

UNIFIED FACILITIES CRITERIA (UFC)

DESIGN: MILITARY RECREATION CENTERS



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U.S. ARMY CORPS OF ENGINEERS

NAVAL FACILITIES ENGINEERING COMMAND (Preparing Activity)

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

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

Change No.	Date	Location



FOREWORD

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

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MILITARY RECREATION CENTER

TABLE OF CONTENTS

CHAPTER 1. INTRODUCTION

Paragraph	1-1	Scope of Document.....	1-1
	1-2	Users of this Document	1-1
	1-2.1	Architects and Engineers.....	1-1
	1-2.2	Planning Personnel	1-1
	1-2.3	Additional Users	1-1
	1-3	Scope of Facility	1-2
	1-3.1	Core Spaces.....	1-2
	1-3.2	Optional Spaces	1-2
	1-4	Users of Facility.....	1-3
	1-5	Related Documents.....	1-3
	1-6	Related Facilities	1-3

CHAPTER 2. GENERAL DESIGN CRITERIA

Paragraph	2-1	Master/Site Planning	2-1
	2-1.1	Size Determinants.....	2-1
	2-1.2	Space Programs.....	2-2
	2-1.3	Location Determinants.....	2-2
	2-2	Layout and Adjacencies	2-10
	2-2.1	Functional Relationship Bubble Diagram.....	2-10
	2-2.2	Quiet vs. Active Functions	2-10
	2-2.3	Space Assessment.....	2-12
	2-3	Alterations to Existing Facilities	2-11
	2-3.1	Regulatory Authorities	2-11
	2-3.2	Other Considerations.....	2-11
	2-3.3	Codes	2-12
	2-4	Exterior Design	2-12
	2-4.1	Structure.....	2-12
	2-4.2	Exterior Finishes.....	2-12
	2-5	Interior Design	2-12
	2-6	Services.....	2-12
	2-6.1	Plumbing	2-12
	2-6.2	Heating, Ventilating, and Air Conditioning	2-12
	2-6.3	Fire Protection	2-13
	2-6.4	Electrical.....	2-13
	2-7	Site Work.....	2-14
	2-7.1	Landscaping	2-14
	2-7.2	Site Lighting.....	2-14
	2-7.3	Outdoor Activities	2-14
	2-8	Barrier Free Design Requirements.....	2-14

2-9	Anti-Terrorism/Force Protection	2-14
2-10	Sustainable Design	2-14
2-10.1	The United States Green Building Council LEED™ Green Building Rating System	2-14
2-10.2	ITG FY92 – 02 Design Energy Target Reductions, NAVFAC Interim Technical Guidance.....	2-14
2-10.3	EPA List of Affirmative Procurement Guideline Items.....	2-14
2-10.4	Whole Building Design Guide.....	2-15
2-10.5	DoD Energy Budget.....	2-15

CHAPTER 3. FUNCTIONAL CRITERIA

Paragraph	3-1	Functional Data Sheets	3-1
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<u>APPENDIX A</u>	REFERENCES.....	A-1
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INACTIVE

FIGURES

<u>Figure</u>	<u>Title</u>	
2-1	Functional Relationship Bubble Diagram	2-11

TABLES

<u>Table</u>	<u>Title</u>	
2-1	Size Classifications	2-1
2-2	Space Program for Extra Small Installation	2-3
2-3	Space Program for Small Installation	2-4
2-4	Space Program for Medium Installation	2-5
2-5	Space Program for Large Installation	2-6
2-6	Space Program for Extra Large Installation	2-7
2-7	Space Program for Super Large Installation	2-8
2-8	Space Program for Extra Small Installation (Optional Spaces)	2-9
2-9	Space Program for Small Installation (Optional Spaces)	2-9
2-10	Space Program for Medium Installation (Optional Spaces)	2-9
2-11	Space Program for Large Installations (Optional Spaces)	2-10
2-12	Space Program for Extra Large and Super Large Installations (Optional Spaces)	2-10
3-1	Lobby/Entrance	3-1
3-2	Customer Service Area/Control	3-2
3-3	Server Room	3-3
3-4	Computer Room	3-4
3-5	Game Room	3-5
3-6	Mini Theater	3-6
3-7	TV Lounge	3-7
3-8	Snack/Vending	3-8
3-9	Food Service Area	3-9
3-10	Library/Quiet Room	3-10
3-11	Multipurpose Room	3-11
3-12	Personal Storage Lockers	3-12
3-13	Laundry	3-13
3-14	Individual TV Room	3-14
3-15	Music Listening	3-15
3-16	Music Practice Room(s)	3-16
3-17	Outdoor Gathering Area	3-17
3-18	Pay Telephones	3-18
3-19	Staff Offices	3-19
3-20	Toilets (male and female)	3-20

CHAPTER 1

INTRODUCTION

1-1 **SCOPE OF DOCUMENT.** This UFC provides guidelines for evaluating, planning, and designing Military Recreation Centers (MRCs). The information in this Guide applies to the design of all new construction projects as well as renovation projects. Renovation projects should update existing facilities to meet the guidance and criteria within budgetary constraints. This guide 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 information for all individuals involved in the planning, design, or evaluation of MRC facilities. 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 Guide include the following:

1-2.1 **Architects and Engineers.** Architects and Engineers (A/Es) and Design/Build contractors providing design services under the direction of the individual design agencies, including the Naval Facilities Engineering Command (NAVFAC), Navy Personnel Command (NPC), Community and Family Support Center (CFSC), and Army and Air Force Exchange Service (AAFES). All DoD facilities must meet the basic building requirements of UFC 1-200-01.

1-2.2 **Planning Personnel.** Planning Personnel will use the Guide for pre-design planning or to assess the extent of improvements required in an existing MRC in order to achieve the standard established herein.

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

- Headquarters Staff
- Major Command Staff
- Installation Commanders
- Installation Facilities Management
- Installation Technical Proponents
- Program Directors
- Facility/Program Operations Staff

1-3 **SCOPE OF FACILITY.** The MRC is a social and recreational center primarily for use by single and unaccompanied enlisted military personnel. It is intended to provide alcohol-free and tobacco-free recreational alternatives for 17- to 25-year olds.

SE In certain cases, the Marine Corps may allow alcohol in their facilities. **SE** The Navy may also call these LIBERTY or Single Sailor Centers. The Marine Corps may also call these Single Marine Centers.

The MRC includes certain core spaces that provide for both individual and group functions in an environment that is comfortable and conducive to interaction, either physical or visual. It also includes support spaces and may include optional or additional spaces that complement the core spaces.

1-3.1 **Core Spaces.** Include the following core spaces to classify the facility as a MRC. More complete descriptions of these spaces may be found in [Chapter 3](#).

- Customer Service Area/Control Counter
- Computer Area
- Game Area (both table gaming and video gaming)
- Mini-theater
- TV Lounge
- Snack/Vending Area
- Library/Quiet Space
- Multipurpose Room **SE** Core for Marine Corps only

1-3.2 **Optional Spaces.** Consider the following non-essential (optional) spaces as they complement the core spaces or offer additional functionality. See paragraph 2-1.1.2 for more information on how to select optional spaces for a facility.

- Multipurpose Room
- Mini Personal Storage
- Automatic Teller Machine (ATM) (in lobby)
- Laundry
- Food Service **SE** not permitted for Navy
- Coffee Bar

- Individual TV viewing stations
- Music Listening Area
- Music Practice Room
- Outdoor Gathering Area
- Pay Telephone Room (for Large, Extra Large, and Super Large facilities only)

1-4 **USERS OF FACILITY.** The following facility users are listed in order of most likely usage (i.e. target audience):

- 17- to 25-year old, single or unaccompanied, enlisted military personnel;
- Facility Staff; and
- All other active duty military personnel.

1-5 **RELATED DOCUMENTS.** This UFC augments the  Navy: Liberty Program Accreditation MWR Standards and Metrics Document prepared by the PERS-654, July 2001. Marine Corps: Semper Fit MCO P1700.29 and SMP MCO P1700.36. Used together, these documents form the Program Document. For additional information see Navy document P-80.

1-6 **RELATED FACILITIES.** There are other facilities that single enlisted military personnel could use but are not the focus of the program. These facilities complement the MRC program but play a different role in the social environment of a base. The MRC is distinct from these other programs in that it primarily targets 17- to 25-year old, single or unaccompanied, enlisted military personnel. Related facilities include the following:

- Fleet Recreation Center;
- Outdoor Adventure Centers and Rental Centers;
- Information/Tickets and Tours (ITT);
- Amusement Center;
- Fitness Center;
- Bowling Center;
- Base Theater;
- Base Library; and

- Clubs.

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CHAPTER 2

GENERAL DESIGN CRITERIA

2-1 MASTER/SITE PLANNING.

2-1.1 **Size Determinants.** Several factors determine the size of the facility.

2-1.1.1 **Size Classifications.** The facility size classifications and the active duty populations they serve are shown in Table 2-1. The size of the facility is based, in part, on this active duty population. When the total population is broken down into distinctive geographic locations, consider providing multiple facilities sized individually for the geographic populations.

