

PURPOSE OF THE PROGRAM AREA REQUIREMENTS

The purpose of the Space Program Tabulation is to provide a framework within which the detailed design process can proceed. The design must provide the listed areas as minimums for key program spaces such as the exhibition hall and meeting rooms. Specific areas for support spaces are listed either based on the presented configuration, user expectations, or the consultant's experience with other convention centers. General areas such as storage and food service areas may vary somewhat from the tabulation in the final design.

Simply put, the basic program areas for public function spaces are fixed requirements, and supporting space requirements can be more flexible. The final configuration must provide a balanced facility that is functionally acceptable to the County.

Entries for unassigned spaces and public and vertical circulation are by nature broad in scope. Comparison of this space tabulation to the ultimate building design may show significant deviations in these categories. These are an expected result of the design process that must first confirm this program, further develop the functional layouts provided and explore alternate configurations, and respond to change from the marketplace, building operator and the County.

The current planning concept proposes to allocate function and support spaces between a renovated Public Auditorium and new construction on the Mall Site, the following table of spaces includes an approximation of how those spaces might be distributed. This effort is intended to reinforce functional relationships and adjacencies, and does not imply that the final design shall adhere rigidly to this breakdown of spaces.

SPACE PROGRAM TABULATION

Space Description	Mall Site	Auditorium	Subtotals
<i>Public Lobbies, Concourses & Registration</i>			169,200
Public Lobbies & Entrances	47,600	6,000	
Registration	5,400	1,800	
Pre-Function Concourses	40,400	7,500	
Other Public Circulation	56,000	4,500	
<i>Exhibition Halls</i>			270,000
Exhibition Halls	270,000		
<i>Assembly Spaces</i>			133,000
Grand Ballroom		30,000	
Meeting Rooms	100,000		
Board Rooms	3,000		
<i>Front of House Support Areas</i>			34,600
Show Managers' Offices	2,700	900	
Host Desk	400	200	
Business Center	900		
Coat Check / Ticket Office / Registration Office	900	300	
Public Restrooms	22,200	1,800	
First Aid Room	450	450	
Circulation & Unassigned	3,000	400	
<i>Back of House Service Areas</i>			206,380
Loading Dock	12,150		
Truck Apron	62,500		
Access Ramps to Exhibition Halls	7,200		
Compactor / Recycling Station	2,400	800	
Dock Office	200		
Security Office	900		
Receiving and Warehouse	7,000		
Storage			
General Building Storage	2,600	750	
Meeting & Banquet	5,200	1,500	
Exhibitor Storage	1,800		
Operable Walls	2,850	400	
Pyrotechnics Room	100	100	
Service Contractor Offices	1,200	600	
Client Recording Room	200		

Audiovisual/Sound Control Room	400	200	
Chorus Dressing Room		600	
Green Room		400	
Engineering & Maintenance Shops			
Electrical Shop	1,200		
Building Trades Shop	1,200		
Landscape Maintenance	1,500		
Staffing Office	300		
Uniform Issue	600		
Employee Locker Rooms	600		
Employee Break Rooms	1,200		
Housekeeping/Janitorial	2,220	400	
Back-of-House Service Corridors	26,710	3,600	
Data Services Room	600		
Main Telephone Room	900		
Technology Closets	1,300	400	
Electrical Rooms	6,750	750	
Air Handling Rooms	14,900	1,200	
Central Plant / Shared Utility Services	14,900		
Emergency Generator Room	3,200		
Circulation & Unassigned	9,300	600	
Food Service Areas			30,500
Food Service Dock	1,800	1,800	
Receiving Office	100	100	
Commissary	1,200	700	
Full-Service Banquet Kitchen	5,200	4,500	
Food Service Operations Offices	600	600	
Chef's Table / Tasting Room	1,000	1,000	
Concessions	3,000		
Pantry / Setup Alcoves	3,300	200	
Storage	900	800	
Locker Alcove/ Staff Briefing	300	300	
Food Service / Back-of-House Toilets	400	400	
Executive/Marketing Offices	800		
Circulation & Unassigned	950	550	
Venue Management Offices			11,650
Reception	225		
Director	225		
Enclosed Offices	1,800		
Workstations	2,400		
Conference Rooms, Large	800		
Conference Rooms, Medium	800		
Break Room/Kitchenette	600		

Restrooms	500		
Workroom	400		
Filing, Storage & Supplies	400		
Secured Money Room	150		
Circulation & Unassigned	3,350		
<i>Vertical Circulation</i>			59,700
Allowance for Escalators	24,300		
Allowance for Elevators	11,100		
Stair Towers	24,300		
Enclosed Building Area			915,030
<i>Unenclosed Areas</i>			37,200
Vehicle Drop-off & Arrival (Exterior)	27,900	9,300	
Gross Convention Program Area			952,230

VEHICLE DROP-OFF & ARRIVAL

This area separates vehicular pavement from pedestrian circulation areas. Accessibility without raised curbs is preferred to ease crowd management and visitors using wheeled luggage and hand dollies. Color banding or patterning of paving transitions to sidewalks should be aligned with the spatial definition of the pedestrian walkway to the main entrance(s). Provide a canopy over the drop-off lane for weather protection.

There should be movable barriers to separate vehicles from attendees. These are human scale and pedestrian-friendly items such as planters, bollards and street furniture. These can be reconfigured for different event needs, special entry displays or the temporary use of queuing restraints. Some architectural features or elements can also support temporary signage for shuttle bus route designations.

The first impression of arriving visitors should be of high quality yet durable finishes. Provide views into the building to build a visitor’s expectation of excitement and involvement in event activities. Provide special feature lighting in the canopy and facade to set different moods for evening events.

Program Space: Vehicle Drop-Off & Arrival

27,900 SF

- | | |
|--------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Color banding/patterning to separate vehicles from pedestrians. • Multiple lighting scenes for changing “mood”. • Security system CCTV coverage. • Identify television production van parking location to coordinate power, data and broadcast service interface. • Provide staging for valet parking, taxi and limousine service. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 16 ft. for buses. • Ceiling: Weather protection canopy. • Walls: Glass on building side of drop-off. • Floors: Hard surface (pavers, patterned and/or colored concrete). |
| AUDIOVISUAL | <ul style="list-style-type: none"> • Provide audio system loudspeakers and background music with zoned paging and program distribution. |
| PLUMBING | <ul style="list-style-type: none"> • Potable water with interior cutoffs for deck washing. |
| ELECTRICAL | <ul style="list-style-type: none"> • 110-volt, 20-amp outlets in NEMA-3R box at 60 ft. along perimeter. • 208-volt, 60-amp, 3-phase outlet in NEMA-3R box flanking each major entrance. |

Program Space: Vehicle Drop-Off & Arrival, continued

- | | |
|---|---|
| LIGHTING | <ul style="list-style-type: none">• Specialty lighting to create mood or highlight special building features.• General illumination for daylight infill or evening use. |
| TELECOM | <ul style="list-style-type: none">• Provide minimum of two (2) Category 6 outlets in NEMA-3R box to two locations near each entrance. |
| GRAPHICS | <ul style="list-style-type: none">• Fixed directional exhibition hall identification.• Electronic message boards - LED full matrix.• Placement for temporary event signs for shuttle buses. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Public lobby and concourse• Public restrooms• Registration |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none">• Ash/trash/recycle receptacles.• Movable planters• Benches |

1 Final square footage to be based on configuration. Estimated area is based on an average of several alternate building configurations.

PUBLIC LOBBIES & ENTRANCES

Because of the large size of the convention center and its urban context, this program anticipates the facility having multiple entrances. While one major entry may be part of the architectural signature, primary entrances should provide access to registration and public circulation that welcomes visitors to the City. These transitional areas should immediately orient attendees to the rest of the building with an impression of openness and indirect natural light. Glazed walls between the arrival zone and entrance concourses will reinforce the attendees' association with a particular event. Architectural features should balance the grandness of the lobby with human scale details.

Provide landmarks to orient visitors to their location in the facility. These elements may include planted areas, atriums, unique artwork or other displays. Visual connection between levels also reinforces this sense of place.

Public area furniture should be heavy and solid to discourage easy relocation by patrons, yet be removable by staff to set up special events. Such furnishings should not interfere with emergency exits, registration or other typical uses of public space.

These spaces should be configured to facilitate security control points into exhibition halls and meeting room blocks which can be adapted for both single and multiple concurrent shows.

Program Space: Public Lobbies & Entrances

53,600 SF

- FEATURES**
- Integrated walk-off mats at major entrances or vestibules
 - Interior landscaping in movable planters.
 - Security system CCTV coverage.
 - Locate and provide power for temporary-use x-ray machines and magnetometers for high security events.
 - Motorized rods or trusses for event banners or back drape.
- FINISHES**
- Ceiling Height: Varies; minimum 14 feet.
 - Ceiling: Clerestories and/or skylights to allow natural light along the concourse; decorative acoustical tile with gypsum board feature areas, coffering or special shapes and materials.
 - Walls: Durable, low maintenance materials, with impact-resistant drywall and chair rail as the minimum requirement. Expanses of glass to allow views in and out, as well as natural light.
 - Floors: Carpet, nylon roll goods or 36-inch square tiles. Use banded pattern for simple replacement of limited areas. Consider hard materials such as stone, pavers or terrazzo in selected high-traffic areas if slip resistance is addressed.
- ACOUSTICS**
- Background noise level should meet noise criterion curve of no greater than NC-40.
 - Reverberation time should be less than 1.5 seconds.
- AUDIOVISUAL**
- Microphone and line-level inputs at 60 feet on center along interior walls.
 - Provide audio system loudspeakers and background music with zoned paging and program distribution.
 - Interface AV control with lighting control system.
 - There shall be multiple LCD screens located in appropriate locations for SMATV and Information Services.
 - Motorized rods or trusses for event banners or back drape.
- PLUMBING**
- Potable water in wall pocket at portable food cart areas, minimum one per major entrance.
 - Drains with locking cover plate.

Program Space: Public Lobbies & Entrances, continued

- | | |
|---|---|
| ELECTRICAL | <ul style="list-style-type: none"> • Provide 110-volt 20-amp floor and wall outlets at 30 ft. on center. • Provide 208-volt 30-amp 1-phase outlet at 60 feet on center • Provide 208-volt 60-amp 3-phase outlets at major exhibition hall entrances, minimum two (2) per hall division. • Convenience outlets for electronic signage and advertising panels. • Motorized banner rods shall have fixed rigging points nearby for additional lighting. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Metal halide and compact fluorescent. • Specialty lighting to create mood or highlight special features. • All lighting to have programmable control system. • Lighting to be zoned to assist maintenance operations. • Avoid lighting in enclosed areas such as small soffits and at inaccessible areas over stairways and escalators. |
| TELECOM | <ul style="list-style-type: none"> • Provide four (4) Category 6 outlets to the base of each column and along perimeter walls at 30 feet on center. • Provide four (4) Category 6 outlets at each ATM location. • Provide two (2) Category 6 outlets for each fixed electronic sign panel. • Provide two (2) Category 6 outlets for each fixed advertising panel. • Provide a minimum of four (4) multi-mode fiber-optic connections each on 30-foot centers along interior walls and on 60-foot centers along exterior walls and at major building entrances. |
| GRAPHICS | <ul style="list-style-type: none"> • Directional, fixed. • Building directories, both electronic displays and fixed/static maps. • Employee recognition plaques. • Building dedication plaque. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none"> • Restrooms. • Registration areas. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none"> • Planters. • Trash/recycle receptacles. • Artwork. • Chairs, benches and tables. • Rigging equipment. |

1 Circulation areas are approximate and may change substantially dependent upon final building configuration.

REGISTRATION

Registration occurs in the link space between public lobbies and prefunction concourses. The preferred approach incorporates large alcoves created by widening the concourse at key locations off the circulation spine. These areas are dedicated to event registration purposes.

Concourses widened to a minimum of 60 feet can allow 30 feet each for lateral circulation and for temporary registration counters. Ample space should be allowed for queuing without impacting lateral circulation.

A variety of registration configurations must be planned for including islands, U-shaped, linear and parallel. Clear direction from building entrances will be reinforced by event graphics, but a simple orientation is best for handling large crowds of people.

Registration should be clearly visible from the vehicle drop-off or primary entrance(s). Secured rooms located interior to registration alcoves can function as a ticket office, coat check or registration office. If possible, provide easy access from here to the show manager offices.

Program Space: Registration

7,200 SF

FEATURES

- Security system CCTV coverage.
- Motorized rod or truss for banners or drape backdrop in registration area.

FINISHES

- Ceiling Height: Minimum 10 feet, 14 feet preferred.
- Ceiling: 2 ft. x 2 ft. decorative acoustical tile or gypsum board with coffering, feature areas or special shapes and materials.
- Walls: Durable, low maintenance materials up to 3-4 feet high that convey a sense of quality.
- Floors: Carpet, nylon roll goods or 36-inch square tiles. Use banded pattern for simple replacement of limited areas.

ACOUSTICS

- Background noise level should meet noise criterion curve of no greater than NC-40.
- Reverberation time should be less than 1.5 seconds.

AUDIOVISUAL

- Microphone and line-level inputs at 60 feet on center along interior walls.
- Provide audio system loudspeakers and background music with zoned paging and program distribution.
- There shall be multiple LCD screens located in appropriate locations for SMATV and Information Services.

Program Space: Registration, continued

- ELECTRICAL**
- Provide 110-volt 20-amp circuits to columns, back wall or floor outlets at 30 feet on center in registration areas.
 - Provide 208-volt 60-amp 3-phase outlets, minimum of two per registration area.
 - Convenience outlets for electronic signage and advertising panels.
 - Outlets for lighting at fixed rigging points near motorized banner rods.
- LIGHTING**
- Type: Recessed compact fluorescent or strip fluorescent with parabolic troffer or acrylic diffuser.
 - All dimmable lighting to be connected to central dimming system. All non-dimming lighting to be controlled by programmable lighting system.
 - Lighting to be zoned to assist maintenance operations.
 - Motorized banner rods shall have fixed rigging points nearby for additional lighting.
- TELECOM**
- Provide minimum four (4) each 4-pair Category 6 cables to the base of each column, and to floor or wall outlets on perimeter walls at registration areas on minimum 30 ft. x 30 ft. grid.
 - Provide a minimum of four multi-mode fiber optic connections each on 30 foot centers at interior walls and columns in each registration area.
 - Provide two (2) each Category 6 cables to each LCD screen location.
- GRAPHICS**
- Directional, fixed.
- SUPPORT SPACES REQUIRED**
- Restrooms.
 - Secure room for registration office, materials.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Planters.
 - Trash/recycle receptacles.
 - Artwork.

PRE-FUNCTION CONCOURSES

The gathering space outside of meeting rooms is primarily used for pre- and post-event social networking by attendees. Pre-function spaces outside of the meeting rooms should allow for tabletop registration at individual room events. Refreshments such as water, sodas, coffee and snacks are typically served, requiring access points to service corridors. Allow one-quarter to one-third of the adjacent room size to be used for pre-function and circulation, assuming all rooms are not filled to capacity.

Alcoves for restrooms should be directly accessible from pre-function spaces and convenient to meeting areas and vertical circulation cores.

Public area furniture should be heavy and solid to discourage easy relocation by patrons, yet be removable by staff to set up special events. Such furnishings should not interfere with emergency exits, registration or other typical uses of public space.

Program Space: Pre-Function Concourses

108,400 SF

- | | |
|--------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Security system CCTV coverage. • Indirect natural lighting where building configuration allows. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: Varies; minimum 12 ft. • Ceiling: Acoustical tile with feature areas combining gypsum board coffering or special shapes and materials. • Walls: Durable, low maintenance materials up to 3-4 feet high, with impact-resistant drywall and chair rail as the minimum requirement. • Floors: Carpet, nylon roll goods or 36-inch square tiles. Use banded pattern for simple replacement of limited areas. |
| AUDIOVISUAL | <ul style="list-style-type: none"> • Microphone and line-level inputs at 60 feet on center along interior walls. • Provide audio system loudspeakers and background music with zoned paging and program distribution. • Provide flat screen video display for television and information purposes midline at each meeting room entrance. • There shall be multiple LCD screens located in appropriate locations for SMATV and Information Services. |
| PLUMBING | <ul style="list-style-type: none"> • Potable water at portable food cart areas. • Drains with cover plate. |

Program Space: Pre-Function Concourses, continued

- ELECTRICAL**
- Floor and wall outlets for cleaning and general maintenance purposes at 60 ft. centers.
 - Minimum (2) 208-volt 60-amp 3-phase for portable food cart locations at ballroom and major meeting rooms.
 - Convenience outlets for electronic signage and advertising panels.
- LIGHTING**
- Type: Metal halide, fluorescent, incandescent.
 - Specialty lighting to create mood or highlight special features.
 - All lighting to have programmable control system.
 - Lighting to be zoned to assist maintenance operations.
- TELECOM**
- Provide four (4) Category 6 outlets to the base of each column and along interior perimeter walls at 30 feet on center.
 - Provide two (2) each Category 6 cables to each LCD screen location.
 - Provide minimum two (2) data connections for point-of-sale terminals at portable food locations.
 - Provide a minimum of four multi-mode fiber-optic connections each on 30-foot centers along interior walls and on 60-foot centers along exterior walls and at major building entrances.
- GRAPHICS**
- Directional, fixed.
 - Backlit advertising panels.
- SUPPORT SPACES REQUIRED**
- Restrooms.
 - Back-of-house corridor access.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Planters.
 - Trash/recycle receptacles.
 - Tables.
 - Artwork.
 - Chairs and benches.

