

UNIFIED FACILITIES CRITERIA (UFC)

FITNESS CENTERS



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U.S. ARMY CORPS OF ENGINEERS

NAVAL FACILITIES ENGINEERING COMMAND

AIR FORCE CIVIL ENGINEER CENTER (Preparing Activity)

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

Change No.	Date	Location
1	30 May 2019	<u>Updated Service-specific criteria in para. 2-3; updated references in paras. 3-5.1.2 and 3-6.4.1; updated functional data sheet link in para. 4-3; updated requirements and references in Tables 2-1, 4-20, 4-22, 4-25, 4-29, 4-30, 5-1, 5-2, 5-8, 5-9, 6-1, 6-14, and 6-17; added new Table 5-10 for building support/vertical circulation; updated App. B; designated former App. A as App. D, App. B as App. A, and App. D as Chap. 6; and updated references in App. D</u>

This UFC supersedes FC 4-740-02F, *Air Force Fitness Centers*, dated 26 September 2006, and FC 4-740-02N, *Navy and Marine Corps Fitness Centers*, dated 1 April 2014.

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 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 most stringent of the UFC, the SOFA, the HNFA, and the BIA, as applicable.

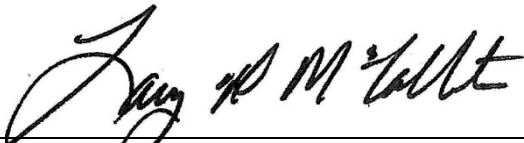
UFC are living documents and will be periodically reviewed, updated, and made available to users as part of the Services' responsibility for providing technical criteria for military construction. Headquarters, U.S. Army Corps of Engineers (HQUSACE), Naval Facilities Engineering Command (NAVFAC), and Air Force Civil Engineer Center (AFCEC) are responsible for administration of the UFC system. Defense agencies must 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 must be sent to the respective Service proponent office by the following electronic form: [Criteria Change Request](#). The form is also accessible from the Internet sites listed below.

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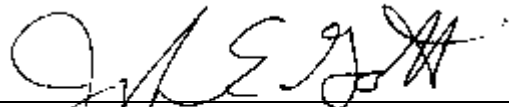
- Whole Building Design Guide web site <http://dod.wbdg.org/>.

Refer to UFC 1-200-01, *DoD Building Code (General Building Requirements)*, for implementation of new issuances on projects.

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**UNIFIED FACILITIES CRITERIA (UFC)
NEW DOCUMENT SUMMARY SHEET**

Document: UFC 4-740-02, *Fitness Centers*

Superseding: FC 4-740-02F, *Air Force Fitness Centers*, dated 26 September 2006, and FC 4-740-02N, *Navy and Marine Corps Fitness Centers*, dated 1 April 2014.

Description: This UFC provides criteria for planning and design of fitness centers for the combined DOD United States Armed Forces.

Reasons for Document: This is a new Joint Service document. This document represents another step in the Joint Services' effort to bring uniformity to the planning, design, and construction of military facilities. The UFC was developed to provide design requirements to accomplish the following:

- Assist planners in understanding facility requirements to ensure accurate space program budgets
- Provide architects, engineers, and construction surveillance personnel with essential, minimum requirements for the design and construction of fitness centers
- Clarify the operational intent of the facility design

Impact: The following will result from the publication of this UFC:

- This UFC creates a single source for common DOD fitness center criteria and an accurate reference to individual Service-specific documents
- This UFC facilitates updates and revisions and promotes agreement and uniformity of design and construction between the Services

Unification Issues: The following is non-unified content:

- For Navy and Marine Corps only, exceptions in supporting specific functional program areas occur as noted in Table 2-1, "Functional Program Areas" and the functional data sheets in Chapter 4.
- The Army has different ceiling fan requirements.
- Chapter 6, "Austere Fitness Centers," applies only to the Navy.

Note: The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by DOD.

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CHAPTER 1 INTRODUCTION

1-1 PURPOSE AND SCOPE.

This UFC provides requirements for evaluating, planning, programming, and designing fitness centers. This UFC is not intended as a substitute for thorough review by individual program managers and operations staff in the appropriate Service.

1-2 APPLICABILITY.

The information in this UFC applies to the design of all new construction projects, including additions, alterations, and renovation projects within the United States and its territories and possessions and outside of the United States and its territories and possessions. It also applies to the procurement of design-build services for these projects.

1-3 USERS OF FACILITY.

The facility users are as follows:

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

1-4 GENERAL BUILDING REQUIREMENTS.

Comply with UFC 1-200-01, *DOD Building Code (General Building Requirements)*. UFC 1-200-01 provides applicability of model building codes and government-unique criteria for typical design disciplines and building systems, as well as accessibility, antiterrorism, security, high-performance and sustainability requirements, and safety. Use this UFC in addition to UFC 1-200-01 and the UFCs and government criteria referenced therein.

1-5 REFERENCES.

Appendix D contains a list of references used in this document. The publication date of the code or standard is not included in this document. In general, the latest available issuance of the reference is used.

1-6 GLOSSARY.

Appendix C contains acronyms and abbreviations.

1-7 AUSTERE FITNESS CENTERS (FOR NAVY ONLY).

Chapter 6 of this UFC contains requirements for fitness centers that are specifically designated as "austere." Austere construction is intended for facilities in locations determined by Commander, Navy Installations Command (CNIC), and approved by the Office of the Chief of Naval Operations (OPNAV) to be eligible for austere construction. The austere standards are intended to be applied flexibly and in varying degrees to all facilities at locations designated as austere. Flexibility is allowed to ensure the criteria are appropriate for individual austere locations.

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CHAPTER 2 PLANNING AND LAYOUT

2-1 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.

2-1.1 Access.

Locate the fitness center to be visible and easily accessible to other facilities utilized by the target audience, such as barracks/dormitories, MWR/NEX/MCCS/Services facilities, and dining facilities. To accommodate patron access, evaluate 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.

2-1.2 Cost.

Design these facilities with the objective of achieving the lowest lifecycle cost over a 40-year period. 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 following performance requirements outlined in this UFC.

2-1.3 Expansion.

Evaluate possible future additions when selecting the site to ensure cost-effective expansion possibilities. Future projects may include additional fitness center spaces, adjacent aquatics/swimming pool, adjacent outdoor sports fields and courts, and new/emerging program requirements.

2-2 FACILITY SIZE.

The space program must be developed in coordination with the installation's mission requirements. The fitness center's size will be driven by the program and the installation's population.

2-3 SPACE PROGRAM.

The final space program for a new fitness center will need to be carefully determined by installation representatives, using the criteria in this UFC. The space assessment and its related basic facility requirement (BFR) calculation serves as the basis for the validated DD Form 1391, which defines the total authorized space allowances for each project.

For the Navy and Marine Corps, the space program is developed through the use of an interactive spreadsheet and serves as a baseline for the fitness center planning team. This spreadsheet is available as a downloadable Microsoft® Excel file from the Whole

Building Design Guide (WBDG) website:

http://www.wbdg.org/references/pa_dod_sps.php. (See Appendix B for a sample space program spreadsheet for a Navy facility.)

For the Air Force, the space program is developed through the use of an interactive spreadsheet and serves as a baseline for the fitness center planning team. This spreadsheet is available as a downloadable Microsoft® Excel file from the WBDG website: http://www.wbdg.org/references/pa_dod_sps.php.

For the Army, the space program is developed through consultation with the Physical Fitness Facility Center of Standardization to determine space requirements on the MILCON Requirements, Standardization, and Integration (MRSI) website: <https://mrsi.erdcdren.mil/cos/hnc/pff/>. //

2-3.1 Space Tabulation.

The tabulation of areas for the majority of spaces within a fitness center follows UFC 3-101-01, *Architecture*, paragraph 2-2, "Building Area Calculations." Functional balconies within fitness centers used for fitness must be programmed as full scope in the area calculation. For indoor elevated jogging tracks, the Navy, Marine Corps, and Air Force programs these at full square footage.

Space requirements for the optional multipurpose field and supporting facilities are in Chapter 5.

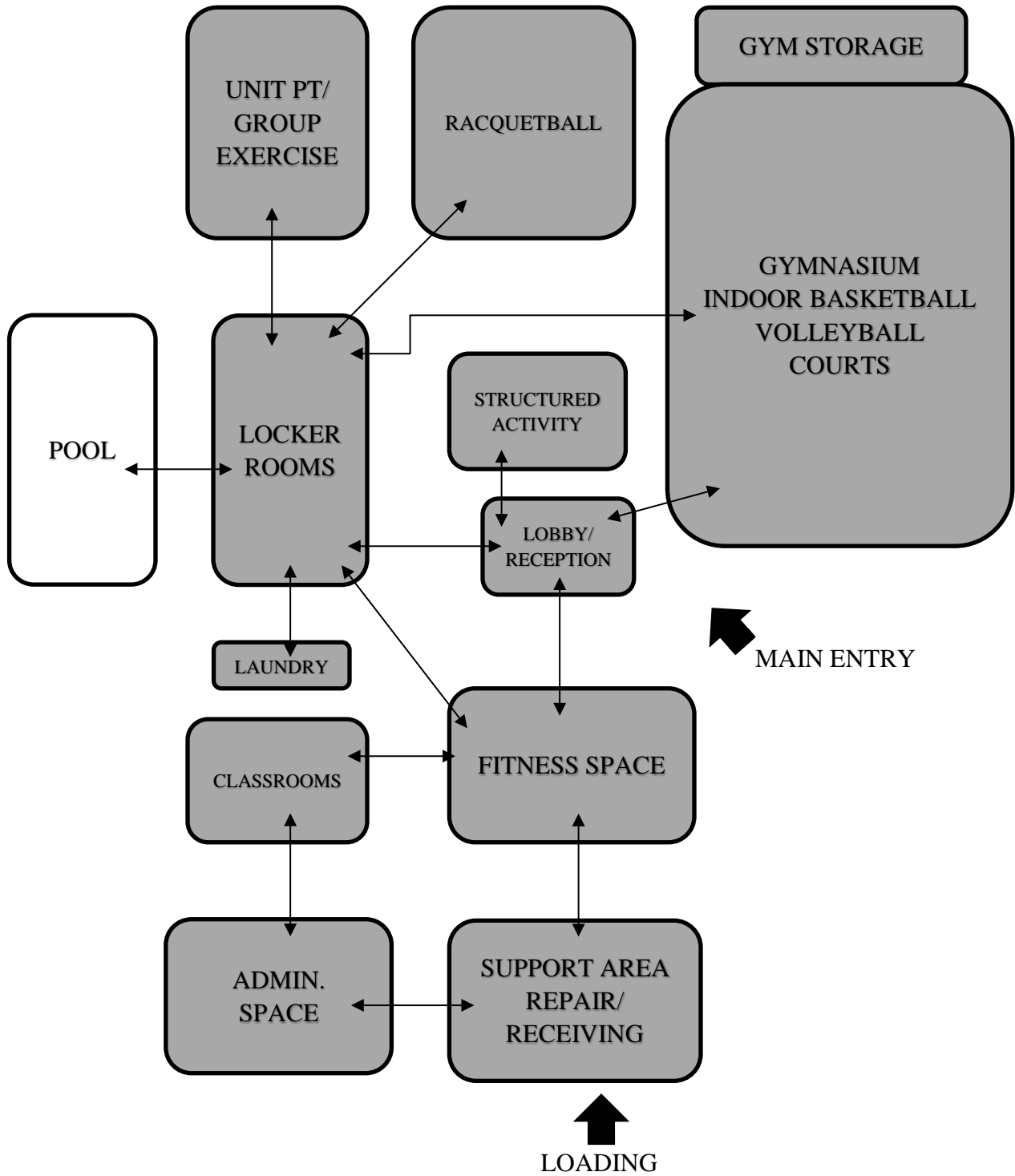
2-4 LAYOUT AND ADJACENCIES.

The appropriate adjacencies are illustrated in Figure 2-1. These diagrams do not convey a building shape. Actual building shape will vary with available site, topography, vehicular access, site restrictions, utility access, and final installation program requirements. Required adjacencies may be accommodated vertically. This figure illustrates 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 evaluate 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



2-5 SPACE ASSESSMENT.

See Chapter 4 for additional information on the space types and their relationships to each other.

2-6 SCOPE OF FACILITY.

The fitness center comprises the fitness program spaces, the administrative area, and building support. Within the fitness programs there are core functional program areas and optional functional program areas. All functional program areas are described in Table 2-1 and paragraph 2-7. 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, an interactive space programming tool has been developed to help users calculate a baseline space program for a new fitness center. This tool is described in paragraph 2-3.

A fitness center may be combined with a natatorium or outdoor athletic fields; however, the natatorium and fields have different category codes and may be programmed separately or as part of a fitness center complex. Chapter 5 includes requirements for multipurpose fields and softball fields. Requirements for natatoriums and other types of athletic fields are not included in this UFC.

2-7 PROGRAM AREAS.

2-7.1 Fitness Program, Administrative Areas, and Building Support.

Table 2-1 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. This table identifies functional areas; when programming a facility, evaluate other areas such as circulation/corridors, exterior wall cavities, and mechanical/electrical/communication rooms to determine gross areas of the building. See UFC 3-101-01 for methods to calculate gross building area. Service-specific spaces are identified with an asterisk (*).

2-8 ANTITERRORISM/FORCE PROTECTION.

Refer to UFC 4-020-01, *DOD Security Engineering Facilities Planning Manual*, and UFC 4-010-01, *DOD Minimum Antiterrorism Standards for Buildings*, to develop requirements.

Table 2-1 Functional Program Areas

Functional Program Area	Description/Requirements
Lobby/Reception	
Entry lobby and waiting/display	Entry space in front of control counter and/or vestibule. Combined with a waiting area with seating and display space. Space includes a public telephone.
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 must be accommodated via LOS or CCTV. Provides area to hold gear for issue (e.g., towels, balls, and racquets).
Retail/vending/food and 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	Restrooms used primarily by visitors, spectators, and persons not using the locker and shower rooms. Sizing is tied to gym capacity.
Janitor's closet	Space used by custodial staff, with mop sink and storage space.
Administrative	
Director's office	Private office.
Program managers' offices	Private office. Installation to determine quantity of offices and workstations within each office.
Administrative support	Workstations.
Classroom/training room	Space used for conducting training and large meetings. Classroom sized for 25 persons (750 ft ² [69.68 m ²]) for small facilities, 50 persons (1500 ft ² [139.35 m ²]) for medium and large, and 75 persons (2250 ft ² [209.03 m ²]) for extra-large and jumbo 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 subdividable room with partitions (for classes and/or unit/command fitness training).

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	
Fitness program manager's office	Private office adjacent to fitness assessment room and fitness spaces. May include 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.
Indoor track	Optional. Determine permissibility by center size and climate.
Structured Activities	
Structured activity space	Can be used as needed, e.g., for rock climbing wall, indoor cycling, volleyball, martial arts/boxing, other structured activity, or rolled into other functional areas, as needed.
Racquetball courts	Designed and specified to meet USA Racquetball Association (USRA) <i>Standard Specifications for Racquetball Court Construction</i> .
Spectator area/officiating	Optional.
Functional fitness	Space that supports Service-developed programs. Functional fitness implies performing exercise in an optimal way, to achieve certain goals that allow improved performance of regular activities outside the gym. Typical equipment in the functional fitness area includes A-frames used for various exercises with bands, individual weight stations, and various kettlebells and other equipment.
Auxiliary gymnasium	Optional. This space is used for sports competitions such as basketball, volleyball, wrestling, and indoor soccer. The auxiliary gymnasium can also support instructional functions, informal, intramural, group exercise/fitness functions, and community events. Preferably, the auxiliary gymnasium will be adjacent to the main gymnasium and, if not adjacent, must be nearby.
High Intensity Tactical Training (HITT) Center*	Marine Corps-only space. This is typically one large, open-space room that is non-partitionable and used for implementation of the HITT program. Activities/classes such as aerobics, martial arts, and yoga must not be used in this space.

Indoor Cycling	Classroom to accommodate indoor cycling classes, which includes an instructor on a bike and participants on bikes. These bikes are different from stationary bikes utilized in the cardio area. This space may be included as part of the programmed space allotted for structured activities.
Locker Rooms	Separate male/female facilities. Each locker room is divided into the three indicated sub-areas.
Men's Locker Room	Programmed per installation population.
Locker/dressing area	Programmed per installation population.
Toilet area	Programmed per installation population.
Shower/drying area	Programmed per installation population.
Women's Locker Room	Programmed per installation population.
Locker/dressing area	Programmed per installation population.
Toilet area	Programmed per installation population.
Shower/drying area	Programmed per installation population.
\1\ Steam room	Optional. This space is not supported by the Navy. <i>/1/</i>
Sauna	Optional. When used, provide separate male/female facilities.
Convertible locker space	Optional. 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.
Receiving and equipment repair/storage	Receiving, storage, and repair. Area to hold (if necessary), assemble, and repair equipment and store overflow from the equipment issue (e.g., seasonal items).
Additional programmatic storage	Optional storage for additional optional program equipment. May be combined with receiving/equipment repair.
Other Program Areas	
Massage room	Optional room for massage.
\1\ Hot tub	Optional. This space is not supported by the Navy. <i>/1/</i>

Unisex changing room/unisex locker room	Single-person locker room with shower, lavatory, and toilet; family member accompanies child. Adjacent to locker area and provides direct access to the pool.
Parent/child area	<p>M\ Optional /M/ age-appropriate spaces based on Service guidance. Navy 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. (750-mm) -high clear wall with a central entry/exit point.</p> <p>Marine Corps option: 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.</p>
Mother's room	Private space for nursing mothers. One per facility.
Related Program/Facility Areas	
Pool	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 2-1 for these adjacencies.
Physical therapy/rehabilitation training	Optional. Note that these functions are a different category code. This space is only supported in special circumstances.
Multipurpose field	See Chapter 5 for details. Fields may be programmed with or separate from a fitness center on a case-by-case basis; also refer to UFC 4-750-02N.
Outdoor track	See Chapter 5 for details. Tracks may be programmed with or separate from a fitness center on a case-by-case basis; also refer to UFC 4-750-02N for other criteria.
Softball field	See Chapter 5 for details. Fields may be programmed with or separate from a fitness center on a case-by-case basis.

CHAPTER 3 GENERAL DESIGN CRITERIA

3-1 GENERAL.

This chapter provides general criteria only and consists mainly of references to the technical design criteria documents and general considerations. Chapter 4 provides the specific design requirements for each fitness center space.

3-1.1 Authorized Building Program.

A DD Form 1391 funding document is developed for all new construction projects, which establishes the project requirements and authorized building size. The designer must use the functional space program descriptions and functional diagrams in this UFC; however, the design may not exceed the square footage allowances or add functions not authorized by the validated DD Form 1391.

3-1.2 Accessibility.

Comply with stated and cross-referenced requirements for accessibility. Facilities programmed for wheelchair competition activities shall be designed to provide access for a 40-inch (1016-mm) -wide wheelchair at the main entrance, gymnasium, and restrooms.

3-2 STRUCTURE.

3-2.1 Substructure.

For the gymnasium, provide a level concrete slab on grade over properly graded crushed stone subbase, with a minimum 10-mil (0.25-mm) polyethylene sheet vapor barrier located directly between the slab and the subbase. For rooms with floor padding, provide a recessed slab to compensate for the mat thickness or a transition area outside of the mat area.

3-2.2 Superstructure.

Provide clear spans for the activity area and gymnasium. Where specialized elements such as basketball backstops, divider curtains and drapes, lighting and sound equipment, decorative banners, acoustical treatments, score boards, or running tracks will be suspended above the floor, design the roof structure for the appropriate support locations and loadings.

3-3 ARCHITECTURE.

Comply with stated and cross-referenced requirements for architecture. Fitness areas are to be as open as possible, with maximum utilization of natural light and views. Larger spaces will be provided to allow flexibility in addressing future fitness trends. Also comply with the following fitness center-specific requirements.

3-4 EXTERIOR DESIGN.

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

3-4.1 Entrances/Exits.

3-4.1.1 Main Entry.

Design the facility to require access at one main entry point sized in accordance with egress requirements of NFPA 101, *Life Safety Code*. To determine the occupant load of the gymnasium, use "Assembly Use - Without Fixed Seating" from NFPA 101. If the main entrance is not sized to accommodate the occupant load of a special event (e.g., change of command, award ceremonies), a separate gymnasium special event entrance with a paved path to the parking area is required.

3-4.1.2 Covered Entry and Alarm.

The 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 doors can open completely without obstruction from snow and ice. All other exterior doors must 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.

3-4.1.3 Equipment Deliveries.

If applicable, provide a separate entrance for equipment deliveries. See paragraph 3-8 for more information on site work.

3-4.2 Doors and Windows.

Provide doors and windows to allow natural light into and views in and out of the facility. Mitigate glare and direct sunlight in activity spaces such as the gymnasium and fitness spaces.

3-4.3 Exterior Finishes.

The exterior color, texture, and design must be consistent with the programs offered, building type, and the local environment in accordance with installation design standards. The design must communicate a sense of activity and energy while complying with installation design guides/standards.

3-4.4 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. The facility must include both a building-mounted sign and site monument sign (roadway-visible) that must be strategically located, adequately lit, and sized to permit proper viewing by individuals approaching the facility.

3-4.5 Exterior Walls and Mold.

Follow UFC 3-101-01 during design to help prevent the development of mold in exterior walls.

3-5 INTERIOR DESIGN.

Construction and finishes (walls, floors, and ceilings) must support the image and theme of the facility and be consistent with the programs offered and any installation interior standards. The interior design must offer the same interest, excitement, and professionalism found in comparable commercial facilities. As with the exterior, design the fitness center interior to reflect a high energy, non-institutional character that communicates a sense of activity.

