SCOTT AIR FORCE BASE INSTALLATION FACILITIES STANDARDS (IFS)











Installation Elements

Site Development

Facilities Exteriors

Facilities Interiors

2019

Scott Air Force Base IFS

Table of Contents

A. OVERVIEW	5	B03.2.3. Preserves B03.2.4. Perimeter Fence	
A01. Facility Hierarchy		C. SITE DEVELOPMENT	35
A02. Facility Quality		C01. Site Design	
A03. Facility Districts		C01.1. Site Design Considerations	
B. INSTALLATION ELEMENTS	8	C01.2. Building Orientation	
B01. Comprehensive Planning	8	C01.2. Building Orientation	
B01.1. Installation Development Plan (IDP)	8	C02.1. Utility Components	
B01.1.1. IFS Component Plan of IDP		•	
B01.1.2. Brief History of Base B01.1.3. Future Development		C03.1 Configurations and Daries	
·	12	C03.1.1 Paying and Striping	38
B02. Street Envelope Standards		C03.1.1. Paving and Striping C03.1.2. Curbing	
B02.1. Hierarchy of Streets B02.1.1. Arterial Streets	14	C03.1.3. Internal Islands and Medians	
B02.1.2. Collector Streets		C03.2. Parking Structures	42
B02.1.3. Local Streets		C03.3. Connectivity	43
B02.1.4. Special Routes	4.0	C04. Stormwater Management	43
B02.2. Hierarchy of Intersections	18	C04.1. Stormwater Requirements	44
B02.2.1. Arterials B02.2.2. Arterial/Collector		C05. Sidewalks, Bikeways and Trails	45
B02.2.3. Collectors		C05.1. Circulation and Paving	46
B02.2.4. Special Intersections B02.2.5. Street Frontage Requirements		C05.1.1. Ramps and Stairs	
B02.2.6. Sight Lines		C05.1.2. Lighting	
B02.3. Street Elements	21	C06. Landscape	49
B02.3.1. Paving		C06.1. Climate-based Materials	49
B02.3.2. Curb and Gutter		C06.1.1. Landscape Design Concept	
B02.3.3. Utility Service Elements B02.3.4. Traffic Signs		C06.1.2. Xeriscape Design Principles C06.1.3. Minimizing Water Requirements	
B02.3.5. Street Lighting		C06.1.4. Plant Material Selection	
B02.3.6. Other		C06.1.5. Water Budgeting (Hydrozones)	
B03. Open Space / Public Space	C06.1.6. Base Entrance Landscaping C06.1.7. Streetscape Landscaping	, ,	
B03.1. Plazas, Monuments and Static Displays	25	C06.1.8. Pedestrian Circulation Landscaping	
B03.1.1. Paved Plazas		C06.1.9. Parking Lot Landscaping	
B03.1.2. Sculptures, Markers and Statuary B03.1.3. Static Display of Aircraft		C06.1.10. Screen/Accent Landscaping C06.1.11. Other	
B03.2. Grounds and Perimeters	29	C07. Site Furnishings	57
B03.2.1. Parade Grounds	<u>-</u> '	C07.1. Furnishings and Elements	
B03.2.2. Parks		<u> </u>	

Table of contents continued

C07.2. Site Furnishings Products, Materials / Color . C07.2.1. Barbeque Grills C07.2.2. Benches C07.2.3. Bike Racks		D03.3.4. Thermal Shading D03.3.5. Renewable Heating/Cooling D03.3.6. Solar Photovoltaic System D03.3.7. Solar Thermal System	
C07.2.4. Bike Lockers		D04. Building Entrances	97
C07.2.5. Bollards		D04.1. Primary Entrances	98
C07.2.6. Bus Shelters		D04.2. Secondary Entrances	98
C07.2.7. Drinking Fountains		D05. Wall Systems	
C07.2.8. Dumpster Enclosures / Gates C07.2.9. Fencing			
C07.2.10. Flagpoles		D05.1. Hierarchy of Materials	
C07.2.11. Lighting – Landscape / Accent		D05.2. Layout, Organization and Durability	100
C07.2.12. Litter and Ash Receptacles		D05.3. Equipment, Vents and Devices	100
C07.2.13. Picnic Tables		D05.4 Wall Systems Materials	101
C07.2.14. Planters – Free Standing		D05.4.1. Flat Metal Panels	
C07.2.15. Play Equipment C07.2.16. Screen Walls		D05.4.2. Brick Veneer	
C07.2.17. Tree Grates		D05.4.3. Architectural Precast	
C07.2.18. Other		D05.4.4. Stucco Over Sheathing	
C08. Exterior Signs	7/	D05.4.5. Curtain Wall	
_		D05.4.6. Cast-in Place Concrete	
C08.1. Colors and Types	/4	D05.4.7. Tilt-up Concrete	
C08.1.1. Materials and Color Specifications		D05.4.8. Ribbed Metal Sheeting	
C08.1.2. Installation and Gate Identification Signs		D05.4.9. EIFS	
C08.1.3. Building Identification Signs		D05.4.10.GFRC D05.4.11.Concrete Block	
C08.1.4. Traffic Control Devices (Street Signs) C08.1.5. Directional and Wayfinding Signs		D05.4.11.Concrete Block D05.4.12. Fiber Cement Siding	
C08.1.6. Informational Signs		D05.4.13. Other	
C08.1.7. Motivational Signs			100
C08.1.8. Parking Lot Signs		D06. Doors and Windows	
C08.1.9. Regulatory Signs		D06.1. Types	107
C08.1.10. Other		D06.2. Layout and Geometry	107
C09. Lighting	82	D06.3. Glazing and Shading	107
C09.1. Fixtures and Lamping	83	D06.4. Hardware	107
C09.2. Light Fixture Types	84	D06.5. Doors and Windows Materials	108
C09.2.1. Street Lighting		D06.5.1. Anodized Aluminum	
C09.2.2. Parking Lot Lighting		D06.5.2. Hollow Metal	
C09.2.3. Lighted Bollards		D06.5.3. Aluminum-clad Wood	
C09.2.4. Sidewalk Lighting		D06.5.4. Other	
C09.2.5. Walls / Stairs Lighting C09.2.6. Other		D07. Roof Systems	110
		D07.1. Roof Type and Form	111
D. FACILITIES EXTERIORS		D07.2. Roof Slope	111
D01. Supporting the Mission		D07.3. Parapets and Copings	111
D02. Sustainability	90 91 91	D07.4. Color and Reflectivity	111
D03. Architectural Features		D07.5. Gutters, Downspouts, Scuppers, Drains	
D03.1. Orientation, Massing and Scale		D07.6. Roof Vents and Elements	
D03.2. Architectural Character		D07.7. Clerestories and Skylights	
D03.3. Details and Color		D07.8. Vegetated Roof	
D03.3.1. Climate-based Data D03.3.2. Natural Ventilation System D03.3.3. Thermal Mass		Dor.o. vegetated Nooi	113

Table of contents continued

D07.9. Roof Systems Materials 1	113 E04. Ceilings	37
D07.9.1. Standing Seam Metal	E04.1. Ceiling Materials	37
D07.9.2. Membrane Single-ply	E04.1.1. Exposed Framing (Roof / Floor Structure	
D07.9.3. Built-up Multi-ply D07.9.4. Concrete Tile	Above)	
D07.9.4. Concrete Tile D07.9.5. Clay Tile	E04.1.2. Exposed Concrete	
D07.9.6. Slate Shingles	E04.1.3. Grid and Acoustical Tile	
D07.9.7. Vegetated System	E04.1.4. Gypsum Board	
D07.9.8. Ribbed Metal Sheeting	E04.1.5. Metal Panels E04.1.6. Wood	
D07.9.9. Composite Shingles	E04.1.6. Wood E04.1.7. Rapidly-Renewable Products	
D07.9.10. Other	E04.1.8. Other	
D08. Structural Systems1		10
D08.1. Systems and Layouts 1	117 E05.1. Doors and Windows and Frames Materials 14	40
D08.2. Structural Systems Materials1	117 E05.1.1. Aluminum	
D08.2.1. Concrete	E05.1.2. Hollow Metal	
D08.2.2. Insulated Concrete Forming (ICF)	E05.1.3. Wood	
D08.2.3. Steel	E05.1.4. Other	
D08.2.4. Pre-Engineered Steel D08.2.5. Masonry	E06. Casework Systems14	14
D08.2.6. Heavy Timber	E06.1. Casework Materials14	45
D08.2.7. Light-gauge Steel	E06.1.1. Plastic Laminate	
D08.2.8. Lumber Framing	E06.1.2. Solid Polymer Surface	
D08.2.9. Other	E06.1.3. Rapidly-Renewable Products E06.1.4. Metal	
D09. Mechanical, Electrical and Plumbing1	121 E06.1.5 Other	
D09.1. Passive and Active Systems1	122 E06.2. Countertop Materials	48
D09.2. Functionality and Efficiency1		
E. FACILITIES INTERIORS	123 E06.2.2. Solid Polymer Surface E06.2.3. Natural Stone	
E01. Building Configurations1	124 E06.2.4. Cast Stone	
E01.1. Layout and Common Areas	_	
E01.1.1. Interior Design Process	E06.2.6 Other	
E01.1.2. Codes and Regulations	E07. Furnishings15	50
E01.2. Quality and Comfort1	125 E07.1. Durability and Serviceability1	50
E02. Floors 1	126 E07.2. Accessories	50
E02.1. Floor Materials		
E02.1.1. Prepared Slabs	E08.1 Types and Color1	
E02.1.2. Natural Stone and Terrazzo E02.1.3. Quarry Tile	E08.2. Interior Signs Materials	51
E02.1.4. Ceramic Tile	E09. Lighting, Power and Communication15	51
E02.1.5. Resilient Floor	E09.1. Functionality and Efficiency1	51
E02.1.6. Carpet	E09.2. Types and Color1	51
E02.1.7. Rapidly-Renewable Products E02.1.8. Other	F. Appendices1	52
E03. Walls	133 G. Appendices1	52
E03.1. Wall Materials		
E03.1.1. Concrete		
E03.1.2. Masonry		
E03.1.3. Ceramic Tile		
E03.1.4. Gypsum Board		
E03.1.5. Metal Panels		
E03.1.6. Wood Paneling E03.1.7. Rapidly-Renewable Products		
E03.1.8. Other	Version 02 00	∩ 1

A. OVERVIEW

Comply with Air Force Corporate Standards for Overview: http://afcfs.wbdg.org/index.html

This Installation Facilities Standards (IFS) document is part of the Air Force Corporate Facilities Standards (AFCFS) program to assist bases in implementing and maintaining facilities standards as appropriate for efficient operations within the respective climate region. IFS fully replaces, consolidates and simplifies existing facilities standards documents, such as the Architectural Compatibility Plan (ACP) or ACGs, FEPs, etc., and organizes information using the same structure, or Table of Contents, as the AFCFS website.

IFS reflects the AFCFS' concepts of "Facility Hierarchy" (categorizing facilities into group numbers) and "Facility Quality" (assigning an appropriate level of quality to each group number) and applies these principles at the base level. Applicable DoD and Air Force criteria such as UFCs, AFIs, Memoranda, and UFGSs (Guide Specs) are referenced and linked within IFS to ensure the document is always current.

Navigating within this IFS is efficient and straightforward. Please use the interactive Table of Contents to locate subject matter, and click on the title of a section to access it. From any page, click on the "Back to Table of Contents" footer to return. Content is organized into 4 major sections: Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors.

This IFS document begins as a fill-in PDF form, which is fully editable, and becomes a "living document" that can be regularly updated by base-level personnel following a format that is consistent across the Air Force. While the format is standardized, IFS content is customized for base operations and the local climate to ensure mission success while emphasizing reduced maintenance and reduced initial costs, life-cycle costs, energy use, and water use.

- 1. Conformance to Air Force Corporate Facilities Standards (AFCFS) and Installation Facilities Standards (IFS) are required by Air Force Instruction (AFI) 32-1023 and Air Force Memorandum. Please refer to the AFCFS website for links to documentation on current policy.
- 2. Requests to deviate from any installation facilities standards, that are Unified Facilities Criteria (UFC) requirements, will follow the process outlined in the AFCFS for UFC waivers and exemptions.
- 3. The IFS is a component plan of the Installation Development Plan (IDP) per Air Force Instruction (AFI) 32-7062 (replacing the Architectural Compatibility Plan). All military construction projects and Non-Appropriated Funds (NAF) facilities are required to comply with the IDP and its IFS component plan by AFI 32-1023. The Base Civil Engineer (BCE) maintains and implements the IDP and its component plans, to include the IFS.
- 4. Please refer to the AFCFS website as a portal to reference materials and requirements documents for design and construction projects (via links). Specific references to current DoD memoranda and Air Force criteria are updated periodically to provide the most current guidance and requirements. Programming, design and contract documents should list "current edition" for all reference and requirements documents. The documents in force at the date of execution of the design and/or construction contract shall be the governing version.
- 5. Advanced Modeling Requirements:
 - For all Air Force projects requiring advanced modeling, to include 3D visualization, Building Information Modeling (BIM), facility data, quantity take-off, geospatial, etc., follow the Army standards. Refer to USACE Minimum Model Matrix (M3) and Project Execution Plan (PxP) which outline required model uses. Refer to CAD BIM Technology Center (Contract Requirements) for more information on M3 and PxP.
- 6. Joint Bases shall implement IFS under their Joint-Base designation with volume numbers for individual installations following the IFS Development Tool template. For example, for Joint Base Langley-Eustis, provide: Vol. 1 Langley AFB and Vol. 2 Fort Eustis.
- 7. References and Supplementary Documents listed in Appendix G are included in these Installation Facilities Standards by reference and are fully part of this document. Please refer to <u>Appendix G</u> for a listing of documents, which are available via hyperlink for viewing and downloading.

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

♠ Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



932nd Airlift Wing and Flightline Facilities



Historical Monuments and Facilities



Tower at McCullough Road



Recreation Area Water Feature

A01. FACILITY HIERARCHY

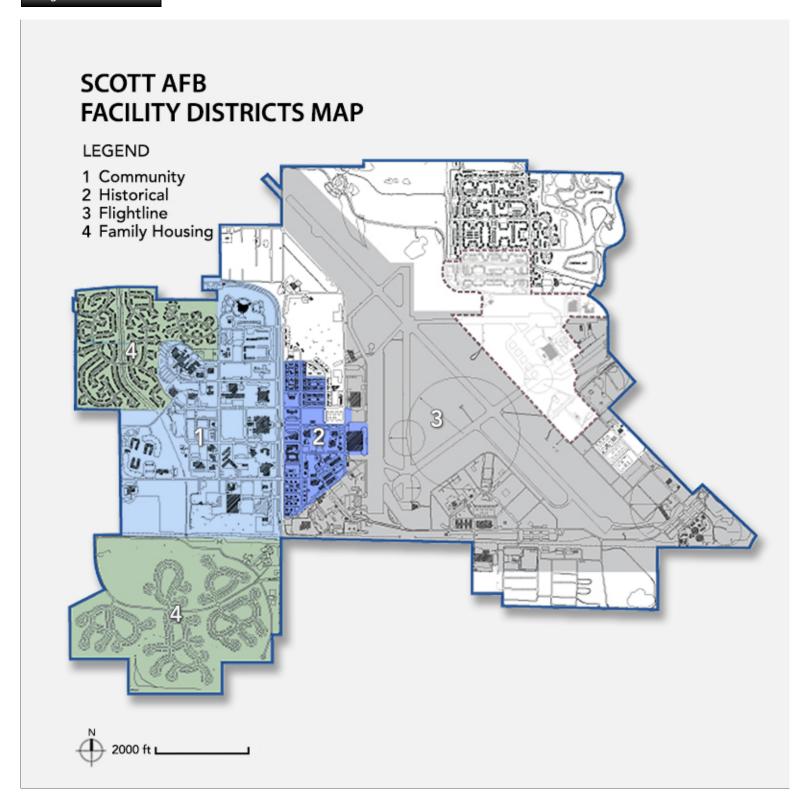
Comply with AF Corporate Standards for Facility Hierarchy (and subsections): http://afcfs.wbdg.org/facility-hierarchy/index.html

A02. FACILITY QUALITY

Comply with AF Corporate Standards for Facility Quality (and subsections): http://afcfs.wbdq.org/facility-quality/index.html

A03. FACILITY DISTRICTS

Comply with AF Corporate Standards for Facility Districts (and subsections): http://afcfs.wbdg.org/facility-districts/index.html



Note: Apply the <u>base-wide standards</u> in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

B. INSTALLATION ELEMENTS

Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

B01. COMPREHENSIVE PLANNING

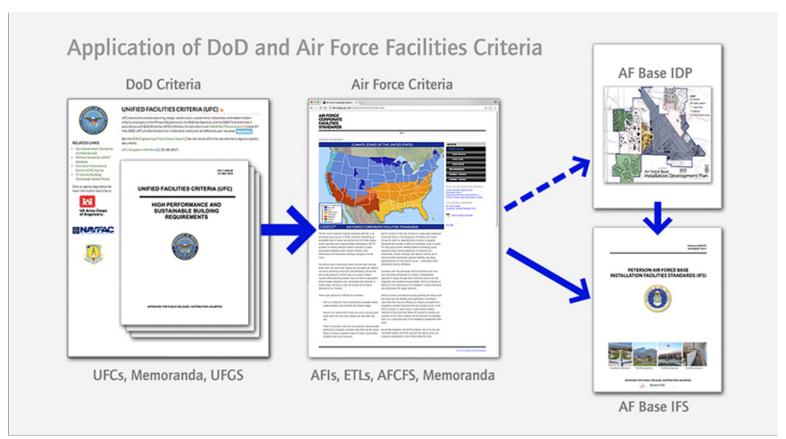
Comply with Air Force Corporate Standards for Comprehensive Planning: http://afcfs.wbdg.org/installation-elements/comprehensive-planning/index.html

B01.1. Installation Development Plan (IDP)

♠ Applicable N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

Applicable N/A Small graphics do not apply



Department of Defense, Department of the Air Force and Air Force Base Criteria

1. The Base Civil Engineer is responsible for developing, maintaining and implementing the installation's Comprehensive Planning documents and to ensure that the Installation Development Plan (IDP) is prepared, maintained, and implemented following AFI 32-7062.

B01.1.1. IFS Component Plan of IDP

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Installation Elements: Base-wide Infrastructure



Site Development



Facilities Exteriors



Facilities Interiors

1. The Base Civil Engineer is responsible for maintaining Installation Facilities Standards (IFS) as a Component Plan of the base's Installation Development Plan (IDP).

B01.1.2. Brief History of Base

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

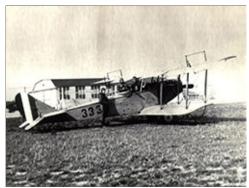
Image Tool 800 x 440

♠ Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Scott Field c. 1917



Early Aircraft at Scott Field



DH-4



Ford C-4A

On April 6, 1917, the United States Congress declared war on Germany and formally entered World War I, which had been raging in Europe since 1914. The entrance into the war meant the U.S. War Department needed to bolster the armed forces, which only had 140,000 active duty soldiers and a handful of airplanes. During this time, Secretary of War Newton Baker advocated an expanded role in aviation increasing the number of planes and air fields.

Business and political leaders on both sides of the Mississippi River wanted the Midwest chosen as a site for one of the new "flying fields." Aerial expert Albert Bond Lambert joined the St. Louis Chamber of Commerce and directors of the Greater Belleville Board of Trade to negotiate a lease agreement for nearly 624 acres of land near the town of Belleville, Illinois.

The War Department signed the lease on June 14, 1917, in which it paid seven landowners \$7,400 a year with the option to buy the land for \$122,895. Congress appropriated \$10 million for the field's construction and more than 2,000 workmen were given instructions to build sixty buildings in sixty days, lay a mile-long railroad spur, and construct a 1,600 foot landing circle.

During its construction, the field was named in honor of Corporal Frank Scott. In 1911, Corporal Scott and Lieutenant Lewis Rockwell took off on a Wright Type-B biplane at College Park, Maryland. Though the take off and flight went smoothly, the plane developed engine problem during the landing and crashed. Corporal Scott was killed instantly and Lieutenant Rockwell died later that evening. The decision to name the aviation site at Belleville after Corporal Scott is a lasting tribute to those who lost their lives during the early years of military aviation. Today, Scott is the only Air Force base to be named after an enlisted person.

After construction was completed in the August 1917, the first flight from Scott Field took off on September 2 and flying instruction began on September 11. Scott Field's main mission was to train pilots and mechanics on the Standard Trainers and then the Curtiss JN-4D "Jenny." It was standard for units to organize and train at Scott Field before deploying to Europe.

In 1917, flying planes was precarious at best. Early planes were made from wood, fabric, and wire and were dangerous to fly. When a student crashed, he faced a long walk back to the training field or, if in luck, a long drive to the nearest medical treatment center. The need for crash crews became immediately apparent as did the need for aeromedical evacuation aircraft and personnel. This lead to the development of the earliest Aeromedical Evacuation aircraft and Scott Field transported its first patient on August 24, 1918.

When the war ended on November 11, 1918, Scott Field's future became uncertain. The armed forces were urged to decrease the size of the military and many training facilities, such as Scott Field, feared the chopping block. Welcomed news came in 1919 when the War Department announced its decision to purchase Scott Field for nearly \$120,000 instead of closing it. In 1921 Scott Field's mission changed from training pilots and was selected to become a lighter-than-air station. The facility underwent a growth spurt and added many new buildings in order to accommodate the new mission. The most notable addition was the airship hangar and was second in size only to the naval station in Lakehurst, New Jersey where the airship Hindenberg met its disastrous fate in 1937.

Not only was Scott Field involved in training lighter-than-air personnel, but its personnel were in involved with advancing lighter-than-air science and understanding the upper atmosphere. In 1927, Scott Field supported Captain Hawthorne C. Gray's three attempts to break the world free balloon altitude record of 40,809 feet. On his second attempt he reached an altitude of 42,410 feet, but the attempt did not make record books because Captain Gray had to jump from the balloon as it was landing. He reached 42,410 feet during his final attempt, but died during the flight and his record was nullified.

By 1937 the lighter-than-air mission was scrapped in favor of Scott becoming the new home to the General Headquarters Air Force. Scott Field was granted \$7.5 million and over 1,500 acres for building expansion. With the threat of war looming, General George C. Marshall, Army Chief of Staff, decided not to move General Headquarters Air Force to Scott, but the decision did not halt the expansion of the field. Instead, Scott Field's mission changed to communications training.

On July 1, 1939, the Basic School of the Air Corps Technical School transferred to Scott Field from Chanute Field, Illinois, with the first students arriving in September 1939. Even as it was just beginning, the communications training mission continued to grow. By 1941 Scott Field received an additional \$300,000 for construction to be able to handle approximately 5,800 students. By the onset of World War II, Scott Field was well on its way to earning the title of Communications University of the Army Air Forces and adopted the slogan, "The best damn radio operators in the world." By 1942, Scott Field hosted foreign students from China, France and other Allied partner nations and, in 1943, became the home of the 58th Woman's Army Auxiliary Corps (WAACS).

The U.S. Air Force became a separate service in 1947 and Scott Field officially became Scott Air Force Base on January 13, 1948. Scott's communications training mission continued into the 1950s, and the base's aeromedical mission continued to grow. By the end of 1950, Douglas C-54 Skymasters were bringing 200 patients a week to Scott from Korea. In August 1957, many of Scott's radio courses moved to Lackland Air Force Base, Texas, and by 1959 the remaining courses were either phased out or moved to other bases.

In October 1957, responsibility for Scott moved from Air Training Command (ATC) to Military Air Transport Service (MATS). As a consequence of the realignment, Scott's wing host, the 3310th Technical Training Wing was redesignated on October 1, 1957, as the 1405th Air Base Wing. In the years following the transition, Scott's central location and extensive medical facilities led to it becoming an aeromedical evacuation hub. On June 1, 1964, the 1405th was redesignated as the 1405th Aeromedical Transport Wing in conjunction with its assuming responsibility for all aeromedical evacuation operations within the continental United States. However, the 1405th would only fill this role for about 18 months due to a major airlift reorganization.

