



**US Army Corps  
of Engineers**

MIDDLE EAST DISTRICT

**CENTER OF STANDARDIZATION -  
CONTINGENCY DESIGN STANDARDS**

**Non-Permanent  
Fire Station**

**Facility Standard**

**December 18, 2014**

**Description:**

This Facility Standard establishes the minimum facility capability baseline for all Theaters across the Unified Land Operations (ULO) spectrum of operations sub-categorized by function/task and mission profile that delineates levels of service (e.g., initial entry (first 180 days), temporary (NMT 2-years), semi-permanent (NLT 2-years and NMT 5-years). Theater unique requirements commonly executed within a geographic region are “special considerations” and contained in the “Specific Theater Design Considerations” segment of the Guidance Section of this Facility Standard.

**Applicability:**

- The Non-Permanent Fire Station (hereafter referred to as the NPFS) Facility Standard establishes the baseline planning, design, and construction thresholds for all NPFS functional spaces unless otherwise stipulated (e.g., Theater Options) by superseding Service requirements that cannot be met without a request for deviation (see Waivers below).
- This Facility Standard shall be used in conjunction with the Army Facility Component System (AFCS) with Force Structure, operational, and logistics having priority over technical considerations.
- This Facility Standard applies equally to all Non-Permanent facilities of this type and within the mission consideration parameters outlined in the Description above for Initial, Temporary, and Semi-Permanent. When feasible mandatory requirements and guidance for semi-permanent facilities should be incorporated into the design of temporary facilities.
- This Facility Standard supersedes Service space allowance Facility Standards and/or any permanent construction standards and criteria developed by the Services and serves as the primary authority for Non-Permanent facilities worldwide.
- This facility is excluded from complying with the Architectural Barriers Act Accessibility Standard for Department of Defense Facilities and the October 31, 2008 DoD Memorandum "Access for People with Disabilities" due to its use only by able-bodied military personnel.
- This facility is not required to provide the code required drinking fountains.
- This Facility Standard applies to standalone facilities containing only the functional space described in this Facility Standard, as well as multiuse, facilities that contain functional spaces described in this Facility Standard.

**Waivers:**

- Only the COE has the authority to approve exceptions or deviations to this Facility Standard.
- Waiver Request from this Facility Standard shall be submitted by either the Combatant Command (COCOM), Land Component Command (LCC), or Army Service Component Command (ASCC) J/G-4 and forwarded to the Office of the Chief of Engineers OCE
- All Waiver Requests shall include Command endorsement of cost, logistics and time or delay to implement the deviation cited.
- Deviations will cite specific metric or threshold in question, any relevant citation or requirements to identify the existing conflict requiring resolution, compelling justification or detailed operational or mission impact if deviation is denied.
- All waiver requests to this Facility Standard requires Contingency Facilities Center of Standardization (C-COS) review, adjudication, and/or conflict resolution prior to submission by the appropriate J/G-4 activity cited above.

- All COE approved waivers shall be documented in the appropriate Theater mission/master plan (generally, either the logistics plan or operations plan of the J/G-staff) thereby serving as the modified standards for the facility type affected within confines of the mission scope and duration.
- Permanent construction standards, criteria, and technical engineering guidance may be considered to the extent feasible within the mission context or operational parameters. However, citation of permanent construction standards, criteria, or technical guidance is NOT sufficient, sole justification for deviating from this Facility Standard.
- Late submissions and/or execution delays are NOT sufficient stand alone justification for accelerated review or other dispensation to meeting the Facility Standard contained herein.
- As a non-permanent or expeditionary construction solution, this Facility Standard cannot afford a lengthy adjudication process. Hence, any Waiver Request will be reviewed and adjudicated only once. Multiple submissions absent fundamentally compelling or new facts will not be re-considered. Hence, specificity and definitive explanation of what needs to be deviated from, how that deviation will be met, and a compelling justification of operational or mission impact (what specifically cannot be met) is imperative when submitting a Waiver Request.
- A permanent record of Waiver Requests and their final outcome will be maintained by the C-COS for future trend analysis and refinement of Facility Standards, lessons learned, or future adjudication.

The Facility Standard table(s) establishes thresholds (minimum acceptable) for mandatory requirements contained in this Facility Standard. Deviations from Facility Standard table(s) require waiver approval PRIOR to design implementation or construction execution.

The Guidance Section provides instructions and definitions necessary for the application of the mandatory requirements, thresholds, and metrics outlined and described within the Facility Standard table(s).

As such, they are used in conjunction with the Facility Standard in order to consistently ensure the intent and embedded functionality contained herein will meet the operations requirements for Non-Permanent facility construction within the mission parameters and fiscal constraints for the COCOM Commander.

