

# UNIFIED FACILITIES CRITERIA (UFC)

## LODGING FACILITIES



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**UNIFIED FACILITIES CRITERIA (UFC)**

**LODGING FACILITIES**

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U.S. ARMY CORPS OF ENGINEERS

NAVAL FACILITIES ENGINEERING COMMAND (Preparing Activity)

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

Record of Changes (changes are indicated by \1\ ... /1/)

<b>Change No.</b>	<b>Date</b>	<b>Location</b>

## FOREWORD

The Unified Facilities Criteria (UFC) system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applies to the Military Departments, the Defense Agencies, and the DoD Field Activities in accordance with [USD \(AT&L\) Memorandum](#) dated 29 May 2002. UFC will be used for all DoD projects and work for other customers where appropriate. All construction outside of the United States is also governed by Status of Forces Agreements (SOFA), Host Nation Funded Construction Agreements (HNFA), and in some instances, Bilateral Infrastructure Agreements (BIA.) Therefore, the acquisition team must ensure compliance with the most stringent of the UFC, the SOFA, the HNFA, and the BIA, as applicable.

UFC are living documents and will be periodically reviewed, updated, and made available to users as part of the Services' responsibility for providing technical criteria for military construction. Headquarters, U.S. Army Corps of Engineers (HQUSACE), Naval Facilities Engineering Command (NAVFAC), and Air Force Center for Engineering and the Environment (AFCEE) are responsible for administration of the UFC system. Defense agencies should contact the preparing service for document interpretation and improvements. Technical content of UFC is the responsibility of the cognizant DoD working group. Recommended changes with supporting rationale should be sent to the respective service proponent office by the following electronic form: [Criteria Change Request](#). The form is also accessible from the Internet sites listed below.

UFC are effective upon issuance and are distributed only in electronic media from the following source:

- Whole Building Design Guide web site <http://dod.wbdg.org/>.

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**UNIFIED FACILITIES CRITERIA (UFC)**  
**NEW DOCUMENT SUMMARY SHEET**

**Document:** UFC 4-720-01

**Superseding:** AFSDG 4-724-01

**Description:** This UFC provides planning and design criteria for Lodging Facilities. This document was developed from AFSDG 4-724-01, dated 21 June 2005, Army Lodging Standard Design Criteria, and discussions with all the Service contacts noted in Chapter 1, Contacts.

**Reasons for Document:** This UFC was developed for the following reasons:

- Establish planning and design criteria for Navy Lodging Facilities (Navy Gateway Inns and Suites), which did not previously exist.
- Unify planning and design criteria among the Services. The Air Force had existing criteria in the form of AFSDG 4-724-01, dated 21 June 2005, and the Army has existing criteria in the form of Army Lodging Standard Design Criteria.

**Impact:** The following direct benefits, both positive and negative, will result from the publication of this UFC:

- The Navy now has design and planning criteria for their Navy Gateway Inns and Suites program. This will enhance the project development process and help ensure minimum standards are achieved.
- Unification of the Services' criteria reduces confusion among government and non-government project development personnel and reduces criteria maintenance costs.

**Non-unification Issues:** Lodging Facilities are substantially unified among Services and accommodate the same basic functions and overall facility design. However, differences exist between the Services that result from programmatic variations that are, in some cases, fundamental to the different Service missions:

- Room sizing, layout, finishes and design features vary somewhat among Services. These differences are essential for each Service to maintain their individual "brand" of visitor lodging facility, which is critical to a successful program. These differences are not detailed in this UFC and readers are directed to the Service agencies in Chapter 1, Contacts.
- Service-specific programming policies are referenced in Chapter 2. These references are essential given the lodging program variability among the Services.

Non-programmatic differences are minor and include the following:

- Army has additional hot water storage requirements to accommodate mission requirements as approved by the Army Facilities Standardization Committee.
- The Air Force requires some minor variations in mechanical criteria: guest room and toilet ventilation requirements, and temperature and humidity requirements for guest laundry and fitness spaces.
- The Army uses prefabricated kitchens in their suites and staff break area.
- The Army has additional grounds storage needs due to the fact that the lodging program maintains the lodging grounds. The Installation typically maintains the lodging grounds for the other Services.
- The Air Force provides a clothes washer and dryer in their suites.
- The Air Force provides a range in their OCONUS staff break area.

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## CHAPTER 1 INTRODUCTION

### 1-1 SCOPE.

This UFC provides guidelines for evaluating, planning, programming, and designing lodging facilities (LF) to accommodate both temporary duty (TDY) travel and permanent change of station (PCS) travel as described below. The information in this UFC applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental United States (CONUS) and outside the continental US (OCONUS). Alteration and renovation projects should update existing facilities to meet the guidance and criteria contained in this UFC within budgetary constraints. This UFC is not intended as a substitution for thorough review during design by individual Program Managers and Operations Staff in the appropriate Service.

Lodging programs are managed as follows:

- Army. The lodging facilities described in this document accommodate all official travel, including both PCS and TDY lodging.
- Navy. The lodging facilities described in this document accommodate all TDY lodging. PCS lodging is addressed by the [NEXCOM Office](#), Navy Lodge program.
- Air Force. The lodging facilities described in this document accommodate all TDY lodging. PCS lodging is addressed by the [Temporary Lodging Facilities Design Guide](#)
- Marine Corps. The lodging facilities described in this document accommodate all TDY lodging. PCS lodging is addressed by the USMC HQ, [Personal and Family Readiness Division](#) (MRK).

### 1-2 USERS OF THIS UFC.

This UFC is intended as a source of basic architectural and engineering information for all individuals involved in the planning, design, or evaluation of LFs. Specific users of the UFC include the following:

#### 1-2.1 Architects and Engineers.

Architects and engineers (A/Es) that provide design services will use this UFC under the direction of the Service design agencies.

#### 1-2.2 Planning Personnel.

Installation and facility planning personnel will use this UFC, in conjunction with other required programming documents, for programming new or replacement facilities, pre-design planning, or assessing the extent of improvements required in an existing LF in order to achieve the standard established herein.

### **1-2.3 Additional Users.**

Additional users include the following:

- Headquarters Staff and Field Operating Agencies,
- Major Command Staff/Regions,
- Installation Commanders,
- Installation Facilities Management,
- Installation Technical Proponents, and
- LF managers and senior staff.

### **1-3 DOCUMENT ORGANIZATION.**

The criteria are organized to parallel the design process:

- Chapter 2—Planning and Programming. This section provides criteria relevant to site planning, project scope, funding, and execution of LF projects.
- Chapter 3—General Design Criteria. This section provides overarching technical design criteria such as codes and standards, site design, overall building design, infrastructure, and building systems.
- Chapters 4 and 5—Design Criteria. These sections provide detailed requirements for each functional space as well as illustrative design information. This section is divided into chapters for guest rooms and all other spaces.
- Appendices—Appendix A provides all applicable references. Appendix B provides “best practices” that include valuable background information, lessons learned, and design guidance the designer is expected to incorporate according to the needs of the project. Appendix C provides space criteria.

### **1-4 CONTACTS.**

Prior to project development, confirm the acquisition methodology and coordinate the design team composition and facility requirements with the following contacts, as appropriate:

- Army. Family and Morale, Welfare and Recreation Command (FMWRC): U.S. Army Installation Management Command, Attn: Family and MWR Command-Director, Hospitality Programs, 11711 North IH 35, Suite 110, San Antonio, TX 78233-5498.

- Navy. CNIC (N924), Fleet & Family Readiness, Washington, DC (Program Manager), and CNIC (N944), Fleet & Family Readiness, Millington, TN (Facilities Support).
- Air Force. Air Force Center for Engineering and the Environment (AFCEE) for the acquisition methodology and HQ Air Force Services Agency, Lodging Facilities Branch (HQ AFSVA/SVOLF) for design team composition and facility requirements.
- Marine Corps. USMC HQ, Installations and Logistics, I&L (LF).

## **1-5 SCOPE OF FACILITY.**

LFs provide quality, consistent, and cost effective lodging services to official government travelers. The design and configuration of LFs employ most concepts of a mid-priced, limited service private sector hotel—i.e., a hotel that does not have full-service food and beverage capability. Department of Defense Instructions (DoDI) 1015.11 and 1015.12 provide policy and resourcing for all lodging facilities and define TDY and PCS lodging. The Joint Federal Travel Regulations define the types of travelers that will use these facilities.

Criteria in this UFC include options and requirements. Options shall be approved by the agencies identified in Chapter 1, Contacts. All criteria or features not identified as options shall be considered the minimum requirement for the facility and shall be funded and incorporated unless a waiver is obtained from the agencies identified in Chapter 1, Contacts.

### **1-5.1 Types of Facilities.**

There are two types of LFs:

- Central. Central facilities accommodate the main check-in function, the majority of the guest services and administration, and the guest rooms and suites. There will always be at least one central facility on an Installation that includes visitor lodging.
- Satellite. Satellite facilities accommodate additional guest rooms, suites and limited services and support functions. They may be located remotely from the central facility to serve additional Installation areas or near the central facility as part of a visitor lodging complex.

### **1-5.2 Functional Program Areas.**

Table 1-1 provides a listing of all the LF functional program areas, indicates if each area is included in each type of facility, and describes the function of the area.

TABLE 1-1. FUNCTIONAL PROGRAM AREAS

Functional Program Area	Central	Satellite	Description
<b>Guest Services</b>			
Covered entry	X		Covered vehicle drive for loading/drop-off at main entry
Entrance vestibule	X	X	Entry airlock
Central lobby	X		Central facility lounge seating and circulation space between reception and other central guest services
Satellite lobby		X	Satellite seating/waiting and circulation space adjacent to main entry
Reception	X		Reception desk for check-in/out and guest service
Concierge <sup>1</sup>	X		Optional concierge desk/area for guest service
Bell cart station	X	X	Area near the entrance vestibule for storage of bell carts.
Coffee bar <sup>1</sup>	X		Optional area for self-service coffee
Food service <sup>1</sup>	X	X	Optional small cafeteria-style food service for continental or limited menu self-service meals (includes service, dining, and prep/storage)
Service			Self-service serving line
Dining (seating)			Seating area
Prep/storage			Limited food prep/warming kitchen and food and dry goods storage
Retail food service <sup>1</sup>	X		Optional contract (retail) food service ranging from a small coffee kiosk to a full-service restaurant
Retail sales <sup>1</sup>	X		Optional area adjacent to reception for sale of small items such as sundries, candy, drinks, etc.
Luggage storage	X		Secure room adjacent to reception for storage of guest luggage
ATM <sup>1</sup>	X	X	Optional ATM kiosk
Registration machines <sup>1</sup>	X	X	Optional self-service registration kiosks.
Public toilets	X	X <sup>1</sup>	Public toilets
DSN Phones <sup>1</sup>	X		Optional area for DSN phones
Fitness room <sup>1</sup>	X	X	Optional, small, guest fitness room
Conference room <sup>1</sup>	X		Optional conference room
Business center <sup>1</sup>	X		Guest-use computers and office equipment
Study room <sup>1</sup>	X	X	Optional room(s) used by guests for small group study sessions, typically only at training installations
Guest laundry	X	X	Self-service guest laundry
Gear wash <sup>1</sup>	X	X	Optional area for personnel to wash equipment after field exercises
Guest bulk storage, Option 1 <sup>1</sup>	X	X	Optional area for self-service guest storage of large, bulky items
Vending <sup>1</sup>	X	X	Optional self-service guest vending

Functional Program Area	Central	Satellite	Description
Ice	X	X	Self-service ice dispenser on each floor
Patio <sup>1</sup>	X	X	Optional outdoor space for picnic tables, seating, grills, etc.
Patio storage <sup>1</sup>	X	X	Only available with patio, provides storage for amenities, as needed based on climate
Guest corridors/circulation	X	X	Access to guest rooms and remote services
Guest room <sup>2</sup>	X	X	Standard room with a combined living/sleeping area and private bath. See Table 4-1, 4-5.
Family/business suite (Suite) <sup>2</sup>	X	X	Suite with separate living and sleeping areas, a compact kitchen and private bath See Table4-3
<b>Administration Services</b>			
Lodging communications	X		IT/communications room including guest and staff Internet, television, and administrative file server.
Manager's office	X		Private office See Table5-29
Asst. manager <sup>1</sup>	X		Optional private office See Table 5-29
Front desk supervisor	X		Private office See Table5-29
Accounting office	X		A single office or up to 3-4 workstations depending upon operation size
Clerical	X		Workstations for clerical staff in an open office area See Table 5-31
Reservations <sup>1</sup>	X		Optional workstations for reservations staff in open office area See Table 5-31
Work space	X		Copier, printers, facsimile machines, work space, common files, and administrative storage See Table5-31
Cash room	X		Secure room where front desk agents reconcile shift cash functions and store cashier banks
<b>Floor Support</b>			
Janitor areas	X	X	Janitor closet on each floor or wing.
Housekeeping areas	X	X	Housekeeping support and supplies on each floor or wing
Utility rooms	X	X	Mechanical, electrical, communications, and sprinkler rooms located for efficient utility distribution
<b>Back-of-House Support</b>			
Training room <sup>1</sup>	X		Optional room for staff training
Training office <sup>1</sup>	X		Optional office and/or training material storage area
Central Janitor areas	X	X	Central janitor closet with additional supply storage See Table 5-38
Housekeeping manager	X	X	Private office
Housekeeping assistant <sup>1</sup>	X	X	Optional private office for large programs
Soiled linen storage	X	X	Separate storage from clean linens, adjacent to receiving or laundry

Functional Program Area	Central	Satellite	Description
Clean linen storage	X	X	Separate storage from soiled linens
Receiving	X	X	Service entrance/loading dock
Receiving/supply office <sup>1</sup>	X		Optional private office
Linen laundry <sup>1</sup>	X		Optional space with industrial-grade equipment, based on local service contract linen costs and availability
Supply/general storage areas	X	X	Storage and warehousing of facility supplies
Cleaning fluid storage	X	X	Separate storage for cleaning chemicals
Utility rooms	X	X	Central facility mechanical, electrical, communications, and sprinkler rooms
Guest bulk storage, Option 2 <sup>1</sup>	X	X	Optional staff-access secure room for guest storage of large, bulky items
Break area	X	X	Staff break area with kitchenette and lockers
Staff toilets	X	X <sup>1</sup>	Staff facilities
Maintenance workshop	X		Includes limited storage and accommodates repair of small equipment and furnishings
Grounds equipment storage <sup>1</sup>	X		Optional space with direct exterior access for grounds and exterior building maintenance supplies and equipment
Service circulation	X	X	Separate stairs, corridors and elevators from guest circulation

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

<sup>2</sup> The final number, mix and variations of room types will be determined in the planning stage. See Chapter 2 for more information.

<sup>3</sup> Specific design needs for each Functional Program Area may be described in Tables in Chapters 4 and Chapter 5.

## CHAPTER 2 PLANNING AND PROGRAMMING

### 2-1 INTRODUCTION.

This chapter provides basic guidelines for planning and programming new lodging facilities and renovating existing facilities. The number of guest rooms, suites, guest support areas, and service areas at each site will vary depending on the mission, but standard plans and requirements will remain consistent. Renovations will follow this guidance as closely as possible, understanding that variances will be made on a case-by-case basis. The agencies noted in Chapter 1, Contacts, have programming and design latitude and decision making authority in the following areas: site selection and exterior architectural treatment.

### 2-2 SITE PLANNING.

Installation planning personnel will determine the appropriate site for a new LF or campus. The footprint and mass of a new LF is significantly greater than traditional dormitory-style facility configurations; therefore, appropriate and adequate site selection is critical. Coordinate site and building height requirements with fire department capabilities, DoDI 4165.57, and airfield restrictions (if applicable).

Determine the most appropriate and cost effective location for the LF/campus based on the following factors:

- Development potential, future expansion and adjoining land uses. Expansion of lodging facilities usually involves adding guest rooms. It is generally impractical to add onto an existing lodging facility. Therefore, if potential future expansion is identified during the programming stage, allow space in the site development plan for additional structures and size site utilities accordingly.
- Proximity to and capacity of recreational centers and community facilities such as fitness centers, dining facilities, postal service centers, Installation exchanges, commissaries, pedestrian circulation systems, bike paths, and mass transit routes. Balance the proximity to community services with the need for quiet and privacy.
- Proximity to a particular activity or site that the lodging facility serves, if applicable, also considering transportation resources and routes to those activities.
- Existing topography and landscape. Site selection should minimize the need for excessive grading.
- Available Installation infrastructure such as roads and drives, parking, landscape, utilities, and fire department access.
- Future demands placed on the capacity of supporting infrastructure and utilities.

- Facilities requiring demolition.
- Off-Installation communities and adjoining neighborhoods.

## **2-3 PROGRAMMING.**

### **2-3.1 Programming Policy.**

Information and guidance regarding work classifications, funds sources and approval levels for both appropriated fund (APF or MILCON) and non-appropriated fund (NAF) projects may be found in DoDI 1015.11, 1015.12, and 1015.15 and the following documents:

#### **2-3.1.1 Army.**

- AR 420-1
- AR 215-1

#### **2-3.1.2 Navy and Marine Corps.**

- OPNAVINST 11010.20H
- NAVFACINST 11010.45

#### **2-3.1.3 Air Force.**

- AFI 32-1021
- AFI 32-1022
- AFI 32-1023
- AFI 34-205
- AFI 34-246

### **2-3.2 Initial Project Scope.**

The initial primary facility scope of a LF project shall be programmed using the standards and criteria contained this UFC and the following documents:

- Army Lodging Standard Design Criteria and Army Standards for Army Lodging
- UFC 2-000-05N (P-80)
- AFH 32-1084

The organizations provided in Chapter 1, Contacts, will provide the number and types of rooms based on usage data. Planning shall incorporate accessibility requirements in all common guest support areas. Allow space for guest support areas, back-of-house service areas, and site requirements. Replacement of existing support functions will be considered in the programming of a new facility.

### **2-3.3 Final Project Scope.**

The final project scope will be based on the results of an independent assessment performed through the agencies identified in Chapter 1, Contacts. This assessment validates the site selection; determines the overall number of room types, support areas, guest services to be provided; and identifies any companion projects necessary to provide a complete and usable facility.

The facility space program will accommodate the following:

- Projected guest utilization based on official historical usage, non-availability certificates issued, and projected usage based on new or planned activities that will yield 80% average projected occupancy for the proposed facility/complex.
- ABA-accessible room count per Chapter 3, Accessibility
- Potential for retention and renovation of existing facilities
- Need for additions/alterations versus completely new construction projects
- Existing on-Installation community facilities and their potential for meeting current and future needs
- Additional requirements such as potential surge conditions, significant transient crew requirements, and historic long-term TDY and PCS commitments

### **2-3.4 Guest Room and Suite Sizing.**

Comply with Table 2-1 for guest room and suite net area standards (net area as measured from interior finished wall to interior finished wall). Commands desiring a waiver from these absolute planning factors must submit a fully justified request, formatted as a normal congressional reprogramming action, and an economic analysis to the organizations provided in Chapter 1, Contacts.

**TABLE 2-1. NET AREA STANDARDS FOR NEW CONSTRUCTION AND RENOVATION**

Room Type	Minimum	Maximum
Guest Room	300 ft <sup>2</sup> (27.9 m <sup>2</sup> )	325 ft <sup>2</sup> (30.2 m <sup>2</sup> )
Suite	450 ft <sup>2</sup> (41.8 m <sup>2</sup> )	606 ft <sup>2</sup> (56.3 m <sup>2</sup> )

**2-3.5 Support Space Sizing.**

Support space sizing standards are provided in Appendix C of this UFC. Sample space programs are included to demonstrate how to calculate space requirements.

**2-4 FUNDING/COST GUIDANCE.**

Design these facilities with the objective of achieving the lowest life cycle cost over a 50-year period. The budget must support an appropriate and high-quality program and the performance requirements outlined in this UFC. The following information provides guidance on developing a budget that will support these goals.

**2-4.1 Site Cost.**

The project will fund outdoor passive and/or active use areas and/or site amenities as required to provide an attractive and usable facility that is competitive with comparable commercial facilities. These features must complement the architecture of the campus and include amenities such as walks, site lighting, landscaping, benches, trash receptacles, and fencing if used to screen equipment or dumpsters. Additional amenities such as barbecue grills and tables are permitted, but they are the funding responsibility of the Installation or the Activity/Major Command.

**2-4.2 Other Design Cost Considerations.**

**2-4.2.1 Guest Room and Suite Sizing.**

Guest rooms and suite usable space minimums in Table 2-1 cannot be changed due to budgetary constraints.

**2-4.2.2 Signage.**

The project budget shall include all interior and exterior facility directional signage, room and informational signage, and the freestanding exterior facility identification (monument) sign.

**2-4.2.3 Furnishings Fixtures and Equipment.**

Chapters 4 and 5 provide the breakdown of furnishings, fixtures and equipment (FF&E) for each space and indicate whether the items are contractor furnished/contractor installed (CFCI), i.e., included in the project construction contract, or government furnished/government installed (GFGI), i.e., not part of the construction contract. Some

items are also classified as government furnished/contractor installed (GFCI). Items included in the project construction contract may be funded by different sources depending on the Service and overall project funding approach, so confirm the interior design funding sources with the agencies identified in Chapter 1, Contacts, prior to finalizing the project budgets.

**2-4.3 Additional Funding/Cost Guidance for NAF Projects.**

If the LF project is a NAF project, additional special reporting and approval requirements must be followed. See DoDI 7700.18 for this guidance.

**2-5 RENOVATION PLANNING.**

Lodging renovations range from building and system upgrades to complete reconfiguration. The requirements and recommendations in this UFC apply to renovations. Some flexibility in complying with established guidance contained in this UFC is allowed for renovated facilities, but the facilities shall include the required spaces to the greatest extent feasible. Flexibility in design may be considered based on existing conditions and physical limitations such as construction type, location and character of load bearing walls and columns, and others.

## CHAPTER 3 GENERAL DESIGN CRITERIA

### 3-1 GENERAL.

UFC 1-200-01 provides applicability of model building codes and government-unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, sustainability, and safety. Use this UFC in conjunction with the criteria identified in 1-200-01.

### 3-2 ACCESSIBILITY.

Per DoD requirements, provide accessible rooms per Table F224.2 of the ABA Accessibility Standard for DoD facilities. Comply with DoD Memorandum, DoD Housing Inspection Standards for Medical Hold and Holdover Personnel for wounded warrior accessibility. This will require some ABA guest rooms to include direct access to an adjoining guest room.

### 3-3 STRUCTURE.

Coordinate column/wall spacing to limit awkward placement within larger public spaces.

