

# \*USAREUR Regulation 215-7

## Morale, Welfare, and Recreation

### USAREUR Standardization of Physical Fitness Facilities

15 August 2002

---

**\*This regulation supersedes USAREUR Regulation 215-7, 4 November 1993.**

---

For the Commander:

ANTHONY R. JONES  
*Major General, GS*  
*Chief of Staff*

Official:



MARILYN A. QUAGLIOTTI  
*Brigadier General, GS*  
*Deputy Chief of Staff*  
*Information Management*

---

**Summary.** This regulation prescribes standards for USAREUR physical fitness facilities, including mandatory fitness equipment, equipment room layout, and customer assistance.

**Summary of Change.** This revision--

- Prescribes updated fitness equipment requirements (table 1).
- Provides DA standards for new fitness facility critical functional areas (table 2).
- Provides a sample floor plan (fig 1).
- Rescinds appendix B, Recommended Additional Fitness Equipment and Priority for Purchasing or Acquiring.
- Rescinds appendix C, Recommended Cam-Type Exercise Machines.
- Rescinds appendix D, The Ideal Physical Fitness Center and Program.

**Applicability.** This regulation applies to area support groups and base support battalions.

**Supplementation.** Commanders will not supplement this regulation without Office of the Deputy Chief of Staff, Personnel and Installation Management (ODCSPIM), HQ USAREUR/7A (AEAGA-GR), approval.

**Forms.** USAREUR and higher-level forms (printed and electronic) are available through the USAREUR Publications System (UPUBS).

**Records Management.** Records created as a result of processes prescribed by this regulation must be identified, maintained, and disposed of according to AR 25-400-2. File numbers and descriptions are available on the United States Army Records Management and Declassification Agency website at <http://www.rmda.belvoir.army.mil>.

**Suggested Improvements.** The proponent of the regulation is the ODCSPIM (AEAGA-GR, DSN 370-7378). Users may suggest improvements to this regulation by sending a DA Form 2028 (Recommended Changes to Publication and Blank Forms) to the ODCSPIM, HQ USAREUR/7A (AEAGA-GR), Unit 29351, APO AE 09014.

**Distribution.** C (UPUBS). This regulation is available only in electronic format.

---

## CONTENTS

1. Purpose
2. References
3. Explanation of Abbreviations and Terms
4. Responsibilities
5. Policy and Procedures
6. Facility Management

### Tables

1. Required Fitness Equipment
2. DA Standards for Critical Functional Areas

### Figure

1. Sample Floor Plan
- 

## 1. PURPOSE

This regulation prescribes responsibilities and standards for physical-fitness-facility exercise equipment, layout, and customer service.

## 2. REFERENCES

- a. AR 215-1, Morale, Welfare, and Recreation Activities and Nonappropriated Fund Instrumentalities.
- b. DA Pamphlet 385-5, Fundamentals of Safety In Army Sports and Recreation.
- c. UR 215-9, Civilian Participation in USAREUR Sports and Fitness Programs.
- d. ACSM's Health/Fitness Facility Standards and Guidelines--Second Edition. (This publication is available at <http://www.acsm.org/publications/books.htm>.)

## 3. EXPLANATION OF ABBREVIATIONS AND TERMS

### a. Abbreviations.

ASG	area support group
BSB	base support battalion
DCSPIM	Deputy Chief of Staff, Personnel and Installation Management, USAREUR
DOD	Department of Defense
IDP	individual development plan
misc.	miscellaneous
PFC	physical fitness center
PFF	physical fitness facility
sq. ft.	square feet
UR	USAREUR regulation
USAREUR	United States Army, Europe

## **b. Terms.**

### **cardiovascular equipment**

Programmable exercise equipment designed to improve the cardiovascular system. This equipment measures speed, distance, calories burned, and heart rate.

### **circuit equipment**

Weight stacks with pins that permit the user to select the desired weight to provide varied resistance.

### **free-weight equipment**

Weight-training equipment consisting of dumbbells, benches, weight plates, bars, and racks.

### **physical fitness facility**

A facility that includes, but is not limited to, a gymnasium with multipurpose courts, racquetball/handball courts, cardiovascular, free-weight, circuit or plate-loaded (or both) areas, and group-exercise classrooms, as well as mens and womens locker rooms with showers, toilets, and saunas.

