

UNIFIED FACILITIES CRITERIA (UFC)

DESIGN: YOUTH CENTERS



NAVAL FACILITIES ENGINEERING COMMAND (Preparing Activity)

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UNIFIED FACILITIES CRITERIA

YOUTH CENTER

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FOREWORD

[Note: Forward is updated upon final Tri-Service review]

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YOUTH CENTER

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CHAPTER 1

INTRODUCTION

1-1 **SCOPE OF DOCUMENT.** This UFC provides guidelines for evaluating, planning, programming, and designing Youth Centers. The information in this UFC applies to the design of all new construction projects, to include additions, alterations, and renovation projects in the continental United States and overseas. It also applies to the procurement of design/build services for the above-noted projects. Alteration and renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints. This UFC is not intended as a substitution during design for thorough review by individual Program Managers and Operations Staff in the appropriate Service.

1-2 **USERS OF THIS DOCUMENT.** This UFC is intended to be a source of basic architectural and engineering information for all individuals involved in the planning, design, or evaluation of Youth Centers. Note: where one Service's criteria vary from the other Services' criteria, it is noted in the text with the **SE** (Service Exception) symbol. Specific users of the UFC include the following:

1-2.1 **Architects and Engineers.** Architects and Engineers (A/Es) who will provide design services under the direction of the individual design agencies, including the Army Corps of Engineers (COE), Army Community and Family Support Center (CFSC), Naval Facilities Engineering Command (NAVFAC), and Navy Personnel Command (NPC).

1-2.2 **Planning Personnel.** Planning personnel will use this UFC for programming new or replacement facilities, pre-design planning, or assessing the extent of improvements required in an existing Youth Center in order to achieve the standard established herein.

1-2.3 **Additional Users.** Additional users include the following:

- Headquarters Staff and Field Operating Agencies
- Major Command Staff/Regions
- Installation Commanders
- Installation Facilities Management
- Installation Technical Proponents
- Program Directors
- Facility/Program Operations Staff

1-3 **SCOPE OF FACILITY.** The Youth Center is a social and recreational center primarily for use by children ages 6 to 18 in support of a Youth Program, as defined by DoD Instruction 6060.cc *Youth Programs* (Draft). The Youth Center supports opportunities for youth to develop their physical, social, emotional, and cognitive abilities and to experience achievement, leadership, enjoyment, friendship, and recognition. Youth Program activities are generally offered free of charge or at a reasonable cost to parents to encourage participation and make them affordable to families.

The Youth Center facility may comprise up to three functional program areas. Not all three program areas are required, but if a certain program area is provided, it must include certain elements to meet individual program requirements. Beyond the required spaces, each program area may have additional spaces required or allowed by the individual Services.

The three functional program areas and their respective required elements are described in Sections 1-4 through 1-6. The other facility spaces are described in Section 1-7. All of these spaces are described in greater detail in Chapters 2 and 4. Additionally, due to the numerous possible variations of Youth Center programs, a special space program tool has been developed to help users navigate the intra- and inter-Service permutations. This tool is described in Section 2-2, it may be helpful to review this material in conjunction with these program descriptions.

1-4 **SAC PROGRAM AREA.** Included in the Youth Center facility, but generally separate from the youth program functions, is a School-Age Care (SAC) program. This area supports the SAC program and includes the SAC Activity Rooms, the SAC Toilets, and support and outdoor areas. **SE** Note: the Navy does not provide the dedicated SAC toilet—SAC youth share the toilets in the Youth Program Area. See Table 3-1 for more on this Service Exception.

The SAC program provides before- and after-school accountable childcare for a fee. This may include having the school bus pick-up and drop-off the children both before and after school. If the children are dropped off by the bus after school, the Youth Center keeps them until parents can pick them up from the center. **SE** The SAC program varies by Service:

- The Army SAC program is generally for children ages 6 to 10. The Army generally accommodates its SAC program in separate facilities.
- The Navy program is generally for children ages 6 to 12. The Navy does not separate the SAC functions from the youth program functions.
- The Air Force program is for children ages 6 to 12.
- The Marine Corps SAC program is generally for children ages 6 to 12.

1-5 **YOUTH PROGRAM AREA.** This program area includes the following spaces:

1-5.1 **Commons.** This area is the heart of the program area around which all other program spaces generally revolve. It should accommodate social units of 12 to 15 youth gathering in pockets, while allowing these groups to interact with and feel part of the larger space. Subsets of the Commons include the Game Area, Snack Bar Eating Area, television (TV) viewing, and general gathering and conversation areas. All these spaces are generally in one open and inviting space, but the subset spaces may be defined by variations in ceiling heights or finishes.

1-5.2 **Activity Rooms.** There are two categories of Activity Rooms that are the same size, but have different design characteristics. Each Service may specify General Activity Rooms, Special Activity Rooms, or both, depending on the size of the facility and its program needs.

1-5.2.1 The General Activity Room may be configured for gatherings, club meetings, arts and crafts (with the addition of a sink), or for other general uses. For these types of activities, this room accommodates up to 30 youth with the appropriate staff supervision.

1-5.2.2 The Special Activity Room is designed for active functions such as dance or martial arts. As such, it may have a higher ceiling, different flooring, and features such as dance bars and mirrors. For these types of activities, the room accommodates 10 to 15 youth with the appropriate staff supervision. This room is not intended for team sport activities, however. Those activities are accommodated in the multipurpose room.

1-5.3 **Homework/Computer.**  The Homework and Computer functions are required as part of the Youth Program, but the Services vary as to how they accommodate these functions:

- The Army generally provides separate Homework and Computer rooms, sized identically. For small programs/facilities, this function may be combined into one space;
- The Navy and Marine Corps provide a separate Computer Room and typically accommodate homework activities in one of the Activity Rooms; and
- The Air Force accommodates both functions in one Homework/Computer Room.

1-5.4 **Outdoor Activity Area.** There is a need for outdoor activity space as part of the Youth Program. This may be accommodated through the SAC Outdoor Activity Area or an additional outdoor space may be programmed as part of the Youth Program.

1-6 **TEEN PROGRAM AREA.** This area provides older teens their own space to socialize and have access to more independent activities in a home-like environment. Activities may include things like table games, video games, computers, and television watching. Teens should be given more latitude and independence than the younger youth. This area includes the Teen Room/Lounge and an outdoor Teen Patio.

1-7 **ADDITIONAL FUNCTIONAL AREAS AND OPTIONAL SPACES.** These spaces do not necessarily fall into any of the dedicated program areas.

1-7.1 **Administrative Area.** The administrative area includes the facility lobby, the check-in area, the communications room, and staff offices and work areas.

1-7.2 **Other and Optional Spaces.** Other spaces include various toilets (SE) the Services accommodate toilets differently—see Table 3-1) and the multipurpose room. The multipurpose room accommodates large motor activities and team sports. There are different size options for the multipurpose room that vary by Service.

Optional spaces vary by Service and may include separate spaces not directly related to a program, such as a kitchen, or spaces that are optional within a program space such as a dedicated music/multimedia room (part of the Youth Program). (SE) The Navy normally does not permit kitchens in their Youth Centers.

1-8 **USERS OF FACILITY.** The primary facility users are as follows:

- Youth participants,
- SAC program participants,
- Teen participants,
- Facility staff,
- Volunteers,
- Other program partners, and
- Parents.

1-9 **RELATED DOCUMENTS.** The aforementioned Department of Defense Instruction for Youth Programs DoD 6060.cc (Draft) provides the program requirements for Youth Centers and DoD Instruction 6060.3 *School-Age Care (SAC) Program* provides the program requirements for SAC. Also review DoD School-age Program Inspection Checklist and the *NSACA Standards for Quality School-Age Care*.

(SE) Refer also to the following Service-specific related documents:

- For Army projects, this UFC serves as the framework for the *Youth Center Definitive Standard Design*;
- For Navy projects, use this UFC in conjunction with the *Navy Youth and School-age Care (SAC) Standards and Metrics*;
- For Air Force projects, use this UFC in conjunction with the *USAF Services Design Guide for Youth/School Age Center*; and
- For Marine Corps projects, this UFC serves as the primary criteria document for Youth Centers.

CHAPTER 2

PLANNING AND LAYOUT

2-1 **SIZE DETERMINANTS.** Several factors determine the size of the facility.

2-1.1 **Needs Validation Assessment.** Conduct a Needs Validation Assessment (NVA) or Project Validation Assessment (PVA) to determine the need for each of the three program areas (see Sections 1-4 through 1-6), the optional spaces, and the size of the populations to be served by each program. The three program areas may be sized differently within a single facility. In some cases, one or more program areas may not be needed if the population served is too small or if that population is served by other, existing facilities. When reviewing existing facilities, consider both facilities on the installation and facilities within the community, such as the Boys & Girls Clubs of America, 4-H, and other community centers.

SE Note: each Service may have different requirements with regard to which programs should be provided as part of this facility. While the NVA or PVA and the criteria in this UFC provide guidelines for the size of a Youth Center, the final space program will need to be carefully determined by installation representatives and the appropriate Service program office.

2-1.2 **SAC Program Size.** Once the need and population size for the SAC program area has been determined, the SAC area is sized based on the number of SAC activity rooms needed. Each room serves two ratio groups or a total of 30 children. **SE** An Air Force SAC room serves two ratio groups or a total of 24 children. A ratio group represents the ratio of children to adult caregivers, or 15 children to one adult caregiver. The Air Force ratio group is 12 children to one adult caregiver.

The maximum number of SAC rooms permitted per facility is eight. If the needs assessment determines that more than eight rooms are required, provide multiple facilities.

Included in the SAC program are dedicated SAC toilets, and a storage closet for each SAC room. **SE** Navy does not provide the dedicated SAC toilet—SAC children share the toilets in the Youth Program area.

2-1.3 **Youth Program Size Classifications.** Once the need for the Youth program area has been determined, the size is classified by the number of youth to be accommodated in the *primary* program spaces. (Additional youth may be accommodated in optional spaces, like the Multipurpose Room.) Therefore, each size category provides for appropriate space in the Commons and support areas and provides the appropriate number of activity rooms.

SE Tables 2-1.1 and 2-1.2 illustrate these size classifications with the appropriate Service exceptions. The Army provides a combined Computer/Homework Room for their small youth program. For larger programs, they provide separate Computer Rooms and Homework Rooms. Due to the fact that the Army provides this additional program space for their larger programs, the number of youth that can be accommodated is greater than the other Services. These differences are reflected in Table 2-1.2.

In general for all Services, as noted above, the number of youth to be accommodated in the size classifications only account for the dedicated Youth program spaces. When programming the Youth program area, consider that additional youth may be accommodated in other areas such as the Multipurpose Room.

TABLE 2-1.1 NAVY, AIR FORCE, AND MARINE CORPS YOUTH PROGRAM SIZE CLASSIFICATIONS

Size Classification (No. of Youth)	Activity Rooms (General or Special)	Homework/Computer Rooms*
Up to 60 Youth	1	1
61 to 90 Youth	2	1
91 to 135 Youth	3	2
136 to 155 Youth	4	2

* **SE** Navy and Marine Corps provide a separate Computer Room and typically accommodate the homework function in the Activity Rooms. The Air Force combines the Homework function with the Computer Room.

TABLE 2-1.2 ARMY YOUTH PROGRAM SIZE CLASSIFICATIONS

Size Classification (No. of Youth)	Activity Rooms (Gen. or Spec.)	Computer Rooms	Homework Rooms
Up to 60 Youth	1	1 combined room	
61 to 105 Youth	2	1	1
106 to 150 Youth	3	1	1
151 to 170 Youth	4	1	1

2-1.4 **Teen Program Size Classifications.** Once the need for the Teen program area has been determined, classify the size as follows:

- Up to 15 teens,
- 16 to 30 teens,
- 31 to 45 teens, and
- 45 to 60 teens.

2-1.5 **Optional Spaces.** Once the program areas have been sized, determine which optional spaces should be included. Optional spaces are identified in Paragraph 2-1.5.3. Optional spaces vary by Service. The Base representatives, in conjunction with the program manager, must decide which optional activity spaces should be provided. Note the following when selecting optional activities:

2-1.5.1 If an existing facility is being renovated to accommodate the Youth Center function, the amount of space available will likely determine what options may be provided. See Section 2-5 for more information on alterations to existing facilities.

2-1.5.2 Consider what can be provided within both the operational and construction budgets.

2-1.5.3 Optional spaces include the following:

- Multipurpose Room;
- Kitchen. **SE** Navy normally does not permit kitchens;
- Music Room(s);
- Additional Parent Waiting (in addition to the waiting area in the lobby).
SE Navy does not permit additional parent waiting;
- Laundry Room. **SE** Navy normally does not permit laundry rooms;
- Youth Program Outdoor Activity Area; and
- Outdoor Open Area (large play area).

2-1.6 **Administrative Area.** The administrative area must be sized respective of all the program areas provided. For example, if a facility is to have only one or two SAC activity rooms and small youth and teen programs, a small administrative area will probably be sufficient. However, if a facility is to have only one or two SAC activity rooms, a small teen program, but a large youth program, a medium or large administrative area will probably be required. Carefully consider the entire program when sizing the administrative area.

2-1.6.1 **Administrative Spaces.** Administrative office space, both private offices and workstations, should be thoroughly justified to and approved by the program manager. In general, the administrative area includes the following:

- Lobby,
- Check-in,
- Staff Offices,

- Staff Workstations,
- Break/Staff Training Room,
- Copy/file Room,
- Storage,
- Communications Room,
- Staff/Visitor's Toilets/Janitor's closet (see Paragraph 3-5.1 for more information on toilets), and
- Administrative Site Support (including staff and patron parking, drop-off/bus drive, and service drive).

2-1.6.2 **Office Limits.** The overall number of private offices is limited to five and the number of workstations is limited to eight. These limits are regardless of the size of the Administrative Area. However, programmers should consider the overall size of the Administrative Area when selecting the number of private offices and workstations. For example, a small General Administrative Area will not typically require five private offices.

 The Navy places additional limits on private office quantities. A small General Administrative Area is permitted one office. A medium General Administrative Area is permitted one office or two with additional justification. A large General Administrative Area is permitted two offices. An extra large General Administrative Area is permitted two offices or three with additional justification.

2-1.7 **Other Size Considerations.** If the projected installation requirements exceed the largest size allowances for a program area, provide multiple Youth Centers. Further, when the total program populations are broken down into distinctive geographic locations, consider providing multiple facilities sized individually for the geographic populations.

2-2 **SPACE PROGRAM.** The space program for Youth Centers is developed through the use of an interactive spreadsheet. It is completed by first entering the appropriate Service branch and then selecting the appropriate sizes for the three Program areas, the additional program spaces and options, the administrative area, and the site areas. The selections will vary depending on the Service branch selected. This is a result of the appropriate Service exceptions. As selections are made, the program areas are calculated and summed for both the building and the site.

This spreadsheet is available as a downloadable Microsoft[®] Excel[®] file from the Whole Building Design Guide Web site (www.wbdg.org) under the DoD page, Tools section.

2-2.1 Samples of the interactive spreadsheet with the Service branch selected as “Army” and “Navy” are illustrated in Figures 2-1 and 2-2, respectively. Figure 2-1 is a blank Army form and Figure 2-2 shows a completed Navy sample. These two Services were chosen to illustrate some of the differences in the options available on the form depending on the Service selected in the first line.

