



# Engineered Air Theatre



## Venue Technical Information

April 2020

## **General Information**

The Engineered Air Theatre (EAT) is a multi-use venue catering to a variety of performances. The facility is host to concerts, cabarets, dance shows, and plays, as well as meetings, parties and weddings. It has a well-appointed theatrical lighting array, excellent projection viewing and a top-tier sound system.

In order to be accessible to a range of users, the EAT is also equipped with a prefocused simple lighting wash and a limited sound system that can be operated by the Front of House staff, without the need for a technician.

For performances that require more than the basics, a technician from Arts Commons is required. For any event, a staff member from Arts Commons must be present in the theatre while it is being used by the client.

One hour of technical consultation is included in the basic rental fee. It is mandatory that a representative of the client meets with the Technical Coordinator no later than 72 hours prior to the performance day.

### **Theatre Location:**

Organizers and performers can access the EAT with their equipment via the Arts Commons Stage Door at 220 - 9th Avenue SE. Alternate, closer, access for smaller vehicles is available through the B2 level underground parkade (entrance via Macleod Trail SE). Parking fees apply if vehicle is left for longer than 30 minutes. (This parkade is camera-operated). The parkade access has 1.86m (6'1") vehicle clearance.

*Do not arrive at the public doors to the theatre. These doors are locked and will only be opened for patron access at showtime.*

### **Loading Door to Stage:**

Loading access from the Stage Door is via a long hallway, down the service elevator to B2 level and through an additional hallway.

Maximum dimensions of scenery/ road cases is determined by the service elevator to the theatre:

- Elevator door opening is 4' wide by 7' high
- Elevator dimensions are 8'2" deep x 9'7" high
- Smallest door to the stage is 4'11" wide x 6'8" high
- Smallest door to the dressing rooms is 2'8" wide x 6'8" high

Dollies are available to transport items to the theatre.

The loading dock is shared with several other venues, so access is tight. There is an absolute maximum of one trailer parked in the bay at one time.

**Parking:**

Unless special circumstances dictate (shore power required, studio recording truck etc), there is no provision for vehicle parking at the loading dock or elsewhere. There are many parking options near Arts Commons, either surface level, underground, or curbside. If essential, one loading bay may be booked (space permitting) in advance. Additional bus and tractor parking is available across the street if pre-arranged with the City of Calgary. This must be done in advance and there is a fee.

**Patron Access:**

The EAT patron entrance is located on 9<sup>th</sup> Avenue S.E. near the Macleod Tr. intersection, adjacent to Theatre Calgary's Max Bell Theatre.

**Seating:**

Various seating configurations are available, including rows, cabaret tables, high-tops and in-the-round. Seating configurations can be arranged through your bookings coordinator.

There are 56 fixed seats in the balcony and a maximum of 129 loose seats can be placed on the floor, for a max. total of 185. When a mixing console is placed in the house, seats may need to be removed or placed at the rear of the theatre.

**Storage:**

The access corridor that runs alongside the theatre is an emergency route and cannot be obstructed in any way. The other hallway, that runs to the elevator, may be used to store smaller items, such as road cases, provided that enough passageway is left for adequate egress.

There is no provision for storage on the loading dock, since this dock is shared with other venues.

**Stage Information****Stage Deck:**

The permanent stage has a masonite-covered (rough side up) surface, 34' 6" wide by 11' 4" deep. Stage height is 20" above the seating level. The height of the fixed lighting grid from the stage deck is 16', with approximately 13' 6" clearance from the stage to the bottom of stage lighting fixtures.

A stage extension, consisting of 4' or 8' deep risers, can be added to the front of the stage. The 8' extension does not extend the entire width of the stage to maintain access to the patron emergency exit (see diagram).

Permanent alterations to the deck (such as painting or cutting) are not allowed. If drilling, screwing, or nailing into the deck is required, special arrangements need to be made prior to the date of load-in. Under no circumstances is it permitted to screw or nail to the stage extension risers. A black "Marley"

dance floor can be installed over the deck surface upon request. No alterations, cuts or holes may be made do the dance floor.

There is only one entrance to the stage, from Stage Left, through a door 5'6" wide by 6'8" high. There is no Stage Right entrance or standard crossover. Backstage space is very small, with limited useable space in the Stage Left hall next to the dressing rooms.

### Miscellaneous Stage Equipment:

Clip lights (i.e. blue running lights):		4
Aluminum Framed Risers:	4' X 8'	7
	4' X 4'	1
	4' x 4' triangle (used for 8' extension)	1
Riser Legs: 10 ¼" (to be flush with stage)		36
Rostrum Blocks	various sizes	5

A UL25 push-around mast lift, extension ladder, 10' step ladder and 6' step ladder are available.

Other staging items, risers, furniture, etc. may be available upon request from our other venues, subject to availability.

### Rigging Information:

Fixed grid comprised of 3" x 3' squares.

Grid height above stage: 16' 0", with approximately 13' 6" clearance from the stage floor to the bottom of stage lighting fixtures.

Grid height above auditorium floor: 19' 9"

### Stage Drapes:

Main Curtain: royal blue velour with fullness, permanently installed on a traveller track and motorized. Control is either from Stage Left, or from the production booth. The traveller motor is quite loud and not recommended for use during performances.

A royal blue velour curtain also covers the entire back wall and both Stage Left and Stage Right walls. This curtain is mounted on a (non-motorized) traveller track and is easily drawn aside to reveal the projection wall. It is comprised of 10' segments.

There are no other installed draperies, or scrim.

6 *black* velour legs (4 @ 16'0" x 10'0" / 2 @ 17'2" x 10'0") are available for use as masking, or to create a crossover.

**Dressing Rooms:**

The dressing rooms are located on the same level as the stage, off Stage Left.

All dressing rooms are equipped with a washroom, complete with a shower.

There is a small shared common green room (8' 9" x 12' 4") with a small refrigerator, microwave, kettle and telephone. All dressing rooms have a keypad combination lock that share a combination.

