

FACILITIES CRITERIA (FC)

AIR FORCE LODGING VISITING QUARTERS TEMPORARY LODGING FACILITIES



APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

FACILITIES CRITERIA (FC)

**UNITED STATES AIR FORCE
LODGING
VISITING QUARTERS
TEMOPORARY LODGING FACILITIES**

Any copyrighted material included in this FC is identified at its point of use.
Use of the copyrighted material apart from this FC must have the permission of the copyright holder.

AIR FORCE CIVIL ENGINEER CENTER

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

Change No.	Date	Location
1		

FOREWORD

Facilities Criteria (FC) provide functional requirements (i.e., defined by users and operational needs of a particular facility type) for specific DoD Component(s), and are intended for use with unified technical requirements published in DoD Unified Facilities Criteria (UFC). FC are applicable only to the DoD Component(s) indicated in the title, and do not represent unified DoD requirements. Differences in functional requirements between DoD Components may exist due to differences in policies and operational needs.

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 FC, the SOFA, the HNFA, and the BIA, as applicable.

Because FC documents are coordinated with unified DoD technical requirements, they form an element of the DoD UFC system applicable to specific facility types. The UFC system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applicable to the Military Departments, Defense Agencies, and the DoD Field Activities. The UFC System also includes technical requirements and functional requirements for specific facility types, both published as UFC documents and FC documents.

FC are living documents and will be periodically reviewed, updated, and made available to users as part of the Services' responsibility for providing criteria for military construction. HQ U.S. Army Corps of Engineers (HQ USACE), Naval Facilities Engineering Command (NAVFAC), and the Air Force Civil Engineer Center (AFCEC) are responsible for administration of the UFC system. Defense agencies should contact the preparing service for document interpretation and improvements. Technical content 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 site listed below.

FC 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/>

Refer to UFC 1-200-01, *General Building Requirements*, for implementation of new issuances on projects.

AUTHORIZED BY:

JOE SCIABICA, SES

Director

Air Force Civil Engineer Center

FACILITIES CRITERIA (FC)

NEW SUMMARY SHEET

Document: FC 4-720-01F, *Air Force Lodging Visiting Quarters / Temporary Lodging Facilities*.

Superseding: None.

Description: This FC provides guidelines for evaluating, planning, programming, and designing Visiting Quarters and Temporary Lodging Facilities. The information in this FC 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 United States (OCONUS). It also applies to the procurement of design-build services for the above-noted projects. Alteration and renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints.

Reasons for Document: This FC is the initial release to establish requirements for Visiting Quarters and Temporary Lodging Facilities. It defines the criteria for determining appropriately sized, flexible, cost-optimized, durable, quality-designed facilities on a life cycle basis to support the mission. The guest room plans presented in this FC are Air Force Lodging standards and are not to be changed. A thorough compliance check of all other applicable criteria is required.

Impact: Use of this FC will facilitate and standardize the design of Visiting Quarters and Temporary Lodging Facilities throughout the Air Force. It will provide more complete and consistent project requirements and expedite the programming and design of facilities and reduce initial design cost.

Unification Issues: None.



United States Air Force
Lodging Design Guide

Visiting Quarters
Temporary Lodging Facilities

27 August 2015

Table of Contents

Chapter 1 – Introduction	5
1-1 General Information.....	6
1-2 Life Cycle Renovation Investments.....	6
1-3 VQ and TLF Design Guide Compliance Checklists.....	8
1-4 Cost Template for New Construction and Renovation	10
1-5 Leadership in Energy and Environmental Design (LEED).....	11
1-6 Anti-Terrorism Force Protection (ATFP)	11
1-7 Code Compliance.....	11
Chapter 2 – Visiting Quarters	12
2-1 Space Programs.....	13
2-2 Site Planning	22
2-2.1 Vehicular Access	23
2-2.2 Emergency Service.....	23
2-2.3 Service Vehicles	23
2-2.4 Bus Route Access.....	23
2-2.5 Pedestrian Access	23
2-2.6 Guest Parking	24
2-2.7 Accessible Parking.....	24
2-2.8 Motorcycle Parking	24
2-2.9 Bicycle Parking	24
2-3 Site Considerations	24
2-3.1 Grading.....	24
2-3.2 Landforms.....	24
2-3.3 Storm Drainage.....	24
2-3.4 Utility Corridors	24
2-3.5 Site Lighting.....	24
2-3.6 Outdoor Areas	25
2-3.7 Signage	25
2-3.8 Fencing.....	25
2-4 Landscape Architecture	25
2-4.1 Landscape Site Design	25
2-4.2 Landscape Maintenance.....	26
2-4.3 Landscape Irrigation	26
2-5 Building Design	26
2-5.1 Building Area Calculations	26
2-5.2 Accessibility	26
2-5.3 Attics and Basements	26
2-6 Architecture	26
2-6.1 Architectural Compatibility.....	26
2-6.2 Exterior Finish Materials.....	26
2-6.3 Windows	26
2-6.4 Exterior Doors	27
2-6.5 Roofing	27
2-6.6 Building Signage.....	27
2-6.7 Porte Cochere.....	27
2-7 Interior Design.....	27
2-7.1 Public Areas.....	27
2-7.1.1 Vestibule.....	29
2-7.1.2 Front Desk.....	29
2-7.1.3 Multi-Function Lobby	29

2-7.1.4	Retail Sales	30
2-7.1.5	Business Center	30
2-7.1.6	Exercise Room	30
2-7.1.7	Guest Laundry and Ice Machine Room.....	31
2-7.1.8	Public Restrooms	31
2-7.1.9	Conference/Employee Training Room	31
2-7.1.10	Automated Registration and Teller Machines.....	32
2-7.1.11	Retail Food Service	32
2-7.2	Administrative Areas	33
2-7.2.1	Luggage Storage Room.....	33
2-7.2.2	General Manager.....	33
2-7.2.3	Workspace	33
2-7.2.4	Retail Storage.....	34
2-7.3	Back-of-House	34
2-7.3.1	Central Janitor Area.....	34
2-7.3.2	Staff Restrooms.....	34
2-7.3.3	Housekeeping Office	34
2-7.3.4	Housekeeping and Laundry	35
2-7.3.5	General, Equipment and Grounds Storage	35
2-7.3.6	Engineering Office/Workshop	35
2-7.3.7	Receiving.....	35
2-7.3.8	Break Room	36
2-7.3.9	Service Circulation.....	36
2-7.4	Guestrooms and Support	36
2-7.4.1	Standard Guestroom	36
2-7.4.2	Business Suite.....	40
2-7.4.3	Guestroom Corridors and Elevator Lobbies	46
2-7.4.4	Housekeeping Closets.....	46
2-7.4.5	Janitor Closets.....	46
2-7.5	Signage and Accessories.....	47
2-8	Building Systems.....	47
2-8.1	Acoustics	47
2-8.2	Mechanical Systems	47
2-8.3	HVAC System.....	47
2-8.4	Ventilation.....	47
2-8.5	Laundry Areas	47
2-8.6	Plumbing.....	48
2-8.6.1	Hot Water Systems.....	48
2-8.7	Energy Performance	48
2-8.8	Electrical/Communications.....	48
2-8.8.1	Guest Support/Service Areas	49
2-8.9	Power Supply.....	49
2-8.10	Guestrooms and Suites.....	49
2-8.11	Lighting	50
2-8.11.1	Guest Support/Service Areas	50
2-8.11.2	Guestrooms and Suites	50
2-8.12	Corrosion Protection	51
Chapter 3 – Temporary Lodging Facilities		52
3-1	Space Program	53
3-2	Site Planning	53
3-2.1	Vehicular Access	54
3-2.2	Emergency Service.....	54

3-2.3	Pavements and Circulation	54
3-2.4	Roads	54
3-2.5	Walks.....	54
3-2.6	Parking	54
3-2.7	Bicycle Parking	55
3-3	Site Considerations	55
3-3.1	Grading.....	55
3-3.2	Landforms.....	55
3-3.3	Retention Basins.....	55
3-3.4	Site Lighting	55
3-3.5	Site Amenities.....	55
3-3.6	Playgrounds.....	55
3-3.7	Active/Passive Outdoor Areas.....	55
3-3.8	Site Signage	56
3-3.9	Equipment Screening.....	56
3-4	Landscape Architecture.....	56
3-4.1	Landscape Irrigation	56
3-5	Building Design	56
3-5.1	Building Area Calculations	56
3-5.2	Attics and Basement.....	56
3-6	Architecture	56
3-6.1	Architectural Compatibility.....	56
3-6.2	Windows	57
3-6.3	Doors	57
3-6.4	Roofing	57
3-6.5	Building Signage.....	57
3-7	Interior Design.....	57
3-7.1	Building Entrance.....	57
3-7.2	Back-of-House	57
3-7.2.1	Housekeeping and Laundry.....	57
3-7.2.2	Break Room	58
3-7.2.3	Staff Restroom.....	58
3-7.2.4	Housekeeping Office	58
3-7.2.5	Central Linen Storage.....	59
3-7.3	TLF Units	59
3-7.3.1	Two Bedroom TLF	59
3-7.4	TLF Corridors.....	64
3-7.5	Guest Support Areas	65
3-7.5.1	Janitor Closets.....	65
3-7.5.2	Housekeeping Closets.....	65
3-7.6	Signage and Accessories.....	65
3-8	Building Systems.....	65
3-8.1	Acoustics	66
3-8.2	Mechanical Systems.....	66
3-8.2.1	HVAC System.....	66
3-8.3	Plumbing.....	66
3-8.3.1	Hot Water Systems.....	66
3-8.4	Energy Performance	67
3-8.5	Electrical/Communications.....	67
3-8.6	Power Supply.....	67
3-8.7	Lighting	67
3-8.8	Corrosion Protection	68
3-8.9	Fire Protection/Life Safety.....	68

Chapter 4 – Air Force Lodging FF&E Standards 69

Chapter 5 – Codes, Standards and References 71



Chapter 1 – Introduction

Chapter 1 – Introduction

1-1 General Information. This guide is to be used at the Project Validation Assessment (PVA) level and design implementation level for Visiting Quarters (VQ) and Temporary Lodging Facilities (TLF). The intent is to provide design direction. It is not intended to be a technical construction manual.

This guide provides standards and considerations for planning, programming and designing new construction, major renovations, and permanent conversion of existing facilities as new VQ and/or TLF regardless of funds source used for construction unless waived by AF/A1S.

This guide must be used in conjunction with other Department of Defense documents that give related guidance. Unique design requirements of a specific project will be addressed at the installation level. This design guide is not a substitute for research required by programmers and designers. Further, programmers and designers must incorporate installation and Major Command design requirements such as architectural compatibility and systems requirements.

Required spaces and guestroom space requirements are mandatory. All other programming and design requirements included in this guide are standards and/or recommendations subject to local requirements.

All work to existing facilities beyond cosmetic treatment (replacing carpet, painting, etc.) is considered major renovation. The term “renovation” is not a programming class of work, but describes the nature of the project being done.

1-2 Life Cycle Renovation Investments. During the PVA process, market driven information will be provided to determine the number of rooms to be included in the proposed facility. Once that has been established, and in the case of a major renovation, the life cycle of the features of the existing facility will be assessed and weighed against a replacement schedule driven by industry standards.

The life cycle schedule below provides the standard life cycle replacement schedule for a typical lodging facility for primary building and site components. A column has been provided to allow for determining anticipated replacement years for the existing building based on year of construction and known renovations to the facility. The following table should be used to facilitate conversion phasing decisions and development of a preventative maintenance program for the building in the future.

Lodging Life Cycle Schedule Building Number and Name Name of Base			
Item		Lodging Standard Life Cycle Replacement Years	Building Probable Replacement Years
SUBSTRUCTURE			
Foundations	Standard Foundation	75	
	Slab on Grade	50	
SHELL			
Superstructure	Raised Floor Construction	75	
	Roof Construction	50	
Exterior Enclosure	Exterior Walls	Life	
	Exterior Soffits	40	
	Exterior Windows	40	
	Exterior Doors	40	
Roofing	Roof Coverings	20	
	Roof Openings	20	
INTERIORS			
Interior Construction	Partitions	60	
	Interior Doors	30	
Stairs	Stair Construction	40	
	Stair Finishes	7	
Interior Finishes	Painted Masonry Wall Finishes	7 to 12	
	Painted Drywall Wall Finishes	7 to 12	
	Vinyl Wallpaper Wall Finishes	12	
	Ceramic Tile Wall Finishes	25 to As Needed	
	Wood Veneer Wall Finishes	7 to 12	
	VCT Floor Finishes	20 to As Needed	
	Carpet Floor Finishes	6 to 12	
	Tile Floor Finishes	25 to As Needed	
	Painted Drywall Ceiling Finishes	7 to 12	
Acoustical Tile Ceiling Finishes	15 to As Needed		
SERVICES			
Conveying	Elevators	30	
Plumbing	Plumbing Fixtures	35	
	Domestic Water Distribution and Sanitary Waste	35	
Heating, Ventilation and Air Conditioning	Terminal and Packaged Units	20	
Fire Protection	Sprinklers – Pumps and Concealed Piping	25	
Electrical	Lighting, Wiring, Service and Distribution	20	
	Communications and Security	15	
EQUIPMENT AND FURNISHINGS			
Equipment	Equipment	15	
Furnishings	Upholstery and Softgoods	6	
	Casegoods	12	
BUILDING SITEWORK			
Site Improvements	Roadways	40	
	Parking Lots	40	
	Pedestrian Concrete Paving	35	
	Miscellaneous Concrete, Light Poles, Etc.	35	
	Exterior Signage	25	
	Landscaping	15	
Site Civil/Mechanical Utilities	Site Utilities	40	
Site Electrical Utilities	Electrical Distribution	30	
	Site Lighting, Communications and Security	20	

1-3 VQ and TLF Design Guide Compliance Checklists. To further develop the scope of work for the proposed project, the information contained in the Design Guide needs to be applied to the existing building and site conditions. The following checklists will be used to identify the areas in which the existing facility is in compliance with the Design Guide and the areas in which it is not in compliance. The information will be used to determine the extent of new construction and renovation. All elements of the lodging facilities are included in these checklists regardless of fund source. Refer to AF 65-106, Chapter 6 for proper fund source for the various elements in the lodging checklists.

VQ Design Guide Compliance Checklist		
Building Number and Name		
Name of Base		
Primary New VQ Design Guide Items	Building Complies	Building Does Not Comply
Standard Guestrooms 312 NSF (313 NSF for DoDABA), Living/Sleeping Area, Closet, Bathroom, Softgoods		
Business Suites 398 NSF (398 NSF for DoDABA), Living Area, Entry/Kitchenette, Sleeping Area, Closet, Bathroom, Softgoods		
Furniture		
Finishes		
Equipment Food and Beverage Counters		
Card Key Room Access System		
Window Treatments		
Room Safes Large Enough for Laptop Computer Storage		
Bathroom Amenities High Quality Bath Towels, Towel Bars, Soap Dishes, Shower Curtain Rod (Bowed Rods for Bathtubs, Straight Rods for Showers)		
Primary Public and Support Spaces Lobby, Retail Food Service, Business Center, Exercise Room, In House Laundry, Retail Sales, Conference Room, Guest Laundry, Housekeeping Rooms		
General Building Configuration Guestrooms, Business Suites, Primary Public and Support Spaces Integrated into First Floor of Building, Interior Corridors, Elevator		
Building Exterior Sloped Metal Roof, Regional Theme, Porte Cochere, Flag Poles, Air Force Inns Monument Building Identifier Sign		
Building Signage Site Identifier and Directional, Exterior Rooms, Interior Rooms, Interior Directional		
Landscaping		
Mechanical System Individual Room Temperature Control		
Electrical System Sufficient and Appropriate Lighting, Adequate Electrical Outlets, Wireless Internet		
Plumbing		
LEED Silver		
ATFP		
DoDABA		

TLF Design Guide Compliance Checklist Building Number and Name Name of Base		
Primary New TLF Design Guide Items	Building Complies	Building Does Not Comply
Two Bedroom TLF 787 NSF (884 NSF DoDABA), Living Area, Master Bedroom, Second Bedroom, Kitchen/Dining Area, Utility Room, Bathroom, Softgoods		
Furniture		
Finishes		
Equipment Food and Beverage Counters and Kitchenettes		
Card Key Room Access System		
Window Treatments		
Room Safes Large Enough for Laptop Computer Storage		
Bathroom Amenities High Quality Bath Towels, Towel Bars, Soap Dishes, Shower Curtain on Bowed Rods for Bathtubs, Straight Rods for Showers		
Primary Public and Support Spaces Lobby, Housekeeping Rooms		
General Building Configuration TLF Units, Primary Public and Support Spaces Integrated into Building, Interior Corridors		
Outdoor Public Spaces Playgrounds, Fenced Dog Park		
Building Exterior Sloped Metal Roof, Regional Theme, Porte Cochere, Flag Poles, Air Force Inns Monument Building Identifier Sign		
Building Signage Site Identifier and Directional, Exterior Rooms, Interior Rooms, Interior Directional		
Landscaping		
Pet Friendly Accommodations		
Mechanical System Individual Room Temperature Control		
Electrical System Sufficient and Appropriate Lighting, Adequate Electrical Outlets, Wireless Internet		
Plumbing		
LEED Silver		
ATFP		
DoDABA		

1-4 Cost Template for New Construction and Renovation. The following template is used for the development of preliminary total project costs for new construction and renovation of VQ and TLF buildings according to the Design Guide standards. The scope of work is outlined in the table below including preliminary total project costs.