Provide premium high-end finishes that are durable, hygienic, long-lasting, easily maintainable, and consistent with the programs offered and theme of the facility. 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 physical training (PT)/group exercise
- Fitness spaces
- Structured activities
- Locker rooms and public toilets

3-5.1 Interior Construction.

3-5.1.1 Glass and Mirrors.

Interior construction must be extremely durable. Hollow-core wood doors are not allowed. All interior glass must be tempered safety glass and mirrors must be made of break-resistant materials.

3-5.1.2 Counters, Casework, and Cabinets.

Counters, casework, and cabinets must be of high-quality and durable construction. Specify Architectural Woodwork Institute (AWI) premium or custom for construction and finishes per *M\ North American Architectural Woodwork Standards (NAAWS)*. *11*

Casework and cabinet doors and drawer faces must be provided as veneer panel core. Doors, drawers, and casework faces must be plastic laminate at a minimum. Countertops must be solid surface/solid composite plastics only. Specify 0.75 inch (20 mm) minimum thickness for plywood, plywood backing, and solid wood panels. Particleboard must not be used.

3-5.1.3 Functions

Identify the functions requiring counters/casework in each space within the fitness center and design these to accommodate these functions. Consult with the facility manager and program managers for specific program requirements.

3-5.2 Finishes.

Finishes must take into account the intended uses, be appropriately durable, and be low maintenance. Finishes must have good acoustical noise-reducing characteristics. They must meet the requirements listed in NFPA 101.

Vinyl composition tile (VCT) is not allowed. For information on finishes in specific areas, see Chapter 4. Also, coordinate the interior design with UFC 3-120-10, *Interior Design*, and installation design standards.

3-5.3 Building Signage.

Develop a comprehensive signage package (both interior and exterior) that addresses way-finding and definition of all spaces within the facility. Signage must reflect and complement the environment through the colors, images, and materials used. Building signage must provide clear directional and informational assistance to all functional areas. Mechanical, electrical, and/or utility room doors must have identifying signage to match other building signage. Provide signage in accordance with UFC 3-120-01, *Design: Sign Standards*.

3-5.4 Acoustics.

In general, since much of the facility comprises high-activity, high-noise functions, the design must 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 for individual spaces. Where not indicated in Chapter 4 for a particular room, use the interior acoustic requirements for typical spaces noise isolation class (NIC) ratings in UFC 3-101-01.

3-5.5 Window Treatments.

All windows and other glazed openings to the exterior of the building must be provided with horizontal blinds or solar shading systems as built-in equipment.

3-6 SERVICES.

3-6.1 Plumbing.

Design all building systems, such as domestic hot and cold water, sanitary and storm drainage, propane, fuel oil, or natural gas systems to meet the requirements of local installation standards and established criteria.

In multi-story facilities, locate toilets on each floor appropriately sized for participant load. Maintain a minimum of 60 percent of fixture counts in main locker rooms. Locate floor drains outside the normal travel paths. In toilet areas, locate floor drains under the partitions, where possible. Provide the number of electric water coolers (EWC) as required by UFC 3-420-01, *Plumbing Systems*, for peak occupancy loads, located as specified in Chapter 4 of this UFC. If all of the Chapter 4 requirements cannot be met by the number of EWCs required by UFC 3-420-01, additional units will be required. A location up to 100 feet (30.5 m) away from the entrance is considered acceptable when the requirement states "near." EWCs throughout the facility must be combination water fountain and bottle-filling units. Never locate EWCs above wood flooring. EWCs must be provided on all levels.

3-6.2 Heating, Ventilating, and Air Conditioning (HVAC).

Comply with stated and cross-referenced requirements for HVAC and UFC 3-410-02, *Direct Digital Control for HVAC and Other Building Control Systems*. Unless otherwise stated, design spaces to comply with comfort cooling and heating requirements of UFC 3-410-01, *Heating, Ventilating, and Air Conditioning Systems*. Do not locate moisture-containing or -producing HVAC equipment above areas with wood floors, either on the roof or within the overhead space, due to the risk of a leak causing water damage.

If Chapter 4 requirements include providing ceiling fans, provide high-volume low-speed (HVLS) fans with appropriate clearances. Provide multi-speed fans with wall-mounted controls. The number of fans and fan sizes must be selected to provide consistent air movement over the entire space. For all spaces with ceiling fans, the minimum ceiling height listed is the minimum height of the fan; the actual ceiling shall be at the required clearance height above the fan. **For Army projects:** In two-story spaces, provide HVLS fans. In a one-story space, provide one fan with a diameter of not less than 48 inches per maximum of 400 square feet (37 m²). In a one-story space, the distance from the floor to the fan must be no less than the suggested minimum ceiling height. Use demand-controlled ventilation and/or energy recovery as required and restricted by UFC

1-200-02, *High-Performance and Sustainable Building Requirements*, and UFC 3-410-01 or when lifecycle cost-effective.

3-6.3 Fire Protection and Life Safety.

Comply with stated and cross-referenced requirements for fire protection, life safety, and mass notification systems.

3-6.3.1 Operable Partitions.

Where one or more operable partitions are provided, fire suppression and fire alarm devices must be provided to protect the space in accordance with UFC 3-600-01, *Fire Protection Engineering for Facilities*, with the partitions in the open or closed position.

Means of egress inclusive of the number of exit access doors and door swing must be in accordance with NFPA 101 requirements, with the partitions in the open or closed position.

3-6.3.2 Protection from Mechanical Damage.

Protect fire suppression, fire alarm, and life safety devices from mechanical damage where devices are located in areas subject to damage from sports equipment or related activities. Provide protective guards over exposed devices such as sprinklers, fire alarm notifications, exit signs, and manual pull stations or provide devices designed to handle impact damage. Minimize projections into activity spaces by providing flush-mounted devices. Manual pull stations with break-glass mechanisms are prohibited.

3-6.4 Electrical.

Refer to UFC 1-200-01 and comply with stated and cross-referenced requirements for electrical systems. Also comply with the following fitness center-specific requirements.

3-6.4.1 Lighting.

See Chapter 4 for light level and control requirements that are exceptions or additions to the requirements referenced above. Refer to ~~UFC~~ UFC 3-530-01, *Interior and Exterior Lighting Systems and Controls*, ~~11~~ for lighting levels not specified in Chapter 4 or in the requirements referenced above.

3-6.4.2 Standby Power Connection.

Provide the facility service entrance with the capability to temporarily connect a portable generator via an external connection point. Provide a hard surface area adjacent to the building service entrance sized to accommodate the largest portable generator (with integral fuel tank) dimension and weight available based on the generator size determined during the design. Provide accessible ground rod, bonded to the building grounding system, for connection to a portable generator.

Comply with NFPA 70, *National Electrical Code*, Article 702, "Optional Standby Systems." Connect all emergency loads to a separate emergency panel served from the

main service panel by a manual transfer switch. Document the generator size required to support design conditions. Place signage at the connection point designating proper generator size. Loads to be supported by the emergency generator include the following, as a minimum:

- Facility lighting (interior and exterior)
- Electric water heaters
- Gymnasium power
- Gymnasium HVAC system when a separate system is primarily serving the gymnasium
- Toilet and shower exhaust within locker rooms
- Public toilet exhaust

3-6.4.3 Telecommunication Systems.

See Chapter 4 for outlet locations.

3-6.4.4 Cable Television (CATV).

See Chapter 4 for outlet locations.

3-6.4.5 Electronic Security Systems (ESS).

Design the ESS in accordance with UFC 4-021-02, *Electronic Security Systems*. See Chapter 4 for locations and additional criteria. For all facilities identified to operate in the unmanned state, provide Common Access Card (CAC) -enabled entrances and provide duress alarm buttons accessible to patrons.

3-6.4.6 Closed-Circuit Television (CCTV).

Design the CCTV system in accordance with UFC 4-021-02. See Chapter 4 for locations and additional requirements.

For all facilities identified to operate in the unmanned state, provide CCTV cameras in public fitness center spaces and at access points with a connection to a local CCTV recording system.

3-6.4.7 Intercommunication and Public Address (PA) Systems.

See Chapter 4 for locations and additional criteria.

3-6.4.8 Receptacles.

See Chapter 4 for locations and additional criteria.

3-6.4.9 Emergency Medical Alert.

Provide a means of notification of a medical emergency event by using a latching dedicated blue mushroom-type switch connected directly to the transmitter device/panel used to send fire alarm signals to a fire alarm/security supervising station. Activation of the medical emergency mushroom switch will activate a separate signal via the transmitter to the fire station/security supervising station.

3-6.4.10 Lightning Protection System.

Install lightning protection systems for new facilities and existing facilities modifications in accordance with NFPA 780, *Standard for the Installation of Lightning Protection Systems*.

3-7 FURNISHINGS AND EQUIPMENT.

Furnishings, fixtures, and equipment (FF&E) items are listed for specific spaces in Chapter 4. Fitness equipment includes all government-furnished, government-installed fitness equipment, including cardiovascular, strength training, and functional training items. These items are funded using the same source as FF&E but will be procured, installed, and coordinated by non-appropriated funds (NAF) via the fitness program management office.

3-8 SITE DESIGN AND ORGANIZATION.

Where possible, use outdoor spaces as transition spaces and for extended fitness uses, such as areas for runners and bicyclists and covered concrete pads for functional fitness equipment/apparatus. Provide a site design that feels 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.

3-8.1 Landscaping.

Refer to UFC 3-201-02, *Landscape Architecture*, and comply with stated and cross-referenced requirements for landscaping. Also comply with local installation landscape standards. Avoid plantings that require an irrigation system.

3-8.2 Parking and Access Drives.

Provide adequate parking for both staff and patrons with appropriate access drives.

Connect at least one of each site arrival point to an accessible building entrance using an accessible route. Provide bicycle racks near the facility entrance in a secure location. The total number of parking spaces to be constructed for a fitness center is based on a parking analysis of site conditions that considers factors such as available parking in the vicinity, access to public or government-furnished transportation, and location with respect to troop housing.

3-8.3 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 that exceed 100 feet (30 m) in length. Provide access to the serviced areas: receiving and equipment repair area, recycling/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. Comply with UFC 4-010-01. Ensure proper drainage if depressions are used. Do not cross outdoor activity areas with service access.

3-8.4 General Site Lighting.

Refer to UFC 1-200-01 and comply with stated and cross-referenced requirements for electrical systems. If the facility is near a flightline, site lighting cannot interfere with or be a distraction to aircraft movement at night.

3-9 SUSTAINABLE DESIGN.

Comply with UFC 1-200-02.

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CHAPTER 4 SPECIFIC DESIGN CRITERIA

4-1 INTRODUCTION.

4-1.1 Design.

This chapter identifies the specific design needs for each functional area outlined in the space program. Tables 4-1 through 4-32 provide this data in a standard functional data sheet format.

4-1.2 Service-Specific Programmatic Differences.

Service-specific programmatic differences are indicated on the functional data sheets. Comply with agency requirements that apply to the project.

4-2 INTERIOR CONSTRUCTION SPECIALTIES.

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

4-2.1 Casework/Built-In Equipment.

This includes anything physically attached or plumbed to the building, such as counters, cabinets, casework, toilet accessories, fixed window treatments, and laundry machines.

4-2.2 Furnishings, Fixtures and Equipment (FF&E).

This includes contractor-furnished, contractor-installed loose items such as desks, tables, chairs, and bookshelves.

4-2.3 User-Provided Equipment.

This includes all government-furnished, government-installed items, which are typically limited to office equipment such as computers, printers, copiers, and flat panel displays (if mounted, the flat panel display mount will be built-in).

4-2.4 Fitness Equipment.

This includes all government-furnished, government-installed fitness equipment, including cardiovascular, strength training, and functional training items. These items are funded using the same source as FF&E but will be procured and installation-coordinated by NAF by the fitness program management office.

4-3 FUNCTIONAL DATA SHEETS.

These data sheets are available as a Microsoft® Word file for use during project execution. The file is downloadable from the Whole Building Design Guide (WBDG) website as an attachment to this UFC: \\ \ <http://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc/ufc-4-740-02> /1/

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 must 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.
Min. Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Provide a low-maintenance, durable finish with a wainscot. Provide painted gypsum wallboard or accent wall materials and color for visual interest. Floor. Provide a low-maintenance, durable, moisture- and slip-resistant finish suitable for this high-traffic area. Provide stained concrete, stone, terrazzo, or porcelain tile. Provide a walk-off mat/area at the entrance door that works integrally and flush with the adjacent finishes. Provide a base that matches the flooring or a vinyl or rubber base. Ceiling. Provide an identifying entry feature by creating custom ceiling using a combination of ceiling systems and/or a ceiling exposed to structure above.
Plumbing	Provide electric water cooler(s) near public toilets.
HVAC	Provide 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 decorative and task lighting. Provide accent lighting at signage/wayfinding devices.
Communication	CCTV. Provide at least one outlet or as needed to cover the entrance and lobby. CATV/Internal Video. Provide a CATV outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide an outlet in the waiting/display area. Security. None required.
Casework/ Built-in Equipment	Provide display cases in this space.
Furnishings, Fixtures & Equip. (FF&E)	Waiting/display area must include durable, easy-to-clean, and moisture-resistant furniture; tables; magazine and brochure rack; tack surfaces; wall art; trophy case (if not built-in); and a wall clock. Provide a means to display installation and staff information. Provide a cell phone charging podium. Provide a self-use blood-pressure monitor.
User-provided Equipment	Computers and CCTV equipment.
Special Req.	Provide an airlock at the main entrance. Provide a grated snow-trap for Northern Tier bases.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

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; the check-in method may be located at the facility entrance or in the lobby to ensure all patrons check-in at entry. 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>
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	<p>Walls. Painted gypsum wallboard. Provide accent wall materials and color for visual interest.</p> <p>Floor.</p> <p style="padding-left: 20px;">In front of counter: Provide a low-maintenance, durable, moisture- and slip-resistant finish suitable for this high-traffic area. Provide stained concrete, stone, terrazzo, or porcelain tile. Provide a base that matches the flooring or a vinyl or rubber base.</p> <p style="padding-left: 20px;">Behind counter: Provide stained concrete, stone or porcelain tile, or carpet. Provide vinyl or rubber base.</p> <p>Ceiling. Acoustic ceiling panels (ACP). Use the ceiling to define and separate this area from the lobby, e.g., a dropped gypsum board soffit over the control desk and gypsum board false beams.</p>
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC."
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	Provide power for all equipment per Chapter 3, "Electrical."
Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) of general ambient lighting. Provide fixed 50 fc (500 lx) task lighting at the control counter; decorative fixtures are preferred. In addition, provide accent lighting for emphasis around the counter area.
Communication	<p>CCTV. All monitors must be viewable from this area.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide PA and audio system controls at the control counter for room-by-room and "all call" communication. Provide intercom capability as directed by installation. 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.</p> <p>Data. Data outlets must be provided for every piece of equipment identified as requiring data plus a 25% spare capacity for flexibility. Pieces of equipment include, but are not limited to, POS, computers, copier/printer/fax, and ID check system.</p> <p>Security. Provide a duress alarm with controls next to the POS units.</p>

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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 must be dual height for standing transactions, seated office functions, and ADA customer service. Note that ADA-height counter must 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; laminate 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 area for emergency response.</p> <p>Provide supports such as steel angle braces for counters with knee-hole space. Provide wall and base cabinets and an equipment counter.</p> <p>Storage must accommodate towels, small athletic equipment such as balls and rackets, and juice bar/vending supplies (if provided at the control counter). Provide flat panel display mount.</p>
Furnishings, Fixtures & Equip. (FF&E)	<p>Chairs and stools. Provide an automatic external defibrillator (AED).</p>
User-provided Equipment	<p>CCTV monitors, printers, scanner or swipe-card check-in device, and PA controls. POS units, desktop computer for administrative functions, and flat panel display.</p>
Special Req.	<p>Attendants at the control desk must have direct LOS visual control over the following: main entrance, free weight area, gymnasium entrance, locker room entrance, and climbing wall (if provided). Attendants must also have visual control (via LOS or CCTV) over the unit PT/group exercise rooms, the selectorized equipment, the cardio equipment, and structured activity areas. Air Force permits visual control of the locker room entrance via CCTV.</p> <p>For times when counter is not staffed: Provide a gate between the desk and surrounding area. Provide 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. Customers.</p>
Min. net ft² (m²)	

Table 4-3 Retail/Vending/Food and Beverage Sales

Description/ Usage	The retail/vending functions may be accommodated at the control counter. A juice bar or expanded retail functions will be provided in a separate area. Vending can also be provided at a self-service standalone space with vending machines. The vending area, if a standalone space, must be identifiable, visually screened but not totally enclosed, and visually accessible from the control desk. Space is considered optional for Navy.
Min. 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 (AFF). Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted surfaces. Floor. Provide hard-surface flooring matching lobby or corridor such as seamless vinyl, hard tile or other durable material. Use of VCT is not allowed in this area. Ceiling. ACP or painted gypsum board.
Plumbing	Two-compartment stainless steel countertop sink with hot and cold water supply and a clean-out. Provide floor drain. If an icemaker is desired, provide a water connection.
HVAC	Provide 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 40 fc (400 lx) of general ambient lighting. Provide 50 fc (500 lx) on food displays and at food preparation areas. Provide accent fixtures and lighting to provide special ambience.
Communication	CCTV. Provide 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 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. Provide duress alarm control next to the POS units.
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 must be solid-surface. Drink rail. Dishwasher. Provide a lighted menu board (unless concessionaire operated). Option for under-cabinet microwave.
Furnishings, Fixtures & Equip. (FF&E)	Food and beverage/expanded retail: refrigerator, freezer, and other small appliances as required. In lieu of under-cabinet microwave, option for counter microwave. Provide ice maker and refrigerated display cases. 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. Provide a built-in safe per local policy.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-4 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. Locate laundry adjacent to the control counter. It is preferred that the location be on an outside wall for ease of pick-up service.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU or mold-resistant gypsum wallboard. Provide durable finishes, rub rails, and metal/high-impact plastic corner guards. Floor. Sealed concrete, porcelain tile, or seamless vinyl. Ceiling. None, vinyl-faced ACP, or epoxy painted mold-resistant gypsum wallboard.
Plumbing	Provide hot and cold water and drain connections in recessed washer outlet box to each of the washing machines and one laundry sink. Provide floor drains. Provide connections and floor drain to an ice machine, if provided. Coordinate ice machine floor drain location with equipment.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 76 °F (24 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Laundry Rooms, Central." Provide separate vents for each dryer and vent dryers per UFC 3-410-01.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Regardless of size, enclose laundry rooms with a 1-hour fire barrier.
Power	Provide outlets per Chapter 3, "Electrical." Provide a dedicated circuit for each washer (or washer extractor) and for each dryer (or dryer tumbler). If hard-wired (non-plug-connected), provide wall-mounted safety disconnect switch within sight of the equipment it controls.
Lighting	Provide system per Chapter 3, "Electrical."
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. Provide lockable doors.
Acoustics	Provide partition construction with a minimum STC rating of 52 per Chapter 3, "Acoustics."
Casework/ Built-in Equipment	Provide a built-in folding table and shelves for clean towel storage.
Furnishings, Fixtures & Equip. (FF&E)	Provide storage shelves (freestanding) for laundry supplies. Laundry carts, and commercial grade washers/dryers.
User-provided equipment	None required.

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

Table 4-5 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 must be adjacent to the lobby and gymnasium. Provide unisex or separate male, female, and gender-neutral restrooms depending on the total number of patrons to be accommodated.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Epoxy or semi-gloss enamel painted mold-resistant gypsum wallboard with a ceramic tile wainscot. Prefer full-height ceramic tile walls with integral patterns, especially on wet walls. Use a dark-colored epoxy grout. Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Semi-gloss enamel or epoxy painted mold-resistant gypsum wall board.
Plumbing	Provide wall-hung water closets, wall-hung urinals and lavatories based on the applicable UFC 3-420-01 requirements for the calculated occupancy of the gymnasium. Provide a floor drain.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Exhaust per UFC 3-410-01.
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. Provide lockable doors.
Casework/ Built-in Equipment	Solid-surface countertop with either underhung or integral sink. Solid composite toilet and urinal 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 electric hand dryers. Fold-down diaper-changing table/station in male, female, and gender-neutral toilets.
Furnishings, Fixtures & Equip. (FF&E)	Lockable cabinets for cleaning supplies at janitor's closet.
User-provided Equipment	None required.
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). Exhaust per UFC 3-410-01.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-6 Parent/Child Area

Description/ Usage	The parent/child area is optional. This option provides parents/guardians a venue in which to exercise while maintaining direct visual control over their child. Part of the room has exercise equipment for the parent to use while the other part is designated for the children. The two areas must be divided by a 30-in. (760-mm) high, 0.5-in. (13-mm) thick, clear, shatterproof Plexiglas partition to ensure the parent can see the child at all times. Include a centrally located entry/exit in the partition.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Semi-gloss painted gypsum wallboard. Floor. Homogeneous resilient sheet flooring with scuff-resistant properties and maintenance consisting of damp mop, no wax, buff only, and resilient base. Exercise area must include permanently adhered resilient athletic flooring consisting of dual durometer layers of natural and synthetic rubbers, calendared and vulcanized together. The top layer is a non-porous, slip-resistant, textured surface; the bottom layer is a cushioned performance layer. Total thickness to be 3/8 in. (9 to 10 mm). Athletic flooring system cannot be accommodated by interlocking flooring tiles or movable furnishings such as mats. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms."
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	Provide outlets per Chapter 3, "Electrical," in the child area. For safety of the children, the top of the electrical outlet boxes must be 54 in. (1350 mm) AFF. Provide flush-floor outlets for commercial-grade fitness equipment and outlets for wall- or ceiling-mounted flat panel display 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. 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. Provide lockable doors.
Casework/ Built-in Equip.	Child area to include storage cabinet for children's games and toys. Flat panel display universal wall mount.
Furnishings, Fixtures & Equip. (FF&E)	Child area: Provide child-sized tables, chairs, and games. Provide exercise mat. Fitness area: Provide fitness equipment.
User-provided Equipment	Flat panel display.

