

UNIFIED FACILITIES CRITERIA (UFC)

FINAL DRAFT **FITNESS CENTERS**



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UNIFIED FACILITIES CRITERIA (UFC)

FITNESS CENTERS

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U.S. ARMY CORPS OF ENGINEERS

NAVAL FACILITIES ENGINEERING COMMAND (Preparing Activity)

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

Record of Changes (changes are indicated by \1\ ... /1/)

Change No.	Date	Location



FOREWORD

The Unified Facilities Criteria (UFC) system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applies to the Military Departments, the Defense Agencies, and the DoD Field Activities in accordance with [USD\(AT&L\) Memorandum](#) dated 29 May 2002. UFC will be used for all DoD projects and work for other customers where appropriate. All construction outside of the United States is also governed by Status of forces Agreements (SOFA), Host Nation Funded Construction Agreements (HNFA), and in some instances, Bilateral Infrastructure Agreements (BIA.) Therefore, the acquisition team must ensure compliance with the more stringent of the UFC, the SOFA, the HNFA, and the BIA, as applicable.


UFC are living documents and will be periodically reviewed, updated, and made available to users as part of the Services' responsibility for providing technical criteria for military construction. Headquarters, U.S. Army Corps of Engineers (HQUSACE), Naval Facilities Engineering Command (NAVFAC), and Air Force Civil Engineer Support Agency (AFCEA) are responsible for administration of the UFC system. Defense agencies should contact the preparing service for document interpretation and improvements. Technical content of UFC is the responsibility of the cognizant DoD working group. Recommended changes with supporting rationale should be sent to the respective service proponent office by the following electronic form: [Criteria Change Request \(CCR\)](#). The form is also accessible from the Internet sites listed below.

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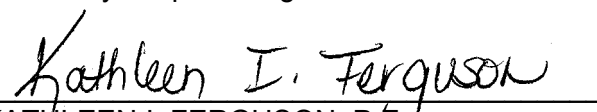
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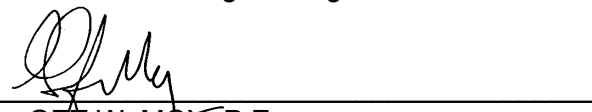
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**UNIFIED FACILITIES CRITERIA (UFC)
REVISION SUMMARY SHEET**

Document: UFC 4-740-02

Superseding: UFC 7-740-02N, Design: Indoor Fitness/Recreational Facilities.

Description: This UFC consolidates the single service design criteria for Fitness Centers. It also identifies the differences between fitness programs offered by the individual services. Information regarding aquatic facilities and pools is not included in this UFC. Information regarding recreations centers is in UFC 4-740-16, *Military Recreation Centers*.

Reasons for Document: This UFC contains the criteria for determining the appropriate size of a Fitness Center based on base population. It also provides information on the fitness programs offered by each service to allow for a Fitness Center design that meets the individual service and base requirements. It provides non-Government standard resources that provide guidance in the design of Fitness Centers.

Impact: Cost impacts are negligible. However, having this information in a single document should decrease design time and design expense.

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CHAPTER 1 INTRODUCTION

1-1 SCOPE OF DOCUMENT.

This UFC provides guidelines for evaluating, planning, programming, and designing Fitness Centers. The information in this UFC applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental United States (CONUS) and outside the continental United States (OCONUS). It also applies to the procurement of design-build services for the above-noted projects. Alteration and renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints. This UFC is not intended as a substitution for thorough review by individual Program Managers and Operations Staff in the appropriate Service.

1-2 USERS OF THIS DOCUMENT.

This UFC is intended to be a source of basic architectural and engineering information for all individuals involved in the planning, design, or evaluation of Fitness Centers. Note: where one Service's criteria vary from the other Services' criteria, it is noted in the text as a **Service Exception**. For the purpose of this UFC, Service Exceptions identified as Navy do not include the USMC. Specific users of the UFC include the following.

1-2.1 Architects and Engineers.

Architects and engineers (A/Es) who provide design services under the direction of the individual design agencies will use this UFC along with other documents to design facilities and develop design-build requests for proposals. Design agencies include the Army Corps of Engineers (COE), Army Community and Facility Support Center (CFSC), Naval Facilities Engineering Command (NAVFAC), Commander, Navy Installations Command (CNIC), and the Air Force Major Command Civil Engineers.

1-2.2 Planning Personnel.

Planning personnel will use this UFC along with other documents for programming new or replacement facilities, pre-design planning, or assessing the extent of improvements required in an existing Fitness Center in order to achieve the standard established herein.

1-2.3 Additional Users.

Additional users include the following:

- Headquarters staff and field operating agencies,
- Major command staff/regions,
- Installation commanders,

- Installation facilities management,
- Installation technical proponents,
- Program directors, and
- Facility/program operations staff.

1-3 **SERVICE CONTACTS.**

Prior to project development, confirm the acquisition methodology and coordinate the design team composition and facility requirements with the following Service contacts:

- Army. Family, Morale, Welfare, and Recreation Command (FMWRC), Alexandria, VA.
- Navy. CNIC (N944), Fleet & Family Readiness, Millington, TN.
- Air Force. Air Force Civil Engineering, Brooks City-Base, TX, and HQ Air Force Services Agency, Randolph AFB, TX.
- Marine Corps. USMC HQ, Personal and Family Readiness Division, Quantico, VA.

1-4 **ACQUISITION METHODOLOGY.**

There are two primary acquisition methodologies for Government construction: design-bid-build and design-build. Service personnel involved with project development should understand the acquisition methodology as it affects how and when they can influence the resulting facility design.

1-4.1 **Design-Bid-Build.**

The design-bid-build acquisition methodology is characterized by separation between the designer of record and the construction contractor. An internal or Government-contracted architect or engineer designs the facility, and the Government separately contracts for construction. Service personnel have the opportunity to interface with the designer of record and influence the design at several predefined points in the design process.

1-4.2 **Design-Build.**

The design-build acquisition methodology is characterized by the combination of design and construction services under one contract. The Government contracts with one entity to prepare the design and to construct the facility based on the requirements outlined in a request for proposal (RFP). Service personnel have the opportunity to influence the design during the development of the RFP and during the design-build contractor selection process. Any reviews that occur post contract award are limited to ensure

compliance with the RFP and the contractor's proposal. Government-initiated design changes, particularly those that impact cost and schedule, typically cannot occur after award without a contract modification.

1-5 DESIGN TEAM QUALIFICATIONS.

The design team of record for Fitness Centers shall have experience designing a minimum of three fitness centers, unless additional experience requirements are defined in a design-build RFP. Experience in designing all components of the programmed project, such as athletic playing fields, running tracks, pools, and other associated functions is always desired; however, if the project includes those components that design experience is required. The design team shall coordinate with Service user representatives and construction staff.

1-6 SCOPE OF FACILITY.

The Fitness Center comprises the fitness program spaces, the administrative area, and building support. An additional component in some facilities is the Health and Wellness Center (HAWC)/health promotions. This component includes health promotions, health education, and fitness testing functions. **Service Exceptions:** Only the Air Force provides the HAWC as a consolidated center. The Marine Corps provides the health promotion functions in at least one Fitness Center on an Installation and integrates fitness testing with its fitness program. The Army may provide some of the functions of the HAWC within its fitness program.

Within the fitness and HAWC programs there are core functional program areas and optional functional program areas. All functional program areas are described in Tables 1-1 and 1-2. All of these spaces are described in greater detail in Chapters 2 and 4. Additionally, due to the numerous possible variations of Fitness Center programs, a special space program tool has been developed to help users navigate the intra- and inter-Service permutations. This tool is described in Chapter 2, Space Program.

1-7 PROGRAM AREAS.

1-7.1 Fitness Program, Administrative Areas, and Building Support.

Table 1-1 lists the core and optional areas for the fitness program, administrative areas, and building support. These are the traditional functions of a Fitness Center. They provide facilities and support services to meet the general fitness, skill development, training, and sports needs of all authorized users.

TABLE 1-1. FUNCTIONAL PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Lobby/Reception	
Entry lobby and waiting/display	Minimal entry space in front of control and/or vestibule. Combined with a waiting area with seating and display space.
Control counter/equipment issue storage	Sign-in and small gear issue. Provides visual control via line of sight (LOS) to, at minimum, the entry, free weights, and locker room entrance. Visual control over other key areas shall be accommodated via LOS and/or CCTV. Provides area to hold gear for issue (i.e., towels, balls, rackets).
Retail/vending/food & beverage sales	Food and beverage sales may be combined with gear issue (refrigerator); may be self-serve (vending). Option for a retail area for clothes, sports equipment. Option for an expanded, separate juice counter in lobby space. May be contract space.
Public restrooms/janitor's closet	Public restrooms (tied to gym capacity), with the janitor's closet and public telephone(s).
Administrative	
Director's office	Private office.
Program managers' offices	Private offices (Air Force (AF) and Marine Corps) or workstations (Army and Navy).
Administrative offices	Workstations.
Classrooms/training rooms	Required program space, except for Army Extra Small and Small size facilities.
Copy/work/break room	Copier, layout space, storage, small staff break area.
Gymnasium	
Basketball/volleyball court(s)	NCAA-size court(s).
Spectator seating	Minimum of 200 seats, more as required and with additional courts.
Storage/support	Storage area with access to both the gym and to the outside if adjacent intramural fields are present.
Unit PT/Group Exercise	
Group exercise room	One large subdivideable room with partitions (for classes and/or unit/command fitness training). AF may program this as multiple rooms.
Storage/support	Storage area with access to Unit PT/group exercise room.
Fitness Spaces	
Stretching/warm-up/cool-down	Usually one open space; may use floor finishes to separate subspaces; may use alcoves; may use balconies/mezzanines.
Free/plate-loaded weights	
Selectorized (machine) weights	
Cardiovascular (cardio) equipment	

TABLE 1-1. FUNCTIONAL PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Fitness program manager's office	Private office adjacent to fitness assessment room and fitness spaces. May include fitness testing equipment. Marine Corps requires fitness testing equipment.
Fitness assessment room	Private office with desk, computer, and chairs for staff to meet with customer adjacent to fitness spaces. Includes fitness testing equipment. Not required for the Marine Corps as the HAWC will provide this function.
Structured Activities	
Structured activity space	Can be used as needed, i.e., for climbing wall, spinning, martial arts/boxing, other structured activity, or rolled into other functional areas as needed. Army requires this as a stand-alone space.
Racquetball courts	Designed and specified to meet U.S. Racquetball Association Rules.
Spectator area/officiating	Optional for Army and Marine Corps. Required for AF. Not supported by Navy.
Locker Rooms	
Men's Locker Room	Separate male/female facilities. Each locker room is divided into the three sub areas indicated.
Locker/dressing area	
Toilet area	
Shower area	
Women's Locker Room	
Locker/dressing area	
Toilet area	
Shower area	
Sauna	Separate male/female facilities. Optional for Army to have either sauna or steam room (see below). Optional for AF and Marine Corps.
Steam room	Separate male/female facilities. Optional for Army to have either steam room or sauna (see above). Optional for AF. Not supported by Marine Corps.
Hot tub	Optional. May be separate male/female or may be combined. Not supported by Army.
Convertible locker space	Optional for Army and AF. Optional for Marine Corps only in Large or Extra Large Facilities. Not supported by Navy. This is locker/changing space that can be used for additional male or female space to accommodate tournaments and/or changing demographics. It is a separate room between the male and female locker rooms with double-locked doors into each.
Support Areas	
Laundry	For towels and uniforms. Adjacent to receiving (if laundry service used) and control desk, if possible.

TABLE 1-1. FUNCTIONAL PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Receiving and equipment repair	Receiving, storage, and repair (with tool storage). Adjacent to loading dock or double exterior doors and the fitness spaces. Area to hold (if necessary), assemble, and repair equipment. Also store overflow from the equipment issue (i.e., seasonal items). Lockable storage with a sub area of additional secure storage.
Additional programmatic storage	Optional storage for additional, optional program equipment (i.e., boxing ring). May be combined with receiving/equipment repair.
Other Program Areas	
Pool	<p>Note that pools and natatoriums are a different category code. If a pool/natorium is desired, it will affect the adjacencies and traffic flow within the building. See Figure 2.3 for these adjacencies. For space and technical criteria for pools/natoriums, refer to the following additional documents/contacts:</p> <ul style="list-style-type: none"> • Army, US Army FMWRC; • Navy and Marine Corps. UFC 2-000-05N (P-80), <i>Facility Planning Criteria for Navy/Marine Corps Shore Installations CCN 740-53 and 750-30</i>; and • Air Force. UFC 4-750-07F, <i>Aquatic Facilities</i>.
Track	<p>Army required—an indoor track is required in at least one facility per Installation.</p> <p>AF required—Installation determines indoor track or outdoor track.</p> <p>Navy and Marine Corps—optional. Navy determines permissibility by center size and climate.</p>
Multipurpose Field	<p>Optional for Army, Navy and Marine Corps. See Chapter 5 for details.</p> <p>For the AF, tracks and fields will be programmed on a case-by-case basis and may use portions of the design criteria in Chapter 5, as needed; also refer to UFC 4-750-02N for other criteria.</p>
Massage room	Optional room for massage.
Physical therapy/rehabilitation training	Optional. Similar functional requirements to fitness assessment office. The Navy does not support this space except in special circumstances. Coordinate with the contacts provided in Chapter 1, Service Contacts. AF also only exercises this option in special circumstances. See requirements in Table 4-26.

TABLE 1-1. FUNCTIONAL PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Family changing room	Required for Army and Navy if co-located with a pool/natatorium. Optional for AF and Marine Corps. Single-person locker room with shower, lavatory, and toilet—family member accompanies child. Adjacent to locker area, parent/youth work-out area (AF only), and provide direct access to the pool.
Male Distinguished Visitor's (DV) locker room *	AF only option.
Female DV locker room *	AF only option.
Parent child area	Function and requirements vary by Service: Army: Not supported. Navy required and AF option: Provides a separate room for parents to watch their children while exercising—includes adult fitness equipment on one side and a separate child play area on the other. The two sides are divided by a 30-in.- (760-mm-) high clear wall with a central entry/exit point. Marine Corps required: Provides an unstaffed child care room with play area for the children and a seating/lounge area for the adults. Adult supervision is required in this area. Does not include fitness equipment.
Parent/youth work-out area *	AF only option. Provides a separate space for parents and youth to work out together.

* Service-specific space

1-7.2 Health and Wellness Center Program Areas.

The HAWC spaces described in Table 1-2 may be required for the Air Force as part of a consolidated HAWC. For the Marine Corps, some of the spaces are required as part of its health promotions program and some are integrated with its fitness program. For the Army, they may be provided as part of the fitness program.

Note: The HAWC criteria provided in this document applies to a HAWC that is collocated with a Fitness Center. If a stand-alone HAWC is to be built, review this information for general guidance only, and develop a comprehensive facility program that includes the appropriate support spaces.

TABLE 1-2. HEALTH AND WELLNESS PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Lobby/reception	AF required. Not supported by Army and Marine Corps.
Director's office	AF required. Army and Marine Corps optional.
Program managers' offices	AF and Marine Corps required. Army optional.

TABLE 1-2. HEALTH AND WELLNESS PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Support staff workstations	AF required. Army and Marine Corps optional.
Break room	AF option if the facility does not have a demonstration kitchen: Cannot have both. Not supported by Army and Marine Corps.
Classroom/training room	AF and Marine Corps required. Army optional. These rooms may be shared with the fitness center. Requires access from fitness center in this case.
Resource room/computer lab	AF and Marine Corps required. AF combines with lobby/reception. Optional for Army.
Storage/support	Tied to classrooms and demonstration kitchen.
Ergometry and fitness testing	AF required. Marine Corps required and should be adjacent to the fitness area. Not supported by Army.
Wellness assessment room	AF required. Not supported by Army and Marine Corps.
Equipment demonstration room	Required AF only if Health and Wellness Center is not collocated with the Fitness Center. Optional for Army.
Demonstration kitchen	Army and AF optional. Marine Corps required in at least one facility on an installation.
Relaxation room	Marine Corps optional. Lounge/massage chairs, music. Not supported by Army and AF.
Physical therapy workstation/athletic training room	Optional. PT clinical space.

1-7 **USERS OF FACILITY.**

The facility users are as follows:

- Active duty, guard, reserve, retired military personnel and their family members; and
- DoD civilians and others as authorized.

1-8 **RELATED DOCUMENTS.**

The Department of Defense (DoD) Memorandum dated 25 January 1999 requires the use of The American College of Sports Medicine's *Health/Fitness Facility Standards and Guidelines* for fitness and sports standards.

Also refer also to the following **Service-specific** related documents:

- **Army.** U.S. Army Physical Fitness Facilities Technical Criteria,

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- **Navy and Marine Corps.** UFC 2-000-05N (P-80), *Facility Planning Criteria for Navy/Marine Corps Shore Installations* and Navy Fitness Center Standards and Metrics, and
- **Air Force.** AF Services Facilities Design Guide: Fitness Centers and Air Force Services Standard Design for Concessions Stands.

CHAPTER 2 PLANNING AND LAYOUT

2-1 SIZE DETERMINANTS.

Fitness Center size is generally driven by the Installation population. However, the population and sizing factors vary by Service.

2-1.1 Army.

For **Army** population and Fitness Center size criteria, use this UFC and the associated space program spreadsheet (see Chapter 2, Space Program). Also refer to *U.S. Army Physical Fitness Facilities Technical Criteria* and the *Army Quantity Questionnaire spreadsheet* for additional information.

The **Army** uses five size classifications:

- Extra small, for populations between 251 and 1,000;
- Small, for populations between 1,001 and 3,000;
- Medium, for populations between 3,001 and 6,000;
- Large, for populations between 6,001 and 10,000; and
- Extra large, for populations between 10,001 and 15,000.

Over 15,000, the Army adds population in increments of 5,000 for the purpose of determining Fitness Center sizing.

2-1.2 Navy.

For **Navy** population and Fitness Center size criteria, refer to UFC 2-000-05N (P-80), *Facility Planning Criteria for Navy/Marine Corps Shore Installations* and *Navy Fitness Center Standards and Metrics*. This UFC and the associated space program spreadsheet (see Chapter 2, Space Program) have been designed to work with the Navy population and size criteria. In the event of a conflict between this UFC and the P-80, use the criteria in this UFC.

The **Navy** uses six size classifications:

- Extra small, for populations less than 500;
- Small, for populations between 501 and 3,000;
- Medium, for populations between 3,001 and 7,000;
- Large, for populations between 7,001 and 14,000;

- Extra large, for populations between 14,001 and 30,000; and
- Jumbo, for populations over 30,000.

2-1.3 **Air Force.**

Air Force population and Fitness Center size criteria are provided at the following Web site: www.wbdg.org/references/pa_dod_sps.php. The Air Force uses a separate space program spreadsheet (see Chapter 2, Space Program). The Air Force uses the following size classifications:

- Small, for populations less than 1,000;
- Medium 1, for populations between 1,001 and 2,000;
- Medium 2, for populations between 2,001 and 3,000;
- Medium 3, for populations between 3,001 and 4,000;
- Medium 4, for populations between 4,001 and 5,000; and
- Large, for populations between 5,001 and 6,000.

Over 6,000, the Air Force adds population in increments of 1,000 for the purpose of determining Fitness Center sizing. The facility area increases by 465 m² (5,000 ft.²) for every 1,000-person increase in population.

2-1.4 **Marine Corps.**

For **Marine Corps** population and Fitness Center size criteria, refer to UFC 2-000-05N (P-80), *Facility Planning Criteria for Navy/Marine Corps Shore Installations*. This UFC and the associated space program spreadsheet (see Chapter 2, Space Program) have been designed to work with the Marine Corps population and size criteria. In the event of a conflict between this UFC and the P-80, use the criteria in this UFC.

The **Marine Corps** uses five size classifications:

- Extra small, for populations less than 500;
- Small, for populations between 501 and 3,000;
- Medium, for populations between 3,001 and 7,000;
- Large, for populations between 7,001 and 14,000; and
- Extra large, for populations between 14,001 and 30,000.

The **Marine Corps** also uses actual Installation population figures and a specific formula for sizing the fitness spaces on Installations with populations greater than

3,000: Peak load = 3.5% of installation population; fitness area = 4.2 m (45.32 ft.²) times peak load. For the purposes of this formula, the fitness areas include only the free weight, selectorized equipment, and cardiovascular equipment areas and do not include space for stretching/warm-up/cool-down and the fitness assessment office.

2-2 **SPACE PROGRAM.**

The space program for Fitness Centers is developed through the use of an interactive spreadsheet. It is completed by first entering the appropriate Service branch and then selecting the appropriate size basis for the facility. These selections generate the default space program, which is broken down into the spaces listed in Tables 1-1 and 1-2. In some cases, there are options to modify the default numbers or to add optional spaces. This spreadsheet is available as a downloadable Microsoft[®] Excel[®] file from the Whole Building Design Guide (WBDG) Website under the DoD page, Unified Facilities Spreadsheets: http://www.wbdg.org/references/pa_dod_sps.php.

Service Exceptions: The **Air Force** worksheet is available as a separate downloadable Microsoft[®] Excel[®] file from the WBDG Website: www.wbdg.org/references/pa_dod_sps.php. Space requirements for the optional **Army, Navy and Marine Corps** multipurpose field can be found in Chapter 5.

2-2.1 Samples of completed interactive spreadsheets for each Service are included in Appendix B.

2-2.2 The data upon which the interactive spreadsheet is based is also provided in Appendix B. Do not use Appendix B to develop the space program—use only the interactive spreadsheet.

2-2.3 The space program developed through the use of the interactive spreadsheet serves as a guideline for the Fitness Center planning team and generally represents the maximum space allowed. The final space program for a new Fitness Center will need to be carefully determined by Installation representatives and the appropriate Service program office guided by the criteria in this UFC.

2-3 **LOCATION DETERMINANTS.**

Determine the most appropriate and cost-effective location for a Fitness Center based on the following factors. Ensure the availability and capacity of required utilities and the compatibility of the mass/scale of the facility relative to adjacent structures.

2-3.1 **Access.**

Locate the Fitness Center to be visible and easily accessible to a diverse representation of the target audience, including both genders. Sites that meet this requirement include along the pedestrian paths to the existing barracks/dormitories, existing MWR/NEX/MCCS/Services facilities, and/or the dining facility. To accommodate patron access, consider the relationships to existing vehicular and pedestrian circulation patterns, bike

trails, and bus stops. Provide adequate parking as close to the facility as possible within antiterrorism (AT) requirements.

2-3.2 Related Facilities.

Locate the facility near other high-visibility areas and related functions such as outdoor running tracks, sports fields, open park space, swimming pools, outdoor recreation centers, military recreation centers, etc.

2-3.3 Cost.

Design these facilities with the objective of achieving the lowest life cycle cost over a 50-year period. To do so, the project's design program must adequately define the scope and performance requirements and match those needs against a budget. Conversely, the budget must adequately support an appropriate and high-quality program and the performance requirements outlined and identified in this UFC. Also consider possible future additions when selecting the site to ensure cost-effective expansion possibilities.

2-4 LAYOUT AND ADJACENCIES.

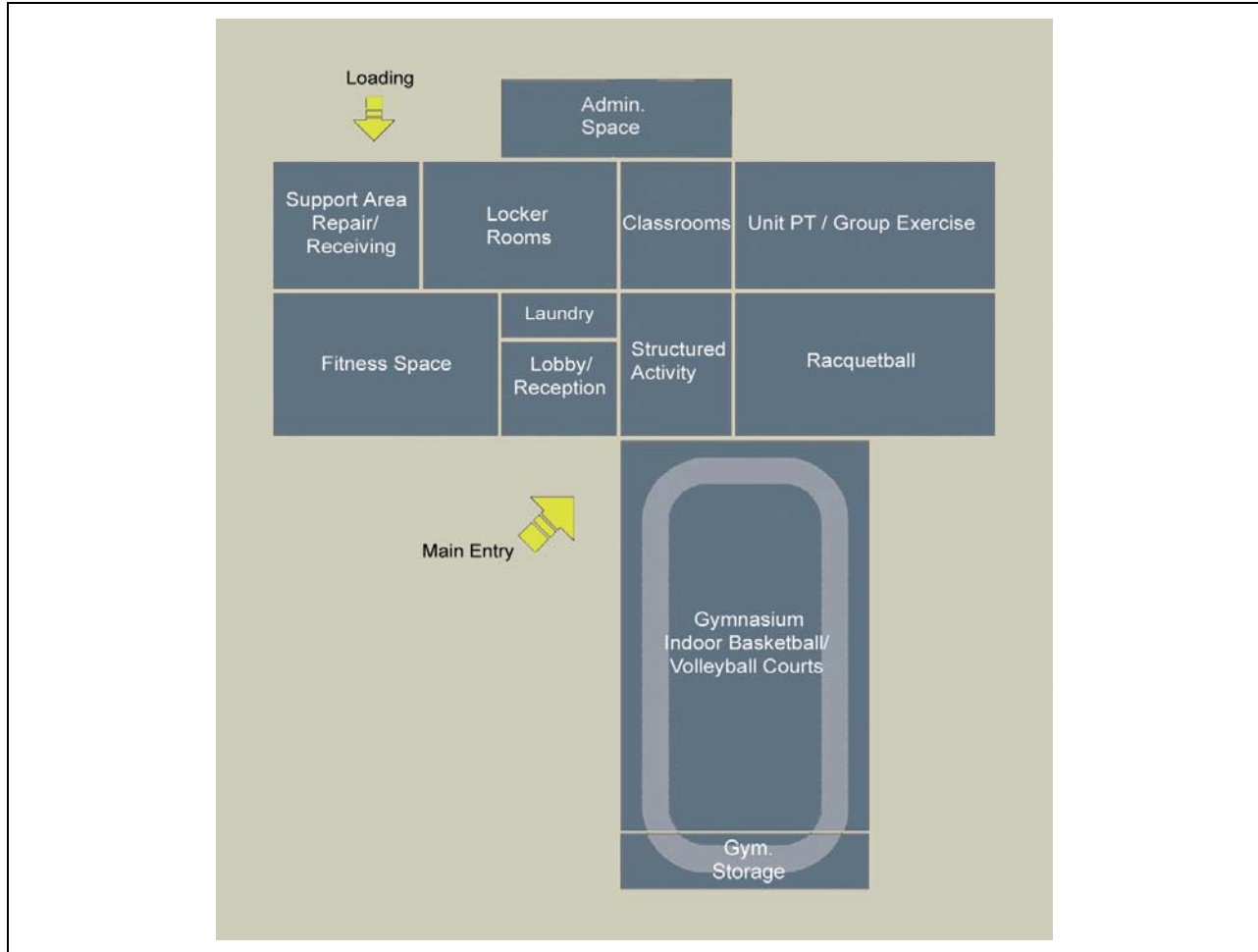
The appropriate layout and adjacencies are illustrated in Figures 2.1 through 2.3. These diagrams do not convey a building shape. Required adjacencies may be accommodated vertically.

