USAF DINING FACILITIES DESIGN GUIDE

USAF SERVICES
Combat Support & Community Service

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The Air Force Services Agency's Food Service Branch is responsible for providing food service excellence in support of the Air Force readiness and peacetime mission. Our vision begins with food service professionals building customer oriented programs through innovative solutions responsive to tomorrow's needs. The centerpiece of this program is "world-class" facilities that enhance the dining experience. We've created this dining facilities design guide to help you reach that goal.

The guide focuses on the appropriate configuration and design for the serving and eating areas of Air Force dining facilities around the world. Developing innovative facilities that implement a food-court type system is the most effective way to offer nutritious meals utilizing a buffet concept. Incorporating the principles of this guide will help support Air Force Services' commitment to facilities excellence and contribute to improved quality of life for our Airmen.

These guidelines should be utilized during the programming, design, and construction phases to ensure we provide quality facilities for dining facility managers, their staff, and the customers. By utilizing our limited resources wisely we can continue to improve the functionality and appearance of our base dining facilities. We think we've captured the best practices for today's "state-of-the-art" facilities and trust you will find them useful…enjoy!

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INTRODUCTION

1A Purpose and Background

One mission of the HQ Air Force Services Agency (HQ AFSVA) is to provide top quality food service to military personnel in modern, state-of-the-art dining facilities at Air Force (AF) installations worldwide. Daily food service is very important to the quality of life for Airmen and has a dramatic effect on morale and retention.

This guide provides Air Force specific guidance for the evaluation, planning, programming, and design for new construction or the renovation of existing dining facilities. It is also intended to help assure that these facilities conform to the AFSVA Golden Eagle Standards (GES) for food service operations.

Information contained in this AF Dining Facilities Design Guide is available as an interactive website in Hypertext Markup Language (HTML) format for on-line viewing and in Portable Document File (PDF) format that may be easily downloaded from the website and printed. It is intended to provide supplemental information that will be added to the existing Unified Facilities Criteria (UFC) document UFC 4-722-01, *Dining Facilities* at the next revision as an addendum or annex to the basic UFC document.

1B Design Guide Scope and Use

The focus of this guide is to illustrate design concepts, functional relationships, materials, finishes, and other design guidance, which must be considered when constructing or renovating AF dining facilities. Guidance is provided for two distinct types of Air Force dining facilities:

- Full service facilities at permanent Air Force installations
- Air Force Contingency Kitchens (AFCKs) utilized in more remote areas

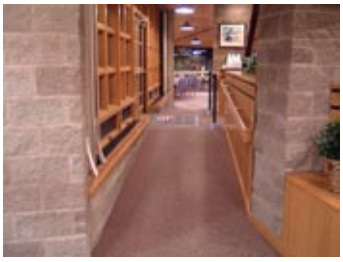
This guide addresses only the "front of house" for both types of Air Force dining facilities, such as serving, dining, and public support areas. Design guidance is provided regarding architectural character, thematic environments, signage, materials, finishes, and equipment. "Back of house" areas, such as the kitchen, food preparation, food storage areas, loading docks, and other support areas are addressed in the existing UFC 4-722-01 and are not included in this guide.

The content of this guide has been developed through collaboration with representatives of HQ AFSVA and is intended to help architects, designers, food service representatives, and base civil engineers develop functional and aesthetically pleasing dining facilities. Examples are provided regarding designs and materials that have worked well for other AF or private sector facilities, as well as examples of things that should be avoided. The guidelines presented in this document may need to be adapted to suit unique criteria for individual AF installations or host nation specific requirements. Realizing that few installations will incorporate all elements exactly as demonstrated in this guide, dining facility construction projects should focus on functionality, durability, and flexibility to help support this HQ AFSVA mission.

CHAPTER 2

Serving Area

"The Iditarod" at Elmendorf



Interior Accessible Ramps

Accessible Entrance Ramp

Avoid Visible Utilities

PLANNING AND PROGRAMMING

2A General

Programming and planning provide the basic guidelines for sizing and configuring dining facilities and include diagrams that clarify the desired relationships between functions. Since there are many different configurations of existing dining facilities, this guide provides guidance based on recently constructed prototypical designs of Air Force dining facilities to illustrate the principles of good design that may be applied to new construction or renovation projects. Specific guidance regarding DoD space allowances and other Air Force criteria are available in AFH 32-1084 *Facility Requirements,* dated 1 September 1996.

Serving and dining areas should be considered as subsets of one holistic experience when developing plans for dining facilities. A Comprehensive Interior Design (CID) is authorized and should always be utilized during the development of the interiors and themed environments. Traditional dining facility designs often do not address the modern food service needs of the Air Force. Existing facilities may need to be adapted to address a “sports bar" type atmosphere with common amenities available in commercial establishments, such as espresso and smoothie bars. These modern food service concepts help to provide a more social atmosphere for Airmen to spend time, not just eat and leave. Entertainment zones that accommodate televisions, game or pool tables, internet cafes, and similar recreational areas can provide much needed places for Airmen to spend leisure time. These recreational opportunities are especially important during war or special exercises and at installations located in extreme climates.

2B Building Codes and Accessibility

All Air Force dining facilities must be designed, constructed, and altered in accordance with Air Force criteria. These criteria are based on national standards, private sector consensus standards, and model codes. Refer to UFC 200-01, *Design: General Building Requirements* for specific guidance. In the event of conflicts between model codes and Air Force criteria, use Air Force requirements. All Air Force facilities shall be designed to be accessible to and usable by persons with disabilities. New construction must conform with the Americans with Disabilities Act Architectural Guidelines (ADAAG) and the Uniform Federal Accessibility Standards (UFAS), with the more stringent standards applying in the event of conflicts.

2C Mechanical, Electrical, and Plumbing

Provide flexibility for future modifications of both dining and serving areas by strategically locating all mechanical, electrical, and plumbing (MEP) service. This includes potential future vendor displays that may require electrical or plumbing outlets. Where possible, conceal all utilities such as exposed wires and floor drains for maximum visual aesthetics. Provide for cable/satellite TV in appropriate sections of the dining area. A public telephone should be located near the restrooms and coat storage area. Consider current and potential future needs for power, data outlets, and internet access in the dining areas. Refer to the existing UFC 4-722-01, *Dining Facilities* for detailed MEP requirements.

AT/FP Considerations

AT/FP Considerations

Utilize Sustainable Materials Where Possible

"Iditarod" Theming at Elmendorf AFB

"Joshua Tree Inn" Theming at Edwards AFB

PLANNING AND PROGRAMMING

2D Antiterrorism/Force Protection

Since dining facilities contain large groups of Airmen during peak hours of operation, Antiterrorism/Force Protection (AT/FP) measures should be considered as a prime component of the design process. Natural and architectural barriers should be used to achieve the required stand-off distances from vehicular threats. Some locations may also require additional AT/FP measures, such as (fragmentation film) laminated glass in blast hardened frames applied to exterior windows and doors, security lighting, bollards or similar installation specific requirements. Provide limited access to nearby roads or driveways and provide controlled access to the loading dock and mechanical equipment areas. Refer to the AF Installation Force Protection Design Guide, installation Security Forces Chief, and other DoD publications listed in Chapter 6 – Reference Documents for additional information.

2E Sustainable Development

The development of sustainable facilities is an important Air Force initiative and should be included as an integral component of the design process. Sustainable materials should be utilized where possible, such as low volatile organic compound (VOC) paint and vinyl. Refer to AF Sustainable Facilities Design Guide, the Whole Building Design Guide, and the LEED rating system from the United States Green Building Council for additional information.

2F Theming

Host nation or base-related themes should be developed when possible for each dining facility and integrated into the architectural and interior designs. Many thematic environments are best presented in the foyers, lobbies, and dining areas, since available space in serving areas is normally fully utilized for food service equipment and functions. The creation of themed environments may sometimes be accomplished by renovating existing space. Facility identification and serving station signs may also be used to create or enhance the thematic environment.