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

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

FIGURE 2-1. SAMPLE BLANK INTERACTIVE SPREADSHEET FOR AN ARMY YOUTH CENTER

Select Service Branch:	<u>Army</u>		Gross m ² Gross ft. ²
School Age Care (SAC): Enter no. of SAC Rooms	<u> </u>	SAC Building	<input type="text"/> <input type="text"/>
<small>*The Army generally accommodates SAC in other facilities. When provided, the SAC program includes no. of SAC rooms selected plus space for storage and toilets.</small>			
Youth Program: Select Size of Youth Program	<u> </u>	Youth Building	<input type="text"/> <input type="text"/>
<small>*The Army Youth program adds an additional, dedicated homework room, except for small programs where it is combined with the computer room.</small>			
Teen Program: Select Size of Teen Program	<u> </u>	Teen Building	<input type="text"/> <input type="text"/>
Additional Spaces and Options			
Select Size of Multipurpose Room	<u> </u>	Multipurpose Room	<input type="text"/> <input type="text"/>
<small>*Army options include items 1 through 5.</small>			
Select Kitchen size	<u> </u>	Kitchen	<input type="text"/> <input type="text"/>
Select Music Room option (no. of rooms)	<u> </u>	Music Rooms	<input type="text"/> <input type="text"/>
Select Additional Parent Waiting option	<u> </u>	Parent Waiting	<input type="text"/> <input type="text"/>
<small>*This is an additional waiting area located near the Activity Rooms and is in addition to the waiting area in the lobby.</small>			
Select Laundry Room option	<u> </u>	Laundry	<input type="text"/> <input type="text"/>
<small>*A One-washer Room includes one washing machine and two dryers. A Two-washer Room includes two washing machines and three dryers.</small>			
Administrative Area			
Select Size of General Admin. Area	<u> </u>	General Admin. Area	<input type="text"/> <input type="text"/>
Office Requirements			
Enter no. of private offices required:	<u> </u>	Private offices	<input type="text"/> <input type="text"/>
Enter no. of workstations required:	<u> </u>	Workstations	<input type="text"/> <input type="text"/>
		Subtotal Admin. Area and Offices	<input type="text"/> <input type="text"/>
TOTAL GROSS BUILDING			<input type="text"/> <input type="text"/>
Site			
SAC Site Program: Tied to SAC building selection (entered above)		SAC Site Support	<input type="text"/> <input type="text"/>
Youth Site space not permitted without Youth Program	<u> </u>	Youth Site Support	<input type="text"/> <input type="text"/>
Teen Site: Tied to Teen Program building selection (entered above)		Teen Site Support	<input type="text"/> <input type="text"/>
Select Outdoor Open Area Option	<u> </u>	Outdoor Open Area	<input type="text"/> <input type="text"/>
Administrative: Tied to building selection (entered above)		Admin. Site Support	<input type="text"/> <input type="text"/>
TOTAL GROSS SITE SUPPORT			<input type="text"/> <input type="text"/>
TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)			<input type="text"/> <input type="text"/>

FIGURE 2-2. SAMPLE COMPLETED INTERACTIVE SPREADSHEET FOR A NAVY YOUTH CENTER

MCON P-000, Youth Center, Sample Naval Air Station, Virginia Beach, Virginia				
Select Service Branch:		Navy		
			Gross m ²	Gross ft. ²
School Age Care (SAC): Enter no. of SAC Rooms	2	SAC Building	228.76	2,462
*For Navy, SAC Program includes the number of SAC rooms selected plus appropriate space for storage.				
Youth Program: Select Size of Youth Program	61 to 90 Youth	Youth Building	430.72	4,636
*The Navy Youth program deletes the space allowance for vending machines and the activity room storage closet is smaller.				
Teen Program: Select Size of Teen Program	16 to 30 Teens	Teen Building	115.44	1,243
Additional Spaces and Options				
Select Size of Multipurpose Room	3. Half-court w/ bleachers	Multipurpose Room	466.34	5,020
*Navy options include items 1 through 4.				
Kitchen is not normally permitted for Navy				
Select Music Room option (no. of rooms)	1 room	Music Rooms	6.69	72
Parent Waiting is not permitted for Navy				
Laundry Rm not normally permitted for Navy		Laundry		
*A One-washer Room includes one washing machine and two dryers. A Two-washer Room includes two washing machines and three dryers.				
Administrative Area				
Select Size of General Admin. Area	Large	General Admin. Area	182.02	1,959
Office Requirements				
Enter no. of private offices required:	2	Private offices	27.20	293
Enter no. of workstations required:	4	Workstations	21.76	234
*Navy limits private offices: Small Admin. gets 1 office. Medium gets 1 or 2. Large gets 2. Ex. Large gets 2 or 3. See Section 2-1.6 for more details.				
Subtotal Admin. Area and Offices			230.98	2486
TOTAL GROSS BUILDING			1479.00	15,920
Site				
SAC Site Program: Tied to SAC building selection (entered above)		SAC Site Support	355.81	3,830
Select Youth Site option	No	Youth Site Support		
*In facilities where Youth Program is provided but SAC is not, Youth Site area is mandatory. If SAC is provided, Youth Site area is optional.				
Teen Site: Tied to Teen Program building selection (entered above)		Teen Site Support	185.80	2,000
Select Outdoor Open Area Option	No	Outdoor Open Area		
Administrative: Tied to building selection (entered above)		Admin. Site Support	1915.60	20,620
TOTAL GROSS SITE SUPPORT			2457.21	26,450
TOTAL GROSS FACILITY (BUILDING + SITE SUPPORT)			3,936	42,370

2-3 **LOCATION DETERMINANTS.** Several factors determine the most appropriate and cost-effective location for a Youth Center.

2-3.1 **Access.** The Youth Center should be easily accessible by buses (dropping off), privately-owned vehicles (either dropping off/picking up or parking), and by youth patrons via foot or bicycle. Weigh these considerations against the effect on traffic during peak pick-up/drop-off times. For example, a location near or adjacent to a school or child development center may be convenient for patrons, but it may cause traffic congestion at peak times. To accommodate parent/patron access, provide adequate parking as close as possible, taking into account Antiterrorism/Force Protection (AT/FP) requirements (see Section 3.8).

2-3.2 **Safety.** Consider the above-noted pedestrian and bicycle traffic by the youth patrons. Minimize the degree to which the pedestrian and bike paths cross vehicular paths in the approach to the Youth Center site. If pedestrian and bike paths cross or run adjacent to busy streets and intersections, provide mitigation measures, such as bollards, to increase safety. Also consider the location of bus access for drop-off and pick-up.

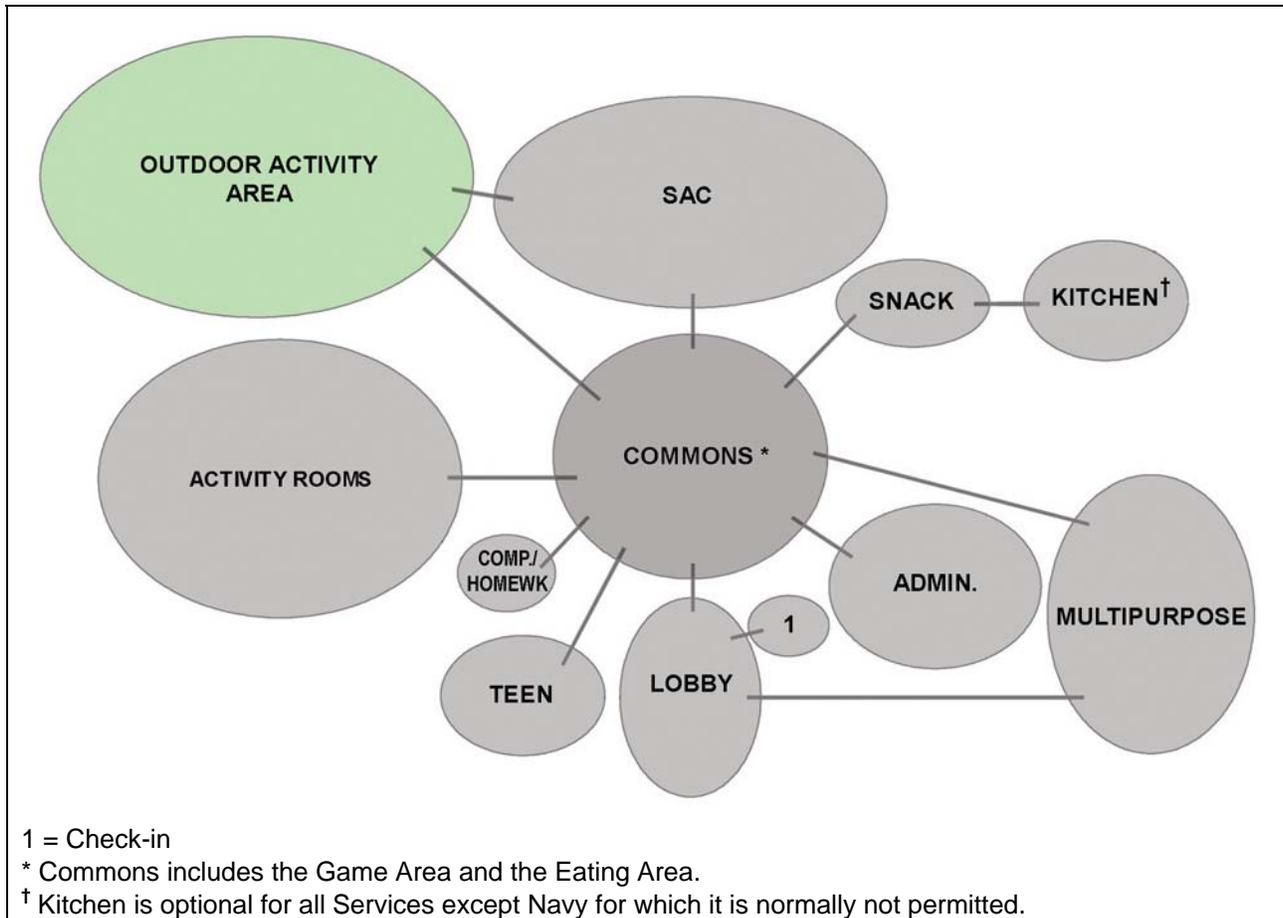
2-3.3 **Cost.** These facilities should be designed with the objective of achieving the lowest life cycle cost over a 30-year period. To do so, the project's design program must adequately define the scope and performance requirements and match those needs against a budget. Conversely, the budget must adequately support an appropriate and high-quality program and the performance requirements outlined and identified in this UFC.

2-3.4 **Related Facilities.** Consider locating near other facilities such as youth sports fields, open park space, etc.

2-4 **LAYOUT AND ADJACENCIES.** The appropriate layout and adjacencies are illustrated through a bubble diagram and adjacency matrices.

2-4.1 **Functional Relationship Bubble Diagram.** The bubble diagram in Figure 2-3 indicates acceptable relative adjacencies of the functional spaces.

FIGURE 2-3. FUNCTIONAL RELATIONSHIP BUBBLE DIAGRAM



2-4.2 **Adjacency Matrices.** Figures 2-4 and 2-5 further illustrate the acceptable relative adjacencies of functional spaces and should be used in conjunction with Figure 2-3.  Figure 2-4 provides the adjacencies for Army, Air Force and Marine Corps facilities. Figure 2-5 provides the adjacencies for Navy facilities.

FIGURE 2.4. ADJACENCY MATRIX

Functional Spaces	Lobby/Building Entrance	Check-in	Administrative Offices	Break/Staff Training Room	Copy/File Room	Staff Lockers	SAC Activity Rooms	SAC Toilets †	SAC Outdoor Activity Area	Commons	Game Area	Snack Bar/Vending †	Eating Area	Kitchen * †	Homework/Computer Room †	General Activity Room(s)	Special Activity Room(s)	Music/Multimedia Room *	Parent Waiting Area *	Youth/Teen Toilet †	Teen Room/Lounge	Teen Patio *	Multipurpose Room †	Multipurpose Room Storage/Gear Issue	Laundry * †	Staff/Public Toilets †	Youth Outdoor Activity Area *	Outdoor Open Area *	Pick-up and Drop-off (Bus)	Service Drive/Trash	Staff Parking	Patron Parking		
Lobby/Building Entrance		1	3			3			1					1/3				3			1	1	3							3	3			
Check-in			3							2	2	2	2		2	2	2	2	2	2	2	2	2											
Administrative Offices				1	1	3																		3	3									
Break/Staff Training Room					1	1																												
Copy/File Room																																		
Staff Lockers																																		
SAC Activity Rooms								1	1	1				3	3																			
SAC Toilets †																																		
SAC Outdoor Activity Area																											2/3	2/3						
Commons											1	1	1	3	1	1	1	1	1	1	3		1			3	3	2						
Game Area												3	3								3	3												
Snack Bar/Vending †													1	1																				
Eating Area																						1/3	3											
Kitchen * †																						2/3	3							3				
Homework/Computer Room †																3																		
General Activity Room(s)																																		
Special Activity Room(s)																																		
Music/Multimedia Room *																																		
Parent Waiting Area *																																		
Youth/Teen Toilet †																																		
Teen Room/Lounge																																		
Teen Patio *																																		
Multipurpose Room †																																	3	
Multipurpose Room Storage/Gear Issue																																		
Laundry * †																																		
Staff/Public Toilets †																																		
Youth Outdoor Activity Area *																																		
Outdoor Open Area *																																		
Pick-up and Drop-off (Bus)																																		
Service Drive/Trash																																		
Staff Parking																																		
Patron Parking																																		3

1 = Direct physical access/adjacency
 2 = Direct visual access/visual control
 3 = Near but not necessarily adjacent

* = Optional space
 † = There are one or more Service Exceptions associated with this space.

FIGURE 2.5. NAVY ADJACENCY MATRIX

Functional Spaces	Lobby/Building Entrance	Control/Check-In	Administrative Offices	Break/Staff Training Room	Copy/File Room	Staff Lockers	SAC Activity Rooms	SAC Toilets	SAC Outdoor Activity Area	Commons	Snack Bar/Vending	Computer Room	General Activity Room(s)	Special Activity Room(s)	Music/Multimedia Room	Youth/Teen Toilet	Teen Lounge	Teen Patio	Multipurpose Room	Multipurpose Room Storage/Gear Issue	Staff/Public Toilets	Youth Outdoor Activity Area/Hard Surface	Youth Outdoor Activity Area/Covered	Outdoor Open Area	Pick-up and Drop-Off (Bus)	Service Drive/Trash	Staff Parking	Patron Parking	
Lobby/Building Entrance		1	3							2											3				1		3	3	
Control/Check-In			3				2	2		2	2	2	2	2	2	2	2			2		1				2			
Administrative Offices				1	1	3															3								
Break/Staff Training Room					1	1																							
Copy/File Room																													
Staff Lockers																													
SAC Activity Rooms								3	1	1		3																	
SAC Toilets										1																			
SAC Outdoor Activity Area																							2/3	2/3	2/3				
Commons											1	1	1	1	1	1	3			1			3	1	2				
Snack Bar/Vending																	3												
Computer Room														3			3												
General Activity Room(s)																3							3	3	3				
Special Activity Room(s)																3													
Music/Multimedia Room																3													
Youth/Teen Toilet																	3		3										
Teen Lounge																													
Teen Patio																													
Multipurpose Room																													
Multipurpose Room Storage/Gear Issue																													
Staff/Public Toilets																													
Youth Outdoor Activity Area/Hard Surface																													
Youth Outdoor Activity Area/Covered																													
Open Outdoor Play Area																													
Pick-up and Drop-Off																													
Service Drive/Trash																													
Staff Parking																													
Patron Parking																													

1 = Direct physical access/adjacency
 2 = Direct visual access/visual control
 3 = Near but not necessarily adjacent

2-4.3 **Space Assessment.** See the Functional Data Sheets in [Chapter 4](#) for additional information on the space types and their relationships to each other.

2-5 **ALTERATIONS TO EXISTING FACILITIES.**

2-5.1 **Regulatory Authorities.**  Refer to the following for the appropriate authorities for each Service:

- Army. The standard may be modified to accommodate the existing structure. However, all proposed modifications to the standard must be sent to the Army Corps of Engineers, Engineering & Support Center, HSV (CEHNC) for review and HQDA (CFSC‑CYS) for approval prior to the initiation of concept design.
- Navy and Marine Corps. Authorities are contained in *OPNAVINST 11010.20F Facilities Projects Manuals* and *NAVFACINST 11010.45*

Comprehensive Regional Planning Instruction. Prior to planning alterations to an existing facility to convert it to a Youth Center, the activity should consult the following: Navy: NPC (Pers 656D/659) and Marine Corps: MCCA HQ (MRY/MRD).

- Air Force. HQ AFCEE for architectural and publication coordination; HQ Air Force Civil Engineering Support Agency (AFCEA) for technical issues relating to fire, life safety, and certification; HQ AFSVA for functional requirements; and HQ USAF/ILV for functional policies.

2-5.2 **Other Considerations.** Consider the site of the existing facility and its limitations with regard to the Youth Center's needs. Only permanent facilities should be considered for conversion to a Youth Center. Exceptions may be made for other buildings that are in excellent condition, subject to the location determinants in Section 2-3.

Consideration of adaptability to the intent of the building program must be given. For instance, can the building accommodate a multipurpose room? Does it have site space for the outdoor activity area and the teen patio? Whether planning a conversion, alteration, addition, or new construction, AT/FP requirements must be taken into account (see Section 3.8). Also consider barrier-free design requirements as noted in Section 3-7.

CHAPTER 3

GENERAL DESIGN CRITERIA

3-1 **GENERAL.** Use *UFC 1-200-01, Design: General Building Requirements* for guidance on the use of model building codes for design and construction of Department of Defense facilities. See Section 3-5 for the appropriate governing codes for building services.

3-2 **STRUCTURE.** The Youth Center must be a single-story structure.  The Air Force may allow two-story Youth Centers, but prefers a single-story structure.

3-2.1 **Foundation.** The foundation is site specific and must be designed upon known geotechnical considerations, by an engineer knowledgeable of the local conditions.

3-2.2 **Superstructure.** Provide clear spans as required for the activity areas and multipurpose room. Use pre-engineered components for superstructure framing, where feasible.

3-2.3 **Materials.** Climate conditions, high humidity, industrial atmosphere, salt water exposure, or other adverse conditions should be considered when selecting the following:

- The type of cement and admixtures used in concrete,
- The concrete cover on reinforcing steel in concrete membrane,
- The coatings on structural members,
- Expansion joints,
- The level of corrosion protection, and
- The structural systems.

3-3 **EXTERIOR DESIGN.** In general, the building's image, theme, and fixtures must be consistent with the programs offered. Design the Youth Center to reflect a residential, non-institutional character. The building design should comply with the Service command and installation architectural standards and design guides. Also consider the local geographical and cultural environment. The building and site should provide a visually attractive and welcoming appearance with ample parking, and signs giving directions to the site.

3-3.1 **Entrances.** The main facility entrance to the lobby should serve as a welcome and transition point—elements such as a covered entry are very desirable.

Such a feature might be combined with a covered walkway that connects the building to short-term parking to protect arriving youth and parents from inclement weather. If a covered walkway feature is provided, it should be structurally independent from the main Youth Center structure. In cold climates, provide a canopy (or a recess) at required egress doors to ensure that doors can completely open without obstruction from snow and ice.

Consider providing separate entrances to the multipurpose room and the teen room. Alternatively, consider providing a paved path from the parking area to a multipurpose room exit.  The Navy requires a separate, exterior entrance to the Teen Room/Lounge that is independent from the main lobby but visible from the check-in.

3-3.2 Doors and Windows. Residential size and type of doors and windows should be provided. Casement and other projecting types of windows must be recessed or located so as to be free from dangerous protrusions. Ensure windows and doors comply with AT/FP criteria as noted in Section 3-8.

3-3.3 Exterior Finishes. The exterior color, texture, and design should be consistent with the programs offered and the local environment and be appropriate for the building type. Design the Youth Center to reflect a residential-style, non-institutional character—the design should communicate a sense of fun while complying with installation architectural standards. The physical environment supports the operational quality of a center and profoundly affects the behavior and development of youth, as well as the efficient functioning and sense of well being in adult staff. Also coordinate the exterior finishes with the Service-specific design standards noted below in Section 3-4.2 for interior finishes.

Consider climate conditions, high humidity, industrial atmosphere, salt water exposure, or other adverse conditions when selecting exterior finishes, including the roof system, to ensure durability.