These three figures all illustrate a facility with the gymnasium near the front entrance. This configuration allows the gymnasium to be used for events while the rest of the facility is closed off. However, also consider the massing of the facility when determining the location of the gymnasium.

2-4.1 Basic Facility.

The diagram in Figure 2-1 indicates acceptable relative adjacencies of the major functional spaces for a basic facility.

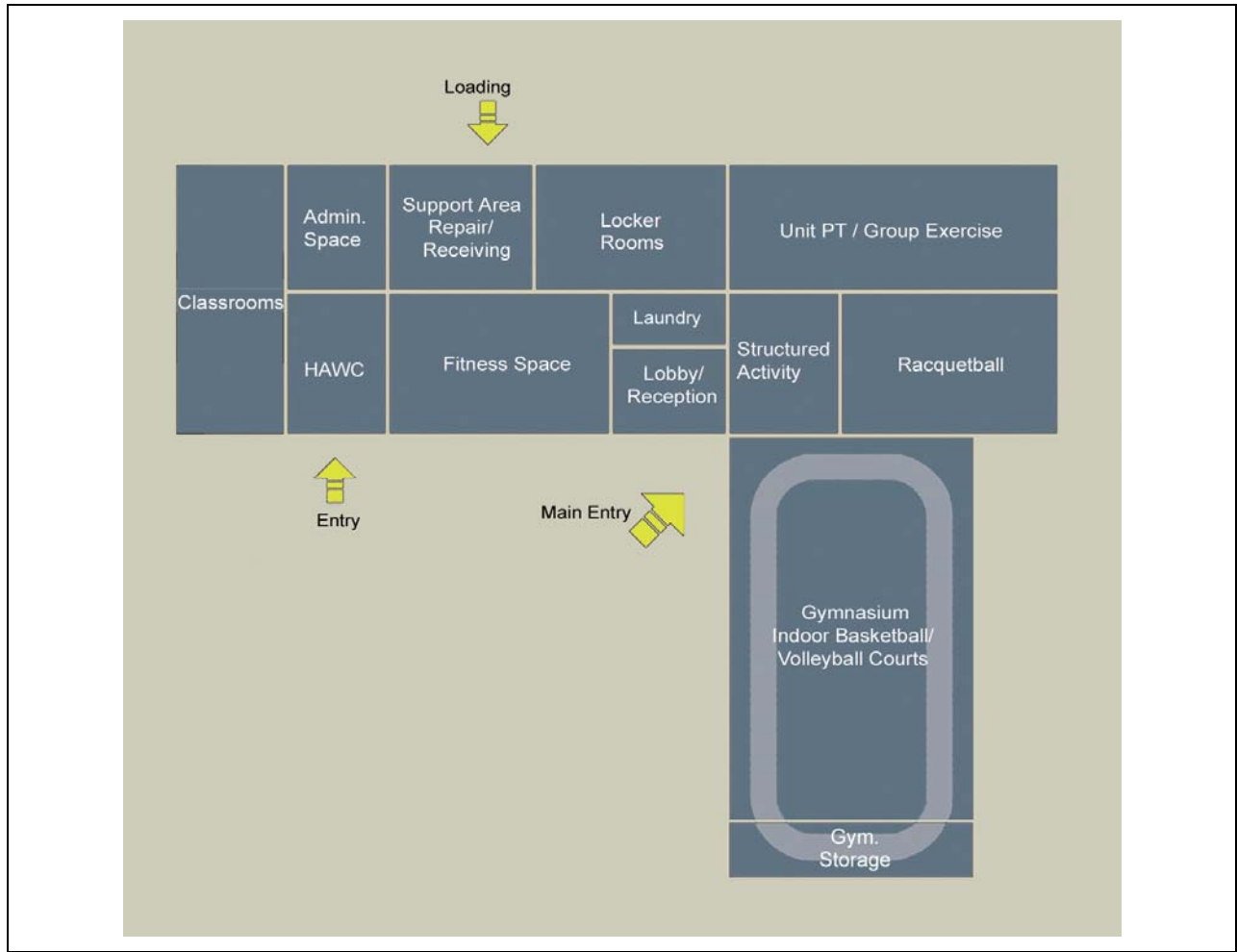
FIGURE 2.1. BASIC FACILITY FUNCTIONAL RELATIONSHIP DIAGRAM



2-4.2 Facility with a Consolidated Health and Wellness Center.

The diagram in Figure 2-2 indicates acceptable relative adjacencies of the major functional spaces for a facility with a consolidated HAWC. Note that only Air Force facilities include a consolidated HAWC.

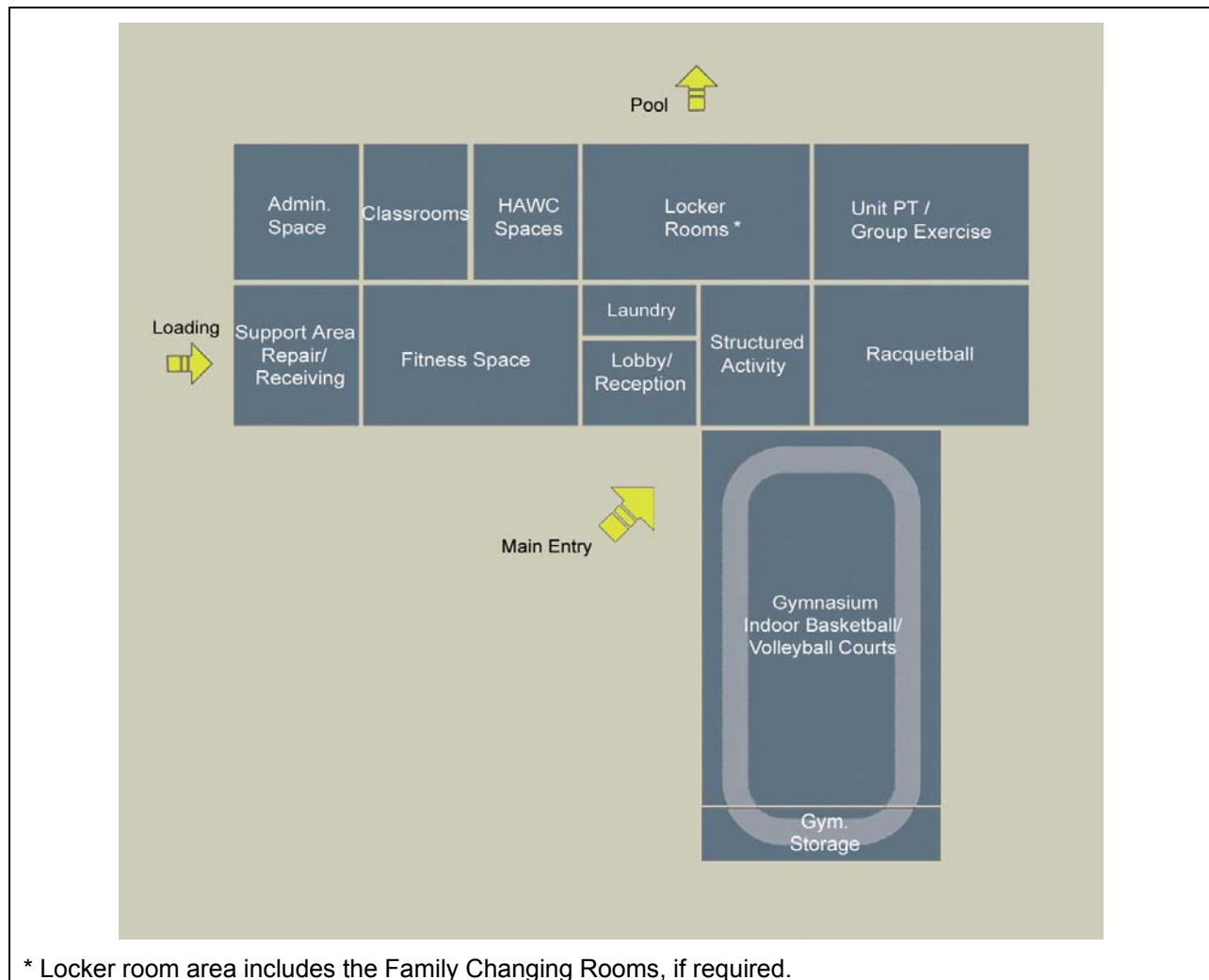
**FIGURE 2.2. FACILITY WITH CONSOLIDATED HEALTH AND WELLNESS CENTER
FUNCTIONAL RELATIONSHIP DIAGRAM**



2-4.3 Facility to Accommodate a Pool.

The diagram in Figure 2-3 indicates acceptable relative adjacencies of the major functional spaces for a facility that includes or is adjacent to a pool.

**FIGURE 2.3. FACILITY TO ACCOMMODATE A POOL
FUNCTIONAL RELATIONSHIP DIAGRAM**



2-5 SPACE ASSESSMENT.

See the Functional Data Sheets in [Chapter 4](#) for additional information on the space types and their relationships to each other.

2-6 ALTERATIONS TO EXISTING FACILITIES.

2-6.1 Regulatory Authorities.

Refer to the following regulatory authorities for each Service:

- **Army.** The standard may be modified to accommodate the existing structure. However, all proposed modifications to the standard must be sent to the Army Corps of Engineers, Engineering & Support Center, HSV (CEHNC) for review and HQDA (FMWRC) for approval prior to the initiation of concept design.
- **Navy and Marine Corps.** Authorities are contained in *OPNAVINST 11010.20G Facilities Projects Manuals* and *NAVFACINST 11010.45 Comprehensive Regional Planning Instruction*. Prior to planning alterations to an existing facility to convert it to a Fitness Center, the activity should consult the following: Navy: CNIC (N944) and Marine Corps: HQMC Personal and Family Readiness Division (MRS/MRD).
- **Air Force.** The standard may be modified to accommodate the existing structure. However, all proposed modifications to the standard must be sent to HQ Air Force Civil Engineering Support Agency (AFCESA) for fire and life safety issues, to HQ Air Force Services Agency (AFSVA) for functional issues, and to the respective MAJCOM Services Director for deviations from the core requirements.

2-6.2 **Other Considerations.**

Ensure the site of the existing facility can accommodate the Fitness Center's needs. Consider only permanent facilities for conversion to a Fitness Center. Exceptions may be made for other buildings that are in excellent condition, subject to the location determinants in Section 2-3.

Assess existing buildings being considered for conversion, alteration, or addition as to whether they can support all the core and optional spaces and dimensional requirements of the proposed building program. For example, ensure the building can accommodate an appropriately sized gymnasium. Ensure it can accommodate the locker rooms. Verify that the floor-to-ceiling heights are appropriate. All technical, code, accessibility, and AT requirements must be met as noted in Chapter 3.

CHAPTER 3 GENERAL DESIGN CRITERIA

3-1 GENERAL.

References within this UFC to applicable criteria and codes are intended to assist the designer in compiling the required statutes. These references are not intended to identify all those that may apply. It is the responsibility of the designer of record to identify and comply with all required statutes.

Use UFC 1-200-01, *General Building Requirements* for guidance on the use of model building codes for design and construction of DoD facilities.

3-1.1 Accessibility.

Provide barrier-free design in accordance with the requirements of the DEPSECDEF Memorandum "Access for People with Disabilities" dated Oct 31, 2008. The memorandum updates the DoD standards for making facilities accessible to people with disabilities. The US Access Board issued an update of the accessibility guidelines which the DEPSECDEF Memorandum implements with military unique requirements specified in the memorandum attachment. The new DoD, "ABA (Architectural Barriers Act) Accessibility Standard" and the DEPSECDEF Memorandum are located at <http://www.access-board.gov/ada%2Daba/aba-standards-dod.cfm>.

3-1.2 Antiterrorism.

Design this facility in accordance with UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*. UFC 4-010-01 is a multidiscipline UFC therefore all architectural/engineering disciplines need to be aware of the requirements. Examples include, but are not limited to, the following:

- Civil engineers need to be aware that UFC 4-010-01 will affect site location of buildings, roadways, parking, access roads, and landscaping.
- Mechanical engineers need to be aware that UFC 4-010-01 will affect air intake design and location, utility routing, mail room ventilation, HVAC controls, HVAC equipment support, and the site location of chillers, compressors and other heavy equipment.
- Electrical engineers need to be aware that UFC 4-010-01 will affect HVAC controls, utility routing, electrical equipment support, mass notification, and site location of substations, transformers, generators, and other heavy equipment.

3-1.3 **Sustainability.**

Design and construct the facility to comply with UFC 4-030-01, *Sustainable Development*. The sustainable development policies for each Service are referenced in UFC 4-030-01 and provide the specific requirements that must be met.

3-2 **STRUCTURE.**

In addition to the criteria established in Section 3-1 of this document, refer to UFC 3-310-01, *Structural Load Data*. **Service Exception:** For Navy projects, comply with UFC 3-300-10N, *Structural Engineering*.

Provide clear spans as required for the activity areas and gymnasium. Use pre-engineered components for superstructure framing, where feasible.

3-3 **ARCHITECTURE.**

Service Exception: For Navy projects, comply with UFC 3-100-10N, *Architecture*.

3-3.1 **Exterior Design.**

The building's image, theme, and fixtures must be consistent with the programs offered. The building design should reflect the local geographical and cultural environment and comply with the appropriate Service and Installation architectural standards. The building and site should provide a visually attractive, safe, and welcoming appearance. Consider grouping high bay spaces together. The high bay areas should not dominate or overwhelm surrounding structures.

3-3.1.1 **Entrances/Exits.**

Design the facility to require access at one main entry point. This main facility entrance to the lobby serves as a welcome and transition point—provide a covered entry. In cold climates, provide a canopy (or a recess) at required egress doors to ensure that doors can open completely without obstruction from snow and ice. All other exterior doors shall have a local, key-controlled alarm that sounds at the door and the control desk when the door is opened. Indicate this alarm with signage on the door.

If applicable, provide a separate entrance to the HAWC and a separate entrance for equipment deliveries. Provide a separate gymnasium emergency/special event exit with a paved path to the parking area.

3-3.1.2 **Doors and Windows.**

Provide windows to allow natural light into the facility. Use aluminum or hollow metal frames and doors. Mitigate glare and direct sunlight in activity spaces such as the gymnasium and fitness spaces.

3-3.1.3 **Exterior Finishes.**

The exterior color, texture and design shall be consistent with the programs offered, building type and the local environment in accordance with Installation standards. The design should communicate a sense of activity and fun while complying with Installation architectural standards. Coordinate the exterior finishes with the Service-specific design standards noted below under interior finishes.

3-3.1.4 **Exterior Signage.**

Equip the main entrance with an attractive, clearly visible sign that provides the program hours of operation. Ensure that signage complies with Installation requirements. Sign placement and type are site-specific, but signs must be strategically located, adequately lit, and of sufficient size to permit proper viewing by individuals approaching the facility.

3-3.1.5 **Exterior Walls and Mold.**

Comply with current industry standards and the following documents during design to help prevent the development of mold in exterior walls:

- **Navy.** Interim Technical Guidance (ITG) FY03-4, *NAVFAC Mold Response Manual*,
- **Air Force.** ETL 04-3: Design Criteria for Prevention of Mold in Air Force Facilities.

3-3.2 **Interior Design.**

Design the Fitness Center interior with a premium, non-institutional character that reflects professional, high-end commercial facilities. Interior construction and finishes (walls, floor, and ceiling) shall support the image and theme of the facility and be consistent with the programs offered. The following key public spaces offer the greatest opportunity to establish a creative and interesting interior design approach:

- Entry lobby and waiting/display
- Control counter
- Unit PT/group exercise
- Fitness spaces
- Structured activities
- Locker rooms and public toilets

3-3.2.1 Interior Construction.

Interior construction must be extremely durable. Use no hollow core wood doors. All interior glass shall be tempered safety glass and mirrors must be made of break-resistant materials.

Counters, casework, and cabinets shall be of high-quality and durable construction. Specify Architectural Woodwork Institute (AWI) Premium or Custom for finishes per *AWI Quality Standards Illustrated*, Current Edition. Casework and cabinet doors and drawer faces should be provided as veneer panel core. Doors, drawers, and casework faces should be plastic laminate at a minimum. Where no water source is present, countertops should be plastic laminate as a minimum with hardwood or solid surface edging. Where a water source is present, countertops shall be solid surface/solid composite plastics only. Specify .75-in. (20-mm) minimum thickness for plywood, plywood backing, and solid wood panels.

Identify the amount (linear ft./mm) of counter/casework and its functional requirements in each space within the Fitness Center with the specific program and the following Service-specific contacts:

- The Activity/Facility Manager for **Army** and **Air Force** projects and
- HQ Program Managers for **Navy** and **Marine Corps** projects.

3-3.2.2 Finishes.

Finishes shall take into account the intended uses, be appropriately durable, and be low maintenance. Finishes should have good acoustical, noise reducing characteristics. They must meet the requirements listed in NFPA 101, *Life Safety Code*. Comply with UFC 3-120-10, *Interior Design*, and coordinate with the following Service-specific standards or agencies:

- **Navy.** CNIC (N944);
- **Air Force.** Air Force Interior Design Guide, Major Command and Installation design standards, and Engineering Technical Letter (ETL) 03-3, *Air Force Carpet Standard*; and
- **Marine Corps.** HQMC Personal and Family Readiness Division.

For more information on finishes in specific areas, see the Functional Data Sheets in Chapter 4.

3-3.3 Acoustics.

Design the facility to provide a comfortable acoustical environment and provide comprehensive sound isolation and sound absorption measures for individual spaces as appropriate. In general, since much of the facility comprises high-activity, high-noise

functions, the design should seek to separate or acoustically protect the smaller, quieter functions rather than the noisier functions. For the purposes of this UFC, the following spaces are considered to be “noisy”:

- Mechanical and laundry rooms
- Selectorized weight area(s)
- Free/plate-loaded weight area(s)
- Cardiovascular equipment area(s)
- Gymnasium
- Unit PT/group exercise room
- Racquetball courts and some other structured activity spaces

At a minimum, provide the required sound transmission coefficient (STC) ratings identified in Chapter 4, Functional Data Sheets, for individual spaces. Use the “Suggested Design Values” STC ratings in UFC 3-450-01, *Noise and Vibration Control* as the basis for the sound design of partition, door and window assemblies. Utilize gypsum board wall “improvements” to increase the STC of gypsum board “Stud Type” partitions to achieve the project sound requirements. Unless noted otherwise extend the room partitions and seal to the structure above for rooms that have a noise source such as, but not limited to, corridors, toilets, elevator machine rooms, gymnasiums, classrooms, training rooms, maintenance rooms, and mechanical rooms. Unless indicated in Chapter 4, STC ratings do not need to be field verified.

3-4 **SERVICES.**

3-4.1 **Plumbing.**

Design domestic hot and cold water, sanitary and storm drainage, propane, fuel oil, or natural gas systems to meet the requirements of UFC 3-420-01, *Plumbing* and local Installation standards.

Locate floor drains outside the normal travel paths. In toilets, locate floor drains under the partitions where possible.

3-4.2 **Heating, Ventilating, and Air Conditioning (HVAC).**

Design the HVAC system to meet the requirements of the most current edition of the International Mechanical Code (IMC); UFC 3-410-01FA, *Heating, Ventilating, and Air Conditioning*; and UFC 3-410-02A, *Heating, Ventilating, and Air Conditioning (HVAC) Control Systems*. **Service Exception:** For Navy projects, design the HVAC system to meet the requirements of UFC 3-400-10N, *Mechanical Engineering*.

Do not locate HVAC equipment above the gymnasium due to the risk of a leak causing water damage.

3-4.3 **Fire Protection and Life Safety.**

Design fire protection and life safety to comply with UFC 3-600-01, *Fire Protection Engineering for Facilities*. **Service Exception:** For Navy projects, also comply with UFC 3-600-10N, *Fire Protection Engineering*.

3-4.4 **Electrical.**

Provide site electrical utilities, interior distribution systems, lighting, communications and security according to UFC 3-500-10, *Electrical Engineering* (Draft) and the latest Installation design requirements.

- Site Electrical Utilities includes equipment, overhead power distribution, underground electrical systems, grounding, metering, and exterior site lighting.
- Interior distribution systems include service entrance and distribution equipment, TVSS, dry type transformers, wiring devices, raceways, conductors, interior lighting systems, emergency power systems, lightning protection systems, and systems furniture.
- Communications and security includes telecommunications systems, television systems, electronic security systems (ESS), and intercommunication systems.

In addition to the criteria identified above, comply with the following Fitness Center-specific requirements.

3-4.4.1 **Lighting.**

See Chapter 4, Functional Data Sheets for light level and control requirements that are exceptions or in addition to the requirements referenced above.

3-4.4.2 **Emergency Power.**

To accommodate mission requirements for the Fitness Center to serve as an area of refuge, provide service entrance with external temporary emergency generator hook-up for the facility. This mission is required for Navy and Marine Corps and determined on a case-by-case basis for Army and Air Force. Coordinate with activity representatives to develop a written manual load-shedding procedure for the facility. Typically, activity-provided generators for this facility will be 500 kVA or 750 kVA. Loads to be supported by the emergency generator include the following: facility lighting, electric water heaters, gymnasium power, gymnasium HVAC system when a separate system is primarily serving the gymnasium, and toilet and shower exhaust. Ensure availability of

a hard surface area adjacent to the building service entrance to accommodate the generator.

3-4.4.3 **CCTV.**

Projects provide the infrastructure for a CCTV system for security. For the Army, the Centers of Standardization, U.S. Army Engineering and Support Center, Huntsville will determine if design and construction funds will be provided for a complete and usable CCTV system. For the Navy and Marine Corps, the contacts provided in Chapter 1, Service Contacts, will determine if design and construction funds will be provided for a complete and usable CCTV system. For the Air Force, provide a complete and usable CCTV system. See Chapter 4, Functional Data Sheets for monitor and camera locations.

3-4.4.4 **Telecommunication Systems.**

See Chapter 4, Functional Data Sheets, for outlet locations.

3-4.4.5 **Television Systems.**

See Chapter 4, Functional Data Sheets, for outlet locations.

3-4.4.6 **Electronic Security Systems (ESS).**

See Chapter 4, Functional Data Sheets, for locations and additional criteria.

3-4.4.7 **Intercommunication Systems.**

See Chapter 4, Functional Data Sheets, for locations and additional criteria.

3-5 **SITE DESIGN AND ORGANIZATION.**

Where possible, use outdoor spaces as transition spaces and for extended fitness uses, such as areas for runners and bicyclists. The site design should feel safe for all authorized users. If located nearby, provide access paths to related functions such as outdoor running tracks, sports fields, open park space, or other outdoor activity areas.

Service Exception: For Navy projects, comply with UFC 3-200-10N, *Civil Engineering*.

3-5.1 **Landscaping.**

Landscaping shall reflect the programs offered and the local geographical environment. Selected plants shall be easy to maintain and enhance the visual quality of the facility in all seasons. Indigenous species are preferred. Comply with UFC 3-201-02, *Landscape Architecture* and the local Installation landscape standards. **Service Exception:** For Air Force, also refer to the USAF *Landscape Design Guide* and any Major Command standards. Provide an irrigation system, as needed.

3-5.2 Parking and Access Drives.

Provide adequate parking for both staff and patrons with the appropriate access drives. Consider location of bicycle racks near the facility entrance in a secure location. Comply with UFC 3-210-02, *POV Site Circulation and Parking*. **Service Exception:** For Air Force, also refer to AFH 32-1084, *Facility Requirements*, paragraph 20.2.2.2 and note 1 of table 20.2.

3-5.3 Service Drive.