Samurai Theming at Yokota AB

Music Theming at Kadena AB

CHAPTER 3

Dining Area

Serving Area

Dining Area

Serving Area

Dining Area

DESIGN AND MATERIAL GUIDELINES

3A General

This chapter provides design and material guidelines, including detailed requirements for each functional space and area of prototypical Air Force dining facilities. These guidelines address design and planning considerations for the utilities, layout, character, function, and circulation for "front of house" areas. Information is provided regarding the preferred materials and finishes that deliver the required durability, yet are still aesthetically pleasing. Photographs and illustrations from existing Air Force and private sector facilities have been included as examples of good and bad design. These examples are intended to help facilitate the preparation of design specifications and contract documents that meet or exceed the AFSVA Golden Eagle Standards.

Specific areas to be addressed in Chapter Three include:

- New Construction
- Renovation
- Serving Areas
- Dining Areas
- Foyers and Lobbies
- Support Areas

3B New Construction

Existing prototypical floorplan designs approved by HQ AFSVA are included in Chapter 5 and can be utilized as the design standards that should be emulated, where possible. These design principles have been implemented at a variety of other Air Force dining facilities and examples have been included in this guide. If feasible, these approved design concepts should also be applied to renovation projects.

To determine practical, functional locations for new dining facilities, potential sites should be located where they are easily accessible for the majority of AF personnel. Dining facilities should be centrally located close to dormitory housing areas, where enlisted Airmen may easily walk to the dining facility and should be located where they are compatible with adjacent land uses. Consider local climatic conditions, such as extreme heat, cold, or precipitation, and the weather implications on pedestrian travel routes for large numbers of troops visiting the dining facility. Existing road networks and transportation routes should be evaluated for ease of vehicular access to the proposed dining facility by Airmen, visitors, and delivery trucks.

Elmendorf AFB

MacDill AFB

MacDill AFB

Shaw AFB

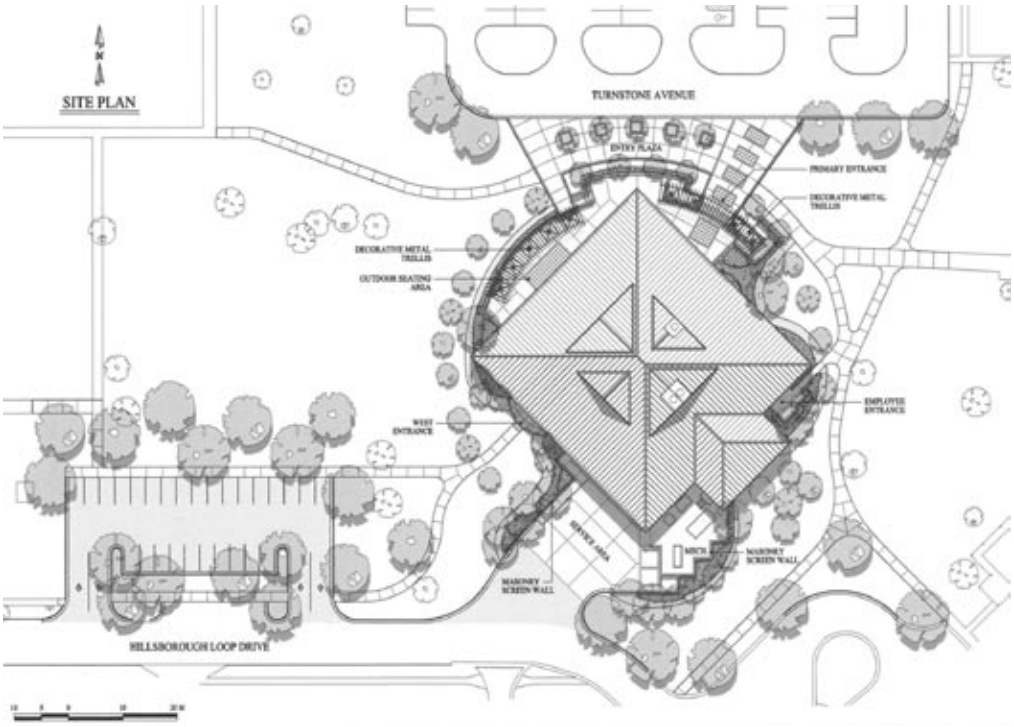
Eglin AFB

DESIGN AND MATERIAL GUIDELINES

3B New Construction (continued)

When evaluating criteria to determine site selection, each alternative should be considered based upon its adequacy under forecasted conditions, such as a surge in the base population. The availability of adequate parking areas should also be a major consideration since many Airman must drive from work to the dining facility for some meals. Site selection criteria should evaluate the following:

- Accessibility
- AT/FP Considerations
- Available Space
- Compatibility with Adjacent Land Uses
- Compatibility with Future Master Plan Goals
- Existing Base Infrastructure
- Terrain
- Sustainable Development Goals



Example Dining Facility Siteplan from MacDill AFB

The proposed site should be integrated with approach roads and the existing landscape. Landscape plantings can dramatically improve the first impression of a facility and can also help control erosion. The existing landscape may also be utilized to create stand-off distances required for effective AT/FP measures and to create buffer zones around the facility. In some instances, landscaping may also reduce maintenance requirements. Follow sustainable design principles for Xeriscaping and low water usage plant design. Refer to the USAF Landscape Design Guide for additional information.

DESIGN AND MATERIAL GUIDELINES

3C Renovation

Existing facilities should be renovated where possible to conform to the current requirements at each base, as well as to the AFSVA Golden Eagle Standards. Current infrastructure and budget constraints are important considerations when evaluating potential renovation projects. The impact of existing structural columns should be considered when designing the layouts for renovated serving areas. Where possible, avoid locating serving stations where structural columns may interfere with the service process. This situation requires additional personnel to service each side of a serving station where columns are located in the middle.

Avoid Column Conflicts with Serving Stations

Modifications to existing dining areas are easier to accomplish than reconfiguring the serving areas due to the existing electrical, plumbing, and other complex requirements. Plan suitable locations for TVs where there are adequate mounting supports and the visibility of wires can be minimized. The installation Civil Engineer Squadron (CES) should be consulted for proper authorization and coordination for all renovation projects. Proper mounting supports must be located when installing heavy objects, such as TVs, themed artwork or displays. This coordination with CES is especially important at installations located in active seismic zones.

Linear Serving Areas may Create "Bottlenecks"

3D Serving Areas

Photos of existing Air Force dining facilities have been included as good examples of serving areas that feature the desired “scatter” configuration. This type of design offers desired advantages that enable these facilities to serve the most amount of people in the shortest amount of time. As base populations change or “surge,” these facilities can adjust the hours of operation to accommodate the current need for food service that changes with the base population.

"Scatter" Serving Area

"Scatter" Serving Area

"Scatter" Serving Area

"Scatter" Serving Area at MacDill AFB

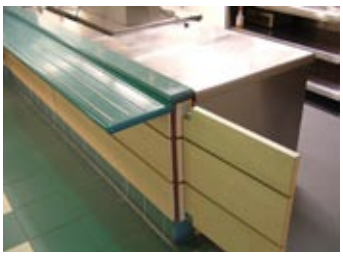
CHAPTER 3

Serving Station

Serving Station

Serving Station

Serving Station



Solid Surface Counters with Stainless Sliders

DESIGN AND MATERIAL GUIDELINES

3D.1 Serving Stations

The configuration of each serving station area must accommodate the type of food service options to be provided. Designs should consider flexibility for future changes to accommodate the delivery of alternative menu selections. Different types of serving stations include hot food service from warming containers, grill-to-order cooking stations, sandwich preparation stations, self service buffet style stations, and other specialty configurations that may feature a combination of menu selection delivery methods. Entree stations should be prominently located in the servery area.

Incandescent "can" lighting is effective in front of the servings stations, while fluorescent lights behind provide good lighting for cooking, serving, and cleaning. Serving stations need the ability to be serviced from the back in most instances. Items like warm bread drawers should not be located below the tray shelf areas, because they are hard for customers to notice. Dish lorators and cup dispensers should be located at counter level, where possible, and sized to match demand at peak capacity.

Hot Food Service Station

Grill-to-Order Cooking Station

Sandwich Preparation Station

Back Serviced Serving Stations

3D.2 Serving Station Counters

Serving station counters should be commercial quality. Stainless steel provides a durable, easily cleaned surface, but should not be over utilized to create an “institutional” feel for the facility. Solid surface materials also provide durable surfaces and are available in a variety of colors. Functional and attractive serving stations can be achieved by utilizing a variety of durable materials that are compatible with the interior finishes and architectural character of the facility. Limit the use of wood inside the serving area, because it can be easily stained or damaged and can be difficult to clean. Trash receptacles need to be located under counters or out of sight.

