



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

DAIM-ZA

JAN 18 2008

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 Advanced Individual Training (AIT) Complexes

1. The enclosed Army Standard for design and construction of AIT complexes is hereby approved for implementation. The Army Standard applies to Active and Reserve Component facilities on Army Installations. 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 the DAIM-ODF memorandum, Subject: Waiver Process for Facility Army Standards and Standard Designs, latest edition.
2. These standards are 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 AIT complexes are Mr. Lee Jorde, DAMO-TRI, [lee.jorde@hqda.army.mil](mailto:lee.jorde@hqda.army.mil), 703-614-9813 and Mr. Charles Huffman, DAIM-ISH, [charles.huffman@hqda.army.mil](mailto:charles.huffman@hqda.army.mil), 703-601-2504.
4. The FDT POCs at the USACE Center of Standardization are Mr. Bill Workman, CESWF, BT / OSUT, [william.k.workman@swf02.usace.army.mil](mailto:william.k.workman@swf02.usace.army.mil), 817-886-1715 and Ms. Lisa Bobotas, Dining Facilities, CENAO, [lisa.a.bobotas@nao02.usace.army.mil](mailto:lisa.a.bobotas@nao02.usace.army.mil).

ROBERT WILSON  
Lieutenant General, GS  
Assistant Chief of Staff  
for Installation Management

Enclosure



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

**The Army Standard for  
Advanced Individual Training (AIT) Complexes**

**Description:**

Advanced Individual Training (AIT) complexes are required by the Army to encompass living, dining, training, and administrative/command operations. AIT Complexes are comprised of Barracks/Company Operations Facilities (B/COF), Dining Facility (DFAC), Battalion Headquarters (BNHQ), and Lawn Equipment Storage Buildings (LEB). These facilities, with outdoor training areas and any additional support facilities are arranged on the site as a unit to allow the battalion to live, eat, train, and work together. When multiple battalions are organized under a brigade, a Brigade Headquarters (BDHQ) may also be programmed in the AIT Complex. This statement of requirements does not address facilities for permanent party personnel; those are defined in other Department of the Army standards.

B/COF is comprised of sleeping, latrine, classrooms, storage and company operations components. DFAC is comprised of delivery, storage, preparation, cleaning, serving, seated dining, and field feeding components. BNHQ is comprised of administration, special functions, storage and classroom components for personnel assigned to work in those facilities. BDHQ is comprised of administration and special function components for personnel assigned to work in those facilities. LEB provides storage for maintenance equipment and materials. The site includes a running track, physical training (PT) pits, vehicular and service access drives and parking areas.

**Applicability:**

- The Army Standard applies to Active and Reserve Component facilities on Army Installations.
- The Army Standard is mandatory for all construction projects effective in FY08 and beyond.
- AIT projects must be reviewed by the USACE designated Center of Standardization (COS) for compliance with the Army Standard.
- All USACE geographic districts shall incorporate the mandatory design features described herein in close coordination with the COS for AIT complexes.
- This Army Standard supersedes space allowance standards contained in AR 405-70 and serves as the primary authority for AIT facilities worldwide.

**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 the Army Standard require COS conflict resolution prior to submission by the Garrison Commander through the 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.
- 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 AIT COMPLEXES**