As part of an Air Force consolidation of strategic, tactical, and logistics airlift under one command, MATS was redesignated as Military Airlift Command (MAC) on January 1, 1966. In support of the reorganization, the 375th Troop Carrier Wing was redesignated in December 1965, as the 375th Aeromedical Airlift Wing (AAW), and was subsequently activated and organized on Scott AFB on January 12, 1966. In accordance with the activation order, the 375th assumed all the resources and manpower of the 1405th as that wing was discontinued. The addition of a fleet of C9A Nightingales in 1968 further expanded the 375th's aeromedical mission and by 1970 the 375th AAW moved an average of 60,600 patients a year mainly from the Vietnam Theater.

In 1973 the Paris Peace Accords were signed and ended the United States' involvement in the Vietnam War. That same year, the 375th AAW's Patient Airlift center coordinated 61 aeromedical missions to bring 367 former POWs back to the U.S. in Operation HOMECOMING.

By 1978 the 375th took on the mission of Operational Support Airlift and was managing a dispersed continental fleet of T-39A Saberliners which flew a combined 92,000 hours a year flying passengers and cargo around the world. The T-39As were eventually phased out in 1984 and Scott received C-21A Learjets.

Big changes occurred in the 1990s. In 1991 the 375th AAW became the 375th Airlift Wing and, in 1992, the Military Airlift Command inactivated and its personnel and assets were combined with others to form Air Mobility Command (AMC) headquartered at Scott. In that same year, the Tanker Airlift Control Center (TACC) began operations at Scott and optimized air refueling and the way military cargo and passengers reached their destination. In 1998, the MidAmerica Airport moved to Scott as did the 126th Air Refueling Wing in 1999.

Into the 2000s, AMC went through a major reorganization to establish its warfighting headquarters. AMC's Fifteenth and Twenty-First Air Forces became Expeditionary Mobility Task Forces in 2003. They, along with all AMC's wings and independent groups realigned to a newly activated Eighteenth Air Force on Scott AFB. The new ready mobility operations capability would speed support for contingencies and humanitarian missions. The retirement of the C-9A Nightingale and the reduction of the C-21A fleet led to a flying mission restructuring that today has Scott using a diverse mix of assigned and non-assigned aircraft to support aeromedical airlift, operational support airlift and air refueling missions.

While all these changes occurred, Scott AFB continued to play a crucial role in military operations and worldwide events. Following the terrorist attacks on September 11, 2001, the TACC ensured military planes stayed in the air by means of air refueling and that search and rescue crews arrived safely in New York and Washington D.C. From September 18, 2001 to December 2015, AMC aircraft, including those from the 375th, completed over 138,624 sorties and transported 2,779,261 passengers and 1,484,469 tons of cargo in Operation ENDURING FREEDOM and AMC tankers offloaded 523,981,520 pounds of fuel to 32,531 receiving aircraft in Operation NOBLE EAGLE.

On August 30, 2005, a team from the 375th Aeromedical Evacuation Squadron deployed to Kessler AFB, Mississippi and airlifted victims from areas devastated by Hurricane Katrina. A few days later on September 6, over 200 375th members supported Joint Task Force Katrina. Medical Group personnel set up a medical evacuation center at the Louis Armstrong International Airport in New Orleans while Civil Engineer members helped with cleanup, restoration of utilities, and establishment of a tent city for the 82nd Airborne Division.

The 906th Air Refueling Squadron moved (without personnel and equipment) from the 319th Operations Group, Grand Forks AFB, North Dakota, to the 375th Operations Group, Scott AFB. The 906th became an active associate unit flying the KC-135R Stratotanker aircraft of the 126th Air Refueling Wing, Illinois Air National Guard. In conjunction with the 906th's realignment, the 375th Airlift Wing was redesignated as the 375th Air Mobility Wing.

Today Scott AFB continues to be the home of the 375th Air Mobility Wing, the 618th AOC (TACC), the 18th Air Force, Air Mobility Command, and the United States Transportation Command.

B01.1.3. Future Development

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

Applicable N/A Small graphics do not apply



Adjacent Open Space

- 1. Follow AFI 32-7062 for Air Force Comprehensive Planning, the Comprehensive Planning Process, Comprehensive Planning Requirements, and Geospatial Mapping.
- 2. Address all future development under the Installation Development Plan (IDP).

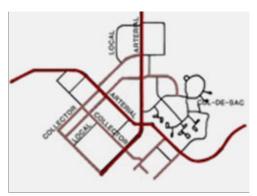
B02. STREET ENVELOPE STANDARDS

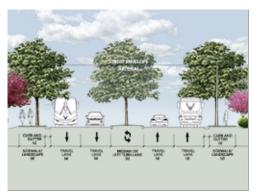
Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

Comply with AF Corporate Standards for Street Envelope Standards: http://afcfs.wbdg.org/installation-elements/street-envelope-standards/index.html

B02.1. Hierarchy of Streets

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2





Hierarchy of Streets

Street Envelope Section

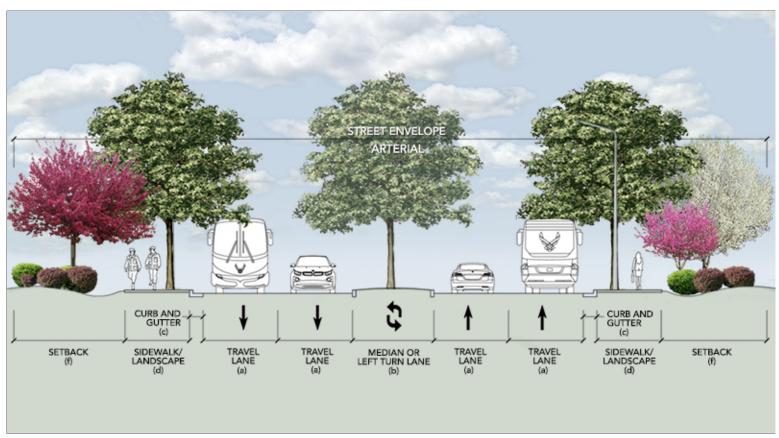
- 1. Develop and evolve a hierarchical transportation network of arterial, collector and local streets following UFC 3-201-01 and its industry references.
- 2. Provide consistent functionality throughout the installation and a level of visual quality relating to the adjacent Facility Group number.
- 3. Routes along facilities in Group 1 may have materials, finishes and features with a higher visual quality than Groups 2, 3 and 4. Reduce maintenance requirements by installing highly durable materials and finishes in routes along Group 3 industrial facilities.
- 4. Special routes may have a visual quality comparable to those along facilities in Group 1.
- 5. Create and maintain arterials with two lanes of traffic in each direction with landscaped or paved medians as applicable to the local climate and adjacent facility group designation / land use.
- 6. Minimize stops and turns along arterials. Eliminate on-street parking along arterials and collector streets.
- 7. Connect arterials to local streets with appropriately scaled collector streets.
- 8. Provide appropriate landscape setbacks and pedestrian buffers along all streets.
- 9. Minimize and consolidate curb cuts along streets.
- 10. Ensure access for emergency and service vehicles.
- 11. Define bicycle traffic routes in the Installation Development Plan or its applicable component plans.
- 12. Define appropriate force protection features, site furnishings, signs, lighting, utilities, and paving in the IFS.

B02.1.1. Arterial Streets

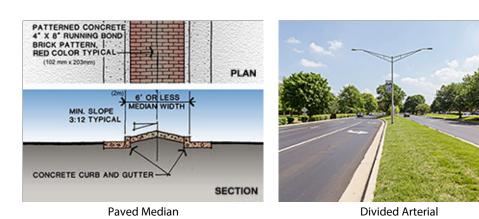
● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

• Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2



Travel Lane (a): 12' Median (b): 12' Curb and Gutter (c): 2' Sidewalk / Landscape (d): 12') Setback (f): Min. 35' or per ATFP



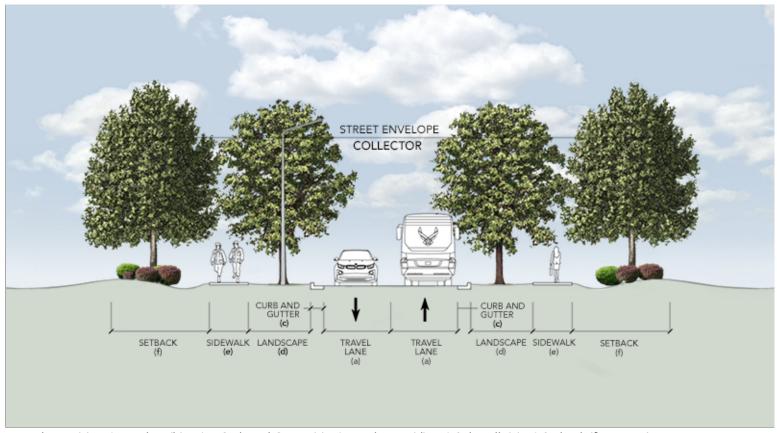
- 1. Stops and turns should be minimized and on-street parking shall not be allowed at any point along arterial streets.
- 2. Provide sidewalks on at least one side of arterial streets and both sides of arterial streets in developed areas. Provide a 6 foot buffer between the road and sidewalk where space allows.
- 3. Limit curb cuts on arterial streets to entries into major facilities, building groups and major parking areas.
- 4. Signs, plantings and street lighting should be added to reinforce the importance of arterial streets.

B02.1.2. Collector Streets

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1



Travel Lane (a): 12' Median (b): N/A Curb and Gutter (c): 2' Landscape (d): 10' Sidewalk (e): 6' Setback (f): Min. 35' or per ATFP



Collector Street in the Historic District

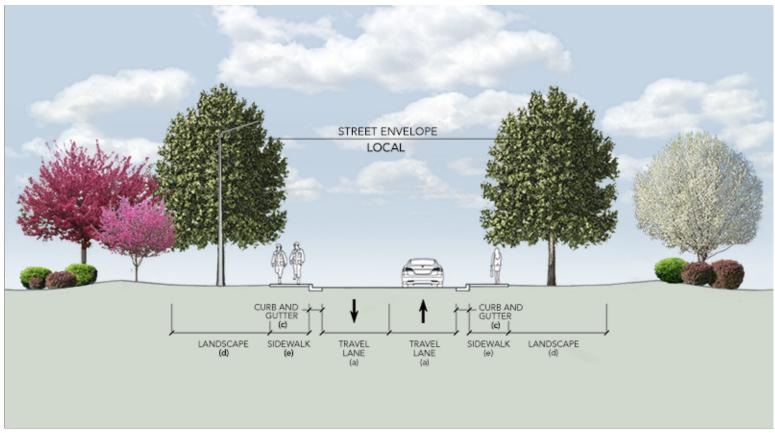
- 1. Traffic stops are frequent and speeds are low on collector streets.
- 2. Provide sidewalks on at least one side of collector streets. Buffers are preferred but not required on collector streets.
- 3. On street parking may be allowed on one side where secondary roads are over 28 feet wide but not less than 34 feet wide. Parking shall not interfere with intersections or traffic flow.
- 4. Signs, plantings and street lighting should be added to reinforce the importance of arterial streets.

B02.1.3. Local Streets

• Applicable N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

• Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2



Travel Lane (a): 11' Median (b): N/A Curb and Gutter (c): 1.5' Landscape (d): 15' Sidewalk (e): 6'





Local Streetscape

Landscaped Cul-de-sac

- 1. Traffic stops are frequent and speeds are low on collector streets.
- 2. Provide sidewalks on at least one side of collector streets. Buffers are preferred but not required on collector streets.
- 3. On street parking may be allowed on one side where secondary roads are over 28 feet wide but not less than 34 feet wide. Parking shall not interfere with intersections or traffic flow.
- 4. Signs, plantings and street lighting should be added to reinforce the importance of arterial streets.

5. Cul-de-sacs are to only be used in the military housing area. The minimum radius for cul-de-sacs shall be 50'.

B02.1.4. Special Routes

○ Applicable ● N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Distinguished Visitor Route Decorative Paving

Colored Pavers Crosswalk at Group 1

1. Develop all special routes consistently with those adjacent to Group 1 facilities.

B02.2. Hierarchy of Intersections

○ Applicable ● N/A Large graphics do not apply

• Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Controlled Access



Local Street Intersection

- 1. Provide a hierarchy of intersections to include arterial, arterial-collector, collector, collector-local and local following UFC 3-201-01 and its industry references.
- 2. Passive systems such as traffic circles are preferred to active systems such as signalized intersections. Aggressively pursue passive systems to lower maintenance requirements and reduce energy use.
- 3. Use a level of visual quality for an intersection equal to the quality found in the related streetscape, which corresponds to the adjacent Facility Group number.

B02.2.1. Arterials

	Large graphics do not apply
--	-----------------------------



Image Tool 250 x 188



Coordinated Street Elements

1. Provide an informal grouping of low lying native ground cover and shrubs with trees as a backdrop at all four corners. Monument walls may be used adjacent to Group 1 facilities. Maintain appropriate sight lines at all intersections.

B02.2.2. Arterial/Collector

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply
- 1. Provide an informal grouping of low lying native ground cover and shrubs with trees as a backdrop at all four corners. Maintain appropriate sight lines at all intersections.

B02.2.3. Collectors

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply
- 1. Provide an informal grouping of low lying native ground cover and shrubs with trees as a backdrop at all four corners. Maintain appropriate sight lines at all intersections.

B02.2.4. Special Intersections

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





DV Route at Historical Hangar

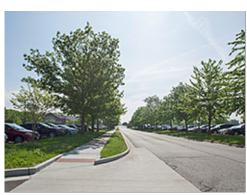
Colored Pavers

1. Develop all special intersections consistently with those adjacent to Group 1 facilities or along the designated special route.

B02.2.5. Street Frontage Requirements

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2





- 1. Consistently maintain open space buffers following B03.2.3. Preserves.
- 2. Refer to C06.1.7. Streetscape Landscaping for planting and screen wall requirements along street frontage.

B02.2.6. Sight Lines

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Preserved Sight Lines

Coordinated Intersection Elements

1. Provide adequate sight lines for an effective and safe traffic operation per American Association of State Highway and Transportation Officials (AASHTO) standards and local municipality guidelines.

B02.3. Street Elements

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6



Integrate ATFP Systems



Coordinated Utility Features



Cohesive Storm Drainage Elements







Organized Appearance

Harmonizing Landscape Elements

Consistent Color

- 1. Emulate the streetscape area's pre-development hydrology using passive and active design features to help sustain the adjacent regionally appropriate landscape. Coordinate with the base Stormwater Management Plan.
- 2. Employ systems, materials and techniques to maximize streetscape sustainability. Consider pervious paving and reflectivity of surfaces appropriate for the local climate.
- 3. Install at-grade curbing and/or raised-profile curb and gutter as applicable to direct stormwater to bioswales and rain gardens as source water for vegetation. Do not paint concrete curbing.
- 4. Provide all on-site utility service lines and equipment below grade when adjacent to Facility Group 1. In routes along Group 2, 3 and 4, when mounting elements such as utility cabinets, communications equipment and water valves above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
- 5. Provide traffic control devices including access control point/entry control facility signs, speed limit signs and street name signs following the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) per UFC 3-120-01.
- 6. Crosswalk markings shall follow the MUTCD for Streets and Highways, current edition. Provide white markings that define the edges of the crosswalk or a tone of lines defining the area of the crosswalk consistent with common practices found in the adjacent municipality.
- 7. Follow UFC 3-120-01 for directional and wayfinding signs and address both vehicular and pedestrian traffic.
- 8. Reduce energy consumption and reduce maintenance requirements by providing street lighting only when functionally required to ensure safety and to address antiterrorism following UFC 4-010-01. Ensure the quality and quantities of lighting and fixtures are appropriate for the adjacent Facility Group number.

B02.3.1. Paving

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 1

Image Tool 250 x 188

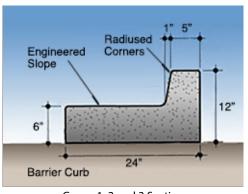


Bitumenous Concrete Paving

- 1. Pavement design shall comply with UFC 3-250-01. Ensure appropriate analysis and design of subgrade conditions to promote low maintenance, high performance pavements. Apply all applicable best practices from Appendix B of the UFC.
- 2. Materials shall be specified in accordance with UFC 3-250-01 and must conform to requirements set forth in the Unified Facility Guide Specifications (UFGS) for concrete and bituminous pavement.

B02.3.2. Curb and Gutter

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2



Engineered 8" 4"
Slope
Radiused Corners
6" 12"

Group 1, 2 and 3 Section

Group 4 Section

- 1. Continuous concrete curbs shall be provided at paved roads and parking areas adjacent to Group 1, Group 2 and Group 4 facilities. Asphalt curbs are not permitted.
- 2. Integral concrete curb and gutter shall be used at areas with drainage (asphalt sloped towards curb). A header curb without gutter shall be allowed in areas coordinated with the stormwater management practices.
- 3. A minimum standard curb height of 6 inches shall be consistently maintained. Rolled mountable curbs may be used in Family Housing areas.

B02.3.3. Utility Service Elements

- Applicable

 N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Base Standard Color

Underground Electrical Distribution

- 1. Provide all utility service lines below grade when streets are adjacent to Facility Group 1; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these consistently and provide visual screening following Site Development, Landscaping.
- 2. Overhead service lines along streets adjacent to Facility Groups 2, 3 and 4 are discouraged.

B02.3.4. Traffic Signs

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply
- 1. Refer to Exterior Signs, Colors and Types for Traffic Control Devices, which includes signs.

B02.3.5. Street Lighting

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply
- 1. Refer to the Lighting section for appropriate applications along streets.

B02.3.6. Other

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply

B03. OPEN SPACE / PUBLIC SPACE

Comply with Air Force Corporate Standards for Installation Elements: http://afcfs.wbdg.org/installation-elements/index.html

Comply with AF Corporate Standards for Open Space / Public Space: http://afcfs.wbdg.org/installation-elements/open-space-public-space/index.html

B03.1. Plazas, Monuments and Static Displays

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3



Berlin Wall Memorial Plaza



Airlift Monument



Memorial Statuary



Static Display of Aircraft

- 1. Natural features and culturally or historically significant features or events may be recognized and acknowledged with physical elements such as plazas, monuments and static displays. However, limit these elements on the base to ensure judicious use of resources and to reduce ongoing maintenance requirements.
- 2. Design highly durable plazas, monuments and static displays with a level of quality comparable to Facility Group 1.
- 3. Link plazas, monuments and static displays to the pedestrian circulation system. Install landscaping, site furnishings and lighting appropriate for the application and local climate following Installation Facilities Standards (IFS).
- 4. Select systems, products and materials for paving, walls, and structures following IFS.

B03.1.1. Paved Plazas

○ Applicable ○ N/A Large graphics do not apply

 \bullet Applicable \bigcirc N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Group 1 Paved Plaza

Group 2 Plaza

Concrete Paving

- 1. Mitigate heat island by providing high-albedo, shaded plazas. Pervious pavers shall be used on all plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall incorporate appropriate expansion and construction joints.
- 2. Pavers shall match the color of pavers used on adjacent sidewalks using base standard range of red blend. Bricks used on plazas shall typically be 4" x 8" size.

B03.1.2. Sculptures, Markers and Statuary

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Stone Base and Bronze Plaque

Pole-Mounted Display with Marker at Grade

Bronze Sculpture and Plaque

- 1. Relate new sculpture, markers and statuary to the base's architectural design theme. Generally limit these elements to frequently used locations adjacent to Facility Group 1 and highly traveled community pedestrian spaces.
- 2. Consider entry gates as possible sites for new displays.
- 3. All proposed memorials shall follow AFI 36-3108 and be limited to highly deserving individuals or groups as deemed appropriate by the installation leadership. Living memorials (tree plantings / etc.) are discouraged due to added maintenance requirements.
- 4. When sculpture requires a base, match the materials and / or color palette of adjacent buildings.
- 5. Use direct or indirect lighting to accentuate features or enhance an intended effect.

Ensure that all sculpture, markers and statuary are honorable and inspiring, provide a sense of place, positively contribute to the base's visual quality, and encourage pride for the community and the US Air Force.

B03.1.3. Static Display of Aircraft

• Applicable N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

○ Applicable ● N/A Small graphics do not apply



Ground-Mounted Static Display

- 1. Follow IFS base-wide standards for all elements of the display area with specific attention to traffic sight lines, pedestrian circulation, site furnishings, signs, and lighting. Address requirements for the Facility District as well.
- 2. Generally locate concrete base/foundation structures for static displays below grade.
- 3. At static displays where pedestrian paths are provided, a minimum of one trash receptacle and one bench shall be provided. Receptacle and bench design must conform to IFS requirements.

B03.2. Grounds and Perimeters

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3



Pavilion in the Historic District



Park with Playground Area



Water Feature in Open Space Preserve



Perimeter Fence Adjacent to Group 1

- 1. Provide formal spaces for parade and review functions, recreational areas and parks following the base's Installation Development Plan (IDP) and Installation Facilities Standards (IFS). Refer to the Site Furnishings topic for additional information.
- 2. Maintain preservation areas following the IDP and IFS.
- 3. Comply with UFC 4-010-01 DoD Minimum Antiterrorism Standards for Buildings and UFC 4-022-03 Security Fences and Gates for all elements associated with the base's gates and perimeter fence.
- 4. Identify and describe base-wide utility corridors in the IDP.

- 5. Base-wide utility infrastructure shall be inconspicuous. Bury utility service lines below grade when adjacent to Facility Group 1 and when economically feasible for Facility Groups 2, 3 and 4. When service lines are located above grade, create an ordered, coordinated appearance.
- 6. Follow the requirements of this IFS regarding all utility structures and service lines located above grade that visually impact the installation.
- 7. Where screening of utility equipment and structures is provided, allow adequate and proper clearance for safety and maintenance.
- 8. Reduce visual clutter and visual impact of the following items through a combination of careful placement, screen walls, landscaping and painting:
- · Electrical switch-stations.
- Sewage lift stations.
- Water well pumps, storage tanks and/or related structures.
- Gas piping, meters and similar incidental items.
- Above ground fuel storage tanks.
- Any ground-mounted freestanding utility item exposed to view.
- 9. Larger structures such as electrical switch-stations, sewage lift stations, fuel storage tanks and mechanical/electrical equipment shall be screened from view, using materials, forms, and colors in the screen walls which match those respective design elements present at adjacent buildings.
- 10. Paint above-ground equipment and associated components such as electrical piping or exposed plumbing lines dark bronze.
- 11. Maintain currently buried utility service lines as a visual asset.
- 12. Bury the following exposed above-grade items in future projects when economically feasible:
- Electrical power grid and service lines.
- Telephone lines.
- · Cable TV lines.
- Communications lines.
- Exterior lighting service lines.
- Any similar system of above-ground lines serving the base.
- 13. Consolidate and enclose service utility lines in underground utility corridors when feasible. Create routes along the inside edge of parking lot islands.

B03.2.1. Parade Grounds

Applicable \(\cap \) N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1 Image Tool 800 x 440

○ Applicable ● N/A Small graphics do not apply



Parade Ground and Paved Viewing Platform

- 1. Follow UFC 3-201-02, Appendix B for the planning and design process and criteria for parade grounds.
- 2. Establish and maintain parade grounds only where there is a confirmed need and provide landscape materials appropriate for the locale following IFS.
- 3. Bleachers may be installed only when there is a documented requirement at parade grounds. Nonferrous metals that do not require painting or going maintenance are preferred. The Base Civil Engineer shall determine quantities, sizes, and products on a case basis.

B03.2.2. Parks

- Applicable N/A Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Park Pavilions **Park Seating**

Park Green Adjacent to Playing Fields

- 1. Bleachers may be installed only when there is a documented requirement at parks and fields for recreational events. Follow guidance under Parade Grounds.
- 2. Picnic pavilions may be provided in parks where there is a documented need.
- 3. Prohibited picnic pavilion materials include wood, concrete masonry units (CMU) or metal pre-manufactured storage sheds. Use only materials and detailing that is low maintenance and endures with minimal weathering.
- 4. When picnic pavilions are permitted near facilities, generally match the architecture of the adjacent facility and provide a level of quality of the adjacent facility group number.

