DEPARTMENT OF THE ARMY
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

DAIM-ZA

APR 9 2010

MEMORANDUM FOR

Commander, US Army Corps of Engineers (CEMP), 441 G Street NW, Washington, DC 20314
Installation Management Command (IMCOM), 2511 Jefferson-Davis Highway, Arlington, VA 22202-3926

SUBJECT: Army Standard for Fire Stations

1. The Army Standard for Fire Stations (encl) is hereby approved for implementation.

2. These standards apply to all Army Components. Only the Assistant Chief of Staff for Installation Management has the authority to approve exceptions to this standard. Waivers from the Army Standard must be approved in accordance with AR 420-1.

3. These standards are mandatory for Military Construction, Army projects in FY13 and beyond and, where feasible, will be incorporated into FY12 projects. Designs based on these Army Standards, Standard Designs, and Design Criteria will be developed consistent with Military Construction transformation methodologies.

4. The chair for the Facilities Design Team (FDT) is Mr. Bill E. Sproul, PE, DAIM-ODC, William.Sproul1@us.army.mil, (703) 604-1454. The FDT POC at the USACE Center of Standardization for Fire Stations is Mr. Juan Pace, CEHNC-ED-CS-A, Juan.R.Pace@usace.army.mil, (256) 895-1675.

Encl

RICK LYNCH
Lieutenant General, GS
Assistant Chief of Staff
for Installation Management

DEPARTMENT OF THE ARMY
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The Army Standard for Fire Stations

Reviewed (March-2021)

Description: The standard Army Fire Station is an emergency respondent facility which supports the needs of military, civilians, soldiers and families during fire and medical emergency situations. The Fire Station is comprised of three main essential elements: **Apparatus Equipment & Maintenance, Administrative & Training, and Living areas.**

Applicability:

- The Army Standard applies to Active, Reserve, and National Guard Component facilities on Army Garrisons.
- All United States Army Corps of Engineers (USACE) geographic districts shall incorporate the key mandatory design features described herein in close coordination with USACE Center of Standardization (CoS) for Fire Station facilities.
- The criterion covers all MCA funded Army Fire Station Facilities. The functional relationships are mandatory unless variations are approved by the CoS. The size of the Army Fire Stations shall be based on the mission of the installation. The staff size shall depend on the number of companies in the facility and whether the facility is a Satellite or a Headquarters facility. All projects must be reviewed by the CoS to ensure conformance with the Army Standard.

Waivers:

- Only the Assistant Chief of Staff for Installation Management has authority to approve exceptions to the Army Standard.
- Waivers from the Army Standard must be requested in accordance with Army Regulation (AR) 420-1 and the Army Facilities Standardization Program Charter, latest edition.
- All requests for a waiver to the Army Standard require CoS conflict resolution prior to submission by the Garrison Commander.
- Garrison Army Standard waiver request submissions must be received in sufficient time to allow the completion of the Facility Design Team review and development of recommendations or courses of action for the Army Facilities Standardization Committee to consider prior to implementation into project design.

- All waiver requests shall include compelling rationale of functional and operational deviations to include substantiating documentation in sufficient detail for the Army to assess implications of approving the waiver.

- All Headquarters, Department of the Army (HQDA) approved waivers shall be documented in installation master plans thereby serving as the installation's modified standards for the facility type affected.

- Late submissions and/or project delays are NOT sufficient stand-alone justification for accelerated review or other dispensation to meeting the Army Standard contained herein.

The Guidance section provides instructions and definitions necessary for the application of the mandatory requirements contained in the tabular section of the Army Standard. As such, they are used in conjunction with the Army Standard in order to ensure the intent and embedded functionality contained herein shall meet the Army's mandatory requirements set forth by this standard.

The Army Standard for Fire Stations is as follows and is based on Army Baseline Standards:

THE ARMY STANDARD FOR FIRE STATIONS

ITEM	MANDATORY CRITERIA
Facility Consolidation	Fire Stations are intended to be stand-alone facilities except when combining a Fire Station with Military Police (MP), Safety, and Directorate of Emergency Services (DES) functions, which is called a DES Facility. An Army Standard has been developed for a DES Facility. No other facility types can be combined with the Fire Station.
Energy and Sustainability	Fire Stations shall be designed to meet energy and sustainable design and development requirements as established by Federal Law and Department of the Army policy.
Planning and Design	This Standard provides guidelines for evaluating, planning, programming, and designing Structural and Aircraft Rescue Fire Fighting (ARFF) Fire Stations. The information in this Standard applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental Unites States (CONUS) and outside the continental US (OCONUS). Alteration and renovation projects shall update existing facilities to meet the guidance and criteria contained in this Standard within budgetary constraints.
Accessibility	The Administrative & Training Areas in the Fire Station are the only areas open to general public and are the only areas within the Fire Station that are required to be Architectural Barriers Act of 1968 (ABA) accessible and shall be in accordance with the latest edition of the Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, as required by Architectural Barriers Act, title 42 United States Code, sections 4151 - 4157, (42 USC 4151-4157).

