

Adrienne Arsht Center

FOR THE PERFORMING ARTS OF MIAMI-DADE COUNTY



Ziff Ballet Opera House

Technical Specifications



Courtesy of Odebrecht

Address & Telephone Information

1300 Biscayne Boulevard
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Production Department

Director of Production	Kevin Mynatt	786-468-2308 kmynatt@arshtcenter.org
Production Manager	Kristen Pieski	330.524.6683 kpieski@arshtcenter.org
Senior Technical Director	Angel Emerson	850-499-0161 aemerson@arshtcenter.org

House Crew

Head Carpenter	Al Solano	786-468-2304 asolano@arshtcenter.org
Assist Carpenter/Head Fly/Steward	John Mulvaney	786-468-2307 jmulvaney@arshtcenter.org
Head Electrician	Dudley Pinder	786-468-2305 dpinder@arshtcenter.org
Head Audio/Video	Rafael Cambon	786-468-2313 rcambon@arshtcenter.org

Ziff Ballet Opera House

The Ziff Ballet Opera House (ZBOH) is a classic horseshoe-shaped theater, similar to La Scala in Milan. The Lynn Wolfson Stage is the second largest in the United States after the Metropolitan Opera House in New York City. The ZBOH design includes isolation channels throughout the building which assures the hall is completely removed from external ambient sound and vibration. The theater is the Miami home of Florida Grand Opera, Miami City Ballet, Broadway Across America, and other presentations of large-scale theater, dance, and music by the Center and other presenters.

**** Please reference: PDF Ground Plan**

Labor

The Center holds a collective bargaining agreement with the International Alliance of Theatrical Stage Employees (I.A.T.S.E). ZBOH Department Heads (5) and any additional stagehands called to work in the theater are members of I.A.T.S.E. Local 500. House equipment, including but not limited to personnel lifts, lighting consoles, sound consoles, stage lifts, fly systems will be operated by an Arsht Center Department Head or a stagehand designated by the venue Steward.

Fire Safety

City of Miami Fire

City of Miami Fire Rescue Inspectors are contracted for any performance or event that uses open flame, smoke, haze or pyrotechnic effects. **Fire Watch requests should be provided as part of the advance, and should be submitted to Production *no later than 2 weeks before the date of the event.***