B03.2.3. Preserves

- Applicable N/A Large graphics do not apply
- Applicable \(\cap \) N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Preserve Adjacent to DISA Integrated Stormwater Swale

- 1. Preserve areas adjacent to runways, taxiways, aprons, golf course roughs, storage areas, antenna facilities, and ammunition storage areas, as open space.
- 2. Provide minimal maintenance with mowing as needed for controlling bird behavior for airfield safety, or eliminating fire hazards.

B03.2.4. Perimeter Fence

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6



Perimeter Fence Adjacent to Facility Group 1 Entry Control Facility (ECF)



High Security / High Visibility Fencing



Secondary Base Entrance



MetroLink Entrance Station







Ancillary Facility

Group 1 Pedestrian Entrance

ATFP Control Systems

- 1. Design, install and maintain the base's perimeter fence following UFC 4-022-03.
- 2. Stringently comply with ATFP requirements following UFC 04-010-01 for all spaces adjacent to the base's perimeter fence and all gates.
- 3. Fencing, gates and other elements that are associated with the main gates shall be a level of quality equivalent to Facility Group 1.
- 4. Maintain a positive visual quality along the traffic corridor on both sides of the main gates. Specifically address pedestrian access, circulation and common areas.

C. SITE DEVELOPMENT

Comply with Air Force Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

C01. SITE DESIGN

Comply with Air Force Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Site Design / NEPA: http://afcfs.wbdg.org/site-development/site-design-nepa/index.html

C01.1. Site Design Considerations

Applicable	● N/A	Large graphics do not apply
	N/A	Small graphics do not apply

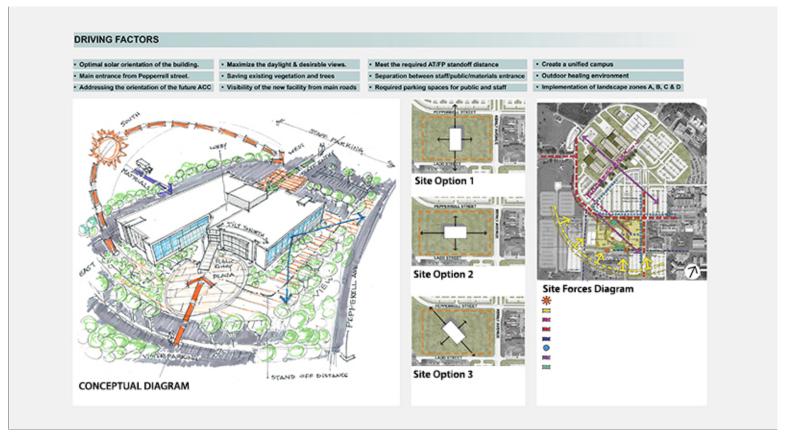
- 1. Collect documentation to validate approvals and completion of the NEPA process.
- 2. Ensure site design compliance with the Installation Development Plan (IDP) and its component plans and Installation Facilities Standards (IFS).
- 3. Promote integrated design with on-site solutions such as engineered small-scale hydrologic controls verses base-wide infrastructure; consider open space, natural features, bioswales, building roofs, streets, and paved surfaces.
- 4. Limit the impact of development on land and water resources. All site elements and infrastructure shall reinforce an image of sustainability, with reduced energy demand, renewable-energy usage, and water conservation.
- 5. Consider energy conservation during site design for the following categories: building and site lighting, auxiliary systems and equipment (refrigerators, elevators, etc.), building envelope, electric power and distribution, HVAC systems and equipment, service hot water, energy management (metering, EMCS).
- 6. Coordinate on-site renewable-energy systems and components to minimize area requirements and maximize efficiencies. Appropriately buffer and screen these and other mechanical systems and equipment.
- 7. New building projects should preserve open space and protect natural habitat.
- 8. Conform to existing topography to the greatest extent possible and use slopes to increase site and building efficiencies. Design sites to minimize irrigation and impacts to stormwater runoff.
- 9. Carefully study new project sites to identify the character of adjacent buildings, streets, landscaping, and site design elements. Reinforce the existing character in new site design.
- 10. Consider relationships to adjacent facilities and district / centralized heating and cooling infrastructure and cost effectively connect building systems to harvest heat, grey water or other beneficial byproducts.
- 11. Minimize existing and planned obstructions from landscaping, structures, topography, and adjacent developments to preserve solar access and natural ventilation.
- 12. Purposefully integrate service access, receiving and storage areas to eliminate the need for visual screening.
- 13. Appropriately connect to the base network of streets, sidewalks and trails using drive aisles, parking areas, walkways, paths, and bicycle routes addressing both vehicles and pedestrians.
- 14. Applicably coordinate heat island mitigation in paving and roof designs when implementing an integrated approach to stormwater management.
- 15. Consider the location of "Designated Tobacco Areas."

C01.2. Building Orientation

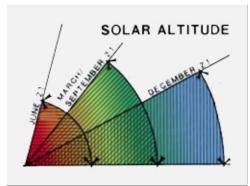
♠ Applicable N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

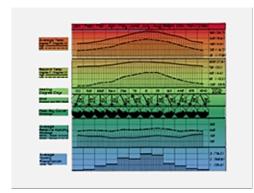
♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6



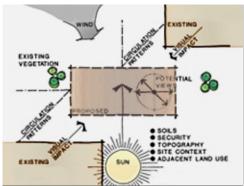
Conceptual Site Analysis and Site Design Diagram



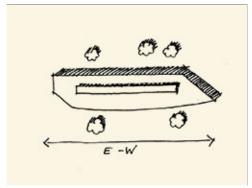
Local Solar Data

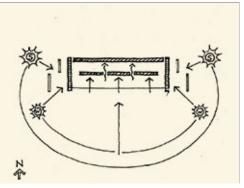


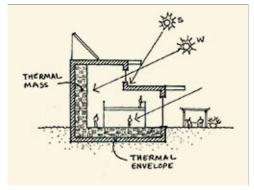
Local Climate Data



Site Data







East-West Axis

Optimum Solar Control

Optimized Shading

- 1. Ensure the site will accommodate optimum requirements for building orientation, which is with the long axis parallel to the east/west direction for rectilinear CONUS buildings.
- 2. Meet Installation Facilities Standards (IFS) requirements for the locations of the building's passive and renewable-energy systems—including geothermal and solar systems—and exterior shading systems.
- 3. Locate the building(s) and permitted ancillary structures to promote solar gain, solar shading, natural ventilation, rainwater harvesting, wind buffering and other beneficial passive systems. Consider natural ventilation during the design of HVAC systems.
- 4. Consider relationships to adjacent sites and their facilities and infrastructure, and cost effectively integrate building systems to harvest heat, grey water or other beneficial byproducts.
- 5. Consider the "public side" of the building, its views and the location of the main entrance.

C02. UTILITIES

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Utilities: http://afcfs.wbdg.org/site-development/utilities/index.html

C02.1. Utility Components

○ Applicable ● N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3



Utility Cabinet with Screen Wall



Utility Elements Beyond Screen Wall



Utility Element with Base Standard Color

- 1. Provide all on-site utility service lines below grade for Facility Group 1; when mounting elements (such as utility cabinets, communications equipment and water valves) above grade is unavoidable, paint these consistently and provide visual screening following Installation Facilities Standards (IFS).
- 2. Provide installation of utility infrastructure to support near term and future electric vehicle charging stations.
- 3. Define all service entry points into the building and route distribution below grade into an interior space within the facility; exposed conduits, cables and wires on exterior walls are not permitted for Facility Group 1.
- 4. Include consideration of appropriate placement of meters in support of Automated Revenue Management Services (ARMS).
- 5. Limit exterior mechanical distribution systems such as exterior steam, chilled water, and hot water distribution to Group 3 facilities; when required for Group 1 and 2 facilities integrate with the architecture and provide visual screens following IFS.
- 6. Direct roof drainage to underground collection when feasible or provide splash blocks / paved channels to intercept roof drainage at grade.

C03. PARKING AREAS

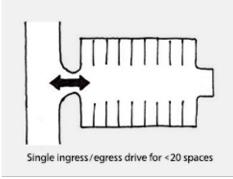
Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Parking Areas: http://afcfs.wbdg.org/site-development/parking-areas/index.html

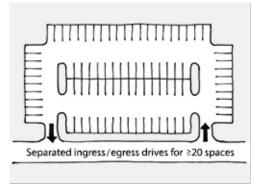
C03.1. Configurations and Design

○ Applicable N/A Large graphics do not apply

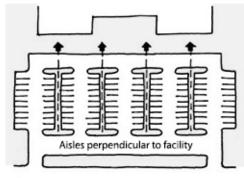
♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6







Large Lot Configuration



Facility Group 1 Configuration







Preferred Geometry

Adjacent Accessible Spaces

Integration of Controlled Access

- 1. Evaluate adjacent sites and cost-effectively consolidate parking areas to maximize efficient use; ensure that all areas meet accessibility guidelines.
- 2. Generally envision on-site parking as a series of small connected singular areas selectively placed around the facility served, rather than a single large area; buffer parking areas from the facility main entrance with a transition space and provide drop-offs to decrease close-in parking. Comply with IFS standards while meeting ATFP requirements.
- 3. Integrate at-grade and raised-profile curbing, permeable paved areas, and parking islands with the stormwater system and direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation.
- 4. Define pedestrian access with approved hardscape and provide shading along the primary path from the parking area to the main entrance of the building.
- 5. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
- 6. Accessible parking spaces shall be marked according to UFC 3-120-01 and its references in ABAAS and the MUTCD.
- 7. Consider locations and requirements of near term and future electric vehicle charging stations.
- 8. Designate preferred parking spaces for electric vehicles and carpools near the main entrance.
- 9. Consider cost-effectively integrating solar photovoltaic arrays into covered parking structures.
- 10. Reserved parking is discouraged except for Facility Group 1.
- 11. On-street parking is discouraged except in multi-use areas. When used, provide approved on-street parking configurations following UFC 3-201-01.
- 12. Access and service drives should accommodate the largest vehicle serving the facility.

C03.1.1. Paving and Striping

○ Applicable ● N/A Large graphics do not apply

• Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Bitumenous Paving

Standard White Striping

Facility Group 1 paving materials shall be as follows.

Primary: Asphaltic concrete

Secondary: Concrete

Accent: Permeable pavers

Facility Group 2 paving materials shall be as follows.

Primary: Asphaltic Concrete

Secondary: N/A

Accent: N/A

Facility Group 3 paving materials shall be as follows.

Primary: Concrete where operationally required

Secondary: Asphaltic Concrete

Accent: N/A

Facility Group 4 paving materials shall be as follows.

Primary: Asphaltic Concrete

Secondary: N/A

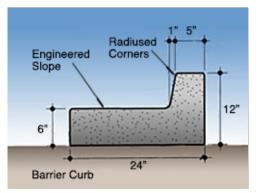
Accent: N/A

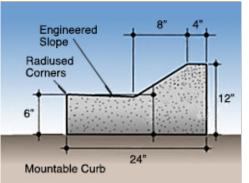
- 1. All new parking lots in Groups 1 and 2 shall be constructed of asphalt paving.
- 2. Porous paving may be considered on a case basis.
- 3. Cost-effectively provide light-colored concrete to reduce heat island effect; otherwise install asphaltic concrete paving. Dirt, gravel, and grass lots are not allowed.
- 4. Use consistent striping, angles and stall sizes in all parking areas.
- 5. All parking shall be marked with white stripes of paint or applied vinyl coatings. Red or yellow markings shall only be used for safety purposes and must be kept to a minimum. All lines shall be four inches (4") wide.

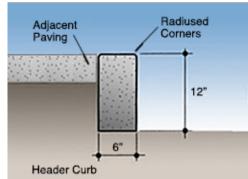
C03.1.2. Curbing

- Large graphics do not apply
- Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 4

Image Tool 250 x 188







"Barrier" Curb

"Mountable" Curb

Header Curb



Integral Curb and Gutter

Concrete

Facility Group 1 curbing / edging materials shall be as follows.

Secondary:

Primary:

N/A

Accent:

N/A

Facility Group 2 curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A **Facility Group 3** curbing / edging materials shall be as follows.

Primary: Concrete

Secondary: N/A

Accent: N/A

Facility Group 4 curbing / edging materials shall be as follows.

Primary:

Concrete

N/A

Secondary:

Accent: N/A

- 1. Define all parking lots with either raised profile or at-grade curbing to promote drainage and protect paving edges. All raised curbs shall be the rolled (mountable) type.
- 2. Integrate curbing to direct stormwater to bioswales and rain gardens as source water for regionally appropriate native vegetation.

3. Wheel stops are not permitted except at locations where car bumpers could contact adjacent items such as poles, signs or pedestrians.

C03.1.3. Internal Islands and Medians

○ Applicable ● N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Central Rock Mulch Island

Median with Rock Mulch

Landscaped Median

- 1. Install landscape islands and medians as visual breaks, to reduce heat island effects and to accommodate bioswales and rain gardens with consideration for snow removal. Coordinate suitable landscape or barriers integrated with walls and fences to ensure adequate force protection.
- 2. When lighting is necessary, contain fixture bases within medians or internal landscape islands.

C03.2. Parking Structures

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply
- 1. Parking structures are encouraged in land-constrained locations when economically feasible.
- 2. Consider near term and future electric vehicle charging stations and renewable energy generation development during the analysis and design.
- 3. Consider opportunities for integrating parking structures into multi-use developments with pedestrian-oriented uses located on the ground floor and parking on upper levels; ensure ATFP guidelines are fully addressed.
- 4. Structures may be constructed below grade with roofs serving as vegetated areas or plazas.

C03.3. Connectivity

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

○ Applicable ● N/A Small graphics do not apply



Strong Visual and Physical Connection to Primary and Secondary Entrances

- 1. Refer to the Installation Development Plan (IDP) for locations of transit stops and pedestrian and cycling networks; provide appropriately sized sidewalks and bike paths to connect facilities and users to these networks.
- 2. Provide amenities such as rain and shade shelters, trees, and benches to encourage and facilitate use of public transportation.
- 3. Evaluate the IDP for the current and planned network of roads and optimally develop vehicular access to and from the site.

C04. STORMWATER MANAGEMENT

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Stormwater Management: http://afcfs.wbdg.org/site-development/stormwater-management/index.html

C04.1. Stormwater Requirements

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1 Image Tool 800 x 440

Select number of graphics / images (small: 250 px x 188 px) to insert 6 ● Applicable ○ N/A



Gentle Grades in Topography and Grassy Basins with Pervious Subgrade Materials



Drainage Swale Greenway



Parking Surface Discharge to Riprap



Base-wide Stormwater System







Bioswale at Parking Area

Drainage Basin Bridge as an Amenity

Foundation Rock Mulch

- 1. Design all stormwater systems including retention ponds, detention areas, channels, etc. as on-site amenities that are consistent with natural systems and drainage patterns, that help sustain the base landscape with beneficial functionality and that provide aesthetic appeal; coordinate with the base Stormwater Management Plan.
- 2. Incorporate bioswales into the design of all roadway, parking and facility roof systems to enhance water quality and support the overall stormwater system.
- 3. Permeable paving may be used in areas that are not subjected to severe freeze-thaw cycles.
- 4. Provide rainwater harvesting and storage that is attached to the building's roof drain systems to support grey water irrigation; consider freeze protection for winter months.
- 5. When underground drainage systems are required establish a maintenance program to include removal of sediments and debris; inspect joints seasonally for alignment to prevent leakage and the development of voids and surface failures.
- 6. Cost-effectively integrate stormwater systems with ATFP measures.

C05. SIDEWALKS, BIKEWAYS AND TRAILS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Sidewalks, Bikeways and Trails: http://afcfs.wbdg.org/site-development/sidewalks-bikeways-trails/index.html

C05.1. Circulation and Paving

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6



Formal Configuration and Paving Adjacent to Group 1



Concrete Paving in Group 2



Crosswalk with White Striping



Brick Pavers in Group 1







Detattched Sidewalk along Collector Street

Resilient Surface Paving at Trail

Zero Curb at Entrance

Facility Group 1 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Pervious Pavers

Secondary: Concrete Edging

Accent: N/A

Facility Group 2 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Pervious Pavers

Secondary: Concrete Edging

Accent: N/A

Facility Group 3 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Permeable concrete

Secondary: N/A

Accent: N/A

Facility Group 4 sidewalks, plazas, and courtyards paving materials shall be as follows.

Primary: Permeable concrete

Secondary: N/A

Accent: N/A

- 1. Maintain efficient geometry and accessibility to connect building entrances to adjacent parking areas and activity areas and to the base transportation system following ATFP. Efficiently use materials to optimize life-cycle costs and to minimize maintenance.
- 2. Generally conform horizontal layouts of sidewalks to the geometric configuration of adjacent buildings, streets, parking lots, and other adjacent related site amenities. Occasional meanders and/or jogs may be included to capture views, to coordinate with landscaping or accommodate site constraints.
- 3. Walks in parking areas shall provide a direct path using "safe islands" and "peninsulas" to encourage safety. Walks parallel to streets shall follow streetscape guidelines. Clearly mark pedestrian crossings at vehicular routes.
- 4. Mitigate heat island by providing high-albedo, shaded sidewalks. Pervious pavers shall be used on all sidewalks, plazas and courtyards in Facility Groups 1 and 2; use pervious concrete in Groups 3 and 4. The designer shall incorporate appropriate expansion and construction joints.
- 5. Only experienced contractors will install pervious pavements.
- 6. Consider an integrated approach that could include stormwater management (permeable surfaces) and complement the design of the storm drainage system when appropriate.
- 7. Pedestrian paths should be at least 5' in width to allow for comfortable side-by-side walking.
- 8. Sidewalks leading to a building main entrance and at the interior of parking lots shall be a minimum width of 6'. Walks greater than 10' wide may be used at high-density pedestrian areas where volumes of traffic justify added material.

- 9. Where cars park adjacent and head-in to the sidewalk and wheel stops are not used, such perimeter walks shall be increased to a minimum width of 8' to accommodate overhangs of the parked vehicles.
- 10. All sidewalks shall have positive drainage to prevent ponding of water or ice accumulation with slopes ranging from 2.1% to 4.2%. Walks with a slope greater than 4.2% shall be designed as ramps following accessibility guidelines. All walks shall have a minimum cross slope of 2.1%.
- 11. Pavers shall conform to the following range of color: red blend. Pavers used on walks shall typically be 4x8 nominal in size.
- 12. Connect to the bicycle circulation system and provide bicycle parking with a suitable means for securing bicycles following IFS. Consider changing/shower facilities for use by cyclists.
- 13. Refer to the Installation Development Plan for future trails, bicycle paths, and sidewalks.

C05.1.1. Ramps and Stairs

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Site Stair at Entrance Plaza

Curb Ramp at Street Crosswalk

1. Use ramps instead of stairs for sidewalks, bikeways and trails and at all buildings where possible. Where steps are unavoidable, follow UFC 1-200-01 and its references to the International Building Code.

C05.1.2. Lighting

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Pedestrian Scaled Fixture



Decorative Lighted Bollards and Fixtures



In-ground Light Markers

1. Provide lighting for all stairs and landings where traffic warrants.

2. Refer to the Lighting section for path lighting along sidewalks, bikeways and trails.

C06. LANDSCAPE

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Landscape: http://afcfs.wbdg.org/site-development/landscape/index.html

C06.1. Climate-based Materials

○ Applicable

N/A Large graphics do not apply

 \bullet Applicable \bigcirc N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Native Trees

Grasses and Trees as Focus

Native Evergreen Species

- 1. Use only native, naturally occurring, drought tolerant indigenous plant species (including grasses) appropriate for the locale to promote energy efficiency and water conservation, preserve drainage patterns, inhibit erosion, improve air quality, lower maintenance, and add beauty.
- 2. Follow details and specifications of the American Standard for Nursery Stock, current edition.

C06.1.1. Landscape Design Concept

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3



Native Grasses Accented with Trees



Drought Tolerant Indigenous Grasses



Integrated Stormwater Greenway

- 1. Develop, maintain and implement a climate-based plant list with landscape features using a regionally appropriate palette of materials to promote energy efficiency, preserve drainage patterns, inhibit erosion, improve air quality, lower maintenance and add beauty. Follow UFC 3-201-02 Landscape Architecture.
- 2. Landscaping is required for all newly developed sites and facilities; preserve existing native landscape where possible and avoid overplanting.
- 3. Concentrate landscaping in Facility Group 1 and along major thoroughfares and integrate these landscaped areas into the base's stormwater management plan. Refer to the Streetscape Envelope Standards in this IFS.
- 4. All Facility Group 1 and 4 sites shall be landscaped at their entire perimeter; limit formal planting arrangements to formal spaces typically associated with Group 1. Landscape public spaces near the main entrances of Group 1 facilities.
- 5. Facility Group 2 and 3 sites may have a native undisturbed landscape except at the main entrances of Group 2, which should be newly landscaped.
- 6. Facility plantings shall follow the Installation Facilities Standards (IFS) plant list, which is based on the specific microclimates created by the adjacent building: shadow areas, protected areas, zones adjacent to thermal mass, and availability of rainwater and/or grey water.
- 7. Provide open spaces as transitions between developed and native areas that promote quality of life and provide visual relief and allow walkable connections to the transportation system.
- 8. Return suitable areas to a natural state to minimize and, whenever possible, eliminate ground maintenance requirements; expand prairie areas where appropriate with native plants to eliminate mowing and maintenance requirements.
- 9. In tree clusters replace grass with naturalized shrub beds and leaf litter mulch to eliminate mowing requirements.
- 10. Use plantings in open spaces to reinforce the space as a visual asset.
- 11. Consider landscape windbreaks when suitable for the local climate.
- 12. Integrate security requirements into the landscape design. Coordinate the heights of trees and shrubs and note restrictions for plantings following UFC 4-010-01.
- 13. Berms may be used as an integral part of the overall landscape strategy for screening, security and/or visual interest.

C06.1.2. Xeriscape Design Principles

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188







Drought Tolerant Species

1. Apply xeriscape principles following UFC 3-201-02, Appendix B, and Air Force Corporate Facilities Standards.

2. Facility plantings are encouraged to use native plant species and to consider specific microclimates created by the adjacent building: shadow areas, protected areas, zones adjacent to thermal mass, and availability of rainwater and/or grey water.

C06.1.3. Minimizing Water Requirements

○ Applicable ● N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2

Image Tool 250 x 188





Raised Plating Beds

Limited Ornamental Planting

1. Reasonably reduce demand on potable water while seeking opportunities to increase alternative water sources for irrigation. Reduce or eliminate the use of potable/domestic water for purposes of landscape architecture maintenance, consistent with existing legal or contractual obligations, and prohibit potable-water irrigation in new construction beyond establishment following current DoD and Air Force policy.

C06.1.4. Plant Material Selection

○ Applicable ● N/A Large graphics do not apply

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6







Approved Street Trees



Drought Tolerant Plant Materials







Flowering Shrubs

Trees for Shading

Trees for Screening

- 1. Use only native, naturally occurring plant materials including grasses or turf suited for the local climatic conditions in the landscape design; potable-water irrigation systems are discouraged beyond the establishment period.
- 2. New facilities are encouraged to use native plant species as indicated on the current Plant List available from the Base Civil Engineer.
- 3. Trees should be the focus of landscape plantings and, where possible, should be a mix of deciduous and evergreen species for variety; provide tree grates when appropriate and use tree quards on smaller trees.
- 4. Ground covers are only recommended when minimal maintenance is required.
- 5. Turf areas should be limited to those that can be sustained by natural rainfall or grey water (non-potable) irrigation systems; turf may be defined by at-grade concrete mow strips to lessen maintenance.
- 6. Analyze soils and provide organic amendments as needed to improve plant growth and conserve water.
- 7. All plant material shall have one-year warranty and is subject to approval by the Base Landscape Architect.