ITEM	MANDATORY CRITERIA																		
<p>Gross Area of Facilities</p>	<p><b>AIT COMPLEX FACILITIES MAXIMUM GROSS AREA:</b></p> <p><u>GSF (Gross Square Feet) Deviation:</u> 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.</p> <table border="0"> <tr> <td>B/COF</td> <td>93,000 GSF</td> <td>(each, four B/COF per BN)</td> </tr> <tr> <td>BNHQ</td> <td>12,300 GSF</td> <td>(one per BN)</td> </tr> <tr> <td>BDHQ</td> <td>9,100 GSF</td> <td>(one per BDE)</td> </tr> <tr> <td>1300 PN DFAC</td> <td>33,760 GSF</td> <td>(one BN serving capacity)</td> </tr> <tr> <td>2600 PN DFAC</td> <td>62,390 GSF</td> <td>(two BN serving capacity)</td> </tr> <tr> <td>LEB</td> <td>2,000 GSF</td> <td>(serves one BN)</td> </tr> </table> <p>PN = personnel</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>The requirement is based on population and whether installation has existing facilities on hand, or master plan involves constructing more than a battalion size AIT complex.</p> <p>B/COF and DFAC square footage listed above include covered training/assembly and queuing areas respectively.</p>	B/COF	93,000 GSF	(each, four B/COF per BN)	BNHQ	12,300 GSF	(one per BN)	BDHQ	9,100 GSF	(one per BDE)	1300 PN DFAC	33,760 GSF	(one BN serving capacity)	2600 PN DFAC	62,390 GSF	(two BN serving capacity)	LEB	2,000 GSF	(serves one BN)
B/COF	93,000 GSF	(each, four B/COF per BN)																	
BNHQ	12,300 GSF	(one per BN)																	
BDHQ	9,100 GSF	(one per BDE)																	
1300 PN DFAC	33,760 GSF	(one BN serving capacity)																	
2600 PN DFAC	62,390 GSF	(two BN serving capacity)																	
LEB	2,000 GSF	(serves one BN)																	
<p>Energy Policy Act 2005 (EPACT 05) / Executive Order 13423</p>	<p>AIT Battalion and Company Headquarters facilities shall be designed in compliance with requirements for federal facilities IAW EPACT 05 and <u>E.O. 13423</u>.</p>																		
<p>Sustainability</p>	<p>AIT Complex facilities shall be designed to meet current sustainable development and design policy requirements as established by the Department of the Army.</p>																		
<p>Antiterrorism /Force Protection</p>	<p>Facilities shall meet security requirements in accordance with (IAW) UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings, latest edition.</p>																		
<p>Technical Design Criteria and Standards</p>	<p>International Building Code except where Installation Design Guide or military standards are required to meet specific operational needs.</p>																		
<p>Outdoor Training</p>	<p>The minimum mandatory exterior training areas include:</p> <ul style="list-style-type: none"> <li>• a closed quarter mile running track (one per BN)</li> <li>• One physical training pit per company (four per BN)</li> <li>• Four / 4-station pull-up bar sets per company (sixteen per BN).</li> </ul> <p>PT pit shall have a minimum size of 18,500 Square Feet (SF).</p>																		

The Army Standard for Advanced Individual Training (AIT) Complexes

<p>Exterior Lighting</p>	<p>Exterior lighting systems shall be provided for parking areas, sidewalks, interconnecting buildings, service yards, service drives, outdoor training areas, and any required security lighting.</p>
<p>Parking</p>	<p><u>Private Operated Vehicle (POV) Parking:</u> Parking shall be provided for BDHQ and BNHQ staff, Company Cadre within B/COF, DFAC staff, government and service vehicles, and visitors. Total parking space allocation for the complex shall be designed based on current Tables of Distribution and Allowances (TDA) plus 120% of maximum shift for DFAC.</p>
<p>Accessibility</p>	<p><u>BDHQ &amp; BNHQ</u> – Shall comply with the Americans with Disabilities Act (ADA) Accessibility Guidelines (ADAAG) for Buildings and Facilities.</p> <p><u>DFAC</u> – Administrative areas (including approach to the public entrance) shall be ADA compliant.</p> <p><u>B/COF</u> – No ADA compliance requirement.</p>
<p>Telecommunications</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• A Telecommunications Room (TR) shall be provided for the voice and data network. TR(s) shall be in accordance with the I3A Guide and ANSI/EIA/TIA-569-B.</li> </ul>
<p>Maximum Site Planning Distances</p>	<p>Maximum distances between facilities and supporting amenities:</p> <ul style="list-style-type: none"> <li>• B/COF to DFAC – 1,680 feet</li> <li>• B/COF to PT Pits and Track – 1,200 feet</li> <li>• BNHQ to DFAC – 1,800 feet</li> <li>• B/COF to BNHQ – 1,680 feet</li> <li>• BNHQ to BDHQ – 1,680 feet</li> </ul>