TABLE 2-1. SIZE CLASSIFICATIONS

Size Classification	Active Duty Population Served
Super Large	> 50,000
Extra Large	14,001 – 50,000
Large	7,001 – 14,000
Medium	3,001 – 7,000
Small	500 – 3,000
Extra Small (OCONUS Only)	< 500

2-1.1.2 **Optional Spaces.** Once the size classification has been determined, determine which optional activity spaces to include (see paragraph 1-3 for more information on optional activities). The Base representatives, in conjunction with the project manager, must decide which optional activity spaces to provide. Note the following when selecting optional activities:

2-1.1.2.1 If an existing facility is being renovated to accommodate the MRC function, the amount of space available will likely determine what options may be provided. Note that the existing facility must accommodate the core activity spaces to be considered for use as an MRC. See paragraph 2-3 for more information on alterations to existing facilities.

2-1.1.2.2 Consider what functions are provided in existing facilities on the installation and the proximity of those existing facilities to the new MRC.

2-1.1.2.3 Consider what can be provided within the budget.

2-1.1.2.4  For Navy facilities, avoid providing optional spaces that may be commandeered for mission-oriented functions (i.e., a multipurpose room that might be commandeered for use a meeting facility).

2-1.2 **Space Programs.** Once the size classification has been determined and the optional activities selected, Tables 2-2 through 2-7 illustrate the size programs for the minimum facilities by size classification, including core activities, activity support functions, and site support. Tables 2-8 through 2-12 illustrate the space programs for the optional activity spaces by size classification. The selected optional activity spaces must be added to the minimum facilities to determine the total space program for the facility. These tables (spreadsheets) are available as downloadable Microsoft[®] Excel[®] files to be used as an interactive tool on the Whole Building Design Guide DoD page (<http://dod.wbdg.org/>) website.

2-1.3 **Location Determinants.** The Master/Site Planning determinants in paragraphs 2-1.3.1 through 2-1.3.3 must be weighed together when selecting the most appropriate and cost effective location for an MRC. The success of the MRC has a great deal to do with the convenience of its location as it relates to its function. Therefore, while cost is critical in the development of the MRC model, a low cost should not be the sole determinant in locating an MRC.

2-1.3.1 **Existing Space Types.** Prior to initiating the physical planning of the MRC itself, complete a space type analysis of the existing base. The purpose of this analysis is to identify the following:

- Existing base functions which are core elements to an MRC,
- Existing base functions which are identical to other space types generally associated with an MRC but not core elements, and
- Existing base functions that are similar and compatible with the function of an MRC. See Section 1-6 for a list of related facilities.

2-1.3.2 **Access.** The MRC should be the hub of the MWR/MCCS activities for the enlisted personnel. Choose a location that encourages participation by a diverse representation of the target audience, including both genders, by being visible and easily accessible. Consider locating near other high-visibility areas and related functions. This could be along the pedestrian paths to the existing barracks, existing MWR/NEX/MCCS facilities, and/or the dining facility. Also consider proximity to any concentration of afloat units. To accommodate patron access, provide adequate parking as close as possible to the facility, taking into account the antiterrorism requirements in UFC 4-010-01.

TABLE 2-2. SPACE PROGRAM FOR EXTRA SMALL INSTALLATION

Functional Component		Space Allocation Standard			Extra Small Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	1	3.72	40
	ITT Kiosk	0.93	10	per kiosk	1	0.93	10
	Check-out Equipment Storage	0.74	8	per under counter unit	1	0.74	8
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	2	1.49	16
	Server Room	5.95	64	per room	1	5.95	64
	Computer Area						
	Workstations	1.39	15	per workstation	8	11.15	120
	Control/Help Counter	7.43	80	per control counter	0	0.00	0
	Game Room						
	Video Game Stations	10.22	110	per video station	4	40.88	440
	Pinball/Arcade Stations	1.39	15	per machine	4	5.57	60
	Pool Tables	32.52	350	per table	1	32.52	350
	Ping Pong/Table Tennis	29.26	315	per table	1	29.26	315
	Foosball						
	Air Hockey	3.25	35	per table	1	3.25	35
	Mini Theatre	2.79	30	per person	10	27.87	300
	TV Lounge	2.32	25	per person	12	27.87	300
	Snack/Vending						
	Vending	1.67	18	per vending machine	4	6.69	72
	Seating	4.46	48	per 4 seat table	1	4.46	48
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	2	4.65	50
	Reading/Writing	2.04	22	per person	6	12.26	132
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	20	55.74	600
	Multipurpose Storage	9.29	100	per room	1	9.29	100
	Staff Offices						0
	Program Manager	11.15	120	per office	1	11.15	120
	Program Assistant	7.43	80	per workstation	0	0.00	0
	Program Leader	7.43	80	per workstation	0	0.00	0
	Recreation Aide	0.00	0	per workstation	0	0.00	0
Pay Telephones	0.56	6	per phone	2	1.11	12	
Activity Support	Entrance Lobby	11.15	120	per lobby	1	11.15	120
	General Activity Storage	2.79	30	per room	1	2.79	30
	Office Storage	5.57	60	per room	1	5.57	60
	Toilets (Male and Female)						0
	Water Closets/Urinals	2.32	25	per fixture	2	4.65	50
	Lavatories	1.39	15	per fixture	2	2.79	30
	Janitor's Closet	3.72	40	per closet	1	3.72	40
	Total Building Net Area-Core Spaces & Support					327.20	3,522
Circulation and Mechanical Building Factor @				15%	49.08	528	
Total Building Gross Area-Core Spaces & Support					376.28	4,050	
Site Support	Staff Parking	41.81	450	per space	3	125.42	1,350
	Passenger Van Parking	55.74	600	per space	1	55.74	600
	Patron Parking						
	Surfaced	41.81	450	per space	45	1,881.23	20,250
	Unsurfaced/Overflow	41.81	450	per space	45	1,881.23	20,250
	Bicycle Racks	5.57	60	per 10-bike Rack	1	5.57	60
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support					3,967.76	42,710	
Total Facility (Building Gross Core Spaces and Site)						4,344.04	46,760

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

TABLE 2-3. SPACE PROGRAM FOR SMALL INSTALLATION

Functional Component		Space Allocation Standard			Small Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	1	3.72	40
	ITT Kiosk	0.93	10	per kiosk	1	0.93	10
	Check-out Equipment Storage	0.74	8	per under counter unit	1	0.74	8
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	2	1.49	16
	Server Room	5.95	64	per room	1	5.95	64
	Computer Area						
	Workstations	1.39	15	per workstation	12	16.72	180
	Control/Help Counter	7.43	80	per control counter	0	0.00	0
	Game Room						
	Video Game Stations	10.22	110	per video station	4	40.88	440
	Pinball/Arcade Stations	1.39	15	per machine	4	5.57	60
	Pool Tables	32.52	350	per table	2	65.03	700
	Ping Pong/Table Tennis	29.26	315	per table	1	29.26	315
	Foosball						
	Air Hockey	3.25	35	per table	1	3.25	35
	Mini Theatre	2.79	30	per person	20	55.74	600
	TV Lounge	2.32	25	per person	12	27.87	300
	Snack/Vending						
	Vending	1.67	18	per vending machine	4	6.69	72
	Seating	4.46	48	per 4 seat table	1	4.46	48
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	2	4.65	50
	Reading/Writing	2.04	22	per person	6	12.26	132
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	30	83.61	900
	Multipurpose Storage	9.29	100	per room	1	9.29	100
	Staff Offices						
	Program Manager	11.15	120	per office	1	11.15	120
	Program Assistant	7.43	80	per workstation	0	0.00	0
	Program Leader	7.43	80	per workstation	0	0.00	0
	Recreation Aide	0.00	0	per workstation	1	0.00	0
Pay Telephones	0.56	6	per phone	2	1.11	12	
Activity Support	Entrance Lobby	11.15	120	per lobby	1	11.15	120
	General Activity Storage	2.79	30	per room	1	2.79	30
	Office Storage	5.57	60	per room	1	5.57	60
	Toilets (Male and Female)						
	Water Closets/Urinals	2.32	25	per fixture	4	9.29	100
	Lavatories	1.39	15	per fixture	4	5.57	60
	Janitor's Closet	3.72	40	per closet	1	3.72	40
	Total Building Net Area-Core Spaces & Support					428.45	4,612
Circulation and Mechanical Building Factor @				15%	64.27	692	
Total Building Gross Area-Core Spaces & Support					492.72	5,304	
Site Support	Staff Parking	41.81	450	per space	3	125.42	1,350
	Passenger Van Parking	55.74	600	per space	1	55.74	600
	Patron Parking						
	Surfaced	41.81	450	per space	45	1,881.23	20,250
	Unsurfaced/Overflow	41.81	450	per space	45	1,881.23	20,250
	Bicycle Racks	5.57	60	per 10-bike Rack	1	5.57	60
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support					3,967.76	42,710	
Total Facility (Building Gross Core Spaces and Site)						4,460.48	48,014