DESIGN AND MATERIAL GUIDELINES

3D.2 Serving Station Counters (continued)

Solid Surface Counters with Stainless Sliders

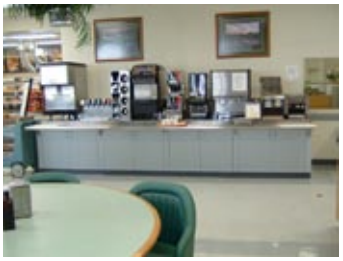
Solid Surface Counters with Stainless Sliders

Stainless Steel Counters

3D.3 Beverage Stations

Front service of beverage stations and consolidation units (ice maker/dispenser and beverage dispensers in one unit) are usually preferred, because less space is required. Beverage stations should be located where they do not conflict with queuing line for food serving stations. Areas near the exit to the cashier stations are good locations where customers can select drinks after obtaining food items and may help prevent spills in the serving area. Under counter ice makers with a top counter dispenser save space and eliminate the need to repeatedly refill the unit and possibly the need for an additional ice machine in the kitchen. Glass holders, paper or plastic "to go" cups with lids, straws and a napkin dispenser for spills should be provided adjacent to the beverage stations to minimize customer traffic. Easy access to beverage stations from the dining area for refills should be provided that does not disturb the flow of customers in the serving area.

Beverage Station



Beverage Station

Beverage Station with Front Service

Back Service Requires More Space

Glass and Cup Holders

Beverage Station

Beverage Station

Beverage Station

Salad Bar

Soup Station

Salad Bar

Refrigerated Station

Non-Refrigerated Station

DESIGN AND MATERIAL GUIDELINES

3D.4 Salad Bars and Soup Stations

Salad bars may be island configurations with access from all sides or just one side for customer access. Include accommodations for both hot and cold wells so the salad bar station may also be used as a universal station of self service offerings like a breakfast buffet or specialty selections. Address proper "sneeze guard" design for easy access by customers and provisioning by the dining facility staff. Soup stations and salad bars should be located together, where possible, and include accommodations for hot bread, crackers, and similar items. Salad plates, soup bowls, and soup spoons should also be located at each station, as required.

Island Salad Bar

Single Side Salad Bar

Soup and Salad Bar Islands

3D.5 Specialty Food Stations

Consider special needs for dessert and cold food stations, such as refrigeration, plumbing, and electrical requirements. Provide flexible display spaces that can be reconfigured as service options change. Dessert stations should typically be located near the cashier stations or otherwise out of the main flow of customer traffic. Non-refrigerated food selections include cereal, fruit, and other items served and consumed at room temperature.

Refrigerated Dessert Stations

DESIGN AND MATERIAL GUIDELINES

Tray Holders

Tray and Silverware Station

Silverware Station

Vendor Provided Displays and Equipment

Vendor Display Graphics

3D.6 Tray Holders

Provide a dedicated place located near the serving area entrance to put trays and tray holders. Avoid locating trays or tray holders in areas that may create a bottle neck effect. Utilizing tray holder carts with rollers that can be loaded in the dish washing area and rolled into position in the serving area is an efficient way to re-supply trays quickly. Tray holder carts also provide a convenient way to store clean trays. Utilize tray holders manufactured from stainless steel or similar commercial quality materials with heavy duty rollers.

Tray Holders with Rollers

Silverware Station

3D.7 Silverware Stations

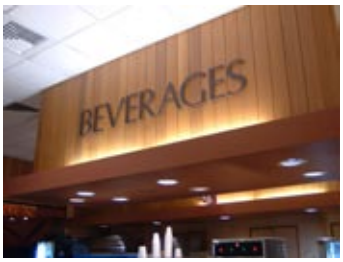
Locate silverware stations near the exit from the serving area or near the entrance to the dining area, but not where they may create a bottle neck effect. Napkin dispensers, extra straws, condiments, and water dispensers may also be required at the same location. Provide for adequate access (from the rear if possible) to re-supply silverware and other supplies with minimal disruption to customers. Utilize only commercial quality materials and other products, as needed.

3D.8 Vendor Supplied Displays

Provide adequate, dedicated space and electrical/plumbing services for changeable vendor displays and equipment that will not disrupt the traffic flow within the serving area. Avoid placing vendor service items in awkward areas just because it may have needed electrical service or available space. Provide space for AFSVA and vendor supplied graphic images and advertisements that can be periodically replaced. Vendor advertising space may also be used to generate additional revenue.

Vendor Displays

DESIGN AND MATERIAL GUIDELINES



Overhead Signage with Wash Lighting

Neon Signage

Neon Signage

Cashier Stations

Cashier Stations

3D.9 Serving Station Signage and Menu Boards

Signage identifying each serving station should be commercial quality and integrated into the architectural designs. Overhead serving station signs, such as individual letters or neon, help to identify each station and the type of food selection available. These signs may also be used to reinforce the themed environment of the facility through terminology, colors, images, and materials. Supplemental signs should also be used to identify the presence of any items below the counter area, such as bread warmers or cup dispensers.

Accommodate for menu board display information at each serving station and/or a central location near the servery entrance to confirm daily menu choices and prices. Menu boards should be easily changeable and located where they do not obstruct the transaction area. Electronic menu boards or display screens controlled by a central computer system allow easy updates and changes, however some of these systems may be cost prohibitive. Menu information can be effective at eye level or overhead, provided they are easily legible, even during crowded conditions of peak periods.

Avoid Hard-to-Read Menu Displays

Changeable Display Monitors

3D.10 Cashier Stations

Cashier stations need to be located between serving and dining areas. Provide space for the cashier to sit inside the cashier station that allows transactions to be conducted from both sides. Provide adequate queuing and counter space for customers to place their trays and prepare in advance for the cashier transaction. Consider point-of-purchase options and other items, like additional silverware needed at or near the check-out area. Cashier stations should not appear cluttered or disorganized.

Cashier Stations

Cashier Stations

DESIGN AND MATERIAL GUIDELINES

3D.11 Serving Area Floors, Walls, and Doors

Dark ceramic tiles with sealed, dark grout are the most durable floor coverings for serving areas and travel paths for customers and employees. Tile is also an excellent choice for wall coverings, because it is durable and easy to clean. Tile colors and designs may also be used to reinforce the themed environment of the facility. Corner guards and bumper rails on walls are mandatory and should utilize stainless steel or similar materials. Doors should also be protected by bumper guards manufactured from stainless steel or other durable materials to protect doors from damage.

Tile Floors

Tile Walls and Floors

Tile Floors

Pick-up Window

Food Warmers

Tile Walls and Stainless Steel Corner Guards

Tile Walls with Door and Wall Protection

3D.12 Flight Kitchens

Consider a pick-up area or delivery window where flight crews may collect "to go" orders. Flight kitchen accommodations should include a beverage station, food warmers, and any other specialized equipment needed to package or deliver meals to the flight line, as determined by the flight kitchen manager. Address issues associated with “grab & go” meal options where "to go" containers are available in lieu of plates and glasses. The flight line service area needs a straight line configuration where meals can be assembled and packaged for delivery to aircraft and crew members. Flight kitchens and service areas need direct access to the main kitchen facilities.

Consider Covered Pick-up and Waiting Areas

Pick-up Windows

DESIGN AND MATERIAL GUIDELINES

3E Dining Areas

Dining areas should provide flexibility to reconfigure tables and chairs for maximum efficiency. Consult the dining room manager for information regarding desired table grouping configurations and requirements. Televisions should be located in designated seating areas and integrated into the architectural designs, where possible. Utilize aesthetically appealing installations for TVs with concealed wiring and electrical connections. Provide some seating where customers can get away from the TVs for a more social dining experience. Microwaves, water stations, and supplemental condiment stations located in the dining areas are effective.