C06.1.5. Water Budgeting (Hydrozones)

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 2



Segregated Planting Areas



Mulched Planting Beds

- 1. Comply with DoD and Air Force policy on potable-water irrigation systems.
- 2. Provide irrigation systems in new construction to establish plant materials following "Water for Landscaping" in UFC 1-200-02. Note the climate zone and annual rainfall for the locale.

- 3. New buildings shall cost-effectively integrate a grey-water reclamation system following UFC 1-200-02, which provides source water for an automatic drip irrigation system; connect adaptive plantings adjacent to facilities to a grey-water irrigation system when available and discontinue the use of potable water for irrigation after the establishment period.
- 4. Provide irrigation design following UFC 3-201-02. Install drip irrigation products and components following UFGS Section 32 84 24 Irrigation Sprinkler Systems. Match the color of valve box lids to the adjacent ground treatment (i.e. green at turf & native seed areas, brown at wood mulch & rock areas).
- 5. Life cycle cost-effectively equip irrigation systems to sense soil moisture, rainfall and wind to minimize unnecessary watering; incorporate drip irrigation systems as the primary source.

C06.1.6. Base Entrance Landscaping

○ Applicable

N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Grasses in Open Space

Low-Level Accent Planting

Variations in Color

- 1. At the main gate, reinforce a sense of arrival through a well-designed concentration of landscape elements consistent in visual quality with Facility Group 1.
- 2. Ensure landscaping has seasonal features with spring and fall color and a combination of evergreen and deciduous trees and shrubs for winter interest.
- 3. Integrate base signs and street and pedestrian lighting whenever feasible.

C06.1.7. Streetscape Landscaping

○ Applicable ● N/A Large graphics do not apply

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 6







Tree-Lined Street in Historic District



Low-Level Planting at Intersection



Pedestrian Scaled Species



Trees for Shading and Screening



Trees Defining Space

- 1. Provide landscape designs with plant materials appropriately representing the level of quality of the adjacent Facility Group number. Refer to the Installation Elements section.
- 2. Select a variety of regionally appropriate streetscape plantings and grading to create a visual interest.

C06.1.8. Pedestrian Circulation Landscaping

- Applicable N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Color, Texture and Patterns for Interest

Definition of Circulation and Space

Defining Sidewalks and Features

- 1. Define walkways with landscaping where appropriate.
- 2. Provide rest areas along the pedestrian circulation network with human-scaled deciduous shade trees. Supplement tree plantings with finely textured shrubs when appropriate for the climate.
- 3. Provide wind breaks where required.

C06.1.9. Parking Lot Landscaping

- Applicable

 N/A Large graphics do not apply
- ♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Xeric Planting in Median

Grass and Trees in Island

Grasses in Bioswale

- 1. Integrate appropriate landscaping elements into parking areas to visually soften the appearance at a minimum rate of 10 percent of the total area.
- 2. Avoid trees that drop sap, fruit, or seeds, and use long-lived species; keep trees trimmed, removing dead and dying trees or branches.
- 3. Provide planting in islands within parking lots for shade and appeal following IFS and the base stormwater management plan.

4. Rain garden islands shall be landscaped to receive rainwater runoff from adjacent impervious parking areas to be absorbed into the ground/planting bed. Native plants and groundcovers are recommended within the rain garden areas, which can survive without supplemental irrigation once established.

C06.1.10. Screen/Accent Landscaping

Applicable • N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Accent Planting at Low Wall

Raised Planter and Seating Wall

Shrubs and Trees as a Focal Point

- 1. Provide complimentary accent landscaping at monuments and static displays.
- 2. At Facility Group 1, provide landscaping adjacent to all freestanding signs without distracting from the written communication.
- 3. Provide landscape screening of utility elements adjacent to Facility Group 1.
- 4. Providing landscaping as visual screening is preferred to the construction of walls and fences; berming and mounding may supplement landscape screening.

C06.1.11. Other

- Applicable N/A Large graphics do not apply
- Applicable N/A Small graphics do not apply

C07. SITE FURNISHINGS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdq.org/site-development/index.html

Comply with AF Corporate Standards for Site Furnishings: http://afcfs.wbdg.org/site-development/site-furnishings/index.html

C07.1. Furnishings and Elements

○ Applicable N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3







Shaded Seating Area

Coordinated Furnishings

Harmonious Color for Screen Walls

- 1. Provide a coordinated consistent inventory of site furnishings to positively contribute to the visual environment, image, and identity of the base; ensure durability, low maintenance, reduced visual clutter, and compatibility with the adjacent architecture.
- 2. Remove poorly located or redundant litter / ash receptacles, newspaper and bicycle racks, telephone booths, vending machines, walls and fences to reduce visual clutter and to lessen the requirements for maintenance.
- 3. Group 1, 2, and 3 site furnishings shall be dark bronze powder coated metal. Generally match the site furniture of adjacent facilities and the facility district.
- 4. Install needed outdoor seating (benches and low walls) in public gathering spaces near main and secondary building entrances. Low walls shall match facility architecture.
- 5. Benches in Groups 1, 2, 3 and parks shall be dark bronze powder coated metal. Recycled plastic benches May be provided in Group 2, 3 and parks.
- 6. Integrate functional bicycle racks with the design of the building's main entrance grounds in Facility Groups 1 and 2 while meeting ATFP requirements.
- 7. Limit the use of bollards, but when necessary for force protection use dark bronze round dome top designs in Groups 1 and 2; Clad steel pipe bollards in Group 3; cast iron bollards may be used in parks and trails. Illuminated bollards may be used as approved on a case basis.
- 8. Locate architecturally coordinated containers for recycling, litter, ash, vending, etc., to minimize visual clutter and not visible from the building's main entrance. Minimize the use of freestanding planters.
- 9. Generally limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas following IFS.
- 10. Flagpoles using approved materials may be installed at locations designated by IFS, and in accordance with AFI 34-1201.

- 11. Refer to the Overview Section "Facility Hierarchy" topic of this AFCFS for guidelines regarding ancillary structures such as pavilions and shade shelters.
- 12. Bus shelters shall be provided only where there is a documented need and when approved on a case basis. Generally emulate the designs of adjacent shelters using Dark bronze aluminum framed, domed roof structures.
- 13. Monuments and static displays shall be limited. New elements are generally discouraged unless these are fully vetted through the base's approval process and designed following IFS.
- 14. When visual screening is necessary, consider landscaping as the first option; screen walls are permitted only in Group 1 finished with brick piers and dark bronze metal fencing.
- 15. For fencing, apply the standards for "Products, Materials and Color" in the following section. Limit those with the highest visual quality to Facility Group 1 where there is sustained maintenance. Define all levels of security and visual quality.
- 16. Do not use chain-link fencing at Group 1, 2 or 4 facilities; Limit the use of barbed-wire outriggers on chain-link fencing at industrial sites, unless required for additional security or protection of assets.
- 17. Wood fencing may be used in Facility Group 4 and in recreation areas following IFS for material and finish when there is sustained periodic maintenance.
- 18. Provide trash dumpster enclosures for Group 1 with brick walls and metal gates to match adjacent facilities; Group 2 shall use brick piers and metal screen walls; and Group 3 shall use metal posts and screen walls; all metal screen walls and gates shall be metal factory finished dark bronze.
- 19. Specify screen wall materials and finishes that do not require painting or maintenance beyond periodic cleaning.
- 20. Group 1, 2, 3 and recreational area picnic tables and seating shall be vinyl clad or powder coated dark or medium bronze. Generally limit picnic tables, barbeque grills and drinking fountains to lodging, dormitories, housing areas, parks and recreation areas.
- 21. Limit the use of freestanding planters to areas with ongoing maintenance.
- 22. Provide kiosks only where there is a documented need for visual communication of posted messages. When used, match adjacent facilities in materials and detailing and consolidate kiosks with other site furnishings within 30 feet of major pedestrian paths. Limit kiosks to facility Groups 1 and 2 and parks.
- 23. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

C07.2. Site Furnishings Products, Materials and Color

Note: Apply the below base-wide standards for Site Furnishings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

C07.2.1. Barbeque Grills

● Applicable ○ N/A

Number of base standards 2



Type:	Charcoal
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Most Dependable Fountains, Inc.
Color:	Natural stainless steel
Finish:	Mill
Model #	#: SS BBQ Grill
Other:	Concrete foundation, coordinate with Base Architect
UFGS:	N/A
Type:	Natural Gas
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	BBQ Coach
Color:	Natural stainless steel
Finish:	Mill
Model #	#: 32" 4-Burner
Other:	Built-in Concrete or masonry, coordinate with Base Architect
UFGS:	N/A



● Applicable ○ N/A

Number of base standards 2



Type:	Metal Slatted
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Belson Outdoors
Color:	Dark Bronze or Black to match adjacent
Finish:	Factory powder coat
Model #	#: Model CBPB-6SB-BK
Other:	N/A
UFGS:	N/A
Type:	Recycled plastic
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	The Park Catalog
Color:	Slats: cedar or brown; black or matching base
Finish:	Factory
Model #	#: 289-1106, 6ft Comfort Park Avenue Recycled Plastic Bench
Other:	Limit use to lodging applications
UFGS:	



Number of base standards 2

Image Tool 250 x 188



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Brandir International Inc.

Color: Black

Finish: Factory powder coat

Model #: The Ribbon Bike Rack, RB-07

Other: N/A



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Belson Outdoor

Style 2

N/A

Color: Black

UFGS:

Type:

Finish: Factory powder coat

Model #: Model 2633

Other: 6"Dia x 36"H

UFGS: N/A

C07.2.4. Bike Lockers

○ Applicable ● N/A

● Applicable ○ N/A

Number of base standards 4

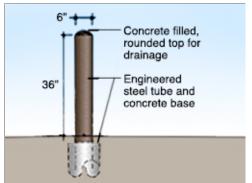
lmage Tool 250 x 188

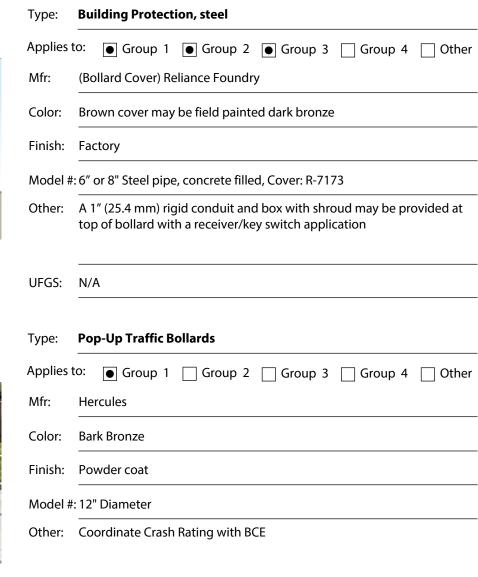


Type:	Lighted Round Dome Top
Applies	to: • Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Lithonia Lighting Products
Color:	Dark Bronze
Finish:	Anodized aluminum
Model #	t: KBC8 LED
Other:	3000K LED Lamp, 360° downlighting
UFGS:	N/A
Type:	Historical District Bollard
Applies	to: • Group 1 • Group 2 • Group 3 Group 4 • Other
Mfr:	TBD
Color:	Dark Bronze
Finish:	Anodized aluminum
Model #: Round Historical Replica	
Other:	3000K LED Lamp



UFGS: N/A







UFGS:

N/A

Applicable \(\cap \) N/A

Number of base standards 2

Image Tool 250 x 188



Type: **Dome Top, Open Corners**

Mfr: Belson Outdoors or Handi-Hut

Color: Dark Bronze

Applies to:

Finish: Powder coated

Model #: Domed roof, two openings

Other: Provide concrete slab. Select integrated bench.

UFGS: N/A

Type: Flat Top Enclosure

Applies to: ● Group 1 ● Group 2 ● Group 3 ● Group 4 ● Other

● Group 1 ● Group 2 ● Group 3 ● Group 4 ● Other

Mfr: Belson Outdoors or Handi-Hut

Color: Dark Bronze

Finish: Powder coated

Model #: Domed roof, single opening

Other: Provide concrete slab. Select integrated bench.

UFGS: N/A

C07.2.7. Drinking Fountains

Number of base standards 1

Image Tool 250 x 188

● Group 1 ● Group 2 ● Group 3 ● Group 4 ☐ Other



Type: **Pedestal**

Mfr: Most Dependable Fountains, Inc.

Color: Natural or Dark Bronze

Finish: Stainless Steel

Model #: MDF 440 SMSS

Other: Accessible

UFGS: N/A

C07.2.8. Dumpster Enclosures / Gates

Applicable \(\cap \) N/A Number of base standards 1 Image Tool 250 x 188



Type: 1: Brick and Steel

Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

Color: Scott blend brick, dark brown doors

Finish: Face brick, powder coated doors

Model #: Match adjacent building

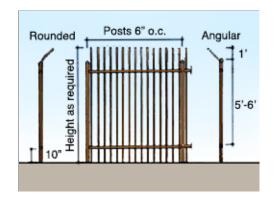
Steel gates and hardware, dark brown, dumpsters shall be painted dark

brown

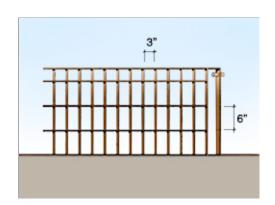
UFGS: Section 04 20 00 Unit Masonry Number of base standards 7

Type:

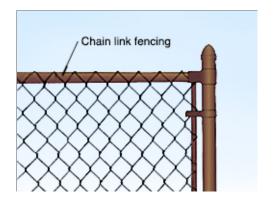
Image Tool 250 x 188



Type:	Style A Barrier: High security, high visibility
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark bronze or black
Finish:	Powder coated
Model #: Steel posts, rails and pickets (vertical, bent outward at top)	
Other:	Brick or split face CMU piers may be used
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



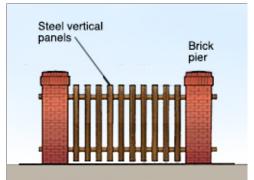
Style B Barrier: High security, medium visibility

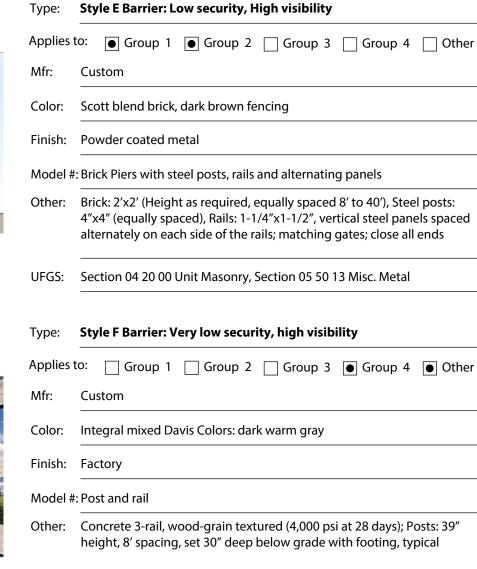


Type:	Style C Barrier: High security, low visibility
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	General Wire Company
Color:	Dark bronze or black
Finish:	Powder coated galvanized steel
Model #	: Chain link, steel posts and rails, gates and accessories
Other:	N/A
UFGS:	Section 32 31 13 Chain Link Fences and Gates
Type:	Style D Barrier: Low security, High visibility
Applies	to: • Group 1 • Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Scott blend brick, beige precast cap, dark bronze fencing
Finish:	Face brick, powder coated metal
Model #	Brick Piers with steel posts, rails and pickets
Other:	Brick: 2'x2' (Height as required, equally spaced 12' to 40'), Steel posts: 4"x4" (equally spaced), Rails: 2"x2", Pickets: 1"x1" (6"o.c.); close all ends of tubing

UFGS: Section 04 20 00 Unit Masonry, Section 05 50 13 Misc. Metal



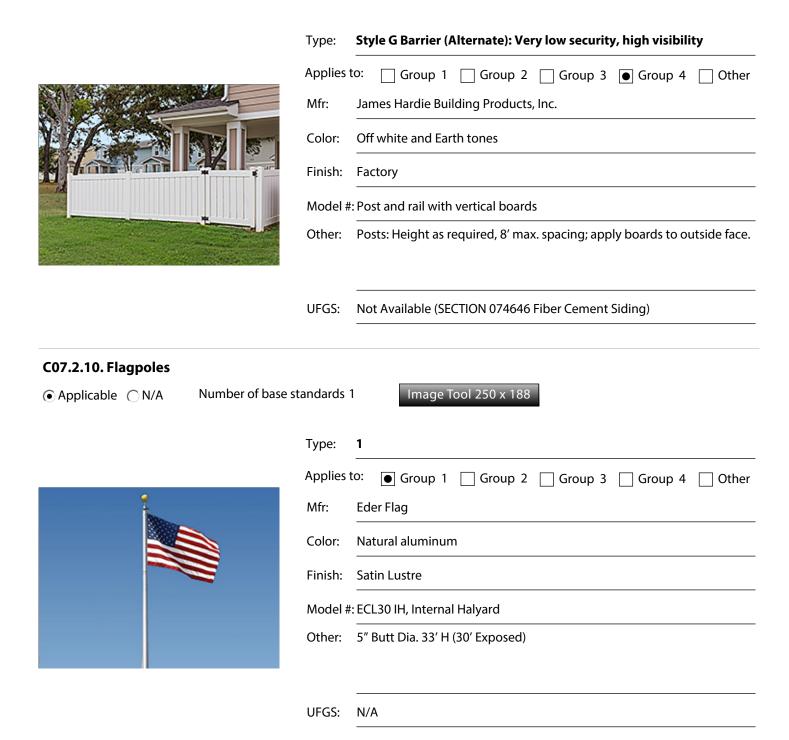




SECTION 03 33 00 Cast-In-Place Architectural Concrete



UFGS:



C07.2.11. Lighting - Landscape / Accent

Please refer to the Lighting section.

C07.2.12. Litter and Ash Receptacles

● Applicable ○ N/A

Number of base standards 2

lmage Tool 250 x 188



Type:	Style 1: Precast concrete
Applies to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Belson Outdoors
Color:	Black
Finish:	Factory powder coat
Model #	: CBTR-FT-BK
Other:	Rigid plastic internal liner
UFGS:	N/A
Type:	Style 2: Recycled Plastic Round Trash Receptacle
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Belson Outdoors
Color:	Cedar slats, black lid
Finish:	Facotory
Model #	: PB32R
Other:	Provide black plastic liner PB32GLINER. Optional in-ground mount may be used.
Model # Other: UFGS: Type: Applies t Mfr: Color: Finish: Model #	: CBTR-FT-BK Rigid plastic internal liner N/A Style 2: Recycled Plastic Round Trash Receptacle to: Group 1 Group 2 Group 3 Group 4 Ot Belson Outdoors Cedar slats, black lid Facotory : PB32R Provide black plastic liner PB32GLINER. Optional in-ground mount results.



UFGS: N/A

C07.2.13. Picnic Tables

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Steel, Rectangular
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Wabash Valley
Color:	Brown top and seats, black base
Finish:	Factory
Model #	t: Signature Series, 46" Square Pedestal Tables with 4 Seats
Other:	Perforated pattern, in-ground mount or surface mount with engineered slab
UFGS:	N/A

C07.2.14. Planters

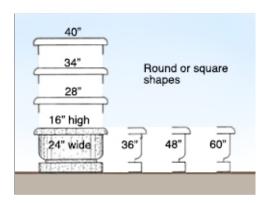
● Applicable ○ N/A

Number of base standards 1

Type:

Image Tool 250 x 188

Precast concrete



Applies to: Group 1 Group 2 Group 3 Group 4 Oth	
Mfr:	Materials, Inc.
Color:	Weatherstone Gray
Finish:	Smooth
Model #: Santa Fe	
Other:	N/A
UFGS:	N/A

C07.2.15. Play Equipment

♠ Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Little Tikes Commercial

Color: Varies

Finish: Powdercoated Steel

Model #: N-R-G Freestyle

Other: Coordinate with Base Architect

C07.2.16. Screen Walls

● Applicable ○ N/A

Number of base standards 2

Type:

Brick / Steel

Image Tool 250 x 188





Type:	Metal or Composite Post, Rail and Slat
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark bronze
Finish:	Factory
Model #	t: Post, rail and vertical slat
Other:	Coordinate size and detailing with BCE
UFGS:	Section 05 50 13 Misc. Metal, Section 06 20 00 Finish Carpentry

C07.2.17. Tree Grates

● Applicable ○ N/A Number of base standards 1

Image Tool 250 x 188

Type:

Cast Iron



Applies to: Group 1 Group 2 Group 3 Group 4 Other			
Mfr:	Neenah Enterprises, Inc.		
Color:	Natural cast iron		
Finish:	Cast		
Model #: 2-Piece, round or square			
Other:	N/A		
UFGS:	N/A		
UFGS:	N/A		

C07.2.18. Other

○ Applicable ● N/A

CO8. EXTERIOR SIGNS

Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html

Comply with AF Corporate Standards for Exterior Signs: http://afcfs.wbdg.org/site-development/exterior-signs/index.html

C08.1. Colors and Types

Applicable N/A Large graphics do not apply

♠ Applicable N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188







Jogging Trail sign

Specially Approved Monument Sign

EV / Low-Emissions Vehicle Parking Sign

- 1. Provide concise functional signs as a visually unifying element with consistent colors and types for all Installation and Gate Identification Signs; Building Identification Signs; Traffic Control Devices; Directional and Wayfinding Signs; and Informational and Motivational Signs.
- 2. Provide signs with the lowest overall life cycle costs considering initial cost, ongoing maintenance and lifespan while meeting quality standards. Follow IFS for specifications appropriate for the local climate to withstand weathering.
- 3. Reduce the number of signs, reduce visual clutter and provide only essential signs required for identification, directions, instructions, and customer service following UFC 3-120-01. Remove non-conforming signs during renovation projects.
- 4. Use clear concise terms for content consistent with UFC 3-120-01.
- 5. Display of emblems on building exterior walls or other permanent structures is prohibited by UFC.
- 6. Raised "standout" letters and numbers may be used for Group 1 with approval on a case basis.
- 7. Group 2 and 3 facilities shall have wall mounted facility signs with sizes and layouts following UFC 3-120-01. Signs are not permitted for Group 4 facilities.
- 8. Only one identification sign is permitted at each building entrance. Include a building address consistent with US Postal Service protocols following UFC 3-120-01.
- 9. Traffic Control Devices, which regulate vehicular traffic on the installation, shall conform to the standards in the Manual of Uniform Traffic Control Devices (MUTCD) published by the Federal Highway Administration. Coordinate street signs with this IFS.
- 10. Provide Directional and Wayfinding Signs and address both pedestrian and vehicular traffic following UFC 3-120-01 for size, layout and content.
- 11. Reserved parking signs should be kept to a minimum. When approved, provide post-mounted sign faces in base standard materials and colors. Consider "bracketing" a designated area with a single sign at each end.