Room 1: 8' 8" X 12' 4" 5 make up stations

Room 2: 6' 4" X 8' 9" 1 make up station

Room 3: 9' 6" X 20' 4" 9 make up stations

**Wardrobe Equipment:**

1 rolling costume rack (full size)

1 iron

1 ironing board

**Lighting Information**

The EAT is designed to provide lighting for a variety of theatrical and corporate events. There is a fixed lighting "house hang" suitable to most events, part of which may be operated by the Front of House staff for those events that do not require specific technical support. An Arts Commons technician is required for any lighting that is cue motivated, or that requires colour or refocussing.

A limited supply of "specials" is available for show-specific lighting.

The house hang is adjustable, but the client will be billed for all time required to restore the array back to its default configuration.

**Lighting Control:**

Location: lighting control is in the production booth at the rear of the balcony level

Control System: Electronic Theater Controls Ion XE Console, with 40-fader submaster wing and iPad remote

Dimmer Info: Strand CD-80 Dimmers - 92 dimmers @ 2400W

Circuit Locations: Circuits are located throughout the ceiling grid, at side booms and on stage. However, some circuits have been duplicated as many as 6 times throughout the venue

Connectors: 120V 20 amp new style twist-lock connectors

### Power Tie-in:

Three power tie-in options are available at Stage Left:

- 50 Amp single phase 220 V Range Plug
- 30 Amp single phase 220 V Dryer Plug
- 100 Amp 3 Phase, 4 Wire, requiring a hook up by a licensed electrician

The EAT is not designed for or equipped with followspots, although arrangements may be made for them to be rented for specific productions. A rental fee will apply.

### House Lighting Plot:

The house stage wash includes two areas: the main stage and the 4' extension, with three zones each – SL, C and SR. Each zone has a pair of white front-lights, a single warm top-light and a single scroller top-light. The two areas have scroller tip-lights from each side.

The main stage area also has warm and cool side boom lights, warm and cool backlights, 3-colour cyc lights, and backlight breakups.

Two fixtures are equipped with I-Cue moving mirrors and are intalled as one centre front light and one centre top light.

The 8' extension is not covered by the house lighting plot, but can be lit from the specials bar, which is easily accessed from a stepladder on the balcony.

There are two bars which are designated as specials bars and may be used as needed. One bar is over the balcony and is easily accessible using a stepladder. The other is over the floor seating area and requires seating to be clear and the lift to access. The specials bars are hung with an assortment of SL Lekolite-type fixtures as default.

### Lighting Inventory:

	Instruments	Power	Frame	House Hang	Storage	TOTAL
Strand	26° SL	575W	6.25"	14	13	27
Strand	26 SL Lens Tube				2	2
Strand	19° SL Lens Tube				2	2
Strand	36° SL	575W	6.25"	8	8	16
Strand	15°-32° SL	575W	6.25"	12	2	14
Strand	23°-50° SL	575W	6.25"	8	4	12
Strand	6" Fresnelite Fresnel (13°-65°)	750W	7.5"	14	4	18
ETC	Source 4 Par MCM (Wide)	575W	7.5"	2	2	4
EcoPower	EP-FLFWW (work lights)	50W		10		10
Strand	SL End Cap Spare	575W			3	3
Strand	Coda Three cell Cyc Light	500W	8.5"x9.5"	3		3

**Lighting Accessories:**

Chroma-Q Colour Scrollers (permanently installed)	12
Rosco I-Cue Mirrors (permanently installed)	2
Donuts	17
Gobo holders, size B	29
Iris units	9
Top Hats	2

All Fresnels are equipped with barn doors.

A selection of Rosco colour (and some Lee) is available upon request.

A selection of gobos, floor booms and floor stands is available upon request.

**Video Information**

The EAT has a Panasonic PT-EW640 WXGA LCD Video projector available for rent

- Image resolution is 1280p x 800p (16:10)
- Light Output 5800 lm
- Connection to the projector is via HDMI or VGA cabling

Standard projector location is on the balcony rail lighting position. Any other position must be approved ahead of time and requires additional setup/restore time.

A 24' width of the rear wall is painted white and free of electrical outlets and junction boxes, so may be used as a projection screen or cyclorama. No other screens are generally available.

Distance to Projection wall: 32' 2".

Recommended Image size: 16' x 10' with the standard lens

A wider-angle lens is available to allow for nearly full stage-width projection.

The presentation laptop can be located either in the production booth or onstage.

Arts Commons can provide a PowerPoint-capable PC laptop and remote clicker for a rental fee.

Arts Commons does not have a Mac running QLab.

## **Sound Information**

The EAT is equipped with both a professional full-range system and another, smaller, sound system to allow for operation by Front of House staff. Events that require sound mixing, cues, wireless microphones, or full-range audio require a technician supplied by Arts Commons. The general rule is that if audio is a significant part of your event, you likely need a sound technician. Arts Commons is committed to providing a high standard of presentation for every event.

Four monitor mixes are available without hiring a monitor technician and second console sidestage.

*All ambient preshow/ postshow music is to be supplied by the client. CD is preferred, but an mp3 player, or files sent in advance, is acceptable.*

### **Front of House Staff Audio System:**

Simple shows with four onstage audio sources, or less, can be operated by Front of House staff, using an audio cart positioned at House Left, near the rear of the main floor area. The equipment provided:

- 4 channel microphone mixer
- 1/8" stereo audio input (onstage or at audio cart)
- HDMI audio input from projector signal
- TASCAM 112 MK2 cassette deck
- TASCAM CD-301 single disk CD player
- Shure SM 58 microphones (up to 4)
- Radial ProAV DI, for computer/iPod audio or ¼' instrument jack
- Microphone stands with boom arm
- 20' microphone cables

### **Control Locations:**

The production booth is at the rear of the balcony level. It is a good audio control location for events where the audio does not need adjustment during the event, or has full cueing, such as corporate speaking events and plays. The booth windows can be fully closed, with the use of programme microphone audio through speakers in the booth. For events that have live music or potential for changes on-the-fly, the mix position on the floor level is preferable. It is on the main level, centre, just under the lip of the balcony. The floor mix position requires at least five seats to be moved.



**Mixing Console:**

Digico SD11i with D-Rack stage box

- Includes overview screen
- 12 faders x 3 banks x 2 layers
- 32 mono or stereo channels
- 12 busses configurable in groups or auxiliary sends as required
- Up to 6 stereo effects, 12 graphic EQs
- 32 mic inputs (stage box) + 16 mic inputs (local onboard)
- 16 line outputs (stage box) + 8 line outputs (local onboard)

The EAT stage has 16 analog inputs to the patch bay located around the stage. For shows that require more inputs, the D-Rack stage box can be used instead of, or as well as, the analog connections. The mixing console is exclusively for use by qualified technicians.