Special Req.	Mar-resistant Plexiglas partition of shatterproof, 30-in. (750-mm) high, 0.5-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. Provide vision panel in the door and side lites.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customer. Adults. Children.
Min. net ft² (m²)	

Table 4-7 Receiving and Equipment Repair/Storage

Description/ Usage	Provides an area to store, 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.
Min. Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Durable materials such as CMU with heavy-duty epoxy paint. Floor. Sealed concrete. Ceiling. None. Paint the exposed structure.
Plumbing	Provide a utility sink with hot and cold water connections and a floor drain.
HVAC	Provide 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 30 fc (300 lx) of general ambient lighting. Provide 50 fc (500 lx) 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 lockable doors, a door alarm, and exterior door bell.
Casework/ Built-in Equipment	None required.
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. Provide workbenches and lockable tool and parts storage cabinet.
User-provided Equipment	None required.
Special Requirements	Provide a pair of locking exterior double doors, 4 ft (1.22 m) wide by 9.5 ft (2.9 m) tall each, with flush sills, to facilitate movement of equipment. Provide an interior pair of locking double doors, 4 ft (1.22 m) wide by 9.5 ft (2.9 m) each, 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 ft² (m²)	

Table 4-8 Administrative Offices

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' office(s), and support staff workstations. The offices must be free from frequent distraction, have a professional appearance, and provide a sense of workplace.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board or wall covering. Floor. Carpet tile with resilient base. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 76 °F (24 °C).
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	CCTV. Provide monitoring capability in the director's office when directed by the installation. CATV/Internal Video: One outlet required for director's office. PA/Audio: Provide a speaker. Provide controls in the director's office with room-by-room and "all call" communication. Provide intercom capability as directed by installation. 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, and scanner. Security. Provide lockable area for fitness access DVRs.
Acoustics	Provide partition 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)	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 layout must provide adequate space for filing and overhead storage.
User-provided Equipment	Computers and other office equipment. Provide safe (for cash funds).
Special Requirements	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. Where possible, locate offices on exterior wall and provide windows for natural light admission. Provide shades or blinds at exterior windows for light control. Provide side lites next to the office doors for supervision and security.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-9 Classrooms/Training Rooms

Description/ Usage	This space is used for conducting training and large meetings. This space must be accessible from administrative areas and public circulation spaces. Classroom sized for 25 persons at 750 ft ² (69.7 m ²) for small facilities, 50 persons at 1,500 ft ² (139.4 m ²) for medium and large, and 75 persons at 2,250 ft ² (209.0 m ²) for extra-large and jumbo facilities.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wallboard or wall covering. Floor. Carpet tile is preferred. Other acceptable materials include stone, terrazzo, porcelain tile, stained concrete, or other hard tile. VCT is not allowed. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide 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 portable and dedicated equipment.
Lighting	Provide per Chapter 3, "Electrical," and include multiple light levels with controls for viewing multimedia presentations.
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 two outlets. Provide additional outlets for training purposes. Security. Provide lockable doors.
Acoustics	Provide partition 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	Provide a universal flat panel display mount. Provide solid-surface countertop. Provide lockable wall and base cabinets. Bulletin board with tack surface and dry-erase board.
Furnishings Fixtures & Equipment (FF&E)	Provide tables and chairs. Provide A/V cart, podium/lectern.
User-provided Equipment	CCTV equipment, flat panel display, printer, and DVD player.
Special Requirements	Provide a lockable storage closet with built-in shelves for training materials and floor space for AV cart. Provide a vision panel, minimum 5 ft ² (0.46 m ²), in the door. For medium-size facilities and larger, provide an acoustical operable partition with minimum STC of 45. The operable partition is to recess into an alcove when in open position. Provide two separate entrances.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-10 Copy/Work/Break Room

Description/ Usage	This space is used as a staff workroom for copying, meetings, breaks, and lunches. Provide isolated alcove or separate space for copy/workroom.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board or wall covering. Floor. Provide hard-surface flooring matching corridor, such as seamless vinyl, hard tile, or other durable material. Ceiling. ACP.
Plumbing	Provide a two-compartment stainless-steel countertop sink with hot and cold water. Provide a cold-water connection for refrigerator ice maker.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 76 °F (24 °C).
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. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide outlets as required for equipment. Security. Provide lockable doors.
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. Provide lockable wall and base cabinets. Bulletin board with tack surface and dry-erase board.
Furnishings Fixtures & Equipment (FF&E)	Provide table, chairs, microwave, coffee machine, and refrigerator.
User-provided Equipment	Copier/fax/printer and 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 ft² (m²)	

Table 4-11 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.
Min. Ceiling Ht.	10 ft (3.05 m) minimum except where furred down at soffits.
Finishes	Walls. Epoxy or semi-gloss enamel painted CMU or mold-resistant gypsum wallboard. Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. High-humidity-rated, vinyl-faced ACP with a corrosion-resistant supporting grid or mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and semi-gloss paint.
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 with a pool). Provide an electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side of this space (opposite the adjacent toilet/shower wet side) and exhaust from the wet area. Exhaust per UFC 3-410-01. Limit relative humidity to under 50% through the use of humidistats. Provide multi-speed ceiling fans with wall-mounted controls (not required to be HVLS fans).
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Where shower spaces are open to the locker room area, provide corrosion-resistant sprinkler and escutcheons such as stainless steel throughout the locker room.
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. Provide outlets where flat panel displays are required; provide at height of flat panel display.
Lighting	Provide system per Chapter 3, "Electrical." Lighting fixtures must have translucent, damp location, non-breakable, protective covers. Minimize shadowing at face of lockers.
Communication	CCTV. None required. CATV/Internal Video. Provide CATV outlets for wall or ceiling mounts. PA/Audio. Provide PA speakers as needed for full coverage. Provide speakers for the separate audio system. Provide an emergency call/alarm. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.

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Casework/ Built-in Equipment	<p>Provide solid plastic (HDPE) lockers and benches. Lockers must be a minimum of 15-in. wide by 24-in. deep (375 mm by 600 mm) with integral minimum 16-in. (400-mm) -wide benches (usually part of the locker system). Five percent of lockers must be accessible. Accessible benches are required to be adjacent to accessible lockers. Benches must have a minimum of 20 in. (500 mm) to maximum 24 in. (600 mm) in depth; 42 in. (1050 mm) minimum in length; seat height of 17 to 19 in. (425 to 475 mm) above the floor.</p> <p>Typically provide a mix of full- and half-sized Z-shaped lockers; provide 2 half-height lockers and 1 full-height locker in every 2 spaces. The location's climate determines 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 shelves and hooks for coats and hats inside lockers. Steel lockers are not permitted. Mount lockers at a level above the floor to ensure operating hardware is easily reachable. Provide padlock or touch combination hardware.</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 a full-height wall mirror.</p>
Furnishings, Fixtures & Equip. (FF&E)	Provide a scale and a wall clock.
User-provided Equipment	Provide blood pressure monitor and flat panel display.
Special Requirements	Provide dropped gypsum board soffits over lockers or utilize sloped-top lockers to preclude the tops of the lockers being used for storage. Design the space to block direct views from the public areas in. Consider providing natural light via frosted skylights or translucent wall building materials.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-12 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 must be adjacent to this area. Other adjacent functions may include sauna and/or steam room. Shower compartment construction options include constructed separation walls, field-assembled pre-manufactured shower partitions and pre-manufactured solid surface shower compartments. Shower counts are programmed per installation.
Min. 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 tile with dark-colored epoxy grout. Slope tile to drain. 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 system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side (adjacent locker/dressing area) and exhaust from the wet (toilet/shower) area. Exhaust per UFC 3-410-01. If constructed separation walls are used from floor to ceiling, locate exhaust outlets in each space.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the shower area.
Power	Provide outlets per Chapter 3, "Electrical."
Lighting	Provide system per Chapter 3, "Electrical." 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.
Casework/ Built-in Equipment	Solid plastic (HDPE) shower partitions secured at floor, wall, and ceiling or provide permanent walls between showers; see Finishes for wall finish. Provide fixed solid plastic benches at drying areas at least 16 in. (400 mm) wide. Provide hooks or towel pins on wall in drying area. Provide swim mats or tiles that are textured, anti-slip, self-draining, and raise the walking surface above standing water. If the facility includes a pool, provide a swimsuit spin-dry unit.
Furnishings, Fixtures & Equip. (FF&E)	None required.
User-provided Equipment	None required.
Special Requirements	Design the space to block direct views from the public areas into the shower room areas. Provide natural light via frosted skylights or translucent wall building materials.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-13 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.
Min. 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 painted, mold-resistant gypsum wallboard elsewhere. Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Vinyl-faced ACP or mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and semi-gloss paint.
Plumbing	Provide wall-hung water closets, wall-hung urinals and lavatories based on the applicable UFC 3-420-01 requirements for the calculated occupancy of the facility. Provide floor drains to fully drain area.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side of this space (adjacent locker/dressing area) and exhaust from the wet area (toilet/shower). Exhaust per UFC 3-410-01. Limit relative humidity to under 50% through the use of humidistats.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Where shower spaces are open to the toilet area, provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the toilet room.
Power	Provide outlets per Chapter 3, "Electrical," Provide GFCI outlets at lavatory at counter height.
Lighting	Provide system per Chapter 3, "Electrical." Lighting fixtures must have translucent, damp location, non-breakable protective covers with shatterproof lens. 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. Use holes in lavatory countertop for waste disposal; coordinate location of paper towel dispenser. The sink may be either undermount or integral with the counter. Solid plastic (HDPE) toilet and urinal partitions secured at floor and ceiling. Toilet accessories: Toilet paper dispensers, paper towel dispenser, 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. Provide electric hand dryers.

Furnishings, Fixtures & Equip. (FF&E)	None required.
User-provided Equipment	None required.
Special Requirements	Design entrances to prevent direct views into this area. Provide natural light via frosted skylights or translucent wall building materials.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-14 Unisex Changing Room/Unisex Locker Room

Description/ Usage	This space provides separate, individual rooms equipped with changing area, shower, toilet, sink, diaper changing table, and lockers intended as a single-use facility for adults with or without small children. Locate near the pool (if provided) or near the parent/child area. Allow for unisex locker units to be used independently from unisex changing rooms.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. See Tables 4-11, 4-12, and 4-13 for the appropriate finishes. Floor. See Tables 4-11, 4-12, and 4-13 for the appropriate finishes. Ceiling. See Tables 4-11, 4-12, and 4-13 for the appropriate finishes.
Plumbing	Provide shower, wall-hung water closet, and lavatory. Provide a minimum of one floor drain in shower, one general floor drain, and additional drains as needed to ensure proper drainage.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Exhaust per UFC 3-410-01. Limit relative humidity to 50% through use of humidistats.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Where shower spaces are open to the locker room area, provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the locker room.
Power	Provide outlets per Chapter 3, "Electrical." Provide counter-height GFCI outlets at the lavatory.
Lighting	Provide system per Chapter 3, "Electrical." Lighting fixtures must have translucent, damp location, non-breakable protective covers. Minimize shadowing at face of lockers. Provide lighting directly over lavatory to minimize reflections and glare in the mirrors. In the shower, 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. Provide lockable doors.
Casework/ Built-in Equipment	See Tables 4-11, 4-12, and 4-13 for the appropriate casework.
Furnishings, Fixtures & Equip. (FF&E)	See Tables 4-11, 4-12, and 4-13 for the appropriate FF&E.
User-provided Equipment	None required.
Special Requirements	See Tables 4-11, 4-12, and 4-13 for the appropriate special requirements.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-15 Steam Room

Description/ Usage	Note: This space is not supported by the Navy. The optional steam room must have an adjacent cool-down space and direct access to the shower spaces and the 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.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Full-height ceramic tile with dark-colored epoxy grout. Floor. Non-slip ceramic. Ceiling. Tile: pitched for drainage down the walls.
Plumbing	Provide a cold-water shower with a rope pull-chain. Provide floor drains. Provide access to a keyed hose bibb with hot and cold water.
HVAC	Temperature operating range: 100 °F (38 °C) to 110 °F (43 °C). Humidity 100% relative. Provide secured controls.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Provide high-temperature-rated corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the steam room. Fire alarm notification appliances are not required within the steam room. Provide an audible and visual fire alarm notification appliance on the wall directly opposite the entry door into the steam room, with a minimum sound power of 95 dB at 10 ft (3 m) and 110 cd. At a minimum, provide a 100 in. ² (.06 m ²) vision panel within the entry door into the steam room.
Power	None required.
Lighting	35 fc (375 lx). General ambient lighting. Lighting fixtures must have translucent, moisture-resistant, non-breakable 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 in the steam room that sounds at the control counter. Telephone. None required. Data. None required. Security. None required.
Casework/ Built-in Equipment	Provide ceramic tile benches in a single- or double-tiered arrangement.
Furnishings, Fixtures & Equip. (FF&E)	Provide wall-mounted clock visible from steam room.
User-provided Equipment	None required.
Special Requirements	An adjacent cool-down space can serve the steam room, sauna (if provided), and hot tub (if provided). It must have a bench with wall-mounted clothing/towel hooks. Provide a full-glass door with a door seal adequate to retain the steam within the room. Provide steam generator in an adjacent closet.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-16 Sauna

Description/ Usage	Note: This space is not supported by the Navy. The optional sauna must 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. Providing a prefabricated, packaged unit is acceptable.
Min. Ceiling Ht.	8 ft (2.44 m) minimum.
Finishes	Walls. CMU with either 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 °F to 180 °F (77 °C 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." Provide high-temperature-rated corrosion resistant sprinklers and escutcheons such as stainless steel throughout the sauna. Fire alarm notification appliances are not required within the sauna. Provide an audible and visual fire alarm notification appliance on the wall directly opposite the entry door into the sauna, with a minimum sound power of 95 dB at 10 ft (3 m) and 110 cd. At a minimum, provide a 100 in. ² (0.6 m ²) vision panel within the entry door into the sauna.
Power	Provide a dedicated circuit for the heat source.
Lighting	Provide 10 fc (100 lx) of general ambient lighting. Lighting fixtures must be rated for wet applications, with ambient temperature rating of at least 180 °F (82 °C).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm mounted within 36 in. (900 mm) of finished floor that sounds at the control counter until reset by the respondent. Telephone. None required. Data. None required. Security. None required.
Casework/ Built-in Equipment	Provide solid board cedar or redwood benches. One bench must meet ABA requirements. Provide a wall-mounted room temperature and humidity gauge. Provide hooks.
Furnishings, Fixtures & Equip. (FF&E)	Provide a water tub and ladle for wet sauna. Provide a wall-mounted clock in this area that is visible from the sauna room.
User-provided Equipment	None required.
Special Requirements	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). It must have a bench with wall-mounted clothing/towel hooks.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-17 Massage Room

Description/ Usage	The optional massage room provides a private space for massage service. It is preferred to be adjacent to the locker/shower facilities.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board. Floor. Non-slip porcelain tile with dark-colored epoxy grout or resilient flooring with resilient base or porcelain tile. Ceiling. ACP.
Plumbing	Provide a hand-wash sink with hot and cold water connections. Provide floor drain.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 72 °F (22 °C) to 78 °F (26 °C). Provide independent thermostat.
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 fc (500 lx) with indirect light fixtures and provide continuous 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. Provide lockable doors.
Acoustics	Provide partition 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; adjustable-height wheeled stool for the therapist; massage chair in addition to or in lieu of the massage table; small table for making and verifying appointments.
User-provided Equipment	None required.
Special Requirements	None required.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-18 Hot Tub

Description/ Usage	Note: This space is not supported by the Navy. The optional hot tub must 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. May provide separate male and female rooms as part of or adjacent to male and female toilet and shower facilities or provide a single room for use by both men and women.
Min. Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Water-resistant surface. Floor. Slip-resistant ceramic tile, no larger than 1 by 1 in. (25 by 25 mm) tiles with dark epoxy grout. Ceiling. Water-resistant surface.
Plumbing	Provide a floor drain.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 72 °F (22 °C) to 78 °F (26 °C). Provide minimum six air changes per hour.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the hot tub area.
Power	Provide waterproof outlets. Provide dedicated power for the water pump with a timer-operated pump switch with patron access.
Lighting	Provide waterproof fixtures.
Communication	CCTV. Provide outlets as required for coverage if the facility is shared by men and women. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Provide an emergency call/alarm that sounds at the control counter. Telephone. None required. Data. None required. Security. Provide lockable area for when fitness access is in use.
Casework/ Built-in Equipment	Provide clothes hooks, seating bench, and handrail for entrance/exit of pool.
User-provided Equipment	CCTV equipment.
Furnishings, Fixtures & Equip. (FF&E)	Provide freestanding shelving unit for towels and a wall clock. Provide a chemical storage cabinet.
Special Requirements	Provide a whirlpool tub with a dedicated water supply, water filter, hot water heater, and water pump. Provide an emergency shut-off control for the whirlpool. Provide an adjacent dry-off/dressing area. Provide corrosion-resistant materials for hardware, AC ducts, AC registers, and door frames.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-19 Convertible Locker Space

Description/ Usage	<p>Note: This space is not supported by the Navy.</p> <p>This optional space for large or extra-large facilities 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 4-11 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>
Min. Ceiling Ht.	10 ft (3.05 m) minimum except where furred down.
Finishes	<p>Walls. Epoxy or semi-gloss enamel painted CMU or mold-resistant gypsum wallboard.</p> <p>Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain.</p> <p>Ceiling. High humidity-rated, vinyl-faced ACP with a corrosion-resistant supporting grid or mold-resistant gypsum wallboard with a veneer plaster (level 5) finish and semi-gloss paint.</p>
Plumbing	Provide floor drains. Provide an electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Exhaust per UFC 3-410-01. Control exhaust to unoccupied exhaust rate of 0.06 cfm/ft ² (0.0183 m ³ /min./m ²) when space is unoccupied. Limit relative humidity to under 50% through the use of humidistats. May provide ceiling fans with wall-mounted controls.
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." Lighting fixtures must have translucent, damp location, non-breakable protective covers. Minimize shadowing at face of lockers.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. Provide an outlet.</p> <p>PA/Audio. Provide a speaker. Provide an emergency call/alarm.</p> <p>Telephone. Provide one line.</p> <p>Data. None required.</p> <p>Security. Provide lockable doors.</p>
Casework/ Built-in Equipment	<p>Provide solid plastic (HDPE) lockers and benches. Lockers must be a minimum of 15 in. wide by 24 in. (375 mm by 600 mm) deep with integral minimum 16-in. (400-mm) -wide benches (usually part of the locker system). These lockers are daily use only (not rented). Typically provide a mix of full- and half-sized Z-shaped lockers. The location's climate will determine 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.</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. Provide a full-height wall mirror.</p>

Furnishings, Fixtures & Equip. (FF&E)	None required.
User-provided Equipment	None required.
Special Requirements	The doors in to the male and female locker/dressing area must be keyed from both sides. Provide dropped gypsum board soffits over lockers or utilize sloped top lockers to preclude the tops of the lockers being used for storage.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-20 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. Court size must meet NCAA standards. \1\ See Appendix D of this UFC for a link to the NCAA basketball court diagram. /1/
Min. Ceiling Ht.	28 ft (8.53 m) clear height below structure and lights.
Finishes	Walls. Provide durable wall system up to 12 ft (3.66 m) in height, such as CMU with heavy-duty epoxy. Above 12 ft (3.66 m), use semi-gloss enamel and acoustic panels. Floor. Maple athletic flooring, 25/32 in. (19.8 mm) thick. Synthetic multipurpose, resilient, athletic flooring may be allowed when requested by the installation. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i> ; however, where primary space use is basketball, minimum ball rebound must be 93%. Ceiling. Exposed, painted structure. Provide acoustical banners, baffles, panels, or similar treatment.
Plumbing	No plumbing fixtures in the gymnasium. Ensure access to nearby electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Gym, sports arena (play area)." Provide durable air grill covers and do not place air grills in line with basketball nets. Locate ductwork to avoid trapping balls.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety," inclusive of protection from mechanical damage. Provide protection for sprinklers, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or safety zones near activity spaces. Install component equipment (except manual pull stations) minimum 8 ft (2.44 m) AFF for safety considerations. Provide manual pull stations with protective covers. Provide upright sprinklers with head guards.
Power	Provide outlets per Chapter 3, "Electrical." Provide power for the scoreboard, shot clocks, and a high, wall-mounted clock. Provide power requirements for other functions such as retractable backboards, divider curtain, and stage sound and lighting. Provide recessed floor outlets to power portable equipment used to officiate games. Locate power outlets along sidelines at center court.
Lighting	Provide system per Chapter 3, "Electrical." Provide lighting levels for basketball in accordance with IESNA Class III adjustable up to Class II. If the program dictates televised events, provide appropriate IESNA lighting class of play levels for that specific sport. Provide keyed light switches. Provide fixtures with wire cages or appropriate shatterproof luminaires. Do not locate fixtures directly above basketball backboards. \1\ Do not install high-pressure sodium lighting. /1/
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. None required unless specified by installation. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Provide data outlets in recessed floor boxes routed to scoreboard, centered under the anticipated scoring table location but outside the court boundaries. Security. Provide lockable area for when fitness access is in use.