### 3-4 ARCHITECTURE.

#### 3-4.1 Attics.

Attic access is required, but restricted to LF personnel only. Storage capability in attic areas shall not be provided.

#### 3-4.2 Exterior Design.

The building design shall comply with Command and Installation architectural standards and incorporate the local geographical and cultural environment. See Appendix B, Best Practices, for additional guidance.

##### 3-4.2.1 Exterior Finishes.

Exterior finishes shall be durable and low-maintenance. Coordinate exterior colors and finishes with the interior design standards noted in Chapter 3, Interior Design, paragraph 3-4.3.

##### 3-4.2.2 Windows/Natural Light.

Provide for the admission of natural light in the design of the facility window systems and in the design of the overall footprint and floor depth. Select furniture systems that maximize the admission of natural light into the facility. The goal should be to achieve the LEED® “Daylight & Views” points. In designing for natural light admission, coordinate with Chapter 3, Electrical Design, paragraph 3-5.4.

Comply with the following requirements:

- Use tight-fitting, insulated, commercial-grade windows that meet antiterrorism requirements per UFC 4-010-01. Light-duty residential grade windows are not acceptable.
- Analyze the cost and sustainability benefits of Energy Star labeled windows and low emissive (Low E) double pane glazing for increased thermal performance, ultraviolet retardation, and maximum light transmission. Qualifying products are listed on the Energy Star website. Provide these windows and glazing if the analysis supports.
- Size windows nominally between 10 and 15 percent of the floor area they serve.
- Maximize window size and area to increase the admission of natural light into guest rooms.
- Select windows that are compatible with the type of window coverings to be used to ease maintenance.
- Provide solid surface windowsills at all windows.

### **3-4.2.3 Exterior Doors.**

Comply with the following requirements:

- All public area entrance doors shall meet force protection and accessibility construction standards minimum requirements per UFC 1-200-01, and will be a minimum of 36 in. (910mm) in width.
- Remote, non-guest exit doors shall be equipped with an alarm that sounds at the front desk when the doors are opened. This alarm shall be programmable to be operational at specific times of the day.
- Secondary guest entrances shall have electronic key card locks.
- Doors shall be fully weather-stripped; include a heavy-duty metal threshold to prevent drafts, dirt, water, and insect entry; and be thermally insulated.
- Exterior entrance service doors will be hollow metal with hollow metal frames.
- All doors require doorstops, and wall-mounted bumpers will be used where possible. Provide blocking in walls as required.
- See Interior Doors below for locking system requirements.

### **3-4.2.4 Roofing.**

Unless the installation's architectural compatibility standards state otherwise, all lodging facilities shall have sloped standing-seam metal roofs. Cool roofs are required unless engineering analysis on its suitability negates its use in accordance with ACSIM Sustainable Design and Development Policy.

Provide protection against falling ice and snow for sloped roofs located over building entrances. Coordinate exterior locations of dryer vents and bath exhausts to minimize roof penetrations and reduce the visual impact on exterior elevations.

### **3-4.2.5 Building Signage.**

Building signage shall provide clear directional and informational assistance. Mechanical, electrical and/or utility room doors must have identifying signage to match other building signage.

### **3-4.3 Interior Design.**

Interior design and FF&E packages shall comply with the Service-specific branding concepts that provide the finish and color requirements for each space. The agencies noted in Chapter 1, Contacts, shall provide the latest branding concept standards. See Appendix B, Best Practices, for additional general guidance.

#### **3-4.3.1 Interior Doors.**

All interior door hardware throughout lodging facilities will be lever style. If possible, provide single hardware assembly for door closure and hold open operation.

If an electronic locking system is not already in use at other Installation lodging facilities, provide a complete system, including the reception desk. If an electronic locking system is in use at other Installation lodging facilities, match existing system. Assure that the statement of work for the locking system software selected for Installation will interface with the Property Management System. All doors will operate from this same locking system except doors accessing utility and service functions.

#### **3-4.3.2 Interior Construction.**

Provide blocking for all wall- or ceiling-mounted equipment and furnishings.

Built-in cabinets must be well constructed with sturdy hardware and meet the requirements of the Kitchen Cabinet Manufacturer's Association standards. Particleboard may not be used. All case goods and hardware will be coordinated with the Comprehensive Interior Design package for the project to ensure matching woods, stains, and finishes as best possible. In all cases, concealed hinges will be provided. Finishes must be able to withstand frequent cleaning and must coordinate with the other finish materials. Countertops shall be solid surface/solid composite plastics only. Where no water source is present, plastic laminate with hardwood or solid surface edging may be permitted with approval from the agencies identified in Chapter 1, Contacts.

### **3-4.3.3 Finishes.**

Finishes should take into account the intended uses and be highly durable. They must meet the requirements listed in NFPA 101 and UFC 3-120-10.

Comply with the following requirements throughout the entire facility:

- In moist climates, do not cover the inside of exterior walls with impervious materials such as mirrors or vinyl wall coverings to help preclude mold development in the wall.
- Procure a high quality, easy to maintain, durable carpet that provides a long lasting appearance.
- For additional finish criteria in specific areas, see Chapters 4 and 5.

### **3-4.4 Acoustics.**

Design the facility to provide a comfortable acoustical environment and provide comprehensive sound isolation and sound absorption measures for individual spaces as appropriate. Provide acoustical design to prevent sound from noisy spaces such as corridors, toilets, elevator machine rooms, and mechanical rooms from having negative impact on the adjacent spaces. Comply with the following:

- Isolate sound-generating mechanical equipment to minimize sound and vibrations from being transmitted through the building structure. Isolation methods include isolation hangers or other appropriate methods.
- Walls between living units, between living units and corridors, between living units and other spaces, and exterior walls of living units shall have a minimum sound transmission class (STC) of STC 54.
- Floor and ceiling assemblies shall be a minimum of STC 55 and have an impact isolation class (IIC) of at least 60.
- Telephone, cable television, convenience outlets, and mechanical ducts shall be staggered or otherwise designed to not compromise the acoustical integrity of wall, floor, or ceiling assemblies.
- Where fluorescent lamps are used, specify fluorescent lamp ballasts with a sound level rating 'A'.

At a minimum, provide the required STC ratings identified above and the ratings in Chapter 5, Functional Data Sheets, for individual spaces. Use the "Suggested Design Values" STC ratings in UFC 3-450-01 as the basis for the sound design of partition, door and window assemblies. Utilize gypsum board wall "improvements" to increase the STC of gypsum board "Stud Type" partitions to achieve the project sound requirements. Unless noted otherwise extend the room partitions and seal to the

structure above for rooms that have a noise source such as, but not limited to, corridors, toilets, classrooms, training rooms, maintenance rooms, and mechanical rooms. Unless indicated in Chapters 4 and 5, STC ratings do not need to be field verified.

### **3-5 SERVICES.**

#### **3-5.1 Plumbing.**

Comply with the following:

Provide for the installation of fixtures and associated amenities noted in Chapters 4 and 5, Specific Design Criteria.

Design plumbing systems to take advantage of stacking bathrooms and common wet walls for efficiency.

Exposed plumbing pipes are not permitted.

Copper piping shall be used for all supply lines. If PVC drainage pipe is used above public spaces, the area shall be insulated for sound control.

Provide shut-off valves at all fixtures.

Toilet and bath fixtures must match and be white in color.

All bathroom plumbing fixtures exposed (pipes, faucets, etc.) shall be first-line plated brass, manufactured by nationally known manufacturers.

All tubs and lavatories shall have pop-up-type waste stoppers. Rubber stoppers are not permitted.

Tub/shower valves shall be pressure balanced anti-scald type. Locate faucet, showerhead and controls on interior wall to allow for placement of plumbing access panel.

Provide filtered water lines for break area refrigerators with automatic icemakers.

Provide hose bibbs on exterior walls of each building at 100 ft. (30.5m) intervals and where indicated in Chapters 4 and 5; freeze proof as dictated by climatic conditions.

Central hot water domestic systems (gas if possible) will be specified for all projects to reduce costs and provide better service for guests. The minimum requirements are to allow for simultaneous use of 100% of the showers discharging (maintaining a pressure of 15psi at the showerhead). Minimum hot water storage will be sized to maintain flow under 100% shower discharge for a five-minute period (capacity will vary based on number of rooms). The heat exchangers within the calorifier will be capable of raising the contents from 50°F (10°C) to 149°F (65°C) in one hour. The temperature of the hot water as it leaves the hot water storage calorifier will be 140°F (60°C). Service Exception: The Army requires that a circulating pump or other approved in-line system

shall be installed to provide hot water to the guest room taps at 110°F (43°C), 75% diversity for 30 minutes (capacity will vary based on number of rooms).

### **3-5.2 Heating, Ventilating, and Air Conditioning (HVAC).**

In order to minimize the possibility of mold or mildew, ensure the humid area criteria provisions in the core mechanical UFCs as defined in UFC 1-200-01 are followed when designing the HVAC system. Air Force HVAC systems shall be designed in accordance with ETL 04-3.

#### **3-5.2.1 System Selection.**

Selection of the HVAC system shall be based upon the lowest total life cycle costs: include initial costs, operating costs, energy costs, system maintenance and repair costs, and component replacement costs, if not expected to achieve the same life cycle of the systems under consideration.

Refer to Appendix B, Best Practices, for additional information and considerations in system selection. Comply with the following:

- If a geothermal heat pump system (GCHP) is being considered, the soil reports prepared during the design process shall include borings to the depth necessary to consider the use of a ground source heat pump. The cost of the drilling and installation of the pipe shall be considered in the economic analysis.
- In the selection of chilled water systems, the design of HVAC enclosures shall take into account the space needed for chillers to receive air to cool condenser coils and room for service. The enclosure design shall prevent large amounts of pollen and vegetation from clogging condenser coils, be appropriately located on the site, and be compatible with surrounding architecture and exterior design elements.
- Supply air and outside air (OSA) will be ducted to the sleeping rooms. Branch ducts will be equipped with balancing dampers. Do not place ductwork over the shower area, and ceiling space will not be used as return air plenums. Soffit areas in guest room and suite closets are good ductwork locations. Determine the amount of transfer/return air sound attenuation between the guest rooms and adjacent areas.
- For new construction, do not locate HVAC units in the ceiling.
- Coordinate the location of sensors and thermostats with location of furniture and artwork throughout the building.

#### **3-5.2.2 Maintainability.**

Maintainability of the system is critical to the continued quality of life of the occupants. Design access to the system to minimize disruption or inconvenience to LF guests and

maximize servicing efficiency. Air Force shall comply with ETL 01-1. In renovated facilities when HVAC units are located above the ceiling, ensure that filters, controls, drain pans, and condensate piping, control valves and coils are easily accessible for servicing and cleaning. Condensate piping must be equipped with traps and threaded clean-outs at the unit. Design drawings must detail these features including minimum clearances for maintenance and required force protection setback distances.

### **3-5.2.3 Ventilation.**

Each guest room will be supplied continuously with conditioned outside air via a central ventilation system to meet the current ASHRAE Standard 62.1 (Service Exception: For Air Force facilities meet ASHRAE Standard 62.2-2010, table 4.1a) or as required for building pressurization, whichever is larger. Equip all branch ducts with accessible volume control dampers. The guest room or suite's HVAC unit's fan must run continuously. Operable windows are not permitted in guest rooms in view of the foregoing.

### **3-5.2.4 Bathroom Exhaust.**

Bathrooms shall be equipped with a central exhaust system. Comply with the following:

- The exhaust system shall run continuously and be interlocked with the building supply air system. Ensure the system meets HVAC-Related Background Sound criteria for hotel rooms as listed in the latest ASHRAE Handbook – HVAC Applications. Service Exception: For Air Force facilities, guest bathroom exhaust shall meet ASHRAE Standard 62.2-2010, table 5.2 for continuous exhaust.
- Include a manual volume damper accessible from the space for proper balancing.
- Include a life cycle cost evaluation for utilizing heat recovery from the exhaust system to precondition ventilation air.

### **3-5.2.5 Guest Room HVAC Systems.**

Individual HVAC systems shall not be used as the primary facility HVAC system to condition outside air. When guest rooms are equipped with individual HVAC systems, these systems will be ducted vertical fan units or heat pumps placed within designated mechanical closets or mechanical rooms equipped with lockable doors. If individual HVAC systems are used as a secondary system for the guest rooms in humid areas, they must be carefully designed to avoid mold and mildew.

### **3-5.2.6 Piping System.**

Where centralized hot and chilled water are utilized, individual HVAC systems shall be connected to a centralized mechanical system by a four-pipe hot water and chilled water distribution system to provide positive space control.

Where GCHPs are used, evaluate the need for a backup heating system (such as an auxiliary boiler) and towers in the loop based on site location.

### **3-5.2.7 Perimeter Fin Tube Heating.**

In OCONUS areas or as applicable per local code where perimeter fin tube heating is utilized, provide temperature control for each zone.

### **3-5.2.8 Laundry Areas.**

Design straight-run venting of dryers to avoid lint clogs. Dryer venting must be exhausted away from windows and exterior balcony areas.

### **3-5.3 Fire Protection and Life Safety.**

Fire Protection shall be in accordance UFC 3-600-01. Fire sprinkler heads shall be concealed in occupied and living spaces.

Provide carbon monoxide detection in accordance with NFPA 720 and as part of the installed addressable fire alarm and emergency notification system in all LFs that contain carbon-based fuel burning systems. Comply with the following:

- Provide a separate carbon monoxide alarm (voice message) via the fire alarm system.
- Locate carbon monoxide detectors in the immediate vicinity of the bedroom portion of the guest rooms and suites.
- Locate carbon monoxide detectors on the ceiling in the same room as all permanently installed fuel-burning appliances.
- Transmit a separate carbon monoxide alarm signal to the Installation's Receiving Station.
- Transmit a separate carbon monoxide trouble and supervisory signals to the Installation's Receiving Station.

### **3-5.4 Electrical Design.**

Surface-mounted conduit or wire-mold shall not be used in any guest rooms, public spaces or administrative spaces. General outlets required should comply with UFC 3-520-01. Comply with the following LF-specific requirements:

#### **3-5.4.1 Lighting.**

See Chapters 4 and 5, Functional Data Sheets for light level and control requirements that are exceptions or in addition to standard requirements. For the guest rooms and suites, adapt the Residential Housing sections of UFC 3-530-01 as modified by Chapters 4 and 5 of this UFC.

#### **3-5.4.2 CCTV.**

Provide the infrastructure for a CCTV system. The agencies identified in Chapter 1, Contacts, will determine funding requirements for the additional components required to develop a complete system. See Chapters 4 and 5, Functional Data Sheets for monitor and camera locations.

#### **3-5.4.3 Telecommunication Systems.**

See Chapters 4 and 5, Functional Data Sheets, for jack locations. Where “house phones” are indicated, these shall connect to the front desk or dedicated administrative areas only. Allow for easy, future upgrades to data and communications cables and allow for fiber optic cables for communications. Provide cellular repeaters as needed throughout the facility to ensure adequate mobile phone service.

Provide Internet access through a business class wired and WiFi network system throughout all spaces indicated in Chapters 4 and 5. The system must comply with DoDI 8420.01. At a minimum the system shall include multiple SSID, VLAN tagging, SNMP for remote management and monitoring with Power Over Ethernet for flexible deployment and password protection. Army should comply with Technical Criteria for the Installation Information Infrastructure Architecture (I3A).

#### **3-5.4.4 Television Systems.**

See Chapters 4 and 5, Functional Data Sheets, for outlet locations.

#### **3-5.4.5 Electronic Security Systems (ESS).**

See Chapters 4 and 5, Functional Data Sheets, for locations.

### **3-6 SITE WORK.**

Organize the site to be compatible with the site planning and style of adjacent existing structures. Locate the building to reflect local climatic conditions. For example, provide protection from prevailing winds and glare and orient operable windows to take advantage of summer breezes. Locate the building to take advantage of passive solar heating and daylighting.

#### **3-6.1 Site Circulation and Parking.**

Comply with UFC 3-210-02. Provide guest access to lodging facilities from secondary (collector) streets to minimize the congestion associated with main arterial streets.

Where possible, divide main entrances with landscaped traffic medians between entry and exit lanes. Because of the high volume of traffic using the entrances, the minimum width of non-divided entry roads will be 24 ft. (7.3m).

### **3-6.1.1 Emergency and Service Vehicles.**

Design access drives and parking areas to accommodate service vehicles. Provide access to fire protection vehicles in accordance with UFC 3-600-01 and UFC 4-010-01. Obtain width, weight, and turning radii of fire fighting vehicles from the Installation fire department.

### **3-6.1.2 Parking.**

Provide a minimum of .5 parking spaces per guest room. Parking spaces shall be 10 ft. wide (3.1m) minimum. In addition to standard guest parking, provide a minimum of three short-term check-in parking spaces at central facilities. For programs with more than 200 rooms, provide a check-in space at the central facility for 1.5% of all guest rooms. As an option, identify each check-in space with a sign. Additional visitor parking with the exception of accessible parking is not required, but may be an option based on local requirements.

Provide one staff parking space for each daytime lodging staff person. Staff parking shall be separated from guest parking. Based on site size and layout, consider providing an optional sign to indicate staff-only parking with close access to the staff entrance. Parking areas will be sized to local conditions.

### **3-6.1.3 Pedestrian Access.**

All sidewalks and walkways shall be a minimum of 6 ft. (1.8m) wide. Design and grade sidewalks to provide barrier-free access to the first floor of all lodging facilities and to any associated outdoor use areas. In addition to accessibility requirements, provide ramps and curb cuts throughout to accommodate rolling luggage and other moving needs. Provide connections to other functional areas of the Installation with pedestrian circulation systems.

### **3-6.2 Site Development.**

Well-designed site amenities enhance the visual experience of a LF campus and complete the lodging project. The landscape architect shall coordinate with the architect and interior designer to ensure smooth transitions are made from within the building to the outdoors and vice versa. Provide effective transitions by incorporating building materials, colors, and design details into the site design and amenities. Also coordinate paving materials, signage and site furnishings. See Appendix B, Best Practices, for additional guidance.

#### **3-6.2.1 Fencing.**

Any fencing used as a screening material shall be compatible with the lodging campus and surrounding architecture, comply with Installation standards, and will be

accomplished with project funds. Fencing around the perimeter of the site, if desired, will be the responsibility of the Installation or Activity/Major Command.

**3-6.2.2 Site Furniture.**

Select site furniture that is in harmony with the architectural style and complements the building. Place the site furniture to help organize the outdoor spaces and to maximize usability.

**3-6.2.3 Exterior Signage.**

Signage includes the freestanding exterior facility identification (monument) sign and required site signage, including parking and street signage. All signage will be in accordance with the Installation signage program. The monument sign and building identification signage shall include the Service-specific appropriate branding styles and logos.

**3-6.3 Drainage and Landscaping.**

Comply with UFC 3-201-02 and UFC 3-210-10. See Appendix B, Best Practices, for additional guidance on landscaping specific to LFs.

**3-6.4 Storm Water Management/ Low Impact Development.**

Comply with UFC 3-210-10. See Appendix B, Best Practices, for additional guidance specific to LFs.

**CHAPTER 4 SPECIFIC DESIGN CRITERIA – GUEST ROOMS AND SUITES**

**4-1 INTRODUCTION.**

This chapter identifies the specific design needs for the guest rooms and suites. Sizing guidance for these rooms is provided in Chapter 2, Programming.

Design criteria are provided in a standard Functional Data Sheet (FDS) table format that generally follows the Unifomat II/Work Breakdown Structure. The Interior Construction/Built-in Equipment category includes anything physically attached or plumbed to the building such as counters, cabinets, casework, toilet accessories, window treatments, laundry machines, and retractable overhead screens. Furnishings and equipment are provided in separate tables for rooms and suites. Unless noted otherwise, finishes and features included in the FDS tables represent the required minimums.

**4-2 GUEST ROOMS.**

**4-2.1 Design Criteria.**

Table 4-1 identifies the specific design needs for the guest room, including its variations.

**TABLE 4-1. GUEST ROOMS**

<b>Description/ Usage</b>	The guest room includes combined living/work and sleeping areas and a private bathroom and can include the following variations: <ul style="list-style-type: none"> <li>• an extended-stay studio suite version that has basically the same layout but trades closet space for a small pre-fabricated kitchenette</li> <li>• a pet-friendly version that has different finishes</li> </ul>
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Entry doors shall be self-closing, solid core wood a minimum of 36-in (915 mm) wide with a decorative face, automatic electronic lock, swing bar door guard, deadbolt, and 180-degree one-way viewer. Provide a second viewer at the appropriate height in ABA rooms. Provide inoperable windows on as much of the exterior wall as possible. Provide full-height sliding closet doors with a header track and a floor track mounted directly to the floor. Opening hardware shall be integral with the frame.
<b>Interior Construction/ Casework</b>	Provide a ceiling fan with integral low-profile light and combined light dimmer and speed control. Provide closet shelf and hanging rod. Extended-stay studio suites include a prefabricated kitchenette unit.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum board. Provide vinyl corner guards on all exposed corners to 48 in (1220 mm) above the base. <b>Floor.</b> Commercial grade (heavy wear classification) carpet and pad. For pet-friendly rooms, provide porcelain tile flooring, commercial wood-grain vinyl or linoleum sheet flooring and base throughout. <b>Base.</b> Stained or painted wood or carpet. <b>Ceiling.</b> Painted gypsum wallboard.

**TABLE 4-1. GUEST ROOMS**

<b>Plumbing</b>	See Table 4-5 for bathroom plumbing requirements. For extended-stay studio suites, provide hot and cold water to the kitchenette unit.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Room HVAC systems will be standardized with electronic sensors or key card readers regulating temperature controls. Individual climate control must be provided and located within each guest room. Limit individual thermostat controls to the range of 65 to 78 F (18 to 26 C) degrees.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide outlets for all equipment. Provide a quad outlet at the desk and at least one of the two nightstands to power guest's equipment such as computers and chargers. Provide a minimum of one outlet in an easily accessible location for use with an ironing board/iron. Provide individual circuits for each guest room.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. In addition, provide backlit wide rocker switches at room entrance and bathroom. Task lighting provided by table or wall fixtures at the bed, desk and lounge seating shall provide adequate directional lighting for reading, typically 30-40 fc (325-430 lux).
<b>Communication</b>	<p><b>Telephone.</b> Provide one jack (ganged with data in single box) at the nightstand, one jack (ganged with data in single box) at the desk, and one jack at the CATV outlet location. Label each jack "phone."</p> <p><b>Data.</b> Provide one jack (ganged with telephone in single box) at the nightstand and one jack (ganged with telephone in single box) at the desk. Label each jack "data port." Provide Wi-Fi service throughout the room.</p> <p><b>CCTV.</b> None required.</p> <p><b>CATV.</b> Provide an outlet at the TV location.</p> <p><b>Security.</b> Door electronic card key access reader.</p>
<b>Acoustics</b>	Provide acoustical separation per Chapter 3, Acoustics.
<b>Special Requirements</b>	Locate downlights and sprinkler heads such that they are not within 12 in (305 mm) of the sweep of the ceiling fan blades. Provide transition strips where different floor finishes meet.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**4-2.2 Furnishings, Fixtures and Equipment.**

Coordinate FF&E packages with the interior designer and follow the requirements noted in Chapter 3, Interior Design. To assist planners and designers, Table 4-2 provides the general types of FF&E by Service for each space and indicates whether the item is CFCI, GFGI, or GFCI (F/I).