**System Processing:**

- Lake LM44 4x4 and 2x6 System Processors for all outputs
- Lenovo x230 tablet pc for processor control & Smaart measurement
- Smaart measurement kit (TASCAM US144 mic pre & Earthworks M30 mic)

**Analog Processing:**

- dbx DDP digital dynamics processor
- Drawmer MX-30 Stereo Gated Compressor Limiter
- TC Electronics M-One Effects Unit
- Ashly GQX 3102 Stereo Third Octave Graphic EQ's

**Playback Equipment:**

- HHB CDR830 Plus CD Burner
- TASCAM CDX-1500 Dual Transport CD Player
- Laptop PC available for rent

**Speakers:**Full-Range Performance System (requires technician)

- Meyer CQ-1 for stereo mains x2
- Meyer UPM1P for front fill (may be placed as either lip fills on stage, or side fills on CQ-1 carts) x2
- Meyer UPJ permanently flown as balcony fills x2

The full-range performance system is flat ~55hz-17khz  $\pm$  3 dB @ 100 dB A-weighted. 100 dB at floor mix position is the maximum permitted level in the theatre owing to the possible audio disruption to neighboring venues.

The EAT does not have subwoofers as standard, but they may be requested from our other venues, subject to availability.

Simple Performance System (operated by FOH staff)

- Centre cluster: Tannoy CPA 15 (mono feed) x2
- Tannoy CPA 12 (balcony fill) x1

Simple system is flat ~90hz-15khz  $\pm$  3 dB @ 95 dB A-weighted

Extra speakers common to both systems

- Bose 102 Flush mounted loudspeaker as under-balcony fills x3
- Lobby speaker system

**Intercom System:**

- Wired, 3 channel Clear Com
- Stage Management Desk in production booth
- Station locations: production booth, backstage adjacent to dressing rooms, and throughout the theatre and lobby
- 5 beltpacks, 5 single headsets and 3 speaker boxes are available

**Monitors:**

- 4x EAW SM200iH (passive/biamp switchable 12" x 1"), using QSC PL230 Amplifiers
- 2x Tannoy System 8 reference monitors (permanent to booth)

**Audio Input Equipment:**

	<u>Qty</u>	<u>Make</u>	<u>Model</u>	<u>Description</u>
Microphones				
	6	Shure	SM58	Dynamic Vocal Mic
	4	Shure	SM57	Dynamic Instrument Mic
	4	Shure	Beta 87	Condenser Vocal Mic
	2	AKG	451	Small Diaphragm Condenser
	4	ElectroVoice	PL35	Hypercardiod Drum Mic
	1	Audix	D6	Bass Drum Mic
	2	BayerDynamic	MK5	Lavalier Mic, cabled
	2	Audio Technica	4051a	Small Diaphragm Condenser Mic
	2	Shure	UR2	Hand held wireless mic, SM58 capsules*
	2	Shure	UR1	Lavalier transmitter beltpack*
	2	DPA	4060	Lavalier capsules, omnidirectional
	2	Crown	LM 300	Gooseneck Lectern Mic
	2	Crown	PCC 160	Hypercardiod Boundary Mic

Note: wireless microphones are an ancillary rental item. Two receivers are readily available, more upon request, subject to availability from our other venues

**Direct  
Injection**

	1	Radial	Pro AV 2	Stereo MultiMedia
	2	JSCH Special	-	DI box and tranformer isolator
	2	Countryman	Type 85	FET DI
	2	Whirlwind	Director	DI
	2	Whirlwind	HotBox	Active DI
	5	Radial	JDI	Passive Jensen DI
	2	Radial	J48	Active DI
	1	Rapco	LTI 100	Laptop Interface, 1/8" hardwired input

**Isolators**

	1	Radial	Twin Iso	2-Channel Isolator
	5	Cable Factory	LSplit-2	Signal Splitter and Iso boxes

**Default  
Equipment**

1	Shure	SM58	Talkback Use in Booth
3	ClearCom	CC95	Intercom headsets, default placements in theatre
3	ClearCom	501	Intercom wired belt packs, default placements in theatre
1	Crown	PZM 11	Programme mic in house ceiling
1	Radial	Pro AV 2	Stereo MultiMedia DI, in booth