EXHIBITION HALLS

The exhibition area is the largest single component hosting event activities of the Convention Center. The space will be configured to provide flexibility to handle simultaneous multiple events typically in different stages of the event cycle (move-in, event and/or move-out) while minimizing conflicts between events.

All exhibition space will be on one level. Plan configuration must permit direct access of exhibit materials to the floor through dock berths and by means of ramps to allow over-the-road trucks to drive onto the exhibition floor.

Each hall division must be serviceable individually to permit multiple simultaneous shows. A 30 ft. square utility grid system in the floor should be provided to give exhibitors access to utilities and services required for their exhibits. Exhibit booths and aisles are laid out on a 10 ft. x 10 ft. module that makes up a larger grid for the utilities. The structural grid should be a multiple of that 30 ft. module, with added space at perimeter walls for clearance at floor boxes.

Layout of the hall shall provide separate paths for attendees and service personnel. The intent is to minimize conflicts between the different traffic flows through the building. Paths may be separated vertically, horizontally or in a combination of both.

Program Space: Exhibition Halls

270,000 SF

DIVISIBILITY

- Provide for separation of hall into smaller units with respective accommodations for public entrance and service access. Allow for three (3) divisions of approximately equal size.
- Division to be made with manually controlled operable wall panels on a single track.
- Lighting, sound and HVAC controls shall relate to each division.

FEATURES

- Security system CCTV coverage.
- Explore daylighting opportunities for setup and tear-down. Any daylighting solutions will require countermeasures to ensure blackout capability in the hall during events.
- Personnel doors into the exhibition halls are to be minimum 9'-0" high, with at least one pair of 3'-8" wide doors in each grouping to accommodate auto and service vehicle access to front-of-house areas.
- Truck/freight access should use overhead doors approximately 20 ft. by 20 ft, minimum size 20 ft. wide by 16 ft. high. Use horizontal sliding, vertical bi-fold or segmented stacking operation with personnel doors in lieu of coiling overhead doors.

Program Space: Exhibition Halls, continued

- FEATURES**
- Cast-in-place floor utility boxes on grid 30 ft. on center each way. Extend the hall dimension 3 feet beyond the centerline of the utility grid at the perimeter walls of the space. Provide a double row at operable walls and columns.
 - Manually operated exhaust fans for exhibits producing odors, objectionable fumes or vehicle exhaust.
 - Provide free-through bail-out system using conduit or PVC pipe for temporary event use that interconnect the following areas:
 - One 8-inch pipe with maximum of three 90 degree sweeps from exhibition floor boxes to electrical room with stage power.
 - Saw-cut or acid-etch floor slab with 10 ft. X 10 ft. grid to aid booth layout. Fill saw-cuts with colored acrylic material for contrast.
 - HVAC, fire and life safety systems to be designed to allow for pyrotechnic and theatrical effects in individual and combined hall configurations.
- FINISHES**
- Floor: Troweled concrete with dry-shake-applied metallic hardener.
 - Ceiling: Open to structure, painted black or dark color shade. Where applicable, fireproofing is to be integrally colored. Apply K-13 or other acoustic material to underside of deck.
 - Lower Walls: Durable, low maintenance materials such as split-face masonry or poured-in-place concrete up to 10 ft. above finished floor. Use integral color to minimize painting and touch-up repairs.
 - Upper Walls: Painted gypsum board from minimum 10 ft. above finished floor to structure above. Consider color banding for visual interest using fabric-wrapped or perforated acoustical panels, tectum, K-13 or other materials.
- STRUCTURE**
- Minimum 60 ft. X 90 ft. column grid. Concrete or concrete-encased steel columns; rounded form is preferred over square to reduce chipping from abuse.
 - Bottom of overhead structure to be a minimum of 30'-0" above finished floor. Column trees if used must maintain 16 ft. clear to structure before branching.
 - Design floor live loading of 350 lbs. per square foot.
 - Overhead structure requires rigging support for banners, projection screens, speakers, lighting trusses, etc. Design criteria specified in Systems section.

Program Space: Exhibition Halls, continued

- AUDIOVISUAL**
- Provide fabric-wrapped acoustical panels, tectum or similar acoustical treatment on upper portions of perimeter walls.
 - Use direct-adhered, sound-absorbent material on underside of structure. Suspended panels not recommended due to increased maintenance.
 - Background noise level should meet noise criterion curve NC-40.
 - Acoustical performance criteria for operable walls STC 52 ±1dB.
 - Acoustical performance criteria for permanent walls and floors adjoining occupied space is minimum STC 58.
 - General sound system for paging with distributed overhead loudspeakers (coaxial units). Time delay in both room axes required.
 - Paging system zoned to each hall division or combination of divisions.
 - Microphone jacks and line-level inputs located in selected floor boxes located at proposed stage locations.
 - Provide connections and cabling for line signals, recording, playback and in-house broadcasting.
 - There shall be multiple LCD screens located in appropriate locations for SMATV and Information Services.
 - Distributed Television (DTV) for internal redirection of broadcast or cable television, satellite down- and up-links
 - Assistive listening system.
- PLUMBING**
- Hot and cold potable water taps in recessed boxes in perimeter walls at 60'-0" on center.
 - Industrial water in floor boxes at 30 ft. on center both ways.
 - Water: At each plumbing box, provide 3/4" supply and ball valve with one 1/2" quick connect fitting at 90 psi.
 - Drains: Provide indirect drainage for all floor boxes. Drain shall remove moisture from all compartments.
 - Compressed air: Provide piping system with 1/2" quick-connect valves in floor boxes.
- ELECTRICAL**
- At 30 ft. centers inside floor box, provide:
 - (1) each 208-volt 30-amp 3-phase circuits.
 - (1) each 208-volt 100-amp 3-phase quick connect.
 - Supplemental Stage Power: Provide four (4) 208-volt 400-amp 3-phase company switches. Locate at the back of the hall in two (2) electrical rooms serving remote areas.

Program Space: Exhibition Halls, continued

- LIGHTING**
- Type: A combination of metal halide (HID) and compact fluorescent cluster fixtures. Options include multiple lamp fixtures, clusters of fixtures, and bi-level ballast fixtures.
 - Level: 70 foot-candles with all lamps burning. 50 foot-candles general illumination.
 - Controls interface to daylighting sensors, if applicable.
 - Programmable control to allow three or four (3-4) lighting levels (25-50-75 and 100%) during setup and show activities. Fluorescent fixtures to have standby power capability.
 - Instant on/instant off capabilities for emergency lighting.
- TELECOM**
- Provide minimum six (6) Category 6 outlets in each floor box.
 - Provide a minimum of four (4) each multi-mode fiber optic outlets in each floor box.
 - House telephones located in recessed wall box at concourse side adjacent to each major bank of doors and at service side of hall near load-in vestibules (two per hall division).
- GRAPHICS**
- Size to relate to scale of room and viewing distance.
 - Establish individual identity for each hall division at both back- and front-of-house locations.
 - Alphanumeric grid identification mounted on the underside of structure.
 - Sequence halls for future expansion.
 - Locate exits, concessions, restrooms and other fixed user spaces.
- SUPPORT SPACES REQUIRED**
- Concessions.
 - Restrooms.
 - Operable wall storage on dock side of halls.
 - Show managers' offices overlooking show halls.
 - Storage for tables, chairs, and production equipment.
 - Exhibitor storage.
 - First Aid rooms.
 - Truck dock and drive-in vehicular access.

Program Space: Exhibition Halls, continued

**FURNITURE,
FIXTURES &
EQUIPMENT**

- Stack chairs and dollies.
- Folding tables and table dollies.
- Queuing equipment.
- Turnstiles and ticket boxes.
- Personnel and material handling equipment (forklifts, platform lifts).
- Theatrical lighting.
- Rigging equipment.
- Portable concert stage.
- Portable dance floor.
- Presidential lecterns.
- Trash/recycle receptacles.
- Electrical distribution breakout boxes.
- Telephone handsets.
- Assistive listening headsets.

GRAND BALLROOM

The Project currently anticipates retrofitting the Public Auditorium into the grand ballroom. This ballroom space will accommodate formal dining and assembly events as well as provide flexibility, allowing simultaneous activities. This space should be highly visible and have a significant arrival and entry procession. The ballroom and its pre-function will have a higher level of finishes than other meeting rooms, typically the highest finishes in the facility.

The highest demand for the ballroom is for banquet functions in support of conventions and trade shows, typically breakfast and lunch. This room should accommodate up to 1,650 people comfortably at a single banquet event using six foot round tables. Additional uses for the ballroom will include lectures or similar presentations using theater-style seating for up to 2,700 people. Classroom seating with linear tables is also used for teaching or testing purposes. Evening functions will include cocktail receptions with dancing or other musical entertainment.

Ballroom features should include a finished ceiling with a minimum clear height of 30 feet. A variety of lighting types will be used including dimmable incandescent, fluorescent and specialty lighting for architectural features. There will be fixed power locations in the ceiling for using portable theatrical lighting trusses to be installed for special events.

Wall finishes will include durable hard surfaces where subject to abuse. Feature areas may include wood, stone or fabric-wrapped acoustical panels. Large floor areas will be a custom designed carpet with inlays featuring durable, classic materials such as granite.

The ballroom divisions shall each have power, lighting, audiovisual, rigging and other support needed for use with portable stages. The ballroom shall maintain the existing stage with back-of-house access to green rooms and related production support. Ideally, the stage shall have access to loading docks or freight elevators for move-in of products, presentation and theatrical materials, and set decorations.

Program Space: Grand Ballroom

30,000 SF

- DIVISIBILITY**
- Divisible into thirds using operable walls. Provide three operable walls on three tracks.
 - Lighting, sound, and HVAC controls to relate to each division.

Program Space: Grand Ballroom, continued

- FEATURES**
- Fixed stage 48-inches above finished floor with overhead rigging capabilities. Stage to have operable wall or similar method to secure stage area and present finished appearance when not in use.
 - Drive-in access from freight elevator for Skyjack rigging lift.
 - Provide hinged wall panels and overhead roll-up door for oversize vehicle or display access to ballroom.
 - Food service through back-of-house service corridors from kitchen.
 - Rigging capability for hanging banners, drape and other decorations.
 - Security system CCTV coverage.
 - Permanent accommodations for portable stage and dais set-up, i.e., microphones, projector, lighting and audio controls, power and data.
 - Cable tray or holding system at doors into service corridors for production support. Coordinate with mouse holes if used; locations for supplemental power, audio and lighting controls.
 - HVAC, fire and life safety systems to be designed to allow for pyrotechnic and theatrical effects in individual and combined hall configurations.
- FINISHES**
- Ceiling Height: 35 ft. clear. Low-hanging obstructions (if any) shall not impact audiovisual capabilities in room.
 - Ceiling Type: Refurbish existing materials.
 - Walls: Special treatment behind head table/stage location(s). Durable, low maintenance finish with an emphasis on a high quality appearance using non-custom materials.
 - Floors: Carpet, nylon roll goods or 36-inch square tiles. Provide banding or other definable areas at entries and to simplify replacement of zones.
- STRUCTURE**
- Design floor live loading to accommodate light exhibits.
 - Elevated structure shall accommodate the dynamic loading from dancing or similar events. Aerobics and other high-impact rhythmic events should be restricted from the ballroom by operating policy.
 - Overhead structure requires rigging support for banners, projection screens, speakers, lighting trusses, etc. Design criteria specified in Systems section.
- ACOUSTICS**
- Background noise level should meet NC-35.
 - Acoustic performance criteria for operable walls STC of 52 ±1dB.

Program Space: Grand Ballroom, continued

- AUDIOVISUAL**
- Room sound system with overhead speakers capable of high quality voice and music reinforcement.
 - Background and music assignment and volume controls.
 - Audio system zoned to room divisions.
 - Microphone jacks: Minimum of four per head table location as well as center and back of each room division.
 - Line-level pairs at each microphone jack and at 30 feet on center along perimeter walls.
 - Projector control jacks at head table and opposite head table location(s) for each division and combination.
 - Capability for remote central audio recording of programs.
 - Connectivity for projection signals and DMX controls located in ceiling grid to support temporary light truss fixtures.
 - LCD event activity message panel at each function space entrance.
- ELECTRICAL**
- Quadruplex convenience outlets with dedicated 20-amp circuits at 15 ft. centers on perimeter walls.
 - Provide 208-volt, 100-amp, 3-phase connections in recessed wall box at 60 feet on center in head walls (behind stage positions).
 - Two 208-volt, 400-amp company switches to support the fixed stage.
 - One 110-volt 20-amp circuit for convenience outlets at 30 ft. centers each way, recessed in floor. Specify minimum extra heavy duty load rated covers.
 - One 208-volt 30-amp 3-phase outlet in floor at 30 ft. on center each way.
 - Buss duct located in ceiling grid to support temporary light truss fixtures.
- LIGHTING**
- Type: Dimmable incandescent or fluorescent for general illumination. Decorative where appropriate. Sconces not recommended. If included, chandeliers shall be low profile or retractable.
 - Level: 40-50 foot-candles, general illumination.
 - Programmable controls activated based on room divisions.
 - Custom panels for light and temperature controls.
- TELECOM**
- Provide four (4) Category 6 outlets at 30 ft. centers at perimeter walls and in floor on 30 ft. x 30 ft. grid.
 - Provide four (4) multi-mode fiber-optic outlets at 30 ft. centers at perimeter walls and in floor on 30 ft. x 30 ft. grid.
 - House telephones located in recessed wall box at concourse side adjacent to each major bank of doors and at service side (two per room division).

Program Space: Grand Ballroom, continued

- | | |
|---|--|
| GRAPHICS | <ul style="list-style-type: none">• Identify ballroom divisions (front- and back-of-house).• Scale to relate to size of pre-function space and viewing distance.• Special memorial plaque or sponsor recognition, if any. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Production control.• Restrooms.• Storage for tables, chairs, and other furniture.• Pre-function space.• Operable wall storage.• Back-of-house corridors.• Food service cart staging areas.• Main food/kitchen storage area. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none">• Tables.• Table trucks.• Stack chairs.• Chair trucks.• Portable dance floor.• Lectern.• Portable stage and accessories.• Performance lighting equipment.• Audio equipment.• Lavalier and table top microphones.• Rigging equipment.• Portable simultaneous translation equipment.• Assistive listening system and headsets. |

MEETING ROOMS

Meeting room spaces must accommodate a wide spectrum of event types and group sizes. These spaces are generally associated with each exhibition hall division and are arranged to accommodate simultaneous multiple events. Meeting rooms can be on separate levels but should be related to exhibition halls and assignable to each hall division.

The smallest room division will be approximately 900 net square feet. For planning purposes, modules of 30 ft. by 60 ft. with a gross area of 1,800 square feet are used as the basis for this program. Flexibility in sizing of permanent meeting rooms is required so that a variety is available to users. Minimum ceiling heights should vary with the overall room size to maintain the right proportions for multimedia presentations.

The designers are encouraged to consider alternate mixes and configurations of meeting rooms, particularly when creating a stronger link to specific exhibition hall divisions. Approximately 65 - 70 room breaks are desired for the completed convention center. A sample mix of permanent room sizes is listed below:

Count	Size	Area	Extension	Height	Total Breaks
3	30 ft. X 30 ft.	900	2,700	16 ft.	3
6	30 ft. X 60 ft.	1,800	10,800	16 ft.	12
12	60 ft. X 90 ft.	5,400	64,800	18 ft.	36
3	60 ft. X 120 ft.	7,200	21,600	18 ft.	12
Total			99,900		63

Head table locations along are planned for two walls of each room break, providing flexibility of room configuration. Provide microphone, audio and lighting controls for each room with the ability to combine electronically for single point controls when operable walls are removed.

Program Space: Meeting Rooms

100,000 SF

- DIVISIBILITY**
- Divisions achieved using operable walls to divide permanent rooms (lockable). No more than two sides of a divided room should be operable walls.
 - Lighting, sound, and HVAC controls to relate to each division.
 - For rooms less than 3,000 sq. ft., maximum of two room divisions.
 - For rooms between 3,000 sq. ft. and 7,500 sq. ft., maximum of four room divisions.
 - For rooms exceeding 7,500 sq. ft., maximum of eight room divisions.
 - Operable wall storage enclosures on back-of-house service corridor side.

Program Space: Meeting Rooms, continued

- FEATURES**
- Personnel doors into meeting rooms are to be minimum 9'-0" high.
 - Door hardware should utilize concealed rods and closers with levers of a type allowing smooth, quiet operation. Stops built-in or on walls (not on floor).
 - Entrance alcoves on prefunction side sized for tabletop registration.
 - Food service through back-of-house service corridors.
 - Peepholes in doors on both public and service sides of rooms.
- FINISHES**
- Ceiling Height: Varies with maximum room dimension, 14-foot minimum.
 - Ceiling: 2 x 2 acoustical lay-in with coffers and drop soffits at perimeter and at operable wall tracks.
 - Walls: Durable wainscot, low maintenance finish up to 4 feet above floor. Painted gypsum board not recommended.
 - Floors: Carpet, nylon roll goods or 36-inch square tiles. Provide contrasting borders and pattern to facilitate placement of rows of chairs.
- ACOUSTICS**
- Background noise level should meet NC-35.
 - Permanent walls constructed to meet STC 50-55.
 - Acoustic performance criteria for operable walls STC 52 ±1dB.
- AUDIOVISUAL**
- Room sound system with overhead speakers capable of medium quality voice reinforcement.
 - Background music assignment and volume control.
 - Microphone jacks and line-level pairs: At head table location(s) when operable walls are in place and at rear wall near public entry doors.
 - Projector control jacks at head table and lectern location(s).
 - Distributed Television (DTV) system to link video signals to the ballroom and other meeting rooms.
 - LCD event activity message panel at each function space entrance.
- ELECTRICAL**
- Provide 110-volt 20-amp convenience outlets along perimeter walls and in floor boxes at 30 ft. on center and at operable wall locations, minimum four (4) circuits per division.
 - Provide floor outlets at head table locations.
 - Provide one each 208-volt 60-amp 3-phase connection in recessed box at the head wall for each meeting room division.
 - All outlets are to be organized into a tight configuration.
 - Provide cable tray in service corridors and doggie door/mouse hole at each room division.

