

# DoD UNIFIED FACILITIES CRITERIA PROGRAM

## FY 2013 Program Review





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## 1 EXECUTIVE SUMMARY

The Department of Defense is required to streamline government criteria by eliminating duplication of information and to increase reliance on private sector standards. Since 1999, the Unified Facilities Criteria Program, under the leadership of the Engineering Senior Executive Panel, implements these requirements for facility planning, design, construction and maintenance.

Unified Facilities Criteria (UFC) and Unified Facilities Guide Specifications (UFGS) are technical manuals and specifications used for planning, design, construction, and maintenance of all DoD facility projects. Highlights and accomplishments for FY 2013 include:

- Approved the standup of three new Functional Working Groups: Utility Control, Energy Generation, and Contingency Engineering
- Improved total unification rate of UFC to 69% compared to the 1998 baseline of 9%
- Reached 100% unification rate and 100% current (up to date) for all core UFC documents
- Published 16 UFC documents
- Implemented (International Building Code) IBC 2012
- Published key energy criteria in UFC 1-200-02 High Performance and Sustainable Building Requirements
- Published a new contingency engineering series of criteria documents:
  - UFC 1-201-01 Non Permanent Facilities in Support of Military Operations
  - UFC 1-202-01 Host Nation Facilities in Support of Military Operations
- Began bundling UFGS for more cost-effective and efficient updates

In addition to criteria document improvements, the program provides technical expertise and guidance on many key DoD issues. Major accomplishments in FY 2013 include:

- Implemented a study to identify initial and life-cycle costs associated with the extended facility service life associated with commercial and DoD facilities
- Began the development of a vendor gateway on the Whole Building Design Guide to promote integration of beneficial technology into DoD facilities criteria
- Created partnership with the DoD Facility Corrosion program team, and developed the process to improve transition of corrosion prevention technologies into facilities criteria



## 2 PROGRAM OVERVIEW

### 2.1 Program Authority

Public Law 114-113 (the National Technology Transfer and Advancement Act) and OMB Circular A119 (1998) require agencies to streamline government criteria by eliminating duplication of information and increasing reliance on private sector standards. For facility planning, design, construction and maintenance, the Department of Defense complies with these requirements through the Unified Facilities Criteria (UFC) Program. The UFC program is implemented through Military Standard (MIL-STD) 3007 (Standard Practice for Unified Facilities Criteria and Unified Facilities Guide Specifications) in compliance with DoD Instruction 4120.24 (Defense Standardization Program), and directed by DoD Directive 4270.5 (Military Construction). The program objectives are:

- Streamline the military criteria by eliminating duplication of information
- Increase reliance on private sector standards
- Create a more efficient criteria development and publishing process