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

TABLE 2-4. SPACE PROGRAM FOR MEDIUM INSTALLATION

Functional Component		Space Allocation Standard			Medium Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	2	7.43	80
	ITT Kiosk	0.93	10	per kiosk	1	0.93	10
	Check-out Equipment Storage	0.74	8	per under counter unit	2	1.49	16
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	3	2.23	24
	Server Room	5.95	64	per room	2	11.89	128
	Computer Area						
	Workstations	1.39	15	per workstation	16	22.30	240
	Control/Help Counter	7.43	80	per control counter	1	7.43	80
	Game Room						
	Video Game Stations	10.22	110	per video station	8	81.75	880
	Pinball/Arcade Stations	1.39	15	per machine	6	8.36	90
	Pool Tables	32.52	350	per table	4	130.06	1,400
	Ping Pong/Table Tennis	29.26	315	per table	1	29.26	315
	Foosball						
	Air Hockey	3.25	35	per table	1	3.25	35
	Mini Theatre	2.79	30	per person	36	100.33	1,080
	TV Lounge	2.32	25	per person	16	37.16	400
	Snack/Vending						
	Vending	1.67	18	per vending machine	6	10.03	108
	Seating	4.46	48	per 4 seat table	2	8.92	96
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	3	6.97	75
	Reading/Writing	2.04	22	per person	8	16.35	176
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	40	111.48	1,200
	Multipurpose Storage	9.29	100	per room	1	9.29	100
	Staff Offices						
	Program Manager	11.15	120	per office	1	11.15	120
	Program Assistant	7.43	80	per workstation	1	7.43	80
	Program Leader	7.43	80	per workstation	1	7.43	80
	Recreation Aide	0.00	0	per workstation	1	0.00	0
Pay Telephones	0.56	6	per phone	3	1.67	18	
Activity Support	Entrance Lobby	11.15	120	per lobby	1	11.15	120
	General Activity Storage	2.79	30	per room	2	5.57	60
	Office Storage	5.57	60	per room	2	11.15	120
	Toilets (Male and Female)						
	Water Closets/Urinals	2.32	25	per fixture	12	27.87	300
	Lavatories	1.39	15	per fixture	12	16.72	180
	Janitor's Closet	3.72	40	per closet	1	3.72	40
	Total Building Net Area-Core Spaces & Support					710.78	7,651
Circulation and Mechanical Building Factor @				15%	106.62	1,148	
Total Building Gross Area-Core Spaces & Support					817.39	8,799	
Site Support	Staff Parking	41.81	450	per space	5	209.03	2,250
	Passenger Van Parking	55.74	600	per space	1	55.74	600
	Patron Parking						
	Surfaced	41.81	450	per space	70	2,926.35	31,500
	Unsurfaced/Overflow	41.81	450	per space	70	2,926.35	31,500
	Bicycle Racks	5.57	60	per 10-bike Rack	2	11.15	120
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support					6,147.19	66,170	
Total Facility (Building Gross Core Spaces and Site)						6,964.59	74,969

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

TABLE 2-5. SPACE PROGRAM FOR LARGE INSTALLATION

Functional Component		Space Allocation Standard			Large Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	2	7.43	80
	ITT Kiosk	0.93	10	per kiosk	2	1.86	20
	Check-out Equipment Storage	0.74	8	per under counter unit	3	2.23	24
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	4	2.97	32
	Server Room	5.95	64	per room	2	11.89	128
	Computer Area						
	Workstations	1.39	15	per workstation	24	33.44	360
	Control/Help Counter	7.43	80	per control counter	1	7.43	80
	Game Room						
	Video Game Stations	10.22	110	per video station	10	102.19	1,100
	Pinball/Arcade Stations	1.39	15	per machine	8	11.15	120
	Pool Tables	32.52	350	per table	6	195.09	2,100
	Ping Pong/Table Tennis	29.26	315	per table	2	58.53	630
	Foosball						
	Air Hockey	3.25	35	per table	2	6.50	70
	Mini Theatre	2.79	30	per person	48	133.78	1,440
	TV Lounge	2.32	25	per person	20	46.45	500
	Snack/Vending						
	Vending	1.67	18	per vending machine	8	13.38	144
	Seating	4.46	48	per 4 seat table	3	13.38	144
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	5	11.61	125
	Reading/Writing	2.04	22	per person	10	20.44	220
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	50	139.35	1,500
	Multipurpose Storage	9.29	100	per room	2	18.58	200
	Staff Offices						
	Program Manager	11.15	120	per office	1	11.15	120
	Program Assistant	7.43	80	per workstation	1	7.43	80
	Program Leader	7.43	80	per workstation	1	7.43	80
	Recreation Aide	0.00	0	per workstation	2	0.00	0
Pay Telephones	0.56	6	per phone	4	2.23	24	
Activity Support	Entrance Lobby	11.15	120	per lobby	2	22.30	240
	General Activity Storage	2.79	30	per room	3	8.36	90
	Office Storage	5.57	60	per room	2	11.15	120
	Toilets (Male and Female)						
	Water Closets/Urinals	2.32	25	per fixture	16	37.16	400
	Lavatories	1.39	15	per fixture	16	22.30	240
	Janitor's Closet	3.72	40	per closet	1	3.72	40
Total Building Net Area-Core Spaces & Support						970.90	10,451
Circulation and Mechanical Building Factor @					15%	145.63	1,568
Total Building Gross Area-Core Spaces & Support						1,116.53	12,019
Site Support	Staff Parking	41.81	450	per space	6	250.83	2,700
	Passenger Van Parking	55.74	600	per space	2	111.48	1,200
	Patron Parking						
	Surfaced	41.81	450	per space	98	4,096.89	44,100
	Unsurfaced/Overflow	41.81	450	per space	98	4,096.89	44,100
	Bicycle Racks	5.57	60	per 10-bike Rack	3	16.72	180
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support						8,591.39	92,480
Total Facility (Building Gross Core Spaces and Site)						9,707.92	104,499

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

TABLE 2-6. SPACE PROGRAM FOR EXTRA LARGE INSTALLATION

Functional Component		Space Allocation Standard			Extra Large Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	3	11.15	120
	ITT Kiosk	0.93	10	per kiosk	2	1.86	20
	Check-out Equipment Storage	0.74	8	per under counter unit	4	2.97	32
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	5	3.72	40
	Server Room	5.95	64	per room	3	17.84	192
	Computer Area						
	Workstations	1.39	15	per workstation	60	83.61	900
	Control/Help Counter	7.43	80	per control counter	2	14.86	160
	Game Room						
	Video Game Stations	10.22	110	per video station	12	122.63	1,320
	Pinball/Arcade Stations	1.39	15	per machine	10	13.94	150
	Pool Tables	32.52	350	per table	8	260.12	2,800
	Ping Pong/Table Tennis	29.26	315	per table	3	87.79	945
	Foosball						
	Air Hockey	3.25	35	per table	4	13.01	140
	Mini Theatre	2.79	30	per person	60	167.22	1,800
	TV Lounge	2.32	25	per person	27	62.71	675
	Snack/Vending						
	Vending	1.67	18	per vending machine	10	16.72	180
	Seating	4.46	48	per 4 seat table	4	17.84	192
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	10	23.23	250
	Reading/Writing	2.04	22	per person	12	24.53	264
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	60	167.22	1,800
	Multipurpose Storage	9.29	100	per room	2	18.58	200
	Staff Offices						
	Program Manager	11.15	120	per office	2	22.30	240
	Program Assistant	7.43	80	per workstation	2	14.86	160
	Program Leader	7.43	80	per workstation	3	22.30	240
	Recreation Aide	0.00	0	per workstation	3	0.00	0
Pay Telephones	0.56	6	per phone	6	3.34	36	
Activity Support	Entrance Lobby	11.15	120	per lobby	3	33.44	360
General Activity Storage	2.79	30	per room	4	11.15	120	
Office Storage	5.57	60	per room	4	22.30	240	
Toilets (Male and Female)							
Water Closets/Urinals	2.32	25	per fixture	22	51.10	550	
Lavatories	1.39	15	per fixture	22	30.66	330	
Janitor's Closet	3.72	40	per closet	1	3.72	40	
Total Building Net Area-Core Spaces & Support						1,346.68	14,496
Circulation and Mechanical Building Factor @				15%		202.00	2,174
Total Building Gross Area-Core Spaces & Support						1,548.68	16,670
Site Support	Staff Parking	41.81	450	per space	11	459.86	4,950
	Passenger Van Parking	55.74	600	per space	3	167.22	1,800
	Patron Parking						
	Surfaced	41.81	450	per space	132	5,518.26	59,400
	Unsurfaced/Overflow	41.81	450	per space	132	5,518.26	59,400
	Bicycle Racks	5.57	60	per 10-bike Rack	3	16.72	180
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support						11,698.90	125,930
Total Facility (Building Gross Core Spaces and Site)						13,247.58	142,600