Site Selection and Planning	The most critical determinant for the location of a Fire Station is response time. In addition to response time, provide adequate site space to accommodate the fire fighting vehicular turning radii, personnel parking, visitor parking, delivery vehicles, storage requirements, and reserve
	vehicles (if applicable). Direct access and response time may conflict with tightening antiterrorism (AT) criteria - ensure that trucks shall not have to cross access control points to reach a target structure or flight line. Facility site shall be prominent and easily visible from the target areas (structures or flight lines).
Vehicular Circulation/Service Road/Drives	Provide site entrances, exits, service drives and any special circulation areas sized to accommodate the largest vehicle that uses the area. Drive through bays shall be utilized. Provide a service road/drive on the side of the building adjacent to the mechanical room. The service drive shall have a controlled access point.
Staff/Visitor Parking	Provide parking for authorized Fire Station staff. Parking area shall be sized to accommodate two shifts. Provide parking for Fire Station visitors. Visitor parking shall be separate from staff parking. Access drives to staff and public parking shall not cross the vehicle access drive out of the Apparatus Bay. Visitor parking spaces shall be approximately 25% of staff parking and shall contain the appropriate number of handicapped accessible spaces as determined by the Architectural Barriers Act of 1968.
Exterior Lighting	Exterior lighting systems shall be provided for parking areas, sidewalks, building entrances and perimeter for safety, evacuation and security measures. If the facility is near a flight line, site lighting shall not interfere with or be a distraction to aircraft movement at night.
Response Time	Refer to Department of Defense (DoD) Instruction 6055.06, *DoD Fire and Emergency Services Program* to determine required response times.
Patio	Provide outdoor patio space adjacent to the kitchen/dining area, residential in nature, and provide area for firefighters to prepare meals in an outdoor setting that promotes stress reduction and team building. A one or two company station shall have 150 SF and a 3-Company station shall have 250 SF.
Canopy	Provide overhead protection at fire station entrance and when required at egress doors at 40 SF. Canopy area shall be calculated using US Army Technical Instructions 800-01 (TI 800-01), Design Criteria. As required by geographical location, this area may be required to be a vestibule at 80 SF per vestibule area.
Emergency Generator	Provide 100% emergency generator back-up power for Headquarters and Satellite stations for a 72-hour period.

Primary Facility Scope and Capacity for Standard Structural Fire Station

The facility sizes below are based on Standard Structural Fire Stations.

Gross Square Feet (GSF) Deviation: The facility constructed gross area shall not exceed 105% of the space allocation set forth in this document to accommodate site, construction, or environmental factors.

The number of Apparatus Bays and Dorm Rooms are used to determine the overall size of the Fire Station facility.

A Standard One Company Fire Station includes a two bay apparatus at 4,095 SF net. A Standard Two and Three Company Fire Station includes a three bay apparatus at 5,642 SF net.

Facility Size Classification	Facility Size (GSF)	Apparatus Bay	Number of Emergency Vehicles **(See Note 1)**	Dorm Rooms **(See Note 2)**	Staffing (Min.)
One Company Headquarters (HQs)	16,500	2	Up to 4	5	22
One Company Satellite	11,500	2	Up to 4	5	12
Two Company HQs	20,200	3	Up to 6	10	33
Two Company, Two Story HQs	24,600	3	Up to 6	10	33
Two Company Satellite	15,000	3	Up to 6	10	22
Three Company HQs	23,100	3	Up to 6	15	44
Three Company Two Story HQs	27,600	3	Up to 6	15	44
Three Company Satellite	17,500	3	Up to 6	15	32

Notes:

1) Total number of Apparatus Bays shall be determined by the authorized number of emergency vehicles based on the current Table of Distribution and Allowance (TDA). One additional bay is authorized for every additional one to two emergency vehicle(s).

2) When Emergency Medical Services (EMS) is authorized based on the current TDA, two (2) additional dorm rooms are authorized.

Primary Facility Scope and Capacity for Standard Aircraft Rescue Fire Fighting (ARFF) Fire Station

The facility sizes below are based on Standard ARFF Fire Stations.

Gross Square Feet (GSF) Deviation: The facility constructed gross area shall not exceed 105% of the space allocation set forth in this document to accommodate site, construction, or environmental factors.

The number of Apparatus Bays and Dorm Rooms are used to determine the overall size of the Fire Station facility.

A Standard One Company Fire Station includes a two bay apparatus at 4,550 SF net. A Standard Two and Three Company Fire Station includes a three bay apparatus at 6,370 SF net.

Facility Size Classification	Facility Size (GSF)	Apparatus Bay	Number of Emergency Vehicle **(See Note 1)**	Dorm Rooms **(See Note 2)**	Staffing (Min.)
One Company HQs	17,100	2	Up to 4	5	22
One Company Satellite	12,100	2	Up to 4	5	12
Two Company HQs	21,100	3	Up to 6	10	33
Two Company, Two Story HQs	25,600	3	Up to 6	10	33
Two Company Satellite	15,800	3	Up to 6	10	22
Three Company HQs	24,000	3	Up to 6	15	44
Three Company Two Story HQs	28,500	3	Up to 6	15	44
Three Company Satellite	18,300	3	Up to 6	15	32

Notes:

1) Total number of Apparatus Bays shall be determined by the authorized number of emergency vehicles based on the current Table of Distribution and Allowance (TDA). One additional bay is authorized for every additional one to two emergency vehicle(s).

2) When Emergency Medical Services (EMS) is authorized based on the current TDA, two (2) additional dorm rooms are authorized.

Layout and Adjacencies

The key internal adjacencies are driven by response time. The locations of the living areas shall accommodate a turn out response time of 60 seconds from the time of dispatch to the Apparatus Bay(s) in the event of an alarm.