3-3.4 Exterior Signage. The main entrance should be equipped with an attractive, clearly located sign that provides the program hours of operation. Ensure that signage complies with Installation requirements. Sign placement and type are site-specific, but signs must be strategically located, adequately lit, and of sufficient size to permit proper viewing by individuals approaching the facility.

3-4 INTERIOR DESIGN. Construction and finishes (walls, floor, and ceiling) should support the image and theme of the facility and be consistent with the programs offered. Finishes should be extremely durable with good acoustical, noise reducing characteristics. The interior design should offer the same interest, excitement, and professionalism that can be found in comparable commercial hospitality facilities. As with the exterior, design the Youth Center to reflect a high energy, non-institutional character that communicates a sense of fun. Consider techniques to display and celebrate the youth's artwork.  For Navy facilities consider bright and vibrant colors and wall murals in common areas.

3-4.1 **Interior Construction.** Counters, casework, and cabinets should be of high-quality and durable construction. Specify Architectural Woodwork Institute (AWI) Premium or Custom for finishes per *AWI Quality Standards Illustrated*, Current Edition. Casework and cabinet doors and drawer faces should be provided as veneer panel core. Doors, drawers, and casework faces should be plastic laminate at a minimum. Where no water source is present, countertops should be plastic laminate as a minimum with hardwood or solid surface edging. Where a water source is present, countertops should be solid surface/solid composite plastics only. Specify 20-mm (.75-in.) minimum thickness for plywood, plywood backing, and solid wood panels.

Confirm the amount (linear mm/ft.) of counter/casework for each space within the Youth Center with the following **SE** Service-specific contacts:

- The Installation Manager for Army and Air Force projects and
- HQ Program Managers for Navy and Marine Corps projects.

All Interior glass must be tempered safety glass and mirrors must be break-resistant materials.

3-4.2 **Finishes.** Finishes should take into account the intended uses and be appropriately durable. They must meet the requirements listed in NFPA 101, *Life Safety Code*. **SE** Also coordinate the interior design with the following Service-specific standards or agencies:

- Army. DG 1110-3-122, *Interior Design Guide and Installation Design Guide Standards*;
- Navy. PERS-656;
- Air Force. *Air Force Interior Design Guide*, Major Command and installation design standards, and *Engineering Technical Letter (ETL) 00-06, Air Force Carpet Standard*; and
- Marine Corps. MCCS HQ MRY/MRD.

3-4.2.1 In moist climates, do not cover the inside of exterior walls with impervious materials such as mirrors or vinyl wall coverings. This is due to a concern over mold developing in the wall.

3-4.2.2 For the teen room/lounge, consider guiding a teen focus group in selection of an interior color scheme. For more information on finishes in specific areas, see the Functional Data Sheets in Chapter 4. **SE** The Navy requires the involvement of a teen focus group in the selection of interior color schemes for the Teen Room/Lounge.

3-5 **SERVICES.** Also see Section 3-9 for information on sustainable design and energy consumption.

3-5.1 **Plumbing.** Design domestic hot and cold water, sanitary and storm drainage, propane, fuel oil, or natural gas systems to meet the requirements of the most current edition of the International Plumbing Code (IPC), local installation standards, and *MIL-HDBK-1003/1, Plumbing*. *UFC 3-420-01, Plumbing* is in draft form and when complete will supersede *MIL-HDBK-1003/1*.

SE Navy requirements differ from the other Services on toilet requirements. See Table 3-1 for this Service exception.

TABLE 3-1. TOILET REQUIREMENTS BY SERVICE

Service	SAC	Youth	Teens	Staff	Visitors
Army, Air Force, and Marine Corps	Separate male/female (child-use only).	Separate male/female (child-use only) shared by Youth & Teens.		Separate male/female shared by staff and visitors.	
Navy	Separate male/female (child-use only) shared by SAC & Youth.		Multiple unisex toilets shared by Teens, Staff, and Visitors.		

3-5.2 **Heating, Ventilating, and Air Conditioning (HVAC).** Design the HVAC system to comply with the requirements of the most current edition of the International Mechanical Code (IMC). Use *MIL-HDBK 1003/3, Heating, Ventilating, Air Conditioning, and Dehumidifying Systems* as supplemental guidance until it is replaced. Comply with AT/FP requirements in the design of the HVAC system (see Paragraph 3-8).

Consider climate conditions, high humidity, industrial atmosphere, salt water exposure, or other adverse conditions when selecting exterior HVAC components to ensure durability.

3-5.3 **Fire Protection and Life Safety.** Design fire protection and life safety to comply with *UFC 3-600-01 Design: Fire Protection Engineering for Facilities*; the National Fire Protection Association (NFPA) Standards, latest editions; and the requirements listed below. Complete compliance with the NFPA 101, *Life Safety Code*, is required by Public Law (USC Title 10, Section 1794, *Military Child Care*) and may not be waived except by the Secretary of each military Service.

In case of conflict between this UFC and the latest edition of NFPA 101, contact the appropriate Service representative below for resolution:

- Army. USACE District Fire Protection Engineer
- Navy. NAVFAC EFD/EFA Fire Protection Engineer
- Air Force. HQ AFCESA/CES
- Marine Corps. HQ Fire Protection Engineer

3-5.3.1 **Occupancy Classification.** The entire facility, except for the multipurpose room, will be classified as an educational occupancy as defined in NFPA

101. The multipurpose room, if provided, will be classified as an assembly occupancy as defined in NFPA 101.

3-5.3.2 **Exiting Requirements.** Use the NFPA 101-listed occupant load factors for the purpose of designing the means of egress as follows:

- Use the factor for “Educational Use, Classrooms” for the entire facility except the multipurpose room and
- Use the factor for “Assembly Use, Concentrated use, without fixed seating” for the multipurpose room.

3-5.3.2.1 Rooms normally occupied by second-grade children and older may be located no more than one floor above the ground floor.  Note: Only the Air Force allows a Youth Center of more than one floor.

3-5.3.2.2 Provide at least two separate, accessible exits on every story. Any interior stair serving as an exit will be enclosed by fire resistant construction as required by NFPA 101 and allow discharge from the stairway directly to the outside.

3-5.3.2.3 Provide corridors of at least 1830 mm (72 in.) clear width.

3-5.3.2.4 Egress corridors may not be used as a portion of a supply, return, or exhaust air system serving adjoining areas.

3-5.3.2.5 Provide sufficient doors between the multipurpose room and the building core areas to accommodate the egress of at least one-half of the maximum multipurpose room occupant load into the building core areas. Size the main entrance/lobby and other exits directly connected to the main entrance/lobby to accommodate the exit of the multipurpose occupants along with the occupants of the building core areas.

3-5.3.2.6 Equip all exit doors from the facility to the outside with panic hardware.

3-5.3.2.7 Where cold weather vestibules are provided at activity room exits and exits other than the primary entrance, use a non-latching-type door held closed by a hydraulic door closer for inside door. Install panic egress hardware only on the exterior door.

3-5.3.2.8 Provide either of the following methods to protect the means of egress:

- Provide a direct exit to the outside from every room normally occupied by children, or
- Design corridor walls to form smoke partitions. Use magnetic hold-open devices for all fire doors and kitchen doors.

3-5.3.2.9 Provide a smooth, accessible, and unobstructed evacuation route to a safe gathering area not less than 23 m (75 ft.) from the facility for all activity rooms. The route must not cross any emergency vehicle access path, parking area, or street. The evacuation route must be at least 1020 mm (44 in.) wide, and turns and bends in the route should be wider to account for use of wheelchairs. Provide gates with not less than 1020 mm (44 in.) clear width as necessary in the play area fence. Provide sufficient outdoor lighting for the egress path to meet NFPA 101 minimum illumination requirements.

3-5.3.3 **Exit Marking.** Provide LED-illuminated exit signs where exit marking is required by NFPA 101. Install exit signs in child occupied rooms when exterior exit doors are provided.

3-5.3.4 **Additional Exiting Requirements for Extreme Cold Weather Locations.** If the facility location meets the weather criteria outlined below, provide for horizontal exiting within the facility according to NFPA 101 and the criteria in this section.

Extreme cold weather locations are those with more than 50 hours per year with a dry-bulb temperature below –15 degrees C (5 degrees F) between the hours of 0900 and 1600. (Weather data for DoD is maintained by the Air Force Combat Climatology Center and may be accessed for all DoD locations at https://www2.afccc.af.mil/prodloc_mil/index.html). The file can be searched by installation or city name. Temperature data is found in the Table, Dry-Bulb Temperature Hours for an Average Year and is presented first by month and annual summary. From the summary under the column 0900 to 1600, total the hours. For example, the numbers in parenthesis are the hours in that temperature range for the following bases: Bangor, ME (40); Elmendorf AFB, AK (151); Minot, ND (244); Offutt AFB, NE (41); and Andrews AFB, MD (0). Weather data is also available at <http://www.afccc.af.mil/> using the “Other Domain” link to submit a service request for the weather data.

3-5.3.4.1 Provide a two-hour area separation wall dividing the facility areas roughly in half on either side of the wall. When a gymnasium is provided, provide the separation wall between the gymnasium and the core areas.

3-5.3.4.2 Design corridor doors in the two-hour area separation wall to recess into the wall providing a smooth continuous wall surface. Install magnetic latches to hold door open, which release when the fire evacuation signal sounds. Install swinging doors that swing in opposite directions.

3-5.3.4.3 Install magnetic latches to hold open other doors in the two-hour area separation wall that release when the fire evacuation signal sounds.

3-5.3.4.4 Seal and fire stop all penetrations of the two-hour separation wall for conduit, piping, HVAC and electric service to maintain the fire rating of the wall.

3-5.3.5 **Emergency Lighting.** Provide emergency lighting in all areas required by NFPA 101 and at the front desk area for desk attendant to make emergency calls and

carry out other duties necessary for the safety and security of the children. Whenever possible, incorporate the emergency lighting into the normally provided lighting fixtures.

3-5.3.6 Flammability Codes and Standards. Use textiles and upholstered components complying with the applicable interior finish requirements stated in NFPA 101 and other applicable local, state, or federal standards. In addition, comply with the following:

- Use carpets tested for Volatile Organic Compounds (VOCs) and that bear a green label from the Carpet and Rug Institute indicating that the carpet emissions are within the acceptable range and
- Use products containing less than 0.05 parts per million (ppm) of formaldehyde. Any product purchased with formaldehyde levels above 0.05 ppm must bear a label in accordance with 29 CFR 1910.1048, *Formaldehyde Standard*.

3-5.3.7 Fire Hydrants. Provide at least one fire hydrant within 45 m (150 ft.) of the building's fire department connection.

3-5.3.8 Fire Separation.

3-5.3.8.1 Provide one-hour fire-rated construction to separate the multipurpose room from the building core areas.

3-5.3.8.2 Provide a one-hour fire-resistive barrier around the laundry room, if provided, and at least a 45-minute fire-rated door.

3-5.3.8.3 Other fire separations are not required in a typical one-story Youth Center fully protected with an automatic sprinkler system. Additionally, smoke barriers are not required if direct exits are provided from each room normally occupied by children (see Section 3-5.3.2).

3-5.3.9 Fire Extinguisher Cabinets. If fire extinguishers are required by the local installation, provide recessed fire extinguisher cabinets. Recessed cabinets located in fire-rated walls must be listed or approved fire-rated cabinets that can be installed in fire rated walls without having to "build-out" the wall.

3-5.3.10 Fire Suppression Systems. Provide complete automatic sprinkler systems meeting the requirements of UFC 3-600-01 for all Youth Centers. Wet pipe sprinkler systems are the preferred system type because of the high reliability and low maintenance requirements. Take care to avoid freezing sprinkler pipes located in attic spaces. Portions of the sprinkler system subject to freezing may be pre-action sprinkler systems. Note the following additional criteria:

- Design the sprinkler system water flow indication to activate the building fire evacuation system;

- Discharge inspectors' test connections to a safe, outside location onto a hard surface outside of areas where children play or congregate. Indicate discharge location on drawings;
- Use quick response type sprinkler heads; and
- Ensure that the fire department connection is accessible without entering or transiting an outdoor play area or crossing a discharge path.
- Pipe penetrations of the exterior wall must be no greater than 610 mm (24 in.) above finished grade.

If the optional kitchen is included, provide a wet chemical or water spray hood duct and cooking surface fire extinguishing system according to NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*.

3-5.3.11 Fire and Alarm System. Provide an automatic fire evacuation alarm system according to NFPA 72, *National Fire Alarm Code* and complying with the installation's requirements. Note the following requirements:

3-5.3.11.1 Locate the fire alarm control panel in an environmentally controlled location in the facility.

3-5.3.11.2 At a minimum, meet the following criteria for circuits in the systems:

- Initiating circuits – Class B, Style C
- Notification circuits – Class A, Style Z
- Signaling Circuits – Class B, Style 3.5

3-5.3.11.3 Fully addressable control panels with addressable supervisory sensors, pull stations, notification devices, and other devices are recommended.

3-5.3.11.4 Provide audio and visual notification devices/strobes in accordance with NFPA 72 and *UFC 4-021-01, Design and O&M: Mass Notification Systems*.



Note, Army and Navy require the following additional criteria:

Provide a voice evacuation system that is capable of accepting input from a remote location. This system must be UL listed for fire alarm use. The voice evacuation system will satisfy the requirements of the Mass Notification System. Provide a single type of visual notification device that will serve as the fire alarm visual alarm notification and as the Mass Notification System visual alarm notification that complies with NFPA 72 and is labeled "Emergency." The spacing and location of the visual notification devices must meet the requirements of NFPA 72.

3-5.3.11.5 The signal type/tone will be the same throughout the building, and will be heard on the playgrounds. Sufficient alarm notification devices will be provided so that

the signal is not be excessively loud in any location (15 dB above ambient is the target level).

3-5.3.11.6 Provide manual pull stations inside the facility at each exterior exit door.

3-5.3.11.7 Building smoke detection is not required and should not be provided except for the one smoke detector that is required by NFPA 72 to be located over the fire alarm control panel. Heat detectors are not required in any area because the facility is fully sprinkled. Smoke detectors must be installed in HVAC ducts as required by NFPA 90A *Standard for the Installation of Air-Conditioning and Ventilating Systems*.

3-5.3.11.8 Provide either a graphic or alphanumeric annunciator at the front desk or vestibule.

3-5.3.11.9 Provide and install a fire alarm transmitter compatible with the installation fire alarm receiving equipment to transmit fire alarm and system supervisory signals to the installation fire alarm reporting center. Consult with the Installation Fire Chief or fire system maintenance activity. This may be a sole source item.

3-5.4 **Electrical.** Provide electric service and distribution equipment, wiring receptacles and grounding, interior and exterior lighting and control, emergency lighting, telephone, communication systems, fire alarm, and intrusion systems in accordance with NFPA 70, *National Electrical Code*; UFC 3-520-01, *Interior Electrical Systems*; and the latest installation design requirements. See the latest edition of *Electric Current Abroad*, U.S. Department of Commerce, to determine voltages and cycles in overseas locations. Service grounding system and all wiring methods must meet the current NFPA 70 requirements. All service equipment must be Underwriters Laboratories (UL) listed. Alternately, published proof from an approved independent testing laboratory may be provided.

3-5.4.1 **Lighting.** Vary lighting levels and types throughout the Youth Center. Provide a combination of task and ambient light to create interest. Consider that most public spaces in the Youth Center should exhibit a more residential or hospitality-oriented character than an office or educational facility. For more information on the specific spaces, refer to the Functional Data Sheets in [Chapter 4](#).

3-5.4.2 **Communications and Data.** Provide a junction box with rigid conduit to the ceiling for telephone and data connections. Telephone and data outlets may be independent of each other or combined into a single junction box. If these connections can be combined into a single junction box then the cover plate to that junction box must allow for multiple connections. In some unique situations, the cable television (CATV)/internal video connection can also be combined into a single junction box with the appropriate cover plate.

Confirm the preference for individual or combined telephone/data/video outlets with the following  Service-specific contacts:

- The Installation Manager for Army and Air Force projects and

- HQ Program Managers for Navy and Marine Corps projects.

SE The Navy requires that each space supplied with a data connection have two hard-wired connections: a primary and an alternate. The alternate serves as a back-up and is generally not activated.

3-5.4.3 **Alarm System.** Consider providing an alarm system for intrusion detection to protect equipment and assets. Provisions for an alarm system must be justified during the planning/programming process. **SE** For Navy, the individual Navy Installation desiring an alarm system may fund the system as collateral equipment.

3-5.4.4 **Closed Circuit Television (CCTV).** CCTV is designed to deter and reduce the risk of child abuse and protect staff from any unwarranted allegations of child abuse. **SE** Service requirements vary on CCTV systems—note the following criteria:

3-5.4.4.1 **Army.** The video surveillance system for Army programs is to be digital, which allows for speed (quicker access to images), reduced space requirements (few tapes to store), and higher quality images. Locate the central monitor in the administrative/reception area. Design the system to provide documentation of the following areas:

- All activity spaces,
- Hallways to include exit doors,
- Kitchen to include delivery entrance and storage room,
- Reception area (front desk/lobby area/main entrance), and
- Outdoor Activity Areas to include the outdoor storage area that children can access.

This equipment, external to the outlets, is considered personal property. All video monitoring security systems will be coordinated with U.S. Army Community and Family Support Center, Child and Youth Services Directorate for the latest specifications for Video Monitoring Equipment. All patrons must be notified of the camera surveillance.

3-5.4.4.2 **Navy.** Provide conduit (minimum 19 mm (.75 in.)) and cabling in each activity space with the central monitors located at the check-in desk and a remote monitor located in the Youth Center Director's office. The conduit will accommodate government-furnished/government-installed, locally-funded video equipment. This may require outlets higher in the ceilings, walls, or both. Provide electrical service adjacent to anticipated location of cameras and monitors.

3-5.4.4.3 **Air Force.** Provide the entire CCTV system including cameras, monitors, conduit, cabling, power, and junction boxes required for a complete and operational

system. Place monitors at the main check-in desk where they can be easily viewed by staff and in the Youth Center Director's office.