Verify the size of required service vehicles prior to planning and designing the service access areas. Provide a back-up spur for dead-end and service drives which exceed 100 ft. (30 m) in length. Provide access to the serviced areas: the receiving and equipment repair area, garbage dumpster/storage (indoor or outdoor), mechanical room, and service entry, if one is designated. Provide a service vehicle apron and consolidate service access when possible. Screen or separate the service area from public use or traffic areas with attractive walls, fences, depressions, berms, and landscaping. Ensure proper drainage if depressions are used. Do not cross outdoor activity areas with service access.

CHAPTER 4 SPECIFIC DESIGN CRITERIA

4-1 INTRODUCTION.

This chapter identifies the specific design needs for each functional area outlined in the space program. Tables 4-1 through 4-29 provide this data in a standard Functional Data Sheet format.

The interior construction specialties, equipment and furnishings criteria provided in these tables are broken down as follows:

- Casework/Built-in Equipment. This includes anything physically attached or plumbed to the building such as counters, cabinets, casework, toilet accessories, window treatments, laundry machines, and retractable overhead screens.
- Furnishings, Fixtures, and Equipment (FF&E). This includes contractor-furnished, contractor-installed loose items such as desks, tables, chairs, bookshelves, and televisions (if mounted, TV mount would be built-in).
- User-provided FF&E. This includes all government-furnished, government-installed items, which are typically limited to office equipment such as computers, printers, copiers, and projectors (if mounted, projector mount would be built-in).

TABLE 4-1. ENTRY/LOBBY and WAITING/DISPLAY

Description/ Usage	The lobby serves as the primary entrance to the facility for patrons, visitors, and spectators. The lobby should be open and friendly in design and serve to introduce the rest of the facility. Immediately adjacent to the lobby is the waiting/display area which provides an area for customers to relax and for the facility to display trophies and special activities and programs.
Ceiling Ht.	10 ft. (3.05 m) minimum.
Finishes	<p>Walls. Provide a low-maintenance, durable finish with a wainscot. Consider semi-gloss or better painted gypsum wallboard or the use of wall covering where budget and practical considerations allow.</p> <p>Floor. Provide a low-maintenance, durable, moisture and slip-resistant finish suitable for this high traffic area. Consider stained concrete, stone, terrazzo, porcelain, or other hard tile. Provide a walk-off mat/area at the entrance door. Provide a base that matches the flooring or a vinyl base.</p> <p>Ceiling. Provide a decorative ceiling. Consider exposed, painted structure with an acoustical spray paint.</p>
Plumbing	Provide electric water cooler(s).
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Consider decorative and task lighting.

TABLE 4-1. ENTRY/LOBBY and WAITING/DISPLAY

Communication	<p>CCTV. Provide at least one outlet, or as needed to cover the entrance and lobby.</p> <p>CATV/Internal Video. Provide a CATV outlet.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line.</p> <p>Data. Provide an outlet in the waiting/display area. Service Exception: In Navy and USMC facilities, this outlet shall not be an NMCI line.</p> <p>Security. None required.</p>
Acoustics	No special provisions required.
Casework/ Built-in Equipment	<p>Built-in, recessed floor mat at entrance.</p> <p>Provide display cases and tack surfaces in this space.</p>
Furnishings Fixtures & Equip. (FF&E)	Waiting/display area should include durable, easy to clean, and moisture-resistant furniture: tables, chairs, magazine and brochure rack, wall art, trophy case (if not built-in), and a wall clock. Provide a means to display Installation and staff information.
User-provided Equipment	<p>Provide CCTV cameras per the outlet count.</p> <p>Consider providing a self-use blood-pressure monitor, a computer with Internet connectivity, and a pay phone.</p>
Special Req.	Provide an airlock at the main entrance where climate conditions dictate. Exterior doors shall have continuous or heavy-duty hinges. Provide a grated snow-trap for northern tier bases. Signage.
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-2. CONTROL COUNTER/EQUIPMENT ISSUE/STORAGE.

Description/ Usage	<p>The control counter is often referred to as the front desk or reception desk. It's the focal point of information exchange within the building and is the check-in location for patrons. Patrons shall not be able to access other facility spaces without passing the control desk and checking in. Do not use check-in/counting methods that restrict rapid access/egress to/from the facility, such as a turnstile.</p> <p>Equipment such as towels, balls, and racquetball rackets will be issued from the control desk. It must provide for direct supervision of the facility and greeting, informing, and directing patrons to their particular activity area. Additionally, the control desk serves as the focal point for safety and emergency situations.</p> <p>In smaller facilities, vending functions can be provided as an over-the-counter service at the control counter. Also see Table 4-3.</p>
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	<p>Walls. Semi-gloss or better painted gypsum wallboard. Consider wall coverings.</p> <p>Floor. In front of counter: Provide a low-maintenance, durable, moisture and slip-resistant finish suitable for this high traffic area. Consider stained concrete, stone, terrazzo, porcelain, or other hard tile. Provide a base that matches the flooring or a vinyl base.</p> <p>Behind counter: Provide stained concrete, stone porcelain, other hard tile, vinyl composition tile (VCT), or carpet. Provide vinyl base.</p> <p>Ceiling. Acoustical Ceiling Panels (ACP). Consider using the ceiling to define and separate this area from the Lobby, i.e., a dropped gypsum board soffit over the control desk and gypsum board false beams.</p>
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. Provide an emergency shut-off control per AT requirements.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide power for all equipment per Chapter 3, Electrical. Perform a power requirement survey as this area's power requirements are extremely site- and locale-specific.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (540 Lux) of general ambient lighting. Provide task lighting; consider decorative fixtures.
Communication	<p>CCTV. All monitors must be viewable from this area.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. PA and audio system controls. Provide a speaker.</p> <p>Telephone. Provide one line per two points of sale (POS). Provide at least two additional general purpose phone lines. In facilities that include a multipurpose field, provide a means for communication between the field kiosk and the control desk (also see FF&E).</p> <p>Data. Provide one outlet per POS. Provide additional outlets, as needed, for associated hardware.</p> <p>Security. Provide a duress alarm with controls next to the POS units.</p>
Acoustics	No special provisions required.

TABLE 4-2. CONTROL COUNTER/EQUIPMENT ISSUE/STORAGE.

Casework/ Built-in Equipment	<p>Provide a 24-in.- (610-mm-) deep counter with built-in cabinets. Provide file drawers and storage drawers with a minimum of two lockable drawers for each POS. The counter should be dual height for standing transactions, seated office functions, and ADA customer service. Note that ADA-height counter should have knee-hole space on both sides of the counter. The counter must be a durable solid surface material such as granite, concrete, or solid plastic—laminated is not permitted. Modesty panels and apron must be of durable materials. Provide a towel return drop opening in the counter top with space for a laundry cart below. The staff access to the counter must permit access to the free weight and treadmill areas for emergency response. Consider supports such as steel angle braces for counters with knee-hole space. Consider providing wall and base cabinets and an equipment counter.</p> <p>Storage must accommodate towels, small athletic equipment such as balls and rackets, and food and beverage/vending supplies (if provided at the control counter). Consider if clean towels will be provided by a service or if they will be in laundry carts and provide storage space accordingly.</p> <p>Provide PA controls.</p> <p>Consider providing an automatic external defibrillator (AED).</p>
Furnishings Fixtures & Equip. (FF&E)	<p>Chairs and stools.</p> <p>In facilities that include a multipurpose field, provide a means for communication between the field kiosk and the control desk and the controls for the field competition-level field lights. See Chapter 5 for additional details.</p>
User-provided Equipment	<p>POS units, desktop computer for administrative functions, CCTV monitors, and printers. Scanner or swipe-card check-in device (optional for Air Force).</p>
Special Req.	<p>Attendants at the control desk must have direct line-of-sight visual control over the following, at minimum: the entry, free weight area, treadmill section of the cardiovascular area, and locker room entrance. Visual control over other key areas shall be accommodated via LOS and/or CCTV and are identified in the individual functional data sheets. Service Exceptions: The Army and Air Force permit visual control of the locker room entrance and treadmill section of the cardiovascular area via CCTV.</p> <p>Consider providing a gate between the desk and surrounding area. Consider providing a coiling door or grille at the counter to serve as a security screen.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-3. RETAIL/VENDING/FOOD AND BEVERAGE SALES.

Description/ Usage	As noted in Table 4-2, the retail/vending functions may be accommodated at the control counter. This table describes the optional food and beverage sales or expanded retail functions that will be provided in a separate area that is highly visible and accessible to patrons to encourage business. Vending can also be provided at a self-service standalone space with vending machines. The vending area, if a standalone space, should be identifiable, visually screened but not totally enclosed, and visually accessible from the control desk.
Ceiling Ht.	9 ft. (2.74 m) minimum or matched with the lobby.
Finishes	Walls. Ceramic wall tile or other hard surfaces approved for food and beverage areas to a minimum of 4 ft. (1.22 m) above finished floor. Floor. Provide hard-surface flooring such as VCT, seamless vinyl, hard tile or other durable material. Ceiling. ACP or painted gypsum board.
Plumbing	Two-compartment countertop sink with hot and cold water supply and a clean-out. Floor drain. If an icemaker is desired, provide a water connection.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide dedicated outlets for the vending machines and countertop height outlets for microwave and other equipment as required per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Provide task lighting. Consider accent fixtures and lighting to provide special ambience.
Communication	CCTV. Provide sufficient quantity to allow adequate coverage. CATV/Internal Video. Provide an outlet at food and beverage area, if applicable. PA/Audio. Provide a speaker and intercom connection. Telephone. Provide one line per two points of sale (POS). Provide at least one additional general purpose phone line. Data. Provide one outlet per POS. Provide additional outlets, as needed, for associated hardware. Security. Consider providing duress alarm control next to the POS units.
Acoustics	If possible, do not locate this area near noisy spaces as defined in Chapter 3, Acoustics. However, this space is typically open to the fitness area and lobby spaces.
Casework/ Built-in Equipment	Countertop with base and wall cabinets at the front opening. Behind the service corridor, provide base and wall cabinets. Sink-area countertop shall be solid-surface. Drink rail. Dishwasher, refrigerated display cases, Consider an ice maker. Provide a lighted menu board (unless concessionaire operated).
Furnishings Fixtures & Equip. (FF&E)	Food and beverage/expanded retail: Under cabinet or counter microwave, refrigerator, freezer, and other small appliances as required. Bistro-style tables and chairs.
User-provided Equipment	Provide CCTV cameras per the outlet count. Vending machines. POS unit(s).
Special Req.	Provide a means to secure the food and beverage sales/retail area. Consider providing a built-in safe per local policy.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-4. PUBLIC TOILETS/JANITOR'S CLOSET

Description/ Usage	These toilet rooms are used primarily by visitors, spectators, and persons not using the locker and shower rooms. They should be adjacent to the lobby and gymnasium. Provide unisex or separate male and female restrooms depending on the total number of patrons to be accommodated in the bleachers.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum wallboard with a ceramic tile wainscot. Consider full ceramic tile walls with integral patterns. Use a dark-colored epoxy grout. Floor. Porcelain tile with integral patterns. Use a dark-colored epoxy grout. Ceiling. Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum wall board. None needed for janitor's closet.
Plumbing	Provide wall-hung water closets, wall-hung urinals (Service Exception: Navy prefers floor-mounted urinals), and lavatories based on the applicable code for the calculated occupancy of the gymnasium. Provide a floor drain. Provide a keyed hose bibb.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Solid-surface countertop with either underhung or integral sink. Service Exception: For single-use toilets, Navy allows wall-hung lavatories. Solid composite toilet and urinal partitions. Consider permanent ceramic-tile-finished partitions. Toilet accessories: toilet paper dispensers, paper towel dispenser with integral trash receptacle, robe hooks, grab bars, sanitary napkin disposal (female water closet stalls), seat cover dispensers, and soap dispensers. Mirror. Fold-down diaper changing table/station in both the male and female toilets.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	Provide a Janitor's closet associated with or in proximity of these toilets. This closet includes a floor mop sink with hot and cold water and a hose connection, a floor drain, and storage for pails, mops, vacuums, and related cleaning supplies and equipment. Include a lockable door (which can be opened from the inside) with a vision panel. Provide lockable cabinets for cleaning supplies. Provide exhaust ventilation directly to the outside.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-5 ADMINISTRATIVE OFFICES

Description/ Usage	<p>The administrative offices consist of a mix of private and open office space. The quantity and type of offices are facility specific. Generally speaking, the following office spaces are provided: Director's office, Program Managers' office(s), and support staff workstations.</p> <p>The offices should be free from frequent distraction, have a professional appearance, and provide a sense of work place.</p>
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	<p>Walls. Semi-gloss or better painted gypsum wall board or wall covering.</p> <p>Floor. Carpet with vinyl or rubber base.</p> <p>Ceiling. ACP.</p>
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Ensure an adequate number of circuits to power all equipment.
Lighting	Provide system per Chapter 3, Electrical.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video: None required.</p> <p>PA/Audio: Provide a speaker. Provide controls in the Director's office.</p> <p>Telephone. Provide one line per staff plus one additional line for fax and copier.</p> <p>Data. Provide one outlet per staff plus one outlet for each printer, copier, scanner, etc.</p> <p>Security. None required.</p>
Acoustics	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics. If possible, do not locate these offices near noisy spaces as defined in Chapter 3, Acoustics.
Casework/ Built-in Equipment	Provide dry-erase boards in select offices.
Furnishings Fixtures & Equipment (FF&E)	<p>Private Offices—provide furniture for 120 ft.² (11 m²) or 100 ft.² (9.3 m²) office: desk, credenza, filing cabinet, desk chair, and two side chairs.</p> <p>Workstations—provide furniture for 64 ft.² (6 m²) workstation: desk chair and side chair for open offices. Workstation systems furniture must provide adequate space for filing and overhead storage.</p>
User-provided Equipment	Computers and other office equipment.
Special Requirements	<p>Locate offices on exterior wall and provide windows for natural light admission. Provide side lights next to the office doors for supervision and security. For the director's office, provide an interior window with blinds to accommodate visual supervision over the fitness area and the control counter, where possible.</p> <p>Near or adjacent to the administrative offices, provide a telecommunications room in compliance with Chapter 3, Electrical</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-6. CLASSROOMS/TRAINING ROOMS

Description/ Usage	This space is used as a classroom for conducting programmed fitness and health related training.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard or wall covering. Floor. VCT with vinyl base. Consider carpet. Ceiling. ACP.
Plumbing	Consider providing a small sink in the counter (see Casework).
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical and additional outlets necessary to operate dedicated equipment.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. Provide outlets as required for coverage. CATV/Internal Video. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide a minimum of one outlet. Consider providing additional outlets for training purposes. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 49 per Chapter 3, Acoustics. If possible, do not locate this room near noisy spaces as defined in Chapter 3, Acoustics.
Casework/ Built-in Equipment	Solid-surface countertop; see Chapter 3, Interior Construction, for length criteria. Provide lockable wall and base cabinets. Provide an electrically operated retractable screen and a built-in computer projector mount. Bulletin board with tack surface and dry-erase board.
Furnishings Fixtures & Equipment (FF&E)	Provide tables, chairs, and an AV cart. Consider providing TV, VCR, and DVD player.
User-provided Equipment	Provide CCTV cameras per the outlet count. Projector and printer.
Special Requirements	Provide a lockable storage closet for training materials and AV cart. Provide a vision panel in the door. Service Exception: For the Marine Corps, provide a moveable partition to divide the large classroom into two spaces.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-7. COPY/WORK/BREAK ROOM

Description/ Usage	This space is used as a staff workroom for copying, meetings, breaks, and lunches.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wall board or wall covering. Floor. VCT with vinyl or rubber base. Ceiling. ACP.
Plumbing	Provide a sink with hot and cold water. Consider a water connection for refrigerator ice maker.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide one additional outlet at counter height for convenience. Provide additional outlets necessary to operate dedicated equipment.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. None required. CATV/Internal Video. Consider providing one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide outlets as required for equipment. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide two separate solid-surface countertops: one for food/break functions and one for administrative functions. See Chapter 3, Interior Construction, for length criteria. Provide lockable wall and base cabinets. Bulletin board with tack surface and dry-erase board.
Furnishings Fixtures & Equipment (FF&E)	Table, chairs, microwave, coffee machine, and refrigerator.
User-provided Equipment	Copier, fax machine, printers, and other office equipment as required. Consider providing a laminating machine.
Special Requirements	Locate copy/work/break room on exterior wall and provide windows for natural light admission. Provide a vision panel in the door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-8. GYMNASIUM/BASKETBALL/VOLLEYBALL COURTS

Description/ Usage	This space is used for team activities and sports competitions such as basketball and volleyball. Multiple court gymnasiums with divider curtains can accommodate simultaneous activities. The gymnasium can also support instructional functions, informal, intramural, and extramural sports as well as community events.
Ceiling Ht.	28 ft. (8.53 m) clear height below structure and lights.
Finishes	Walls. Pre-faced concrete masonry units (CMU) or CMU with heavy-duty epoxy up to 12 ft. (3.66 m). Above 12 ft. (3.66 m), use semi-gloss enamel and consider acoustic panels. Floor. Maple athletic flooring. Synthetic multipurpose, resilient, athletic flooring may be allowed when requested by the Installation and approved by the contacts identified in Chapter 1, Service Contacts. Flooring must meet "DIN" standards for the specified function per ACSM. Ceiling. Exposed, painted structure. Provide acoustical banners.
Plumbing	No plumbing fixtures in the gymnasium. Ensure access to nearby electric water coolers.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 68 F (20 C) minimum, 78 F (26 C) maximum, less than 50% relative humidity, 20 cfm/person outside air and use CO ₂ sensors to control outside air, and 10 recirculation air changes/hour. Provide durable air grill covers and do not place air grills in line with basketball nets.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety. Provide protection for sprinkler heads, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or raise it above 6 ft. (1.83 m) for safety considerations.
Power	Provide outlets per Chapter 3, Electrical. Provide power for the scoreboard; shot clocks; and a high, wall-mounted clock. Consider power requirements for other functions such as retractable backboards, divider curtain, and stage sound and lighting.
Lighting	Provide system per Chapter 3, Electrical. Metal halide or high-output fluorescent, 50 ft. candles (540 Lux) minimum at floor level, adjustable up to 80 ft. candles (860 Lux). If the program dictates, consider providing up to 100 ft. candles (1080 Lux). Provide perimeter compact fluorescents multi-level switched for non-sport activities. Provide keyed light switches. Provide protection for all fixtures. Do not locate fixtures directly above basketball backboards. Do not install high-pressure sodium lighting.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. None required. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Consider providing data outlets in recessed floor boxes routed to scoreboard, centered under the anticipated scoring table location, but outside the court boundaries. Security. None required.
Acoustics	For single court modules, reverberation time shall equal 1.0 second. For two-court or larger modules, reverberation time shall equal 1.8-2.0 seconds. Provide additional acoustical control with sound baffles, banners, and acoustical materials. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facility structure.

TABLE 4-8. GYMNASIUM/BASKETBALL/VOLLEYBALL COURTS

Casework/ Built-in Equipment	<ul style="list-style-type: none"> • Provide retractable basketball nets/backboards at two per half court or six per full court. Breakaway rims must be installed on all goals. • Provide volleyball built-in flush floor insert sleeves in each court. Consider floor inserts for gymnastics standards. • Motor-operated, vertical-acting (roll-up), divider curtain with manual override. Ensure the motor is easily accessible for maintenance. • Provide an electronic scoreboard that is visible from the seating areas. Provide control for scoreboard and divider curtain on side of room opposite of bleachers. • Bleachers. Use telescoping bleachers to maximize the flexibility of the space and to allow sideline space for gymnasium events. If bleachers are powered, provide a keyed control switch located to allow visual control of the bleacher operation. Provide for accessible seating. Service Exception: Navy requires manually-operated bleachers. • Provide game lines on flooring for full- and half-court basketball and volleyball. • Provide 6-ft.- (1830-mm-) high attached safety padding with bottom edge on top of floor base on all walls that can be impacted by a player. • Provide one pair of 30-second timing clocks for the main court.
Furnishings Fixtures & Equip. (FF&E)	<p>Provide volleyball stanchions, net, standard protective pads, net antenna, and elevated judge's stands.</p> <p>Provide a large surface walk-off mat outside the entrance to the gym. Consider providing this as a built-in, recessed mat.</p> <p>Provide wrestling mat, exercise mat, protective floor coverings with portable rolling stand, seating, scoring table, and chairs.</p>
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<ul style="list-style-type: none"> • Entrance doors into the gym shall have vision panels and ensure visual access from the control counter. • Provide minimum 10 ft. (3.05 m) of unobstructed floor space as a safety zone between the outer edge of the playing area and any feature or obstruction. Provide minimum 15 ft. (4.57 m) of unobstructed floor space as a safety zone between the outer edge of the playing area and any adjacent court playing area. • Consider moisture control and prevention of condensation on floor surface. Consider under-floor ventilation requirements, under-slab vapor barrier, estimated dew point occurrence, local water table, and local soil conditions. • Provide exterior double doors with removable latch post for equipment access. • Provide natural light through the use of windows and/or overhead skylights. Mitigate glare on the play and spectator areas. Any glass panels should be a minimum of 18 ft. (5.49 m) above finished floor and .5 in. (13 mm) thick, tempered, laminated safety glass. • Do not locate windows, doors, or other obstructions within 7 ft. (2135 mm) of all backboard centerlines. • Ensure no glazing or lighting can create glare or distraction on the play areas. Also consider cross-court play. Do not use window treatments to mitigate glare.
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p> <p>Participants.</p> <p>Spectators.</p>
Min. net m² (ft²)	

TABLE 4-9. GYMNASIUM STORAGE/SUPPORT

Description/ Usage	This room accommodates the storage of equipment and supplies, e.g., roll-away basketball goals, volleyball standards, gymnasium floor protective covering, and telescopic platform for maintenance/repair, needed for program support. Coordinate with overhead storage.
Ceiling Ht.	10 ft. (3.05 m) minimum.
Finishes	Walls. CMU or painted gypsum wall board. Floor. Sealed concrete. Ceiling. None required.
Plumbing	None required. Consider providing a connection for an ice maker and a floor drain. Service Exception: Ice maker is not supported by Marine Corps.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 65 F (18 C) minimum, 85 F (29 C) maximum.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 20 ft. candles (215 Lux).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Shelving and storage cabinets.
User-provided Equipment	
Special Req.	The room must be at least 8 ft. (2.44 m) wide and be accessible from both interior and exterior through lockable double doors with kick-plates. Consider a coiling roll-up door for the exterior access. Consider providing "dutch" doors at interior for equipment issue. Service Exception: Navy discourages the use of dutch doors. Provide a vision panel in the door. Provide ramp at exterior door to facilitate equipment issue/delivery, if necessary. In addition to the gym storage room, a separate storage area accessible from the exterior may be provided for exterior sports and athletic equipment, e.g., bleachers and soccer goals.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.

TABLE 4-10. UNIT PT/GROUP EXERCISE ROOM

Description/ Usage	This is typically one large room that is partitionable and can be used for large unit physical training or for multiple smaller classes that require only minimal equipment. Activities/classes include aerobics, martial arts, yoga, etc. Air Force may program this as multiple rooms.
Ceiling Ht.	10 ft. (3.05 m) minimum. Provide a 12 ft. (3.66 m) ceiling for facilities with large martial arts programs.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy or painted, double-layer (impact side) gypsum board. Floor. Maple athletic flooring. Synthetic multipurpose, resilient, athletic flooring may be allowed when requested by the Installation and approved by the contacts identified in Chapter 1, Service Contacts. Flooring must meet "DIN" standards for the specified function per ACSM. Ceiling. Exposed structure with acoustical spray paint or ACP. If ACP, provide non-sag panels.
Plumbing	None required. Consider access to electric water coolers and toilets.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 68 F (20 C) minimum, 74 F (23 C) maximum, less than 60% relative humidity, 20 cfm/person outside air and use CO ₂ sensors to control outside air. Provide multi-speed ceiling fans.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) minimum at the floor with 80% indirect and 20% direct. Provide protection for all fixtures and dimming capability.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. Provide outlets for ceiling-mounted monitors. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Consider providing data outlets in the walls or in recessed floor boxes. Security. None required.
Acoustics	Reverberation time shall equal 1.0 second. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facilities structure. Provide partition and door construction with a minimum STC rating of 50 per Chapter 3, Acoustics.
Casework/ Built-in Equipment	Provide one or more movable acoustical partition(s) with minimum STC rating of 45. Partition(s) shall recess into a closet. Provide a continuous stretching bar on at least one wall. Provide a continuous toe bar (for sit-ups) on at least one wall (different from wall with stretching bar). Provide a built-in protective box for the telephone. Provide mirrors on at least two walls at a minimum of 18 in. (450 mm) above the floor. Provide a secured sound system for each divided space and wireless headsets for instructors. Provide wall- or ceiling-mounted TV brackets in each divided space. Provide personal effects storage, such as cubbies, for customers in the room. Consider providing an AED.
Furnishings Fixtures & Equip. (FF&E)	TVs. Provide other fitness equipment as needed: spinning equipment, stair steps, exercise balls, small dumbbells, etc.