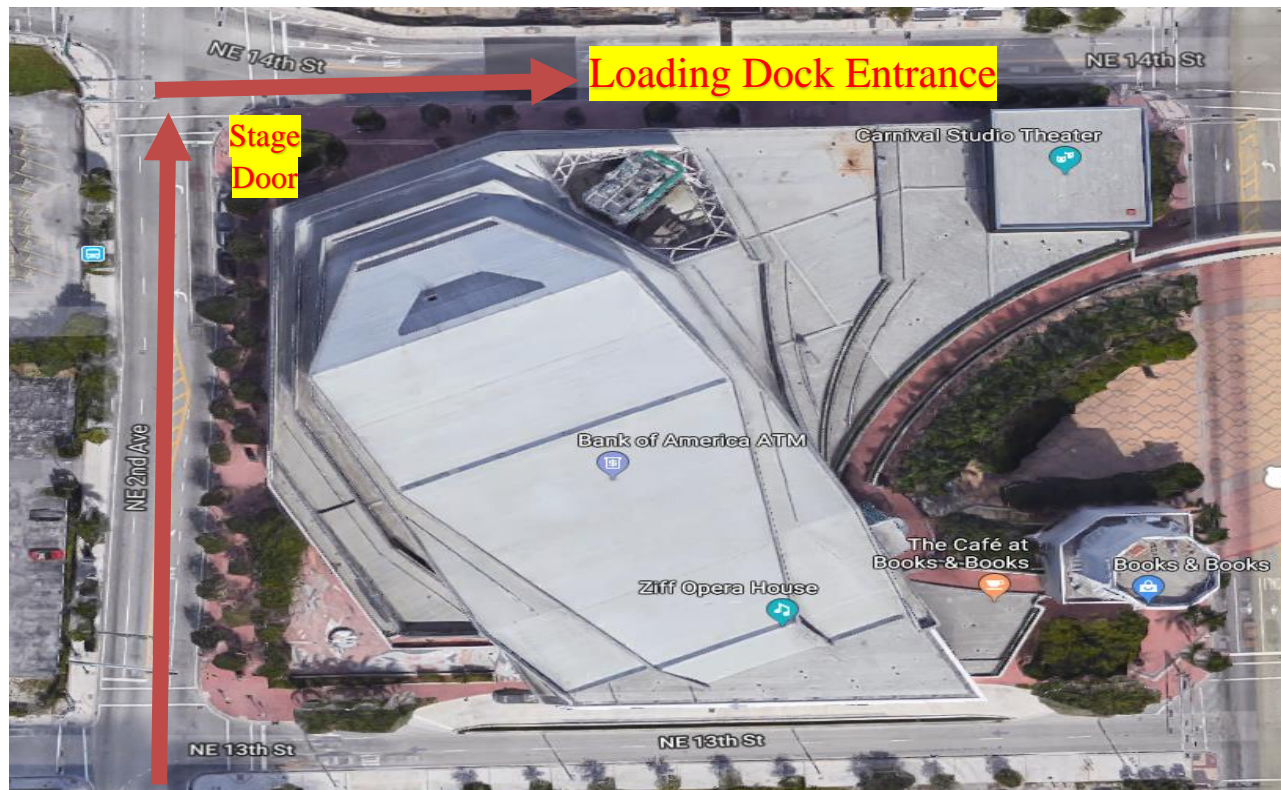
Seating

The Ziff Ballet Opera House auditorium has a seating capacity of 2,454 seats distributed among the orchestra level and four tiers.

Orchestra Pit	68
Orchestra Main	772
Orchestra Circle	204
Box Tier	98
Second Tier	356
Third Tier	390
<u>Fourth Tier</u>	<u>566</u>
Grand Total	2,454

Loading Dock

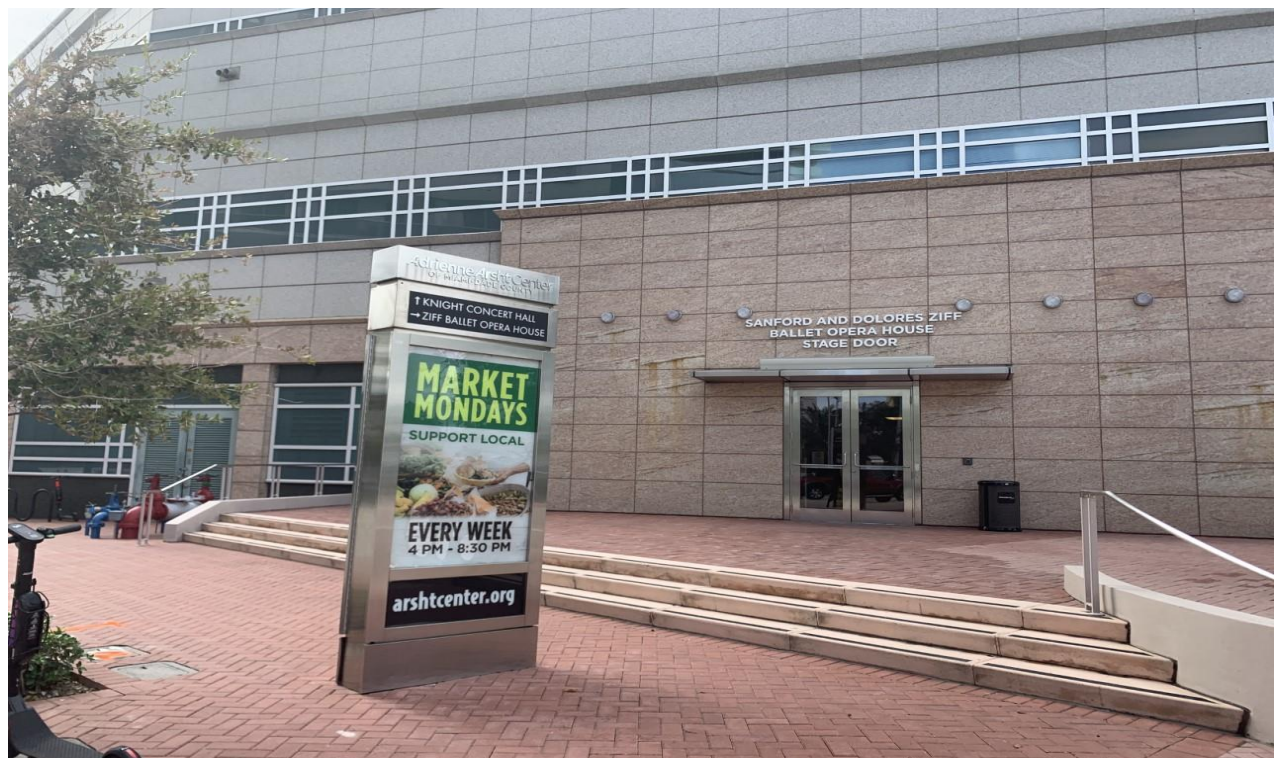
The entrance to the loading dock is located on Northeast 14th Street between Biscayne Boulevard and Northeast 2nd Ave. Trucks should approach the docks coming from Northeast 2nd Ave to turn eastbound onto Northeast 14th street. There are 4 bays that are at dock height (no forklift needed) and can accommodate three full-size 53' trailers. All the bays in the loading dock are fully sheltered from the weather. There is a direct push from each bay onto the stage.





