

NATIONAL SAWDUST is a 2,200-square-foot Chamber Hall with balcony on three sides and ceiling height of 25 feet. The acoustics are optimized for non-amplified music while also offering a variable system of acoustic curtains and loudspeakers to tune the room for light sound reinforcement, amplified and electronic music.

Capacity: Cabaret seating configuration: **105**; Theater seating configuration: **170**, Standing-Room: **320**

Stage Configuration:

- The stage is comprised of (12) interlocking manually-adjusted decks
- Full size stage (12 decks): approx. 27' wide x 12' deep
- Deck height options: Flat (0"), 12", 24", 30"

Rigging:

- Motorized upstage batten (4th electric) for hung projection screen
- (12) Stage decks are manual assist, individually height-adjustable
- Motorized piano lift stage left for potential lateral stage extension
- Scenic elements **must** be floor-standing, and fireproofed with certification
- Rigging capabilities and points are highly limited, please inquire with Production staff

Banned Properties: Any use of the following properties in performance are subject to fines or cleaning fees if not expressly approved in writing: Open flame [\$1000 fine]. Haze, smoke, incense or other airborne particulates (except venue hazer). Glitter, sand, soil, confetti, finely shredded paper, or any fine material that can fall under the stage or potentially foul its mechanical components. Liquids, food, ice, or fluids deliberately spilled on stage.

BACKLINE

(1) Bösendorfer 225 grand piano — 7'4", 92 keys. **Any** use of extended technique **must** be advanced.

(1) Fender Deluxe Reverb (reissue) — tube guitar amplifier

(1) Genz-Benz Shuttle 9.0 bass head + (2) Bag End s15d cabinet — bass combo amplifier

(1) AER Compact XL — solid-state amplifier (acoustic guitar)

>>> THERE ARE NO DRUMS OR DRUM HARDWARE ON BACKLINE <<<

(1) drum rug

(4) guitar stand

(3) single-tier keyboard stand

(12) K&M 11870 heavy-duty music stand

(12) Mighty Bright Duet2 LED music stand lights

(1) conductor's podium 3ft x 3ft x 8in, white lucite

SOUND CONSOLE

HOUSE MIX CONSOLE:

DiGiCo SD8-24, software Stealth Core 2 v1090

SD-Rack with 48 XLR inputs (tied to upstage patch panels), 8 Analog XLR Line Outputs to monitor wedges

- Mix position is in an open-front Control Booth overlooking the balcony.
- NS does not operate a dedicated monitor console, monitor mixing from stage is possible on an in-house iPad running DiGiCo SD App

FX: DiGiCo SD8 internal FX, Bricasti M7 Reverb

LOUDSPEAKERS & SOUND REINFORCEMENT

National Sawdust is a proud partner of Meyer Sound.

MAIN FLOWN PA SYSTEM:

- (10) Meyer Sound LINA line array (5 per side)
- (2) Meyer Sound UPJ outfill (1 per side)
- (2) Meyer Sound LINA balcony fill (1 per side)
- (2) Meyer Sound 750-LFC subwoofer (1 per side)



(2) Ground "Sidecars": (1) Meyer Sound UPJ top, (1) Meyer Sound 950-LFC sub

MEYER SOUND CONSTELLATION®:

Constellation is an active-acoustic system of loudspeakers, microphones, and algorithmic digital signal processing allowing the acoustical properties of the hall to be altered to suit the nature of the event taking place, providing flexibility unattainable with traditional mechanical methods of variable acoustics such as baffles, orchestra shells, or secondary chambers. These loudspeakers are installed invisibly behind the architectural "shell" of the performance hall, distributed among the walls and ceiling.

- (74) Meyer Sound UP-4XP
- (12) Meyer Sound Ashby
- (12) Meyer Sound MM-10 compact sub
- (4) Meyer Sound UMS-1XP compact sub

SPATIAL AUDIO

National Sawdust's Constellation system is hosted on Meyer Sound's D-Mitri® platform, allowing spatial audio and multichannel surround sound designs to be mapped and played through the Constellation loudspeakers via Meyer SpaceMap®. Use of spatial audio is offered only to select performances and must be discussed and approved before an event is contracted.