Typical Dining Area

Typical Dining Area

Dining Area Televisions

Use Casters on Chairs for Carpet Floors

Corner Booth with Bench Seating

Typical Dining Area

Typical Dining Area

Some dining areas may contain areas for specialty offerings, such as espresso, ice cream or smoothie bars. Provide adequate MEP infrastructure to accommodate future service offerings and address current or future needs for wired or wireless electronic access, communication ports, and cyber café type seating areas. Recreational game areas may also be utilized to provide a more social atmosphere. These areas should be located away from the main dining areas to minimize noise and disruptions. Consider a separate recreational room with a door to isolate noise. Fire extinguishers should be recessed rather than surface mounted onto existing walls. Provide clocks prominently located in visible areas.

3E.1 Chairs and Tables

Seating groups of four are the most desirable configurations. Square tables offer the most flexible options to rearrange the seating areas as needed and to place tables together for small group functions. Booths should be used selectively. Corners and other awkward areas next to walls and windows are good potential locations for booths with bench seating.

Chairs should not be located too close to a transition of floor materials (tile to carpet). Allow room to push chairs back from the table, as needed. Chair rails are effective to prevent wall and/or chair damage, especially if walls are constructed of rough stone or concrete. Stackable chairs offer the most flexibility for storage, reconfiguration, and are also cost effective. Flat leg bottoms are preferred over those with casters on non-carpeted floors due to caster maintenance problems. Castered chairs are needed on carpet floors to prevent carpet damage and five spoke bases on castered chairs are required to prevent tipping. Vinyl seats are preferred for chairs and bench seating because they are durable and easy to clean. Fabric seat backs are acceptable, if they have been treated for stain and fire protection.

DESIGN AND MATERIAL GUIDELINES

Supplemental Condiment Station

Supplemental Condiment Station

Condiment Station

POW/MIA Table Setting

POW/MIA Table Setting

3E.2 Condiment and Amenity Stations

Condiment stations should be centrally located as you exit the serving area. Depending upon the size of the facility, additional smaller condiment stations with popular refill items (like ketchup, mustard, etc.) may also be needed in the dining areas. Condiment stations should be constructed from durable materials that are easily cleaned and compatible with the interior finishes of the dining and serving areas. Provide a counter area to support trays while condiments are selected. Condiment stations should include napkins, straws, and extra silverware in addition to the desired condiment selections. Amenities such as water or microwave stations should be provided where needed or included at condiment stations.

Condiment Station at Servery Exit

Water Station Located in the Dining Area

3E.3 POW/MIA Table and Specialty Displays

Consider providing a dedicated space in a prominent position inside the main dining area for a POW/MIA table and flag display or other specialty displays for Mother's/ Father's Day, Christmas, etc. The POW/MIA table display is a very important part of the military culture that honors all soldiers missing or killed in action and helps serve as a reminder to remember those not here. If utilized, a POW/MIA table display should feature the following items:

- ☐ A single round table with a white tablecloth
- ☐ A single chair leaning forward
- ☐ A single rose displayed in a vase
- ☐ A full place setting with the glass inverted, a slice of lemon and a pinch of salt
- ☐ A Bible
- ☐ A candle with candle holder
- ☐ A small sign explaining the symbology of remembering those not here
- ☐ Both American and POW/MIA flags

POW/MIA Table Setting and Flag Display

DESIGN AND MATERIAL GUIDELINES

Supplemental Dining Area

Supplemental Dining Area

Supplemental Dining Area Entry Steps

Supplemental Dining Area

Carpet with Tile Travel Paths

3E.4 Supplemental Dining Areas

Supplemental dining areas on the perimeter of the main dining area or smaller dining rooms may be needed to accommodate small group functions and to provide a more private dining experience. These areas should include amenities like a microphone with volume controls, built in speakers, cable TV/monitor viewing set-up, weapons storage areas, etc. These areas can also be used as overflow seating areas and may be closed during non-peak periods. Half-wall partitions with integrated seating/plants/HVAC work well in conjunction with steps and ADA compliant ramps to separate these areas from the main seating areas.

Supplemental Dining Area for Small Group Functions

Supplemental Dining Area for Small Group Functions with Weapons Storage

3E.5 Dining Area Floors, Windows, and Walls

High quality, low pile carpet is preferred for floors in the dining areas. Carpet tiles should be utilized where possible, due to their ability to be easily replaced. Dark ceramic tiles or stone with sealed, dark grout are the most durable floor coverings in the serving areas and main travel paths within the dining area.

Vertical blinds are preferred over horizontal blinds or drapes because they are easier to clean and adjust light levels effectively. If drapes or valances are used, they must meet all Occupational Safety and Health Administration (OSHA) and fire protection requirements. Durability should be a major consideration when selecting construction materials for walls. Wall materials should compliment the architectural character of the facility and chair rails should be utilized where needed.

Tile Floors and Durable Lower Wall Protection

Low Pile Carpet Floors and Durable Masonry Walls

DESIGN AND MATERIAL GUIDELINES

3F Foyers and Lobbies

Foyers and lobbies should address foul weather requirements with easily cleanable floor materials. Walk-off mats inside the foyer and removable rugs in lobby areas should be provided for particularly bad weather days. Consider built-in drains inside recessed walk-off mat in foyers to allow water to drain off and heated mats in cold weather climates. Address the need for gum machines and other vendor supplied equipment located near the entrances. Provide a trash container and ashtray on the outside near each entrance. Consider the need for bicycle racks and a boot washing station outside each entrance of dining facilities.

AFSV Foyer Welcome Mat

MacDill AFB Entrance

Boot Wash Station

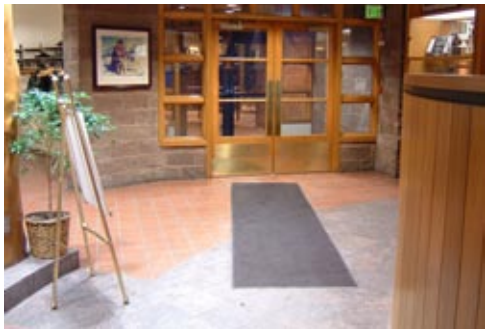
Seymour Johnson AFB Entrance

Use Walk-off Mats to Prevent Slips and Stains

Foyer at MacDill AFB

Foyer at MacDill AFB

Reading Material and Gum Machines



Walk-off Mats Utilized During Wet Weather

Yokota AB Entrance

Door Holders

CHAPTER 3

Use Tile or Stone Floors for Durability

Use Tile or Stone Floors for Durability

Vinyl Entry Signage

Avoid Signage Clutter

Hours of Operation and FPCON Signs

DESIGN AND MATERIAL GUIDELINES

3F.1 Foyers, Lobbies, and Corridors - Floors and Walls

Natural stone materials, terrazzo or dark ceramic tiles with sealed, dark grout are the most durable floor coverings in foyers, lobbies, and corridors due to the high traffic in these areas. Recessed walk-off mats inside the entry where customers hit four footsteps on each mat will reduce maintenance cost for flooring. Walls should be constructed of durable materials or wall coverings with corner guards. Provide a dedicated area for the display of newspapers and other reading materials at the entry foyers that does not obstruct these doorways.

Utilize Durable Tile Floors in Corridors

Tile or Stone Floor Patterns in High Volume Traffic Areas

Durable Tile Foyers and Corridors

3F.2 Entry Signage

Identification signage should be provided at each dining facility entrance. The name of the facility and identification signs should be coordinated with the themed environments of the DF, when possible. Welcome mats and other supplemental items provide good opportunities for additional identification signs. Provide easy to change hours of operation and Force Protection Condition (FPCON) signage at each entrance, but avoid a cluttered appearance.

Facility Identification Signage

Facility Identification Welcome Mats

CHAPTER 3

Electronic Menu Displays

Freestanding Menu Displays

Thematic Menu Displays

Announcement and Display Boards

Award and Display Boards

DESIGN AND MATERIAL GUIDELINES

3F.3 Menu Display Signage

Menu display signage should be located near the entrance to the serving area to provide food selection and price information. A menu display should be presented at eye level and located where it does not obstruct the flow of people entering the serving area. Menus should be easy to update and normally need to be revised on a daily basis or more. Electronic menu boards are easy to update and maintain, however the initial cost is expensive. Consider utilizing display monitors that can be updated via a central remote computer to present menu information at the entrance to the serving area and at each serving station. Provide for an alternative method of displaying menu information, such as a freestanding marker board, in the event repairs are needed for an electronic menu board system.

