



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

JAN 18 2008

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MEMORANDUM FOR

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

SUBJECT: Army Standard for Warriors Transition Unit (WTU) Headquarters

1. The enclosed Army Standard for WTU Headquarters is hereby approved for implementation. The standard applies to all Army Components. Only the Assistant Chief of Staff for Installation Management has authority to approve exceptions to this standard. Waivers from the Army Standard must be approved in accordance with AR 420-1.
2. This standard is mandatory for Military Construction, Army (MCA) projects in FY08 and beyond. Designs based on these Army Standards, Standard Designs and Design Criteria will be developed consistent with MILCON transformation methodologies.
3. The co-chairs for Facilities Design Team (FDT) for WTU Headquarters are Mr. James Staulcup, MEDCOM, james.staulcup@us.army.mil, 706-787-7579, and Mr. Charles Huffman, DAIM-ISH, charles.huffman@hqda.army.mil, 703-601-2504.
4. The FDT POC at the USACE Center of Standardization for WTU Headquarters is Mr. Bill Workman, CESWF, william.k.workman@swf02.usace.army.mil, 817-886-1715.

ROBERT WILSON
Lieutenant General, GS
Assistant Chief of Staff
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Enclosure
as



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The Army Standard for Warrior Transition Unit (WTU) Headquarters

Description:

A building provided for battalions, companies, batteries, and troops as space to perform daily administrative and supply activities supporting the Warrior in Transition units. It is also known as a company operations facility. Separate unit headquarters at echelons below company (platoon, detachment, contact team, and so on) are reported as 61050, Administrative Building, General Purpose.

Applicability:

- The Army Standard applies to Active, Reserve and National Guard Component facilities on Army Installations.
 - The Army Standard is mandatory for all construction projects effective in FY08 and beyond.
 - WTU Company and Battalion Headquarters projects must be reviewed by the COS for compliance with the Army Standard.
 - All USACE geographic districts incorporate the mandatory design features described herein in close coordination with the USACE designated Center of Standardization (COS), for WTU Company and Battalion Headquarters.
 - This Army Standard supersedes space allowance standards and/or contained in AR 405-70 and serves as the primary authority for WTU Company and Battalion Headquarters worldwide.
 - This Army Standard does not apply when facility is defined in another Army Standard.
- Example:** The Army Standard for Operational Readiness Training Complex (ORTC) defines the Battalion and Brigade Headquarters to meet the specific ORTC requirement.

Waivers:

- Only the Assistant Chief of Staff for Installation Management has the authority to approve exceptions to the Army Standard.
- Waivers from the Army Standard must be requested in accordance with the AR 420-1 and the Army Facilities Standardization Program Charter, latest edition.
- All waiver requests to this Army Standard require COS conflict resolution prior to submission by the Garrison Commander through IMCOM Region to HQ IMCOM.
- Garrison Army Standard waiver request submissions must be received in sufficient time to allow completion of 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. Late submissions or project delays are not sufficient stand alone justification for accelerated review or other dispensation to meeting the Army Standard contained herein.
- 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 HQDA approved waivers shall be documented in installation master plans thereby serving as the installations modified standards.