### **plate-loaded equipment**

Weight-training equipment that uses weight plates for desired weight resistance.

## **4. RESPONSIBILITIES**

a. The Office of the Deputy Chief of Staff, Personnel and Installation Management (ODCSPIM), HQ USAREUR/7A (AEAGA-GR), will provide--

- (1) Technical assistance and information on the latest fitness equipment, facility layout, and fitness trends.
- (2) Guidance on fitness center design and equipment authorized for purchase.
- (3) Advice to the USAREUR Command Group on resource allocation and prioritization.
- (4) Specialized training for facility managers and personnel.

(5) Assistance to area support group (ASG) and base support battalion (BSB) personnel in their procurement of the required equipment through the bulk-buy process. Procurements must meet the specifications of this regulation.

b. ASG commanders will--

- (1) Ensure physical fitness facilities in their areas meet the standards in this regulation.
- (2) Provide resources to staff and maintain physical fitness facilities in their areas.
- (3) Ensure that physical fitness facilities are operated professionally and at no cost to soldiers, DOD civilian employees, family members, or other authorized personnel.

**NOTE:** Charges for special-interest fitness classes and resale activities are authorized.

(4) Ensure physical fitness facility personnel are trained in the proper use, safety, and maintenance of fitness equipment.

(5) Specify, when applicable, age limits for users for facilities and equipment. Children who are 12 years old and under will not be allowed in cardiovascular or strength areas. Children who are 16 years old and under must be actively participating in the same activity as and under the direct supervision of a parent or guardian at all times.

(6) Ensure individual development plans (IDPs) include staff training and staff use of fitness equipment.

(a) Staff members will be allowed 45 minutes during their 8-hour workshift for training and use of equipment.

(b) IDPs will include training in the following:

1. Biomechanics of exercise.
2. Cardiopulmonary resuscitation/automatic external defibrillator.
3. First aid.
4. Organization and administration of fitness and sports programs.
5. Physical fitness program management for facility personnel.

(c) For administrative personnel, IDPs will include the following training:

1. Community Family Support Center Morale, Welfare, and Recreation Training Center Basic Management Course.
2. Cooper Physical Fitness Specialist Certification.

## **5. POLICY AND PROCEDURES**

a. Physical fitness facilities in USAREUR will have at least the following:

- (1) An office for fitness facility staff equipped to handle administration, equipment issue, and safety.
- (2) Ventilation and lighting that meets the guidelines in “ACSM’s Health/Fitness Facility Standards and Guidelines”. Ventilation guidelines are in appendix A, supplement 9; lighting guidelines are in appendix A, supplement 10.
- (3) Lockers, restrooms, and showers (available at no cost to users).
- (4) One sauna for males and one for females; or, when space is limited, a sauna that may be used by both.
- (5) Weight belts, towels, speed bags, and boxing gloves.
- (6) Four pairs of protective eyewear for each racquetball courts (available at no cost).
- (7) An area for free-weight equipment.
- (8) An area for cardiovascular equipment.
- (9) An area for circuit equipment or plate-loaded equipment (or both).
- (10) Marked running and walking routes. Handouts that show alternate running routes must be available. Routes may or may not be entirely on U.S. Army installations.

b. Table 1 prescribes required equipment at each facility.

c. Table 2 provides DA standards for allocating spaces in different sizes of facilities. Paragraph 3 defines abbreviations used in the table.

d. Equipment-room layouts for each fitness facility will be coordinated with the HQ USAREUR/7A staff to provide a safe, customer-friendly environment. Figure 1 is a sample floor plan.

e. When two physical fitness facilities are on the same installation, one of the facilities must comply with the minimum standards in subparagraphs a through c above. Fitness areas may be located in different buildings on the same installation. To estimate the number of pieces of equipment that can fit into each facility, allocate 25 square feet for each piece of equipment.

f. Requests to purchase equipment not listed in table 1 must be sent to the ODCSPIM, HQ USAREUR/7A (AEAGA-GR), Unit 29351, APO AE 09014, before the equipment is purchased.