- 12. Parking lot identification signs may be used to identify areas or rows within large lots.
- 13. Follow the guidelines and requirements in ABAAS and the MUTCD for accessible parking signs.
- 14. Follow UFC 3-120-01 for Informational and Motivational Signs for size, layout and content.
- 15. Symbols or pictographs (graphic expressions of actual objects) may be used to indicate service, mandatory / prohibitory, sports, and recreation when rapid communication is necessary.
- 16. Force Protection signage may be applied to glass doors using white vinyl lettering.
- 17. Refer to UFC 3-120-01 for prohibited signs, which include those with animated, blinking, chasing, flashing, or moving effects.
- 18. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

C08.1.1. Materials and Color Specifications

- Applicable N/A Large graphics do not applyApplicable N/A Small graphics do not apply
- 1. Fabricate sign panels from aluminum sheeting with vinyl sign faces and lettering. Sign posts shall be dark bronze anodized aluminum with capped ends in a concrete base.
- 2. Fence mounted sign panels may be attached with exposed fasteners.
- 3. All signage shall follow Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices (MUTCD) using standard colors. Refer to MUTCD color specifications, which provide cross-referenced Pantone Matching System (PMS) numbers.
- a. Standard Blue
- b. Standard Dark Bronze (also Federal Standard Color 30040)
- c. Standard Red
- d. Standard Black (non-reflective)
- e. Standard White
- f. Standard Brown

Materials and Color Specifications

♠ Applicable ○ N/A

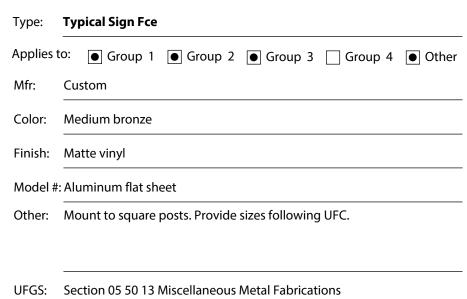
Number of base standards 3

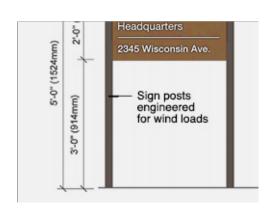
Type:

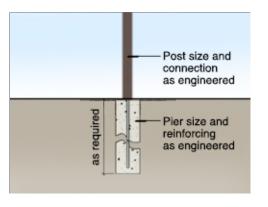
Typical Sign Post

Image Tool 250 x 188









Type:	Typical Sign Base
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Natural Gray
Finish:	Sonotube-formed
Model #	#: 24" height x 12" diameter, as engineered.
Other:	At grade with 3/4" chamfer. Provide engineered sizes.
UFGS:	UFGS 03 30 00 Cast-in-place Concrete

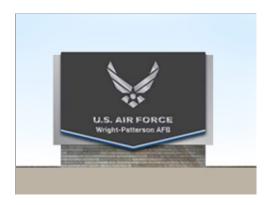
C08.1.2. Installation and Gate Identification Signs

Type:

Applicable \(\cap \) N/A
Number of base standards 1

lmage Tool 250 x 188

Primary, Secondary and Tertiary (Uses per UFC)



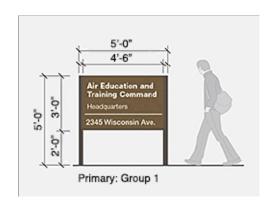
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Dark bronze, brushed aluminum, accents per UFC
Finish:	Powder coat or vinyl sign face
Model #	t: Metal frame and panels, buff stone base
Other:	White vinyl lettering. Provide dimensions per UFC. Secondary signs shall match primary sign's materials, but shall be smaller in size per UFC. Tertiary signs shall follow the UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.3. Building Identification Signs

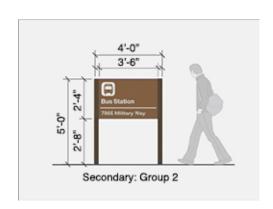
● Applicable ○ N/A

Number of base standards 5

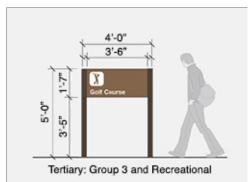
Image Tool 250 x 188



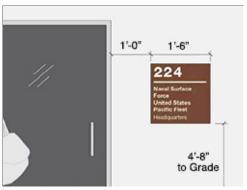
Type:	Freestanding Primary Sign (Sizes and Uses per UFC)
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Medium brown face, dark bronze posts, white vinyl lettering
Finish:	Powder coat or vinyl sign face
Model #	t: Aluminum sheet face, extruded aluminum posts
Other:	Provide layout and sizes per UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Type:	Freestanding Secondary Sign (Sizes and Uses per UFC)
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Medium brown face, dark bronze posts, white vinyl lettering
Finish:	Powder coat or vinyl sign face
Model #	#: Aluminum sheet face, extruded aluminum posts
Other:	Provide layout and sizes per UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications



Type:	Freestanding Tertiary Sign (Sizes and Uses per UFC)
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Medium brown face, dark bronze posts, white vinyl lettering
Finish:	Powder coat or vinyl sign face
Model #	t: Aluminum sheet face, extruded aluminum posts
Other:	Provide layout and sizes per UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications Wall Mounted
	Wall Mounted
Type:	Wall Mounted
Type:	Wall Mounted to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other
Type: Applies Mfr:	Wall Mounted to: ■ Group 1 ■ Group 2 ■ Group 3 ☐ Group 4 ☐ Other Custom



Other: Provide layout and sizes following UFC.



Type:	Glass Mounted
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	White vinyl lettering
Finish:	Matte vinyl
Model #	#: Machine-cut sheet vinyl
Other:	Apply vinyl lettering to glass. Provide sizes following UFC.
UFGS:	N/A

C08.1.4. Traffic Control Devices (Street Signs)

● Applicable ○ N/A

Number of base standards 1

Type:

Image Tool 250 x 188

Street Signs



	·
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	White reflective lettering on a Standard Brown background
Finish:	Powder coat or vinyl sign face
Model #	#: Aluminum sign face, control arm or pole mounted
Other:	Mount 7' above grade minimum, pictographs and logos are prohibited on street name signs per UFC.
UFGS:	Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.5. Directional and Wayfinding Signs

Number of base standards 2

UFGS:

Type:

Applies to:

Image Tool 250 x 188



Type: Vehicular

Applies to: Group 1 Group 2 Group 3 Group 4 Other

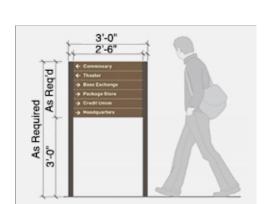
Mfr: Custom

Color: Medium brown face, dark bronze posts, white reflective lettering

Finish: Powder coat or vinyl sign face

Model #: Aluminum sheet face, extruded aluminum posts

Other: Conform to the requirements of the MUTCD and its DoD Supplement. Provide types and sizes where required by UFC.



Mfr: Custom

● Group 1 ● Group 2 ● Group 3 ● Group 4 ● Other

Section 05 50 13 Miscellaneous Metal Fabrications

Color: Medium brown face, dark bronze posts

Finish: Powder coat or vinyl sign face

Pedestrian

Model #: Aluminum sheet face, extruded aluminum posts

Other: White vinyl lettering. Provide types and sizes where required by UFC.

UFGS: Section 05 50 13 Miscellaneous Metal Fabrications

C08.1.6. Informational Signs

Applicable N/A Large graphics do not apply

○ Applicable ○ N/A Small graphics do not apply

1. Minimize informational signs such as static display signs, hours of operation, and project signs to reduce visual clutter.

2. Static display signs shall have standard dark bronze sign faces.

3. Hours of operation signs shall have a level of quality equivalent to the Facility Group number.

	C08.1.7. Motivational Signage
	○ Applicable ● N/A Large graphics do not apply
	○ Applicable ● N/A Small graphics do not apply
	1. Provide professionally produced motivational signs as important elements of campaigns to boost morale, improve safety, aid in recruiting, and accomplish other motivational objectives. Consolidate this signage to reduce visual clutter.
	2. Motivational signs shall be limited to an electronic "marquee" type changeable sign near each gate. Temporary signs are not permitted. Motivational information may also be posted in a small, printed format on kiosks in specified, high pedestrian use areas. Refer to kiosks under Site Furnishings.
	3. Follow UFC 3-120-01 for color and layout. Note that animated, blinking, chasing, flashing, or moving effects are prohibited by the UFC.
	4. Mount marquee signs on reinforced concrete bases with a natural warm gray color.
	C08.1.8. Parking Lot Signs
	○ Applicable ● N/A
	1. Not applicable.
	C08.1.9. Regulatory Signs
	○ Applicable ● N/A
	1. Regulatory signage, which restricts, warns and advises, shall be limited to those mandated under Highway/Traffic, Government Warning, and/or Parking Regulation. Follow UFC 3-120-01 and its industry references for color and layout.
	2. Provide a comprehensive, systematic approach to regulatory signage to avoid clutter and confusion from "over signage."
	3. Maintain base warning signs for safety and security at the base perimeter and at specific secure areas. Use these to notify visitors of restrictions governing conduct on the base, as well as other security procedures.
	C08.1.10. Other
	○ Applicable ● N/A
(CO9. LIGHTING
	Comply with AF Corporate Standards for Site Development: http://afcfs.wbdg.org/site-development/index.html
	ntepin arcismongiorgistic acveropment machinim

4. Temporary / Project Signage shall be judiciously placed to avoid visual clutter. Schedule and arrange for the removal of these

signs prior to installation.

Comply with AF Corporate Standards for Lighting:

http://afcfs.wbdg.org/site-development/lighting/index.html

Scott Air Force Base IFS Page 82 of 155 Back to Table of Contents

C09.1. Fixtures and Lamping

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

♠ Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Approved Accent Lighting



Double Pole Street Lighting



Accent Lighting at Static Display



Lighted Markers on Jogging Trail

- 1. Provide, coordinate and efficiently install street, parking lot, sidewalk and facility lighting with appropriate luminaires, lamping, placement and spacing following UFC 3-530-01 and Installation Facilities Standards (IFS); ensure the level of quality is consistent with the adjacent facility group number. Pole-mounted, wall-mounted and bollard fixtures are permitted.
- 2. Integrate controls to automatically reduce lighting power during periods of non-activity; automatically turn off power when sufficient daylight is available.

- 3. Ensure continuity and consistency of lighting elements. In new construction generally match post types, fixture types, styles, heights, sizes, materials, colors, and lamp types of adjacent facilities and the facility district.
- 4. Economically provide renewable-energy power sources such as solar photovoltaic when feasible.
- 5. Use appropriately designed or shielded luminaires to direct light downward to minimize light pollution and intrusion onto adjacent sites and to facilitate night training.
- 6. Calculate illuminant levels for all lighting applications following UFC 3-530-01 and ensure compliance with pre-curfew maximum brightness level requirements.
- 7. Sufficiently address environmental factors to prevent corrosion and weathering of fixtures, plinths and other components.
- 8. Wall mounted fixtures should respond to the architectural character of the facility.
- 9. Efficient accent lighting of architectural and landscape features may be provided for Group 1, lodging and historical applications. Accent lights in ground-mounted locations may be provided for static displays and signs when these do not conflict or cause hazards with overhead aircraft.
- 10. Comply with UFC 3-530-01 for light source technology and lamp types. High efficiency lamping such as LED is preferred for most applications.
- 11. Provide round tapered, square non-tapered, or round non-tapered aluminum poles and aluminum fixtures with square, rectangular or circular housings in colors and shapes to match adjacent facilities and the facility district.
- 12. Install lighted bollards only at Group 1 and high-traffic Group 2 facilities. Generally match materials, colors and shapes of adjacent facilities and the facility district.
- 13. Install natural warm gray color, smooth finished concrete bases for all poles in heights appropriate for the facility group and application. Generally Groups 1, 2 and 4 shall have at-grade bases. Group 3 shall have taller bases for added durability.
- 14. When parking lot lighting is necessary, provide an illuminated path to the building's main entrance. Pole bases should be contained within an internal landscape median or island.
- 15. Consistently install lighting for sidewalks, bikeways and trails to match adjacent facilities.
- 16. Landscape accent lighting may be used in public gathering spaces and in Group 1 facilities. Coordinate the design, luminaire selection, and placement with the location of trees, shrubs, and site furnishings.
- 17. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

C09.2. Light Fixture Types

Note: Apply the below base-wide standards for Light Fixtures (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

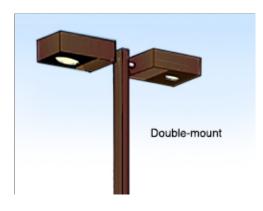
Scott Air Force Base IFS Page 84 of 155 Back to Table of Contents

C09.2.1. Street Lighting

● Applicable ○ N/A

Number of base standards 2

Image Tool 250 x 188



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Hubbell, Kim Lighting
Color:	Dark Bronze Anodized (or Clear Anodized as approved by BCE)
Finish:	Factory
Model #	t: Rectilinear Cutoff, Single Arm or Dual Arm Mount
Other:	Lamp: LED. Follow manufacturer's recommendations for fixture base.
UFGS:	N/A
Type:	Style 2
Applies	to: • Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Hubbell, Kim Lighting
Color:	Clear Anodized as approved by BCE
Finish:	Factory
Model #	t: Round Cutoff, Single Arm or Dual Arm Mount
Other:	Lamp: LED. Follow manufacturer's recommendations for fixture base.
UFGS:	N/A

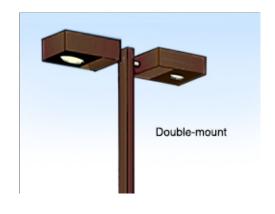


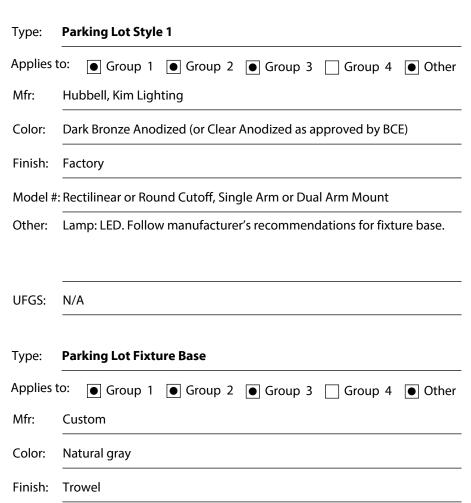
C09.2.2. Parking Lot Lighting

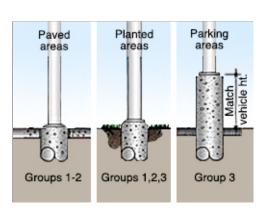
Applicable \(\cap \) N/A

Number of base standards 2

Image Tool 250 x 188







UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

Model #: Form-cast, round

Other: N/A

C09.2.3. Lighted Bollards

● Applicable ○ N/A

Number of base standards 2

Image Tool 250 x 188



Type:	Lighted Round Dome Top
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Lithonia Lighting Products
Color:	Dark Bronze or Black
Finish:	Anodized aluminum
Model #	#: KBC8 LED
Other:	Flared cone, 3000K LED Lamp. Follow manufacturer's recommendations for fixture base.
UFGS:	N/A
Type:	Lighted Square Sloped Top
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	TBD
Color:	Dark Bronze or Black
Finish:	Anodized aluminum
Model #	t: Round Historical Replica
Other:	3000K LED Lamp; Limit use to the historic district.



UFGS: N/A

C09.2.4. Sidewalk Lighting

Image Tool 250 x 188 Number of base standards 1 **Rectilinear Cutoff** Type: Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ● Other Mfr: Hubbell, Kim Lighting Single mount Double mount Color: Dark Bronze Anodized (or Clear Anodized as approved by BCE) Finish: Anodized aluminum Bollard Model #: Rectilinear Cutoff, Single Arm or Dual Arm Mount Other: Lamp: LED. Follow manufacturer's recommendations for fixture base. UFGS: N/A C09.2.5. Walls / Stairs Lighting Image Tool 250 x 188 ● Applicable ○ N/A Number of base standards 1 Type: Style 1 Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other Mfr: Vista Lighting Color: Dark bronze anodized Finish: Smooth Model #: Aluminum Step and Brick Lights, 5230 round louvered Other: Lamp: LED UFGS: N/A C09.2.6. Other ○ Applicable ● N/A

D. FACILITIES EXTERIORS

Comply with Air Force Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

● Applicable ○ N/A Select number of graphics / images (large: 800 px x 440 px) to insert 1

Image Tool 800 x 440

● Applicable ○ N/A Select number of graphics / images (small: 250 px x 188 px) to insert 3

Image Tool 250 x 188



Scott Base-wide Standard Materials Palette



Historic District Architecture



Contemporary Architectural Features



Brick and Architectural Precast

D01. SUPPORTING THE MISSION

Comply with AF Corporate Standards for Supporting the Mission: http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html

D02. SUSTAINABILITY

Comply with Air Force Corporate Standards for Sustainability: http://afcfs.wbdg.org/facilities-exteriors/supporting-the-mission/index.html

D03. ARCHITECTURAL FEATURES

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Architectural Features: http://afcfs.wbdg.org/facilities-exteriors/architectural-features/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188





























D03.1. Orientation, Massing and Scale

- 1. Orient new buildings to maximize energy efficiency, passive solar and daylighting potential of the building; narrow buildings oriented along an east-west axis are preferred to minimize heat gain in the summer months and maximize heat gain in the winter months resulting in less overall energy usage.
- 2. Provide orthogonal geometry for principal building form; angular geometry may be used sparingly for Group 1 and used only for emphasis at specific areas such as building entrances and stairwells.
- 3. Maintain a human scale and reduce the visual scale of large buildings with sub-massing related to interior functional operations; create consistent form and scale in adjacent buildings with compatible profiles or silhouettes.
- 4. Building heights shall not be limited; however, building heights over 2 stories shall be considered on a case basis.
- 5. Combine functions where practical to avoid a proliferation of small, independent structures.
- 6. Use and coordinate shading devices with orientation and for function.

D03.2. Architectural Character

- 1. Develop architectural features, materials and detailing appropriate for the Facility Group designation. Refer to Building Entrances, Wall Systems and Roof Systems.
- 2. Respond to the local climate and regional influences with environmentally functional architectural features.
- 3. For new facilities design generally maintain consistency and visual unity in the character of the adjacent buildings through compatible architectural features: repeated use of similar forms such as roofs, and through recurring elements such as doors, windows, materials and colors.
- 4. Reinforce the historical Air Corps theme with a campus environment and related architectural features expressive of flight innovation and technology. Maintain compatibility with the historic architecture without direct stylistic imitation.
- 5. All facilities shall express sustainability through their orientation, massing, shape, form, materials, and detailing. Provide louvers, fins and other shading devices to control heat gain and glare and to and improve energy efficiency.
- 6. Strive for economical construction without compromising a high-quality, professional appearance.

D03.3. Details and Color

- 1. Provide a palette of earth-tone colors related to the native landscape in brick, block, stucco and powder-coated metals. Refer to wall systems for detailed material listings.
- 2. Relate the level of architectural detailing to the Facility Group number.
- 3. Use only integrally colored materials as the predominant exterior building material; do not use materials that require field painting and ongoing maintenance.
- 4. Provide consistent and compatible colors for every exterior building feature, including walls, roofs, doors, windows, gutters, downspouts, utility and mechanical elements, and other visible elements.
- 5. Noncorrosive metals with factory applied color finishes are required.
- 6. Combine details and color with orientation, massing, scale and architectural character to maintain base compatibility.
- 7. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D03.3.1. Climate-based Data and Life-Cycle Cost-Effective Passive and Natural Design Strategies:

Climate dominated by mechanical cooling

Climate dominated by mechanical heating
Climate with similar mechanical cooling / heating needs
Climate with minimal mechanical cooling / heating needs
Climate with high humidity
Climate with moderate humidity
Climate with low humidity
○ High Solar Insolation
 Moderate Solar Insolation
Low Solar Insolation
 Soils with High Thermal Conductivity
Soils with Average Thermal Conductivity
 Soils with Low Thermal Conductivity
Others Madeusta to has a support winfall
Other: Moderate to heavy annual rainfall
Other:
Facility: Narrow buildings along E-W axis are preferred
Wall: Integral shading features and devices / interior masonry thermal mass walls (for heating)
Doors: Recessed are preferred
Windows: Limit north-facing windows / maximize windows on south façades with shading
Roof: High to medium albedo, minimal to moderate slope
Structure: Do not expose ferrous metals. Provide factory finished non-ferrous metals or concrete
MEP: Ground-source and solar photovoltaic following LCCA
Other: Optimize shading devices to provide summer shade and allow winter solar heat gain
Other: Internal thermal mass walls may be used for heating following LCCA

Note: Apply the below <u>base-wide standards</u> for Architectural Features (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D03.3.2. Natural Ventilation System

♠ Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1 Aluminum Windows

Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

Mfr: Kawneer (or equivalent)

Color: Dark Bronze anodized or as approved by BCE

Finish: Anodized

Model #: 2x4, Awning type

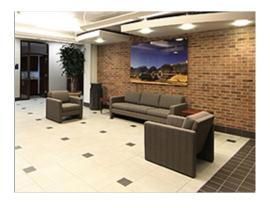
Other: Provide thermally broken frames.

UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts

D03.3.3. Thermal Mass

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type: **Style 1 Interior Wall Material**

Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom, TBD

Color: Red brick blend

Finish: Light texture

Model #: Coursed unit masonry

Other: Brick is preferred. Concrete block may only be used in Group 3 when

approved by the BCE.

UFGS: Section 04 20 00 Unit Masonry

D03.3.4. Thermal Shading

♠ Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1 Wall Devices

_ _ _

Mfr: Kawneer (or equivalent) or custom

Color: Dark Bronze

Finish: Factory, to match frames

Model #: Louver

Applies to:

Other: Shading devices may be attached to frames or structure

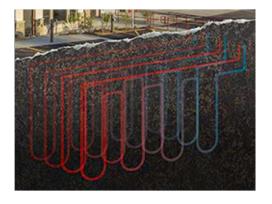
UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts

● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

D03.3.5. Renewable Heating/Cooling

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type: Style 1 Geothermal (Ground Source)

Applies to: ● Group 1 ● Group 2 ● Group 3 ● Group 4 ☐ Other

Mfr: Climate Master

Color: N/A

Finish: N/A

Model #: N/A

Other: Vertical ground loop well field

UFGS: Section 23 81 47 Water-Loop and Ground-Loop Heat Pump Systems

D03.3.6. Solar Photovoltaic System

● Applicable ○ N/A

Number of base standards 2

lmage Tool 250 x 188



Type:	Roof-Mounted PV Panels
Applies to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	TBD
Color:	Factory
Finish:	Matte
Model #	#: Flat plate collector
Other:	Coordinate installation with roofing manufacturer
UFGS:	Section 26 31 00 Solar Photovoltaic (PV) Components
Type:	Ground-Mounted PV Panels
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	TBD
Color:	Factory
Finish:	Matte
Model #	#: Flat plate collector, fixed or tracking
Other:	Coordinate with local utility provider; photo of USAFA courtesy AFCEC



UFGS: Section 48 14 00 Solar Photovoltaic Systems

D03.3.7. Solar Thermal System

Number of base standards 1

lmage Tool 250 x 188



Type: Wall-Mounted or Roof-Mounted Panels

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: TBD

Color: Factory

Finish: Matte

Model #: Flat plate collector

Other: N/A

UFGS: Section 48 14 13 Solar Liquid Flat Plate And Evacuated Tube Collectors

D04. BUILDING ENTRANCES

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Building Entrances: http://afcfs.wbdg.org/facilities-exteriors/building-entrances/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188

































D04.1. Primary Entrances

- 1. Emphasize the primary entrance in the overall building design with a projecting or recessed covering for weather protection following Installation Facilities Standards (IFS) for Facility Group designations.
- 2. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1.
- 3. Fully integrate all elements including the design of handicap ramps in the overall design of the primary entrance in an organized uncluttered appearance.
- 4. Install paved transitional spaces sized for the building function and occupancy.
- 5. Install appropriate lighting and site furniture following ATFP and IFS.
- 6. Protect entrances in from falling ice and snow.
- 7. Provide porte cocheres or covered drop-offs when justified for lodging and medical facilities; do not use for prestige or architectural accents.

D04.2. Secondary Entrances

- 1. Provide vestibules at entries in Groups 1, 2 and 3 unless used infrequently or serving unconditioned space following ASHRAE 90.1; use of stair towers as vestibules for multi-story buildings is encouraged when building and / or energy codes are satisfied.
- 2. Reflect the character of the primary entrance to a lesser extent with a smaller scale.
- 3. Include a recess or projection for weather protection and shading.
- 4. Integrate service and egress doors and loading areas with the building design by matching the materials and detailing and reflect the overall quality of the facility.
- 5. Incorporate egress structures such as stair towers into the facility design.
- 6. Canopies may be used for service and loading areas; weather protection beyond weatherstripping is not required at doors used only for life safety egress.
- 7. Develop building massing and orientation to minimize the appearance of service and loading areas; physically and visually separate these from primary entrances.
- 8. Loading areas must be organized, orderly and have an uncluttered appearance.