The Army Standard for Advanced Individual Training (AIT) Complexes

Signage	Signage shall be provided for all public amenities.
---------	---

**BARRACKS / COMPANY OPERATIONS FACILITY (B/COF)**

ITEM	MANDATORY CRITERIA						
Capacity vs. Population	Each B/COF shall be designed for a population of 300 personnel in two person living suites.						
Gross Area of Facility	<table border="0"> <tr> <td>Barracks / Company Operations</td> <td>89,500 GSF</td> </tr> <tr> <td>Covered Training / Assembly Area</td> <td>3,500 GSF</td> </tr> <tr> <td><b>Total per B/COF</b></td> <td><b>93,000 GSF</b></td> </tr> </table>	Barracks / Company Operations	89,500 GSF	Covered Training / Assembly Area	3,500 GSF	<b>Total per B/COF</b>	<b>93,000 GSF</b>
Barracks / Company Operations	89,500 GSF						
Covered Training / Assembly Area	3,500 GSF						
<b>Total per B/COF</b>	<b>93,000 GSF</b>						
Sleeping Area	Provide a minimum of 216 Net Square Feet sleeping area for each two person Living Module. Periodic events require a surge capacity for an extra person in the Living Module.						
Private / Semi-Private Offices	<u>Provide offices for:</u> (total = seven offices per B/COF) Command Offices- Company Commander (150 NSF); Executive Officer (110 NSF); Training Office; 1 <sup>st</sup> Sgt (120 NSF) and OPS Sgt (110 NSF). One Drill Instructor office shall be provided on each floor. A total of three (3) Drill Instructor Offices (i.e.: 3 Drill Instructors per office) with a minimum 320 NSF per each office. Each Drill Instructor office shall have a private toilet and shower.						
Public Restrooms	Separate male and female restrooms shall be provided on the first floor for visitors, administrative personnel, and building occupant use. Each restroom shall have a minimum of one (1) shower.						
Waiting	A waiting area shall be adjacent to the Command Offices. A minimum 250 NSF shall be provided.						
CQ Station	One (1) centrally located CQ Station shall be located to provide maximum visual surveillance of the building main entrance and corridors on the first floor. CQ Station shall be a desk for one PN.						
Computer Learning Center with Storage & Day Room with Storage	A computer learning center and dayroom shall be provided on each floor with a minimum of 900 NSF for each room. Each of these spaces will need to accommodate twenty-four (24) people. The Computer Learning Center is intended for the use of computer-based learning. The dayroom is intended for casual and recreational uses. Each room shall have a storage area for miscellaneous items.						
Multi-Purpose Space with Storage	A multi-purpose space shall be provided, which is capable of being subdivided into three smaller areas. A minimum of 1700 NSF shall be provided which includes storage. Space shall be adequate to accommodate 100 soldiers.						
Luggage Storage	Provide secure storage, two (2) per floor for six (6) luggage rooms. Each room shall be a minimum 160 NSF and capable to store soldier's suitcases.						

The Army Standard for Advanced Individual Training (AIT) Complexes

Company Supply	Provide a minimum 280 NSF for storage of general equipment and supplies.
Secure Storage	Provide a minimum 100 NSF. Such items as night goggles and other high-value equipment may be stored in this room. Access to this room shall be through the Supply room.
Covered Training Areas	Provide one (1) covered training area near the building main entrance and one (1) training area at the rear entrance. These areas are available to perform simple calisthenics during periods of inclement weather. Two (2) boot washing stations shall be provided at the building's rear covered training area and one (1) boot washing station at the building main entrance. A minimum of three (3) public telephone stations will be provided in the rear Covered Training area for each B/COF.
Arms Vault	Provide arms vault in accordance with AR 190-11 and DoD Regulation 5200.1-R, Information Security Program. Vault door shall incorporate a steel Dutch-door type day-gate with a steel issue shelf built into lower leaf of day-gate. Provide a minimum 200 NSF.
Weapons Cleaning	Soldiers returning from training shall have direct access to this room prior to entering into the main building. Room shall be a minimum of 120 NSF and have a countertop for gun cleaning purposes.
Laundry	Provide a total of fifty-eight (58) washers and seventy-six (76) stackable dryers per B/COF.
Janitor Closet	Provide two (2) janitor closets per floor. Each janitor closet shall be a minimum 20 NSF with a built-in sink.
Scrub Room	Large sinks and tables are used to clean field equipment. A minimum of 240 NSF shall be provided.
Profile Recovery	Fitness equipment such as; treadmills, stationary bicycles and other equipment may be used for injured trainees to maintain their aerobic conditioning and improve their recovery from minor physical injuries. Provide a minimum 350 NSF.