<b>Table 1 Required Fitness Equipment</b>					
<b>Free-Weight Equipment</b>					
2.5-pound weight plates	Calf raise (standing/seated)	Olympic incline bench press with rack			
5-pound weight plates	Curl bars with collars	Preacher curl			
10-pound weight plates	Double-tier dumbbell racks	Pull-up bars/dip bars			
25-pound weight plates	Dumbbells (18 pair, 5 to 100 pounds)	Shoulder press			
35-pound weight plates	Hack squat	Smith machine			
45-pound weight plates	Impact-resistance flooring (note 1)	Squat rack with pegs			
Abdominal boards	Leg press	Storage racks for weight plates			
Adjustable benches	Olympic bench press with rack	Stretch machine			
Bar with collars for benching	Olympic decline bench press with rack	T-bar row			
Beauty bells with rack (1 to 12 pounds)					
<b>Circuit and Plate-Loaded Equipment</b>					
Abdominal Crunch	Hip adductor	Pullover			
Bicep curl	Incline chest press	Rear deltoid/Pec fly			
Cable crossover	Lateral raise	Seated leg curl			
Calf machine	Lat pull down	Seated leg press			
Chest press seated	Leg curl	Seated low row			
Decline chest press	Leg extension	Shoulder press			
Dip and chin assist	Lower back extension	Tricep extension			
<b>Additional Plate-Loaded Equipment (note 2)</b>					
Abdominal crunch	Iso-lateral leg curl	Seated bicep curl			
Gripper	Iso-lateral leg extension	Seated calf machine			
Hip abductor	Iso-lateral low row	Squat lunge			
Iso-lateral chest press	Iso-lateral shoulder press	Super horizontal calf			
Iso-lateral decline chest press	Kneeling leg curl	Tricep extension			
Iso-lateral front lat pulldown	Lower back extension	Tricep press			
Iso-lateral high row	Pullover	Uni-lateral leg press			
Iso-lateral incline chest press					
<b>Cardiovascular Equipment (note 3)</b>					
<b>Equipment ↓</b>	<b>Size of Facility →</b>	<b>XS</b>	<b>S</b>	<b>M</b>	<b>L</b>
Cross trainer		2	8	15	25
Recumbent bikes		2	3	9	15
Stair climber		1	4	5	5
Treadmill		4	10	20	30
Upright bikes		1	2	2	5
<b>NOTES:</b> 1. The free-weight area must be equipped with proper flooring, wall mirrors, and posted instructional charts. 2. When space is available, physical fitness centers may incorporate one line of circuit and one line of plate-loaded equipment. 3. Instructions must be posted on or near each piece of equipment, and adequate space must be provided between pieces of equipment to allow for safe use and for patrons to walk around safely. (XS=extra small; S=small;M=medium;L=large)					

g. Each fitness area must be separated from the main multipurpose court by a wall or other protective divider.

## 6. FACILITY MANAGEMENT

a. The facility staff must be trained to instruct patrons in the proper use of exercise equipment.

b. The number of machine brands must be kept to an absolute minimum.

c. All weight plates must have handholds, and there must be enough weight trees for weights.

d. Equipment sign-out logs must be maintained.

e. Exercise-machine usage must be tracked. This information will be used to make decisions about equipment purchases and elimination of machines that are not used.