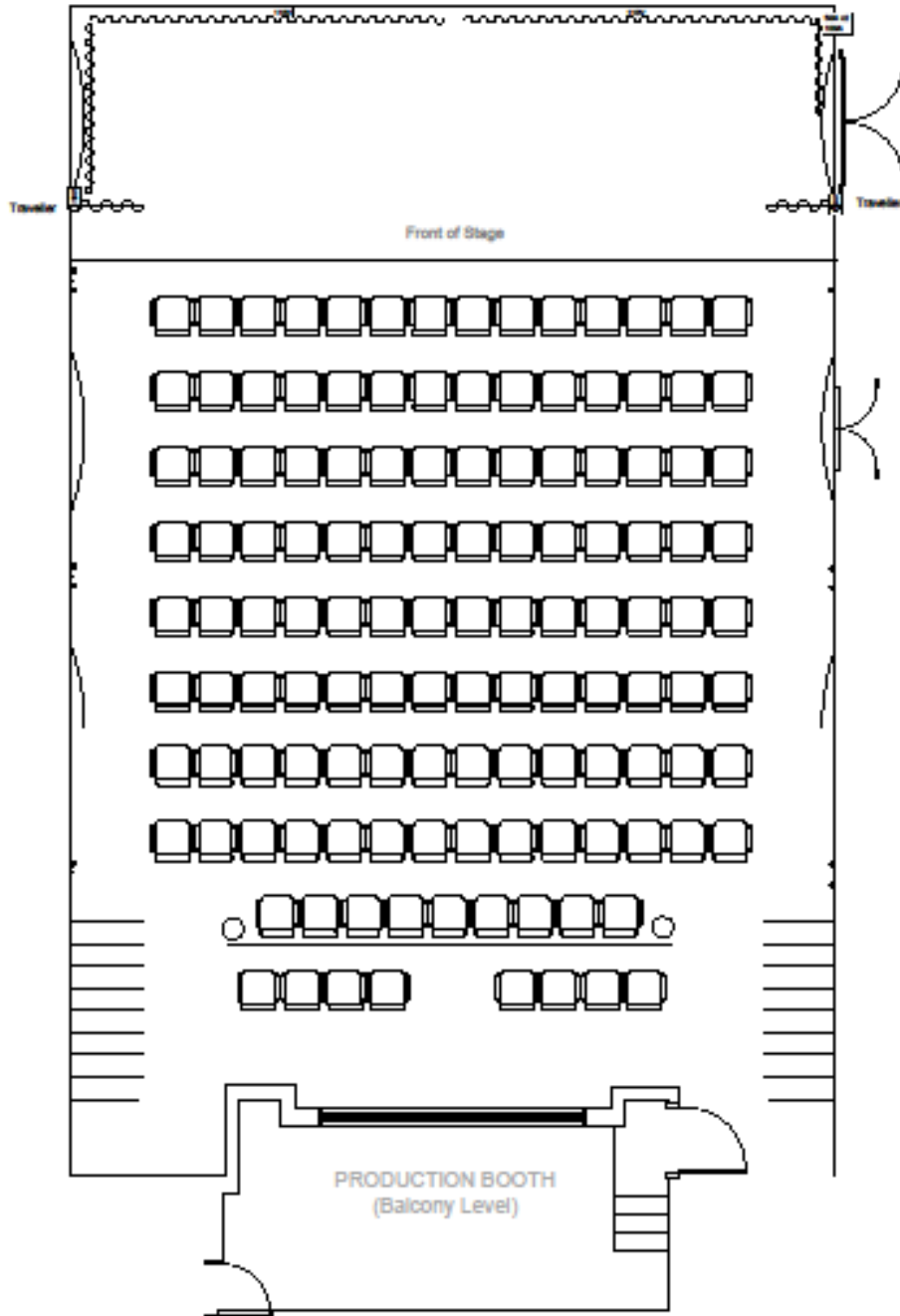
**Miscellaneous Equipment:**

<u>Item</u>	<u>Description</u>	<u>Qty</u>
Regular Short Mic Stands	K & M, green base	7
Regular Tall Mic Stands	K & M, green base	9
Tall Mic Stand	Green Base, Long fixed boom	1
Round Base Stands	Tall, Black, slotted base	10
Round Base Stand	12" tall, black base	1
Round Base Stand	24" tall, silver base	1
Music Stands, Wenger	Black	6
Keyboard Stands	Euromet, X-brace Single	2
Guitar Stands	Single	2
Guitar Stand	Boat, holds 5	1
Small tables	2' x 2', 17.5"h, Brown, silver base	2
Orchestra Chairs	Black, padded	8
Bar Stools	Black, Hard-topped, wooden	4
Bar Stools	Black, Soft-topped, metal	4
Sand Bags	Black	14
Persian Rug	8' x 11', Cream with Red Accents	1
Drum Rug	4' x 3', black	1

**Piano:**

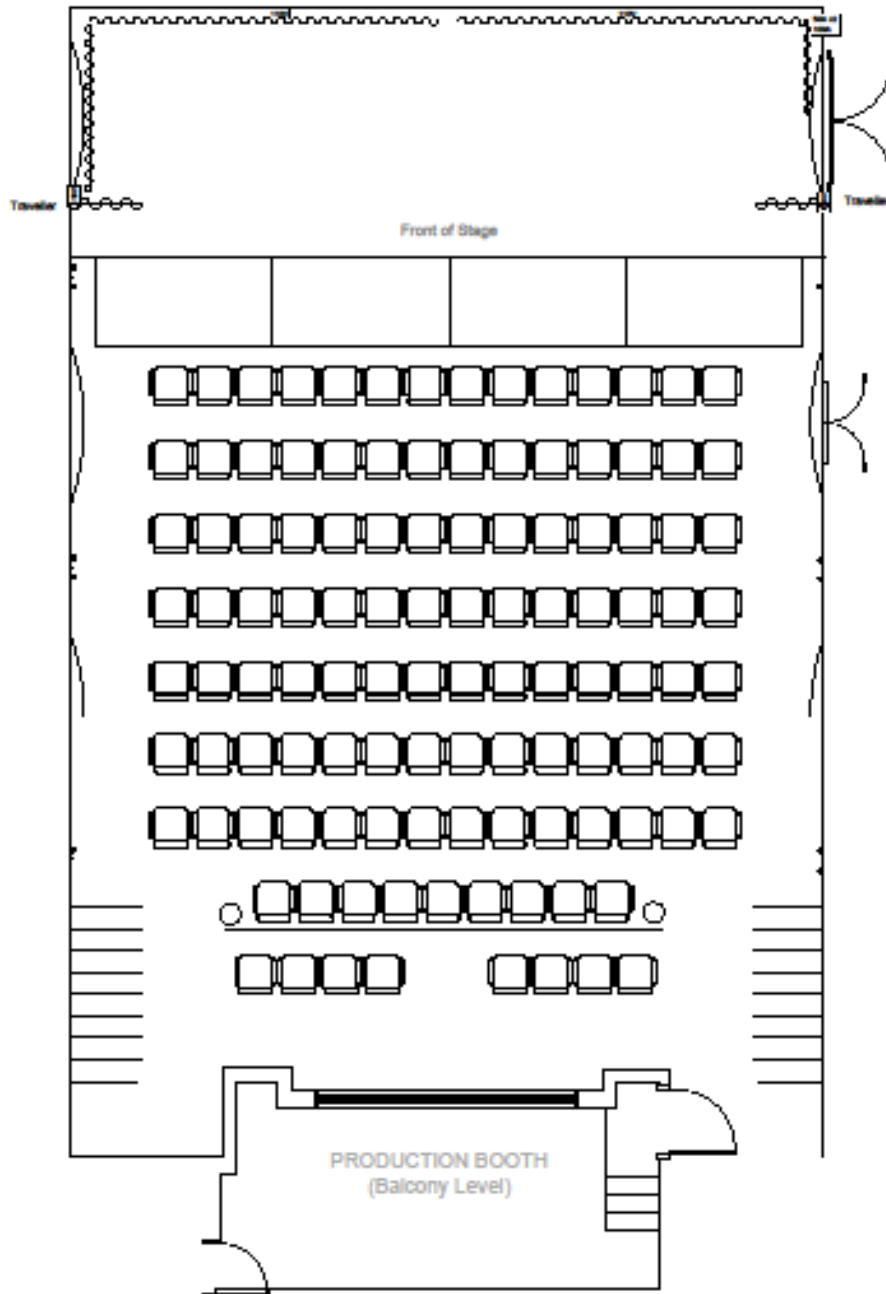
A 7' Steinway "B" grand piano is available for rent in the EAT. Tuning by our preferred provider is strongly encouraged to provide a professional standard of performance.