D05. WALL SYSTEMS

 $\label{lem:comply} \mbox{Comply with AF Corporate Standards for Facilities Exteriors:} \\$

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Doors and Windows:

http://afcfs.wbdg.org/facilities-exteriors/wall-systems/index.html

Comply with AFCFS Recommended Materials:

 $\underline{http://afcfs.wbdg.org/facilities-exteriors/wall-systems/materials/index.html}$

Insert 3 photos for each facility group.

Image Tool 250 x 188















Group 3

Group 4











D05.1. Hierarchy of Materials

- 1. Group 1 facilities may have more refined detailing than Group 2 and Group 2 may have more definition than Group 3.
- 2. Group 1 and 2 facilities shall be a combination of Scott Blend brick and warm gray architectural pre-cast.
- 3. On larger structures use metal wall panels above the first level of brick for Group 3 facilities. Refer to Appendix F for special requirements of Facility Districts.
- 4. Use Scott Blend brick on all one and two story buildings in high visibility areas. Provide a running bond pattern with tooled concave joints of warm gray (natural) mortar. Achieve visual interest through the use of brick rowlocks, soldiers and corbeling compatible with historic detailing. Consistently design sills, lintels, arched openings and keystones to maintain a unified basewide theme.
- 5. Group 1, 2 and 3 shall use a warm gray precast concrete lintels, banding, sills or accents. Group 1 facilities may use a 30" high pre-cast concrete base.
- 6. Group 4 shall be a combination of the following materials: Brick base with cementitious siding above.
- 7. Multi-story Group 1 facilities may include a transition in material, color or detailing to create a visual base. Generally, limit materials to a single color on Groups 3 and 4.
- 8. Use high-performance building envelopes following UFC 1-200-02.
- 9. Use detailing not subject to excessive weathering. Provide wall accents consistently throughout the base.
- 10. Use integrally colored materials and factory-finished metals.
- 11. Translucent wall panels may be used in Facility Group 1 and recreational uses in Group 2 when protected from direct solar gain. Provide insulating panels and shading appropriate for the orientation and exposure.
- 12. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.
- 13. Maintain compatibility with adjacent structures through materials and detailing.
- 14. EFIS requires project specific approval.

D05.2. Layout, Organization and Durability

- 1. Organize wall components including doors, windows, accents, shading devices, control joints, etc., to provide an ordered, professional appearance.
- 2. Recessed wall openings may be used for shading.
- 3. Deciduous trees may be used for shading.
- 4. Provide appropriate transitions between dissimilar materials to mitigate effects of thermal expansion and galvanic action.
- 5. All joint sealants shall be slightly darker than adjacent surfaces.
- 6. Materials requiring regular maintenance are not permitted; do not use exposed structural steel or other materials that require painting.
- 7. Refer to C07.2.16. Screen Walls for materials and colors of freestanding walls.
- 8. Refer to D07. Roofs for downspouts.

D05.3. Equipment, Vents and Devices

1. Arrange all mechanical, electrical, fire alarm, lightning protection and other system components to create an orderly appearance that integrates with the wall system.

- 2. Do not expose conduits, cables, piping, lightning protection components, etc. on exterior walls; if unavoidable in renovations, finish these elements to match the adjacent wall surface.
- 3. Avoid visual clutter and where surface-mounted elements are required they shall match the wall color.

D05.4 Wall Systems Materials

Facility Group 1 wall materials shall be as follows.

Facility Group 3 wall materials shall be as follows.

Primary: Brick / Metal Panel

Secondary: Precast Architectural Concrete Secondary: Metal Panel

Accent: Alternating Brick Courses Accent: N/A

Facility Group 2 wall materials shall be as follows.

Facility Group 4 wall materials shall be as follows.

Primary: Brick Primary: Fiber Cement Siding

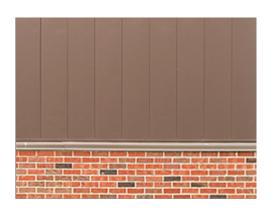
Secondary: Precast Architectural Concrete Secondary: Fiber Cement Siding, Trim Boards

Accent: Alternating Brick Courses Accent: Concrete or Brick Foundation Cladding

Note: Apply the below <u>base-wide standards</u> for Wall Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D05.4.1. Flat Metal Panels

● Applicable	Number of base standards 1	Image Tool 250 x 188
--------------	----------------------------	----------------------



Type:	Insulated Wall Panel System
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Firestone
Model #: UNA-CLAD / UNA-FOAM	
Color:	Sierra Tan / River Tan per approval
Finish:	Powder Coated
Other:	Route and Return Dry Seal
UFGS:	Section 07 42 13 Metal Wall Panels: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf Section 07 42 63 Fabricated Wall Panel Assemblies: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 42 63.pdf

Scott Air Force Base IFS Page 101 of 155 Back to Table of Contents

D05.4.2. Brick Veneer

D05.4.5. Curtain Wall

lmage Tool 250 x 188 Applicable \(\cap \) N/A Number of base standards 1 **Scott Blend** Type: Applies to: ● Group 1 ● Group 2 ● Group 3 ● Group 4 ☐ Other Mfr: **Richards Brick Company** Model #: 7B-88C Color: Scott Blend Finish: Straight edges, medium texture Other: SW, FBX UFGS: Section 04 20 00 Unit Masonry: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf **D05.4.3. Architectural Precast** Image Tool 250 x 188 Number of base standards 1 **Coursed precast** Type: Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other Mfr: Midwest, Lager Monument Model #: Smooth Casting Color: Warm gray precast concrete Finish: Very light texture Other: N/A UFGS: Section 03 45 00 Precast Architectural Concrete: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 45 00.pdf **D05.4.4. Stucco Over Sheathing** ○ Applicable ● N/A

UFGS:

D05.4.7. Tilt-Up Concrete

○ Applicable ● N/A

D05.4.8. Ribbed Metal Sheeting

Applicable N/A Number of base standards 1

Image Tool 250 x 188

Section 03 33 00 Cast-In-Place Architectural Concrete: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf



Type:	Metal Wall Panel
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Berridge
Model #	: HR-16 Galvalume
Color:	Parchment / Sierra Tan
Finish:	Smooth texture, factory finished
Other:	24 Gauge Steel
UFGS:	Section 07 42 13 Metal Wall Panels: http://www.wbdq.org/FFC/DOD/UFGS/UFGS 07 42 13.pdf

Image Tool 250 x 188



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Dryvit
Model #	: "Outsulation" System
Color:	#111 "Prairie Clay" per approval
Finish:	"Sandpebble" or sandblast texture per approval
Other:	Other colors require prior approval
UFGS:	Section 07 24 00 Exterior Insulation and Finish Systems: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 24 00.pdf

D05.4.10. GFRC

○ Applicable ● N/A

D05.4.11. Concrete Block

○ Applicable ● N/A

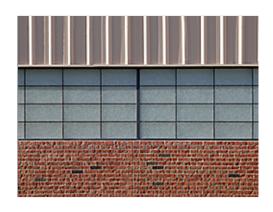
D05.4.12. Fiber Cement Siding

Applicable N/A Number of base standards 1

lmage Tool 250 x 188



Type:	Style 1
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	James Hardie Building Products, Inc.
Model #:	Horizontal lap siding, shingle siding
Color:	Earth tones
Finish:	Wood texture
Other:	Hardie Plank, Hardie Shingle
UFGS:	SECTION 074646 Fiber Cement Siding: (Not Available on UFGS)



Type:	Insulated Translucent Wall Panels
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Kalwall
Model #: 4" Wall Panel Unit System	
Color:	White #00 or Bone White #21B per approval
Finish:	Factory
Other:	N/A
UFGS:	Section 08 45 23 Fiberglass-Sandwich-Panel Assemblies (Not Available on USGS)

D06. DOORS AND WINDOWS

Comply with AF Corporate Standards for Facilities Exteriors:

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Doors and Windows:

http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/doors-and-windows/materials/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188











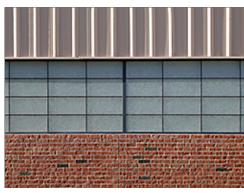




Group 3

Group 4











D06.1. Types

- 1. Provide dark bronze anodized aluminum doors, windows and frames with thermal breaks for Facility Groups 1-3; use consistent color for the door and frame. For renovation projects the color of new windows, doors and frames may match the existing.
- 2. Aluminum clad wood windows are preferred for Facility Group 4; white cladding is preferred.
- 3. Standard-sized hinged doors are preferred. Use sliding, folding, overhead, sectional and other door configurations only to support mission operations.
- 4. Automatic doors are allowed only where functionally necessary.
- 5. Limit hollow metal doors and frames to security doors, utility rooms and mechanical rooms in Groups 1 and 2 and to any application in Group 3 facilities.
- 6. Utility and emergency egress doors shall match the wall color.
- 7. Passive thermal comfort methods of ventilation are encouraged where life cycle cost justified.
- 8. Windows must meet force protection requirements.
- 9. Adjacent joint sealants should be slightly darker than the frame color.
- 10. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D06.2. Layout and Geometry

- 1. Visually and functionally compose openings in walls for the climate-specific exposure.
- 2. Consistently use opening type, size, placement, mullion pattern, and color to reinforce the overall architectural design.
- 3. Openings shall augment interior lighting and space conditioning needs.
- 4. Protect against vandalism, intrusion and coordinate sound ratings.

D06.3. Glazing and Shading

- 1. Tinted, energy-efficient, low-e, double-pane glazing is required for all exterior doors and windows.
- 2. Glazing color shall follow Installation Facilities Standards (IFS).
- 3. Translucent wall panels may be integrated into wall systems.
- 4. Do not use mirrored glazing.
- 5. Fully integrate applicable shading designs for overhangs, louvers, light shelves and grilles.
- 6. Where appropriate, install window screens to take advantage of natural ventilation.

D06.4. Hardware

- 1. Provide hardware appropriate for the Facility Group while considering activity and frequency of use and local climate; hardware may be of higher visual quality for Facility Group 1.
- 2. Ensure hardware will perform throughout the facility's lifespan without showing extreme wear.
- 3. Select finishes that will not degrade by intensity of operation or exposure to the elements.
- 4. Use consistent finishes and color on window and door systems throughout a facility. For renovation projects the color of new hardware may match the existing hardware.

5. Design building systems to eliminate the need for security screens whenever possible.

D06.5. Doors and Windows Materials

Note: Apply the below <u>base-wide standards</u> for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D06.5.1. Anodized Aluminum

Number of base standards 1

Image Tool 250 x 188



Type:	Anodized Aluminum Doors, Windows and Frames
Applies	to: • Group 1 • Group 2 Group 3 Group 4 Other
Mfr:	Kawneer (or equivalent)
Color:	Dark Bronze Anodized
Finish:	Matte
Model #: 2x4	
Other:	Provide thermally broken frames

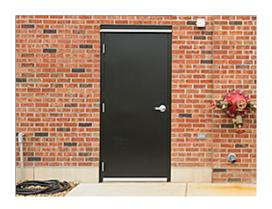
UFGS: Section 08 41 13 Aluminum-Framed Entrances and Storefronts: http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf

D06.5.2. Hollow Metal

Number of base standards 1

Image Tool 250 x 188

Section 08 11 13 Steel Doors and Frames:



Type:	Hollow Metal Doors, Windows and Frames
Applies t	o: • Group 1 • Group 2 • Group 3 Group 4 Other
Mfr:	Steelcraft
Color:	Dark Bronze
Finish:	Powder Coated, Satin
Model #	2x4 frame
Other:	Provide thermally broken frames

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf

UFGS:

D06.5.3. Aluminum-clad Wood

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Aluminum-clad Residential
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Marvin
Color:	White or Earth tones
Finish:	Powder coated, satin
Model #	: Aluminum-clad wood windows
Other:	Double hung
UFGS:	Section 08 14 00 Wood Doors http://www.wbdq.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf
	11(tp.//www.wbaq.0tq/FFC/DOD/OFG5/OFG5 06 14 00.pg1

D06.5.4. Other

○ Applicable ● N/A

D07. ROOF SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

 $\underline{http:\!/\!afcfs.wbdg.org/\!facilities\!-\!exteriors/\!index.html}$

Comply with AF Corporate Standards for Roof Systems:

http://afcfs.wbdg.org/facilities-exteriors/roof-systems/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/roof-systems/materials/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188















Group 3

Group 4











D07.1. Roof Type and Form

- 1. Use proven, cost-effective roof systems with high durability, weather resistance, and low maintenance that are compatible with Installation Facilities Standards (IFS) and requirements for the designated Facility Group.
- 2. Group 1 & 2 buildings of simple geometry shall use a sloped standing seam metal roof, with gabled ends and color-coated metal rakes. Group 1 & 2 buildings of complex geometry and large footprints shall use a combination of sloped standing seam metal roofs and low sloped roofs with parapets.
- 3. Do not use rooftop mechanical units unless mandatory on sloped roofs. Provide color-coated metal screens when unavoidable.
- 4. Roof translucent panels are only permitted with project specific approval by the 375th CES.
- 5. Group 3 facilities may use standing seam metal roof with gabled or hipped ends. Larger facilities may use low sloped roofs with parapet.
- 6. Group 4 facilities shall have gabled or hipped composite shingle roofs.
- 7. Roof eaves where provided, shall extend beyond the exterior wall for roof drainage and shading.
- 8. Keep roofs uncluttered and minimize penetrations.
- 9. Increase the insulation value of existing roofing systems during renovations for conformance with Energy Code compliance.
- 10. Roofs shall be maintained for the life of the system and replaced in accordance with UFC 3-110-04 and AFI 32-1051. A warranty is required on all new roofs.
- 11. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D07.2. Roof Slope

- 1. Group 1 and 2 buildings and smaller Group 3 building, use sloped roofs, min. 3½:12, preferred 5:12.
- 2. Low-sloped roofs with parapet are allowed for larger structures or to match existing conditions on renovation projects.
- 3. For larger Group 3 buildings use minimal-sloped 1/2:12 roofs.
- 4. Group 4 facilities shall use 4:12 to 6:12 roof slopes.
- 5. Ensure adequate drainage, and connect to the subsurface rain collection system where available.
- 6. Provide roof slopes to accommodate solar photovoltaic, solar thermal, passive systems and daylighting when applicable following UFC 1-200-02.
- 7. Provide additional components as required for the roofing type as directed by UFC 3-110-03.

D07.3. Parapets and Copings

1. Extend wall materials vertically above the roof line and provide metal copings of dark bronze. Ensure copings are properly flashed and detailed to avoid roof leaks.

D07.4. Color and Reflectivity

- 1. Groups 1 and 2 and smaller facilities in Group 3 shall be dark bronze to match adjacent facilities and follow requirements of IFS.
- 2. All minimal-slope membrane roofs shall use only use high-albedo, high reflectivity color to help decrease the temperature around the buildings and minimize damage to human and wildlife habitat.
- 3. Group 4 sloped roofs shall be earth tones.
- 4. Comply with UFC 3-110-03 and ASHRAE 90.1 for Solar Reflectance Index (SRI) and thermal requirements.

- 5. All roof flashing shall match the color of the predominant background material.
- 6. Elements (mechanical equipment, roof screening, vents, handrails) color shall be approved by the 375th CES.

D07.5. Gutters, Downspouts, Scuppers, Drains

- 1. All sloped roofs shall use gutters and downspouts. Gutters shall be outside the fascia.
- 2. Internal roof drainage systems are not permitted in new construction. Minimal-sloped roofs shall be sloped to drain to the building perimeter through scuppers into downspouts.
- 3. All gutters and fascias shall match the roof color.
- 4. Size the roof drainage system per IBC and SMACNA for the region. Ensure overflow drains are in compliance.
- 5. Use scuppers in parapet walls. Arrange scuppers in an orderly manner consistent with other elements of the wall system.
- 6. When open scuppers are connected to downspouts, provide transitions consistent with adjacent facilities.
- 7. Integrate downspouts with the architectural details of the wall system and arrange in an orderly, non-prominent appearance. Generally, blend downspouts with the color of the wall (not contrasting it).
- 8. Fabricate downspouts from non-corrosive materials such as aluminum or zinc-coated steel. Provide powder-coated finishes in dark bronze.
- 9. All downspouts shall be solid.
- 10. Provide angled transitional pieces for downspouts to fit closely against the wall for their entire length. Fastening and detailing must be approved by the 375th CES.
- 11. Coordinate locations of downspouts to conceal control joints in masonry walls when possible.
- 12. Place downspouts away from building entries. Water discharged should not run across sidewalks.
- 13. Provide concrete splash blocks, cast iron receivers at grade, or tie into storm drainage system.

D07.6. Roof Vents and Elements

- 1. Minimize and consolidate roof penetrations into a single, inconspicuous point whenever possible.
- 2. On sloped roofs, clad pipe penetrations to match the roofing material.
- 3. Avoid the use of rooftop mechanical equipment, however for renovations and unavoidable configurations ensure units are painted and screened.
- 4. Provide access points and service routes to equipment. Protect the roof following UFGS.
- 5. Combine roof vents whenever possible and place them on the least visible slope of the building.
- 6. Ensure attic spaces are properly vented at ridges and soffits.
- 7. All exposed equipment and vents shall be painted dark bronze.
- 8. Avoid roof-mounted antenna systems unless in conflict with SOW.
- 9. Arrange Lightning Protection Systems (LPS) components in an ordered, uncluttered, inconspicuous appearance and integrated into the organization of the roof and wall systems. Ensure that LPS roof mounting systems are approved by the roofing manufacturer. Additions to a roof shall not interfere with LPS or other rooftop systems that may be required.
- 10. Permanent fall protection shall be included to a roof with a slope above 3:12 per UFC 3-110-03.

D07.7. Clerestories and Skylights

- 1. Clerestories are permitted in Group 1 facilities and allowed in Group 3 facilities only when serving passive systems and are justifiable by life-cycle analysis.
- 2. Skylights are not permitted to eliminate leakage.
- 3. Design clerestories using the same principles for seasonal shading that are required for walls and roof overhangs.
- 4. Translucent panel systems are preferred in clerestory applications due to lack of window cleaning.
- 5. Clerestories must comply with UFC 4-10-01.

D07.8. Vegetated Roof

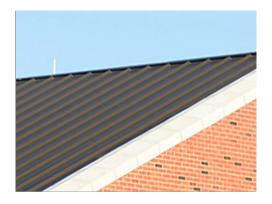
1. Not applicable.

D07.9. Roof Systems Materials

Note: Apply the below <u>base-wide standards</u> for Roof Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D07.9.1. Standing Seam Metal

● Applicable ○ N/A Number of base standards 1 Image Tool 250 x 188



Type:	Style 1
Applies	to: • Group 1 • Group 2 • Group 3 Group 4 Other
Mfr:	Berridge
Color:	Dark bronze
Finish:	Matte
Model #	: Tee-Panel
Other:	Shed, gabled or hipped standing seam metal

UFGS: Section 07 61 14 Steel Standing Seam Roofing

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 61 14.00 20.pdf

D07.9.2. Membrane Single-ply

_				_		
Δ	nn	lical	hle	\cap	N/A	

Number of base standards 1

Image Tool 250 x 188

	Type:	Finish 1
	Applies	to: • Group 1 • Group 2 • Group 3 Group 4 Other
	Mfr:	Carlisle Systems
32	Color:	Off-white
2	Finish:	Smooth
4/4	Model #	: TPO single-ply, "flat" minimal slope
6/11	Other:	
	Other.	IVA
	UFGS:	Section 07 53 23 Ethylene-Propylene-Diene-Monomer Roofing
	01 03.	http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 53 23.pdf
		Section 07 54 50 TPO Thermoplastic Single-Ply Roofing (Not Available on UFGS)
		(Not / Wallasic Sir Sir Gs)
D07.9.3. Built-up Multi-ply		
○ Applicable ● N/A		
D07.9.4. Concrete Tile		
○ Applicable ● N/A		
D07.9.5. Clay Tile		
○ Applicable ● N/A		
D07.9.6. Slate Shingles		
○ Applicable ● N/A		
D07.9.7. Vegetated System		
○ Applicable ● N/A		

D07.9.8. Ribbed Metal Sheeting

• Applicable N/A	Number of base standards	Image Tool 250 x 188
	Туре:	Style 1
	Applies t	o: Group 1 Group 2 Group 3 Group 4 Other
	Mfr:	Berridge
	Color:	Dark Bronze
	Finish:	Factory
	Model #	: High Seam Tee-Panel
	Other:	24 gauge steel, Width: 16" Batten height: 1-3/4"
	UFGS:	Section 07 41 13.19 Batten-Seam Metal Roof Panels (Not Available on UFGS)
D07.9.9. Composite Shin Applicable N/A N/A 	rgles Number of base standards [*] Type:	Image Tool 250 x 188 Style 1
	Applies t	
	Mfr:	Tamko
	Color:	Earth Tones
	Finish:	Factory
	Model #	: Heritage
	Other:	Gabled or hipped with transverse gable or hipped features
	UFGS:	Section 07 31 13 Glass-fiber-reinforced Asphalt Shingles http://www.wbdg.org/FFC/DOD/UFGS/UFGS 07 31 13.pdf
D07.9.10. Other		
○ Applicable ● N/A		

Scott Air Force Base IFS Page 115 of 155 Back to Table of Contents

D08. STRUCTURAL SYSTEMS

Comply with AF Corporate Standards for Facilities Exteriors:

http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Structural Systems:

http://afcfs.wbdg.org/facilities-exteriors/structural-systems/index.html

Comply with AFCFS Recommended Materials:

http://afcfs.wbdg.org/facilities-exteriors/structural-systems/materials/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188

























D08.1. Systems and Layouts

- 1. Pre-engineered structural steel framing may be used for Groups 1, 2 and 3 facilities; Installation-appropriate thermal envelopes, materials and detailing are required.
- 2. Select economical structural systems that integrate roof and wall systems.
- 3. Narrow buildings 60' or less in width with column-free interiors are preferred for office, administrative and personnel spaces; when interior columns are required optimize the structural grid layout for open-plan arrangements.
- 4. Fully coordinate structural grids with exterior window systems to align columns with window frames or wall systems.
- 5. When structure is exposed provide an organized appearance and coordinate with mechanical, electrical, plumbing, fire protection, information technology, and communications systems.
- 6. Limit the use of specialty systems (such as space frames, vaults or domes) and of structure as a visual feature.
- 7. Cost-effectively design interior bearing walls as thermal mass.
- 8. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

D08.2. Structural Systems Materials

Note: Apply the below <u>base-wide standards</u> for Structural Systems (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

D08.2.1. Concrete

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type:	Cast-In-Place
Applies	to: • Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Custom
Color:	Natural Gray
Finish:	Light texture
Model #	: Post and beam and/or waffle slab
Other:	N/A

UFGS: Section 03 30 53 Miscellaneous Cast-In-Place Concrete

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 30 53.pdf Section 03 33 00 Cast-In-Place Architectural Concrete http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf

Section 03 47 13 Tilt-Up Concrete

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 47 13.pdf

D08.2.2. Insulated Concrete Forming (ICF)

○ Applicable ● N/A

D08.2.3. Steel

Applicable \(\cap \) N/A

Number of base standards 1

Image Tool 250 x 188



Rigid Framing Type:

● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: **US Steel**

Color: Shop primed

Finish: Matte

Model #: Structural steel shapes

Other: N/A

UFGS: Section 05 12 00 Structural Steel

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 12 00.pdf

D08.2.4. Pre-Engineered Steel

Applicable \(\cap \) N/A

Number of base standards 1

Image Tool 250 x 188



Moment Frame Type:

Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

Mfr: **Behlen Building Systems**

Color: Factory primed

Finish: Matte

Model #: Moment Frame

Other: Draped insulation may be used behind wall system;

Behlen standing seam roof system may be used for Group 3

UFGS: Section 13 12 00 Steel Building Systems

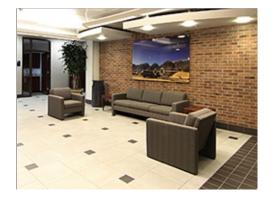
(Not Available on UFGS)

Section 13 34 19 Metal Building Systems

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 13 34 19.pdf

Number of base standards 1

Image Tool 250 x 188



у
,

Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Custom

Color: Beige

Finish: Smooth texture

Model #: Brick or CMU

Other: N/A

UFGS: Section 04 20 00 Unit Masonry

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf

D08.2.6. Heavy Timber

○ Applicable ● N/A

D08.2.7. Light-gauge Steel

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



y	pe:	Steei	Framing	

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ● Group 4 ☐ Other

Mfr: Steelrite

Color: Factory

Finish: Galvanized

Model #: Structural framing shapes

Other: N/A

UFGS: Section 05 45 00 Light Gauge Steel Framing System

(Not Available on UFGS)

D08.2.8. Lumber Framing

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Lumber Framing
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Boise Cascade Wood Products
Color:	N/A
Finish:	S4S
Model #	: Structural dimensional lumber
Other:	N/A
UFGS:	Section 06 10 00 Rough Carpentry http://www.wbdg.org/FFC/DOD/UFGS/UFGS 06 10 00.pdf Section 06 11 00 Wood Framing and Sheathing (Not Available on UFGS)

D08.2.9. Other

○ Applicable ● N/A

D09. MECHANICAL, ELECTRICAL AND PLUMBING

Comply with AF Corporate Standards for Facilities Exteriors: http://afcfs.wbdg.org/facilities-exteriors/index.html

Comply with AF Corporate Standards for Mechanical, Electrical and Plumbing: http://afcfs.wbdg.org/facilities-exteriors/machanical-electrical-and-plumbing/index.html

Insert 3 photos for each facility group.