Cost Template for New VQ and TLF Construction and Renovation

Description	Total New Rooms	Total New Construction Cost Per Room	New Construction Subtotals	Total Convert Rooms	Total Convert Cost Per Room	Convert Subtotals
Probable Project Cost Estimate Worksheet						
New VQ and TLF Facilities Construction						
VQ Standard Guestroom - 312 NSF	0	\$0	\$0			
VQ Standard Guestroom DoDABA - 313 NSF	0	\$0	\$0			
VQ Business Suite - 398 NSF	0	\$0	\$0			
VQ Business Suite DoDABA - 398 NSF	0	\$0	\$0			
Two Bedroom TLF - 787 NSF	0	\$0	\$0			
Two Bedroom TLF DoDABA - 884 NSF	0	\$0	\$0			
Subtotal New VQ and TLF Facilities Construction			\$0			
VQ and TLF Facilities Conversions Construction						
VQ Standard Guestroom Minor Interior Renovations at Baths, Millwork and Finishes - 312 NSF				0	\$0	\$0
VQ Standard Guestroom DoDABA Minor Interior Renovations at Baths, Millwork and Finishes - 313 NSF				0	\$0	\$0
VQ Business Suite Minor Interior Renovations at Baths, Millwork and Finishes - 398 NSF				0	\$0	\$0
VQ Business Suite DoDABA Minor Interior Renovations at Baths, Millwork and Finishes - 398 NSF				0	\$0	\$0
Two Bedroom TLF Minor Interior Renovations at Baths, Kitchens, Millwork and Finishes - 787 NSF				0	\$0	\$0
Two Bedroom TLF DoDABA Minor Interior Renovations at Baths, Kitchens, Millwork and Finishes - 884 NSF				0	\$0	\$0
Building Specific Exterior Building Renovation of Exterior Aesthetics and/or Adding Porte Cochere, Minor Interior Renovations in Public Spaces and Rooms (Summary of Detailed Cost Items Developed in Separate Spreadsheet)				1	\$0	\$0
Subtotal VQ and TLF Facilities Conversions Construction						\$0
Subtotal Construction			\$0	\$0		
Area Cost Factor						
X% of Subtotal Construction		\$0			\$0	
Subtotal Area Cost Factor			\$0			\$0
Adjusted Subtotal			\$0	\$0		
Escalation						
Month Year Mid-Point of Construction, X% of Adjusted Subtotal		\$0			\$0	
Subtotal Escalation			\$0			\$0
Construction Cost			\$0	\$0		
Contingency						
5% of New Construction Cost, 10% of Conversions		\$0			\$0	
Subtotal Contingency			\$0			\$0
Contract Cost			\$0	\$0		
Construction Cost + Subtotal Contingency						

Cost Template for New VQ and TLF Construction and Renovation (Cont.)

Description	Total New Rooms	Total New Construction Cost Per Room	New Construction Subtotals	Total Convert Rooms	Total Convert Cost Per Room	Convert Subtotals
Supervision, Inspection & Overhead (SIOH)		\$0			\$0	
6.5% of Total Contract Price						
<i>Subtotal SIOH</i>			\$0			\$0
Design Fees		\$0			\$0	
10% of Total Contract Price						
<i>Subtotal Design Fees</i>			\$0			\$0
Design Agency Management Fee		\$0			\$0	
2.5% of Total Contract Price						
<i>Subtotal Design Agency Management Fee</i>			\$0			\$0
FF&E (Non RPIE)						
VQ Standard Guestroom - 312 NSF				0	\$0	\$0
VQ Standard Guestroom DoDABA - 313 NSF				0	\$0	\$0
VQ Business Suite - 398 NSF				0	\$0	\$0
VQ Business Suite DoDABA - 398 NSF				0	\$0	\$0
Two Bedroom TLF - 787 NSF				0	\$0	\$0
Two Bedroom TLF DoDABA - 884 NSF				0	\$0	\$0
<i>Subtotal FF&E (Non RPIE)</i>						\$0
Estimated Total Project Cost			\$0			\$0
Contract Cost + Subtotal SIOH + Subtotal Design Fees + Subtotal Design Agency Management Fee + Subtotal FF&E (Non RPIE)						

Note 1: Construction costs should include 2% for Sustainable Design and Development and Energy Cost Allowance per AFI 32-1022 (LEED Silver Certification).

Note 2: Construction costs should include 3% for Antiterrorism Force Protection Cost Allowance per AFI 32-1022.

Note 3: Include costs for special new construction items specific to a location including special fill, foundations, earthquake zone construction requirements and hurricane zone construction requirements. Earthquake and hurricane zone construction requirements achieve most ATFP requirements, therefore, these costs should not be duplicated.

1-5 Leadership in Energy and Environmental Design (LEED).

Regardless of fund source, all Air Force construction projects are required to meet LEED silver certification following the current guidelines of the U.S. Green Building Council (USGBC). VQ facilities will meet "LEED for New Construction" and TLFs will meet "LEED for Homes" criteria.

1-6 Anti-Terrorism Force Protection (ATFP)

The VQ and TLF buildings will comply with the current DoD Minimum Antiterrorism Standards for Buildings for threat and protective measures for facilities using the maximum setbacks from roads and other facilities.

1-7 Code Compliance

The VQ and TLF construction will be compliant with current applicable building codes, including the International Building Code, International Plumbing Code, International Mechanical Code, Life Safety Code and the National Electrical Code and the Department of Defense Architectural Barriers Act (DoDABA) Accessibility Guidelines.



Chapter 2 - Visiting Quarters

Chapter 2 – Visiting Quarters

2-1 Space Programs. Space programs follow for four range of room configurations; up to 125 rooms, 126 to 215 rooms, 216 to 310 rooms and 311 to 400 rooms. The figures represented in red in the space programs will change depending on the number of rooms in the building. The space program includes public areas, retail food service, administration services, guestrooms, back-of-house, interior circulation, structure, walls and partitions for all floors.

Up to 125 Room VQ Space Program

Functional Area (Up to 125 Room VQ)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One					
Public Areas					
Vestibule	1	80	7	80	7
Front Desk	1	120	11	120	11
Multi-Function Lobby Area	1	504	47	504	47
(Lobby Seating Area - 200 NSF (Business Center - 4 Computer Stations - 64 NSF) (Retail Food Service Seating Area - 16 Seats - 240 NSF)					
Retail Sales	1	80	7	80	7
Exercise Room	1	300	28	300	28
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Public Restrooms	2	75	7	150	14
Conference Room Restrooms	2	75	7	150	14
Conference Room	1	315	29	315	29
Conference Room Storage	1	35	3	35	3
Subtotal Public Areas				1,979	184
Retail Food Service					
Retail Food Service Servery	1	225	21	225	21
Retail Food Service Kitchen	1	300	28	300	28
Subtotal Retail Food Service				525	49
Administration Services					
Luggage Storage Room	1	275	26	275	26
General Manager	1	125	12	125	12
Workspace	1	500	46	500	46
Retail Storage	1	20	2	20	2
Subtotal Administration Services				920	85
Guestrooms					
Standard Guestroom	45	312	29	14,040	1,304
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	6	312	29	1,872	174
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	313	29	313	29
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Subtotal Guestrooms				17,304	1,608

Up to 125 Room VQ Space Program (Cont.)

Functional Area (Up to 125 Room VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One (Cont.)					
Back of House					
Central Janitor Area	1	100	9	100	9
Staff Restrooms	2	50	5	100	9
Housekeeping Office	1	100	9	100	9
Housekeeping and Laundry	1	500	46	500	46
General, Equipment and Grounds Storage	1	125	12	125	12
Engineering Office/Workshop	1	150	14	150	14
Receiving	1	125	12	125	12
Break Room	1	100	9	100	9
Data Communication Room	1	150	14	150	14
Mechanical Equipment Room	1	300	28	300	28
Electrical Room	1	150	14	150	14
Elevator Equipment Room	1	100	9	100	9
Subtotal Back of House Support				2,000	186
Subtotal Net SF Level One				22,728	2,111
Interior Circulation (Corridors, Stairs and Elevators)	1	5,909	549	5,909	549
Structure, Exterior Walls and Interior Partitions	1	5,227	486	5,227	486
Subtotal Enclosed Space Level One				33,865	3,146
Level Two					
Standard Guestroom	56	312	29	17,472	1,623
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	5	312	29	1,560	145
Business Suite	4	398	37	1,592	148
Business Suite with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	398	37	398	37
Business Suite with DoDABA Communication Features	1	398	37	398	37
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Two				22,994	2,136
Interior Circulation (Corridors, Stairs and Elevators)	1	5,978	555	5,978	555
Structure, Exterior Walls and Interior Partitions	1	5,289	491	5,289	491
Subtotal Enclosed Space Level Two				34,261	3,183
Total Enclosed Space				68,126	6,329
Covered Exterior Space (Porte Cochere) at 1/2 Scope				200	19
Gross Area for Congressional Reporting Purpose				68,326	6,347
Porte Cochere (Actual SF)	1	400	37	400	37
Actual Gross Total Footprint Area Reflected in Cost				68,526	6,366

126 to 215 Room VQ Space Program

Functional Area (126 - 215 VQ)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One					
Public Areas					
Vestibule	1	120	11	120	11
Front Desk	1	200	19	200	19
Multi-Function Lobby Area	1	800	74	800	74
(Lobby Seating Area - 300 NSF (Business Center - 5 Computer Stations - 80 NSF) (Retail Food Service Seating Area - 28 seats - 420 NSF)					
Retail Sales	1	100	9	100	9
Exercise Room	1	375	35	375	35
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Public Restrooms	2	75	7	150	14
Conference Room Restrooms	2	150	14	300	28
Conference Room	2	315	29	630	59
Conference Room Storage	2	35	3	70	7
Subtotal Public Areas				2,990	278
Retail Food Service					
Retail Food Service Servery	1	225	21	225	21
Retail Food Service Kitchen	1	300	28	300	28
Subtotal Retail Food Service				525	49
Administration Services					
Luggage Storage Room	1	473	44	473	44
General Manager	1	125	12	125	12
Workspace	1	667	62	667	62
Retail Storage	1	33	3	33	3
Subtotal Administration Services				1,298	121
Guestrooms					
Standard Guestroom	47	312	29	14,664	1,362
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	6	312	29	1,872	174
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Subtotal Guestrooms				17,615	1,636
Back of House					
Central Janitor Area	1	167	16	167	16
Staff Restrooms	2	50	5	100	9
Housekeeping Office	1	100	9	100	9
Housekeeping and Laundry	1	833	77	833	77
General, Equipment and Grounds Storage	1	167	16	167	16
Engineering Office/Workshop	1	200	19	200	19
Receiving/Loading Dock	1	392	36	392	36
Break Room	1	167	16	167	16
Data Communication Room	1	250	23	250	23
Mechanical Equipment Room	1	350	33	350	33
Electrical Room	1	233	22	233	22
Elevator Equipment Room	1	167	16	167	16
Subtotal Back of House Support				3,126	290
Subtotal Net SF Level One				25,554	2,374

126 to 215 Room VQ Space Program (Cont.)

Functional Area (126 - 215 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One (Cont.)					
Interior Circulation (Corridors, Stairs and Elevators)	1	6,644	617	6,644	617
Structure, Exterior Walls and Interior Partitions	1	5,877	546	5,877	546
Subtotal Enclosed Space Level One				38,075	3,537
Level Two					
Standard Guestroom	71	312	29	22,152	2,058
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	5	312	29	1,560	145
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	313	29	313	29
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Two				25,689	2,387
Interior Circulation (Corridors, Stairs and Elevators)	1	6,679	620	6,679	620
Structure, Exterior Walls and Interior Partitions	1	5,908	549	5,908	549
Subtotal Enclosed Space Level Two				38,277	3,556
Level Three					
Standard Guestroom	60	312	29	18,720	1,739
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	5	312	29	1,560	145
Business Suite	9	398	37	3,582	333
Business Suite with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	398	37	398	37
Business Suite with DoDABA Communication Features	1	398	37	398	37
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	290	27	290	27
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Three				26,277	2,441
Interior Circulation (Corridors, Stairs and Elevators)	1	6,832	635	6,832	635
Structure, Exterior Walls and Interior Partitions	1	6,044	561	6,044	561
Subtotal Enclosed Space Level Three				39,153	3,637
Total Enclosed Space				115,505	10,730
Covered Exterior Space (Porte Cochere) at 1/2 Scope				200	19
Gross Area for Congressional Reporting Purpose				115,705	10,749
Porte Cochere (Actual SF)	1	400	37	400	37
Actual Gross Total Footprint Area Reflected in Cost				115,905	10,768

216 to 310 Room VQ Space Program

Functional Area (216 - 310 VQ)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One					
Public Areas					
Vestibule	1	140	13	140	13
Front Desk	1	280	26	280	26
Multi-Function Lobby Area (Lobby Seating Area - 375 NSF (Business Center - 6 Computer Stations - 100 NSF) (Retail Food Service Seating Area - 34 seats - 510 NSF)	1	985	92	985	92
Retail Sales	1	140	13	140	13
Exercise Room	1	412	38	412	38
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Public Restrooms	2	75	7	150	14
Conference Room Restrooms	2	150	14	300	28
Conference Room	2	315	29	630	59
Conference Room Storage	2	35	3	70	7
Subtotal Public Areas				3,352	311
Retail Food Service					
Retail Food Service Servery	1	225	21	225	21
Retail Food Service Kitchen	1	300	28	300	28
Subtotal Retail Food Service				525	49
Administration Services					
Luggage Storage Room	1	512	48	512	48
General Manager	1	125	12	125	12
Workspace	1	835	78	835	78
Retail Storage	1	46	4	46	4
Subtotal Administration Services				1,518	141
Guestrooms					
Standard Guestroom	50	312	29	15,600	1,449
Standard Guestroom with DoDABA Mobility Features without Roll-in Showers	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll- in Showers	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Subtotal Guestrooms				17,927	1,665
Back of House					
Central Janitor Area	1	183	17	183	17
Staff Restrooms	2	50	5	100	9
Housekeeping Office	1	100	9	100	9
Housekeeping and Laundry	1	1,166	108	1,166	108
General, Equipment and Grounds Storage	1	208	19	208	19
Engineering Office/Workshop	1	250	23	250	23
Receiving/Loading Dock	1	392	36	392	36
Break Room	1	233	22	233	22
Data Communication Room	1	350	33	350	33
Mechanical Equipment Room	1	400	37	400	37
Electrical Room	1	316	29	316	29
Elevator Equipment Room	1	233	22	233	22
Subtotal Back of House Support				3,931	365
Subtotal Net SF Level One				27,253	2,532

216 to 310 Room VQ Space Program (Cont.)

Functional Area (216 - 310 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One (Cont.)					
Interior Circulation (Corridors, Stairs and Elevators)	1	7,086	658	7,086	658
Structure, Exterior Walls and Interior Partitions	1	6,268	582	6,268	582
Subtotal Enclosed Space Level One				40,607	3,772
Level Two					
Standard Guestroom	78	312	29	24,336	2,261
Standard Guestroom with DoDABA Mobility Features without Roll-in Showers	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Showers	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Two				27,248	2,531
Interior Circulation (Corridors, Stairs and Elevators)	1	7,084	658	7,084	658
Structure, Exterior Walls and Interior Partitions	1	6,267	582	6,267	582
Subtotal Enclosed Space Level Two				40,600	3,772
Level Three					
Standard Guestroom	78	312	29	24,336	2,261
Standard Guestroom with DoDABA Mobility Features without Roll-in Showers	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features with Roll-in Showers	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Three				27,248	2,531
Interior Circulation (Corridors, Stairs and Elevators)	1	7,084	658	7,084	658
Structure, Exterior Walls and Interior Partitions	1	6,267	582	6,267	582
Subtotal Enclosed Space Level Three				40,600	3,772

216 to 310 Room VQ Space Program (Cont.)

Functional Area (216 - 310 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level Four					
Standard Guestroom	62	312	29	19,344	1,797
Standard Guestroom with DoDABA Mobility Features without Roll-in Showers with Communication Features	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Business Suite	14	398	37	5,572	518
Business Suite with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	398	37	398	37
Business Suite with DoDABA Communication Features	1	398	37	398	37
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	290	27	290	27
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Four				27,953	2,597
Interior Circulation (Corridors, Stairs and Elevators)	1	7,268	675	7,268	675
Structure, Exterior Walls and Interior Partitions	1	6,429	597	6,429	597
Subtotal Enclosed Space Level Four				41,650	3,869
Total Enclosed Space				163,456	15,185
Covered Exterior Space (Porte Cochere) at 1/2 Scope				200	19
Gross Area for Congressional Reporting Purpose				163,656	15,204
Porte Cochere (Actual SF)	1	400	37	400	37
Actual Gross Total Footprint Area Reflected in Cost				163,856	15,222

311 to 400 Room VQ Space Program

Functional Area (311 - 400 VQ)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One					
Public Areas					
Vestibule	1	160	15	160	15
Front Desk	1	360	33	360	33
Multi-Function Lobby Area	1	1,478	137	1,478	137
(Lobby Seating Area - 450 NSF)					
(Business Center - 8 Computer Stations - 128 NSF)					
(Retail Food Service Seating Area - 40 Seats - 600 NSF)					
(Access to Parking - 300 NSF)					
Retail Sales	1	160	15	160	15
Exercise Room	1	450	42	450	42
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Public Restrooms	2	75	7	150	14
Conference Room Restrooms	2	150	14	300	28
Conference Room	2	315	29	630	59
Conference Room Storage	2	35	3	70	7
Subtotal Public Areas				4,003	372

311 to 400 Room VQ Space Program (Cont.)

Functional Area (311 - 400 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level One (Cont.)					
Retail Food Service					
Retail Food Service Servery	1	225	21	225	21
Retail Food Service Kitchen	1	300	28	300	28
Subtotal Retail Food Service				525	49
Administration Services					
Luggage Storage Room	1	550	51	550	51
General Manager's Office	1	125	12	125	12
Workspace	1	1,000	93	1,000	93
Retail Storage	1	60	6	60	6
Subtotal Administration Services				1,735	161
Guestrooms					
Standard Guestroom	45	312	29	14,040	1,304
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Mobility Features and Communication Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	2	313	29	626	58
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Subtotal Guestrooms				16,993	1,579
Back of House					
Central Janitor Area	1	300	28	300	28
Staff Restrooms	2	50	5	100	9
Housekeeping Office	1	100	9	100	9
Housekeeping and Laundry	1	1,500	139	1,500	139
General, Equipment and Grounds Storage	1	250	23	250	23
Engineering Office/Workshop	1	300	28	300	28
Receiving/Loading Dock	1	925	86	925	86
Break Room	1	300	28	300	28
Data Communication Room	1	150	14	150	14
Mechanical Equipment Room	1	450	42	450	42
Electrical Room	1	399	37	399	37
Elevator Equipment Room	1	300	28	300	28
Subtotal Back of House Support				5,074	471
Subtotal Net SF Level One				28,330	2,632
Interior Circulation (Corridors, Stairs and Elevators)	1	7,366	684	7,366	684
Structure, Exterior Walls and Interior Partitions	1	6,516	605	6,516	605
Subtotal Enclosed Space Level One				42,212	3,921
Level Two					
Standard Guestroom	82	312	29	25,584	2,377
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31

311 to 400 Room VQ Space Program (Cont.)

Functional Area (311 - 400 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level Two (Cont.)					
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Two				27,870	2,589
Interior Circulation (Corridors, Stairs and Elevators)	1	7,246	673	7,246	673
Structure, Exterior Walls and Interior Partitions	1	6,410	595	6,410	595
Subtotal Enclosed Space Level Two				41,526	3,858
Level Three					
Standard Guestroom	81	312	29	25,272	2,348
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	4	312	29	1,248	116
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Three				27,871	2,589
Interior Circulation (Corridors, Stairs and Elevators)	1	7,246	673	7,246	673
Structure, Exterior Walls and Interior Partitions	1	6,410	596	6,410	596
Subtotal Enclosed Space Level Three				41,528	3,858
Level Four					
Standard Guestroom	82	312	29	25,584	2,377
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	3	312	29	936	87
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	335	31	335	31
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Four				27,871	2,589
Interior Circulation (Corridors, Stairs and Elevators)	1	7,246	673	7,246	673
Structure, Exterior Walls and Interior Partitions	1	6,410	596	6,410	596
Subtotal Enclosed Space Level Four				41,528	3,858

311 to 400 Room VQ Space Program (Cont.)