TABLE 4-10. UNIT PT/GROUP EXERCISE ROOM

User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<p>Design the rooms to allow for flexibility in use. Provide a method of fastening padding on walls for use during combative sports. Provide acoustical separation from the rest of the facility.</p> <p>Provide natural light where appropriate—provide glare and heat-gain protection if exterior glazing is provided.</p> <p>Provide some visual connection to the rest of the facility—consider providing interior windows to other exercise modules/circulation areas. If windows are provided, provide blinds.</p> <p>Accommodate queuing of customers in the area immediately outside the entrance.</p> <p>Provide secure storage either within the room or with a direct adjacency to store items such as mats, stair steps, wall padding, and other fitness equipment.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-11. FITNESS AREA

Description/ Usage	<p>This area is typically the focal point of the facility. The area is divided into four sections: stretching/warm-up/cool-down, free/plate-loaded weights, selectorized (machine) equipment, and cardiovascular equipment. The stretching/warm-up/cool-down area is open space within the larger room. It can also serve as transition areas between the other sections. The cardiovascular equipment area can be located in multiple areas throughout the facility. Service Exception: For Marine Corps, cardiovascular equipment shall be located in one area only. Consider locations such as balconies, alcoves, etc. The criteria in this table will apply regardless of equipment location. This area is adjacent to the equipment repair/receiving area.</p> <p>The free/plate-loaded weights area includes dumbbells, plate racks and plate-loaded equipment, and benches. The selectorized (machine) equipment consists of pin-selected weight equipment. The cardiovascular equipment consists of items such as treadmills, stationary bikes, stair climbers, etc.</p>
Ceiling Ht.	12 ft. (3.66 m) minimum. 14 ft. (4.27 m) is preferred.
Finishes	<p>Walls. Pre-faced CMU or CMU with heavy-duty epoxy. Provide high-impact wall guards up to 18 in. above finished floor in the free weight area.</p> <p>Floor. In the stretching/warm-up/cool-down and free weights areas, use permanently adhered impact flooring with a nonporous, high-density rubber/elastic surface. Composite products such as recycled rubber may be used; however, the top layer should be virgin (unrecycled) material chemically bonded to the sublayers. For the selectorized equipment and cardiovascular equipment areas either match the stretching/warm-up/cool-down and free weights areas or use multipurpose, resilient, non-porous athletic flooring.</p> <p>All flooring must meet "DIN" standards for the specified function per ACSM. Impact and athletic flooring system shall not be accommodated by interlocking flooring tiles or movable furnishings such as mats.</p> <p>Ceiling. Exposed, painted structure. Consider providing ACP or other acoustical banners and treatments.</p>
Plumbing	Provide a minimum of two electric water coolers.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 68 F (20 C) minimum, 74 F (23 C) maximum, less than 60% relative humidity, 20 cfm/person outside air and use CO ₂ sensors to control outside air. Provide multi-speed ceiling fans.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.

TABLE 4-11. FITNESS AREA

Power	<p>Provide outlets per Chapter 3, Electrical.</p> <p>Free weight area: Provide outlets for wall- or ceiling-mounted television monitors.</p> <p>Selectorized equipment area: If a fitness tracking system will be provided, coordinate equipment outlets with the specific equipment selected. Provide flush-floor outlets for commercial-grade equipment in a grid pattern sized appropriately for equipment spacing and to accommodate fitness tracking systems. Consider providing a raised floor system for power distribution; this is particularly useful in conversion projects. See Special Requirements for additional raised floor criteria. Provide outlets for wall- or ceiling-mounted television monitors.</p> <p>Cardiovascular equipment area: Coordinate equipment outlets with the specific equipment selected. Provide flush-floor outlets for commercial-grade equipment in a grid pattern sized appropriately for equipment spacing and to accommodate fitness tracking systems. Consider providing a raised floor system for power distribution; this is particularly useful in conversion projects. See Special Requirements for additional raised floor criteria. Provide dedicated circuits for all treadmills. Coordinate television monitor outlet locations with CATV outlet locations and the equipment selected: If cardiovascular equipment incorporates monitors, ensure outlets are located appropriately, and provide outlets for wall- or ceiling-mounted television monitors as necessary to ensure adequate viewing angles for all equipment.</p>
Lighting	<p>Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) uniform lighting with 80% indirect and 20% direct. Consider the possibilities for glare affecting equipment users—particularly those using equipment with horizontal benches. Mitigate glare as necessary.</p>
Communication	<p>CCTV. Provide outlets as needed for coverage.</p> <p>CATV/Internal Video. Provide outlets for wall or ceiling mounted television monitors throughout the fitness area. Mount at proper viewing height for cardiovascular exercise machines in that area. The quantity and location of the CATV outlets shall be determined by the sports fitness facility designer and the Installation fitness program manager and shall be coordinated with the equipment layout. The goal shall be to enhance the experience and enjoyment of working out in the fitness areas and to have a sufficient number of CATV monitors available for comfortable viewing by all users of the fitness area. Consider FM sound broadcast of video monitors.</p> <p>PA/Audio. Provide PA speakers as needed. Provide a separate audio system with speakers as needed for full coverage. Consider separate volume control and separate channels for individual activity areas.</p> <p>Telephone. None required.</p> <p>Data. Provide data outlets in recessed floor boxes in the cardiovascular and selectorized equipment areas.</p> <p>Security. None required.</p>
Acoustics	<p>Reverberation time shall equal 1.0-1.3 seconds. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facilities structure.</p>
Casework/ Built-in Equipment	<p>Provide 6 ft. (1830 mm) tall mirrors on at least two walls at a minimum of 18 in. (450 mm) above the floor. One of the two walls must be in the free weight area.</p> <p>Provide toe bars (for sit-ups) in the stretching area(s).</p> <p>Provide self-serve equipment cleaning supply stations throughout that include disinfectant spray bottles and disposable or reusable towels.</p> <p>Provide bulletin boards.</p> <p>Consider providing an AED.</p>

TABLE 4-11. FITNESS AREA

Furnishings Fixtures & Equip. (FF&E)	<p>Fitness equipment shall be commercial grade. Sample equipment lists for each area (cardiovascular, free weights, and selectorized) are provided in Appendix C. Address accessibility issues in equipment selection.</p> <p>Provide a heavy punching bag and a speed bag if a boxing program is included.</p> <p>Exercise mats, wall clocks, and trash containers.</p>
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<p>If this space is provided on the second floor, ensure that the elevator is specified to accommodate the fitness equipment.</p> <p>The design live load for the foundation/floor in this space shall be 150 PSF.</p> <p>Provide storage either within the room or with a direct adjacency to store items such as mats, spare equipment, punching bags, and other sports equipment.</p> <p>Provide natural light through the use of windows and/or overhead skylights. Mitigate glare.</p> <p>Provide attractive, color coordinated décor that projects a friendly environment. Avoid bland treatments such as a black floor and tan walls. Color selection should coordinate with equipment selected for the space.</p> <p>Consider providing a help desk within this space in larger facilities. If provided, locate it within the space in areas not well served by the control counter.</p> <p>If provided, the raised floor provides flexibility for routing power and data cables for fitness equipment. Typically, this will be a low-profile access floor.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-12. FITNESS ASSESSMENT ROOM

Description/ Usage	This room provides a space for staff to meet with customers and evaluate the customer's fitness level. It is inside or directly adjacent to the fitness spaces and the program manager's office and should include typical office furnishings and fitness testing equipment. Service Exception: This space is not required for the Marine Corps. The HAWC spaces provide this function for the Marine Corps.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wall board or wall covering. Floor. Carpet with vinyl base. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. Provide dedicated controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide a minimum of one quad outlet on at least three walls. Gang outlets with data and telephone. Provide additional dedicated outlets to accommodate the fitness equipment.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video: None required. PA/Audio: Provide a speaker. Telephone. Provide one line. Data. Provide at least one outlet at the desk area and one outlet at the fitness equipment area. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Office furniture: desk, credenza, filing cabinet, desk chair, and two side chairs. Fitness testing equipment such as a treadmill or cycle with built-in monitoring sensors/devices. Scale.
User-provided Equipment	Computer, printer, and other office equipment as needed.
Special Req.	Provide side lights with blinds next to the door for supervision and security. If this space is provided on the second floor, ensure that the elevator is specified to accommodate the fitness equipment.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-13. ROCK CLIMBING

Description/ Usage	A rock climbing wall is an optional addition, usually to the fitness equipment area or combined with other structured activities. The main uses of climbing walls are threefold: offering instructional programs for new climbers, fitness training or recreation for intermediate through advanced climbers, and climbing competitions. Locate the wall within the facility so that it is a highly visible feature or centerpiece and also serves an advertising function. Ensure direct visual control from the control counter.
Ceiling Ht.	Accommodate a 20 ft. (6.1 m) minimum-height climbing wall and the specific requirements of the equipment selected.
Finishes	Walls. CMU. Basic wall features should include arêtes, dihedrals, overhanging routes, flakes, chimneys, buttresses, and roof. Consider not only the width and height of climbing walls, but also the available depth to create interesting features. Floor. The flooring beneath the climbing wall should be a soft and resilient surface such as recycled rubber chips or a resilient rubber playground surface. The depth of the material should be specified to attenuate a 10 ft. (3.05 m) fall. Flooring must meet "DIN" standards for the specified function per ACSM. Ceiling. None required.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux). Metal halide, mercury vapor, or fluorescent lights are recommended. Coordinate the location of lights with the design of the climbing wall. Lighting should not impair the wall user, e.g., down-lighting fixtures should not be installed directly above the climbing wall.
Communication	CCTV. If direct LOS is not possible from the control desk, provide an outlet (also see Special Requirements). CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. If direct LOS is not possible from the control desk, provide an emergency call/alarm that sounds at the control counter. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equip.	Consider manufactured climbing walls. Select the provider based both on service and product features. Accommodate any specific power requirements. Provide a bulletin board in a visible, adjacent area on which appropriate information and materials are posted, e.g., safety and injury guidelines, climbing tips, target heart zone information, and instructions for measuring heart rate.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	CCTV cameras per the outlet count.

TABLE 4-13. ROCK CLIMBING

Special Req.	<p>Climbing wall, whether custom designed or manufactured, shall exhibit a natural rock appearance.</p> <p>Provide a separate teaching station.</p> <p>If direct line of sight from the control counter is not possible, provide a means to secure the climbing wall during periods of non-use.</p> <p>Safety: If a manufactured climbing wall is used, comply with the manufacturer's guidelines and safety requirements. Also refer to the following industry groups for more information on safety requirements: Climbing Wall Association and Association for Challenge Course Technology.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-14. RACQUETBALL COURTS

Description/ Usage	Racquetball courts generally consist of one or more enclosed courts within a larger space that allows circulation, waiting, and spectator viewing. Courts are sized and specified specifically for the game of racquetball (see Special Requirements).
Ceiling Ht.	20 ft. (6.1 m) exactly.
Finishes	Walls. Side and front walls shall be .5-in.- (13-mm-) thick, balanced, high density dry panel systems with minimum 50 pound density weight panels over .5 in. (13 mm) sound cushion layer. Unless building layout precludes the option, provide a shatterproof, tempered glass back wall/door for viewing and officiating. Minimum calculated wall reflectance must be 0.65. Floor. Maple athletic flooring. Flooring must meet "DIN" standards for the specified function per ACSM. Ceiling. .5-in.- (13-mm-) thick high density resin core panels.
Plumbing	None Required. Consider access to electric water coolers and toilets.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 60 F (16 C) minimum, 68 F (20 C) maximum; 15 cfm/person outside air and use CO ₂ sensors to control outside air; 10 recirculation air changes per hour; and less than 50% relative humidity. Ventilating ducts must be installed flush with the ceiling or wall surfaces. Supply and return vents should be located in the rear one-third of the ceiling and/or the upper one-third of the back wall.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety. Any fire suppression or detection equipment must be protected and flush with the wall or ceiling surface.
Power	None required in courts. Provide convenience outlets per code in the waiting/viewing area.
Lighting	Provide 970 Lux (70 ft. candles) minimum. Provide 1,076 Lux (100 ft. candles) for competition play. Use translucent, impact resistant, nonbreakable, flush mounted protective covers specifically designed for racquetball courts. Light should be evenly distributed throughout the court. Metal halide fixtures are preferred. For courts with glass walls, the lighting level shall be the same on both sides of the glass wall. This reduces glare and allows players to follow the ball as it plays off the glass wall.
Communication	CCTV. Provide at least one outlet in the waiting/viewing area. CATV/Internal Video. None required. PA/Audio. Provide a speaker in each court (upper end of back wall preferred) and in the waiting/viewing area. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide mounting sockets and netting for wally ball games on 50% of the courts or per local demand. Provide recessed wallet lock boxes in one sidewall of each court.
Furnishings Fixtures & Equip. (FF&E)	Provide a large walk-off mat outside the entrance to the courts. Consider providing this as a built-in, recessed mat. If a waiting/viewing area is included, provide seating for spectators.
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	Court striping and dimensions shall comply with U.S. Racquetball Association (USRA) rules. Wall, floor, and ceiling materials and construction shall comply with USRA Standard Specifications for Racquetball Court Construction.
For use during project execution by the appropriate Service agency	

Occupancy	Staff. Customers. Participants. Spectators.
Min. net m² (ft²)	

TABLE 4-15. MEN'S AND WOMEN'S LOCKERS/DRESSING

Description/ Usage	Separate men's and women's locker/dressing rooms will be used by those participating in fitness/sports activities for changing, dressing, and securing personal effects. It is open and directly adjacent to the toilet/shower facilities. As such, moisture and humidity must be addressed in the locker/dressing rooms.
Ceiling Ht.	10 ft. (3.05 m) minimum except where furred down.
Finishes	Walls. Epoxy or semi-gloss or better enamel painted CMU or mold-resistant gypsum wallboard. Floor. Slip-resistant porcelain tile with dark grout. Ceiling. High humidity-rated, ceramic-faced ACP. Provide a corrosion-resistant supporting grid.
Plumbing	Provide and locate floor drains as required to ensure proper drainage and no standing water on the floor (this is particularly important in facilities that include a pool). Consider providing an electric water cooler.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 70 F (21 C) minimum, 78 F (26 C) maximum. Provide for air flow from the dry side of this space (opposite the adjacent toilet/shower wet side) to the exhaust intakes in the wet area. Provide 0.50 CFM/ft. ² of outside air and a minimum of eight air changes per hour. Provide air supply as necessary to minimize air velocities while providing negative pressure. Limit relative humidity to under 50% through the use of humidistats. Humidistats may also be used to throttle back air changes as long as temperature and humidity remain within limits. Consider providing ceiling fans. Service Exception: For the Air Force, provide multi-speed ceiling fans.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide counter-height outlets at the vanity area. Provide power to the hair dryers identified in the built-in equipment. Consider providing outlets for wall or ceiling mounted televisions.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers. Minimize shadowing at face of lockers.
Communication	CCTV. None required. CATV/Internal Video. Consider providing CATV outlets for wall or ceiling mounts. PA/Audio. Provide PA speakers as needed for full coverage. Consider providing speakers for the separate audio system. Provide an emergency call/alarm. Telephone. Provide one line. Data. Consider providing outlets. Security. None required.
Acoustics	No special provisions required.

TABLE 4-15. MEN'S AND WOMEN'S LOCKERS/DRESSING

Casework/ Built-in Equipment	<p>Provide solid composite lockers and benches. Lockers shall be a minimum of 15-in. wide by 18-in. deep (380 mm x 455 mm). Typically provide a mix of full- and half-sized Z-shaped lockers. However, consider the location's climate when determining the ratio of half- to full-sized lockers: Colder climates will require a higher percentage (or 100%) of full-sized lockers to accommodate bulkier cold weather gear. Steel lockers are not permitted. Provide minimum 16-in. (406-mm) wide floor-mounted or integral (usually part of the locker system) benches.</p> <p>Service Exceptions: Navy requires 24-in. (610 mm) deep lockers and integral benches. Air Force also allows free-standing benches (FF&E).</p> <p>Mount lockers at a level above the floor to ensure operating hardware is easily reachable.</p> <p>Provide a vanity area with a counter and mirror. Provide wall-mounted hair dryers adjacent to this area. Provide one hair dryer for every three shower heads for men and one hair dryer for every two shower heads for women.</p> <p>Provide shelves and hooks for coats and hats.</p> <p>Provide a full-height wall mirror.</p>
Furnishings Fixtures & Equip. (FF&E)	<p>Provide a scale and a wall clock. Consider providing televisions per the outlet count. Air Force allows free-standing benches.</p>
User-provided Equipment	<p>Consider providing a blood pressure monitor.</p>
Special Req.	<p>Provide dropped gypsum board soffits over lockers to preclude the tops of the lockers being used for storage.</p> <p>Service Exception: The Air Force allows an option for additional, separate male and female distinguished visitors (DV) locker rooms independent from the core locker rooms. They should be adjacent to but visually separate from the group locker rooms.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff. Customers.</p>
Min. net m² (ft²)	

TABLE 4-16. MEN'S AND WOMEN'S TOILETS

Description/ Usage	Separate men's and women's toilet facilities are open and directly adjacent to the corresponding gender's locker/dressing and shower areas.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Full height ceramic tile with dark-colored epoxy grout on cementitious backer units at wet walls and ceramic tile wainscots at fixture areas. Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum wallboard elsewhere. Floor. Mud set, non-slip porcelain tile with dark-colored epoxy grout. Ceiling. Mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and epoxy paint.
Plumbing	Provide lavatories, urinals, and water closets. Service Exception: Navy requires floor-mounted urinals. Provide proper drainage (i.e., floor drains and/or perimeter trench drains).
HVAC	Provide system per Chapter 3, HVAC. In addition, provide 70 F (21 C) minimum, 78 F (26 C) maximum. Provide for air flow from the dry side (adjacent locker/dressing area) to the exhaust intakes in the wet (toilet/shower) area. Provide 0.50 CFM/ft. ² of outside air and a minimum of 15 air changes per hour. Provide air supply as necessary to minimize air velocities while providing negative pressure. Limit relative humidity to under 50% through the use of humidistats. Humidistats may also be used to throttle back air changes as long as temperature and humidity remain within limits. Note that the high rate of air change is required and should be achievable by bringing in air from other high-volume spaces, such as the gymnasium.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide GFCI outlets at lavatory at counter height.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers. Provide lighting directly over lavatories and grooming counters and minimize reflection glare in the mirrors in the overall lighting design.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Solid-surface countertop supported at both ends and with the front edge supported by galvanized angle reinforcing. The sink may be either underhung or integral with the counter. Phenolic or solid composite water closet and urinal partitions secured at floor and ceiling. Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe and towel hooks, grab bars, feminine hygiene receptacles in women's water closets, seat cover dispensers, and soap dispensers at lavatories. Provide wall-mounted shelves and full-width mirror at the lavatories. Provide a full-length mirror.
Furnishings Fixtures & Equip. (FF&E)	

TABLE 4-16. MEN'S AND WOMEN'S TOILETS

User-provided Equipment	
Special Req.	Do not allow direct views into this area. Provide a privacy screen at the entrance. Consider providing natural light via frosted skylights or translucent wall building materials (such as insulated glass block). Service Exception: For Air Force facilities, if DV locker rooms are provided (see Table 4-15), provide associated, separate male and female toilet and shower facilities. When funds are limited, consider providing DV lockers and dressing area separate from the main locker room with access to the shower and toilet areas.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-17. MEN'S AND WOMEN'S SHOWERS	
Description/ Usage	These separate male and female areas are directly adjacent to (and may be open to) the corresponding gender's locker/dressing and toilet areas and include private shower and adjacent drying stalls. If the facility includes a pool, the pool entry/exit should be adjacent to this area. Several other functions may be provided in this space such as sauna, steam room, and/or hot tub.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Full height ceramic tile with dark-colored epoxy grout on cementitious backer units. Floor. Mud set, non-slip porcelain tile with dark-colored epoxy grout. Ceiling. Mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and epoxy paint.
Plumbing	Provide minimum 42-in.- (1068-mm-) wide private shower/drying stalls for men and women. Provide a minimum of one floor drain at each shower stall and additional drains as needed to ensure proper drainage.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 70 F (21 C) minimum, 78 F (26 C) maximum. Provide for air flow from the dry side (adjacent locker/dressing area) to the exhaust intakes in the wet (toilet/shower) area. Provide 0.50 CFM/ft. ² of outside air and a minimum of 20 air changes per hour. Provide air supply as necessary to minimize air velocities while providing negative pressure. Note that the high rate of air change is required and should be achievable by bringing in air from other high-volume spaces, such as the gymnasium.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 430 Lux (40 ft. candles) of general ambient lighting. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers. In the showers, provide recessed fixtures with sealed lenses, rated for wet applications.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Phenolic or solid composite shower partitions secured at floor and ceiling. Consider permanent walls between showers; see Finishes for wall finish. If the facility includes a pool, provide swim mats or tiles that are textured, anti-slip, self-draining and raise the walking surface above standing water. Also provide a swim-suit spin-dry unit.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	

TABLE 4-17. MEN'S AND WOMEN'S SHOWERS	
Special Req.	<p>Do not allow direct views into the shower room areas. Provide a privacy screen at the entrance to this area.</p> <p>Consider providing natural light via frosted skylights or translucent wall building materials (such as insulated glass block).</p> <p>Service Exception: For Air Force facilities, if DV locker rooms are provided (see Table 4-15), provide associated, separate male and female toilet and shower facilities. When funds are limited, consider providing DV lockers and dressing area separate from the main locker room with access to the shower and toilet areas.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-18. STEAM ROOM

Description/ Usage	The optional steam room should have an adjacent cool down space and direct access to the shower and locker spaces. It provides a warm, extremely humid (close to 100%) environment for therapy and relaxation. Provide separate male and female rooms as part of or adjacent to male and female toilet and shower facilities. Consider providing a prefabricated, packaged unit.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Full height ceramic tile with dark-colored epoxy grout on cementitious backer units. Floor. Non-slip porcelain or quarry tile with dark-colored epoxy grout. Ceiling. Tile on cementitious backer units. Should be pitched for drainage down the walls.
Plumbing	Provide a cold water shower with a pull-chain. Provide floor drains. Provide access to a keyed hose bibb with hot and cold water.
HVAC	100 F (38 C) minimum, 110 F (43 C) maximum. Humidity 100% relative. Provide secured controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	None required.
Lighting	Provide system per Chapter 3, Electrical. Provide 35 ft. candles (375 Lux) of general ambient lighting. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker in the adjacent cool-down area. Provide an emergency call/alarm mounted within 36 in. (915 mm) of finished floor that sounds at the control counter until reset by the respondent. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide ceramic tile benches in a single- or double-tiered arrangement. Provide steam generator in an adjacent closet with a floor drain and exhaust system. Provide power to the steam generator.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	Design the entrance/exit to ensure steam is not trapped at this point. Consider providing an air exhaust at the ceiling above the entrance/exit to address this. Provide a full-glass door with a door seal adequate to retain the steam within the room. An adjacent cool down space can serve the steam room, sauna (if provided), and hot tub (if provided). Include a wall-mounted, solid-composite bench and wall-mounted clothing/towel hooks. Provide a wall-mounted clock in this area that is visible from within the steam room.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-19. SAUNA

Description/ Usage	The optional sauna should have an adjacent cool down space and direct access to the shower and locker spaces. It provides a very hot, dry environment for therapy and relaxation. Provide separate male and female rooms as part of or adjacent to male and female toilet and shower facilities. Consider providing a prefabricated, packaged unit.
Ceiling Ht.	8 ft. (2.44 m) minimum.
Finishes	Walls. Redwood or cedar panels. Floor. Sealed concrete with removable redwood tile "mats." Ceiling. Redwood or cedar panels.
Plumbing	Provide a floor drain.
HVAC	Provide a separate dry heat system with individual temperature controls and a timer to achieve 170 to 180 F (77 to 82 C) with 5% relative humidity. Provide secure controls. Provide passive ventilation to achieve four air changes/hour.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide a dedicated circuit for the heat source.
Lighting	Provide 35 ft. candles (375 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm mounted within 36 in. (915 mm) of finished floor that sounds at the control counter until reset by the respondent. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide solid board cedar or redwood benches. Provide a wall-mounted room temperature and humidity gauge. Provide hooks.
Furnishings Fixtures & Equip. (FF&E)	Provide a water tub and ladle. Provide a wall-mounted clock.
User-provided Equipment	
Special Req.	Provide an insulated door with a vision panel and seals to maintain temperature. Minimize exposed metal hardware. Ensure no exposed metal fasteners on the benches. Use plastic or wood interior door handle. An adjacent cool-down space can serve the sauna, steam room (if provided), and hot tub (if provided). Include a wall-mounted, solid-composite bench and wall-mounted clothing/towel hooks.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-20. HOT TUB

Description/ Usage	<p>The optional hot tub should have direct access to the shower and locker spaces and be adjacent to the steam room, if provided. It provides a hot pool of water with powered jets of water for therapy and relaxation. If a pool is included as part of the facility, consider locating the hot tub on the pool deck. Service Exception: The Army will only provide this option in a facility that includes a pool.</p> <p>May provide separate male and female spaces as part of or adjacent to male and female toilet and shower facilities or provide a single space for use by both men and women. If the hot tub is located within the toilet/shower rooms, place controls and equipment in a non-gender specific area. If a user-activated timer is specified (as an energy saving measure), locate that control in the hot tub area.</p>
Ceiling Ht.	10 ft. (3.05 m) minimum.
Finishes	<p>Walls. If located within the Fitness Center, see Table 4-17. If located on the pool deck, coordinate with pool requirements.</p> <p>Floor. If located within the Fitness Center, see Table 4-17. If located on the pool deck, coordinate with pool requirements.</p> <p>Ceiling. If located within the Fitness Center, see Table 4-17. If located on the pool deck, coordinate with pool requirements.</p>
Plumbing	Provide a hot tub with a dedicated water supply, hot water heater, and water pump. Provide a floor drain.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 72 F (22 C) minimum, 78 F (26 C) maximum and a minimum of 10 air changes per hour.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide dedicated power for the water pump with a timer-operated pump switch with patron access.
Lighting	Provide system per Chapter 3, Electrical. Provide waterproof fixtures.
Communication	<p>CCTV. Provide outlets as required for coverage if the facility is shared by men and women.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker. Provide an emergency call/alarm mounted within 36 in. (915 mm) of finished floor that sounds at the control counter until reset by the respondent.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Acoustics	No special provisions required.
Casework/ Built-in Equipment	<p>Provide a chemical storage cabinet.</p> <p>Provide clothes hooks and handrail for entrance/exit of hot tub.</p>
Furnishings Fixtures & Equip. (FF&E)	Shelving for towels and a wall clock.
User-provided Equipment	Provide CCTV cameras per the outlet count.