### Unified Facilities Criteria Program Background and Authorities

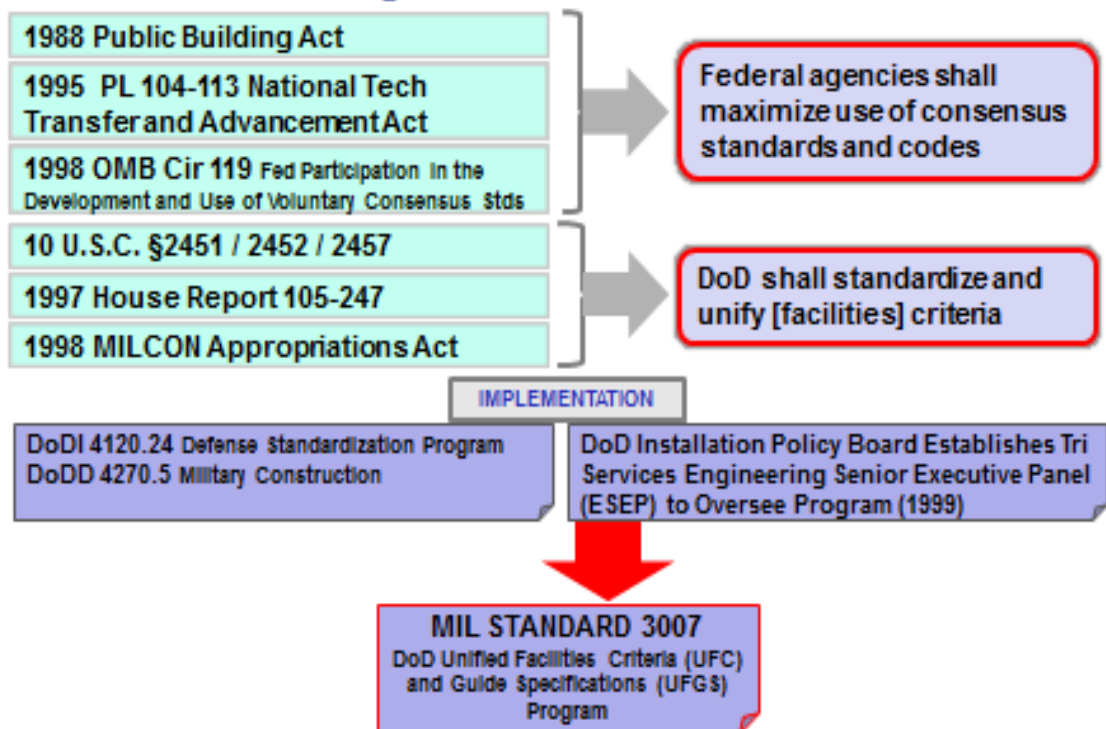


Figure 1-1  
UFC Program Background and Authorities



## 2.2 Program Organization

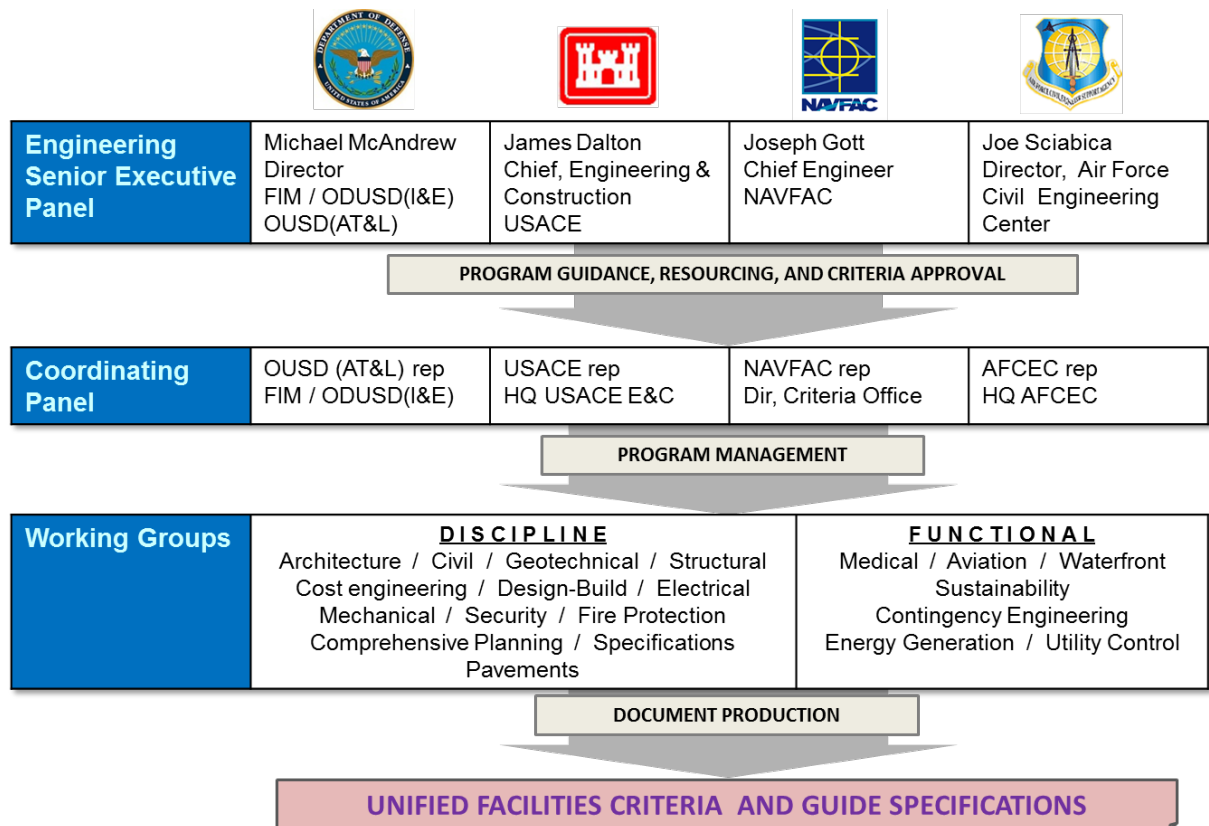
The Engineering Senior Executive Panel (ESEP) provides program guidance, resourcing, and criteria approval. The UFC Coordinating Panel (CP) provides program management and oversees the criteria discipline and functional working groups.

The Discipline and Functional Working Groups are responsible for criteria development and production.

### FY 2013 Program Organization Highlights

- ESEP Chair - Joe Sciabica, Director AFCEC, replaced interim AF rep COL Scott Hartford
- CP Chair - Pete Rossbach, USACE
- Approved the standup of three new Functional Working Groups: Utility Control, Energy Generation, & Contingency Engineering

### UFC Program Organization



**Figure 2-2  
UFC Program Organization**



### 2.3 Program Administration

The ESEP approved a new category of criteria documents with the designation "Facilities Criteria" (FC). The designation applies only to facility-type criteria that are unique to a single Military Department, such as FC 4-721-10N, "Navy and Marine Corps Unaccompanied Housing". Facilities Criteria (FC) are focused on functional requirements, i.e., defined by users and operational needs of a particular facility type. Differences in functional requirements between DoD Components may exist due to differences in policies and operational needs. FC are applicable only to the DoD Component(s) indicated in the title, and are intended for use with unified technical requirements published in DoD Unified Facilities Criteria (UFC).

### 2.4 Program Resources

The ESEP resources the UFC program and assigns personnel within USACE, NAVFAC, AFCEC, and ODUSD (I&E) to participate on the Coordinating Panel and the 22 working groups (both discipline- and functionally-aligned). The working groups are responsible for development and maintenance of the criteria documents by in-house staff or by Architect-Engineering contract. Additional funding is also allocated by each service component to augment criteria work which requires resources outside of the working group. The breakout of funding is shown in Table 2-1.