THE ARMY STANDARD FOR WTU BATTALION AND COMPANY HEADQUARTERS

ITEM	MANDATORY CRITERIA								
Gross Area of Facilities	<p><u>GSF (Gross Square Feet) Deviation:</u> Facility constructed gross area shall not exceed 105% of space allocation set forth in this document to accommodate site, construction, or environmental factors.</p> <p>The Army Standard provides all square footage at full scope. There are no spaces computed at one-half the actual floor area.</p> <p><u>Battalion Headquarters (Bn Hq):</u> A Battalion Headquarters is provided when there is a requirement for two or more company headquarters.</p> <p>Maximum 8,100 GSF (max 24 personnel (PN)).</p> <p><u>Company Headquarters (Co Hq):</u> Maximum GSF per Co Hq.</p> <table border="0"> <tr> <td>Extra-Small</td> <td>6,900 GSF, (max 28 PN)</td> </tr> <tr> <td>Small</td> <td>8,300 GSF, (max 38 PN)</td> </tr> <tr> <td>Medium</td> <td>10,300 GSF, (max 47 PN)</td> </tr> <tr> <td>Large</td> <td>11,000 GSF, (max 53 PN)</td> </tr> </table>	Extra-Small	6,900 GSF, (max 28 PN)	Small	8,300 GSF, (max 38 PN)	Medium	10,300 GSF, (max 47 PN)	Large	11,000 GSF, (max 53 PN)
Extra-Small	6,900 GSF, (max 28 PN)								
Small	8,300 GSF, (max 38 PN)								
Medium	10,300 GSF, (max 47 PN)								
Large	11,000 GSF, (max 53 PN)								
Energy Policy Act 2005 (EPACT 05) / Executive Order 13423	WTU Battalion and Company Headquarters facilities shall be designed in compliance with requirements for federal facilities IAW EPACT 05 and <u>E.O. 13423</u> .								
Sustainability	WTU Battalion Headquarters and Company Headquarter facilities shall be designed to meet current sustainable development and design policy requirements as established by the Department of the Army.								
Antiterrorism /Force Protection	Facilities shall meet security requirements in accordance with (IAW) UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, latest edition.								
Technical Design Criteria and Standards	International Building Code except where Installation Design Guide or military standards are required to meet specific operational needs.								
Exterior Appearance	Comply with Installation Design Guide architectural features.								
Exterior Lighting	Exterior lighting systems provided for parking areas, sidewalks, service yards, service drives, building entrances and perimeter.								
Accessibility	WTU Headquarters will be accessible to individuals with disabilities in accordance with the Uniform Federal Accessibility Standards (UFAS), as required by Architectural Barriers Act, title 42 United States Code, sections 4151 - 4157, (42 USC 4151-4157). The U.S. Architectural & Transportation Barriers Compliance Board established the Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities in August 1994. The latest edition of these guidelines, referred to as the ADAAG, will be met whenever they provide equal or greater accessibility than UFAS.								
Finishes	Finishes shall be coordinated through USACE COS to ensure use of therapeutic colors, flooring material and countertop textures.								

The Army Standard for WTU Battalion and Company Headquarters

Limited Access Areas	Accessibility is not required to elevator pits, elevator penthouses, mechanical rooms, piping or equipment catwalks, lookout galleries, electrical and telephone closets, and general utility rooms.
Reception/Lobby	Provide accessible primary entry and congregating area for Soldier and their visitors. Signage/way finding is required to public amenities, such as vending, public toilets, administration, public phones, elevators, and offices, and exit signage.
Public Restroom and Water Fountain	Accessible public restroom with diaper changing area, and water fountain on ground floor near building entrance or reception area.
Elevators	Elevator system shall be provided when building is two-story or higher.
Telecommunications	<ul style="list-style-type: none"> • Telecommunications infrastructure will meet the United States Army Information Systems Engineering Command (USAISEC) Technical Guide for Installation Information Infrastructure Architecture (I3A) and American National Standards Institute / Telecommunications Industry Association / Electronic Industries Alliance (ANSI/TIA/EIA) 568 and 569 requirements. • The facility must connect to the Installation telecommunications (voice and data) system through the outside plant (OSP) underground infrastructure per I3A guidance. Connections to OSP cabling system shall be from each facility main cross connect located in main telecommunications room or telecommunications equipment room to closest OSP access point. • Telecommunications outlets will be provided IAW the Technical Guide for Installation Information Infrastructure Architecture (I3A Guide). Telecommunications outlets will be provided per the I3A technical guide based on functional purpose of the various spaces with the facility as modified by user special operational requirements. • Telecommunication Room. A Telecommunications Room (TR) shall be provided for voice and data network. TR(s) shall be in accordance with the I3A Guide and ANSI/EIA/TIA-569-B.
Private Operated Vehicle (POV) Parking	<ul style="list-style-type: none"> • POV parking space will be provided for 90% of all assigned WTU headquarters personnel plus 10 parking spaces for Visitor Parking per headquarters. • Maximum travel distance from vehicle parking to headquarters shall not exceed a quarter mile.
Secure Documents Storage	Provide classified files secure documents storage in accordance with requirements in AR 380-5.
Copier/Fax Room	Each headquarters shall be provided with a minimum 100 Net Square Feet (NSF) room. The room shall be designed to accommodate a copier, printer and fax.
Reception Station	Provide a Reception Station at each Headquarters reception area. Desk shall provide visual control access to the main building entrance and reception area.