3-5.4.4.4 **Marine Corps.** Provide the entire CCTV system including cameras, monitors, conduit, cabling, power, and junction boxes required for a complete and operational system. Place monitors at the main check-in desk where they can be easily viewed by staff and in the Youth Center Director's office.

3-6 **SITE WORK.**

3-6.1 **Landscaping.** Landscaping should reflect the programs offered and the local geographical environment. The plant selection should be easy to maintain and enhance the visual quality of the facility in all seasons. Indigenous species are preferred. Refer to the local installation landscape standards.  For Air Force, also refer to the USAF *Landscape Guide* and any Major Command standards.

Do not use poisonous or toxic plants or rocks. Table 3-2 provides a non-comprehensive list of common plants which are known to be poisonous. Table 3-3 provides a list of plants for which no evidence currently exists of a poisonous quality. These lists are provided by the Maryland Poison Center. Within the United States, check with local extensions of the U.S. Department of Agriculture for more information about the nature of common plantings in specific locations. These lists are not intended to serve as a guide for plants to use or not use but are merely provided for informational purposes. Refer to a comprehensive, commercially-available field guide for complete lists of poisonous plants.

TABLE 3-2. COMMON POISONOUS PLANTS

Amaryllis	Jerusalem cherry
Azalea	Jimsonweed
Barberry	Jonquil
Black locust	Lily-of-the valley
Boxwood	Mistletoe
Caladium	Mountain laurel
Castor bean	Narcissus
Chinaberry	Nephtytis/Arrowhead
Chinese evergreen	Nightshade family
Chrysanthemum	Oak (acorns)
Crown of thorns	Peony
Daffodil	Philodendron family
Dumbcane/Dieffenbachia	Poison ivy/oak/sumac
English ivy	Pokeweed
Euonymous	Privet
Four o'clock	Rhododendron
Fruit pits or seeds	Snowball bush/Hydrangea
Gladiola	Water hemlock
Holly	Wisteria
Hyacinth	Yew
Iris	

TABLE 3-3. COMMON NON-POISONOUS PLANTS

African violet	Marigold
Christmas cactus	Mulberry (ripe berries only)
Coleus	Norfolk pine tree
Corn plant	Peperomia
Crocus	(spring) Petunia
Dandelion	Poinsettia*
Dogwood	Prayer plant
Dracaena	Pyracantha/Firethorn
Easter lily	Rose
Ferns	Rubber tree plant
Ficus*	Sansevieria/Snake plant
Forsythia	Scheffiera*
Fuchsia	Spider plant
Geranium	Swedish Ivy
Hibiscus	Tulip*
Honeysuckle	Wandering Jew
Impatiens	Wax plant
Jade plant	Wild strawberry/Snakeberry
Lilac	Zebra plant

* Sap may be irritating.

3-6.2 **Drop-off Area/Bus Stop.** Comply with AT/FP standards noted in Paragraph 3-8 below. Consider providing a sign at the entry to the bus drop-off lane that reads, "Bus Drop-Off Lane Only. All Other Vehicles Prohibited."

3-6.3 **Parking and Access Drives.** Provide adequate parking for both staff and patrons with the appropriate access drives. Consider location of bicycle racks near the facility entrance in a secure location.

3-6.4 **Service Drive.** The size of required service vehicles should be verified by the designer prior to planning the service access areas. A back-up spur should be provided for dead-end and service drives which exceed 30 m (100 ft.) in length. Access should be near the serviced areas, i.e., kitchen (if provided), 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 fences, depressions, berms, and landscaping. Ensure proper drainage if depressions are used. Do not cross outdoor activity areas with service access. Ensure compliance with AT/FP standards noted in Paragraph 3-8 below, particularly for dumpster separation and access control.

3-6.5 **General Site Lighting.** Ensure that parking areas and the facility have adequate lighting for safety, evacuation, and security measures.

3-6.6 **SAC Outdoor Activity Area.** The SAC Outdoor Activity Area should comply with the Consumer Product Safety Commission (CPSC) *Handbook for Public Playground Safety* guidelines for developmentally-appropriate play spaces and groupings. It should also comply with *ASTM F1487, Standard Consumer Safety Performance Specification for Playground Equipment for Public Use*. See Table 4-4.2 for more information on this space.

3-6.7 **Youth Outdoor Activity Area.** If both SAC and Youth programs are accommodated in a facility, the youth program may share the SAC Outdoor Activity Area, in which case there are no additional criteria. If SAC is not provided or if an additional, separate Youth Outdoor Activity Area is programmed, it should at a minimum meet the National Recreation and Park Association's (NRPA) *Park, Recreation, Open Space and Greenway Guidelines*. Also consider providing features such as an exterior basketball court.

3-6.8 **Teen Patio.** See Table 4-10.2 for more information on this space.

3-6.9 **Optional Outdoor Open Area.** This optional area is intended for large area outdoor activities, such as team sports. Consider designing features to accommodate a regulation soccer field or a little-league baseball field. At a minimum, this space should also meet the NRPA's *Park, Recreation, Open Space and Greenway Guidelines*.

3-7 **BARRIER FREE DESIGN REQUIREMENTS.** Design Youth Centers to be barrier-free and accessible in compliance with the Architectural Barriers Act (Public

Law 90-480) of 1968, <http://www.access-board.gov/ufas/ufas-html/ufas.htm> - ABA. Provide barrier free design requirements in accordance with the Uniform Federal Accessibility Standards (UFAS), published as Federal Standard (FED-STD)-795, <http://www.access-board.gov/ufas/ufas-html/ufas.htm>, and 28 CFR Part 36, the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG), <http://www.access-board.gov/adaag/html/adaag.htm>.

3-8 **ANTITERRORISM/FORCE PROTECTION.** Design the facility to comply with *UFC 4-010-01, DoD Minimum Antiterrorism Standards for Buildings* and *UFC 4-021-01, Design and O&M: Mass Notification Systems*. All Youth Centers within the European Command area of responsibility must also comply with Appendix 1 (AT/FP Construction Design Standards) to Appendix D (Logistics) to USCINEUR AT/FP OPOD 01-01.

SE Note, Army and Navy have different requirements for mass notification systems. See Paragraph 3-5.3.11 for more information.

3-9 **SUSTAINABLE DESIGN.** Use an integrated approach to the planning and design of Youth Centers that minimizes energy consumption and optimizes life cycle cost renewable energy possibilities. Use a practical combination of site selection and siting, energy conserving building envelope technologies, energy efficient lighting, occupant sensing controls, variable frequency drives for motors and exhaust fans, and high efficiency HVAC systems to achieve this goal. Incorporate renewable energy principles such as day-lighting, passive and active solar heating, natural ventilation, and photo-voltaics where they are life cycle cost effective.

3-9.1 **Service Specific.** **SE** See the following Service-specific requirements:

3-9.1.1 **Army.** Design Youth Center projects with consideration for sustainable ratings in eight facility categories: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Facility Delivery Process, Current Mission, and Future Missions. The minimum rating for the Army's Sustainability Project Rating Tool (SPiRiT) must be in accordance with the current rating. Most projects can reach the sustainability rating without increasing costs, while improving installation sustainability and balancing available resources with customer requirements. Understanding and applying the principles of Sustainable Design and Development and using the SPiRiT rating process improves day-to-day decisions and project quality.

3-9.1.2 **Navy and Marine Corps.** Use the United States Green Building Council (USGBC) LEED™ Green Building Rating System to measure the sustainability of the completed project. It can also be used during planning and design as a source of green building strategies. LEED™ addresses sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. The minimum LEED™ rating of "Certified" should be met within budgetary constraints. Actual certification is encouraged, but not required.

Follow the guidance in UFC 3-400-01, *Design: Energy Conservation*.

3-9.1.3 **Air Force.** It is Air Force policy to apply sustainable development concepts in the planning, design, construction, environmental management, operation, maintenance, and disposal of facilities and infrastructure projects, consistent with budget and mission requirements.

Each Major Command should incorporate sustainable development using LEED™ criteria. The *Air Force Sustainable Facilities Guide* will provide tools and suggested guidelines for selecting candidate projects. The goal is to have all MILCON/NAF projects in the FY09 program capable of achieving LEED™ certification. Submission to the USGBC for actual LEED™ certification is at MAJCOM discretion. This policy does not apply to Host Nation or NATO funded projects.

Sustainable development concepts will benefit the Air Force by creating high-performance buildings with long-term value. They are to be integrated into the development process and balanced with all other design criteria to achieve best value for the Air Force. The economic analysis process need not change, but the elements to consider will now include sustainable technologies and their potential for long-term savings. Complete Air Force policies may be found in the *Air Force Sustainable Facilities Guide* found at <http://www.afcee.brooks.af.mil/dc/products/dcproducts.asp>.

3-9.2 **Other Sustainable Design Criteria.** The following general references provide more information:

3-9.2.1 When specifying products that are included in EPA's list of affirmative procurement guideline items, designers must include the requirement for these products to meet or exceed the recycled material content standards established by EPA. The list of products and their corresponding recycled content requirements are found at www.epa.gov/cpg/products. Listed products likely to be used in Youth Centers include building insulation, carpet and cushion, cement and concrete, latex paint, floor tiles, patio blocks, restroom dividers, and structural fiberboard.

3-9.2.2 The "Whole Building Design Guide" www.wbdg.org further explains the environmental issues related to building materials and provides technical guidance on green building material selection.

3-9.3 **DoD Energy Budget.** Design of new facilities must ensure that building energy consumption does not exceed the DoD energy budget figures.

CHAPTER 4
SPECIFIC DESIGN CRITERIA

4-1 **INTRODUCTION.** This chapter identifies the specific design needs for each functional area as outlined in the space program. Tables 4-1 through 4-11 provide this data in a standard Functional Data Sheet format.

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 Web site (www.wbdg.org) under the DoD page, Tools section.

TABLE 4-1. LOBBY

Description/ Usage	The Lobby serves as the entrance to the facility. This entrance should be recognizable from the outside and be close to the school bus drop-off, base bus stop, and patron parking. The lobby should be open and friendly and serve to introduce the rest of the facility. It should have a comfortable area for waiting. The Check-in (see Table 4-2) is an integral part of the lobby.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Provide a low-maintenance, durable finish. Prefer a wainscot. Consider painted gypsum wallboard or the use of vinyl wall covering where budget and practical considerations allow. Floor. Provide a low-maintenance, durable, moisture and slip-resistant finish suitable for this high traffic area. Consider seamless vinyl, stained concrete, or stone or quarry tile. Provide a walk-off mat/area at the entrance door. Ceiling. Provide a decorative ceiling. Consider exposed, painted structure.
Plumbing	None required. Consider providing a drinking fountain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code. Consider outlets for display cases.
Lighting	430 Lux (40 ft. candles). General ambient lighting. Consider decorative and task lighting.
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Consider providing one line for local or toll-free calls. Data. None required. Security. None required.
Casework	Consider providing display cases in this space and along corridors for display of projects.
Furnishings Fixtures & Equip. (FF&E)	Floor mat at entrance; soft padded furniture for seating/waiting area; tables; magazine rack, and tack surfaces. Consider providing a pay phone.  For Army, consider providing a ceiling or wall-mounted TV and security monitors.
Special Req.	Airlock at main entrance. Signage.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-2. CHECK-IN

<p>Description/ Usage</p>	<p>The Check-in area is the primary area to monitor and control access into and out of the building. Youth will be checked in here, and all visitors must register at this point. It must have visible control over all primary entrances/exits and the Commons and access points to other spaces.</p> <p>Game supplies may be stored at the check-in desk. The audio and CCTV controls will also be located here.</p>	
<p>Min. Ceiling Ht.</p>	<p>2.74 m (9 ft.) minimum.</p>	
<p>Finishes</p>	<p>Walls. Painted gypsum wallboard. Consider vinyl wall coverings. Floor. VCT with vinyl or rubber base. Consider carpet or cushioning properties behind the counter. Ceiling. ACP. Consider using the ceiling to define and separate this area from the Lobby.</p>	
<p>Plumbing</p>	<p>None required.</p>	
<p>HVAC</p>	<p>20 C (68 F) minimum, 26 C (78 F) maximum</p>	
<p>Fire Protection</p>	<p>Provide system per Section 3-5.3.</p>	
<p>Power</p>	<p>Provide power for all equipment. Perform a power requirement survey as this area's power requirements are extremely site and locale specific.</p>	
<p>Lighting</p>	<p>540 Lux (40 ft. candles). General ambient lighting. Provide task lighting; consider decorative fixtures.</p>	
<p>Communication</p>	<p>CCTV. All lobby monitors must be viewable from this area. CATV/Internal Video. None required. PA/Audio. PA controls. Provide a speaker. Telephone. Provide one line per two points of sale (POS). Provide at least two additional general purpose phone lines. Data. Provide one outlet per POS. Provide additional outlets, as needed, for associated hardware. Security. None required.</p>	
<p>Casework</p>	<p>Provide a 610 mm (24 in.) deep counter with built-in cabinets. Provide file drawers and storage drawers with a minimum of two lockable drawers for each POS. The counter should be dual height for standing transactions, seated office functions, and ADA customer service. Note that ADA-height counter should have knee-hole space on both sides of the counter. Consider a durable material for the counter such as solid surface—laminated edges are not permitted. Consider supports such as steel angle braces for counters with knee-hole space. Modesty panels and apron must be of durable materials. Consider providing wall and base cabinets and equipment counter.</p>	
<p>Furnishings Fixtures & Equip. (FF&E)</p>	<p>Point-of-Sale units, desktop computer for administrative functions. CCTV monitors. Printers. Chairs and stools. Scanner or swipe-card check-in device.</p>	
<p>Special Requirements</p>	<p>Consider providing a gate between desk and surrounding area. Consider providing a coiling door or grille at the counter to serve as a security screen.</p>	
<p>For use during project execution by the appropriate Service agency</p>		
<p>Occupancy</p>	<p>Staff. Patrons/Youth.</p>	
<p>Min. net m² (ft²)</p>		

TABLE 4-3.1 ADMINISTRATIVE OFFICES

Description/ Usage	The Administrative Offices consist of a mix of closed and open office space. The quantity and selection of closed offices is facility specific. The remaining staff sits in open offices or workstations arranged in an open office plan with systems furniture. All offices are used for planning, developing, organizing, supervising, implementing, promoting, and evaluating facility operations. The offices should be free from frequent distraction, have a professional appearance, and provide a sense of work place.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wall board or vinyl wall covering. Floor. Carpet with vinyl or rubber base Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Provide system per Section 3-5.3.
Power	Ensure an adequate number of circuits to power all equipment. Provide a minimum of one quad outlet in closed offices on at least three walls. Gang outlets with data and telephone. Workstations should provide at least one quad outlet per staff. Provide additional outlets as necessary to operate shared equipment such as printers, fax, etc.
Lighting	540 Lux (50 ft. candles). General ambient fixtures.
Communication	CCTV. Provide one outlet for remote monitor in Director's office and one for the School-age Coordinator. CATV/Internal Video: None required. PA/Audio: Provide a speaker. Telephone. Provide one line per staff plus one additional line for fax and copier. Data. Provide one outlet per staff plus one outlet for each printer, copier, scanner, etc. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Private Offices—provide furniture for 11 m ² (120 ft. ²) office: desk, credenza, filing cabinet, desk chair and two side chairs. Workstations—provide furniture for 4.5 m ² (48 ft. ²) workstation: desk chair and side chair for open offices. Workstation systems furniture must provide adequate space for filing and overhead storage.
Special Requirements	Provide vision panels in office doors.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-3.2 BREAK/ STAFF TRAINING ROOM

Description/ Usage	Used for staff training, meetings, breaks, and lunches. Consider that staff lockers may be in this area (see Table 4-3.4).
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wall board or vinyl wall covering. Floor. VCT with vinyl or rubber base. Ceiling. ACP
Plumbing	Provide a sink. Consider water connection for refrigerator ice maker.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code. Provide one additional outlet at counter height for convenience. Provide additional outlets necessary to operate dedicated equipment such as the coffee machine, refrigerator, time clocks, microwave, and various training equipment.
Lighting	540 Lux (50 ft. candles). Consider dimmable lights.
Communication	CCTV. None required. CATV/Internal Video. Consider providing one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line. Data. Provide a minimum of one outlet. Consider providing additional outlets for training purposes. Security. Provide a vision panel in the door.
Casework	Solid-surface countertop; see paragraph 3-4.1 for length criteria. Provide lockable wall and base cabinets. Provide storage for training materials and AV cart.
Furnishings Fixtures & Equipment (FF&E)	Table and chairs, microwave, coffee machine, and refrigerator. Bulletin board with tack surface. Dry-erase board. AV cart with TV, VCR, and DVD for training purposes. Projector and screen. Computers.
Special Requirements	Provide a vision panel in the door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-3.3 COPY/FILE AREA

Description/ Usage	This area could be either enclosed and centralized or open and decentralized within the Administrative area. It houses copy machines, printers other than those dedicated to specific individuals, filing cabinets, and storage for general office supplies. In addition, provide sufficient space to act as a workroom for staff to allow for collating documents, presentations, and work projects.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wall board or vinyl wall covering. Floor. VCT with vinyl or rubber base. Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code and dedicated outlets for copiers and printers.
Lighting	540 Lux (50 ft. candles)
Communication	CCTV. Consider providing one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide at least one line for telephone and one additional line, if appropriate, for a facsimile machine. Data. As necessary for network printers. Security. Lockable area for filing or lockable filing cabinets.
Casework	610-mm (24-in.) deep countertop. Lockable base and wall cabinets and storage shelves.
Furnishings Fixtures & Equipment (FF&E)	Photocopy machine and other office equipment, as appropriate. Work table for collating documents and other work.
Special Requirements	If this is a dedicated room with a door, provide a vision panel.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-3.4. OPTIONAL STAFF LOCKER AREA