Image Tool 250 x 188









Group 3

Group 4

















D09.1. Passive and Active Systems

- 1. Fully integrate passive heating and cooling systems into facility designs whenever practical for the local climate prior to the design of active mechanical systems.
- 2. Provide optimized passive and active systems; design active mechanical systems to supplement thermal mass walls and floors.
- 3. Develop renewable energy systems including geo-exchange (ground source heat pumps) when life cycle cost effective.
- 4. Performance display screens, which report energy performance and utility savings, are encouraged; when provided locate these in building lobbies or common areas.
- 5. Solar domestic hot water systems are required when life cycle cost effective for the climate.
- 6. Integrate shading into building exteriors to reduce solar heat gain during hot seasons.

D09.2. Functionality and Efficiency

- 1. Fully coordinate mechanical, electrical, plumbing (MEP) and fire protection systems with each other and with the building structure, enclosure, thermal envelope and interior design.
- 2. Ensure direct exterior access is provided (for CE) to main mechanical and electrical rooms.
- 3. Screen exterior equipment from primary views (landscape, building masses, screen walls) and comply with ATFP requirements.
- 4. Keep equipment away from main building entrances; locate service area/yard on least visible side of a building.
- 5. Coordinate the location of all exterior meters, equipment and devices to provide convenient access and an overall coordinated and orderly appearance.
- 6. Design emergency generator systems integrally with all other building systems and avoid incompatible building additions; locate generators near service areas and ensure they are not visible from primary entrances.
- 7. When structure is exposed as a finished ceiling, fully integrate MEP and fire protection systems to provide an organized uncluttered appearance.
- 8. Conceal ducts, piping, conduits, devices, etc., when permanent walls, suspended ceilings or raised floors are provided; locate sprinkler heads in orderly configuration.
- 9. Limit interior wall-mounted equipment in occupied personnel spaces; avoid surface-mounted conduit and pipes.
- 10. Provide efficient utility rooms with layouts to facilitate system performance and maintenance; provide convenient access to controls, clearly label systems and include operating and maintenance instructions.
- 11. Separate mechanical and electrical and communications rooms.
- 12. Integrate recessed and wall-mounted fixtures such as fire standpipe cabinets and drinking fountains within permanent walls.

Insert 3 photos for each facility group.

lmage Tool 250 x 188



























E01. Building Configurations

Comply with Air Force Corporate Standards for Building Configurations: http://afcfs.wbdq.org/facilities-interiors/buildings-configurations/index.html

- 1. Provide open-plan configurations for office, administrative, operational and related activities and spaces for maximum flexibility. Use a "core and shell" approach in which all building systems, infrastructure and permanent interior partitions anticipate two or more uses {operations} during a facility's lifespan. Utilize AFMAN 32-1084 Facility Requirements Standards for planning, space utilization allowable area assignments.
- 2. Create flexible interior configurations using Furniture, Fixtures & Equipment (FF&E) and limit "hard wall" private offices and private rooms. To the greatest extent, limit permanent partitions to core areas such as toilet rooms, stairs, mechanical and utility rooms. Use durable long-lasting finishes in core areas for walls, ceilings, floor coverings and built-in casework. Coordinate interior FF&E layouts with structural grids during space planning.
- 3. Provide high-performance building configurations following UFC 1-200-02. Ensure passive design strategies are cost effectively incorporated before active mechanical systems are designed.
- 4. Comply with UFC 1-200-01 for general building requirements, model building codes and government unique criteria for typical design disciplines and building systems. UFC 1-200-01 also provides direction for accessibility, anti-terrorism, security, sustainability requirements, and safety.
- 5. Meet security and force protection requirements in UFC 4-010-01: DoD Minimum Antiterrorism Standards for Buildings.
- 6. Comply with AFCFS for supporting mission requirements, addressing human comfort and well-being, and creating highly flexible interiors while satisfying requirements for high performance and sustainable buildings.
- 7. Provide a level of quality for interior features, materials and finishes that is appropriate for the Facility Group number.
- 8. Design and review shall be accomplished by architects utilizing professional interior designers when appropriate. In-house design projects shall involve the base architect and interior designer.
- 9. Consultation with the State Historic Preservation Officer (SHPO) will be required for properties listed on the National Register of Historic Places and within the Historic District designated for the Base.
- 10. Maintain architectural compatibility following AFCFS and this Installation Facilities Standards (IFS) document to create continuity while avoiding monotony.

E01.1. Layout and Common Areas

Comply with Air Force Corporate Standards for Layout and Common Areas: http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/layout-and-common-areas/index.html

- 1. Create open-plan interior environments to accommodate changes.
- 2. Limit interior partitions, private offices and rooms; use furniture or modular systems to provide privacy and acoustic control.
- 3. When partitions are functionally justified such as for conference rooms, use systems furniture and moveable (demountable) floor-to-ceiling wall systems for acoustical or visual privacy.
- 4. Proportion lobbies and common spaces based on type of function, activity and facility group and flexibility to support multiple missions over time. Provide distinct boundaries for waiting areas with a variety of comfortable and moveable furniture arranged in small flexible groupings to accommodate the widest range of persons and families.
- 5. Design common areas to accommodate and manage a sudden influx of people that rapidly reaches the maximum occupant load
- 6. Allow no direct sight lines into restrooms. Endeavor to swing restroom doors into adjacent corridor/ room.
- 7. Situate utility and core areas to minimize impact on daylighting and to maximize use as thermal buffers.

- 8. Ensure electrical, lighting and communications system can be adaptable to configuration changes.
- 9. Avoid power poles to the maximum extent; when poles are necessary minimize the number and coordinate locations with furniture placement and other elements.
- 10. Avoid sloping floors to maintain flexibility and eliminate future structural changes.
- 11. Special consideration may apply to Sensitive Compartmented Information Facilities (SCIFs).

E01.1.1. Interior Design Process

- 1. Comply with UFC 3-120-10 for the Comprehensive Interior Design (CID,) which includes both Structural Interior Design (SID) and Furniture, Fixtures & Equipment (FF&E) design services.
- 2. Use a collaborative, integrated planning and design team, composed of user, government support staff, and appropriate professionals. Integrate architectural features using simple detailing to create a professional appearance; avoid extravagant or excessive detailing.
- 3. Ensure interior designs satisfy the functional requirements within the context of flexibility, sustainability and the building's energy performance.
- 4. Base space planning on square foot allocations from AFM 32-1084. Identify special requirements if any, such as privacy separation, VIP areas, gathering spaces and storage. Note: The occupant's rank and position may create a request for additional square footage and selection of alternative materials. Such requests must be approved at the appropriate command level.
- 5. Provide clear circulation and pathway finding for both horizontal and vertical directions that accommodate the number of personnel in the facility.
- 6. Maximize efficiencies in the space plan for functional relationships and adjacencies for all facility users. Efficiently create and situate rooms and support rooms such as conference / meeting rooms and break rooms.
- 7. Provide interior design building-related illustrations, drawings, schedules, materials selections, specifications and cost estimates as listed in UFC 3-120-10. Refer to Furnishings in this IFS also.
- 8. SID Format shall follow HQ AFCEC standards.
- 9. Base the FF&E package on the furniture footprint developed in the SID. Identify all new or existing equipment needed and its users within each facility or each area of the facility. Provide specific information on: equipment sizes, electrical requirements, ventilation requirements, weight (if heavy), quantity, and security level if required. Presume all administrative spaces have computers and supporting equipment.

E01.1.2. Codes and Regulations

- 1. Refer to UFC 1-200-01. This UFC provides general building requirements, establishes the use of consensus building codes and standards, identifies key core UFC's, and identifies unique military criteria. National Fire Protection Association (NFPA) 101 Life Safety Code shall also be used as a companion document.
- 2. Fire Code requirements shall be identified in the International Building Code (IBC) and must be used where dictated by UFC 1-200-01 except where noted in UFC 3-600-01.

E01.2. Quality and Comfort

Comply with Air Force Corporate Standards for Quality and Comfort: http://afcfs.wbdg.org/facilities-interiors/buildings-configurations/quality-and-comfort/index.html

- 1. Select floor materials in response to the amount of foot traffic a floor receives and to Base conditions to provide the greatest long term value.
- 2. Floor treatments (patterns and layouts) should convey the designation of the Facility Groups (Group 1, 2, 3 or 4), type of use and type of space while considering a life cycle cost analysis. Facility Group 1 may receive higher quality treatments the Facility Groups 2 through 4, but should not consume an excessive amount of resources.

- 3. Installation cost, durability, maintenance and appearance shall be considered when selecting materials appropriate to the facility type.
- 4. Comply with Mandatory Use Policy for the Air Force Carpet Acquisitions within the contiguous U.S. (OMB Memoranda, Improving Acquisition through strategic resourcing 5 December 2012, and attachment 1). Roll carpet goods shall only be used in areas such as high profile major command suites and similar areas with BCE approval. Carpet tiles shall be used in all other spaces.
- 5. Relate the visual quality of finishes to the Facility Group number.
- 6. Building and interior configurations should address both operations and climatic responses.
- 7. Convey a professional image; avoid trendy patterns and textures.
- 8. Use materials and finishes that provide a healthy indoor environment.
- 9. Orient interior spaces toward views while maintaining cost-effective building performance and efficiency.
- 10. Promote air movement and daylighting for human health and wellbeing.
- 11. Comply with Federal Government policy regarding protection and enhancement of the cultural environment.
- 12. Natural stone, terrazzo and ground/polished concrete slab flooring shall be used in high traffic areas of Group 1.
- 13. Resilient flooring may be used in low traffic areas in Group 1, 2 and 4. Acceptable resilient flooring includes rubber, LVT, VCT and linoleum. Resilient flooring may be used for stairs, office break rooms, dining areas, fitness areas, and rubber floor base.

E02. Floors

Comply with Air Force Corporate Standards for Floors: http://afcfs.wbdq.org/facilities-interiors/floors/index.html

E02.1. Floor Materials

Facility Group 1 floor materials shall be as follows.	Facility Group 3 floor materials shall be as follows.
--	--

Primary: Terrazzo, Natural Stone and Prepared Slabs Primary: Prepared Slabs (Ground)

Secondary: Porcelain tile Secondary: Prepared Slabs (Sealer), VCT and LVT

Tertiary: Carpet Tile, Rubber Stair Treads Tertiary: Carpet Tile (Administrative only)

Facility Group 2 floor materials shall be as follows.

Facility Group 4 floor materials shall be as follows.

Primary: Prepared Slabs (Ground, Polished and Stained) Primary: Carpet

Secondary: Porcelain tile, LVT Secondary: Ceramic tile and LVT

Tertiary: Carpet, Rubber Stair Treads Tertiary: N/A

- 1. Natural stone and terrazzo flooring may be used in high traffic areas of Group 1 as approved on a case basis.
- 2. Resilient and rapidly renewable flooring may be used in low traffic areas in Group 1, 2 and 4.
- 3. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Scott Air Force Base IFS Page 126 of 155 Back to Table of Contents

Note: Apply the below <u>base-wide standards</u> for Floors (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E02.1.1. Prepared Slabs

 Image Tool 250 x 188



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Local (TBD)

Color: Natural gray cement, light to dark aggregate (color to be selected)

Finish: Fine polished texture, slip resistant

Model #: Medium to small aggregate

Other: Conform to ABA requirements for coefficient of friction

UFGS: Section 03 35 45 Polished Concrete Finishing (Not Available on UFGS)

Style 2, Ground, Polished and Stained



Color: Natural gray cement, light to dark aggregate (color to be selected

Finish: Medium polished texture, slip resistant

Model #: Medium to small aggregate

Type:

Other: Conform to ABA requirements for coefficient of friction

UFGS: Section 03 35 45 Polished Concrete Finishing

(Not Available on UFGS)

E02.1.2. Natural Stone and Terrazzo

Number of base standards 1

Image Tool 250 x 188



Ground and Polished Terrazzo Type:

Applies to:

● Group 1 Group 2 Group 3 Group 4 Other

Mfr: Local (TBD)

Color: Natural gray cement, light to dark aggregate (color to be selected)

Finish: Fine to medium polished texture, slip resistant

Model #: Medium to small aggregate

Other: Conform to ABA requirements for coefficient of friction

UFGS: Section 09 63 40 Stone Flooring

(Not Available on UFGS)

Section 09 66 13 Portland Cement Terrazzo Flooring http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 66 13.pdf

E02.1.3. Quarry Tile

Applicable \(\cap \) N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1

Applies to:

☐ Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: American Olean and Daltile

Color: Earth tones

Finish: Matte, slip resistant

Model #: Commercial kitchen

Other: Epoxy grout is recommended.

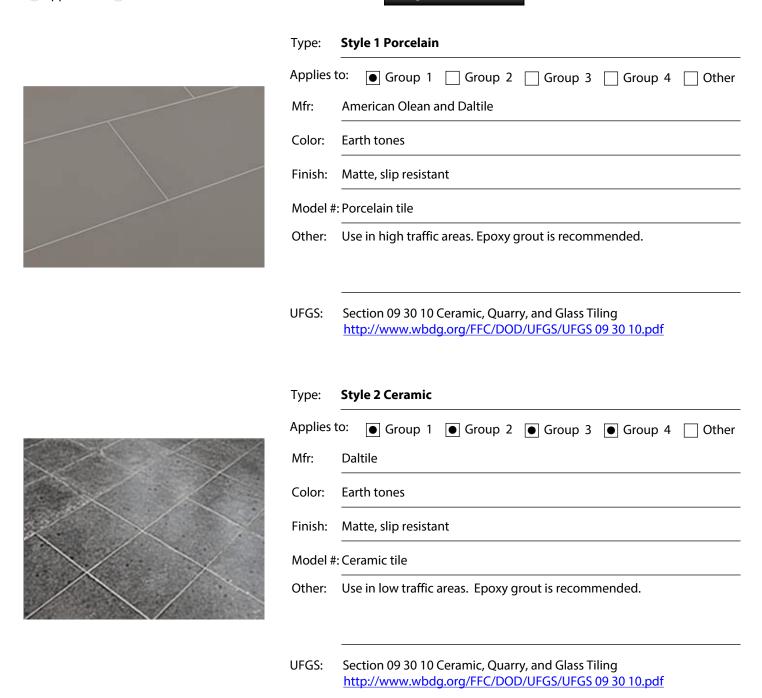
UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf

Applicable \(\cap \) N/A

Number of base standards 2

Image Tool 250 x 188



E02.1.5. Resilient Floor

Number of base standards 2

Type:

Image Tool 250 x 188



Type:	Style 1 Stair Treads
Applies	to: • Group 1 • Group 2 Group 3 Group 4 Other
Mfr:	Roppe
Color:	Neutral tones
Finish:	Factory
Model #	: Raised design rubber tread
Other:	Stair treads material
UFGS:	Section 09 65 00 Resilient Flooring http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 65 00.pdf



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Johnsonite

Color: Neutral field color with accent color as approved by BCE

Finish: Factory

Model #: 24" x 24" Interlocking tile

Other: Roll goods may be considered with approval of the BCE

UFGS: Section 09 65 00 Resilient Flooring

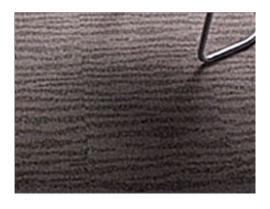
Style 2 Rubber Flooring

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 65 00.pdf

● Applicable ○ N/A

Number of base standards 2

Image Tool 250 x 188



Type: Style 1

Applies to:

Group 1 Group 2 Group 3 Group 4 Other

Mfr: Mohawk Group

Color: Neutral or multi-colored flecks that yield a neutral tone

Finish: Yarn: Nylon 6 or 6.6/cut pile or loop pile

Model #: Broadloom, 6' wide rolled, carpet tiles, entry walk-off carpet

Other: N/A

UFGS: UFGS 09 68 00 Carpeting

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf



Type: Style 2

Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ● Group 4 ☐ Other

Mfr: Mohawk Group

Color: Earth tones

Finish: Factory

Model #: Broadloom, residential loop, "Smartstrand"

Other: N/A

UFGS: UFGS 09 68 00 Carpeting

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 68 00.pdf

E02.1.7. Rapidly-Renewable Products

○ Applicable ● N/A



Type:	Thin Set Mortar
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	TEC/ HB Fuller
Color:	Selected from manufacturer neutral colors
Finish:	Light texture
Model #	t: Full Flex Latex Mortar
Other:	Recommended by manufacturer for porcelain tile
UFGS:	Section 09 30 10 Ceramic, Quarry and Glass Tiling

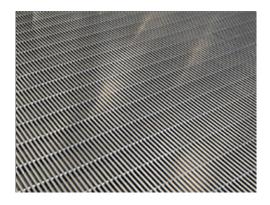
http://www.wdbg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf



Type:	Raised Computer Flooring	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	TBD	
Color:	As approved by the BCE	
Finish:	As approved by the BCE	
Model #: As approved by the BCE		
Other:	Applications must be approved during the design phase by the BCE	
UFGS:	Section 09 69 13 Rigid Grid Access Flooring	

http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-

ufgs/ufgs-09-69-13



Type:	Walk-off Mat
Applies t	o: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	CS Group
Color:	Factory
Finish:	Factory
Model #	: Type 316 Stainless Steel
Other:	Applications must be approved during the design phase by the BCE
UFGS:	Section 12 48 13 Entrance Floor Mats and Frames http://www.wbdg.org/ffc/dod/unified-facilities-guide-specifications-ufgs/ufgs-12-48-13
Type:	Epoxy Grout
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Mapei-Kerapoxy
Color:	Earth tones
Finish:	Smooth trowel finish



UFGS: Section 09 30 10 Ceramic, Quarry and Glass Tiling

Model #: Dry tile grout mix with latex additive

Other: N/A

http://www.wdbg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf

E03. Walls

Comply with Air Force Corporate Standards for Walls: http://afcfs.wbdg.org/facilities-interiors/walls/index.html

E03.1. Wall Materials

Facility Group 1 wall materials shall be as follows.

Facility Group 3 wall materials shall be as follows.

Primary: Concrete or brick

Primary: Ground face block, sealed (do not paint)

Secondary: Gypsum board (painted), level 3 – 5 by BCE

Secondary: N/A

Tertiary: Cerami

Ceramic tile (restrooms)

Ceramic tile (restrooms)

Facility Group 2 wall materials shall be as follows.

Facility Group 4 wall materials shall be as follows.

Primary: Brick

Primary:

Tertiary:

Gypsum board (painted), level 3

Secondary:

Gypsum board (painted), level 3 – 5 by BCE

Secondary: N/A

Tertiary:

Ceramic tile (restrooms)

Tertiary: Ceramic tile (restrooms)

- 1. Provide durable low-maintenance wall materials and finishes for a long life span with the possibility of one or more uses of spaces during that time. Apply wall finishes assuming a 10-year life span. Color Shall be cohesive and of consistent quality throughout the facility
- 2. Comply with Unified Facilities Criteria for Sound Transmission Loss (TL), Noise Reduction (NR) and Sound Transmission Class (STC) ratings.
- 3. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
- 4. Provide a level of finish following UFGS Section 09 29 00 Gypsum Board.
- 5. Select and apply paint with sheens (gloss levels) appropriate for the application following UFGS Section 09 90 00 Paints and Coatings.
- 6. Provide ceramic tile on wet walls of kitchens, toilet rooms, locker rooms, etc., in all facility groups. Provide a backer consisting of "mold-tough" gypsum backer board.
- 7. Neutral split-face or ground-face integrally colored block with a clear sealer may be used in Group 3. Do not paint block.
- 8. Provide rubber base on drywall partitions in Groups 1 and 2.
- 9. Hardwood base may only be used in Group 1 as approved on a case basis.
- 10. Hardwood chair rails / bumper rails may be used in high-use areas of Groups 1 and 2; aqueous clear finishes are preferred to reduce maintenance; plastic chair rails are permitted only in medical applications.
- 11. Decorative moldings may be used only in Group 1 when approved on a case basis.
- 12. Corner guards are permitted only in high traffic spaces with wheeled or cart use such as private service areas in Groups 1 and 2; stainless steel corners guards with a brushed finish may be judiciously used in Group 3.
- 13. Group 4 may use painted composite wood base.
- 14. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below <u>base-wide standards</u> for Walls (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type: Cast in Place

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Local (TBD)

Color: Natural grey cement, neutral aggregates

Finish: Board formed, panel formed, hand rubbed

Model #: Medium to small aggregate

Other: Section 03 35 00 Concrete Finishing

http://www.wdbg.org/FFC/DOD/UFGS/UFGS 03 35 00.pdf

UFGS: Section 03 33 00 Cast-In-Place Architectural Concrete

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 03 33 00.pdf

E03.1.2. Masonry

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type: **Modular Face Brick**

Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Local (TBD), Belden, Glen-Gery

Color: Base Standard (Scott Blend)

Finish: Light texture

Model #: Coursed unit masonry

Other: N/A

UFGS: Section 04 20 00 Unit Masonry

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 04 20 00.pdf

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1

Applies to: • Group 1 • Group 2 • Group 3 • Group 4 Other

Mfr: American Olean, Daltile

Color: Earth tones

Finish: Gloss, Semi-Gloss, Matte (Determined by application/ location)

Model #: Ceramic wall tile

Other: Located on wet walls in restrooms, kitchens, break rooms, locker rooms

and similar locations

UFGS: Section 09 30 10 Ceramic, Quarry, and Glass Tiling

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 30 10.pdf

E03.1.4. Gypsum Board

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type: Style 1

Applies to: ● Group 1 ● Group 2 ● Group 3 ● Group 4 ☐ Other

Mfr: US Gypsum

Color: Paint (Sheen per UFGS), Solid Earth tone colors

Finish: Level 3 – 5 to be determined by the BCE

Model #: Tapered edge

Other: Provide "mold-tough" gypsum backer board in wet locations

UFGS: Section 09 29 00 Gypsum Board

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf

Section 09 90 00 Paints and Coatings

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf

E03.1.5. Metal Panels

○ Applicable ● N/A

E04. Ceilings

Comply with Air Force Corporate Standards for Ceilings: http://afcfs.wbdg.org/facilities-interiors/ceilings/index.html

E04.1. Ceiling Materials

Facility Group 1 ceiling materials shall be as follows.		Facility Group 3 ceiling materials shall be as follows.	
Primary:	Exposed Framing (Roof / Floor Structure Above)	Primary:	Exposed Framing (Roof / Floor Structure Above)
Secondary:	Grid and Acoustical Tile	Secondary:	Exposed Framing (Roof / Floor Structure Above)
Tertiary:	Gypsum board (painted)	Tertiary:	Gypsum board (painted)
Facility Group 2 ceiling materials shall be as follows.		Facility Group 4 ceiling materials shall be as follows.	
Primary:	Exposed Framing (Roof / Floor Structure Above)	Primary:	Gypsum board (painted)
Secondary:	Grid and Acoustical Tile	Secondary:	N/A
Tertiary:	Gypsum board (painted)	Tertiary:	N/A

- 1. Accent ceiling materials such as metal, wood, and rapidly renewable may be used in Group 1 as approved on a case basis.
- 2. Follow UFC 3-450-01 (Vibration and Noise Control) for acoustic design issues including speech privacy, sound isolation or sound masking.
- 3. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

Note: Apply the below <u>base-wide standards</u> for Ceilings (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E04.1.1. Exposed Framing (Roof / Floor Structure Above)

• Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Vulcraft

Color: Neutral colors reviewed on a case basis

Finish: Field painted (Sheen per UFGS)

Model #: Formlok floor and roof decking

Other: N/A

UFGS: Section 05 30 00 Steel Decks

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 05 30 00.pdf

E04.1.2. Exposed Concrete

○ Applicable ● N/A

E04.1.3. Grid and Acoustical Tile

Applicable \(\cap \text{N/A} \)

Number of base standards 3

Image Tool 250 x 188



Type: Style 1 All Purpose

Applies to: • Group 1 • Group 2 Group 3 Group 4 Other

Mfr: Armstrong

Color: White

Finish: Factory

Model #: 2'x2' Tegular with reveal edge and fine texture, grid 15/16"

Other: Performance characteristics are Class A; NRC-0.70; CAC-40; LR-0.86;

minimum recycled content 82%. Grid 15/16" Prelude. (Ceiling and grid:

Fire rated when applicable)

UFGS: Section 09 51 00 Acoustical Ceilings

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 51 00.pdf



Type:	Style 2 Kitchen
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Armstrong
Color:	White
Finish:	Factory
Model i	#: Kitchen – 2' x 2' Ceramaguard
Other:	Grid 15/16" Prelude (Ceiling and grid: Fire rated when applicable)
UFGS:	Section 09 51 00 Acoustical Ceilings http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 51 00.pdf
Type:	Style 3 Wood or Metal
Applies	to: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Armstrong
Color:	Neutral colors



Model #: Specialty suspended wood or metal with BCE approval Other: Grid 15/16" Prelude or concealed system by manufacturer UFGS:

E04.1.4. Gypsum Board		
● Applicable ○ N/A	Number of base standards	1 Image Tool 250 x 188
	Туре:	Style 1
	Applies	to: • Group 1 • Group 2 Group 3 • Group 4 Other
	Mfr:	US Gypsum
	Color:	Paint (Sheen per UFGS), Solid Earth tone colors
	Finish:	Gypsum board (painted), level 3 – 5 to be determined by the BCE
	Model #	: Thickness as required by Building Code
	Other:	Meet STC per requirements by UFC, provide Fire Rated assembly when required.
	UFGS:	Section 09 29 00 Gypsum Board http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 29 00.pdf Section 09 90 00 Paints and Coatings http://www.wbdg.org/FFC/DOD/UFGS/UFGS 09 90 00.pdf
E04.1.5. Metal Panels		
○ Applicable ● N/A		

E04.1.6. Wood

○ Applicable ● N/A

E04.1.7. Rapidly-Renewable Products

○ Applicable ● N/A

E04.1.8. Other

○ Applicable ● N/A

E05. Doors and Windows

Comply with Air Force Corporate Standards for Doors and Windows: http://afcfs.wbdg.org/facilities-interiors/doors-and-windows/index.html

E05.1. Doors and Windows and Frames Materials

Facility Group 1

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, clear anodized

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 1

door (leaf) materials shall be as follows.