Fire Protection

Fire Station facilities shall be fully protected by automatic fire suppression,

	fire detection, and building alarm systems.
Electrical Design	Provide site electrical utilities, interior distribution systems, communications, and security according to the latest codes and criteria.
Firefighter Alert System	Provide simultaneous light and audible control inside and outside to alert on duty staff of emergencies.
Apparatus, Equipment & Maintenance- (Room Features)	
Apparatus Bay	1. The Apparatus Bay(s) shall be properly sized to house authorized emergency vehicles as per the Fire Station's Table of Distribution and Allowance (TDA) for the installation. The size of Apparatus Bays are used to determine the overall area of the Fire Station facility. 2. Bays shall be double length and shall be sized according to truck modules of two medium sized trucks. ③ A Standard Structural Apparatus for a One-Company Fire Station shall be 45 ft. Wide X 91 ft. long (4,095 SF) net. ③ A Standard Aircraft Rescue Fire Fighting Apparatus for a OneCompany Fire Station shall be 50 ft. Wide X 91 ft. long (4,550 SF) net. ③ A Standard Structural Apparatus for a Two and Three-Company Fire Station shall be 62 ft. Wide X 91 ft. long (5,642 SF) net. ③ A Standard Aircraft Rescue Fire Fighting Apparatus for a Two and Three-Company Fire Station shall be 70 ft. Wide X 91 ft. long (6,370 SF) net. ③ An additional Structural bay shall be 17 ft. Wide X 91 ft. Length (1,547 SF) net. ③ An additional Aircraft Rescue Fire Fighting bay shall be 20 ft. Wide X 91 ft. Length (1,820 SF) net. 3. Bays shall be sited to provide ready access for trucks to maneuver into traffic and any major thoroughfare. 4. Drive through bays shall be utilized. 5. Each bay shall include the following support utility drops for vehicles: air handling/air quality systems, overhead cold water fill, compressed air, cold water, floor trench drain(s), lighting, power, and oil/water separator. 6. A complete Apparatus Bay Air Cleaning System shall be utilized consisting of exhaust filtration for apparatus and for off-gassing from Personal Protective Equipment. A hose based or Fire Apparatus Vehicle Exhaust Removal System (FAVERS) system may be used in conjunction with the filtration system. 7. Maintain total volume Apparatus Bay air quality within established Regulatory Guidelines for Volatile Organics, Nitrogen Oxide, Sulfur Dioxide, Carbon Monoxide, Particulates, Diesel Exhaust Particulates established by: ③ NIOSH- National Institute for Occupational Safety & Health REL

	(Recommended Exposure Limit/10 Hour Time Weighed Average) ③ OSHA- Occupational Safety & Health Administration PELS (Permissible Exposure Limit/ 8 Hour Time Weighed Average) ③ ACGIH- American Conference of Governmental Industrial Hygienists: Threshold Limit Value (Average Over 8 Hour Work Shift)/ Short Term Exposure Limit (Over 15 Minute Period) ③ Latest NFPA 1500 - National Fire Protection Association Standard on Fire Department Occupational Safety and Health Program 8. Provide an oil-water separator with holding tank for waste water from all Apparatus Bay drains. 9. Bays shall be heated except in very temperate/tropical climates, but shall not be air conditioned. 10. Provide an emergency eye wash fountain and shower, foot operated mop sink with mop hanging rack, and ice machine.
Apparatus, Equipment & Maintenance (Room Features)- (Cont.)	**The following are areas required to support the Apparatus Bay and shall be included in every Headquarters facility: Station Captain's Suite, Personal Protective Equipment (PPE) Gear Storage, Hose Storage, Self-Contained Breathing Apparatus (SCBA) Maintenance Room, Self-Contained Breathing Apparatus (SCBA) Compressor Room, Protective Clothing Laundry, Equipment Wash/Disinfection, Work Room/ Equipment Maintenance, Emergency Medical Services (EMS) Equipment Storage, Fire Extinguisher Inspection (Flight Line or Non-Flight Line) Maintenance and Storage or Clean-Up Room or PPE Gear Storage Room, and Hazardous Material/Chemical, Biological, Radiological, Nuclear, Explosive Equipment Storage and Spare Personal Protective Equipment Storage.** **The following are areas required to support the Apparatus Bay and shall be included in every Satellite facility: Personal Protective Equipment (PPE) Gear Storage, Hose Storage, Self-Contained Breathing Apparatus (SCBA) Maintenance Room, Self-Contained Breathing Apparatus (SCBA) Compressor Room, Protective Clothing Laundry, Equipment Wash/Disinfection, Work Room/ Equipment Maintenance, Emergency Medical Services (EMS) Equipment Storage, and Fire Extinguisher Inspection (Flight Line or Non-Flight Line) Maintenance and Storage or Clean-Up Room or PPE Gear Storage Room.**
Station Captain's Suite	The Station Captain Office shall only be located in the Headquarters Fire Stations. This typical office space at 120 net square feet shall contain a workstation and private dorm room at 85 net square feet. The dorm room shall have direct access from the Station Captain's office and direct access to the Assistant Chief's Toilet. The Station Captain's office shall be accessible from the Apparatus Bay and an observation window shall be provided to the Apparatus Bay.
Personal Protective Equipment (PPE) Gear	Shall have a locker area to accommodate Personal Protective Equipment. The area shall have an air quality system to filter and remove gaseous