Service Component	FY 2011	FY 2012	FY 2013
USACE	\$2,000,000	\$2,000,000	\$2,000,000
NAVFAC	\$1,114,000	\$1,114,000	\$1,114,000
AFCEC	\$40,000	\$200,000	0

**Table 2-1  
Criteria Development Funding**

In addition to direct funding for development and maintenance of DoD criteria, funding is required for DoD access to non-government standards (industry consensus standards), management and distribution of DoD standards on the Whole Building Design Guide (WBDG), and administration and maintenance of SPECSINTACT. Significant cost savings are realized for these services by procurement through DoD bulk service contracts. The costs have been steady over the history of the program and have been funded by ODUSD (I&E). The breakout of FY 2013 Costs is shown in Table 2-2.

Access to Non Government Standards	\$1,900,000
WBDG	\$700,000
SPECSINTACT	\$400,000
TOTAL	\$3,000,000

**Table 2-2  
Criteria Access and Distribution – FY 2013 Funding**



### 3 UNIFIED FACILITIES CRITERIA (UFC)

#### 3.1 Introduction

UFC documents are technical manuals used for planning, design, construction, and maintenance of DoD facility projects. The majority of UFC are design manuals that define design requirements and best practices for DoD construction projects. A smaller percentage of UFC provide planning requirements, maintenance guidance, and handbook type information used by field personnel.

#### 3.2 Criteria Strategy

Industry codes and standards provide minimum consensus safety and performance requirements and are the basis of DoD criteria. UFC 1-200-01 General Building Requirements implements the International Building Code and other consensus codes and standards. UFC 1-200-01 also references 28 other “core” UFC documents and other DoD special requirements to implement legislation and policy, and provide criteria associated with unique DoD functions. These documents collectively comprise the “DoD Building Code.”

The remaining UFC documents generally fall into two categories: facility-type, or specialty. Facility-type UFC documents provide space and functional requirements for facilities built frequently (such as fitness centers) or have unique DoD requirements (such as aircraft hangars and Navy piers). Specialty UFC documents are used on projects that require the use of that specialty system or component (such as cathodic protection, boiler control systems, and dockside utilities).

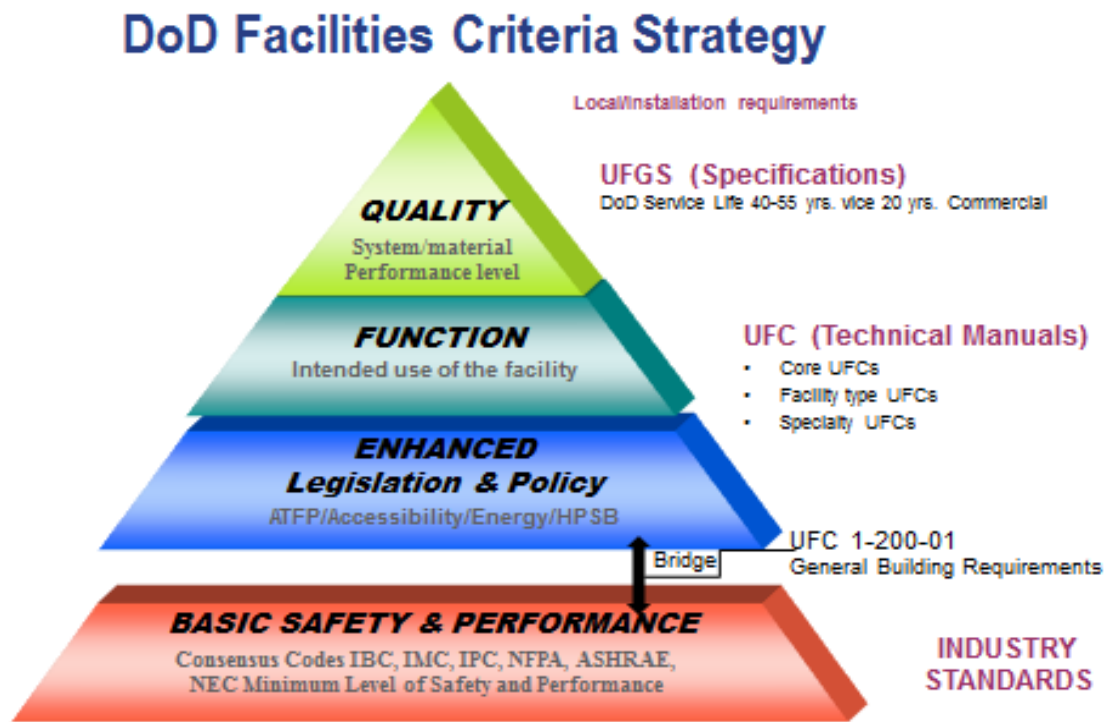


Figure 3-1  
DoD Facilities Criteria Strategy



### 3.3 Health Metrics

The primary indicators of UFC health are “% Unified” and “% Current.” % Unified represents the percentage of total UFC documents used by all three Military Departments that are unified, and indicates progress toward reducing duplicate criteria. % Current represents the percentage of all UFC documents that have been revised within a specified target timeframe or refresh rate. Refresh rates are assigned as at 6 years, 9 years, or 12 years. UFC documents can be kept current on an interim basis by incorporating minor changes and publishing as a “change” (without updating the publication date) rather than a full revision. UFC changes are not captured in the % Current calculation. Data collection for % Current began in FY 2011. The baseline for % Unified data is extracted from the March 1998 report to the Congressional Defense Committees titled “Unified Design Guidance.”