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Acoustics	For single court modules, reverberation time must equal 1.0 second. For two-court or larger modules, reverberation time must equal 1.8 to 2.0 seconds. Provide additional acoustical control with sound baffles, banners, and acoustical materials. Provide noise attenuation measures to mitigate acoustical problems resulting from vibration transmitted through the facility structure.
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. Tournament courts only require 2 goals. Breakaway rims must be installed on all goals. • Provide volleyball built-in flush floor insert sleeves in each court. Provide 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 to officials, players, and spectators. Provide control for scoreboard and divider curtain on side of room opposite of bleachers. • Bleachers. Use manually-operated, telescoping bleachers to maximize the flexibility of the space and allow sideline space for gymnasium events. Provide for accessible seating. \1\ Minimum of 200 seats; more as required and with additional courts. /1/ • Provide game lines on flooring for full- and half-court basketball and volleyball. • Provide 6-ft (1.83 m) -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)	Provide volleyball stanchions, net, standard protective pads, net antenna, and elevated judge's stands. Provide wrestling mat, exercise mat, protective floor coverings with portable rolling stand, seating, scoring table, and chairs. \1\ Provide an AED. /1/
User-provided Equipment	CCTV cameras per the outlet count.
Special Requirements	<ul style="list-style-type: none"> • Court size must meet NCAA standards. See Appendix D of this UFC for a link to an NCAA basketball court diagram. • Interior entrance doors into the gym must have vision panels, minimum 5 ft² (0.46 m²) each and ensure visual access from the control counter to the gym entrance. Where line of sight is not possible, CCTV monitoring of gym entrance must be provided. • 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 12 ft (3.7 m) side to side and 18 ft (5.5 m) end to end of unobstructed floor space as a safety zone between the outer edge of the playing area and any adjacent court playing area. • Design for moisture control and prevention of condensation on floor surface. • Provide exterior double doors with removable latch post for equipment access. • Provide natural light. Skylights are not permitted above wood floors. Mitigate glare on the play and spectator areas. Any glass panels must be a minimum of 18 ft (5.49 m) AFF and 0.5-in. (13-mm) -thick, tempered, laminated safety glass. • Do not locate windows, doors, or other obstructions within 7 ft (2.13 m) of all backboard centerlines. • Ensure no glazing or lighting can create glare or distraction on the play areas and cross-court play. Do not use window treatments to mitigate glare.

For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers. Participants. Spectators.
Min. net ft² (m²)	

Table 4-21 Gymnasium Equipment 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.
Min. Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU or painted gypsum wall board. Floor. Sealed concrete. Ceiling. None required.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 65 °F (18 °C) to 85 °F (29 °C).
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 fixtures with wire cages or appropriate shatterproof luminaire.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. Provide lockable doors.
Casework/ Built-in Equipment	None required.
Furnishings, Fixtures & Equip. (FF&E)	Shelving and storage cabinets.
User-provided Equipment	None required.
Special Requirements	Area must be accessible from both interior and exterior though lockable double doors with kick-plates. Provide "Dutch" doors at interior for equipment issue. Provide a vision panel in the door. Provide ramp at exterior door to facilitate equipment issue/delivery, if necessary. The area must be at least 8 ft (2.44 m) wide. 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.
Min. net ft² (m²)	

Table 4-22 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. For renovation projects, if rock climbing area is not visible from the control counter, this space must be included in a lockable room.
Min. Ceiling Ht.	For renovations, accommodate a 20-ft (6.1-m) -minimum-height climbing wall and the specific requirements of the equipment selected. For new projects, accommodate a 25-ft (7.6-m) -minimum-height climbing wall.
Finishes	<p>Walls. CMU. Basic wall features can include arêtes, dihedrals, overhanging routes, flakes, chimneys, buttresses, and roof. Design for not only the width and height of climbing walls but also the available depth to create interesting features.</p> <p>Floor. The flooring beneath the climbing wall must be seamless rubber surfacing.</p> <ul style="list-style-type: none"> • Description: Cushioned seamless floor system comprised of a cushioned impact course and colored cap surface, composed of peroxide-cured EPDM and recycled select rubber bonded by a specially formulated polyurethane binder. Completed system must comply with applicable Consumer Product Safety Commission (CPSC) criteria for playground surfacing \1\ contained in <i>Public Playground Safety Handbook /1/</i> and the following: <ul style="list-style-type: none"> ○ Tested for shock attenuation under ASTM F1292 and Head Injury Criterion (HIC). ○ Tested for slip resistance under ASTM E303. ○ Tested for fire resistance under ASTM E84. ○ Complies with ABA for wheelchair access. • Thickness: Poured-in-place; final thickness of 3.75 in. (93.8 mm). • Color: As selected by architect from manufacturer's full range of standard colors. • Primer: As recommended by the manufacturer. • Line Marker: Two-component polyurethane as recommended by the manufacturer for demarcation of specific areas or other lines or lanes. • Thinner: As recommended by the manufacturer. • Acceptable Manufacturers and Products: <ul style="list-style-type: none"> ○ No Fault Industries \1\ Safety Surface /1/ ○ Vitricon Vitriturf ○ Approved substitute • Installation: <ul style="list-style-type: none"> ○ Areas of installation: climbing wall landing surface. ○ Proceed only when ambient and surface temperatures are within range recommended by the manufacturer and substrate condition has been approved by the installer. <p>Ceiling. None required.</p>
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Gym, sports arena (play area)."

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 fc (500 lx) with uniform vertical illuminance on climbing surfaces. Coordinate the location of lights with the design of the climbing wall. Lighting must not impair the wall user, e.g., down-lighting fixtures must not be installed directly above the climbing wall.
Communication	<p>CCTV. If direct LOS is not possible from the control desk, provide an outlet (also see Special Requirements).</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. If direct LOS is not possible from the control desk, provide an emergency call/alarm that sounds at the control counter.</p> <p>Data. None required.</p> <p>Security. Provide lockable area for when fitness access is in use.</p>
Casework/ Built-in Equip.	Manufactured climbing walls are acceptable. Select the provider based both on service and product features. Accommodate any specific power requirements. Provide a wall-mounted 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)	None required.
User-provided Equipment	CCTV cameras per the outlet count.
Special Requirements	<p>Climbing wall, whether custom designed or manufactured, must exhibit a natural rock appearance. Component manufactured holds that mount to the climbing wall surface must be adjustable to accommodate climbing competitions. This feature will also allow for climbing route variations and various types of holds.</p> <p>Provide a separate teaching station.</p> <p>If direct LOS 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; Association for Challenge Course Technology. Ensure all anchors and other safety devices are installed for safe use.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-23 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).
Min. Ceiling Ht.	20 ft (6.1 m) exactly.
Finishes	<p>Walls. Pre-manufactured racquetball court side and front walls must be 0.5-in. (13-mm) -thick, balanced, high-density dry panel systems with minimum 50-pound density weight panels over 0.5-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. See Acoustics section of this table for additional wall information.</p> <p>Floor. Maple athletic flooring. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i>.</p> <p>Ceiling. Pre-manufactured racquetball court ceiling, 0.5-in. (13-mm) -thick, high-density resin core panels.</p>
Plumbing	Must be near an electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 66 °F (19 °C) to 72 °F (22 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Gym, sports arena (play area)." Install ducts above ceiling or within wall surfaces. Install heavy-duty dent-resistant supply and return grilles flush and 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," inclusive of protection from mechanical damage. Provide flush-mounted institutional style sprinklers throughout the racquetball court. Do not locate sprinklers closer than 6 ft (1.83 m) to the front wall of the court. Provide flush-mounted fire alarm and life safety equipment where these devices are required to be installed within the racquetball court.
Power	None required in courts. Provide convenience outlets per Chapter 3, "Electrical," in the waiting/viewing area.
Lighting	Provide system per Chapter 3, "Electrical." Match requirements for indoor tennis courts per UFC 3-530-01. Provide lighting levels for racquetball in accordance with IESNA Class III adjustable up to Class II. Use translucent, impact-resistant, non-breakable, flush-mounted protective covers specifically designed for racquetball courts. For courts with glass walls, the lighting level must 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	<p>CCTV. Provide at least one outlet in the waiting/viewing area to look into the court.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker in each court (upper end of back wall preferred) and in the waiting/viewing area.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. Provide lockable area for when fitness access is in use.</p>
Acoustics	Racquetball separation wall assembly must provide STC 60 rating. To achieve this STC rating and control impact noise, separating wall can either include independent steel frames separated by a 1-in. (25-mm) clear space or can incorporate CMU block wall with steel frames directly attached.

Casework/ Built-in Equipment	Provide mounting sockets and netting for wallyball games on 50% of the courts or per local demand. Provide recessed storage boxes in one sidewall of each court.
Furnishings, Fixtures & Equip. (FF&E)	If a waiting/viewing area is included, provide seating for spectators.
User-provided Equipment	CCTV cameras per the outlet count.
Special Requirements	<p>Court striping and dimensions must comply with USRA rules. Wall, floor, and ceiling materials and construction must comply with USRA <i>Standard Specifications for Racquetball Court Construction</i>.</p> <p>Because of the special air-conditioning requirements for racquetball courts, design exterior exposed racquetball court walls to eliminate wet walls and mildew in accordance with Chapter 3, "Exterior Walls and Mold."</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers. Participants. Spectators.
Min. net ft² (m²)	

Table 4-24 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, and yoga.
Min. Ceiling Ht.	10 ft (3.05 m) minimum clear to lowest overhead feature. Provide a 12-ft (3.66-m) minimum clear height ceiling for facilities with large martial arts programs.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU. Painted, double-layer high-impact gypsum board on studs is also acceptable. Floor. Maple athletic flooring. Synthetic multipurpose, resilient, athletic flooring may be allowed when requested by the installation. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i> . Ceiling. Exposed structure with acoustical spray paint or ACP. If ACP, provide non-sag tiles.
Plumbing	Must be near electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 66 °F (19 °C) to 72 °F (22 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/aerobics room." Provide at least one ceiling fan per partitionable area.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	Provide outlets per Chapter 3, "Electrical." Provide power at flat panel display mounting locations and for sound system.
Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) minimum at the floor. To address safety concerns, coordinate lighting design with equipment layout and ensure that equipment users, particularly those using horizontal benches, are not exposed to glare of direct/down lighting. Provide protection for all fixtures when appropriate for specific activity. Provide multi-level switching.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. Provide outlets for monitors coordinated with their location. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Provide data outlets in the walls or in recessed floor boxes. Security. Provide lockable doors.
Acoustics	Reverberation time must 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 construction with a minimum STC rating of 50 per Chapter 3, "Acoustics."

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Casework/ Built-in Equipment	Provide one acoustical operable partition with minimum STC rating of 45. Partition must be recessed into an alcove. Provide impact-resistant/shatterproof mirrors 6 ft (1.83 m) tall on at least two walls at a minimum of 18 in. (450 mm) above the floor. If required, provide infrastructure and speakers for sound system for each divided space. Provide wall- or ceiling-mounted flat panel display mount in each divided space. Provide personal effects storage, such as cubbies, for customers in the room.
Furnishings, Fixtures & Equip. (FF&E)	Provide other fitness equipment as needed: indoor cycling equipment, stair steps, exercise balls, and small dumbbells. Provide an AED. Optional stage/platform.
User-provided Equipment	CCTV cameras per the outlet count. Flat panel display and sound system with mp3 and auxiliary input capability.
Special Requirements	Provide vision panel in the door, minimum 5 ft ² (0.46 m ²), and consider side lites. Design the rooms to be rectangular 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. Provide natural light where appropriate based on activities in the space. Provide glare and heat-gain protection if exterior glazing is provided. 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. Accommodate queuing of customers in the area immediately outside the entrance. Provide secure storage room with direct adjacency to store items such as mats, stair steps, wall padding, and other fitness equipment. Storage rooms must either have double doors without astragal or designed as flow-through storage rooms.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-25 Fitness Area

Description/ Usage	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 one or multiple areas throughout the facility. The criteria in this table will apply regardless of equipment location. Fitness area is adjacent to the equipment repair/receiving area. 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, and stair climbers.
Min. Ceiling Ht.	12 ft (3.66 m) minimum. 14 ft (4.27 m) is preferred.
Finishes	<p>Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU. Provide high-impact wall guards up to 18 in. (450 mm) AFF in the free weight area.</p> <p>Floor. Use permanently adhered resilient athletic flooring consisting of dual durometer layers of natural and synthetic rubbers, calendared and vulcanized together. The top layer is a non-porous, slip-resistant, textured surface; the bottom layer is a cushioned performance layer. In the stretching/warm-up/cool-down spaces, use 1/4 in. (6 mm) thickness; in cardio, selectorized machine weights, and free weight areas use 3/8 in. (9 to 10 mm) thickness. Do not use interlocking flooring tiles or movable furnishings such as mats. Consider providing a low-profile raised floor in the selectorized and cardiovascular equipment areas to provide flexibility for routing power and data cables for fitness equipment.</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 system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms." Provide ceiling fans.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	<p>Provide outlets per Chapter 3, "Electrical."</p> <p>Free weight area: Provide outlets for wall- or ceiling-mounted flat panel displays.</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. Provide outlets for wall- or ceiling-mounted flat panel displays.</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. Provide dedicated circuits for all treadmills. Coordinate flat panel display 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 flat panel displays as necessary to ensure adequate viewing angles for all equipment.</p>

Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) uniform lighting. To address safety concerns, coordinate lighting design with equipment layout and ensure that equipment users, particularly those using horizontal benches, are not exposed to glare of direct/down lighting.
Communication	<p>CCTV. Provide outlets as needed for coverage.</p> <p>CATV/Internal Video. Provide outlets for wall- or ceiling-mounted flat panel displays throughout the fitness area. Mount at proper viewing height for cardiovascular exercise machines in that area, height as selected by fitness area designer. The quantity and location of the CATV outlets must be determined by the sports fitness center designer and the Installation fitness program manager and must be coordinated with the equipment layout. The goal must be to enhance the experience and enjoyment of working out in the fitness areas and to have a number of CATV monitors available for comfortable viewing by all users of the fitness area. Consider W options for wireless transmission of audio broadcast from V 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 and entertainment systems. Data to equipment for fitness tracking is optional.</p> <p>Security. None required.</p>
Acoustics	Reverberation time must equal 1.0 to 1.3 seconds. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibration transmitted through the facilities structure.
Casework/ Built-in Equipment	<p>Provide 6-ft (1.83-m) -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. Provide 1.5-ft by 1.5-ft by 15-in. (0.46-m by 0.46-m by 0.38-m) -deep open cubbies – quantity to be 50% of number of pieces of fitness equipment.</p> <p>Provide wall-mounted bulletin boards.</p>
Furnishings, Fixtures & Equip. (FF&E)	<p>Fitness equipment must be commercial grade.</p> <p>Provide a free-standing heavy punching bag and a speed bag if a boxing program is included.</p> <p>Exercise mats, wall clocks, and trash containers.</p> <p>Provide self-serve equipment cleaning supply stations throughout that include disinfectant spray bottles and disposable or reusable towels.</p> <p>Provide an AED.</p>
User-provided Equipment	<p>CCTV cameras per the outlet count.</p> <p>Flat panel display.</p>

Special Requirements	<p>If this space is provided on the second floor, ensure the elevator is specified to accommodate the fitness equipment.</p> <p>The foundation/floor in this space must be designed to accommodate all live and dead loads associated with the equipment.</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.</p> <p>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 must 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> <p>If doors are provided, include vision panels, minimum 5 ft² (0.46 m²) each, and consider side lites.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-26 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 must include typical office furnishings and fitness testing equipment.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board. Floor. Carpet tile with resilient base. Ceiling. ACP.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide independent thermostat.
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 fc (500 lx) 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. Provide a computer system with internet connectivity at each data outlet location. Security. None required.
Casework/ Built-in Equipment	None required.
Furnishings, Fixtures & Equip. (FF&E)	Office furniture: desk, credenza, filing cabinet, desk chair, and two side chairs. Partitions and dividers. Fitness testing equipment that testing can be completed on, such as a treadmill or cycle with built-in monitoring sensors/devices. Scale and height rod.
User-provided Equipment	Computers, printer, and other office equipment as needed.
Special Requirements	Provide a key locked door. Provide side lites with blinds next to the door for supervision and security. If this space is provided on the second floor, ensure the elevator is specified to accommodate the fitness equipment.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 4-27 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. The track is required but it can be either indoor or outdoor.
Min. Ceiling Ht.	10 ft (3.05 m) minimum. If suspended in a high-bay area, the underside of the track structure must be 14 ft (4.27 m) minimum AFF.
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 must 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 must match the criteria for the space in which the track is located. When located within the gymnasium surrounding the court safety zone, provide lighting levels and controls matching the court it surrounds. When suspended above the gymnasium, provide lighting control with horizontal illuminance: 30 fc (300 lx), CV = 0.30 or less (E _{max} /E _{min} = 4:1 or less).
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. Provide lockable area for when fitness access is in use.
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 freestanding storage units for towels and personal items. (This can also be incorporated into casework.) Consider providing cardio fitness equipment, such as treadmills or stair climbers, in unused corners.
User-provided Equipment	CCTV cameras per the outlet count.

Special Requirements	<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 preferred to be 45 in. (1067 mm) wide. The turns must have a minimum inside radius of 20 ft (6.1 m). Consider using banked curves. The height of banked curves on an indoor track must be 1 in. per 1 ft (25 mm per 300 mm) of track width. When using banked curves, ensure compliance with ABA requirements.</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, minimum 5 ft² (0.46 m²) each. Ideally, the entry lobbies are to be located near the center of a straightaway.</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>Track length and number of lanes varies as follows: 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. 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 must not encroach into the clear zones of the gym. 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 ft² (m²)	

Table 4-28 Functional Fitness

Description/ Usage	<p>Functional training is exercise performed to better enable the participant to move through normal life activities. Functional fitness implies performing exercise in an optimal way, to achieve certain goals that allow improved performance of regular activities outside the gym. This may mean more fluid, precise movements, accomplishing necessary activities with the least possible wear and destruction, and remaining pain-free in the performance of mundane tasks. Better function could have applications in pulling weeds, loading the dishwasher, waxing the car, or carrying groceries home from the store.</p> <p>Typical equipment in the functional fitness area includes A-frames used for various exercises with bands, individual weight stations, and various kettle bells and other equipment.</p>
Ceiling Ht.	14 ft (4.27 m) minimum.
Finishes	<p>Walls. CMU with heavy-duty epoxy or painted, double-layer (impact side) gypsum board, and provision of high-impact wall guards up to 18 in. (450 mm) AFF where weights are used.</p> <p>Floor. Use 3/8-in. (9- to 10-mm) -thick permanently adhered resilient athletic flooring consisting of dual durometer layers of natural and synthetic rubbers, calendared and vulcanized together. The top layer is a non-porous, slip-resistant, textured surface; the bottom layer is a cushioned performance layer. Provide a section of turf in coordination with installation requirements.</p> <p>Ceiling. Open structure is preferred; however, adequate acoustics must be maintained.</p>
Plumbing	Provide a minimum of one electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms." Provide ceiling fans.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety," inclusive of protection from mechanical damage. Provide protection for sprinklers, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity spaces. Install component equipment (except manual pull stations) minimum 8 ft (2.44 m) AFF for safety considerations. Provide manual pull stations with protective covers. Provide upright sprinklers with head guards in areas without suspended ceilings.
Power	Provide outlets per Chapter 3, "Electrical." Convenience outlets required.
Lighting	<p>Provide system per Chapter 3, "Electrical." Lighting must be switched to allow for different levels of lighting. Provide fixtures with wire cages.</p> <p>Light level: 30 fc (300 lx) at the floor, minimum.</p>
Communication	Sound system: Flush recessed speakers, 25-watt minimum output rating, capable of reproducing the entire audible range for human speech. Link speakers and provide audio interface in accessible area for sound equipment.
Acoustics	Walls must be acoustically treated to minimize the transmission of sounds from impact to other spaces.
Casework/ Built-in Equipment	None required.