## Engineered Air Theatre – Full Seating – 185 Seats



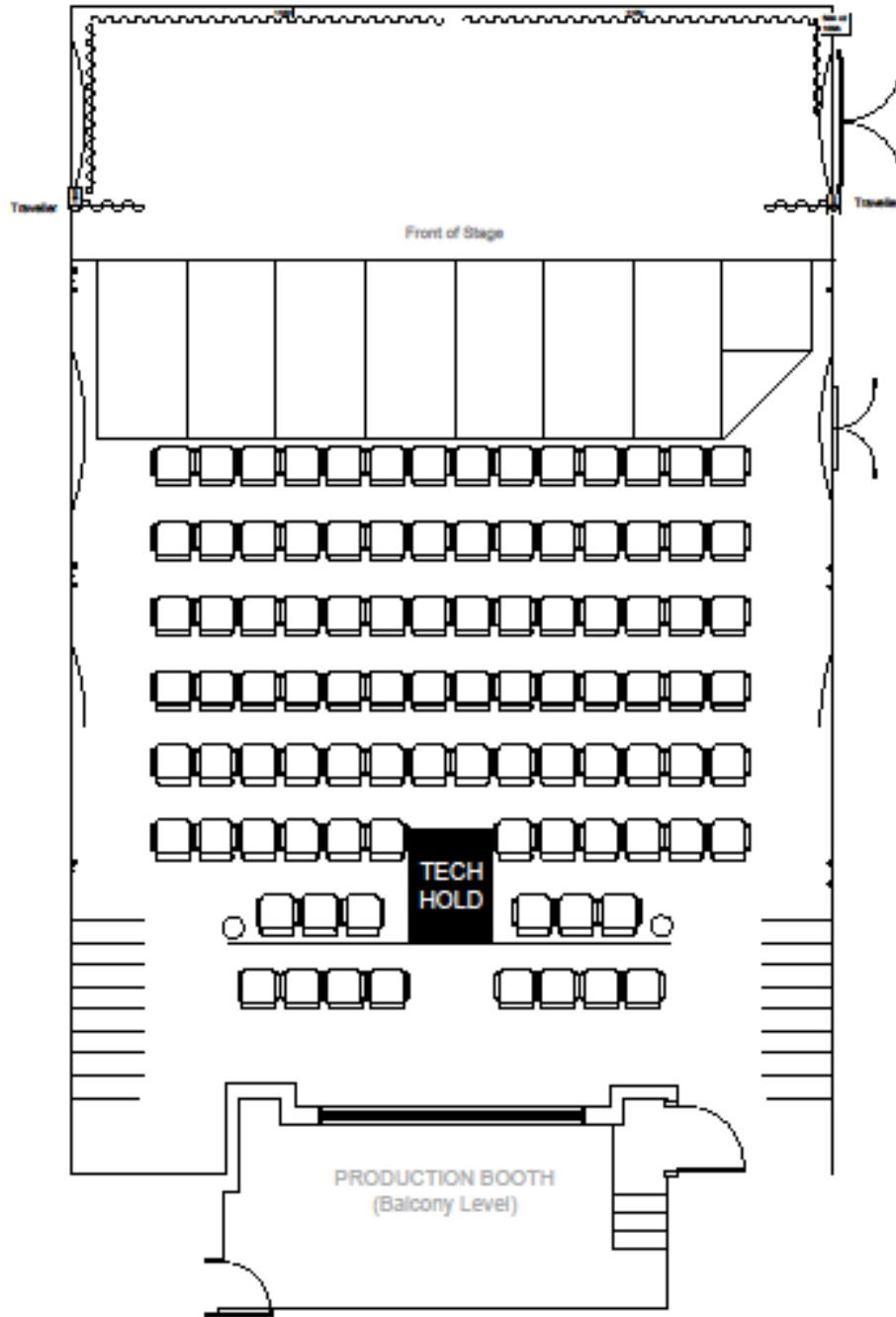
Engineered Air Theatre  
House Drawing  
January 8, 2020