**TABLE 4-2. GUEST ROOM FF&E**

Army		Navy		Air Force	
FF&E	F/I	FF&E	F/I	FF&E	F/I
Queen bed	GFGI	Queen bed <sup>1</sup>	GFGI	Queen bed w/ bed box	GFGI
2 nightstands	GFGI	2 nightstands	GFGI	2 30-in-wide (760-mm) 3-drawer bedside chests	GFGI
2 nightstand lamps	GFGI	2 nightstand lamps	GFGI	2 nightstand lamps	GFGI
TV armoire w/drawers	GFGI	4-drawer dresser	GFGI	N/A	
Flat panel television	GFGI	Flat panel TV	GFGI	Flat panel TV (wall-mount)	GFGI
DVD player	GFGI	N/A		N/A	
Desk	GFGI	Desk	GFGI	Desk	GFGI
Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
Desk lamp	GFGI	Desk lamp	GFGI	Desk lamp w/ outlet	GFGI
Lounge chair	GFGI	Lounge chair	GFGI	Lounge chair(s) w/ ottoman(s)	GFGI
Window treatments	GFGI	Window treatments	GFGI	Window treatments	GFGI
Artwork	GFGI	Artwork	GFGI	Artwork	GFGI
Under counter refrigerator	GFGI	Under counter refrigerator	GFGI	5.3 ft <sup>3</sup> (.15m <sup>3</sup> ) Microfridge	GFCI
Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
Ironing board, iron	GFGI	Ironing board, iron	GFGI	Ironing board, iron	GFGI
Ironing board caddy	CFCI	Ironing board caddy	GFGI	Ironing board caddy	GFGI
Full-length mirror	GFGI	Full-length mirror	GFGI	Full-length mirror	GFGI
Safe w/ pedestal	CFCI	Safe w/ pedestal	GFGI	Safe w/ pedestal	GFGI
Microwave	GFGI	Microwave	GFGI	Microwave (incl w/ microfridge)	GFGI
N/A		Coffee pot	GFGI	Coffee pot	GFGI
N/A		Alarm clock	GFGI	Alarm clock	GFGI
N/A		Ice bucket	GFGI	Ice bucket	GFGI
N/A		Luggage rack	GFGI	Luggage rack	GFGI
N/A		Wastebasket	GFGI	Wastebaskets	GFGI

<sup>1</sup> For Navy facilities when mission essential requirements dictate, provide two double beds and two separate and lockable closets/lockers for ranks of E-6 and below.

4-3 SUITES.

4-3.1 Design Criteria.

Table 4-3 identifies the specific design needs for the suite.

**TABLE 4-3. SUITE**

<b>Description/ Usage</b>	The suite includes separate and distinct living/work and sleeping areas, a kitchenette, and a private bathroom.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Entry doors shall be self-closing, solid core wood a minimum of 36-in (915 mm) wide with a decorative face, automatic electronic lock, swing bar door guard, deadbolt, and 180-degree one-way viewer. Provide a second viewer at appropriate height in ABA rooms. Provide inoperable windows on as much of the exterior wall as possible. Provide full-height sliding closet doors with a header track and a floor track mounted directly to the floor. Opening hardware shall be integral with the frame.
<b>Interior Construction/ Casework</b>	Provide a ceiling fan with integral low-profile light and combined light dimmer and speed control. Provide closet shelf and hanging rod. In PCS facilities, provide built-in shelving per the standard floor plan, which accommodates the additional storage requirements for longer stays. At the kitchenette, provide a solid-surface counter with base and upper cabinets. <b>Army</b> suites include a prefabricated kitchenette unit. <b>Air Force</b> suites include a ventless laundry washer/dryer combination.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum board. Provide vinyl corner guards on all exposed corners to 48 in (1220 mm) above the base. At the kitchenette, provide a solid-surface or ceramic tile backsplash. <b>Floor.</b> Commercial grade (heavy wear classification) carpet and pad. At the kitchenette, provide porcelain tile with a dark-colored epoxy grout and matching base. <b>Base.</b> Stained or painted wood or carpet. <b>Ceiling.</b> Painted gypsum wallboard.
<b>Plumbing</b>	Provide an under-mount stainless steel kitchen sink with a removable trap and drain plug. For <b>Army</b> suites, provide service to the prefabricated kitchenette unit. For <b>Air Force</b> suites, provide service to laundry washer/dryer combination. See Table 4-5 for bathroom plumbing requirements.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Room HVAC systems will be standardized with electronic sensors or key card readers regulating temperature controls. Individual climate control must be provided and located within both the bedroom and living areas. Limit individual thermostat controls to the range of 65 to 78 F (18 to 26 C) degrees.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide power to all equipment. Provide a quad outlet at the desk and at least one of the two nightstands to power guest's equipment such as computers and chargers. Provide a minimum of one outlet in an easily accessible location for use with an ironing board/iron. Provide individual circuits for each suite.

**TABLE 4-3. SUITE**

<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. In addition, provide backlit wide rocker switches at suite entrance, bedroom entrance, and bathroom. Task lighting provided by table or wall fixtures at the bed, desk and lounge seating shall provide adequate directional lighting for reading, typically 30-40 fc (325-430 lux).
<b>Communication</b>	<p><b>Telephone.</b> Living area—Provide one jack (ganged with data in single box) at the dining counter/table, one jack (ganged with data in single box) at the desk, and one jack at the CATV outlet location.</p> <p>Bedroom—Provide one jack (ganged with data in single box) at the nightstand and one jack (ganged with data in single box) at the dresser/TV area. Label each jack “phone.”</p> <p><b>Data.</b> Living area—Provide one jack (ganged with telephone in single box) at the dining counter/table and one jack (ganged with telephone in single box) at the desk.</p> <p>Bedroom—Provide one jack (ganged with telephone in single box) at the nightstand and one jack (ganged with telephone in single box) at the dresser/TV area. Label each jack “data port.” Provide Wi-Fi service throughout the suite.</p> <p><b>CCTV.</b> None required.</p> <p><b>CATV.</b> Provide outlets at the two TV locations: One in the bedroom and one in the living area.</p> <p><b>Security.</b> Door electronic card key access reader.</p>
<b>Acoustics</b>	Provide acoustical separation per Chapter 3, Acoustics.
<b>Special Requirements</b>	<p>Locate downlights and sprinkler heads such that they are not within 12 in (305 mm) of the sweep of the ceiling fan blades.</p> <p>Provide transition strips where different floor finishes meet.</p> <p>For <b>Air Force</b> ventless laundry washer/dryer combination, ensure adequate air circulation around the unit for heat dissipation and to accommodate maintenance. Ventless dryer does not need to be located on an exterior wall.</p>
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

### 4-3.2 Furnishings, Fixtures and Equipment.

Coordinate FF&E packages with the interior designer and follow the requirements noted in Chapter 3, Interior Design. To assist planners and designers, Table 4-4 provides the general types of FF&E by Service for each space and indicates whether the item is CFCI, GFGI, or GFCI (F/I).

**TABLE 4-4. SUITE FF&E**

Army		Navy		Air Force	
FF&E	F/I	FF&E	F/I	FF&E	F/I
Queen bed	GFGI	Queen bed	GFGI	Queen Bed w/ bed box	GFGI
2 nightstands	GFGI	2 nightstands	GFGI	2 30-in-wide (760-mm) 3-drawer bedside chests	GFGI
2 nightstand lamps	GFGI	2 nightstand lamps	GFGI	2 nightstand lamps	GFGI
TV armoire w/drawers	GFGI	N/A		N/A	
Dresser/wardrobe	GFGI	6-drawer dresser	GFGI	N/A	
2 flat panel televisions	GFGI	2 Flat panel TVs	GFGI	2 Flat panel TVs	GFGI
2 DVD players	GFGI	DVD Player	GFGI	DVD player	GFGI
Desk	GFGI	Desk	GFGI	Desk	GFGI
Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
Desk lamp	GFGI	Desk lamp	GFGI	Desk lamp w/ outlet	GFGI
Sleep sofa	GFGI	2-cushion sofa	GFGI	Sofa (2 or 3 cushion)	GFGI
Coffee table	GFGI	Coffee table	GFGI	Coffee table	GFGI
34-in (865mm) round table	GFGI	4-top dining table	GFGI	N/A	
3 small chairs	GFGI	4 small dining chairs	GFGI	N/A	
End table	GFGI	End table	GFGI	End table	GFGI
Floor lamp	GFGI	Floor lamp	GFGI	Floor lamp	GFGI
Table lamp	GFGI	Table lamp	GFGI	Table lamp	GFGI
Window treatments	GFGI	Window treatments	GFGI	Window treatments	GFGI
N/A		Lounge chair	GFGI	Lounge chair w/ ottoman	GFGI
2 telephones	GFGI	2 telephones	GFGI	2 telephones	GFGI
Ironing board, iron	GFGI	Ironing board, iron	GFGI	Ironing board, iron	GFGI
Ironing board caddy	CFCI	Ironing board caddy	GFGI	Ironing board caddy	GFCI
Artwork	GFGI	Artwork	GFGI	Artwork	GFGI
Safe w/ pedestal	CFCI	Safe w/ pedestal	GFGI	Safe w/pedestal	GFGI
Full-length mirror	GFGI	Full-length mirror	GFGI	Full-length mirror	GFGI
N/A		Microwave	GFGI	Microwave (incl w/ Microfridge)	GFGI
N/A		Coffee pot	GFGI	Coffee pot	GFGI
N/A		Alarm clock	GFGI	Alarm clock	GFGI
N/A		Ice bucket	GFGI	Ice bucket	GFGI
N/A		Luggage rack	GFGI	Luggage rack	GFGI
N/A		Wastebasket	GFGI	Wastebasket	GFGI
N/A		Under counter refrigerator	GFGI	5.3 ft3 (.15m3) microfridge	GFGI

Army		Navy		Air Force	
FF&E	F/I	FF&E	F/I	FF&E	F/I
N/A		Toaster	GFCI	N/A	
N/A		Utensils	GFCI	N/A	
N/A		Soap dish	GFCI	N/A	
N/A		N/A		Washer/dryer combined	GFCI

**4-4 GUEST BATHROOMS.**

Guest bathrooms are similar in configuration and amenities regardless of location in a guest room or a suite. Suite bathrooms may be a little larger, but not significantly. Provide the requisite number of ABA-compliant bathrooms in all room configurations.

Table 4-5 identifies the specific design needs for the guest bathroom.

**TABLE 4-5. GUEST BATHROOMS**

<b>Description/ Usage</b>	Lavatory, water closet, shower/tub, and associated amenities.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door, 36 in. (915mm) wide minimum. No windows required.
<b>Interior Construction/ Casework</b>	<p>Provide a minimum 36-in wide (915mm) solid surface counter top with 4-in. (100 mm) back/side splashes, a 6-in. (150 mm) deep toiletry shelf, and integral soap holder. Provide a minimum of 9 in (230mm) of clear vanity space on both sides of the sink. In PCS facilities, provide a base cabinet with an integral tissue box holder, which accommodates additional storage needs. In other facilities, base cabinets and other under-counter storage are optional.</p> <p>Provide towel bars at the vanity and at the shower/tub, a door-mounted robe hook, toilet tissue dispenser, screw-in curved shower curtain rod, and a wall-mounted hair dryer at the vanity. Shower doors shall not be used.</p> <p>Provide a minimum 36-in-wide (915mm), mirror over the vanity.</p> <p>Provide a hair dryer mount. Coordinate with the agencies identified in Chapter 1, Contacts, to determine if a hard-wired hair dryer is to be provided or if it will be FF&amp;E (see special requirements below).</p>
<b>Finishes</b>	<p>See Chapter 3, Interior Design, for color and finish guidance.</p> <p><b>Walls.</b> Finished mold-resistant gypsum wallboard. Provide a mud-set, one-piece full-height, solid-surface tub/shower surround with 2 recessed soap dishes.</p> <p><b>Floor.</b> Mud set, non-slip, commercial-grade porcelain tile with epoxy grout.</p> <p><b>Base.</b> Porcelain tile.</p> <p><b>Ceiling.</b> Scrubable eggshell or semi-gloss paint (with mold inhibitor) on mold-resistant gypsum wallboard.</p>
<b>Plumbing</b>	<p>Provide a minimum 18-in. (455 mm) integral lavatory; a floor-mounted, tank-type, elongated, water saver water closet with full seat and lid; and a full-size shower with an entry curb sloping to a floor drain. The shower head shall be height adjustable over a wide range.</p> <p>A tub is optional and if provided shall be a cast-iron 60-in. (1525 mm) bathtub with a non-slip surface.</p>
<b>HVAC</b>	<p>Provide a system per Chapter 3, General, and HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure. <b>Service Exception:</b> For Air Force, provide a system per Chapter 3, General, and HVAC, and negative pressure.</p>
<b>Fire Protection and Life Safety</b>	<p>Provide systems per Chapter 3, General, and Fire Protection and Life Safety.</p>
<b>Power</b>	<p>Provide outlets per Chapter 3, General. Provide a dedicated circuit for the hair dryer and size for a 1600-watt unit. Coordinate with the agencies identified in Chapter 1, Contacts, to determine if hair dryer will be hard-wired or a plug-in type.</p>

**TABLE 4-5. GUEST BATHROOMS**

<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. Strategically locate light sources at the vanity to illuminate the occupant's face while eliminating harsh shadows on the face. Coordinating the vanity and other room surface reflectivity characteristics with the lighting design can assist this goal. Provide a recessed ceiling light fixture in the shower area.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Provide transition strips where different floor finishes meet. If wallcoverings are used, seal wallcovering edges at ceiling and base with a clear caulk. ABA-compliant bathrooms will include a roll-in shower with a full-width trench drain along the back wall. If the hair dryer is not hard-wired (per Interior Construction) provide a 1600-watt hair dryer as FF&E.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

## **CHAPTER 5 SPECIFIC DESIGN CRITERIA – SUPPORT AND ADMINISTRATION**

### **5-1 INTRODUCTION.**

This chapter identifies the layout, adjacencies and specific design needs for the public, administrative, and support spaces. These spaces are broken down into guest services, administrative services, floor support, and back-of-house support as indicated in Table 1-1.

Design criteria are provided in the standard FDS table format that generally follows the Uniformat II/Work Breakdown Structure. The Interior Construction/Built-in Equipment category includes anything physically attached or plumbed to the building such as counters, cabinets, casework, toilet accessories, window treatments, laundry machines, and retractable overhead screens. Furnishings and equipment are not included in the FDS but are provided in Table 5-52. Unless noted otherwise, finishes and features included in the FDS tables represent the required minimums.

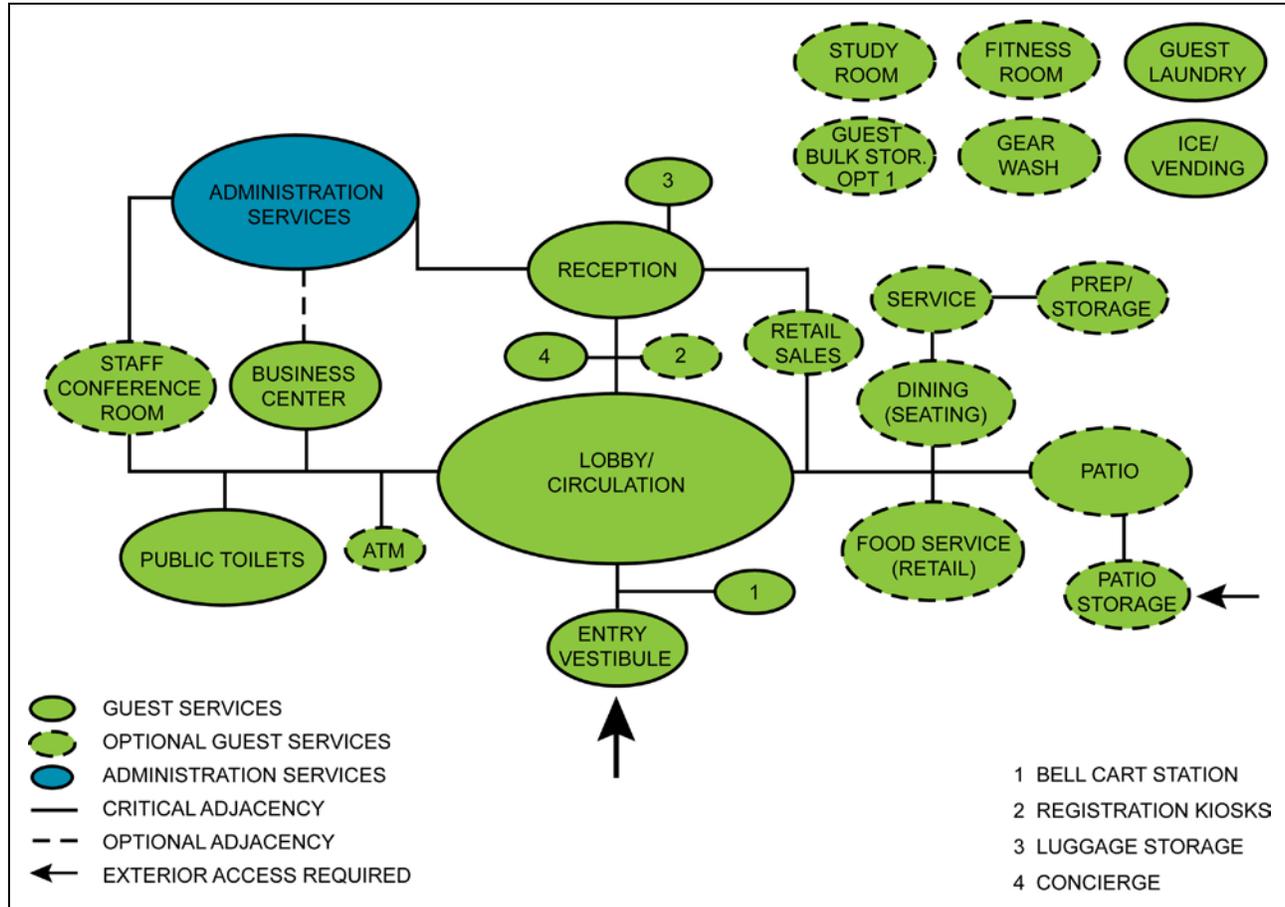
### **5-2 GUEST SERVICES.**

Guest services represent all the public guest spaces of the facility. Public spaces for guest services are critical to the quality level of the guest experience. Most of these spaces are either located in or around the central lobby area or are distributed among the guest rooms and suites.

5-2.1 Guest Services Layout.

Figure 5-1 indicates the acceptable relative adjacencies of the guest services spaces.

FIGURE 5-1. GUEST SERVICES ADJACENCY DIAGRAM



**5-2.2 Guest Services Design Criteria.**

Tables 5-1 through 5-25 provide the guest services specific design criteria in the FDS format. Table 5-52 provides the FF&E for these spaces.