Program Space: Meeting Rooms, continued

- LIGHTING**
- Type: Dimmable, mixture of compact and strip fluorescent.
 - Level: 50 foot-candles.
 - Programmable lighting system with 4-8 button preset control system at public side, 2-button on/off at service side of each room division.
 - Separate circuits and control for head table location(s).
- TELECOM**
- Telephone: Provide four (4) Category 6 outlets at 30 ft. centers along perimeter and in floor boxes at 30 ft. on center and at mid-point of operable walls. Minimum four locations per room division.
 - Fiber optics: Provide at least four (4) multi-mode fibers at head- and back-wall in each room division.
- GRAPHICS**
- Establish meeting room number designations related to divisibility (back-and front-of-house).
 - Size to relate to scale of concourse space and viewing distance/angle.
 - “Meeting in Progress” signs in back of house corridor.
- SUPPORT SPACES REQUIRED**
- Restrooms.
 - Storage for tables, chairs, and other furniture.
 - Pre-function space.
 - Back-of-house corridors.
 - Audiovisual control room.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Tables and dollies.
 - Stack chairs and dollies.
 - Lecterns with light and microphone stand.
 - Loose staging/accessories.
 - Portable projection equipment.
 - Wireless lavalier microphones.
 - Flag sets.
 - Trash/recycle receptacles.
 - Assistive listening system and headsets.

BOARD ROOMS

This suite serves as the before- and after-event lounge for featured presenters and very important guests. It may also be utilized for special meetings or receptions for small important groups.

High quality food and beverage service shall be provided from a small servery/bar area with service access to the main kitchen. If possible, provide a secure back-of-house entry to a securable passenger loading area with access for limousines.

The suite should include three specific rooms, a reception area/conference room, servery/bar and a private toilet room. These spaces should have finishes such as wood paneling and fabric wallcovering or fabric-wrapped acoustical panels. The furniture and casework should provide a high level of quality and comfort.

Provide power, telephone, data and audiovisual systems capabilities to support interactive links, delegate voting and videoconferencing between board members here and at remote locations.

Flexible lighting schemes should adapt the space from board meetings to multimedia presentations and videoconferencing. Wall washers and indirect lighting should enhance the ambience of the room, with feature lighting for artwork.

Program Space: Board Rooms

3,000 SF (3 @ 1,000 SF)

- | | |
|------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Access to/from public circulation. • Food service through back-of-house service corridors to dedicated servery/bar. • Controlled access using card swipe or user ID system. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 10 ft. minimum. • Ceiling: 2 ft. x 2 ft. acoustical lay-in with coffers or other perimeter feature. • Walls: Wood paneling, fabric-wrapped wall panels or other easily renewable finishes. At least one wall should have a tackable surface or rail. Painted gypsum board should be minimized. Provide marker board behind sliding or side-hinged wall panels. • Floors: Carpet, 100% nylon, commercial tufted. |
| ACOUSTICS | <ul style="list-style-type: none"> • Background noise level should meet NC-30 • Permanent walls constructed to meet STC 50-55. • Provide acoustic isolation between conference room and private restroom. |

Program Space: Board Rooms, continued

- AUDIOVISUAL**
- Room sound system with recessed wall or overhead speakers capable of surround-sound voice and music presentation.
 - Built-in video projector with motorized projection screen.
 - DTV system to link video signals to the ballroom and other meeting rooms.
 - Provide two 42-inch LCD monitors wall mounted or in custom casework.
- ELECTRICAL**
- Minimum four (4) floor convenience outlets at perimeter walls; minimum two per wall.
 - Quadruplex 110-volt, 20-amp convenience outlet in the center of the room, either in floor or fixed furniture.
- LIGHTING**
- Type: Dimmable fluorescent for general illumination, incandescent for feature lighting. Decorative where appropriate.
 - Programmable lighting system with 4-8 button preset control system at public side, 2-button on/off at service side of room.
 - Provide switched and half-switched duplex wall outlets for control of decorative floor and table lamps.
 - Level: 50 foot-candles at board table, 20-30 foot-candles for general illumination.
- TELECOM**
- Provide four (4) Category 6 outlets on a minimum of two perimeter walls and in (1) outlet either in floor or fixed furniture.
 - Provide four (4) multi-mode fiber optic outlets on a minimum of two perimeter walls.
- GRAPHICS**
- Wall identification plaque.
 - Fixed directional. Board room should be named, not numbered.
 - LCD event activity message panel at each function space entrance.
- SUPPORT SPACES REQUIRED**
- Back-of-house corridors.
 - Private restroom.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Conference table
 - Leather-upholstered swivel chairs on casters
 - Lounge seating
 - Artwork

Program Space: Board Room Suite - Pantry

- | | |
|--|---|
| FEATURES | <ul style="list-style-type: none"> • Built-in service bar with hidden closure (folding panel, shutters). • Controlled access using card swipe or user ID system. • Lockable base and upper cabinets. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum. • Ceiling: 2 ft. x 2 ft. acoustical tile. • Walls: Gypsum board, painted or fiber-reinforced plastic panels. • Floor: Quarry tile or sheet vinyl. |
| PLUMBING | <ul style="list-style-type: none"> • Double stainless steel sinks with disposer. • Ice maker connection for refrigerator. |
| ELECTRICAL | <ul style="list-style-type: none"> • Provide minimum three (3) 110-volt 20-amp circuits distributed throughout the room. • Provide GFI-duplex outlets above counter. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser; strip under upper cabinets. • Provide switched and half-switched duplex wall outlets for stepped lamp control. • Level: 30-40 foot-candles. |
| TELECOM | <ul style="list-style-type: none"> • Provide wall-mounted house phone. |
| FURNITURE,
FIXTURES &
EQUIPMENT | <ul style="list-style-type: none"> • Refrigerator with ice maker. • Coffee service. • Microwave oven. |

SHOW MANAGERS' OFFICES

During the individual show as well as during move-in and move-out, these offices will serve as the administrative center for the event promoter. During the show, these spaces may be used as small meeting rooms. An ideal arrangement for the offices allows direct access to the prefunction concourse, with controlled access both visually and physically to prime exhibition space. Often the best location for these offices is on a mezzanine level near the hall entrance.

Dedicated offices for each exhibition hall division will be required. A flexible suite that spans hall divisions is also usable as a single office for larger shows. Office access should be from the concourse or registration lobby and should not require going through a security checkpoint.

Program Space: Show Managers' Offices

3,600 SF (4 @ 900 SF)

- | | |
|--------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Access to/from public circulation with access to exhibition floor nearby. • View of exhibition floor. • Coat closet and lockable storage closet. • No other interior subdivisions shall be provided in this area. • Card access required. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. • Ceiling: 2 ft. x 2 ft. acoustical lay-in. • Walls: Gypsum board, painted. • Floor: Carpet, 100% nylon fiber; tufted construction. |
| AUDIOVISUAL | <ul style="list-style-type: none"> • Provide event and background music monitoring system with volume control. • Provide microphone jack for paging announcements to registration, prefunction and exhibition areas. • Distributed Television (DTV) connectivity. • LCD event activity message panel at each function space entrance. |
| PLUMBING | <ul style="list-style-type: none"> • Ice maker connection for refrigerator. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets in floor and along perimeter walls for office equipment. Provide each office with a minimum of (4) each 110-volt 20-amp circuits. • One 208-volt 30-amp 3-phase outlet per management office. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with parabolic troffer or acrylic diffuser. • Stepped or dimmable for low-light event conditions. • Level: 50 foot-candles. |

Program Space: Show Managers' Offices, continued

- | | |
|---|--|
| TELECOM | <ul style="list-style-type: none">• Provide each office with a minimum of four (4) each Category 6 outlets on each perimeter wall. |
| GRAPHICS | <ul style="list-style-type: none">• Wall identification plaque. |
| FURNITURE
FIXTURES &
EQUIPMENT | <ul style="list-style-type: none">• Office furniture provided by each show manager.• Light-blocking curtains at exhibition hall windows.• Refrigerator with ice maker. |

HOST DESK

Provide an alcove near the primary entrance(s) to the convention facility for a permanent host desk. Two functions are performed here. First, a friendly host should be the first impression attendees have when entering the building for the first time, someone trained to read people and to offer assistance without being prompted. Second, the information attendant may also be an extension of the security staff, trained to be watchful of changing conditions and to provide first response in the case of an emergency.

Provide a 36 inch tall service counter with a lower, 30-inch high work surface, telephone and task lighting. Attendants should be positioned to have an overview of the concourse. The intent is for the host to be positioned in front of the counter most of the time welcoming guests and not seated behind a counter. Wall finishes should match the surrounding public concourse.

Program Space: Host Desk

600 SF

FEATURES	<ul style="list-style-type: none"> • Service counter (30 - 36 inch) with attendant work surface. • Silent emergency push button alarm tied to Central Security office.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: Minimum 8 ft. in alcove. • Ceiling: 2 ft. x 2 ft. patterned acoustical tile or gypsum board soffit compatible with surrounding concourse. • Walls or millwork: Durable, low maintenance materials conveying a sense of quality. • Floors: Carpet, nylon roll goods or 36-inch square tiles to match adjacent finishes.
ELECTRICAL	<ul style="list-style-type: none"> • Provide 110-volt convenience outlets at attendant side of counter.
LIGHTING	<ul style="list-style-type: none"> • Type: Metal halide, fluorescent to match concourse • Under-counter task lighting.
TELECOM	<ul style="list-style-type: none"> • Provide two (2) Category 6 outlets to the back of the service counter. • House telephone.
GRAPHICS	<ul style="list-style-type: none"> • Directional, fixed. • Building Directory nearby.
FURNITURE, FIXTURES, & EQUIPMENT	<ul style="list-style-type: none"> • Special display boards (if any). • Trash/recycle receptacles. • Task chair with casters and star base.

BUSINESS CENTER

This space will be used to provide a variety of support services to exhibitors and attendees alike. Opening onto the public concourse, there should be a semi-private lobby with a service counter to handle customer requests. Space should allow for several high-tech working cubicles to be installed along one wall for accessing computer-based services to include word processing, scanners and printers.

The business center may be a branded or franchise-operated outlet that provides pack-and-ship services and should have access both into the concourse and to the public sidewalk. Business center operating hours may mirror the adjacent business community rather than be limited to supporting event activity.

An automated teller machine (ATM) should be installed here, opening onto the public concourse and under the facility's control.

Program Space: **Business Center**

900 SF

- | | |
|-------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Glass storefront near concourse. • Service counter for 4 attendants. • Separate equipment and storage area behind screen wall. • Provide island-style counter with storage beneath in work area. • Access from a service corridor is beneficial but not required. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 10ft. with drop soffit at service counter. • Ceiling: 2 ft. x 2 ft. acoustical tile at counter, 2 ft. x 4 ft. in work area. • Walls: Gypsum board, painted. • Floor: Carpet to match adjacent area in counter area, resilient tile in work area. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets: Provide minimum (4) each 110-volt 20-amp circuits along perimeter of lobby area for computer/printer/scanner at cubicles. • Provide minimum 100-amp service to work area for photocopiers, binders and related office equipment. • Locate one quadruplex outlet at attendant position under the service counter. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent for general illumination with halogen feature or display lighting. • Level: 40-50 foot-candles general illumination; 80-150 foot-candles at displays; 60-80 foot-candles in work area. |

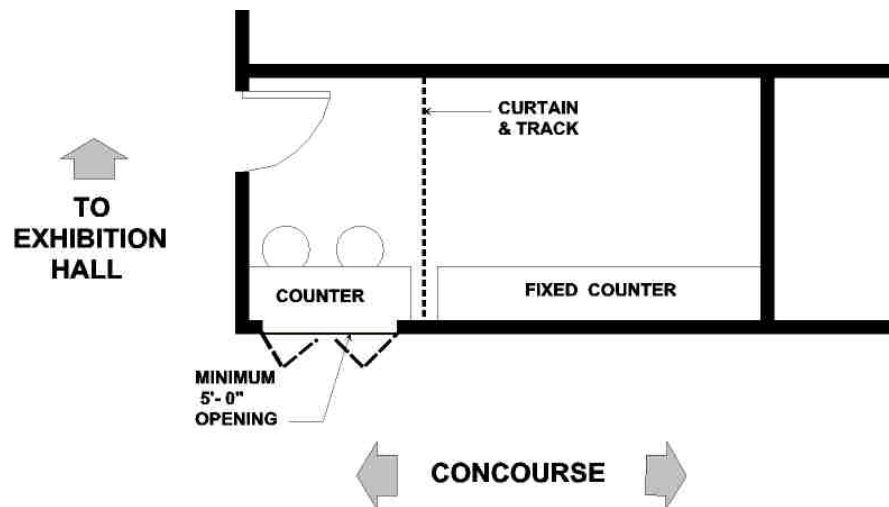
Program Space: Business Center, continued

- | | |
|----------------------------------|---|
| TELECOM | <ul style="list-style-type: none">• Provide minimum of four (4) Category 6 outlets to each attendant position at service counter.• Provide two (2) Category 6 outlets at cubicles in lobby.• Provide minimum four (4) Category 6 outlets on each perimeter wall and to island-style counter in work area. |
| GRAPHICS | <ul style="list-style-type: none">• Wall identification plaque.• Overhead panel directional sign. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Public concourses.• Storage.• Access to Back-of-House Circulation (preferable). |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none">• Warehouse shelving units.• Locking storage cabinets.• Rolling flat top carts. |

COAT CHECK / TICKET OFFICE / REGISTRATION OFFICE

Provide one multi-function event support space near major entrances and at each registration lobby. This space will be use-adapted on a case-by-case basis and will serve as a temporary ticket office, checked baggage and coat room or as a back office for show managers in support of registration.

Provide a service counter with a lockable closure finished to be compatible with the adjacent concourse so that these spaces are minimal features when not in use. A curtain and track will divide the space to provide visual privacy between service and back-office activities. Provide a fixed counter along one wall within the work area. Clothing racks and shelving to support luggage and coat check activities will be portable.



These spaces will also be used by show managers for convenient storage of printed materials, badges, event brochures or promotional products. Computer servers, printers and other electronics may be located in these offices for the duration of an event.

Program Space: Coat Check / Ticket Office / Registration Office

1,200 SF (4 @ 300 SF)

FEATURES

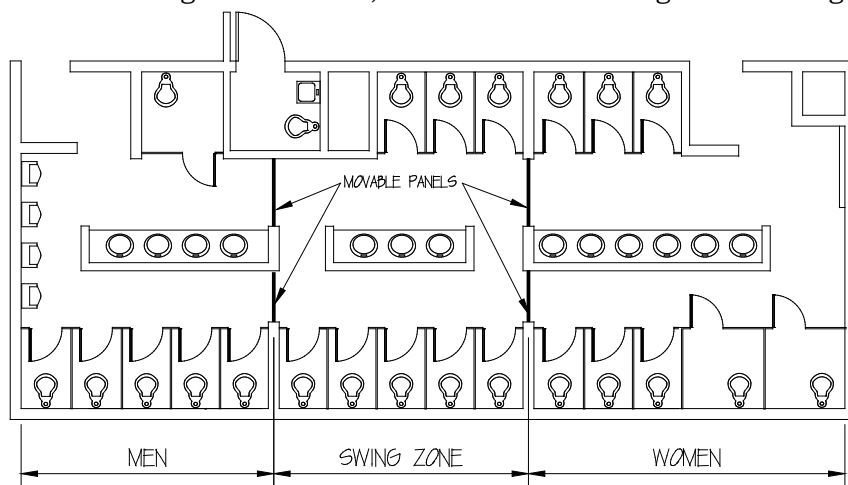
- Ideally distributed among registration lobbies, near entrances.
- Lockable – card-key access only by Show Manager.
- Service counter for two attendants with locking hinged panels or overhead shutter. Finish should blend into adjacent wall finishes to be unobtrusive when closed.
- Curtain and track to separate public from work areas.
- Provide CCTV coverage and panic alarm buttons.
- May be used as offices or as server closet for registration computers.

Program Space: Coat Check / Ticket Office / Registration Office, continued

- FINISHES**
- Ceiling Height: 9 ft. minimum.
 - Ceiling: 2 ft. x 2 ft. lay-in acoustical tile.
 - Walls: Impact-resistant gypsum board to underside of structure, painted.
 - Floor: Commercial-grade carpet.
- ELECTRICAL**
- Minimum (3) 110-volt circuits to each multifunction area. Provide minimum (1) quadruplex on each wall.
 - Convenience outlets beneath service counter, one per attendant station.
- LIGHTING**
- Type: Fluorescent, recessed with acrylic diffuser. Down lights in soffit at service counter.
 - Level: 40 foot-candles at counter, 30 foot-candles general illumination.
- TELECOM**
- Four (4) Category 6 outlets at each attendant position.
 - Four (4) Category 6 outlets on each fixed wall.
- GRAPHICS**
- Programmable LED panel overhead; minimum two (2) lines of text.
 - Wall plaque identification with changeable message panel for temporary alternate room assignment.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Task chairs.
 - Mobile coat racks.
 - Shelving/storage units.
 - Point of sale terminals.