**BATTALION HEADQUARTERS (BNHQ)**

ITEM	MANDATORY CRITERIA
Gross Area of Facility	Battalion Headquarters: 12,300 GSF
Secure Communications Room	Provide a minimum 65 NSF secure communications room to accommodate Secret Internet Protocol Router Network (SIPRNET).
Telecommunications Room	Provide a minimum 110 NSF secure communications room to accommodate telecommunications equipment.

The Army Standard for Advanced Individual Training (AIT) Complexes

<p>Private / Semi-Private Offices</p>	<p><u>Provide private offices for:</u> (total = nine (9) private offices per BNHQ) Battalion Commander (200 NSF) with a Closet (12 NSF minimum); Executive Officer (150 NSF); Sergeant Major (150 NSF); S-1 (110 NSF); S-2 (110 NSF); S-3 (110 NSF); S-4 (110 NSF); Chaplain (150 NSF); Chaplain Assistant (110 NSF)</p> <p><u>Provide semi-private offices for:</u> (total = five (5) semi-private offices per BNHQ)</p> <p>Inst. Work Space with three (3) workstations (325 NSF); Personnel &amp; Admin area with nine (9) workstations (1050 NSF); Training &amp; Operations Area with three (3) workstations (530 NSF); Intelligence Area with three (3) workstations (400 NSF); Supply &amp; Logistics with two (2) workstations (210 NSF)</p>
<p>Staff Duty</p>	<p>Provide a minimum 110 NSF Staff Duty adjacent to the Lobby Corridor.</p>
<p>Coffee Bar</p>	<p>Provide a minimum 45 NSF Coffee Bar located adjacent to the Personnel and Admin area.</p>
<p>Message Center</p>	<p>Provide a minimum 150 NSF Message Center located adjacent to the S-1 Office and the Personnel &amp; Admin area. Provide a lockable pass-through opening with a counter from the Message Center to the Lobby Corridor.</p>
<p>Classrooms</p>	<p>Provide three (3) classrooms, each a minimum of 1,025 NSF and capable of accommodating a minimum of 60 personnel.</p>
<p>Conference Room</p>	<p>Provide a minimum 450 NSF Conference Room capable of accommodating at least sixteen (16) chairs around a conference table and twelve (12) chairs along the Conference Room walls.</p>
<p>Storage</p>	<ul style="list-style-type: none"> <li>• <u>Supply Storage:</u> Provide a minimum 100 NSF storage room located along the Command Suite corridor.</li> <li>• <u>Classroom Storage:</u> Provide a three (3) minimum 25 NSF storage rooms located adjacent to the Classroom.</li> </ul>
<p>Vending</p>	<p>Provide a minimum 45 NSF open space to accommodate three (3) vending machines that allows access from Lobby Corridor.</p>
<p>Restrooms</p>	<ul style="list-style-type: none"> <li>• <u>Public Restrooms:</u> Provide separate male and female restrooms with a minimum 230 NSF each. Restrooms shall be located adjacent to the Lobby Corridor for visitors and building occupant use. Each restroom shall have a minimum of one (1) shower.</li> <li>• <u>Command Suite Restroom:</u> Provide a minimum 50 NSF unisex restroom located within the Command Suite for use of the command staff.</li> </ul>

The Army Standard for Advanced Individual Training (AIT) Complexes

Drinking Fountains	Locate four (4) drinking fountains adjacent to corridor and outside of the Public Restrooms. Locate two (2) drinking fountains along the corridor adjacent to the Command Suite for use of the command staff.
Janitor Closet	Provide a minimum 30 NSF janitor closet with built-in sink.