Functional Area (311 - 400 VQ) (Cont.)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
Level Five					
Standard Guestroom	60	312	29	18,720	1,739
Standard Guestroom with DoDABA Mobility Features without Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Mobility Features with Roll-in Shower	1	313	29	313	29
Standard Guestroom with DoDABA Communication Features	3	312	29	936	87
Business Suite	18	398	37	7,164	666
Business Suite with DoDABA Mobility Features without Roll-in Shower with Communication Features	1	398	37	398	37
Business Suite with DoDABA Communication Features	1	398	37	398	37
Guest Laundry and Ice Machine Room (1-Washer/Dryer Pair Per 12 Standard Guestrooms at 45 SF Per Pair + 20 SF for Ice Machine)	1	245	23	245	23
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Data Switch Room	1	50	5	50	5
Mechanical Equipment Room	1	150	14	150	14
Electrical Room	1	50	5	50	5
Subtotal Net SF Level Five				28,877	2,683
Interior Circulation (Corridors, Stairs and Elevators)	1	7,508	697	7,508	697
Structure, Exterior Walls and Interior Partitions	1	6,642	617	6,642	617
Subtotal Enclosed Space Level Five				43,027	3,997
Total Enclosed Space				209,820	19,492
Covered Exterior Space (Porte Cochere) at 1/2 Scope				200	19
Gross Area for Congressional Reporting Purpose				210,020	19,511
Porte Cochere (Actual SF)				1	400
Actual Gross Total Footprint Area Reflected in Cost				210,220	19,529

2-2 Site Planning. Determining the appropriate site for a new VQ campus is the responsibility of the installation. Guidance on site location requirements for the new VQ construction includes guest demands, square footage, building height allowances, force protection setback requirements and available sites on an installation.

Consider the following lodging facility site selection and planning factors:

- Market information
- Compliance with the Base General Plan
- Base leadership (and Facilities Board) requirements
- Proximity to existing lodging facilities
- Development potential, future expansion and adjoining land uses; expansion potential for lodging facilities usually involves the addition of more guestrooms; it is generally impractical to build an addition onto an existing lodging facility; if the potential for adding additional guestrooms to a lodging facility is identified during the initial programming stage, allow space in the site development plan for additional structures and size utilities accordingly
- Force protection, accessibility and environmental considerations
- Proximity to and capacity of recreational centers and community facilities such as fitness centers, dining facilities, postal service centers, base exchanges, commissaries, pedestrian circulation systems, bike paths and mass transit routes; proximity to community services must be balanced with the need for quiet and privacy
- Existing topography and landscape – sites should be selected that minimize the potential for excessive grading

- Available base infrastructure such as roads and drives, parking, landscaping and fire department access
- Adjacencies, relationships, site attributes, development potential, building footprints
- Future demands placed on the capacity of supporting infrastructure and utilities
- Utility availability and utility location
- Vehicle circulation system, including public transportation access
- Existing walkways, designated bike and jogging paths
- Facilities requiring demolition
- Off-base communities and adjoining neighborhoods
- Other factors as might be determined by the design program and local conditions

2-2.1 Vehicular Access. 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 recommended minimum width of non-divided entry roads will be 24'-0". Provide covered passenger loading and/or drop off (porte cochere) at the main lobby entrance.

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

Follow local threat assessment and force protection criteria for all vehicle access design, critical in determining allowable set-backs, eliminating lines of approach perpendicular to the building. Consider snow dumping, especially in northern tier installations. Consider installing removable bollards as needed to restrict unauthorized vehicle access.

2-2.2 Emergency Service. Separation between buildings is required for fire protection purposes but may also be dictated by force protection requirements and local fire protection policies. Provide access to fire protection vehicles from three sides. Obtain width, weight, and turning radii of fire fighting vehicles from the base fire department.

2-2.3 Service Vehicles. Access drives and parking areas will be designed to accommodate service vehicle and delivery truck access. 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'-0" wide and 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 or gates as needed to restrict unauthorized vehicle access. Where possible, separate service entrances associated with mechanical rooms or mechanical enclosures from guest parking areas.

2-2.4 Bus Route Access. Where possible and appropriate, access to public transportation systems will be considered in project design. If the base provides bus service, walkways to existing facilities are required.

2-2.5 Pedestrian Access. Walkways to building entrances will be 8'-0" wide. All other sidewalks will be 6'-0" wide. Design and grade sidewalks for barrier-free access to the first floor of all lodging facilities and to any associated outdoor use area. Provide connections to other functional areas of the base with pedestrian circulation systems. In northern tier locations, consider the use of sidewalks above steam heat tunnels to keep sidewalks free of ice in the winter, or consider heated or covered walks in lieu of open walkways.

2-2.6 Guest Parking. Provide 0.5 parking spaces per guestroom. In addition, provide one space per business suite for reserved parking. Provide one parking space for each daytime lodging staff. Parking areas will be sized to local conditions and may be reduced.

2-2.7 Accessible Parking. Provide accessible parking spaces in accordance with the Department of Defense Architectural Barriers Act (DoDABA) Accessibility Guidelines. Locate these parking spaces to provide the most convenient access to the building entry. Provide accessible parking spaces based on the total number of guest spaces and staff parking.

2-2.8 Motorcycle Parking. Designated motorcycle parking areas are not required.

2-2.9 Bicycle Parking. Provide bicycle parking facilities within the lodging campus area as determined by the installation. Provide all bicycle parking on concrete surfaces adjacent to sidewalks of first floor building corridors. Racks will comply with base architectural guidelines.

2-3 Site Considerations

2-3.1 Grading. Provide smooth grading transitions (no steps) at building entries. For renovation projects, make every effort to eliminate stairs to the facility. Where appropriate, use grading to control views of mechanical equipment, trash dumpsters and similar site elements. Where on-site water retention is required, consider their visual impact. Use large water retention sites for outdoor recreation areas.

2-3.2 Landforms. Use landforms such as mounds and swales in conjunction with plant materials to soften or obscure undesirable views, provide spatial articulation, and to enhance drainage structures and surface water retention areas.

2-3.3 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. At 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. Refer to Unified Facilities Criteria 3-201-2 Landscape Architecture for further guidance.

2-3.4 Utility Corridors. 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'-0", whichever is greater. Locate utility corridors to allow for future street-tree plantings. Consider using pipe tunnels and trenches.

2-3.5 Site Lighting. 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 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 is required for night visitors. 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. Consider a solar collection system if the geographical location of the lodging facility can support the required solar levels.

2-3.6 Outdoor Areas. Include outdoor passive and/or active use areas in all lodging campus plans. Where appropriate, design pavilions to become an integral part of the site. Outdoor areas will include project-funded amenities such as walks, site lighting, landscaping, fencing (if used to screen equipment or dumpster enclosures only) and an enclosed pet area located near the pet friendly rooms located on the first floor of TLF buildings. Pet friendly rooms and enclosed pet areas are only used with TLFs.

2-3.7 Signage. Signage includes the primary exterior monument sign, parking, and site directional signs.

2-3.8 Fencing. Fencing around the perimeter of the site, if desired, is an APF cost and the responsibility of the installation.

2-4 Landscape Architecture

The landscape architect must obtain the installation approved plant list, if available, and have an intimate knowledge of the indigenous plant materials for the region. The design must conform with DoD force protection guidance referencing maximum height and location of plant materials adjacent to a lodging facility.

The design intent will include creating an aesthetically pleasing landscape minimizing resource and maintenance requirements. The landscape design report will include the following topics:

- Planning and Design Analysis
- Plant Selection Options
- Plant Installation
- Turf Alternatives
- Mulch Materials Alternatives
- Plant Zoning and Water Requirements
- Soil Improvements
- Irrigation Plan
- Maintenance Considerations
- Security (layout and lighting)

2-4.1 Landscape Site Design. After performing a site analysis including 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 - using landscape elements to focus attention on important features by manipulating and placing tree masses and screening undesirable features
- Visual separation - separating multiple buildings into framed units and arranging shrubs and small trees around a building to soften structural lines
- Spatial articulation - using plant materials to create outdoor enclosed spaces, to separate spaces from one another, and to direct people through outdoor spaces by visually defining and reinforcing patterns of movement
- Visual screening or enhancement - using landscape elements to screen unattractive views of objects such as trash dumpsters, pad mounted electrical transformers, parking areas and mechanical equipment
- Wind control - using landscape elements to control, slow, guide, deflect or filter the prevailing winds
- Sun control - using landscape elements around buildings, walkways and parking areas to intercept direct and indirect radiation from buildings and parking

2-4.2 Landscape Maintenance. Include landscape establishment and maintenance within the initial contract for installation of plant materials. The duration of the establishment period must be for a period of one year as part of the construction contract. The establishment period requirements will include irrigation, mowing and edging, mulch replacement, inspection/control of pests and weeds, tightening staking/guying materials, pruning, fertilization, and maintaining watering saucers.

2-4.3 Landscape Irrigation. Landscape with indigenous materials and plants to minimize irrigation needs. Consider irrigation systems in lodging facility projects sited in 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.

In cold climates, locate backflow preventers in the mechanical room. Where freezing is not a problem, locate backflow preventers within outdoor, 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 system. Take advantage of non-potable water if possible.

2-5 Building Design

2-5.1 Building Area Calculations

Actual Gross Total Footprint Area Reflected in Cost. This is measured to the outside face of the exterior enclosure walls.

Gross Area for Congressional Reporting Purposes. This is measured to the outside face of the exterior enclosure walls; however, covered exterior space (e.g., Porte Cochere) is included as one half overall size.

Net Square Feet. Net Square Feet (NSF) is measured from the inside face of the walls between rooms and the inside face of the exterior wall and the inside face of the wall separating the room and the interior building corridor.

2-5.2 Accessibility. Lodging will be designed to be accessible to and usable by persons with disabilities, including hearing impairments. New construction, as well as renovations to existing facilities, must be designed and constructed to meet accessibility standards. Adherence to Department of Defense Architectural Barriers Act (DoDABA) Accessibility Guidelines is mandatory.

2-5.3 Attics and Basements. Attic access is required and will be fire protected if required by applicable code. Storage capability in attics and basements will not be provided.

2-6 Architecture

2-6.1 Architectural Compatibility. The architectural character of lodging facilities must be in context with their surroundings and is defined by the base and/or MAJCOM architectural compatibility standards.

2-6.2 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.

2-6.3 Windows

- All living areas and places of assembly will have fixed windows; per ETL 04-3 *Design Criteria for the Prevention of Mold in Air Force Facilities*, all windows will be non-operable
- Use tight-fitting, insulated, commercial-grade windows; light-duty residential grade windows are not acceptable
- Windows and glazing will meet force protection construction standards minimum requirements; consider low emissive (Low E) double pane glazing for increased thermal performance, ultraviolet retardation, and maximum light transmission; incorporate features to assist with LEED silver certification
- Size windows nominally between 10 and 15% of the floor area they serve
- Increase window size and area to maximum allowable to increase the emission of natural light into guestrooms
- Provide solid surface window sills at all windows

2-6.4 Exterior Doors

- All public area entrance doors will meet force protection and accessibility construction standards minimum requirements and will be a minimum of 3-feet in width
- Main entrance doors will be sensor or push button operated
- Designated exit doors must be equipped with operable panic hardware; alarms that are annunciated at the front desk and can be activated at any specific time will be installed on all remote exit doors
- Doors will be fully weather-stripped and will include a heavy-duty metal threshold to prevent dirt, water and insect entry, and must be thermally insulated
- Provide insulated overhead coiling doors into supply areas, if located adjacent to exterior service areas
- 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

2-6.5 Roofing. Unless the installation's architectural compatibility standards state otherwise, all lodging facilities will have sloped standing seam metal or concrete tile roofing systems.

Concealed or interior gutters must not be used to eliminate potential leakage and future maintenance requirements. Avoid tapered roof insulation to achieve slope. Coordinate exterior locations of dryer vents and bath exhausts to minimize roof penetration and lessen the visual impact on exterior elevations.

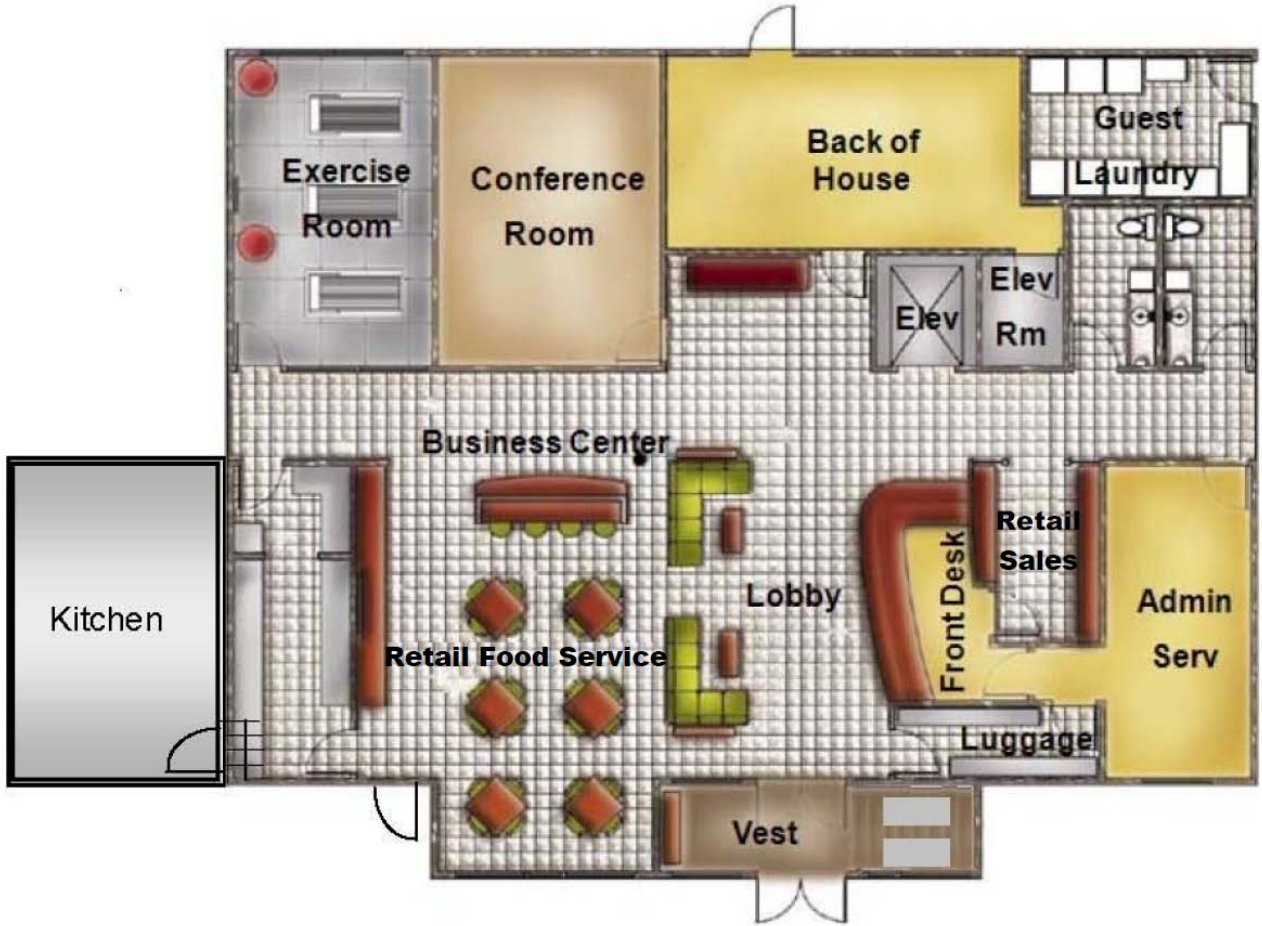
2-6.6 Building Signage. Building signage must provide clear directional and informational assistance. Mechanical, electrical and/or utility room doors must have identifying signage to match other building signage.

2-6.7 Porte Cochere. Provide a covered passenger loading and/or drop off at the main lobby entrance. Provide a covered walkway connecting the area to the main lobby entrance. Provide adequate lighting and benches. The design of the covered area must be compatible with the architecture of the VQ facility. Comply with ATFP requirements for Porte Cocheres attached to buildings including surge width and provide removable bollards.

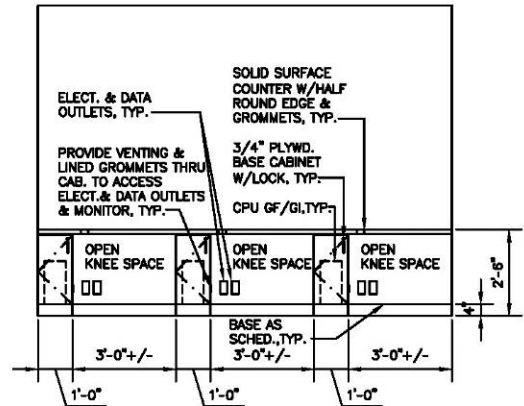
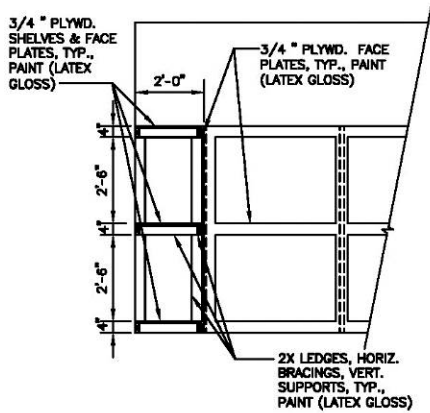
2-7 Interior Design

2-7.1 Public Areas. The public areas of the VQ are to be designed to provide services to guests in an open, comfortable and inviting multi-purpose setting. These areas include a vestibule, front desk, multi-function lobby, retail sales, business center, exercise room, guest laundry, public restrooms, conference room, automated registration and teller machines (where provided) and retail food service.

Lobby Area Plan to Support 125 Rooms



Lobby Area Millwork Details



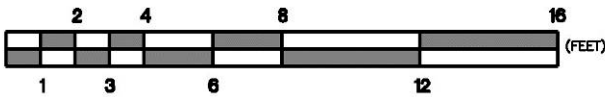
NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.