**TABLE 5-1. COVERED ENTRY**

<b>Description/ Usage</b>	This is the primary entrance for guests and visitors.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	NA.
<b>Interior Construction/ Built-in Equipment</b>	NA
<b>Finishes</b>	<b>Floor.</b> Paved..  <b>Ceiling.</b> Painted exposed structure.
<b>Plumbing</b>	None required.
<b>HVAC</b>	NA
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	NA.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	NA
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	NA

**TABLE 5-2. ENTRANCE VESTIBULE**

<b>Description/ Usage</b>	This is the primary entrance for guests and visitors.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Antiterrorism-compliant automated glass doors with infrared sensor operation.
<b>Interior Construction/ Built-in Equipment</b>	Provide a recessed or lay-down walk-off mat.
<b>Finishes</b>	<b>Walls.</b> Aluminum store front glazing system at front and back at a minimum. <b>Floor.</b> Stone or porcelain tile. <b>Base.</b> Match floor. <b>Ceiling.</b> Painted exposed structure or gypsum wall board.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> If inner doors will be locked during non-business hours, provide a house phone or intercom. <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage of the vestibule and exterior entrance. <b>CATV.</b> None required. <b>Security.</b> If doors will be locked during non-business hours, provide an electronic card key access reader locking door.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Provide an airlock as required by local climate. If the facility includes a reception desk, ensure desk is visible from the entrance and vice versa.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-3. CENTRAL LOBBY**

<b>Description/ Usage</b>	The central lobby provides a comfortable seating/waiting area near or directly adjacent to the main entrance and open-feeling circulation between reception and guest services. Along with those spaces, this area serves as the interior architectural focal point of the facility and should feel warm and inviting.
<b>Ceiling Ht.</b>	10 ft. (3.1m) minimum over open areas. Vary the ceiling height to help define spaces and coordinate with other lobby and guest service areas.
<b>Windows/Doors</b>	Provide windows or glazed storefront on at least one wall of the entire lobby/guest services area.
<b>Interior Construction/ Built-in Equipment</b>	Provide built-in features such as planters, seating, a fireplace, and railings to enhance the design and define the areas. Provide vinyl corner guards. Provide wall or ceiling TV mount(s).
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Also see Chapter 3, Interior Design, for wall material guidance. <b>Floor.</b> Stone or porcelain tile and inset commercial-grade carpet and pad. Tile shall have .125-in (3 mm) grout joints. <b>Base.</b> Stained wood or stone/tile to match floor. <b>Ceiling.</b> Painted exposed structure or gypsum wall board with dropped soffits to define areas.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 20 fc (215 lux) general ambient and 50 fc (540 lux) at the seating area. Coordinate the lighting and interior design. Use recessed compact fluorescent downlights for general lighting with cove, wall sconces, decorative pendant, chandelier, or other indirect lighting as accents.
<b>Communication</b>	<b>Telephone.</b> House phone. <b>Data.</b> Provide a minimum of one jack at the seating area and Wi-Fi service throughout the lobby. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> As an option, provide one outlet for a wall- or ceiling-mounted TV. <b>Security.</b> None required.
<b>Acoustics</b>	Provide features to minimize reverberation time and control noise. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facility structure.
<b>Special Requirements</b>	Develop a professional wayfinding plan that is coordinated with the interior design and provides directions to guest services, public amenities, and guest rooms by room number.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-4. SATELLITE LOBBY**

<b>Description/ Usage</b>	The satellite lobby provides a seating/waiting area near or directly adjacent to the main entrance and an enhanced circulation space that gives a sense of welcome and entry to the minimum-service satellite facilities.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	Provide vinyl corner guards.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Also see Chapter 3, Interior Design, for wall material guidance. <b>Floor.</b> Porcelain tile or other resilient flooring. <b>Base.</b> Coordinate with floor finish. <b>Ceiling.</b> Painted exposed structure or gypsum wall board with dropped soffits to define areas.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 20 fc (215 lux) general ambient and 50 fc (540 lux) at the seating area. Coordinate the lighting and interior design.
<b>Communication</b>	<b>Telephone.</b> As an option, provide a house phone. <b>Data.</b> Provide a minimum of one jack at the seating area and Wi-Fi service throughout. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	Provide features to minimize reverberation time and control noise. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facility structure.
<b>Special Requirements</b>	Develop a professional wayfinding plan that is coordinated with the interior design and provides directions to guest services, public amenities, and guest rooms by room number.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-5. RECEPTION**

<b>Description/ Usage</b>	Reception accommodates check-in/check-out, other guest services and the administrative functions of the front desk staff.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum. Vary the ceiling height to help define spaces and coordinate with other lobby and guest service areas.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	The reception/front desk will be custom designed for each project, ABA-compliant, and coordinated with the interior design of the entire lobby area. The transaction top and credenza work surfaces shall be solid surface material and the under counter areas shall be enclosed with built-in cabinetry. Coordinate the design with all power, data, and telephone wiring systems and ensure adequate ventilation of computer equipment. See Chapter 3, Interior Design, for overall design, color and finish guidance.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Also see Chapter 3, Interior Design, for wall material guidance. <b>Floor.</b> Match lobby in front of counter and provide commercial grade carpet and pad behind the counter. <b>Base.</b> Coordinate with floor finish. <b>Ceiling.</b> Gypsum wall board with dropped soffits over the counter to define areas.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux). Use recessed compact fluorescent down lights for soffit and general illumination behind counter.
<b>Communication</b>	<b>Telephone.</b> Provide two jacks per workstation. <b>Data.</b> Provide two jacks per workstation. <b>CCTV.</b> Provide outlets for camera coverage of front and back of counter. Provide for monitors viewable from behind the counter but not in front. <b>CATV.</b> None required. <b>Security.</b> Provide a duress alarm at each workstation with direct connection to the supporting police/security authority.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Ensure easy access to a facsimile machine and a photocopier by the front desk staff. Door bell at receiving will sound here.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-6. CONCIERGE**

<b>Description/ Usage</b>	Optional area for a staff member to meet with guests and provide assistance on transportation and local activities.
<b>Ceiling Ht.</b>	Coordinate with central lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Coordinate with central lobby. <b>Floor.</b> Coordinate with central lobby. <b>Base.</b> Coordinate with central lobby. <b>Ceiling.</b> Coordinate with central lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack. <b>Data.</b> Provide one jack. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	The concierge desk should be clearly visible from the reception area and lobby.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-7. BELL CART STATION**

<b>Description/ Usage</b>	Provides storage for bell carts when not in use.
<b>Ceiling Ht.</b>	Coordinate with central lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Coordinate with central lobby. Provide impact resistant wall board up to 48 in (1220 mm) above finished floor and provide wall bumper guards. <b>Floor.</b> Coordinate with central lobby. <b>Base.</b> Coordinate with central lobby. <b>Ceiling.</b> Coordinate with central lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	This area should be clearly visible from the exterior entrance and the reception area.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-8. COFFEE BAR**

<b>Description/ Usage</b>	The optional coffee bar provides a small area for self-service coffee directly off the central lobby in facilities without other food service options.
<b>Ceiling Ht.</b>	Coordinate with central lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	Solid-surface counter with lockable base cabinets. Coffee machine.
<b>Finishes</b>	<b>Walls.</b> Coordinate with central lobby. <b>Floor.</b> Hard surface flooring that is coordinated with central lobby. <b>Base.</b> Coordinate with central lobby. <b>Ceiling.</b> Coordinate with central lobby.
<b>Plumbing</b>	Provide a connection to a coffee machine.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a minimum of one counter-height duplex outlet.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-9. FOOD SERVICE – SERVICE**

<b>Description/ Usage</b>	The optional food service area is a small, self-service area that is typically limited to breakfast. It is directly off of the lobby and may act as an extension of the entire lobby area. It is broken down into three sub-areas: Service where the food is served, dining where patrons sit to eat, and prep/storage where the food is prepared. This table describes the service area.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum. Vary the ceiling height to help define spaces and coordinate with other lobby and guest service areas.
<b>Windows/Doors</b>	Swinging door with a vision panel and a deadbolt lock to the prep/storage area.
<b>Interior Construction/ Built-in Equipment</b>	Solid-surface service counters with lockable base cabinets. Coffee machine.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wall board. Provide a solid-surface or resilient tile backsplash at the counter. <b>Floor.</b> Porcelain tile with .125-in (3 mm) grout joints. <b>Base.</b> Porcelain tile or stained wood. <b>Ceiling.</b> Coordinate with central lobby.
<b>Plumbing</b>	Provide water supply and drains for coffee machine and juice machine (if included). Provide a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Ensure adequate counter-height outlets to power anticipated equipment such as coffee and juice machines, warming plates/lights, self-service microwave and toaster.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux) general ambient and 50 fc (540 lux) at the counters.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	The service area should be clearly visible from the dining area, but provide a sense of separation between the two spaces. Staff servicing the area should have visual control over the entire service and dining areas.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-10. FOOD SERVICE – DINING**

<b>Description/ Usage</b>	The optional food service area is a small, self-service area that is typically limited to breakfast. It is directly off of the lobby and may act as an extension of the entire lobby area. It is broken down into three sub-areas: Service where the food is served, dining where patrons sit to eat, and prep/storage where the food is prepared. This table describes the dining area.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum. Vary the ceiling height to help define spaces and coordinate with other lobby and guest service areas.
<b>Windows/Doors</b>	Provide windows or glazed storefront on at least one wall.
<b>Interior Construction/ Built-in Equipment</b>	Provide a wall or ceiling TV mount. Coordinate seating with FF&E and provide a bar/counter seating area and/or table seating.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wall board. <b>Floor.</b> Porcelain tile with .125-in (3 mm) grout joints or commercial carpet and pad. <b>Base.</b> Porcelain tile or stained wood. <b>Ceiling.</b> Coordinate with central lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux) general ambient.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> Provide Wi-Fi service throughout. <b>CCTV.</b> None required. <b>CATV.</b> Provide a minimum of one outlet for wall- or ceiling-mounted TV(s). <b>Security.</b> None required.
<b>Acoustics</b>	Provide features to minimize reverberation time and control noise. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facility structure.
<b>Special Requirements</b>	The dining area should be clearly visible from the lobby areas and reception, but provide a sense of separation between the spaces.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-11. FOOD SERVICE – PREP/STORAGE**

<b>Description/ Usage</b>	The optional food service area is a small, self-service area that is typically limited to breakfast. It is directly off of the lobby circulation and may act as an extension of the entire lobby area. It is broken down into three sub-areas: Service where the food is served, dining where patrons sit to eat, and prep/storage where the food is prepared. This table describes the prep/storage area. Food preparation is typically limited to thawing and staging with minimal to no scratch preparation.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	Lockable swinging door with vision panel to the receiving area or service corridor.
<b>Interior Construction/ Built-in Equipment</b>	Provide minimum 24-in.- (610-mm-) deep stainless steel countertop, metal cabinets and wire shelves for food, utensil, equipment and supply storage. Commercial ice maker. Under-counter commercial-grade dishwasher, if scoped.
<b>Finishes</b>	<b>Walls.</b> Epoxy or semi-gloss or better latex painted mold-resistant gypsum wall board. Food prep areas will have ceramic tile with dark-colored epoxy grout or FRP panels. The walls shall be impact resistant up to 48 in. (1220 mm) from finished floor. <b>Floor.</b> Porcelain tile with epoxy grout. <b>Base.</b> Porcelain tile. <b>Ceiling.</b> High humidity-rated, ceramic-faced acoustical ceiling panels (ACP).
<b>Plumbing</b>	Food service scope will vary by location. Depending on final scope of food service, comply with the required codes and consider the following requirements: a hand-washing sink at each entrance; a two-compartment food preparation sink; commercial-grade dishwasher, a three-compartment, deep dishwashing sink with a gooseneck faucet and 180-F (82-C) hot water booster. The hot water booster shall also connect to the heavy-duty, commercial-grade dishwasher. Lodging prep areas will typically use grease interceptors in lieu of central grease traps to service individual equipment. Locate them to be easily accessible for cleaning, be located outside of food preparation areas, and not project above the floor in open walkways or work areas. At a minimum, provide one hand-washing sink, a separate two-compartment sink, a connection for an ice maker, and a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Perform a power requirement survey as this area's power requirements are extremely site- and locale-specific. Provide a dedicated electrical circuit for the cold storage.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack. <b>Data.</b> Provide one jack. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Electronic door lock to receiving/service corridor if available.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-12. RETAIL FOOD SERVICE**

<b>Description/ Usage</b>	Optional space (may be contract operation) that can range from a small coffee bar/kiosk to a full-service restaurant. Coordinate design, finishes and amenities with the service provider.
<b>Ceiling Ht.</b>	Coordinate with service provider.
<b>Windows/Doors</b>	Coordinate with service provider.
<b>Interior Construction/ Built-in Equipment</b>	Coordinate with service provider.
<b>Finishes</b>	<b>Walls.</b> Coordinate with service provider. <b>Floor.</b> Coordinate with service provider. <b>Base.</b> Coordinate with service provider. <b>Ceiling.</b> Coordinate with service provider.
<b>Plumbing</b>	Coordinate with service provider. Provide separate metering.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide separate metering.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Coordinate with service provider. <b>Data.</b> Coordinate with service provider. <b>CCTV.</b> Coordinate with service provider. <b>CATV.</b> Coordinate with service provider. <b>Security.</b> Coordinate with service provider.
<b>Acoustics</b>	Coordinate with service provider.
<b>Special Requirements</b>	Coordinate with service provider.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-13. RETAIL SALES**

<b>Description/ Usage</b>	Optional area directly adjacent to reception and providing display space for retail items such as pre-packaged food, beverages, sundries, and small gifts.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	Counter with lockable base cabinets and display shelving. Provide a service counter open to behind the reception counter where the point of sale (POS) will reside.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wall board. <b>Floor.</b> Match lobby circulation. <b>Base.</b> Stained wood. <b>Ceiling.</b> Gypsum wall board or ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide dedicated circuits to refrigerated/freezer display cases.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Locate the POS equipment in the reception area.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-14. LUGGAGE STORAGE**

<b>Description/ Usage</b>	Secure room for limited storage of guest luggage. While this room is included under guest services, it is not publicly accessible and is directly adjacent to the reception staff areas.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Provide 24-in.-deep (610-mm) heavy-duty shelving on all walls. Provide 30 in. (760 mm) of vertical space between shelves.
<b>Finishes</b>	<b>Walls.</b> Painted impact-resistant gypsum wall board or CMU. <b>Floor.</b> Vinyl composition tile (VCT) or match lobby. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-15. ATM**

<b>Description/ Usage</b>	Optional area or alcove directly off of the lobby with space for an automated teller machine (ATM).
<b>Ceiling Ht.</b>	Coordinate with lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Coordinate with lobby. <b>Floor.</b> Coordinate with lobby. <b>Base.</b> Coordinate with lobby. <b>Ceiling.</b> Coordinate with lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> Provide one jack. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	The ATM should be clearly visible from the reception area. Review requirement for CCTV coverage.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-16. REGISTRATION MACHINES**

<b>Description/ Usage</b>	Optional area or alcove directly off of the lobby with space for one or more registration machine(s).
<b>Ceiling Ht.</b>	Coordinate with lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Coordinate with lobby. <b>Floor.</b> Coordinate with lobby. <b>Base.</b> Coordinate with lobby. <b>Ceiling.</b> Coordinate with lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> Provide one jack for each machine. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	In central facilities, the registration machine(s) should be clearly visible from the reception area.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-17. PUBLIC TOILETS**

<b>Description/ Usage</b>	Male and female public toilets directly off the central lobby with an optional electric water cooler. Satellite facilities shall only have a single unisex toilet.
<b>Ceiling Ht.</b>	9 ft. (2.74 m) minimum.
<b>Windows/Doors</b>	Entrance doors. Unisex toilet shall have a door lockable from the inside.
<b>Interior Construction/ Built-in Equipment</b>	Solid-surface countertop with either under-mount or integral sinks. Solid composite or phenolic core toilet and urinal partitions. Toilet accessories: toilet paper dispensers, automatic paper towel dispenser, built-in trash receptacle, robe hooks, grab bars, sanitary napkin disposal and purse shelf (female water closet stalls), automatic soap dispensers, and optional seat cover dispensers. Full-width mirror over vanity. Fold-down diaper changing table/station in both the male and female toilets.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished mold-resistant gypsum wallboard with a ceramic tile wainscot. Use a dark-colored grout. <b>Floor.</b> Porcelain tile. Use a dark-colored grout. <b>Base.</b> Porcelain tile. <b>Ceiling.</b> Finished mold-resistant gypsum wall board.
<b>Plumbing</b>	Provide automatic flush-valve wall-hung water closets and urinals, and 18-in (455 mm) minimum, automatic lavatories based on the applicable code. Provide a floor drain outside of the internal circulation paths. As an option, provide a keyed hose bibb. Provide an electric water cooler near the entrance to the toilets.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure. <b>Service Exception:</b> For Air Force, provide a system per Chapter 3, General, and HVAC; use the continuous exhaust requirements per ASHRAE 62.1, table 6-4; and provide negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-18. DSN PHONES**

<b>Description/ Usage</b>	Optional area or alcove directly off of the lobby with space for one or more Defense Switched Network (DSN) phones.
<b>Ceiling Ht.</b>	Coordinate with lobby.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Coordinate with lobby. <b>Floor.</b> Coordinate with lobby. <b>Base.</b> Coordinate with lobby. <b>Ceiling.</b> Coordinate with lobby.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one compliant jack for each DSN phone. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-19. FITNESS ROOM**

<b>Description/ Usage</b>	Optional area with several fitness machines for guest use.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entrance door with a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Provide a minimum of one wall or ceiling TV mount. Provide an 8-ft.- (2.4m) high mirror covering one full wall. Provide an interior window to the corridor at 42 in. (1070 mm) above finished floor, a minimum of 36 in. (915 mm) high, and a minimum of 10 ft. <sup>2</sup> (.93 m <sup>2</sup> ) total window area.
<b>Finishes</b>	<b>Walls.</b> Finished double-layer (impact side) gypsum board. <b>Floor.</b> Resilient seamless rubber sheet flooring. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	Provide either an electric water cooler or a bottle water cooler (FF&E).
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. In addition, provide 68 F (20 C) minimum, 74 F (23 C) maximum, less than 50% relative humidity, 20 cfm/person outside air and use CO <sub>2</sub> sensors to control outside air. Provide multi-speed ceiling fans. <b>Service Exception:</b> For Air Force, provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide flush-floor outlets for commercial-grade equipment sized appropriately for equipment spacing. Provide outlet(s) for wall- or ceiling-mounted televisions.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> House phone. <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> Provide outlet(s) for wall or ceiling mounted TV(s). Coordinate with selected fitness equipment to accommodate equipment with built-in or attached TVs. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-20. CONFERENCE ROOM**

<b>Description/ Usage</b>	Optional room used by guests or staff for meetings.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	Lockable entrance door(s) with a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Provide an 8-ft. (2.4m) minimum length built-in counter with lockable base cabinets. Provide a retractable overhead screen, a ceiling projector mount, and a wall-mounted dry-erase board.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber, carpet or wood. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a ceiling outlet for a projector.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. Consider dimming capability.
<b>Communication</b>	<b>Telephone.</b> Provide a house phone and one jack on each of three walls and a minimum of one centrally-located floor jack. <b>Data.</b> Provide two jacks in a single box on each of three walls, a minimum of one centrally-located floor jack, and a ceiling jack for the projector. Provide Wi-Fi service. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> Provide one outlet. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 50 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-21. BUSINESS CENTER**

<b>Description/ Usage</b>	Optional area that includes computers and office equipment for guest use. This may be a small area or alcove off of the lobby with a single computer or a separate room with multiple computers/workstations.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	Lockable entrance door, as required.
<b>Interior Construction/ Built-in Equipment</b>	Provide a 24-in. (610-mm) deep counter with cord cut-outs and grommets and knee space. Provide lockable cabinets and shelving. Note that CPUs will be stored in the lockable cabinets to preclude customer access.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide a minimum of two jacks in a single box. <b>Data.</b> Provide a minimum of two jacks in a single box and coordinate with final equipment schedule. Provide Wi-Fi service <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 50 per Chapter 3, Acoustics.
<b>Special Requirements</b>	If this is an alcove off of lobby circulation, provide visual control from reception. If it is a separate room, consider providing a staff entrance from the administrative areas to facilitate supervision and technical support/assistance.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-22. STUDY ROOM**

<b>Description/ Usage</b>	Optional room(s) used by guests for small group study sessions and meetings.
<b>Ceiling Ht.</b>	8 ft. (2.4m) minimum.
<b>Windows/Doors</b>	Lockable entrance door with a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Provide a wall-mounted marker board.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide a house phone and one jack on each of three walls and a centrally-located floor jack. <b>Data.</b> Provide two jacks in a single box on each of three walls and a centrally-located floor jack. Provide Wi-Fi service. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> Provide one outlet. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-23. GUEST LAUNDRY**

<b>Description/ Usage</b>	Self-service laundry for guests. Depending on facility size and mission, this may be either a single centralized room or rooms per every floor. If centralized, the room shall not be located directly off the lobby circulation areas. Laundry on the guest room floors shall be located off the guest corridors and near the vertical circulation, if possible.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entrance door with a large vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Provide large, heavy-duty, residential washers and dryers. Provide removable covers to conceal the plumbing connections and a spacer between the dryers and the wall to preclude the dryer vent from become compressed due to dryer movement. Provide a wall TV mount and a tack board.
<b>Finishes</b>	<b>Walls.</b> Epoxy-painted, moisture-resistant gypsum board. <b>Floor.</b> Porcelain tile. <b>Base.</b> Porcelain tile. <b>Ceiling.</b> Moisture-resistant ACP.
<b>Plumbing</b>	Provide connections to the washers, one drain per washer with solid interceptors, and one additional floor drain. In PCS facilities provide a laundry sink with a solid interceptor and goose-neck faucet,
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. In addition, provide 20 C (68 F) minimum, 27 C (80 F) maximum. Provide straight-run vents to the outside for the dryers. Provide a minimum of six air changes per hour, 50 to 60% relative humidity, and negative pressure. <b>Service Exception:</b> For Air Force, provide a system per Chapter 3, General, and HVAC. Provide straight-run vents to the outside for the dryers. Provide ventilation in accordance with ASHRAE 62.1-2010, table 6-1, Hotels, Motels, Resorts, Dormitories-laundry rooms, central.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide concealed outlets for currency change machine and laundry vending, if provided as powered equipment (see Table 5-52).
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> As an option, provide a house phone. <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> As an option, provide an outlet for wall-mounted TV. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 54 per Chapter 3, Acoustics. Partitions between the laundry room and a guest room or suite shall have a minimum STC rating of 60 per Chapter 3, Acoustics.
<b>Special Requirements</b>	Mount utility connections 36 in. (915 mm) above finished floor and ensure easy access for maintenance. Consider Wi-Fi for laptop use while waiting for laundry.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-24. GEAR WASH**

<b>Description/ Usage</b>	Optional area used by guests coming in from field exercises to clean their personal equipment. This is typically only included at school/training Installations. Locate this room at a secondary, ground floor building entry.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entrance door with a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Epoxy-painted, moisture-resistant gypsum board. <b>Floor.</b> Sealed concrete. <b>Base.</b> 4-in. (100 mm) ceramic tile. <b>Ceiling.</b> Moisture-resistant ACP.
<b>Plumbing</b>	Three deep, stainless steel wash sinks with flexible nozzles, one hose bibb, and floor drains with sediment traps located to ensure proper drainage.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Provide a minimum of 12 air changes per hour, 50 to 60% relative humidity, and negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux).
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-25. GUEST BULK STORAGE, OPTION 1**

<b>Description/ Usage</b>	Optional self-service areas used by PCS guests to store luggage and other bulky items.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entrance door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in, heavy-gauge wire cages with closers that allow for use of individual padlocks. Each cage shall enclose 25 ft. <sup>2</sup> (2.3 m <sup>2</sup> ) and have 14 linear ft. (4.3 m) of durable wall-mounted shelving.
<b>Finishes</b>	<b>Walls.</b> Epoxy-painted, impact-resistant gypsum board. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP or exposed structure.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux).
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Access passageways to cages shall be a minimum of 6 ft. (1.8 m) wide to facilitate movement of items. Distribute rooms among guest rooms on multiple floors and locate near suites, if possible. These may be adjacent to guest laundry with access from the laundry rooms.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-26. VENDING/ICE**

<b>Description/ Usage</b>	Self-service drink, snack and ice vending area for guests. A minimum of one area per floor, located off the guest corridors and near the vertical circulation, if possible. First-floor vending area shall be recessed off a hallway and easily accessible from both the lobby and the first-floor guest rooms. These areas may be combined with the guest laundry—see Special Requirements.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	None required.
<b>Interior Construction/ Built-in Equipment</b>	Commercial ice dispenser sized at 300 lbs (136 kg) per 200 guests.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Porcelain tile. <b>Base.</b> Porcelain tile. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	Provide a connection to the ice machine and a floor drain positioned under the ice machine and out of view.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Ensure adequate ventilation to support the equipment.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Confirm power/outlet requirements with machine manufacturer.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 10 fc (110 lux).
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	Provide partition construction with a minimum STC rating of 52 per Chapter 3, Acoustics. Partitions between vending/ice and a guest room or suite shall have a minimum STC rating of 60 per Chapter 3, Acoustics.
<b>Special Requirements</b>	If combined with the guest laundry, provide the plumbing, power, and ventilation requirements to support the selected equipment. If only one area is provided per floor, locate centrally.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-27. PATIO**