**Table 2**  
**DA Standards for Critical Functional Areas**

		AUTHORIZED PFF SPACE ALLOWANCE															
CRITICAL FUNCTIONAL AREAS & TOTAL PFC BUILDING AREA (Areas in square feet) 6/22/01		X-SMALL (Population 251 - 1000)	SMALL (Population 1001 - 3000)	MEDIUM (Population 3001 - 6000)	LARGE (Population 6001 - 10,000)	X-LARGE Population (10,001 - 15,000) (1 Large + 1 Increment)	Population 15,001 - 20,000	Population 20,001 - 25,000	Population 25,001 - 30,000	Population 30,001 - 35,000	Population 35,001 - 40,000	Population 40,001 - 45,000	45,001 - 50,000	50,001 - 55,000	55,001 - 60,000	60,001 - 65,000	INCREMENT (5000 increments over 10,000)
Fitness Module	Cardiovascular Area	550	1,350	2,550	4,000	6,000	8,000	10,000	12,000	14,000	16,000	18,000	20,000	22,000	24,000	26,000	2,000
	Circuit Area	800	1,150	1,500	2,300	3,450	4,600	5,750	6,900	8,050	9,200	10,350	11,500	12,650	13,800	14,950	1,150
	Free Weight Area	975	2,145	3,250	5,200	7,800	10,400	13,000	15,600	18,200	20,800	23,400	26,000	28,600	31,200	33,800	2,600
	Flexible Space - 10%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Storage - 10%	233	465	730	1,150	1,725	2,300	2,875	3,450	4,025	4,600	5,175	5,750	6,325	6,900	7,475	575
<b>subtotal</b>		<b>2,325</b>	<b>4,645</b>	<b>7,300</b>	<b>11,500</b>	<b>17,250</b>	<b>23,000</b>	<b>28,750</b>	<b>34,500</b>	<b>40,250</b>	<b>46,000</b>	<b>51,750</b>	<b>57,500</b>	<b>63,250</b>	<b>69,000</b>	<b>74,750</b>	<b>5,750</b>
Exercise Module	Large Group Exercise	1,200	1,650	2,800	4,500	6,750	9,000	11,250	13,500	15,750	18,000	20,250	22,500	24,750	27,000	29,250	2,250
	Small Group Exercise	1,000	1,250	1,750	2,500	3,750	5,000	6,250	7,500	8,750	10,000	11,250	12,500	13,750	15,000	16,250	1,250
	Storage - 10%	220	290	455	700	1,050	1,400	1,750	2,100	2,450	2,800	3,150	3,500	3,850	4,200	4,550	350
	<b>subtotal</b>	<b>2,200</b>	<b>2,900</b>	<b>4,550</b>	<b>7,000</b>	<b>10,500</b>	<b>14,000</b>	<b>17,500</b>	<b>21,000</b>	<b>24,500</b>	<b>28,000</b>	<b>31,500</b>	<b>35,000</b>	<b>38,500</b>	<b>42,000</b>	<b>45,500</b>	<b>3,500</b>
<b>Sauna, Lockers, Showers, Toilets</b>		<b>2,400</b>	<b>3,800</b>	<b>5,850</b>	<b>8,800</b>	<b>11,800</b>	<b>14,800</b>	<b>17,800</b>	<b>20,800</b>	<b>23,800</b>	<b>26,800</b>	<b>29,800</b>	<b>32,800</b>	<b>35,800</b>	<b>38,800</b>	<b>41,800</b>	<b>3,000</b>
Structured Activity Module	Racquetball Courts	850	850	850	1,700	2,550	3,400	4,250	5,100	5,950	6,800	7,650	8,500	9,350	10,200	11,050	850
	Other Structured Activities	1,150	1,150	2,150	2,300	3,450	4,600	5,750	6,900	8,050	9,200	10,350	11,500	12,650	13,800	14,950	1,150
	<b>Storage - 10% of Struct. Act.</b>	<b>115</b>	<b>115</b>	<b>215</b>	<b>230</b>	<b>345</b>	<b>460</b>	<b>575</b>	<b>690</b>	<b>805</b>	<b>920</b>	<b>1,035</b>	<b>1,150</b>	<b>1,265</b>	<b>1,380</b>	<b>1,495</b>	<b>115</b>
Gym Module	Basketball Courts (Gymnasium)	10,200	17,400	24,600	31,800	40,200	48,600	57,000	65,400	73,800	82,200	90,600	99,000	107,400	115,800	124,200	8,400
	Support (Toilets & Storage)	1,020	1,740	2,460	3,180	4,020	4,860	5,700	6,540	7,380	8,220	9,060	9,900	10,740	11,580	12,420	840
<b>subtotal</b>		<b>11,220</b>	<b>19,140</b>	<b>27,060</b>	<b>34,980</b>	<b>44,220</b>	<b>53,460</b>	<b>62,700</b>	<b>71,940</b>	<b>81,180</b>	<b>90,420</b>	<b>99,660</b>	<b>108,900</b>	<b>118,140</b>	<b>127,380</b>	<b>136,620</b>	<b>9,240</b>
<b>Indoor Jogging Track</b>		<b>1,500</b>	<b>2,100</b>	<b>2,650</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>3,200</b>	<b>0</b>
<b>TOTAL NET OF MODULES</b>		<b>22,213</b>	<b>35,455</b>	<b>51,810</b>	<b>71,560</b>	<b>96,090</b>	<b>120,620</b>	<b>145,150</b>	<b>169,680</b>	<b>194,210</b>	<b>218,740</b>	<b>243,270</b>	<b>267,800</b>	<b>292,330</b>	<b>316,860</b>	<b>341,390</b>	<b>24,530</b>