All UFC	FY 1998	FY 2011	FY 2012	FY 2013
Total # UFC	361	198	191	187
Unified	9%	58%	66%	69%
Current	Unknown	57%	57%	57%

**Table 3-1**  
**UFC Health Metrics – All UFC**  
(as of September 30, 2013)

Core UFC	FY 1998	FY 2011	FY 2012	FY 2013
# Core UFC	NA	43	33	28
Unified	NA	63%	82%	100%
Current	NA	63%	82%	100%

**Table 3-2**  
**UFC Health Metrics – Core UFC**  
(as of September 30, 2013)

### 3.4 FY 2013 Publications and Highlights

- UFC 1-200-01 General Building Requirements
- UFC 1-200-02 High Performance and Sustainable Building Requirements
- UFC 1-201-01 Non-Permanent DOD Facilities in Support of Military Operations
- UFC 1-202-01 Host Nation Facilities in Support of Military Operations
- UFC 3-201-01 Civil Engineering
- UFC 3-220-01 Geotechnical Engineering
- UFC 3-301-1 Structural Engineering
- UFC 3-310-04 Seismic Design for Buildings
- UFC 3-401-01 Mechanical Engineering





UFC 4-010-05 Sensitive Compartmented Information Facilities Planning, Design, and Construction  
UFC 4-021-02 Electronic Security Systems  
UFC 4-022-03 Security Fences and Gates  
UFC 4-023-03 Design of Buildings to Resist Progressive Collapse  
UFC 3-410-01 Heating, Ventilating, and Air Conditioning Systems  
UFC 4-510-01 Design: Military Medical Facilities  
FC 4-721-10N Navy and Marine Corps Unaccompanied Housing

### **3.5 Current UFC Projects**

#### **3.5.1 FY 2013 Program:**

UFC 1-300-08: Criteria for Transfer and Acceptance of DoD Real Property  
UFC 3-340-02: Structures to Resist the Effects of Accidental Explosions  
UFC 3-540-08: Installation Level Renewable Power Generation NEW  
UFC 3-570-01: Cathodic Protection Systems NEW  
UFC 3-600-01: Fire Protection Engineering for Facilities  
FC 4-141-05N: Navy and Marine Corps Smart Grid Control Centers NEW  
UFC 4-740-02F: Air Force Fitness Centers  
UFC 4-760-10N: Navy Museums and Historic Resource Facilities  
UFC 4-832-01N: Design: Industrial and Oily Wastewater Control

#### **3.5.2 FY 2012 Program:**

UFC 1-300-09N: Design Procedures  
UFC 3-101-01: Architecture  
UFC 3-210-10: Low Impact Development  
UFC 3-250-01FA: Pavement Design for Roads, Streets, Walks, and Open Storage Areas  
UFC 3-430-08: Central Heating Plants NEW  
UFC 3-460-03: O&M: Maintenance of Petroleum Systems  
UFC 3-520-05: Stationary Battery Areas  
UFC 3-535-01: Visual Air Navigation Facilities  
UFC 3-560-01: Electrical Safety, O&M  
UFC 3-580-01: Telecommunications Building Cabling Systems Planning and Design  
UFC 3-580-02: Exterior Telecom NEW  
UFC 3-710-01: Parametric Cost Control for Design Build NEW  
UFC 4-420-01: Ammunition and Explosive Storage Magazines NEW  
UFC 4-020-02: Security Engineering Facilities Design Manual



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UFC 4-023-01: Structural Design to Resist Explosives Effects for New Buildings  
UFC 4-211-01N: Aircraft Maintenance Hangars: Type I, Type II and Type III  
UFC 4-215-01: Armories and Arms Rooms NEW  
FC 4-722-01N: Navy and Marine Corps Dining Facilities  
FC 4-730-10N: Navy and Marine Corps Fire Stations  
UFC 4-860-01FA: Railroad Design and Rehabilitation

### **3.5.3 FY 2011 Program:**

UFC 1-201-02: Assessment of Existing Facilities for Use in Military Operations NEW  
UFC 1-300-02: Unified Facilities Guide Specifications (UFGS) Format Standard  
UFC 3-120-01: Air Force Sign Standard  
UFC 3-250-01FA: Pavement Design for Roads, Streets, Walks, and Open Storage Areas  
UFC 3-460-03: O&M: Maintenance of Petroleum Systems  
UFC 4-021-01: Design and O&M: Mass Notification Systems  
UFC 4-133-01N: Navy Air Traffic Control Facilities  
FC 4-179-02N: Small Arms Ranges Design and Maintenance NEW  
FC 4-740-02N: Navy and Marine Corps Fitness Centers  
UFC 4-740-14: Design: Child Development Centers

