

Technical Criteria for Soldier Performance Readiness Center

TRADOC SPRC

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Table of Contents

EXECUTIVE SUMMARY	2
A. OVERVIEW	2
B. USE OF DOCUMENT	2
FUNCTIONAL CRITERIA	3
A. GENERAL	3
B. PHYSICAL TRAINING MODULE	5
C. RECONDITIONING AND COGNITIVE PERFORMANCE MODULE	6
D. CLASSROOMS	7
E. ADMINISTRATION	9
F. TOILET/JANITOR'S CLOSET	11
Appendix A	13
A. Physical Training Module Equipment (Under Development)	13
B. Rehab Module Equipment (Under Development)	13

EXECUTIVE SUMMARY

A. OVERVIEW

Holistic Health and Fitness (H2F) is a comprehensive, integrated, and immersive health and fitness system of governance, personnel, equipment/facilities, program, and leader education that generates lethal Soldiers who are physically ready and mentally tough to engage with and overmatch the enemy in multi-domain operations. H2F is an overarching framework (system) that focuses all aspects of human performance optimization (periodization, recovery, sleep, injury prevention, nutrition, mental training, etc.) to maximize individual and unit readiness. It is a lifecycle system that develops/improves/sustains Soldier readiness from pre-accession training, through an Army career, and as a Soldier for life. One component of this system will be the Soldier Performance Readiness Center (SPRC). The SPRC is a dedicated training facility designed to generate lethal Soldiers who are physically fit and mentally tough to engage with and overmatch the enemy in multi-domain operations.

The SPRC is category code 74044 in the Real Property Categorization System. The definition is as follows: Physical training facilities provide facilities and support services to meet the individual physical fitness, coordination, skills development, and training needs of military personnel. (Category code is under review.)

B. USE OF DOCUMENT

This document will be used, in conjunction with the Army Standard, for the design and construction of new SPRC for the United States Army. Standards for new construction will meet the quality standards described in the Functional Criteria section. Renovation or conversion of existing facilities should be evaluated on a case-by-case basis, but where possible shall conform to the requirements of this standard.

FUNCTIONAL CRITERIA

A. GENERAL

This chapter provides the criteria for the individual spaces and overall building area allowances for SPRC.

1. This is a partial SPRC solution meeting the required touchpoints for training. It consists of two separate structures: Physical Training Structure and Reconditioning and Cognitive Training Facility. These structures should be located as close as possible to each other. The Soldiers and H2F team will still need access to Administrative and Classrooms within the Brigade AO.
2. Comply with UFC 1-200-01 "DoD Building Code" which provides applicability of model building codes and government-unique criteria for typical design disciplines and building systems, as well as for accessibility, antiterrorism, security, high performance and sustainability requirements, and safety.
3. Doors and Windows:
 - a) Aluminum or hollow metal door frames are recommended, unless otherwise specified.
 - b) All vision panels shall be minimum of 5 sq. ft.
4. Plumbing:
 - a) Restrooms shall be provided to accommodate staff.
 - b) Where an electric water cooler unit (EWC) is specified, it shall consist of either two water fountains in a single unit combination, or two separate units side by side to allow for one unit to be mounted at ADA height. Electrically cooled units are required. Water fountains shall be fed from dedicated 120 V, 20A circuits.
 - c) Provide a minimum of 1 EWC that has a bottle filling station. Water from both the spout and the filler shall be refrigerated. Automatic bottle filler is preferred over manual control.
5. Ceiling Requirements:
 - a) Where acoustical lay-in ceilings are provided, the following apply:
 - i) Ceiling tiles shall be 2' x 2' acoustical tile on standard "T" shaped pre-finished metallic grid system.
 - ii) Surface light reflectance: No less than 0.75. Lighting placement and lamping types shall be considered when designing the ceiling.
 - iii) Sound absorption for acoustical panels: No less than .55 noise reduction coefficient (NRC).
 - b) Overstock: Provide 2% for future replacement.
6. Wall Materials:
 - a) Wall throughout the SPRC shall be extremely durable and impact resistant. Where concrete masonry unit (CMU) walls are provided, use bullnose corner units or mechanically fastened corner guards at all outside corners. On gypsum board walls, use mechanically fastened corner guards on outside corners in high traffic areas, or where the potential for impact is significant.
7. Wall Finishes:
 - a) Where paint is used, paint shall be water-based epoxy, semi-gloss finish. Apply one coat compatible primer with two finish coats of 5 to 6 mils dry film thickness (DFT), unless otherwise specified.