TABLE 4-20. HOT TUB

Special Req.	Provide an emergency shut-off control for the powered jets. Consider aluminum or nonferrous metal for hardware, AC ducts, AC registers, and door frames. An adjacent cool-down space can serve the hot tub, sauna (if provided), and steam room (if provided). Include a wall-mounted, solid-composite bench and wall-mounted clothing/towel hooks.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-21. CONVERTIBLE LOCKER SPACE

Description/ Usage	<p>This optional area provides locker/dressing space that can be converted to male or female space, as needed, to accommodate tournaments and/or changing demographics. It is a separate room between the male and female locker rooms with double-locked doors into each. The criteria generally follow that in Table 4-15 for the locker/dressing area.</p> <p>This is not additional locker space and will need to be deducted from the overall calculated locker space for the facility.</p> <p>Service Exceptions: The Navy does not support this space. The Marine Corps will only consider this option for Large or Extra Large facilities.</p>
Ceiling Ht.	10 ft. (3.05 m) minimum except where furred down.
Finishes	<p>Walls. Epoxy or semi-gloss or better enamel painted CMU or mold-resistant gypsum wallboard.</p> <p>Floor. Slip-resistant porcelain tile with dark grout.</p> <p>Ceiling. High humidity-rated, ceramic-faced ACP. Provide a corrosion-resistant supporting grid.</p>
Plumbing	None required. Consider providing an electric water cooler.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 70 F (21 C) minimum, 78 F (26 C) maximum. Provide for air flow from the dry side of this space (opposite the adjacent toilet/shower wet side) to the exhaust intakes in the wet area. Provide 0.50 CFM/ft. ² of outside air and a minimum of eight air changes per hour. Provide air supply as necessary to minimize air velocities while providing negative pressure. Limit relative humidity to under 50% through the use of humidistats. Humidistats may also be used to throttle back air changes as long as temperature and humidity remain within limits.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide counter-height outlets at the vanity area.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers. Minimize shadowing at face of lockers.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. Consider providing an outlet.</p> <p>PA/Audio. Provide a speaker. Provide an emergency call/alarm.</p> <p>Telephone. Provide one line.</p> <p>Data. Consider providing outlets to support personal fitness tracking devices.</p> <p>Security. None required.</p>
Acoustics	No special provisions required.

TABLE 4-21. CONVERTIBLE LOCKER SPACE

Casework/ Built-in Equipment	<p>Provide solid composite lockers and benches. Lockers shall be a minimum of 15-in. wide by 18-in. deep (380 mm x 455 mm). These lockers are daily use only (not rented). Typically provide a mix of full- and half-sized Z-shaped lockers. However, consider the location's climate when determining the ratio of half- to full-sized lockers: Colder climates will require a higher percentage (or 100%) of full-sized lockers to accommodate bulkier cold weather gear. Provide minimum 16-in. (406-mm) wide floor-mounted or integral (usually part of the locker system) benches. Steel lockers are not permitted.</p> <p>Mount lockers at a level above the floor to ensure operating hardware is easily reachable.</p> <p>Provide a vanity area with a counter and mirror. Provide wall-mounted hair dryers adjacent to this area. Provide one hair dryer for every two shower heads.</p> <p>Provide shelves and hooks for coats and hats.</p> <p>Provide a full-height wall mirror.</p> <p>Consider providing ceiling fans.</p>
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	<p>The doors in to the male and female locker/dressing area must be keyed from both sides.</p> <p>Provide dropped gypsum board soffits over lockers or prefabricated metal top closure to preclude the tops of the lockers being used for storage.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-22. LAUNDRY.

Description/ Usage	The laundry accommodates cleaning and drying of towels and uniforms. Some installations contract out towel laundry; however, there is still a requirement to provide laundry for uniforms. The laundry room should be adjacent to the control counter. It may be combined with the receiving and equipment repair area (Table 4-7) if it requires adjacency to a loading dock or exterior service entrance for laundry service.
Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Epoxy painted CMU or mold-resistant gypsum wallboard. Consider the impacts from carts and the movement of equipment—provide durable finishes, rub rails, and metal/high-impact plastic corner guards. Floor. Sealed concrete, VCT, or seamless vinyl. Ceiling. None, moisture-resistant ACP, or epoxy painted mold-resistant gypsum wallboard.
Plumbing	Provide hot and cold water and drain connections to each extractor and one laundry sink. Provide floor drains. Provide connections to an ice machine and utility sink in the equipment storage area and provide a separate floor drain.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 20 C (68 F) minimum, 27 C (80 F) maximum. Provide separate vents to the outside for the dryers. Provide a minimum of six air changes per hour, 50 to 60% relative humidity, and negative pressure.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety. Note requirement for one-hour rated construction and 45-minute-rated door with self closer.
Power	Provide outlets per Chapter 3, Electrical. Provide a wall-mounted safety disconnect switch for each extractor.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
Casework/ Built-in Equipment	Large, high capacity industrial extractors and dryers—provide a minimum of two dryers per extractors. Extractors must be mounted on vibration-isolated concrete foundations. Provide a built-in table for folding laundry and shelves for clean towel storage. Ice machine. Provide wall-mounted hanging racks if facility accommodates a large uniform inventory.
Furnishings Fixtures & Equip. (FF&E)	Provide storage shelves for laundry supplies. Laundry carts.
User-provided Equipment	

TABLE 4-22. LAUNDRY.

Special Req.	Provide easy access to rear of dryers to allow maintenance and cleaning of vents (see HVAC). Provide space for storage of laundry carts. Coordinate door openings and dimensions with room layout and equipment sizes, e.g., laundry carts, extractors, dryers, and ice machines. Provide acoustical measures to control the noise/vibration of the extractors and dryers. The laundry room should not be visible from the lobby area.
For use during project execution by the appropriate Service agency	
Occupancy	Staff.
Min. net m² (ft²)	

TABLE 4-23. RECEIVING AND EQUIPMENT REPAIR.

Description/ Usage	Provides an area to hold, assemble, and repair fitness equipment. It will also be used to store overflow from the control counter/equipment issue storage, such as large or seasonal items. This area is adjacent to the fitness areas. There is an option for additional storage for optional programmatic items (such as a boxing ring). If required, this space will usually be part of/adjacent to the receiving and equipment repair area.
Ceiling Ht.	10 ft. (3.05 m) minimum.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy paint. Floor. Sealed concrete. Ceiling. None. Paint the exposed structure.
Plumbing	Provide a work sink with hot and cold water connections and a floor drain.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide additional outlets at the work bench.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting. Provide task lighting at the work bench.
Communication	CCTV. Provide one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide one line with internal two-way communication. Data. Provide one outlet. Security. Provide a door alarm and exterior door bell.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide a secure storage area for equipment, tools, supplies, and resale items. It must include adequate shelving, bins, and open end cubicles. Provide a 96 x 24 in. (2438 x 609 mm) work bench for equipment repair within the storage area.
Furnishings Fixtures & Equip. (FF&E)	Provide adequate shelving, bins, and open end cubicles for storage of athletic equipment for both in and out of season supplies.
User-provided Equipment	CCTV cameras per the outlet count. A computer may be required for maintenance use.
Special Req.	Provide a locking exterior double door with flush sills, a minimum 68-in. (1730 mm) clear open width and sufficient height to facilitate movement of equipment. Consider an electric roll-up door with an exterior transition ramp or a loading dock and associated roadway. Provide an interior double door with a minimum 68-in. (1730 mm) clear open width to facilitate movement of equipment. Do not combine this space with mechanical or electrical rooms.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-24. INDOOR TRACK

Description/ Usage	The indoor track provides space for running, jogging, and walking. It is usually co-located with the gymnasium (see Table 4-20) either surrounding the court safety zone or suspended above the gym area or other high-bay space. Service Exceptions: Indoor track requirements vary by Service: Army. The space is allocated for one track in each Installation. Navy. The indoor track is an option depending upon local climate and facility size. When provided, Navy indoor tracks shall be suspended tracks. Air Force. The track is required but it can be either indoor or outdoor. Indoor tracks are recommended for Installations with extreme weather conditions to facilitate year round fitness testing and physical conditioning. Marine Corps. The indoor track is an option.
Ceiling Ht.	10 ft. (3.05 m) minimum. If suspended in a high-bay area, the underside of the track structure should be 14 ft. (4.27 m) minimum above the finished floor.
Finishes	Walls. CMU with semi-gloss enamel paint. Floor. Resilient, cushioned running surface, such as rubber or urethane. Ceiling. Exposed, painted structure.
Plumbing	Provide an electric water cooler in the entrance lobby to the track.
HVAC	The HVAC criteria should match the criteria for the space in which the track is located.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide power to a wall-mounted clock and electric water cooler. If cardio fitness equipment is provided, coordinate power requirements.
Lighting	The lighting criteria should match the criteria for the space in which the track is located.
Communication	CCTV. Provide outlets for adequate coverage. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide a telephone line or other emergency call system within or adjacent to the running track area. Data. None required. Security. None required.
Acoustics	The acoustical criteria should match the criteria for the space in which the track is located.
Casework/ Built-in Equipment	Provide signage to indicate running directions (directions alternate day-to-day). Provide personal effects storage, such as cubbies, for customer use. Bulletin board and digital clock.
Furnishings Fixtures & Equip. (FF&E)	Provide storage for towels and personal items. Consider providing cardio fitness equipment, such as treadmills or stair climbers, in unused corners.
User-provided Equipment	CCTV cameras per the outlet count.

TABLE 4-24. INDOOR TRACK

Special Req.	<p>The metric unit equivalent for the track distance must be an accurate soft conversion because runners will time themselves based on number of laps; the reference point must be consistent. Track length is based on the inside radius. Lanes are 42 in. (1067 mm) wide.</p> <p>The turns should have a minimum inside radius of 20 ft. (6100 mm) and a minimum outside radius of 32 ft. (9.75 m). Consider using banked curves. The height of banked curves on an indoor track should be 1 in. per 1 ft. (25 mm per 305 mm) of track width.</p> <p>Provide “lobby” areas at the entrances to a suspended track so that the doors do not open onto the track area and to provide space for stretching and warm-up. Provide an exercise mat in this area. Provide vision panels in the doors. Ideally, the entry lobbies should be located near the center of a straight-a-way.</p> <p>Ensure that the elevator is specified to accommodate the fitness equipment.</p> <p>Provide for exterior views if possible or, at a minimum, natural light admission. Mitigate glare and prevent direct sunlight on the track or the gymnasium (if suspended above).</p> <p>Service Exceptions: The Services vary as to allowable length and number of lanes:</p> <p>Army. Minimum track distance/size is 1/14 mile (115 m) and two lanes, which will fit over the smallest gymnasium option. In facilities with an arena-style gymnasium, use a track distance/size of 1/12.3 mile (130.5 m) in length and three lanes. The preferred distance/size is 1/11 mile (146.3 m) in length and three lanes.</p> <p>Navy. Minimum track distance/size is 1/14 mile (115 m) and two lanes, which will fit over the smallest gymnasium option. In larger facilities, the preferred distance/size is 1/11 mile (146.3 m) in length and three lanes. In Extra Large and Jumbo size facilities, the Navy will include a 1/8-mile (201.2-m), four-lane track.</p> <p>Air Force. Minimum track distance/size for new facilities is 1/8 mile (201.2 m) and four lanes. Minimum track distance/size for add/alter facilities is 1/10 mile (161 m) and three lanes.</p> <p>Marine Corps. Minimum track distance/size for new facilities is 1/8 mile (201.2 m) and four lanes. The minimum track distance/size for add/alter facilities is 1/11 mile (146.3 m) in length and three lanes.</p> <p>Typically, the most space and cost effective location for the indoor track is suspended above the gymnasium. Service-specific size and length criteria for the track is given above, but consider the following when sizing the indoor track:</p> <ul style="list-style-type: none"> • Ensure the suspended track does not interfere with gymnasium play below. The track should not encroach into the clear zones of the gym. While decreasing the track turn radii may preclude the track from encroaching on the clear zones, radii smaller than the minimum noted above will make for an awkward running venue and should be avoided. • Ensure that required adjacencies are not affected by the placement of the track. • The facility can be designed to allow the track to extend beyond the gymnasium area and into other high-bay spaces, such as the fitness area. This can make for an interesting architectural feature but will have significant cost implications.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-25. MASSAGE ROOM

Description/ Usage	The optional massage room provides a private space for massage service. It should be adjacent to the locker/shower facilities.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wall board. Floor. Solution dyed nylon carpet with antimicrobial treatment with resilient vinyl transitions. Ceiling. ACP.
Plumbing	Provide a hand-wash sink.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 72 F (22 C) minimum, 78 F (26 C) maximum, a minimum of six air changes per hour, and less than 60% relative humidity. Provide dedicated controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) with indirect light fixtures and provide dimming capability.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm that sounds at the control counter until reset by the respondent. Telephone. Provide one line. Data. None required. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics. If possible, do not locate this room near noisy spaces as defined in Chapter 3, Acoustics.
Casework/ Built-in Equipment	Provide clothes hooks.
Furnishings Fixtures & Equip. (FF&E)	Provide a securable storage cabinet for supplies such as sheets, towels, and massage oil. Unless operated by a concessionaire, provide the following: height-adjustable massage table with adjustable head rest. Provide an adjustable-height wheeled stool for the therapist. Consider providing a massage chair in addition to or in lieu of the massage table. Provide a small table for making and verifying appointments.
User-provided Equipment	
Special Req.	For use during project execution by the appropriate Service agency
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-26. PHYSICAL THERAPY/REHAB TRAINING

Description/ Usage	This optional office provides a space for staff to meet with customers and rehabilitate injuries. A private office is preferred, but a workstation may be acceptable if it is large enough to accommodate the equipment and private consultation with the customer. Service Exceptions: The Navy does not support this space except in special circumstances. Coordinate with the contacts provided in Chapter 1, Coordination. In Marine Corps facilities, this space could be adjacent to or combined with the fitness assessment room (see Table 4-12). The Air Force HQ AF Health Promotion does not endorse this space as a Service-wide practice. If used, coordinate locally with clinic to ensure area meets patient safety and is in compliance with the Accreditation Association for Ambulatory Health Care (AAHC) and/or the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wall board or wall covering. Floor. Sheet or tile resilient flooring with vinyl base. Ceiling. ACP.
Plumbing	None required. See Special Requirements for additional options.
HVAC	Provide a system per Chapter 3, HVAC. Provide dedicated controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide a minimum of one quad outlet in closed offices on at least three walls. Gang outlets with data and telephone. Workstations should provide at least one quad outlet per staff. Provide additional dedicated outlet to accommodate the fitness equipment.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide one outlet at desk and one outlet at the fitness equipment. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics. If possible, do not locate this room near noisy spaces as defined in Chapter 3, Acoustics.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Office furniture: desk, credenza, filing cabinet, desk chair, and two side chairs. Cardiovascular fitness equipment. Provide a height-adjustable physical therapy table for examinations and manipulation.
User-provided Equipment	
Special Req.	Locate offices on exterior wall and provide windows for natural light admission. Provide side lights next to the office doors for supervision and security. May provide a separate but adjacent space to contain a stainless steel, therapeutic spa tub for additional rehabilitation functions. For the spa tub area, use the criteria for the optional hot tub (see Table 4-20), particularly for flooring finishes.
For use during project execution by the appropriate Service agency	
Occupancy	Staff.

	Customers.
Min. net m² (ft²)	

TABLE 4-27. FAMILY CHANGING ROOM/FAMILY LOCKER ROOM

Description/ Usage	<p>For the Navy and Marine Corps, this optional space provides separate, individual rooms equipped with changing area, shower, toilet, sink, diaper changing table, and lockers intended to accommodate adults with small children. Locate near the pool (if provided) or near the parent/child and/or parent/youth areas. Navy only provides this option when the facility includes a pool.</p> <p>The Army configures this space differently and will only program it as part of a pool. Contact Army Corps of Engineers, CEHNC for details.</p> <p>For the Air Force, this optional space provides separate, individual rooms equipped with changing area, shower, toilet, sink, diaper changing table to accommodate adults with youth and children. Provide lockers in a common unisex area directly adjacent to all the individual rooms.</p>
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	<p>Walls. See Tables 4-15, 4-16, and 4-17 for the appropriate finishes.</p> <p>Floor. See Tables 4-15, 4-16, and 4-17 for the appropriate finishes.</p> <p>Ceiling. See Tables 4-15, 4-16, and 4-17 for the appropriate finishes.</p>
Plumbing	Provide shower stall, lavatory, and water closets. Provide a floor drain.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 70 F (21 C) minimum, 78 F (26 C) maximum. Provide for air flow from the dry side (adjacent locker/dressing area) to the exhaust intakes in the wet (toilet/shower) area. Provide 0.50 CFM/ft. ² of outside air and a minimum of 15 air changes per hour. Provide air supply as necessary to minimize air velocities while providing negative pressure. Note that the high rate of air change is required and should be achievable by bringing in air from other high-volume spaces, such as the gymnasium.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide counter-height GFCI outlets at the lavatory.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Lighting fixtures in wet area should have translucent, moisture resistant, nonbreakable, protective covers. Provide lighting directly over lavatory and consider reflections and glare in the mirrors when designing the overall lighting design. In the shower, provide recessed fixtures with sealed lenses, rated for wet applications.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker. Provide an emergency call/alarm.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Acoustics	No special provisions required.

TABLE 4-27. FAMILY CHANGING ROOM/FAMILY LOCKER ROOM

Casework/ Built-in Equipment	<p>Provide solid composite lockers and benches. Lockers shall be a minimum of 15-in. wide by 18-in. deep (380 mm x 455 mm). Typically provide a mix of full- and half-sized Z-shaped lockers. However, consider the location's climate when determining the ratio of half- to full-sized lockers: Colder climates will require a higher percentage (or 100%) of full-sized lockers to accommodate bulkier cold weather gear. Steel lockers are not permitted. Provide minimum 16-in. (406-mm) wide floor-mounted or integral (usually part of the locker system) benches.</p> <p>Service Exceptions: Navy requires 24-in. (610 mm) deep lockers and integral benches. Air Force also allows free-standing benches (FF&E).</p> <p>Mount lockers at a level above the floor to ensure operating hardware is easily reachable.</p> <p>Provide a mirror over the lavatory. Provide one wall-mounted hair dryer adjacent to this area.</p> <p>Provide shelves and hooks for coats and hats.</p> <p>Provide a full-height wall mirror.</p> <p>Phenolic or solid composite shower partitions secured at floor and ceiling.</p> <p>Phenolic or solid composite water closet partitions secured at floor and ceiling.</p> <p>Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe and towel hooks, grab bars, feminine hygiene receptacles in women's water closets, seat cover dispensers, and soap dispensers at lavatories.</p> <p>Provide swim mats or tiles that are textured, anti-slip, self-draining and raise the walking surface above standing water. Also provide a swim-suit spin-dry unit.</p> <p>Consider providing ceiling fans. Service Exception: For the Air Force, provide multi-speed ceiling fans.</p>
Furnishings Fixtures & Equip. (FF&E)	Provide a wall clock.
User-provided Equipment	
Special Req.	<p>Provide direct access to the pool deck.</p> <p>For additional special requirements, see Tables 4-15, 4-16, and 4-17 for the appropriate special requirements.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p>
Min. net m² (ft²)	

TABLE 4-28. PARENT/CHILD AREA.

Description/ Usage	The Parent/Child area is required for the Navy and Marine Corps, optional for Air Force, and not supported by the Army. Service Exceptions: The Navy and Air Force provide parents/guardians a venue in which to exercise while maintaining direct visual control over their child. Part of the room has fitness equipment for the parent to use while the other part is designated for the children. The two areas are divided by a half-height Plexiglas partition. The Marine Corps option provides a short-term, self-service care room in which parents may watch their children separate from the rest of the facility. There is no fitness component in this room.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Consider wall coverings. Floor. VCT or sheet vinyl and vinyl or rubber base. Exercise area should include permanently adhered impact flooring with a nonporous, high-density rubber/elastic surface. Composite products such as recycled rubber may be used; however, the top layer should be virgin (unrecycled) material chemically bonded to the sublayers. Flooring must meet "DIN" standards for the specified function per ACSM. Impact flooring system shall not be accommodated by interlocking flooring tiles or movable furnishings such as mats. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 68 F (20 C) minimum, 74 F (23 C) maximum, less than 60% relative humidity, 20 cfm/person outside air and use CO ₂ sensors to control outside air. Provide multi-speed ceiling fans.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical in the child area. Provide flush-floor outlets for commercial-grade fitness equipment and outlets for wall or ceiling mounted television monitors in the fitness area.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. Provide outlets to ensure adequate coverage. CATV/Internal Video. Provide an outlet in the fitness area. Consider providing an outlet in the child area. PA/Audio. Provide a speaker. Provide an emergency call/alarm that sounds at the control counter until reset by the respondent. Telephone. Provide an outlet. Data. Provide an outlet. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equip.	Child area: Storage cabinet for children's games and toys.
Furnishings Fixtures & Equip. (FF&E)	Child area: Provide child-sized tables, chairs, and games. Consider providing a TV, VCR/DVD, and exercise mat. Note, if a TV is included, provide a protective shield to minimize damage to the TV from children and thrown objects. Fitness area: Provide fitness equipment and a TV.
User-provided Equipment	CCTV cameras per the outlet count.

TABLE 4-28. PARENT/CHILD AREA.

Special Req.	<p>For the Navy/Air Force configuration, the Plexiglas partition shall be shatterproof, 30-in.- (760-mm-) high, .5-in.- (13-mm-) thick, and clear to ensure the parent can see the child at all times. Include a centrally-located entry/exit in the partition.</p> <p>Meet the requirements outlined in AFI 34-266, <i>Air Force Fitness and Sports Programs</i>. If this space is provided on the second floor, ensure that the elevator is specified to accommodate the fitness equipment.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Customers.</p> <p>Adults.</p> <p>Children.</p>
Min. net m² (ft²)	

TABLE 4-29. PARENT/YOUTH WORKOUT AREA

Description/ Usage	The Parent/Youth area is optional for the Air Force and not supported by other Services. Space will typically house a stretching area; one 8-piece selectorized circuit weight equipment line for adults; one 8-piece selectorized circuit weight equipment line for youth; and two to four cardiovascular machines. Coordinate with the local Chief, Airman and Family Services Flight, or Flight Commander when designing this area.
Ceiling Ht.	12 ft. (3.66 m) minimum. 14 ft. (4.27 m) is preferred.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy. Floor. In the stretching area, use permanently adhered impact flooring with a nonporous, high-density rubber/elastic surface. Composite products such as recycled rubber may be used; however, the top layer should be virgin (unrecycled) material chemically bonded to the sublayers. Avoid the use of interlocking impact flooring tiles. For the selectorized equipment and cardiovascular equipment areas, use multipurpose, resilient, athletic flooring. For the circuit training equipment, consider using the impact flooring detailed above. All flooring must meet "DIN" standards for the specified function per ACSM. Ceiling. Exposed, painted structure. Consider providing ACP or other acoustical banners and treatments.
Plumbing	Provide a minimum of one electric water cooler inside or near the room.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 68 F (20 C) minimum, 74F (23 C) maximum, less than 60% relative humidity, 20 cfm/person outside air and use CO2 sensors to control outside air. Provide multi-speed ceiling fans.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Selectorized equipment area: If a fitness tracking system will be provided, coordinate equipment outlets with the specific equipment selected. Provide flush-floor outlets for commercial-grade equipment in a grid pattern sized appropriately for equipment spacing and to accommodate fitness tracking systems. Consider providing a raised floor system for power distribution; this is particularly useful in conversion projects. See Special Requirements for additional raised floor criteria. Cardiovascular equipment area: Coordinate equipment outlets with the specific equipment selected. Provide flush-floor outlets for commercial-grade equipment in a grid pattern sized appropriately for equipment spacing and to accommodate fitness tracking systems. Consider providing a raised floor system for power distribution; this is particularly useful in conversion projects. See Special Requirements for additional raised floor criteria. Provide dedicated circuits for all treadmills. Provide outlets for wall- or ceiling-mounted television monitors.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) uniform lighting with 80% indirect and 20% direct.