Storage (Included in Apparatus Bay Area)	emissions from stored gear and is located along the side walls of the Apparatus Bay. The locker layout shall allow free air circulation around and throughout the clothing. Personal Protective Equipment Gear Storage is located along the side walls of the Apparatus Bay. As required by installation, this area can assigned in place of the Fire Extinguisher Inspection (Flight Line or Non-Flight Line) Maintenance and Storage and shall be accessible from the Apparatus Bay.
Hose Storage (Included in Apparatus Bay Area)	Shall have area for drying and storage of hoses. Hoses are rolled and stored on mobile storage racks and shall be accessible from Apparatus Bay. Hose storage racks are located along the side walls of the Apparatus Bay.
Self-Contained Breathing Apparatus (SCBA) Maintenance Room	Shall have area to service and maintain Self-Contained Breathing Apparatus at 144 net square feet. The room also contains a Mask Pressure Testing Machine. Shall provide area for open shelf storage units. This area shall be accessible from Apparatus Bay and shall have direct access to the Self-Contained Breathing Apparatus Compressor Room.
Self-Contained Breathing Apparatus (SCBA) Compressor Room	Shall have room to house compressor to support the Self-Contained Breathing Apparatus at 50 net square feet. Shall have adequate access to this area for the placement of compressor equipment. This space shall include sound attenuation. A compressed air supply line shall be provided from this room to the Apparatus Bay and Self-Contained Breathing Apparatus Maintenance Room. Shall have direct access from the SelfContained Breathing Apparatus Maintenance Room.
Protective Clothing Laundry	Shall have laundry facility area to wash and disinfect firefighters' protective clothing. This area shall be accessible from the Apparatus Bay. ③ 100 net square feet shall be provided for a One and Two-Company Fire Station. ③ 150 net square feet shall be provided for a Three-Company Fire Stations.
Equipment Wash/ Disinfection	Shall have area to wash/disinfect and initiate any minor repair to firefighters' equipment at 150 net square feet. Shall provide area for a work table with adequate lighting and ample storage. Shall provide area for hanging racks and open shelf storage units. This area shall be adjacent to the Work Room/Equipment Maintenance and shall be accessible from the Apparatus Bay. Provide an oil-water separator with holding tank for waste water from all drains.
Work Room/ Equipment Maintenance	Shall have area to maintain and repair firefighting equipment at 120 net square feet. Provide area for a work bench with adequate lighting and ample storage. This room area to be adjacent to the Equipment Wash/Disinfection Area and shall be accessible from the Apparatus Bay. Provide an oil-water separator with holding tank for waste water from all drains.
Emergency Medical Services (EMS) Equipment Storage	Shall have Emergency Medical Services storage area for supplies at 25 net square feet. Emergency Medical Services storage shall be fully conditioned, accessible from the Apparatus Bay and shall be restricted and

	controlled. In the Headquarters stations this area shall be located in the Hazardous Material/Chemical, Biological, Radiological, Nuclear, Explosive Equipment Storage area.
(Hazardous Material/Chemical, Biological, Radiological, Nuclear, Explosive Equipment Storage (HAZMAT/CBRNE) and Spare Personal Protective Equipment (SPPE) Storage	1. Shall have storage area to house equipment classified for use with hazardous materials. Sufficient open shelf storage areas shall be provided. This area shall be accessible from the Apparatus Bay. ③ 240 net square feet shall be provided for a One-Company Fire Station. ③ 360 net square feet shall be provided for a Two-Company Fire Station. ③ 480 net square feet shall be provided for a Three-Company Fire Station. 2. The Hazardous Material/Chemical, Biological, Radiological, Nuclear, Explosive Equipment Storage area shall contain a Logistics Officer area. This area is a typical office space that shall contain a workstation at 80 net square feet. 3. In the Headquarters stations, the Emergency Medical Services Equipment Storage shall be located in the Hazardous Material/Chemical, Biological, Radiological, Nuclear, Explosive Equipment Storage area at 25 net square feet.
Fire Extinguisher Inspection (Non Flight Line) Maintenance and Storage-Option for the Clean-Up Room or the Personal Protective Equipment (PPE) Gear Storage Room	1. This area accommodates maintenance and service of fire extinguishers at 160 net square feet. This area shall be accessible from the Apparatus Bay. 2. As required by installation mission, this room may be a Clean-Up Room. This area provides showers and lockers for the firemen to decontaminate themselves before entering the living portion of the fire station. A service window shall be provided to the Protective Clothing Laundry room. ③ Two private showers w/ changing areas and full privacy doors shall be provided for a One-Company Fire Station. ③ Two private showers w/ changing areas and full privacy doors shall be provided for a Two-Company Fire Station. ③ Three private showers w/ changing areas and full privacy doors shall be provided for a Three-Company Fire Station. 3. As required by the installation's mission, this room may be a Personal Protective Equipment Gear Storage Room. Shall have a locker area to accommodate Personal Protective Equipment. The area shall be kept under constant negative pressure to evacuate gaseous emissions from stored gear or filtration equipment that is designed to filter and remove gaseous emissions from Personal Protective Equipment shall be used. The locker layout shall allow free air circulation around and throughout the clothing.
Fire Extinguisher (Flight Line) Maintenance and Storage-Option for the Clean-Up	1. This area accommodates maintenance and service of fire extinguishers at 160 net square feet. This area shall be accessible from the Apparatus Bay. This area accommodates maintenance and service of flight line fire