**FACILITY STANDARD**

ITEM	MANDATORY CRITERIA	Mission Phase
Site Selection & Planning	Fire Station are stand alone facilities. The area served should have aviation assets or a minimum population of 500 personnel, or significant quantities of ammunition or fuel. The most critical determinant for the location of a Fire Station is response time per DoDI 6055.06, <i>DoD Fire and Emergency Services Program</i> .	Initial/Temporary/Semi-Permanent
Vehicular Circulation	Drive through bays shall be utilized.	Temporary/Semi-Permanent
Emergency Generator	Provide 100% emergency generator back-up power for Headquarters and Satellite stations for a 72-hour period.	Initial/Temporary/Semi-Permanent
Fire Station	Provide NLT 2 apparatus bays for NLT 4 vehicles and NMT than 3 apparatus bays for NMT 6 vehicles. Provide sleeping space for NLT 5 personnel and NMT 15. Provide administrative space for NLT 22 and no more than 44 personnel.	Initial/Temporary/Semi-Permanent
	Provide 9.1 m <sup>2</sup> gross area per person NLT 91 m <sup>2</sup> (10 pn staff) NMT 2100 m <sup>2</sup> (230 pn Company +) total gross area.	Semi-Permanent
	Fire Station Facility has total minimum of 1532 m <sup>2</sup> to maximum of 2,137 m <sup>2</sup> gross area, for Type IIB non-combustible construction Type VB combustible construction should not be used.	Initial/Temporary/Semi-Permanent
	Office sizes shall be determined by the Commander and NMT 2,137 m <sup>2</sup> gross area, for Type IIB non-combustible construction	Initial/Temporary/Semi-Permanent
	Sleep area sizes shall be determined by the Commander and NMT 1394 m <sup>2</sup> gross area, for Type IIB non-combustible construction.	Initial/Temporary/Semi-Permanent
	Apparatus/Storage shall be determined by the Commander and NMT 1626 m <sup>2</sup> gross area, for Type IIB non-combustible construction	Initial/Temporary/Semi-Permanent
Administrative Space	Provide space for varied administrative work and meeting space NLT 1.4 m <sup>2</sup> and NMT 4.2 m <sup>2</sup> .	Initial/Temporary/Semi-Permanent
Sleeping Space	Provide sleeping space NLT 6.7 m <sup>2</sup> gross area per person.	Temporary/Semi-Permanent
Station Captain's Suite	Provide a Station Captain's Suite will be a 9.1 m <sup>2</sup> office with a bed and an observation window to the apparatus bay.	Semi-Permanent
Apparatus Bay and Personal Protective Equipment Gear Storage	The apparatus bay contains PPE Gear Storage and Hose Storage Areas.	Initial/Temporary/Semi-Permanent
Provide a Self-Contained Breathing	Provide at 4.7 m <sup>2</sup> .	Semi-Permanent

Apparatus (SCBA) Compressor Room		
SCBA Maintenance Room	Provide at 9.3 m <sup>2</sup> .	Semi-Permanent
Laundry	Provide a protective clothing laundry at NLT 9.1 m <sup>2</sup> and NMT 14 m <sup>2</sup> .	Semi-Permanent
Equipment Wash/Disinfection Room	Provide at 14 m <sup>2</sup> .	Temporary/Semi-Permanent
Work Room/ Equipment Maintenance Room	Provide at 11.2 m <sup>2</sup> .	Temporary/Semi-Permanent
Emergency Medical Services Equipment Storage	If the Commander determines it is required, provide Emergency Medical Services Equipment Storage at 2.4 m <sup>2</sup>	Temporary/Semi-Permanent
Hazardous Material (HAZMAT)/Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE) Equipment Storage and Spare Personal Protective Equipment (PPE) Storage	Provide HAZMAT, CBRNE, and PPE Storage at NLT 22.3 m <sup>2</sup> and NMT 44.6 m <sup>2</sup>	Temporary/Semi-Permanent
Non Flight Line Fire Extinguisher Maintenance and Storage	Provide at 14.9 m <sup>2</sup> .	Temporary/Semi-Permanent
Flight Line Fire Extinguisher Storage	Provide at 14.9 m <sup>2</sup> .	Temporary/Semi-Permanent
Structural and Aircraft Rescue Fire Fighting Agent Storage	Provide at 7 m <sup>2</sup> per aircraft rescue fire fighting truck and 4.5 m <sup>2</sup> per structural truck.	Semi-Permanent
Watch Desk Area	Provide at NLT 9.1 m <sup>2</sup> and NMT 18.2 m <sup>2</sup> .	Temporary/Semi-Permanent
Janitor's Closet	Provide a mop sink.	Temporary/Semi-Permanent
Entry Vestibule	If Commander determines energy conservation measures are mandatory provide an Entry vestibule. Provide if security requirements mandate use for controlled facility access. Entry Vestibule to be NLT 3.7 m <sup>2</sup> gross area and NMT 6 m <sup>2</sup> gross area	Initial/Temporary/Semi-Permanent
Interior Configuration	Minimize the use of Interior Walls to create open and flexible office configurations and to increase potential for reconfiguration based on occupant needs in the future.	Initial/Temporary/Semi-Permanent
Day/Training Room	If Commander determines meeting space is required provide NMT 1.5 m <sup>2</sup> net area per person and NLT 1.4 m <sup>2</sup> per person for net seating area with immediate access from facility entry. NLT 30.8 m <sup>2</sup> and NMT 33 m <sup>2</sup> .	Initial/Temporary/Semi-Permanent
Toilets	Provide if no latrine available within 100 meters.	Initial/Temporary/Semi-Permanent