Stage Door

The Stage Door is located at the intersection of Northeast 2nd Avenue and Northeast 14th Street. For safety and security of guests and staff, anyone working or visiting the Ziff Ballet Opera House Lynn Wolfson Stage, Carnival Studio Theater or Peacock Foundation Studio is required to check in with Security at this entrance, without exception. Those not having proper identification and authorization will be denied entry and asked to leave. Once checked in, you will be allowed entry to the dock.



Lynn Wolfson Stage

Dimensions

Proscenium opening width:	50' 0"
Proscenium opening height	Min 34' 0"; Max 38' 0"
Stage depth	71' 0"
Main Stage width: Fly rail to wall pocket	126' 0"
Main Stage gridiron height	110'
Main Stage grid counterweight lines	95 line sets
Apron, from curtain	4'
Inner pit	38' wide 8' deep
Outer pit	60' wide x 6' 6" deep
Pit size, small configuration	38' wide x 8' deep, up to 25 musicians
Pit size, large configuration	60' wide x 14' 6" deep, up to 96 musicians
Locking rail	Deck (0'-0")
Pin rail	50'
Fly rail to edge of compensating lift (SR wing)	34'
Fly rail to Left Stage wall	193'
Lower weight bridge	99'
Upper weight bridge	106'
Light gallery	79'
Rear Stage	84' wide x 57' deep x 35' high
Left Stage	66' wide x 61' deep x 35' high
Rear and Left Stage gridiron height	35'
Followspot Throw	170'

Wagons, Traps, and Compensating Lifts

- The Main Stage is equipped with four scenery wagons and three compensating lifts which live center stage (60' wide by 48' deep, starting 12' feet upstage of plaster).
- Of the four wagons, the single 48' deep x 60' wide x 18" tall wagon travels to the Rear Stage while three individual 16' deep x 60' wide x 18" tall wagons travel to the Left Stage, either individually, or as a unit.
- The second level is comprised of three wagons (60' wide by 16' deep) that move Upstage as a unit. Each wagon has 24 traps covering a center section of 36' wide by 13' 10" deep.
- The bottom is the lift surface, which has the same layout as the second level wagons, but only rises to stage level.
- The first level can travel upstage on top of the second level if traps with full escape possibilities are needed (through compensating lift wagons into basement).
- From the top of the lift surface to stage level is approximately 3' (maximum travel).