Room or the PPE Gear Storage Room	extinguishers and includes both an indoor storage/maintenance and an outdoor storage area. 2. As required by installation mission, this room may be a Clean-Up Room. This area provides showers and lockers for the firemen to decontaminate themselves before entering the living portion of the fire station. A service window shall be provided to the Protective Clothing Laundry room. ③ Two private showers w/ changing areas and full privacy doors shall be provided for a One-Company Fire Station. ③ Two private showers w/ changing areas and full privacy doors shall be provided for a Two-Company Fire Station. ③ Three private showers w/ changing areas and full privacy doors shall be provided for a Three-Company Fire Station. 3. As required by the installation's mission, this room may be a Personal Protective Equipment Gear Storage Room. Shall have a locker area to accommodate Personal Protective Equipment. The area shall be kept under constant negative pressure to evacuate gaseous emissions from stored gear or filtration equipment that is designed to filter and remove gaseous emissions from Personal Protective Equipment shall be provided. The locker layout shall allow free air circulation around and throughout the clothing.
Storage of Structural and Aircraft Rescue Fire Fighting (ARFF) Agent	As dictated by mission requirements with at least one required per department, this area is a single-story structure separate from the fire station building. It shall be located along the drive leading into the Apparatus Bay for ease of loading and unloading of firefighting agents. 75 SF per Aircraft Rescue Fire Fighting truck and 48 SF per structural truck are required for sizing.
Administrative & Training (Room Features)	**Shall group all the administrative offices and training/support areas of similar function in the same general area and this general area shall be considered the Administrative Office Area.** **The following offices shall be identified and included in every Headquarters facility: Provide separate dedicated offices for the Fire Chief, Deputy Fire Chief, Assistant Chief, Training Officer, Assistant Chief for Fire Prevention, Inspector(s), Emergency Medical Services (EMS), and Hazardous Materials (HAZMAT) Safety. In the Inspector(s)' office, there is one inspector per company. Provide a Lobby, ABA Toilet, General Administration Storage, Department Training Room, Computer Training/Testing Room, and Telecommunications Room. All Dispatch and dispatch-like functions shall be grouped together. Dispatch Areas include: Dispatch Supervisor, Dispatch Toilet, and Dispatch Kitchenette, and Uninterrupted Power Source (UPS) Room.** **The following offices shall be identified and included in every Satellite facility: Provide separate dedicated office for the Stations Officer's Office/Watch Desk Area with an adjacent UPS Room. Provide a Lobby, ABA Toilet, General Administration Storage, Computer**

	Training/Testing Room, and Telecommunications Room.
Fire Chief's Suite	1. This typical office space at 200 net square feet shall contain a workstation, private dorm room at 85 net square feet, and private toilet at 60 net square feet. In the private toilet provide water closet, shower, and lavatory. Shall be adjacent to the Deputy Chief's Office and directly off the Lobby. Operable windows shall provide natural light. Anti-terrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions shall be addressed. 2. Independent environmental control shall be provided for the Fire Chief's Office.
Fire Chief's Conference Room	This area shall provide conference space at 240 net square feet for the station on-duty personnel and provide space for a small conference table for 8 to 10 people. The Fire Chief's Conference Room shall be located off of the corridor in the Administrative Office area.
Deputy Chief's Office	1. This typical office space at 120 net square feet shall contain a workstation and be located adjacent to the chief's office and directly off the lobby. 2. Independent environmental control shall be provided for the Deputy Chief's Office.
Station Officer's Office/Watch Desk	This area at 230 net square feet serves to control public access to the station and shall contain a Watch Desk whose function is to receive emergency calls from dispatch. This area contains the security monitors if provided for the station and is occupied 24 hours a day 7 days a week. This area shall have direct access to the apparatus bay and the lobby. Operable windows shall provide natural light. Anti-terrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions. Independent environmental control shall be provided. ③ The UPS room at 60 net square feet is the termination point for all data and communication utilities to support the Station Officer's Office/Watch Desk area only. This room also houses the equipment racks for the Station Officer's Office/Watch Desk area's computer networks, telephone, communication feeds, and an UPS. The UPS room shall be adjacent to and accessible from the Station Officer's Office/Watch Desk area.
Assistant Chief's Suite	1. This typical office space at 120 net square feet shall contain a workstation, private dorm room at 85 net square feet, and private toilet at 60 net square feet. The dorm room shall have direct access from the Assistant Chief's office. In the toilet provide water closet, shower, and lavatory. The toilet shall have access from the Assistant Chief's dorm room and the Station Captain's dorm room. The Assistant Chief area shall be located off of the corridor in the Administrative Office area. 2. Independent environmental control shall be provided for the Assistant Chief's Suite.
General Administration	Shall provide storage at 80 net square feet for general administration and

Storage	office supplies. Shall be located off of the corridor in the Administrative Office area. Provide built in storage shelving.
Lobby	Shall be at 100 net square feet and serves as the entrance to the facility and be a gathering/waiting space for the visiting public. The lobby is the entrance into the Administrative Office area and shall be recognizable from the outside as a well-lit, inviting space.
Public Toilet	Shall provide an ABA accessible toilet at 48 net square feet with a lavatory and water closet off of the Lobby area.
Dispatch's Suite	1. This room at 256 net square feet functions to receive and dispatch fire related emergency related calls. This room also serves to control public access to the station. This area contains the security monitors for the station and is occupied 24 hours a day, 7 days a week. Provide free access area around the consoles for this room. Provide a dedicated toilet and kitchenette directly adjacent to and accessible from the room for staff use. Provide tinted windows. If possible, operators shall be able to see exterior conditions. Antiterrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions shall be addressed. This area shall have direct access from the lobby. ③ A workstation area shall be provided for a Dispatch Supervisor. The Dispatch Supervisor shall be located in the Dispatch area. ③ Shall provide ABA accessible toilet at 48 net square feet with a lavatory and water closet adjacent to and accessible from the Dispatch area for staff use. ③ Shall provide kitchenette at 20 net square feet with a kitchen sink and disposal adjacent to and accessible from the Dispatch area for staff use. ③ The UPS room at 60 net square feet is the termination point for all data and communication utilities to support the Dispatch area only. This room also houses the equipment racks for the Dispatch area's computer networks, telephone, communication feeds, and an UPS. The UPS room shall be adjacent to and accessible from the Dispatch area. 2. Independent environmental control equipment shall be provided for the Dispatch Suite.
Telecommunications Room	Shall provide a preferably centrally located room at 180 net square feet for the termination of all data and communication utilities in the facility. There shall be a minimum of one Telecommunications Room on each floor, designed in accordance with I3A Guide and ANSI/EIA/TIA-569-B.
Assistant Chief for Fire Prevention's Office	This typical office space at 120 net square feet shall contain a workstation located adjacent to and accessible from the Inspectors' Office area or accessible from the corridor in the Administrative Office area.
Inspector(s)' Office	This typical office space contains workstations for the Fire Inspectors located adjacent to and accessible to the Assistant Chief for Fire Prevention's Office. This area shall be located off of the corridor in the