Furnishings, Fixtures & Equip. (FF&E)			
	Description	Notes	Quantity
	Double power station (3")/storage/stainless	Includes rack, bench, platform	1
	Glute/ham bench (split pad)/lineal		1
	Step-up box with plywood; no logo		1
	Olympic lifting bar 20kg, 1-1/8 in. shaft		2
	1800# test zinc		
	45# bumper plate		8
	35# bumper plate		4
	25# bumper plate		4
	10# bumper plate		4
	Olympic plates - grip rubber	4-10, 4-5, 4-2.5	70
	Adjustable dumbbells	15-60/5# (10 Pair Total)	1
	Triple-tier dumbbell rack (15 pr.)	Bottom two levels for DBs, top level for kettlebells.	1
	Band attachments		1
	Vertical medicine ball rack		1
	Kettlebells 5-60/5, 70 to 100 lb/10	15/20/25/30/35/40	165
	Olympic curl bar (26 lb.) 5 ft black		1
	Olympic spring lock collars		3
	Medicine ball	4/6/8/10/12/15/18/20/25/30 elite medicine balls	1
	TRX straps		2
	Stretch equipment: cage (e.g., True Stretch, 37 deg. angle calf stretch blocks with heel anti-slip ledge and a PT table for pre/post conditioning		
	Pre-movement prep, cooldown, injury prevention, supports functional movement: stretch cage and calf stretch blocks attached semi-permanent to floor, PT table		
	Power sled (plate loaded); includes harness + belt		1
		Double ladder	1
		Battling rope 50 ft	1
		Weight lifting bands	1
User-provided Equipment	None required.		
Special Requirements	<ul style="list-style-type: none"> • A storage room must be provided. • Must be on first floor of facility due to dropping weights. • Provide vision panels in the doors, minimum 5 ft² (0.46 m²), and consider side lites. 		
For use during project execution by the appropriate Service agency			
Occupancy	Staff. Customers.		
Min. net ft² (m²)			

Table 4-29 Auxiliary Gymnasium

Description/ Usage	<p>Note: This space is not supported by the Navy.</p> <p>This space is used for sports competitions such as basketball, volleyball, wrestling, and indoor soccer. The auxiliary gymnasium can also support instructional functions, informal, intramural, group exercise/fitness functions, and community events.</p> <p>Preferably the auxiliary gymnasium will be adjacent to the main gymnasium. If not adjacent, must be nearby.</p>
Ceiling Ht.	Minimum 25 ft (7.62 m) clear height to lowest overhead element.
Finishes	<p>Walls. Provide durable wall system up to 12 ft (3.66 m) height, such as CMU with heavy-duty epoxy. Above 12 ft (3.66 m), use semi-gloss enamel and consider acoustic panels.</p> <p>Floor. Maple athletic flooring, 25/32 in. (19.8 mm) thick, must be installed in gymnasiums 6,500 ft² (603.9 m²) or larger. Synthetic multipurpose, resilient, athletic flooring may be allowed when requested by the Installation. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i>.</p> <p>Ceiling. Exposed, painted structure. Provide acoustical banners, baffles, panels, or similar treatment. /1/</p>
Plumbing	None required. Ensure access to nearby electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Gym, sports arena (play area)." Provide durable air grill covers and do not place air grills in line with basketball nets. Locate ductwork to avoid trapping balls.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety," inclusive of protection from mechanical damage. Provide protection for sprinklers, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or safety zones near activity spaces. Install component equipment (except manual pull stations) minimum 8 ft (2.44 m) AFF for safety considerations. Provide manual pull stations with protective covers. Provide upright sprinklers with head guards.
Power	Provide outlets per Chapter 3, "Electrical." Provide power for the scoreboard, shot clocks, and a high, wall-mounted clock. Consider power requirements for additional lighting for special events.
Lighting	Provide system per Chapter 3, "Electrical." Provide lighting levels for basketball in accordance with IESNA Class III adjustable up to Class II. If the program dictates televised events, provide appropriate IESNA lighting class of play levels for that specific sport. Provide perimeter compact fluorescents multi-level switched for non-sport activities. Provide keyed light switches. Provide fixtures with wire cages or appropriate shatterproof luminaires. Do not locate fixtures directly above basketball backboards. Do not install high-pressure sodium lighting.
Communication	<p>CCTV. Provide at least one outlet on each wall.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. None required.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>

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Acoustics	Reverberation time must equal 1.0 second. Provide noise attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibrations transmitted through the facility's structure.
Casework/ Built-in Equipment	<ul style="list-style-type: none"> • Provide six retractable basketball nets/backboards. Breakaway rims must be installed on all goals. • Provide volleyball built-in flush floor insert sleeves in each court. • Provide an electronic scoreboard. • Provide game lines on flooring for full- and half-court basketball and volleyball. • Provide 6-ft (1.83-m) -high attached safety padding with bottom edge on top of floor base on all walls that can be impacted by a player.
Furnishings, Fixtures & Equip. (FF&E)	Provide volleyball stanchions, net, standard protective pads, and net antenna. Provide wrestling mat, exercise mat, and protective floor coverings. Provide an AED.
User-provided Equipment	CCTV cameras per the outlet count.
Special Requirements	<ul style="list-style-type: none"> • Interior entrance doors into the auxiliary gymnasium must have vision panels, minimum 5 ft² (0.46 m²) each. • Provide a minimum 10-ft (3.05-m) unobstructed floor space safety zone between the outer edge of the playing area and any feature or obstruction. • 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. • Do not locate windows, doors, or other obstructions within 7 ft (2.14 m) of all backboard centerlines. • Ensure no glazing or lighting can create glare or distraction on the play areas.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 4-30 High Intensity Tactical Training (HITT) Center

Description/ Usage	Note: \1\ This space is for Marine Corps only. /1/ This is typically one large, open space room that is non-partitionable and is used for implementation of the HITT program. Activities/classes such as aerobics, martial arts, and yoga must not be used in this space.
Ceiling Ht.	20 ft (6.1 m) minimum.
Finishes	Walls. CMU with heavy-duty epoxy or painted, double-layer (impact side) gypsum board. Floor. Use 3/8 in. (9 to 10 mm) thick permanently adhered resilient athletic flooring consisting of dual durometer layers of natural and synthetic rubbers, calendared and vulcanized together. The top layer is a non-porous, slip-resistant, textured surface; the bottom layer is a cushioned performance layer. Synthetic artificial turf and track are to be installed in centers 2000 ft ² (185.8 m ²) or larger. HITT logo is to be included on flooring where Olympic lift platform stations will be located. Provide high-impact wall guards up to 18 in. (450 mm) AFF. Impact and athletic flooring system cannot be accommodated by interlocking flooring tiles or movable furnishings such as mats. Ceiling. Exposed structure with acoustical spray paint or ACP. If ACP, provide non-sag tiles.
Plumbing	Provide a minimum of one electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC". Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms." Provide ceiling fans.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety," inclusive of protection from mechanical damage. Provide protection for sprinklers, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity spaces. Install component equipment (except manual pull stations) minimum 8 ft (2.44 m) AFF for safety considerations. Provide manual pull stations with protective covers. Provide upright sprinklers with head guards in areas without ceilings.
Power	Provide outlets per Chapter 3, "Electrical."
Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) minimum at the floor. To address safety concerns, coordinate lighting design with equipment layout and ensure that equipment users, particularly those using horizontal benches, are not exposed to glare of direct/down lighting. Provide protection for all fixtures and dimming capability.
Communication	CCTV. Provide at least one outlet on each wall. CATV/Internal Video. Provide at least one outlet for wall-mounted monitor(s). PA/Audio. None required. Telephone. Provide one line with internal two-way communication. Data. Provide at least one outlet. \1\ HDMI /1\ cable outlet below dedicated flat panel display. Security. None required.
Acoustics	Reverberation time must equal 1.0 second. Provide noise-attenuation measures to mitigate acoustical problems resulting from mechanical systems, plumbing systems, and vibrations 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	<ul style="list-style-type: none"> • Provide adjustable pull-up bars on at least one wall. Number of bars is determined by center size. • Provide a built-in protective box for the telephone. • Provide 9-ft (2.74-m) -high mirrors on at least two non-adjacent walls at a minimum of 18 in. (450 mm) above the floor. • Provide wall flat panel display mount in each divided space. • Provide personal effects storage, such as cubbies, for customers in the room. • Provide attached wall padding for both ends of rubberized track surface.
Furnishings, Fixtures & Equip. (FF&E)	<ul style="list-style-type: none"> • Fitness equipment must be commercial grade. Equipment counts will vary by size based on square footage. • Address accessibility issues in equipment selection. • Provide other combat fitness equipment as needed: power racks (Olympic lift platforms with wood base and squat rack type), plyometric equipment, speed and agility equipment, functional training equipment, kettlebells, medicine balls. • Office equipment: desk and chair. • Provide an AED.
User-provided Equipment	CCTV cameras per the outlet count. One dedicated flat panel display for video analysis usage. Flat panel display must have 1 HDMI /1/ port to connect to moveable hardware platform.
Special Requirements	<ul style="list-style-type: none"> • Design the rooms to allow for flexibility in use. Provide a method of fastening padding on walls for use during sprint/speed training. Provide acoustical separation from the rest of the facility. • Provide protection of all sprinklers, fire alarm strobe/speaker, thermostats, and other similar features. • Provide natural light where appropriate. Provide glare and heat-gain protection if exterior glazing is provided. • 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. • Accommodate queuing of customers in the area immediately outside the entrance. • Provide secure storage either within the room or with a direct adjacency to store items such as speed/agility equipment, cones, ladders, and other fitness equipment. • Provide attractive, color-coordinated HITT logo on one main wall. Walls must be colored white. • Color selection for equipment must match HITT logo color. • Provide vision panels in the doors, minimum 5 ft² (0.46 m²) each, and consider side lites. • Provide space for fitness testing; 25- to 40-yd dash, 5-10-5 cone drill, and kneeling medicine ball throw.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 4-31 Indoor Cycling

Description/ Usage	Classroom to accommodate indoor cycling classes, which includes an instructor on a bike and participants on bikes. These bikes are different from the stationary bikes utilized in the cardio area. This space may be included as part of the programmed space allotted for structured activities.
Ceiling Ht.	10 ft (3.0 m) minimum to lowest element.
Finishes	Walls. Painted walls. Coordinate with users to find out any special images such as murals as well as preferred color (light vs. dark). Floor. Rubber or wood floor typical. Provide flooring that is appropriate and industry standard for indoor cycling classrooms. Strongly recommend use of platforms for the classroom to provide better view of the instructor. Ceiling. Exposed, painted structure. Consider providing ACP or other acoustical banners and treatments.
Plumbing	Provide an electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms." For Army projects, provide 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." Match requirements of indoor basketball court, per UFC 3-530-01. Lighting must be switched to allow for different levels of lighting. Natural light via windows may be provided but direct sunlight and glare must be avoided. Windows providing internal views to other spaces is desirable. Lighting control: Use of occupancy sensors to activate lighting by motion detection is recommended. In addition, grouping lights so a portion of the lights may be turned off, especially if natural daylighting is provided, is required. Independent slide or toggle controls may also be used to control fixtures by groups. Grouping must be coordinated with user.
Communication	CCTV/CATV/Internal Video. Provide for up to 3 large flat panel displays on the front wall. The control for these must also be in the center of the front wall near the instructor. PA/Audio. Provide speakers for main PA system so announcements from the desk can be heard in this space. Provide ceiling-mounted speakers for high-quality music reproduction. If a lay-in ceiling is provided the speakers must be recessed. Speakers must have a 100-watt minimum output rating and must be capable of reproducing CD-quality sound. Provide wiring, cabling, and other built-in support for a user-provided sound system plugged into the speaker system in the room. Provide the connection for the instructor near the center of the front wall. The instructor will position their stereo equipment close to their bike so they can adjust the music while working out. Telephone. None required. Data. None required. Security. None required.

Acoustics	The indoor cycling classroom must be designed to acoustically separate this space from other spaces. In addition, this space must be designed for proper acoustics for aerobic and other exercise classes. Aerobic activity will require partitions to be sound rated to 53 STC minimum. Where glass walls are used to enhance interior views, front these walls to interior circulation and not into other activity spaces. One exception is the gymnasium.
Casework/ Built-in Equipment	Architectural Casework: Provide storage cubicles (cubbies) along one wall of the module for incidental storage during activities. Provide minimum of one cubby for 75% of the total number of participants at room's maximum occupant load (based on 50 ft ² [4.6 m ²] per person). Cubby design is generally an open-face cube in modular "banks" aligned on one wall to counter-top height or vertically with the tallest cubicle 5 ft (1.52 m) AFF. Cubbies must be minimum 14 in. by 14 in. (350 mm by 350 mm), 18 in. by 18 in. preferred (450 mm by 450 mm) face opening by minimum 15 in. (375 mm) deep. Construct cubbies of ½-in. (12.5-mm) minimum particle board shell with 1/2 in. (12.5 mm) plywood horizontal shelves. Entire construction veneered with .048 horizontal grade, high-pressure plastic laminate. As an alternative, if solid wood or hardwood veneer-core plywood is used throughout, the surfaces may be finished and sealed with a polyurethane (or equal) coating. Cubbies may also be made from a plastic or solid phenolic type material for added durability. The coating must be cleanable and able to withstand moisture without degrading. Edge trim of cubby frames must be solid hardwood (bonded) or 3 mil PVC edging routed into panel edge. Use of plastic laminate edges is not allowed. If counter-height, provide solid-surface countertop with eased edge front and minimum 1-in. (25-mm) -tall lip where the counter abuts the wall.
Furnishings, Fixtures & Equip. (FF&E)	None required.
User-provided Equipment	Flat panel displays.
Special Requirements	<ul style="list-style-type: none"> • Design the rooms to allow for flexibility in use. • Provide acoustical separation from the rest of the facility. • Provide secure storage room with a direct adjacency to store fitness equipment. • Per installation request, special lighting or themes may be required. • Provide vision panels in the doors, minimum 5 ft² (0.46 m²) each, and consider side lites. Provide a means to darken the vision panels.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 4-32 Mother's Room

Description/ Usage	This space is used by nursing mothers.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board. Floor. Provide hard-surface flooring matching corridor such as seamless vinyl, hard tile, or other durable material. Ceiling. ACP.
Plumbing	Provide countertop-mounted sink with hot and cold water. Provide a cold-water connection for refrigerator ice maker.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 76 °F (24 °C).
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. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide outlets as required for equipment. Security. Provide lockable doors.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide extended solid-surface countertop for bottle prep/clean functions and to house mini-fridge below.
Furnishings Fixtures & Equipment (FF&E)	Guest chair on casters if table/work surface is provided or a lounge chair with tablet arm; small undercounter refrigerator and microwave.
User-provided Equipment	None required.
Special Requirements	None required.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

CHAPTER 5 ACTIVITY FIELDS

5-1 INTRODUCTION AND PLANNING ISSUES.

This chapter provides criteria for activity fields, including a multipurpose activity field with an encircling running track, softball fields, spectator seating, and support buildings. These features may be included as standalone or as components of a fitness center complex. When programming these fields and support features, different category codes apply and funding sources may be different from the fitness center.

The activity fields must be planned in conjunction with a comprehensive audit of other existing or planned activity fields on the installation to maximize consolidation and shared efficiencies.

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 activity fields:

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

5-2 PROGRAM AREAS.

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

Table 5-1 Multipurpose Field

Functional Program Area	Description/Service Exceptions
Support Building	
Concessions	Accommodates the preparation and sales of food and drink.
Covered public space	Covered, paved exterior area directly adjacent to the concessions service window.
Male toilets	A standard configuration for toilets. This can be expanded if the program and budget allow.
Female toilets	A standard configuration for toilets. This can be expanded if the program and budget allow.
Maintenance bay	Accommodates the storage of a field maintenance vehicle, maintenance supplies, and master lighting controls.
Announcer's booth/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-ABA access to the press box.
Fields and Site Spaces	
Multipurpose field and track	Fixed-size field encircled by a 1312-ft (400-meter) running track per Table 5-8.
Softball field	Fixed-size softball field per Table 5-9.
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 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 spreadsheets.

Figure 5-1 Activity Field Space Program

Functional Program Area		Standard		Quantity	Total Area	
		ft ²	m ²		ft ²	m ²
Support Building	Concessions*	200	18.6	1	200	18.6
	Covered public space*	280	26.0	1	280	26.0
	Male toilets*	160	14.9	1	160	14.9
	Female toilets*	160	14.9	1	160	14.9
	Maintenance bay	280	26.0	1	280	26.0
	Press box	350	32.5	1	350	32.5
	Dry goods storage	80	7.4	1	80	7.4
	Sports activity storage	40	3.7	1	40	3.7
	Building support/vertical circulation	30	2.8	1	30	2.8
Subtotal - Net Spaces					1,580	146.8
Net-to-Gross Factor (incl. construction)				15%	237	22.0
Total Building					1,817	168.8
Site	Multipurpose field and track	141,570	13,151.9	1	141,570	13,151.9
	Softball field	82,915	7,702.8	1	82,915	7,702.8
	Bleacher pads*	6,750	627.1	2	13,500	1,254.2
	Parking*	450	41.8	38	17,100	1,588.6
	Site circulation*	57,181	5,312.1	1	57,181	5,312.1
Total Site					312,266	29,009.5
Total Project Area					314,083	29,178.3

* If the multipurpose and softball field are 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 (*) must not be changed regardless of adjacent functions.

5-4 LOCATION DETERMINANTS.

The location of the activity fields must be coordinated with the fitness center location as described in paragraph 2-1 and the planning issues noted in paragraph 5-1. Ensure adequate site space per Figure 5-1.

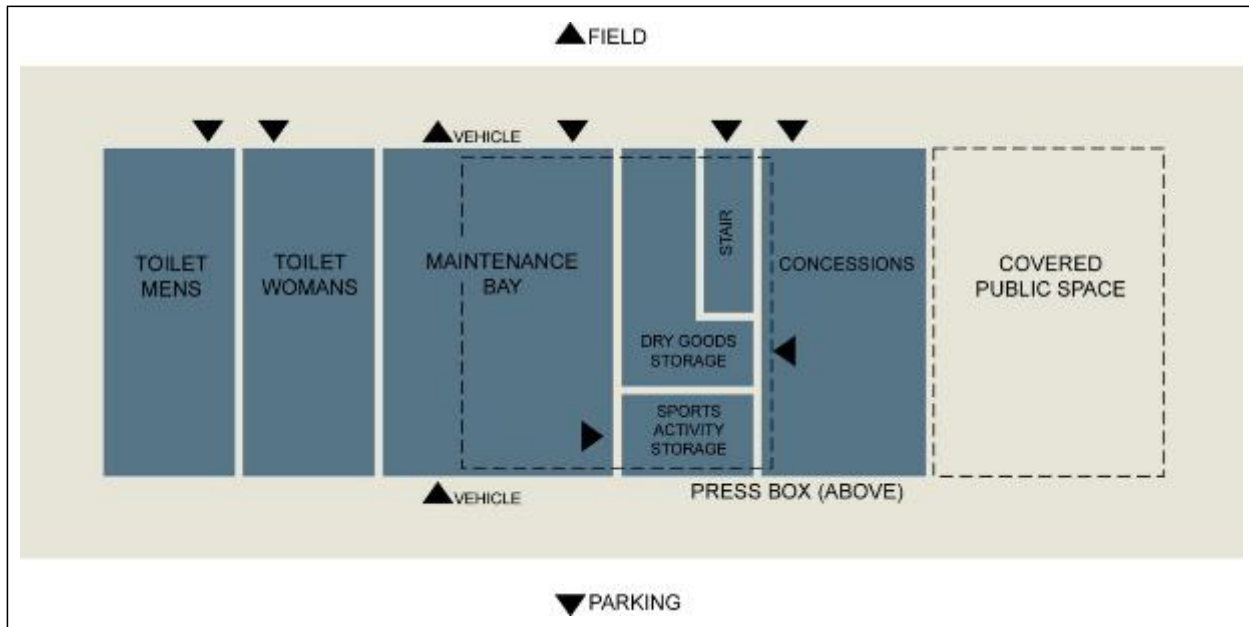
5-5 LAYOUT AND ADJACENCIES.

The appropriate layout and adjacencies for the multipurpose field and associated buildings are illustrated in Figures 5-2 and 5-3. These diagrams do not convey a building or site shape and do not include the softball field(s). If softball fields are being included with the fitness center and multipurpose field, they must be located to take advantage of common features such as parking, circulation paths, and support buildings.

5-5.1 Support Building.

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

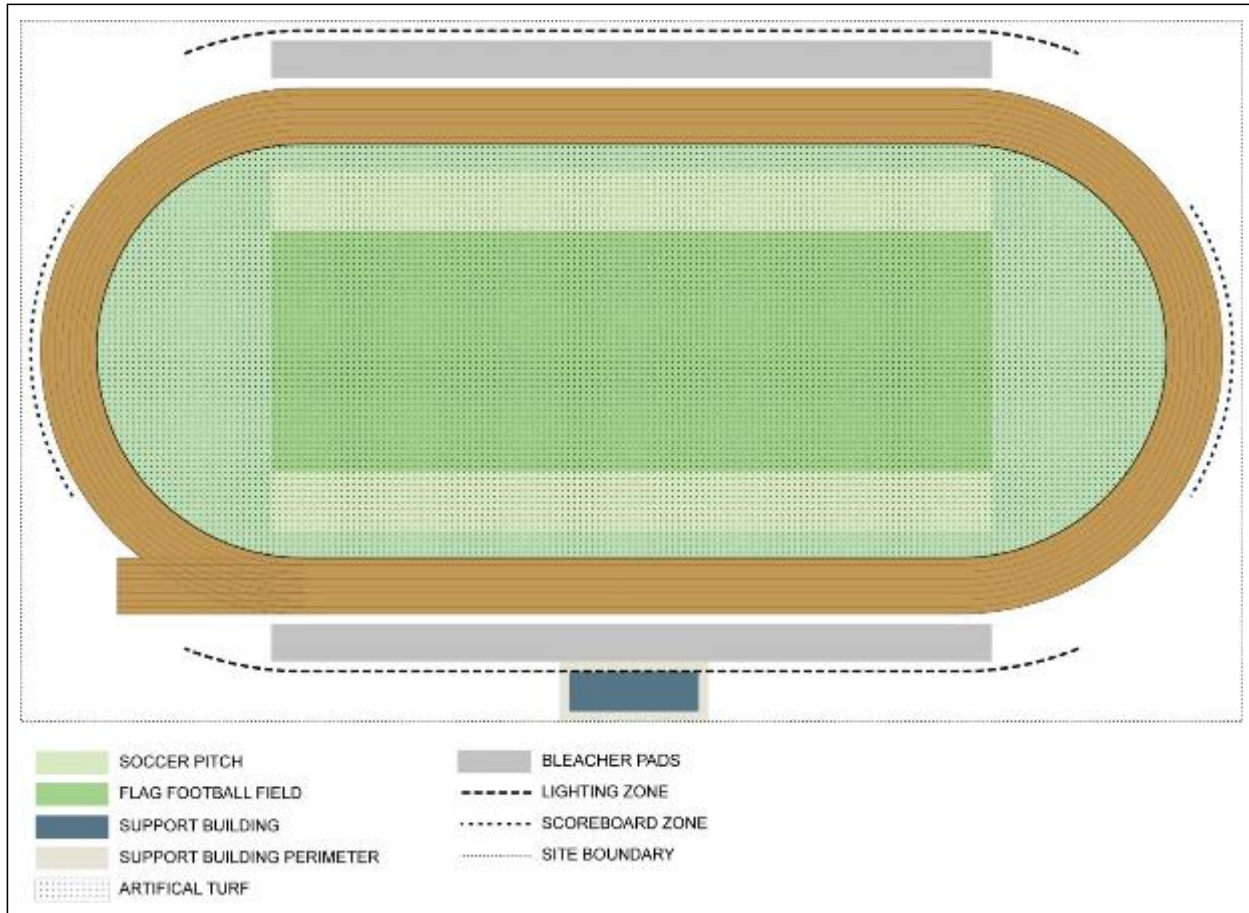
Figure 5-2 Support Building Functional Relationship Diagram



5-5.2 Multipurpose Field and Site.