TYPICAL LUGGAGE STORAGE

AF VO

AFPC/SVXFB

30 APR '12

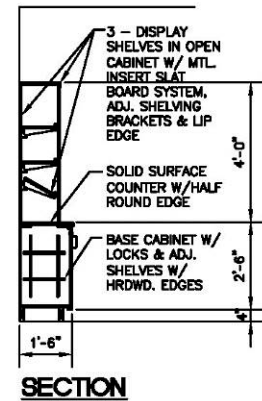
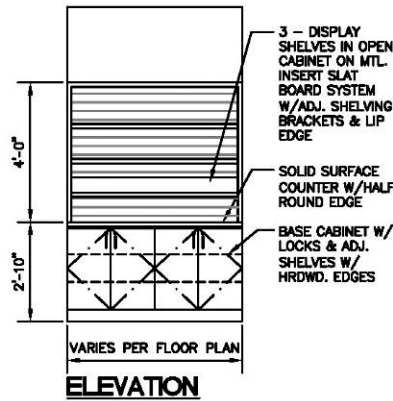
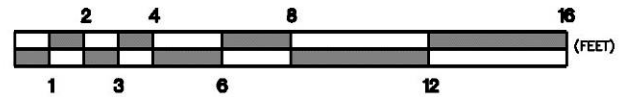


BUSINESS CENTER COUNTER

AF VO

AFPC/SVXFB

30 APR '12



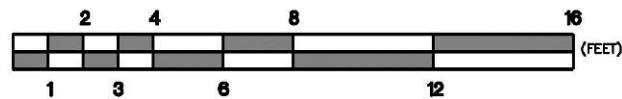
NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.

TYPICAL RETAIL SALES COUNTER

AF VO

AFPC/SVXFB

30 APR '12



2-7.1.1 Vestibule

Floor Finish

- Porcelain tile
- Walk-off mat

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Furniture

- Space permitting

2-7.1.2 Front Desk

Floor Finish

- Porcelain tile

Wall Finishes

- Painted drywall/wood/tile/laminate

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Millwork

- Front desk and rear counter
- Solid surface/stone countertops

Signage

- Front desk sign

2-7.1.3 Multi-Function Lobby

Floor Finish

- Porcelain tile
- Area rug/carpet

Wall Finish

- Painted drywall/wood/tile/laminate

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Furniture

- Space permitting

2-7.1.4 Retail Sales

Floor Finish

- Porcelain tile

Wall Finish

- Painted drywall/wood/tile/laminate/slat wall

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Millwork

- Display casework

Equipment

- Refrigeration units

Signage

- Retail sales sign

2-7.1.5 Business Center

Floor Finish

- Porcelain tile

Wall Finish

- Painted drywall/wood/tile/laminate

Ceiling Finish

- Painted drywall

Millwork

- Two-sided computer counter

Lighting

- Compact fluorescent

Furniture

- Space permitting

Equipment

- Wireless Internet
- Charging stations
- Computer workstations, printer and wired Internet outlets to this area for guests to print boarding passes, check weather, house/apartment hunt, and guests not traveling with a computer

2-7.1.6 Exercise Room

Floor Finish

- Rubberized sheet flooring with cove base

Wall Finish

- Painted drywall
- Mirror (one long side)

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Cardio exercise equipment only is authorized, no weigh equipment of any type allowed
- Floor area for stretching and calisthenics
- Wall mounted flat screen television

Signage

- Exercise Room sign

2-7.1.7 Guest Laundry and Ice Machine Room

Floor Finish

- Porcelain tile

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Furniture

- Folding area

Equipment

- Vending machine (detergent, bleach, fabric softener)
- Ice machine
- Utility sink
- Waste receptacle

Signage

- Guest Laundry sign

2-7.1.8 Public Restrooms

Floor Finish

- Porcelain tile or ceramic tile

Wall Finishes

- Painted drywall
- Ceramic tile
- Porcelain tile
- Mirror over vanity

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Millwork

- Lavatory counter

Equipment

- Toilet partitions, toilet paper dispensers, waste receptacles and soap dispensers
- Feminine hygiene vending for women's restroom
- Diaper changing station for men's and women's restrooms

Signage

- Men's restroom and women's restroom signs

2-7.1.9 Conference/Employee Training Room

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent
- Compact fluorescent

Furniture

- Multi-purpose training tables
- Stack chairs
- Task chairs

Equipment

- Audio/visual equipment
- Ceiling mounted projection screen
- Wireless and wired Internet
- Dry erase/white board
- Floor outlets for audio/visual, electrical and network

Storage Closets

- For storage of audio/visual equipment, podium and furniture

2-7.1.10 Automated Registration and Teller Machines

Floor Finish

- Porcelain tile

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- Compact fluorescent

Equipment

- Flush, wall mounted automated teller machine (located in wall of administrative services, across from public restrooms) or free standing

Signage

- Automated registration and teller machine signage

2-7.1.11 Retail Food Service

Floor Finishes

- Ceramic tile
- Sealed concrete
- Porcelain tile
- Quarry tile

Wall Finishes

- Painted drywall
- Chair rail

Ceiling Finishes

- Painted drywall soffit
- Suspended acoustical tile

Lighting

- Recessed fluorescent
- Compact fluorescent

Millwork

- Cabinets and counter
-

Furniture

- Four-top dining tables
- Dining chairs

Equipment

- Point of sale equipment
- Condiment counter
- Shelving
- Coffee serving table
- Cappuccino machine
- Soda dispenser
- Brewer
- Soda system
- Power blender
- Refrigerators
- Ice maker
- Sink
- Under counter dishwasher
- Dish table

- Convection/microwave oven
- Ice water bin
- Toaster
- Panini grill
- Ceiling mounted flat screen television

Signage

- Logo sign

2-7.2 Administrative Areas

2-7.2.1 Luggage Storage Room

Floor Finishes

- Porcelain tile

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Millwork

- Shelving for luggage storage

2-7.2.2 General Manager

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Furniture

- Desk with file pedestal and return
- Desk chair
- Credenza with filing below
- Two guest chairs

2-7.2.3 Workspace

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Furniture

- Systems furniture

Equipment

- Copier, fax machine and safe

2-7.2.4 Retail Storage

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Shelving for storage

2-7.3 Back-of-House

2-7.3.1 Central Janitor Area

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile or painted exposed structure

Lighting

- Fluorescent

Equipment

- Storage shelving

2-7.3.2 Staff Restrooms

Floor Finishes

- Porcelain tile

Wall Finishes

- Painted drywall
- Ceramic tile

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Lavatories/free hanging sinks, mirrors above sinks, water closets, waste receptacles, paper towel dispensers and soap dispensers

2-7.3.3 Housekeeping Office

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Furniture

- Desk with filing pedestal and return
- Two guest chairs

2-7.3.4 Housekeeping and Laundry

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Employee lockers, double tiered, 12" x 18" x 36", molded plastic fronts
- Space for laundry cart and housekeeping cart storage
- Area for sorting soiled linen
- Shelving for linen storage and supply items

2-7.3.5 General, Equipment and Grounds Storage

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile or painted exposed structure

Lighting

- Fluorescent

Equipment

- Shelving and storage cabinets

2-7.3.6 Engineering Office/Workshop

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Work bench
- Shelving and storage cabinets

2-7.3.7 Receiving

Floor Finish

- Sealed concrete

Wall Finish

- Painted drywall

Ceiling Finish

- Suspended acoustical tile or exposed painted structure

Lighting

- Fluorescent

2-7.3.8 Break Room

Flooring

- Porcelain tile and base with sealed grout

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Millwork

- Solid wood construction cabinets and counters with hidden hinges, integral routed pulls, raised panel doors and drawer fronts, adjustable shelving, stained to match casegoods
- Solid surface counter top with integral 4" back and side splashes

Equipment

- Two compartment, 8" deep kitchen sink, 18-gauge brushed stainless steel, satin finish, with single-lever faucet and integral spray hose
- Refrigerator with ice maker and filtered water line
- Wall mounted television adjacent to a duplex outlet and cable television outlet
- Electrical outlets above counter height, GFI where appropriate and as required to service appliance, including the disposal, refrigerator, microwave and 12-cup coffee maker
- Wired network outlet for time clock

2-7.3.9 Service Circulation

Floor Finish

- Porcelain tile or sealed concrete

Wall Finish

- Painted drywall
- Vinyl corner guards on outside corners, 48" from top of base

Ceiling Finish

- Suspended acoustical tile

Lighting

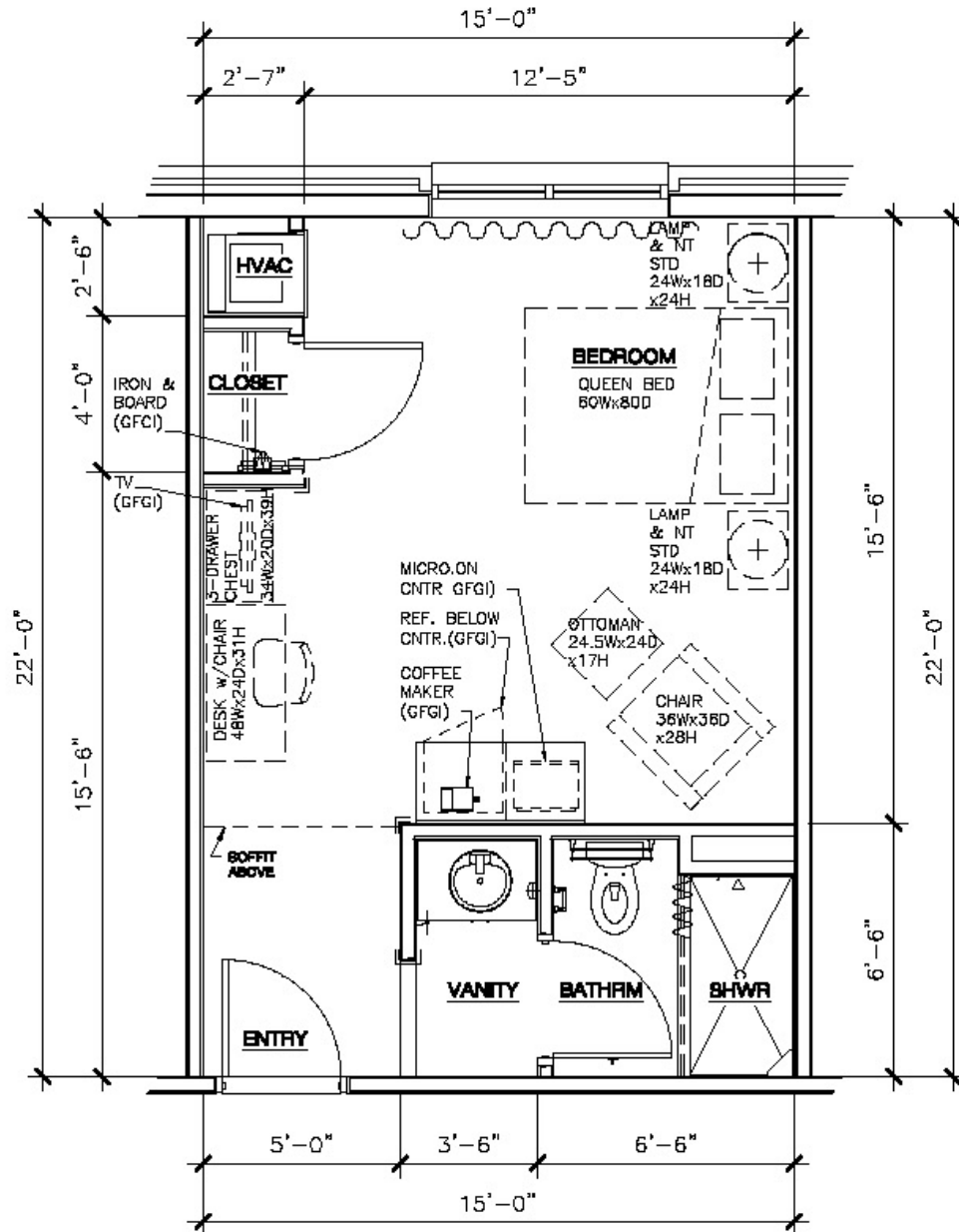
- Recessed fluorescent

2-7.4 Guestrooms and Support

2-7.4.1 Standard Guestroom

- Living/sleeping area, closet and bathroom with lavatory area

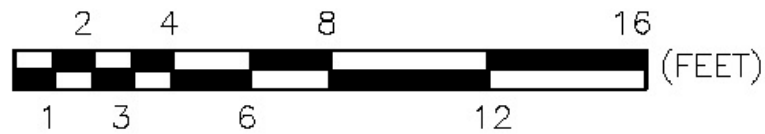
Standard Guestroom Plan
312 NSF



AIR FORCE VISITING QUARTERS:
STANDARD GUEST ROOM - 312 NSF

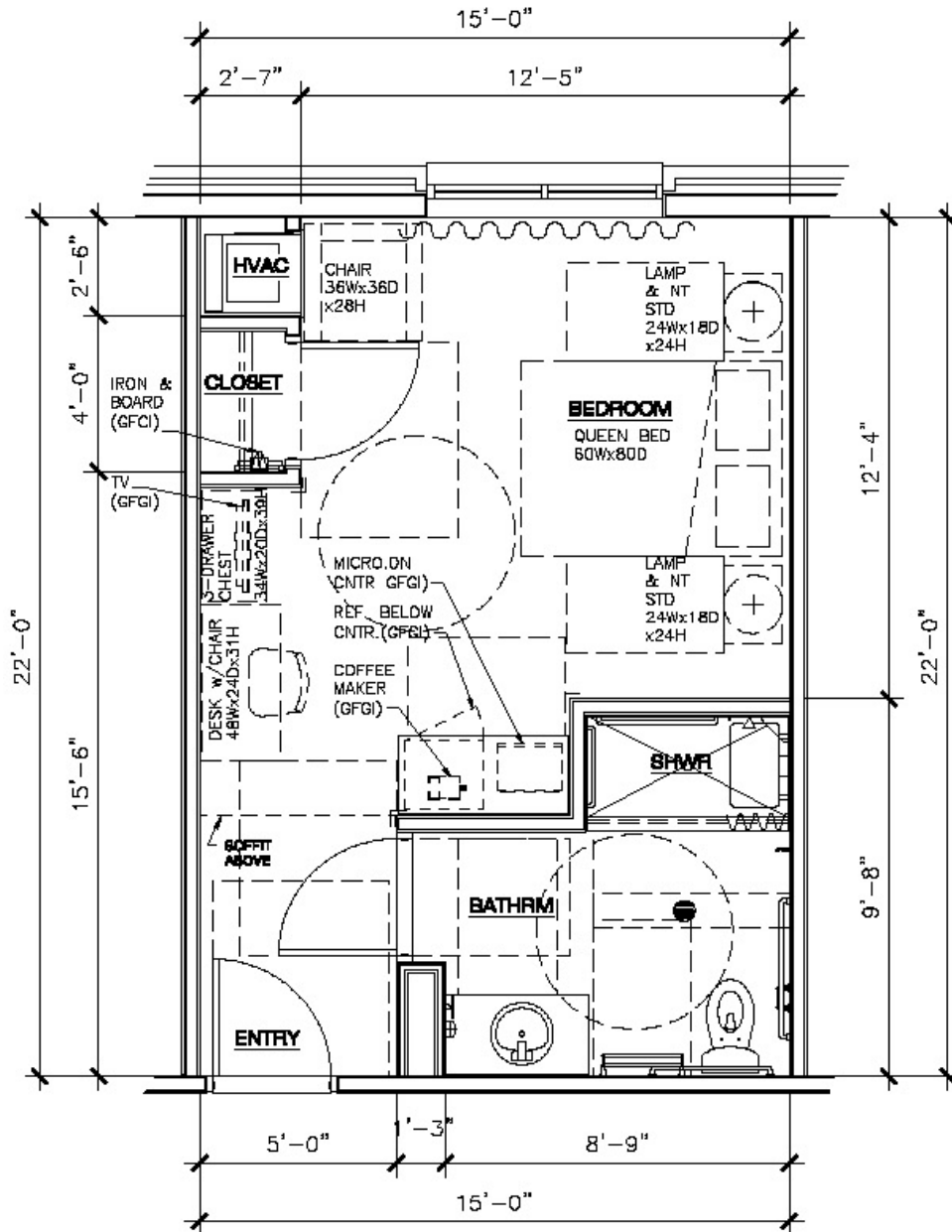
AFPC/SVXFB

SEPT. 2013



NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

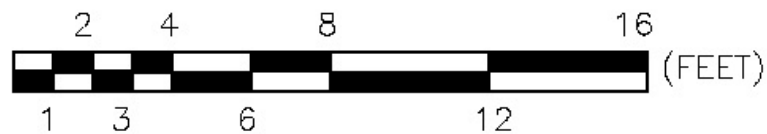
Standard Guestroom DoDABA Plan
313 NSF



AIR FORCE VISITING QUARTERS:
ACCESSIBLE GUEST ROOM – 313 NSF

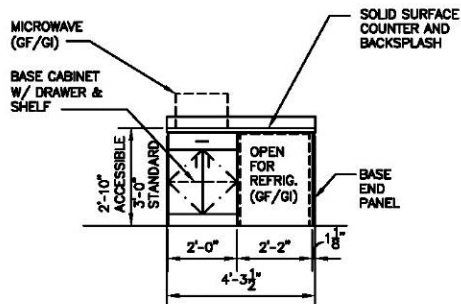
AFPC/SVXFB

SEPT. 2013



NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

Standard Guestroom Millwork Detail



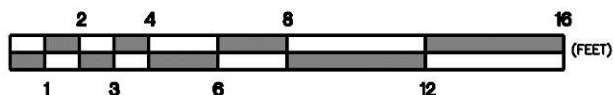
- NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.
 2. INSTALL MATCHING WOOD TRIM AROUND UNDERCOUNTER REFRIG.