Floor

The stage floor surface is ¼" Masonite over 2 ¾" tongue-and-groove plywood attached to 2"x 4" sleepers over 2" resilient pads and insulation.

Soft Goods

Quantity	Description	Height	Width
18	Velour legs	40'	16'
7	Velour borders	12'	40'
2	Velour borders	16'	40'
1	Sharks tooth scrim (black)	35'	73'
1	Sharks tooth scrim (white)	35'	73'
1	White muslin cyclorama	40'	73'
2	Full B.O.C	40'	73'
1	B.O.C.Split	40'	73'
	Velour Tabs	8'	40'

Electrical Information

Show Power Distribution

Loading Dock	3 disconnects: 1 - 400A, 1 - 200A and 1 - 100A.
Light Gallery stage left @ 80' high	8 - 400A disconnects Serviced by a chain motor on trolley suspended from upper steel
Down stage left wall	2 - 400A, 5-wire disconnect
Down stage left Proscenium wall	1 - 100A, 5-wire disconnect
Down stage right Proscenium wall	1 - 100A, 5-wire disconnect
Mid stage left wall	1 - 100A, 5-wire disconnect
Up Stage Right Wall	1 - 100A, 5-wire disconnect
Up stage left wall (Rear Stage)	1 - 100A, 5-wire disconnect
Up stage right Wall (Rear Stage)	1 - 100A, 5-wire disconnect
Basement	1 - 100A, 5-wire disconnect

Lighting Information

- The lighting consoles and accessories present in this space include:
 - (2) Gio5 Console with ETC EOS Motorized Fader and EOS Programming Wings
 - (2) ETC Nomad Pucks Mini-Computer with Unlocked Output & Nomad 6144 Output Kit
 - (2) ETC Response MKII 4-Ports Gateway with XLR Output
- House lights, work lights, non-dims and curtain warmers are controlled separately by a [Paradigm Lighting](#) system that connects to local button stations, touch screens on stage and in the FOH lighting booth.
- DMX transfer/tie-in for road consoles is available in the FOH lighting booth and on stage. Control of the front of house lighting positions requires 1 DMX universe. Control of the FOH and over stage dimmers requires 2 DMX universes.
- Dimmers: 948 Strand CD80 2.4k dimmers + 19 CD 80 6k dimmers. Please see [circuit distribution](#) for locations and totals.

- 4- 21' light ladders each on stage left and right on motorized rigging and tracks to travel US/DS. One additional ladder is dead hung on each side.
- There is a dedicated **FOH lighting plot**. Please discuss any changes with the Director of Production and the Head Electrician.
- Please see lighting inventory below. The lighting instrument inventory is subject to change. Contact the Director of Production or the Head Electrician for updated information of available equipment for your show.

Fixtures: Front of House

27	ETC Source 4 5° @ 750w
69	ETC Source 4 10° @ 750w
28	ETC Source 4 14° @ 750w
52	ETC Source 4 19° @ 750w
16	ETC Source 4 26° @ 750w
4	Lycian 1293 3k Xenon followspots (in followspot Booth)

Fixtures: Storage

8	ETC Source 4 5° @ 750w
11	ETC Source 4 10° @ 750w
3	ETC Source 4 14° @ 750w
60	ETC Source 4 19° @ 750w
192	ETC Source 4 26° @ 750w
60	ETC Source 4 36° @ 750w
10	ETC Source 4 50° @ 750w
12	ETC Source 4 15°/30° Zoom @ 750w
6	ETC Source 4 25°/50° Zoom @ 750w
95	ETC S4 PAR MFL @ 750w (w/ WFL, NSP, & VNSP lenses available)
10	ETC S4 MultiPAR MFL 12 cell 4 Circuit @ 750w per cell (w/WFL, NSP, & VNSP lenses available)
18	L&E 65-60 MR16 Ministrip @ 750w (EYC lamps)
24	Altman GC-6 Ground Cyc @ 1kw (2kw per circuit)
10	Altman Sky Cyc 03 @ 1kw
4	Wybron BP-2 Beam Projector @ 750w
6	DeSisti Leonardo Fresnel @ 2kw
2	Hazers (rental fee applies)
2	Fog machines (rental fee applies)