**BRIGADE HEADQUARTERS (BDHQ)**

ITEM	MANDATORY CRITERIA
Gross Area of Facility	Brigade Headquarters: 9,100 GSF
Classified Document Storage	Provide a minimum 100 NSF secured Classified Document Storage Room to accommodate classified documents.
Secure Communications Room	Provide a minimum 70 NSF secure communications room to accommodate Secret Internet Protocol Router Network (SIPRNET).
Telecommunications Room	Provide a minimum 75 NSF communications room to accommodate telecommunications equipment.
Private / Semi-Private Offices	<p><u>Provide private offices for:</u> (total = nine (9) private offices per BDHQ)                      Brigade Commander (200 NSF); Executive Officer (150 NSF); Sergeant Major (150 NSF); S-1 (110 NSF); S-2 (110 NSF); S-3 (110 NSF); S-4 (110 NSF); Chaplain (150 NSF); Chaplain Assistant (110 NSF)</p> <p><u>Provide semi-private offices for:</u> (total = four (4) semi-private offices per BDHQ)                      Supply &amp; Logistics with four (4) workstations (660 NSF); Personnel &amp; Admin area with seven (7) workstations (1167 NSF); Training &amp; Operations Area with seven (7) workstations (966 NSF); Intelligence Area with four (4) workstations (400 NSF)</p>
Staff Duty	Provide a minimum 110 NSF Staff Duty adjacent to the Lobby Corridor.
Message Center	Provide a minimum 145 NSF Message Center located adjacent to the Personnel & Admin area. Provide a lockable pass-through opening with a counter from the Message Center to the Lobby Corridor.
Conference Room	Provide a minimum 370 NSF Conference Room capable of accommodating a minimum of fourteen (14) chairs around a conference table and eight (8) chairs along the Conference Room walls.

The Army Standard for Advanced Individual Training (AIT) Complexes

Storage	Provide a minimum 100 NSF Supply Storage room.
Vending	Provide a minimum 45 NSF open space to accommodate three (3) vending machines that allows access from Lobby Corridor.
Restrooms	<ul style="list-style-type: none"> <li>• <u>Public Restrooms</u>: Provide separate male and female restrooms with a minimum 180 NSF each. Restrooms shall be located adjacent to the Lobby Corridor for visitors and building occupant use. Each restroom shall have a minimum of one (1) shower. Locate two (2) drinking fountains adjacent to the exterior of the Public Restrooms.</li> <li>• <u>Command Suite Restroom</u>: Provide a minimum 35 NSF unisex restroom located within the Command Suite for use of the command staff.</li> </ul>
Janitor Closet	Provide a minimum 20 NSF janitor closet with built-in sink.

**DINING FACILITY (DFAC)**

ITEM	MANDATORY CRITERIA												
Population	<p>DFAC capacity is based on a maximum 95% utilization factor</p> <ul style="list-style-type: none"> <li>• 1300 Soldier serving capacity within 90 minutes</li> <li>• 2600 Soldier serving capacity within 90 minutes</li> </ul> <p>Where requirements exist for larger facility and complex is provided in a consolidated area, it shall be constructed in lieu of constructing two 1300 Soldier DFACs.</p>												
Gross Area	<p>Gross building area consists of exterior covered queuing, covered loading dock and all enclosed spaces.</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td></td> <td style="text-align: center;"><u>1300PN</u></td> <td style="text-align: center;"><u>2600PN</u></td> </tr> <tr> <td>DFAC</td> <td style="text-align: center;">27,240 GSF</td> <td style="text-align: center;">49,610 GSF</td> </tr> <tr> <td>Covered queuing</td> <td style="text-align: center;"><u>6,520 GSF</u></td> <td style="text-align: center;"><u>12,780 GSF</u></td> </tr> <tr> <td></td> <td style="text-align: center;">33,760 GSF</td> <td style="text-align: center;">62,390 GSF</td> </tr> </table>		<u>1300PN</u>	<u>2600PN</u>	DFAC	27,240 GSF	49,610 GSF	Covered queuing	<u>6,520 GSF</u>	<u>12,780 GSF</u>		33,760 GSF	62,390 GSF
	<u>1300PN</u>	<u>2600PN</u>											
DFAC	27,240 GSF	49,610 GSF											
Covered queuing	<u>6,520 GSF</u>	<u>12,780 GSF</u>											
	33,760 GSF	62,390 GSF											
Operation	<ul style="list-style-type: none"> <li>• This facility must enable concurrent and segregated company operation. This includes separate queuing, entrances, hand wash, toilets, head-count stations, serving lines, self-service lines, dining rooms, beverage refill line and exits.</li> <li>• A consolidated soiled dish drop-off and dish wash area shall be located immediately adjacent to the exits.</li> <li>• Provide facilities and equipment for short order, hot food, and specialty service lines. Patron flow through serving lines shall minimize backtracking for desserts and beverages.</li> <li>• Provide beverage refill stations in each main dining area.</li> </ul>												

