52	QSC CX404
Over Balcony	4	EAW MK2394e	QSC CX502
Control Room	2	EAW UB12Se	QSC CX404
Control Room	1	Bag End S10e–1	QSC CX404
Effects/Monitor	4	Mackie HR624	Self-Powered
Effects/Monitor	4	EAW JFX88	QSC CX702
Effects/Monitor	4	EAW SM200iH	QSC CX702
Effects/Monitor	4	EAW SM260iV	QSC CX702

Sound Equipment

House Mixing Console

Amount	Manufacturer	Model	Description
1	Yamaha	PM5DRH	48–mono inputs, 4–stereo inputs, 4–stereo effect inputs, 24–mix

			outputs, 8-matrix outputs
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Outboard Processing Equipment

Amount	Manufacturer	Model	Description
1	Ashley	Protea 4.24G	Graphic equalizer – 4 channel
1	TC Electronics	M3000	Effects processor
1	Eventide	Eclipse	Effects processor

Playback and Recording

Amount	Manufacturer	Model	Description
1	HHB	CDR830 Plus "Burn It"	CD Recorder
1	Denon	DN-T625	CD Player and Cassette Deck
1	Tascam	MD-CD1	Minidisc and CD Player
1	Tascam	MD-350	Minidisc Recorder

Assisted Listening System

A Sennheiser Infrared assisted listening system is available from Guest Services. Call for more information.

Theatrical Intercom System

Dell Hall has a built in four-channel Clear-Com system. There are connections in all production areas and backstage areas.

Amount	Manufacturer	Model	Description
2	Clear-Com	V-BOX	Portable Wall Station Box
8	Clear-Com	RS-601	Remote Belt pack
2	Clear-Com	RS-602	Remote Belt pack, 2 Channel
2	Beyerdynamic	DT-109.28 400B	Headset- Double Muff
2	Beyerdynamic	DT-108.28 400B	Headset- Single Muff
2	Clear-Com	CC-260	Headset- Double Muff
6	Clear-Com	CC-95	Headset- Single Muff
2	Clear-Com	HS-6	Handset
1	Clear-Com	TW-40	Walkie-Talkie Interface
4	Clear-Com	WBS-670/4	Wireless Clearcom with Four Packs

Paging System

A networked paging system serves to page the lobby, backstage, and stage areas. Paging may be performed from the portable SM Rack and from the Guest Services office.

Microphones and Direct Input Boxes

Amount	Manufacturer	Model	Description
6	Shure	SM57-LC	Microphone
6	Shure	SM58-LC	Microphone
2	Shure	SM81-LC	Microphone
2	Shure	Beta 87C	Microphone
1	Shure	Beta 98D/S	Microphone
2	Electro-Voice	RE 20	Microphone
4	Sennheiser	MD421 II	Microphone
10	AKG	C 535 EB	Handheld Condenser Microphone
10	BSS	AR-133	Active DI
2*	DPA	SMK4061	Stereo Condenser Microphone Kit
2	AKG	C 451 B	Condenser Instrument Microphone
2	Audio-Technica	ES935ML (ES935S/C)	Condenser Gooseneck Microphone
2	Shure	Beta 52A	Kick Drum Microphone
4	Crown	PCC-160	Boundary Microphone
6	Shure	Beta 98D/S	Condenser Percussion Microphone
4	Shure	U124D/Beta87/Mke2	Wireless system

*Matched Pair

Ancillary Equipment

Amount	Manufacturer	Model	Description
1	Whirlwind	PRESS POWER 2	Press Box With Case
3	Whirlwind	MS-12-0-NR-050-SS	Microphone Sub Snake

Video Equipment*

*Currently there is no video equipment available.

*A projection booth is available.

*The distance from projector location to plaster line is 127'-7".

Stage Area Power

All connections and disconnections to these panels will be performed by house personnel.
All CAMLok connections are neutral and ground reverse.

Company Switches

Amperage	Location	Connection Type	Notes
400 Amps	DSR on Proscenium	CAMLok / Tie-In	Double Neutral
400 Amps	DSR on Proscenium	CAMLok / Tie-In	Double Neutral
100 Amps	DSR on Proscenium	CAMLok, Distro to 2P&G and Edison on Wall	
60 Amps	DSR on Proscenium	60 Amp Pin and Sleeve*	Isolated Ground, Audio Only
60 Amps	DSL On Proscenium	60 Amp Pin and Sleeve*	Isolated Ground, Audio Only
100 Amps	DSL on Proscenium	CAMLok, Distro to 2P&G and Edison on Wall	
200 Amps	DSL Wing Wall	CAMLok	Isolated Ground, Audio Only
100 Amps	MSL Wing Wall	CAMLok, Distro to 2P&G and Edison on Wall	
100 Amps	USL Upstage Area Wall	CAMLok, Distro to 2P&G and Edison on Wall	
100 Amps	USR Upstage Area Wall	CAMLok, Distro to 2P&G and Edison on Wall	
100 Amps	USR Upstage Wall	CAMLok, Distro to 2P&G and Edison on Wall	
400 Amps	DSR on Mid Rail	CAMLok / Tie-In	Double Neutral
400 Amps	DSR on Mid Rail	CAMLok / Tie-In	Double Neutral
100 Amps	USR on Mid Rail	CAMLok	
100 Amps	USR on Gridiron	CAMLok	
100 Amps	USL on Gridiron	CAMLok	
100 Amps	DSR on Forestage Gridiron	CAMLok	
400 Amps	Loading Dock Receiving Area	CAMLok / Tie-In	Double Neutral
100 Amps	Trap Room Under Stage	CAMLok	

*Dell Hall is also equipped with Pin and Sleeve cables and breakout boxes:

Amount	Manufacturer	Part #	Description
2	Leviton	Connectors are 560P9W	50' 60-Amp Pin and Sleeve Cable

2	Union Connector	56DBT-06122U-IG	60-Amp Pin and Sleeve Breakout Box with 12 circuit breakers with 2 Edison connectors each.
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On Stage Audio Power

Onstage and in the house of Dell Hall there are numerous power outlets with orange Edison connectors. These have an isolated ground specifically for audio equipment. They should only be used for such.