PUBLIC RESTROOMS

Public restrooms should be well distributed throughout the public circulation areas to serve the meeting and banquet spaces. At least one set of restrooms should be accessed from within the exhibition hall. Restrooms should be located to serve blocks of meeting rooms and convenient to the general circulation pattern. Restrooms in the concourse area should not be concentrated in or around the registration area, in order to avoid congestion during peak ingress/egress conditions.



The concourse restrooms should have the flexibility to be converted for use by a single sex for any given event. A common configuration has a pair of movable partitions between adjacent restrooms so that fixture counts can be adjusted for when one gender is expected to dominate the delegate population.

Historically, determining the correct number of fixtures to provide in meeting facilities was problematic, with building code required counts not addressing the peak load condition that occurs during break periods. Recent changes are more closely aligned with past experience in public assembly buildings, but the designers should compare code-based quantities with the following approach:

Estimate a peak population for the total of exhibition, meeting and banquet area at 15 square feet per person. Provide fixtures for 110 percent of this population at 125 persons per fixture. Use local rules for spitting the fixtures between males and females to satisfy “potty parity” conditions if applicable.

$$\frac{270,000+30,000+100,000 \text{ SF}}{15 \text{ SF per person}} \times 110\% \div 125 \text{ per fixture} = 235 \text{ fixtures}$$

Provide a unisex restroom for attendant assistance (“family restrooms”) near at least 50% of the large public restroom blocks unless directed otherwise by building codes.

Program Space: Public Restrooms

24,000 SF

- FEATURES**
- Handicap accessible facilities to be provided in accordance with current code.
 - Ceiling-mounted partition system for ease of cleaning floors. Urinal screens recommended for ballroom and meeting restrooms only.
 - Brushed stainless steel toilet room accessories.
 - Janitor’s closet for each toilet room (one for each sex) or accessible from both sides of paired rooms, containing slop sink and hot water.
 - Avoid swinging door vestibules, using sound baffle walls. Provide locking roll-down grille to secure restrooms during unoccupied periods.
 - Dispensers for paper towels to be hands-free, vendor-supplied.
 - Integrated cabinetry for baby changing areas in both men’s and women’s restrooms.
 - Under-counter trash containers, locate soap dispensers above counter opening.
 - Provide wall-mounted recessed trash container next to each restroom door.
- FINISHES**
- Ceiling Height: Minimum 9 ft.; 10 ft. preferred for larger facilities.
 - Ceiling: Gypsum board, water-resistant and painted.
 - Walls: Ceramic tile with dark colored grout to hide dirt. Vestibules to have durable low maintenance surfaces with acoustic materials from approx. 4 feet above the floor.
 - Countertops: Impervious surface, not plastic laminate.
 - Partitions: Textured stainless steel toilet partitions.
 - Floors: Ceramic mosaic tile with dark colored grout to hide dirt, minimum 6x6-inch.
- AUDIOVISUAL**
- Provide audio system loudspeakers and background music with zoned paging and program distribution.
- PLUMBING**
- Drinking fountains located nearby.
 - Provide tempered water (75-90° F) to single faucet in multiple-occupancy restrooms. Locate mixing valve in janitor closet.
 - Dual-flush toilets.
 - Battery operated electronic flush valve and lavatory sensors.
 - Battery operated soap dispensers
 - Hose bib with lockable access for each restroom.
 - Floor drains.
 - Provide isolation valves for each restroom to aid maintenance and repair.
 - Provide one shower cubicle for each sex at restrooms closest to bike racks.

Program Space: Public Restrooms, continued

- LIGHTING**
- Type: Compact and/or strip fluorescent. Avoid wall-wash fixtures at tile walls.
 - Level: 30 foot-candles.
 - Infrared room occupancy sensors connected to light controls.
- GRAPHICS**
- Use of international symbols without text to identify toilet room entrances is acceptable.
- SUPPORT SPACES REQUIRED**
- Janitorial closets.

1 Square footage to be finalized based on configuration and code requirements.

FIRST AID ROOM

The First Aid Room is required to provide a facility for the treatment of minor injuries to Center employees, service contractor personnel, and show attendees. This space also acts as a holding area while more seriously ill or injured persons are awaiting transportation to a local hospital or other treatment facility.

This space should be located between the public concourse and exhibition hall for use both during move-in/out and the events. Access to back-of-house corridor is beneficial for removing ill or injured patrons outside of public view.

Program Space: First Aid Room

900 SF (2 @ 450 SF)

- FEATURES**
- Wheelchair accessible toilet room with water closet and lavatory.
 - Storage space for wheelchairs, stretchers, oxygen equipment, etc.
 - Emergency alarm tied to central security office.
 - Wide door for wheelchair and stretcher access.
 - Millwork counter and storage cabinets.
- FINISHES**
- Ceiling Height: 9 ft.
 - Ceiling: 2 ft. x 4 ft. acoustical tile.
 - Walls: Utility block or gypsum board, epoxy painted.
 - Floors: Vinyl tile or sheet goods.
- ACOUSTICS**
- Partitions built to underside of structure.
 - If gypsum board partitions, provide acoustical batts for increased privacy.
- PLUMBING**
- Small toilet room.
- ELECTRICAL**
- Convenience outlets, minimum three circuits.
 - Circuits on standby power.
- LIGHTING**
- Type: Fluorescent, recessed with acrylic diffuser.
 - Level: 40 foot-candles. Provide standby power to lighting circuits.
- TELECOM**
- Provide minimum two (2) Category 6 outlets on minimum of two walls.
- SUPPORT SPACES REQUIRED**
- Access to back-of-house corridor.
 - Janitorial closet.

Program Space: First Aid Room, continued

**FURNITURE,
FIXTURES, &
EQUIPMENT**

- Stretcher.
- Nurse's desk and chair (one per room).
- Cubicle curtain and track.
- Wheelchairs.
- Refrigerator.

LOADING DOCKS

The truck docks serve as the main activity area for loading and unloading displays to be used at the Convention Center. Special attention should be given to screening the truck docks from public views and controlling access.

The dock surface is to be at the same floor elevation as the exhibition hall, to facilitate set-up/take-down of exhibits. The truck apron should be sloped down to 4 feet below the dock surface. Ramps from the apron to the dock/exhibition hall floor should be provided to allow drive-in access for trucks to each hall division as well as to provide emergency exiting from the exhibition hall. Ramp slope and transition areas should be designed to keep low-boy trailers from dragging the ground.

Ideally, docks should be arranged so that the dock is continuous, providing access from each parking space to each hall division for maximum flexibility of use. One truck dock berth per 10,000 SF of exhibition space is the recommended ratio, but this has been reduced in some highly constrained designs to a minimum of one per 12,000 SF. In addition to the exhibition hall docks, dedicated food service docks, berths for trash dumpsters/compactors, a recycling station and a separate, enclosed food waste area are required.

While the truck apron may be open to the elements, the dock circulation area must be enclosed and the environment protected against temperature extremes. Closure at the entrance to the hall should be a horizontal sliding door, vertical bi-fold or lift door with personnel doors through them where the emergency exit scheme allows using the loading dock as an exit. These allow easy movement of freight into the building when convention attendees are not using the exhibition hall.

Program Space: Loading Docks

12,150 SF

FEATURES

- Security system CCTV coverage.
- Power and signal hookups for media vehicles.
- Sliding or overhead door for direct access between each exhibition hall and the dock. Avoid rails, depressions or projections at doorsill. Provide air curtains at dock openings into exhibition halls or service corridors.
- One manually operated pneumatic dock leveler per six docks; minimum one per hall division.
- Dock bumpers and steel angle protectors at each loading dock berth.
- Canopy at trucks extending minimum 10 feet from face of dock wall.
- Safety striping at intersections, temporary storage zones.
- Protection bollards at entry vestibules.
- Location to accommodate multiple buses as alternative green room location

Program Space: Loading Docks, continued

- FINISHES**
- Ceiling Height: 16 ft. minimum clearance to obstruction; 18 ft. preferred.
 - Ceiling: Stucco on suspended lath preferred; consider exposed structure as value engineering alternative.
 - Walls: Cast-in-place concrete or concrete-filled CMU.
 - Floors: Sealed, hardened concrete.
 - Dock Apron: Broom-finished concrete.
- AUDIOVISUAL**
- Paging system zone with emergency override capability.
- PLUMBING**
- Storm drainage on apron.
 - Hose bib with interior cutoff at each ramp.
 - Prep area for auto show and other display vehicles with hot & cold running water and drains
 - Air compressor and expansion tank to serve exhibition hall floor boxes.
- ELECTRICAL**
- 208-volt, 3-phase, 60-amp outlets at face of dock at 60 ft. on center.
 - 110-volt, 20-amp convenience outlets on inside dock wall.
 - Service as needed for rechargeable vehicles (FF&E purchased).
 - 208-volt, 3-phase, 200-amp shore power for mobile production trucks.
- LIGHTING**
- Type: Recessed HID or compact fluorescent cluster fixtures.
 - Level: 20 foot-candles.
 - Floodlights on apron to facilitate loading activity.
 - Dock lights with articulating arms for trailer interiors.
- TELECOM**
- Provide cable path to audiovisual control room for remote broadcast vehicle connectivity.
- GRAPHICS**
- Each exhibition hall entrance identified.
 - Reflective number at each dock space, visible to driver.
- SUPPORT SPACES REQUIRED**
- Toilets for dock personnel.
 - Dock office for directing operations.
 - Security office.
 - Exhibitor storage.
 - Off-site truck staging and marshaling.
 - Forklift and golf cart indoor storage and charging area.

COMPACTOR / RECYCLING STATION

Planning for solid waste handling assumes that services handling commingled recycling of corrugated paper, aluminum, plastics and glass will be available at the time the convention center opens.

A corrugated paper compactor and baler will be required, as well as a truck bay or other convenient storage location in the loading dock area will be required for recyclables.

Program Space: **Compactor / Recycling Station**

3,200 SF (4 @ 800 SF)

FEATURES	<ul style="list-style-type: none"> • Power hookups for compactor and baling equipment. • Overhead coiling door for moving large bins or bales. • Protection bollards at entry vestibules. • Nearby access to freight elevators and back-of-house service corridors.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 25 ft. minimum clearance to any obstruction per compactor supplier. • Ceiling: Stucco on suspended lath if exterior space; open to structure if interior. • Walls: Precast panels, cast-in-place concrete or concrete-filled block. • Floors: Sealed concrete. • Dock Apron: Broom-finished concrete.
PLUMBING	<ul style="list-style-type: none"> • Insulated hose bib with interior cut-off at dock area. • Floor drain.
ELECTRICAL	<ul style="list-style-type: none"> • 208-volt outlets for compactor and/or baler.
LIGHTING	<ul style="list-style-type: none"> • Type: Chain-hung or surface-mounted fluorescent strip with acrylic lens. • Level: 20 foot-candles.
GRAPHICS	<ul style="list-style-type: none"> • Directional, fixed, at truck apron and interior dock. • Wall plaque identification.
FURNITURE, FIXTURES, & EQUIPMENT	<ul style="list-style-type: none"> • Baler. • Compactor with bin lifter. • Wheeled collection bins.

DOCK OFFICE

The dock office is located near the entrance to the loading dock area and is the control point for loading and unloading activity for the building. Truck drivers will use this as a check-in point for dock assignment when arriving to load or unload exhibit materials.

Provide space in office for communication system to off-site marshaling area.

Program Space: Dock Office

200 SF

FEATURES	<ul style="list-style-type: none"> • Windows for direct visual and physical access/control of truck dock, apron, and service drive. • Radio, intercom, and paging communication controls. • Controls for access gates, if any. • Video monitors for security CCTV coverage of vehicle approach and dock areas.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 8 ft. minimum. • Ceiling: 2 ft. x 4 ft. lay-in acoustical tile. • Walls: Utility block, painted. • Floor: Vinyl tile.
AUDIOVISUAL	<ul style="list-style-type: none"> • Paging microphone zoned for loading dock area,
ELECTRICAL	<ul style="list-style-type: none"> • Minimum (4) 110-volt 20-amp circuits for equipment. Connect (2) circuits to standby power.
LIGHTING	<ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: 40 foot-candles.
TELECOM	<ul style="list-style-type: none"> • Minimum four (4) Category 6 outlets.
GRAPHICS	<ul style="list-style-type: none"> • Directional, fixed, at truck apron and interior dock. • Wall plaque identification.
FURNITURE, FIXTURES, & EQUIPMENT	<ul style="list-style-type: none"> • Chairs. • File cabinets. • Radio equipment. • Network computer.

SECURITY OFFICE

The Security Office will be located at the employee entrance to the facility. It will be the control center for the building security system and where an emergency response team will coordinate their activities. Provide custom console for monitoring fire alarm, security and building automation systems.

Other functions related to building operation and security will be performed from here. These include issuing photo identification badges for staff and controlling keys or access cards for the building.

A secure holding room should be located within the Security Office that can be used to detain unruly visitors while reducing the possibility of self-harm.

Program Space: Security Office

900 SF

- | | |
|--------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Windows for direct view of and physical control of employee entrance. • Security system CCTV controls. • Radio, intercom, and paging communication controls. • Gate control and intercom for dock and apron access. • Card access system. • Secure holding area / room. • HVAC design shall provide extra cooling to accommodate heat generated by dense rack-mounted equipment; maximum temperature 70°F. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum. • Ceiling: 2 ft. x 4 ft. lay-in acoustical tile. • Walls: Gypsum wallboard or concrete block, painted. • Floor: Static-resistant nylon carpet or vinyl tile. |
| AUDIOVISUAL | <ul style="list-style-type: none"> • Provide event monitoring and background music system with volume control. • Distributed Television (DTV) connectivity. |
| ELECTRICAL | <ul style="list-style-type: none"> • Minimum (6) 110-volt 20-amp circuits for equipment. • UPS for control console, recording and radio equipment. • All circuits connected to standby power. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Task lighting at workstations. • Level: 40 foot-candles general illumination. |

Program Space: Security Office, continued

- TELECOM**
- Minimum four (4) Category 6 to each wall. Floor or wall outlets as required to supply systems furniture workstations.
 - Minimum four (4) analog telephone lines dedicated for emergency use and wired separate from building PABX.
 - Fiber optic connectivity as required for monitoring building automation, fire alarm and security systems.
- GRAPHICS**
- Directional, fixed.
 - Wall plaque identification.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Modular workstations.
 - Chairs.
 - File cabinets.
 - Radio equipment (800 MHz).

RECEIVING & WAREHOUSE

A single checkpoint is used by staff to receive all non-event and non-food materials for use in the building. From here, deliveries should be routed internally to their final destination or warehoused in assigned storage areas. Typical deliveries include paper towels, toilet paper and other consumables, light bulbs, office supplies and maintenance materials.

All food service deliveries, including related paper products and other consumables, should be routed externally to a separate food service receiving area. Mail and express packages should be delivered to a mailroom in the Venue Management Office.

A receiving counter and vestibule should be provided with internal access to the main storage area. Allow clear access for forklifts from the loading dock into storage via roll-up door. Warehouse staff will have 2-3 workstations within this space.

There is a need for warehouse-style storage for the facility. Goods will include attic stock materials from construction (carpet, ceiling tiles and other finish materials) along with bulk storage for consumables, decorations, and extra tables and chairs for peak demand.

Access to stored materials will be restricted to warehousemen. Provide secure control (card access) or otherwise integrate with keyed entry system.

Program Space: Receiving & Warehouse

7,000 SF

- FEATURES**
- Intercom for attendant with the ability to be monitored by Security Office.
 - Service counter with lockable access i.e., roll-up shutter or door and vestibule.
 - Access to loading dock and storage areas.
 - Ramp to truck apron for receiving hand truck deliveries.
 - Roll-up door for deliveries using forklifts or pallet jacks.
 - Card access system.

- FINISHES**
- Ceiling Height: 9 ft. minimum in vestibule. In storage area, 16 feet minimum to obstruction, additional height beneficial.
 - Ceiling: 2 x 4 lay-in acoustical tile in vestibule. None required in storage area.
 - Walls: Utility block, painted.
 - Floor: Sealed concrete.

- ELECTRICAL**
- Convenience outlets in storage area.
 - Minimum two (2) quadruplex 110-volt outlets at service counter.
 - Floor or wall outlets as required to supply modular workstations.

Program Space: Receiving & Warehouse, continued

- | | |
|--|--|
| LIGHTING | <ul style="list-style-type: none">• Vestibule: Recessed fluorescent with acrylic diffuser.• Storage: HID or fluorescent strip, hung or surface mounted.• Level: 30 foot-candles, 40 at service counter and office area.• Task lighting at workstations. |
| TELECOM | <ul style="list-style-type: none">• Minimum four (4) Category 6 outlets at service counter.• Floor or wall outlets as required to supply modular workstations. |
| GRAPHICS | <ul style="list-style-type: none">• Directional, fixed at truck apron and interior dock.• Wall plaque identification. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Loading dock.• Back-of-house corridors.• Access to freight elevators. |
| FURNITURE, FIXTURES & EQUIPMENT | <ul style="list-style-type: none">• Electronic scale.• Storage racking system• Forklift• Pallet jacks• Modular workstations.• Chairs.• File cabinets.• Computer terminals |

GENERAL BUILDING STORAGE

Storage for general uses to be assigned by the operator should be distributed throughout the building. Storage area designated for table, chair and room setup equipment in service corridors and alcoves is listed separately in this program. General storage rooms should be located proximate to event spaces, in room sizes from 200 to 900 square feet.