Accessories

30	ETC Source 4 19° lens tube
29	ETC Source 4 26° lens tube
18	ETC Source 4 36° lens tube
18	ETC Source 4 50° lens tube
6	ETC Source 4 90° lens tube

- 36 Drop in iris for ETC Source 4
- 75 "A" Size pattern holder
- 75 "B" Size pattern holder
- 60 Wybron #7110 Coloram II with universal plate
- 60 Custom 25 Color gel string (see below for details)
- 6 Wybron #1900 24-way power supply
- 36 14" Top hat for ETC S4 05°
- 36 12" Top hat for ETC S4 10° (10 in use FOH, 26 in storage)
- 6 10" Top hat for Wybron Coloram II scroller accessory slot
- 76 7.5" Top hat for ETC S4 Par
- 38 6.25" Top hat for ETC S4 19°-50°
- 80 6.25" Half hat for ETC S4 19°-50°
- 50 6.25" Donut for ETC S4 19°-50°
- 24 12" Donut for ETC S4 10°
- 24 14" Donut for ETC S4 05°
- 6 12" Barn doors for 2k Fresnel (4 leaf)
- 50 7.5" Barn door For ETC S4 Par

Moving Lights

- 3 Martin MAC 2K Performance w/ 2 ea. 2 unit flight case (rental fee applies)
- 3 Martin MAC 2K Wash w/ 2 ea. 2 unit flight case (rental fee applies)
- 10 VariLite VL1000 TS (rental fee applies)
- 4 VariLite VL1000 TI (rental fee applies)
- 2 LEX 208v moving light power distro box

Custom Color String for Coloram II Color Scrollers

Frame #	Color	Description
0	R00	Clear
1	R02	Bastard Amber
2	R08	Pale Gold
3	R09	Pale Amber Gold
4	R14	Medium Straw
5	R317	Apricot
6	R318	Mayan Sun
7	R22	Deep Amber
8	R26	Light Red
9	R27	Medium Red
10	R36	Medium Pink
11	R44	Middle Rose
12	R53	Pale Lavender
13	R54	Special Lavender
14	R57	Lavender
15	R357	Royal Lavender
16	R58	Deep Lavender
17	L142	Pale Violet

18	R65	Daylight Blue
19	L161	Slate Blue
20	R76	Light Green Blue
21	R80	Primary Blue
22	R83	Medium Blue
23	L124	Dark Green
24	R91	Primary Green

*Other color strings in limited quantities are available. Please contact the Head Electrician for details.

Audio Information

Power Distribution

Isolated ground A/C power

- Down stage left, basement level: one (1) - 200amp
- Up stage left 1- 100amp
- Down stage left storage 1- 200amp

Mix Positions

House Mix Position: The Front of House sound mix position is 9' deep x 17' wide and located 84' from plaster line. *If your production requires FOH to be mixed from within the house, advance notice must be given in writing to allow for seat removal and adjustment in ticket sales.*

Sound Control Room

Acoustically isolated room containing recording, playback, audio console, loudspeaker array signal processing equipment, patching equipment for routing microphone and line level lines and a microphone signal splitting system. Large window is capable of opening.

Front of House

- 1 [Midas Verona 320](#)
- 2 Denon DN C680 CD player
- 1 Tascam DV-RA1000 DVD-R Audio Recorder
- 3 Yamaha DME64N DSP (FOH Processing: System EQ, Distribution, Dynamics)
- 7 XTA DS-800 modular microphone split system

Outboard Gear

- 4 Klark-Teknik DN-360 dual channel graphic equalizer
- 5 BSS DPR404 compressor/de-esser (12 channels)
- 3 Drawmer DS404 gate (8 channels)
- 1 Yamaha SPX2000 multi effects processor
- 1 T.C. Electronics D-TWO multi-tap rhythm delay