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

Figure 5-3 Multipurpose Field and Site Functional Relationship Diagram



5-5.3 Space Assessment.

See Chapter 4 for additional information on space types and their relationships to each other.

5-6 GENERAL DESIGN CRITERIA.

The design of the multipurpose and softball fields must comply with the design guidance in Chapter 3. Additional requirements or exceptions specific to the activity fields are provided here.

5-6.1 Accessibility.

Per *ABA Accessibility Standards (ABAAS)*, Section 407.4, 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 square feet (46.5 m²). Accessible routes are continuous, unobstructed paths connecting all accessible elements and spaces. The accessible route must comply with ABAAS provisions for location, width minimum of 36 inches (900 mm), passing space, head room, surface, slope (maximum of 1:12 or 8.33 percent), changes in level, doors, egress, and areas of rescue assistance.

5-6.2 Exterior Lighting.

Provide lighting and control systems per paragraph 3-6.4.1 and the additional criteria identified in paragraph 5-8, which notes field lighting levels and control requirements.

5-7 SITE DESIGN.

The site design, parking, other hard-surface areas, and landscaping of the activity fields must comply with the design guidance identified in Chapter 3. Additional requirements for specific areas of the multipurpose and softball fields are provided in paragraph 5-8.

5-8 SPECIFIC DESIGN CRITERIA.

The specific design needs for each functional area of the activity fields are provided in Tables 5-2 through 5-9 in a standard functional data sheet format.

Table 5-2 Concessions

Description/ Usage	Space for preparation and sale of food and drinks.
Ceiling Ht.	10 ft (3.05 m) minimum
Finishes	Walls. CMU with heavy-duty epoxy paint. Floor. Sealed concrete or seamless vinyl. Ceiling. Painted exposed structure.
Plumbing	Two-compartment stainless-steel 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. Provide wall hydrant on exterior wall.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to ventilated 10 °F (6 °C) above the 1.0% dry bulb temperature. No mechanical cooling.
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 POS units, microwave, and other food/warming equipment as required.
Lighting	Provide system per Chapter 3, "Electrical." Provide 40 fc (400 lx) of general ambient lighting. Provide task lighting of 50 fc (500 lx) 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. (600-mm) -deep solid surface work-surface counter for food preparation. Provide two solid surface 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, a freezer, and an ice maker.
User-provided Equipment	A glass-front, front-loading refrigerated display case; soda fountain machine with under-counter boxed syrup; microwave; and other food preparation/warming equipment as required by the specific menu. Trash receptacles.
Special Requirements	Provide a minimum 36-in (900-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 ft² (m²)	

Table 5-3 Covered Public Space.

Description/ Usage	Covered, paved exterior area directly adjacent the concessions service window.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. None. Floor. Sealed concrete or brick or stone pavers if budget allows. Ceiling. Painted exposed structure.
Plumbing	Provide a keyed exterior wall-hydrant; frost-free as dictated by climatic conditions.
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 5 fc (50 lx) of general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. Provide emergency telephone. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	None required.
Furnishings, Fixtures & Equip. (FF&E)	Provide trash and recycling receptacles. Provide an AED in an exterior-mounted tamper-resistant case with a breakable seal for access.
User-Provided Equipment	None required.
Special Requirements	None required.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 5-4 Men's and Women's Toilets

Description/ Usage	Separate ABA-compliant men's and women's toilet facilities that exit directly to the exterior.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Semi-gloss enamel painted, mold-resistant gypsum wallboard with a ceramic tile wainscot. Prefer full-height ceramic tile walls with integral patterns, especially on wet walls. Use a dark-colored epoxy grout. 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 flush-valve floor-mounted urinals, two flush-valve wall-mounted water closets, and two lavatories. Provide wash-out stall urinals, recess-mounted so that top of lip is level with adjacent finished floor. Female: Three flush-valve wall-mounted water closets and two lavatories. Provide floor drains for proper drainage located under the water closet partitions. Provide keyed hose bibbs with hot and cold water.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 55 °F (13 °C) to ventilated 10 °F (6 °C) above the 1.0% dry bulb temperature. No mechanical cooling. Exhaust per UFC 3-410-01.
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 must have translucent, damp location, non-breakable protective covers with shatterproof lenses.
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, with the front edge supported by galvanized angle reinforcing. Consider use of holes in lavatory countertop for waste disposal; coordinate location of paper towel dispenser. The sink must be integral with the counter. As an option, consider stainless-steel wash trough-style lavatories. Provide stainless-steel, solid plastic (HDPE) toilet and urinal partitions secured at floor and ceiling. Toilet accessories must be stainless steel and include: toilet paper dispensers, paper towel dispenser, 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)	None required.
User-provided Equipment	None required.
Special Requirements	Exterior doors must 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 ft² (m²)	

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 (3.05 m) minimum.
Finishes	Walls. 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. Provide exterior wall hydrant.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 55 °F (13 °C) to ventilated 10 °F (6 °C) above the 1.0% dry bulb temperature. No mechanical cooling.
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. 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 must be lockable.
Furnishings, Fixtures & Equip. (FF&E)	Provide workbenches and lockable tool and parts storage cabinet.
User-provided Equipment	Synthetic turf groomer.
Special Requirements	Place the master control panel for the field lights and irrigation system in this space. Provide a paved approach outside the overhead doors, where equipment can be hosed-off prior to entering the bay.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 5-6 Announcer's Booth/Press Box

Description/ Usage	Second-story space to accommodate observers and scoreboard controls.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. CMU with heavy-duty epoxy paint. Floor. Sealed concrete. Ceiling. Painted exposed structure.
Plumbing	None required.
HVAC	Ventilate to not greater than 10 °F (6 °C) above the 1.0% dry bulb temperature. No heating or mechanical cooling provided.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	Provide outlets per Chapter 3, "Electrical." Provide dedicated power to the wireless 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. Where required in project scope, provide PA system with speakers to project sound to spectator's area(s). Telephone. Provide one line. Data. Wireless scoreboard controller. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide a seated-height solid surface countertop at field-side window.
Furnishings, Fixtures & Equip. (FF&E)	Three chairs. Provide the control panel for the wireless scoreboard. Wireless scoreboard controls to include a game timer/clock, home and visitor scores, and quarter and half indicators.
User-provided Equipment	None required.
Special Requirements	Provide lockable, horizontal sliding windows facing the multipurpose field for the full width of the wall. The window sill must be at the seated-height countertop and the glazed area must extend to 78 in. (1950 mm) AFF. 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 ft² (m²)	

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 (3.05 m) minimum.
Finishes	Walls. CMU with heavy-duty epoxy paint. Floor. Slip-resistant sealed concrete. Ceiling. Painted exposed structure.
Plumbing	None required.
HVAC	Ventilate to not greater than 10 °F (6 °C) above the 1.0% dry bulb temperature. No heating or mechanical cooling provided.
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. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/Built-in	None required.
Furnishings, Fixtures & Equip. (FF&E)	Provide storage shelving as required.
User-provided Equipment	None required.
Special Requirements	The walls for both storage rooms must extend to underside of structural ceiling. The dry goods storage must only be accessible from the concessions area via a lockable door. The sports activity storage must only be accessible from the exterior via a lockable door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 5-8 Multi-Purpose Field and Track

Description/ Usage	This table describes the multipurpose field and track and associated features including the bleacher pads, lighting zone, \1\ scoreboard zone, and site circulation. <i>/1/</i>
Dimensions	<p>Track. A 1312-ft (400-meter) elliptical track: six lanes for medium-sized facilities and smaller, eight lanes for large-sized facilities and larger, and a 328.1-ft (100-meter) dash straightaway. For Air Force only, provide lane markings at 1.24 mile (2.0 km) distance for alternate walk test. See Special Requirements below for additional criteria.</p> <p>Multipurpose field. Fixed-size field of 360 ft by 160 ft (109.7 m by 48.8 m) playing area, with an additional 10 ft (3.0 m) of unobstructed space on each side. The synthetic turf multipurpose field must be striped for soccer per \1\ <i>NCAA Soccer Rules /1/</i> and for flag football per United States Flag Football Association (USFFA) <i>National Rules</i>. It is preferred that striping be integrated in the factory with the synthetic turf. The field must have white stripes for flag football and yellow stripes for soccer. In general, \1\ <i>NCAA /1/</i> and USFFA standards must be followed. 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 (1.53-m) space around perimeter. The length can be continuous or with 5-ft (1.53-m) gap between each set of bleachers.</p>

<p>Surface Materials</p>	<p>Track. Provide a first-class, full-pour polyurethane synthetic surface, including all necessary sub-structure and drainage to obtain long-life durability, pursuant to the guidelines of <i>NCAA Cross Country/Track and Field Rules</i>. The minimum thickness of the track surface must be ½ in. (13 mm) and the surface color will be determined by the installation. Provide a flush, paved transition strip a minimum width of 18 in. (450 mm) between the outside edge of the track and the surrounding area. This transition strip must not present a tripping hazard. The surfacing system minimum performance standards must reflect ASTM requirements for the materials specified. Running lanes will be marked on the track and markings will be placed for the 1.5-mile (2.41 km) events through use of a standard starting line and finish location arrow. The synthetic track system must be designed and constructed with a minimum five (5) year warranty covering the synthetic track surface against defects, workmanship, and normal use. Provide service start and stop signage for fitness testing.</p> <p>Multipurpose field. Provide either a natural grass turf or a synthetic artificial turf surface. As a minimum, the synthetic turf field must be an infill turf product utilizing a UV-stable, extruded-spine monofilament polyethylene fiber system. The finished playing surface must appear as mowed grass with no irregularities and must afford excellent traction for athletic shoes of all types. The finished surface must resist abrasion and cutting from normal use. The infill materials must be a mixture of graded, dust-free, rounded silica sand and crumb rubber. Seams (glued and/or sewn) must be as recommended by the synthetic turf manufacturer. The field must include an adequate drainage layer, including geotextile, panel drains, and stone base below the playing surface designed to prevent the field from excessive ponding of water. Grade field subgrades to provide a minimum of 0.7% slope from crown to sidelines. Drainage mats are not permitted. The synthetic playing field must be designed and constructed with a minimum eight- (8) -year warranty covering the synthetic playing surface against defects, workmanship and normal use, and increased G-max rating. The G-max value of the field must be from 100 to 125 at the completion of the installation and must not exceed a value of 175 during the 8-year warranty period; the increase in G-max value must not increase more than 5% in any single year. This surface must cover the entire area within the inside perimeter of the track.</p> <p>Bleacher pads. Reinforced concrete. Pad surface must 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>
<p>Plumbing and Drainage</p>	<p>Multipurpose field. Provide drainage per the selected manufacturer's specifications; do not use plastic cells for drainage. Subbase system must consist of a stone aggregate base on the subgrade to serve as a base for the synthetic turf and remove water from the synthetic turf surface. Subbase system must also include a concrete edge curb and attachment system and a sub-drainage system to convey storm and/or groundwater away from playing field areas. Sub-drainage system must consist of perforated HDPE drainage piping in gravel-filled trenches sloped to provide positive drainage. Provide an appropriate liner, as specified by the manufacturer, over the prepared subgrade and interiors of the sub-drain trenches prior to installation of subbase materials, piping, and trench backfill to prevent groundwater from entering the sub-drainage system. Provide water supply with quick hose disconnects at 4 locations around the perimeter of the field.</p> <p>If 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 for the track and multipurpose field. These drinking fountains may also be located on the support building exterior wall.</p>

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Power	Provide power to the lights, wireless scoreboard, and lighting control/communications kiosk.
Lighting	Provide system per Chapter 3, "Lighting." IESNA Class III lighting levels for recreation mode and Class II for competition mode.
Fencing	Provide a 4-ft (1.2-m) -tall vinyl-coated chain-link fence around outermost lane of track. The fencing must be 9 gauge (prior to vinyl coating) galvanized steel with vinyl-coated PVC coating, double-knuckle top and bottom with top and bottom rail. Color of vinyl coating specified by installation. Posts are to be 3-in. (75-mm) -diameter galvanized steel with vinyl coating and foundations are to be concrete with a minimum depth of 4 ft (1.2 m) or to the frost line, whichever is greater.
Furnishings, Fixtures & Equip. (FF&E)	<p>Multipurpose field. Soccer goals and cones. Provide natural grass turf or synthetic artificial turf grooming and maintenance equipment.</p> <p>Bleacher pads. Five-row, tilt-up, portable aluminum bleachers. Provide trash and recycling receptacles.</p> <p>Scoreboard zone. Provide an electronic wireless scoreboard that includes game timer/clock, home and visitor scores, and quarter and half indicators. Scoreboard must be sized to ensure visibility from the opposite end of the field. Provide protector (i.e., fencing/net) for scoreboard.</p>
Special Requirements	<p>Track. Track design and exact dimensions must be per <i>NCAA Cross Country/Track and Field Rules 11</i> guidelines for running tracks. Track will include lane markings; markings will be placed for 1.5-mile (2.41-km) events. The inner lane must have a width of 48 in. (1200 mm) and all other lanes must have a width of 42 in. (1050 mm). Inner and outer edges of track to have concrete containment curb per track manufacturer's design and requirements.</p> <p>Multipurpose field. Fixed-size playing area per Dimensions section above. Provide white striping for flag football per <i>USFFA National Rules</i>, "Diagram of Eight Man Field." Provide yellow striping for soccer per <i>NCAA Soccer Rules. 11</i> 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 must 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 ft² (m²)	

Table 5-9 Softball Field

Description/ Usage	This table describes the requirements for the softball field and related features, including dugouts, bleacher pads, lighting, scoreboard, and site circulation.
Dimensions	<p>Softball Field. The dimensions are as follows: bases are 70 ft (21.3 m) apart, pitching mound must be 50 ft (15.2 m) from home, and the outfield fence must be 300 ft (91.4 m) from home. The backstop must be 25 ft (7.6 m) from home plate. The side fence must be 25 ft (7.6 m) from the foul line. The synthetic turf softball field must be striped for softball per the <i>11 GSL – USSSA Slow-Pitch Rule Book & By-Laws 11</i> to include the foul lines, batters' boxes, coach's boxes, and on-deck circles. It is preferred that striping be integrated in the factory with the synthetic turf. Provide breakaway bases (double first base) attached to rubber grommets anchored in the ground that release on impact.</p> <p>The new synthetic turf softball field must utilize an "infill" system consisting of synthetic turf fibers and an infill of sand and crumb rubber.</p> <p>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 (1.53-m) space around perimeter. Separate pads and bleachers are to be provided on the home and visitor sides behind backstop.</p>
Surface Materials	<p>Softball field. Provide either a natural grass turf or a synthetic artificial turf surface. As a minimum, the synthetic turf field must be an infill turf product utilizing a UV-stable, extruded-spine monofilament polyethylene fiber system. The finished playing surface must appear as mowed grass with no irregularities and must afford excellent traction for athletic shoes of all types. The finished surface must resist abrasion and cutting from normal use. The infill materials must be a mixture of graded, dust-free, rounded silica sand and crumb rubber with a ratio of sand to rubber to be per manufacturer's recommendation but must be a minimum 25% sand to rubber by volume. <i>11</i> Seams (glued and/or sewn) must be as recommended by the synthetic turf manufacturer. To the maximum extent possible, field striping, markings, and inlays must be factory installed. <i>11</i> The field must include an adequate drainage layer, including geotextile, panel drains, and stone base below the playing surface, designed to prevent the field from excessive ponding of water. Grade field subgrades to provide a minimum of 0.7% slope for drainage. Drainage mats are not permitted. The synthetic playing field must be designed and constructed with a minimum eight (8) year warranty covering the synthetic playing surface against defects, workmanship, and normal use, and increased G-max rating. The G-max value of the field must be from 100 to 125 at the completion of the installation and must not exceed a value of 175 during the 8-year warranty period; the increase in G-max value must not increase more than 5% in any single year. Provide a cast-in-place concrete perimeter edge curb constructed as recommended by the synthetic turf manufacturer.</p> <p>Bleacher pads. Reinforced concrete. Pad surface must 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>Softball field. Provide drainage per the selected manufacturer's specifications; do not use plastic cells for drainage. Subbase system must consist of a stone aggregate base on the subgrade to serve as a base for the synthetic turf and remove water from the synthetic turf surface. Subbase system must also include a concrete edge curb and attachment system and a sub-drainage system to convey storm and/or groundwater away from playing field areas. Sub-drainage system must consist of perforated HDPE drainage piping in gravel-filled trenches sloped to provide positive drainage. Provide an appropriate liner, as specified by the manufacturer, over the prepared subgrade and interiors of the sub-drain trenches prior to installation of subbase materials, piping, and trench backfill to prevent groundwater from entering the sub-drainage system.</p> <p>Provide a minimum of 4 quick-couplers (2 on each side of the field) for turf maintenance and washing down the field. Quick-couplers must be located around the field so that a 100-ft (30-m) hose can reach all parts of the field. Locate couplers adjacent to the synthetic turf.</p> <p>If 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 for the track and multipurpose field. These drinking fountains may also be located on the support building exterior wall.</p>
Power	<p>Provide system per Chapter 3, "Electrical." Include power for lights, wireless scoreboard, and lighting control/communications kiosk.</p>
Lighting	<p>Provide system per Chapter 3, "Lighting." Match requirements of football fields per UFC 3-530-01.</p>
Fencing	<p>Backstop Fencing. Provide a 16-ft (4.9-m) -tall vinyl-coated chain-link softball backstop with 6-ft (1.8-m) top overhang panel sloped at 45 degrees 25 ft (7.6 m) from home plate. The backstop must be 16 ft (4.9 m) wide on the home field side, 16 ft (4.9 m) wide behind home plate, and 16 ft (4.9 m) wide on the visitor side. The fencing must be 9 gauge (prior to vinyl coating) galvanized steel, vinyl coated, and be double-knuckled at the top and bottom. Color of vinyl coating specified by installation. Provide an 8-in. (200-mm) -wide concrete maintenance curb 4 in. (100 mm) above adjacent grade at the base of / below the fence.</p> <p>Side Fencing. Provide a 6-ft (1.8-m) -tall vinyl-coated chain-link fence between the backstop and outfield fence with one 4-ft (1.2-m) man gate adjacent to the farthest end of the dugout from home plate and one double 5-ft (1.5-m) (10-ft [3-m] opening) equipment gate halfway between the first to second base line and the outfield fence. Fencing must be 9 gauge (prior to vinyl coating) galvanized steel, vinyl coated, double-knuckle top and bottom with top and bottom rail. Color of vinyl coating specified by installation. Provide an 8 in. (200 mm) wide concrete maintenance curb 4 in. (100 mm) above adjacent grade at the base of /below the fence.</p> <p>Outfield Fence. Provide a 6 ft (1.8 m) tall vinyl coated chain link fence around the outfield. Fencing must be 9 gauge (prior to vinyl coating) galvanized steel with vinyl coating, double knuckle top and bottom with top and bottom rail with 4-1/2 in. (112 mm) corrugated plastic tubing over top rail/fence. Color of vinyl coating specified by Installation. Provide an 8-in. (200-mm) -wide concrete maintenance curb 4 in. (100 mm) above adjacent grade at the base of / below the fence.</p> <p>Foul Pole. Provide a 20-ft (6.1-m) -tall foul pole with 1.5 ft (0.5 m) by 12 ft (3.7 m) visible galvanized steel mesh wing with optic yellow vinyl coating at the intersection of each foul line and outfield fence.</p>

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Furnishings, Fixtures & Equip. (FF&E)	<p>Softball field. Bases. Provide natural grass turf or synthetic artificial turf grooming and maintenance equipment.</p> <p>Bleacher pads. 5-row, tilt-up, portable aluminum bleachers. Provide trash and recycling receptacles.</p> <p>Scoreboard zone. Provide an electronic wireless scoreboard that includes game timer/clock, home and visitor scores, and ball/strike/out indicators. Scoreboard must be sized to ensure visibility from the backstop. Provide protector (i.e., fencing/net) for scoreboard.</p>
User-provided Equipment	None required.
Special Requirements	<p>Softball field. Fixed-size playing area per Dimensions above.</p> <p>Site circulation. Provide a lighting control/communications kiosk adjacent to the side fencing. The kiosk must include lighting system controls 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> <p>Dugouts (Optional). Provide dugouts for the visitor and home teams. Each dugout to be 8 ft (2.4 m) deep by 20 ft (6.1 m) wide with a minimum 4-in. (100-mm) -thick broom-finished concrete slab floor; surrounded by a 6-ft (1.8-m) -tall vinyl-coated chain-link fence beginning 25 ft (7.6 m) along the base line from home plate. The fencing must have a 4-ft (1.2-m) -wide opening at the end farthest from home plate. Fencing to be 9 gauge (prior to vinyl coating) galvanized steel, vinyl coated, double-knuckle top and bottom with top and bottom rail. The concrete slab floor must extend 4 in. (100 mm) beyond the face of the chain link fencing and be 4 in. (100 mm) above adjacent grade. Provide a single-slope standing seam metal roof with 8 ft (2.4 m) clear to underside of structure inside of the dugout. The roof must start behind/outside of the fence to the field and extend a minimum of 1 ft (0.3 m) beyond the side and back fencing of the dugout. Color of vinyl coating and metal roof as specified by installation.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff Customers
Min. net ft² (m²)	

Table 5-10 \1\ Building Support/Vertical Circulation

Description/ Usage	This space is to accommodate building HVAC, janitor's closet, and non-ABA access to the press box.
Min. Ceiling Ht.	N/A
Finishes	Walls. CMU with heavy-duty epoxy paint. Floor. Sealed concrete or seamless vinyl. Ceiling. Painted exposed structure.
Plumbing	Provide a floor drain. Provide a mop sink with hot and cold water and a hose connection.
HVAC	Heating and ventilation only.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	As required for mechanical equipment.
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 shelving in janitor's closet.
Furnishings, Fixtures & Equip. (FF&E)	Mechanical HVAC equipment, as required. If required by installation, provide lockable cabinets for cleaning supplies in janitor's closet.
User-provided Equipment	None required.
Special Req.	None.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

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CHAPTER 6 AUSTERE FITNESS CENTERS (NAVY ONLY)

CHAPTER 1 GENERAL

6-1 PURPOSE.