Description/ Usage	This optional area is used by all staff for the storage of personal articles only. It is not intended as a rest room or shower facility. It is usually part of or adjacent to the Break/Staff Training room (see Table 4-3.2).
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wall board or vinyl wall covering. Floor. VCT with vinyl or rubber base. Ceiling. ACP.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Half-sized lockers with key/combination locks.  Navy requires padlock lockers
Special Requirements	If this is a dedicated room with a door, provide a vision panel in the door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff.
	Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-3.5 STAFF/VISITORS TOILETS/ JANITOR’S CLOSET

Description/ Usage	See Table 3-1 for Service-specific toilet requirements. These are separate male and female toilets for use by adult staff and visitors. SE Navy provides multiple unisex toilets that are shared by Teens, staff, and visitors—see Table 4-9.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Epoxy or enamel painted, moisture-resistant gypsum wall board with a ceramic tile wainscot. Consider full ceramic tile walls. Floor. Ceramic tile. Ceiling. Painted, moisture-resistant gypsum board. None needed for janitor's closet.
Plumbing	Provide wall-hung water closets, wall-hung urinals, and lavatories based on the applicable code for the calculated occupancy. Provide a floor drain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Ventilate to the exterior per code.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. Provide lockable doors. Provide a vision panel in the door.
Casework	Solid-surface countertop with either underhung or integral sink. Solid composite toilet and urinal partitions. SE Not necessary for Navy unisex toilets.
Furnishings Fixtures & Equipment (FF&E)	Toilet accessories: toilet paper dispensers, paper towel dispenser with integral trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
Special Requirements	Provide a Janitor's closet associated with or in proximity of these toilets. This closet includes a mop sink with hot and cold water, a floor drain, and storage for pails, mops, vacuums, and related cleaning supplies and equipment. Include a lockable door, (which can be opened from the inside) with a vision panel. Provide lockable cabinets for cleaning supplies. Provide exhaust ventilation directly to the outside.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-3.6. OPTIONAL LAUNDRY

Description/ Usage	This optional Laundry Room may be used for washing sports uniforms or other items associated with the operation and maintenance of a Youth Center. It is sized in one of two modules: a one-washer room or a two-washer room. SE The Navy normally does not provide laundry without justification.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted water-resistant gypsum wallboard. Floor. VCT or seamless vinyl. Ceiling. None or Acoustical Ceiling Panels. Consider washable and humidity resistant panels. Gypsum wallboard ceiling may also be used.
Plumbing	Hot and cold water to each of the washing machines and one laundry sink. Floor drains. Provide recessed plumbing cabinets for each utility connection to the machines.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Provide separate vents to the outside for the dryers. Provide adequate dehumidification as part of the building systems.
Fire Protection	Provide system per Section 3-5.3. Note requirement for 1-hour rated construction and 45 min.-rated door with self closer.
Power	Provide outlets per code. Provide power to each washer and dryer.
Lighting	540 Lux (50 ft. candles) general ambient lighting.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. Provide a vision panel in the door.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Large, high capacity washers and dryers—provide one more dryer than washer (either one washer and two dryers, or two washers and three dryers). Provide for storage of laundry supplies. Consider providing a folding table and hanging rack.
Special Requirements	Provide easy access to rear of dryers to allow easy maintenance and cleaning of vents (see HVAC).
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-4.1. SAC ACTIVITY ROOMS

Description/ Usage	<p>These rooms accommodate a variety of activities and program options for youth in the SAC program. These rooms may be used for multiple activities such as arts/crafts, hobbies, performing arts/drama, science, and study. The room should be able to accommodate multiple activities at the same time.</p> <p>SE Note: the Services vary on how they configure these rooms; see floor finishes below for more information.</p>
Min. Ceiling Ht.	2.44 m (8 ft.) minimum and (12 ft.) maximum.
Finishes	<p>Walls. Gypsum wall board—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.).</p> <p>Floor. Provide 100% hard surface flooring (prefer vinyl composition tile) and the use of area carpets to allow flexibility of room configuration. Vinyl or rubber base.</p> <p>SE Air Force requires 50% carpet (in clean area), 50% seamless, impervious, non-skid, non-textured hard-surface flooring (in play area). Vinyl or rubber base. Navy will allow stained concrete for hard-surface flooring.</p> <p>Ceiling. ACP.</p>
Plumbing	Provide one two-compartment sink with hot and cold water. To facilitate arts and crafts activities, consider making this a deep sink. To prevent scalding of youth, limit water temperature to 43 C (110 F). Provide a floor drain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide duplex outlets at 2.44 m (8 ft.) on center at perimeter walls; provide at least one GFI duplex above countertop; provide duplex outlets for TV (near cable outlet), refrigerator, and microwave.
Lighting	540 Lux (50 ft. candles) minimum. Consider providing as much as 750 Lux (70 ft. candles) to accommodate arts and craft activities.
Communication (in each room)	<p>CCTV. Provide minimum one outlet. Consider the shape of the room and the panning range of the camera to determine if additional outlets will be necessary.</p> <p>CATV/Internal Video. Provide one outlet. SE Navy does not support CATV in this space.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. Consider providing at least two outlets.</p> <p>Security. Do not create corners or “nooks” not visible from other areas of the room.</p>
Casework	Provide lockable base and wall cabinets with adjustable shelves. Solid surface countertops are required where water is present and preferred elsewhere.
Furnishings Fixtures & Equip. (FF&E)	<p>Tables, chairs, soft seating areas, computers, tack board, and marker board. Consider age-appropriate dimensions for all furniture and fixtures.</p> <p>Consider providing undercounter refrigerator and microwave for life skills training. Provide storage for each youth. Consider individual lockers.</p>
Special Requirements	<p>Provide tackable surfaces on the walls.</p> <p>Include vision panels in interior doors and large windows in the interior walls. Provide exterior doors to outside activity area. SE Army requires exterior doors to be alarmed. Navy does not require exterior doors.</p> <p>Provide a dedicated storage closet (the space for this has been included in the space program) with hanging rods and/or shelves for each SAC Activity Room.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	Room. Storage Closet.

TABLE 4-4.2 OUTDOOR ACTIVITY AREA

Description/ Usage	The Outdoor Activity Area should be designed to meet the requirements for NSACA accreditation. It should be conducive to creative play and must include three zones: hard-surface area, shaded area, and an open area. A certified playground safety inspector should be involved in the design of the Outdoor Activity Area or, at a minimum, the design review.
Min. Ceiling Ht.	N/A
Finishes	Walls. N/A Floor. Hard-surface Areas—cast-in-place concrete over well-compacted sub-grade is generally the most durable, low-maintenance surface material. Consider color additives or surface finishes to improve the appearance and reduce glare. Avoid smooth steel trowel finishes, which can become slippery when wet. Use Zones—Use zones are the areas under and around playground equipment and are defined by ASTM 1487. Use surface materials that meet the shock absorbency criteria recommended by CPSC and ASTM guidelines. Generally, poured-in place resilient safety surfaces are the best option. Ceiling. N/A
Plumbing	Provide a keyed, tamper-resistant hose bibb. Consider providing misters in hot, dry climates—connect to potable water system and provide code-compliant back-flow prevention. Consider providing an irrigation system—consider safety factors such as tripping hazards and the use zones in the design.
HVAC	N/A
Fire Protection	N/A
Power	N/A
Lighting	Provide security lighting on a timer for after-hours activation and on a switch for staff control.
Communication	CCTV. None required.  The Army provides outdoor camera coverage. CATV/Internal Video. None required. PA/Audio. Provide speakers for adequate coverage. Speakers to be outdoor type. Consider outdoor noise levels when spacing speakers. Telephone. None required. Data. None required. Security. Do not create blind spots or hidden areas.
Casework	Provide an enclosed, weather-tight, vandal-proof storage shed for outdoor equipment. It should be readily accessible to the major play zones and be architecturally or thematically compatible with the Youth Center, including the roof design. Ventilate the storage shed and provide concrete floors sloped to the door for drainage. Provide visibility into the shed and eliminate blind spots created by the shed for child-abuse concerns. Locks must be selected to operate at the exterior of the door but not allow children to be trapped inside the structure.
Furnishings Fixtures & Equip. (FF&E)	CPSC-compliant, age-appropriate play equipment. Consider other items such as sports equipment, balls, outdoor tables and chairs, etc.
Special Requirements	Per Section 3-7, comply with ADAAG Amendment 15.6 for play areas. It includes technical provisions for ground level and elevated play components, accessible routes, ramps and transfer systems, ground surfaces and soft contained play structures.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-5.1. COMMONS

Description/ Usage	<p>This is the “heart” of the facility. It is the space that connects the basic components of a youth center such as the activity rooms, computer room, teen room, multipurpose room, and the SAC area. The area should be open and inviting and offer defined areas where smaller groups of youth can gather for such activities as eating, gaming, and group conversations. The Commons should naturally “grow” out of the Lobby. The entrances to the other youth center components should be well defined and act as “portals” to these other areas.</p> <p>The game area, snack bar/eating area, and vending area could be sub areas within the Commons. SE The Navy normally does not provide a vending area.</p> <p>The Commons should also provide access to the outdoor activity areas but not the Teen Patio.</p>
Min. Ceiling Ht.	2.4 m (8 ft.) minimum with 3.66 m (12 ft.) recommended; up to 5.49 m (18 ft.) may be considered. Consider varying the ceiling heights to provide interest and variety of scale.
Finishes	<p>Walls. Painted gypsum wall board or vinyl wall covering.</p> <p>Floor. VCT with vinyl or rubber base. If budget allows, consider stained concrete, terrazzo tile, or some other natural stone tile.</p> <p>Ceiling. Along with the height, vary the ceiling finishes to help define the sub areas of the Commons. Consider painted gypsum board or decorative finishes.</p>
Plumbing	None required. Consider providing a drinking fountain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code. Additional outlets are required in the game area and for the CCTV and CATV system. Also consider other additional outlets for special events held in this space, e.g. like a dance.
Lighting	215 to 430 Lux (20 to 40 ft. candles) general ambient lighting. Provide a variety of other accent and task lighting fixtures to create interest. Provide dedicated fixtures over the pool and gaming tables. Consider providing dimming in some areas.
Communication	<p>CCTV. Provide sufficient quantity to allow adequate coverage.</p> <p>CATV/Internal Video. One or two outlets.</p> <p>PA/Audio. Provide at least one speaker.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Tables, chairs, soft and padded furniture, and television(s). Additional specific furniture requirements are described in the associated areas.
Special Requirements	<p>This space will be greatly enhanced by skylights or clerestory windows. SE Army requires the exterior doors to be alarmed.</p> <p>A general Youth Program storage closet is programmed and generally provides storage for the Commons and Game Area. It is likely located off of the Commons. If it is a separate room, provide a vision panel in the door.</p>
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	Area. Storage Closet.

TABLE 4-5.2. GAME AREA

<p>Description/ Usage</p>	<p>This area is used for table games such as pool, ping pong, foosball, or air hockey. May also be used for board and video games. The Game Area may be a part of the Commons, but some passive separation should be provided to give this area a unique feel.</p>	
<p>Min. Ceiling Ht.</p>	<p>2.44 m (8 ft.) minimum. Provide at least 3.35 m (11 ft.) above pool tables.</p>	
<p>Finishes</p>	<p>Walls. Painted gypsum wall board or vinyl wall covering. Provide a wainscot if budget permits. Floor. Consider varying floor finishes to help define zones within the game area. Consider VCT with vinyl or rubber base and carpet for acoustical protection. Ceiling. ACP or painted gypsum board ceiling may be used to help define this area from the Commons.</p>	
<p>Plumbing</p>	<p>None required.</p>	
<p>HVAC</p>	<p>20 C (68 F) minimum, 26 C (78 F) maximum.</p>	
<p>Fire Protection</p>	<p>Provide system per Section 3-5.3.</p>	
<p>Power</p>	<p>Provide outlets per code and for games that require electricity.</p>	
<p>Lighting</p>	<p>Provide lighting levels appropriate to the individual games.</p>	
<p>Communication</p>	<p>CCTV. Provide sufficient quantity to allow adequate coverage. CATV/Internal Video. One or two outlets. PA/Audio. Provide at least one speaker. Telephone. None required. Data. None required. Security. None required.</p>	
<p>Casework</p>	<p>Consider providing a game cabinet. If provided, consider its location with respect to how it may limit the flexibility of the room.</p>	
<p>Furnishings Fixtures & Equipment (FF&E)</p>	<p>Table games such as pool, ping pong, foosball, or air hockey. Board games and video games. Chairs, tables, and stools.</p>	
<p>Special Requirements</p>	<p>Consider the acoustics of this area as games can get noisy.</p>	
<p>For use during project execution by the appropriate Service agency</p>		
<p>Occupancy</p>	<p>Staff. Patrons/Youth.</p>	
<p>Min. net m² (ft²)</p>		

TABLE 4-5.3. SNACK BAR/EATING/VENDING AREA

Description/ Usage	<p>This area provides the snack and beverage service for the center. It may have various configurations depending on the Service branch, size of facility, and types of programs offered.</p> <p>The snack bar is a service counter that offers a limited menu such as chips, sandwiches, and sodas.</p> <p>Vending supports the snack area with a limited selection of food and beverages. There are usually no more than three vending machines in a youth facility. SE The Navy normally does not provide a vending area.</p> <p>The eating area is directly adjacent to these functions and is part of the Commons. Seating should be comfortable and easily arranged. Consider two- and four-top tables.</p>
Min. Ceiling Ht.	2.44 m (8 ft.) minimum with the eating area complying with the requirements of the Commons.
Finishes	<p>Walls. Ceramic wall tile or other hard surfaces approved for the snack bar to a minimum of 1.22 m (4 ft.) from finished floor.</p> <p>Floor. Provide hard-surface flooring such as VCT, seamless vinyl, or quarry tile or other durable material.</p> <p>Ceiling. ACP or painted gypsum board.</p>
Plumbing	Two-compartment countertop sink with hot and cold water supply. Floor drain. If an ice-maker is desired, provide a cold-water connection
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide dedicated outlets for the vending machines and countertop height convenience outlets for microwave and other equipment as required.
Lighting	430 Lux (40 ft. candles) general ambient lighting. Provide task lighting. Consider accent fixtures and lighting to provide special ambience.
Communication	<p>CCTV. Provide sufficient quantity to allow adequate coverage.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker and intercom connection.</p> <p>Telephone. None required.</p> <p>Data. Provide one outlet.</p> <p>Security. None required.</p>
Casework	Countertop with base and wall cabinets at the front opening. Behind the service corridor, provide base and wall cabinets. Countertop at sink area to be solid-surface. Drink rail.
Furnishings Fixtures & Equipment (FF&E)	<p>Under cabinet or counter microwave, refrigerator, freezer, and other small appliances as required. Also provide a menu board.</p> <p>Vending machines.</p> <p>Tables and chairs/stools in the eating area.</p> <p>Consider an ice maker.</p>
Special Requirements	Provide a roll-up door for the snack bar.
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Patrons/Youth.</p>
Min. net m² (ft²)	<p>Snack Bar.</p> <p>Eating Area.</p>

TABLE 4-6. OPTIONAL KITCHEN

Description/ Usage	<p>This optional area provides a commercial-grade kitchen with an adequate cooking battery and storage for both cold and dry goods. The kitchen is generally used to prepare refreshments for day-to-day consumption by patrons and for special events. There are two size options: a small kitchen generally adequate for preparing ad hoc meals for day-to-day patrons, and a larger kitchen capable of preparing a planned menu for a larger group of people.</p> <p>SE The Navy normally does not provide a kitchen.</p>
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	<p>Walls. Ceramic wall tile or hard surfaces approved for kitchen to a minimum of 2.44 m (8 ft.) from finished floor.</p> <p>Floor. Quarry tile or other non-slip, durable material.</p> <p>Ceiling. Water and mildew resistant lay-in panels or painted gypsum wall board.</p>
Plumbing	As necessary to support the cooking and cleaning battery designed for the kitchen, including an ice machine. Floor drains must also be provided that comply with all local building and health codes.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Provide exhaust.
Fire Protection	Provide system per Section 3-5.3. Provide commercial hood and duct system and listed fire suppression system for the range.
Power	Provide outlets per code and dedicated circuits for the specified kitchen equipment.
Lighting	540 Lux (50 ft. candles).
Communication	<p>CCTV. None required. SE The Army provides camera coverage for both the kitchen and the dry storage area.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Casework	Design the counters and cabinetry with consideration of the overall kitchen design and equipment selection.
Furnishings Fixtures & Equipment (FF&E)	Commercial-grade, stainless steel equipment for the preparation, cooking, and cleaning areas, and may include the following: frozen and refrigerated food cabinets, three-compartment dish table, dish wash spray assembly, baking and convection oven, minimum four-burner cook top, storage racks, dishwashers, ice machine, and prep-tables.
Special Requirements	Consider providing a pass-through window to the snack bar.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-7.1. COMPUTER ROOM

Description/ Usage	<p>This area serves primarily for computer use by SAC, youth, and teens.</p> <p>Consider that computer use must be monitored for appropriate use.</p> <p>Provide direct visual access into this room from public areas to highlight this room as a showcase. SE In Air Force facilities, the area should also provide an area designated for homework. Air Force prefers this space to be more private for study activities.</p>
Min. Ceiling Ht.	2.44 m (8 ft.).
Finishes	<p>Walls. Painted gypsum wall board or vinyl wall covering.</p> <p>Floor. Anti-static carpet with vinyl or rubber wall base.</p> <p>Ceiling. ACP.</p>
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum with 24/7 operation.
Fire Protection	Provide system per Section 3-5.3.
Power	As necessary to support all the equipment in this room. Locations of outlets should be specific to the layout of the room and may include recessed, flush, floor-mounted junction boxes. Provide an Isolated Ground Panel Board.
Lighting	430 Lux (40 ft. candles) general ambient indirect lighting. Provide fixtures designed for use in computer environments to reduce glare and reflections.
Communication	<p>CCTV. Provide at least one outlet.</p> <p>CATV/Internal Video. Provide one outlet. SE Navy does not allow CATV in this space.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. Provide one outlet for each computer and additional outlets, as required, for other equipment and printers.</p> <p>Security. Lockable doors. Provide a vision panel in the door.</p>
Casework	<p>Consider built-in countertops for computers, monitors, printers, etc. If counters are provided, ensure access to power and data outlets.</p> <p>Consider ergonomically correct seating heights for the range of ages that will be using the computers when considering built-in counters.</p>
Furnishings Fixtures & Equipment (FF&E)	<p>Tables, chairs, computers, printers, tack boards, and marker boards. Consider modular computer workstations.</p> <p>Consider providing lockable storage.</p> <p>Consider ergonomically correct seating heights for the range of ages that will be using the computers when selecting the furniture. Height-adjustable furniture may be required.</p>
Special Requirements	If exterior windows are provided, equip with shading devices.
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Patrons/Youth.</p>
Min. net m² (ft²)	