	Administrative Office area. ③ 144 net square feet shall be provided for a One-Company Fire Station. ③ 288 net square feet shall be provided for a Two-Company Fire Station. ③ 432 net square feet shall be provided for a Three-Company Fire Station.
Training Officer's Office	This typical office space at 100 net square feet shall contain a workstation. Observation windows shall be provided to the Computer Training/Testing Room and Department Training Room to monitor and control access. This area shall be located off of the corridor in the Administrative Office area.
Department Training Room	1. Shall provide a room for continuing education and training. This area shall be located off of the corridor in the Administrative Office area. Access to the room shall be controlled by the Training Officer. Operable windows shall provide natural light. Anti-terrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions shall be addressed. ③ 420 net square feet shall be provided for a One-Company Fire Station. ③ 700 net square feet shall be provided for a Two-Company Fire Station. ③ 980 net square feet shall be provided for a Three-Company Fire Station. 2. Shall provide a separate room at 80 net square feet for storage of audiovisual equipment, media, and additional equipment and furnishings adjacent to and with direct access from the Department Training Room. 3. Independent environmental control shall be provided for the Department Training Room.
Computer Training/Testing Room	1. Shall provide a room at 190 net square feet for Computer Training and Testing consisting of carrels for study and testing. This area shall be located off of the corridor in the Administrative Office area. 2. In Headquarters Stations, access to the room shall be controlled by the Training Officer. 3. Independent environmental control shall be provided for the Computer Training/Testing Room. 4. In Satellite Stations, this room may be an Inspector(s)' Office as required by the installation's mission.
Emergency Medical Services (EMS) Office	This typical office space at 80 net square feet shall contain a workstation. This area shall be located off of the corridor in the Administrative Office area.
Hazardous Materials (HAZMAT) Safety Office	This typical office space at 120 net square feet shall contain a workstation. This area shall be located off of the corridor in the Administrative Office

	area.

Living (Room Features)	**Shall group all the sleeping and living areas of similar function in the same general area. This general area shall be considered the Living Area.** **The following rooms shall be identified and included in the Living Area of every Headquarters facility: Day/Training Room, Recreation Room, Janitor's Closet, Dorm Rooms, Laundry Room, Bathroom/Showers/Changing, Additional Toilet/Shower, and Fitness Room.** **The following rooms shall be identified and included in the Living Area of every Satellite facility: Day/Training Room, Janitor's Closet, Dorm Rooms, Laundry Room, Bathroom/Showers/Changing, and Fitness Room.**
Day/Training Room	Shall be configured like a large residential kitchen/dining/living room. Shall be flexible to accommodate various functions such as informal meetings and group training for the number of companies on duty. Kitchen shall be sized to provide ample room for meal preparation for the entire facility's overnight population. All kitchen appliances shall be light commercial grade. Operable windows shall provide natural light. Anti-terrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions shall be addressed. Separate dry and cold food storage shall be provided for each shift. Access shall be off the corridor of the Living Area and shall have direct access to the outdoor Patio. ③ 648 net square feet shall be provided for a One-Company Fire Station. ③ 1,296 net square feet shall be provided for a Two-Company Fire Station. ③ 1,944 net square feet shall be provided for a Three-Company Fire Station.
Dorm Rooms	1. Shall provide private quarters for the firefighters' sleeping duty shifts that promote comfort and relaxation. Each room shall be shared by two firefighters of different crew/shifts so that the room is never occupied simultaneously. Access shall be from the Living Area's corridor and operable windows shall provide natural light in every dorm room. Antiterrorism issues, especially in outside the continental US (OCONUS) locations with regard to natural light provisions shall be addressed. ③ Five (5) Dorm Rooms at 700 net square feet total shall be provided for a One-Company Fire Station. ③ Ten (10) Dorm Rooms at 1,400 net square feet total shall be provided for a Two One-Company Fire Station. ③ Fifteen (15) Dorm Rooms at 2,100 net square feet total shall be provided for a Three-Company Fire Station. ③ Two (2) Dorm Rooms at 280 net square feet total shall be provided for an EMS requirement based on the Table of Distribution and Allowance (TDA).