### **3.5.4 FY 2010 Program:**

UFC 3-400-03: Renewable Energy Systems NEW  
UFC 3-410-04N: Industrial Ventilation  
UFC 3-530-01: Design: Interior and Exterior Lighting and Controls  
UFC 3-535-02: Design Drawings for Visual Air Navigation Facilities NEW  
UFC 3-540-01: Design Engine Driven Generators NEW  
UFC 4-022-01: Security Engineering: Entry Control Facilities/Access Control Points  
UFC 4-023-02: Structural Design to Resist Explosives Effects for Existing Buildings NEW  
UFC 4-023-04: Design of Windows to Resist Explosives Effects NEW  
UFC 4-026-01: Design of Buildings to Resist Forced Entry NEW

### **3.5.5 FY 2009 Program:**

UFC 3-490-06: Design: Elevators NEW  
UFC 4-023-10: Design for Safe Havens NEW  
UFC 4-027-01: Design to Mitigate Terrorist Attacks in Expeditionary Environments NEW

### **3.5.6 FY 2008 Program:**

UFC 4-010-04: Security Engineering Vaults, Arms Rooms, Secure Rooms, and Magazines NEW



### **3.6 FY 2014 Plan**

UFC 1-101-01: Unified Facilities Criteria Program Administration NEW

UFC 1-300-01: Criteria Format Standard

UFC 3-220-10N: Soil Mechanics

UFC 3-320-06A: Concrete Floor Slabs on Grade Subjected to Heavy Loads

UFC 3-510-01 Foreign Voltages and Frequencies Guide

UFC 3-555-01N: 400 Hertz Medium Voltage Conversion/Distribution and Low Voltage Utilization Systems

UFC 3-601-02: Operations and Maintenance: Inspection, Testing, and Maintenance of Fire Protection Systems

UFC 4-020-01: DoD Security Engineering Facilities Planning Manual

UFC 4-451-10N: Design: Hazardous Waste Storage



## 4 UNIFIED FACILITIES GUIDE SPECIFICATIONS (UFGS)

### 4.1 Introduction

UFGS are technical master guide specifications used in construction projects. UFGS reference industry-consensus test and material standards and are mostly prescriptive in nature. UFGS are edited by the designer for each project and speak to the construction contractor. Sections are numbered and titled in accordance with Construction Specifications Institute's (CSI) Masterformat™ 2012 (<http://www.csinet.org/mfnumber>). Sections are organized into 3 parts in accordance with UFC 1-300-02:

#### Part 1 – GENERAL

References

Submittals

#### Part 2 – PRODUCTS

System Performance

Materials

#### Part 3 – EXECUTION

How to install

Field Quality Control and Testing

### 4.2 Criteria Strategy

UFGS provide the level of quality and performance to provide best life-cycle cost sustainment for DoD facilities over 45-55 year service life. UFGS are editable in order to adjust quality and level of performance based on project specific factors such as climate zone, site factors, structural loading, corrosion potential, durability requirements, facility criticality, and installation appearance requirements. New in FY 2013, the DWGs created “bundles” of specifications to facilitate in update and maintenance. These “bundles” group UFGSs of similar content for update at the same time. For instance, the Structural DWG categorized and grouped several Concrete UFGSs together for update and funding. Some UFGS bundles, such as Environmental, may cross DWGs, but will be grouped together with one project lead. DWGs are identifying the primary UFC tied to their UFGS, and its relationship in content (low, medium, or high) as part of this effort; CMS is being programmed to show the UFC and UFGS relationship fields in the document screens.

### 4.3 Health Metrics

The primary indicators of UFGS health are “% Unified” and “% Current”. % Unified represents the percentage of total UFGS used by all three Military Departments that are unified, and indicates progress toward reducing duplicate criteria. % Current represents the percentage of all UFGS that have been revised within a specified target timeframe or refresh rate. Refresh rates are assigned as 3 years, 5 years, or 7 years.

Data collection for % Current began in FY 2012 for UFGSs. The baseline for % Unified data is extracted from the March 1998 report to the Congressional Defense Committees titled “Unified Design Guidance.”



Before August 2012, UFGS changes that were minor in scope were considered “revisions” and allowed to reset the refresh cycle. In August 2012, this metric was adjusted so that minor changes did not count as revisions. Because of this metric adjustment, the current metric value for % current is overstating the true health of the UFGS inventory in accordance with the new measurement standard. Many UFGS that reset their refresh cycle prior to August 2012 based on minor changes, and therefore are not yet due for revision, would be due or overdue for revision had the current rule applied previously.

<b>All UFGS</b>	<b>FY 1998</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Total # UFGS</b>	<b>1179</b>	<b>836</b>	<b>836</b>	<b>836</b>
<b>% Unified</b>	<b>0</b>	<b>67</b>	<b>67</b>	<b>67</b>
<b>% Current</b>	<b>Unknown</b>	<b>Unknown</b>	<b>61</b>	<b>61</b>