TABLE 4-29. PARENT/YOUTH WORKOUT AREA

Communication	<p>CCTV. Provide outlets as needed for coverage.</p> <p>CATV/Internal Video. The goal is to enhance the experience and enjoyment of working out in the cardiovascular area. As the default option, provide CATV to each integrated cardiovascular exercise machine. A secondary option is to provide wall or ceiling mounted televisions. The quantity of CATV monitors and outlets shall be determined by the designer of record in the cardio area, coordinated with the equipment layout, coordinated with the sports fitness facility designer, and coordinated with the Installation activity manager. It is most desirable to have a sufficient number of CATV monitors available for comfortable viewing by all users of the cardiovascular area. If using wall or ceiling mounted televisions, provide a minimum of one outlet per monitor and mount at proper viewing height for cardiovascular exercise machines. Consider FM sound broadcast of video monitors.</p> <p>PA/Audio. Provide speakers as needed.</p> <p>Telephone. None required.</p> <p>Data. Consider providing data outlets in recessed floor boxes in the cardiovascular and selectorized equipment areas.</p> <p>Security. None required.</p>
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide 6 ft. (1830 mm) tall mirrors on at least two walls at a minimum of 18 in. (450 mm) above the floor. Provide toe bars (for sit-ups) in the stretching area(s). Provide self-serve equipment cleaning supply stations throughout that include disinfectant spray bottles and disposable or reusable towels. Provide bulletin boards, exercise mats, wall clocks. Consider providing an AED.
Furnishings Fixtures & Equip. (FF&E)	Sample equipment lists for each area (cardiovascular and selectorized) are provided in Appendix C. Address accessibility issues in equipment selection. Provide trash containers, exercise mats, wall clocks.
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<p>If this space is provided on the second floor, ensure that the elevator is specified to accommodate the fitness equipment. The design live load for the foundation/floor in this space shall be 150 PSF.</p> <p>Provide storage either within the room or with a direct adjacency to store items such as mats, spare equipment, and other sports equipment.</p> <p>Provide natural light through the use of windows and/or overhead skylights. Provide attractive, color coordinated décor that projects a friendly environment. Avoid bland treatments such as a black floor and tan walls. Color selection should coordinate with equipment selected for the space.</p> <p>Consider providing a help desk within this space in larger facilities. If provided, locate it within the space in areas not well served by the control counter.</p> <p>If provided, the raised floor provides flexibility for routing power and data cables for fitness equipment. Typically, this will be a shallow-depth raised floor.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

4-2 HEALTH AND WELLNESS CENTER SPACES.

Tables 4-30 through 4-37 provide the specific design needs for each HAWC functional areas in a standard Functional Data Sheet format.

TABLE 4-30. HEALTH AND WELLNESS CENTER RECEPTION/WAITING AREA

Description/ Usage	Reception and waiting area for customers going to the HAWC for testing or consultation. With this space, include an area off to the side which accommodates a resource library and computer lab for use by the customers as well as the staff. Provide seating for eight people.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Floor. Carpet or vinyl tile. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical and to power dedicated equipment.
Lighting	Provide system per Chapter 3, Electrical. Provide 15 ft. candles (160 Lux) of fluorescent lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide one line at the reception desk. Data. Provide communications and data connections. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide a 240-in.- (610-mm-) deep reception counter with built-in cabinets.
Furnishings Fixtures & Equip. (FF&E)	Desk, chairs, file cabinets, book and magazine racks.
User-provided Equipment	
Special Req.	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-31. HEALTH AND WELLNESS CENTER DEMONSTRATION KITCHEN

Description/ Usage	Optional space. Provide a kitchen demonstration island with a range, vegetable sink, and countertop workspace. When provided, the demonstration kitchen must be placed directly adjacent to the classroom that is used for health promotions, and the dividing wall between the kitchen and the classroom must be retractable in order to accommodate large class demonstrations.
Min. Ceiling Ht.	12 ft. (3.66 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Floor. Vinyl tile. Ceiling. ACP.
Plumbing	Provide a deep double sink with hot and cold water connections.
HVAC	Provide a system per Chapter 3, HVAC. Provide appropriate exhaust for range and ovens per code.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of fluorescent or incandescent lighting.
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one outlet. Data. Provide one outlet. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide countertop workspace with a double sink and upper/lower closed storage cabinets.
Furnishings Fixtures & Equip. (FF&E)	Provide a refrigerator/freezer, dishwasher, double oven, microwave, and miscellaneous equipment to demonstrate new methods of food preparation.
User-provided Equipment	
Special Req.	Provide an angled mirror over the demonstration area to facilitate viewing by students.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-32. HEALTH AND WELLNESS CENTER ADMINISTRATIVE AREA

Description/ Usage	The administrative offices consist of a mix of private and open office space. The quantity and type of offices are facility specific. Generally speaking, the following office spaces are provided: Director's office, Program Managers' offices, and support staff workstations. The offices should be free from frequent distraction, have a professional appearance, and provide a sense of work place.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard or vinyl wall covering. Floor. Carpet with vinyl or rubber base. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Ensure an adequate number of circuits to power all equipment. Provide a minimum of one quad outlet in closed offices on at least three walls. Gang outlets with data and telephone. Workstations should provide at least one quad outlet per staff. Provide additional outlets as necessary to operate shared equipment such as printers, fax, etc.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video: None required. PA/Audio: Provide a speaker with adjustable volume. Telephone. Provide one line per staff plus one additional line for fax and copier. Data. Provide one outlet per staff plus one outlet for each printer, copier, scanner, etc. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 45 per Chapter 3, Acoustics.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Private Offices—provide furniture for 120 ft. ² (11 m ²) or 100 ft. ² (9.3 m ²) office: desk, credenza, filing cabinet, desk chair, and two side chairs. Workstations—provide furniture for 64 ft. ² (6 m ²) workstation: desk chair and side chair for open offices. Workstation systems furniture must provide adequate space for filing and overhead storage. Provide dry-erase boards in select offices and workstations.
User-provided Equipment	
Special Req.	Locate offices on exterior wall and provide windows for natural light admission. Provide side lights next to the office doors for supervision and security.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-33. HEALTH AND WELLNESS CENTER BREAK ROOM

Description/ Usage	Optional space. This space is used as a staff workroom for copying, meetings, breaks, and lunches. Air Force: Provide this optional space when a demonstration kitchen is not provided.
Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard or vinyl wall covering. Floor. VCT with vinyl or rubber base. Ceiling. ACP
Plumbing	Provide a sink with hot and cold water. Consider a cold water connection for refrigerator ice maker.
HVAC	Provide a system per Chapter 3, HVAC.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide one additional outlet at counter height for convenience. Provide additional outlets necessary to operate dedicated equipment such as the copier, fax machine, printers, coffee machine, refrigerator, time clocks, microwave, and various other office machines.
Lighting	Provide system per Chapter 3, Lighting.
Communication	CCTV. None required. CATV/Internal Video. Consider providing one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide outlets as required for equipment. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide two separate solid-surface countertops: one for food/break functions and one for administrative functions. See Chapter 3, Interior Construction, for length criteria. Provide lockable wall and base cabinets, bulletin board with tack surface, and dry-erase board.
Furnishings Fixtures & Equip. (FF&E)	Table, chairs, microwave, coffee machine, and refrigerator.
User-provided Equipment	Copier, fax machine, printers, and other office equipment as required.
Special Req.	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-34. HEALTH AND WELLNESS CENTER ERGOMETRY/FITNESS TESTING

Description/ Usage	This should be an enclosed room with 8 ft. x 10 ft. (2440 x 3050 mm) testing cubicles; provide one testing station per 1500 active duty assigned personnel. Place room adjacent to the wellness assessment room, if applicable. For Marine Corps facilities, these spaces should be located adjacent to the fitness area.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Floor. Carpet or vinyl tile. Ceiling. ACP.
Plumbing	Consider access to a hand wash sink with hot and cold water connections. If adjacent sink is not available, provide one.
HVAC	Provide a system per Chapter 3, HVAC. Individually zone room and provide dedicated thermostat/temperature controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide a minimum of one quad outlet on at least three walls. Gang outlets with data and telephone. Provide additional dedicated outlets to accommodate the fitness equipment.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video: None required. PA/Audio: Provide a speaker. Telephone. Provide one line. Data. Provide at least one outlet at desk and one outlet at the fitness equipment. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Office furniture: desk, credenza, filing cabinet, desk chair, two side chairs, computer, printer, and other office equipment as needed. Fitness testing equipment.
User-provided Equipment	
Special Req.	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-35. HEALTH AND WELLNESS CENTER STORAGE/JANITOR'S CLOSET

Description/ Usage	Provide storage for Health and Wellness Center materials and supplies.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Floor. Vinyl tile. Ceiling. Exposed structure.
Plumbing	Provide a floor mop sink with hot and cold water and a hose connection. Provide a floor drain.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide storage for Health and Wellness Center materials and for janitor's supplies such as pails, mops, vacuums, and related cleaning supplies and equipment.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	Provide a lockable door (which can be opened from the inside) with a vision panel. Provide lockable cabinets for cleaning supplies. Provide exhaust ventilation directly to the outside.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-36. HEALTH AND WELLNESS CENTER TOILETS/LAVATORIES

Description/ Usage	These toilets are used primarily by Health and Wellness Center visitors and staff. Provide separate rooms for men and women. For Air Force, if physical therapy services are located in the facility, coordinate locally with clinic to ensure this area meets patient safety and is in compliance with the AAAHC and/or the JCAHO.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum wallboard with a ceramic tile wainscot. Consider full ceramic tile walls with integral patterns. Use a dark-colored epoxy grout. Floor. Non-slip ceramic tile with integral patterns. Use a dark-colored epoxy grout. Ceiling. Epoxy or semi-gloss or better enamel painted, mold-resistant gypsum board.
Plumbing	Provide wall-hung water closets, wall-hung urinals, and lavatories based on the applicable code. Provide a floor drain. Provide a keyed hose bibb.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide a minimum of eight air changes per hour and negative pressure.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Solid-surface countertop with either underhung or integral sink. Solid composite toilet and urinal partitions. Consider permanent ceramic-tile partitions. Toilet accessories: toilet paper dispensers, paper towel dispenser with integral trash receptacle, robe hooks, grab bars, sanitary napkin disposal (female water closet stalls), seat cover dispensers, and soap dispensers. Mirror. Provide fold-down diaper changing table/station in the male and female toilets.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 4-37. HEALTH AND WELLNESS CENTER RELAXATION ROOM

Description/ Usage	Optional space for Marine Corps only. Provide acoustic treatment to reduce sound transmission into the room. Provide comfortable lounge seating for four to six customers.
Min. Ceiling Ht.	9 ft. (2.74 m) minimum.
Finishes	Walls. Semi-gloss or better painted gypsum wallboard. Floor. Carpet. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. In addition, provide 72 F (22 C) minimum, 78 F (26 C) maximum, a minimum of six changes per hour, and less than 60% relative humidity. Provide dedicated controls.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide power for the electric massage chairs.
Lighting	Provide system per Chapter 3, Electrical. Provide 50 ft. candles (540 Lux) with indirect light fixtures and provide dimming capability.
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one outlet for future use purposes. Data. Provide one outlet. Security. None required.
Acoustics	Provide partition and door construction with a minimum STC rating of 52 per Chapter 3, Acoustics.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Provide one or more electric massage chairs. Provide an audio system.
User-provided Equipment	
Special Req.	This room should be located in a remote location within the Health and Wellness Center and be free from noise and distractions.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

CHAPTER 5 MULTIPURPOSE FIELD

5-1 INTRODUCTION AND PLANNING ISSUES.

This chapter provides criteria for an optional addition to a Fitness Center in the form of a well-defined multipurpose activity field with an encircling running track, spectator seating and a support building. This entire area will be referred to as the multipurpose field in this UFC. The multipurpose field should be planned in conjunction with a comprehensive audit of other existing or planned activity fields on the Installation to maximize consolidation and shared efficiencies. However, this chapter does not provide criteria for any other activity fields.

5-1.1 Related Activity Areas.

The following are outdoor activity areas that will benefit from being planned in conjunction with and located in proximity to the multipurpose field:

- Softball fields.
- Tennis courts.
- Outdoor basketball courts.
- Other sports fields, as needed.

5-1.2 Shared Efficiencies.

The following are the advantages to combining the multipurpose field with the related activity areas identified above:

- Shared use of the support building, which includes concessions, toilets, and a press box.
- Shared use of parking.
- Facilitates multi-activity tournaments.
- Increases awareness of Installation sports and fitness programs.

5-2 PROGRAM AREAS.

Table 5-1 lists the program areas of the multipurpose field, breaking them down by the support building areas and the site areas.

TABLE 5-1. MULTIPURPOSE FIELD FUNCTIONAL PROGRAM AREAS

Functional Program Area	Description/Service Exceptions
Support Building	
Concessions	Accommodates the warming and sales of food and drink.
Covered public space	Covered, paved exterior area directly adjacent the concessions service window.
Male toilets	A standard configuration for toilets. This can be expanded if the program and budget allows.
Female toilets	A standard configuration for toilets. This can be expanded if the program and budget allows.
Maintenance bay	Accommodates the storage of a field maintenance vehicle, maintenance supplies, and master lighting controls.
Press box	Second-story space to accommodate up to three observers and the scoreboard controls.
Dry goods storage	Accommodates storage of non-food items such as paper goods.
Sports activity storage	Accommodates storage of sports activity items such as cones and flags.
Building support/vertical circulation	Accommodates building HVAC, janitor's closet, and non-ADA access to the press box.
Fields and Site Spaces	
Multipurpose field and track	Fixed-size field striped for soccer per United States Soccer Federation Inc. and for touch and flag football per United States Flag Football Association. Optional to provide striping for National Collegiate Athletic Association (NCAA) football. 400-m running track per USA Track and Field.
Bleacher pads	Standard-size concrete pads and portable, aluminum bleachers.
Lighting zone	Area outside the field and bleacher footprint with high-mast lights to illuminate the track and field to standardized levels.
Scoreboard zone	Area outside the field but within the track with an electronic scoreboard.
Paved parking	Usually shared with the Fitness Center, other fields or other facilities.
Unpaved parking	Overflow parking area for sport tournaments or other large group activities.
Site circulation	A mix of hard-surface pathways and grassed areas to connect the various areas of the multipurpose field complex.

5-3 **SPACE PROGRAM.**

The multipurpose field has a standardized space program as illustrated in Figure 5-1. It is not developed with the Fitness Center's interactive spreadsheet.

FIGURE 5-1. MULTIPURPOSE FIELD SPACE PROGRAM

Functional Program Area		Standard		Quantity	Total Area	
		m ²	ft. ²		m ²	ft. ²
Support Building	Concessions*	18.6	200	1	18.6	200
	Covered public space*	26.0	280	1	26.0	280
	Male toilets*	14.9	160	1	14.9	160
	Female toilets*	14.9	160	1	14.9	160
	Maintenance bay	26.0	280	1	26.0	280
	Press box	32.5	350	1	32.5	350
	Dry goods storage	7.4	80	1	7.4	80
	Sports activity storage	3.7	40	1	3.7	40
	Building support/vertical circulation	2.8	30	1	2.8	30
Subtotal - Net Spaces					146.8	1,580
Net-to-Gross Factor (incl. construction)				15%	22.0	237
Total Building					168.8	1,817
Site	Multipurpose field and track	13,151.9	141,570	1	13,151.9	141,570
	Bleacher pads	627.1	6,750	2	1,254.2	13,500
	Parking*	41.8	450	19	794.3	8,550
	Site circulation*	5,312.1	57,181	1	5,312.1	57,181
Total Site					20,512.4	220,801
Total Project Area					20,681.2	222,618

* If the multipurpose field is part of a larger complex of related activity fields, sizes of these areas may be increased if mission, site and budget allow. Areas without an (*) should not be changed regardless of adjacent functions.

5-4 **LOCATION DETERMINANTS.**

The location of the multipurpose field shall be coordinated with the Fitness Center location, as described in Chapter 2, Location Determinants, and the planning issues noted above in Chapter 5. Ensure adequate site space per Figure 5-1.

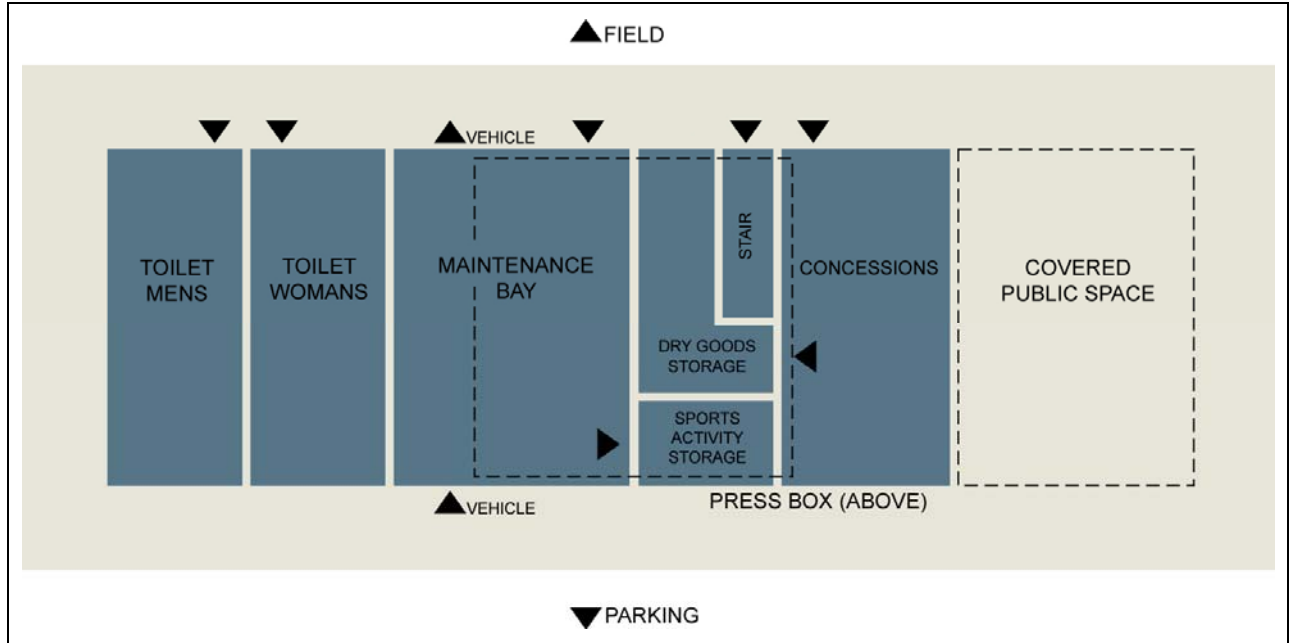
5-5 **LAYOUT AND ADJACENCIES.**

The appropriate layout and adjacencies are illustrated in Figures 5-2 through 5-3. These diagrams do not convey a building or site shape.

5-5.1 **Support Building.**

The diagram in Figure 5-2 indicates acceptable relative adjacencies of the support building.

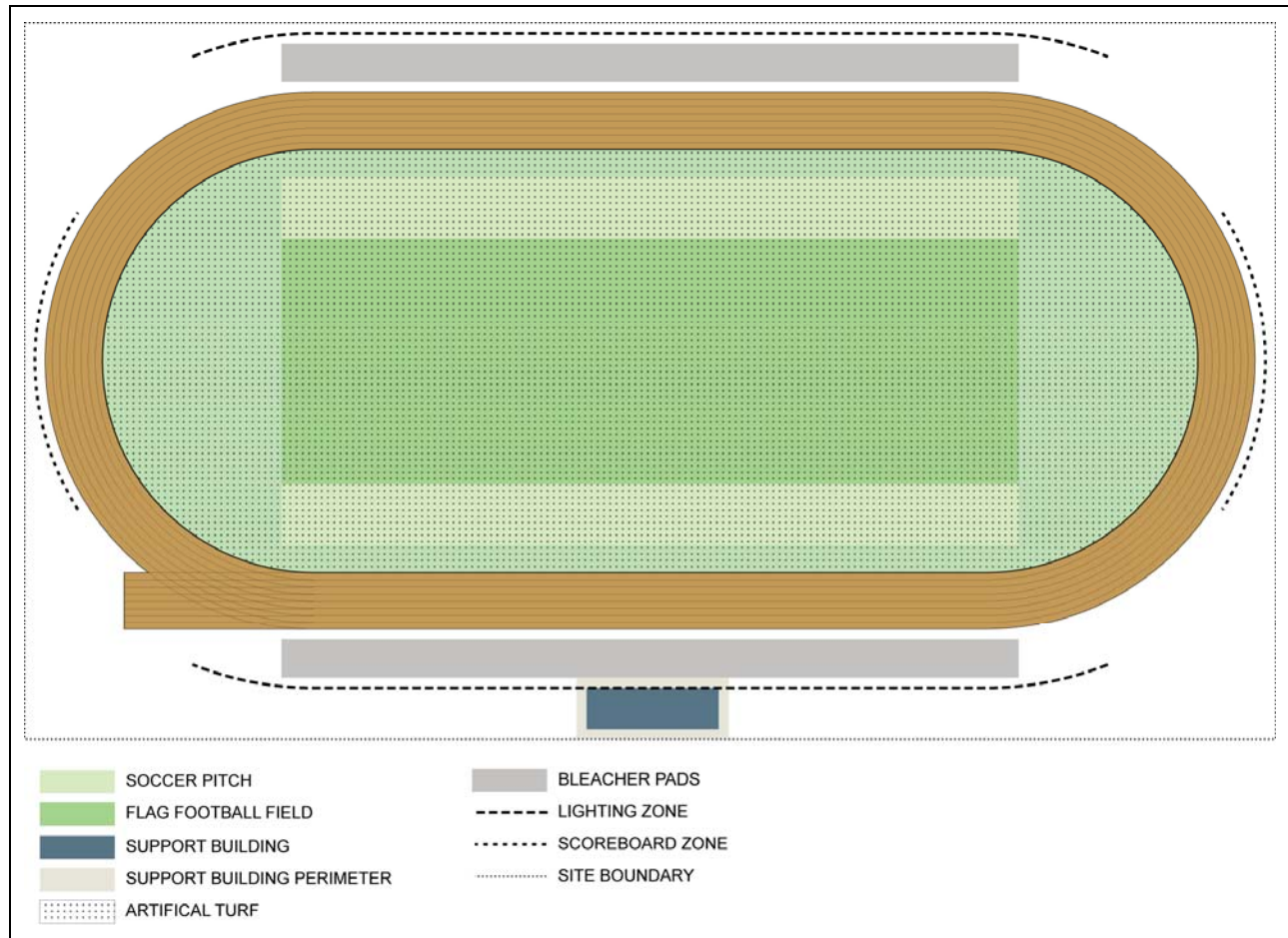
FIGURE 5-2. SUPPORT BUILDING FUNCTIONAL RELATIONSHIP DIAGRAM



5-5.2 Field and Site.

The diagram in Figure 5-3 indicates acceptable relative adjacencies of the field and site spaces.

FIGURE 5-3. FIELD AND SITE FUNCTIONAL RELATIONSHIP DIAGRAM



5-5.3 Space Assessment.

See the Functional Data Sheets in Chapter 5, Specific Design Criteria, for additional information on the space types and their relationships to each other.

5-6 GENERAL DESIGN CRITERIA.

The design of the multipurpose field shall comply with the design guidance identified in Chapter 3. Additional requirements or exceptions specific to the multipurpose field are provided here.

5-6.1 Accessibility.

Per ADAAG 4.1.3 (5)(b), the second-story press box space is not required to be accessible as it is not open to the general public, houses less than five persons, and is less than 500 ft² (46.5 m²).

5-6.2 Exterior Lighting.

Provide lighting and control systems per Chapter 3, Lighting, and the additional criteria identified Chapter 5, Specific Design Criteria, which notes field lighting levels and control requirements.

5-7 SITE DESIGN.

The site design, parking and other hard-surface areas, and landscaping of the multipurpose field shall comply with the design guidance identified in Chapter 3. Additional requirements for specific areas of the multipurpose field are provided in Chapter 5, Specific Design Criteria.

5-8 SPECIFIC DESIGN CRITERIA.

The specific design needs for each functional area of the multipurpose field are provided in Tables 5-2 through 5-8 in a standard Functional Data Sheet format.