The purpose of this chapter is to provide implementation requirements for austere construction as established by CNIC. These requirements were developed to address construction of support facilities in CNIC-designated operating environments.

6-2 DEFINITION AND SCOPE.

An austere facility is defined as a structure designed and constructed with minimal infrastructure, footprint area, and finishes, incorporating applicable building codes and facility criteria to assure adherence to all health, accessibility, and life safety standards and regulations required to fulfill the mission, including antiterrorism force protection (AT/FP) appropriate to each site.

- Austere construction is intended for support facilities, such as unaccompanied housing (UH), administration, galleys, and fitness facilities.
- Build austere facilities with the least total ownership costs (TOC) possible, including purchase, maintenance, and use of consistently available alternative local goods.

6-3 APPLICABILITY.

This chapter applies to Navy fitness center facilities designated as austere by CNIC. This chapter modifies requirements provided in other chapters of this UFC.

6-4 MODIFICATIONS.

The following are modifications to this UFC. When designated austere, delete the coordinating paragraph in this UFC and replace with the following Chapter 6 paragraph:

CHAPTER 2 PLANNING AND LAYOUT

2-1 LOCATION DETERMINANTS.

2-1.1 Access.

Locate the fitness center to be visible and easily accessible to a diverse representation of users. Consider sites located along pedestrian paths to the existing or proposed barracks/dormitories, existing or proposed MWR/NEX facilities, and/or the dining facility. To accommodate patron access, consider the relationships to existing or proposed vehicular and pedestrian circulation patterns, bike trails, and bus stops.

2-1.2 Cost.

Design these facilities with consideration of a timeframe appropriate to austere facilities, regionally appropriate acquisition of equipment, base operating support (BOS) access difficulties, and logistical difficulties.

2-3 SPACE PROGRAM.

Refer to UFC 2-000-05N, *Facility Planning Criteria for Navy/Marine Corps Shore Installations*, for space planning spreadsheets for austere fitness facilities.

2-5 SPACE ASSESSMENT.

See the austere functional data sheets in Chapter 6 for additional information on the space types and their relationships to each other.

2-7 PROGRAM AREAS.

2-7.1 Fitness Program, Administrative Areas, and Building Support.

Table 6-1 lists the core and optional areas for the fitness program, administrative areas, and building support. This table identifies functional areas. Program the facility, including areas such as circulation/corridors, exterior wall cavities, and mechanical/electrical/communication rooms to determine the gross area of the building. See UFC 3-101-01 for methods to calculate gross building area.

Table 6-1 \1\ Austere Functional Program Areas

Functional Program Area	Description/Requirements
Lobby/Reception	
Entry lobby and waiting/display	Entry space in front of control counter 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 LOS to, at minimum, the entry, free weights, and locker room entrance. Visual control over other key areas must be accommodated via LOS or CCTV. Provides area to hold gear for issue (e.g., towels, balls, and racquets).
Public restrooms	Restrooms used primarily by visitors, spectators, and persons not using the locker and shower rooms. Sizing is tied to gym capacity.
Janitor's closet	Space used by custodial staff, with mop sink and storage space.
Administrative	
Director's office	Private office.
Program managers' offices	Workstations.

Administrative/Support Staff	Workstations.
Classroom	Space used for conducting training and large meetings. Classroom sized for 25 persons (750 ft ² [69.68 m ²]) for small facilities, 50 persons (1,500 ft ² [139.35 m ²]) for medium and large, and 75 persons (2,250 ft ² [209.03 m ²]) for extra-large and jumbo 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 subdividable room with partitions (for classes and/or unit/command fitness training).
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	
Fitness program manager's office	Private office adjacent to fitness assessment room and fitness spaces. May include fitness testing equipment.
Structured Activities	
Locker rooms	Separate male/female facilities. Each locker room is divided into the three sub areas indicated.
Men's locker room	Programmed per installation population.
Locker/dressing area	Programmed per installation population.
Toilet area	Programmed per installation population.
Shower/drying area	Programmed per installation population.
Women's locker room	Programmed per installation population.
Locker/dressing area	Programmed per installation population.

Toilet area	Programmed per installation population.
Shower/drying area	Programmed per installation population.
Support Areas	
Laundry	For towels and uniforms.

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CHAPTER 3 GENERAL DESIGN CRITERIA

3-3 ARCHITECTURE.

Refer to UFC 3-101-01 for direction as to the appropriate core criteria for architectural details and finish concerning:

- Exterior finishes, vapor retarders, thermal insulation, and air infiltration.
- Design and detail roof systems to resist maximum wind for the area.
- Austere construction requires durable materials and finishes throughout.

In addition to UFC 3-101-01, the following requirements in paragraphs 3-4.3, 3-5.1, and 3-5.2 are specific to austere fitness centers.

3-4.3 Exterior Finishes.

Exterior surfaces requiring paint must use a minimum of one prime coat and two finish coats.

3-5.1 Interior Construction.

Ability to repair, refinish, and reconfigure are important in austere construction. For austere projects, the use of light-frame construction for interior wall construction is preferred. Concrete/masonry is optional; minimize load-bearing walls where appropriate.

Construct cabinets to American Woodworking Institute (AWI) custom grade with heavy-duty hardware.

3-5.2 Finishes.

Refer to Table 6-2 for austere interior finishes. For additional information on finishes in specific areas, see the functional data sheets in Chapter 6.

Ceilings are to be exposed and painted, including all exposed plumbing, mechanical fire stops, and electrical conduit, unless it is more cost-effective to provide a finished ceiling.

Table 6-2 Austere Interior Finishes

General Space	Recommended Finishes			
	Floor	Base	Walls	Ceiling
Entry/vestibule	CONCS/WM	RB	P	P
Control counter/equipment issue storage	CONCS	RB	P	P
Public toilets	CONCS or PT	RB	P or CT	P
Janitor's closet	CONCS	RB	P	P
Administrative office	CONCS	RB	P	P
Classroom/conference room	CONCS	RB	P	P
Copy/work room	CONCS	RB	P	P
Basketball/volleyball courts	RSF	RB	P	P
Group exercise room	RSF	RB	P	P
Fitness spaces	RSF	RB	P	P
Locker rooms	PT	CT	P	P
Toilets	PT	CT	P/CT wet walls	P
Showers	PT	CT	CT full height	P
Laundry	CONCS	RB or CT	P or CT	P
Stairwells	CONCS	RB	P	P

Key:

CONCS – Sealed concrete

CT – Ceramic tile

P – Paint

PT – Porcelain tile

RB – Rubber base

RSF – Resilient sports flooring

WM - Walk-off mat (surface)

3-6 SERVICES.

3-6.1 Plumbing.

Avoid plumbing chases whenever possible by placing plumbing in wall cavities. Fixture clearances must be appropriately sized for the intended occupants and use low-flow WaterSense requirements where feasible.

- Provide hot and cold water to laundry facilities.
- Provide easily accessible shutoff valves at all fixtures.
- Water closets must be commercial-quality. Use low-consumption type only if appropriate for the austere location. It is recommended that areas with low water pressure use power-flush-type water closets. Use elongated, one-piece construction with a closed front seat and a lid. Provide fixtures in a neutral color.

- Provide flush-valve toilets, dual-flush manual type.
- Provide hose bibbs on one exterior wall of each building and near air-cooled mechanical equipment; frost-free as dictated by climatic conditions. Provide floor drains in all janitor's closets and laundry rooms, if applicable.
- Use the following flow fixtures as standards: washerless faucets at lavatories with single-lever faucets. Provide overhead rainfall type showerheads with maximum 2.2 gallons per minute (0.14 liter per second [l/sec]) flow rate. Locate showerheads a minimum of 75 inches (1875 mm) above the shower base.

3-7 FURNISHINGS AND EQUIPMENT.

Furnishings, fixtures, and equipment (FF&E) procurement packages must be designed by the same design agent as the facility to ensure complete coordination. Final approval of FF&E specifications will be determined by the design team, including guidance/input received from the respective NAVFAC interior designers. A turn-key approach to FF&E procurement within military construction projects is directed to the greatest extent possible and practical. This will ensure a coherent FF&E package and the most practical use of funding.

Specified furnishings must be as minimal as possible to meet the required mission of the facility. Durability, flexibility, and sustainability must be the major prerequisites for all products provided. Special attention must be given to the geographic location and extreme weather conditions of the facility to provide the most practical solutions to endure the situation. Surge capabilities must be considered as required by the specific location and facility requirements.

3-8 SITE DESIGN AND ORGANIZATION.

Apply austere decision-making processes to assess, modify, and incorporate location, antiterrorism circulation, and lighting plans appropriate to local conditions.

3-8.2 Parking and Access Drives.

Apply austere decision-making to assess, modify, and incorporate requirements such as pedestrian circulation, bus access, service vehicle parking, and lighting plans appropriately to local conditions and to limit parking as much as possible while still meeting the facility mission. Review the security study and incorporate its requirements into the design. Ensure existing and proposed parking is in compliance with antiterrorism requirements. In austere facilities, parking for residents, visitors, staff, and service personnel must be extremely minimal and only as critical to the mission. Maintenance parking for service functions does not necessarily require dedicated space. Use the expected frequency of maintenance vehicles to determine whether dedicated parking is needed. Locate service access and parking to avoid disturbing residents.

3-8.3 Service Drive.

Limit (or eliminate) use of screen walls.

3-9 SUSTAINABLE DESIGN.

Comply with UFC 1-200-02. For projects designated austere (CONUS and OCONUS), the Chief Engineer of NAVFAC has waived third-party certification requirements.

CHAPTER 4 SPECIFIC DESIGN CRITERIA

4-1 INTRODUCTION.

This chapter identifies the specific design needs for each functional area outlined in the space program.

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, fixed window treatments, and laundry machines.
- Furnishings, Fixtures, and Equipment (FF&E). This includes contractor-furnished, contractor-installed loose items such as desks, tables, chairs, and bookshelves.
- User-provided Equipment. This includes all government-furnished, government-installed items, which are typically limited to office equipment such as computers, printers, copiers, and flat panel displays (if mounted, flat panel display mount would be built-in).

4-3 FUNCTIONAL DATA SHEETS.

When designated austere, delete the coordinating table in this UFC and replace with the following Chapter 6 table:

Table 6-3 (Replace Table 4-1) Austere Entry

Description/ Usage	The entry serves as the primary entrance to the facility for patrons.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted surfaces. Floor. Sealed concrete, moisture and slip-resistant. Provide a surface walk-off mat/area at the entrance door. Provide rubber base. Ceiling. Exposed painted structure.
Plumbing	Provide electric water cooler(s) in proximity of public toilets/locker rooms.
HVAC	Provide 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."
Communication	CCTV. Provide at least one outlet or as needed to cover the entrance. CATV/Internal Video. Consider a CATV outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide an outlet. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	None.
Furnishings, Fixtures & Equip. (FF&E)	Furniture must be durable, easy to clean, and moisture-resistant, if provided. Provide a means to display installation and staff information.
User-provided Equipment	Provide CCTV cameras per the outlet count.
Special Req.	Provide an airlock at the main entrance. Exterior doors must 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	Staff. Customers.
Min. net ft² (m²)	

Table 6-4 (Replace Table 4-2) Austere Control Counter/Equipment Issue/Storage

Description/ Usage	The control counter is often referred to as the front desk or reception desk. It is the focal point of information exchange within the building and is the check-in location for patrons. Patrons must 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. Equipment such as towels and balls 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. Staff access to the counter must permit access to the free weight and treadmill areas for emergency response.
Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted surfaces. Floor. Sealed concrete, moisture and slip-resistant finish. Provide rubber base. Ceiling. Exposed painted structure.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Provide an emergency HVAC shut-off control in accordance with UFC 4-010-01.
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 power requirements are extremely site- and locale-specific.
Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) of general ambient lighting. Provide fixed 50 fc (500 lx) task lighting at the control counter.
Communication	CCTV. All monitors must be viewable from this area. CATV/Internal Video. None required. PA/Audio. Provide PA and audio system controls at the control counter for room-by-room and "all call" communication. Provide intercom capability as directed by installation. Provide a speaker. Telephone. Provide at least two general-purpose phone lines. Data. Data outlets must be provided for every piece of equipment identified as requiring data, plus a 25% spare capacity for flexibility. Pieces of equipment include, but are not limited to, computers, copier/printer/fax, and ID check system. Security. None.
Acoustics	No provisions required.
Casework/ Built-in Equipment	Provide a 24-in (600-mm) -deep counter with built-in base cabinets. Provide file drawers and storage drawers with a minimum of two lockable drawers for each POS. The counter must be dual height for standing transactions, seated office functions, and ABA customer service. Note that ABA-height counter must have knee-hole space on both sides of the counter. The counter must be a durable solid surface material such as concrete or solid surfacing material; laminate is not permitted. Provide a towel return drop opening in the counter top with space for a laundry cart below, if required by operations. Modesty panels and apron must be of durable materials. Provide supports such as steel angle braces for counters with knee-hole space. Provide wall cabinets. Storage must accommodate towels and small athletic equipment such as balls. Provide PA controls.

Furnishings, Fixtures & Equip. (FF&E)	Chairs and stools. Provide an AED.
User-provided Equipment	Desktop computer for administrative functions, CCTV monitors, and printers.
Special Req.	Attendants at the control desk must have direct LOS visual control over the following, at minimum: entry, free weight area, treadmill section of the cardiovascular area, and locker room entrance. Visual control over other key areas must be accommodated via LOS and/or CCTV and are identified in the individual functional data sheets.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-5 (Replace Table 4-4) Austere 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. Locate adjacent to the control counter. It is preferred that the location be on an outside wall.
Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU or mold-resistant gypsum wallboard. Provide durable finishes, rub rails, and metal/high-impact plastic corner guards. Floor. Sealed concrete with rubber base. Ceiling. None or epoxy painted mold-resistant gypsum wallboard.
Plumbing	Provide hot and cold water and drain connections in recessed washer outlet box to each of the washing machines and one laundry sink. Provide floor drains. Provide connections and floor drain to an ice machine, if provided.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 76 °F (24 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Laundry Rooms, Central." Provide separate vents for each dryer and vent dryers per UFC 3-410-01.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Regardless of size, enclose laundry rooms with a 1-hour fire barrier.
Power	Provide outlets per Chapter 3, "Electrical". Provide a dedicated circuit for each washer (or washer extractor) and for each dryer (or dryer tumbler). If hard-wired (non-plug connected), provide wall-mounted safety disconnect switch within sight of the equipment it controls.
Lighting	Provide system per Chapter 3, "Electrical."
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	Large, high-capacity commercial washers and dryers.
Furnishings, Fixtures & Equip. (FF&E)	Provide storage shelves for laundry supplies. Laundry carts.
User-provided Equipment	None.
Special Req.	Provide easy access to rear of dryers (or tumblers) 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, washers/extractors, dryers/tumblers, and ice machines.
For use during project execution by the appropriate Service agency	
Occupancy	Staff.
Min. net ft² (m²)	

Table 6-6 (Replace Table 4-5) Austere Public Toilets

Description/ Usage	These toilet rooms are used primarily by patrons and staff if no locker and shower rooms are provided. They must be adjacent to the lobby and gymnasium. Provide unisex or separate male and female restrooms.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Semi-gloss enamel painted, mold-resistant gypsum or ceramic tile wainscot. Floor. Sealed concrete or non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Exposed painted structure.
Plumbing	Provide wall-hung water closets, wall-hung urinals, and lavatories based on UFC 3-420-01 for the calculated occupancy of the gymnasium. Provide a floor drain.
HVAC	Provide system per Chapter 3, "HVAC." Exhaust per UFC 3-410-01.
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 undermount or integral sink. For single-occupancy toilets, wall-hung lavatories without countertop are allowed. Solid plastic (HDPE) toilet and urinal partitions. Toilet accessories: Toilet paper dispensers, paper towel dispenser, trash receptacle, robe hooks, grab bars, sanitary napkin disposal (female water closet stalls), seat cover dispensers, and soap dispensers. Mirror.
Furnishings, Fixtures & Equip. (FF&E)	None.
User-provided Equipment	None.
Special Req.	None.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-7 (Replace Table 4-5) Austere Janitor's Closet

Description/ Usage	This space is for use of custodial staff and includes mop sink and storage space for cleaning equipment and supplies.
Min. Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Semi-gloss enamel painted, mold-resistant gypsum wallboard. Floor. Sealed concrete. Ceiling. Not required but where provided must be moisture-resistant and cleanable.
Plumbing	Provide a floor drain. Provide a mop sink with hot and cold water and a hose connection.
HVAC	Provide system per Chapter 3, "HVAC." Exhaust per UFC 3-410-01.
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. None required. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide shelving.
Furnishings, Fixtures & Equip. (FF&E)	If required by installation, provide lockable cabinets for cleaning supplies.
User-provided Equipment	None required.
Special Req.	Locate in proximity of other areas with plumbing. This closet includes storage for pails, mops, vacuums, and related cleaning supplies and equipment. Include a lockable door (which can be opened from the inside). Provide space for lockable cabinets for cleaning supplies, as required by installation.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-8 (Replace Table 4-8) Austere Administrative Office

Description/ Usage	The administrative office provides space for the director, program manager(s) and/or support staff. This space may also be used for conference and copy room functions for staff.
Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board. Floor. Sealed concrete with rubber base. Ceiling. Exposed painted structure.
Plumbing	None required.
HVAC	Provide 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."
Communication	CCTV. Provide monitoring capability when directed by the installation. CATV/Internal Video: One outlet required for office. PA/Audio: Provide a speaker. Provide controls in the office with room-by-room and "all call" communication. Provide intercom capability as directed by installation. 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, and scanner. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	None.
Furnishings Fixtures & Equipment (FF&E)	Workstations—provide furniture for 64 ft ² (6 m ²) workstation: desk chair and side chair for open offices. Provide task lighting and adequate space for filing and overhead storage.
User-provided Equipment	Computers and other office equipment.
Special Requirements	Provide an interior window with blinds to accommodate visual supervision over the fitness area and the control counter, where possible. Provide a vision panel, minimum 5 ft ² (0.46 m ²), in the door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-9 (Replace Table 4-9) Austere Classrooms

Description/ Usage	This optional space is used for conducting meetings and training. This function may be incorporated into the administrative office area. When provided as a separate space, program for 25 persons at 750 ft ² (69.7 m ²)
Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wallboard. Floor. Sealed concrete with rubber base. Ceiling. Exposed painted structure.
Plumbing	None required.
HVAC	Provide 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."
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. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	None.
Furnishings Fixtures & Equipment (FF&E)	Provide tables, chairs, and an AV cart, as required.
User-provided Equipment	Provide CCTV cameras per the outlet count.
Special Requirements	Provide a vision panel, minimum 5 ft ² (0.46 m ²), in the door if space is provided.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-10 (Replace Table 4-10) Austere Copy/Work/Break Room

Description/ Usage	This optional space is used as a staff workroom for copying, meetings, breaks, and lunches and may be incorporated into the administrative office area.
Ceiling Ht.	9 ft (2.74 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted gypsum wall board. Floor. Sealed concrete with rubber base. Ceiling. Exposed painted structure.
Plumbing	Provide a two-compartment stainless steel sink with hot and cold water. Provide a cold-water connection for refrigerator ice maker.
HVAC	Provide 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 if casework is provided.
Lighting	Provide system per Chapter 3, "Electrical."
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide outlets as required for equipment. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	Solid-surface countertops if casework is provided.
Furnishings Fixtures & Equipment (FF&E)	Table, chairs, microwave, coffee machine, and refrigerator, as required.
User-provided Equipment	Copier, fax machine, printers, and other office equipment, as required.
Special Requirements	Provide a vision panel, minimum 5 ft ² (0.46 m ²), in the door if space is provided
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-11 (Replace Table 4-11) Austere 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. Distribution of lockers for each gender are determined on a case-by-case basis.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Epoxy or semi-gloss enamel painted CMU or mold-resistant gypsum wallboard. Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Exposed painted structure.
Plumbing	Provide and locate floor drains as required to ensure proper drainage and no standing water on the floor. Provide an electric water cooler.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side of this space (opposite the adjacent toilet/shower wet side) and exhaust from the wet area. Exhaust per UFC 3-410-01. Provide ceiling fans with wall-mounted controls (do not have to be HVLS fans).
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Where shower spaces are open to the locker room area, provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the locker room.
Power	Provide outlets per Chapter 3, "Electrical." Provide counter-height outlets at the vanity area.
Lighting	Provide system per Chapter 3, "Electrical." Lighting fixtures must have translucent, damp location, unbreakable protective covers. Minimize shadowing at face of lockers.
Communication	CCTV. None required. CATV/Internal Video. Provide CATV outlets for wall or ceiling mounts. PA/Audio. Provide PA speakers as needed for full coverage. Provide speakers for the separate audio system. Provide an emergency call/alarm. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Provide solid plastic (HDPE) lockers and benches. Lockers must be a minimum of 15 in. wide by 24 in. deep (375 mm by 450 mm). Typically provide a mix of full-and half-sized Z-shaped lockers. The location's climate will determine 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. (400-mm) -wide integral (usually part of the locker system) benches. Mount lockers at a level above the floor to ensure operating hardware is easily reachable. Provide a full-height wall mirror.
Furnishings, Fixtures & Equip. (FF&E)	Provide a scale and a wall clock. Provide a flat panel display.