Electronic Menu Displays

Electronic Menu Displays

3F.4 Displays and Artwork

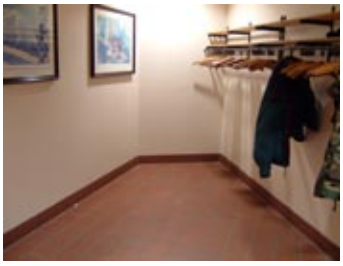
Dedicated spaces should be provided for awards, displays, announcements, and artwork instead of having them scattered on walls. The award cases and display areas at Elmendorf are good photographic examples. Display easels and menu boards should be located out of travel paths. Themed artwork displayed at a consistent eye level provides a more appealing visual environment than artwork mounted at various different heights.

Elmendorf Award Display Case

Themed Artwork and Award Displays

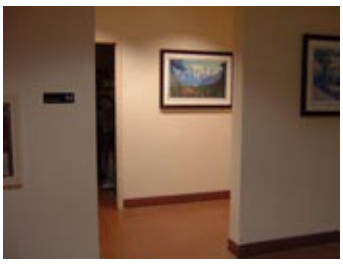
Support Areas

Support Area Storage



Coat and Hat Storage

Coat and Hat Storage



Restroom Entry

DESIGN AND MATERIAL GUIDELINES

3G Support Areas

Stanchions may be used to temporarily close off an area or signal the facility is closed. Freestanding signs may also be used in support spaces to communicate operational information, messages, advertising, and special events or menu selections.

3G.1 Support Areas - Floors and Walls

Dark ceramic tiles with sealed, dark grout are the most durable floor coverings in the public travel areas and inside the restrooms. Corner guards for walls are mandatory for all high traffic areas, but not for restrooms.

3G.2 Bus Cart Stations

Busing is provided by the DF staff. Provide areas for storing 3 or 4 bus carts. Seating configurations should allow for easy access to bus tables. Bus cart stations should be adjacent to the main dining area, but walls or screens should be utilized to obstruct views from the dining area of carts waiting to be emptied or cleaned.

Bus Cart Stations

Bus Cart Stations

3G.3 Coat and Hat Storage

Hat racks and coat hangers located at the main entrances or the entrance to the servery area are most effective. Coat hangers are preferred over hooks on cold climate bases, because they hold more coats. Hat storage racks are also helpful and help save space.

Coat and Hat Storage

Coat and Hat Storage

3G.4 Restrooms

Commercial quality restroom fixtures are required. Use durable materials that are easy to clean for walls, counters, and fixtures. Public phones need to be located near the restroom/coat storage area. Diaper changing accommodations are not required.

CHAPTER 4

CONTINGENCY KITCHEN GUIDELINES

4A General

Air Force Contingency Kitchens (AFCKs) are utilized in more remote installations to support military deployment activities worldwide. The requirements and guidelines for these contingency kitchens are very different than the normal dining facilities at more permanent AF bases. Existing infrastructure is often not available, such as water or electrical service and the special requirements for food preparation, delivery and cleaning must be addressed. AFCKs are to be self-contained, temporary facilities that must be constructed and operational as quickly as possible. Refrigeration requirements are provided by truck trailers. These facilities should also be designed to provide the highest level of food service functions possible to support the mission requirements.

4B Serving Areas

Serving area configurations will vary depending upon the mission goals and the food service function provided by each AFCK. Speed/fast food lines will always be required and should be designed to allow easy access by customers who desire "grab & go" food items. Locate speed/fast food lines, drink dispensers and "to go" containers where they do not obstruct the service of customers at full menu food stations, such as grilled foods or hot food service containers. The general design principles for serving areas of AFCKs are similar to the desired "scatter" serving configurations for permanent AF installations. Functional adjustments will be needed based upon the limitations at each facility and the food service options offered. Consider special limitations regarding refrigeration, water, and space challenges when designing and constructing AFCK facilities.

4C Dining Areas

Dining tables and chairs should be composed of two-person and four-person tables that can be easily configured for different groupings. Multiple tables may need to be placed together to form larger table areas to accommodate larger groups of customers that desire to dine together. Stackable chairs with flat leg bottoms and vinyl or plastic seats and backs are the most functional solutions. Tables placed against the wall with bench seating may also be desired for some configurations to maximize available dining space. Consider the expected quantity of customers to be accommodated at one time and the potential for a "surge" in demand when designing AFCK dining areas. Use durable and easily cleaned floor materials, such as tile or sheet vinyl instead of carpet, to minimize maintenance. Plastic eating utensils and paper or plastic plates should be utilized to minimize cleaning requirements. Provide trash receptacles near the exit of the dining area, if busing services are not provided.

4D Foyers, Lobbies, and Support Areas

Foyer designs and materials should address the unique climatic conditions at each installation. Mud rooms or foyers with durable floor materials and walk-off mats are required for cleaning dirt and mud from boots. Sand and dust are particular problems in desert and other harsh climates. Consider the need for an air lock entry to minimize dust from entering the AFCK. Provide facilities for washing hands near the entrance with portable water containers, soaps or other low water use hand washing stations.

CHAPTER 4

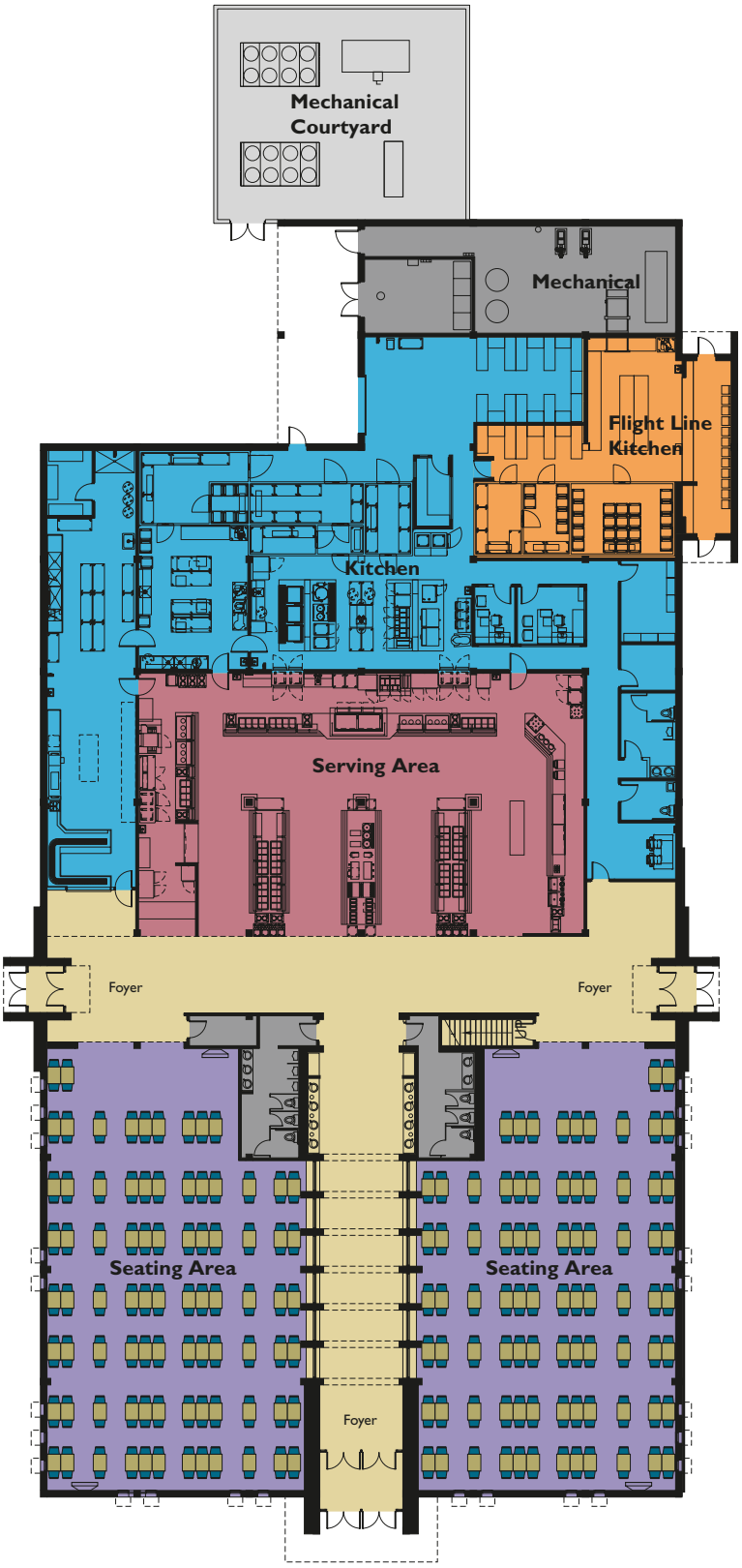
CONTINGENCY KITCHEN GUIDELINES

4E AFCK Approved Plan Layout

The approved plan below reflects a AFCK design for Al Udeid Air Base in Qatar that addresses the desired design concepts required for AFCKs.