Technical Criteria

Soldier Performance Readiness Center

- b) Surface light reflectance: No less than 0.50. Lighting placement and lamping types shall be considered when designing the walls. Increase lighting output with light colors and/or panels with not less than 0.50 light reflectance.
 - c) Ferrous metals (window and door frames): Water based epoxy. Apply one coat primer compatible with finish coat, and as barrier coat to factory primer. Apply two finish coats of 5 to 6 mils DFT.
- 8.** Floor Finishes:
- a) Surface light reflectance: No less than 0.20. Lighting placement and lamping types shall be considered when designing the floor. Increase lighting output with off-white colors and/or textures with not less than 0.20 light reflectance.
- 9.** Options:
- a) In high bay spaces consider larger industrial high volume/low speed (HVLS) ceiling fans which are appropriate for commercial applications.

B. PHYSICAL TRAINING MODULE

- 1.** Function/Description:
 - a) This will be a stand-alone structure. It is to be in proximity of the Reconditioning and Cognitive Training facility within the Brigade AO.
 - b) The area is divided into two zones: Warm up (Zone 0) and Resistance (Zone 1).
- 2.** Essential Design Requirements:
 - a) Zone 0 is an uncovered area used to prep the soldiers for entry and exit.
 - b) Zone 1 is in a covered outdoor structure. Climate should be considered for this zone. Supply heating/cooling devices as necessary to allow for year-round training.
 - c) Structurally, it is preferred this module be clear span. This allows for the most efficient and safe layout and movement.
- 3.** Ceiling Height:
 - a) 16'-0" minimum. This clear height is to the lowest element.
- 4.** Finishes:
 - a) Ceiling:
 - i) Open structure.
 - b) Floor:
 - i) Sub floor to be concrete slab on grade, extended out for zone 0 as well. Shall have a minimum compressive strength of 3000psi.
 - ii) Zone 0 flooring will be brushed finished concrete.
 - iii) Zone 1 flooring shall be a minimum 3/8" thick permanently adhered resilient athletic flooring consisting of dual-layer natural and synthetic rubber. The top layer is a non-porous, slip resistant, textured surface; the bottom layer is a cushioned performance layer. Avoid the use of interlocking impact flooring tiles.
- 5.** Mechanical (HVAC):
 - a) Provide ventilation in accordance with ANSI/ASHRAE 62.1 requirements for "Health club/weight rooms" and other applicable codes as required for open structures.
 - b) Recommend the use of speed high-volume, low-speed (HVLS) ceiling fans, with wall-mounted controls.
- 6.** Lighting:
 - a) Lighting to be switched to allow different levels of lighting.
- 7.** Power:
 - a) Provide duplex outlets along structural columns on one side. Ensure they are properly enclosed in a waterproof box. No equipment in the Physical Training module requires any electrical power.
- 8.** Communication:
 - a) Optional at the additional cost to the User.
- 9.** Sound:
 - a) Optional at the additional cost to the User.
- 10.** Fixed Equipment:
 - a) Provide self-serve equipment cleaning supply stations throughout that include disinfectant spray bottles and disposable towels.
- 11.** Equipment List:
 - a) Refer to Appendix A.

C. RECONDITIONING AND COGNITIVE PERFORMANCE MODULE

- 1. Function/Description:**
 - a) This will be a stand-alone facility. It is to be in proximity of the Physical Training Structure within the Brigade AO.
 - b) This module provides a space to rehab from injuries. It consists of a Private Injury Management office, three Injury Management cubicles, and two Private Counseling rooms, it also includes a laundry room, cognitive training area and reconditioning training area.
- 2. Essential Design Requirements:**
 - a) Provide privacy curtains for each cubicle.
 - b) Provide one countertop area with sink and lockable cabinets above and below.
- 3. Ceiling Height:**
 - a) 9'-0" minimum.
- 4. Finishes:**
 - a) Ceiling:
 - i) Acoustical tile.
 - b) Wall:
 - i) Acrylic latex paint with a scrubbable eggshell or sating finish, whichever has higher gloss, is a minimum. Wall covering may be used for the cognitive training space.
 - c) Floor:
 - i) Offices: vinyl flooring. Carpet tiles are not acceptable.
 - ii) Reconditioning space: vinyl flooring or athletic rubber flooring. Carpet tiles are not acceptable.
 - iii) Cognitive training space: vinyl flooring. Carpet tiles are not acceptable.
- 5. Windows and Doors:**
 - a) Provide windows for natural light admission in offices, where applicable.
- 6. Plumbing:**
 - a) Ice maker and washing machine are required.
- 7. Mechanical (HVAC):**
 - a) 68 F minimum, 74 F maximum in offices, 78 F maximum in open areas. Provide dedicated controls.
- 8. Lighting:**
 - a) Provide minimum 50 ft. candles in cubicles and offices.
- 9. Power:**
 - a) Provide a minimum of one duplex outlet in closed offices on at least three walls. Gang outlets with data and telephone.
 - b) Provide additional dedicated outlets to accommodate the equipment.
- 10. Communication:**
 - a) Coordinate with MEDCOM to ensure proper medical network connections are provided.
 - b) Provide data and telephone lines for each office space.
 - c) For open admin areas or SPRC facilities without dedicated admin space, provide Wi-Fi for VPN access.
- 11. Equipment List:**
 - a) Refer to Appendix A.