The Army Standard for WTU Battalion and Company Headquarters

Reception Area	A reception area shall be provided for Soldiers and visitors. The minimum seating capacity per Headquarters is as follows: <u>Bn Hq:</u> – 12 Seats <u>Co Hq:</u> – 10 Seats
Showers	Provide a minimum of one (1) female shower and one (1) male shower in each Headquarters.
Conference Room	Provide a conference room equipped with: video teleconference capability (VTC), table and seating, storage credenza, marker board with tack strip and marker tray. <u>Bn Hq:</u> Minimum 500 NSF (Net Square Feet) <u>Co Hq:</u> Minimum 250 NSF
Records Room	Provide a minimum 100 NSF records storage room.
Supply Room	Provide a minimum 100 NSF supply room.
Janitor Closet	Provide a minimum 20 NSF janitor closet with a built-in floor sink.

WTU BATTALION HEADQUARTERS

ITEM	MANDATORY CRITERIA
Secure Communications Room	Provide secure communications room to accommodate Secret Internet Protocol Router Network (SIPRNET).
Break Room	<ul style="list-style-type: none"> • Provide a break room of 195 NSF with seating for minimum 4 persons. • Built-in countertop with under/overhead cabinets (including shelves) shall include a sink, shelf for a microwave, full size refrigerator and a minimum of 2 vending machines.
General Storage	Provide a minimum 150 NSF feet for office file cabinets and bookcase.
Open Office Area Workspace	<u>Open Offices:</u> 8 Total <ul style="list-style-type: none"> • Provide a minimum of 48 net square feet (NSF) of working area for each workspace. • Offices are provided for: Chaplain Assistant; Driver; IT Specialist; Financial Management; Supply Specialist; Human Resources Specialist; Family Readiness Spt Asst; Supervisory Medical Assistant
Private Offices	<u>Private Offices:</u> 15 Total Battalion Commander - 200 NSF Command Sergeant Major – 200 NSF Chaplain – 140 NSF Executive Officer; Social Worker (6 total); Operations Sergeant; Occupational Therapist; S1; S3; S4 – 120 NSF per office

WTU COMPANY HEADQUARTERS

ITEM	MANDATORY CRITERIA
Distribution Center	Provide a minimum 110 NSF distribution center room. This space shall be a windowless room, located on an exterior wall and adjacent to the main building entrance.
Kitchenette	Minimum 100 NSF kitchenette with built-in countertop with under/overhead cabinets (including shelves) shall include a sink, shelf for a microwave, full size refrigerator and 2 vending machines.
Open Office Area Workspace	<p>Provide a minimum of 48 NSF of area for each workspace. Number of open offices based on Company Headquarters (Co Hq) size:</p> <p><u>Extra-Small Co Hq: 8 Total per Co Hq</u> Medical NCO; TR. Specialist; Occupational Therapist; Financial Technician; Human Resources Specialist; Family Readiness Spt Asst; Supply Technician; Medical Support Assistance</p> <p><u>Small Co Hq: 12 Total per Co Hq</u> Medical NCO; (2) TR. Specialist; Occupational Therapist; (2) Financial Technician; (2) Human Resources Specialist; Family Readiness Spt Asst; Supply Technician, (2) Medical Support Assistance;</p> <p><u>Medium Co Hq: 12 Total per Co Hq</u> (3) Human Resource Assistant; (2) TR. Specialist; (1) Occupational Therapist; (1) Financial Technician; (1) Human Resources Specialist; (1) Family Readiness Spt Asst; (2) Supply Technician, (1) Medical Support Assistance</p> <p><u>Large Co Hq: 12 Total per Co Hq</u> (2) TR. Specialist; (1) Occupational Therapist; (2) Financial Technician; (2) Human Resources Specialist; (1) Family Readiness Spt Asst; (1) Supply Technician, (2) Medical Support Assistance; (1) Medical NCO</p>
Private / Semi-Private Offices	<p><u>Extra-Small Co Hq: 11 Offices per Co Hq</u> (1) Commander – 120 NSF (1) First Sergeant – 120 NSF (1) Case Manager – 120 NSF (1) Social Worker – 120 NSF (2) Nurse Case Manager – 120 NSF each (2) Platoon Sergeant – 120 NSF each (2 per office) (3) Squad Leader – 140 NSF each (3 per office)</p> <p><u>Small Co Hq: 15 Offices per Co Hq</u> (1) Commander – 120 NSF (1) First Sergeant – 120 NSF (1) Case Manager – 120 NSF (1) Social Worker – 120 NSF (2) Extra Offices – 120 NSF each</p>