**Table 4-1  
UFGS Health Metrics**  
(as of September 30, 2013)

#### **4.4 FY 2013 New, Revised, or Unified Publications**

- UFGS 01 33 29.00 20 SUSTAINABLE REQUIREMENTS
- UFGS 01 62 35 RECYCLED/RECOVERED/BIOBASED MATERIALS
- UFGS 02 56 00 EXTERIOR LIGHTING
- UFGS 03 44 00 REINFORCED AUTOCLAVE AERATED CONCRETE PANELS
- UFGS 07 08 27.00 10 BUILDING AIR BARRIER SYSTEM TESTING FOR COMMISSIONING
- UFGS 07 54 19 POLYVINYL-CHLORIDE ROOFING
- UFGS 08 51 13 ALUMINUM WINDOWS
- UFGS 09 30 13 CERAMIC TILING
- UFGS 23 07 00 THERMAL INSULATION FOR MECHANICAL SYSTEMS
- UFGS 26 12 21 SINGLE-PHASE PAD-MOUNTED TRANSFORMERS
- UFGS 26 13 01 PAD-MOUNTED DEAD-FRONT AIR INSULATED SWITCHGEAR
- UFGS 26 56 00 EXTERIOR LIGHTING
- UFGS 26 41 00 LIGHTNING PROTECTION SYSTEM
- UFGS 26 42 15.00 10 CATHODIC PROTECTION SYSTEM (STEEL WATER TANKS)
- UFGS 33 01 98 SLIP LINING OF EXISTING PIPING FOR LEVEE APPLICATIONS

#### **4.5 Current UFGS Projects**

##### **4.5.1 FY 2013 Program:**

- UFGS 00 22 13 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS



UFGS 01 32 01.00 10 PROJECT SCHEDULE  
UFGS 01 45 35 SPECIAL INSPECTIONS  
UFGS 03 11 13.00 10 STRUCTURAL CAST-IN-PLACE CONCRETE FORMING  
UFGS 03 11 19.00 10 INSULATING CONCRETE FORMING  
UFGS 03 15 00.00 10 CONCRETE ACCESSORIES  
UFGS 03 20 00.00 10 CONCRETE REINFORCING  
UFGS 03 30 00 CAST-IN-PLACE CONCRETE  
UFGS 03 30 00.00 10 CAST-IN-PLACE CONCRETE  
UFGS 03 30 53 MISCELLANEOUS CAST-IN-PLACE CONCRETE  
UFGS 03 31 01.00 10 CAST-IN-PLACE STRUCTURAL CONCRETE FOR CIVIL WORKS  
UFGS 03 35 00.00 10 CONCRETE FINISHING  
UFGS 03 39 00.00 10 CONCRETE CURING  
UFGS 03 44 00 REINFORCED AUTOCLAVE AERATED CONCRETE PANELS  
UFGS 05 05 23 WELDING, STRUCTURAL  
UFGS 05 05 23.13.10 ULTRASONIC INSPECTION OF WELDMENTS  
UFGS 05 12 00 STRUCTURAL STEEL  
UFGS 05 50 14 STRUCTURAL METAL FABRICATIONS  
UFGS 05 50 15 CIVIL WORKS FABRICATIONS  
UFGS 08 34 16 CORROSION CONTROL HANGAR DOORS  
UFGS 08 34 16.10 STEEL SLIDING HANGAR DOORS  
UFGS 08 88 58 AIR TRAFFIC CONTROL TOWER CAB GLASS  
UFGS 09 96 00 HIGH PERFORMANCE COATINGS  
UFGS 26 32 33.00 10 UNINTERRUPTIBLE POWER SUPPLY (UPS) SYSTEM ABOVE 15 KVA CAPACITY  
UFGS 28 00 00 ELECTRONIC SECURITY SYSTEM ACCEPTANCE TESTING  
UFGS 28 20 00.00 20 ELECTRONIC SECURITY SYSTEM (ESS), COMMERCIAL  
UFGS 33 01 99 SLIP LINING OF EXISTING PIPING  
UFGS 33 11 00 WATER DISTRIBUTION  
UFGS 33 32 13.14 PACKAGED SEWAGE LIFT STATIONS, GRINDER PUMP TYPE

**4.5.2 FY 2012 Program:**

UFGS 01 33 29 SUSTAINABLE REQUIREMENTS  
UFGS 03 41 33 PRECAST STRUCTURAL PRETENSIONED CONCRETE  
UFGS 08 34 16.20 VERTICAL LIFT FABRIC DOORS  
UFGS 09 90 00 PAINTS AND COATINGS  
UFGS 23 09 23 LONWORKS DIRECT DIGITAL CONTROL FOR HVAC AND OTHER LOCAL BUILDING SYSTEM  
UFGS 26 35 44.00 20 270 V DC POWER SYSTEM



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UFGS 26 56 20.00 10 AIRFIELD AND HELIPORT LIGHTING AND VISUAL NAVIGATION AIDS  
UFGS 31 00 00 EARTHWORK  
UFGS 32 01 11.52 RUNWAY RUBBER REMOVAL  
UFGS 32 17 23.00 20 PAVEMENT MARKINGS  
UFGS 33 56 63 FUEL IMPERMEABLE LINER SYSTEM  
UFGS 33 82 00 TELECOMMUNICATIONS OUTSIDE PLANT (OSP)  
UFGS XX XX XX TRAFFIC SIGNAGE  
UFGS XX XX XX ADVANCED METERING