TABLE 5-2. CONCESSIONS

Description/ Usage	Space for warming and sale of food and drinks.
Ceiling Ht.	10 ft. (3.05m) minimum
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy paint. Floor. Sealed concrete, VCT, or seamless vinyl. Ceiling. Painted exposed structure.
Plumbing	Two-compartment sink with hot and cold water supply and a clean-out. Provide a separate hand-washing sink. Floor drain. Provide water connections to the ice machine and soda fountain.
HVAC	Provide a system per Chapter 3, HVAC. Provide heat and ventilation only; do not cool.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide dedicated outlets for the refrigerators, ice machine, and fountain soda machine. Provide countertop-height outlets for point of sale (POS) units, microwave and other food preparation/warming equipment as required.
Lighting	Provide system per Chapter 3, Electrical. Provide 40 ft. candles (430 Lux) of general ambient lighting. Provide task lighting at the food preparation and service areas. Provide an occupancy sensor on the light controls.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. Provide one line per POS. Provide at least one additional general purpose phone line. Data. Provide one outlet per POS. Provide additional outlets, as needed, for associated hardware. Security. Consider providing duress alarm control next to the POS units.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide 24-in.-deep (610 mm) work-surface counter for food preparation. Provide two service counters with service windows opening to the public covered space and the side facing the field. Provide coiling doors at the service windows.
Furnishings Fixtures & Equip. (FF&E)	Provide a menu board; an under-counter, reach-in refrigerator; and an ice maker.
User-provided Equipment	A glass-front, front-loading refrigerated display case; soda fountain machine with under-counter boxed syrup; a microwave; and other food preparation/warming equipment as required by the specific menu. Trash receptacles.
Special Req.	Provide a minimum 36-in.- (915-mm-) wide access door to the dry goods storage room.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-3. COVERED PUBLIC SPACE.

Description/ Usage	Covered, paved exterior area directly adjacent the concessions service window.
Ceiling Ht.	10 ft. (3.05m) minimum.
Finishes	Walls. None. Floor. Sealed concrete, or brick or stone pavers if budget allows. Ceiling. Painted exposed structure.
Plumbing	Provide a keyed exterior hose bibb.
HVAC	None.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	None required.
Lighting	Provide system per Chapter 3, Electrical. Provide 15 ft. candles (160 Lux) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide an automatic external defibrillator (AED) in an exterior-mounted, recessed case with a breakable seal for access.
Furnishings Fixtures & Equip. (FF&E)	Provide trash and recycling receptacles.
User-provided Equipment	
Special Req.	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-4. MEN'S AND WOMEN'S TOILETS

Description/ Usage	Separate ADA-compliant men's and women's toilet facilities that exit directly to the exterior.
Ceiling Ht.	10 ft. (3.05 m) minimum.
Finishes	Walls. Full-height, glazed ceramic tile with dark colored epoxy grout on cementitious backer units. Floor. Slip-resistant epoxy no seam floor with integrated epoxy base to 6 in. (150 mm) AFF. Ceiling. Mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and epoxy paint.
Plumbing	Male: two floor-mounted urinals, two floor-mounted water closets, and two lavatories. Female: three floor-mounted water closets and two lavatories. Provide floor drains for proper drainage located under the water closets partitions. Provide keyed hose bibbs with hot and cold water.
HVAC	Provide a system per Chapter 3, HVAC. Provide heat and ventilation only; do not cool. In addition, provide a minimum of 15 air changes per hour with supply by air dump to decrease air velocities, negative pressure.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Lighting fixtures should have translucent, moisture resistant, nonbreakable, protective covers. Provide lighting directly over lavatories and grooming counters and minimize reflection glare in the mirrors in the overall lighting design.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide solid-surface lavatory countertops supported at both ends and with the front edge supported by galvanized angle reinforcing. The sink shall be integral with the counter. As an option, consider stainless steel wash trough-style lavatories. Provide stainless steel, phenolic or solid composite water closet partitions secured at floor and ceiling. Do not provide partitions at urinals. Toilet accessories shall be stainless steel and include: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe and towel hooks, grab bars, feminine hygiene receptacles in women's water closets, seat cover dispensers, and soap dispensers at lavatories. Provide full-width mirror at the lavatories.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	
Special Req.	Exterior doors shall have a keyed lockset that is lockable from the exterior only.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-5. MAINTENANCE BAY

Description/ Usage	Space for field maintenance equipment, including truck, field groomer, and main access for field lighting.
Ceiling Ht.	10 ft. (3.05m) minimum.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy paint. Floor. Sealed concrete. Ceiling. Painted exposed structure.
Plumbing	Provide floor drain with a filter-cartridge-style oil/water separator.
HVAC	Provide a system per Chapter 3, HVAC. Provide heat and ventilation only; do not cool.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide an occupancy sensor on the light controls.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide lockable cabinets for cleaning supplies. Provide two overhead doors on opposite sides of the bay to allow drive-through with the maintenance vehicle. Provide one separate personnel door to the side of one of the overhead doors. All doors shall be lockable.
Furnishings Fixtures & Equip. (FF&E)	
User-provided Equipment	Field turf groomer and field wet-down system water cannons.
Special Req.	Place the master control panel for the field lights in this space.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-6. PRESS BOX

Description/ Usage	Second-story space to accommodate observers and scoreboard controls.
Ceiling Ht.	10 ft. (3.05m) minimum.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy paint. Floor. Sealed concrete, VCT, or seamless vinyl. Ceiling. ACP or painted gypsum board.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. Provide ventilation only; do not heat or cool.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical. Provide dedicated power to the scoreboard controls.
Lighting	Provide system per Chapter 3, Electrical. Provide an occupancy sensor on the light controls.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. Provide one line. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide a seated-height countertop at field-side window.
Furnishings Fixtures & Equip. (FF&E)	Three chairs. Provide the control panel for the scoreboard. Scoreboard controls to include a game timer/clock, home and visitor scores, and quarter and half indicators.
User-provided Equipment	
Special Req.	Provide lockable, horizontal sliding windows facing the multipurpose field for the full-width of the wall. The window sill shall be at the seated-height countertop and the glazed area shall extend to 78 in. (2030 mm) above finished floor. If the support building serves multiple activity fields, provide a counter and windows on each side that faces a field.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-7. DRY GOODS AND SPORTS ACTIVITY STORAGE

Description/ Usage	Accommodates separate storage spaces for dry food service supplies such as paper goods (not for food storage) and sports activity items such as cones and flags.
Ceiling Ht.	10 ft. (3.05m) minimum.
Finishes	Walls. Pre-faced CMU or CMU with heavy-duty epoxy paint. Floor. Slip-resistant sealed concrete. Ceiling. Painted exposed structure.
Plumbing	None required.
HVAC	Provide a system per Chapter 3, HVAC. Provide heat and ventilation only; do not cool.
Fire Protection	Provide system per Chapter 3, Fire Protection and Life Safety.
Power	Provide outlets per Chapter 3, Electrical.
Lighting	Provide system per Chapter 3, Electrical. Provide an occupancy sensor on the light controls.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	
Furnishings Fixtures & Equip. (FF&E)	Provide storage shelving as required.
User-provided Equipment	
Special Req.	The walls for both storage rooms shall extend to underside of structural ceiling. The dry goods storage shall only be accessible from the concessions area via a lockable door. The sports activity storage shall only be accessible from the maintenance bay via a lockable door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

TABLE 5-8. FIELDS AND SITE SPACES

Description/ Usage	This table describes all the site spaces outside of the support building, including the multipurpose field and track, bleacher pads, lighting zone, scoreboard zone, parking, and site circulation.
Dimensions	<p>Track. A 400-meter elliptical track: Six lanes for medium-sized facilities and smaller, eight lanes for large-sized facilities and larger, and a 100-meter dash straightaway, fitting in a rectangle 591 ft. x 263 ft (180.14 m x 80.14 m). See Special Requirements below for additional criteria.</p> <p>Multipurpose field. 360 ft. x 160 ft. (109.73 m x 48.77 m) playing area with an additional 10 ft. (3.05 m) of unobstructed space on each side. See Special Requirements below for additional criteria.</p> <p>Bleacher pads. Pads are sized to accommodate 5-row tilt-up bleachers with a 5 ft. (1525 mm) space around perimeter. The length can be continuous or with 5 ft. (1525 mm) gap between each set of bleachers.</p>
Surface Materials	<p>Track. Base layer of asphalt or bituminous material with a cushioned synthetic/rubber course topping with protective color coating and lane markings. Provide a flush, paved transition strip a minimum width of 18 in. (455 mm) between the outside edge of the track and the surrounding area. This transition strip shall not present a tripping hazard.</p> <p>Multipurpose field. Synthetic field artificial turf comprising monofilament polyethylene blend fibers tufted into a polypropylene backing with a mixture of silica sand and cryogenic rubber infill (such as FieldTurf® or equal). This surface shall cover the entire area within the inside perimeter of the track.</p> <p>Service Exceptions: Army, Air Force, and Marine Corps will allow natural grass turf surface.</p> <p>Bleacher pads. Reinforced concrete. Pad surface shall be flush with surrounding areas.</p> <p>Site circulation. Provide concrete pathways with grass in non-paved areas. If budget and design language allow, provide brick or porous concrete pavers in lieu of concrete.</p>
Plumbing and Drainage	<p>Multipurpose field. Provide drainage per the selected manufacturer's specifications; do not use plastic cells for drainage. Provide a field wet-down system with quick hose disconnects within the track area but outside the field playing areas to accommodate wetting of the playing surface for cool-down. System components include either portable water cannons or portable sprinklers that connect to the hose disconnects. Valves/controls for the system shall be outside the track area and located either in the maintenance bay or a secure exterior location.</p> <p>If Army, Air Force, and Marine Corps facilities include a natural grass turf surface, the field wet-down system is not required. Provide a sprinkler system or other means of watering the turf.</p> <p>Site circulation. Provide drinking fountains adjacent to an approach path the track and multipurpose field. These drinking fountains may also be located on the support building exterior wall.</p>
Power	Provide power to the lights, scoreboard, and lighting control/communications kiosk.
Lighting	<p>Provide system per Chapter 3, Lighting. Light shall be maintained (not initial) levels measured at 3 ft. (915 mm) from field surface. Minimize light pollution through the use of cut-off shields and by optimizing pole height. Aiming angles shall not be greater than 45 degrees above vertical. Cut-off shields are required on any luminaire that is within a distance of 2.5 times its height from the property boundary.</p> <p>Track. 15 ft. candles (160 Lux) for recreation mode and 50 ft. candles (540 Lux) for competition mode.</p> <p>Multipurpose field. 20 ft. candles (215 Lux) for recreation mode and 50 ft. candles (540 Lux) for competition mode.</p>

TABLE 5-8. FIELDS AND SITE SPACES

Fencing	Fencing shall be 9 gage measured at metal, not coating, double knuckle, and vinyl coated.
Furnishings Fixtures & Equip. (FF&E)	<p>Multipurpose field. Soccer goals and cones. If NCAA-style football will be accommodated, provide removable field goal posts.</p> <p>Bleacher pads. 3- to 5-row, tilt-up, portable aluminum bleachers. Provide trash and recycling receptacles.</p> <p>Scoreboard zone. Provide an electronic scoreboard that includes game timer/clock, home and visitor scores, and quarter and half indicators. Scoreboard shall be sized to ensure visibility from the opposite end of the field.</p>
Special Req.	<p>Track. Track design and exact dimensions shall be per the USA Track and Field (USATF), USATF Rules, Article IV, Rules of Competition, Section I General, Rule 160, Track Lanes and Measurements, current edition.</p> <p>Multipurpose field. Provide white striping for soccer per Federation Internationale de Football Association, Document: Laws of the Game, current edition. Provide gold striping per United States Flag Football Association (USFFA), USFFA Rulebook, Diagram of Eight Man Field, current edition. If NCAA-style football is to be accommodated, provide contrasting-color striping per the NCAA governing document except that no hash marks shall be included. Provide an Installation logo at the center of the field.</p> <p>Site circulation. Provide a lighting control/communications kiosk adjacent to an approach path to the track and multipurpose field. The kiosk shall include controls for the recreation mode light level on a one-hour maximum timer, a phone or intercom communication link to the fitness center control desk, and a phone or intercom communication link to the Installation emergency dispatch.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net m² (ft²)	

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APPENDIX B SPACE PROGRAM

B-1 SPACE PROGRAM STANDARDS.

The data in Figure B-1 is the basis for the Space Program Interactive Spreadsheet discussed in Chapter 2, Space Program, and is provided here for reference only. Do not use this table to program a Fitness Center. The interactive spreadsheet combines this data in the correct manner and incorporates the necessary Service Exceptions—which may not be apparent from this Figure.

FIGURE B-1. SPACE PROGRAM STANDARDS

Functional Component	Space Allocation Standard			
	m ²	ft. ²	Standard	Description
Fitness Spaces				
Lobby/Reception				
Entry Lobby	9.29	100	Vestibule/Lobby Module(s) (for 2-3 ppl)	Vesibule and/or space for 2 to 3 ppl to queue
Control Counter	11.61	125	Counter Module(s)	Space for counter, space behind, space in front
Equipment issue storage	16.26	175	Storage Module(s)	Equipment storage at/behind gear issue
Vending	1.86	20	Vending Machine(s)	per vending machine
Waiting/Display	8.36	90	Seating/Display Module(s) (for 4 ppl)	Space for seating for 4 ppl and display area
Spectator peak-time circulation	27.87	300	Circulation Module(s)	Per one-side bleachers - driven by gym size
Public restrooms/phones	0.00		Public Restroom(s)	Option - Driven by gym size
Gymnasium				
Basketball/volleyball Court	826.07	8,892	One-court/200-seat Module(s)	NCAA Court + 10' safety + 200 seats (one side)
Two Court Module	1630.95	17,556	Two-court/200-seat Module(s)	Two courts + 10' safety, 16' between cts, + 200 seats
Arena-style Two-Court Module	1708.62	18,392	Arena-style Two-Court Module(s)	Provides space for arena-style seating for center, longitudinal ct.
Additional Spectator seating	84.71	912	Additional 200-seat Module(s)	Four rows of seats (one ea. side) = 200 ppl.
Basic storage/support	65.03	700	Storage Module(s)	Roughly 8% of base gym area
Additional court storage	32.52	350	Additional storage module(s)	Storage space per additional court
Unit PT/Group Exercise				
Partitionable Room(s)	4.65	50	people at 4.6 m ² (50 ft. ²)/person	116.1 m2 (1,250 ft.2) (25 ppl) minimum size
Storage/support	0.46	5	10% of partitionable room area	11.6 m2 (125 ft.2) minimum (10% of room area)
Fitness Spaces				
Stretching	4.65	50	people at 4.6 m ² (50 ft. ²)/person	50 sf per person - min. 2 ppl
Cardiovascular Equipment	4.65	50	items at 4.6 m ² (50 ft. ²)/item	50 sf per station
SelectORIZED (machine) weights	4.65	50	items at 4.6 m ² (50 ft. ²)/item	50 sf per station
Free/Plate-loaded weights	6.04	65	items at 6.0 m ² (65 ft. ²)/item	65 sf per station
Fitness Program Manager's Office	11.61	125	Office	Private office that may include fitness testing equipment
Fitness Assessment Room	11.61	125	Office(s)	1 piece fitness equip for testing, computer desk, chairs, stretching
Structured Activities				
Structured Activity Space	74.32	800	Flexible space Module(s)	Based on size of a single racquetball court
Racquetball Courts	74.32	800	Racquetball Court(s)	Single court size. Minimum of two courts
Spectator/officiating	18.58	200	Spectator/officiating Module(s)	Two rows of 10 seats for one ct. Max of two cts (400 sf)
Structured activity storage	7.43	80	10% of Structured Activity Space	Based on Structured activity space (10% of room area)
Locker Rooms				
Men's Locker Room				
Locker/changing area	0.74	8	Lockers	Per slot (2 double lockers or 1 single locker)
Shower/drying area	2.79	30	Showers	Per shower & integral drying area at 22 lockers/shower
Toilet area	4.18	45	Water closets/lavatory modules	Per wc and lav. at 30 lockers per wc/lav
Woman's Locker Room				
Locker/changing area	0.74	8	Lockers	Per slot (2 double lockers or 1 single locker)
Shower/drying area	2.79	30	Showers	Per shower & integral drying area at 22 lockers/shower
Toilet area	4.18	45	Water closets/lavatory modules	per wc and lav. at 20 lockers per wc/lav
Sauna and cool-down area			M/F (2) Saunas/cool-down area	small = 6 ppl, med = 8-9, lg = 12 ppl (+ cool down space)
Steam Room and cool-down area			M/F (2) Steam Rooms/cool-down area	small = 6-7 ppl, med = 8-9, lg = 12-14 (+ cool down space)
Hot Tub			Unisex Hot Tub	small = 5 ppl, med = 8, lg = 12-14 ppl
Support Areas				
Laundry	18.58	200	Laundry Room	Per one-washer/two-dryer room
Equipment repair and receiving			Repair/receiving Room	Fixed receiving area + variable repair (10% of Fitness)
Storage			Storage Room	Variable lockable storage room (5% of fitness)
Additional Programmatic Storage			sf Additional Storage	To be filled-in by programmer and justified based on item stored.
Core HAWC Spaces				
Lobby/Reception	27.87	300	Lobby/Reception Module(s)	per area
Director's Office	11.15	120	Office	per office
Program Managers' Offices	9.29	100	Office(s)	per office
Support Staff Workstations	5.95	64	Workstation(s)	per workstation
Classrooms/Training rooms	58.53	630	Classroom/Training Module(s)	per room
Resource Room/Computer Lab	23.23	250	Resource/Computer Lab Module(s)	per room
Storage/support	7.43	80	Storage/support Module(s)	per area
Ergometry and Fitness Testing *	7.43	80	Testing Cubicle(s)	per testing cubicles
Wellness Assessment *	13.94	150	Assessment Room(s)	per room
Administrative Spaces (required or optional)				
Director's Office	11.15	120	Office	per office
Program Managers' Offices	9.29	100	Office(s)	per office
Support Staff Workstations	5.95	64	Workstation(s)	per office
Copy/file/work/break Room	7.43	80	Workroom Module(s)	per room
Classroom/Training Room	39.02	420	15-person Classroom/Training Module(s)	small training room (15 ppl)
Classroom/Training Storage	5.57	60	Storage Module(s)	per 15-person Training Room
* Service-specific space.				
¹ If contract service, verify area with contractor.				

FIGURE B-1. SPACE PROGRAM STANDARDS (continued)

Functional Component	Space Allocation Standard			
	m ²	ft. ²	Standard	Description
Optional or Service-specific Program Spaces				
Indoor Track				
Indoor Track			need to include corners	
1/14th-mile Indoor Track	310.01	3,337	1/14th-mile, 2-lane Indoor Track	1/14th-mile, 2-lane Indoor Track (754 linear ft.)
1/12th-mile Indoor Track	523.03	5,630	1/12th-mile, 3-lane Indoor Track	1/12th-mile, 3-lane Indoor Track (1284 linear ft.)
1/11th-mile Indoor Track	556.75	5,993	1/11th-mile, 3-lane Indoor Track	1/11th-mile, 3-lane Indoor Track (1440 linear ft.)
1/8th-mile Indoor Track	989.11	10,647	1/8th-mile, 4-lane Indoor Track	1/8th-mile, 4-lane Indoor Track (2640 linear ft.)
Indoor track lobby	13.38	144	Indoor track lobby(ies)	Access point to lobby from stair/elevator
Additional Group Exercise Room	116.13	1,250	Additional Group Exercise Room	per room
Massage Room	11.15	120	Massage Room(s)	per room
Physical Therapy Training	11.61	125	Physical Therapy Training Room(s)	per room
Expanded Retail ¹	9.29	100	Expanded Retail Module(s)	per area
Expanded Juice Bar ¹	13.94	150	Expanded Juice Bar Module(s)	per area
Expanded Juice Bar Seating	13.94	150	Two-table seating Module(s)	Two 4-top tables and seating area
Family Changing Room	10.22	110	Family Changing Room(s)	per shower, wc, lav, changing, and locker
Male DV Locker Room *	46.45	500	Male DV Locker Room	500, 750, 1000 sf
Female DV Locker Room *	23.23	250	Female DV Locker Room	250, 500, 750
Child Play Area/Parent Child Area *	74.32	800	Parent/child Module(s)	400 sf play area (at 35 sf/child), 400 sf equip (50 sf/equip)
HAWC Demonstration Kitchen	46.45	500	Kitchen Module(s)	per kitchen
HAWC Relaxation Room *	9.29	100	Relaxation Room(s)	per room
Site Spaces				
Staff Parking	41.81	450	Parking Spaces	per space (including circulation)
Loading dock	8.36	90	Loading Dock	Per single-truck dock
Service Drive/trash	69.68	750	Service Drive Module	per area
Customer Parking	41.81	450	Parking Spaces	per space (including circulation)
Bicycle Rack Area	14.86	160	10-bike Rack(s)	per 10-bike Rack
Patio	2.32	25	Patio Module(s)	per patio
* Service-specific space.				
¹ If contract service, verify area with contractor.				

B-2 SAMPLE INTERACTIVE SPREADSHEETS.

Figures B-2.1 through B-2.3 illustrate sample interactive spreadsheets completed for hypothetical Army, Navy, and Marine Corps facilities, respectively. The Air Force does not use this tool to program its Fitness Centers. See Chapter 2, Size Determinants, for more information on Air Force size criteria.

**FIGURE B-2.1. SAMPLE INTERACTIVE WORKSHEET FOR AN
ARMY FITNESS CENTER**

Sample Army Fitness Facility Project				
Select Service Branch:		Army		
Select size of facility: Army size options are to the right. Check box next to the appropriate size. Refer to UFC Section 2.1 for population criteria.		Check box next to appropriate facility size. Extra Small <input type="checkbox"/> For populations of 251-1,000 Small <input type="checkbox"/> For populations of 1,001-3,000 Medium <input type="checkbox"/> For populations of 3,001-6,000 Large <input checked="" type="checkbox"/> For populations of 6,001-10,000 Extra Large <input type="checkbox"/> For populations of 10,001-15,000		
Based on data entered above, facility size basis is:		Large For populations of 6,001-10,000		
Confirm facility size basis is correct (yes or no):		Yes		
Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.				
Fitness Spaces		Default quantities	m ²	ft. ²
<u>Lobby/Reception</u>				
Entry Lobby		4 Vestibule/Lobby Module(s) (for 2-3 ppl).	37.16	400
Control Counter		4 Counter Module(s).	46.45	500
Equipment issue storage		4 Storage Module(s).	65.03	700
Vending		6 Vending Machine(s).	11.15	120
Waiting/Display		6 Seating/Display Module(s) (for 4 ppl).	50.17	540
Spectator peak-time circulation	For this option, select yes or no:	No		
Public restrooms/phones	For this option, select size of restroom:	2 male/ 3 female	20.90	225

**FIGURE B-2.1. SAMPLE INTERACTIVE WORKSHEET FOR AN
ARMY FITNESS CENTER**

Sample Army Fitness Facility Project			
Gymnasium	Default quantities	m²	ft.²
Basketball/volleyball Court	1 Two-court/200-seat Module(s). and 1 Arena-style Two-Court Module(s).	3339.57	35,948
Additional Spectator seating	0 Additional 200-seat Module(s). 1400 total seats.		
Basic storage/support	1 Storage Module(s).	65.03	700
Additional court storage	2 Additional storage module(s).	65.03	700
Unit PT/Group Exercise			
Partitionable Room(s)	140 people at 4.6 m2 (50 ft.2)/person.	650.30	7,000
Storage/support	10% of partitionable room area.	65.03	700
Fitness Spaces			
Stretching	5 people at 4.6 m2 (50 ft.2)/person.	23.23	250
Cardiovascular Equipment	80 items at 4.6 m2 (50 ft.2)/item.	371.60	4,000
Selectorized (machine) weights	46 items at 4.6 m2 (50 ft.2)/item.	213.67	2,300
Free/Plate-loaded weights	80 items at 6.0 m2 (65 ft.2)/item.	483.08	5,200
Fitness Program Manager's Office	1 Office.	11.61	125
Fitness Assessment Room	3 Office(s).	34.84	375
Structured Activities			
Structured Activity Space	3 Flexible space Module(s).	222.96	2,400
Racquetball Courts	2 Racquetball Court(s).	148.64	1,600
Spectator/officiating	2 Spectator/officiating Module(s).	37.16	400
Structured activity storage	10% of Structured Activity Space.	22.30	240
Locker Rooms			
Space criteria for men's and women's locker, shower, and toilet areas are provided at the end of the spreadsheet because they are determined by selections made throughout.			
Sauna and cool-down area	Large M/F (2) Saunas/cool-down area.	26.76	288
Steam Room and cool-down area			
Hot Tub			

**FIGURE B-2.1. SAMPLE INTERACTIVE WORKSHEET FOR AN
ARMY FITNESS CENTER**

Sample Army Fitness Facility Project			
Fitness Spaces (continued)	Default quantities	m ²	ft. ²
Support Areas			
Laundry	3/6 machine combo Laundry Room.	29.26	315
Equipment repair and receiving	Repair/receiving Room.	123.09	1,325
Storage	Storage Room.	54.58	588
Additional Programmatic Storage	400 sf Additional Storage.	37.16	400
Core HAWC Spaces			
Lobby/Reception			
Director's Office			
Program Managers' Offices			
Support Staff Workstations			
Classrooms/Training rooms			
Resource Room/Computer Lab			
Storage/support			
Ergometry and Fitness Testing *			
Wellness Assessment *			
Administrative Spaces (required or optional)			
Director's Office	1 Office.	11.15	120
Program Managers' Offices	1 Office(s).	9.29	100
Support Staff Workstations	8 Workstation(s).	47.56	512
Copy/file/work/break Room	2 Workroom Module(s).	14.86	160
Classroom/Training Room	1 15-person Classroom/Training Module(s).	39.02	420
Classroom/Training Storage	1 Storage Module(s).	5.57	60

**FIGURE B-2.1. SAMPLE INTERACTIVE WORKSHEET FOR AN
ARMY FITNESS CENTER**

Sample Army Fitness Facility Project			
Optional or Service-specific Program Spaces	Default quantities	m ²	ft. ²
Indoor Track			
Indoor Track	1/11th-mile, 3-lane Indoor Track	278.37	2,997
Indoor track lobby	1.5 Indoor track lobby(ies).	20.07	216
Additional Group Exercise Room			
Massage Room			
Physical Therapy Training			
Expanded Retail 1			
Expanded Juice Bar 1			
Expanded Juice Bar Seating			
Family Changing Room			
Male DV Locker Room *			
Female DV Locker Room *			
Child Play Area/Parent Child Area *			
HAWC Demonstration Kitchen			
HAWC Relaxation Room *			
Locker Rooms			
The following Locker Room spaces are based on total building occupancy, which is driven by the selections made on this spreadsheet.			
Army allocates the locker area at a 60% Male and 40% Female split.		To change this default split, select new: 	
Men's Locker Room		321.06	3,456
Locker/changing area	To change default, select new: 	427 Lockers in 282 slots.	
Army designates 2 spaces (slots) for every 3 lockers (66%). This is 1 full-sized & 2 half-sized lockers for every 3 required. To change this default (with CFSC approval), select new configuration. ALSO: See Women's Locker/changing area.			
Shower/drying area		19 Showers.	
Toilet area		14 Water closets/lavatory modules.	

**FIGURE B-2.1. SAMPLE INTERACTIVE WORKSHEET FOR AN
ARMY FITNESS CENTER**

Sample Army Fitness Facility Project						
Woman's Locker Room Locker/changing area Shower/drying area Toilet area	To change default, select new: 	285 Lockers in 188 slots. 13 Showers. 14 Water closets/lavatory modules.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">234.48</td> <td style="width: 50%; text-align: right;">2,524</td> </tr> </table>	234.48	2,524	
234.48	2,524					
Building Totals						
		Subtotal - Total Net Building Area	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">7,237.2</td> <td style="width: 50%; text-align: right;">77,903</td> </tr> </table>	7,237.2	77,903	
7,237.2	77,903					
		Net-to-gross Factor @ 0.2	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">1,447.4</td> <td style="width: 50%; text-align: right;">15,581</td> </tr> </table>	1,447.4	15,581	
1,447.4	15,581					
		TOTAL GROSS BUILDING	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">8,684.6</td> <td style="width: 50%; text-align: right;">93,484</td> </tr> </table>	8,684.6	93,484	
8,684.6	93,484					
Site Spaces						
		Default quantities	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 25%; text-align: center;">m²</td> <td style="width: 25%; text-align: center;">ft.²</td> </tr> </table>		m ²	ft. ²
	m ²	ft. ²				
Staff Parking		6 Paking Spaces.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">250.83</td> <td style="width: 50%; text-align: right;">2,700</td> </tr> </table>	250.83	2,700	
250.83	2,700					
Loading dock		1 Loading Dock.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">8.36</td> <td style="width: 50%; text-align: right;">90</td> </tr> </table>	8.36	90	
8.36	90					
Service Drive/trash		1 Service Drive Module.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">69.68</td> <td style="width: 50%; text-align: right;">750</td> </tr> </table>	69.68	750	
69.68	750					
Customer Parking		298 Parking Spaces.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">12457.89</td> <td style="width: 50%; text-align: right;">134,100</td> </tr> </table>	12457.89	134,100	
12457.89	134,100					
Bicycle Rack Area		5 10-bike Rack(s).	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">74.32</td> <td style="width: 50%; text-align: right;">800</td> </tr> </table>	74.32	800	
74.32	800					
Patio						
		TOTAL GROSS SITE SUPPORT	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">12,861.1</td> <td style="width: 50%; text-align: right;">138,440</td> </tr> </table>	12,861.1	138,440	
12,861.1	138,440					
TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;">21,545.7</td> <td style="width: 50%; text-align: right;">231,924</td> </tr> </table>	21,545.7	231,924	
21,545.7	231,924					

FIGURE B-2.2. SAMPLE INTERACTIVE WORKSHEET FOR A
NAVY FITNESS CENTER

Sample Navy Fitness Facility Project				
Select Service Branch:		Navy		
Select size of facility: Navy size options are to the right. Check box next to appropriate size. Refer to UFC Section 2.1 for population criteria.		Check box next to appropriate facility size. Extra Small <input type="checkbox"/> For populations of <500 Small <input type="checkbox"/> For populations of 501-3,000 Medium <input type="checkbox"/> For populations of 3,001-7,000 Large <input type="checkbox"/> For populations of 7,001-14,000 Extra Large <input type="checkbox"/> For populations of 14,001-30,000 Jumbo For populations over 30,000, enter 1 here: 1		
Based on data entered above, facility size basis is:		Jumbo For populations of >30,000		
Confirm facility size basis is correct (yes or no):		Yes		
Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.				
Fitness Spaces		Default quantities	m ²	ft. ²
Lobby/Reception				
Entry Lobby		6 Vestibule/Lobby Module(s) (for 2-3 ppl).	55.74	600
Control Counter		4 Counter Module(s).	46.45	500
Equipment issue storage		4 Storage Module(s).	65.03	700
Vending		1 Vending Machine(s).	1.86	20
Waiting/Display		5 Seating/Display Module(s) (for 4 ppl).	41.81	450
Spectator peak-time circulation	For this option, select yes or no: Yes	3 Circulation Module(s).	83.61	900
Public restrooms/phones	For this option, select size of restroom: 2 male/ 3 female	2 male/ 3 female Public Restroom(s).	20.90	225

**FIGURE B-2.2. SAMPLE INTERACTIVE WORKSHEET FOR A
NAVY FITNESS CENTER**

Sample Navy Fitness Facility Project					
			Default quantities	m ²	ft. ²
Gymnasium					
Basketball/volleyball Court			3 Two-court/200-seat Module(s).	4892.86	52,668
Additional Spectator seating	To change default, enter new quantity: <input style="width: 50px;" type="text"/>		0 Additional 200-seat Module(s). 600 total seats.		
Basic storage/support			5 Storage Module(s).	325.15	3,500
Additional court storage					
Unit PT/Group Exercise					
Partitionable Room(s)			75 people at 4.6 m2 (50 ft.2)/person.	348.38	3,750
Storage/support			10% of partitionable room area.	34.84	375
Fitness Spaces					
Stretching			12 people at 4.6 m2 (50 ft.2)/person.	55.74	600
Cardiovascular Equipment			150 items at 4.6 m2 (50 ft.2)/item.	696.75	7,500
Selectorized (machine) weights			54 items at 4.6 m2 (50 ft.2)/item.	250.83	2,700
Free/Plate-loaded weights			45 stations at 6.0 m2 (65 ft.2)/stations.	271.73	2,925
Fitness Program Manager's Office					
Fitness Assessment Room			1 Office(s).	11.61	125
Structured Activities					
Structured Activity Space			3 Flexible space Module(s).	222.96	2,400
Racquetball Courts			8 Racquetball Court(s).	594.56	6,400
Spectator/officiating					
Structured activity storage			10% of Structured Activity Space.	22.30	240
Locker Rooms					
Space criteria for men's and women's locker, shower, and toilet areas are provided at the end of the spreadsheet because they are determined by selections made throughout.					
Sauna, cool-down area	To change default, select new: <input style="width: 50px;" type="text"/>		Large M/F (2) Saunas/cool-down area.	26.76	288
Steam Room, cool-down area	To change default, select new: <input style="width: 50px;" type="text"/>		Large M/F (2) Steam Rooms/cool-down area.	30.66	330
Hot Tub	To change default, select new: <input style="width: 50px; background-color: yellow;" type="text" value="Medium"/>		Medium Unisex Hot Tub.	11.71	126

**FIGURE B-2.2. SAMPLE INTERACTIVE WORKSHEET FOR A
NAVY FITNESS CENTER**

Sample Navy Fitness Facility Project			
Fitness Spaces (continued)	Default quantities	m ²	ft. ²
Support Areas			
Laundry	5/10 machine combo Laundry Room.	44.59	480
Equipment repair and receiving	Repair/receiving Room.	141.44	1,523
Storage	Storage Room.	63.75	686
Additional Programmatic Storage	For this option, enter required sf: 200 200 sf Additional Storage.	18.58	200
Core HAWC Spaces			
Lobby/Reception			
Director's Office			
Program Managers' Offices			
Support Staff Workstations			
Classrooms/Training rooms			
Resource Room/Computer Lab			
Storage/support			
Ergometry and Fitness Testing *			
Wellness Assessment *			
Administrative Spaces (required or optional)			
Director's Office	1 Office.	11.15	120
Program Managers' Offices	1 Office(s).	9.29	100
Support Staff Workstations	5 Workstation(s).	29.73	320
Copy/file/work/break Room	3 Workroom Module(s).	22.30	240
Classroom/Training Room	5 15-person Classroom/Training Module(s).	195.09	2,100
Classroom/Training Storage	5 Storage Module(s).	27.87	300

**FIGURE B-2.2. SAMPLE INTERACTIVE WORKSHEET FOR A
NAVY FITNESS CENTER**

Sample Navy Fitness Facility Project				
Optional or Service-specific Program Spaces		Default quantities	m ²	ft. ²
Indoor Track				
Indoor Track	To change default, select new: <input style="background-color: yellow;" type="text"/>	1/8th-mile, 4-lane Indoor Track	989.11	10,647
<small>To change the default selection (described to the right), choose the size of track desired. The description to the right will then change to reflect the new choice. To return to the default, delete the selection above.</small>				
Indoor track lobby	To change default, enter new quantity: <input style="background-color: yellow;" type="text"/>	2 Indoor track lobby(ies).	26.76	288
Additional Group Exercise Room				
Massage Room	For this option, select yes or no: <input checked="" type="checkbox"/> Yes	1 Massage Room(s).	11.15	120
Physical Therapy Training	For this option, select yes or no: <input type="checkbox"/> No			
Expanded Retail 1	For this option, select yes or no: <input type="checkbox"/> No			
Expanded Juice Bar 1	For this option, select yes or no: <input checked="" type="checkbox"/> Yes	1 Expanded Juice Bar Module(s).	13.94	150
Expanded Juice Bar Seating	For this option, enter required modules: <input type="text" value="2"/>	2 Two-table seating Module(s).	27.87	300
Family Changing Room	Does this facility include a pool (yes/no)? <input checked="" type="checkbox"/> Yes	5 Family Changing Room(s).	51.10	550
Male DV Locker Room *				
Female DV Locker Room *				
Child Play Area/Parent Child Area *		1 Parent/child Module(s).	74.32	800
HAWC Demonstration Kitchen				
HAWC Relaxation Room *				
Locker Rooms				
<small>The following Locker Room spaces are based on total building occupancy, which is driven by the selections made on this spreadsheet.</small>				
Navy allocates the locker area at a 60% Male and 40% Female split.		To change this default split, select new: <input style="background-color: yellow;" type="text"/>		
Men's Locker Room			384.14	4,135
Locker/changing area	To change default, select new: <input style="background-color: yellow;" type="text"/>	508 Lockers in 335 slots.		
<small>Navy designates 2 spaces (slots) for every 3 lockers (66%). This is 1 full-sized & 2 half-sized lockers for every 3 required. To change this default, select new configuration. ALSO: See Women's Locker/changing area.</small>				
Shower/drying area		23 Showers.		
Toilet area		17 Water closets/lavatory modules.		

**FIGURE B-2.2. SAMPLE INTERACTIVE WORKSHEET FOR A
NAVY FITNESS CENTER**

Sample Navy Fitness Facility Project				
Woman's Locker Room			278.61	2,999
Locker/changing area	To change default, select new: <input style="background-color: yellow;" type="text"/>	338 Lockers in 223 slots.		
Shower/drying area		15 Showers.		
Toilet area		17 Water closets/lavatory modules.		
Building Totals				
		Subtotal - Total Net Building Area	10,533.0	113,380
	Is this facility more than one story (yes/no)? <input style="background-color: yellow;" type="text" value="Yes"/>	Net-to-gross Factor @ 0.28	2,949.2	31,746
		TOTAL GROSS BUILDING	13,482.2	145,126
Site Spaces				
		Default quantities	m²	ft.²
Staff Parking		15 Paking Spaces.	627.08	6,750
Loading dock		1 Loading Dock.	8.36	90
Service Drive/trash		1 Service Drive Module.	69.68	750
Customer Parking		500 Parking Spaces.	20902.50	225,000
Bicycle Rack Area		2 10-bike Rack(s).	29.73	320
Patio				
		TOTAL GROSS SITE SUPPORT	21,637.4	232,910
		TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)	35,119.6	378,036

**FIGURE B-2.3. SAMPLE INTERACTIVE WORKSHEET FOR A
MARINE CORPS FITNESS CENTER**

Sample Marine Corps Fitness Facility Project				
Select Service Branch:		Marine Corps		
Select size of facility: Marine Corps size options are to the right. Check box next to appropriate size. Also enter actual total Installation population size in the space provided. Refer to UFC Section 2.1 for reference to population criteria.		Check box next to appropriate facility size. Extra Small <input type="checkbox"/> For populations of <500 Small <input type="checkbox"/> For populations of 501-3,000 Medium <input type="checkbox"/> For populations of 3,001-7,000 Large <input checked="" type="checkbox"/> For populations of 7,001-14,000 Extra Large <input type="checkbox"/> For populations of 14,001+		
		Enter actual total population:	8,500	
Based on data entered above, facility size basis is:		Large For populations of 7,001-14,000		
		Total Installation population is	8,500	
Confirm facility size basis is correct (yes or no):		Yes		
Many of the spaces below are determined by the size and/or population criteria confirmed above. Where appropriate or necessary, modify each space or select the appropriate options to determine the total net facility size.				
Fitness Spaces		Default quantities	m ²	ft. ²
Lobby/Reception				
Entry Lobby		4 Vestibule/Lobby Module(s) (for 2-3 ppl).	37.16	400
Control Counter		4 Counter Module(s).	46.45	500
Equipment issue storage		4 Storage Module(s).	65.03	700
Vending		6 Vending Machine(s).	11.15	120
Waiting/Display		6 Seating/Display Module(s) (for 4 ppl).	50.17	540
Spectator peak-time circulation	For this option, select yes or no:			
Public restrooms/phones	For this option, select size of restroom: 1 male/ 1 female	1 male/ 1 female Public Restroom(s).	8.92	96

**FIGURE B-2.3. SAMPLE INTERACTIVE WORKSHEET FOR A
MARINE CORPS FITNESS CENTER**

Sample Marine Corps Fitness Facility Project				
			m ²	ft. ²
Gymnasium				
Basketball/volleyball Court	Select size: Arena-style	1 Arena-style Two-Court Module(s)	1708.62	18,392
<i>Select the Basketball/volleyball Court size. The selected size will be described to the right.</i>				
Additional Spectator seating	To change default, enter new quantity: 	0 Additional 200-seat Module(s). 1200 total seats.		
Basic storage/support				
Additional court storage				
Unit PT/Group Exercise				
Partitionable Room(s)	To change default, enter new quantity of ppl: 	140 people at 4.6 m2 (50 ft.2)/person.	650.30	7,000
Storage/support		10% of partitionable room area.	65.03	700
Fitness Spaces				
Stretching		5 people at 4.6 m2 (50 ft.2)/person.	23.23	250
Cardiovascular Equipment		For Medium and larger facilities, this number includes area for cardio, selectorized, and free weights.	1252.54	13,483
Selectorized (machine) weights		See above.		
Free/Plate-loaded weights		See above.		
Fitness Program Manager's Office				
Fitness Assessment Room		4 Office(s).	46.45	500
Structured Activities				
Structured Activity Space		3 Flexible space Module(s).	222.96	2,400
Racquetball Courts		4 Racquetball Court(s).	297.28	3,200
Spectator/officiating				
Structured activity storage		10% of Structured Activity Space.	22.30	240
Locker Rooms				
<i>Space criteria for men's and women's locker, shower, and toilet areas are provided at the end of the spreadsheet because they are determined by selections made throughout.</i>				
Sauna and cool-down area	To change default, select new: 			
Steam Room and cool-down area				
Hot Tub	To change default, select new: 			

**FIGURE B-2.3. SAMPLE INTERACTIVE WORKSHEET FOR A
MARINE CORPS FITNESS CENTER**

Sample Marine Corps Fitness Facility Project			
Fitness Spaces (continued)	Default quantities	m ²	ft. ²
Support Areas			
Laundry	To change default, select new: 2/4 machine	2/4 machine combo Laundry Room.	21.37 230
Equipment repair and receiving		Repair/receiving Room.	141.51 1,523
Storage		Storage Room.	63.79 687
Additional Programmatic Storage	For this option, enter required sf: 100	100 sf Additional Storage.	9.29 100
Core HAWC Spaces			
Lobby/Reception			
Director's Office			
Program Managers' Offices		1 Office(s).	9.29 100
Support Staff Workstations		1 Workstation(s).	5.95 64
Classrooms/Training rooms		2 Classroom/Training Module(s).	117.05 1,260
Resource Room/Computer Lab		1 Resource/Computer Lab Module(s).	23.23 250
Storage/support		1 Storage/support Module(s).	7.43 80
Ergometry and Fitness Testing *			
Wellness Assessment *			
Administrative Spaces (required or optional)			
Director's Office		1 Office.	11.15 120
Program Managers' Offices		2 Office(s).	18.58 200
Support Staff Workstations		8 Workstation(s).	47.56 512
Copy/file/work/break Room		2 Workroom Module(s).	14.86 160
Classroom/Training Room			
Classroom/Training Storage			

**FIGURE B-2.3. SAMPLE INTERACTIVE WORKSHEET FOR A
MARINE CORPS FITNESS CENTER**

Sample Marine Corps Fitness Facility Project			
Optional or Service-specific Program Spaces	Default quantities	m ²	ft. ²
Indoor Track			
Indoor Track	To change default, select new: <input style="background-color: yellow;" type="text"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
<i>To change the default selection (described to the right), choose the size of track desired. The description to the right will then change to reflect the new choice. To return to the default, delete the selection above.</i>			
Indoor track lobby	To change default, enter new quantity: <input style="background-color: yellow;" type="text"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Additional Group Exercise Room		<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Massage Room	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="No"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Physical Therapy Training	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="No"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Expanded Retail 1	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="No"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Expanded Juice Bar 1	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="No"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Expanded Juice Bar Seating		<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Family Changing Room	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="No"/>	<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Male DV Locker Room *		<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Female DV Locker Room *		<input style="width: 50px;" type="text"/>	<input style="width: 50px;" type="text"/>
Child Play Area/Parent Child Area *	For this option, select yes or no: <input style="background-color: yellow;" type="text" value="Yes"/>	0.5 Parent/child Module(s).	37.16 400
HAWC Demonstration Kitchen		1 Kitchen Module(s).	46.45 500
HAWC Relaxation Room *			<input style="width: 50px;" type="text"/>
Locker Rooms			
<i>The following Locker Room spaces are based on total building occupancy, which is driven by the selctions made on this spreadsheet.</i>			
Marine Corps allocates the locker area at a 80% Male and 20% Female split.			To change this default split, select new: <input style="background-color: yellow;" type="text"/>
Men's Locker Room		<input style="width: 50px;" type="text" value="337.69"/>	<input style="width: 50px;" type="text" value="3,635"/>
Locker/changing area	To change default, select new: <input style="background-color: yellow;" type="text"/>	447 Lockers in 295 slots.	
<i>Marine Corps designates 2 spaces (slots) for every 3 lockers (66%). This is 1 full-sized & 2 half-sized lockers for every 3 required. To change this default, select new configuration. ALSO: See Women's Locker/changing area.</i>			
Shower/drying area		20 Showers.	
Toilet area		15 Water closets/lavatory modules.	

**FIGURE B-2.3. SAMPLE INTERACTIVE WORKSHEET FOR A
MARINE CORPS FITNESS CENTER**

Sample Marine Corps Fitness Facility Project				
Woman's Locker Room Locker/changing area Shower/drying area Toilet area	To change default, select new: 	112 Lockers in 74 slots. 5 Showers. 6 Water closets/lavatory modules.	94.01	1,012
Building Totals				
			Subtotal - Total Net Building Area	5,512.1 59,334
Is this facility more than one story (yes/no)? No			Net-to-gross Factor @ 0.2	1,102.4 11,867
			TOTAL GROSS BUILDING	6,614.5 71,200
Site Spaces				
			Default quantities	m ² ft. ²
Staff Parking		12 Paking Spaces.	501.66	5,400
Loading dock	For this option, select yes or no: Yes	1 Loading Dock.	8.36	90
Service Drive/trash		1 Service Drive Module.	69.68	750
Customer Parking		160 Parking Spaces.	6688.80	72,000
Bicycle Rack Area		3 10-bike Rack(s).	44.59	480
Patio	For this option, select yes or no: No			
			TOTAL GROSS SITE SUPPORT	7,313.1 78,720
			TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)	13,927.6 149,920

APPENDIX C EQUIPMENT LISTS

C-1 FITNESS EQUIPMENT LISTS.

The following lists contain sample equipment for the fitness areas and are broken down into three categories: free weights, selectorized equipment, and cardiovascular equipment.

C-1.1 Free/plate-loaded Weights.

The following are samples of commercial-grade, plate-loaded or free weight equipment and benches:

- Leg Extension
- Leg Curl (Seated)
- Leg Curl (Horizontal/Prone)
- Leg Curl (Standing/Kneeling)
- Squat Press (Seated/45deg/Hip)
- Squat Press (Vertical/Hack)
- Squat Press (Horizontal/Supine)
- Squat Press (Jammer/Ground Based)
- Calf Raise (Seated)
- Calf Raise (Standing)
- Calf Raise (45deg)
- Rotary Calf
- Tibia Dorsi Flexion
- Abduction
- Adduction
- Glute Isolation
- Chest Press (Seated)
- Chest Press (Horizontal/Supine)

- Wide Chest Press
- Incline Press
- Decline Press
- Military/Shoulder Press
- Lat Pulldown
- Lat Pullover
- Low Row
- High Row
- Rear Deltoid (Seated)
- Rear Deltoid (Horizontal/Prone)
- Back Extension
- T-Bar/Lever Row
- Lateral/Deltoid Raise
- Shoulder Press
- Shrug
- Bicep Curl
- Tricep Extension
- Tricep Dip Extension
- Wrist Curl
- Hand Grip Isolation
- Neck Isolation
- Smith Machine
- Ab Crunch
- Rotary Torso
- Dumbbell Sets (10pr)

- Dumbbell Rack-1 Tier/5pr
- Dumbbell Rack-2 Tier/10pr
- Fixed Barbell Set (10 Assorted)
- Fixed Barbell Rack
- Weights (Assorted 2.5#-45#)
- Weight Tree/Rack
- Bars (Assorted/Loose)
- Bar Rack
- Benches (Assorted)
- Squat Rack (F) & Bar
- Bench Press (F) & Bar
- Incline Press (F) & Bar
- Decline Press (F) & Bar
- Military/Shoulder Press (F) & Bar
- Dead Lift Platform/Rack (F) & Bar
- Power Cage/Rack (F) w/ Bar
- Curl Bench (Seated)
- Curl Bench (Standing)
- Leg Raise/Dip
- Chin-Up/Dip
- Back Extension
- Abdominal Board

C-1.2 Selectorized (Machine) Equipment.

The following are samples of selectorized equipment:

- Multi-Station (Ex. 6 stations)

- Leg Extension
- Leg Curl (Seated)
- Leg Curl (Horizontal/Prone)
- Leg Curl (Standing/Kneeling)
- Leg Press (Seated/45deg)
- Leg Press (Horizontal/Supine)
- Leg Press (Lunge)
- Calf Raise (Seated)
- Calf Raise (Standing/Donkey)
- Calf Raise (45deg)
- Rotary Calf
- Abductor
- Adductor
- Multi-Hip Machine (Rotary Hip)
- Hip Extension
- Glute Isolation
- Bent Arm/Pectoral Fly
- Straight Arm Fly/Rear Delt
- Chest Press (Seated)
- Chest Press (Horizontal/Supine)
- Incline Press
- Decline Press
- Lat Pulldown
- Lat Pullover
- Low Row

- High Row
- Rear Deltoid (Seated)
- Rear Deltoid (Horizontal/Prone)
- Back Extension
- Lateral/Deltoid Raise
- Shoulder/Overhead Press
- Bicep Curl
- Tricep Extension
- Tricep Dip Extension (Press)
- Wrist Curl
- Neck Isolation
- Smith Machine (H)
- Cable Crossover w/ Chin-up Bar
- Cable Station (2 sided)
- Ab Crunch
- Rotary Torso
- Pull-up/Dip Assist

C-1.3 Cardiovascular Equipment.

The following are samples of commercial-grade, electronically controlled cardiovascular equipment:

- Treadmill
- Elliptical Trainer
- Cross Trainer/Hiker (Upright)
- Cross Trainer/Hiker (Recumbent)
- Stationary Bike (Upright)

- Stationary Bike (Recumbent)
- Stair Climber/Stepper
- Rowing Machine
- Skier
- Kayak Machine
- Skate Machine