LEGEND

- Seating Area
- Serving Area
- Kitchen
- Flight Line Kitchen
- Service Area
- Mechanical Courtyard



Al Udeid AB Contingency Kitchen Floorplan

CHAPTER 5

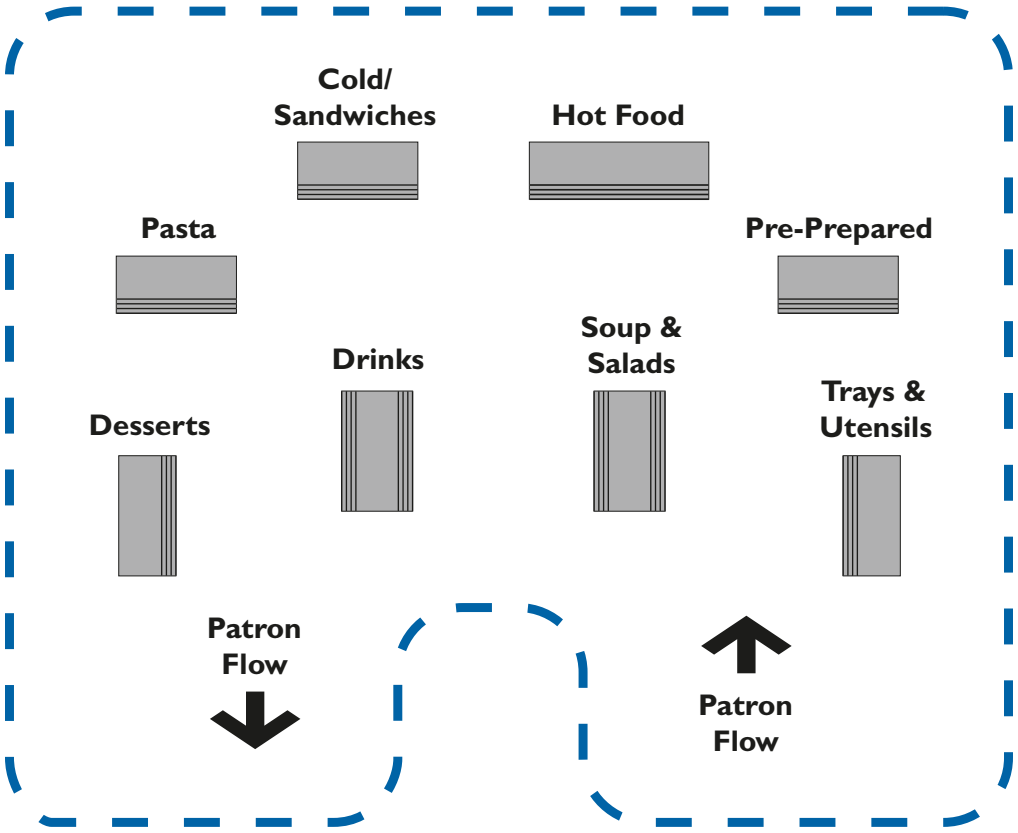
ILLUSTRATIVE DESIGN INFORMATION

5A General

This chapter contains illustrative design information and examples of approved floor plans that show how the design principles detailed in this guide were applied to existing Air Force dining facility projects.

5B Serving Area Functional Relationships

The diagram below illustrates the desired functional relationships of typical Air Force serving area components utilizing the desired "scatter" configuration.



"Scatter" Serving Area Functional Relationship Diagram

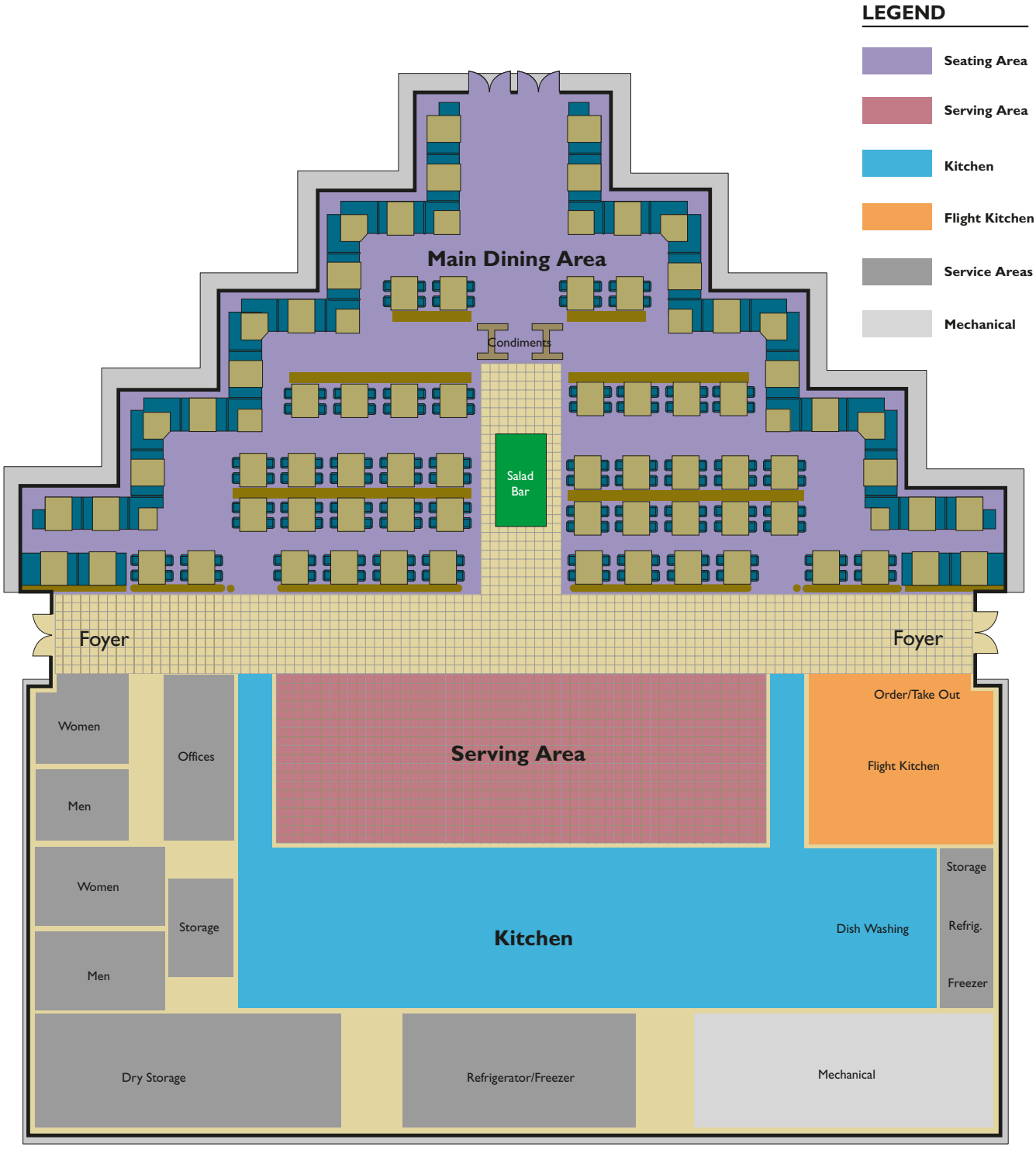
CHAPTER 5

ILLUSTRATIVE DESIGN INFORMATION

5C Dining Area Renovation Examples

5C.1 Existing Dining Area

The existing and renovated floorplan images in this chapter provide a case study of a dining room renovation project at Eielson AFB's "Two Seasons" dining facility. The before and after floorplans illustrate how an existing, traditional dining area can be remodeled and upgraded to create a contemporary dining area with recreational spaces and a "sports bar" type atmosphere.