	2. Space shall be provided for individual wardrobes, beds and nightstands in each dorm room. 3. Acoustical privacy between rooms shall be provided. 4. Independent environmental control shall be provided for each Dorm Room.
Bathroom/Showers/Changing	Provide a separate men's and women's Bathroom/Showers/ Changing Area. Bathroom/Showers/Changing area shall contain private water closets, lavatory and shower stalls with private changing areas for firefighters. Access shall be off the corridor of the Living Area. ③ One-Company Station: Provide 1 water closet, 1 shower, and 1 lavatory for females at 150 net square feet, and provide 2 water closets, 2 showers, and 2 lavatories for males at 250 net square feet. ③ Two-Company Station: Provide 1 water closet, 1 shower, and 1 lavatory for females at 150 net square feet, and provide 4 water closets, 4 showers, and 3 lavatories for males at 325 net square feet. ③ Three-Company Station: Provide 1 water closet, 1 shower, and 1 lavatory for females at 150 net square feet, and provide 4 water closets, 4 showers, and 4 lavatories for males at 350 net square feet.
Fitness Room	1. Shall provide a room at 437 net square feet to accommodate fitness machines, treadmill, stationary bicycle, elliptical machine, free weights and mats. Room shall be sized to provide free circulation and shall be adjacent to, or in the proximity of, the Bathroom/Showers/Changing area. Access shall be off the corridor of the Living Area. 2. Independent environmental control shall be provided for the Fitness Room.
Additional Toilet/Shower	This area shall be a toilet at 60 net square feet with a lavatory, water closet, and shower. Access shall be off the corridor of the Living Area.
Laundry Room	Shall provide a room to accommodate large heavy duty commercial washers and dryers, built-in laundry-folding table and wall-mounted drying rack for the firefighters' personal use. Provide direct dryer exhaust to the exterior of the building. Access shall be off the corridor of the Living Area. ③ Provide area at 80 net square feet for one washer and two dryers for a One-Company Fire Station. ③ Provide area at 160 net square feet for two washers and two dryers for a Two-Company Fire Station. ③ Provide area at 240 net square feet for three washers and three dryers for a Three-Company Fire Station.
Janitor's Closet	Provide a Janitor's closet at 48 net square feet. Provide exhaust ventilation directly to the outside. This room shall be off the corridor of the Living Area and near the Bathroom/Showers/Changing area. An additional Janitor's Closet shall be off the corridor of the Living Area near the Day/Training
	Room in the Two-Story Fire Station.

Recreation Room	Provide a Recreation Room at 240 net square feet in a Headquarters station to accommodate up to two "game units", such as pool tables, foosball tables, ping pong tables or video game consoles. Access shall be off the corridor of the Living Area. ③ As dictated by Installation mission requirements this area shall become additional Day/Training Room area.
Vending	Shall provide space at 40 net square feet for two or more vending machines for snacks and drinks. Vending area shall be conveniently located for use of the firefighters and the fire station staff. Vending shall not be located in the Day/Training Room or Lobby.
Net to Gross Factor	The net-to-gross factor accounts for circulation space, Mechanical Room, Electrical Room, and wall thicknesses. The net-to-gross multiplier for Fire Stations is as follows: ③ The net-to-gross multiplier for a One-Story Fire Station is 22%. ③ The net-to-gross multiplier for a Two-Company Fire Station is 30%.

GUIDANCE SECTION

CATEGORY CODE	DESCRIPTION
73010	Fire Station

1. General Design Philosophy: The Standard Army Fire Station is a comprehensive facility designed to support the military firefighters' mission to protect lives, installation facilities and flight-lines. The facility also accommodates the firefighters' administrative functions and provides an environment for fire prevention education and training.

2. General Layout: The square feet and overall size of each Fire Station shall vary in accordance to specific functional components collocated in each facility. The key internal adjacencies are driven by response time. The number, size, and configuration of emergency vehicles necessary to meet the mission of the specific installation are crucial to the sizing of the apparatus bay. OCONUS fire stations may require larger space allocations due to host nation requirements. Special requirements must be coordinated with the CoS Huntsville. Site constraints may drive the need for a two-story structure. Ensure the appropriate adjacencies are maintained for a two-story structure so that the required response times may be achieved. The Administrative & Training areas shall be placed on the first floor.

3. Fire Station Master Planning: The Fire Station shall be easily accessible by military personnel, military personnel family members, and reservists and layouts are driven by response time. The Fire Station shall be sited a minimum of 45 meters (150') from the perimeter of the installation and 25 meters (82') from trash containers, roadways and parking lots. If these standoff distances are not provided, the Fire Station shall be hardened as described in the "DoD Antiterrorism Minimum Standards for Buildings". Reference: UFC 4-010-01 Unified Facilities Criteria – DOD Antiterrorism Minimum Standards for Buildings. Site to be compatible with the site planning and style of adjacent existing site.

4. Signage: As a minimum the facility shall be identified as a "Fire Station". Coordinate the signage with the Installation Design Guide (IDG) standards. The installation or community name or geographic location of the facility may be used for public identification purposes. Location of the sign is a site adaptation issue.

5. Interior Signage: Provide room identification signage and similar type signs for all rooms. Coordinate the signage with the Installation Design Guide.

6. Exterior Construction: Use sustainable, low maintenance finish materials. Coordinate the exterior finishes with the Installation Design Guide. Building to be compatible with the architecture of adjacent existing structures.

7. Interior Construction: Use sustainable, durable, impact resistant, low volatile organic compounds (VOC), low maintenance finish materials. Coordinate the interior/exterior finishes with the Installation design standards. Construction and finishes (walls, floor, and ceiling) shall support the cohesive image and theme of the facility. Design the living areas of the facility, such as the Day Room and the Dorm Rooms, to reflect a residential, non-

institutional character. Counters, casework, and cabinets shall be of high-quality and durable construction.

8. Interior Glass: All interior glass must be tempered safety glass and mirrors must be constructed with break-resistant materials.

9. Acoustics: Design the facility to provide a comfortable acoustical environment. Provide comprehensive sound isolation and sound absorption measures for individual spaces as appropriate. Provide acoustical design to prevent sound from noisy spaces such as corridors, toilets, elevator machine rooms, and mechanical rooms from having negative impact on the adjacent spaces.