<b>MISC. AREA (25% of the Net)</b>		<b>5,553</b>	<b>8,864</b>	<b>12,953</b>	<b>17,890</b>	<b>24,023</b>	<b>30,155</b>	<b>36,288</b>	<b>42,420</b>	<b>48,553</b>	<b>54,685</b>	<b>60,818</b>	<b>66,950</b>	<b>73,083</b>	<b>79,215</b>	<b>85,348</b>	<b>6,133</b>
<b>ROUNDING FACTOR</b>																	
<b>MISC. AREA (30% of the Net)</b>		<b>6,664</b>	<b>10,636</b>	<b>15,543</b>	<b>21,468</b>	<b>28,827</b>	<b>36,186</b>	<b>43,545</b>	<b>50,904</b>	<b>58,263</b>	<b>65,622</b>	<b>72,981</b>	<b>80,340</b>	<b>87,699</b>	<b>95,058</b>	<b>102,417</b>	<b>7,359</b>
<b>TOTAL GROSS AREAS:</b>		<b>27,766</b>	<b>44,318</b>	<b>64,763</b>	<b>89,450</b>	<b>120,113</b>	<b>150,775</b>	<b>181,438</b>	<b>212,100</b>	<b>242,763</b>	<b>273,425</b>	<b>304,088</b>	<b>334,750</b>	<b>365,413</b>	<b>396,075</b>	<b>426,738</b>	<b>30,663</b>
<b>NOMINAL GROSS AREAS:</b>		<b>26,200</b>	<b>43,700</b>	<b>64,600</b>	<b>87,700</b>	<b>117,700</b>	<b>147,700</b>	<b>177,700</b>	<b>207,700</b>	<b>237,700</b>	<b>267,700</b>	<b>297,700</b>	<b>327,700</b>	<b>357,700</b>	<b>387,700</b>	<b>417,700</b>	<b>30,000</b>
<b>TOTAL GROSS AREA IN METRIC:</b>		<b>2,580</b>	<b>4,117</b>	<b>6,017</b>	<b>8,310</b>	<b>11,159</b>	<b>14,007</b>	<b>16,856</b>	<b>19,705</b>	<b>22,553</b>	<b>25,402</b>	<b>28,251</b>	<b>31,099</b>	<b>33,948</b>	<b>36,797</b>	<b>39,645</b>	<b>2,849</b>
<b>NOMINAL GROSS AREA IN METRIC:</b>		<b>2,580</b>	<b>4,120</b>	<b>6,020</b>	<b>8,310</b>	<b>11,160</b>	<b>14,010</b>	<b>16,860</b>	<b>19,710</b>	<b>22,560</b>	<b>25,410</b>	<b>28,260</b>	<b>31,110</b>	<b>33,960</b>	<b>36,810</b>	<b>39,660</b>	<b>2,850</b>
<b>ACTUAL SQ. FT. BASED ON METRIC:</b>		<b>27,771</b>	<b>44,347</b>	<b>64,799</b>	<b>89,448</b>	<b>120,125</b>	<b>150,802</b>	<b>181,480</b>	<b>212,157</b>	<b>242,834</b>	<b>273,511</b>	<b>304,188</b>	<b>334,865</b>	<b>365,542</b>	<b>396,220</b>	<b>426,897</b>	<b>30,677</b>
<b>TOTAL GROSS AREAS @ 30%:</b>		<b>28,876</b>	<b>46,091</b>	<b>67,353</b>	<b>93,028</b>	<b>124,917</b>	<b>156,806</b>	<b>188,695</b>	<b>220,584</b>	<b>252,473</b>	<b>284,362</b>	<b>316,251</b>	<b>348,140</b>	<b>380,029</b>	<b>411,918</b>	<b>443,807</b>	<b>31,889</b>
<b>PARTICIPANT LOADS:</b>																	
50	Cardiovascular Area	11	27	51	80	120	160	200	240	280	320	360	400	440	480	520	40
<b>Spaces per 1000 population:</b>		<b>11.00</b>	<b>9.00</b>	<b>8.50</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>
50	Selectonized	16	23	30	46	69	92	115	138	161	184	207	230	253	276	299	23
<b>Spaces per 1000 population:</b>		<b>16.00</b>	<b>7.67</b>	<b>5.00</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>	<b>4.60</b>
65	Free Weight Area	15	33	50	80	120	160	200	240	280	320	360	400	440	480	520	40
<b>Spaces per 1000 population:</b>		<b>15.00</b>	<b>11.00</b>	<b>8.33</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>	<b>8.00</b>
<b>Total pieces of equipment:</b>		<b>42</b>	<b>83</b>	<b>131</b>	<b>206</b>	<b>309</b>	<b>412</b>	<b>515</b>	<b>618</b>	<b>721</b>	<b>824</b>	<b>927</b>	<b>1,030</b>	<b>1,133</b>	<b>1,236</b>	<b>1,339</b>	<b>103</b>
<b>Pieces of equipment per 1000 population:</b>		<b>42.00</b>	<b>27.67</b>	<b>21.83</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>	<b>20.60</b>
50	Aerobic Exercise	24	33	56	90	135	180	225	270	315	360	405	450	495	540	585	45
<b>Spaces per 1000 population:</b>		<b>24.00</b>	<b>11.00</b>	<b>9.33</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>	<b>9.00</b>
125	Non-structured Exercise	8	10	14	20	30	40	50	60	70	80	90	100	110	120	130	10
<b>Spaces per 1000 population:</b>		<b>8.00</b>	<b>3.33</b>	<b>2.33</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>