## Engineered Air Theatre - 4' Extension Installed – 171 Seats



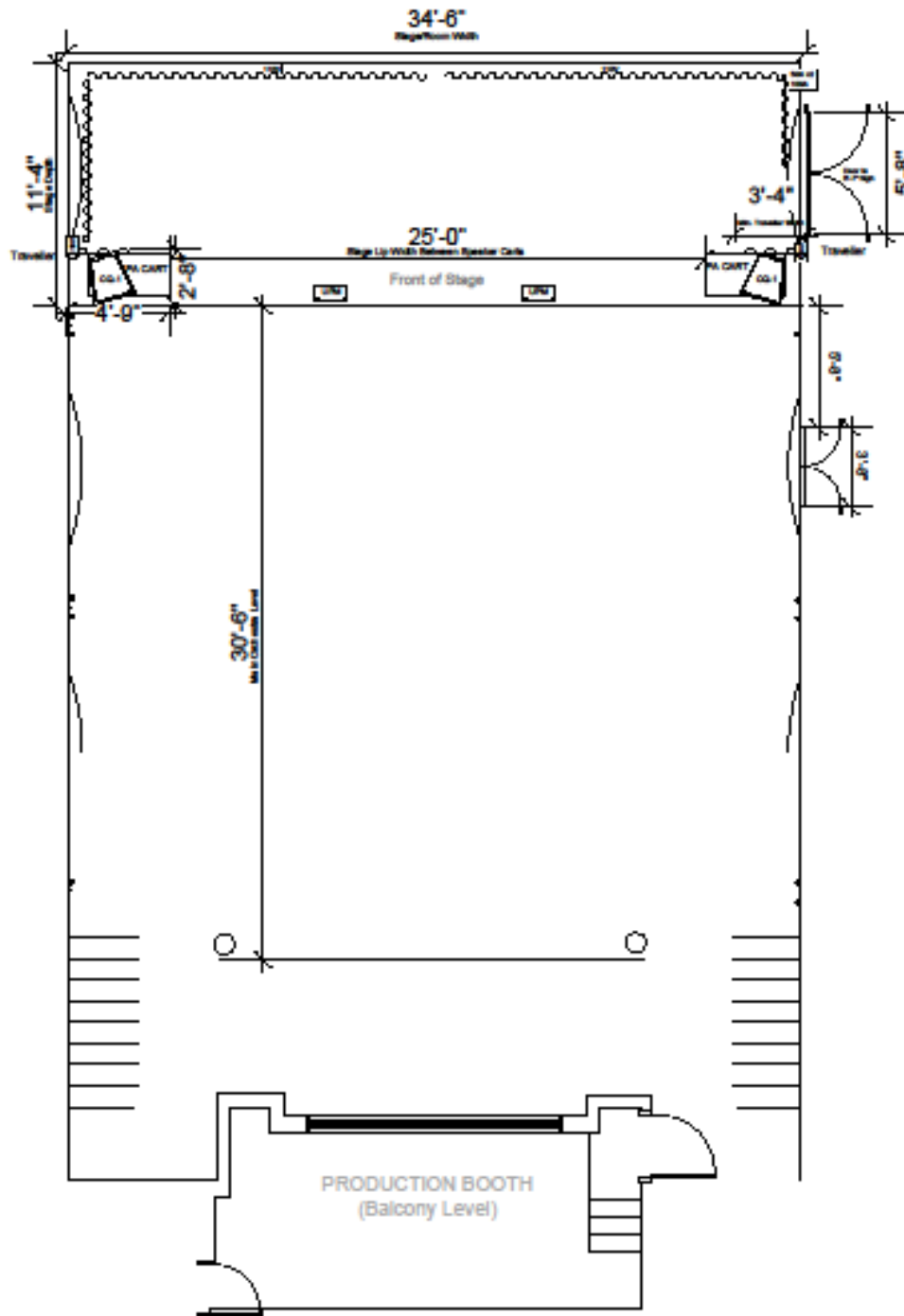
Engineered Air Theatre  
House Drawing  
January 6, 2020