10. Landscaping: Provide materials natural to the area to limit irrigation and maintenance.

11. Utilities: Use underground utility distribution lines, where feasible.

12. Heating, Ventilating and Air Conditioning (HVAC): The HVAC system(s) shall provide heating and air conditioning subject to geographical requirements for the entire facility, excluding the apparatus bay and mechanical room, which require only heating. Radiant heating shall be used for Apparatus Bay heating and radiant floor heating shall be used under all Apparatus Bay doors in cold climates to prevent the doors from freezing to the pavement. A system with zoning flexibility shall be provided. The mechanical room shall have an exhaust fan.

13. Roofline: Flat roofs are not allowed, unless compatibility with existing structures are required. Provide only slope type roofs with a pitch of not less than 3/12.

14. Exterior Windows: Provide all exterior windows with window treatment allowing manual control of exterior light. Do not provide skylights in any location. Exterior windows are an important element that provides daytime lighting to the overall fire station design.

15. Antiterrorism/Force Protection: Facility shall be evaluated for security requirements in accordance with UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, latest edition.

16. Gross Area Calculation: Gross floor areas are calculated in accordance with the latest edition of US Army Technical Instructions 800-01 (TI 800-01), Design Criteria.

17. Physical Security: Facility shall be evaluated for physical security risks using DA Pamphlet 190-51, Risk Analysis for Army Property. High value equipment stored in these facilities should be secured and accounted for in accordance with Section III of AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive).

18. Recycle Space: Provide an easily accessible area that serves the entire building and is dedicated to the collection and storage of non-hazardous materials for recycling, including at a minimum: paper, corrugated cardboard, glass, plastics, and metals.

19. Patio Space: If an attached awning is provided, refer to NFPA 13 for the fire protection requirements.

20. Additional Space: Additional facility capability may include an Emergency Operations Center (EOC) situation room (if required by the installation and validated by HQDA), or a host nation employee dayroom as mandated by master labor contracts (MLC) or Status of Forces Agreement (SOFA). The EOC in the head quarters facility is a specialized conference room used in cases of major operations to manage and coordinate rescue and emergency service efforts. It shall be set up to handle planned and ad-hoc meetings and a high volume of telephone and computer communications.

21. Compliance: The Army Standard may identify an Army regulation, technical guide or other written guidance as mandatory criteria. The Corps of Engineers CoS provides the first line compliance to Standard review. The Facilities Design Team in conjunction with the CoS shall resolve any issues where there may be conflicting, unclear, or no compliance measurement threshold. Resolution may require senior leadership guidance or amendment of the Army Standard. The Army Standard is not intended to provide compliance criteria detailed in references, regulations, industry standards, or the standard design.

REFERENCE CRITERIA

The designs shall use the latest editions of the following design criteria:

- ADA and ABA Accessibility Guidelines for Buildings and Facilities, July 2004, United States Access Board, http://www.access-board.gov/ada-aba.htm
- Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, ADAAG, United States Access Board, http://www.access-board.gov/adaag/html/adaag.htm
- American Society of Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE) Handbooks and Standards (55, 62.1, 90.1)
- ANSI/EIA/TIA-568, Commercial Building Wiring Standard
- ANSI/EIA/TIA-569, Commercial Buildings Standard for Telecommunications Pathways and. Spaces
- Architectural Barriers Act of 1968 (ABA), Public Law 90-480, United States Access Board, http://www.access-board.gov/adaag/html/adaag.htm
- AR 380-5, Department of the Army Information Security Program
- AR 405-70, Utilization of Real Property
- AR 415-15, Army Military Construction Program Development and Execution
- AR 420-1, Army Facilities Management
- Army SDD LEED NC Silver Policy
- AWI Quality Standards Illustrated
- DA PAM 415-28, Facility Guide To Army Real Property Category Codes
- DG 1110-3-122, Interior Design Guide
- DoD Instruction 4165.57, *Air Installations Compatible Use Zones (AICUZ)*
- DoD Instruction 6055.06, *DoD Fire and Emergency Services Program*
- E.O. 13423, Technical Guidance for Implementing the Five Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings
- ETL 1110-3-491, Sustainable Design for Military Facilities
- IBC – International Building Code
- IPC – International Plumbing Code
- NFPA 13, Standard for the Installation of Sprinkler Systems
- NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- NFPA 101, Life Safety Code.
- NFPA 403, Standard for Aircraft Rescue and Fire-Fighting Services at Airports
- NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems
- NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
- UFC 3-120-10, Interior Design
- UFC 3-210-05FA, Landscape Design and Planting Criteria
- UFC 3-301-01 Structural Engineering
- UFC 3-400-01 Energy Conservation
- UFC 3-410-01FA, Heating, Ventilating, and Air Conditioning
- UFC 3-410-02A, Heating, Ventilating, and Air Conditioning (HVAC) Control Systems
- UFC 3-420-01, Plumbing Systems.
- UFC 3-450-01, Noise and Vibration Control
- UFC 3-500-10, Electrical Engineering
- UFC 3-530-01, Design: Interior and Exterior Lighting and Controls
- UFC 3-600-01, Fire Protection Engineering for Facilities

REFERENCE CRITERIA (Cont.)

The Army Standard for Fire Stations, March 2010

- UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings
- UFC 4-023-03, Design of Buildings to Resist Progressive Collapse
- USAISEC, Technical Criteria for the Installation Information Infrastructure Architecture (I3A), latest edition
- USAISEC Technical Guide for the Integration of SECRET Internet Protocol (IP) Router Network (SIPRNET)
- US Army Technical Instructions 800-01 (TI 800-01), Design Criteria
- DA Pamphlet 190-51, Risk Analysis for Army Property
- Section III of AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive)