

# NEW LIFE COVENANT – Temple performance Narrative

## PERFORMANCE FACILITIES AND SYSTEMS

### Building Criteria

The Church worship and production facility is a combination of a church, broadcast facility and performing arts center. The cohabitation and blending of these various use types requires a building where circulation paths are critical, room separations are complex and robust and the finishes selected must exhibit a combination of refinement and durability. When designing each space, special attention will be paid to the following criteria:

- **Structural Loads** – The workshop and performance spaces will have floor and ceiling structural loading criteria in excess of the norm for a traditional worship space.
- **Electrical Requirements** – The dimmable lighting and installed theatrical dimming systems in the production spaces will result in unusually high electrical demand. In addition to the magnitude of the electrical demand, the conduit routing requirements are very particular and detailed, resulting in electrical work that is more demanding than the norm.
- **Circulation Paths** – The ability to move very large and very heavy objects from one room to another and from floor to floor will require a circulation infrastructure that is more similar to an industrial building than it is to a traditional church.
- **Simultaneous Usage** – This issue is best addressed by the project acoustical consultant but it must be remembered that this building has a number of spaces that are very acoustically sensitive and a great number of spaces that produce a great deal of noise, often in proximity to one another. Care will be taken in the planning of walls, doors and room locations to eliminate potential problems.
- **Mechanical Systems** – The requirement for air delivery in the performance spaces to be quiet and slow enough to avoid blowing curtains around will necessitate special attention to these systems. Duct routing in the stage and sanctuary will be prescribed to avoid conflict with the lighting, rigging, projection and other production function.
- **Cable Access** – Throughout the building, and in particular through the main performance spaces there will be a network of wall penetrations, floor penetrations and hooks for the routing and support of temporary cables. All partition penetrations will be piped and capped. Partition ratings will be maintained with intumescent pillows. Something on the order of 60 6-inch penetrations of walls and floors is anticipated to make up this network.

### Sanctuary / Worship Center - General

This is a worship and performance space for a wide variety of uses including worship, dance, music and theatre, accommodating approximately 3,850 audience members. The principal use of this venue is worship, but the intention is to develop a space with broad appeal for rentals. The seating will be on sloped floor and tiered risers. Access to the auditorium will be planned from multiple floor levels to allow good circulation and proper wheelchair distribution. Performer access around and through the performance chamber will also be planned.

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The ceiling reflector height of the hall will be approximately 30'-0" to 40'-0" above the stage, with catwalks above that to approximately 50'-0" above stage level. All structure, piping, duct work and catwalk walking clearances will share the stratum 40'-0" above stage to 50'-0" above stage, and will need to be carefully coordinated to ensure that lighting positions and production functions are not compromised.

Access into the performance chamber will be through sound and light lock vestibules. These vestibules will prevent unwanted light and noise intrusion into these visually and acoustically sensitive spaces.

The sanctuary will have approximately 1,600 linear feet of catwalks running overhead. Over the auditorium, the catwalks will provide support for production lighting and maintenance access for the architectural lighting. Over the stage the catwalks will provide support for production lighting and access for rigging. These catwalks are all designed very specifically for particular functions. Prefabricated catwalk systems will not be acceptable. There are four types of catwalks: Lighting catwalks, pinrail catwalks, and access catwalks.

Lighting catwalks, the most numerous, accounting for around 1,200 linear feet of the total, are approximately 36" wide, built with a solid walking surface with horizontal pipe rails at very precise spacing to accommodate mounting lighting fixtures to the rails. In design, care will be taken to align hangers, arrange deck support members and keep rails clear so that they can serve the intended function.

Pinrail Catwalks are located above the stage and are used to manage electrical cables and rigging lines over the stage. These are called pinrails because the top of the railing on the stage side is a 6" steel pipe with holes to receive belaying pins to which rigging lines will be lashed. These catwalks are designed with higher load ratings to match the rating of the stage floor so that the equipment on these catwalks is properly supported. Traditionally, these catwalks are supported by heavy 'W' members that span from wall to wall.