	Latrine NMT 3.7 (ABA compliant) and NLT 1.4 gross m <sup>2</sup> per person Toilet ratio is NLT 1:20 and NMT 1:10 Lavatory ratio is NLT 1:20 and NMT 1:10	
Tele-communications Room	Comply with I3A Technical Criteria.	Initial/Temporary/Semi-Permanent

## **GUIDANCE**

**General.** The following guidance for application of this Facility Standard is provided for design/construction agent use in coordination with the construction provider within Theater and as designated by the Service Component Commander (SCC)/Land Component Commander (LCC) or equivalent activity as designated by the Combatant Command (COCOM). All design/construction agents shall incorporate the key mandatory design features described within the Guidance Section herein in close coordination with the US Army Corps of Engineers (USACE) Contingency - Center of Standardization (C-COS) – Middle East District, Transatlantic Division. All Temporary and Semi-Permanent Facility projects must be reviewed by the COS.

1. This section of the Facility Standard is a necessary component for determining the application and implementation of the mandatory requirements and thresholds established in this Facility Standard. The C-COS, in coordination with the Contingency Facility Design Team (FDT), is the final arbitrator for any conflicts or inconsistencies in the application of these Facility Standards as well as a mandatory reviewer prior to submission of any formal Waiver Requests. Citing project execution delays as the sole justification for expedited review or other accelerated dispensation for deviating from meeting the Facility Standards is NOT considered a compelling reason for deviation. Late submissions must be substantiated by unforeseen impact; documented life safety, health and welfare issue; or, compelling mission imperatives that cannot be met without an approved waiver.
2. This Facility Standard applies to the full range of Initial through Semi-Permanent construction solutions throughout the spectrum of operational durations.
3. Commander is defined as Combatant Commander or designee with a rank no lower than J/G-4 in the COCOM, LCC, or ASCC staff.
4. Local Commander is defined as the senior officer with facility responsibility.

### **Design Philosophy.**

1. Doctrine, operations, and readiness requirements validation across all Doctrine, Organization, Training, Materiel, Leader Development and Education, Personnel, and Facilities (DOTMLPF) domains were used as the foundation for requirements. These requirements are vetted by joint processes in response to capabilities identified through the Joint Capabilities Identification and Documentation System (JCIDS) to the maximum extent feasible. Consequently, requirements that are contained herein consider past shortfalls and gaps, current needs, and future requirements simultaneously from a facilities context. Hence, deviation from these requirements must carefully consider longer-term needs when considering temporary and/or semi-permanent solutions.
2. The primary staff activity responsible for construction in the Theater of Operations is the J/G-4 in the COCOM, LCC, or SCC staff. Consideration to logistical and fiscal tails associated with building materials, indigenous capabilities, threat, and mission scope/duration are primary decision points that override engineering solutions within a deployed or contingency arena. As such, mission decision parameters may override engineering technical solution or approach except in the areas of health and life safety. Notwithstanding are host nation or Status of Forces Agreements that are many times outside the military commander's purview. While every effort to consider sustainability, design impact, and standardized layout will be made, Force Structure, geopolitical, threat, security, and mission decision parameters will be paramount in selecting any construction solution method, materials, or approach (FM 3-34, JPub 3-34).
3. All requirements are portrayed in performance results at the function or task level. This affords a wide range of construction material and engineering method solutions that are tailorable to the mission profile of the support mission at the time a facility is planned and

designed. Mission duration projections may influence the selection of materials or methods of construction. This standard should not be utilized to perform ‘what if’ scenario analysis. Threat and security are critical decision components for this aspect of design application and significantly influence ultimate design and construction solutions. Essentially, if the nature of the construction is to strive for a level of durability, constructability, or efficiency commensurate to permanent construction standards and criteria, then the design and construction requirements fall outside the mission scope and intent of this Standard. It is imperative that prior to commencing planning and design, such a determination be made at the COCOM, LCC, or SCC level, whichever echelon has been designated as the “executing” or “executive” agent within Theater.

4. As a Non-Permanent solution, this Facility Standard must also consider allied, coalition, and host nation requirements that are theater unique if they exceed the UFC 1-201-01 requirements. When these conditions exist or are known habitual considerations, they shall be addressed in individual Theater Baselines contained below.

**Specific Theater Design Consideration(s):**

- None

**Application Guidance.**

The minimum requirement is a single room for administrative support.

**Reference Criteria.** The designs shall use the latest editions of the following design criteria:

Joint Publication

JP 3-34, Joint Engineer Operations

The Unified Facilities Criteria:

UFC 1-201-01 Non-Permanent DOD Facilities in Support of Military Operations

Army Regulations:

AR 420-1, Facilities Engineering, Army Facilities Management

AR 405-70 Utilization of Real Property

Field Manual

FM 3-34 Engineer Operations

**Facility Category Code:** The category code does not automatically imply specific GSF limit. “T” designates Non-Permanent Construction.

CATEGORY CODE	DESCRIPTION
T73010	Fire Station