## The Army Standard for Advanced Individual Training (AIT) Complexes

Seating Capacity and Arrangement	<p><u>1300PN</u> – Seating capacity is 544 seats. Provide two separate main dining areas with 256 seats each. Provide separate area adjacent to each main dining area, each with 16 seats for cadre/training staff.</p> <p><u>2600PN</u> – Seating capacity is 1088 seats. Provide four separate main dining areas with 256 seats each. Provide separate area adjacent to each main dining area, each with 16 seats for cadre/training staff.</p>
Receiving Area	Provide a minimum of 2 truck dock spaces with one dock leveler at 48" above grade. A ramp and stair shall provide access from dock to dumpster/trash area. A can wash area shall be located adjacent to the loading dock.
Field Feeding Area	Provide an area adjacent to the dock for preparation and storage of field feeding items. This area shall include equipment for hot and cold beverage preparation, an icemaker, and space for handling and storage of insulated containers.
Other Support Areas	Provide handicapped accessible staff toilets with adjacent unisex locker and break area. Provide a manager's office and adjacent staff office with lockable administrative storage. Provide janitor closets accessible to both the kitchen and the dining area.

### BACKGROUND

Advanced Individual Training Complex Composition: An Advanced Individual Training Complex consists of several facilities types with emphasis on the following facility categories:

<u>Category Code</u>	<u>Description</u>
14183	Battalion Headquarters Building
14187	Brigade Headquarters Building
44220	Storage Building, General Purpose --- (used for LEB)
72121	Transient UPH, Advanced Individual Trainees (AIT)
72210	Dining Facility

Facilities covered in standard may have functional elements included in category codes 14185 (Company Headquarters Building), 17119 (Organizational Classroom), 17139 (Covered Training Area) or related category codes.

General Design Philosophy: AIT Complex is programmed as a unit, rather than as individual facilities as the complete AIT battalion drives the overall functionality of the facility. The facilities, outdoor training areas, and any additional support facilities, are arranged on the site as a unit to allow the battalion to live, eat, train, and work together and ideally should be planned within a 1,680 foot diameter circle.

Functional, operational, and spatial relationships critical to meeting battalion training requirements are embedded in the operational layout of facilities. By definition, use of the term complex in this standard refers to multiple facility types that are packaged to meet the training mission objectives while minimizing (to the extent feasible) the complex footprint. The facility planner contacts the COS to consider alternatives to minimize or preclude functional and operational impacts on training requirements when there is a critical need for spatial or land use consideration for siting and implementing this Army Standard.

## The Army Standard for Advanced Individual Training (AIT) Complexes

Planning and Land use: Site selection and real property master planning for all AIT complexes should to maximum extent possible, meet layout and configuration for spatial relationships between BDHQ, BNHQ, B/COF and DFAC as depicted in AIT Complex Standard Design.

### Specific MILCON Transformation Design Considerations:

- Maximum 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 requirements are satisfied.

## GUIDANCE

Operational Configuration: The overall scope of an AIT Complex varies depending on the number of Battalions within the complex. A single battalion AIT Complex includes four B/COF, one BNHQ, one DFAC, an outdoor training area with a quarter mile running track, parking, and service access. A Brigade Headquarters may be included if the site includes multiple Battalions organized under a Brigade. The BNHQ is located at the entrance to the AIT Complex where visitors can be received and entry into the complex controlled and has a clear and convenient pedestrian access to the various Barracks/Company Operations Facilities and Dining Facility. This Standard does not include a Central Cooling Plant.

Site Amenities: Includes site amenities such as running track, PT pits, sidewalks, access drives, controlled access, and exterior utilities.

### “Typical” Battalion AIT complex has:

	<u>Total GSF</u>
• Four Barracks/Company Operations Facility	372,000 GSF (w/ covered training/assembly)
• Battalion Headquarters	9,100 GSF
• 1300 Soldier Dining Facility	33,760 GSF (w/ covered queuing)
• Lawn Equipment Storage Building	2,000 GSF

Arms Vault: Secure arms vault requires 300 PN arms storage for each B/COF. Weapons racks are typically Government furnished and contractor installed. Weapons racks are securely anchored to building structure.

Gross Area Calculation: 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).