Specialized shelving may be designed and installed in selected storage rooms at the Operator's direction.

Program Space: General Building Storage

3,350 SF

- | | |
|--|--|
| FEATURES | <ul style="list-style-type: none"> • Enclosed rooms have card access control. • Minimum 8'-0" x 8'-0" overhead coiling door in rooms 600 sq. ft. or larger. • Personnel doors should be 3'-4" single leaf or 6'-0" pair to allow easy movement of pallet jacks and wheeled carts. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 12 ft. minimum clearance to obstruction. • Ceiling: Open to structure. • Walls: Utility block. • Floor: Sealed concrete. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip, hung or surface mounted. • Level: 30 foot-candles. |
| GRAPHICS | <ul style="list-style-type: none"> • Wall identification plaque "Storage". |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none"> • Back-of-house corridors. • Access to freight elevators. |
| FURNITURE, FIXTURES & EQUIPMENT | <ul style="list-style-type: none"> • Fencing / enclosures. |

MEETING & BANQUET STORAGE

Storage shall be provided for meeting room equipment including chairs, tables, risers and podiums. Storage capacity shall be limited to approximately 50% of the equipment inventory as it is assumed that at least 50% will always be in use.

Meeting room storage shall be distributed throughout the back-of-house corridors proximate to the meeting rooms. This type of storage is assumed to be in designated areas (striped floors), alcoves or otherwise securable areas. The space provided is meant to ensure the security of the equipment while minimizing storage uses in circulation space, which would impair other facility functions. Doorways, fence gate openings and corridor geometry must be adequate to handle the maneuvering of chair and table carts, stages and food service trolleys.

Program Space: Meeting Room Storage

6,700 SF

- | | |
|--|--|
| FEATURES | <ul style="list-style-type: none"> • Open storage areas designated for use via floor striping or chain-link security enclosures. • Coordinate storage alcoves with placement of fire alarm strobes to avoid blocking visibility. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 10 ft. minimum clearance, open to structure. • Walls: Utility block or plywood over gypsum board. • Floor: Sealed concrete with boundary stripe at clear zones. |
| ELECTRICAL | <ul style="list-style-type: none"> • 110-volt 20-amp circuits for cleaning. • 208-volt, 30- and 60-amp outlets for food service equipment. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip with acrylic diffuser, hung or surface mounted. • Level: 30 foot-candles. |
| FURNITURE, FIXTURES & EQUIPMENT | <ul style="list-style-type: none"> • Trolley carts for tables and chairs. • Fencing / enclosures. |

EXHIBITOR STORAGE

One or two large, secure storage rooms shall be provided proximate to the loading dock or the exhibition hall for the exclusive use of show decorators and exhibitors. Provide access for pallet jacks and forklifts via an overhead door, with a separate personnel door. These rooms shall be used for temporary storage of packing crates and other materials associated with displays while the event is in progress. Durability of materials and security against intruder access are the primary design and operational concerns.

Program Space: Exhibitor Storage

1,800 SF

- | | |
|--------------------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Security camera CCTV coverage. • Provide card access control for authorized staff. • Minimum 8'-0" x 10'-0" overhead coiling door. • Personnel doors should be wide enough to allow easy movement of pallet jacks and wheeled carts. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 12 ft. minimum clearance to obstruction. • Ceiling: Open to structure. • Walls: Utility block to the underside of structure. • Floor: Sealed concrete. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets for cleaning. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip, hung or surface mounted. • Level: 30 foot-candles. |
| GRAPHICS | <ul style="list-style-type: none"> • Wall identification plaque "Exhibitor Storage". |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none"> • Loading dock or truck apron. • Exhibition halls. • Back-of-house corridors. • Access to freight elevators. |

OPERABLE WALLS STORAGE

Operable wall storage shall be fully enclosed to protect the wall panels in the retracted position. Sturdy construction is of primary importance for walls to withstand the impact abuse of a moving 1,000-pound panel. Service lighting and maneuvering clearances are required for jostling panels that may become jammed on the track.

Partitions are recommended to be filled concrete block walls. If steel stud partitions are used, provide fire retardant plywood on the interior surface up to 8'-0" above the floor with gypsum drywall above to the underside of the deck.

The recommended location for exhibition hall and ballroom operable walls is at the back side of the space nested in alcoves along the service corridor. In meeting rooms, the alternate location is at the front of the room, creating alcoves as entrances to the rooms.

Program Space: Operable Walls Storage

3,250 SF

- | | |
|-----------------|---|
| FEATURES | <ul style="list-style-type: none"> • Separation of storage areas from back-of-house corridors by wall or other physical barrier. • Optimum location aligned with track. Minimize turns. • One storage pocket for each operable wall. Do not mix panel sequence. • Carpeted bumpers where panels could be expected to contact fixed walls. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling: Open to structure. • Walls: Utility block or fire retardant plywood on 18 gage steel studs. • Floor: Match adjacent room finish; carpet or sealed concrete. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Wall-mounted fluorescent strip or overhead halogen spotlight. Locate fixtures to optimize lighting and to minimize shadows cast by panels. • Level: 20 foot-candles. |

PYROTECHNICS ROOM

The use of pyrotechnics has become an integral part of entertainment productions. The convention center must provide a safe and secure location to temporarily and safely store the materials associated with these type events.

The pyrotechnics room should be located proximate to both the ballroom and exhibition hall so that materials may be quickly moved between the storage and stage areas. Attention to protective measures is extremely important for protecting both occupants and the structure should an accident occur and an explosion or fire ensue. Increased security from fireproofing to hardening may be required by code or recommended by risk management officials, and close attention given to adjacent uses which can act as a buffer against damaging electrical and mechanical equipment that are needed to maintain facility operations.

Program Space: Pyrotechnics Room

200 SF (2@ 100 SF)

FEATURES	<ul style="list-style-type: none"> • Nearby access to exhibition hall and ballroom. • Access to/from back-of-house and dock areas. • Card access required.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 10 feet. • Ceiling: Stucco and lath on furring channels. • Walls: Concrete-filled concrete block or poured-in-place concrete. • Floor: Sealed concrete.
ELECTRICAL	<ul style="list-style-type: none"> • No convenience outlets if allowed by applicable codes.
LIGHTING	<ul style="list-style-type: none"> • Type: Explosion-resistant surface-mounted fixtures. • Level: 40 foot-candles.
SUPPORT SPACES REQUIRED	<ul style="list-style-type: none"> • Loading dock. • Access to back-of-house service corridors. • Proximate to ballrooms and exhibition halls.

SERVICE CONTRACTOR OFFICES

Space is required for event offices and/or temporary equipment storage for service partners. These firms typically have a contractual relationship with facility management and may provide services and equipment as an extension of staff on either an exclusive or non-exclusive basis. This program anticipates that the audiovisual and security service providers will use these spaces, but the Operator will determine the final assignment of spaces to vendors.

Televisions, CD/DVD players, projectors and similar equipment will be leased to events from here. Portable sound systems, including rack-mounted amplifier, equalizer, mixer and alternate sources (compact disc, digital audio tape, FM tuner) and loudspeakers should be stored here. Provide work bench for performing minor equipment repairs.

Each service office shall have space for 2 workstations. Portable service desks will be placed in the back of the exhibition hall and accessible from the back-of-house during setup of events.

Program Space: Service Contractor Offices

1,800 SF (3 @ 600 SF)

FEATURES	<ul style="list-style-type: none"> • Nearby access to exhibit floor. • Access to/from back-of-house and dock areas. • Lockable storage space; wire cage acceptable. • Card access required.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 9 feet minimum; 10 feet acceptable. • Ceiling: 2 ft. x 4 ft. acoustical tile. • Walls: Gypsum board or concrete block; painted. • Floor: Vinyl tile.
ELECTRICAL	<ul style="list-style-type: none"> • Provide each vendor office with two (2) each 110-volt 20-amp circuits.
LIGHTING	<ul style="list-style-type: none"> • Type: Recessed fluorescent with parabolic troffer or acrylic diffuser. • Level: 40 foot-candles.
TELECOM	<ul style="list-style-type: none"> • Provide each office with a minimum of four (4) Category 6 outlets on each perimeter wall. • Floor or wall outlets as required to supply modular workstations.
GRAPHICS	<ul style="list-style-type: none"> • Wall identification plaque.
FURNITURE, FIXTURES, & EQUIPMENT	<ul style="list-style-type: none"> • Modular workstations. • Locking storage cabinets.

CLIENT RECORDING ROOM

This room is to provide show managers a secure place to set up audio and video equipment to make distribution copies of an event. It should be located back-of-house and adjacent to the audiovisual/sound control room, with interconnecting conduit or cable trays. Access should be controlled via temporary badges or magnetic strip cards.

Patch bays should be provided to allow multiple cross-connects from the audio and video signals. Provide several quadruplex outlets at 36 - 42 inches above the floor, and worktables or counters for temporary placement of recording equipment.

Program Space: Client Recording Room

200 SF

- | | |
|---|---|
| FEATURES | <ul style="list-style-type: none"> • Access to audio and video signals for event recording via patch panel to audiovisual/sound control room. Ultimate connectivity will reach designated parking location for broadcast remote control trucks. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. • Ceiling: Lay-in acoustical tile. • Walls: Utility block or gypsum drywall; painted. • Floor: Commercial-grade carpet. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets along perimeter walls. • Isolated ground power as required for sound system equipment. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: Two-stage, 25 foot-candles partial, 50 foot-candles full-on. |
| TELECOM | <ul style="list-style-type: none"> • Provide four (4) each Category 6 outlets on 10'-0" centers to the room. • Provide minimum 16 Category 6 outlets in rack-mounted patch bay for links to audiovisual sound control room. • Provide minimum 32 multi-mode fiber optic outlets in rack-mounted patch bay for links to audiovisual sound control room. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none"> • Audiovisual/sound control room. • Remote broadcast vehicle parking area. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none"> • Patch bays for audio and video signals. • Desk/worktable/chairs. • Portable shelving for CDs, tapes and other supplies. |

AUDIOVISUAL/SOUND CONTROL ROOM

The audiovisual control room should be centrally located back of house with other exhibition hall support areas. All of the controls and patch panels for audio and distributed television (DTV) systems will be located here, with tie lines for patching signals to the Client Recording Room.

This is the location from which event-related signals can be assigned throughout the facility. Satellite feeds and truck dock connections will terminate here. Provide remote volume control and jacks for line in/out in each meeting space. Locate in a combined panel with lighting controls.

The server(s) that controls electronic messaging and advertising panels will also be located here.

Program Space: Audiovisual/Sound Control Room

600 SF

- | | |
|-------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Access to patch panels, cable tray or conduit leading to truck dock for broadcast remote control trucks. • HVAC design shall provide extra cooling to accommodate heat generated by dense rack-mounted equipment; maximum temperature 70°F. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. • Ceiling: 2 ft. X 2 ft. acoustical tile. • Walls: Utility block or gypsum board, painted. • Floor: Vinyl tile or static-resistant commercial carpet. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets on perimeter walls. • Isolated ground power as required for sound system equipment. • Power for rack-mounted equipment. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: Two-stage, 25 foot-candles partial, 50 foot-candles full-on. |
| TELECOM | <ul style="list-style-type: none"> • Provide four (4) each Category 6 outlets on 10'-0" centers to the room. • Provide minimum 16 Category 6 outlets in rack-mounted patch bay for links to audiovisual sound control room. • Provide minimum 32 multi-mode fiber optic outlets in rack-mounted patch bay for links to audiovisual sound control room. |

Program Space: Audiovisual/Sound Control Room, continued

**FURNITURE,
FIXTURES, &
EQUIPMENT**

- Shelving for CDs, DVDs, audio/video tapes and other supplies.
- Portable shelving for tapes and other supplies.
- Desk/worktable/chairs.
- Portable shelving for tapes and other supplies.
- Video, film and slide projection equipment.
- Mobile racks for portable equipment.
- Portable translation system.
- Portable assisted listening system.
- Portable audience response (delegate voting) system

CHORUS DRESSING ROOM

One large dressing room is required to support production-style events in the ballroom. The layout should anticipate that this room will be occasionally divided using pipe and drape or a rolling, nesting partition system to provide privacy by sex. Furnishings should be limited to built-in vanities; the show manager will temporarily provide all other clothing racks and furniture, if any.

Access to this space is restricted to the back-of-house service corridors so that performers can be assembled for production cues. Quick access for costume changes is important. The dressing room does not have to be on the ballroom level if convenient mezzanine space is available. Coordinate circulation patterns with food service staging areas to minimize traffic conflicts.

Program Space: Chorus Dressing Room

600 SF

- FEATURES**
- Vanity with continuous mirror
 - Makeup lighting.
 - Divisible using pipe and drape or rolling, nesting partition system.
- FINISHES**
- Ceiling Height: 10 ft. minimum.
 - Ceiling: 2 ft. x 4 ft. acoustical tile.
 - Walls: Utility block or gypsum board, epoxy painted.
 - Floor: Vinyl tile.
- AUDIOVISUAL**
- Provide event program and background music monitoring system with volume control.
 - Provide Distributed Television (DTV) outlet.
- PLUMBING**
- Provide two unit showers with privacy curtain in each dressing room.
 - Provide minimum four lavatories in continuous counter.
 - Provide two toilet cubicles or access to back-of-house toilets.
 - Hot and cold water.
- ELECTRICAL**
- Provide minimum eight (8) 110-volt 20-amp circuits distributed throughout the room, at least two separate circuits on each wall.
 - Provide quadruplex outlets at 24-30 inches on center above vanity and below continuous makeup mirror.
- LIGHTING**
- Type: Recessed fluorescent with acrylic diffuser.
 - Level: 30-40 foot-candles.
 - Specialty: Provide incandescent strip lighting above vanity mirror and at lavatories.

Program Space: Chorus Dressing Room, continued

- TELECOM**
- Provide minimum four (4) Category 6 outlets to two locations in the room.
- GRAPHICS**
- Wall plaque identification.
- SUPPORT
SPACES
REQUIRED**
- Ballroom
 - Green Rooms

GREEN ROOM

This suite serves as the before- and after-event lounge for featured presenters. Each suite should connect via the back-of-house service corridor to the Grand Ballroom. The green room does not have to be on the same level as the ballroom but may be located on a mezzanine level above or below.

The conference / reception room could be used for hosting an entertainer’s entourage or for mapping out last minute changes to the entertainment program.

The dressing area should be comfortable and relaxing, with indirect lighting, soft colors and acoustically absorptive materials and furnishings. Provide lounge furniture, an alcove for wardrobe racks and a vanity for a touch-up by a makeup artist.

A toilet room with shower should be accessible from the dressing area.

Program Space: Green Room

400 SF

- | | |
|--------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Makeup vanity with mirror. • Controlled access using card swipe or user ID system. • Kitchenette or pantry for preparing drinks and snacks. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum in conference area; 8 ft. elsewhere. • Ceiling: 2 ft. x 2 ft. acoustical tile in conference and dressing areas; moisture-resistant gypsum drywall in bathrooms and pantry. • Walls: Gypsum drywall, painted or with vinyl wallcovering in conference and dressing areas; ceramic tile with dark-colored grout in bathrooms. • Floor: Commercial-grade nylon carpet in conference and dressing areas; ceramic tile with dark-colored grout in bathrooms. |
| AUDIOVISUAL | <ul style="list-style-type: none"> • Provide event program and background music monitoring system with individual volume controls at reception and each dressing area. • Wall-mounted 40-inch LCD televisions in reception and dressing areas. • Provide Distributed Television (DTV) outlet. |
| PLUMBING | <ul style="list-style-type: none"> • Provide toilet compartment with shower. • Provide lavatory in millwork cabinet. • Double stainless steel sinks in servery. • Hot and cold water at all locations. • Ice maker connection for refrigerator. |

Program Space: Green Room, continued

- ELECTRICAL**
- Provide minimum three (3) 110-volt 20-amp circuits distributed throughout the room.
 - Provide duplex outlets at 24 inches on center above vanity and below makeup mirror.
 - Convenience outlets under counter at sidebar for coffee service.
 - Convenience outlets for connected equipment in pantry.
 - Switched outlets for table lamps in dressing areas.
- LIGHTING**
- Type: Recessed and pendant incandescent, dimmable.
 - Level: 30-40 foot-candles.
 - Specialty: Provide incandescent strip lighting above vanity mirror and at lavatories.
- TELECOM**
- Minimum two (2) Category 6 outlets on each wall.
- GRAPHICS**
- Wall plaque identification.
- SUPPORT SPACES REQUIRED**
- Ballroom
 - Chorus dressing room
- FURNITURE, FIXTURES, & EQUIPMENT**
- Conference table and chairs
 - Sidebar for food and beverage setup
 - Lounge furniture in dressing area.
 - Adjustable-height stool at makeup vanity.

ENGINEERING & MAINTENANCE SHOPS

Administration of all facility maintenance, minor repairs and work orders (not related to janitorial services) are handled from this space. A few supervisory offices will be required, but the primary need is for open workshop-type space. Durable surfaces such as painted concrete block will be used. Light carpentry, workbench repairs to electrical appliances and distribution boxes, painting and equipment maintenance are typical tasks performed here.

An area near the loading dock should be provided for charging electric golf and utility carts. Storage of propane-powered forklifts is also needed.