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Private / Semi-Private Offices continued	(3) Nurse Case Manager – 120 NSF each (2) Platoon Sergeant – 120 NSF each (2 per office) (4) Squad Leader – 140 NSF each (3 per office)
	<u>Medium Co Hq: 19 Offices per Co Hq</u> (1) Commander – 120 NSF each (1) First Sergeant – 120 NSF each (1) Exec. Officer – 120 NSF each (1) Supv. Case Manager – 120 NSF each (2) Case Manager – 120 NSF each (4) Nurse Case Manager – 120 NSF each (3) Platoon Sergeant – 120 NSF each (2 per office) (6) Squad Leader – 140 NSF each (3 per office)
	<u>Large Co Hq: 25 Offices per Co Hq</u> (1) Commander – 120 NSF each (1) First Sergeant – 120 NSF each (1) Exec. Officer – 120 NSF each (1) Supv. Case Manager – 120 NSF each (4) Case Manager – 120 NSF each (8) Nurse Case Manager – 120 NSF each (3) Platoon Sergeant – 120 NSF each (2 per office) (6) Squad Leader – 140 NSF each (3 per office)

BACKGROUND

Facility Category Code: The Category Code does not automatically imply a specific GSF limit. WTU Battalion Headquarters is only one size; however WTU Company Headquarters is dependent on company size.

CATEGORY CODE	DESCRIPTION
14188	WTU Headquarters

General Design Philosophy:

Consider layout and configuration for spatial relationships for Warrior Transition Unit Headquarters, wounded warriors and family assistance facility, Dining and WTU barracks to minimize Soldier and visitor travel distances. All facilities should be sited within a “mini-campus” with hospital and medical facilities to facilitate Outpatient care.

The complex site considers the overall site layout, existing facilities and proximity benefits. Ensure accessible routes to these facilities. Soldier and Family access and ability to get to all facilities must be considered to minimize inconvenience.

Consider mass transit opportunities and other issues to minimize inconveniences.

Gross Area of Facilities: An Installation may have a requirement for more than one company headquarters (Co Hq). Installations with Extra-Small or Small Co Hq typically require only one Co Hq. Typically, Installations with Medium Co Hq require two Co Hq; whereas Installations with Large Co Hq typically require three Co Hq. Should an installation have a construction requirement for four (4) Large Co Hq, the mandatory GSF limit would be calculated at 44,000 GSF (4 Large Co Hq x 11,000 GSF per Large Co Hq).

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- Medium Co Hq: Standard Design includes a 1-story “Duplex” (two Co Hq) at 18,550 GSF, and a 2-story “Stacked” (two Co Hq) at approximately 20,600 GSF. The stacked plan is used where available land for construction is limited such as in Korea. The GSF limit per Medium Co Hq was established to account for the larger stacked plan.
- Large Co Hq: Standard Design for Large Co Hq was developed for a Duplex, Half Stacked to capture all three Co Hq into one building at approximately 33,000 GSF. The GSF limit per Large Co Hq was established based on this design.

GUIDANCE

Site Amenities: Includes site amenities such as vehicle service yards, access drives, and exterior utilities.

Specific MILCON Transformation Design Considerations:

- Maximize use of natural light so facilities remain usable during periods of lost utility support.
- Economy of construction is a design prerequisite.
- Facilities must be durable to withstand the rigors of multiple users.
- Pre-fabricated construction components and/or modular construction encouraged as long as facility durability standards are satisfied.

Gross Area Calculation: Gross floor areas depicted in the “Mandatory Criteria” are calculated in accordance with the International Building Code (IBC). Gross floor areas depicted in the “Mandatory Criteria” reflect a change towards counting all space at the actual floor area despite previous guidance in TI 800-01 for considering some space at one-half the actual floor area. This change reflects the goal to go to Industry Standards which does not distinguish between half space and full space.

The Gross Area Calculation is not meant to change how the Army programs, tracks, or calculates gross area. Facility gross area conversions to account for half-space are available upon request.

Previous Gross Area Calculation Methodology (TI 800-01): Gross Floor Areas. Floor areas specified are gross floor areas measured from the exterior surface of the outside walls. These areas include the floor areas taken up by outside walls, interior partitions, stairs, toilets, halls and corridors, enclosed walks, mechanical, electrical and electronic equipment rooms (when incorporated within or attached to structures), and covered shipping and receiving platforms. Also included in the gross floor area, but computed at one-half the actual floor area, are all covered open porches, covered but not enclosed passageways and walks, and uncovered shipping and receiving platforms. (Half-space is calculated as full space in the Army Standard).

Army Technology Standards: Approved Army Technology Standards are implemented in accordance with the applicability and implementation guidance of that standard.

Physical Security: Physical security compliance is defined within the Standard Design. The criteria may change due to technological advancements. The mandatory criteria intent is to ensure each facility constructed incorporates the need for physical security.