Primary: Hardwood veneer, structural solid core

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 2

door (frame) and window frame materials shall be as follows.

Primary: Aluminum, clear anodized

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 2

door (leaf) materials shall be as follows.

Primary: Hardwood veneer, structural solid core

Secondary: Hollow metal (painted)

Tertiary: N/A

Facility Group 3

door (frame) and window frame materials shall be as follows.

Primary: Hollow metal (galvanized, painted)

Secondary: Hollow metal (galvanized, painted)

Tertiary: N/A

Facility Group 3

door (leaf) materials shall be as follows.

Primary: Hollow metal (galvanized, painted)

Secondary: Hollow metal (galvanized, painted)

Tertiary: N/A

Facility Group 4

door (frame) and window frame materials shall be as follows.

Primary: Wood

Secondary: N/A

Tertiary: N/A

Facility Group 4

door (leaf) materials shall be as follows.

Primary: Wood solid core

Secondary: Composite solid core

Tertiary: N/A

- 1. Provide doors and windows for a long facility life span and for maximum flexibility under adaptive use. Install durable doors, windows and frames made of low maintenance materials. Hardwood types and finishes shall not degrade or show excessive wear over their lifespan. Wood door veneer shall not have excessive grain pattern such as oak, consider birch or maple unless matching existing style.
- 2. Install glazing in doors and locate windows to preserve paths of sunlight. Create openings to enhance airflow and to facilitate passive ventilation. Balance building performance with occupant comfort, health, safety, security and productivity.
- 3. Visually integrate doors and windows with the overall facility design to create an organized appearance. These elements must convey an image of lasting quality and efficiency without extravagance. Ensure systems and materials are appropriate for the Facility Group.
- 4. Hardwood casings may be provided over metal frames in Group 1 as approved on a case basis.
- 5. Paneled textured doors are preferred in Group 4.
- 6. Do not use hollow-core wood doors.
- 7. Generally match original hardware in renovations associated with State Historic Preservation.

- 8. Hollow metal doors shall be full flush 1 3/4" (minimum 16 gauge) fabricated of two sheets of steel with completely smooth and unbroken surfaces both sides. All edge seams shall be fully welded and ground smooth, top and bottom rails shall be formed from steel channels. Reinforcing for hardware shall be 12 gauge. Mineral core shall be provided for rated doors.
- 9. Hollow metal frames shall be formed from a minimum 16 gauge. Fabricated as a one piece welded assembly with headers and jambs securely arc welded on the frame face and ground smooth to form a neat mitered corner assembly, provide plaster guards. Provide anchors compatible with the adjacent wall system. Coat inside of all frames with material to inhibit rust and grout all frames solid. Knock down frames shall only be used with the approval of the BCE.
- 10. Wood Doors shall be five ply with stiles and rails bonded to the core, entire unit abrasive planed before veneering. Provide fire resistive composite when required. Factory finish when possible. Quality standard shall be performance grade extra heavy duty. Veneer Grade A, Rotary cut, book match veneer leaves. Pair and set match doors hung in same opening. Satin stainless steel hardware is preferred per AFCFS to reduce signs of wearing.
- 11. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.
- 11. Door hardware shall conform to UFC requirements for Normal, Secure and Collateral Secure locations.

Note: Apply the below <u>base-wide standards</u> for Doors and Windows (products, materials and color). Then refer to the Appendix and apply any additional requirements specifically related to the Facility District in which the project is located.

E05.1.1. Aluminum

Number of base standards 1

Image Tool 250 x 188

Section 08 71 00 Door Hardware



Type:	Style 1		
Applies	to: Group 1 Group 2 Group 3 Group 4 Other		
Mfr:	Kawneer		
Color:	Clear anodized		
Finish:	Factory		
Model #	#: InFrame Interior Framing, (2x4 nominal framing)		
Other:	Larger framing is permitted when required by loading requirements. Doors shall conform to ABA requirements. Satin stainless steel hardware is preferred to reduce signs of wearing		
UFGS:	Section 08 41 13 Aluminum-Framed Entrances and Storefronts http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 41 13.pdf		

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

Scott Air Force Base IFS Page 142 of 155 Back to Table of Contents

♠ Applicable N/A

Number of base standards 2

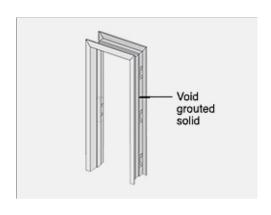
Type:

Steel Frames

Image Tool 250 x 188



Type: **Steel Doors** Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other Mfr: Steelcraft Color: **Neutral colors** Paint (Sheen per UFGS) Finish: Model #: Full flush 1 3/4" leaf Other: Provide in Group 3 and in utility areas of Group 1 and 2 A25 "galvannealed" coating. All interior steel doors shall have a factory applied primer finish. Provide satin stainless steel hardware UFGS: Section 08 11 13 Steel Doors and Frames http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf Section 08 71 00 Door Hardware https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf



Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Steelcraft

Color: Neutral colors, coordinate with base color scheme

Finish: Paint (Sheen per UFGS)

Model #: Welded frame assembly (Min.16 gauge), grouted solid where required

Other: Provide in Group 3 and utility areas of Group 1 and 2 A25 galvannealed coating. All frames shall be factory primed. Satin stainless steel hardware is preferred

UFGS: Section 08 11 13 Steel Doors and Frames

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 11 13.pdf
Section 08 71 00 Door Hardware

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

Number of base standards 2

Image Tool 250 x 188



Type:	Style 1, Administrative Doors
Applies 1	co: Group 1 Group 2 Group 3 Group 4 Other
Mfr:	Algoma, Eggers, Marshfield
Color:	Natural hardwood veneer, Grade A
Finish:	Clear sealer, satin (aqueous), stain when approved by the BCE
Model #	: 1 3/4" structural solid core
Other:	Refer to above standard E05.1. Item 10.
UFGS:	Section 08 14 00 Wood Doors
	http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf
	Section 08 71 00 Door Hardware
	https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf



Applies to: ☐ Group 1 ☐ Group 2 ☐ Group 3 ● Group 4 ☐ Other		
Mfr:	Simpson	
Color:	Natural hardwood veneer or paint grade	
Finish:	Clear Sealer or paint, satin (aqueous)	
Model #: Full slab or panels		
Other:	Satin nickel hardware	

UFGS: Section 08 14 00 Wood Doors

Type: Style 2, Residential Doors

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 14 00.pdf

Section 08 71 00 Door Hardware

https://www.wbdg.org/FFC/DOD/UFGS/UFGS 08 71 00.pdf

E05.1.4. Other

○ Applicable ● N/A

E06. Casework Systems

E06.1. Casework Materials

- 1. Cabinets, countertops and hardware shall be appropriate to the Facility Group and for the particular application and frequency of use. Materials should be durable and not show excessive wear over their lifespan. Countertops should be neutral in color, smooth to light texture and compatible with adjacent cabinet surfaces and plumbing fixtures.
- 2. When used for storage, furniture systems are preferred rather than built-in cabinetry or casework in office, administrative and operational applications. Casework or architectural millwork may be provided in main lobbies in Groups 1 and 2, consolidated break areas, work areas and food service areas in Groups 1, 2 and 3.
- 3. Materials, shapes, and detailing should convey an image of long-lasting quality without extravagance; avoid trendy designs. Comply with Architectural Woodwork Institute (AWI) standards.
- 4. Select casework systems and materials considering durability, maintenance requirements and LCCA.
- 5. Provide countertops/ backsplashes in restrooms, kitchenettes and break rooms. Fabricate of a minimum 1/2" solid surface material. Provide continuous sealant joint/ bead to adjacent surfaces of clear silicone.
- 6. Natural stone and cast stone countertops may only be used in Group 1 with approval on a case basis.
- 7. Metal cabinets and countertops shall be provided in heavy-use operations and in Group 3.
- 8. Refer to AFCFS for approved materials.
- 9. Manufacturers listed below are only provided to establish a baseline of equivalency among all applicable manufacturers.

E06.1.1. Plastic Laminate

● Applicable ○ N/A Number of base standards 1 Image Tool 250 x 188



Type:	Style 1, Low Use Areas Only	
Applies	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Formica, Wilsonart	
Color:	Medium Earth tones and neutral tones	
Finish:	Light textured	
Model #	#: High pressure laminate	
Other:	Combine with matching solid-surface banding on casework edges. Only for use as approved by the BCE in a Facility Group. Provide marine edge in areas with liquids.	
UFGS:	Section 06 41 16.00 10 Plastic-Laminate-Clad Architectural Cabinets http://www.wbdq.org/FFC/DOD/UFGS/UFGS 06 41 16.00 10.pdf	

Scott Air Force Base IFS Page 145 of 155 Back to Table of Contents

E06.1.2. Solid Polymer Surface

Number of base standards 1

Image Tool 250 x 188



Style 1, High Use Areas Type:

Mfr:

Corian (or equivalent)

Color: Neutral to compliment cabinet color/ texture as approved by the BCE

● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

Light textured Finish:

Applies to:

Model #: Solid Surface

Other: Faces and edge banding

UFGS: Section 12 36 00 Countertops

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf

E06.1.3. Rapidly-Renewable Products

Number of base standards 1 Applicable \(\cap \) N/A

Image Tool 250 x 188



Style 1 Moderate Use Areas Type:

Applies to: ● Group 1 ● Group 2 ☐ Group 3 ☐ Group 4 ☐ Other

Mfr: Plyboo

Natural or amber Color:

Finish: Satin

Model #: Flat grain bamboo plywood

Other: FSC® Certified 100%.

UFGS: Section 12 32 00 Manufactured Wood Casework

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 32 00.pdf

E06.1.4. Metal

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Style 1	
Applies t	to: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Steel Sentry	
Color:	Natural stainless steel or neural colors (steel)	
Finish:	Mill (stainless) or Powder coated (steel)	
Model #: Lab, workbench, computer workstation		
Other:	Provide highly durable fabrications and finishes in Group 3 which are subjected to heavy use.	
UFGS:	Section 12 31 00 Manufactured Metal Casework	

E06.1.5. Other

○ Applicable ● N/A

E06.2. Countertop Materials

E06.2.1. Plastic Laminate

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type: Style 1, Low Use Areas Only

Mfr: Formica

Color: Medium Earth tones and neutral tones

Finish: Light textured

Applies to:

Model #: High pressure laminate

Other: Only use rounded half or full bullnose and integral backsplash. Solid surface edges may be used. Do not use plastic laminate edge banding

● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

on front edges.

UFGS: Section 06 41 16.00 10 Plastic-Laminate-Clad Architectural Cabinets

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 06 41 16.00 10.pdf

E06.2.2. Solid Polymer Surface

Applicable \(\cap \) N/ANumber of base standards 1

Image Tool 250 x 188



Type: Style 1, High Use Areas

Applies to: ● Group 1 ● Group 2 ● Group 3 ☐ Group 4 ☐ Other

Mfr: Corian

Color: Medium Earth tones and neutral tones

Finish: Light textured

Model #: Solid Surface

Other: Provide marine edge in areas with liquids

UFGS: Section 12 36 00 Countertops

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf

● Applicable ○ N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Style 1, Group 1 High Visibility, Heavy Use	
Applies t	o: • Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Local (TBD)	
Color:	Neutral Tones, Dark Tones with BCE approval	
Finish:	High polish with sealer	
Model #: Custom cut and polished slabs		
Other:	N/A	

UFGS: Section 12 36 00 Countertops

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf

E06.2.4. Cast Stone

Applicable \(\cap \) N/A

Number of base standards 1

Image Tool 250 x 188



Type:	Style 1, Group 1 High Visibility, Heavy Use	
Applies t	o: Group 1 Group 2 Group 3 Group 4 Other	
Mfr:	Local (TBD)	
Color:	Neutral Tones, Dark Tones with BCE approval	
Finish:	High polish with sealer	
Model #: Custom cut and polished slabs		
Other:	N/A	

UFGS: Section 12 36 00 Countertops

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 36 00.pdf

E06.2.5. Metal

• Applicable N/A

Number of base standards 1

Image Tool 250 x 188



Type: Style 1

Applies to: Group 1 Group 2 Group 3 Group 4 Other

Mfr: Local (TBD)

Color: Stainless Steel

Finish: High Polished

Model #: Type 304, 18-8 analysis, nickel bearing steel

Other: Provide integral fronts, sides and backsplash with rolled/ marine edge to capture liquids

UFGS: Section 12 31 00 Manufactured Metal Casework

http://www.wbdg.org/FFC/DOD/UFGS/UFGS 12 31 00.pdf

E06.2.6. Other

○ Applicable ● N/A

E07. Furnishings

Comply with Air Force Corporate Standards for Furnishings: http://afcfs.wbdg.org/facilities-interiors/furnishings/index.html

E07.1. Durability and Serviceability

Comply with AF Corporate Standards for Durability and Serviceability: http://afcfs.wbdg.org/facilities-interiors/furnishings/durability-and-serviceability/index.html

E07.2. Accessories

Comply with AF Corporate Standards for Accessories: http://afcfs.wbdq.org/facilities-interiors/furnishings/accessories/index.html

E08. Interior Signs

Comply with Air Force Corporate Standards for Interior Signs: http://afcfs.wbdg.org/facilities-interiors/interior-signs/index.html

E08.1 Types and Color

Comply with Air Force Corporate Standards for Types and Color: http://afcfs.wbdg.org/facilities-interiors/interior-signs/types-and-color/index.html

E08.2. Interior Signs Materials

- 1. Interior signage must meet Scott AFB and UFC standards and receive approval of BCE.
- 2. Natural stone, masonry and cast stone signs may only be used in Group 1 with approval on a case basis.

E09. Lighting, Power and Communication

http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/index.html

E09.1. Functionality and Efficiency

Comply with Air Force Corporate Standards for Functionality and Efficiency: http://afcfs.wbdg.org/facilities-interiors/lighting-power-and-communication/functionality-and-efficiency/index.html

E09.2. Types and Color

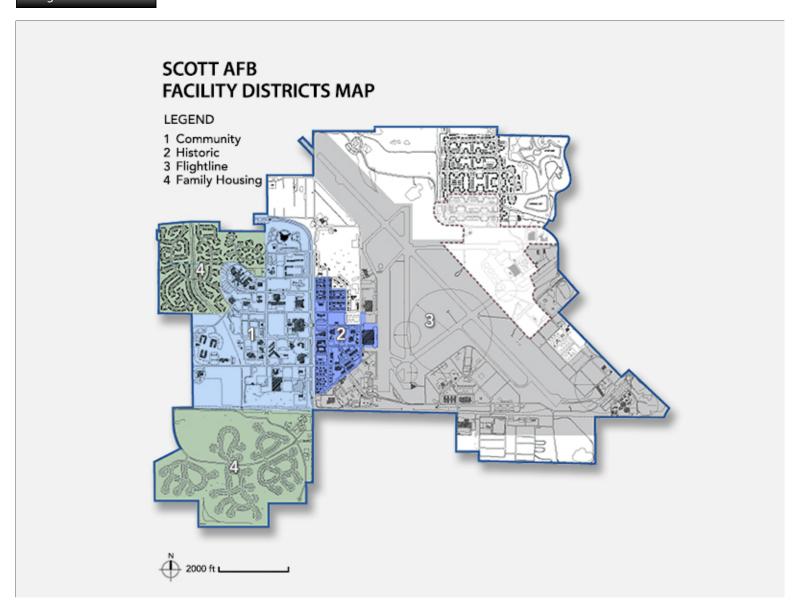
F. APPENDIX - Facility Districts

- Applicable
- N/A

Comply with Air Force Corporate Standards for Facility Districts: http://afcfs.wbdg.org/facility-districts/index.html

Facilities Districts Overview Map:

Image Tool 800 x 600



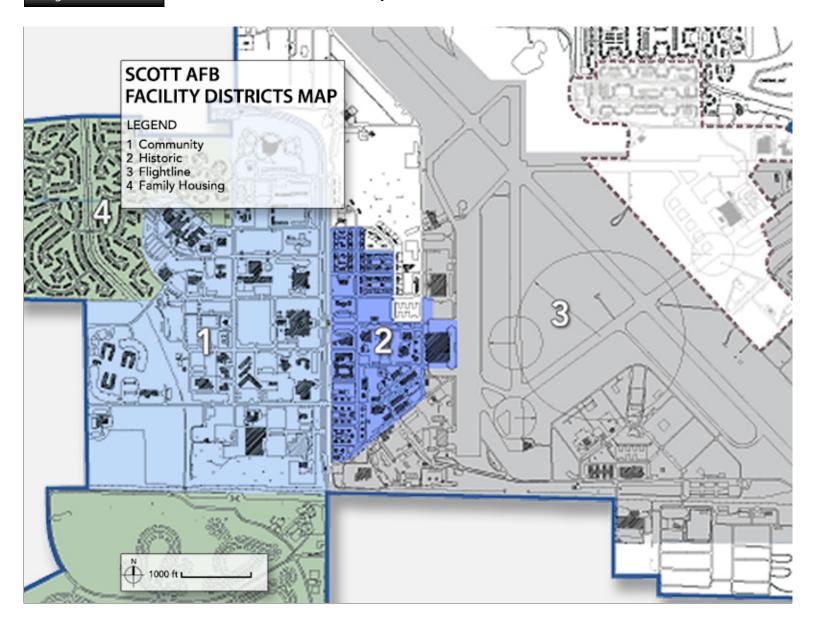
Note: Apply the <u>base-wide standards</u> in this IFS for Installation Elements, Site Development, Facilities Exteriors and Facilities Interiors (products, materials, color, etc.). Following application of the base-wide standards, refer to the Appendix and apply any additional requirements specifically related to the Facility District.

Enter No. of Facility Districts 1

The following Facility Districts list exceptions to the base standards that are unique to each district. Please refer to the Site Development, Facilities Exteriors, and Facilities Interiors sections of this IFS for base standards.

Image Tool 800 x 600

Map of District



Photos for each facility group within the Facility District as applicable.

Image Tool 250 x 188

Group 1	○ Applicable ● N/A
Group 2	○ Applicable ● N/A
Group 3	○ Applicable ● N/A
Group 4	○ Applicable ● N/A
Other	○ Applicable ● N/A

FACILITY DISTRICTS

Scott Air Force Base is divided into districts that align with planning districts as defined in the Installation Development Plan (IDP). Each district has designated uses that support the base's operations. Generally match adjacent facilities in new construction to promote architectural compatibility throughout the installation. Please refer to Section D03.2. and contact the Base Civil Engineer for additional information. A brief description of each district follows.

1. Core District

Facilities in the Core District are administrative, community service, community commercial, medical, outdoor recreation, and historical. These should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 1 or 2 as defined in this IFS. Exceptions to the base-wide standards for the Historical District are listed below.

2. Airfield District

Facilities in the Airfield District are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 2 or 3 as defined in this IFS.

3. Administration District

Facilities in the Administration District are typically office and related uses, should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 1 or 2 as defined in this IFS.

4. Industrial District

Facilities in the Industrial District are industrial in nature, should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 2 or 3 as defined in this IFS.

Open Space

Open space includes undeveloped land both inside and outside of the immediate cantonment area. It both separates and defines the various sections of the base and creates a natural setting for the cantonment area. Areas classified as open space may be undeveloped to act as a buffer space between incompatible uses or for safety or security clearances or there may be other constraints that are not readily visible. All development in this district requires prior coordination and approval from the Base Civil Engineer.

Family Housing

Facilities in the Family Housing area are residential in nature, should generally match adjacent buildings to ensure architectural compatibility and shall follow standards for Facility Group 4 as defined in this IFS.

Metrolink Area

Facilities in the Metrolink Area are considered entry control facilities, should follow standards for Facility Group 1 as defined in this IFS.

Historic District

Listed on the National Register of Historic Places the Scott Field Historic District represents the highest quality visual environment on the installation. Preserve and maintain the handsome red brick administration buildings, officer and noncommissioned officer neighborhoods, parade grounds, and shade trees to create a campus environment and provide a strong reminder of Scott's proud military heritage. Protect the Historic District, its unique setting, materials, construction methods, and styles, as a cultural asset for future generations. Blend any new structures judiciously into the District and conduct all design, construction and renovations following guidelines from the State Historic Preservation Office.

G. APPENDIX - References

Comply with Air Force Corporate Standards: http://afcfs.wbdg.org/index.html

375 CIVIL ENGINEER SQUADRON
Scott AFB IFS Painting Guidelines
http://www.wbdg.org/FFC/AF/AFIFS/Scott AFB Plant List
http://www.wbdg.org/FFC/AF/AFIFS/Scott AFB Plant List.pdf