D. CLASSROOMS

- 1. Function/Description:**
 - a) This function will be in a separate location within the Brigade AO.
 - b) Provide two classrooms, each with seating for 25 students. This classroom space is intended to have the flexibility to accommodate teaching in the traditional lecture mode, as well as to perform computer instruction at each desk, and to use projection and interactive media.
- 2. Essential Design Requirements:**
 - a) Seats are typically arranged in rows facing the front of the room, with varying flexibility for reconfiguration of desks for other modes of instruction.
 - b) Provide moveable partition between the two classrooms to allow conversion to one large space. Two separate entrances and exits are required.
 - c) Provide one demonstration kitchenette; include sink, countertop, and electrical outlets.
- 3. Ceiling Height:**
 - a) 9'-0" minimum.
- 4. Finishes:**
 - a) Ceiling:
 - i) Acoustical tile.
 - b) Wall:
 - i) Acrylic latex paint with a scrubbable eggshell or sating finish, whichever has higher gloss, is a minimum. Wall covering may also be used.
 - c) Floor:
 - i) VCT/LVT flooring is preferred with a vinyl or rubber base. Other acceptable materials include stone, terrazzo, porcelain tile, or other hard tile.
- 5. Windows and Doors:**
 - a) Doors should be provided with vision panels.
 - b) Provide exit door directly to the outside.
- 6. Plumbing:**
 - a) Provide a sink for the demonstration kitchenette.
- 7. Mechanical (HVAC):**
 - a) 68 F minimum, 74 F maximum. Provide dedicated controls.
- 8. Lighting:**
 - a) Provide 50 ft. candles at the desk level. 40 ft. candles in the front near the TV screen.
 - b) Day lighting is preferred and shall be controlled.
- 9. Power:**
 - a) Provide outlets per code.
 - b) Provide additional outlets necessary to operate dedicated equipment, including a recessed floor outlet in one classroom for cooking demonstrations. A cart may be rolled into the lecture space containing cooking equipment (hot plate, crock pot, etc.).
 - c) Power poles are not allowed.
- 10. Communication:**
 - a) Provide data connections for the instructor.
 - b) Provide CCTV outlets as required for coverage.
 - c) Provide a minimum of one Internal video outlet.
- 11. Acoustical Performance:**
 - a) Provide a minimum STC of 45.

- 12.** Fixed Equipment:
 - a) Demonstration kitchenette.
 - i) Sink
 - ii) Countertop
 - iii) Cabinets for instructional storage.
 - b) Provide 6'-0" AFF duplex power outlet, conduit to AV equipment space, and wall blocking for fixed TV.
 - c) Provide dry-erase boards.
- 13.** Special Requirements:
 - a) Provide cabinet with dedicated space for AV equipment.

E. ADMINISTRATION

1. Function/Description:
 - a) This function will be in a separate location within the Brigade AO.
 - b) The administrative offices consist of a mix of private and open office space. This includes private offices, cubicles, team room, and break room.
2. Essential Design Requirements:
 - a) The following office spaces are required:
 - i) Tier 3 Admin

Position	No. of Positions [Rank/CTR]	Office or Cubicle [SF]	Table Required
H2F Program Director*	1 [GS-13]	Office [120]	No
Nutrition Program Director/Provider*	1 [O3]	Office [120]	No
Registered Dietician (RD)*	1 [GS-12]	Office [110]	No
Nutrition Health Educator (NH-E)*	2 [GS-07]	Office [110]	No
Injury Control Director/Provider*	1 [O3-4]	Office [150]	Yes
Physical Therapist (PT)*	1 [GS-12]	Office [150]	Yes
Physical Therapy Assistant (PT-A)*	2 [GS-07]	Shared Office [114]	No
Athletic Trainer (AT)*	5 [CTR]	Cubicle [64]	No
Strength & Conditioning Coach (SC)*	10 [CTR]	Cubicle [64]	No
Mental Readiness Director/Provider*	1 [O3-4]	Office [150]	Yes
Occupational Therapist (OT)*	1 [GS-12]	Office [150]	Yes
Cognitive Performance Specialist (CPS)*	1 [CTR]	Office [100]	No
Occupational Therapy Aide (OT-A)*	2 [GS-07]	Shared Office [100]	No

- b) *Office provided in an offsite location.
3. Ceiling Height:
 - a) 9'-0" minimum.
4. Finishes:
 - a) Ceiling:
 - i) Acoustical tile.
 - b) Wall:
 - i) Acrylic latex paint with a scrubbable eggshell or sating finish, whichever has higher gloss, is a minimum. Wall covering may also be used.
 - c) Floor:

- i) Carpet tile is preferred with a vinyl or rubber base. Other acceptable materials include hard-surface flooring such as seamless vinyl, hard tile, or other durable material.
- 5.** Windows and Doors:
 - a) Provide windows for natural light admission where applicable.
- 6.** Plumbing:
 - a) Consider a cold-water connection for refrigerator ice maker in the break room.
- 7.** Mechanical (HVAC):
 - a) 68 F minimum, 74 F maximum.
 - b) Office temperature controls may be centralized as a minimum.
- 8.** Lighting:
 - a) 50 ft. candles minimum at the desk level.
 - b) Primarily, indirect lighting fixtures, to reduce computer glare, are required.
- 9.** Power:
 - a) Provide a minimum of one duplex outlet in closed offices on at least three walls. Gang outlets with data and telephone. In shared offices, provide minimum one duplex outlet on four walls.
 - b) Cubicles should provide at least one quad outlet per station. Gang outlets with data and telephone.
 - c) Provide additional outlets as necessary to operate shared equipment.
 - d) In break room, provide outlets at built-in counter area for microwave, coffee pot, refrigerator, and other cooking devices. Provide ground fault protection of outlets as required.
- 10.** Communication:
 - a) Provide data/phone outlets for NIPR in all offices and cubicles. Provide MEDCOM data outlets in PT, AT, RD, and OT office and cubicle space. SC positions do not require MEDCOM data access. Consult local MEDCOM IT to determine required networks.
 - b) Provide data outlets as necessary for shared equipment.
 - c) In team room provide 6'-0" AFF duplex power outlet, conduit to AV equipment space, and wall blocking for fixed TV.
- 11.** Acoustical Performance:
 - a) Provide a minimum STC of 45.
- 12.** Fixed Equipment:
 - a) Break Room:
 - i) Solid-surface countertop.
 - ii) Solid wood front cabinetry.
 - iii) Double sink.
- 13.** Special Requirements:
 - a) Provide space in break room for a minimum 18 cu. Ft. refrigerator at the end of the counter.

F. TOILET/JANITOR'S CLOSET

- 1.** Function/Description:
 - a) Support space for staff use. Provide a separate male and female restroom.
- 2.** Essential Design Requirements:
 - a) The net area provided for this function is an estimate. If all required functions can be provided in less area without negatively impacting the function of the spaces (to include circulation through the areas), then the extra area may be utilized for other functions. If more square footage is required to accommodate all the functions, this extra space must come from the miscellaneous area (which includes circulation, structure, mechanical/electrical/communications rooms, etc.)
 - b) There must be no line-of-sight concerns when designing the entrances to the toilet area. Airport style vestibules are acceptable as long as a person cannot see into any part of the toilet area from outside. Even if doors are provided, the entrances must be designed so that a person cannot see into any part of the toilet area from the outside when the doors are opened.
- 3.** Ceiling Height:
 - a) 9'-0" minimum.
- 4.** Finishes:
 - a) Ceiling:
 - i) Toilet area can use epoxy painted, moisture-resistant gypsum board.
 - ii) None needed for the janitor's closet.
 - b) Wall:
 - i) Toilet area can use epoxy painted, moisture-resistant gypsum board. A ceramic tile wainscot, 4' high minimum, is recommended. Use dark-colored epoxy grout for all ceramic tiles.
 - c) Floor:
 - i) Toilet area shall be at a minimum non-slip epoxy coated concrete. Ceramic tile with a dark-colored epoxy grout can be considered.
- 5.** Windows and Doors:
 - a) Views into this space is prohibited. Aluminum or hollow metal frames are recommended.
- 6.** Plumbing:
 - a) Provide wall-hung water closets, wall-hung urinals and lavatories based on the applicable code for the calculated occupancy of the facility.
 - b) Provide a minimum of one floor drain in the toilet area.
- 7.** Mechanical (HVAC):
 - a) Operating range: System able to maintain 68 - 74 degrees (F). Shall meet or exceed ASHRAE 62 for the ventilation rate.
- 8.** Lighting:
 - a) 50 ft. candles.
- 9.** Power:
 - a) Provide outlets per code.
- 10.** Fixed Equipment:
 - a) Solid-surface countertop with either underhung or integral sink.
 - b) Solid composite toilet and urinal partitions.

- c) Toilet accessories: toilet paper dispensers, paper towel dispenser, garment hooks, grab bars, and soap dispensers. Provide full-width mirrors at the lavatories and a full-length mirror.
- 11. Special Requirements:**
- a) 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). Provide lockable cabinets for cleaning supplies. Provide exhaust ventilation directly to the outside.

Appendix A

A. Physical Training Module Equipment (Under Development)

B. Rehab Module Equipment (Under Development)