### **4.5.3 FY 2011 Program:**

UFGS 01 91 00 BUILDING COMMISSIONING  
UFGS 13 48 00.00 10 SEISMIC PROTECTION FOR MECHANICAL EQUIPMENT  
UFGS 21 08 00 COMMISSIONING OF FIRE SUPPRESSION SYSTEMS  
UFGS 22 08 00 COMMISSIONING OF PLUMBING SYSTEMS  
UFGS 23 07 00 THERMAL INSULATION FOR MECHANICAL SYSTEM  
UFGS 23 81 00 UNITARY HVAC EQUIPMENT  
UFGS 25 10 10 UTILITY MONITORING AND CONTROL SYSTEM (UMCS) FRONT END AND INTEGRATION  
UFGS 26 51 00 INTERIOR LIGHTING  
UFGS 27 10 00 BUILDING TELECOMMUNICATIONS CABLING SYSTEM  
UFGS 28 31 76 INTERIOR FIRE ALARM AND MASS NOTIFICATION SYSTEM

### **4.5.4 FY 2010 Program:**

UFGS 26 31 00 SOLAR PHOTOVOLTAIC (PV) COMPONENTS  
UFGS 48 14 13.00 20 SOLAR LIQUID FLAT PLATE AND EVACUATED TUBE COLLECTORS

### **4.6 FY 2014 Plan**

UFGS 01 33 29 SUSTAINABLE REQUIREMENTS  
UFGS 01 35 26 GOVERNMENTAL SAFETY REQUIREMENTS  
UFGS 01 57 16 TEMPORARY PEST CONTROL  
UFGS 01 57 19.00 20 TEMPORARY ENVIRONMENTAL CONTROLS  
UFGS 01 57 19.01 20 SUPPLEMENTAL TEMPORARY ENVIRONMENTAL CONTROLS  
UFGS 01 57 19.02 TEMPORARY ENVIRONMENTAL CONTROLS (GTMO)  
UFGS 01 57 20.00 10 ENVIRONMENTAL PROTECTION  
UFGS 01 57 23 TEMPORARY STORM WATER POLLUTION CONTROL  
UFGS 01 78 00 CLOSEOUT SUBMITTALS  
UFGS 03 31 29 MARINE CONCRETE



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UFGS 04 01 20 REHABILITATION OF REINFORCED AND UNREINFORCED MASONRY WALLS USING FRP COMPOSITE STRUCTURAL REPOINTING