## Engineered Air Theatre - 8' Extension Installed and Tech Hold – 158 Seats



Engineered Air Theatre  
House Drawing  
January 8, 2020

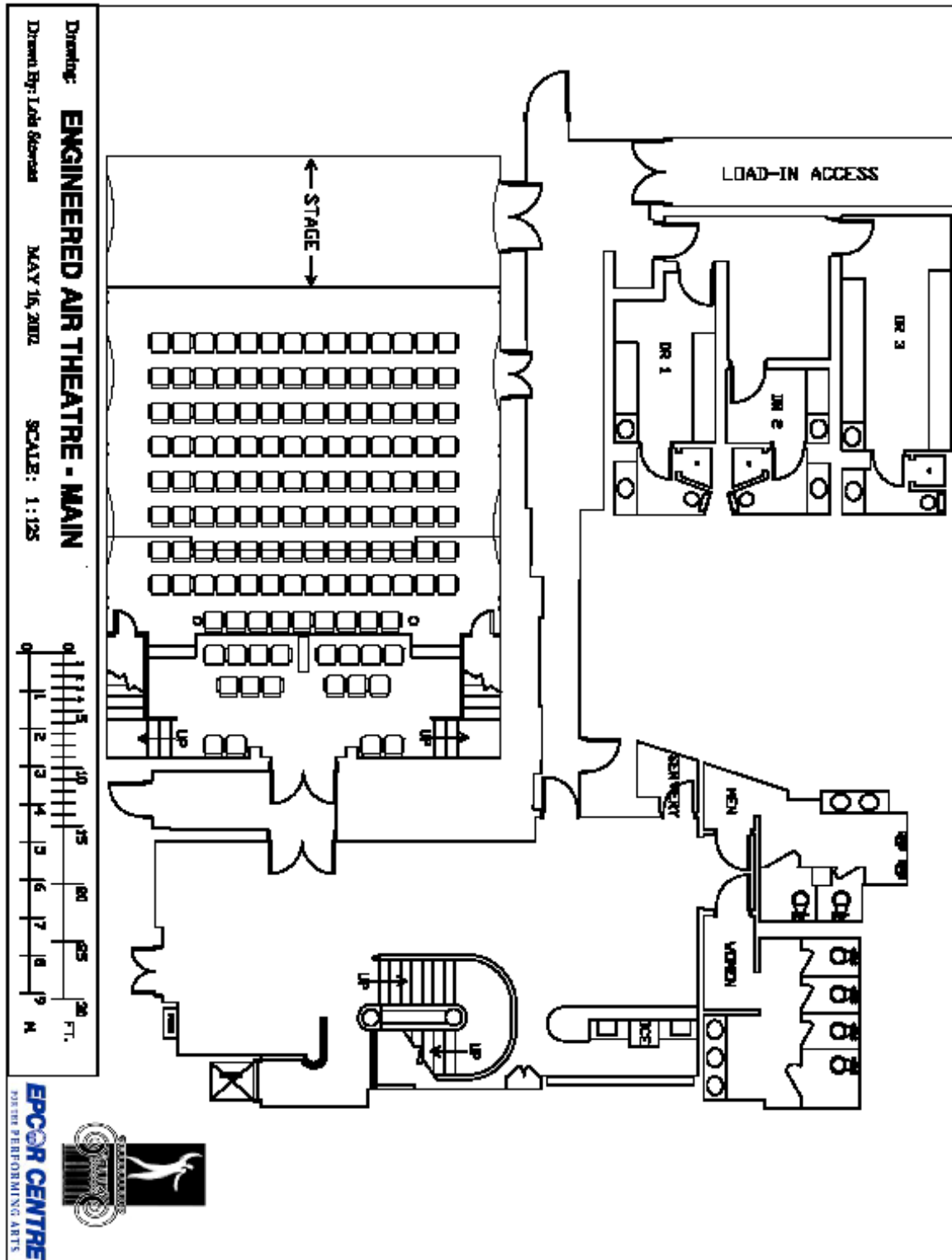
## Engineered Air Theatre - Dimensions



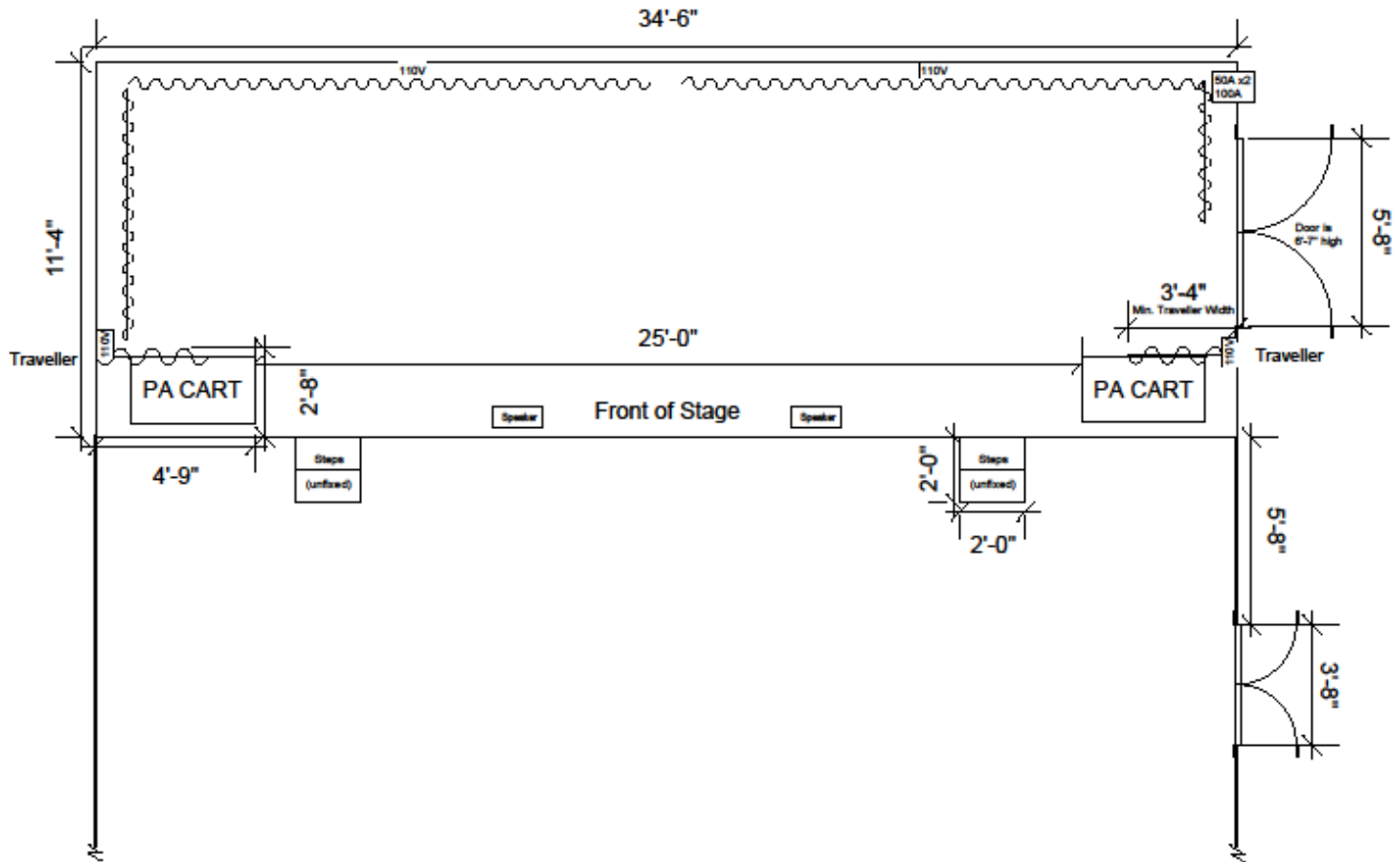
Engineered Air Theatre  
House Drawing  
January 8, 2020



## Engineered Air Theatre - Facility

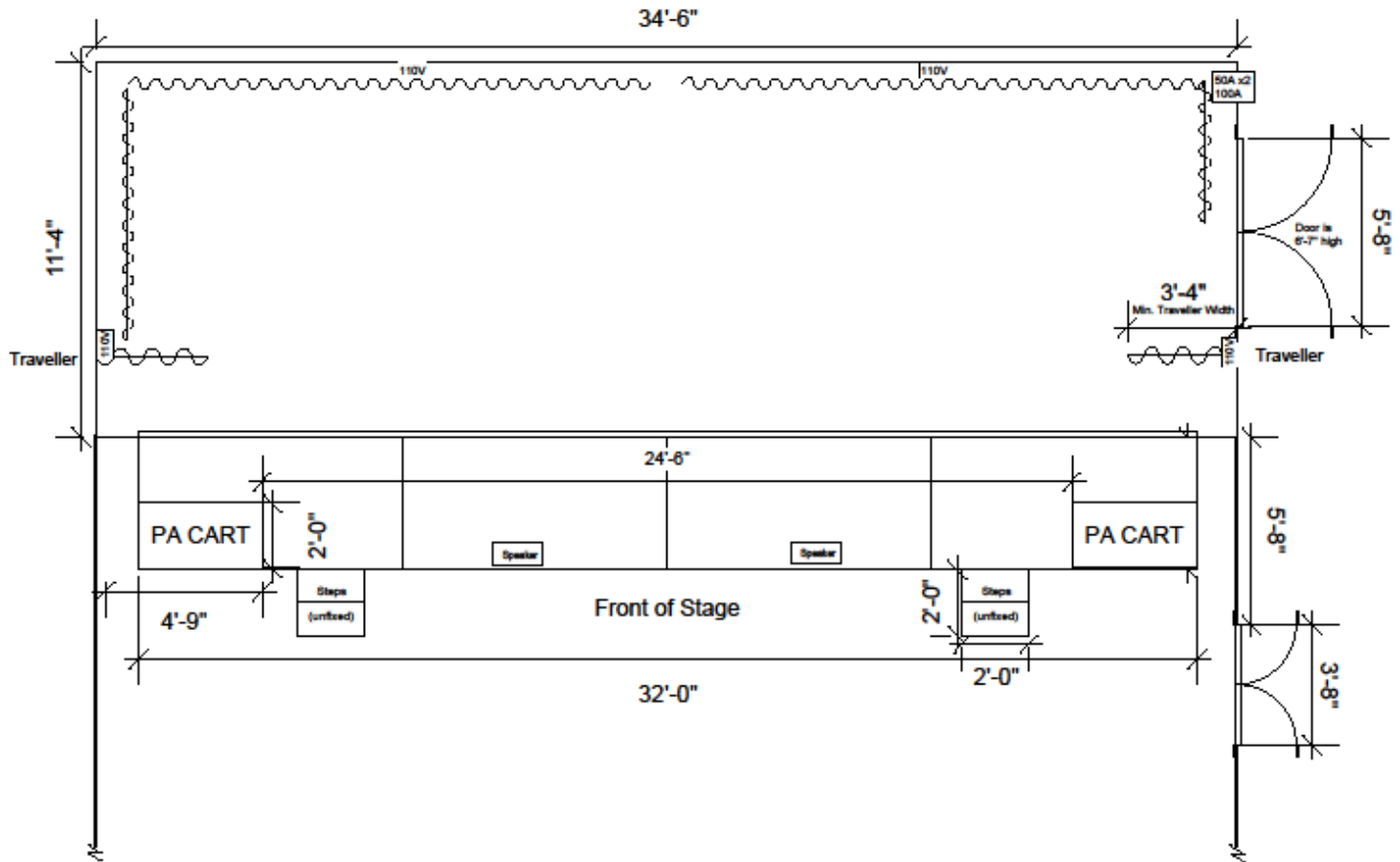


## Engineered Air Theatre – Stage – no extension



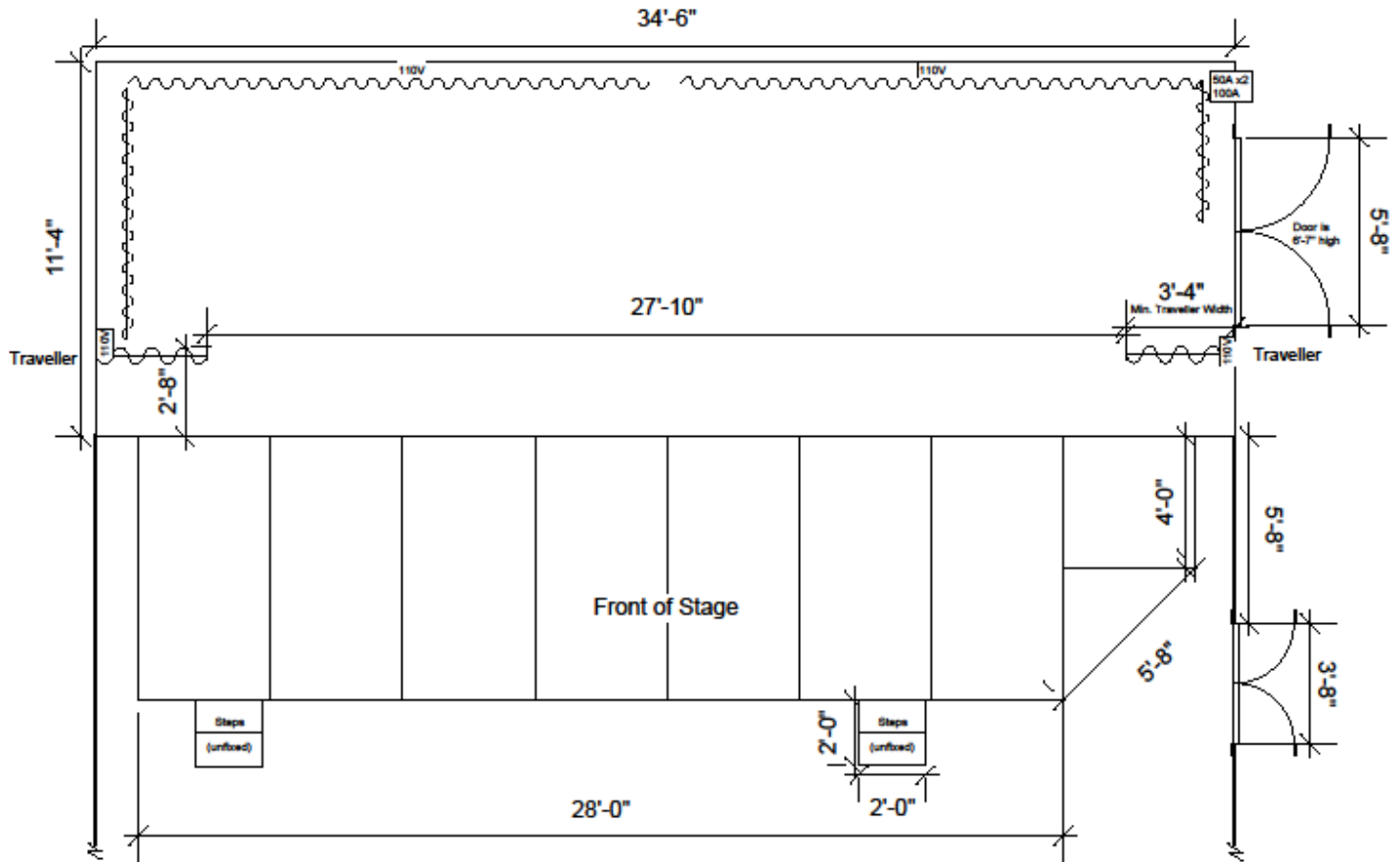
**Engineered Air Theatre**  
Stage Drawing to Scale

## Engineered Air Theatre – Stage – 4' Extension



**Engineered Air Theatre**  
Stage Drawing to Scale

## Engineered Air Theatre – Stage – 8’ Extension



**Engineered Air Theatre**  
Stage Drawing to Scale

Note: The PA speaker carts cannot be securely placed fully downstage on the 8' riser

## Engineered Air Theatre – Lighting Grid