Monitors & Auxiliary Speakers:

- (8) Meyer Sound MJF-210 monitor wedge
- (2) QSC K12 powered speaker — additional floor wedges or fills on stands
- (2) ElectroVoice ETX18SP — additional subs

MICROPHONES & DIs

SDC

- (2) Neumann KM184
- (2) Sennheiser MKH 8020 omni
- (4) Sennheiser MKH 8040 cardioid

LDC

- (2) AKG C414 XLS

Instrument-mounted

- (8) DPA 4099 - wired or wireless
 - (6) Violin/Viola mounts
 - (3) Cello mounts
 - (2) Contrabass mounts
 - (2) Trumpet/Sax mounts
 - (2) Magnetic piano mounts
 - (1) Acoustic guitar mount
 - (1) Universal clamp mount
 - (1) Universal velcro mount
- (1) DPA 4061 - wired or wireless

Vocal

- (6) Sennheiser e 945 handheld dynamic
- (1) Sennheiser e 965 handheld condenser
- (3) Shure SM58
- (2) Sennheiser HSP 4 wireless headset
- (4) DPA 4080 cardioid lavalier

Mic Stands:

- (4) K&M extra-tall heavy-duty tripod fixed-boom stands
- (7) K&M tall tripod telescoping-boom stands
- (8) K&M medium tripod 3-tier telescoping-boom stands
- (3) K&M short tripod boom stands
- (2) K&M short round base boom stands
- (4) K&M tall round base straight stands

Misc:

- 48-channel Radial passive 3-way mic split (Jensen transformers)
- 32-channel 100ft XLR snake — for touring Monitor Console use
- 12-channel 20ft XLR snake — floor box / sub-snake

Instrument

- (4) Shure SM57
- (2) Sennheiser e 906 (amplifiers)
- (2) Sennheiser e 904 (percussion)
- (2) Sennheiser MD-421
- (2) Beyerdynamic M160 Dynamic Double Ribbon
- (1) Audix D6 (kick drum)
- (1) AKG D12 (kick drum)
- (1) ElectroVoice RE20
- (1) Beyerdynamic M88 TG

DI Boxes

- (6) Radial JDI Passive Mono
- (2) Radial J48 Active Mono
- (1) Radial JDI Duplex Stereo
- (1) Radial JPC Computer Active Stereo
- (1) Radial USB-Pro (DAC) USB to Stereo XLR

Wireless

National Sawdust has 4 channels of wireless receiver, we do not have IEM on backline

- (4) Sennheiser EM 300 G3 wireless receiver
- (4) Sennheiser SK 300-945 G3 wireless handheld
- (4) Sennheiser SK 300 G3 belt-pack - 1/8" threaded connector

VIDEO PROJECTION & MEDIA PLAYBACK

Projector: (1) Christie DHD951-Q, 8200 Lumens

- Standard lens 1.2-1.8 (as seen in photos below)
- Extra-short-throw lens 0.8 (larger image, less bright)
- 16:9 aspect ratio, resolution 1920x1080 @ 60 Hz. Final image size depends on projection surface.
- HDBaseT input from control booth, Digital-SDI input via any venue Coaxial tieline
- Artists and clients are expected to provide output via HDMI, NS will provide needed conversion

Projection Surfaces

Projection screens are **not motorized** and **cannot be changed mid-show**

- Upstage Wall — Designers may contact Production department for design files (AI, PSD, PNG) to create content sized for the white wall panels, or to use for templating projection mapping software
- AV Stumpfl 16'x9' front-projection screen — Dead hung from upstage batten, not motorized
- White fabric drape 27'x17' — Dead hung from upstage batten, not motorized

Projection Computer and Video Sources

(1) MacBook Pro Retina 15" running QLab v.4

- Can play/project any AVFoundation-compatible media
- **Recommended video formats:** ProRes LT (.mov), H.264 (.mp4) | 1080i/1080p @ 24/30/60 fps
- **Recommended image formats:** PNG, JPEG | 1920 x 1080 px or larger
- Content can be sized, scaled, and positioned within projector throw via QLab
- PDF can not be projected, slides or title cards should be a series of 1920 x 1080 PNG/JPEG images