Main PA

- 7 Meyer MSL-4 Powered Speaker
- 1 Meyer DF4 Powered Speaker
- 4 Meyer CQ-1 Powered Speaker
- 4 Meyer 650 P Powered Sub-bass Speaker
- 3 Meyer UPA-1P Powered Speaker (4th Tier Delay)

Monitors

- 4 Discrete mixes from FOH
- 4 EAW NT26 speakers (side fill)
- 4 Klark-Teknik DN-360 1/3 octave Graphic Equalizer
- 2 Crown 2402 Power Amplifier

Microphones/Direct Inputs

- 1 Earthworks DK25L drum mic system
- 1 Earthworks DK25L condenser mic
- 1 Earthworks SR30mp condenser mics (2 Total)
- 2 Shure KSM 44 condenser
- 2 Shure SM 57 dynamic mic
- 1 Shure Beta 57 dynamic mic
- 4 Shure Beta 58A dynamic mic
- 2 Shure SM 81 condenser mic
- 1 Shure AD4Q dual channel wireless receiver (total 4 channels)
- 4 Shure AD2 Beta 58A handheld mic
- 2 AKG 414 B/XLS condenser mic
- 3 Sennheiser MD 421 II dynamic mic
- 4 Crown PCC 160 boundary condenser mic
- 2 Earthworks FM500 lectern condenser mic
- 4 BSS AC133 active direct box
- 1 Radial JD 6 6 channel passive direct box
- Various stands/cables

Communication System

- 2 Telex RadioCom BTR-800 w 4 TR-800 belt packs
- 9 Clear-Com RS601 single-channel belt pack
- 4 Clear-Com RS-602 two-channel belt pack

Rigging Information

Forestage Rigging

- There are no center points.
- Downstage proscenium rigging is possible through the near catwalk.
- Downstage of the proscenium rigging points are available upon request.
- Front edge of stage is 7'11" downstage of plaster.
- Points are arranged in a semicircle starting 16'6" downstage of the plaster line.

Fly System

- House fire curtain is steel framed and motorized counterweighted.
- House curtain is motorized counterweighted with variable speed winch, max speed 300fpm.
- 2 - Motorized counterweighted line sets for portal and border.
- 90 - 2,000lbs capacity, 6-line, single purchase, undedicated, manual counterweight line sets.
- 14' arbors, max capacity 2000lbs.
- Battens are truss type consisting of two 1-1/2" diameter schedule 40 pipes held 10" apart by 2 - 1/4" welded steel plates spaced 4' apart. Batten length is 74'; maximum travel is 108' weight is 300lbs.
- Capstan winch: 2000 lbs. capacity, 10 fpm
- Stage Left and Stage Right tab rigging counterweighted
- Total amount of counterweight: 100,000 lbs.
- 4 - 21' tracked light ladders stage left and right on motorized rigging. One additional ladder is dead hung on each side under the bridge.

**** Please reference [Line Set Schedule](#).**

Dressing Rooms

- 2 Visiting company offices
- 1 Conductor's dressing room (with private sink, toilet and shower)
- 8 Principal dressing rooms (with private sink, toilet and shower)
- 6 Two-person dressing rooms (with private sink, toilet and shower)
- 6 Chorus dressing rooms (with sinks, toilets and showers)
- 1 Performers lounge
- 1 Musician's lounge

**** Please refer to [Dressing Room Schedule](#) for assignment.**

Other Spaces

Next Generation Green Room	38' 3" W x 29' 3" L
Terra Group Patrons Salon	32' W x 21' L
Peacock Foundation Studio	53'7" x 79'9" (Pipe grid at 33'9")

Bucket & Scissor Lifts

(These lifts are shared amongst all 3 stages on campus. If needed, please confirm scheduling and use with your Production contact before load in begins.)

- 2) 40 ' Genie AWP-40S Single Person lift
- 1) 25' Genie GS-1930 Scissor lift
- 1) 32' Sky Jack SJIII4632 Scissor lift