TABLE 4-7.2. ARMY HOMEWORK ROOM

Description/ Usage	<p>SE Only the Army provides a dedicated homework room. This area provides a private, dedicated space that is conducive to study and completion of homework. In small facilities, the Army combines this with the Computer Room.</p> <p>The Navy and Marine Corps accommodate this function in the activity rooms and the Air Force accommodates this function in the Computer Room.</p>
Min. Ceiling Ht.	2.44 m (8 ft.).
Finishes	<p>Walls. Painted gypsum wall board or vinyl wall covering.</p> <p>Floor. Carpet with vinyl or rubber base.</p> <p>Ceiling. ACP.</p>
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	Provide 540 Lux (50 ft. candles) general ambient lighting.
Communication	<p>CCTV. Provide at least one outlet.</p> <p>CATV/Internal Video. Consider providing one outlet.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. Consider providing at least two outlets.</p> <p>Security. Provide a vision panel in the door and wall.</p>
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Consider items such as the following: tables, chairs, desks, soft and padded furniture for reading, tack boards, and marker boards.
Special Requirements	If exterior windows are provided, equip with shading devices.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-7.3. GENERAL ACTIVITY ROOM

Description/ Usage	This shared activity room should be versatile and open to allow for a variety of indoor activities for up to 30 youth. As with all of the activity rooms, it is sized as a basic module to afford flexibility in use. This space allows youth to socialize during group games, hold club meetings, do homework, theater/drama, and receive instruction in topics like arts and crafts and the sciences.	
Min. Ceiling Ht.	3.05 m (10 ft.) clear.	
Finishes	<p>Walls. Gypsum wall board—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.).</p> <p>Floor. Provide durable, low-maintenance hard surface flooring such as VCT (consider seamless or moisture-resistant flooring in wet/crafts areas). Consider area carpets or rugs. Vinyl or rubber base. .</p> <p>Ceiling. ACP.</p>	
Plumbing	Provide a sink with hot and cold water and a floor drain.	
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.	
Fire Protection	Provide system per Section 3-5.3.	
Power	As a minimum, provide duplex outlets at 2.44 m (8 ft.) on-center and provide one duplex outlet at each CATV outlet. Consider additional duplex outlets depending on intended usage. Outlets at the sink must be GFI and comply with all codes.	
Lighting	Provide 540 Lux (50 ft. candles) in game/play areas. Consider providing dimmable lighting and down lights at individual activity areas. Coordinate fixture locations so lights are not obstructed or shadows cast.	
Communication	<p>CCTV. Provide at least one outlet.</p> <p>CATV/Internal Video. Consider providing one outlet. SE Navy does not permit CATV in the General Activity Room.</p> <p>PA/Audio. Provide a speaker.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. Consider providing at least two outlets.</p> <p>Security. Do not create corners or “nooks” that are not visible from other areas of the room. Provide vision panels in interior doors and large windows in the interior walls to corridor and/or Commons.</p>	
Casework	Provide solid-surface countertop with base cabinets. Also consider providing wall storage cabinets for arts and craft supplies and projects.	
Furnishings Fixtures & Equip. (FF&E)	Consider items such as the following depending on intended usage: tables, chairs, soft and padded furniture, bookshelves, large pillows, area rugs, television, video games, table games, tack board, dry-erase board, easels.	
Special Requirements	<p>Provide tackable surfaces on the walls.</p> <p>Provide exterior doors to outside activity area. SE Army requires exterior doors to be alarmed. The Navy does not require exterior doors.</p> <p>Provide a dedicated storage closet (included in the space program) with hanging rods and/or shelves.</p> <p>Consider providing a folding room partition. SE The Navy does not recommend folding partitions.</p>	
For use during project execution by the appropriate Service agency		
Occupancy	Staff. Patrons/Youth.	
Min. net m² (ft²)	Room.	Storage Closet.

TABLE 4-7.4. SPECIAL ACTIVITY ROOM

Description/ Usage	This shared activity room is designed to be versatile and open to allow for a variety of indoor activities. As with all of the activity rooms, it is sized as a basic module to afford flexibility in use. The primary difference between this room and the General Activity Room is that it is designed for more active functions such as dance, yoga, or martial arts instruction. However, this room is not intended to accommodate team sports.
Min. Ceiling Ht.	3.05 m (10 ft.) clear.
Finishes	Walls. Painted concrete masonry unit (CMU) wall or impact-resistant gypsum wall board (GWB) or high-density polyethylene (HDPE). SE Navy and Air Force do not permit CMU in these spaces. Floor. Varies depending on intended functions, but may include hard-wood dance floor, athletic flooring, etc. Ceiling. ACP.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Consider the active functions with regard to air changes and humidity control.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Provide one line with internal two-way communication. Data. Consider providing at least two outlets. Security. Do not create corners or “nooks” that are not visible from other areas of the room.
Casework	Varies depending on intended functions, but may include a segmented, height-adjustable dance (ballet) bar; full-height, shatter-proof mirrors; etc.
Furnishings Fixtures & Equipment (FF&E)	Varies depending on intended functions, but may include resilient athletic flooring, martial arts equipment, and other specialized equipment to suit the selected function.
Special Requirements	Include vision panels in interior doors and large windows in the interior walls. Provide exterior doors to outside activity area. SE Army requires exterior doors to be alarmed. The Navy does not require exterior doors. Provide a dedicated storage closet (included in the space program). Consider acoustical requirements for these active function rooms. Consider providing a folding room partition.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-7.5. OPTIONAL MUSIC/MULTIMEDIA ROOM

Description/ Usage	This optional room is smaller than the basic activity room module and is used for musical instrument instruction for one to two students or as a video and/or photography lab.
Min. Ceiling Ht.	2.44 m (8 ft.).
Finishes	Walls. Painted CMU or other material with consideration for acoustical separation from adjacent spaces. SE Navy and Air Force do not permit CMU in these spaces. Floor. VCT or Carpet with vinyl or rubber base. Ceiling. ACP.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. SE Army requires one line with two-way internal communication. Data. None required. Security. Provide a vision panel in the door.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	May include chairs, music stands, etc.
Special Requirements	Integrate equipment storage spaces with the design of these rooms. Music rooms require acoustical separation from the remainder of the facility. Provide soundproof walls from floor to roof deck. Consider providing an acoustical vestibule at the entrance to this room or, at a minimum, a door with sound gaskets on all edges. Provide a vision panel in the door.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-7.6 OPTIONAL PARENT WAITING AREA

Description/ Usage	This optional space is in addition to the lobby waiting area and provides a comfortable area for family and friends to view youth participating in the individual programs. This area should have visual access at a minimum into the Special Activity Rooms. SE Navy does not permit this optional area.
Min. Ceiling Ht.	2.44 m (8 ft.).
Finishes	Walls. Painted gypsum wall board or vinyl wall covering. Floor. Carpet with vinyl or rubber base. Ceiling. ACP.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Soft padded furniture for seating/waiting area, tables, magazine rack.
Special Requirements	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-8. SAC/YOUTH/TEEN TOILETS

Description/ Usage	See Table 3-1 for Service specific toilet requirements. Separate toilets for male and female youth. These toilets are not for use by adults. SE Navy Youth toilets are shared with the SAC youth, but not the teens while the center is occupied by pre-teens—see Table 4-9 for Navy Teen (unisex) toilet criteria.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Epoxy or enamel painted, moisture-resistant gypsum wall board with a ceramic tile wainscot. Provide full-height ceramic tile on wet walls; consider full-height ceramic tile on all walls. Floor. Ceramic tile. Ceiling. Painted, moisture-resistant gypsum board.
Plumbing	Provide water closets, urinals, and lavatories based on the applicable code for the calculated occupancy. To prevent scalding of youth, limit water temperature to 43 C (110 F). Provide a floor drain. Provide a keyed hose bibb. Consider providing a drinking fountain outside this room. Provide wall-hung water closets and urinals. SE The Navy requires floor-mounted urinals.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Provide at minimum 4 – 6 air changes per hour. Ventilate to the exterior per code.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. Ensure entrance can be audibly and visually monitored from Check-in.
Casework	Solid-surface countertop supported at both ends with either underhung or integral sink. Phenolic or solid composite toilet and urinal partitions secured at floor and ceiling.
Furnishings Fixtures & Equipment (FF&E)	Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
Special Requirements	
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-9. NAVY TEEN/STAFF/VISITOR TOILETS

Description/ Usage	SE Navy provides multiple (as needed) unisex toilets for use by Teens, Staff and visitors. Quantity of toilets is based on the applicable code for the calculated occupancy. The other Services do not use unisex toilets. See Table 3-1 for Service-specific toilet requirements.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Epoxy or enamel painted, moisture-resistant gypsum wall board with a ceramic tile wainscot. Provide full-height ceramic tile on wet walls; consider full-height ceramic tile on all walls. Floor. Ceramic tile. Ceiling. Painted, moisture-resistant gypsum board.
Plumbing	One wall-hung water closet and lavatory. Provide a floor drain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Ventilate to the exterior per code.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles).
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. None required. Telephone. None required. Data. None required. Security. Lockable door.
Casework	Solid-surface countertop supported at both ends with either underhung or integral sink. A wall-hung lavatory is also acceptable. Wall-hung water closets.
Furnishings Fixtures & Equipment (FF&E)	Toilet accessories: toilet paper dispensers, paper towel dispenser with integrated trash receptacle, robe hooks, grab bars, and soap dispensers. Mirror.
Special Requirements	This room must be ADA-compliant.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-10.1. TEEN ROOM/LOUNGE

Description/ Usage	This space allows teens to socialize during group games as well as have access to more independent activities like computers or watching television in a home-like environment. Consider an irregular shaped room that can be zoned for different activities. However, do not create blind spots. This room must feel private but still connected to the rest of the center. Consider visual access from the Check-in. SE Navy requires visual access from Check-in.
Min. Ceiling Ht.	2.4 m (8 ft.) minimum with 3.66 m (12 ft.) recommended. Consider varying the ceiling heights and finishes to provide interest and a variety of scale. If a pool table is included, provide at least 3.35 m (11 ft.) over the table.
Finishes	Walls. Gypsum wall board—first 1.22 m (4 ft.) with a protective wall covering wainscot and paint above 1.22 m (4 ft.). Floor. VCT, seamless vinyl, or carpet with vinyl or rubber base. Also see Special Requirements below. Ceiling. Primarily ACP with painted gypsum board used to help define other areas.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	As a minimum, provide duplex outlets at 2.44 m (8 ft.) on-center. An area within the Teen Room/Lounge should provide duplex outlets at 1.22 m (4 ft.) on-center for video games and provide one duplex outlet at each TV cable outlet. Also provide outlets at counter height for portable electronic devices such as CD players and laptops. Provide power at data outlet locations.
Lighting	215 to 430 Lux (20 to 40 ft. candles) general ambient lighting. Provide a variety of accent lighting fixtures to create interest. Consider providing dimming in some areas.
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. Provide at least one outlet. PA/Audio. Provide a speaker. Telephone. Provide one line with internal two-way communication. Data. Provide at least two outlets. Security. Provide vision panels on all doors. Do not create corners or “nooks” that are not visible from other areas of the room.
Casework	Consider counter and base cabinets.
Furnishings Fixtures & Equip. (FF&E)	Tables, chairs, stools, soft and padded furniture, lamps, bookshelves, coffee table, television, stereo, CD player, computers, video games, table games (foosball, pool), and tack board.
Special Requirements	Provide tackable surfaces on the walls. Consider large windows in the interior walls, but avoid putting the Teens “on display” to other patrons. Interior windows work best in walls common with staff areas for supervision. Provide lockable exterior doors to patio. SE Navy requires that exterior doors are visible from Check-in. Provide a dedicated storage closet (included in the space program) with hanging rods and/or shelves. SE For Navy facilities, provide an eating area with hard-surfaced floor (consider stained concrete) and two- and four-top tables and chairs. Consider providing a separate pass-through from the Snack Bar into the Teen Room/Lounge.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-10.2. TEEN PATIO

Description/ Usage	This exterior space should work in conjunction with and be accessible from the Teen Room/Lounge. It needs to allow for privacy for teens from the other outdoor areas. It could benefit from being adjacent to the snack/vending/kitchen area. SE The Navy requires a separate, exterior entrance via the Teen Patio with visual control from Check-in.
Min. Ceiling Ht.	Not Applicable.
Finishes	Walls. Not Applicable. Floor. Brick or concrete pavers, wood, or exposed concrete for hardscape areas. Grass, mulch, or sand for softscape areas. Ceiling. Not Applicable.
Plumbing	Keyed, tamper-resistant hose bibb.
HVAC	None required.
Fire Protection	A sprinkler system may be required if the space is covered. The system will need to be designed for the exterior conditions.
Power	Provide several exterior grade convenience outlets.
Lighting	Ground level, low lumen 55 Lux (5 ft. candles) decorative lighting. Provide security lighting on a timer for after-hours activation and on a switch for staff control. Consider lighting paths also.
Communication	CCTV. None required. SE The Army provides outdoor camera coverage. CATV/Internal Video. None required. PA/Audio. Provide several speakers for adequate coverage. Speakers to be outdoor type. Consider outdoor noise levels when spacing speakers. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Benches and/or chairs, patio tables, BBQ grill. Waste receptacles (must meet AT/FP criteria).
Special Requirements	Consider providing a privacy fence and/or half-height brick or stone walls. Consider providing shade structures, if budget allows. Consider landscaping appropriate to an outdoor recreation area.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	Covered. Open.

TABLE 4-11.1 MULTIPURPOSE ROOM

Description/ Usage	This room serves as a large activity room and will be used for skill building, sports, fitness activities, gymnastics, basketball, volleyball, theatrical plays, dances, in-line/roller skating, and other large area activities.
Min. Ceiling Ht.	7.62 m (25 ft.) clear height below structure and lights.
Finishes	Walls. CMU with glazed wall coating or heavy-duty epoxy up to 3.66 m (12 ft.). Above 3.66 m (12 ft.), use semi-gloss enamel and consider acoustic panels. Floor. Multipurpose, resilient, athletic flooring. Ceiling. Exposed, painted structure. Provide acoustical banners.
Plumbing	None required. Consider access to drinking fountains and bathrooms.
HVAC	18 C (65 F) minimum, 26 C (78 F) maximum; 15 cfm/person outside air, with CO ₂ sensors or other type of energy conservation system; 10 air changes/hour.
Fire Protection	Provide system per Section 3-5.3. Provide protection for sprinkler heads, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or raise it above 1.83 m (6 ft.) for safety considerations. Provide 1-hour fire separation from core areas of building.
Power	Provide outlets per code. Provide power for a scoreboard and a high, wall-mounted clock. Consider power requirements for other activities like stage sound and lighting.
Lighting	Metal halide, 540 Lux (50 ft. candles), with perimeter compact fluorescents multi-level switched for non-sport activities. Provide keyed light switches. Provide protection for all fixtures. Do not locate fixtures directly above basketball backboards.
Communication	CCTV. Provide at least one outlet in each divided space. CATV/Internal Video. None required. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. None required. Security. Provide large, shatter-resistant vision panels in the doors.
Casework	None required.
Furnishings Fixtures & Equip. (FF&E)	Protective wall mats, moveable stage, stage seating, scoring table and chairs.
Special Requirements	Provide 3.05 m (10 ft.) minimum safety distance between “out of bounds” line and nearest walls and bleachers. Acoustical control is required through the use of sound baffles, banners, acoustical materials, etc. Built-in equipment: Provide retractable basketball nets/backboards at two per half court or six per full court. Nets and backboards should be adjustable from 2.44 m to 3.05 m (8 to 10 ft.) for two opposite goals on the half court. Consider floor inserts for volleyball and gymnastics standards. Motor-operated, vertical-acting divider curtain with manual override. Electronic scoreboard—provide control for scoreboard and divider curtain on side of room opposite of bleachers (if bleachers are provided). Bleachers. Provide game lines on flooring for full- and half-court basketball and volleyball. Provide exterior double doors with removable latch post for equipment access.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-11.2 MULTIPURPOSE ROOM STORAGE/GEAR ISSUE

Description/ Usage	This area is used to store athletic equipment and tables and chairs for the center. It should be divided into two areas: one for sports equipment and one for tables and chairs. The sports equipment area should include space for the equipment monitor's desk.
Min. Ceiling Ht.	2.44 m (8 ft.). 3.5 m (10 ft.) is desirable.
Finishes	Walls. CMU or painted gypsum wall board. Floor. Sealed concrete. Ceiling. None required.
Plumbing	None required. Consider providing a connection for an ice maker and a floor drain.
HVAC	18 C (65 F) minimum, 29 C (85 F) maximum.
Fire Protection	Provide system per Section 3-5.3.
Power	Provide outlets per code. Provide two duplex outlets by the desk.
Lighting	215 Lux (20 ft. candles).
Communication	CCTV. Provide at least one outlet. CATV/Internal Video. None required. PA/Audio. Provide speakers with proper spacing. Telephone. Provide one line with internal two-way communication. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Shelving and storage cabinets, one desk, one chair, and one file cabinet.
Special Requirements	Area must be accessible from both interior and exterior through lockable double doors with kick-plates. Consider providing "dutch" doors at interior for equipment issue. SE Navy does not permit dutch doors. Provide ramp at exterior door to facilitate equipment issue/delivery, if necessary. The area must be at least 2.44 m (8 ft.) wide.
For use during project execution by the appropriate Service agency	
Occupancy	Staff. Patrons/Youth.
Min. net m² (ft²)	