## The Army Standard for Advanced Individual Training (AIT) Complexes

Private Operated Vehicle (POV) Parking: The location of POV parking area(s) are designed based on each Installation's specific site constraints and can either be consolidated or spread out along the perimeter of the AIT Complex. Distance is measured based on a pedestrian's path of travel and should not exceed 1,680 feet. (For example: add distance of midpoint of car to end of parking stall, stall to sidewalk, and sidewalk to building entrance. Account for any obstacles into distance measurement.) POV parking areas meet standoff distance requirements dictated IAW UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings. The dining facility space requirement is based on 120% of maximum shift staffing. The B/COF is for able-bodied personnel.

### Vehicle Parking Requirements:

B/COF: 18 per Company x 4 Companies= 72 Total

BNHQ: 18 regular spaces, 3 visitor and 2 handicap spaces = 23 Total

DFAC: 120% (54 PN for a 801-1300 PN facility) = 65 Total (3 handicap parking stalls included in 65 spaces requirement)

TOTAL: 72 + 23 + 65 = 160 Total Vehicle Parking Spaces per typical AIT Complex.

B/COF Living Suites: Each two person living suite has a minimum population of two and may be increased a maximum population of three to accommodate population surges. Mechanical, electrical, plumbing and sewer systems are designed to meet maximum population requirement.

Classrooms and Battalion Headquarters Conference Rooms: Provide video teleconferencing capability. Classrooms are multi-functional spaces divisible by partitions and with full automation connectivity for up to three multi-functional configurations of each large space.

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

SIPRNET: Planning and installation is in accordance with provisions of Technical Guide for the Integration of Secret Internet Protocol Router Network (SIPRNET).

Physical Security Levels: The following are the levels of security access:

Zone 1 – Activities in these zones involve day-to-day operational needs with soldiers assigned to the BNHQ or BGHQ. Operations within this zone may be conducted up to 24 hours per day / 7 days per week. Typically, entrance doors to these functional areas are in an unlocked state with a staff person located at entrance to control access. Functional areas within this zone have lockable door entrances to secure during non-working periods and separation walls are continuous to the building structure in order to prevent unauthorized entries.

Zone 1 security levels: Command Group; S1; S4; Unit Ministry

Zone 2 – Activities in these zones involve much less day-to-day operational needs with soldiers assigned to the BNHQ or BGHQ. Operations within this zone may be conducted up to 24 hours per day / 7 days per week. Typically, entrance doors to these functional areas are in a locked state with a staff person located at entrance to control access. Separation of activities is provided between zone 1 and zone 2 to ensure privacy and prevent unauthorized entries. Functional areas within this zone have lockable entrances to secure during non-working periods and separation walls are continuous to the building structure in order to prevent unauthorized entries.

Zone 2 security levels: S-2 & S-3

## The Army Standard for Advanced Individual Training (AIT) Complexes

### Mission Separation:

The Running Track is separated from all vehicular traffic.

Command Group is separated from: Chaplain's Office; Classrooms

Chaplain's Office has separate exterior entrance located away from building main entrance.

Separation – Defined as separate in space or position from designated mission group(s) or functions, with intervening space. Typically intervening boundaries are those such as different floors, permanently constructed walls, halls or moveable metal partitions can be used.

### Office Adjacencies:

Battalion and Brigade Headquarters adjacencies:

- S-4 has a desired proximity to: S-3

Adjacencies – Considered nearest in space or position; immediately adjoining without intervening space. Typically there is a common boundary or edge, however there may be space between when several services have competing requirement to be adjacent. Typical boundaries used are permanently constructed walls, halls, or moveable partitions.

Laundries: Provides large capacity washers and dryers at a ratio of 8:1 (washers) and 6:1 (stackable dryers) based upon surge capacity. Laundry facilities are adjacent to sleeping area.

Calculations: Provide a minimum of 58 (rounded) washers (~450 PN / 8 washers) and 76 (rounded) stackable dryers (~450 PN / 6 dryers) per B/COF building.

- First Floor – 14 Washers, 20 Stackable Dryers
- Second Floor – 22 Washers; 28 Stackable Dryers
- Third Floor – 22 Washers; 28 Stackable Dryers

Configuration provides 58 washers and 76 stackable dryers (rounded) per B/COF, which equates to 232 washers (58 x 4 bldgs) and 304 stackable dryers (76 x 4 bldgs) per a typical B/COF complex.