Workshops for four distinct groups of facility workers are required, with areas listed below:

Electricians	1,200 SF
Building Trades	1,200 SF
Landscape & Grounds Maintenance	1,500 SF

Program Space: **Engineering & Maintenance Shops**

3,900 SF

- FEATURES**
- Carpentry and repair areas.
 - Rated construction as required by code.
 - Provide ventilation / hood for welding.
- FINISHES**
- Ceiling Height: Minimum 8 feet in offices, 12 feet clear in shops.
 - Ceiling: 2 ft. X 4 ft. acoustical tile in offices. Open to structure in shops.
 - Walls: Utility block or plywood over gypsum board, painted.
 - Floor: Commercial carpet in offices, sealed concrete in shops.
- ELECTRICAL**
- For equipment to be designated:
 - 208-volt, 3-phase, 30- and 60-amp.
 - 110-volt convenience quadruplex outlets at work benches for hand tools. Locate at 42"-48" A.F.F.
 - Convenience outlets on 10'-0" centers at perimeter walls.
 - Floor or wall outlets as required to supply modular workstations.
- LIGHTING**
- Type: Recessed fluorescent with acrylic diffuser in offices. Fluorescent strip with acrylic diffuser, hung or surface mounted in shops.
 - Level: 40 foot-candles in offices, 50 foot-candles in shops.

Program Space: Engineering & Maintenance Shops, continued

- | | |
|--|--|
| TELECOM | <ul style="list-style-type: none">• Minimum four (4) Category 6 outlets on two long office walls and to each workstation.• Minimum four (4) Category 6 outlets with hinged cover on 15'-0" centers on each perimeter wall in shops. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Maintenance storage.• Loading dock.• Access to service elevators. |
| FURNITURE, FIXTURES & EQUIPMENT | <ul style="list-style-type: none">• Modular workstations.• Storage cabinets.• Lumber racks and parts bins.• Drill press.• Hand tools.• Radial arm and table saws.• Portable hydraulic lifts. |

STAFFING OFFICE

This is the check-in point for all non-salaried (and non-temporary) staff. Shared equipment for use on-site such as radios, beepers and cellular phones may be checked out from here. Uniform services (if any) will be handled here, excepting food service workers. The time clock shall be located here. Temporary staff badges will be distributed from here as well.

The configuration should include a vestibule with service counter, manager’s office and a back office for using computers, copiers and other office equipment. Staff work schedules will be coordinated from here. Provide lockable storage.

This should be first space in a sequence of employee support spaces. Other areas to be located nearby include the security office and locker rooms. This entrance should provide direct access to the back-of-house circulation spine.

Program Space:	Staffing Office 300 SF
FEATURES	<ul style="list-style-type: none"> • Service counter with roll-up shutter. • Provide secure access to back-of-house spaces.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum. • Ceiling: 2 ft. x 4 ft. lay-in acoustical tile. • Walls: Utility block or gypsum board, painted. • Floor: Vinyl tile.
ELECTRICAL	<ul style="list-style-type: none"> • Convenience outlets along perimeter walls for office equipment. Provide minimum of two (2) each 110-volt 20-amp circuits.
LIGHTING	<ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: 40 foot-candles.
TELECOM	<ul style="list-style-type: none"> • Minimum four (4) each Category 6 outlets at service counter. • Minimum two (2) each Category 6 on each perimeter wall.
GRAPHICS	<ul style="list-style-type: none"> • Wall plaque identification.
SUPPORT SPACES REQUIRED	<ul style="list-style-type: none"> • Employee entrance. • Security office. • Employee locker rooms.

Program Space: **Staffing Office, continued.**

**FURNITURE,
FIXTURES, &
EQUIPMENT**

- Modular workstations.
- Chairs.
- File cabinets.
- Time clock.

UNIFORM ISSUE

This waiting area should be located near the employee entrance. Queuing space for up to 100 temporary employees should be available nearby either in a wide interior corridor or large entry vestibule.

Temporary employees will be issued a uniform at an eight-foot wide service counter secured with a coiling shutter. Movable racks will be used for distributing uniforms on hangars, and shelving units will be used for folded goods, cummerbunds, bow ties and other miscellaneous items.

Access to the food service locker rooms should be convenient from uniform issue. Access to the main kitchen and commissary shall be via back-of-house corridors.

Program Space: Uniform Issue

600 SF

FEATURES	<ul style="list-style-type: none"> • Waiting area for 10 people, standing and sitting. • 8 ft. service counter to issue staff uniforms. • Shelving units behind service counter for folded goods. Rolling or built-in racks for uniforms on hangars. • Queuing space outside of uniform issue for approximately 100 temporary employees.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum. • Ceiling: 2 ft. x 4 ft. lay-in acoustical tile. • Walls: Painted gypsum board or concrete block. • Floor: Commercial-grade carpet or vinyl tile.
AUDIOVISUAL	<ul style="list-style-type: none"> • Background music and program assignment with volume control.
ELECTRICAL	<ul style="list-style-type: none"> • Minimum two (2) 110-volt circuits to each area. Provide minimum (1) quadruplex each wall and at each attendant counter position.
LIGHTING	<ul style="list-style-type: none"> • Type: Fluorescent, recessed with acrylic diffuser. • Level: 30 foot-candles general, 50 at service counter.
TELECOM	<ul style="list-style-type: none"> • Minimum two (2) each Category 6 outlets to service counter. • Minimum two (2) each Category 6 outlets to issuing office. • Minimum of two house phone in nearby public area.
GRAPHICS	<ul style="list-style-type: none"> • Wall identification plaque.

Program Space: Uniform Issue, continued

- | | |
|---|--|
| SUPPORT
SPACES
REQUIRED | <ul style="list-style-type: none">• Restrooms nearby.• Back-of-house corridors, access to main kitchen.• Food service changing area. |
| FURNITURE,
FIXTURES, &
EQUIPMENT | <ul style="list-style-type: none">• Hanging clothing racks.• Shelving.• Plastic shell interlocking chairs. |

EMPLOYEE LOCKER ROOMS

Employee locker rooms should be located near the employee entrance, break room and security office. Provide convenient access to the back-of-house main circulation system. Locker rooms should be shaped to form separate alcoves for toilet areas and to provide some privacy for shower and dressing areas.

Program Space: Employee Locker Rooms

600 SF

FEATURES	<ul style="list-style-type: none"> • Separate men's and women's locker rooms. • Security camera CCTV coverage outside entrance doors. • Provide separate alcoves for dressing, showers and toilets. • Handicap accessible facilities to be provided in accordance with current code. • Ceiling-mounted partition system in restroom areas for ease of cleaning floors. • Brushed stainless steel toilet accessories. Paper and soap dispensing accessories to be vendor provided.
FINISHES	<ul style="list-style-type: none"> • Wood benches in dressing area. • Ceiling Height: 9 ft. • Ceiling: Gypsum board, water-resistant and painted. • Floors: Porcelain tile. • Walls: Ceramic tile in restroom and shower areas. Painted gypsum board in dressing and locker areas. • Countertops: Impervious surface; not plastic laminate. • Solid vinyl toilet and shower partitions are desirable.
AUDIOVISUAL	<ul style="list-style-type: none"> • Background music and program assignment. • Distributed Television (DTV) connectivity.
PLUMBING	<ul style="list-style-type: none"> • All fixtures to be low-water-consumption type. • Battery operated electronic flush valve sensors. • Battery operated electronic faucet sensors. • Hose bib for each locker room. • Drinking fountain nearby.
TELECOM	<ul style="list-style-type: none"> • House phones in dressing areas.
ELECTRICAL	<ul style="list-style-type: none"> • 110-volt 20-amp outlets at counters and in dressing area for hair dryers and other accessories.

Program Space: Employee Locker Rooms, continued

- LIGHTING**
- Type: Recessed fluorescent with acrylic diffuser.
 - Level: 25-30 foot-candles with accent lighting at lavatories.
 - Infrared room occupancy sensors connected to light monitors.
- GRAPHICS**
- Wall plaques at entrances.
- SUPPORT SPACES REQUIRED**
- Janitor's closet.
 - Employee entrance.
- FURNITURE, FIXTURES & EQUIPMENT**
- Half height metal lockers with bottom shelf (50 each sex), minimum 22 inches deep.
 - Coat rack with shelf unit.
 - Bike lockers.

EMPLOYEE BREAK ROOMS

The break rooms will be restricted to convention center employees, service partners and their guests. Microwave ovens will be available for heating both purchased foods and for personally prepared meals. No prepared meal service will be provided and no built-in fixtures such as hoods will be required. Vending machines for sodas and snacks should be available. Consideration must be given to ventilation systems to deal with odors, humidity and other byproducts of prepared foods.

The program is based on having one large break room located in the back-of-house areas near the other employee support areas - locker rooms, security office, and employee entrance. Two smaller break areas should be allocated within the building so as to minimize travel times between assigned work and break areas.

Program Space: Employee Break Rooms

1,200 SF (1 @ 600 SF, 2 @ 300 SF)

FEATURES	<ul style="list-style-type: none"> • Millwork storage cabinet with countertop, sink, refrigerator. • Vending machine alcove.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: Minimum 10 feet. • Ceiling: 2 ft. X 4 ft. acoustical tile. • Walls: Smooth, non-porous surface. • Floors: Vinyl tile.
AUDIOVISUAL	<ul style="list-style-type: none"> • Distributed TV connection. • Background music and program assignment.
PLUMBING	<ul style="list-style-type: none"> • Hot water connections. • Cold water connections. • Indirect waste and floor drains. • Instant hot water tap for tea and hot chocolate.
ELECTRICAL	<ul style="list-style-type: none"> • Convenience outlets in vending machine alcove. • Convenience outlets for cleaning, television.
LIGHTING	<ul style="list-style-type: none"> • Recessed fluorescent with acrylic diffuser.
TELECOM	<ul style="list-style-type: none"> • Provide four (4) Category 6 outlets on each perimeter wall.
GRAPHICS	<ul style="list-style-type: none"> • Wall plaque identification.

Program Space: Employee Break Rooms, continued

- SUPPORT SPACES REQUIRED**
- Staff restrooms.
 - Seating area.
 - Access to back-of-house corridor.

- FURNITURE, FIXTURES, & EQUIPMENT**
- Tables and chairs.
 - Paper storage.
 - Microwave oven.
 - Refrigerator with ice maker.
 - Coffee service.

HOUSEKEEPING/JANITORIAL

The areas for this operating group include storage and mop closets for the building cleanup function. Janitors' closets should be distributed throughout the building near the public restrooms. Access should be from vestibules and not from any individual restroom (men's or women's). Provide storage shelves for cases of paper consumables such as paper towels and toilet paper, soap dispenser cartridges and cleaning products in each closet. Bulk storage of paper goods and cleaning supplies should be managed through the warehouse function.

The minimum room dimension should be six (6) feet.

Floor scrubbers, motorized carpet sweepers, and other large cleaning equipment will be clustered into designated areas of the back-of-house service corridors, but distributed to different portions of the building because of the multiple levels anticipated in the final design.

Program Space: Housekeeping/Janitorial

2,620 SF

- | | |
|-------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Physical separation of storage areas from back-of-house corridors by wall, fence, or other secure barrier. • Doors, if any, wide enough to allow easy movement of forklifts, pallet jacks, or similar material handling equipment. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 12 ft. high stackable area. • Ceiling: Open to structure. • Walls: Utility block or plywood on gypsum board, painted. • Floor: Sealed concrete. |
| PLUMBING | <ul style="list-style-type: none"> • Hot and cold water. • Floor sink. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Compact or strip fluorescent, hung or surface mounted. • Level: 30 foot-candles. |

BACK-OF-HOUSE SERVICE CORRIDORS

The back-of-house circulation areas provide service access for all parts of the Convention Center and should be separated from public circulation. Low maintenance to indestructible finishes will be required for these areas. Typically, these areas may serve as exit corridors leading to emergency exit stairs or areas of refuge and are rarely seen by attendees. However, the minimum clear exit width must be maintained while using the corridors for food service operations.

Other necessary requirements include space outside the meeting rooms for parking food service carts during meal service; space for temporary storage of empty chair and table trucks; and space for fixed beverage stations with ice, coffee, and soda machines.

Program Space: Back-of-House Service Corridors

30,310 SF

- FEATURES**
- Light traps at entrances to ballroom.
 - Alcoves for food service stations and storage for tables and chairs; minimum depth 6 feet.
 - Security system CCTV coverage.
 - Minimum width 20 feet; preferred structural width 30 feet. Minimum clear passageway 10 feet.
- FINISHES**
- Ceiling Height: 18 ft. minimum at exhibition hall, 9 ft. minimum at ballroom and meeting rooms.
 - Ceiling: Where required by building code. At minimum, provide 2 x 4 lay-in scrubbable tile in soffits at food service alcoves.
 - Walls: Utility block or plywood over gypsum board, painted.
 - Floor: Sealed concrete.
- PLUMBING**
- Water to ice machines and sinks at beverage stations.
 - Indirect waste and floor drains.
- ELECTRICAL**
- 120/208-volt as required by food service carts and equipment.
 - 110-volt, 20-amp convenience outlets on 60 ft. centers.
 - Provide cable tray for permanent cabling; may be used for temporary cable routing.
- LIGHTING**
- Type: Fluorescent strip, hung or surface mounted.
 - Level: 20 foot-candles; 40 foot-candles at beverage stations.

Program Space: Back-of-House Service Corridors, continued

- | | |
|--------------------------------|--|
| TELECOM | <ul style="list-style-type: none">• House telephones in recessed pocket or enclosure.• Provide two (2) each Category 6 outlets at 30 ft. on center. |
| GRAPHICS | <ul style="list-style-type: none">• Designate exit clear zone with painted stripe on floor.• Indicate meeting room numbers for service personnel.• “Meeting in Progress” signs at doors into function space.• Identify “Authorized Personnel Only” at all public-to-service interface points. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Satellite pantries.• Ice machine area.• Storage alcoves. |

1 Square footage to be finalized based on configuration and exiting requirements.

DATA SERVICES ROOM

This room will house the Convention Center’s in-house computer services. It will also be the source and control location for client distributed data services.

This space may have an access floor to accommodate changing technology. It will primarily house computers such as servers for local area networks, e-mail and Internet hubs, and connections for remote access by staff. This room will also contain patch panels for the administrative networks and will require access to the fiber optic backbone.

An umbilical cord made up of a minimum of 128 multi-mode and 32 single-mode fibers shall be connected back to the main telephone room. The umbilical shall be fully terminated at each end and terminators for riser and distribution fiber accommodated nearby for cross-connecting.

Data security will require this space to be lockable and to have a higher level of fire protection than a simple office. Provide power with dedicated grounding and connections to standby power.

Program Space: Data Services Room

600 SF

- FEATURES**
- Provide a minimum of eight (8) 19-inch by 72-inch equipment racks, each with two (2) adjustable shelves.
 - Provide mechanical system for independent 24-hour, 7-day operation. Design shall provide extra cooling to accommodate heat generated by equipment; maximum temperature 70°F.
 - Cable trays located above ceiling connecting service entrance to cross-connect patch panels.
 - Provide FM 200 or similar approved fire suppression system in lieu of water-based fire sprinklers.
 - Provide card access system limited to authorized staff.

- FINISHES**
- Ceiling Height: 9 ft.
 - Ceiling: Lay-in acoustical tile.
 - Walls: Gypsum wallboard; painted. Plywood backboard at wall-mounted equipment areas.
 - Floor: Static-resistant carpet, grounded.

Program Space: Data Services Room, continued

- ELECTRICAL**
- Convenience outlets to be on UPS for using diagnostic equipment.
 - Provide 120/208-volt 100-amp 3 phase to wall-mounted disconnect for Owner connection to computer equipment.
 - Short-term rack-mounted uninterruptured power (UPS) with standby power required for primary data equipment.
 - Provide 110-volt 20-amp circuits to each fixed equipment rack; minimum of six (6) circuits to the room.
 - Cable trays above ceiling connecting patch panels and connecting to fiber optic backbone.
- LIGHTING**
- Type: Recessed fluorescent with acrylic diffuser.
 - Level: Two-stage, 25-40 foot-candles partial, 50-60 foot-candles full-on.
- TELECOM**
- House telephones in open office areas.
 - Data jacks in open office areas.
 - All single- and multi-mode fiber optic cables will be terminated in this space. All interconnectivity for the backbone will occur in this room.
- GRAPHICS**
- Wall identity plaque.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Patch panels.
 - Light sources for fiber optic-to-copper wire connections
 - Shelving for supplies.
 - Desk/worktable/chairs.
 - Routers, hubs, servers and other computer network equipment.

MAIN TELEPHONE ROOM

The main telephone room is the place where both voice and high speed data services enter the building. There will be wall space for equipment provided by the telephone company, then access to the main telephone switch (PABX). Wall space with plywood backboards will be required to terminate all voice outlets for signal distribution throughout the facility. A switch and distribution network dedicated to the convention center's use will be required.

This will also be the termination point of the fiber optic backbone with patch panels to access external high speed data service the building on fiber optic cable. Staff will control the patch panel to connect external-to-internal fiber.

Workstations for telecommunications staff will be required. Provide access to the in-house computer network, which will most likely be located in the venue management offices.