TABLE 4-11.3 SMALL MULTIPURPOSE ROOM

Description/ Usage	<p>This space is optional for the Army and Navy and provides an active function room slotting in size between the Special Activity Room and the smallest Multipurpose Room option. It also generally has less sophisticated equipment than the Multipurpose Room.</p> <p>It is used for a variety of activities including four-square, dances, martial arts, movies, and dance classes.</p>
Min. Ceiling Ht.	3.66 m (12 ft.). Generally, 4.88 m (16 ft.) is the maximum ceiling height, but consider the intended usage of the room.
Finishes	<p>Walls. Impact-resistant painted gypsum wall board.</p> <p>Floor. VCT or consider synthetic athletic flooring or rubber tile.</p> <p>Ceiling. Exposed, painted structure or ACP with hold-down clips.</p>
Plumbing	None required.
HVAC	18 C (65 F) minimum, 26 C (78 F) maximum; 15 cfm/person outside air, with CO ₂ sensors or other type of energy conservation system; 10 air changes/hour.
Fire Protection	Provide system per Section 3-5.3. Provide protection for sprinkler heads, exit signs, manual pull stations, and other exposed components; minimize equipment that protrudes into activity space or raise it above 1.83 m (6 ft.) for safety considerations. Provide 1-hour fire separation from core areas of building.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles), provide dual-level lighting for games and dances, fluorescent fixtures, multi-level switched, and dimmable compact fluorescent for multiple light levels. Provide protection for all fixtures.
Communication	<p>CCTV. Provide at least one outlet.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. None required.</p> <p>Telephone. Provide one line with internal two-way communication.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	None required.
Special Requirements	<p>Provide at least one pair of doors to the interior of the building.</p> <p>Translucent wall panels or windows for natural lighting are desirable—provide suitable protection to windows from ball impacts.</p> <p>Provide good visual access into the room from public areas of the facility.</p> <p>Acoustics: Anticipated peak noise level is 70-80 dBA. Preferred sound criterion is 35-45 dBA. Maximum reverberation time is 1.5 seconds. STC 55 minimum at perimeter walls and ceiling.</p>
For use during project execution by the appropriate Service agency	
Occupancy	<p>Staff.</p> <p>Patrons/Youth.</p>
Min. net m² (ft²)	

APPENDIX A

REFERENCES

GOVERNMENT PUBLICATIONS:

1. Department of Defense (DOD)

<http://www.dtic.mil/whs/directives/>

DoD Instruction 6060.cc (Draft);

DoD Instruction 6060.3, *School-Age Care (SAC) Program*

DoD School-age Program Inspection Checklist

<http://65.204.17.188//report/doc-ufc.html>

UFC 1-200-01, *Design: General Building Requirements*

UFC 3-420-01, *Plumbing (Draft)*

UFC 3-520-01, *Interior Electrical Systems*

UFC 3-600-01 *Design: Engineering Fire Protection*

UFC 3-400-01, *Design: Energy Conservation*

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

UFC 4-021-01, *Design and O&M: Mass Notification Systems*

UFC 4-740-14, *Child Development Centers*

2. U.S. Army Corps of Engineers

USACE Publication Depot
ATTN: CEIM-IM-PD
2803 52nd Ave.
Hyattsville, MD 20781-1102

Youth Center Definitive Standard Design

DG 1110-3-122, *Interior Design Guide*

www.usace.army.mil/usace-docs/

3. Naval Facilities Engineering Command

Engineering Innovation and Criteria
Office
1510 Gilbert Street
Norfolk, VA 23511

P-80 Facility Planning

NAVFACINST 11010.45D,
Comprehensive Regional Planning
Instruction

www.efdlant.navfac.navy.mil/criteria

MIL-HDBK-1003/1, Plumbing

*MIL-HDBK 1003/3, Heating, Ventilating,
Air Conditioning, and Dehumidifying
Systems*

4. Navy Personnel Command

PERS-659
5720 Integrity Drive
Millington, TN 38055
www.mwr.navy.mil

*Navy Youth and School-age Care (SAC)
Standards and Metrics Document*

5. SECNAV/OPNAV Directives Control Office

N09B15
Washington Navy yard, Bldg. 36
720 Kennon Street, SE Rm 203
Washington Navy Yard, DC 20374
<http://neds.nebt.daps.mil/usndirs.htm>

OPNAVINST 11010.20F, *Facilities
Projects Manual*

6. U.S. Air Force Center for Environmental Excellence

HQ AFCEE
3300 Sidney Brooks
Brooks City-Base TX 78235-5112
<http://www.afcee.brooks.af.mil/dc/products/dcproducts.asp>

Air Force Interior Design Guide

USAF Landscape Guide

Air Force Sustainable Facilities Guide

7. U.S. Air Force Civil Engineer Support Agency

HQ AFCESA/CES
139 Barnes Drive, Suite 1
Tyndall AFB, FL 32403-5319

Engineering Technical Letter (ETL) 00-
06, *Air Force Carpet Standard*

www.afcesa.af.mil

8. Consumer Product Safety Commission

4330 East-West Highway
 Bethesda, Maryland 20814-4408
 (301) 504-6816

<http://cpsc.gov/>

Handbook for Public Playground Safety
9. U.S. Department of Commerce

International Trade Administration
 14th & Constitution Ave, NW
 Washington, DC 20230
 (202) 482-3917

www.ita.doc.gov

Electric Current Abroad (1998)
10. U.S. Department of Labor

Occupational Safety & Health
 Administration
 200 Constitution Avenue, NW
 Washington, DC 20210
 (800) 321- 6742

www.osha.gov

29 CFR 1910.1048
Formaldehyde Standard
11. National Institute of Building Sciences

1090 Vermont Avenue, NW
 Suite 700
 Washington, DC 20005-4905
 (202) 289-7800
www.nibs.org

Whole Building Design Guide
www.wbdg.org
12. National Archives and Records Administration

700 Pennsylvania Avenue, NW
 Washington, DC 20408
 (866) 325-7208

Architectural Barriers Act (Public Law
 90-480) of 1968,
 USC Title 10, Section 1794, *Military
 Child Care*

<http://www.access-board.gov/ufas/ufas-html/ufas.htm> - ABA.

[http://www.access-board.gov/ufas/
ufas-html/ufas.htm](http://www.access-board.gov/ufas/ufas-html/ufas.htm)

Uniform Federal Accessibility Standards (UFAS), published as Federal Standard (FED-STD)-795,

[http://www.access-board.gov/adaag/
html/adaag.htm](http://www.access-board.gov/adaag/html/adaag.htm)

28 CFR Part 36, the Americans With Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG),

NON-GOVERNMENT PUBLICATIONS:

1. Architectural Woodwork Institute

1952 Isaac Newton Square West
Reston, VA 20190
(703) 733-0600

www.awinet.org

*AWI Quality Standards Illustrated,
Current Edition*

2. ASTM International

100 Barr Harbor Drive
PO Box C700
West Conshohocken,
Pennsylvania, 19428-2959
(610) 832-9585

www.astm.org

*F1487 Standard Consumer Safety
Performance Specification for
Playground Equipment for Public Use*

3. Boys & Girls Clubs of America

1230 W. Peachtree St. NW
Atlanta, GA 30309
(404) 487-5700

www.bgca.org

4. The Carpet and Rug Institute

310 Holiday Avenue
Dalton, GA 30720
(706) 278-3176

www.carpet-rug.com

5. International Code Council

Headquarters
5203 Leesburg Pike
Suite 600
Falls Church, VA 22041

www.iccsafe.org

International Plumbing Code

International Mechanical Code

International Building Code

6. Maryland Poison Center

University of Maryland School of
Pharmacy
20 N. Pine St.
Baltimore, MD 21201
(410) 706-2151

www.pharmacy.umaryland.edu/~mpc/

7. National Fire Protection Association

1 Batterymarch Park
Quincy, Massachusetts 02169-7471
(617) 770-3000

www.nfpa.org

NFPA 70 National Electric Code (2002)

NFPA 72 *National Fire Alarm Code*

NFPA 90A *Standard for the Installation
of Air-Conditioning and Ventilating
Systems*

NFPA 96 *Standard for Ventilation
Control and Fire Protection of
Commercial Cooking Operations*

NFPA 101 *Life Safety Code*

8. National Recreation and Park Association

22377 Belmont Ridge Road
Ashburn, VA 20148-4501
(703) 858-0784

www.nrpa.org

*Park, Recreation, Open Space
and Greenway Guidelines*

9. National School Age Care Alliance

1137 Washington St.
Dorchester, MA 02124
(617) 298-5012

www.nsaca.org

*NSACA Standards for Quality School-
Age Care*

10. The United States Green Building Council

US Green Building Council
1015 18th Street, NW, Suite 805
Washington, DC 20036

LEED™ Green Building Rating System

www.usgbc.org

APPENDIX B

SPACE PROGRAM DATA

B-1 **SPACE PROGRAM DATA.** The data in Figures B-1 through B-5 are the bases for the Space Program Interactive Spreadsheet discussed in Section 2-2 and are provided here for reference only. Do not use these tables to program a Youth Center. The Interactive Spreadsheet combines this data in the correct manner and incorporates the necessary Service Exceptions—which may not be apparent from these Figures.

FIGURE B-1. SAC SPACE PROGRAM DATA

Functional Component	Space Allocation Standard			Single Room Standard		
	m ²	ft. ²	Standard	No.	m ²	ft. ²
Army/Air Force/Marine Corps SAC						
Building	Activity Room	125.42	1,350	per room (2 ratio groups)	1	125.42 1350
	Storage	5.57	60	per room	1	5.57 60
	SAC toilets	4.18	45	per water closet/lav.	2	8.36 90
Total Building Net Area & Support					139.35	1,500.00
Circulation and Mechanical Building Factor @ 14%					19.51	210
Total Building Gross Area & Support					158.86	1,710
Navy SAC						
Building	Activity Room	97.55	1,050	per room (2 ratio groups)	1	97.55 1050
	Storage	2.79	30	per room	1	2.79 30
	SAC toilets			per water closet/lav.		
Total Building Net Area & Support					100.33	1,080.00
Circulation and Mechanical Building Factor @ 14%					14.05	151
Total Building Gross Area & Support					114.38	1,231
Site						
One OAA						
Two OAA						
Three OAA						
Site	Outdoor Activity Area (OAA)	348.38	3,750	per OAA	1	348.38 3,750
	Storage for Outdoor Equip.	7.43	80	per room	1	7.43 80
Total Site Support					355.81	3,830.00

FIGURE B-2.1. YOUTH SPACE PROGRAM DATA A (up to 90)

Functional Component	Space Allocation Standard			Up to 60 Youth			61 to 90 Youth		
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²
Commons				sum of below + 10% factor					
Building	Game Area	32.52	350	per rec unit ³	1	32.52 350	2	65.03 700	
	Snack Bar					7.43 80		9.29 100	
	Eating Area	1.11	12	per youth	8	8.92 96	15	16.72 180	
	Snack Bar storage	1.86	20	per storage area	1	1.86 20	2	3.72 40	
	Vending Area ¹	1.86	20	per machine	2	3.72 40	2	3.72 40	
Shared Spaces									
Building	General or Special Activity Room	97.55	1,050	per room	1	97.55 1050	2	195.09 2,100	
	Activity Room Storage	5.57	60	per room	1	5.57 60	2	11.15 120	
	Activity Room Storage (Navy)	2.79	30	per room	1	2.79 30	2	5.57 60	
	Homework/Computer Room ²	48.77	525	per room	1	48.77 525	1	48.77 525	
	Youth Toilets	4.18	45	per water closet/lav.	2	8.36 90	4	16.72 180	
	General Storage	7.43	80	per storage room	1	7.43 80	1	7.43 80	
Total Building Net Area & Support					230	2,480	393	4,231	
Circulation and Mechanical Building Factor @ 14%					32.25	347	14%	55.03	592
Total Building Gross Area & Support					262.60	2,827	448.09	4,823	

¹ Navy does not permit Vending.

² Navy and Marine Corps provide a Computer Room and accommodate the homework function in the Activity Rooms. The Air Force combines the Homework function with the Computer Room. The Army provides a separate, dedicated Homework Room in the 61 to 90 Youth category.

³ "Rec. Unit" equals the area of a standard gaming table (such a pool or foosball) and space around it that is required to play.

FIGURE B-2.2. YOUTH SPACE PROGRAM DATA B (91 to 155)

Functional Component	Space Allocation Standard			91 to 135 Youth			136 to 155 Youth			
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²	
Building	Commons		sum of below + 10% factor		164.53	1771.00		220.73	2376.00	
	Game Area	32.52	350	per rec unit ³	3	97.55	1,050	4	130.06	1,400
	Snack Bar					9.29	100		11.15	120
	Eating Area	1.11	12	per youth	30	33.44	360	45	50.17	540
	Snack Bar storage	1.86	20	per storage area	3	5.57	60	3	5.57	60
	Vending Area ¹	1.86	20	per machine	2	3.72	40	2	3.72	40
	Shared Spaces									
	General or Special Activity Room	97.55	1,050	per room	3	292.64	3,150	4	390.18	4,200
	Activity Room Storage	5.57	60	per room	3	16.72	180	4	22.30	240
	Activity Room Storage (Navy)	2.79	30	per room	3	8.36	90	4	11.15	120
	Homework/Computer Room ²	48.77	525	per room	2	97.55	1,050	2	97.55	1,050
	Youth Toilets	4.18	45	per water closet/lav.	6	25.08	270	8	33.44	360
	General Storage	7.43	80	per storage room	2	14.86	160	2	14.86	160
	Total Building Net Area & Support					620	6,671		790	8,506
	Circulation and Mechanical Building Factor @				14%	86.76	934	14%	110.63	1,191
Total Building Gross Area & Support					706.50	7,605		900.84	9,697	

¹ Navy does not permit Vending.

² Navy and Marine Corps provide a Computer Room and accommodate the homework function in the Activity Rooms. The Air Force combines the Homework function with the Computer Room. The Army provides a separate, dedicated Homework Room.

³ "Rec. Unit" equals the area of a standard gaming table (such a pool or foosball) and space around it that is required to play.

FIGURE B-3.1. TEEN SPACE PROGRAM DATA A (up to 30)

Functional Component	Space Allocation Standard			Up to 15 Teens			16 to 30 Teens			
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²	
Bldg	Teen Room/Lounge	3.25	35	per teen	15	48.77	525	30	97.55	1,050
	Storage	3.72	40	per room	1	3.72	40	1	3.72	40
Total Building Net Area & Support					52.49	565.00		101.26	1,090.00	
Circulation and Mechanical Building Factor @				14%	7.35	79	14%	14.18	153	
Total Building Gross Area & Support					59.84	644		115.44	1,243	
Site	Teen Patio	185.80	2,000	per Patio	1	185.80	2,000	1	185.80	2,000
	Total Site Support					185.80	2,000.00		185.80	2,000.00

FIGURE B-3.2. TEEN SPACE PROGRAM DATA B (31 to 60)

Functional Component	Space Allocation Standard			31 to 45 Teens			46 to 60 Teens			
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²	
Bldg	Teen Room/Lounge	3.25	35	per teen	45	146.32	1,575	60	195.09	2,100
	Storage	3.72	40	per room	2	7.43	80	2	7.43	80
Total Building Net Area & Support					153.75	1,655.00		202.52	2,180.00	
Circulation and Mechanical Building Factor @				14%	21.52	232	14%	28.35	305	
Total Building Gross Area & Support					175.27	1,887		230.88	2,485	
Site	Teen Patio	185.80	2,000	per Patio	2	371.60	4,000	2	371.60	4,000
	Total Site Support					371.60	4,000.00		371.60	4,000.00

FIGURE B-4.1. ADMINISTRATIVE SPACE PROGRAM DATA A (small and medium)

Functional Component	Space Allocation Standard			Small Admin		Medium Admin				
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²	
Building	Lobby	1.39	15	per person (per code)	15	20.90	225	30	41.81	450
	Control/Check-in					6.97	75		11.61	125
	Break/Staff Training Room	2.04	22	per staff member	10	20.44	220	16	32.70	352
	Copy/file Room	16.26	175	per room	1	16.26	175	1	16.26	175
	Storage	5.57	60	per storage room	1	5.57	60	1	5.57	60
	Communications Room	5.57	60	per room	1	5.57	60	1	5.57	60
	Staff/Vis. Toilets (M/F) ¹ Jan. closet	4.46	48	per room	2	8.92	96	2	8.92	96
	Total Building Net Area & Support					84.63	911.00		122.44	1,318.00
Circulation and Mechanical Building Factor @				22%	18.62	200	22%	26.94	290	
Total Building Gross Area & Support					103.25	1,111		149.38	1,608	
Site	Staff Parking	41.81	450	per space	12	501.66	5400	16	668.88	7,200
	Patron Parking	41.81	450	per space	8	334.44	3600	14	585.27	6,300
	Pick-up/Drop-off/Bus Lane	74.32	800	per area	1	74.32	800	1	74.32	800
	Service Drive/Trash	69.68	750	per area	1	69.68	750	1	69.68	750
	Bicycle Racks	14.86	160	per 10-bike Rack	1	14.86	160	1	14.86	160
	Total Site Support					994.96	10,710		1,413.01	15,210

Note: Offices and workstations are not shown here; they are calculated on the Space Program Interactive Spreadsheet discussed in Section 2-2

¹ Navy provides unisex toilets for staff, visitors, and teens.