Access catwalks, as the name describes, are intended to allow access to the other catwalks. These are in general allowed to be narrower and simpler in their construction.

Above the stage, within reach of the overhead structure are gridirons. These are permeable floors constructed from c-channels or heavy grating. The gridirons are designed to act as access platforms for installing, inspecting and maintaining the rigging equipment mounted to the overhead structure and are also designed to support rigging loads themselves.

### **Seating**

The seats will be fully upholstered, durable self-rising theatre seats of basic quality. Finishes such as plastic backs and seat pans are anticipated. Seats will contain requisite labeling and aisle lighting as appropriate. Required accommodation for wheelchair spaces and transfer arms will be planned. The size range of the seats will be between 20" and 23" as required to make the seating layout and stagger work, though the target average seat size will be approximately 22".

### **Stage Floor**

The stage is a resiliently supported wood floor. The top surface is to be a removable durable, paintable working surface such as "Plyron" or MDF. The stage construction will require a depression of the concrete slab to accommodate the flooring thickness. The entire finished floor surface will require very tight tolerances for flat and level (+ 1/8" over 10'-0").

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#### **Lighting**

The sanctuary will be equipped with a state of the art stage lighting system, consisting of control console, control network, dimmers, relays, plugging devices, lighting instruments, and accessories for mounting and connecting the lighting instruments. The stage lighting system will also include an architectural lighting control system for dimming and controlling house lights and work lights, so that all lighting can be controlled from strategic locations, such as the Control Room and Stage Manager Panel backstage. This control system will allow simple user interface for the lighting system, while the console will allow for complex control of both the architectural and production lighting for events.

There will be a modest inventory of production lighting fixtures for use in this theatre. These fixtures will use a blend of technologies from traditional halogen sources to newer solid-state sources. In addition to these fixtures an allowance for automated lighting is included for effects and to assist in rapid changeovers.

The architectural lighting will be divided into two principal subgroups, house lighting and work lighting. The house lights will all be dimmable-source fixtures designed to light the sanctuary evenly and at a low level that is appropriate for way-finding and program reading. Decorative

and Accent lighting will provide visual interest and feature architectural elements in the space as required. The work lighting will illuminate the technical areas of the space like the backstage areas, control spaces, catwalks and crossover corridor. All of the architectural lighting will be connected to and controlled by the theatrical dimming system.

### **Rigging**

Over the stage and sanctuary a comprehensive array of structural support members will be planned to allow the suspension of production elements as required.

The rigging will be a system of portable chain hoists that can be used to suspend elements over the stage along with a small number of motorized battens used for stage lighting.

There will be a basic complement of masking curtains for use.

Note that the catwalks and structure are not part of the rigging system and will need to be included in the architectural costs.

### **Ancillary Rooms**

#### **Dressing Rooms**

These rooms will have counters of painted steel or solid surface, and mirrors on several walls to accommodate the planned number of occupants. Above the mirrors will be a row of lamps to provide sufficient and appropriate light for the application of make-up. Racks for costumes and storage shelves will be provided. Above the counter a continuous strip of receptacles powered by a relay switch near the door, will provide electricity. The walls will be heavy masonry.

#### **Control Positions**

These rooms will have laminate or solid surface counters to support the consoles and other equipment needed in these locations.

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#### **Followspot Room**

Large, acoustically-rated windows will separate this space from the sanctuary. Dimmable task lighting and switched overhead lighting will be tied into the dimming systems of the theatres to which they are attached.

#### **Set Construction Room**

This room will have a 16'-0" clear height, with all structure, electrical, mechanical and fire protection systems routed above that datum. The floor will be wood, to allow attachment. Ventilation and power for the tools and work in this space will be planned similar to a light industrial space. Robust acoustic partitions, including large acoustically rated doors will be planned.