<b>Description/ Usage</b>	Optional exterior patio for guest use.
<b>Ceiling Ht.</b>	Not applicable.
<b>Windows/Doors</b>	Not applicable.
<b>Interior Construction/ Built-in Equipment</b>	Not applicable.
<b>Finishes</b>	<b>Walls.</b> Not applicable. <b>Floor.</b> Patterned/textured concrete, stone or brick pavers. <b>Base.</b> Not applicable. <b>Ceiling.</b> Not applicable.
<b>Plumbing</b>	Provide a hose bibb. Provide a gas connection to a grill if availability and budget permit.
<b>HVAC</b>	Not applicable.
<b>Fire Protection and Life Safety</b>	Not applicable for uncovered patios. Fire protection may be applicable if patio is covered.
<b>Power</b>	Provide exterior outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. Provide .5 fc (11 Lux) with energy efficient outdoor light fixtures.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> Provide Wi-Fi service. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	Not applicable.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-28. PATIO STORAGE**

<b>Description/ Usage</b>	Only available with a patio, this room or shed accommodates storage of seasonal items, as needed based on climate.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entry door with a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Painted concrete/CMU or gypsum wallboard. <b>Floor.</b> Sealed concrete. <b>Base.</b> None required. <b>Ceiling.</b> None required.
<b>Plumbing</b>	None required.
<b>HVAC</b>	None required.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-29. GUEST CORRIDORS/CIRCULATION**

<b>Description/ Usage</b>	The public horizontal and vertical circulation paths.
<b>Ceiling Ht.</b>	8 ft. 4 in. (2.5 m) minimum.
<b>Windows/Doors</b>	Maximize natural light in corridors. Windows can be located at corridor ends and/or at corners and intersections.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	See Chapter 3, Interior Design, for color and finish guidance. <b>Walls.</b> Finished gypsum wallboard. Provide impact-resistant wall construction up to a minimum height of 48 in. (1220 mm) above finished floor. Provide a chair rail, surface-mounted corner guards, and a vinyl bumper rail to protect walls from housekeeping carts. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Carpet, wood or tile. <b>Ceiling.</b> Painted gypsum wall board or ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Consider added outlets for housekeeping.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. Provide an average of 10 fc (110 lux) through a combination of wall sconces and recessed compact fluorescent downlights.
<b>Communication</b>	<b>Telephone.</b> As an option, provide house phones at elevator lobbies. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required. See Special Requirements for elevator acoustical criteria.
<b>Special Requirements</b>	Corridors shall be a minimum width of 6 ft. (1.8 m). <b>Elevators.</b> Coordinate the elevator interior with the lobby area design and provide a durable, non-porous, solid-surface wall finish such as high-pressured laminate. Provide stainless steel cart rails and doors (interior and exterior). Minimum load capacity shall be 2,500 lbs (1135 kg), minimum opening shall be 42 in. (1070 mm), and minimum speed shall be 150 ft/min (45.7m/min). Consider faster, traction-type elevators for buildings above five floors. Partitions between the elevators and elevator equipment rooms and guest rooms or suites shall a minimum STC rating of 60 per Chapter 3, Acoustics.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

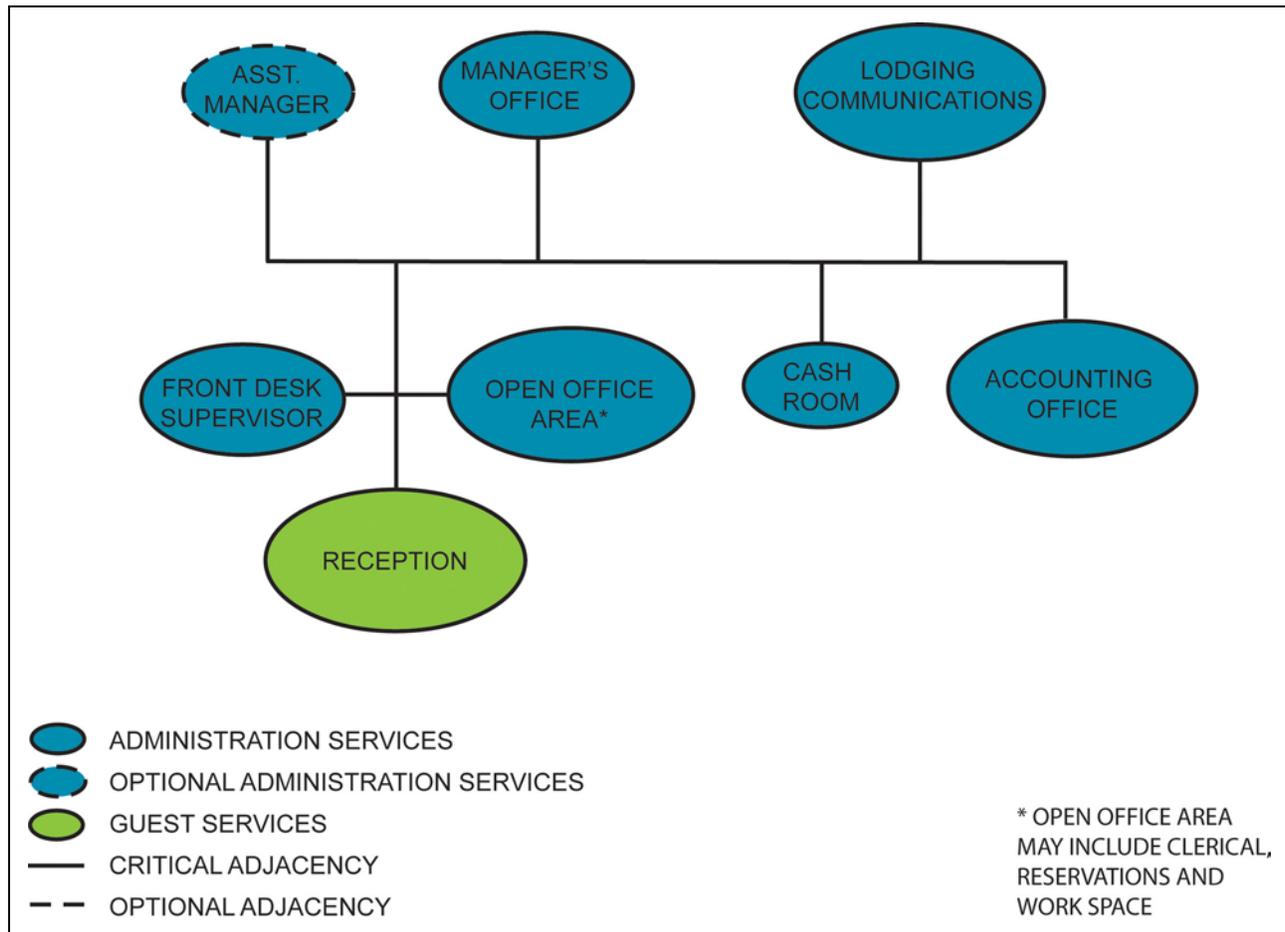
**5-3 ADMINISTRATIVE SERVICES.**

Staff administrative spaces support the overall administration of the facility and/or Installation program. They are typically located adjacent to/behind reception. Design to minimize staff circulation through guest services areas.

**5-3.1 Administrative Services Layout.**

Figure 5-2 indicates the acceptable relative adjacencies of the guest services spaces.

**FIGURE 5-2. ADMINISTRATIVE SERVICES ADJACENCY DIAGRAM**



**5-3.2 Administrative Services Design Criteria.**

Tables 5-29 through 5-32 provide the guest services specific design criteria in the FDS format. Table 5-52 provides the FF&E for these spaces.

**TABLE 5-30. LODGING COMMUNICATIONS**

<b>Description/ Usage</b>	IT communications room includes guest and staff internet, television, and administration file server.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	NA.
<b>Finishes</b>	<b>Walls.</b> Paint. <b>Floor.</b> Concrete. <b>Base.</b> None required. <b>Ceiling.</b> Painted exposed structure or gypsum wall board.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Locking passage door.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	NA.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff access only.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	No minimum required.

**TABLE 5-31. PRIVATE ADMINISTRATIVE OFFICES**

<b>Description/ Usage</b>	The number of private offices will vary by facility and Installation depending on the program and other, existing resources. Offices will vary in size as well. The following private offices may be included in a LF: manager, assistant manager, and front desk supervisor/superintendent.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door. Provide exterior windows if possible.
<b>Interior Construction/ Built-in Equipment</b>	Provide a coat hook on the door and wall-mounted tack and/or marker boards. In the front desk supervisor office provide a one-way window with a view of the front desk and lobby areas.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a minimum of one duplex outlet per wall and one additional duplex outlet at the desk location.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide two jacks in a single box adjacent to the desk duplex outlet. <b>Data.</b> Provide two jacks in a single box adjacent to the desk duplex outlet. <b>CCTV.</b> In the front desk supervisor office provide for a monitor. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-32. ACCOUNTING OFFICE**

<b>Description/ Usage</b>	Depending on the size of the facility and Installation program, this may be an office for one or two people or an open-office area for up to five accounting staff.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entrance door. Provide exterior windows if possible.
<b>Interior Construction/ Built-in Equipment</b>	As an option, provide a wall-mounted tack and/or marker board.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide three duplex outlets per workstation and additional outlets as needed for shared office equipment.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide two jacks in a single box per workstation. Provide additional jacks as necessary for shared equipment. <b>Data.</b> Provide two jacks in a single box per workstation. Provide additional jacks as necessary for shared equipment. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-33. OPEN OFFICE AREA**

<b>Description/ Usage</b>	This is an open office work area that accommodates workstations for clerical and reservations staff, administrative storage, and general work space. It may accommodate shared equipment such as photocopiers, facsimile machines, and printers or those may be in a separate area (see Special Requirements below).
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entrance door. Provide exterior windows if possible.
<b>Interior Construction/ Built-in Equipment</b>	As an option, provide wall-mounted tack and/or marker boards as appropriate.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Also see Special Requirements.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide three duplex outlets per workstation and additional outlets as needed for shared office equipment.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide two jacks in a single box per workstation. Provide additional jacks as necessary for shared equipment. <b>Data.</b> Provide two jacks in a single box per workstation. Provide additional jacks as necessary for shared equipment. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	If possible, separate shared equipment such as printers and photocopiers into a dedicated space that will meet the requirements for indoor environmental quality LEED® credits. Regardless, this shared equipment shall be easily accessible by front desk and administrative staff. The front desk staff in particular must be able to access this equipment quickly to minimize time away from guests.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-34. CASH ROOM**

<b>Description/ Usage</b>	This secure room is used by front desk staff to reconcile shift cash functions, including balancing cash drawer and making deposits.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Provide a 24-in- (610mm) deep counter with upper cabinets. Provide a three-drawer (minimum) secure cash drawer rack that is permanently affixed to wall and has an individual lock on each drawer. Coordinate sizing of this rack with the front desk cash registers. Provide a drop cash safe with a tumbling drum.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack located below counter. <b>Data.</b> Provide two jacks in a single box located below counter. <b>CCTV.</b> Provide outlets for full camera coverage. <b>CATV.</b> None required. <b>Security.</b> Electronic card key access reader. Provide a duress alarm that sounds at the Installation Security Office. The agencies identified in Chapter 1, Contacts, may waive this requirement.
<b>Acoustics</b>	No special provision required.
<b>Special Requirements</b>	Walls shall extend to bottom of deck above for security.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**5-4 FLOOR SUPPORT.**

Floor support spaces are staff areas located on each floor of guest rooms and suites in support of those rooms. Tables 5-33 through 5-35 provide the floor support specific design criteria in the FDS format. Table 5-52 provides the FF&E for these spaces.

**TABLE 5-35. JANITOR AREAS**

<b>Description/ Usage</b>	Janitor closets located in a central location on each floor. Some building configurations may require two closets on each floor. This space may be combined with the housekeeping closets on the guest room floors.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for mops and brooms.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted, moisture-resistant gypsum wall board or CMU. <b>Floor.</b> Stained and sealed concrete or porcelain tile. <b>Base.</b> Rubber. <b>Ceiling.</b> None.
<b>Plumbing</b>	Provide a mop sink and a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Provide negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-36. HOUSEKEEPING AREAS**

<b>Description/ Usage</b>	Rooms located in a central location on each floor. Some building configurations may require two housekeeping areas on each floor. These rooms store the housekeeping carts, guest amenities, clean linens for the rooms served, and accommodate temporary storage of dirty linens. This space may be combined with the janitor closets on the guest room floors.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for mops and brooms.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted, moisture-resistant gypsum wall board or CMU. <b>Floor.</b> Stained and sealed concrete or porcelain tile. <b>Base.</b> Rubber. <b>Ceiling.</b> None.
<b>Plumbing</b>	Provide an optional service connection to a dishwasher. If any water source is present, provide a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-37. UTILITY ROOMS**

<b>Description/ Usage</b>	Mechanical, electrical, communications, and sprinkler rooms located on each floor as needed for efficient utility distribution. The majority of these rooms will be switch closets to accommodate data pulls, CATV pulls and boosters, and telephone pulls. Those rooms shall be no more than 280 ft. (85.4m) from any guest room.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door. Size doors to allow future equipment removal.
<b>Interior Construction/ Built-in Equipment</b>	Built-in equipment racks.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted, gypsum wall board or CMU. <b>Floor.</b> Stained and sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> None.
<b>Plumbing</b>	In mechanical equipment rooms only, provide one hose bibb and floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Switch closets require individual temperature and humidity control per equipment requirements. Do not duct return air from any adjacent space through the communication room.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> As required for system. <b>Data.</b> As required for system. <b>CCTV.</b> None required. <b>CATV.</b> As required for system. <b>Security.</b> See Special Requirements.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics. Mechanical rooms or rooms with noise-generating equipment that are located adjacent to guest rooms or suites shall have partition construction with a minimum STC rating of 60 per Chapter 3, Acoustics.
<b>Special Requirements</b>	The main, first floor electrical room and the mechanical rooms shall be accessible from both the exterior and the interior. Do not combine switch closets with the mechanical rooms and minimize the potential for water damage in the switch closets—do not locate valves, connections, cleanouts, drain traps or similar joints within or directly above the switch closets. Do not co-locate high-power electrical systems in the switch closets due to potential signal interference. Ensure that facility staff will have access (through the key card system) to the facility communications equipment.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

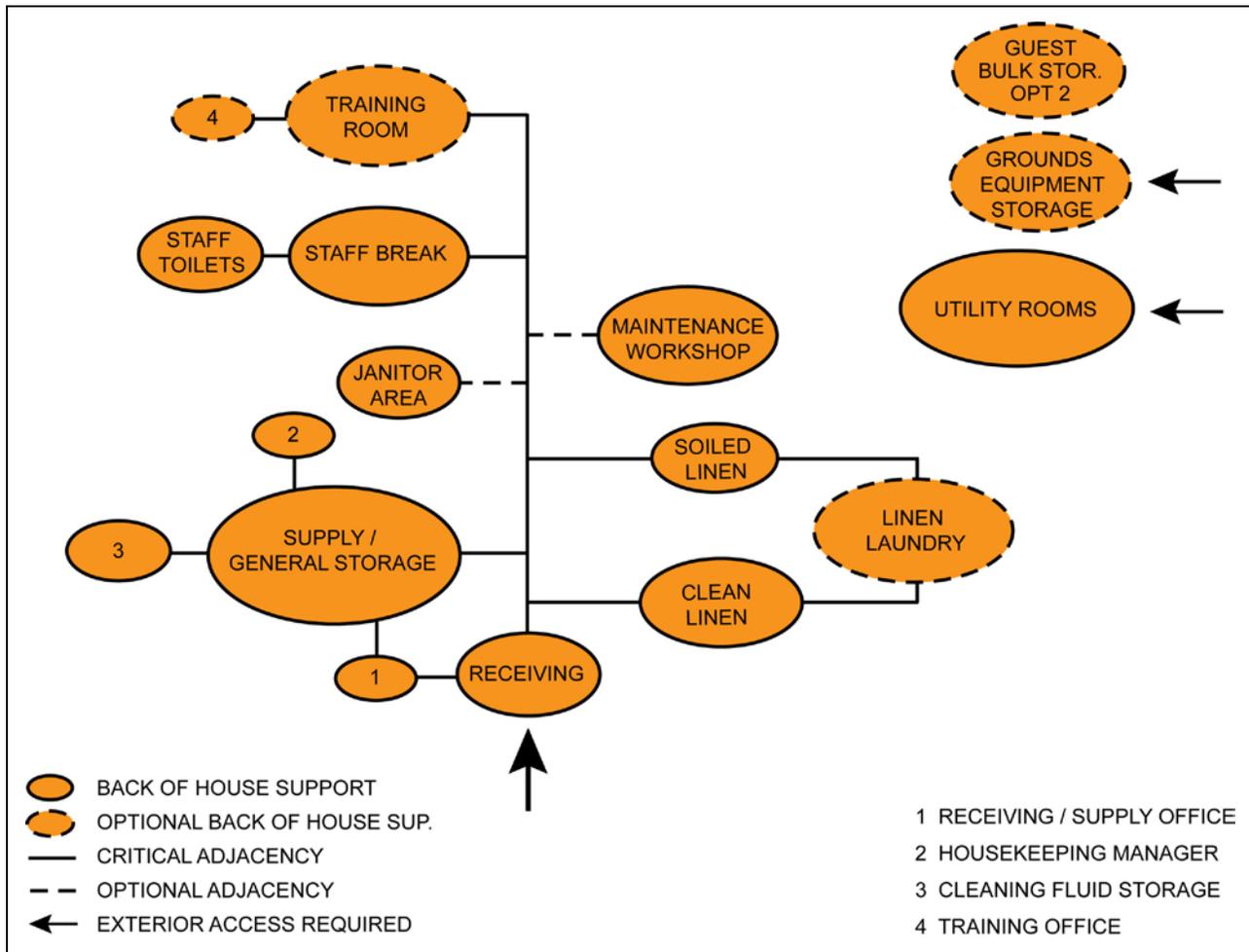
**5-5 BACK-OF-HOUSE SUPPORT.**

Back-of-house support spaces are staff-only areas—typically limited to the first floor—that provide facility and staff support functions.

**5-5.1 Back-of-house Support Layout.**

Figure 5-3 indicates the acceptable relative adjacencies of the back-of-house support spaces.

**FIGURE 5-3. BACK-OF-HOUSE SUPPORT ADJACENCY DIAGRAM**



**5-5.2 Back-of-house Support Design Criteria.**

Tables 5-36 through 5-51 provide the back-of-house support specific design criteria in the FDS format. Table 5-52 provides the FF&E for these spaces.

**TABLE 5-38. TRAINING ROOM**

<b>Description/ Usage</b>	Optional dedicated room for staff training.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door with a small vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Provide a secure cabinet for AV equipment. Provide a retractable overhead screen, a ceiling projector mount, and a wall-mounted marker board.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Wood or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a ceiling outlet for a projector. Also provide floor outlets in a center core.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. Consider dimming capability.
<b>Communication</b>	<b>Telephone.</b> Provide one jack on each wall and floor jacks in a center core. <b>Data.</b> Provide two jacks in a single box on each wall, floor jacks in a center core, and a ceiling jack for the projector. <b>CCTV.</b> None required. <b>CATV.</b> Provide one outlet. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-39. TRAINING OFFICE/STORAGE**

<b>Description/ Usage</b>	This optional space may be used for storage of staff training supplies or for both administration of the staff training program and storage of supplies.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Finished gypsum wallboard. <b>Floor.</b> Commercial grade carpet and pad. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a minimum of one duplex outlet per wall and, if serving an administrative function, one additional duplex outlet at the desk location.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> If serving an administrative function, provide two jacks in a single box adjacent to the desk duplex outlet. <b>Data.</b> If serving an administrative function, provide two jacks in a single box adjacent to the desk duplex outlet. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-40. JANITOR AREA**

<b>Description/ Usage</b>	Central janitor closet(s) serving the first floor public and staff spaces and including additional supply storage.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for mops and brooms.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted, moisture-resistant gypsum wall board or CMU. <b>Floor.</b> Sealed and stained concrete or porcelain tile. <b>Base.</b> Rubber. <b>Ceiling.</b> None.
<b>Plumbing</b>	Provide a mop sink and a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Provide negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-41. HOUSEKEEPING OFFICE**

<b>Description/ Usage</b>	This is a private office for the housekeeping manager and housekeeping assistant to conduct administrative and staff management functions.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wall board. <b>Floor.</b> Carpet or VCT. <b>Base.</b> Rubber or carpet. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a minimum of one duplex outlet per wall, one additional duplex outlet at the desk location, and one additional duplex outlet at the time clock location.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide two jacks in a single box adjacent to the desk duplex outlet. <b>Data.</b> Provide two jacks in a single box adjacent to the desk duplex outlet. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
<b>Special Requirements</b>	The timeclock is installed on the wall outside the office immediately adjacent to the entry door.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-42. SOILED/CLEAN LINEN STORAGE**

<b>Description/ Usage</b>	Separate, distinct storage areas for soiled and clean linen storage. Both shall be adjacent to receiving and/or optional linen laundry.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door with a small vision panel.
<b>Interior Construction/ Built-in Equipment</b>	24-in. (610 mm) deep, heavy-duty, built-in shelving.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted gypsum wall board or CMU. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP or none.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 15 fc (160 lux) average.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	The soiled linen storage consists primarily of space for storage of laundry carts and open floor space for sorting. The clean linen storage consists primarily of storage shelving.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-43. RECEIVING**

<b>Description/ Usage</b>	Central receiving area for deliveries with a loading dock.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Provide an exterior pedestrian door with electronic lockset and a small vision panel. At a minimum, provide double doors from the dock to the interior. As an option, provide an electrically-operated, insulated overhead coiling door at the dock.
<b>Interior Construction/ Built-in Equipment</b>	Loading dock width shall be capable of accommodating a single city delivery truck at minimum, and depth shall be 60 in. (1525 mm) minimum. Provide stairs to the ground level, a manual dock leveling mechanism, and dock bumpers. Provide roof overhang protection of the dock.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted impact-resistant gypsum wallboard or CMU. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP or none.
<b>Plumbing</b>	Provide one hose bibb and a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide one duplex outlet per wall.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux) from recessed fluorescent fixtures.
<b>Communication</b>	<b>Telephone.</b> Provide a house phone or exterior speaker at the entrance gate and/or dock exterior. As an option, provide one jack (ganged with data in single box) located adjacent to a duplex outlet at the interior of the loading dock. <b>Data.</b> As an option, provide one jack (ganged with phone in single box) located adjacent to a duplex outlet at the interior of the loading dock. <b>CCTV.</b> Provide outlets for camera coverage of the dock and access gate. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Provide a door bell adjacent to the house phone/speaker that sounds at the interior receiving area and reception. Coordinate loading dock size and height with anticipated delivery vehicles. This area may serve as the primary employee entrance.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-44. RECEIVING/SUPPLY OFFICE**