Telecommunications: Telecommunications infrastructure meets I3A and ANSI/TIA/EIA requirements. Outlet density is provided per the I3A technical guide based on functional purpose of various spaces within facility as modified by user special operational requirements.

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Finishes: Injured service members with Traumatic Brain Injury (TBI) or behavioral health disorders such as Post Traumatic Stress Disorder (PTSD) may be adversely affected based on issues related to their environment. For example, excessive noise, fluorescent lighting, and harsh smells may exacerbate headaches and startle responses which are associated with these conditions. The use of therapeutic colors, flooring material and/or countertop texture may help to facilitate a calming effect in an individual who is agitated. It is recommended that the design try to supply consistent fluorescent lighting, with uplighting being a possible solution, maximize natural lighting when possible, and avoid complex and/or confusing colors or patterns.

POV Parking: POV parking is based on the minimum site requirement. Handicap spaces are subject to change based on ADA requirements computation. Use the latest editions as identified under mandatory criteria in this Army Standard.

Examples:

- One (1) Extra-Small Co Hq: $(28PN * 0.9) + 10 = 36$ Parking Spaces (2 are Handicap)
- One (1) Small Co Hq: $(38PN * 0.9) + 10 = 45$ Parking Spaces (2 are Handicap)
- Two (2) Medium Co Hq and one (1) Bn Hq: $\{(92PN * 0.9) + 10\} + \{(24 * 0.9) + 10\} = 125$ Parking Spaces (5 are Handicap)
- Three (3) Large Co Hq and one (1) Bn Hq: $\{(159PN * 0.9) + 10\} + \{(24 * 0.9) + 10\} = 186$ Parking Spaces (6 are Handicap)

Sustainability: Facility is designed to meet current sustainable development and design policy requirements as established by the Department of the Army. The Army has transitioned to Leadership in Energy and Environmental Design for New Construction (LEED-NC) and the SILVER rating level is the designated new sustainable performance criteria for MILCON projects starting in FY08 and beyond. Sustainable design techniques should be considered as they relate to site design, site engineering, unit design, and unit engineering.

- Exterior Construction: Use sustainable, low maintenance finish materials.
- Landscaping: Provide materials natural to the area to limit irrigation and maintenance.
- Utilities: Use underground utility distribution lines, where feasible.

Waivers: The Army Facilities Standardization Program Charter is subject to change. The approved charter at the time this standard was approved was dated 24 May 06. Waiver approval has changed since 24 May 06 charter and will be corrected in next revision. Waiver approval will be changed from the Army Facilities Standardization Committee to state only the Assistant Chief of Staff for Installation Management has authority to approve waivers.

Compliance Threshold: The Army Standard may identify an Army regulation, technical guide or other written guidance as mandatory criteria. The Corps of Engineers Center of Standardization provides the first line technical compliance review. The Facilities Design Team in conjunction with the COS will 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 should use latest editions of the following design criteria:

- Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines
- American with Disabilities Act Accessibility Guidelines (ADAAG)
- Uniform Federal Accessibility Standards (UFAS) Federal Standard 795
- IBC – International Building Code

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- AR 405-70, Utilization of Real Property
- AR 415-15, Army Military Construction Program Development and Execution
- DA PAM 415-28, Facility Guide To Army Real Property Category Codes
- ETL 1110-3-491, Sustainable Design for Military Facilities
- IBC – International Building Code
- UFC 3-120-10, Interior Design
- UFC 3-600-01, Design: Fire Protection Engineering for Facilities
- UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings
- UFC 4-023-03, Security Engineering: Design to Resist Progressive Collapse
- American with Disabilities Act Accessibility Guidelines (ADAAG)
- Uniform Federal Accessibility Standards (UFAS) Federal Standard 795
- Executive Order 13423 (E.O. 13423), “Strengthening Federal Environmental, Energy and Transportation Management”.
- Energy Policy Act 2005
- U.S. Army Information Systems Engineering Command (USAISEC) Technical Guide (TG) for Installation Information Infrastructure Architecture (I3A)
- USAISEC Technical Guide for the Integration of SECRET Internet Protocol (IP) Router Network (SIPRNET)
- UFC 3-580-01 Telecommunications Bldg Cabling Systems Planning/Design
- ANSI/TIA/EIA-568-B Commercial Building Telecommunications Cabling Standard
- ANSI/TIA/EIA-569-B Commercial Building Standard for Telecommunications Pathways and Spaces