(1) Yamaha BD-A160 Blu-Ray / DVD player (stereo sound output only, no 5.1 output)

Conversion

(2) AJA HDMI to 4x D-SDI encoder/splitter

(2) D-SDI to HDMI decoder

(1) 4x1 HDMI switcher

(2) 1x4 HDMI splitter

Cameras and Video Recording

(4) Panasonic AW-HN130 HD integrated PTZ camera

(1) Panasonic AW-RP50 camera controller

(1) Blackmagic ATEM 2 M/E Broadcast Studio 4K

(1) Blackmagic ATEM 1 M/E Advanced Panel

(5) Atomos Samurai Blade recorder

Audio Interfaces

(1) Radial USB-DI – 0 in, 2 out

(1) MOTU UltraLite mk3 – 8 in, 10 out, driver required

(1) RME MADiface XT – 2 in, 64 out, driver required



Fig.1 - Projection direct to Upstage Wall



Fig. 2 - Projection to 16'x9' fixed-frame screen

LIGHTING

Lighting Control: ETC Ion with (1) 2x20 fader wing + (1) 2x10 fader wing

- Light console is operated from Control Booth during shows, but can be moved for tech time by special arrangement
- **National Sawdust provides a lighting designer for every performance.**
- Lighting plot and magic sheet available by request.

Rep Plot

(18) ETC Source Four 36°

(13) ETC Source Four 23°

(12) ETC Source Par WFL

(16) ETC ColorSource Par

Gels

All conventional fixtures are gelled with R3206 (1/3 CTB), Ellipsoidals also with R132

Strobes

All ColorSources, Auras, Robes are capable of multi-color strobing

Movers

(10) Martin MAC Aura Moving Wash

(6) Robe Robin DLS4S Moving Profile

Hazer:

Look Solutions Unique 2.1 (NB: a \$200.00 surcharge applies for use of Hazer)

For Guest Lighting Designers and Additional Lighting:

- (12) 2.4kw stage-pin circuits are available on deck
- DMX patch points to deck may be run from side booms
- There is a two port gateway at front of house with one output available
- Ion lighting console has 2 universes (1024 addresses) of control, rep plot uses about half of that.
- NS has a small inventory of additional Source Four Ellipsoidals, 6" Fresnels, stage-pin cable, floor mounts, and three female Edison to male stage-pin adapters. Please advance any additional lighting needs.
- Contact NS Technical Director and Resident Lighting Designer to advance bringing your own fixtures or using our additional inventory
- Additional paid tech time must be scheduled to hang and strike additional fixtures.

AUDIO & VIDEO RECORDING SERVICES

To order recordings for a show, mark recording requests directly in a show's Tech Doc during the advance. Pricing is on a **per-show** basis. All delivered assets are for promotional use only. Leave a Thunderbolt, USB3.0, or USB3.1 hard drive (no thumb drives) with tech crew or box office on night of show. Label drive with name, date of show, contact email. Allow 2-4 business days for asset transfer. Drives can be picked up from NS Box Office (regular hours noon-6pm) or shipped at artist's expense. If Windows compatibility is required, please note on drive.

AUDIO RECORDING:

Archival Stereo Board Feed — \$50.00

48 KHz / 24-bit stereo WAV

Denon DN-500R, fully digital signal path from FOH audio console

Multitrack Audio Recording — \$150.00

48 KHz / 24-bit split WAV - all stage inputs + 2-4 room mics

Sound Devices 970 multitrack recorder, fully digital signal path from FOH audio console, direct output post-gain Mac-compatible TB/USB3/USB-C hard drive with **100 GB** of available space **required** for transfer

VIDEO RECORDING:

Static Wide Shot Video with embedded Archival Audio — inquire for pricing

1920x1080 (1080p) 29.97fps ProRes LT (.MOV) with embedded Stereo Board Feed (48/24 WAV)
Panasonic PTZ camera > Blackmagic ATEM > Atomos Samurai Blade
Mac-compatible TB/USB3/USB-C hard drive with **125 GB** of available space **required** for transfer.

Each additional Static Camera Shot — inquire for pricing (up to 3 additional cameras)

125 GB of **additional** available drive space **per camera** required for transfer.

PTZ Shoot: 4 Camera Live Edit — inquire for pricing

Live switched/edited 4-camera video shoot performed by a dedicated camera operator
You receive an live-cut program feed recorded from ATEM live switcher, and all (4) isolated camera feeds.
Multitrack Audio Recording (\$150.00) recommended for post-production sound mixing.
TB/USB3/USB-C hard drive with **625 GB** of available space **required** for transfer.

LIVE STREAMING:

Upgrade a video recording service to Live Stream — inquire for pricing

Static Wide Shot or PTZ Shoot video recording can be upgraded to a Live Stream.
Live Streams are broadcast on National Sawdust's Vimeo page, and can be simulcast to your own streaming provider (Vimeo, YouTube, Facebook, etc.) by special arrangement.

CAMERA ANGLES:

Installed cameras are fully Point-Tilt-Zoom (PTZ) controllable. Pictured angles reflect a shot directed toward stage and fully zoomed out. Cameras can zoom in tightly enough to read pages on stage.



CAM 1 - house left side wall



CAM 2 - back wall slight left high-angle



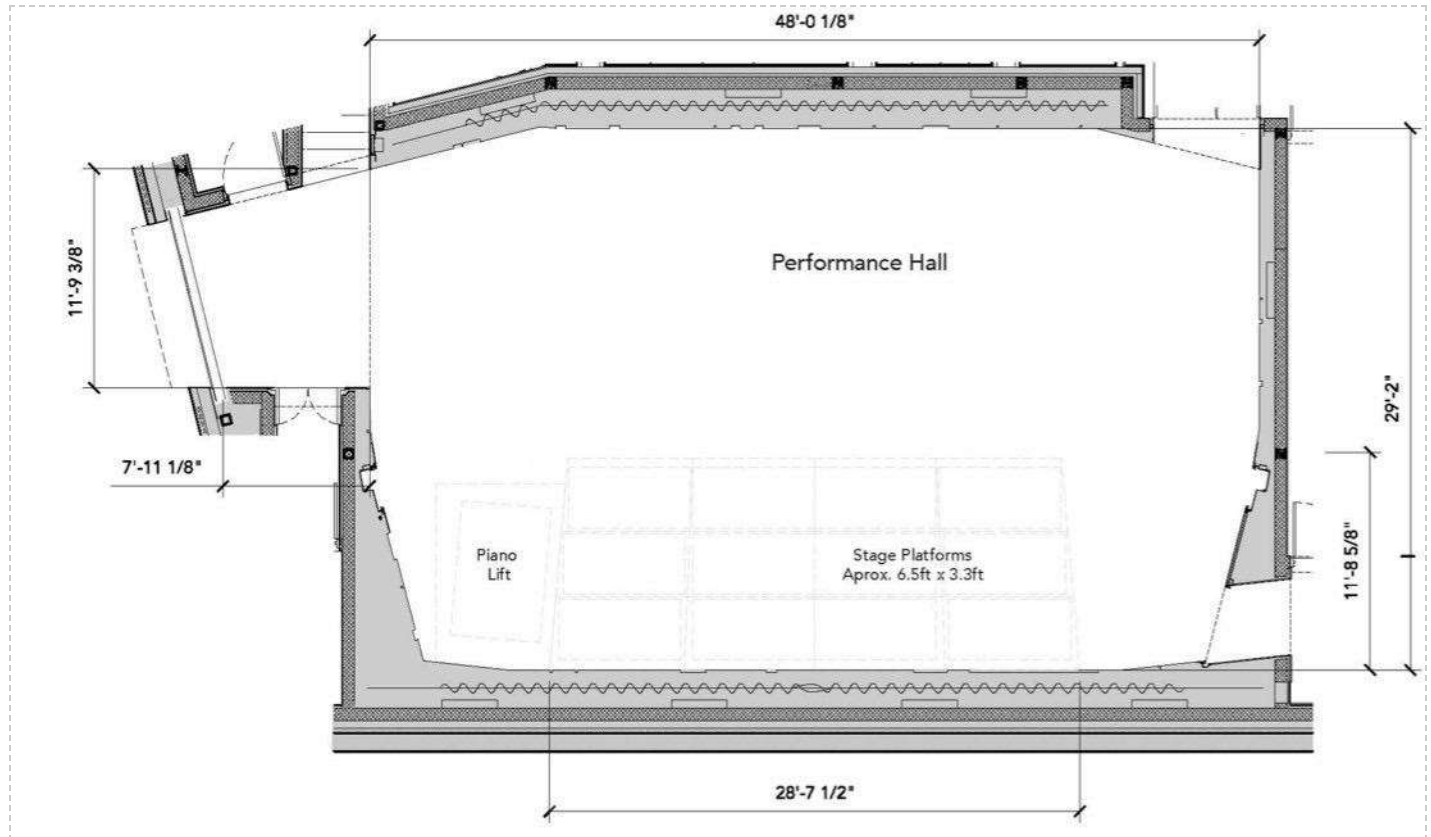
CAM 3 - back wall center head-on



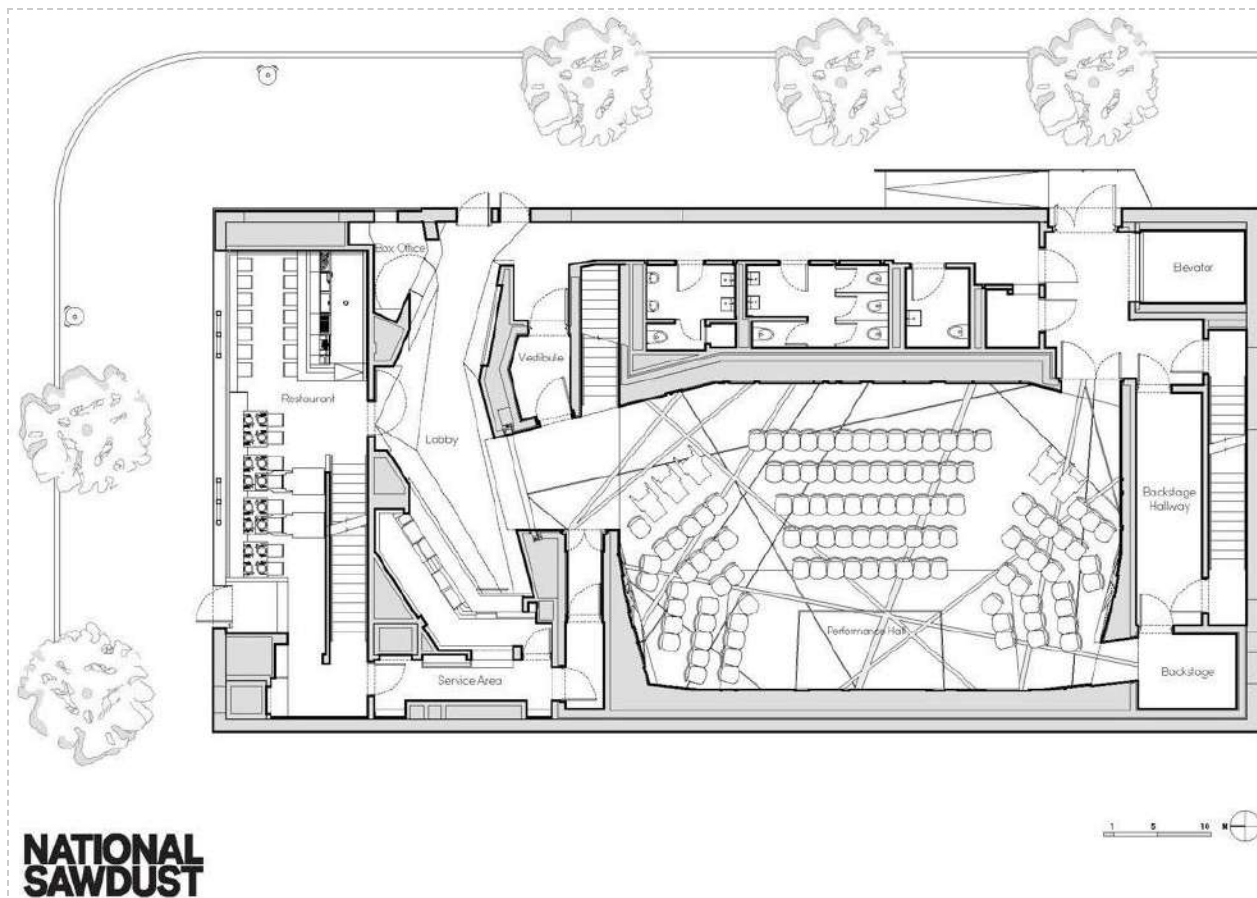
CAM 4 - house right high-angle

VENUE FLOOR PLAN AND DRAWINGS

Main Hall Floor Plan:

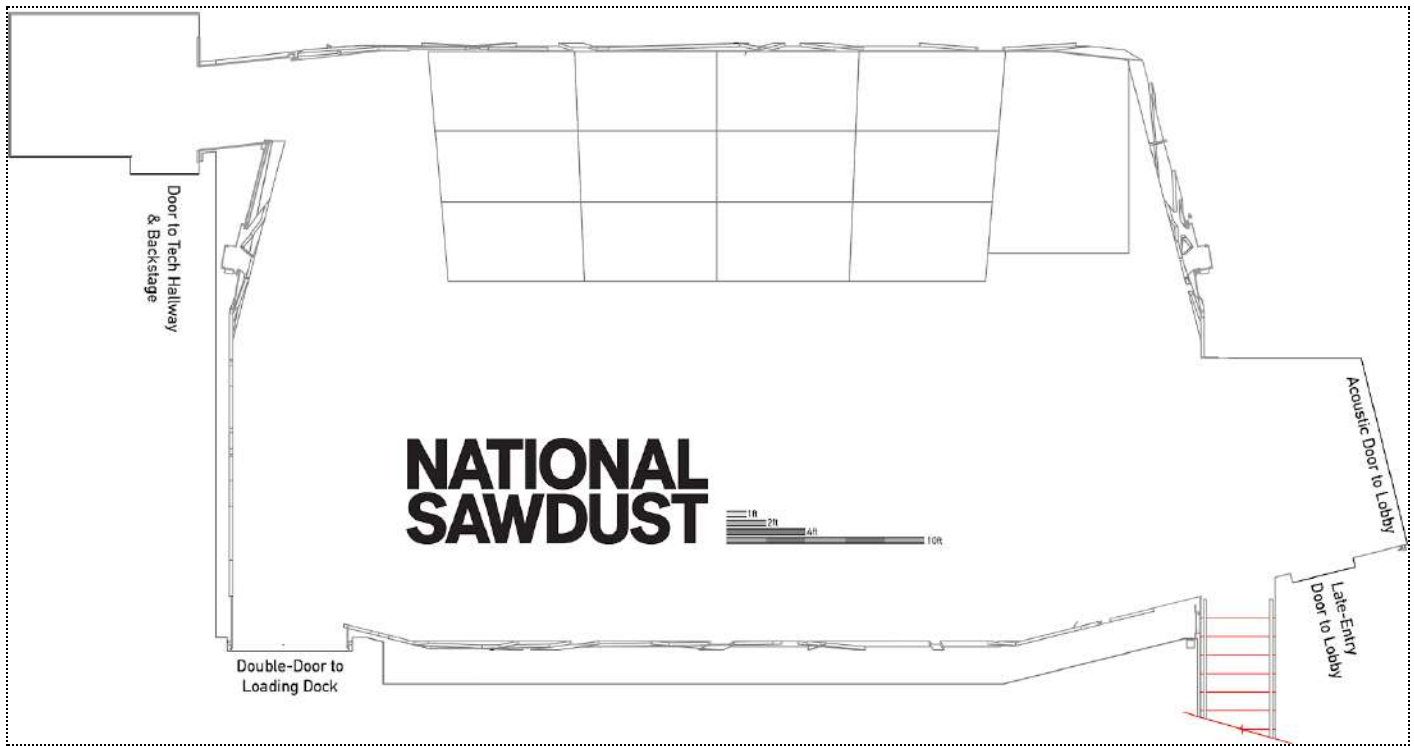


Overhead View of Building, Ground Level:



Main Hall Ground Floor Design Template

This scale drawing is available by request (CAD/DWG, AI, PSD, PNG)



Stage Plot Template

This stage plot template is available by request (PSD, PNG)