<b>Description/ Usage</b>	Small optional private office adjacent to receiving and supply/general storage area for administration of maintenance staff, inventory and deliveries.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable half-lite entry door.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wallboard. <b>Floor.</b> VCT. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a minimum of one duplex outlet per wall with an additional duplex outlet at the desk location.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack (ganged with data in single box) at the desk location. <b>Data.</b> Provide one jack (ganged with phone in single box) at the desk location. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Door bell at receiving will sound here.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-45. LINEN LAUNDRY**

<b>Description/ Usage</b>	This optional space accommodates the in-house laundry of all bed linens and towels.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Lockable entry door with a small vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Large, high capacity industrial extractors and dryers—coordinate dryer size/quantity to ensure appropriate turn-over. Extractors must be mounted on vibration-isolated concrete foundations. Provide a built-in table for folding laundry and storage shelves/lockers. In larger facilities/programs or when permanent-press-type linens with a crease-resistant finish are not available, evaluate the need for a pressing/folding machine. Provide optional high-speed commercial-grade ceiling fans.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted CMU or mold-resistant gypsum wallboard. Provide rub rails, and metal/high-impact plastic corner guards. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> Moisture-resistant ACP.
<b>Plumbing</b>	Provide connections to the extractors, a stainless steel laundry sink with a solid interceptor and goose-neck faucet, an emergency eye wash station, one drain per washer with solid interceptors, and one additional floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Provide separate straight-run vents to the outside for the dryers. Provide a minimum of six air changes per hour, 50 to 60% relative humidity, and negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide a wall-mounted safety disconnect switch for each extractor.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
<b>Special Requirements</b>	This room shall be located on the first floor of the facility. Allow 36 in. (915 mm) from each machine to the wall to accommodate venting, maintenance, and product delivery systems.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-46. SUPPLY/GENERAL STORAGE/CLEANING FLUID STORAGE**

<b>Description/ Usage</b>	Provides warehousing and accessible storage for everything from spare furniture and TVs to consumable goods and operational supplies. Approximately 80% of the area is secured warehousing storage and the remaining 20% is accessible for daily restocking. The two areas may be combined in one large room or in two separate rooms (see Interior Construction). Provide a separate adjacent area for storage of cleaning fluids.
<b>Ceiling Ht.</b>	10 ft. (3.1 m) minimum. 12-16 ft. (3.7-4.9 m) typical.
<b>Windows/Doors</b>	Lockable entry door.
<b>Interior Construction/ Built-in Equipment</b>	Provide a minimum of 200 linear ft. (610m) of 30-in.- (760 mm) deep heavy duty shelving. Shelving shall be designed to support 300 lbs. (136 kg) over 7 ft. (2.1m). The lowest shelf shall be mounted 6 in. (150 mm) above finished floor. Provide a full-height, lockable cage to divide the warehousing section from the accessible storage or these may be two separate rooms.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted CMU or impact-resistant gypsum wall board. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> None required.
<b>Plumbing</b>	Cleaning fluid storage shall include an emergency eye wash station and a floor drain.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Cleaning fluid storage shall include negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Ensure open floor area for packing/unpacking activities and that there is space to accommodate queen size mattresses and furniture storage. The separate area for storage of cleaning fluids shall meet LEED® requirements.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-47. GUEST BULK STORAGE, OPTION 2**

<b>Description/ Usage</b>	This optional secure room accommodates storage of guest's larger, bulkier items, such as bicycles, steamer trunks, etc. It is typically only provided in facilities that accommodate long-term stays and only when budget permits. Locate it on the ground floor near a secondary public entrance.
<b>Ceiling Ht.</b>	9 ft. (2.7m) minimum.
<b>Windows/Doors</b>	Lockable entrance door.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Epoxy-painted CMU or impact-resistant gypsum board. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP or exposed structure.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 30 fc (325 lux).
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	This is not a self-service space. Staff will accompany guests and provide access to the space.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-48. BREAK AREA**

<b>Description/ Usage</b>	The primary function of this space is a staff lounge/break area with a kitchenette and lockers. In central facilities this area can also dual-function as a staff meeting/training area. It is directly adjacent to the staff toilets. In satellite facilities, it serves the staff break functions only.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Provide windows or other means of natural light if possible. If an entry door is included, provide a vision panel.
<b>Interior Construction/ Built-in Equipment</b>	Half-height, double-stacked lockers per full staff count (not only on-duty). Provide solid-surface counter at kitchenette with upper and base cabinets and under-counter dishwasher. <b>Army</b> provides a prefabricated Kitchenette unit. <b>Air Force</b> provides a range with exhaust hood at OCONUS facilities. TV wall mount, tackboard, and lockable bulletin board. In central facilities when this area will function as a staff meeting/training area, provide a ceiling projector mount and a retractable overhead screen.
<b>Finishes</b>	<b>Walls.</b> Painted gypsum wall board with ceramic backsplash at the kitchenette. <b>Floor.</b> Provide a high-quality resilient or hard-surface flooring. <b>Base.</b> Coordinate with flooring. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	Provide an under-mount stainless steel, kitchen sink with a gooseneck single lever faucet and a disposal. Provide connections to the refrigerator ice maker and the coffee machine. As an option, provide a dishwasher. For <b>Army</b> , provide service to the prefabricated kitchenette unit.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> Provide one jack (ganged with data in single box). <b>Data.</b> Provide one wall jack (ganged with phone in single box) and a ceiling jack adjacent to the projector mount, if provided. Provide Wi-Fi service throughout. <b>CCTV.</b> None required. <b>CATV.</b> Provide one outlet for wall-mounted TV. <b>Security.</b> Electronic card key access reader, if applicable.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-49. STAFF TOILETS**

<b>Description/ Usage</b>	Male and female staff toilets directly adjacent to the staff break area.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Entrance doors.
<b>Interior Construction/ Built-in Equipment</b>	Solid-surface countertop with either underhung or integral sink. Solid composite or phenolic core toilet and urinal partitions. Toilet accessories: toilet paper dispensers, automatic paper towel dispenser, built-in trash receptacle, robe hooks, grab bars, sanitary napkin disposal and purse shelves (female water closet stalls), seat cover dispensers, and automatic soap dispensers. Full-width mirror over countertop.
<b>Finishes</b>	<b>Walls.</b> Finished mold-resistant gypsum wallboard with a ceramic tile wainscot. Use a dark-colored grout. <b>Floor.</b> Porcelain tile with integral patterns. Use a dark-colored grout. <b>Base.</b> Porcelain tile. <b>Ceiling.</b> Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum wall board.
<b>Plumbing</b>	Provide automatic flush-valve wall-hung water closets and urinals, and automatic lavatories based on the applicable code. Provide a floor drain. Provide a keyed hose bibb.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure. <b>Service Exception:</b> For Air Force, provide a system per Chapter 3, General, and HVAC; use the continuous exhaust requirements per ASHRAE 62.1, table 6-4; and provide negative pressure.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-50. MAINTENANCE WORKSHOP**

<b>Description/ Usage</b>	A general work room for repair of equipment and furnishings.
<b>Ceiling Ht.</b>	10 ft. (3.1 m) minimum.
<b>Windows/Doors</b>	Double, lockable entrance doors.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for tools. Built in workbenches. Provide built-in tools/equipment as necessary based on the maintenance program.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted CMU or impact-resistant gypsum wallboard. <b>Floor.</b> Sealed concrete. <b>Base.</b> Rubber. <b>Ceiling.</b> None required.
<b>Plumbing</b>	Plumbing requirements shall accommodate the specific maintenance program. Needs may include a handwashing sink, emergency eyewash station, a hose bibb, and floor drains to ensure drainage.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Coordinate ventilation requirements with the selected equipment.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General. Coordinate power requirements and outlet locations with equipment to ensure adequate circuits and correct outlet locations. Provide a minimum of two 240 volt outlets.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 50 fc (540 lux) general lighting and 75 fc (810 lux) task lighting at the workstations.
<b>Communication</b>	<b>Telephone.</b> Provide one jack (ganged with data in a single box) on each wall. <b>Data.</b> Provide one jack (ganged with telephone in a single box) on each wall. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
<b>Special Requirements</b>	Scope of maintenance activities can vary significantly based on program. Carefully coordinate power, HVAC, and equipment requirements.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-51. GROUNDS EQUIPMENT STORAGE**

<b>Description/ Usage</b>	Optional small shed or closet in <b>Navy</b> and <b>Air Force</b> facilities with direct exterior access for storage of grounds and exterior building maintenance supplies and equipment.
<b>Ceiling Ht.</b>	9 ft. (2.7 m) minimum.
<b>Windows/Doors</b>	Lockable entrance door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for tools.
<b>Finishes</b>	<b>Walls.</b> Semigloss enamel painted CMU. <b>Floor.</b> Sealed concrete. <b>Base.</b> None required. <b>Ceiling.</b> None required.
<b>Plumbing</b>	Provide an exterior hose bibb.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Coordinate any specific requirements with the equipment to be stored.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety. Coordinate any specific requirements with the equipment to be stored.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide one duplex outlet per wall.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 15 fc (160 lux)
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	If this is provided as a separate structure, the exterior architecture shall match the main lodging facility.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-52. GROUNDS EQUIPMENT STORAGE (ARMY)**

<b>Description/ Usage</b>	Army space with direct exterior access for storage of grounds and exterior building maintenance supplies and equipment.
<b>Ceiling Ht.</b>	9 ft. (2.7 m) minimum.
<b>Windows/Doors</b>	Lockable personnel door and 8 ft. x 8 ft. (2.4m x 2.4m) manually-operated, insulated overhead door.
<b>Interior Construction/ Built-in Equipment</b>	Built-in shelving and wall brackets for tools.
<b>Finishes</b>	<b>Walls.</b> Semigloss enamel painted CMU. <b>Floor.</b> Sealed concrete. <b>Base.</b> None required. <b>Ceiling.</b> None required.
<b>Plumbing</b>	Provide a utility sink, an emergency eyewash station, and a floor drain. Provide an exterior hose bibb.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC. Coordinate any specific requirements with the equipment to be stored.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety. Coordinate any specific requirements with the equipment to be stored.
<b>Power</b>	Provide outlets per Chapter 3, General. Provide one duplex outlet per wall.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 15 fc (160 lux)
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> Door electronic card key access reader.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	If this is provided as a separate structure, the exterior architecture shall match the main lodging facility.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**TABLE 5-53. SERVICE CIRCULATION**

<b>Description/ Usage</b>	Staff horizontal and vertical circulation paths between back-of-house support areas.
<b>Ceiling Ht.</b>	8 ft. (2.4 m) minimum.
<b>Windows/Doors</b>	Provide heavy-duty swinging doors between the service corridors and public spaces.
<b>Interior Construction/ Built-in Equipment</b>	None required.
<b>Finishes</b>	<b>Walls.</b> Epoxy painted CMU or impact-resistant gypsum wallboard. Provide bumper rails and corner guards. <b>Floor.</b> Stained and sealed concrete or VCT. <b>Base.</b> Rubber. <b>Ceiling.</b> ACP.
<b>Plumbing</b>	None required.
<b>HVAC</b>	Provide a system per Chapter 3, General, and HVAC.
<b>Fire Protection and Life Safety</b>	Provide systems per Chapter 3, General, and Fire Protection and Life Safety.
<b>Power</b>	Provide outlets per Chapter 3, General.
<b>Lighting</b>	Provide system per Chapter 3, General, and Lighting. 20 fc (215 lux) average.
<b>Communication</b>	<b>Telephone.</b> None required. <b>Data.</b> None required. <b>CCTV.</b> None required. <b>CATV.</b> None required. <b>Security.</b> None required.
<b>Acoustics</b>	No special provisions required.
<b>Special Requirements</b>	Corridors shall be a minimum width of 8 ft. (2.4 m). <b>Elevators.</b> Provide stainless steel cart rails and doors (interior and exterior) and provide wall hooks for grommets wall padding. Size the elevators to accommodate a king size mattress, housekeeping service cart, and a stretcher for medical emergencies. Minimum load capacity shall be 3,000 lbs (136 kg). Provide a key operated lock-down/hold feature.
<b>For use during project execution by the appropriate Service agency</b>	
<b>Occupancy</b>	Staff. Guests.
<b>Min. net ft<sup>2</sup> (m<sup>2</sup>)</b>	

**5-6 FURNISHINGS, FIXTURES AND EQUIPMENT.**

Coordinate FF&E packages with the interior designer and follow the requirements noted in Chapter 3, Interior Design. To assist planners and designers, Table 5-52 provides the general types of FF&E by Service for each space and indicates whether the item is CFCI, GFGI, or GFCE (F/I). Note that interior construction items such as toilet accessories, built-in shelving, cabinets, wall-mounts, and plumbed or attached equipment are included in the FDSs. Therefore, if a space has no FF&E, it is not included here.

**TABLE 5-54. FURNISHINGS AND EQUIPMENT**

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
<b>Guest Services</b>						
Entrance Vestibule	Newspaper racks	GFGI	Newspaper racks	GFGI	N/A	
Lobby	3-cushion sofa	GFGI	3-cushion sofa	GFGI	3-cushion sofa	GFGI
	Lounge chairs	GFGI	Lounge chairs	GFGI	Lounge chairs	GFGI
	Coffee table	GFGI	Coffee table	GFGI	Coffee table	GFGI
	End tables	GFGI	End tables	GFGI	End tables	GFGI
	Table lamps	GFGI	Table lamps	GFGI	Table lamps	GFGI
	Area rugs	CFCI	Area rugs	GFGI	N/A	
	Brochure rack	GFGI	Brochure rack	GFGI	Brochure rack	GFGI
	Artwork and plants	GFGI	Artwork and plants	GFGI	Artwork	GFGI
	N/A		N/A		Accent table	GFGI
Reception	Keycard encoders	CFCI	Keycard encoders	GFGI	Keycard encoders	CFCI
	CCTV monitors	CFCI	CCTV monitors	GFGI	CCTV monitors	GFGI
	Artwork	GFGI	Artwork	GFGI	N/A	
	Telephones	GFGI	Telephones	GFGI	Telephones	GFGI
	Folio buckets	GFGI	Folio buckets	GFGI	N/A	
	Computers	GFGI	Computers	GFGI	Computer(s)	GFGI
	Printers	GFGI	Printers	GFGI	Printer(s)	GFGI
	Key box	CFCI	Key box	GFGI	N/A	
Concierge <sup>1</sup>	N/A		Desk	GFGI	N/A	
	N/A		Desk chair	GFGI	N/A	
	N/A		2 side chairs	GFGI	N/A	
	N/A		Telephone	GFGI	N/A	
	N/A		Computer	GFGI	N/A	
	N/A		Brochure rack	GFGI	N/A	
Bell Cart Station	Luggage carts	GFGI	Brass-plated luggage cart w/ 8-in (200mm) wheels and carpet	GFGI	Luggage carts	GFGI

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
Food Service (Service) <sup>1</sup>	Microwave(s)		Microwave(s)	GFGI	N/A	
	Toaster(s)		Toaster(s)	GFGI	N/A	
	Food display racks/cases		Food display racks/cases	GFGI	N/A	
	Refrigerated display case		Refrigerated display case	GFGI	N/A	
Food Service (Dining) <sup>1</sup>	Dining tables	GFGI	Dining tables	GFGI	N/A	
	Chairs	GFGI	Chairs	GFGI	N/A	
	Flat panel television	GFGI	Flat panel TV	GFGI	N/A	
Food Service (Prep/storage) <sup>1</sup>	Work/prep tables	CFCI	Work/prep tables	GFGI	N/A	
	Reach-in freezer	CFCI	Reach-in freezer	GFGI	N/A	
	Reach-in refrigerator	CFCI	Reach-in refrigerator	GFGI	N/A	
Retail food service <sup>1</sup>	N/A		N/A		TBD by PVA <sup>2</sup>	GFCI
Retail sales <sup>1</sup>	N/A		N/A		Food display racks/cases	GFGI
	N/A		N/A		Refrigerated display case(s)	GFGI
	N/A		N/A		Wall mounted shelves	CFCI
	N/A		N/A		Merchandise display racks	GFGI
	N/A		N/A		Microwave	GFGI
ATM <sup>1</sup>	ATM machine	GFGI	ATM machine	GFGI	ATM machine	GFGI
Registration machines <sup>1</sup>	Registration machine(s)	GFGI	Registration machine(s)	GFGI	Registration machine(s)	GFGI
Fitness Room <sup>1</sup>	Treadmill	GFGI	Treadmill	GFGI	Treadmill	GFGI
	Elliptical cross-trainer	GFGI	Elliptical cross-trainer	GFGI	Elliptical cross-trainer	GFGI
	Chest press	GFGI	N/A		N/A	
	Shoulder press	GFGI	N/A		N/A	
	Rear delt-fly	GFGI	N/A		N/A	
	Flat panel television	GFGI	Flat panel TV	GFGI	Flat panel TV	GFGI
	Clean and dirty towel storage	GFGI	N/A		Clean and dirty towel storage	GFGI

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

<sup>2</sup> To be determined by the Project Validation Assessment (PVA) based on market conditions and mission requirements.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
Conference Room <sup>1</sup>	Conference table	GFGI	Conference table	GFGI	Conference table	GFGI
	Conference chairs	GFGI	Conference chairs	GFGI	Conference chairs	GFGI
	N/A		Projector	GFGI	Multi-media projector	GFGI
	N/A		Flip chart easel	GFGI	N/A	
	Credenza	GFGI	N/A		Credenza	GFGI
	Flat panel television	GFGI	N/A		Flat panel TV	GFGI
	VCR/DVD	GFGI	N/A		DVD	GFGI
Business Center <sup>1</sup>	Computers and printers	GFGI	Computers and printers	GFGI	Computer(s) and printer(s)	GFGI
	Desk chairs	GFGI	Desk chairs	GFGI	Desk chairs	GFGI
Study Room <sup>1</sup>	Credenza	GFGI	N/A		Mission dependant	GFGI
	Flat panel television	GFGI	N/A		Mission dependant	GFGI
	VCR/DVD	GFGI	N/A		Mission dependant	GFGI
	AV cabinet	GFGI	N/A		Mission dependant	GFGI
	House phones	GFGI	N/A		Mission dependant	GFGI
	Tables and chairs (10 ppl)	GFGI	Tables and chairs (10 ppl)	GFCI	Mission dependant	GFGI
Guest Laundry	Change machine	CFCI	Change machine	GFGI	N/A	
	Laundry vending	CFCI	Laundry vending	GFGI	Laundry vending	GFCI
	Flat panel television	GFGI	N/A		N/A	
	House phone	GFGI	N/A		N/A	
	Chairs	GFGI	N/A		Chairs (space permitting)	GFGI
	Laundry-folding table	GFGI	Laundry-folding table	GFGI	Laundry-folding table	GFGI
	N/A		N/A		Laundry carts	GFGI
Gear Wash <sup>1</sup>	Drying racks	CFCI	Drying racks	CFCI	N/A	
Vending <sup>1</sup>	Drink vending	GFGI	Drink vending	GFGI	N/A	
	Snack vending	GFGI	Snack vending	GFGI	N/A	
Patio <sup>1</sup>	N/A		Outdoor lounge seating	GFGI	N/A	
	N/A		Outdoor patio tables w/ umbrellas	GFGI	N/A	
	N/A		Gas grill	GFGI	N/A	
	N/A		Picnic tables	GFGI	N/A	
Patio Storage <sup>1</sup>	N/A		Per program	GFGI	N/A	
Guest corridors/ circulation (elevator lobbies)	Console tables	GFGI	Console tables	GFGI	N/A	
	Chairs	GFGI	Chairs	GFGI	Chairs or bench	GFGI
	Mirror	GFGI	Mirror	GFGI	Mirror	GFGI
	Artwork	GFGI	Artwork	GFGI	Artwork	GFGI

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
<b>Administration Services</b>						
Manager's office	Credenza	GFGI	Credenza	GFGI	N/A	
	Desk	GFGI	Desk	GFGI	Desk	GFGI
	Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
	Lateral file	GFGI	Lateral file	GFGI	Lateral file	GFGI
	Small conference table	GFGI	Small conference table	GFGI	N/A	
	4 conference chairs	GFGI	4 conference chairs	GFGI	N/A	
	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	Computer equipment	GFGI	Computer equipment	GFGI	Computer w/ peripherals	GFGI
	N/A		Bookcase	GFGI	Bookcase	GFGI
	N/A		N/A		Side chair	GFGI
Asst. manager's office <sup>1</sup>	Credenza	GFGI	Credenza	GFGI	N/A	
	Desk	GFGI	Desk	GFGI	Desk	GFGI
	Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
	Lateral file	GFGI	Lateral file	GFGI	Lateral file	GFGI
	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	Computer equipment	GFGI	Computer equipment	GFGI	Computer w/ peripherals	GFGI
	Side chair	GFGI	Side chair	GFGI	Side chair	GFGI
	N/A		Bookcase	GFGI	Bookcase	GFGI
Front desk supervisor	Credenza	GFGI	Credenza	GFGI	N/A	
	Desk	GFGI	Desk	GFGI	Desk	GFGI
	Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
	Side chair	GFGI	Side chair	GFGI	Side chair	GFGI
	Lateral file	GFGI	Lateral file	GFGI	Lateral file	GFGI
	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	Computer equipment	GFGI	Computer equipment	GFGI	Computer w/ peripherals	GFGI
	CCTV monitor	GFGI	CCTV monitor	GFGI	CCTV monitor	GFGI
	Key box	CFCI	Key box	GFGI	N/A	
	N/A		Bookcase	GFGI	Bookcase	GFGI
Accounting office	Modular workstations with side chairs	GFGI	Modular workstations with side chairs	GFGI	Desk(s) and desk and side chairs	GFGI
	Telephones	GFGI	Telephones	GFGI	Telephones	GFGI
	Computers	GFGI	Computers	GFGI	Computers	GFGI
	Key box	CFCI	Key box	GFGI	N/A	GFGI
	N/A		N/A		Lateral file(s)	GFGI
	N/A		N/A		Bookcase(s)	GFGI