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

TABLE 2-7. SPACE PROGRAM FOR SUPER LARGE INSTALLATION

Functional Component		Space Allocation Standard			Super Large Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Core Activity Areas	Customer Service Area/Control						
	Customer Interface	3.72	40	per staff member	3	11.15	120
	ITT Kiosk	0.93	10	per kiosk	2	1.86	20
	Check-out Equipment Storage	0.74	8	per under counter unit	4	2.97	32
	Tape Storage/Theatre Equipment	0.74	8	per rack/140 tapes	6	4.46	48
	Server Room	5.95	64	per room	3	17.84	192
	Computer Area						
	Workstations	1.39	15	per workstation	150	209.03	2,250
	Control/Help Counter	7.43	80	per control counter	2	14.86	160
	Game Room						
	Video Game Stations	10.22	110	per video station	30	306.57	3,300
	Pinball/Arcade Stations	1.39	15	per machine	20	27.87	300
	Pool Tables	32.52	350	per table	10	325.15	3,500
	Ping Pong/Table Tennis	29.26	315	per table	6	175.58	1,890
	Foosball						
	Air Hockey	3.25	35	per table	8	26.01	280
	Mini Theatre	2.79	30	per person	100	278.70	3,000
	TV Lounge	2.32	25	per person	40	92.90	1,000
	Snack/Vending						
	Vending	1.67	18	per vending machine	10	16.72	180
	Seating	4.46	48	per 4 seat table	8	35.67	384
	Library/Quiet Area						
	Books/Shelves	2.32	25	per shelf unit	15	34.84	375
	Reading/Writing	2.04	22	per person	20	40.88	440
	Multipurpose Room *						
	Multipurpose Room	2.79	30	per person	100	278.70	3,000
	Multipurpose Storage	9.29	100	per room	2	18.58	200
	Staff Offices						
	Program Manager	11.15	120	per office	2	22.30	240
	Program Assistant	7.43	80	per workstation	2	14.86	160
	Program Leader	7.43	80	per workstation	3	22.30	240
	Recreation Aide	0.00	0	per workstation	3	0.00	0
Pay Telephones	0.56	6	per phone	10	5.57	60	
Activity Support	Entrance Lobby	11.15	120	per lobby	4	44.59	480
	General Activity Storage	2.79	30	per room	5	13.94	150
	Office Storage	5.57	60	per room	5	27.87	300
	Toilets (Male and Female)						
	Water Closets/Urinals	2.32	25	per fixture	22	51.10	550
	Lavatories	1.39	15	per fixture	22	30.66	330
	Janitor's Closet	3.72	40	per closet	1	3.72	40
Total Building Net Area-Core Spaces & Support						2,157.23	23,221
Circulation and Mechanical Building Factor @					15%	323.58	3,483
Total Building Gross Area-Core Spaces & Support						2,480.82	26,704
Site Support	Staff Parking	41.81	450	per space	11	459.86	4,950
	Passenger Van Parking	55.74	600	per space	3	167.22	1,800
	Patron Parking						
	Surfaced	41.81	450	per space	132	5,518.26	59,400
	Unsurfaced/Overflow	41.81	450	per space	132	5,518.26	59,400
	Bicycle Racks	5.57	60	per 10-bike Rack	4	22.30	240
	Bus Stop/Transportation Transfer	18.58	200	per shelter	1	18.58	200
Total Site Support						11,704.47	125,990
Total Facility (Building Gross Core Spaces and Site)						14,185.29	152,694

*  Multipurpose Room is optional for Navy. If this is removed from the space program, be sure to remove both the room and storage allocation and the 15% building factor on those spaces.

**TABLE 2-8. SPACE PROGRAM FOR EXTRA SMALL INSTALLATION
(OPTIONAL SPACES)**

Functional Component		Space Allocation Standard			Extra Small Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Optional Spaces*	Personal Storage Lockers	0.46	5	per two lockers	22	10.22	110
	Automatic Teller Machine (ATM)	2.23	24	per machine	1	2.23	24
	Laundry	2.32	25	per machine	8	18.58	200
	Food Service Area	23.23	250	per tenant	1	23.23	250
	Individual TV Lounge	4.18	45	per chair/TV combo	4	16.72	180
	Music Listening	1.39	15	per person	4	5.57	60
	Musical Practice Rooms	7.43	80	per music room	1	7.43	80
Site: Outdoor Gathering Area		2.79	30	per person	25	69.68	750

* **SE** Note, the Multipurpose Room is optional for Navy and core for the Marine Corps. See Table 2-2 for the Extra Small facility space requirements.

TABLE 2-9. SPACE PROGRAM FOR SMALL INSTALLATION (OPTIONAL SPACES)

Functional Component		Space Allocation Standard			Small Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Optional Spaces	Personal Storage Lockers	0.46	5	per two lockers	22	10.22	110
	Automatic Teller Machine (ATM)	2.23	24	per machine	1	2.23	24
	Laundry	2.32	25	per machine	25	58.06	625
	Food Service Area	23.23	250	per tenant	1	23.23	250
	Individual TV Lounge	4.18	45	per chair/TV combo	4	16.72	180
	Music Listening	1.39	15	per person	4	5.57	60
	Musical Practice Rooms	7.43	80	per music room	1	7.43	80
Site: Outdoor Gathering Area		2.79	30	per person	50	139.35	1,500

* **SE** Note, the Multipurpose Room is optional for Navy and core for the Marine Corps. See Table 2-3 for the Small facility space requirements.

**TABLE 2-10. SPACE PROGRAM FOR MEDIUM INSTALLATION
(OPTIONAL SPACES)**

Functional Component		Space Allocation Standard			Medium Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Optional Spaces*	Personal Storage Lockers	0.46	5	per two lockers	35	16.26	175
	Automatic Teller Machine (ATM)	2.23	24	per machine	1	2.23	24
	Laundry	2.32	25	per machine	35	81.29	875
	Food Service Area	23.23	250	per tenant	1	23.23	250
	Individual TV Lounge	4.18	45	per chair/TV combo	6	25.08	270
	Music Listening	1.39	15	per person	6	8.36	90
	Musical Practice Rooms	7.43	80	per music room	1	7.43	80
Site: Outdoor Gathering Area		2.79	30	per person	75	209.03	2,250

* **SE** Note, the Multipurpose Room is optional for Navy and core for the Marine Corps. See Table 2-4 for the Medium facility space requirements.

**TABLE 2-11. SPACE PROGRAM FOR LARGE INSTALLATION
(OPTIONAL SPACES)**

Functional Component		Space Allocation Standard			Large Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Optional Spaces *	Personal Storage Lockers	0.46	5	per two lockers	50	23.23	250
	Automatic Teller Machine (ATM)	2.23	24	per machine	1	2.23	24
	Laundry	2.32	25	per machine	50	116.13	1,250
	Food Service Area	23.23	250	per tenant	1	23.23	250
	Individual TV Lounge	4.18	45	per chair/TV combo	8	33.44	360
	Music Listening	1.39	15	per person	8	11.15	120
	Musical Practice Rooms	7.43	80	per music room	2	14.86	160
	Site: Outdoor Gathering Area	2.79	30	per person	100	278.70	3,000

* **SE** Note, the Multipurpose Room is optional for Navy and core for the Marine Corps. See Table 2-5 for the Large facility space requirements.

**TABLE 2-12. SPACE PROGRAM FOR EXTRA LARGE AND
SUPER LARGE INSTALLATION (OPTIONAL SPACES)**

Functional Component		Space Allocation Standard			Extra Large Installation		
		m ²	ft. ²	Standard	No.	m ²	ft. ²
Optional Spaces *	Personal Storage Lockers	0.46	5	per two lockers	66	30.66	330
	Automatic Teller Machine (ATM)	2.23	24	per machine	1	2.23	24
	Laundry	2.32	25	per machine	60	139.35	1,500
	Food Service Area	23.23	250	per tenant	2	46.45	500
	Individual TV Lounge	4.18	45	per chair/TV combo	12	50.17	540
	Music Listening	1.39	15	per person	10	13.94	150
	Musical Practice Rooms	7.43	80	per music room	3	22.30	240
	Site: Outdoor Gathering Area	2.79	30	per person	200	557.40	6,000

* **SE** Note, the Multipurpose Room is optional for Navy and core for the Marine Corps. See Table 2-6 for the Extra Large facility space requirements and Table 2-7 for the Super Large facility space requirements.

2-1.3.3 **Cost.** Design the facility with the objective of achieving the lowest life cycle cost. 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.

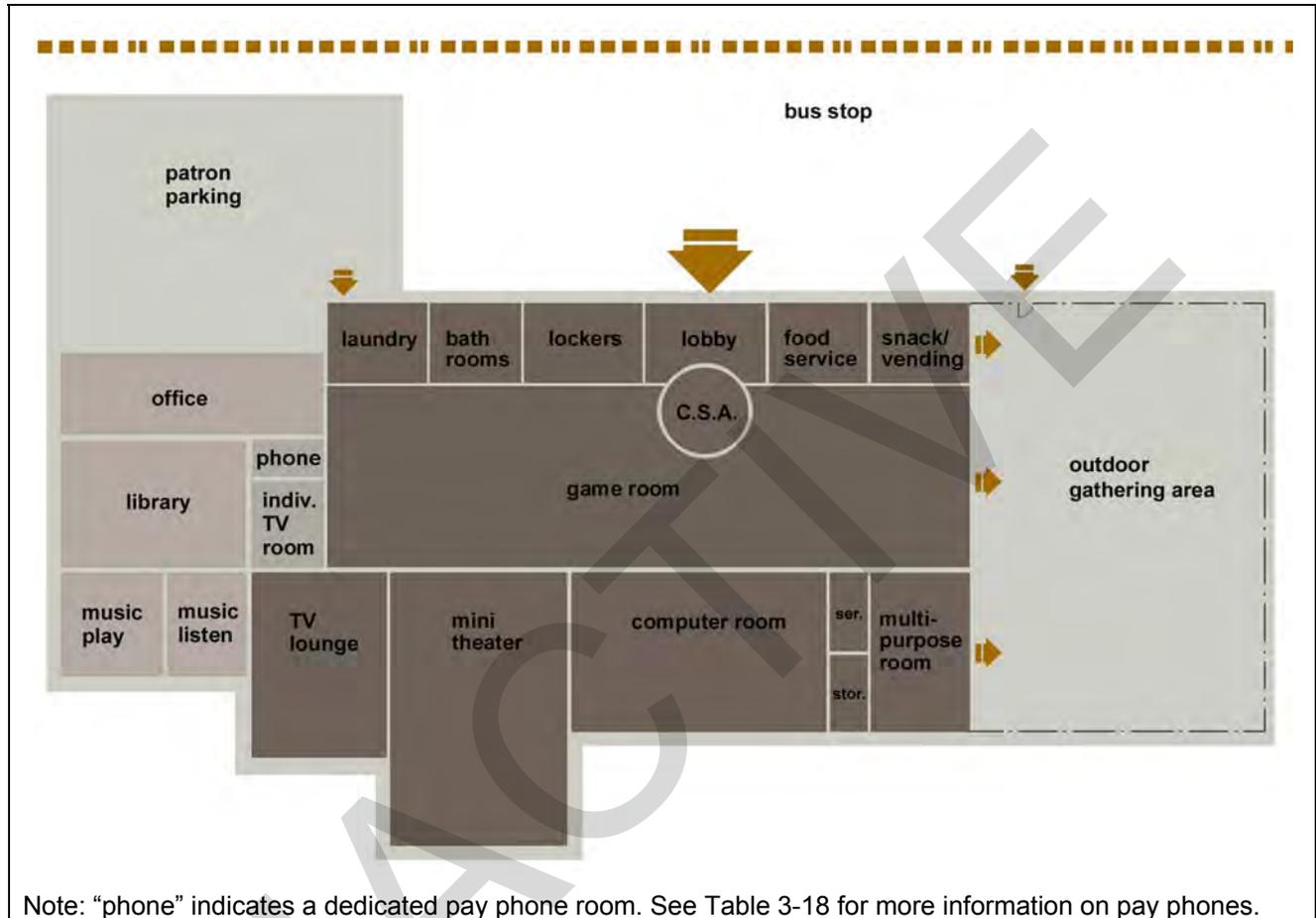
2-2 LAYOUT AND ADJACENCIES.