Accessibility: The Barracks/Company Operations Facilities are for able-bodied personnel and are not required to meet ADAAG requirements. The mission is for transient training and there is no visitor requirement.

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. See Army's latest guidance for sustainability requirements.

- 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 the 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.

The Army Standard for Advanced Individual Training (AIT) Complexes

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 (COS) 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.

**AIT COMPLEX ROOM FINISH SCHEDULE**

SPACE	FLOOR	WALL	BASE *	CEILING **
<b>ADMINISTRATION</b>				
VESTIBULE	PT OR QT	EPGB		ACT, PTD
RECEPTION / LOBBY / HALL / CQ STATION	PT OR QT	EPGB		ACT, PTD
COMMAND PRIVATE OFFICES***	CRPT	PTD		ACT
PRIVATE / SEMI-PRIVATE OFFICES	VCT	PTD		ACT
OPEN OFFICES	VCT	PTD		ACT
<b>STAFF SUPPORT</b>				
CONFERENCE ROOM	CRPT	PTD		ACT
MESSAGE CENTER	VCT	PTD		ACT
STAFF DUTY	VCT	PTD		ACT
COPY ROOM	VCT	PTD		ACT
VENDING / COFFEE BAR	VCT	EPGB		ACT, PTD
RESTROOMS	CT	CT		PTD
<b>SUPPORT AREAS</b>				
CORRIDORS	PT OR QT	EPGB		ACT
JANITOR CLOSET	QT	CT		VACT
MECHANICAL	SC	PTD		PTD
COMMUNICATIONS	SC	PTD		PTD
ELECTRICAL	SC	PTD		PTD
STORAGE (applies to all storage areas)	VCT	EPGB		PTD
COVERED TRAINING	SC	-		EXPOSED
<b>ROOMS</b>				
CLASSROOMS	VCT	EPGB		ACT
SLEEPING AREA	VCT	EPGB		PTD
ARMS VAULT	SC	SC		SC
LAUNDRY ROOM	QT	PTD		EPGB

**LEGEND:**

- SV – SEAMLESS VINYL FLOORING
- CT – CERAMIC TILE
- PT – PORCELAIN TILE
- QT – QUARRY TILE
- VCT – VINYL COMPOSITION TILE
- SC – SEALED CONCRETE
- PTD – PAINTED GYPSUM WALLBOARD
- EPGB – EPOXY PAINTED GYPSUM BOARD
- VACT – VINYL FACED ACOUSTICAL CEILING TILE (MOISTURE RESISTANT)
- ACT – ACOUSTICAL CEILING TILE
- CRPT – CARPET

## The Army Standard for Advanced Individual Training (AIT) Complexes

- \* **Base:** Will be appropriate to the flooring. Base to be sealed with USDA approved caulk (Edible)
- \*\* **Ceiling:** 2 ft X 2 ft size with concealed tile joints
- \*\*\* **Command Private Offices:** Company/Battalion/Brigade Commanders; Executive Officers; Command Sergeant Major; and Chaplain

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

- American with Disabilities Act Accessibility Guidelines (ADAAG)
- Uniform Federal Accessibility Standards (UFAS) Federal Standard 795
- IBC – International Building Code
- AR 405-70, Utilization of Real Property
- AR 420-01, Army Facilities Management
- AR 380-05, Department of the Army Information Security Program
- AR 190-11, Physical Security of Arms, Ammunition, and Explosives
- DoD Regulation 5200.1-R, Information Security Program, – Appendix 7 Physical Security Standards, AP7.1, Vault and Secure Room Construction Standards
- DA PAM 415-28, Construction Real Property Category Codes
- DCID 6/9, Physical Security Standards for Sensitive Compartmented Information Facilities (or replacement Intelligence Community Directive)
- UFC 3-600-01, Fire Protection Engineering for Facilities
- UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings
- UFC 4-023-03, Design of Buildings to Resist Progressive Collapse
- UFC 4-722-01, Dining Facilities
- TB MED 530, Occupational and Environmental Health Food Sanitation
- ETL 1110-3-491, Sustainable Design for Military Facilities
- Executive Order 13423 (E.O. 13423), “Strengthening Federal Environmental, Energy and Transportation Management”
- Energy Policy Act 2005 (EPACT 05)
- 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