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
Clerical	Modular workstation with side chair	GFGI	Modular workstation with side chair	GFGI	Desk(s) and desk and side chairs	GFGI
	Telephone	GFGI	Telephone	GFGI	Telephone(s)	GFGI
	Computer	GFGI	Computer	GFGI	Computer(s)	GFGI
	N/A		N/A		Lateral file(s)	GFGI
	N/A		N/A		Bookcase(s)	GFGI
Reservations <sup>1</sup>	Modular workstations with side chairs	GFGI	Modular workstations with side chairs	GFGI	Desk(s) and desk and side chairs	GFGI
	Telephones	GFGI	Telephones	GFGI	Telephone(s)	GFGI
	Computers	GFGI	Computers	GFGI	Computer(s)	GFGI
	Key box	CFCI	Key box	GFGI	N/A	
	N/A		N/A		Lateral file(s)	GFGI
Work space	Copier	GFGI	Copier	GFGI	Copier	GFGI
	Facsimile machine	GFGI	Facsimile machine	GFGI	Facsimile machine	GFGI
	Paper shredder	GFGI	Paper shredder	GFGI	Paper shredder	GFGI
	File cabinets	GFGI	File cabinets	GFGI	File cabinets	GFGI
	Work table	GFGI	Work table	GFGI	Work table	GFGI
Cash room	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	2 Desk chairs	GFGI	2 Desk chairs	GFGI	Desk chair(s)	GFGI
<b>Floor Support</b>						
Janitor Areas	Janitors cart		Janitors cart	GFGI	N/A	
Housekeeping Areas	Housekeeping cart	GFGI	Housekeeping carts	GFGI	Housekeeping carts	GFGI
	Vacuum cleaners	GFGI	Vacuum cleaners	GFGI	Vacuum cleaners	GFGI
<b>Back-of-House Support</b>						
Training Room <sup>1</sup>	N/A		N/A		Tables	GFGI
	N/A		N/A		Chairs	GFGI
	N/A		N/A		Flat Screen TV	GFGI
	N/A		N/A		DVD	GFGI
	N/A		N/A		Overhead projector	GFGI
Training Office <sup>1</sup>	Desk	GFGI	N/A		Desk	GFGI
	Desk chair	GFGI	N/A		Desk chair	GFGI
	Lateral file	GFGI	N/A		Lateral file	GFGI
	Side chair	GFGI	N/A		Side chair	GFGI
	Book shelves	GFGI	N/A		Book shelves	GFGI
	Computer	GFGI	N/A		Computer	GFGI
	Telephone	GFGI	N/A		Telephone	GFGI
Janitor Areas	Carpet extractor	GFGI	Carpet extractor	GFGI	N/A	
	High-speed buffer	GFGI	High-speed buffer	GFGI	N/A	

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
Housekeeping Manager	Desk	GFGI	Desk	GFGI	Desk	GFGI
	Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
	Credenza	GFGI	Credenza	GFGI	N/A	
	Lateral file	GFGI	Lateral file	GFGI	Lateral file	GFGI
	Side chair	GFGI	Side chair	GFGI	Side chair	GFGI
	Key box	GFGI	Key box	GFGI	Key box	GFGI
	2 storage cabinets	GFGI	2 storage cabinets	GFGI	2 storage cabinets	GFGI
	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	Computer	GFGI	Computer	GFGI	Computer	GFGI
	Time clock	GFCI	Time clock	GFGI	Time clock	GFCI
Soiled/Clean Linen Storage	Linen delivery carts	GFGI	Linen delivery carts	GFGI	Linen delivery carts	GFGI
Receiving	Hand/platform truck	GFGI	Hand/platform truck	GFGI	N/A	
Receiving/supply office <sup>1</sup>	Desk	GFGI	Desk	GFGI	N/A	
	Desk chair	GFGI	Desk chair	GFGI	N/A	
	Lateral file	GFGI	Lateral file	GFGI	N/A	
	Side chair	GFGI	Side chair	GFGI	N/A	
	Telephone	GFGI	Telephone	GFGI	N/A	
	Computer equipment	GFGI	Computer equipment	GFGI	N/A	
	Key box	CFCI	Key box	GFGI	N/A	
Linen Laundry <sup>1</sup>	Linen carts	GFGI	Laundry trucks	GFGI	N/A	
	Anti-static/antifatigue mat	GFGI	Anti-static/antifatigue mat	GFGI	N/A	
	Ironer/folding machine	CFCI	Ironer/folding machine	GFGI	N/A	
Break area	Flat panel television	GFGI	Flat panel TV	GFGI	Flat panel TV	GFGI
	Tables	GFGI	Tables	GFGI	Tables	GFGI
	Chairs	GFGI	Chairs	GFGI	Chairs	GFGI
	N/A		Refrigerator	GFGI	Refrigerator (full-size)	GFGI
	N/A		Microwave	GFGI	Microwave	GFGI
	N/A		Coffee machine	GFGI	Coffee machine	GFGI
N/A		Overhead projector	GFGI	N/A		

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

Functional Program Area	Army		Navy		Air Force	
	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I	Furnishings and Equipment	F/I
Maintenance Workshop	Desk	GFGI	Desk	GFGI	Desk	GFGI
	Desk chair	GFGI	Desk chair	GFGI	Desk chair	GFGI
	Lateral file	GFGI	Lateral file	GFGI	Lateral file	GFGI
	Chairs	GFGI	Chairs	GFGI	Chairs	GFGI
	Telephone	GFGI	Telephone	GFGI	Telephone	GFGI
	Computer	GFGI	Computer	GFGI	Computer	GFGI
	Work tables	GFGI	Work tables	GFGI	Work tables	GFGI
	Storage cabinets	GFGI	Storage cabinets	GFGI	Storage cabinets	GFGI
	Key box	CFCI	Key box	GFGI	Key box	GFGI
	N/A		N/A		Carpet extractor	GFGI
	N/A		N/A		High-speed buffer	GFGI
	N/A		N/A		Grounds equipment	GFGI
Grounds Equipment Storage <sup>1</sup>	Grounds equipment	GFGI	Grounds equipment	GFGI	N/A	
Service Circulation	Tracking mats at entrances	GFGI	Tracking mats at entrances	GFGI	Tracking mats at entrances	GFGI

<sup>1</sup> Optional space requiring approval of the agencies noted in Chapter 1, Contacts.

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### **U.S. GREEN BUILDING COUNCIL**

LEED™ Green Building Rating System, The United States Green Building Council, 1015 18th Street, NW, Suite 805, Washington, DC 20036, <http://www.usgbc.org/>

### **KITCHEN CABINET MANUFACTURERS ASSOCIATION**

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## **UNIFIED FACILITIES CRITERIA**

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UFC 3-600-01, Fire Protection Engineering for Facilities

UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings

## APPENDIX B BEST PRACTICES

### B-1 INTRODUCTION.

The following material identifies background information and other current, good design practices for LFs. The designer is expected to review and interpret this guidance and apply the information according to the needs of the project.

### B-2 PROJECT PLANNING.

#### B-2.1 Site Analysis Costs.

Project programmers must consider costs for the following:

- Preliminary soils analyses essential to determine whether extensive site work and foundation costs are required. Also, organic soil analyses for exterior landscape plant materials may be required.
- Local environmental and climatic conditions such as heavy snow loads, wind loads, high humidity, and extreme temperatures result in additional costs due to structural, and to a lesser extent, insulation requirements.
- Projects located in areas prone to seismic activity.
- Projects located in designated historic districts may incur additional cost in order to ensure compliance with historic preservation requirements.
- The Installation will fund site development costs to include cut/fill and other work necessary to make the site usable. The Installation will provide all NAF projects with a clean site up to 6 in. (150 mm) below grade in accordance with DoDI 1015.15. The Installation is responsible for supporting costs. This considers all work outside the 5-ft. (1525 mm) building line and includes site preparation, roads, utilities, landscaping demolition, etc.

### B-3 SITE DESIGN.

#### B-3.1 General Considerations.

##### B-3.1.1 Site Development.

The site plan is one of the more important elements of any project design and can greatly impact the overall success of the LF project. Involve the installation community planner, architect, landscape architect, and civil, mechanical, electrical, and communication engineers, and the organizations identified in Chapter 1, Contacts. Achieve spatial balance and scale through thoughtful placement and arrangement of structures, landscaping and landforms. Pay special attention to building orientation, mass and scale in developing the site plan.

### **B-3.1.2 Proximity to Common Use Areas.**

Although the emphasis in LF campus planning is to create a residential neighborhood atmosphere, somewhat separated from surrounding base administrative and mission related functions, proximity and access to common public use facilities are desired. The design of vehicular paths, pedestrian paths and landscape can help define layers of boundary around the lodging facility campus to provide this separation, but can also enhance the flow into and out of the adjacent community areas, such as the dry cleaners, post office, dining establishments, theatre, fitness center, enlisted dining facility, and clubs.

### **B-3.1.3 Adjacencies to Public Areas.**

Adjacent recreational spaces additionally enhance these layers of boundary and can buffer other non-desired areas or functions. Site planning and community planning will define an edge to the LF campus, while considering the importance of adjacent community and common public areas. Reference AFPAM 32-1010 for additional useful information and guidance on this subject.

### **B-3.1.4 Community Planning.**

Develop a sense of order, arrival, orientation and community in planning the site. To the extent possible, lodging structures must not be overwhelming in apparent size. Site lodging facilities in relationship to one another to create outdoor spaces for use as passive or active recreation areas. Overall room requirements and available acreage will establish the number of stories of a new LF facility. Any configuration needs to ensure an efficient use of available real estate, but may require additional fire protection, structural, and life safety costs associated with buildings over three stories in height. Locate industrial areas and spaces such as loading docks, mechanical rooms, electrical rooms, trash dumpsters, HVAC equipment toward the rear of the facility or otherwise away from the guest view.

### **B-3.1.5 Building Placement.**

Building placement and design should also take advantage of views that are scenic, pleasant, or interesting. Designers must be sensitive to the approaches to the facility and strive to create a clear sense of arrival for newcomers.

### **B-3.1.6 Climatic Considerations.**

LF design and building orientation must take advantage of local climatic conditions. Where practical, use passive solar construction techniques to reduce energy consumption. Local climate conditions must be considered as well as other site organization issues such as the creation of outdoor space, building scale or orientation to other facilities, when determining the best project site.

### **B-3.1.7 Natural Features.**

Site facilities should take advantage of the positive features of the site. Provide protection from undesirable winds and glare. Incorporate shading from excessive sun in warm climates. Solar gain and prevailing winds can enhance energy conservation and yield significant cost savings. Design roof overhangs to account for sun angles to provide solar shading. Achieve mutual shading by sensitively arranging adjacent structures. Avoid excessive east or west-facing glass and design for maximum cross-ventilation where feasible.

**B-3.2 Site Circulation.**

**B-3.2.1 Vehicular Access.**

Plan vehicular layout to eliminate, or at least minimize, the adverse impact of noise and headlights shining into guest room windows. Consider delivery truck access and required easements.

**B-3.2.2 Emergency Service.**

Reference Chapter 3, Fire Protection and Life Safety, for a minimum separation required between lodging facilities and the closest adjacent building. This separation is for fire protection purposes but may also be dictated by force protection requirements and local fire protection policies.

**B-3.2.3 Service Vehicles.**

Access drives and parking areas will be designed to accommodate service vehicles. Where interior court areas are proposed between adjoining lodging structures, consider designing the main pedestrian walks to accommodate such vehicles. When doing so, these walkways must be a minimum of 8 ft. (2.4m) wide and must be constructed using reinforced concrete to accommodate medium weight vehicles. Consider treating the walkways with a patterned concrete system to minimize the negative visual impact of the wider access route. Consider materials such as concrete grass road type pavers to provide access for infrequent service vehicles.

Consider installing removable bollards as needed to restrict unauthorized vehicle access. Where possible, separate service entrances associated with mechanical rooms or mechanical enclosures from guest parking areas.

**B-3.2.4 Bus Route Access.**

Where possible and appropriate, consider access to public transportation systems in project design. If the Installation provides bus service, designers will consider including shelters and walks to serve guest needs. Bus shelters must be compatible with the architectural style of existing buildings and guidelines established by the Installation.

**B-3.2.5 Pedestrian Access.**

Consider including links to jogging/biking trails as part of the site development process. In northern tier locations, consider the use of sidewalks above steam heat tunnels to keep walkways free of ice in the winter, or consider heated or covered walks in lieu of open corridors.

### **B-3.2.6 Bicycle Parking.**

Provide bicycle parking facilities within the lodging campus area as determined by the Installation and in accord with UFC 4-010-01. Racks will comply with base architectural guidelines. Provide all bicycle parking on concrete surfaces adjacent to sidewalks or first floor building corridors. If these areas are covered and screened from view of the general public, they must be located outside the force protection setback. Consider covered bicycle parking enclosed on a minimum of three sides in northern tier or highly corrosive environments. Consider lockable bicycle lockers, which maximize security and minimize visual clutter.

### **B-3.3 Site Considerations.**

#### **B-3.3.1 Finished Floor Elevation.**

Establishing the ground-level finished floor elevation of LF facilities is one of the more important aspects of site planning. The finished floor elevation affects grading, cut and fill, visual impact of the facility and interior-exterior transitions. In addition, the finished floor elevation has a significant impact on the landscape architect's ability to effectively introduce plant materials into the new environment.

Leveling the site without sensitivity to other demands results in barren sites that lack visual interest. The landscape architect, architect, and civil engineer must work closely together to achieve optimal design results.

#### **B-3.3.2 Grading.**

Grade the site to achieve an orderly transition from the point where guests enter the site by vehicle or on foot to the point where they are at the first floor entrance. Site grading must consider the impacts of the parking area, the lodging facility, bus-stop shelters, sidewalks, outdoor passive use areas, mechanical equipment, and trash dumpsters. Provide smooth transitions (no steps) at building entries. For renovation projects, make every effort to eliminate stairs to the facility. Where appropriate, use grading to control the negative visual impacts that these man-made facilities have on the visual environment. See the discussion of landforms below.

Lodging facilities tend to be linear and relatively narrow in configuration and therefore lend themselves to an orientation paralleling existing contours. Where on-site storm water retention is required, the location of retention areas must be carefully thought out in terms of function as well as visual impact. Use large water retention sites for outdoor recreation areas. Refer to UFC 3-210-10 for further storm water guidance.

#### **B-3.3.3 Landforms.**

Use landforms to soften the impact of parking on the landscape and to positively enhance force protection of the lodging facility campus. Use landforms such as mounds and swales in conjunction with landscape plant materials to soften or obscure the parking areas, provide spatial articulation, or enhance drainage structures or surface water retention areas. Use landforms to add interest and diversity to the project. In particular, landforms can perform an important function around outdoor activity areas by screening undesirable views.

#### **B-3.3.4 Storm Drainage.**

Depending on the geographic location and the availability of nearby subsurface storm drains, provide underground storm drainage for each lodging campus. All site water must either be intercepted in drop inlet structures or be designed to drop directly into a subsurface system. If subsurface storm drains are not available at the proposed site, include as part of the lodging facility project. As a minimum, divert surface water to an underground system to a point where it is discharged into above ground storm drains. Project funds will provide for appropriate surface water retention and erosion prevention, and will provide for drop inlets as necessary to intercept surface runoff and prevent walkways from being flooded.

#### **B-3.3.5 Utility Corridors.**

The site planner will develop underground utility corridors (easements) in coordination with the base community planner, electrical, mechanical, communication and civil engineers. Design corridors to accommodate future expansion. Place utility corridors no closer than one and one-half times the crown width of nearby mature trees or 35 ft. (10.7m), whichever is greater. Locate utility corridors to allow for future street-tree plantings. Consider using pipe tunnels and trenches.

### **B-3.4 Site Amenities.**

#### **B-3.4.1 Site Lighting.**

Site lighting is an integral part of any lodging project. Provide lighting to ensure occupants have a means of safely moving between outdoor spaces. All signage and lighting must be in compliance with the Installation's standards. The selection of materials and locations must be a joint decision between the landscape architect and the electrical engineer. Energy-efficient lamps such as high-pressure sodium with color correction ensuring optimum visual acuity are recommended for energy-conscious site lighting. Consider life-cycle costs of lamp replacement, though, when specifying fixture and lamp types.

Provide adequate site lighting at any point where there is a change in grade requiring steps, near accessible parking areas, under stairwells, and near main entrances to buildings. A lighted sign may be appropriate for night visitors. Use the recommendations of the referenced documents in Chapter 3, Electrical Design, to establish illumination levels. Design exterior lighting such that zero direct-beam illumination leaves the building site. Consider motion detection and photosensitive

sensors to achieve energy efficient lighting design. Additionally, consider a solar collection system if the geographical location of the lodging facility can support the required solar levels required.

#### **B-3.4.2 Outdoor Areas.**

Include outdoor passive and/or active use areas in all lodging campus plans. These features will include project-funded amenities such as walks, site lighting, landscaping, pavilions, and fencing (only if used to screen equipment or dumpsters enclosures). Where appropriate, design pavilions to become an integral part of the site. The pavilions must complement the architectural style and materials of the lodging. Consider additional amenities such as barbecue grills, tables, and benches.

#### **B-3.4.3 Sustainability.**

Incorporate sustainable design concepts into the lodging facility campus. Consider recycling centers and containers and other refuse issues when developing site design and landscaping. Coordinate locations of recycling and refuse containers with site furnishings and landscape to complement the campus and building design. Emphasize ease of use and service access to these containers. Army should comply with the USACE Army LEED Implementation Guide.

### **B-3.5 Landscape Architecture.**

#### **B-3.5.1 Landscape Site Design.**

Perform a site analysis that includes visual elements, hydrology, security, climatic conditions, topography, maintenance, existing vegetation, spatial and program analysis, soil quality, and circulation patterns. Consider these landscape design techniques and principles:

- **Enframement.** Use landscape elements to focus attention on important features by manipulating and placing tree masses and screening undesirable features.
- **Visual Separation.** Separate multiple buildings into framed units and arrange shrubs and small trees around a building to soften structural lines.
- **Spatial Articulation.** Use plant materials to create outdoor enclosed spaces, to separate spaces one from another, and to direct people through outdoor spaces by visually defining and reinforcing patterns of movement.
- **Visual Screening or Enhancement.** Use landscape elements to screen unattractive views of objects such as trash dumpster areas, pad mounted electrical transformers, parking areas, and mechanical utilities.
- **Wind Control.** Use landscape elements to control, slow, guide, deflect, or filter the prevailing winds.

- Sun Control. Use landscape elements around buildings, walkways, and parking areas to intercept direct and reflected radiation from buildings and parking.

### **B-3.5.2 Landscape Irrigation.**

Landscape with indigenous materials and plants to minimize irrigation needs. Consider irrigation systems for arid and semi-arid climatic regions. Use bubbler or drip irrigation systems adjacent to building facades to minimize impact of over spray. Provide all irrigation systems with solid-state automatic multi-station controllers, state-of-the-art control valves, and backflow preventers in accordance with building codes. Provide separate metering for the irrigation system.

In cold climates, locate backflow preventers in the mechanical room. Where freezing is not a problem, locate backflow preventers within screened mechanical enclosures. Include adjusting turf spray coverage, duration of watering cycles, repairing leaks, and general maintenance to ensure proper functioning during the maintenance period for all irrigation systems. Water conservation is a high-priority factor in development of the irrigation design. Take advantage of non-potable water if possible.

## **B-4 BUILDING DESIGN.**

Building design for LFs shall address needs for comfort while incorporating functional building systems. Comprehensive interior design is a critical component, ensuring appropriate finish, material, and furnishing selections. The goal is to provide a cohesive lodging campus reflecting a quality appearance, appropriately sited within the existing community, fulfilling functional and operational requirements, and addressing guest's needs.

### **B-4.1 Mass and Scale.**

Large lodging facilities often have a greater mass than many buildings on an Installation. Modulate the form and facade of these buildings with setbacks, repetitive details, and less dominant colors to soften their physical appearance and blend them in terms of form, proportion, and perceived size. Combine size, shape, proportion, repetition, and placement of design features such as fenestrations, roofs, and columns, etc., to project the architectural character and mass of a building. When planning the project, consider the possibility of future renovations or additions to minimize extensive changes.

Lodging facilities must provide a commercial hospitality environment with an architectural scale that imparts a clear sense of relative comfort, ease, and satisfaction. Architectural scale is defined as the comparative relationship of a structure or space to the human form to possess a human scale. Use relative proportions, height, form and volume of the building or space and its formal relationship to other buildings or spaces to achieve this sense of scale.

### **B-4.2 Architectural Compatibility.**

Despite its massive size, a lodging facility's architectural character must be in context with its surroundings. Architectural character is typically defined in the architectural compatibility standards available at most Installations.

### **B-4.3 Exterior Finish Materials.**

Select reliable, conventional building systems for lodging facilities, and use building materials and finishes that are durable and easy to maintain. Select architectural systems based on their aesthetics, simplicity, economic characteristics, and compliance with Installation architectural guidelines. Consider the benefits and limitations of brick, split face concrete block, and custom pre-finished tilt-up wall construction; they have been used successfully as primary exterior wall finishes. If allowed within Installation standards, brick or split-face block are the preferred exterior finishes. Consider the recycled content requirements for affirmative procurement of products included in the Environmental Protection Agency list of guideline items such as insulation, cement and concrete, latex paint, patio blocks, and structural fiberboard.

## **B-5 INTERIOR DESIGN.**

The interior design of LFs encompasses functional area requirements, relationships, and interior materials and finishes. Several basic lodging functions must be addressed during the design phase of any lodging project. Designers must fully understand the relationships between these interactive functions and take a holistic approach to creating a fully integrated facility:

- Residential. Guest rooms are residential. Activities include sleeping, resting and relaxation (television viewing, reading, etc), personal hygiene and grooming, personal cooking (microwave), and personal study.
- Guest Support. Guest support activities include reception, vending, laundry, retail sales, administration, guest business activities, secure luggage storage, small-scale food and beverage, and meeting/conference activities.
- Services. Service activities allow the facilities to operate efficiently and include back-of-house and guest support services. Back-of-house activities include utility services, maintenance, staff functions, housekeeping, bulk storage, linen storage, supply storage, delivery and refuse removal.

The interior design and architectural design of the facility must be in context with characteristics of the built environment of the local region. The interior design also has a direct impact on the quality of life for the guests.

### **B-5.1 Interior Design Services.**

Interior design shall comply with the Service-specific branding concepts that provide the finish and color requirements for each space. The agencies noted in Chapter 1, Contacts, shall provide the latest branding concept standards. See UFC 3-120-10 for further information on interior package requirements.

A budget is established for all FF&E. FF&E is specified to be durable, functional and aesthetically pleasing with cost and maintenance factors high in consideration. Interior designers must be diligent in staying within the budgeted amount for the entire furnishings package. Interior designers should refrain from one-of-a-kind or custom-made furnishings and lighting. In some instances, custom-sized case goods are required due to architectural constraints affecting the room layout; no special approval is required in these cases.