2-2.1 **Functional Relationship Bubble Diagram (Figure 2-1).** This bubble diagram is not intended to represent a mandatory or even a suggested design but is provided to indicate acceptable relative adjacencies of functional spaces. Circulation space is variable but must be included in overall area calculation.

2-2.2 **Quiet vs. Active Functions.** While quiet functions (lighter color in Figure 2-1) need sound separation from active functions, do not visually or socially separate these functions from the other space types (except for the theater). A view of the active

and more group-orientated functions from the quiet areas is critical to maintain a sense of social interaction.

FIGURE 2-1. FUNCTIONAL RELATIONSHIP BUBBLE DIAGRAM



2-2.2.1 **Space Assessment.** See the Functional Data Sheets in paragraph 3-1 for additional information on the space types and their relationships to each other.

2-3 ALTERATIONS TO EXISTING FACILITIES.

2-3.1 **Regulatory Authorities.** The authorities are contained in OPNAVINST 11010.20F and NAVFACINST 11010.45D. Prior to planning alterations to an existing facility to convert it to an MRC, the activity should consult the following:  Navy: NPC (Pers 656D/659) and Marine Corps: MCCA HQ (MRS/MRD)

2-3.2 **Other Considerations.** Consider the site of the existing facility and its limitations with regard to the MRC's needs. Only consider permanent facilities for conversion to a MRC. Exceptions may be made for other buildings that are in excellent condition, subject to the location determinants in paragraph 2-1.3. Consider adaptability to the intent of the building program. For instance, can the building accommodate a ground-floor facility with space and grading requirements for the mini theater? Does it

have site space for the outdoor deck/patio area and patron parking? Whether planning a conversion, alteration or new construction, ATFP requirements must be taken into account (see paragraph 2-9).

2-3.3 **Codes.** Also make note of the Assembly nature of this function and its impact on construction type classification, fire protection, etc. For information regarding DoD use of codes, refer to UFC 1-200-01, UFC 3-600-01 and UFC 3-420-01.

2-4 **EXTERIOR DESIGN.** In general, the building's image, theme, and fixtures must be consistent with the programs offered. The building design should reflect the local geographical and cultural environment. The building's interior and exterior are presented as a recreational, not a warfare, facility. The building and site should provide a visually attractive and welcoming appearance with ample parking, and signs giving directions to the site. Avoid a hangar- or warehouse-like industrial appearance.

Provide only one, main patron entrance to facilitate security ID check and operational control. Other entrances/exits should be securable (see paragraph 2-6.4.1 for information on alarm systems). Equip the main entrance with an attractive, clearly located, illuminated sign that provides an inviting advertisement.

2-4.1 **Structure.** This building is most efficient as a single-story structure. Consider sloping the slab in the mini theater towards the screen wall if possible.

2-4.2 **Exterior Finishes.** The color, texture, and design should be consistent with the programs offered and the local environment and be appropriate for the building type. The exterior design should coordinate with the local Base Exterior Architectural Plan (BEAP), if available.

2-5 **INTERIOR DESIGN.** Construction and finishes (walls, floor, ceiling) should support the image and theme of the facility and be consistent with the programs offered. The interior design should offer the same interest, excitement, and professionalism that can be found in commercial facilities geared towards 17- to 25-year-old patrons.

Finishes should take into account the intended uses and be appropriately durable. For more information on finishes in specific areas, see the tables in [Chapter 3](#).

2-6 **SERVICES.** See paragraph 2-10 for information on sustainable design and energy consumption.

2-6.1 **Plumbing.** Design domestic hot and cold water, sanitary and storm drainage, propane, fuel oil, or natural gas systems to meet the requirements of local installation standards and UFC 3-420-01.

2-6.2 **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*. Use MIL-HDBK 1003/3 and ITG FY98-01 as supplemental guidance until it is replaced.

2-6.3 **Fire Protection.** Design fire protection and life safety to comply with UFC 3-600-01. Power to the "acoustic" rooms (e.g. Music Practice Room, Music Listening, Individual TV Room) need to have the power interrupted to the equipment when the fire alarm system is activated.

2-6.4 **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 NEC and the latest installation design requirements. See the latest edition of *Electric Current Abroad* 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.

2-6.4.1 **Communications.** Facility-wide (computer room, offices, and customer service area) Internet service must be high-speed (T1 recommended). Standard phone line dial-up service is not acceptable. Additionally, consider special communications needs for the game room and mini theater such as cable television connections.

SE For larger or two- (or more) story facilities, the U.S. Marine Corps requires a two-way Intercom system throughout the facility. The system must allow music and have individual room controls. The Navy only requires a public address system. See Tables 3-2 and 3-4 for more information.

2-6.4.2 **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.

2-6.4.3 **Closed Circuit Television (CCTV).** Consider providing a CCTV system. Provisions for a CCTV system must be justified during the planning/programming process. **SE** Service requirements vary on CCTV systems. Note the following criteria:

2-6.4.3.1 **Navy.** Provide conduit (minimum 19 mm (.75 in.)) and cabling to accommodate camera coverage in primary user spaces and accommodate controls and monitors located at the Customer Service Area and staff offices. 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. Navy facilities must also accommodate the Navy and Marine Corps Intranet (NMCI); refer to UFC 3-580-10.

2-6.4.3.2 **Marine Corps.** Provide the entire CCTV system including cameras, monitors, conduit, cabling, power, and junction boxes for CCTV system. Provide camera coverage in primary user spaces, with controls and monitors located at the Customer Service Area and staff offices.

2-7 SITE WORK.

2-7.1 **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. Native species are preferred. Do not use poisonous plants.

2-7.2 **Site Lighting.** Ensure that parking areas and the compound have adequate lighting for safety and security measures. See UFC 3-530-01.

2-7.3 **Outdoor Activities.** If space permits, consider providing the optional outdoor gathering area. See Table 3-17 for more information on this space.

2-8 **BARRIER FREE DESIGN REQUIREMENTS.** Design MRCs 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>. When these two documents conflict, the one with the greatest accessibility requirement governs.

2-9 **ANTITERRORISM REQUIREMENTS.** The design must comply with the requirements of UFC 4-010-01.

2-10 **SUSTAINABLE DESIGN.** Use an integrated approach to the planning and design of MRCs. Consider sustainable strategies and features such as 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. Follow the direction of NAVFAC Instruction 9830.1.

2-10.1 **The United States Green Building Council (USGBC) LEED™ Green Building Rating System.** Use the 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. It can be downloaded from USGBC at <http://www.usgbc.org/programs/index.htm>.

2-10.2 **Energy Conservation.** Follow the guidance in UFC 3-400-01 to achieve energy conserving designs.

2-10.3 **EPA List of Affirmative Procurement Guideline Items.** When specifying products that are included in EPA's list of affirmative procurement guideline

items, 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 MRCs include building insulation, carpet and cushion, cement and concrete, latex paint, floor tiles, patio blocks, restroom dividers, and structural fiberboard.

2-10.4 **Whole Building Design Guide.** 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.

2-10.5 **DoD Energy Budget.** Design of new facilities must ensure that building energy consumption does not exceed the DoD energy budget figures.

INACTIVE

CHAPTER 3

FUNCTIONAL CRITERIA

3-1 **FUNCTIONAL DATA SHEETS.** Tables 3-1 through 3-20 are the Functional Data Sheets that present a description and all the functional criteria for each space within the facility.

TABLE 3-1. LOBBY/ENTRANCE

Description/ Usage	The Lobby serves as the entrance to the facility and should be recognizable from the outside and be close to the base bus stop and patron parking. The lobby should lead directly into the game room by passing the Customer Service Area. ID checks will be required. Card access readers may be used for the ID checks. An air lock is recommended. May be used as an assembly point and waiting area for local bus stop.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Consider the use of wall covering or wood where budget and practical considerations allow. Floor. Stone or tile. Walk-off mat/area at the entrance door. Ceiling. Painted gypsum wallboard or specialty ceiling.
Plumbing	Wall mounted water fountain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Building system.
Power	Provide one convenience outlet for general cleaning. If optional ATM machine is provided, provide dedicated power.
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)	Cigarette Urn located at exterior entrance for disposal of smoking items. (Note that a designated smoking area must be at least 15.25 m (50 ft.) from the building.) Provide bench seating.
Special Requirements	If provided, place the optional ATM machine in the lobby/entrance area. Provide an exterior Marquis Sign and posted sign at the entrance with the hours of operation. The main exterior door must be lockable.

TABLE 3-2. CUSTOMER SERVICE AREA/CONTROL

Description/ Usage	Space will provide a variety of customer services such as direct customer interface, POS, check-out equipment for various activities, control all audio and visual programs, tape machines, answer telephone and respond to inquiries, store tapes and rental equipment, and monitor and visually control access of entire facility. In smaller facilities, the hardware server may be located here.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard kept to a minimum Floor. Carpet, VCT, and ceramic tile w/ vinyl base. Ceiling. Painted gypsum wallboard and/or specialty ceiling.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Building system.
Power	Provide power for all equipment. Perform a power requirement survey as this area's power requirements are extremely site and locale specific.
Lighting	540 Lux (50 ft. candles). General ambient lighting. Consider decorative and task lighting.
Communication	CCTV. May be required to monitor CATV/Internal Video. Controls for TV Lounge and Mini Theatre. PA/Audio. Music and PA controls. Provide a speaker.  Marine Corps requires an Intercom system to facilitate paging and response between this area and the offices. Telephone. Provide one line per two POS and fax. Provide one additional general-purpose phone line. Data. Provide one high-speed line per POS and fax. Provide additional lines, as needed, for associated hardware (e.g. RecTrac, LAN/WAN, and Internet connections). Security. None required.
Casework	Provide a 610 mm (24 in.) deep counter with built-in cabinets. Provide file drawers and storage drawers with a minimum of two lockable for each POS. The counter should be dual height for standing transactions and seated office functions.
Furnishings Fixtures & Equipment (FF&E)	Desktop computer for administrative functions and for the operation of entertainment equipment. TV Lounge and Mini Theatre equipment. Chairs and stools. Tape storage cabinet. Computer racks.
Special Requirements	In extra small, small, and possibly medium facilities, the computer control space may be located at this counter. Consider the acoustics of this area as this is in a busy, noisy space.

TABLE 3-3. SERVER ROOM

Description/ Usage	In larger facilities, the location of all the servers necessary to operate the Computer Room. Provide direct access to Computer Room.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Floor. Anti-static, non-conductive vinyl tile w/ vinyl or rubber base. Ceiling. None required. Cable tray.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum with 24/7 operation.
Fire Protection	Building system.
Power	Provide dedicated, grounded, convenience outlets for each server and monitor. Provide power for UPS system and one additional power outlet for cleaning and maintenance.
Lighting	Low level, non-glare task lighting as necessary.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide a speaker. Telephone. Backboard for facility. Provide one line. Data. Provide high-speed (T1 recommended) line to serve facility. Security. Extend partitions from finished floor to underside of structure above. Seal around all penetrations. Lockable entrance/exit door.
Casework	Standing countertop for monitors.
Furnishings Fixtures & Equipment (FF&E)	Computer racks, UPS system, and stools.
Special Requirements	Plywood backing over gypsum wallboard for telephone backboards and UPS system.

TABLE 3-4. COMPUTER ROOM

Description/ Usage	<p>This space is for the general use of base-owned computers. The computers will be used for a wide range of activities such as browsing the Internet, emailing, and the printing, faxing, and copying of documents.</p> <p>The functional operation of this room may change depending on the size of the facility. In smaller facilities, some of the functions will be shared, monitored, and located at the Control Desk. While in larger facilities, these same functions may be located in the Computer Room itself.</p> <p>The Control Desk houses the printers, fax machines, copiers, and scanners.</p> <p>Provide direct access to Server Room.</p>
Min. Ceiling Ht.	2.44 m (8 ft.) minimum
Finishes	<p>Walls. Painted gypsum wallboard.</p> <p>Floor. Anti-static VCT or Carpet with vinyl 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	Building system.
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, floor-mounted junction boxes.
Lighting	540 Lux (50 ft. candles) general ambient lighting. Provide fixtures designed for use in computer environments.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide one speaker.</p> <p>Telephone. Provide one telephone line per fax machine. No phone lines required.</p> <p>Data. Provide one line for each computer and additional lines for copiers, scanners, and fax machines.</p> <p>Security. None required.</p>
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	<p>Tables and chairs.</p> <p>Computers, fax machines, copiers, scanners, and other related computer equipment.</p>
Special Requirements	<p>In smaller facilities where the staff functions are located at the Control Desk, visual access to the Computer Room from the Control Desk is essential.</p> <p>Staffing ratios goals are: 1 staff helper/20 computers.</p> <p>Machine ratio goals are: 1 printer and fax machine/10 computers.</p> <p>Provide 1 scanner.</p>

TABLE 3-5. GAME ROOM

Description/ Usage	This space is the heart of the facility and, along with the mini theater; acts as the identity of the MRC. This room is the hub of activity. Besides housing the gaming activities, this room will serve as the ante-room (waiting room or overflow space) for the mini theater and TV lounge. Other functions, such as the computer room and the snack/vending area should open directly to this space. Some tables and chairs associated with the snack/vending area may be located within the game room. The game room should also have direct access to the optional outdoor gathering area.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum with 3.05 m (10 ft.) preferable. Minimum 3.05 m (10 ft.) over pool tables.
Finishes	Walls. Painted gypsum wallboard. Wallcoverings or wood panels may be used should budget allow. Floor. Carpet, carpet tile, or VCT. Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum
Fire Protection	Building system.
Power	Provide convenience outlets for all games. Coordinate location of outlets to avoid tripping hazards. Consider floor boxes where necessary. Provide additional outlets per code.
Lighting	540 Lux (50 ft. candles) or lower for general ambient light. Provide accent lighting and focused lighting over pool tables, ping pong tables, foosball, etc.
Communication	CCTV. Consider a camera to focus on coin and bill changer. CATV/Internal Video. Wall and/or ceiling mounted TV screens. PA/Audio. Provide speakers for adequate coverage of room. Telephone. None required. Data. None required. Security. None required.
Casework	Drink rails at perimeter of room.
Furnishings Fixtures & Equipment (FF&E)	No special requirements other than the games.
Special Requirements	Provide tamper resistant coin and bill changer. Large doors at delivery entrance for table and game replacement.

TABLE 3-6. MINI THEATER

Description/ Usage	Along with the game room, the mini theater should help to establish the identity of the facility. Important to its success is the quality of the entertainment offered and how it is presented. It should be directly adjacent to the game room so that the game room can serve as the ante-room. Design the mini theater for the sole purpose of comfortably watching first run or recently released motion pictures.
Min. Ceiling Ht.	3.05 m (10 ft.) minimum at the screen. Should larger screens be selected, adjust the minimum ceiling height accordingly.
Finishes	Walls. Gypsum Wallboard with fabric wall covering, acoustical panels or fabric curtains above 915 mm (36 in.) +/- above finished floor, with painted gypsum wallboard or polymer plastic material below. Floor. Carpet. Aisles may be a more durable material such as VCT, stone, or painted concrete. Ceiling. Acoustical ceiling panels or other acoustical material, black or dark in color.
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Consider sound dampening at the outlets and inlets. Consider sound transmission through the supply and return ductwork and provide sound dampening accordingly.
Fire Protection	Building system.
Power	Coordinate power locations and requirements with entertainment equipment located in the mini theater. Provide additional outlets per code.
Lighting	Provide lighting with dimmable controls. The lighting should provide general ambient light for safe circulation both before and after the movie. Also provide housekeeping lights that can be turned on separately so as to facilitate the cleaning and upkeep of the theater.
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet at the screen side of the theatre. PA/Audio. Provide speakers as necessary. Ensure that these speakers can be by-passed so that the transmission of general announcements is not made over these speakers during a movie. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Fixed seating with cushioned backs and seats, cup holders—stagger seating if possible. Projection screen.
Special Requirements	Two means of egress may be required for this space. Consult the governing codes to insure total compliance, including exit lighting. Consider light and noise pollution through doors. A vestibule arrangement may be required at the entry to control both light and noise from the adjacent Game Room. Consider loose and informal seating towards the front of the theatre. Consider accessibility in the design of the theater. Comply with all governing codes on this matter. The “playing” equipment for the mini theater is located elsewhere in the facility and only the output equipment is located in the mini theater.

TABLE 3-7. TV LOUNGE

Description/ Usage	The TV lounge is the “living room” of the facility. It should be comfortable and informal and be easily accessible to the game room. It is for group viewing of television, cable and broadcast events on a single large screen TV with a home theater sound system. Other TVs may be located in this room but should not distract from the focus of the large screen TV. The TV lounge may be open to the game room.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Wall coverings or wood panels may be used should budget allow. Floor. Carpet. Ceiling. Acoustical ceiling panels or gypsum wallboard.
Plumbing	N/A.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide power for each TV and additional outlets per code.
Lighting	Provide dimmable lighting.
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet for each TV. PA/Audio. Provide necessary quantity of speakers for adequate coverage. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Comfortable chairs, sofas and end tables. Consider floor and table lamps to help create a living room environment.
Special Requirements	Consider needs for the home theater sound system.

TABLE 3-8. SNACK/VENDING

Description/ Usage	Directly adjacent to the game room, this space should provide for simple vending of food and beverages. A seating area should accompany this space that could spill out into the game room. This area is not the food service/coffee bar but should work in conjunction with that optional space, if provided (See Table 3-13).
Min. Ceiling Ht.	2.44 m (8 ft) minimum.
Finishes	Walls. Painted gypsum wallboard. Consider vinyl wall covering. Floor. VCT with vinyl wall base. Ceiling. ACP. Consider washable panels.
Plumbing	Countertop sink with hot and cold water supply. Floor drain.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide dedicated outlets for the vending machines and countertop height convenience outlets for microwave.
Lighting	540 Lux (50 ft. candles) general ambient lighting. Consider accent fixtures and lighting to provide special ambience.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. None required.
Casework	Countertop with base and wall cabinets for storage of napkins, etc. Drink rail.
Furnishings Fixtures & Equipment (FF&E)	Under cabinet or counter microwave. Vending machines. Tables and chairs/stools.
Special Requirements	Refrigeration may be required for those centers which provide alcohol/beverage service.

TABLE 3-9. FOOD SERVICE AREA

Description/ Usage	<p>This optional space is provided to support the center with brand name retailers or equivalent. The space provided should be capable of supporting national vendors that provide a broad range of food and services. This area should be directly associated with the snack/vending area. Separate seating should not be provided for individual vendors and should be part of the seating included with snack/vending area. Seating should be carefully reviewed to insure that all food-associated spaces are properly supported.</p> <p>The equipment and final design of the space may be vendor specific and provided as part of the facility budget. This approach should be determined at the time of design and in consultation with potential vendors.</p>
Min. Ceiling Ht.	2.44 m (8 ft) minimum.
Finishes	<p>Walls. Painted gypsum wallboard. Floor. VCT with vinyl wall base. Ceiling. ACP. Consider washable panels.</p>
Plumbing	As required to accommodate the specific vendor.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Kitchen exhaust may be required to accommodate a specific vendor.
Fire Protection	Building system. A hood suppression system may be required for specific cooking equipment. If required, design this system in accordance with UFC 3-600-01.
Power	As required to accommodate the specific vendor.
Lighting	As required to accommodate the specific vendor.
Communication	<p>CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. Specific vendors may require a telephone outlet for a POS station and another outlet for general business use. Data. Specific vendors may require a data outlet for a POS station and another outlet for general business use. Security. Specific vendors may require a roll-up security gate to partition their serving line from the remainder of the facility during those times which the food service vendor is closed.</p>
Casework	As required to accommodate the specific vendor.
Furnishings Fixtures & Equipment (FF&E)	As required to accommodate the specific vendor.
Special Requirements	As required to accommodate the specific vendor.

TABLE 3-10. LIBRARY/QUIET ROOM

Description/ Usage	<p>Quiet and comfortable area for studying, writing letters or reading books, newspapers, or magazines. This room should have visual access to the game room allowing patrons an opportunity to feel part of the activities while maintaining a noise level conducive to reading. Personal laptop computers may be used throughout the space.</p> <p>This space is not the Base Library.</p>
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	<p>Walls. Painted gypsum wallboard.</p> <p>Floor. Carpet with vinyl wall base.</p> <p>Ceiling. ACP</p>
Plumbing	None required
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide convenience outlets for cleaning. Provide additional outlets for the use of hand held machines. Provide convenience outlets near tables for use with laptop computers.
Lighting	540 Lux (50 ft. candles) general ambient lighting. Provide task lighting at table/desks.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide one speaker.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Casework	Bookshelves may be provided as casework in lieu of FF&E.
Furnishings Fixtures & Equipment (FF&E)	<p>Tables and chairs for writing and studying with task lighting.</p> <p>Consider reclining type chairs, sofas, and end tables for an informal reading area.</p> <p>Floor and table lamps.</p> <p>Bookshelves, magazine and newspaper racks.</p>
Special Requirements	<p>Provide acoustical separation from the game room and other active functions.</p> <p>Provide adequate shade control to all windows.</p>

TABLE 3-11. MULTIPURPOSE ROOM

Description/ Usage	Flexible room to support a variety of dependent and independent functions. The room should support activities associated with the outdoor space as well as the game room. It must also provide support for training and meetings. A dedicated storage room for the storage of tables and chairs should be directly accessible to the multipurpose room.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Consider a chair rail. Floor. Carpet with vinyl wall base. Ceiling. Acoustical Ceiling Panels.
Plumbing	Hot and cold water to sink, if provided.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide recessed floor boxes, spaced appropriately for training. Boxes should incorporate power and data. Provide additional outlets per code along the walls. Consider other equipment needs such as projectors, television/VCR, etc.
Lighting	540 Lux (50 ft. candles) general ambient lighting. Consider a mix of fluorescent and incandescent. Dimmable and controllable.
Communication	CCTV. None required. CATV/Internal Video. Provide one outlet. PA/Audio. Provide one speaker. Telephone. Provide two outlets. Data. Provide sufficient quantity to support training functions. Security. Exterior door must be lockable.
Casework	None required. Consider providing kitchenette area with a counter, sink, and cabinets.
Furnishings Fixtures & Equipment (FF&E)	Tables and chairs. TV with video and DVD capability. Recessed projection screen. Window shade control (blackout). Marker board.
Special Requirements	STC 49 minimum at perimeter walls and partitions. SE Note: Navy seeks to avoid having rooms such as this used for mission-oriented functions.

TABLE 3-12. PERSONAL STORAGE LOCKERS

Description/ Usage	This optional space is for the short term storage of personal goods such as coats, backpacks, etc.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Floor. VCT with vinyl wall base. Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 (78 F) maximum.
Fire Protection	Building system.
Power	None required.
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 security camera that can view lockers.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Lockers: plastic, pad-lockable, 305 mm wide by 455 mm deep (12 in. x 18 in.), double-tier, with coat hook.
Special Requirements	None required.

TABLE 3-13. LAUNDRY

Description/ Usage	This optional Laundromat provides a practical function for the facility. It should be directly accessible to the game room. Also consider direct access to the outside. The facility may remain open 24/7 or at times when the MRC is closed—must be capable of being locked-off from the remainder of the facility.
Min. Ceiling Ht.	2.74 m (9 ft.) minimum.
Finishes	Walls. Painted water-resistant gypsum wallboard. Floor. VCT. Ceiling. Acoustical Ceiling Panels. Consider washable and humidity resistant panels. Gypsum wallboard ceiling can 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 for the dryers. Provide adequate dehumidification as part of the building systems.
Fire Protection	Building system.
Power	Provide power to each washer and dryer. Provide power for the bill change machine, laundry product vending machines, and TVs. Provide power near the folding area for irons. Do not provide any other additional outlets other than those required and identified above.
Lighting	540 Lux (50 ft. candles) general ambient lighting. Provide occupancy sensors.
Communication	CCTV. Consider a camera positioned to monitor the bill change machine. CATV/Internal Video. Provide one outlet for each TV. PA/Audio. Provide one speaker. Telephone. Provide outlets for one or two optional pay phones. Data. None required. Security. Lockable doors to the exterior and interior.
Casework	Display case/board for advertising local events and attraction.
Furnishings Fixtures & Equipment (FF&E)	Wall or ceiling mounted TVs. Folding tables and hanging racks or clothes lines. Chairs. Extra large, high capacity washers and dryers—provide machines on a ratio of three dryers/two washers. Additional heavy-duty washer and dryer machines. Laundry product vending machines. Tamper resistant coin/bill change machine. Pay phones and associated cabinets.
Special Requirements	Provide lockable exterior double doors for machine access and maintenance. Provide lockable (from MRC) interior door for access to MRC facility. Provide easy access to rear of dryers to allow easy maintenance and cleaning of vents.

TABLE 3-14. INDIVIDUAL TV ROOM

Description/ Usage	This room is for the use of individuals wishing to privately watch TV. The chairs provided for this space are typically custom-designed with an integrated television screen and sound system. The arrangement of chairs is such that individual, private viewing is possible.
Min. Ceiling Ht.	2.44 m (8 ft) minimum.
Finishes	Walls. Painted gypsum wallboard. Floor. Carpet or VCT with vinyl wall base. Ceiling. ACP
Plumbing	None required
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide recessed junction boxes at chair locations for power and communications.
Lighting	Provide dimmable lighting. Should be subdued and relatively dark. Avoid screen glare.
Communication	CCTV. None required. CATV/Internal Video. Provide one line per chair. Integrate with power. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Custom recliners—one chair per one TV. The recliner should have 19 in. (483 mm) TV, VCR, and DVD player.
Special Requirements	Provide adequate light control at windows.

TABLE 3-15. MUSIC LISTENING

Description/ Usage	Optional area or room to allow patrons to listen to music with a headset from a hand-held music player. Provide comfortable lounge chairs and visual access to the active areas of facility.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Floor. Carpet w/ vinyl wall base. Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles) general dimmable ambient lighting. Consider floor and table mounted lights.
Communication	CCTV. None required. CATV/Internal Video. None required. PA/Audio. Provide one speaker. Telephone. None required. Data. None required. Security. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	Easy chairs and sofas. End tables and coffee tables. Table and floor lamps.
Special Requirements	Consider acoustics.

TABLE 3-16. MUSIC PRACTICE ROOM(S)

Description/ Usage	Small, individual rooms to allow one, two, or maybe three patrons to practice music on a variety of instruments. The rooms should provide privacy for the users—visual access to the rest of the facility is not necessary. The room sizes may vary to allow for individual practice or group practice.
Min. Ceiling Ht.	2.44 m (8 ft.) minimum.
Finishes	Walls. Painted gypsum wallboard. Partitions should be floor to underside of deck above. Floor. VCT or Carpet with vinyl wall base. Ceiling. ACP
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. This can be a very active room and may require additional ventilation.
Fire Protection	Building system.
Power	Provide two quad. convenience outlets, each on a dedicated circuit.
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. None required.
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	None required.
Special Requirements	Consider an acoustical vestibule to these rooms as either an individual vestibule for each room or an acoustically secure corridor.

TABLE 3-17. OUTDOOR GATHERING AREA

Description/ Usage	<p>This optional exterior space is designed to work in conjunction with the interior functions of the game room and multipurpose room or to function independently of the interior. This area will host parties, games, and other outside activities sponsored by the base.</p> <p>Consider co-locating other recreation functions in or near the outdoor gathering area (e.g. basketball, horseshoes, and sand volleyball).</p>
Min. Ceiling Ht.	Not Applicable.
Finishes	<p>Walls. Not Applicable.</p> <p>Floor. Brick or concrete pavers, wood, or exposed concrete for hardscape areas. Grass, mulch, or sand for softscape areas.</p> <p>Ceiling. Not Applicable.</p>
Plumbing	Keyed, tamper-resistant hose bibb.
HVAC	None required.
Fire Protection	Building system.
Power	Provide several exterior grade convenience outlets. Consider power requirements for a stage.
Lighting	Ground level, low lumen 55 Lux (5 ft. candles) decorative lighting. Consider lighting paths also.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide several speakers for adequate coverage. Speakers to be outdoor type. Consider outdoor noise levels when spacing speakers.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. Provide fence around entire perimeter. If budget allows, provide a decorative fence. Provide a decorative gate that is alarmed and lockable. Access to the outdoor gathering area must be from the interior spaces of the MRC except on occasions when the exterior gate can be staffed.</p>
Casework	None required.
Furnishings Fixtures & Equipment (FF&E)	<p>Grills (gas or propane)</p> <p>Benches</p> <p>Waste receptacles (must meet ATFP criteria).</p>
Special Requirements	<p>Consider providing shade structures, if budget allows.</p> <p>Consider landscaping appropriate to an outdoor recreation area.</p>

TABLE 3-18. PAY TELEPHONES

Description/ Usage	<p>This area houses pay telephones for use by patrons of the facility. The telephones may be used for quick local calls or long distance calls to friends and family.</p> <p>These phones may be centralized in one area of the facility or spread throughout—most likely near or adjacent to the game room. For larger facilities (Large, Extra Large, and Super Large), consider providing a separate room or area near the quiet functions in addition to phones spread throughout the game room.</p>
Min. Ceiling Ht.	2.44 m (8 ft) minimum.
Finishes	<p>Walls. Painted gypsum wallboard.</p> <p>Floor. VCT with vinyl wall base.</p> <p>Ceiling. ACP</p>
Plumbing	None required.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum.
Fire Protection	Building system.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles) general ambient lighting.
Communication	<p>CCTV. None required.</p> <p>CATV/Internal Video. None required.</p> <p>PA/Audio. Provide one speaker.</p> <p>Telephone. None required.</p> <p>Data. None required.</p> <p>Security. None required.</p>
Casework	Tables (credenza-like) custom-designed for telephone use.
Furnishings Fixtures & Equipment (FF&E)	Chairs.
Special Requirements	<p>Surfaces directly in front of caller should be highly absorptive to prevent voice deflection. Speech privacy is very important.</p> <p>Also provide one duty phone (on-base line) near the Customer Service Area.</p>

TABLE 3-19. STAFF OFFICES

Description/ Usage:	The Program Manager has a private office; other staff in open office plan with systems furniture. Larger facilities may have two private offices—one for the overall program manager and one for the individual center manager. Offices are used for planning, developing, organizing, supervising, implementing, promoting, and evaluating facility operations. The offices should free from frequent distraction—this is not a customer service area. However, the office area should have a view of the customer service area. The offices should have a professional appearance and a sense of work place.
Min. Ceiling Ht.:	2.74 m (9 ft.) minimum.
Finishes:	Walls. Painted gypsum wall board. Floor. Carpet w/ vinyl base Ceiling. ACP
Plumbing:	None required.
HVAC	20 C (68 F) minimum, 26 c (78 F) maximum
Fire Protection	Building system.
Power	Provide outlets per code and one quad outlet per staff. Provide additional outlets as necessary to operate shared equipment such as printers, fax, etc.
Lighting	Lighting levels 860 – 1,290 Lux (80 – 120 ft. candles). General ambient fixtures.
Communication	CCTV. None required. 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 line per staff plus one line for each printer, copier, scanner, etc. Security. None required.
Casework:	Consider providing work counter space and office supply storage.
Furnishings Fixtures & Equipment (FF&E):	Program Manager's office provided with private office furniture. General office space provided with systems furniture with chairs for each workstation and guest chairs for each desk. Consider File Cabinets. Note: The office layout and furnishings should take into account the size of all office equipment to be installed (i.e., desks, computer equipment, copiers, intercom controls, safes, etc.). SE For Marine Corps facilities, office equipment also includes CCTV controls and monitors. The Navy does not support CCTV control/monitor installation in offices.
Special Requirements:	Should have view of Customer Service Area. If possible, provide exterior windows. Will have multiple safes. Provide a secured, small storage closet.

TABLE 3-20. TOILETS (MALE AND FEMALE)

Description/ Usage:	Convenience facilities for patrons and staff.
Min. Ceiling Ht.:	2.44 m (8 ft.) minimum.
Finishes:	Walls. Ceramic tile on all wet walls to a minimum of 1830 mm (6 ft.) above the finish floor. Gypsum wallboard with enameled paint at all other locations. Floor. Non-slip ceramic tile with integral ceramic tile covered base. Ceiling. Painted gypsum wallboard.
Plumbing:	Floor drains, hot and cold domestic water, venting, and other accessories per code. Plumbing equipment: Water closets and urinals with flush valves, lavatories with faucets. Hose bibb with removable key under lavatory counter.
HVAC	20 C (68 F) minimum, 26 C (78 F) maximum. Provide dedicated, 100% exhaust directly to the outside.
Fire Protection	Building system.
Power	Provide outlets per code.
Lighting	540 Lux (50 ft. candles) ambient lighting. Provide additional down light in front of mirror.
Communication	CCTV. None permitted. CATV/Internal Video: None required. PA/Audio: Provide a speaker. Telephone. None required. Data. None required. Security. None required.
Casework:	Solid-surface countertop with either underhung or integral sink. Solid composite toilet and urinal partitions. Toilet accessories: toilet paper dispensers, toilet seat cover dispensers, paper towel dispenser with integrated trash receptacle, robe hooks, sanitary napkin dispensers, grab bars, and soap dispensers. Mirror.
Furnishings Fixtures & Equipment (FF&E):	None required.
Special Requirements:	STC 42 minimum at all perimeter walls and partitions. Ensure accessibility for the physically challenged. Door closer and mop plate required on entrance door. Provide a janitor's closet with a floor mop sink and drain, storage shelves, and hooks for mops and brooms. SE Note: For Marine Corps facilities, provide 80% male toilets and 20% female toilets. For Navy facilities, male to female ratios are determined by the local installation.

APPENDIX A

REFERENCES

GOVERNMENT PUBLICATIONS:

1. Department of Defense (DOD)
Unified Facilities Criteria Program

<http://dod.wbdg.org/>

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

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

UFC 3-420-01, *Design: Plumbing Systems*

UFC 3-580-10, *Design: Navy and Marine Corps Intranet (NMCI) Standard Construction Practices*

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

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

2. Naval Facilities Engineering Command

Engineering Innovation and Criteria
Office
6506 Hampton Blvd
Norfolk, VA 23508

<http://www.navfac.navy.mil/>

P-80, *Facility Planning*

NAVFACINST 11010.45D,
Comprehensive Regional Planning
Instruction

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

ITG FY98-01, *International Mechanical
Code (IMC)*

3. Navy Personnel Command

PERS-654
5720 Integrity Drive
Millington, TN 38055
<http://www.mwr.navy.mil/>

Liberty Program Accreditation MWR
Standards and Metrics Document (July
2001)
4. 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*
5. Directorate of Defense Information, U.S. Marine Corps

Room 2E765, The Pentagon
Washington, DC 20301-1400
(703) 697-5131
<http://www.hqmc.usmc.mil/pubs.nsf>

Semper Fit MCO P1700.29
SMP MCO P1700.36
6. U.S. Department of Commerce

International Trade Administration
14th & Constitution Ave, NW
Washington, DC 20230
(202) 482-3917
<http://www.ita.doc.gov/>

Electric Current Abroad (1998)
7. National Institute of Building Sciences

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

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

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

Architectural Barriers Act (Public Law
90-480) of 1968,

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

<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>

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

NON-GOVERNMENT PUBLICATIONS:

1. International Code Council

Headquarters
5203 Leesburg Pike
Suite 600
Falls Church, VA 22041
<http://www.iccsafe.org/>

International Mechanical Code

2. National Fire Protection Association

1 Batterymarch Park
Quincy, Massachusetts 02169-7471
(617) 770-3000
<http://www.nfpa.org/>

NFPA 70 National Electric Code (2002)

3. The United States Green Building Council

US Green Building Council
1015 18th Street, NW, Suite 805
Washington, DC 20036
<http://www.usgbc.org/>

LEED™ Green Building Rating System