User-provided Equipment	Provide blood pressure monitor.
Special Req.	Provide sloped-top lockers to preclude the tops of the lockers being used for storage.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-12 (Replace Table 4-12) Austere 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 stalls. If the facility includes a pool, the pool entry/exit must be adjacent to this area. Shower compartment construction options include constructed separation walls, field-assembled pre-manufactured shower partitions and pre-manufactured solid surface shower compartments.
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 tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Exposed painted structure.
Plumbing	Provide minimum 36-in (900-mm) -wide private shower 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 system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side (adjacent locker/dressing area) and exhaust from the wet area (toilet/shower). Exhaust per UFC 3-410-01. If constructed, separation walls are used from floor to ceiling; locate exhaust outlets in each space.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the shower room.
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. Provide an emergency call/alarm. Telephone. None required. Data. None required. Security. None required.
Acoustics	No special provisions required.
Casework/ Built-in Equipment	Solid plastic (HDPE) shower partitions secured at floor and ceiling or 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.
Furnishings, Fixtures & Equip. (FF&E)	None required.
User-provided Equipment	None required.
Special Req.	Design the space to block direct views from the public areas into the shower room areas.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-13 (Replace Table 4-13) Austere 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. Ceramic tile wainscot with dark-colored epoxy grout on cementitious backer units at wet walls/fixture areas. Epoxy or semi-gloss painted, mold-resistant gypsum wallboard elsewhere. Floor. Non-slip porcelain tile with dark-colored epoxy grout. Slope tile to drain. Ceiling. Exposed painted structure.
Plumbing	Provide wall-hung water closets, wall-hung urinals, and lavatories based on UFC 3-420-01 for the calculated occupancy of the facility. Provide floor drains to fully drain area.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 70 °F (21 °C) to 78 °F (26 °C). Provide supply air from the dry side of this space (adjacent locker/dressing area) and exhaust from the wet area (toilet/shower). Exhaust per UFC 3-410-01.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety." Where shower spaces are open to the toilet room, provide corrosion-resistant sprinklers and escutcheons such as stainless steel throughout the toilet room.
Power	Provide outlets per Chapter 3, "Electrical."
Lighting	Provide system per Chapter 3, "Electrical." Lighting fixtures must have translucent, damp location, unbreakable protective covers with shatterproof lens.
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 undermount or integral with the counter. Solid plastic (HDPE) toilet and urinal partitions secured at floor and ceiling. Toilet accessories: toilet paper dispensers, paper towel dispenser, 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)	None required.
User-provided Equipment	None required.

Special Req.	Design entrances to prevent direct views into this area.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-14 (Replace Table 4-20) Austere Gymnasium/Basketball/Volleyball Courts

Description/ Usage	Optional space as approved by CNIC. Provide a covered outdoor basketball/volleyball court. Court size must meet NCAA standards. \1\ See Appendix D of this UFC for a link to the NCAA basketball court diagram. /1/
Ceiling Ht.	28 ft (8.53 m) clear height to lowest overhead element.
Finishes	Walls. Provide durable wall system up to 12 ft (3.66 m) in height, such as CMU or concrete with heavy-duty epoxy. Above 12 ft (3.66 m), use semi-gloss enamel. Floor. Synthetic multipurpose, resilient athletic flooring. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i> ; however, where primary space use is basketball, minimum ball rebound must be 93%. Ceiling. Exposed, painted structure.
Plumbing	No plumbing fixtures in the gymnasium. Ensure access to nearby electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Gym, sports arena (play area)." Provide durable air grill covers and do not place air grills in line with basketball nets. Locate ductwork to avoid trapping balls.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety," inclusive of mechanical damage. Provide protection for sprinklers, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or safety zones near activity spaces. Install component equipment (except manual pull stations) minimum 8 ft (2.4 m) AFF for safety considerations. Provide manual pull stations with protective covers. Provide upright sprinklers with head guards.
Power	Provide outlets per Chapter 3, "Electrical." Provide power for the scoreboard; shot clocks; and a high, wall-mounted clock. Provide power requirements for other functions such as retractable backboards and divider curtain. Locate power outlets along sidelines at center court.
Lighting	Provide system per Chapter 3, "Electrical." Provide lighting levels for basketball in accordance with IESNA Class III adjustable up to Class II. Provide keyed light switches. Provide fixtures with wire cages or appropriate shatterproof luminaires. Do not locate fixtures directly above basketball backboards.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. None required, unless specified by installation. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Provide 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	No provisions required.

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. Tournament courts only require 2 goals. Breakaway rims must be installed on all goals. • Provide volleyball built-in flush floor insert sleeves in each court. • 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 to officials, players, and spectators. • Provide game lines on flooring for full- and half-court basketball and volleyball. • Provide 6-ft (1.83-m) -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)	Provide volleyball stanchions, net, standard protective pads, net antenna, as required. Provide wrestling mat, exercise mat, protective floor coverings with portable rolling stand, seating, scoring table, and chairs as required by installation.
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<ul style="list-style-type: none"> • Interior entrance doors into the gym must have vision panels, minimum 5 ft² (0.46 m²) each, and ensure visual access from the control counter to the gym entrance. Where line of sight is not possible, CCTV monitoring of gym entrance must be provided. • 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 12 ft (3.7 m) side to side and 18 ft (5.5 m) end to end of unobstructed floor space as a safety zone between the outer edge of the playing area and any adjacent court playing area. • Design for moisture control and prevention of condensation on floor surface. Design for 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. • Mitigate glare on the play and spectator areas. Any glass panels must be a minimum of 18 ft (5.49 m) AFF and 0.5-in. (13-mm) -thick tempered, laminated safety glass. • Do not locate windows, doors, or other obstructions within 7 ft (2.14 m) of all backboard centerlines. • Ensure no glazing or lighting can create glare or distraction on the play areas and cross-court play. Do not use window treatments to mitigate glare.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers. Participants. Spectators.
Min. net ft² (m²)	

Table 6-15 (Replace Table 4-21) Austere Gymnasium Storage/Support

Description/ Usage	Optional space as approved by CNIC.
Ceiling Ht.	10 ft (3.05 m) minimum.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU or painted gypsum wall board. Floor. Sealed concrete with rubber base. Ceiling. None required.
Plumbing	None required.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 65 °F (18 °C) to 85 °F (29 °C).
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 fixtures with wire cages or appropriate shatterproof luminaires.
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	None.
Furnishings, Fixtures & Equip. (FF&E)	Shelving and storage cabinets as required.
User-provided Equipment	None.
Special Req.	None.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-16 (Replace Table 4-24) Austere 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, and yoga.
Ceiling Ht.	10 ft (3.05 m) minimum clear to lowest overhead feature.
Finishes	Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU. Painted, double-layer high-impact gypsum board on studs is also acceptable. Floor. Synthetic multipurpose, resilient athletic flooring. Flooring must meet DIN standards for the specified function per <i>ACSM's Health/Fitness Facility Standards and Guidelines</i> . Ceiling. Exposed painted structure.
Plumbing	None required. Provide access to electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/aerobics room."
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	Provide outlets per Chapter 3, "Electrical." Provide power at flat panel display mounting locations and for sound system.
Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) minimum at the floor. To address safety concerns, coordinate lighting design with equipment layout and ensure that equipment users, particularly those using horizontal benches, are not exposed to glare of direct/down lighting. Provide protection for all fixtures when appropriate for specific activity.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. Provide outlets for monitors coordinated with their location. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. Provide data outlets in the walls or in recessed floor boxes. Security. None required.
Acoustics	No provisions required.
Casework/ Built-in Equipment	Provide one acoustical operable partition. Partition must be recessed into an alcove. Provide 6-ft (1.83-m) -tall mirrors on at least two walls at a minimum of 18 in. (450 mm) above the floor. If required, provide infrastructure and speakers for sound system for each divided space. Provide wall- or ceiling-mounted flat panel display mount in each divided space as required. Provide personal effects storage, such as cubbies, for customers in the room.
Furnishings, Fixtures & Equip. (FF&E)	Provide other fitness equipment as needed: indoor cycling equipment, stair steps, exercise balls, and small dumbbells. If required, provide sound system with mp3 and auxiliary input capability. Provide an AED.
User-provided Equipment	CCTV cameras per the outlet count. Provide flat panel displays.

Special Req.	Provide vision panel in the door, minimum 5 ft ² (0.46 m ²). Design the rooms to be rectangular to allow for flexibility in use. Provide storage room with a direct adjacency to store items such as mats, stair steps, wall padding, and other fitness equipment as required.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

Table 6-17 (Replace Table 4-25) Austere Fitness Area

Description/ Usage	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 one or multiple areas throughout the facility. 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, and stair climbers.
Ceiling Ht.	12 ft (3.66 m) minimum to the lowest element. 14 ft (4.27 m) is preferred.
Finishes	<p>Walls. Utilize a durable and scrubbable eggshell or satin finish, whichever has higher gloss, for painted CMU. Provide high-impact wall guards up to 18 in. (450 mm) above finished floor in the free weight area.</p> <p>Floor. Use permanently adhered resilient athletic flooring consisting of dual durometer layers of natural and synthetic rubbers, calendared and vulcanized together. The top layer is a non-porous, slip-resistant, textured surface; the bottom layer is a cushioned performance layer. In the stretching/warm-up/cool-down spaces, use ¼ in. (6 mm) thickness; in cardio, selectorized machine weights, and free weight areas, use 3/8 in. (9 to 10 mm) thickness.</p> <p>Impact and athletic flooring system cannot be accommodated by interlocking flooring tiles or movable furnishings such as mats.</p> <p>Ceiling. Exposed, painted structure.</p>
Plumbing	Provide a minimum of two electric water coolers.
HVAC	Provide system per Chapter 3, "HVAC." Temperature operating range: 68 °F (20 °C) to 74 °F (23 °C). Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms." Provide ceiling fans.
Fire Protection	Provide system per Chapter 3, "Fire Protection and Life Safety."
Power	<p>Provide outlets per Chapter 3, Electrical."</p> <p>Free weight area: Provide outlets for wall- or ceiling-mounted flat panel displays.</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. Provide outlets for wall- or ceiling-mounted flat panel displays.</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. Provide dedicated circuits for all treadmills. Coordinate flat panel display 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 flat panel displays as necessary to ensure adequate viewing angles for all equipment.</p>

Lighting	Provide system per Chapter 3, "Electrical." Provide 30 fc (300 lx) uniform lighting. To address safety concerns, coordinate lighting design with equipment layout and ensure that equipment users, particularly those using horizontal benches, are not exposed to glare of direct/down lighting.
Communication	<p>CCTV. Provide outlets as needed for coverage.</p> <p>CATV/Internal Video. Provide outlets for wall- or ceiling-mounted flat panel displays throughout the fitness area. Mount at proper viewing height for cardiovascular exercise machines in that area; height as selected by fitness area designer. The quantity and location of the CATV outlets must be determined by the sports fitness center designer and the installation fitness program manager and must be coordinated with the equipment layout. V\ Consider options for wireless transmission of audio broadcast from video monitors. /1/</p> <p>PA/Audio. Provide PA speakers as needed. Provide a separate audio system with speakers as needed for full coverage. Provide 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 and entertainment systems. Data to equipment for fitness tracking is optional.</p> <p>Security. None required.</p>
Acoustics	No provisions required.
Casework/ Built-in Equipment	Provide 6-ft (1.83-m) -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.
Furnishings, Fixtures & Equip. (FF&E)	<p>V\ Fitness equipment must be commercial grade.</p> <p>Exercise mats, wall clocks, and trash containers. /1/</p> <p>Provide self-serve equipment cleaning supply stations throughout that include disinfectant spray bottles and disposable or reusable towels. Provide an AED.</p>
User-provided Equipment	CCTV cameras per the outlet count.
Special Req.	<p>If this space is provided on the second floor, ensure the access is sized to accommodate the fitness equipment.</p> <p>The foundation/floor in this space must be designed to accommodate all live and dead loads associated with the equipment.</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>If doors are provided, include vision panels, minimum 5 ft² (0.46 m²) each.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Customers.
Min. net ft² (m²)	

APPENDIX A BEST PRACTICES

A-1 STRUCTURE.

A-1.1 Substructure.

For the concrete slab on grade at the gymnasium, consider moisture control and prevention of condensation on the floor surface. Utilize relative humidity (RH) testing as recommended by the Maple Flooring Manufacturers Association (MFMA). Consider under-floor ventilation requirements, under-slab vapor barrier, estimated dew point occurrence, local water table, and local soil conditions. Where continuous water is anticipated beneath floors due to local conditions, a subsurface drainage system is recommended.

A-1.2 Superstructure.

Where feasible, use pre-engineered systems and components for building framing. For example, a pre-engineered metal building system may be an economical solution at the gymnasium. Coordinate HVAC ductwork and lighting arrangements with the structural layout.

A-2 PLUMBING.

For facilities with sensor-operated flush valves and/or faucets, take into consideration the effects on facility operation created by a power outage. Facilities expected to operate without power shall have appurtenances to ensure bathroom functionality during these conditions.

A-2.1 Shower Count

Provide one shower per 15 anticipated fitness facility users per hour for each male and female.

A-3 INTERIORS.

A-3.1 Signage.

Educational/inspirational/motivational signage/wall graphics should be considered in coordination with the installation's health promotion objectives.

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APPENDIX B 1\ SAMPLE INTERACTIVE SPREADSHEET.

Figure B-1 illustrates a sample interactive spreadsheet completed for a hypothetical Navy fitness center.

Figure B-1 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 Vestibula/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

Sample Navy Fitness Facility Project				
		<u>Default quantities</u>	<u>m²</u>	<u>ft.²</u>
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="background-color: yellow;" 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 (66 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				
<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, cool-down area	To change default, select new: <input style="background-color: yellow;" type="text"/>	Large MF (2) Saunas/cool-down area.	26.76	288
Steam Room, cool-down area	To change default, select new: <input style="background-color: yellow;" type="text"/>	Large MF (2) Steam Rooms/cool-down area.	30.66	330
Hot Tub	To change default, select new: <input style="background-color: yellow; border: 1px solid black;" type="text" value="Medium"/>	Medium Unisex Hot Tub.	11.71	126

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

Sample Navy Fitness Facility Project			
Optional or Service-specific Program Spaces	Default quantities	m²	ft.²
Indoor Track			
Indoor Track 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. To change default, select new: <input style="width: 100px;" type="text"/>	1/8th-mile, 4-lane Indoor Track	989.11	10,647
Indoor track lobby To change default, enter new quantity: <input style="width: 100px;" 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			
The following Locker Room spaces are based on total building occupancy, which is driven by the selections made on this spreadsheet.			
Navy allocates the locker area at a 60% Male and 40% Female split.		To change this default split, select new: <input style="width: 100px;" type="text"/>	
Men's Locker Room			
Locker/changing area To change default, select new: <input style="width: 100px;" type="text"/> 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.	508 Lockers in 335 slots.	384.14	4,135
Shower/drying area	23 Showers.		
Toilet area	17 Water closets/lavatory modules.		

Sample Navy Fitness Facility Project			
Woman's Locker Room			278.61
Locker/changing area	To change default, select new: 	338 Lockers in 223 slots.	2,999
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)? 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

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APPENDIX C GLOSSARY

C-1 ACRONYMS AND ABBREVIATIONS.

ABA	Architectural Barriers Act
ABAAS	Architectural Barriers Act Accessibility Standards
AC	Air-Conditioning
ACP	Acoustic Ceiling Panel
ACSM	American College of Sports Medicine
ADA	Americans with Disabilities Act
AED	Automatic External Defibrillator
AFCEC	Air Force Civil Engineer Center
AFF	Above Finished Floor
ASTM	ASTM International
AV	Audiovisual
AWI	Architectural Woodwork Institute
C	Celsius
CATV	Cable Television
CCTV	Closed-circuit Television
cd	Candela
cfm	Cubic Feet per Minute
CMU	Concrete Masonry Units
CNIC	Commander, Navy Installations Command
CONUS	Continental United States
dB	Decibel
deg.	Degree
DIN	Deutsches Institut für Normung eV (German Institute for Standardization; similar to ANSI)

DOD	Department of Defense
E _{max}	Maximum Illuminance
E _{min}	Minimum Illuminance
EPDM	Ethylene Propylene Diene Methylene Rubber
F	Fahrenheit
fc	Foot-Candle
FF&E	Furnishings, Fixtures, and Equipment
ft.	Foot
ft ²	Square Foot
GFCI	Ground Fault Circuit Interrupt
HDMI	High-Definition Multimedia Interface
HDPE	High-Density Polyethylene
HITT	High Intensity Tactical Training
Ht.	Height
HVAC	Heating, Ventilating and Air Conditioning
HVLS	High-Volume, Low-Speed
IESNA	Illuminating Engineering Society of North America
in.	Inch
in ²	Inch Square
km	Kilometer
LOS	Line of Sight
lx	Lux
m	Meter
m ²	Square Meter
max.	Maximum
MCCS	Marine Corps Community Services

min.	Minimum
mm	Millimeter
MWR	Morale, Welfare and Recreation
NAF	Non-Appropriated Funds
NAVFAC	Naval Facilities Engineering Command
NCAA	National Collegiate Athletic Association
NEX	Navy Exchange
NFPA	National Fire Protection Association
OCONUS	Outside the Continental United States
PA	Public Address
POS	Point of Sale
PT	Physical Training or Physical Therapy
PVC	Polyvinyl chloride
req.	Requirement(s)
SF	Square Feet
STC	Sound Transmission Coefficient
UFC	Unified Facilities Criteria
USFFA	United States Flag Football Association
USRA	United States Soccer Federation
UV	Ultraviolet
VCT	Vinyl composition tile
WBDG	Whole Building Design Guide

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APPENDIX D REFERENCES

DEPARTMENT OF DEFENSE (DOD)

<https://www.wbdg.org/ffc/dod/unified-facilities-criteria-ufc>

UFC 1-200-01, *DoD Building Code (General Building Requirements)*

UFC 1-200-02, *High Performance and Sustainable Building Requirements*

UFC 2-000-05N (P-80), *Facility Planning Criteria for Navy/Marine Corps Shore Installations*

UFC 3-101-01, *Architecture*

UFC 3-120-01, *Design: Sign Standards*

UFC 3-120-10, *Interior Design*

UFC 3-201-02, *Landscape Architecture*

UFC 3-410-01, *Heating, Ventilating, and Air Conditioning Systems*

UFC 3-410-02, *Direct Digital Control for HVAC and Other Building Control Systems*

UFC 3-420-01, *Plumbing Systems*

UFC 3-530-01, *Interior and Exterior Lighting Systems and Controls*

UFC 3-600-01, *Fire Protection Engineering for Facilities*

UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*

UFC 4-020-01, *DoD Security Engineering Facilities Planning Manual*

UFC 4-021-02, *Electronic Security Systems*

UFC 4-750-02N, *Design: Outdoor Sports and Recreational Facilities*

AMERICAN COLLEGE OF SPORTS MEDICINE (ACSM)

ACSM's *Health/Fitness Facility Standards and Guidelines*,

<http://www.humankinetics.com/products/all-products/acsms-health-fitness-facility-standards-and-guidelines-5th-edition>

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS (ASHRAE)

ANSI/ASHRAE 62.1, *Ventilation for Acceptable Indoor Air Quality*,

<https://www.ashrae.org/technical-resources/bookstore/standards-62-1-62-2>

ARCHITECTURAL BARRIERS ACT (ABA)

ABA Accessibility Standards, <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-aba-standards/aba-standards>

ARCHITECTURAL WOODWORK INSTITUTE (AWI)

North American Architectural Woodwork Standards (NAAWS), <http://www.naaws-committee.com/>

ASTM INTERNATIONAL

<http://www.astm.org/index.html>

E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*

E303, *Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester*

F1292, *Standard Specification for Impact Attenuation of Surfacing Materials Within the Use Zone of Playground Equipment*

CONSUMER PRODUCT SAFETY COMMISSION (CPSC)

V1\ *Public Playground Safety Handbook*, <https://www.cpsc.gov/s3fs-public/325.pdf>

GLOBAL SPORTS LEAGUE – UNITED STATES SPECIALTY SPORTS ASSOCIATION (GSL – USSSA)

GSL – USSSA *Slow-Pitch Rule Book & By-Laws*,
https://usssa.com/docs/2018/2018_SP_RuleBook.pdf

NATIONAL COLLEGIATE ATHLETIC ASSOCIATION (NCAA)

NCAA Men's and Women's Basketball Court Diagram,
https://www.ncaa.org/sites/default/files/2017MBBWBB_NCAA_Basketball_Court_Diagram_20170622.pdf

NCAA *Cross Country/Track and Field Rules*, <https://www.ncaapublications.com/p-4564-2019-2020-cross-country-and-track-and-field-rules.aspx>

NCAA *Soccer Rules*, <http://www.ncaapublications.com/p-4544-2018-and-2019-soccer-rules.aspx> /1/

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

<http://www.nfpa.org>

NFPA 70, *National Electrical Code*

NFPA 101, *Life Safety Code*

NFPA 780, *Standard for the Installation of Lightning Protection Systems*

UNITED STATES FLAG FOOTBALL ASSOCIATION (USFFA)

National Rules, <http://www.usffa.org/rulebook.htm>

USA RACQUETBALL ASSOCIATION (USRA)

Standard Specifications for Racquetball Court Construction,
<http://www.teamusa.org/USA-Racquetball/How-To-Play/Rules/Court-Specification>