Program Space: Main Telephone Room

900 SF

- | | |
|-------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Cable trays located above ceiling connecting service entrance to switch to cross-connect patch panels. • Provide FM 200 or similar approved fire suppression system in lieu of water-based fire sprinklers. • Provide card access system limited to authorized staff. • Security system CCTV coverage at access doors. • HVAC design shall provide extra cooling to accommodate heat generated by equipment; maximum temperature 70°F. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: Minimum 9 ft. clear to obstruction prior to placement of cable trays. • Ceiling: Open to structure. • Walls: Utility block or gypsum drywall, painted. Plywood backboard at wall-mounted equipment areas. • Floor: Vinyl tile. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets for desktop computers, printers. • Short-term rack-mounted uninterrupted power (UPS) with standby power required for telephone and data equipment. • Cable trays connecting telephone switch and patch panels. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Surface-mounted fluorescent with acrylic diffuser. • Level: Two-stage, 25-40 foot-candles partial, 50-60 foot-candles full-on. |

Program Space: Main Telephone Room

- TELECOM**
- Minimum two (2) Category 6 outlets on 15'-0" centers.
 - Floor or wall outlets as required to supply four (4) Category 6 outlets to each systems furniture workstation.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Portable carts for phones, wire, connectors.
 - Telephone handsets.
 - Shelving for supplies.
 - Desk/worktable/chairs.
 - Telephone switch with real-time billing and facility management software.

TECHNOLOGY CLOSETS & ELECTRICAL ROOMS

These rooms are located throughout the building to provide space for transformers, panel boards, dimmer boards, equipment racks and telephone terminal boards required to provide low voltage and line electrical service to all areas of the facility. Depending upon the equipment included in these rooms, special acoustical treatment and isolation mounts may be required to reduce noise transmission to adjacent spaces. Locations in back-of-house areas are preferred.

Technology closets shall be separate from electrical rooms. Technical specifications for a Category 6 structured cable plant set maximum cable runs at 90 meters, which may affect room placements.

Program Space: Technology Closets & Electrical Rooms

1,700 SF / 7,500 SF

- FEATURES**
- Rated construction as required by code.
 - Fire protection system as required by code.
 - Cable trays in major distribution closets.
 - HVAC design in technology rooms shall provide additional cooling to accommodate heat generated by rack-mounted equipment.
 - HVAC design in electrical rooms shall provide additional cooling to accommodate heat generated by transformers.
- FINISHES**
- Ceiling Height: Minimum 9 ft. clear to obstruction prior to placement of cable trays.
 - Ceiling: Open to structure.
 - Walls: Utility block or gypsum drywall, painted; special acoustical treatment as required for equipment noise. Plywood backboard at wall-mounted telecommunications equipment, if used.
 - Floor: Sealed concrete. Housekeeping pads at transformers.
- LIGHTING**
- Type: Fluorescent strip, hung or surface mounted.
 - Level: 40 foot-candles.
- ELECTRICAL**
- Minimum one (1) 110-volt dedicated circuit in each room in addition to power required for wall- or rack-mounted equipment.
 - Ground buss at each telephone board.
 - Wall-mounted electrical distribution panels.

Program Space: Technology Closets & Electrical Rooms, continued

- TELECOM**
- Rack mounted equipment for telephone, data, video, security and building automation systems.
 - Data lines as required to monitor equipment.
 - House phones not required in technology closets.
- GRAPHICS**
- Wall plaque identification “Technology Room”.
- SUPPORT SPACES REQUIRED**
- Main telephone room.

AIR HANDLING ROOMS

The mechanical system in the building will be divided into several zones to maximize climate control in the various spaces in the building. Each zone requires its own air handling equipment, which will be contained in air handling rooms. These rooms should be located in back-of-house areas. Special consideration must be given to acoustical treatment when these rooms are located adjacent to or inside exhibition halls, near meeting rooms and other noise-sensitive public spaces.

Provide service access to mezzanines and suspended air handling units via catwalk where needed. Provide freight elevator access for replacing motors or other heavy machine parts.

Program Space: Air Handling Rooms

16,100 SF

- | | |
|--------------------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Acoustical treatment as required. • Rated construction as required by code. • Fire protection system as required by code. • Maintenance access: provide two doorways for rooms larger than 1,000 sq. ft. (or less if required by code). • Provide double doors at all access points. • Provide freight access for wheeled carts to all service areas. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: As required for equipment. • Ceiling: Open to structure. • Walls: Utility block or impact-resistant gypsum board, painted. • Floor: Sealed concrete. |
| ELECTRICAL | <ul style="list-style-type: none"> • Power as required for equipment. • Convenience outlets at equipment service points. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip, hung or surface mounted. • Level: 30 foot-candles. |
| TELECOM | <ul style="list-style-type: none"> • Minimum (1) house phone in each room larger than 300 sq. ft. • Data lines or fiber optic cabling as required for monitoring equipment. |
| GRAPHICS | <ul style="list-style-type: none"> • Wall plaque identification. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none"> • District utility services room. • Back-of-house corridors. • Freight elevators. |

Program Space: Air Handling Rooms, continued

FURNITURE,
FIXTURES, &
EQUIPMENT

- Ladders.
- Flashlights.

CENTRAL PLANT / SHARED UTILITY SERVICES

The Shared Utility Services Room provides the space for the entrance into and exit from the building for the supply and return chilled water along with the steam and condensate return piping, pumps, and other equipment.

The piping, shut-off isolation valves and utility metering devices for these utilities are housed in this space

Program Space: Central Plant / Shared Utility Services

14,900 SF

- FEATURES**
- Coiling doors for heat exchanger and pump access and maintenance.
 - Rated construction as required by code.
 - Acoustical treatment as required.
 - Provide card access system limited to authorized staff.
 - Security system CCTV coverage at access doors.

- FINISHES**
- Ceiling Height: As required for equipment; 18 ft. minimum.
 - Ceiling: Open to structure.
 - Walls: Utility block, filled and painted.
 - Floor: Sealed concrete.

- PLUMBING**
- As required for equipment.
 - Floor drains.

- ELECTRICAL**
- Power as required for equipment.
 - Convenience outlets at equipment service points.

- LIGHTING**
- Type: Fluorescent strip, hung or surface mounted.
 - Level: 30 foot-candles.

- TELECOM**
- Data lines or fiber optic cabling as required for monitoring equipment.
 - Wall-mounted house phone.

- SUPPORT SPACES REQUIRED**
- Electrical switchgear room.
 - Emergency generator room.

EMERGENCY GENERATOR ROOM

An emergency generator is required to provide power to egress lighting, smoke removal equipment, elevators, and other essential building functions in the event of a power outage and in emergency situations. This space should be located adjacent to the central plant and main electrical room with at least one exterior wall.

Program Space: Emergency Generator Room

3,200 SF

FEATURES	<ul style="list-style-type: none">• Rated construction and fire protection system as required by code.• Acoustical treatment as required for adjacent activities.• Provide card access system limited to authorized staff.• Security system CCTV coverage at access doors.• Day tank for fuel inside room if allowed by code. Above ground primary fuel tank located at dock apron.
FINISHES	<ul style="list-style-type: none">• Ceiling Height: As required for equipment.• Ceiling: Open to structure.• Walls: Utility block.• Floor: Sealed concrete.
ELECTRICAL	<ul style="list-style-type: none">• Convenience outlets at door and equipment maintenance locations.
LIGHTING	<ul style="list-style-type: none">• Type: Fluorescent strip, hung or surface mounted.• Level: 30 foot-candles.
TELECOM	<ul style="list-style-type: none">• House phone.

FOOD SERVICE DOCK

An area separate from the main exhibition docks must be provided for food service deliveries. Directional signage should clearly separate traffic flows, and ideally a separate dock entrance to this area will be provided.

The dock should be full-height, 48 inches above the apron, to accommodate semi-trailers. A split-dock configuration may be considered for smaller delivery trucks, but in either case provide a four-foot wide ramp from the truck apron to the dock for deliveries using hand trucks, dollies or pallet jacks.

The dock should be at the same floor elevation as the commissary. Dock access for vehicles to the ballroom floor may be provided through this entry. If it is not possible to have the dock, commissary and kitchen on a single level, then freight or service elevators dedicated for food service use must be provided nearby.

A minimum of three (3) truck dock berths are required for food service use. A dedicated, enclosed and refrigerated garbage compactor for food waste must be provided at this dock, and the use of a pulper for composting should be anticipated either now or in the future. A smaller compactor that requires frequent pick-up is desirable. Provide adequate ventilation at this area, and visually screen from the general public.

Program Space: Food Service Dock

3,600 SF (2 @ 1,800 SF)

- | | |
|-----------------|--|
| FEATURES | <ul style="list-style-type: none"> • Power hookups for refrigerated trucks. • Overhead coiling door into building for deliveries using forklifts or pallet jacks. Provide with insect control air curtains. • Dock bumpers and steel angle protectors at each loading dock berth. • Protection bollards at entry vestibules. • Ramp for deliveries using hand trucks and wheeled dollies. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 16 ft. minimum clearance. • Ceiling: Stucco on suspended lath if exterior space; open to structure if interior. • Walls: Precast panels, cast-in-place concrete or concrete-filled block. • Floors: Sealed concrete. • Dock Apron: Broom-finished concrete. |
| PLUMBING | <ul style="list-style-type: none"> • Hose bib at dock area. • Floor drain. • Can wash. |

Program Space: Food Service Dock, continued

- ELECTRICAL**
- 208-volt, 60-amp, 3-phase outlets for refrigerated trucks.
- LIGHTING**
- Type: Recessed HID if exterior; hung or surface-mounted fluorescent if interior.
 - Level: 20 foot-candles.
 - Flood lights on apron to facilitate loading activity.
- GRAPHICS**
- Separate dock identity on truck apron.
- SUPPORT SPACES REQUIRED**
- Food service receiving office.
 - Commissary storage.
 - Soiled linen storage.
 - Nearby access to freight elevators and back-of-house service corridors.

1 Apron area not included.

FOOD SERVICE RECEIVING OFFICE

The receiving office is the initial point of contact for vendors delivering goods to the food service operator. Provide a buzzer at the personnel door, a roll-up door for moving larger deliveries by pallet jack or forklift, and a check-in window or counter. A scale should be conveniently located for weighing produce or similar products.

This area may be configured as a vestibule to the commissary. If so, maintain security and proper conditions (temperature and cleanliness) for stored goods.

Area for an office for the receiving manager is included in the total. Final configuration will be dependent on the food service operator.

This entrance should also be the contact point for linen service. Provide a vestibule nearby in the commissary for both soiled and clean linen, with appropriate separation of material flows to meet local health standards.

Program Space: Food Service Receiving Office

200 SF (2 @100 SF)

FEATURES	<ul style="list-style-type: none"> • Intercom for attendant with the ability to be monitored by Security Office. • Electric lock interface at dock door. Provide view panel in door. • 30-inch tall service counter with 42-inch tall walk-up counter. Provide flip-top access panel. • Lockable 36-inch lower cabinet at back wall with pigeon-holes above for forms.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: 10 ft. • Ceiling: 2 ft X 4 ft. acoustical tile. • Walls: Utility block or plywood over gypsum board, painted. <p>Floors: Sealed concrete.</p>
ELECTRICAL	<ul style="list-style-type: none"> • 110-volt convenience outlets under service counter. • 110-volt convenience outlets at 42 inches AFF at 36 inch back wall counter.
LIGHTING	<ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: 40 foot-candles.
TELECOM	<ul style="list-style-type: none"> • Minimum four (4) each Category 6 outlets at service counter.

Program Space: Food Service Receiving Office, continued

- | | |
|----------------------------------|--|
| GRAPHICS | <ul style="list-style-type: none">• Wall plaque identification.• Message “Ring Buzzer for Assistance”• Delivery hours. |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Food service dock.• Commissary.• Back-of-house service corridor.• Freight elevator and/or service corridor. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none">• Walk-in refrigerator and freezer.• Shelving.• Electronic scale.• Chairs.• Hand truck.• Pallet jack.• Lockable storage area.• Network computers. |

COMMISSARY

This area serves two functions. First, it is a warehouse for non-perishable goods dedicated to food service use. Bulk storage includes disposable and paper products such as cups, plates, trays and napkins. Other items include canned goods and dry food such as rice and flour.

The second function of the commissary is as a holding area for refrigerated deliveries. There will be walk-in coolers and freezers for regular bulk deliveries of milk, eggs, produce, meats and other perishables. Food for the day's consumption will be selected and forwarded to the banquet kitchen for preparation and distribution to meeting rooms.

Provide ample maneuvering room for forklifts and pallet jacks.

Lockable fenced enclosures for soda containers or other vendor-controlled goods are typically provided. A variety of shelving units will be designed and installed as FF&E to handle specific storage requirements. Allow space nearby for temporarily storing food carts.

Program Space: Commissary

1,900 SF

- | | |
|-------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Warehouse shelving for dry goods storage. • Walk-in cooler and freezer. • Roll-up doors at dock and service corridor sides for access using forklifts and pallet jacks. • Holding area for soiled linens (using linen service). |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 12 ft. minimum clear to obstruction. • Ceiling: Open to structure. • Walls: Utility block with epoxy paint. • Floors: Slip-resistant quarry tile at coolers; sealed concrete in shelving areas. |
| PLUMBING | <ul style="list-style-type: none"> • Floor drains at walk-in coolers. • Hose bib with hot and cold taps and drain near roll-up door to docks. |
| ELECTRICAL | <ul style="list-style-type: none"> • 110-volt convenience outlets distributed throughout area. • Power for freezer and refrigerator; provide standby power. • Convenience outlets as required for recharging equipment. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip, hung or surface mounted. • Level: 30 foot-candles. |
| TELECOM | <ul style="list-style-type: none"> • Wall-mounted house phones. • Provide two (2) Category 6 outlets on perimeter walls. |

Program Space: Commissary

- TELECOM**
- Wall-mounted house phones.
 - Provide two (2) Category 6 outlets on perimeter walls.

- SUPPORT SPACES REQUIRED**
- Food service receiving office.
 - Freight elevators.
 - Back-of-house service corridors.

- FURNITURE, FIXTURES, & EQUIPMENT**
- Storage shelves.
 - Linen hanging racks

BANQUET KITCHEN

The banquet kitchen will serve as the primary production facility for the Convention Center expansion. The kitchen should be located adjacent to the grand ballroom, which generates the greatest demand for meals and requires the highest level of quality for both product and service.

It should be located in close proximity to the food service receiving dock and commissary. It is not necessary for the receiving and storage areas to be on the same level as the kitchen; however, easy access via freight elevators is a requirement. The elevators should also link the kitchen to back-of-house corridors for transporting food (“behind the scenes”) to and from other areas in the building. Wherever possible, a fully redundant service pathway, i.e., paired elevators and/or alternate routes, shall be available between the kitchen and serving alcoves so as to minimize disruption of meals caused by equipment failure. Supplemental food service areas such as concessions, satellite pantries and beverage stations will also be linked to these corridors.

The main kitchen will be divided into major work centers including day storage, pre-preparation, salad and dessert assembly, entrée production, pastry bakery, banquet plating, and warewashing. The area shall be designed as an open kitchen. Additional space will include chef and manager offices, staff support facilities, and storage for transportation carts and serving implements.

The banquet food service and meetings rooms shall use portable heated and/or non-refrigerated transportation carts. These carts are filled with pre-plated food in the main banquet kitchen, and brought via back-of-house service corridors to the satellite pantries located behind the appropriate rooms. The carts are then plugged into electrical receptacles (for heated dishes) or housed in roll-in refrigerators. Ice machines and drink stations will be located in these alcoves. Special attention should be paid to maintaining adequate food service alcoves for hot boxes, etc. adjacent to the ballroom in areas not also dedicated to table & chair storage.

Program Space: Banquet Kitchen

9,700 SF

- FEATURES**
- Locate as near as possible to storage and the grand ballroom.
 - Chef's table for specialty dining.
 - Separate HVAC system to allow for operation separate from main building during non-event periods.
 - Ventilation for cooking, makeup air.
 - Lockable liquor storage room.
 - Stainless steel corner guards.
 - Panic alarm for security in the money room.
- FINISHES**
- Ceiling Height: As required by equipment. Minimum 12 feet.
 - Ceiling: Moisture-resistant, cleanable, stain-resistant, removable tile.
 - Walls: Utility block painted with epoxy coating; glazed block or ceramic tile as appropriate. Stainless steel wainscot at food prep areas.
 - Floors: Quarry or porcelain tile (slip-resistant) with sanitary base. Slope to floor drains.
- PLUMBING**
- Natural Gas.
 - Hot and cold water connections.
 - Waste connections and floor drains.
 - Trench drains at ice machines and tilt kettles.
 - Can wash.
- ELECTRICAL**
- To match food service equipment:
 - 110-volt, single-phase.
 - 208-volt, single-phase.
 - 208-volt, 3-phase.
 - 480-volt, 3-phase if allowed by code.
- LIGHTING**
- Type: Recessed fluorescent with acrylic diffuser.
 - Level: 50 foot-candles; 60 foot-candles in warewashing area.
- TELECOM**
- Paired Category 6 outlets distributed throughout kitchen area.
- SUPPORT SPACES REQUIRED**
- Employee restrooms.
 - Food service administrative offices.
 - Back-of-house corridor areas.
 - Food service receiving.
 - Janitorial closets.

Program Space: Banquet Kitchen, continued

**FURNITURE,
FIXTURES, &
EQUIPMENT**

- Class I (fixed equipment):
 - Refrigerators.
 - Sinks.
 - Tables.
 - Cooking equipment.
 - Plating tables.
 - Steam tables.
 - Hoods.
 - Dishwashers.
 - Dish tables.
- Class II (portable equipment):
 - Refrigerated carts.
 - Dish dollies, etc.
- Class III (expendables):
 - China.
 - Glass.
 - Silver.
 - Linen.
- Built-in floor mats.

FOOD SERVICE OPERATIONS OFFICES

Within the main kitchen, offices are required for managing the daily food service operations. These will be provided for the chef, staffing and manager functions. Other offices for the administrative food service functions will be located in the venue management office area.