FIGURE B-4.2. ADMINISTRATIVE SPACE PROGRAM DATA B (large and ex. large)

Functional Component	Space Allocation Standard			Large Admin		Extra Large Admin				
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²	
Building	Lobby	1.39	15	per person (per code)	40	55.74	600	50	69.68	750
	Control/Check-in					16.26	175		18.58	200
	Break/Staff Training Room	2.04	22	per staff member	20	40.88	440	24	49.05	528
	Copy/file Room	16.26	175	per room	1	16.26	175	1	16.26	175
	Storage	5.57	60	per storage room	1	5.57	60	1	5.57	60
	Communications Room	5.57	60	per room	1	5.57	60	1	5.57	60
	Staff/Vis. Toilets (M/F) ¹ Jan. closet	4.46	48	per room	2	8.92	96	2	8.92	96
	Total Building Net Area & Support					149.20	1,606.00		173.63	1,869.00
Circulation and Mechanical Building Factor @				22%	32.82	353	22%	38.20	411	
Total Building Gross Area & Support					182.02	1,959		211.83	2,280	
Site	Staff Parking	41.81	450	per space	20	836.10	9,000	26	1,086.93	11,700
	Patron Parking	41.81	450	per space	20	836.10	9,000	26	1,086.93	11,700
	Pick-up/Drop-off/Bus Lane	74.32	800	per area	1	74.32	800	1	74.32	800
	Service Drive/Trash	69.68	750	per area	2	139.35	1,500	2	139.35	1,500
	Bicycle Racks	14.86	160	per 10-bike Rack	2	29.73	320	2	29.73	320
	Total Site Support					1,915.60	20,620		2,417.26	26,020

Note: Offices and workstations are not shown here; they are calculated on the Space Program Interactive Spreadsheet discussed in Section 2-2

¹ Navy provides unisex toilets for staff, visitors, and teens.

FIGURE B-5.1. OTHER OR OPTIONAL SPACE PROGRAM DATA A

Functional Component	Space Allocation Standard			Half Court w/o Bleachers			Half Court w/ Bleachers		
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²
Multipurpose Room ¹					355.62	3828		416.94	4,488
Equipment Storage	14.86	160	per storage room	1	14.86	160	1	14.86	160
Circulation and Mechanical Building Factor @				8%	30	319		35	372
Multipurpose Rm Subtotal					400.12	4307.04		466.34	5019.84
					Small Kitchen		Large Kitchen		
Kitchen ²					11.15	120		41.81	450
Kitchen Storage (dry and cold)					7.43	80		16.72	180
Circulation and Mechanical Building Factor @				20%	4	40		12	126
Kitchen Subtotal					22.30	240.00		70.23	756.00
					Other/Optional Spaces		Other/Optional Spaces		
Laundry ² (incl. 20% bldg fac)	10.22	110	per room	1	10.22	70	1	10.22	70
Parent Waiting ² (incl. 20% bldg fac)	1.67	18	per person	10	16.72	180	10	16.72	180
Music/MM Room (incl. 20% bldg fac)	6.69	72	per room	1	6.69	72	2	13.38	144
Youth Outdoor Activity Area	11.61	125	per child	30	348.38	3750			
Storage	7.43	80	per storage room	1	7.43	80			
Youth Outdoor Activity Subtotal					355.81	3830.00			
Open Outdoor Area	10,730	115,500	per area	1	10729.95	115500			

¹ In addition to the other Multipurpose Room size options, the Army and Navy offer an option for a Small Multipurpose Room at 232.25 m² (2500 ft.²) plus 9.29 m² (100 ft.²) of storage space.

² Navy does not normally permit the Kitchen, Laundry, or Additional Parent Waiting options.

FIGURE B-5.2. OTHER OR OPTIONAL SPACE PROGRAM DATA B

Functional Component	Space Allocation Standard			Full Court w/ Bleachers			NCAA Full Court w/ Bleach		
	m ²	ft. ²	Standard	No.	m ²	ft. ²	No.	m ²	ft. ²
Multipurpose Room ¹					706.04	7,600		776.64	8,360
Equipment Storage	14.86	160	per storage room	2	29.73	320	2	29.73	320
Circulation and Mechanical Building Factor @					59	634		65	694
Multipurpose Rm Subtotal					794.63	8553.60		870.88	9374.40
					Other/Optional Spaces		Other/Optional Spaces		
Laundry ² (incl. 20% bldg fac)	10.22	110	per room	2	20.44	130	2	20.44	130
Parent Waiting ² (incl. 20% bldg fac)	1.67	18	per person	15	25.08	270	15	25.08	270
Music/MM Room (incl. 20% bldg fac)	6.69	72	per room	3	20.07	216			

¹ Navy, Air Force, and Marine Corps do not permit the "NCAA Full Court with Bleachers" size option. In addition to the other Multipurpose Room size options, the Army and Navy offer an option for a Small Multipurpose Room at 232.25 m² (2500 ft.²) plus 9.29 m² (100 ft.²) of storage space.

² Navy does not normally permit the Kitchen or Additional Parent Waiting options.

APPENDIX C

ILLUSTRATIVE DIAGRAMS

C-1 **ILLUSTRATIVE DIAGRAMS.** The illustrative diagrams include Figures C-1 through C-3. They do not represent mandatory or even suggested layouts but are provided to expand on the Figure 2-3 Bubble Diagram and convey a *possible means* to accommodate the needed adjacencies.  Note that Figure C-3 captures several critical Navy Service Exceptions and is the appropriate diagram for planning Navy facilities.

C-1.1 **Figure C-1.** This diagram illustrates a potential layout with the Multipurpose Room located near the front of the facility. This layout precludes visitors from traveling through the Commons to get to events held in the Multipurpose Room. However, it does separate the Administrative Area from the check-in function, which is a desirable adjacency.

FIGURE C-1. ILLUSTRATIVE LAYOUT DIAGRAM A



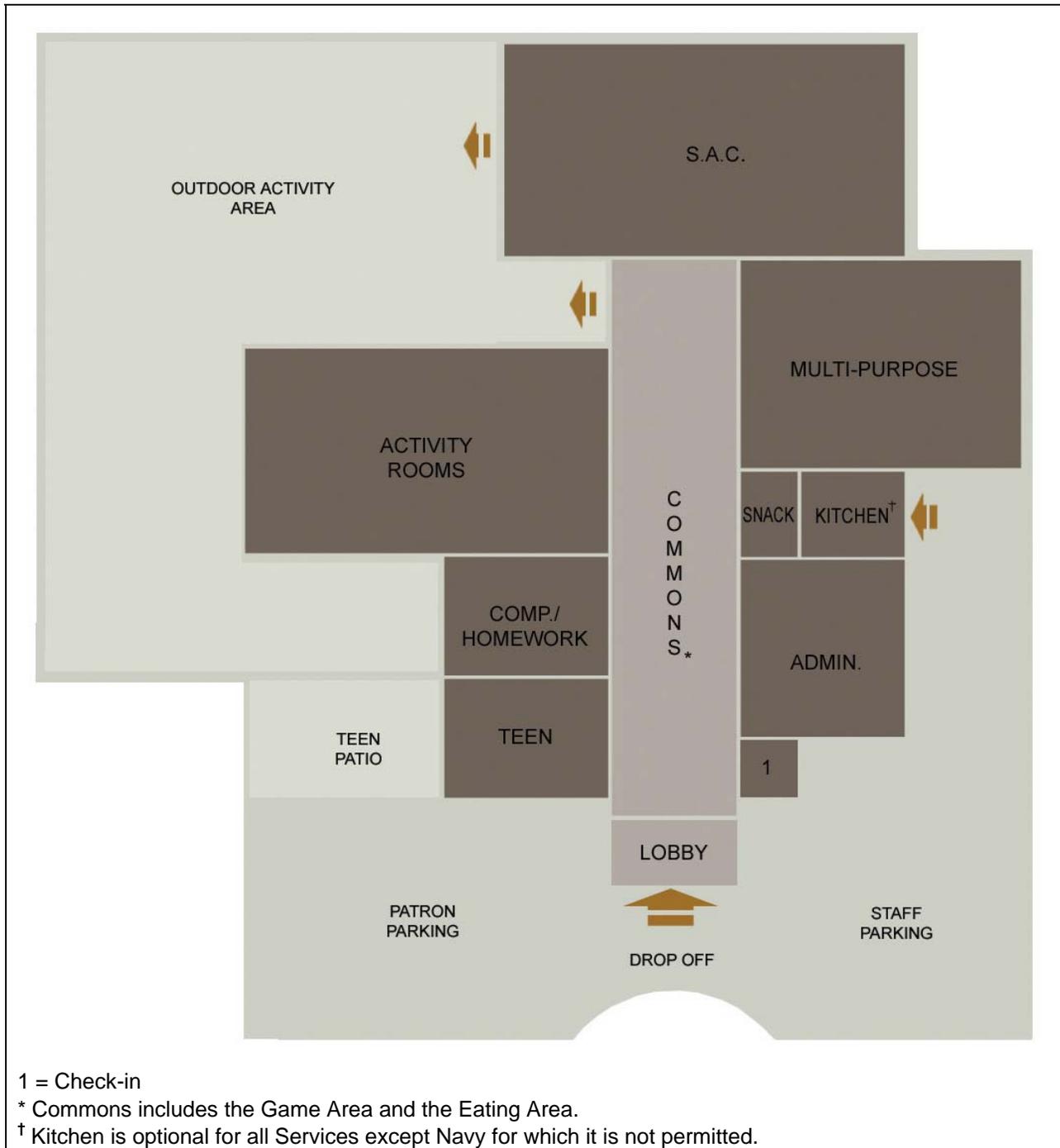
1 = Check-in

* Commons includes the Game Area and the Eating Area.

† Kitchen is optional for all Services except Navy for which it is not permitted.

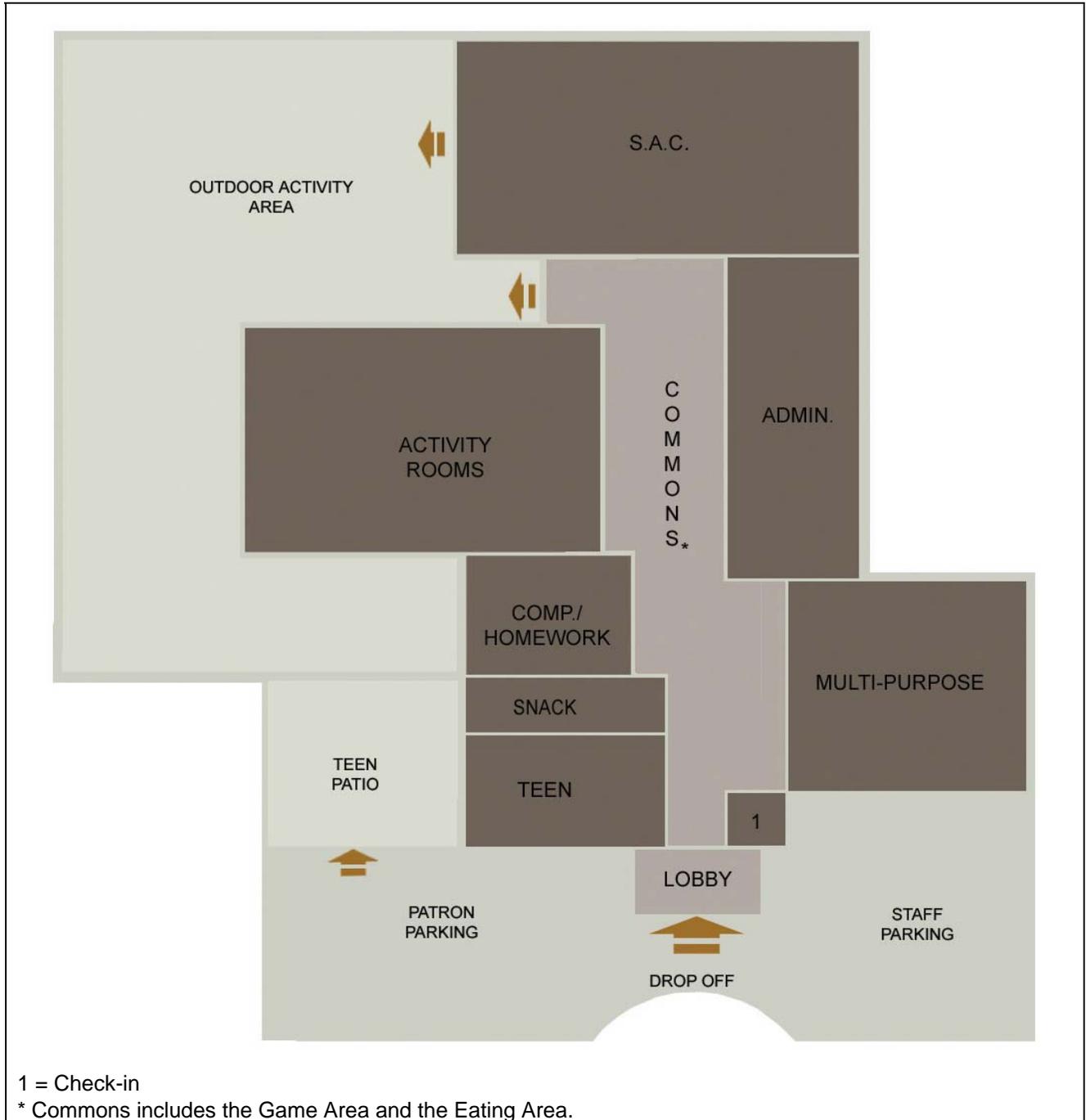
C-1.2 **Figure C-2.** This diagram locates the Administrative Area adjacent to the Check-in.

FIGURE C-2. ILLUSTRATIVE LAYOUT DIAGRAM B



C-1.3 **Figure C-3.** As noted above, this diagram addresses several Navy concerns and desires, specifically the provision for a separate teen entrance through the patio and the snack bar located adjacent to the Teen room.

FIGURE C-3. ILLUSTRATIVE LAYOUT DIAGRAM C



APPENDIX D

AIR FORCE FURNISHINGS, FIXTURES, AND EQUIPMENT SCHEDULE

D-1 **AIR FORCE SCHEDULE OF FURNISHINGS, FIXTURES, AND EQUIPMENT.** **SE** Table D-1 provides a schedule of furnishings, fixtures, and equipment (FF&E) for Air Force Youth Centers.

TABLE D-1. AIR FORCE FF&E LIST FOR YOUTH CENTERS					
Equipment Item	RP ¹	NRP ²	Equipment Item	RP ¹	NRP ²
Kitchen FF&E			Admin/Staff/Support FF&E (cont'd)		
Reach-in Refrigerator (not built-in)		X	Moveable Lockers		X
Reach-in Freezer (not built-in)		X	Lounge Seating & Tables		X
Built-in Refrigerator or Freezer	X		Built-in Counters/Cabinets/ Shelving	X	
Ice Machine	X		Moveable Cabinets & Shelving		X
Hand Sink	X		Cash Registers		X
Food Preparation & Pot Sinks	X		Fixed Tackboards	X	
Range		X	Interior & Exterior Signage	X	
Baking Oven/Convection Oven	X		Fire Extinguishers & Cabinets	X	
Microwave Oven		X	Built-in Display Cabinets	X	
Exhaust Hood w/Fire Suppression	X		Moveable Display Cabinets		X
Dishwasher and Booster Heater	X		Sound System Speakers & Wiring	X	
Dishwasher Hood	X		Youth/School Age FF&E		
Garbage Disposal	X		Desks/Tables/Chairs		X
Dishwasher Tables	X		Lounge Seating		X
Toaster		X	Built-in Counters/Cabinets/ Shelving	X	
Food Mixer/Processor		X	Moveable Cabinets & Shelving		X
Preparation Tables		X	Fixed Dry Erase Boards	X	
Food Carts		X	Moveable Dry Erase Boards		X
Built-in Counters/Shelving	X		Moveable Tackboards		X
Mobile or Moveable Shelving		X	Sinks	X	
Other Loose Equipment		X	Drinking Fountains	X	
Laundry/Janitor FF&E			Toilet Fixtures	X	
Clothes Washer & Dryer		X	Toilet Fixed Accessories	X	
Laundry Sink	X		Toilet Moveable Accessories		X
Built-in Counter & Shelving	X		Mirrors	X	
Moveable Counter & Shelving		X	Refrigerators		X
Janitor Mop Sink	X		Wall Clocks		X
Built-in Mop Rack	X		Games and Game Equipment		X
Admin/Staff/Support FF&E			Retractable Basketball Backstops	X	
Desks & Chairs		X	Moveable Basketball Backstops		X

TABLE D-1. AIR FORCE FF&E LIST FOR YOUTH CENTERS					
Equipment Item	RP ¹	NRP ²	Equipment Item	RP ¹	NRP ²
Systems Furniture		X	All Moveable Athletic Equipment		X
File Cabinets		X	Floor Mats		X
Computers/Printers/Scanners		X	Ballet Bar	X	
Telephone (instruments only)		X	Fixed Scoreboards	X	
Telephone (wiring/outlets)	X		Moveable Scoreboards		X
CCTV Circuiting, Cameras, Mon.	X		Fixed, Retractable Bleachers	X	
Fax Machines		X	Fixed Stage	X	
Copiers		X	Moveable Stage		X
CATV (television monitor only)		X	Theatrical Lighting	X	
CATV (cabling)	X		Fixed Wall Mats	X	
Intercom		X	Built-in Lockers	X	
Wall Clocks		X	Outdoor Handwashing Station	X	
Time Clocks		X	Outdoor Play Equipment	X	
Built-in or Fixed Lockers	X				

¹ RP = Real Property Installed Equipment (also "RPIE"). RPIE is purchased and installed with construction project funds.

² NRP = Non-Real Property Installed Equipment (also "Equipment"). "Equipment" is purchased with equipment funds and may be installed by the construction contractor or by the installation.

Note: Infrastructure to support all types of equipment, both RPIE and non-RPIE, should be included in the construction contract.