Existing Dining Area Configuration at Eielson AFB

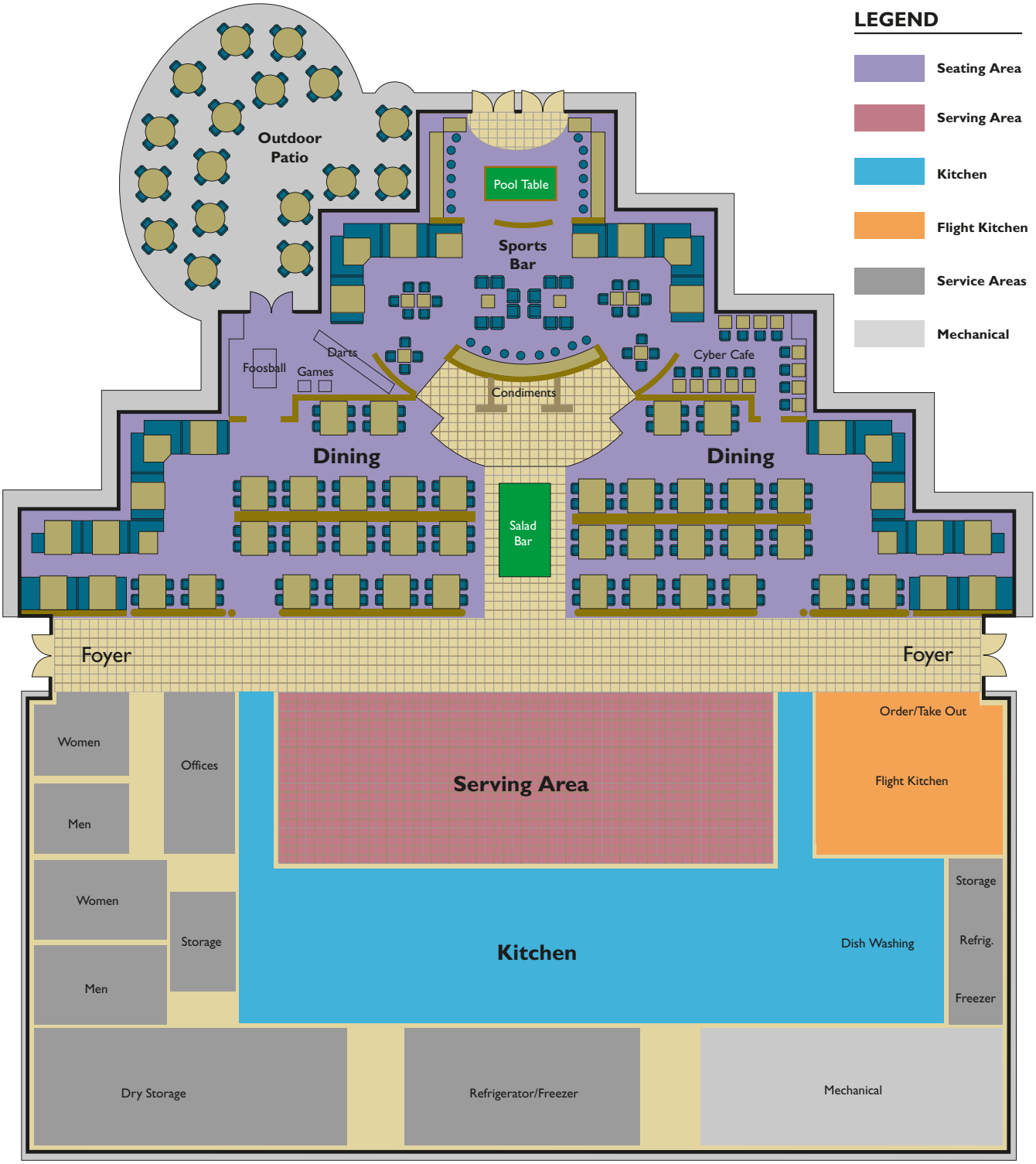
CHAPTER 5

ILLUSTRATIVE DESIGN INFORMATION

5C Dining Area Renovation Examples

5C.2 Renovated Dining Area

As described in this guide, this renovated space provides a modern, appealing dining atmosphere with facilities for entertainment and leisure activities. These design concepts can be applied to many existing Air Force dining facilities, as well as new construction.



Renovated Dining Area Configuration at Eielson AFB

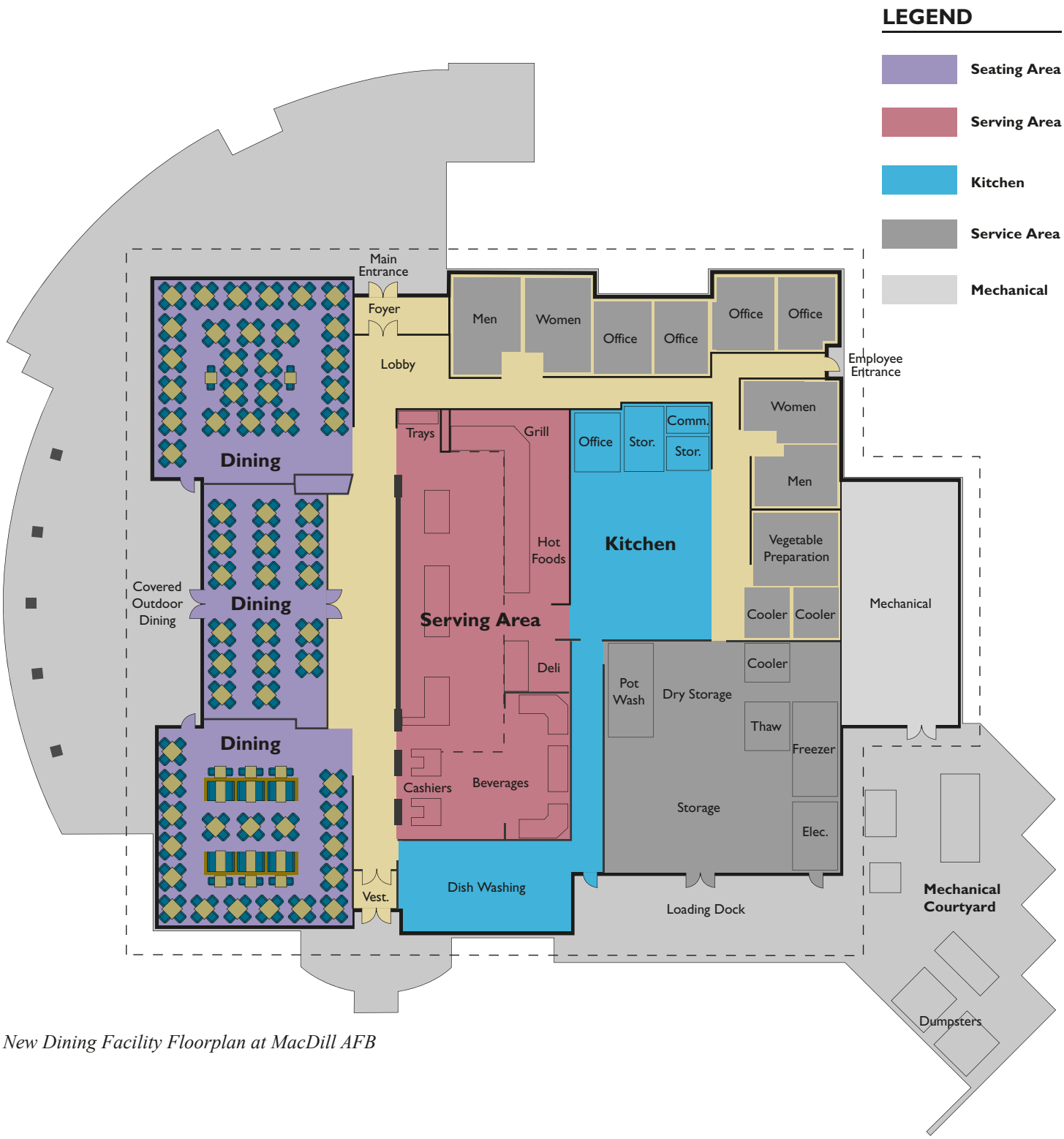
CHAPTER 5

ILLUSTRATIVE DESIGN INFORMATION

5D New Construction Floorplan Examples

5D.1 MacDill AFB Dining Facility

The floorplan illustration below illustrates how the design principles in this guide were adapted to suit the requirements for a new award winning dining facility at MacDill AFB.