Operator preferences vary about raising the floor in these offices approx. 6-8 inches above the kitchen. This option is not recommended but should be confirmed later in the design. Provide a window overlooking the kitchen in each office, and group the offices near the main entrance to the kitchen.

Program Space: Food Service Operations Offices

1,200 SF (2 @ 600 SF)

- | | |
|---|---|
| FEATURES | <ul style="list-style-type: none"> • Windows overlooking the kitchen. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 8 ft. minimum. • Ceiling: 2 ft. x 4 ft. vinyl-faced acoustical tile. • Walls: Gypsum wallboard, painted; impact-resistant where needed. • Floor: Vinyl or quarry tile. |
| ELECTRICAL | <ul style="list-style-type: none"> • Minimum two quadruplex outlets in each office. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: 50 foot-candles. |
| TELECOM | <ul style="list-style-type: none"> • Minimum two (2) each Category 6 outlets on each office wall. |
| GRAPHICS | <ul style="list-style-type: none"> • Wall identification plaque. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none"> • Desks / workstations. • Chairs. • File cabinets. • Radio equipment. • Networked computers. |

CHEF'S TABLE / TASTING ROOM

A chef's table/tasting room shall be located within the banquet kitchen with a view of kitchen operations. The intent is to be able to showcase the quality of the food offerings and demonstrate its preparation for prospective clients of the center in much the manner of a televised cooking show. The tasting room should accommodate a variety of food preparation methods using a gas cook-top, convection ovens, refrigeration and one or two double sinks.

The room should accommodate 14-16 people seated at either a banquet table or island style attached to the main cooking demonstration area. Guests should have a view into the kitchen preferably through fixed glass with curtains should privacy be desired. High quality finishes equal to a high end custom residential kitchen with wood cabinets, stone countertops and stainless steel appliances are an integral part of this creative expression of the convention center's food service capabilities.

The client's path from the service corridor to the tasting room should pass through the kitchen adequate for display purposes but not so as to disrupt banquet preparations if in use for other events in the convention center.

Program Space: Chef's Table/Tasting Room

1,200 SF

- | | |
|-------------------|--|
| FEATURES | <ul style="list-style-type: none"> • Banquet table or island style eating area for 14-16 people. • Demonstration kitchen with back-wall food preparation zone. The cooktop and one sink may be located in the island. • Fixed glass windows with curtains to provide a controlled view of the kitchen |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: As required for equipment. Minimum 9 feet. • Ceiling: 2 ft. X 2 ft. vinyl-faced decorative tile. • Walls: Moisture-resistant drywall and decorative tile. • Floors: Natural or porcelain tile (slip-resistant). |
| PLUMBING | <ul style="list-style-type: none"> • Hot water connections. • Cold water connections. • Indirect waste and floor drains. • Disposer. • Natural gas. |
| ELECTRICAL | <ul style="list-style-type: none"> • To match food service equipment: <ul style="list-style-type: none"> ○ 110-volt, single-phase. ○ 208-volt, 3-phase. • Four (4) each GFI duplex outlets on the island |

Program Space: Chef's Table/Tasting Room, continued

- AUDIOVISUAL**
- Two wall mounted plasma or LCD panels for menu display.
 - Background music.
 - Overhead speakers for background music and paging.
- LIGHTING**
- Type: Dimmable compact fluorescent down-lights with reflectors for general lighting.
 - Level: Two-stage, 25-30 foot-candles partial, 40-50 foot-candles full-on.
 - Under-cabinet fluorescent task lighting.
 - Decorative pendant lighting at dining positions.
 - Adjustable spot lights to feature food preparation area.
 - All lighting should be color corrected for food display.
- TELECOM**
- House telephone.
 - Minimum of four (4) each Category 6 connections on each fixed wall and inside the island cabinet.
 - Two (2) each Category 6 connections at each monitor location.
- GRAPHICS**
- Colors compatible with overall Center color scheme.
 - Wall plaque "Tasting Room"
- SUPPORT SPACES REQUIRED**
- Restroom.
 - Banquet kitchen.
 - Back-of-house corridor areas.
- FURNITURE, FIXTURES, & EQUIPMENT**
- Class I (fixed equipment):
 - Commercial refrigerator and freezer.
 - Wine refrigeration & display.
 - Gas cook-top with grille.
 - Exhaust hood.
 - Convection ovens (2).
 - Disposer.
 - Banquet table (if no built-in island).
 - Comfortable dining chairs.

CONCESSIONS

One concession area shall be provided near each exhibition hall division for the convenience of the attendees and exhibitors. This area will support portable concession stand units which can be placed adjacent or strategically for specific show preferences. Concessions provide the added benefit of keeping visitors near the exhibition space when they wish to purchase a snack or drink. Adjacency to restrooms and telephone alcoves is also desired.

Where practical, configure concession stands with service counters facing both the exhibition hall and the public concourse. This allows food service both before and during events by a single crew.

Fixed concessions areas will provide for the short-term storage, cooking, and serving of snacks, pre-made salads, and cold sandwiches, hamburgers, hot dogs, soda, and beer. Food preparation requiring hoods and grease ducts is anticipated.

Program Space: Concessions

3,000 SF (3 @ 1,000 SF)

FEATURES	<ul style="list-style-type: none"> • Ventilation / exhaust hoods to contain odors from food service area. • Stainless steel corner guards. • Service counter with roll-down security shutter.
FINISHES	<ul style="list-style-type: none"> • Ceiling Height: As required for equipment. Minimum 9 feet. • Ceiling: 2 ft. X 4 ft. vinyl-faced acoustical tile. • Walls: Utility block with epoxy coating or ceramic tile. • Floors: Quarry tile (slip-resistant) with sanitary base.
PLUMBING	<ul style="list-style-type: none"> • Hot water connections. • Cold water connections. • Indirect waste and floor drains. • Natural gas.
ELECTRICAL	<ul style="list-style-type: none"> • To match food service equipment: • 110-volt, single-phase. • 208-volt, 3-phase.
LIGHTING	<ul style="list-style-type: none"> • Recessed fluorescent with acrylic diffuser.
TELECOM	<ul style="list-style-type: none"> • House telephone in service area. • Minimum of four (4) each Category 6 connections. Provide for point-of-sale terminals, credit card modem approval system and in-house computers.

Program Space: Concessions, continued

- | | |
|----------------------------------|---|
| GRAPHICS | <ul style="list-style-type: none">• Scale to relate to size of exhibition hall viewing distance.• Colors compatible with overall Center color scheme.• Message “Refreshments” |
| SUPPORT SPACES REQUIRED | <ul style="list-style-type: none">• Public restrooms.• Portable seating area.• Food cart storage area.• Back-of-house corridor areas. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none">• Class I (fixed equipment):• Beverage equipment.• Refrigeration.• Ice makers.• Hot food grille.• Refrigerated display case.• Exhaust hood.• Point-of-sale terminals.• Shelves for paper storage. |

PANTRY / SETUP ALCOVES

Distributed throughout the building will be storage and work areas dedicated to food service. Ideally these should be located near service elevators to minimize handling food carts and materials more than once.

Temporary holding and distribution of meals often occurs in the service corridors behind the meeting rooms if dedicated pantries are not provided. Food is delivered in either refrigerated or heated rolling carts, with individual meals served to patrons.

Power for hot and cold boxes will require dedicated circuits to be wall mounted or dropped from overhead to create temporary equipment islands. Beverage stations for coffee, tea, soda and water are needed for each permanent meeting room block. A work area for busing dishes should be striped on the floor. Consider placement away from service doors so as to minimize noise transmission to the meeting rooms.

The food service systems designer will determine the final configuration with input from the facility's food service operator.

Program Space: **Pantry / Setup Alcoves**

3,500 SF

- | | |
|-------------------|---|
| FEATURES | <ul style="list-style-type: none"> • Ventilation to contain odors from food service area. • Stainless steel corner guards. • Storage for linen and paper goods. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: As required for equipment. • Ceiling: Gypsum board, painted, or 2 ft. X 4 ft. vinyl-faced acoustical tile. • Walls: Smooth, non-porous surface; utility block with epoxy coating. • Floors: Quarry tile (slip-resistant) with cove base or epoxy-resin coating meeting food service health requirements. |
| PLUMBING | <ul style="list-style-type: none"> • Hot and cold water connections. • Service sink. • Water supply and trench drains at ice machines. • Waste lines and floor drains. |
| ELECTRICAL | <ul style="list-style-type: none"> • To match food service equipment: • 110-volt, single-phase. • 208-volt, single-phase. • 208-volt, 3-phase. |

Program Space: Pantry / Setup Alcoves, continued

- LIGHTING**
- Recessed fluorescent with acrylic diffuser.
 - Level: 50 foot-candles.
- TELECOM**
- Minimum four (4) Category 6 outlets for point-of-sale terminals or networked computers.
 - House phone, either recessed or in an abuse-resistant enclosure.
- GRAPHICS**
- Wall plaque identification for lockable rooms.
- SUPPORT SPACES REQUIRED**
- Food cart storage area.
 - Back-of-house corridor areas.
 - Service elevators
- FURNITURE, FIXTURES, & EQUIPMENT**
- Class I (fixed equipment):
 - Coffee makers.
 - Ice makers.
 - Walk-in coolers.
 - Soda dispensers.
 - Class II (portable equipment):
 - Banquet carts.
 - Shelving.
 - Class III (expendables):
 - China.
 - Glass.
 - Flatware.
 - Linen.
 - Tables.
 - Chairs.
 - Shelving, fixed and rolling.

STORAGE

Storage areas are required for short-term dry goods, tabletop decorations, dry goods, smallwares and other equipment. For convenience and flexibility, this area is programmed as two equal spaces; however, the final design may vary this configuration based on structural constraints or higher levels of service.

Program Space: Food Service Storage

1,700 SF

FEATURES	<ul style="list-style-type: none"> • Access to freight elevator and loading dock. • Internal service counter. • Roll-up door for deliveries using forklifts or pallet jacks.
FINISHES	<ul style="list-style-type: none"> • Ceiling height: 9 ft. minimum in office. In storage area, 12 feet minimum to obstruction, additional height beneficial. • Ceiling: Exposed to structure. • Walls: Utility block, painted. • Floor: Sealed concrete.
ELECTRICAL	<ul style="list-style-type: none"> • Quadruplex 110-volt outlet at service counter for computer, calculator.
LIGHTING	<ul style="list-style-type: none"> • Fluorescent strip, hung or surface mounted. • Level: 30 foot-candles, 50 at service counter.
TELECOM	<ul style="list-style-type: none"> • Minimum four (4) Category 6 outlets.
GRAPHICS	<ul style="list-style-type: none"> • Wall plaque identification.
SUPPORT SPACES REQUIRED	<ul style="list-style-type: none"> • Loading dock. • Back-of-house corridors. • Access to freight elevators.
FURNITURE, FIXTURES & EQUIPMENT	<ul style="list-style-type: none"> • Computer terminal, chair. • Storage shelving • Hand truck.

LOCKER ALCOVE / STAFF BRIEFING

This function should be located in a large alcove or widened part of the service corridor adjacent to the banquet kitchen. Approximately 120 half-height lockers should be wall-mounted with locker-room-style benches. This area will be used in larger fashion as a briefing area for part-time and temporary help for giving instructions before serving a meal function in the ballroom.

Program Space: Locker Alcove / Staff Briefing

600 SF

- | | |
|--|--|
| FEATURES | <ul style="list-style-type: none"> • Deep alcove located along service corridor. • Provide half-height lockers on sanitary base. • Wooden benches, floor-mounted. • Full-height polished metal mirror. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum; match adjacent areas. • Ceiling: Exposed structure. • Floors: Sealed concrete. • Walls: Painted gypsum drywall or concrete block. |
| TELECOM | <ul style="list-style-type: none"> • House phones in service corridor or kitchen area. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets in locker area. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Fluorescent strip, hung or surface mounted. |
| FURNITURE, FIXTURES & EQUIPMENT | <ul style="list-style-type: none"> • Combination of half height and 3-high, 12x12-inch metal lockers (60 each sex), minimum 22 inches deep. • Wood benches in dressing area. • Coat rack with shelf unit. |

FOOD SERVICE EXECUTIVE & MARKETING OFFICES

The administrative, marketing and accounting functions related to the food service operation will be located within or adjacent to the facility’s executive offices. Under different organizational scenarios food services will either be a department of the convention center or independently managed under a service contract arrangement. These requirements will apply regardless of operating structure.

An independent reception area will be required. Offices shall be planned for the food service general manager, account representatives (sales), and for an office manager/accountant. A conference room should complete the office suite. The food service offices should be accessible from the main administrative reception area and does not require an independent entry and identity.

The office manager/accountant’s office will also serve as a money handling area with a freestanding safe. This area must have appropriate security measures provided, including access control, heavy duty construction of partitions and ceiling, duress silent alarm and CCTV coverage.

Program Space: Food Service Executive & Marketing Offices

800 SF

- | | |
|---|--|
| FEATURES | <ul style="list-style-type: none"> • Dedicated reception area, not shared with venue management. • Separate entrance accessible from public concourse. • Card access, duress alarm and CCVT coverage in money-handling areas. |
| FINISHES | <ul style="list-style-type: none"> • Ceiling Height: 9 ft. minimum. • Ceiling: 2 ft. x 2 ft. lay-in acoustical tile; security measures where required. • Walls: Gypsum board, painted; security measures where required. • Floor: Commercial carpet. |
| ELECTRICAL | <ul style="list-style-type: none"> • Convenience outlets in reception and offices. • Silent emergency push button alarm tied to Central Security office. |
| LIGHTING | <ul style="list-style-type: none"> • Type: Recessed fluorescent with acrylic diffuser. • Level: 60 foot-candles. |
| TELECOM | <ul style="list-style-type: none"> • Minimum two (2) each Category 6 outlets to each office wall. |
| FURNITURE, FIXTURES, & EQUIPMENT | <ul style="list-style-type: none"> • Desks / Workstations / Chairs. • File cabinets. • Safe. • Networked computers, printers. • Point-of-sale transactions master computer. |

VENUE MANAGEMENT OFFICES

The venue management offices will house the facility general manager, the business office (financial support), operations supervisor, meeting planners and clerical support. Offices for technical and engineering staff as well as contract services will be located within the programmed areas for those functions and are not included in this tabulation.

Venue Management Offices	Area Each in SF	Total Area in SF
Reception	225 SF	225 SF
Director	225 SF	225 SF
Enclosed Offices (12 each)	150 SF	1,800 SF
Workstations (30 each)	80 SF	2,400 SF
Conference Room, Large	800 SF	800 SF
Conference Rooms, Medium (2 each)	400 SF	800 SF
Break Room/Kitchenette (2 each)	300 SF	600 SF
Restrooms (2 each)	250 SF	500 SF
Workroom	400 SF	400 SF
Filing, Storage & Supplies	400 SF	400 SF
Secured Money Room	150 SF	150 SF
Circulation and Unassigned		3,350 SF

The reception area should have direct access to common spaces including the large conference room, workroom, filing/storage and restrooms. Adjacency to the main convention registration area is also desirable.

If the building configuration favors splitting the management office into two equal parts, locating the event services work group proximate to the exhibition halls or ballrooms should be evaluated.

Program Space: Venue Management Offices

11,650 SF

- FEATURES**
- Typical uses to include offices, conference rooms, work areas, reception lobby.
 - Secure storage for sales materials, brochures, office supplies.
 - Access to administrative area from parking.
 - Provide card access system limited to authorized staff.
 - Security system CCTV coverage at access doors and at all cash-handling areas.
 - Separate HVAC system to allow operation when the Center is not in use.
 - Staff restrooms.
 - Break room.
- FINISHES**
- Ceiling Height: 9 ft. minimum. Higher in entry, larger conference rooms.
 - Ceiling: 2 ft. x 2 ft. lay-in acoustical tile; upgrades to coffered system or gypsum board in special areas.
 - Walls: Vinyl wallcovering; painted drywall; upgraded finishes such as wood or stone in special areas.
 - Floors: Carpet, 100% nylon commercial-grade.
- ACOUSTICS**
- Provide sound isolation blankets at conference rooms, reception and managerial offices.
- AUDIOVISUAL**
- Provide Distributed Television (DTV) system in large conference rooms.
 - Background music assignment throughout the office areas, with volume controls in reception, enclosed offices and conference rooms.
 - Provide ceiling-mounted LCD projectors in conference rooms.
- ELECTRICAL**
- Convenience outlets.
 - Provide minimum one (1) 208-volt 60-amp outlet in workroom.
 - Provide minimum one (1) 208-volt 100-amp disconnect in nearby electrical closet with access to cable tray.
- LIGHTING**
- Type: Fluorescent for general illumination. Task lighting at workstations.
 - Level: 50-60 foot-candles in offices; 30-40 foot-candles in reception and circulation areas.
 - Special effect lighting in reception area.
 - Dimmable capabilities in conference rooms.

Program Space: Venue Management Offices, continued

- TELECOM**
- Minimum four (4) each Category 6 outlets to each office or defined work area.
 - Provide minimum sixteen (16) fiber optic cables from the backbone to be terminated in the technology closet serving the administrative offices.
- GRAPHICS**
- Provide secondary wayfinding system from nearest building entrance to offices.
 - Wall identification plaques for suite and individual offices.
- FURNITURE,
FIXTURES, &
EQUIPMENT**
- Modular workstations, desks, credenzas, task chairs.
 - Reception desk and lounge seating.
 - Conference tables and chairs.
 - File cabinets.
 - Planters and accessories.
 - Break room equipment and accessories.
 - Motorized roll-down screen in conference rooms.