TYPICAL FOOD AND BEVERAGE COUNTER

AF VO: Standard/Accessible Guest Suite

AFPC/SVXFB

04 SEP '13



Living/Sleeping Area

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall with accent wall at headboard
- Vinyl corner guards on outside corner, 48" from top of base

Ceiling Finish

- Painted drywall

Lighting

- Lamps on nightstands
- Ceiling light fixture at entry
- Lamp on desk

Millwork

- Base cabinet with solid surface countertop with waterfall edges and 4" backsplash
- Base cabinet with solid wood construction, hidden hinges, integral routed pulls, raised panel solid wood doors and drawer fronts, fixed shelving and trim to match casegoods

Furniture

- Queen bed/two nightstands
- Bed softgoods including comforter/coverlet, and four bed pillows (confirm with AFPC Lodging Program)
- Lounge chair
- Ottoman
- Desk/dresser
- Fully adjustable, ergonomic desk chair

Equipment

- Wireless Internet
- Telephone at bedside
- Flat screen television
- Undercounter refrigerator
- Microwave

- Coffee pot
- Alarm clock
- Wall-mounted full length mirror at entry/lavatory area wall

Closet

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Doors

- Floor-to-ceiling doors to maximize closet space

Equipment

- Ironing board
- Iron
- Safe (in closet)
- Closet shelf and rod

Bathroom and Lavatory Area

Floor Finish

- 12" x 12" porcelain tile with cove tile base and epoxy grout

Wall Finish

- Painted, water resistant drywall

Ceiling Finish

- Painted, water resistant drywall

Lighting

- Wall-mounted vanity lighting above mirror

Furniture

- Lavatory cabinet with storage below
- Wall-mounted mirror above lavatory
- Solid surface counter with waterfall edges with 4" back and side splashes

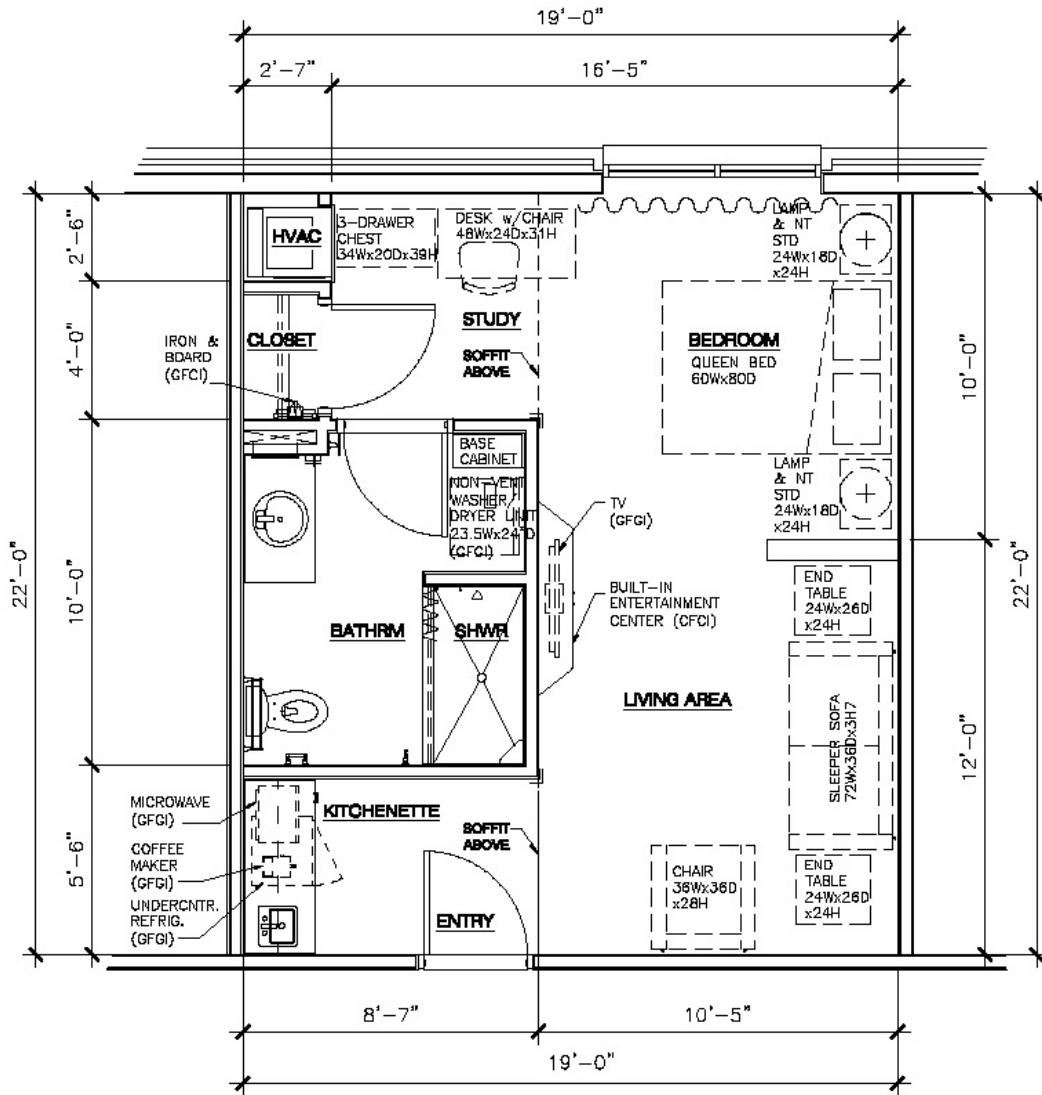
Equipment

- Hair dryer
- Lavatory in the DoDABA compliant guestroom in lieu of a counter and lavatory cabinet; insulate the pipes and maximize knee space as per applicable code
- Cast iron bathtub/shower, white, with non-slip surface; pre-cast shower pan (in new construction)
- Roll-in showers will be used in DoDABA compliant living units
- Shower head with adjustable spray; hand-held with adjustable pole mount, brass components
- White, floor mount, tank type, elongated toilet with full seat and lid
- Surface mounted wet location light fixture centered above bathtub/shower
- Independently switched radiant heat/light fixture with timer in the bathroom; ceiling mounted exhaust fan per code
- Duplex convenience outlets (GFI) both sides of vanity cabinet per code
- Solid surface shower surround material, seamless, with corner shelves sloped for drainage
- Screw-in shower curtain rod; bow-shaped for bathtubs, straight for showers
- Grab bars on the side wall and rear wall of the tub at 36" above finished floor
- Grab bars adjacent to toilet and a shower seat in the tub of all DoDABA compliant living units
- Toilet accessories to include one robe hook, 24" towel bars for VQ standard two service towel sets and one single roll toilet paper holder

2-7.4.2 Business Suite

- Living area, entry/kitchenette, sleeping area, closet and bathroom

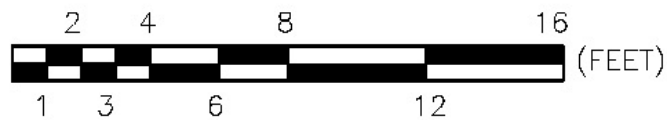
**Business Suite Plan
398 NSF**



AIR FORCE VISITING QUARTERS:
STANDARD BUSINESS SUITE – 398 NSF

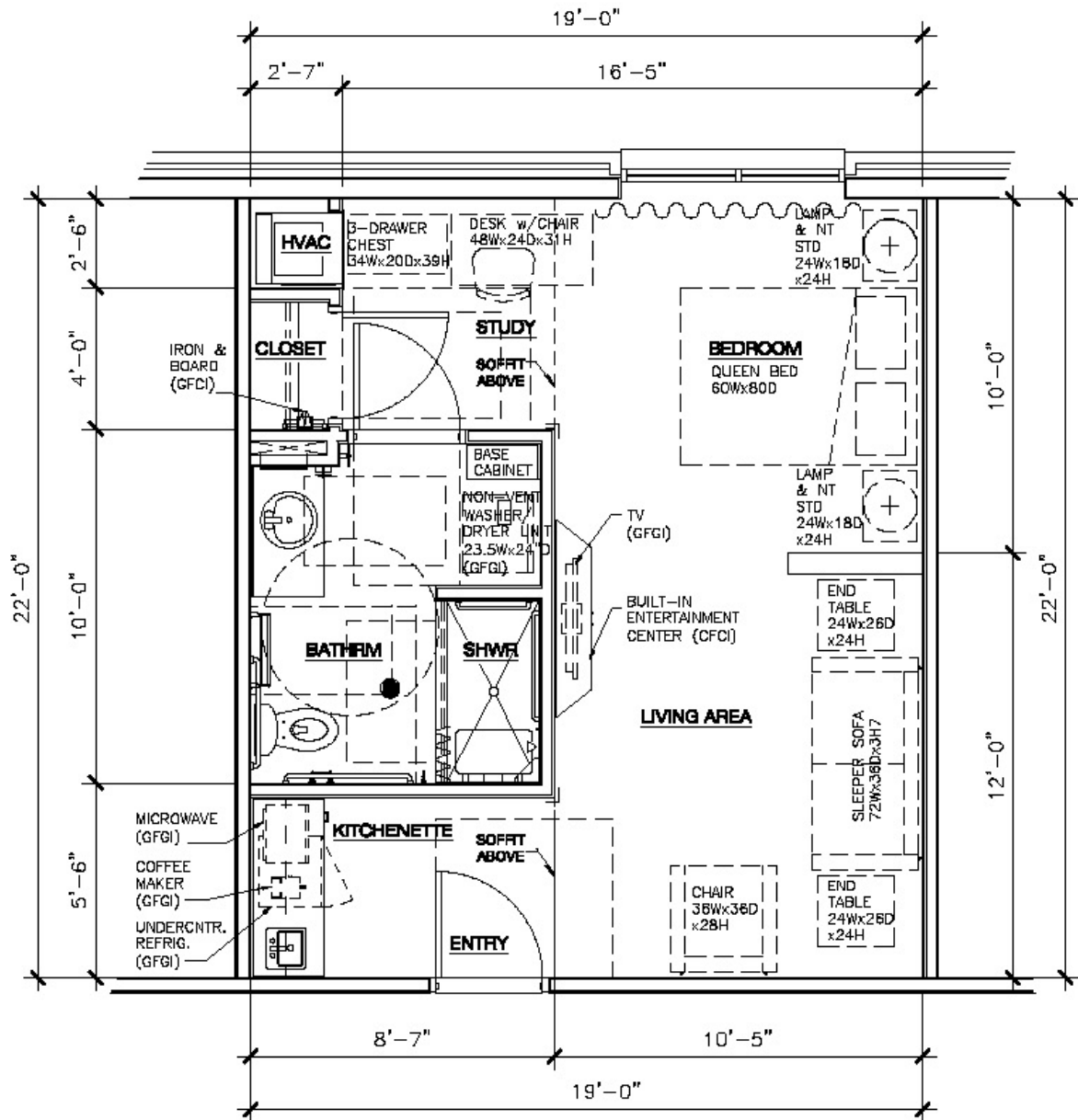
AFPC/SVXFB

SEPT. 2013



NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

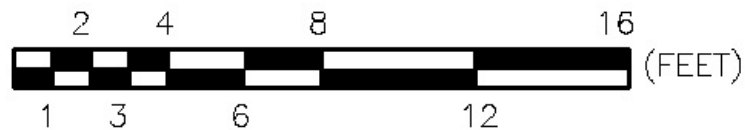
Business Suite DoDABA Plan
398 NSF



AIR FORCE VISITING QUARTERS:
ACCESSIBLE BUSINESS SUITE – 398 NSF

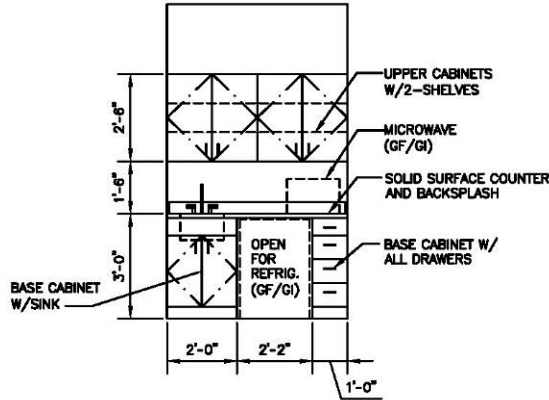
AFPC/SVXFB

SEPT. 2013



NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

Business Suite Millwork Details

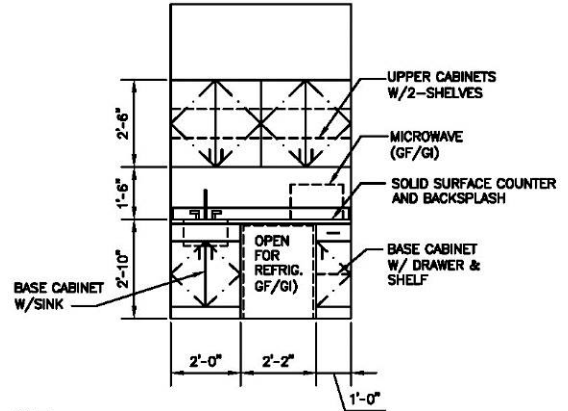
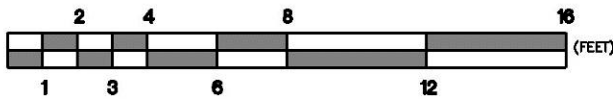


- NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.
2. INSTALL MATCHING WOOD TRIM AROUND UNDERCOUNTER REFRIG.

TYPICAL FOOD AND BEVERAGE COUNTER
AF VQ: Business Suite

AFPC/SVXFB

30 APR '12

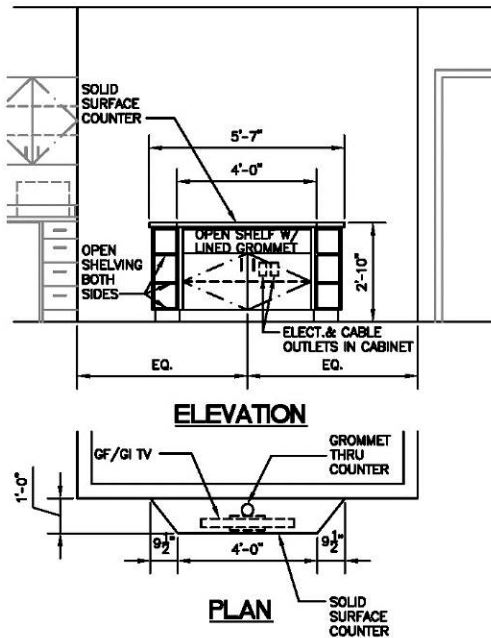
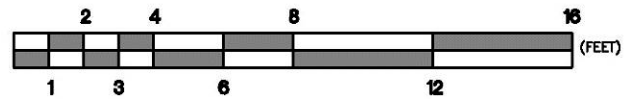


- NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.
2. INSTALL MATCHING WOOD TRIM AROUND UNDERCOUNTER REFRIG.

TYPICAL FOOD AND BEVERAGE COUNTER
AF VQ: Accessible Business Suite

AFPC/SVXFB

30 APR '12

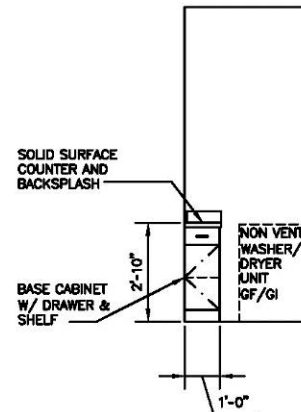
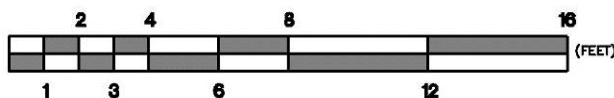


- NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.

MEDIA CENTER
AF VQ: Standard/Accessible Business Suite

AFPC/SVXFB

30 APR '12

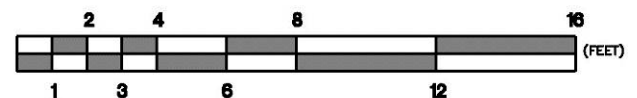


- NOTE:
1. CABINETS TO BE STAINED WOOD TO MATCH BASE STD.

LAUNDRY CABINET
AF VQ: Standard/Accessible Business Suite

AFPC/SVXFB

30 APR '12



Living Area

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall
- Vinyl corner guards on outside corners, 48" from top of base

Ceiling Finish

- Painted drywall

Lighting

- Light fixture at end table
- Ceiling light fixture at entry

Millwork

- Built-in shelving unit with television top shelf

Furniture

- Sofa/chair/coffee table/end tables

Equipment

- Flat screen television

Entry/Kitchenette

Floor Finish

- 12" x 12" porcelain tile with cove tile base and sealed tile grout

Wall Finish

- Painted drywall
- Vinyl corner guards on outside corners, 48" from top of base

Ceiling Finish

- Painted drywall

Lighting

- Lamp on desk
- Fluorescent task lighting under upper cabinet (full length)
- Recessed fluorescent light at entrance

Millwork

- Base cabinet and upper cabinet– solid wood construction with hidden hinges, integral routed pulls, raised panel doors and drawer fronts, adjustable shelving; include wood trim on upper cabinet to hide under cabinet lighting; base cabinet, upper cabinet and trim to match casegoods
- Solid surface counter with waterfall edges, integral 4" back and side splashes

Equipment

- Wireless Internet
- Telephone at desk
- Under counter refrigerator
- 18-gauge stainless steel sink, 8" deep with gooseneck single-lever faucet and integral spray hose
- Microwave
- Coffee pot

Sleeping Area

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall with accent wall at headboard
- Vinyl corner guards on outside corners, 48" from top of base

Ceiling Finish

- Painted drywall

Lighting

- Lamps on nightstands
- Ceiling fan with light kit

Furniture

- Queen bed
- Bed softgoods including comforter/coverlet, shams and skirt, four bed pillows and four accent pillows (confirm with AFPC Lodging Program)
- Two nightstands
- Desk/dresser unit with fully adjustable, ergonomic desk chair

Equipment

- Telephone at bedside
- Telephone at desk
- Alarm clock
- Wireless Internet
- Wall-mounted full length mirror

Closet

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- Recessed fluorescent light fixture located outside closet area

Doors

- Floor-to-ceiling doors to maximize closet space

Equipment

- Ironing board
- Iron
- Safe (in closet)
- Closet shelf and rod

Bathroom and Lavatory Area

Floor Finish

- 12" x 12" porcelain tile with cove tile base and epoxy grout

Wall Finish

- Painted, water resistant drywall

Ceiling Finish

- Painted, water resistant drywall

Lighting

- Wall-mounted vanity lighting above mirror

Furniture

- Lavatory cabinet with storage below
- Wall-mounted mirror above lavatory
- Solid surface counter with half-round or waterfall edges with 4" back and side splashes

Equipment

- Hair dryer
- Lavatory in the DoDABA compliant suite in lieu of a counter and lavatory cabinet; insulate the pipes and maximize knee space as per applicable code
- Pre-cast shower pan
- Roll-in showers will be used in DoDABA compliant suites

- Shower head with adjustable spray; hand-held with adjustable pole mount, brass components
- White, floor mount, tank type, elongated toilet with full seat and lid
- Surface mounted wet location light fixture centered above bathtub/shower
- Independently switched radiant heat/light fixture with timer in the bathroom; ceiling mounted exhaust fan per code
- Duplex convenience outlets (GFI) both sides of vanity cabinet per code
- Solid surface shower surround material, seamless, with two corner shelves sloped for drainage
- Screw-in shower rod with curtain
- Grab bars on the side wall and rear wall of the tub at 36" above finished floor
- Grab bars adjacent to toilet and a shower seat in the tub of all DoDABA compliant suites
- Toilet accessories to include one robe hook, 24" towel bars for business suite standard of two service towel sets and one single roll toilet paper holder
- All-in-one combination washer/dryer unit

2-7.4.3 Guestroom Corridors and Elevator Lobbies

Floor Finishes

- Carpet with carpet base

Wall Finishes

- Painted drywall
- Chair rail

Ceiling Finish

- Painted drywall or suspended acoustical tile

Lighting

- Recessed down lights
- Wall sconces
- Wall washers at artwork

Signage

- Directional signage
- Room number signage
- Room signage for janitor closets and housekeeping closets

2-7.4.4 Housekeeping Closets

Floor Finishes

- Sealed concrete

Wall Finishes

- Painted drywall

Ceiling Finish

- Suspended acoustical tile

Lighting

- Fluorescent

Equipment

- Shelving for supplies and linens

2-7.4.5 Janitor Closets

Flooring

- Sealed concrete with floor drain

Walls

- Painted water resistant drywall

Ceiling

- Suspended acoustical tile or exposed painted structure

Lighting

- Recessed fluorescent

Equipment

- Mop sink
- Mop/broom holder
- Shelving for supplies
- Use building hot water system

2-7.5 Signage and Accessories. Provide signage and accessories for all areas of the VQ facility. Coordinate with the installation, Major Command and Air Force Services Personnel Center Lodging Program, with the final approval by Headquarters Air Force Personnel Center. Graphics presentation and content must be well designed, coordinated with the architecture and interior design, and compatible with the local geographical culture.