UFGS 04 01 21 REHABILITATION OF REINFORCED AND UNREINFORCED MASONRY WALLS USING SURFACE APPLIED FRP COMPOSITES

UFGS 04 20 00 MASONRY

UFGS 04 21 26 GLAZED STRUCTURAL CLAY TILE AND PREFACED CONCRETE MASONRY UNITS

UFGS 05 21 13 DEEP LONGSPAN STEEL JOIST FRAMING

UFGS 05 21 19 OPEN WEB STEEL JOIST FRAMING

UFGS 05 21 23 STEEL JOIST GIRDER FRAMING

UFGS 05 30 00 STEEL DECKS

UFGS 05 40 00 COLD-FORMED METAL FRAMING

UFGS 06 20 00 FINISH CARPENTRY

UFGS 07 12 00 BUILT-UP BITUMINOUS WATERPROOFING

UFGS 07 13 53 ELASTOMERIC SHEET WATERPROOFING

UFGS 07 17 00 BENTONITE WATERPROOFING

UFGS 07 21 13 BOARD AND BLOCK INSULATION

UFGS 07 22 00 ROOF AND DECK INSULATION

UFGS 07 92 00 JOINT SEALANTS

UFGS 08 11 16 ALUMINUM DOORS AND FRAMES

UFGS 08 39 53 BLAST RESISTANT DOORS

UFGS 08 41 13 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

UFGS 08 44 00 CURTAIN WALL AND GLAZED ASSEMBLIES

UFGS 08 51 13 ALUMINUM WINDOWS

UFGS 23 09 13 BACNET CONTROLS

UFGS 23 09 23 BACNET HARDWARE

UFGS 23 09 23 LONWORKS DIRECT DIGITAL CONTROL FOR HVAC AND OTHER LOCAL BUILDING SYSTEM

UFGS 23 09 23.13 20 BACNET DIRECT DIGITAL CONTROL SYSTEMS FOR HVAC

UFGS 23 09 93 HVAC SEQUENCING & POINTS SCHEDULE

UFGS 23 64 00 PACKAGED WATER CHILLERS, ABSORPTION TYPE

UFGS 23 64 10 WATER CHILLERS, VAPOR COMPRESSION TYPE

UFGS 23 65 00 COOLING TOWERS

UFGS 25 08 10 UTILITY MONITORING AND CONTROL SYSTEM TESTING

UFGS 26 23 XX DIESEL GENERATORS

UFGS 27 52 23.00 20 NURSE CALL SYSTEM

UFGS 31 21 13 RADON MITIGATION

UFGS 32 01 29.61 PARTIAL DEPTH PATCHING OF RIGID PAVING





**UNIFIED FACILITIES CRITERIA PROGRAM REVIEW  
FY 2013**

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UFGS 32 12 15 HOT-MIX ASPHALT FOR AIRFIELDS  
UFGS 32 13 11 CONCRETE PAVEMENT FOR AIRFIELDS  
UFGS 32 13 13.06 PORTLAND CEMENT CONCRETE PAVEMENTS FOR ROADS AND SITE FACILITIES  
UFGS 33 05 23.19 TRENCHLESS EXCAVATION USING MICROTUNNELING  
UFGS 33 71 01 OVERHEAD TRANSMISSION AND DISTRIBUTION  
UFGS 33 51 15 NATURAL GAS/LIQUID PETROLEUM GAS DISTRIBUTION  
UFGS 33 60 00.00 10 CENTRAL HIGH TEMPERATURE WATER GENERATING PLANT  
UFGS 33 60 01 VALVES, PIPING AND EQUIPMENT IN MANHOLES  
UFGS 33 61 00 PREFABRICATED UNDERGROUND HEATING AND COOLING SYSTEM  
UFGS 33 61 15 HEAT DISTRIBUTION SYSTEM IN CONCRETE TRENCHES  
UFGS 34 11 00 RAILROAD TRACK ACCESSORIES  
UFGS 43 21 13 PUMPS; WATER, CENTRIFUGAL  
UFGS 43 21 39 PUMPS; WATER, VERTICAL TURBINE  
UFGS 46 07 53.13 PACKAGED WASTEWATER TREATMENT EQUIPMENT, AERATION  
UFGS 46 23 00 GRIT REMOVAL AND HANDLING EQUIPMENT  
UFGS 46 25 14 COALESCING [OR VERTICAL TUBE] OIL-WATER SEPARATORS  
UFGS XX XX XX INTERNAL RADIO ENHANCEMENT FOR MEDICAL FACILITIES  
UFGS XX XX XX INTEGRATED TELEVISION SYSTEM FOR MEDICAL FACILITIES  
UFGS XX XX XX CUSTOMER OWNED RADIO PAGE FOR MEDICAL FACILITIES



## 5 CRITERIA CHANGE REQUESTS (CCR)

### 5.1 Introduction

Criteria Change Requests (CCR) are used to document and submit comments on UFC and UFGS from anyone who wishes to comment on the documents worldwide. The CCR database was moved to the criteria management system in FY 2011 to improve working group notification, execution, and tracking of CCRs which had been all but nonexistent in prior years. The new system has improved the execution immensely. However, as a result of the open nature of the CCR commenting system, the number of comments are too numerous for current working group resources. A steady backlog of CCRs continues to accumulate as shown in Table 5-1.

### 5.2 CCR Status

CCR	FY 2011	FY 2012	FY 2013	TOTAL TO DATE (FY 2011-FY 2013)
SUBMITTED	1077	1113	1027	3317
RESOLVED	913	766	693	2372
PENDING RESOLUTION	164	347	334	845

**Table 5-1**  
**CCR Status**  
(as of September 30, 2013)



## 6 KEY INITIATIVES AND ACCOMPLISHMENTS

### 6.1 UFC/UFGS

- Approved the standup of three new Functional Working Groups: Utility Control, Energy Generation, & Contingency Engineering
- Reached 100% unification rate and 100% current (up to date) for all core UFC
- Published 16 UFC
- Implemented IBC 2012
- Published UFC 1-200-02 High Performance and Sustainable Building Requirements
- Published contingency engineering series criteria:
  - UFC 1-201-01 Non Permanent Facilities in Support of Military Operations
  - UFC 1-202-01 Host Nation Facilities in Support of Military Operations
- Began bundling UFGS for more cost-effective and efficient updates

### 6.2 Facility Extended Service Life Cost Study

ODUSD(I&E) funded this study, awarded in FY 2013, as a follow-on to the L3-STRATIS report on the military construction cost premium. The study goal is to identify any initial and life-cycle costs associated with extending the facility service life from 20-25 years, typical for commercial construction, to 40-55 years, typical for DoD construction.

### 6.3 Criteria Management System Enhancements

Enhancements include:

- Developed an efficient web-based process for approvals of UFC by working groups, CP, and ESEP
- Improved document review process to include spreadsheet-based comment collection, consolidation, and disposition. Reviewer login process will capture all stakeholders for future reference
- Developed functionality to connect UFGS to applicable UFCs to improve UFGS update.
- Developed multiple document connection for single projects (spec bundling)

### 6.4 Technology Integration

NAVFAC awarded a project to develop a vendor gateway on the WBDG. Completion is scheduled for 3rd quarter FY 2014.

### 6.5 DoD Corrosion Program

In July 2013, the CP participated in the DoD Corrosion Prevention Program workshop, hosted by the DoD Corrosion Policy and Oversight office in OUSD(AT&L). Outcomes included:

- Formalizing collaboration between the CP and the Facility Corrosion WIPT



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- Mapping the process for integrating corrosion prevention technologies into criteria
- Initiating the disposition and evaluation of 120 corrosion prevention projects/technologies for criteria integration
- Developing and awarding a study to identify facility corrosion factors by installation

### **6.6 Other Technical Support**

As the definitive resource for department-wide technical guidance for facilities and infrastructure, the criteria Discipline Working Groups (DWGs) regularly provide support in response to requirements from Congress, GAO, OMB, or other agencies or organizations. DWGs (acting through the Coordinating Panel) provided key technical content for the following reports submitted in FY 2013:

- DoD Report to Congress on Technologies to Achieve Progressive Collapse Resistance (October 2012) (Prepared by ODUSD(I&E))
- DoD Report to Congress on Installation Master Planning (February 2013) (prepared by ODUSD(I&E))
- DoD Report to Congress: Facilities and Infrastructure Corrosion Evaluation Study (June 2013) (prepared by the DoD Corrosion Policy Office, OUSD(AT&L))