New Dining Facility Floorplan at MacDill AFB

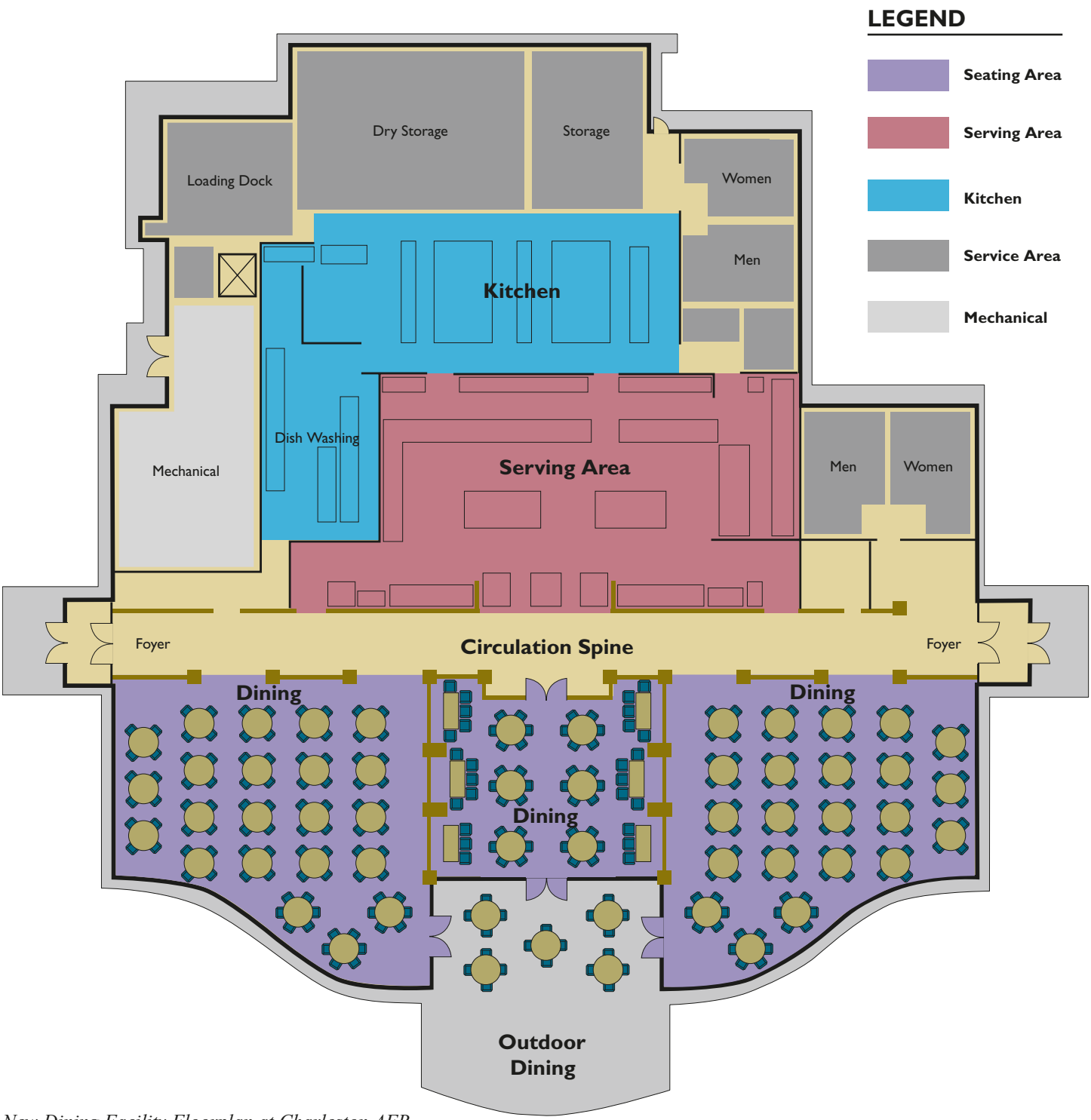
CHAPTER 5

ILLUSTRATIVE DESIGN INFORMATION

5D New Construction Floorplan Examples

5D.2 Charleston AFB Dining Facility

The floorplan illustration below illustrates how the design principles in this guide were adapted to suit the requirements for a new award winning dining facility at Charleston AFB.



New Dining Facility Floorplan at Charleston AFB

CHAPTER 5

ILLUSTRATIVE DESIGN INFORMATION

5D New Construction Floorplan Examples

5D.3 Eglin AFB Dining Facility

The floorplan illustration below illustrates how the design principles in this guide were adapted to suit the requirements for a new dining facility at Eglin AFB.

New Dining Facility Floorplan at Eglin AFB

REFERENCE DOCUMENTS

6A Air Force Publications

Achieving Design Excellence brochure
http://www.afcee.brooks.af.mil/dc/DCD/arch/designbrochure/DEsinglepg.pdf
http://www.afcee.brooks.af.mil/dc/DCD/arch/designbrochure/DEconve.pdf

Air Force Interior Design Guidelines
http://www.afcee.brooks.af.mil/dc/dcd/interior/intdespu.asp

AFI 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects*
http://www.e-publishing.af.mil/pubfiles/af/32/afi32-1023/afi32-1023.pdf

AFH 32-1084, *Facility Requirements,* 1 September 1996
http://www.e-publishing.af.mil/pubfiles/af/32/afh32-1084/afh32-1084.pdf

AFSVA, *Golden Eagle Standards*
http://www.afsv.af.mil/FMP/FMPStandards.htm

ETL 94-4, *Energy Usage Criteria for Facilities in the Military Construction Program*
http://www.afcesa.af.mil/Publications/ETLs/ETL%2094-4.pdf

UFC 3-120-01, *Air Force Sign Standard*
http://www.afcee.brooks.af.mil/dc/dcd/signs/UFC3-120-01.pdf

USAF Landscape Design Guide
http://www.afcee.brooks.af.mil/dc/dcd/land/ldg/index.html

6B Antiterrorism/Force Protection (AT/FP)

AFI 10-245, Air Force Antiterrorism (AT) Standards
http://www.e-publishing.af.mil/pubfiles/af/10/afi10-245/afi10-245.pdf

AFI 31-101, *The Air Force Installation Security Program* (FOUO)

AFI 31-203, *Security Forces Management Information System (SFMIS)*
http://www.e-publishing.af.mil/pubfiles/af/31/afi31-203/afi31-203.pdf

UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*
http://65.204.17.188//report/doc_ufc.html

UFC 4-010-10, *DoD Minimum Antiterrorism Standoff Distances for Buildings* (FOUO)
http://65.204.17.188//report/doc_ufc.html

REFERENCE DOCUMENTS

6B Antiterrorism/Force Protection (continued)

USAF Force Protection Design Guide
http://www.afcee.brooks.af.mil/dc/dcd/arch/force.pdf

DoD Instruction (DoDI) 2000.12, *DoD Antiterrorism (AT) Program*
http://www.dtic.mil/whs/directives/

6C Accessibility

ADA Accessibility Guidelines for Buildings and Facilities
http://www.access-board.gov/adaag/html/adaag.htm

Uniform Federal Accessibility Standards
http://www.access-board.gov/ufas/ufas-html/ufas.htm

6D Unified Facilities Criteria

UFC 4-722-01, *Dining Facilities AFPD 23-3*
http://65.204.17.188/report/doc ufc.html

UFC 3-600-01, *Design: Fire Protection Engineering for Facilities*
http://65.204.17.188/report/doc ufc.html

UFC 200-01, *Design: General Building Requirements*
http://65.204.17.188/report/doc_ufc.html

6E Sustainable Development

USAF Sustainable Design Policy
http://www.afcee.brooks.af.mil/green/resources/policy.asp

USAF Sustainable Facilities Design Guide
http://www.afcee.brooks.af.mil/dc/dcd/arch/rfg/index.html

USGBC United States Green Building Council
http://www.usgbc.org/

REFERENCE DOCUMENTS

6F Publication Information

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