Interior signage will be in accordance with the installation sign standards, accessibility requirements defined in the Department of Defense Architectural Barriers Act (DoDABA) Accessibility Guidelines. 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 Standard Guestrooms and Business Suites. Coordinate directional signage and individual guestroom numbering schemes with the local lodging manager.

2-8 Building Systems

2-8.1 Acoustics. Walls between guestrooms, between guestrooms and living areas, between guestrooms and corridors, between guestrooms on a floor level above or below, exterior walls of guestrooms, mechanical rooms and systems, elevators and stairs, service areas, employee areas, laundry and vending areas, supply areas, and externally-generated sound such as aircraft and automobile noise must have a Sound Transmission Class (STC) of 55. Floor and ceiling assemblies must have a STC of at least 55 and an Impact Insulation Class of at least 60. Telephone, cable television, convenience outlets and mechanical ducts must 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". The high noise levels generated by jet aircraft, as well as normal acoustical concerns, must be addressed early in the design stage.

2-8.2 Mechanical Systems. Locate air intakes on roofs or above first floor, and restrict access to intakes; control access to facility roofs; install emergency shutoff switches for HVAC systems; avoid positioning redundant utilities in the same location or chase; and provide secured access to all supporting facilities and infrastructure systems. Coordinate location of dryer, kitchen and bath exhaust vents on exterior of the facility and away from windows. Exposed ductwork, conduit, etc., is not allowed.

2-8.3 HVAC System. The HVAC system must be designed to ensure that building energy consumption does not exceed Department of Defense energy budget figures.

HVAC systems will be standardized with electronic regulating temperature controls. One individual climate control must be provided and located within each standard guestroom and business suite. Coordinate the location of thermostats with the location of furniture and artwork throughout the facility.

2-8.4 Ventilation. Bathrooms will be equipped with a central exhaust system. System selection will be based upon a life cycle cost analysis. The exhaust system will run continuously and be interlocked with the building supply air system, include a manual volume damper accessible from the space for proper balancing, and include an evaluation for utilizing heat recovery from the exhaust system to precondition ventilation air. Continuous running bathroom exhaust must be quiet and comply with the

Room Sound Criteria listed in the latest ASHRAE applications handbook for hotel rooms. Consider alternative systems that balance cost, maintainability and control.

2-8.5 Laundry Areas. Dryer venting must be designed to prevent clogs and significant maintenance issues. Design straight-run venting of dryers to avoid lint clogs. Dryer venting must be exhausted away from windows and exterior balcony areas.

2-8.6 Plumbing. Provide domestic hot and cold water, sanitary and storm drainage, propane or natural gas, steam or hot water, and/or chilled water as required. Provide metering for water per building and as per Air Force requirements.

Provide hot and cold water to all public restrooms, bathrooms, sinks, janitor closets, drinking fountains (cold water only) and laundry rooms. Provide floor drains in all guest bathrooms, public restrooms, janitor closets, and laundry rooms. Provide a pair of shut-off valves (one for cold water and one for hot water) in guest bathrooms, public restrooms, janitor closets and laundry rooms. Tank type, low water volume toilets are required in all bathrooms. Provide elongated bowl toilets with a closed-front seat and a lid. Toilets and bath fixtures must match and be neutral in color. All exposed bathroom plumbing fixtures (pipes, faucets, etc.) must be first-line chrome-plated brass, manufactured by nationally known manufacturers. All tubs and lavatories must have pop-in water stoppers. Rubber stoppers are not permitted. Tub/shower valves must 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.

In public toilets, provide sensor-activated faucets, toilets and urinals. Drinking fountains will be located in the lobby. Hose bibbs will be provided on all exterior walls of each building at 30.5m (100'-0") intervals; freeze point as dictated by climatic conditions.

2-8.6.1 Hot Water Systems. Central hot water domestic systems (gas if possible) will be specified for all projects to reduce costs and to provide better service for guests.

The domestic hot water system must have a circulating pump or other approved system installed in-line to provide instant hot water at tap. Provide protection from hot water surges. The minimum requirements are to allow for simultaneous use of 100% of the showers discharging (maintaining a pressure of 15 psi at the showerhead). Hot water will be stored at a temperature greater than 140 degrees F. Minimum hot water storage will be sized to maintain flow under 100% shower discharge for a five-minute period (capacity will vary based upon number of rooms). The heat exchangers within the calorifier will be capable of raising the contents from 50 degrees F to 149 degrees F in one hour. The temperature of the hot water as it leaves the hot water storage calorifier will be 140 degrees F.

2-8.7 Energy Performance. Incorporate building and system design features that will assist in obtaining LEED silver certification. Key components of LEED building energy performance are optimized energy use, indoor air quality, and controllability of systems for thermal comfort. Sustainable energy performance in lodging facilities cannot be achieved solely by individual building systems, but must be supplemented by other design factors as well. 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 factors designers must consider, but they will keep in mind the importance of life cycle cost analysis for lodging facilities. The Air Force keeps its 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. Recent federal policy requires the use of

Energy Star and other energy efficient products when acquiring energy using products. When Energy Star labeled products are not available, select products in the upper 25% efficiency and meet LEED energy efficiency guidelines.

2-8.8 Electrical/Communications. The electrical design of VQ projects will be based on maximum guestroom hotel occupancy. The design will include electrical distribution equipment, data fax ports, intrusion detection systems, cable television, fire detection and enunciation, emergency lighting, interior and exterior lighting, receptacles and grounding, and electric, telephone and local area network wiring. Provide individual circuits per room. Provide surge protection on service entrances, distribution panels, sub-panels, selected feeders, and sensitive load circuits. Provide metering for electric power per building and per Air Force requirements. When retail food service is included, provide separate metering.

Provide a mass notification system in all facilities in project funding. This requirement will be integrated into the lodging facility communication system. Coordinate with installation Anti-terrorism office.

The following standards apply to the planning, design and construction phase of new construction and renovation to existing facilities and systems. These standards will also serve as a checklist for reviewing drawings and specifications for electrical design. 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-exchanged 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).

Communications systems will be designed and installed only by qualified telecommunications personnel. Project FF&E funds are used to provide telephone handsets and other peripheral equipment devices to interface with the lodging telephone system. All designs will consider the latest technology available, but actual requirements will vary per location. Due to wide variances, this guide will only suggest the installation of conduit for future communications systems. The use of cable trays is encouraged.

The VQ room card key system will be equipped with a docking station tied to lighting and mechanical control systems for each VQ room. The systems will be turned on immediately when the card is inserted and will be turned off fifteen seconds after it is removed.

Contact AFPC Lodging Program for guidance regarding current Air Force Lodging communications standards.

2-8.8.1 Guest Support/Service Areas. Install wall mounted house telephone and public pay telephones adjacent to lobby areas as required per installation. House telephones will connect to the front desk only. Provide a recessed and less visually prominent location. Provide a cable connection in the break room for a wall mounted television adjacent to a duplex outlet location.

- Drop cable – from the J-box above the ceiling, a RJ6 cable will be terminated to video taps (VT) located above the hall ceiling
- Feeder cable – will be run from VT to VT above the hall ceiling to each VT and terminate in the CATV closets on each wing
- A video amp will be located in each of the CATV closets to boost the signal and a feed cable will be run to each amp in each CATV closet and above the first floor ceiling back to the lodging communications room
- Contractor will run a trunk cable from the lodging communications room to the main communications room and from the main communications room to point of service

- Cable television service will be provided by others

2-8.9 Power Supply. Design the power supply to provide 99% load availability. At CONUS and other appropriate locations, provide standard 60 hertz frequency for all possible loads. At overseas locations, comply with local code requirements and provide 220v/230v duplex power outlets, in addition to 110v. Electric or gas is acceptable for appliances based on local requirements. Allow for 230v, 208v and gas dryer connections.

2-8.10 Guestrooms and Suites. All electrical outlets, cable outlets, phone outlets and light switches will be mounted per applicable code. Through-the-wall duplex electrical outlets between guestrooms and suites will not be used. Provide convenience outlets each 25'-0" on center in interior corridors. All exterior outlets will be waterproofed and ground fault interruption (GFI) protected.

Locate electrical panels in a discreet, safe location. Electrical panels will not be located within individual guestrooms unless location specific requirements dictate otherwise. Provide utility access doors as required. Provide access panels to all interior utility connections discretely to minimize maintenance workers having to cut or otherwise deface finish surfaces. Conceal all wiring; exposed wire mold or conduit will not be used.

- In all bedroom areas, provide two duplex outlets on the headboard wall of bedroom, two duplex outlets on the desk/dresser wall adjacent to the television cable outlet, two duplex outlets on the window wall, and two duplex outlets above the food and beverage counter in standard guestrooms; mounting height per code
- In living areas of all suites, provide a minimum of two duplex outlets on the sofa wall, two duplex outlets adjacent to the television cable outlet, and one quadruplex outlet above the kitchenette counter
- Provide duplex convenience outlets (GFI) on both sides of mirror in all bath areas, as per applicable code; size circuits to accommodate 1600-watt hair dryers, etc.; confirm whether bathroom outlets are permissible in overseas locations
- Provide a ceiling mounted exhaust fan per code in bathrooms

2-8.11 Lighting. Limit the types of lamps necessary to simplify inventory. Halogen lamps and compact fluorescent lighting are required over traditional lighting systems based on long term energy efficiencies, improved luminance, and long lamp life spans. Compact fluorescent fixtures can retrofit standard fixtures and provide a long lamp life. Specify interior lighting that meets Energy Star program standards. Consider solar-powered exterior luminaires when they meet lighting requirements and are cost effective.

2-8.11.1 Guest Support/Service Areas

- Provide recessed lighting as a primary lighting source throughout – additionally consider specific locations that will illuminate and enhance elevator entrances, directories, artwork and other items of interest
- Consider wall washers if corridors are narrow. Sconces may be used in public areas and corridors and may be used adjacent to guestroom entrances to illuminate room numbers
- Provide occupancy sensor lighting controls for administration areas, break area, restrooms, linen storage areas and supply areas; limit surface mounted ceiling lights and fluorescent tube lighting to utility areas such as mechanical rooms and closets
- Provide exterior lighting of parking areas, building entrances and walkways

2-8.11.2 Guestrooms and Suites

- Provide overall ambient and task lighting in each guestroom and suite
- Electrical cords must not exceed 6-feet
- Consider recessed down lights and indirect lighting in living/bedroom areas

- Fixtures must not appear “institutional”; do not rely solely on table lamps or ceiling fan light kits for adequate ambient lighting; provide control of the table lamps in the living room by an individual wall switch located adjacent to the guestroom entrance door; wall sconces will not be used in guestrooms and suites.
- Provide under cabinet lighting over counter areas with upper cabinets, recessed lighting as general path lighting in entrances, washer/dryer areas, and in halls; provide ceiling hugger ceiling fans with integral low profile kits in living and bedroom areas, located in the center of the room; ceiling fans will be equipped with speed control and integral light fixtures will be equipped with on/off switches; coordinate location of sprinkler heads and down lights so that neither is located within 12” of the sweep of the fan blades
- Provide backlit wide rocker light switches in guestrooms, bedrooms and bathrooms to serve as nightlights
- Provide recessed ambient lighting for the bath area, and provide either recessed directional task lighting or wall mounted light fixtures at the vanity area, balanced above the counter and adjacent to the mirror
- In bath areas, provide an independently switched recessed ceiling mounted combination resistance heat-light fixture; provide an integrated night light in the light fixture; provide a 15 – 20 minute heater timer switch; provide sufficient ambient light in the bath including proper illumination within the shower/tub area; locate all switches together within the bath area

2-8.12 Corrosion Protection. Conformance with Air Force and NACE standards for corrosion control on all Air Force lodging projects is required. 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.



Chapter 3 – Temporary Lodging Facilities

Chapter 3 – Temporary Lodging Facilities

3-1 Space Program. Following is a space program for a 10 unit, single story, TLF building. Specific space programs will be developed when the total number of units required is identified for individual projects. The space program includes TLF units, back-of-house support spaces, interior circulation, structure, walls and partitions.

10 Two Bedroom TLF Space Program

Functional Area (Single Story 10 Unit TLF)	Number	Net SF Per Number	Net SM Per Number	Total Net SF	Total Net SM
TLF Units					
Two Bedroom TLF Unit	8	787	73	6,296	585
Two Bedroom TLF Unit with DoDABA Mobility Features (Roll-in Shower Optional for Less than 51 TLF Units)	1	884	82	884	82
Two Bedroom TLF Unit with DoDABA Communication Features	1	787	73	787	73
Housekeeping Closet	1	80	7	80	7
Janitor Closet	1	60	6	60	6
Subtotal Guestrooms				8,107	753
Back of House					
Staff Restroom	2	50	5	100	9
Housekeeping Office	1	100	9	100	9
Housekeeping and Laundry	1	350	33	350	33
Central Linen Storage	1	200	19	200	19
Break Room	1	100	9	100	9
Data Communication Room	1	150	14	150	14
Mechanical Equipment Room	1	300	28	300	28
Electrical Room	1	150	14	150	14
Subtotal Back of House Support				1,450	135
Subtotal Net SF				9,557	888
Interior Circulation (Corridors)	1	1,911	178	1,911	178
Structure, Exterior Walls and Interior Partitions	1	2,198	204	2,198	204
Total Enclosed Space				13,667	1,270
Covered Exterior Space (Porte Cochere) at 1/2 Scope				200	19
Gross Area for Congressional Reporting Purpose				13,867	1,288
Porte Cochere (Actual SF)	1	400	37	400	37
Actual Gross Total Footprint Area Reflected in Cost				14,067	1,307

3-2 Site Planning. Each individual installation is responsible for determining the initial and most appropriate site location for a new TLF complex. This selection will be validated in the programming process and may require an Appropriated Fund companion project to provide a “clean” site and required utilities prior to the start of the TLF project. The Base Comprehensive Plan will be used to evaluate potential sites for the proposed development. Each site has varying inherent values caused by its relationship to other sites and will differ at each installation. The site selection process will identify the required site attributes and development potential of possible TLF sites for consideration. Site design factors will include building footprints, roads and drives, parking, playground, landscape and fire department access. Similar to family housing, child safety, vehicle speed limits, playground location and other potential safety hazards will be considered. Additional determination issues will include availability and location of utilities and close proximity to schools and community facilities.

Site planning is a critical element of any design and can greatly impact the success of the overall project. Commitment and involvement from the project team is a significant factor in site and building design. Design considerations for new or renovated TLFs will include pavements, hardscape, circulation, force protection, accessibility, sustainability, fire protection, security, privacy and noise,

infrastructure, proximity to community facilities, landscape, lighting, climate, topography, existing vegetation and site amenities.

3-2.1 Vehicular Access. Provide primary access from main streets to facilitate guests and visitors in locating the TLF. Provide service vehicle access via secondary (collector) streets to reduce congestion from main arterial streets. If the installation provides bus service, designers will consider indulging appropriate site features (walks, etc.) so that TLF guests will have access to this service.

Trash dumpsters and recycling bins must be conveniently accessible by both the TLF staff and service trucks, but must be located in areas away from main TLF unit entrances. Screen these locations with a combination of hard wall materials, earth forms and landscaping compatible with the TLF complex and surrounding architecture and in compliance with base standards.

3-2.2 Emergency Service. Design access streets and parking areas to accommodate emergency service vehicles and fire protection equipment. If the site plan calls for interior court areas to be placed between adjoining facilities, consider designing the main pedestrian walkways to accommodate medium weight service and fire protection vehicles. Such walkways must be a minimum of 8-feet wide.

3-2.3 Pavements and Circulation. Design paving to blend with a facility's environment. Tree planting in islands and between rows of parking intercepts reflected radiation, visually breaks up the mass of paved surface and provides shade for vehicles. Properly located, the traffic islands can also provide safe pedestrian circulation. Consider the use of permeable pavements for parking and walkways, as a technique for recharging groundwater and reducing contaminated storm water runoff from the site. Where topography allows, design parking areas in multiple levels with transition zones. This may reduce grading requirements and allow the designer to balance the volume of cut and fill. Design these transitions as landscape buffers to soften the visual impact of parking areas.

3-2.4 Roads. Minimize construction of new driveways associated with a TLF project. New approaches, when needed, will be designed for the convenience of guests and employees. Plan with consideration for signage, site furnishings, safety, appearance, maintenance and emergency vehicles. Plan the vehicular layout to eliminate, or at least to minimize, the adverse impact of noise and headlights shining into windows. Additions to existing drives will improve and enhance the existing roads as well as serve the new facility. New drives will orient newcomers, provide an attractive approach to the facility, and relate to natural contours to minimize grading and disruption. Use screening, setbacks and other techniques to integrate the roads with the facilities they support.

3-2.5 Walks. Pedestrian oriented site planning and design contributes to the convenience, comfort and enjoyment of daily activities and can encourage walking and less dependence on automobiles. Walks must be convenient, safe and attractive with adequate landscape lighting. Provide curb cuts for accessibility, for movement of housekeeping carts, and for the convenience of guests using luggage carts. Design and grade sidewalks following Department of Defense Architectural Barriers Act (DoDABA) accessibility guidelines to provide access to entrances of all TLFs and to all outdoor areas intended for use by TLF guests. Provide corridor connections to other areas of the installation such as pedestrian circulation systems and well lit jogging/biking trails.

3-2.6 Parking. Design parking to accommodate TLF guests. Allocate 1.0 parking space per bedroom plus one parking space per staff member for continental US locations. At overseas locations, the Base Civil Engineer will specify the private vehicle capacity for parking lots, typically influenced by the availability of land for this use. Vehicle parking areas consume more site space and have a greater impact on the physical environment than any other site feature. This parking guideline results in a significant area of paving which, if not planned properly, will have a negative impact. This parking ratio applies to most TLF buildings but may be modified based on the parking needs of unique TLF situations. In extreme northern climates, provide outlets for automobile block heaters. Provide

accessible parking spaces in accordance with the Department of Defense Architectural Barriers Act (DoDABA) Accessibility Guidelines. Provide accessible parking spaces based on the total number of guest spaces and total staff parking.

Parking for oversized vehicles (boats, trailers, moving vans, etc.) will not be funded by AFPC Lodging Program. The installation will provide an alternate location away from the TLF site with primary emphasis on safety due to the large maneuvering requirements and presence of children.

3-2.7 Bicycle Parking. Provide an area with a limited number of bicycle racks as determined by AFPC Lodging Program and the installation. Racks will comply with base architectural guidelines.

3-3 Site Considerations

3-3.1 Grading. Grade the site as appropriate to achieve an orderly transition from the site entrance to the first floor elevation. Maintain natural runoff patterns to the extent possible. Limit disruption of natural water flows by minimizing storm runoff, increasing on-site infiltration and reducing contaminants. Where appropriate, use grading to shield or screen less visually attractive features such as dumpsters and mechanical equipment.

3-3.2 Landforms. Use landforms such as mounds and swales in conjunction with landscape plant materials to soften or obscure parking area, provide spatial articulation or enhance drainage structures and surface water retention areas.

3-3.3 Retention Basins. Local building codes or base environmental may require storm water retention. Where on-site retention is required, the location of the retention areas must be carefully planned in terms of function, visual impact and safety. If possible, keep storm water on-site in lieu of draining to collection facilities. Consider controlling storm water at the source by the use of micro-scale features distributed throughout the site. Integrate the landscape design into the stormwater management strategy, creating planted areas that benefit from stormwater while removing pollutants through natural processes.

3-3.4 Site Lighting. Site lighting is an integral part of a TLF complex and includes pedestrian scale lighting, bollard, vehicular and security lighting. Site lighting selection should include the landscape architect, the electrical engineer and the architect. Provide lighting to ensure guests can move safely between outdoor spaces. Comply with the base design standards in the selection of luminaires and poles. Provide adequate site lighting at any point where there is a change in grade requiring steps, near accessible parking areas and near main entrances to buildings. Use solar powered exterior luminaires when they meet lighting requirements and are cost effective.

3-3.5 Site Amenities. Although AFPC Lodging Program does not provide funding for outdoor passive areas or site amenities with TLF projects, the importance of master planning and programming for this part of the project is still critical.

3-3.6 Playgrounds. When choosing play equipment made of plastics, plastic composites, steel or aluminum, ensure these products meet EPA recycled content requirements whenever possible. The same action is required for playground surfaces made of rubber or plastic. Air Force Outdoor Recreation Programs AFI 34-110 must be followed unless location specific requirements dictate otherwise for TLF playground areas. The size of playgrounds should support the number of TLF units.

3-3.7 Active/Passive Outdoor Areas. TLF complex site planning will include outdoor active and/or passive use areas as an integral part of the TLF design. These features must be aesthetically integrated with the TLF complex design and surrounding architecture and can include amenities such

as a fenced pet area and a pet waste station located near the pet friendly rooms and, lighting and landscape plant materials.

3-3.8 Site Signage. Exterior signage will be compatible with the architecture of the complex and provide clear directional and informational assistance. A well placed exterior sign, lit and clearly identifying the TLFs will be provided at the main approach to the facility. Required signage will be funded as part of the project. All signage must be in accordance with the installation's signage program and accessibility requirements.

3-3.9 Equipment Screening. Screen equipment such as chillers, evaporating condensers, switchgear, backflow prevention devices, utility connections and electrical transformers. Architectural screening materials will be compatible with the TLF complex and surrounding architecture. Use landforms to screen objects in landscapes that do not require enclosures.

3-4 Landscape Architecture. Design landscape and the site plan to retain as many existing trees, shrubs or foliage as possible. Allow for natural storm water management. The use of native plants is important. Designs must not include the installation of any poisonous plant materials. Obtain the installation's approved plant list, if available.

3-4.1 Landscape Irrigation. Where required, provide irrigation systems within 75 feet of facility exteriors for TLF projects developed in arid and semiarid climatic regions. Follow base standards for irrigation systems and consider water supply sources, including non-potable or well water if permitted by state standards. Use bubbler or drip irrigation systems adjacent to building facades to minimize the impact of overspraying. Provide all irrigation systems with solid-state automatic multi-action controllers, state-of-the-art control valves and backflow preventers in accordance with building codes. Include flexible risers, swing-joint arm assemblies and 15-degree low trajectory heads in moderate wind areas. In cold climates, locate backflow preventers in the mechanical room. Where freezing is not a problem, locate backflow preventers within screened mechanical enclosures. As part of the installation contract, include the maintenance requirement for adjustments to turf spray coverage and duration of watering cycles, as well as repairing leaks and general system maintenance. Water conservation is a high priority in developing an irrigation design. See additional information and guidance contained in Unified Facilities Criteria 3-201-2 Landscape Architecture.

3-5 Building Design

3-5.1 Building Area Calculations

Actual Gross Total Footprint Area Reflected in Cost. This is measured to the outside face of the exterior enclosure walls.

Gross Area for Congressional Reporting Purposes. This is measured to the outside face of the exterior enclosure walls; however, covered exterior space (e.g., Porte Cochere) is included as one half overall size.

Net Square Feet. Net Square Feet (NSF) is measured from the inside face of the walls between rooms and the inside face of the exterior wall and the inside face of the wall separating the room and the interior building corridor.

3-5.2 Attics and Basements. Attic access is required and will be fire protected if determined by applicable code. Storage in attic areas and basements will not be provided.

3-6 Architecture

3-6.1 Architectural Compatibility. Base architectural design guidelines, surrounding architecture, environment and climate provide the basis for the visual appearance and exterior design of new or renovated TLF buildings.

3-6.2 Windows. Windows will be double paned fixed windows; per ETL 04-3 *Design Criteria for the Prevention of Mold in Air Force Facilities, all windows will be non-operable.* Window type, construction, glazing, color and tint will match the base standard dependant on the regional area of construction and climate, but will not be constructed of less than heavy duty residential grade materials. Incorporate features to assist with LEED silver certification.

Blocking will be provided above all windows across the width of the window and extending 12" minimum (16" if possible) on each side of the window opening to hang drapery rods, allowing draperies to stack for full window exposure.

3-6.3 Doors. Entrance doors to TLF units will be self-closing, metal, 6-panel or flat and equipped with one 180-degree one-way viewer (two viewers will be provided in DoDABA compliant units), permanently-locked doorknobs, deadbolts and electronic swipe card (match base system) lock sets. If an electronic locking system does not exist at the base, provide a complete system, including the system at the Lodging reception desk. Assure that the statement of work for the locking system software is compatible with the property management system.

All entrance doors will meet accessibility requirements and all doors to common areas will be a minimum of 3-feet in width. Main entrance doors into the building will be sensor or push button operated. Designated exit doors must be equipped with panic hardware.

3-6.4 Roofing. TLF roofs, unless by exception, will be designed to slope, using a standing seam metal roof as the standard material selection. Avoid using tapered roof insulation to achieve slope. Coordinate exterior location of plumbing exhaust vents to minimize roof penetrations and lessen the visual impact on exterior TLF elevations.

3-6.5 Building Signage. All signage will be in accordance with the installation signage program. Exterior signage will be compatible with the architecture of the TLF complex and the installation architectural guidelines. Provide clearly visible exterior directional signage and TLF living unit signage. Mechanical, electrical and/or utility room doors will have identifying signage to match.

3-7 Interior Design

3-7.1 Building Entrance

Flooring

- Neutral colored nonskid floor surface and base
- Walk-off mat

Walls

- Painted drywall
- Painted wood chair rail
- Vinyl corner guards on all outside corners
- Artwork
- Space for luggage cart at entrance

Ceiling

- Painted drywall

Lighting

- Recessed down lights
- Wall sconces
- Wall washers at artwork

Equipment

- Fire alarm system annunciator panel discretely located while allowing easy access

3-7.2 Back-of-House

3-7.2.1 Housekeeping and Laundry

Flooring

- Sealed concrete

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Employee lockers, double tiered, 12" x 18" x 36" molded plastic fronts
- Space for laundry cart and housekeeping cart storage
- Area for sorting soiled linen

3-7.2.2 Break Room

Flooring

- 12" x 12" porcelain tile and base with sealed grout

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Millwork

- Solid wood construction cabinets and counters with hidden hinges, integral routed pulls, raised panel doors and drawer fronts, adjustable shelving, stained to match casegoods.
- Solid surface counter top with 4" integral back and side splashes with waterfall edge

Equipment

- Two compartment, 8" deep kitchen sink, 18-gauge brushed stainless steel, satin finish, with single-lever faucet and integral spray hose
- Refrigerator with ice maker and filtered water line
- Wall mounted flat screen television adjacent to a duplex outlet and cable television outlet
- Electrical outlets above counter height, GFI where appropriate and as required to service appliance, including the disposal, refrigerator, microwave and 12-cup coffee maker
- Wired network outlet for time clock

3-7.2.3 Staff Restroom

- One unisex, DoDABA compliant restroom

Flooring

- 12" x 12" porcelain tile and base with epoxy grout

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- White, floor mount, tank type, elongated toilet with full lid and seat
- Wall hung lavatory with insulated pipes. Maximize knee space.
- Toilet accessories to include toilet paper holder, soap dispenser, wall-mounted mirror, waste receptacle, paper towel dispenser, grab bars

3-7.2.4 Housekeeping Office

Flooring

- Carpet with carpet base

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Door

- Door with vision panel

3-7.2.5 Central Linen Storage

Flooring

- Sealed concrete

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

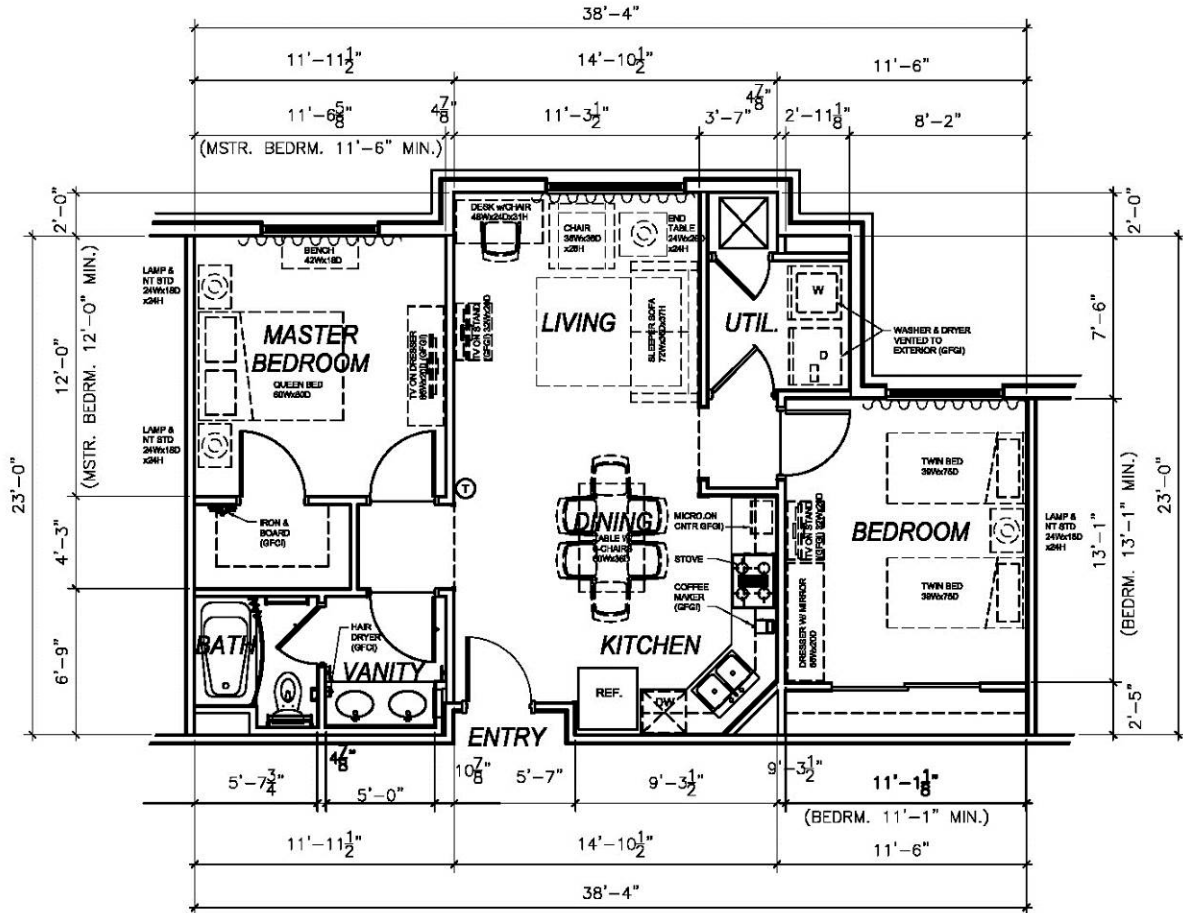
- Shelving for clean linen storage

3-7.3 TLF Units. The specific requirements of the two bedroom TLF is described in this section. Up to 40% of the total inventory of units should be pet units and these units should be located adjacent to the outdoor exercise area. Floor finishes in the pet units are limited to tile and laminate.

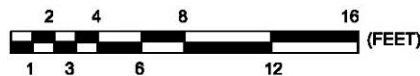
3-7.3.1 Two Bedroom TLF

Two Bedroom TLF. The two bedroom TLF includes a living area, master bedroom, second bedroom, kitchen/dining area, utility room and bathroom with outside vanity area. In addition to the bedrooms, there is additional sleeping space in the living area.

Two Bedroom TLF Plan
787 NSF

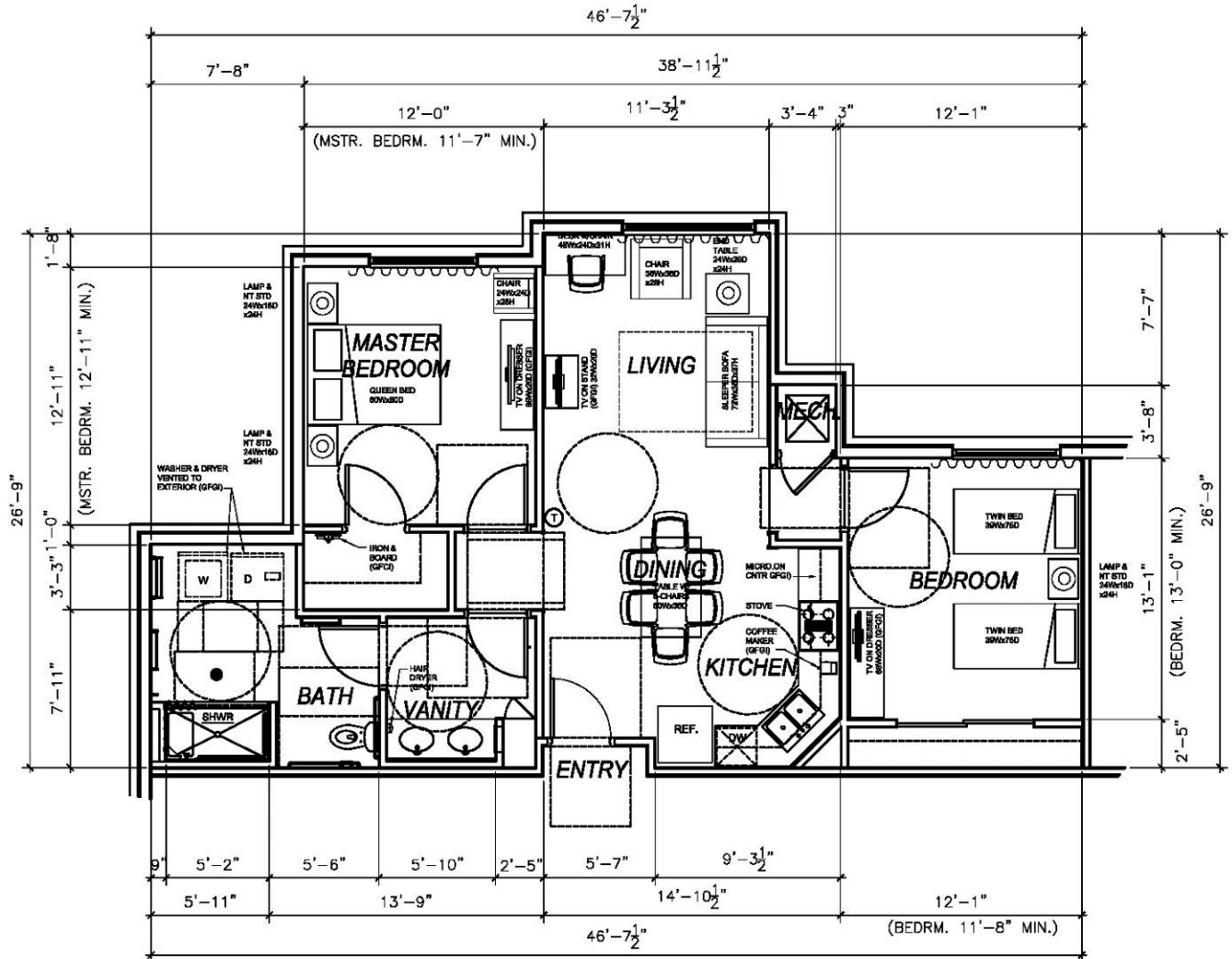


AIR FORCE TEMPORARY LODGING FACILITY
2-BEDROOM STANDARD GUEST UNIT - 787 NSF
AFPC/SVXFB SEPT. 2013



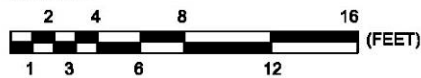
NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

Two Bedroom TLF DoDABA Plan
884 NSF



AIR FORCE TEMPORARY LODGING FACILITY
2-BEDROOM ACCESSIBLE GUEST UNIT - 884 NSF

AFPC/SVXFB SEPT. 2013



NOTE: AS UNIT NET SQUARE FOOTAGE AND FURNITURE CLEARANCES ARE A PRIORITY, THUS, THESE DIMENSIONS ARE TO FINISH FACE OF GYPSUM BOARD OF WALL SO AS TO DENOTE INTERIOR ROOM DIMENSIONS TO BE OBTAINED.

Living Area

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall
- Vinyl corner guards on outside corners, 48" high from top of base

Ceiling Finish

- Painted drywall

Lighting

- End table with lamp
- Lamp on desk
- Ceiling fan with integral light kit

Furniture

- Sleeper sofa
- End table
- Dresser
- Desk
- Fully adjustable, ergonomic desk chair

Equipment

- Telephone at desk
- Wireless Internet
- Flat screen television

Kitchen/Utility Room/Dining Area

Floor Finish

- 12" x 12" porcelain tile with cove tile base and sealed tile grout

Wall Finish

- Painted drywall
- Vinyl corner guards on outside corners, 48" high from top of base

Ceiling Finish

- Painted drywall

Lighting

- Ceiling light fixture at entry door
- Fluorescent task lighting under upper cabinets (full length)
- Pendant light fixture at dining table
- 12" x 48" ceiling mounted fluorescent light fixture in utility room with washer and dryer

Millwork

- Base and upper cabinets – solid wood construction with hidden hinges, integral routed pulls, raised panel doors and drawer fronts, adjustable shelving; include wood trim on upper cabinets to hide under cabinet lighting; base cabinet, upper cabinet and trim to match casegoods
- Solid surface counter with waterfall edges, integral 4" back and side splashes
- Solid wood shelving above washer and dryer for cleaning supplies

Furniture

- Dining table
- Four dining chairs

Equipment

- Refrigerator/freezer with icemaker and filtered water line
- Four-burner stove with oven below
- Microwave
- 18-gauge, 8" deep two compartment stainless steel sink with gooseneck single-lever faucet and integral spray hose
- Disposer
- 12 cup coffee maker
- Washer and dryer
- Dishwasher
- Range hood

Master Bedroom

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall with accent wall at headboard

Ceiling Finish

- Painted drywall

Lighting

- Lamps at nightstands
- Ceiling fan with integral light kit

Furniture

- Queen bed
- Bed softgoods including comforter/coverlet with four bed pillows and bed skirt (confirm with AFPC Lodging Program)
- Two nightstands
- Bench
- Dresser
- Full length mirror

Equipment

- Telephone at bedside
- Wall-mounted flat screen television
- Clock radio

Master Bedroom Closet

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- 12" x 48" ceiling mounted fluorescent light fixture

Door

- Floor-to-ceiling door to maximize closet space

Equipment

- Ironing board
- Iron
- Safe (in closet)
- Closet shelf with rod

Second Bedroom

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- Lamp on nightstand
- Ceiling fan with integral light kit

Furniture

- Two twin beds
- Bed softgoods including one comforter/coverlet with two bed pillows per bed and bed skirt per bed (confirm with AFPC Lodging Program)
- Nightstand
- Dresser with mirror

Equipment

- Clock radio

Second Bedroom Closet

Floor Finish

- Carpet with carpet base

Wall Finish

- Painted drywall

Ceiling Finish

- Painted drywall

Lighting

- 12" x 48" ceiling mounted fluorescent light fixture

Door

- Floor-to-ceiling door to maximize closet space

Equipment

- Closet shelf and rod

Bathroom

Floor Finish

- 12" x 12" porcelain tile with cove tile base and epoxy grout

Wall Finish

- Painted, water resistant drywall

Ceiling Finish

- Painted, water resistant drywall

Lighting

- Wall-mounted vanity lighting above mirror

Furniture

- Lavatory cabinet with storage below
- Wall-mounted frame mirror above lavatory
- Solid surface counter with waterfall edges and 4" back and side splashes

Equipment

- Hair dryer
- High quality metal medicine cabinet with a wood face, mounted on the side wall near the vanity cabinet; wood face will match the cabinet base and casegoods
- Lavatory in the DoDABA compliant unit in lieu of a counter and lavatory cabinet; insulate the pipes and maximize knee space as per applicable code
- Cast iron bathtub/shower, white, with non-slip surface
- Shower head with adjustable spray; hand-held with adjustable pole mount, brass components
- White, floor mount, tank type, elongated toilet with full seat and lid
- Surface mounted wet location light fixture centered above bathtub/shower
- Independently switched ceiling mounted exhaust fan to the exterior and radiant heat/light fixture with timer in the bathroom
- Duplex convenience outlets (GFI) both sides of vanity cabinet per code
- Solid surface tub material, seamless, with two corner shelves sloped for drainage
- Bow-shaped, screw-in shower rod above the tub.

- Grab bars on the side wall and rear wall of the tub at 36" above finished floor in all TLF units
- Grab bars adjacent to toilet and a shower seat in the tub of all DoDABA compliant living units
- Toilet accessories to include one robe hook, 24" towel bars for seven service towel sets in the two bedroom unit, one single roll toilet paper holder

3-7.4 TLF Corridors

Flooring

- Carpet "islands" with center pattern designs surrounded by carpet borders
- Carpet base

Walls

- Painted drywall
- Chair rail and corner guards on outside corners
- Windows at the end and at intersection of corridors; if possible do not use glass to the floor

Ceiling

- Painted drywall/acoustical ceiling tile

Lighting

- Recessed down lights
- Wall sconces
- Wall washers at artwork

3-7.5 Guest Support Areas

3-7.5.1 Janitor Closets

Flooring

- Sealed concrete with floor drain

Walls

- Painted water resistant drywall

Ceiling

- Suspended acoustical tile or exposed painted structure

Lighting

- Fluorescent

Equipment

- Mop sink
- Mop/broom holder
- Shelving for supplies
- Use building hot water system

3-7.5.2 Housekeeping Closets

Flooring

- Sealed concrete

Walls

- Painted drywall

Ceiling

- Suspended acoustical tile

Lighting

- Recessed fluorescent

Equipment

- Shelving for supplies

3-7.6 Signage and Accessories. Provide signage and accessories for all areas of the TLF building. Coordinate with the installation, Major Command and Air Force Personnel Center Lodging Program, with the final approval by Headquarters Air Force Personnel Center. Graphics presentation and content must be well designed, coordinated with the architecture and interior design, and compatible with the local geographical culture. Dependent on proximity to the lodging reception desk, it may be necessary to include an exterior monument sign to identify the TLF complex.

Interior signage will be in accordance with the installation sign standards, accessibility requirements defined in the Department of Defense Architectural Barriers Act (DoDABA) accessibility guidelines and UFC 3-120-01, Air Force Sign Standard. 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 TLF units. Coordinate directional signage and individual guestroom numbering schemes with the local lodging manager.

3-8 Building Systems. Life cycle cost (LCC) and value engineering will be considered and analyzed for all designs. All practical architectural and building system component alternatives and potential maintenance and operational costs will be studied. Base the LCC analysis on methodology described in the latest revision of Unified Facilities Criteria 3-400-01 Energy Conservation.

3-8.1 Acoustics. Careful attention to acoustic design is required for TLF projects to ensure a high degree of privacy for residents within their living units. Provide sound attenuation (55 STC) between units and between units and corridors. Address the isolation of noise from a variety of sources, including adjacent living units, units on a floor level above or below, hallways, mechanical rooms and systems, service areas, employee areas, supply/delivery points, and externally-generated sound such as aircraft and automobile noise.

3-8.2 Mechanical Systems. Life Cycle Costs – Ensure an adequate level of building environmental conditioning at the least life cycle cost (LCC). Base the LCC analysis on methodology described in the latest revision of Unified Facilities Criteria 3-400-01 Energy Conservation.

3-8.2.1 HVAC System. The HVAC system must be designed to ensure that building energy consumption does not exceed Department of Defense energy budget figures.

HVAC systems will be standardized with electronic regulating temperature controls. Individual climate control must be provided and located within the sleeping and living areas in all TLF units. Coordinate the location of thermostats with the location of furniture and artwork throughout the facility. Equip bathrooms with an individual, directly vented, switched exhaust fan. Base the fan system selection on a life cycle cost analysis.

3-8.3 Plumbing. Provide domestic hot and cold water, sanitary and storm drainage, propane or natural gas, steam or hot water, and chilled water as required. Consider solar hot water systems for energy efficiency. Maximize water efficiency by specifying water conserving fixtures, equipment and appliances. Ensure the following requirements are included in the design:

Provide hot and cold water to bathrooms, kitchens, sinks, janitor closets, break rooms and laundry rooms. Provide copper water supply lines. Provide one pair of shut-off valves at washing machines, one pair for all fixtures in kitchen and one pair for all fixtures in bath areas. Clearly identify hot/cold water on faucets. Tank-type, low water volume toilets are required in all bathrooms. Provide elongated bowl toilets with a closed front seat and lid.

All exposed bathroom plumbing fixtures (pipes, faucets, etc.) must be first-line chrome-plated brass, manufactured by nationally known manufacturers. Install single-lever mixing valves for lavatory and bath/showers. All tubs and lavatories must have pop-up type waste stoppers. Rubbers stoppers are not permitted. Tub/shower valves must be pressure balanced anti-scald type. Use top quality chrome plated brass.

Plan plumbing systems for TLFs to take advantage of stacking bathrooms and common wet walls. 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 TLF unit.

Coordinate the location of the back flow prevention devices with the master plan and project team. Provide tamper-resistant hose bibbs on all exterior walls of each building at 50 foot intervals, freeze proof as dictated by climatic conditions. Provide floor drains in janitor closets.

3-8.3.1 Hot Water Systems. Central or on demand hot water domestic systems (gas if possible) will be specified for all projects to reduce costs and provide better service for guests. Size the system to allow simultaneous showering and dishwashing in individual units, with ten-minute recovery. Individual water heaters in each unit will be considered only for very small projects where the number of units does not warrant a central mechanical room.

The domestic hot water system must have a circulating pump or other approved system installed in-line to provide instant hot water at tap. Provide protection from hot water surges. In the design of central hot water systems, verify that the draw-off requirements for the domestic hot water service be determined in accordance with the method recommended in the UPC. The minimum requirements are to allow for simultaneous use of 100% of the showers discharging (maintaining a pressure of 15psi at the showerhead.) Hot water will be stored at a temperature greater than 140 degrees F but less than 149 degrees F. Minimum hot water storage will be sized to maintain flow under 100% shower discharge for a five minute period (total capacity will vary based on number of TLF units). The heat exchangers within the calorifiers will be capable of raising the contents from 50 degrees F to 149 degrees F in one hour. The temperature of the hot water as it leaves the hot water storage calorifier will be 140 degrees F.

3-8.4 Energy Performance. Incorporate building and system design features that will assist in obtaining LEED silver certification. Key components of LEED building energy performance are optimized energy use, indoor air quality, and controllability of systems for thermal comfort. Select, design and install air conditioning, evaporative cooling, dehumidification, mechanical ventilation, and refrigeration in accordance with energy conservation requirements. Renewable energy technologies will be used in TLF projects whenever feasible and cost effective. Consider ground-source heat pumps, high-temperature solar, wind or other energy sources.

3-8.5 Electrical/Communications. The electrical design of the TLF project will be based on maximum TLF unit occupancy. The design will include electrical distribution equipment, data fax ports, cable television, fire detection and enunciation, emergency egress lighting, interior and exterior lighting, receptacles and grounding, and electric, telephone, and local area network wiring.

The following standards apply to the planning, design and construction phase of new TLF construction and renovation to existing facilities systems. These standards will also serve as a checklist for reviewing drawings and specifications for electrical design of TLF projects. 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". Ensure that 110v, 60hz duplex outlets are provided in TLF units in OCONUS locations in addition to any differing local standard (i.e., such as the 220/230v, 50hz European standard.)

Contact AFPC Lodging Program for guidance regarding current Air Force Lodging communications standards.

3-8.6 Power Supply. Design the power supply to provide 99% load availability. At CONUS and other appropriate locations, provide standard 60 hertz frequency for all possible loads. At OCONUS locations, comply with local code requirements and provide 220v/230v duplex power outlets, in addition to 110v.

3-8.7 Lighting. Provide the highest quality illumination within budget and life cycle cost limitations. Use a combination of ambient and task lighting in living units. Limit surface mounted ceiling lights and fluorescent lighting to utility areas such as mechanical rooms and closets. Ceiling fans with integral lights will be provided in living room and bedroom areas. Backlit light switches will be used in bedrooms, sleeping areas and bathrooms to serve as night lights. The following are requirements for areas within the TLF units:

- Overall ambient lighting in addition to task lighting
- 50 foot candles at the surface of desks
- 30 foot candles at the dressers
- Electrical cords must not exceed 6-feet
- 20 foot candles in bathrooms measured at the floor line of the tub/toilet and 50 foot candles measured at the surface of the vanity

3-8.8 Corrosion Protection. Include corrosion protection for electrical components in humid/salt air environments. Consider nitrogen purge or refrigeration type dehumidification protection systems depending on size and complexity.

3-8.9 Fire Protection/Life Safety. Protect all new construction TLF projects and major renovation projects throughout by an approved monitored automatic sprinkler system as required by code.

Ensure that notification devices ("private mode" type) are easily heard within each TLF unit (75dB). This may require additional louder or individual (in each room) notification devices because of the sound attenuating construction found in TLF buildings. Ensure all DoDABA compliant TLF units or common areas include the installation of a visual alarm system and notification devices following accessibility guidelines.



Chapter 4 – Air Force Lodging FF&E Standards

Chapter 4 – Air Force Lodging FF&E Standards

Air Force Lodging FF&E Standards packages include selections and renderings for guestrooms and guestroom corridors for VQ and TLF buildings. However, these packages were prepared prior to the development of this Design Guide and these packages will probably be updated to be consistent with the VQ Standard Guestrooms and Business Suites and the Two Bedroom TLF Units.

The FF&E packages include the following six schemes:

- Scheme A - Traditional
- Scheme B - Transitional
- Scheme C - Contemporary
- Scheme D - Mission
- Scheme E - Coastal
- Scheme F – Asian

Air Force purchasing agreements are in place for the components included in each of the packages noted above. Some components of the current Air Force Lodging FF&E Standards are no longer used in the new design standards in this Design Guide and some components of the Design Guide are not included in the FF&E standards.

Contact AFPC Lodging Program for guidance regarding current Air Force Lodging FF&E Standards.



Chapter 5 - Codes, Standards and References

Chapter 5 – Codes, Standards and References

Codes

International Building Code
International Plumbing Code
International Mechanical Code
Life Safety Code
National Electrical Code

Government Wide

EPA Website
<http://www.epa.gov/epawaste/consERVE/tools/cpg/index.htm>

Energy Star Website
http://www.energystar.gov/index.cfm?products.pr.find_es_products

Department of Defense

Cost Guides/Handbook, SERIES 3-700: COST ENGINEERING
http://www.wbdg.org/ccb/browse_cat.php?o=29&c=4

DoD Architectural Barriers Act Accessibility Guidelines website
<http://www.access-board.gov/ADA-ABA/aba-standards-dod.cfm>

Unified Facilities Criteria 1-200-01, General Building Requirements
http://www.wbdg.org/ccb/DOD/UFC/ufc_1_200_01.pdf

Unified Facilities Criteria 3-120-01, Air Force Sign Standards
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_120_01.pdf

Unified Facilities Criteria 3-120-10, Interior Design
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_120_10.pdf

Unified Facilities Criteria 3-201-02, Landscape Architecture
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_201_02.pdf

Unified Facilities Criteria 3-400-01, Energy Conservation
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_400_01.pdf

Unified Facilities Criteria 3-530-01, Design: Interior and Exterior Lighting and Controls
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_530_01.pdf

Unified Facilities Criteria 3-600-01, Fire Protection Engineering for Facilities
http://www.wbdg.org/ccb/DOD/UFC/ufc_3_600_01.pdf

Unified Facilities Criteria 4-010-01 DoD Minimum Antiterrorism Standards for Buildings
http://www.wbdg.org/ccb/DOD/UFC/ufc_4_010_01.pdf

Unified Facilities Criteria 4-010-02, DoD Minimum Antiterrorism Standoff Distances for Buildings
http://www.wbdg.org/ccb/DOD/UFC/ufc_4_010_02.pdf

Department of Defense (Cont.)

Unified Facilities Criteria 4-030-01, Sustainable Development
http://www.wbdg.org/ccb/DOD/UFC/ufc_4_030_01.pdf

Air Force Policies

ETL 00-1, EPA Guideline Items in Construction and Other Engineering Specifications
http://www.wbdg.org/ccb/AF/AFETL/etl_00_1.pdf

ETL 00-7, Fire Protection Engineering Criteria — Correlation of US and Host Nation Codes and Criteria
http://www.wbdg.org/ccb/AF/AFETL/etl_00_7.pdf

ETL 01-1, Reliability and Maintainability (R&M) Design Checklist
http://www.wbdg.org/ccb/AF/AFETL/etl_01_1.pdf

ETL 02-9, Construction Signs
http://www.wbdg.org/ccb/AF/AFETL/etl_02_9.pdf

ETL 02-12, Communications and Information System Criteria for Air Force Facilities
http://www.wbdg.org/ccb/AF/AFETL/etl_02_12.pdf

ETL 04-3, Design Criteria for Prevention of Mold in Air Force Facilities
http://www.wbdg.org/ccb/AF/AFETL/etl_04_3.pdf

ETL 07-4, Air Force Carpet Standard
http://www.wbdg.org/ccb/AF/AFETL/etl_07_4.pdf

ETL 08-13, Incorporating Sustainable Design and Development (SDD) and Facility Energy Attributes in the Air Force Construction Program
http://www.wbdg.org/ccb/AF/AFETL/etl_08_13.pdf

ETL 12-15, Light-Emitting Diode (LED) Fixture Design and Installation Criteria for Interior and Exterior Lighting Applications
http://www.wbdg.org/ccb/AF/AFETL/etl_10_2.pdf

ETL 99-4, Fire Protection Engineering Criteria and Technical Guidance - Emergency Lighting and Marking of Exits
http://www.wbdg.org/ccb/AF/AFETL/etl_99_4.pdf

Air Force Guides

United States Air Force Project Managers' Guide for Design and Construction
<http://www.wbdg.org/ccb/AF/AFDG/pmguide.pdf>

Department of the Air Force

Visit <http://www.e-publishing.af.mil/>
Select "departmental" and then locate the publication within the corresponding series.

Department of the Air Force (Cont.)

32 Series

AFI 32-1022, Planning and Programming Nonappropriated Fund Facility Construction Projects

AFI 32-1023, Designing and Constructing Military Construction Projects

AFI 32-1032, Planning and Programming Appropriated Funded Maintenance, Repair and Construction Projects

AFI 32-7062, Air Force Comprehensive Planning

AFMAN 32-1084, Facility Requirements

AFPAM 32-1010, Land Use Programming

AFPD 32-10, Installations and Facilities

33 Series

AFI 33-401, Air Force Architecting

34 Series

AFI 34-205, Services Nonappropriated Fund Facility Projects

AFI 34-246, Air Force Lodging Program

65 Series

AFI 65-106, Appropriated Fund Support of Morale, Welfare and Recreation (MWR) and Nonappropriated Fund Instrumentalities (NAFIS)

Related Non-Government Resources

American Hotel and Lodging Association

<http://www.ahla.com/>

American Hotel and Lodging Association Green Resource Center

<http://www.ahla.com/green.aspx>

U.S. Green Building Council (USGBC) LEED website

<http://www.usgbc.org/LEED>