**B-5.2 Color and Materials Selection.**

Select materials to be long-lasting and durable to ease maintenance. Finishes and color scheme should provide a warm, inviting facility for guests.

**B-5.3 Interior Finishes.**

When selecting interior finishes, consider the recycled content requirements for affirmative procurement of products included in Environmental Protection Agency list of guideline items. Federal agencies must purchase products made with recycled materials unless these products do not meet technical requirements, are more expensive than comparable virgin material products, are not available competitively from two or more sources, or are not available in a timely manner. The items in this list related to interior design include carpet and cushion, latex paint, floor tiles, and shower and restroom dividers. This list changes as the Environmental Protection Agency adds new items every other year. The complete list of guideline items and their recycled content requirements is found on the Environmental Protection Agency website. Additionally, designers are encouraged to work with product manufacturers for other available products.

**B-5.3.1 Carpet.**

Consider new products with additional wear-ability and maintenance abilities, and consider recycled/recyclable goods.

**B-5.3.2 Walls.**

The use of natural materials such as stone on the interior can provide a durable finish and provide warmth and texture to the space and will be considered as part of the entrance/lobby area design. If budget allows, consider the use of a textured acrylic finish in common areas and guest rooms, providing a durable coating, rich in texture and easy to maintain.

**B-5.3.3 Ceilings.**

Lay-in acoustical tile ceiling systems with exposed suspended grid systems will be specified for use in administrative areas, business centers, and conference areas only, as they convey a nonresidential quality and are easily damaged. Avoid heavily textured acoustical treatments, including a sprayed popcorn ceiling application, which is difficult to patch.

Coordinate ceiling treatment with lighting selections. Consider varying ceiling heights and combination task and ambient lighting packages, especially in corridors and large areas, such as lobbies and conference rooms, to create interest. Emphasize natural light as much as possible. Consider the use of painted wood crown molding throughout primary guest support areas and in suites.

#### **B-5.4 Furniture Considerations.**

Coordinate with the Comprehensive Interior Design package during the design process. All case goods and hardware will be coordinated with the Structural Interior Design package for the project to ensure matching woods, stains, and finishes as best possible. Selection of materials and finishes for the main lobby area will accommodate heavy use.

#### **B-5.5 Signage, Artwork and Accessories.**

##### **B-5.5.1 Public Area Artwork.**

Provide artwork for all public areas. Coordinate with the installation and the organizations identified in Chapter 1, Contacts. Graphics presentation and content must be well designed, coordinated with the architecture and interior design packages, and compatible with the local geographical culture. All artwork shall be hung with security hangers. Silk plants are authorized for common areas.

##### **B-5.5.2 Accessibility in Signage.**

Interior signage will be in accordance with the installation sign standards, accessibility requirements defined in Chapter 3, Accessibility, and UFC 3-120-01. All interior signage will be funded as part of the LF project. Provide clearly visible unit room names and/or numbers for all guest support areas including main entrance signage and direction signage, service areas, and individual guest rooms and suites. Coordinate directional signage and individual guest room numbering schemes with the local lodging manager and base communications. Consider odd numbers on one side of the hallway and even numbers on the opposite side.

##### **B-5.5.3 Fixture Color and Finish Requirements.**

With the exception of emergency pull boxes, all speakers, electrical panel covers and access panel covers exposed to interior rooms, thermostat controls, fire extinguisher cabinets, hose boxes, electrical boxes, plumbing chase covers, etc. will have a factory finish to match the color of surrounding walls or ceiling as specified in the Structural Interior Design package. Standard factory finish colors may not be acceptable.

#### **B-5.6 Equipment Considerations.**

- Coordinate the use and location of recycling centers throughout the common areas to complement the interior design while supporting sustainability guidance.

- All appliance colors should be coordinated with the FF&E. The construction contractor or design/build contractor will submit cut/datasheets of proposed equivalents/substitutions appliances for review/approval.
- Purchase appliances meeting Energy Star program standards and specifications as included in this guide. Qualifying products are listed on the Energy Star website.

## **B-6 BUILDING SYSTEMS.**

### **B-6.1 Energy Performance.**

Sustainable energy efficient performance in lodging facilities cannot be achieved solely by individual building systems but must be supplemented by other design factors. Comply with UFC 3-400-01. Design factors such as mechanical systems and management controls selection, thermal insulation characteristics, building orientation, solar shading, landscape, electrical system design, occupancy sensor devices, and appliance selection will be considered.

There are many other factors designers must consider, but they will keep in mind the importance of life cycle cost analysis for lodging facilities. The military Services keep their facilities for a longer period of time than most buildings in the private sector. Therefore, considerable attention will be given to energy-efficient design in the initial planning process. Efficient energy management policies require consideration of whole building design that relies on renewable energy sources.

### **B-6.2 Structural.**

#### **B-6.2.1 Structural Selection.**

Select an economical structural system based on force protection requirements, facility size, projected load requirements, subsoil conditions, local availability of materials and labor, feasibility of prefabrication, local construction practices, and resistance to fire, wind, snow, seismic, geologic, and permafrost conditions. Decisions concerning the structural system have substantial impact on construction costs. Coordinate column spacing and layout with the floor plan to ensure column placement within or in alignment with walls. Minimize columns awkwardly placed within guest rooms or living areas, and limit placement to larger public spaces.

#### **B-6.2.2 Structural Best Value.**

Analyze the proposed structural system to determine if it is the best value method to realize the architectural design intent. Larger projects such as a new LF campus design or fast track design-build projects will consider new alternative construction methods and materials. Based on the required expertise needed to apply new construction methods, these systems are not recommended for smaller lodging projects.

#### **B-6.2.3 Life Cycle Considerations.**

Roof systems and supporting structure will consider life cycle costs as well as long-term durability and ease of maintenance. Concrete tile roofing systems and metal roofing systems are recommended for typical lodging construction.

### **B-6.3 Mechanical System Selection.**

Use of a central plant will be considered for LF campuses. A central plant with heating and cooling equipment reduces maintenance and capitalizes on the higher efficiency of larger capacity commercial equipment. Ground-mounted and through-the-wall AC systems may also be considered, as appropriate.

Consider the use of renewable energy technologies as part of the selection of the HVAC system or as a supplemental energy source. Reference UFC 3-400-01 for further guidance. The use of ground source heat pumps is encouraged if economically feasible. Benefits include energy conservation and reduced maintenance. Energy Management Control Systems (EMCS) are effective energy savings systems and highly encouraged.

### **B-6.4 Plumbing.**

Mechanical engineers, architects and structural engineers must work together to carefully plan the size and location of plumbing chases with minimal impact on usable living space. Consider collocating plumbing chases with exhaust risers serving each guest room.

### **B-6.5 Electrical/Communications.**

The electrical design of a LF project will be based on maximum guest room hotel occupancy. Provide surge protection on service entrances, distribution panels, and sensitive load circuits. Mass Notification system speakers will be 4 in. (100mm) diameter, recessed, and factory finished to match color of wall or ceiling as specified in the Structural Interior Design package.

The standards referenced in this UFC apply to the planning, design, and construction phase of new LF construction and renovation to existing facilities and systems. These standards will also serve as a checklist for reviewing drawings and specifications for electrical design of LF projects. Floor plans must show the location of all electrical equipment, items, devices, controls, and loads. Construction drawings must include one line for all electrical equipment (transformers, switching gear, panels, loads, etc) including schedules for all panels, circuits, and loads. Consideration to daily operation and maintenance will be emphasized. This list will not be considered complete or all-inclusive, but rather a starting place. Improved concepts and additions will be added as well as “lessons learned.” Cross-exchange of new, improved, more efficient data is encouraged to increase the electrical group knowledge and processes as well as to further minimize life-cycle costs for lodging facilities. Ensure that 110v, 60hz duplex outlets are provided in rooms in overseas locations, in addition to any differing local standard (i.e., such as the 220/230v, 50hz European standard).

### **B-6.5.1 Lighting.**

Lodging facilities have historically suffered from poor lighting levels, thus designers must provide a much higher quality light source, light level and fixture selection to enhance new LF spaces and their use. The designer must be cognizant of lighting for both day and night situations and will emphasize the use of natural light in combination with lamps to provide a comfortable lighting level. Consider the use of a certified lighting consultant, and provide the highest quality illumination within budget and life cycle cost limitations.

Coordinate lighting selections with ceiling treatments and consider combinations of recessed lighting, light coves, indirect lighting and soffit lighting as alternatives. Coordinate ductwork and lighting locations to use soffit areas as possible. Provide blocking in walls throughout for all wall-mounted accessories including wall mounted lighting fixtures. Limit the types of lamps necessary to simplify inventory. LED lamps and compact fluorescent lighting are good alternatives over traditional lighting systems based on long term energy efficiencies, improved luminance, and long lamp life spans. Specify interior lighting that meets Energy Star program standards. Qualifying products are listed on the Energy Star website. Consider solar-powered exterior luminaires when they meet lighting requirements and are cost effective.

### **B-6.6 Corrosion Protection.**

Conform with NACE International standards for corrosion control on all LF projects. This includes material selection—non-metal or no dissimilar metals, cathodic protection for all underground metal systems, protective coatings for above ground structures and underground metal, and industrial water treatment. Include corrosion protection for electrical components in humid/salt air environments. Consider nitrogen purge or refrigeration type dehumidification protection systems depending on size and capacity.

## **APPENDIX C SPACE CRITERIA**

### **C-1 INTRODUCTION.**

C-2 Space Criteria Chart provides the space criteria standards for all the support spaces. Space standards vary according to the number of guest rooms and suites, the number of floors, whether the facility is central or satellite, and optional programs and spaces. Some spaces must be custom programmed for each facility considering specific site and operational factors. The final space program shall be carefully coordinated with and approved by the agencies identified in Chapter 1, Contacts. To help illustrate the potential combinations of spaces and how they will generate a complete space program, three examples are included in C-2:

- Sample A describes an Army central facility that has 400 rooms and four floors in a 400-room program on a training Installation with 10% suites.
- Sample B describes a Navy central facility that has 200 rooms and four floors in a 200-room program with 5% suites.
- Sample C describes an Air Force central facility that has 350 rooms and four floors in a 350-room program with 5% suites.

C-2 SPACE CRITERIA CHART.

Functional Program Area	Base Area <sup>1</sup>		Space Standard (planning factor)	Notes/explanation	Sample A			Sample B			Sample C		
	ft. <sup>2</sup>	m <sup>2</sup>			Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>
Covered Entry	550	51.1	Per Central Facility	Count 50% of actual roof area	Required	275	0.0	Required	275	25.5	Required	275	0.0
Entrance Vestibule	100	9.3	Per Facility	Standard size	Required	100	9.3	Required	100	9.3	Required	100	9.3
Central Lobby	4	0.4	Per Central Facility guest room (gst rm)	Includes lobby circulation and seating areas	Required	1600	148.6	Required	800	74.3	Required	1400	130.1
Satellite Lobby	260	24.2	100sf + 1sf per Satellite gst rm	Reduced circulation and seating	N/A	N/A		N/A			N/A		
Reception	150	13.9	150sf <100 Program gst rm + 75sf per ea addl 100 gst rms up to 375sf max	75sf per staff, minimum two staff. Count all program guest rooms	Required	375	34.8	Required	225	20.9	Required	338	31.4
Concierge	45	4.2	Per optional Central Facility space	Concierge station in lobby	No			No			No		
Bell Cart Station	20	1.9	20sf <100 Facility gst rm + 10sf per ea addl 50 gst rms	10sf per cart	Required	80	7.4	Required	40	3.7	Required	70	6.5
Coffee Bar	25	2.3	Per optional Central Facility space	Optional self-service coffee	No			No			No		
Food Service: Prep and Storage	150-240	13.9-22.3	Per optional Central Facility space	To be custom programmed with a minimum of 150sf to max of 240sf	Yes	150	13.9	No			No		
Food Service: Service	90-120	8.4-11.1	Per optional Central Facility space	To be custom programmed with a minimum of 90sf to max of 120sf	Yes	100	9.3	No			No		
Food Service: Dining	150	13.9	Optional space at 150sf <100 Central Facility gst rm + 115sf ea addl 50 gst rm up to 600sf max	All three Food Service spaces must be programmed together	Yes	600	55.7	No			No		
Retail Food Service	TBD	TBD	Variable optional Central Facility space based on retail provider	Coordinate the space program with the retail food service vendor	No			No			Yes	650	60.4
Retail Sales	TBD	TBD	Variable optional Central Facility space based on retail provider	Coordinate the space program with the retail vendor	No			No			Yes	80	7.4
Luggage Storage	75	7.0	75sf <100 Program gst rm + .25sf per ea addl gst rm to 150sf max	Count all program guest rooms	Required	150	13.9	Required	100	9.3	Required	138	12.8
ATM	10	0.9	Per optional Central Facility space	Optional one ATM machine	No			Yes	10	0.9	Yes	10	0.9
Registration Machines	20	1.9	Per optional Facility space	Optional two to three kiosks in any facility	Yes	20	1.9	No			Yes	20	1.9
Public Toilets	100	9.3	Minimum for Central Facility male/female toilets + 25sf per addl fixture as determined by code	Use applicable code for specific facility to determine final fixture count	Required	400	37.2	Required	250	23.2	Required	400	37.2
Unisex Toilet	50	4.6	Unisex toilet for satellite facility	Satellite facilities only	N/A			N/A			N/A		
DSN Phones	10	0.9	Per optional Facility Space	Optional DSN phone for guest use	No			No			Yes	10	0.9
Fitness Room	300	27.9	Optional space at 300sf <100 Central Facility gst rms +50sf per ea addl 200 gst rm. 600sf max	Calculated at 50sf per cardio machine	Yes	375	34.8	Yes	350	32.5	Yes	363	33.7
Staff Conference Room	440	40.9	Per optional Central Facility space	Standardized room accommodates 20 people	Yes	440	40.9	Yes	440	40.9	Yes	440	40.9
Business Center	75	7.0	Optional space at 75sf <100 Central Facility gst rms +25sf per ea addl 100 gst rm. 300sf max.	75sf for two workstations and circulation with 25sf for each addl workstation	No			Yes	100	9.3	Yes	138	12.8
Study Room	250	23.2	Per optional Facility space. One room per 75 gst rms or one rm per floor, whichever is less.	Typically provide one per floor or fewer, depending on local demand	Yes	1000	92.9	No			No		

FIGURE C-1. SPACE CRITERIA

Functional Program Area	Base Area <sup>1</sup>		Space Standard (planning factor)	Notes/explanation	Sample A			Sample B			Sample C			
	ft. <sup>2</sup>	m <sup>2</sup>			Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	
Guest Services	Guest Laundry	110	10.2	Per 40 Facility gst rm	Accommodates two to four washers and two to four dryers per every 40 gst rm	Required	1100	102.2	Required	550	51.1	Required	963	89.4
	Gear Wash	170	15.8	Per optional Facility room	Only provided at training bases	No			No			No		
	Guest Bulk Storage, Opt 1	45	4.2	Per one cage (25sf net) per 4 suites for optional space	Distributed as needed to accommodate suites	Yes	450	41.8	No			No		
	Vending	60	5.6	Per optional Facility floor	Accommodates two optional vending machines	Yes	240	22.3	Yes	240	22.3	No		
	Ice	30	2.8	Per Facility floor	Accommodates one ice dispenser	Required	120	11.1	Required	120	11.1	Required	120	11.1
	Patio	TBD	TBD	Variable optional space	To be custom programmed based on site availability and design	No			No			No		
	Patio storage	TBD	TBD	Variable optional space	To be custom programmed based on the final patio scope	No			No			No		
Guest Rooms and Suites	TBD	TBD	Each room	Quantity and distribution of rooms and suites to be determined by an independent assessment. See Table 2.1 for size guidance.	360/40	126,000	11705.4	190/10	61,500	5713.4	332/18	110,400	10256.2	
Administration Services	Lodging Communications	TBD	TBD	Per Facility	TBD based on Service and Installation specific requirements	Required	250	23.2	Required	250	23.2	Required	250	23.2
	Administrative areas													
	Manager (Army)	180	16.7	Per office	Typically one per Central Facility	1	180	16.7	N/A			N/A		
	Manager (Navy, AF)	120	11.1	Per office	Typically one per Central Facility	N/A			1	120	11.1	1	120	11.1
	Asst. manager (Army)	120	11.1	Per optional office	Only in larger programs	0	0	0.0	N/A			N/A		
	Asst. manager (Navy, AF)	80	7.4	Per optional office	Only in larger programs	N/A			0	0	0.0	1	80	7.4
	Front desk super (Army)	100	9.3	Per office	Typically one per Central Facility	1	100	9.3	N/A			N/A		
	Front desk super (Navy, AF)	80	7.4	Per office	Typically one per Central Facility	N/A			1	80	7.4	1	80	7.4
	Accounting	64	5.9	Per Person	Quantity to be determined by Service and facility needs	3	192	17.8	1	64	5.9	2	128	11.9
	Clerical	64	5.9	Per program	One person; typically combined with reservations and work space	1	64	5.9	0	0	0.0	1	64	5.9
	Reservations	64	5.9	Per 500 Program gst rm	40sf per person; typically combined with clerical and work space	2	128	11.9	0	0	0.0	2	128	11.9
	Work space	40	3.7	Per person in admin area	Typically combined with clerical and reservations	6	240	22.3	1	40	3.7	5	200	18.6
	Cash Room	80	7.4	Per Program	For front desk staff to reconcile shift cash	Required	80	7.4	Required	80	7.4	Required	80	7.4
Floor Support	Janitor Areas	25	2.3	Per Facility floor wing		Required	200	18.6	Required	200	18.6	Required	200	18.6
	Housekeeping Areas	200	18.6	Per 30 Facility gst rm	Accommodates two carts and storage	Required	2667	247.7	Required	1333	123.9	Required	2333	216.8
	Utility Rooms	16	1.5	Per Facility: communications room within 280ft of a gst rm	Comm rooms only; other utility rooms programmed by code and included in the multiplier	Required	128	11.9	Required	128	11.9	Required	128	11.9

Functional Program Area	Base Area <sup>1</sup>		Space Standard (planning factor)	Notes/explanation	Sample A			Sample B			Sample C		
	ft. <sup>2</sup>	m <sup>2</sup>			Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>	Option/Quan	ft. <sup>2</sup>	m <sup>2</sup>
Training Room	250	23.2	Optional space at 250sf <100 Central Facility gstr rms +25sf ea addl 50 gstr rms	Accommodates staff training	No			No			Yes	375	34.8
Training Office	80	7.4	Per optional private office/storage closet	Accommodates training staff personnel and/or training material storage	No			Yes	80	7.4	Yes	80	7.4
Central Janitor Areas	80	7.4	Per Facility	Serves first floor public and administrative spaces	Required	80	7.4	Required	80	7.4	Required	80	7.4
Housekeeping Manager (Army)	120	11.1	Per Program	Typically one per Facility	1	120	11.1	N/A			N/A		
Housekeeping Manager (Navy, AF)	80	7.4	Per Program	Typically one per Facility	N/A			1	80	7.4	1	80	7.4
Housekeeping Assistant	100	9.3	Per optional office for large programs	Office quantity variable based on program size	0			0			0		
Soiled Linen Storage	145	13.5	100sf +15sf per 40 Facility gstr rm	Includes carts and sorting space; one cart per 40 gstr rm	Required	250	23.2	Required	175	16.3	Required	231	21.5
Clean Linen Storage	150	13.9	25sf per 16 Facility gstr rm	Shelving	Required	625	58.1	Required	313	29.0	Required	547	50.8
Receiving	150	13.9	150sf <150 Program gstr rm + 1sf per ea addl gstr rm	Loading dock	Required	400	37.2	Required	200	18.6	Required	350	32.5
Receiving/supply Office	80	7.4	Per program	Office	Required	80	7.4	Required	80	7.4	Required	80	7.4
Linen Laundry	450	41.8	Optional central facility space at 450sf <100 Program gstr rm + 1sf per ea addl gstr rm	Includes space for extractors, dryers and folding activities	Yes	750	69.7	No			No		
Addl space for folding machine	60	5.6	Per optional folding machine	Additional laundry room space for optional folding machine	Yes	60	5.6	No			No		
Supply Areas/general Storage	600	55.7	600sf <300 Program gstr rm + 1sf ea addl gstr rm	Includes separate cleaning fluid storage	Required	700	65.0	Required	600	55.7	Required	650	60.4
Guest Bulk Storage, Opt 2	100	9.3	Per optional space	For guest temporary use; only provided at training bases	No			No			No		
Central Staff Break Staff Lockers	150	13.9	150sf <100 Central Facility gstr rm + 1sf per ea addl gstr rm	Base area typically includes 4-top tables, other seating, kitchenette, and staff lockers	Required	450	41.8	Required	250	23.2	Required	400	37.2
Addl space if training function	300	27.9	Per optional training module	Additional break room space if this area is to dual function as a training room	No			Yes	300	27.9	No		
Satellite Staff Area w/ Lockers	150	13.9	150sf <100 Satellite gstr rm + .25sf per ea addl gstr rm	Base area typically includes 4-top tables, kitchenette, and lockers	N/A			N/A			N/A		
Staff Toilets	100	9.3	100sf <150 Facility gstr rm + 100sf ea addl 150 gstr rm	Each 100 sf module includes 50sf for each gender	Required	267	24.8	Required	167	15.5	Required	233	21.7
Maintenance Workshop	150	13.9	150sf <100 Program gstr rm + .5sf per ea addl gstr rm	Work and tool storage space	Required	300	27.9	Required	200	18.6	Required	275	25.5
Grounds Equipment Storage	40	3.7	Per optional Program space	Small shed or exterior closet	N/A			Yes	40	3.7	No		
Grounds Equipment Storage (Army)	400	37.2	Per program space	Required for Army	Yes	400	37.2	N/A			N/A		
<b>Sample Subtotal</b>						<b>142,285</b>	<b>13218.3</b>		<b>69,960</b>	<b>6499.2</b>		<b>123,085</b>	<b>11434.6</b>
<b>Net-to-Gross Factor @</b>					30%	42,686	3965.5		20,988	1949.8		36,926	3430.4
<b>Sample Total</b>						<b>184,971</b>	<b>17183.8</b>		<b>90,947</b>	<b>8449.0</b>		<b>160,011</b>	<b>14865.0</b>

<sup>1</sup> Base area assumes a 100 gstr rm Facility

**Sample A:** Army 400-room, 4-floor Central Facility in a 400-room Program on a training base, 10% suites

**Sample B:** Navy 200-room, 4-floor Central Facility in a 200-room Program, 5% suites

**Sample C:** Air Force 350-room, 4-floor Central Facility in a 350-room Program, 5% suites