**Table 2**  
**DA Standards for Critical Functional Areas--Continued**

		AUTHORIZED PFF SPACE ALLOWANCE															
CRITICAL FUNCTIONAL AREAS & TOTAL PFC BUILDING AREA (Areas in square meters) 11/27/01		X-SMALL (Population 251 - 1000)	SMALL (Population 1001 - 3000)	MEDIUM (Population 3001 - 6000)	LARGE (Population 6001 - 10,000)	X-LARGE (10,001 - 15,000) (1 Large + 1 Increment)	15,001 - 20,000	20,001 - 25,000	25,001 - 30,000	30,001 - 35,000	35,001 - 40,000	40,001 - 45,000	45,001 - 50,000	50,001 - 55,000	55,001 - 60,000	60,001 - 65,000	INCREMENT (5000 increments over 10,000)
Fitness Module	Cardiovascular Area	51.0	126.0	237.0	371.5	557.5	743.5	929.5	1115.5	1301.5	1487.5	1673.5	1859.5	2045.5	2231.5	2417.5	186.0
	Circuit Area	74.5	107.0	139.5	213.5	320.5	427.5	534.5	641.5	748.5	855.5	962.5	1069.5	1176.5	1283.5	1390.5	107.0
	Free Weight Area	91.0	200.0	303.0	483.0	724.5	966.0	1207.5	1449.0	1690.5	1932.0	2173.5	2415.0	2656.5	2898.0	3139.5	241.5
	Flexible Space - 10%	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Storage - 10%	21.7	43.3	68.0	106.8	160.3	213.7	267.2	320.6	374.1	427.5	481.0	534.4	587.9	641.3	694.8	53.5
Exercise Module	Large Group Exercise	111.5	153.5	260.5	417.5	626.5	835.5	1044.5	1253.5	1462.5	1671.5	1880.5	2089.5	2298.5	2507.5	2716.5	209.0
	Small Group Exercise	93.0	116.0	163.0	233.0	349.0	465.0	581.0	697.0	813.0	929.0	1045.0	1161.0	1277.0	1393.0	1509.0	116.0
	Storage - 10%	20.5	27.0	42.4	65.1	97.6	130.1	162.6	195.1	227.6	260.1	292.6	325.1	357.6	390.1	422.6	32.5
	subtotal	204.5	269.5	423.5	650.5	975.5	1300.5	1625.5	1950.5	2275.5	2600.5	2925.5	3250.5	3575.5	3900.5	4225.5	325.0
Sauna, Lockers, Showers, Toilets		223.0	353.3	543.5	817.5	1096.5	1375.5	1654.5	1933.5	2212.5	2491.5	2770.5	3049.5	3328.5	3607.5	3886.5	279.0
Structured Activity Module	Racquetball Courts	79.0	79.0	79.0	158.0	237.0	316.0	395.0	474.0	553.0	632.0	711.0	790.0	869.0	948.0	1027.0	79.0
	Other Structured Activities	107.0	107.0	200.0	214.0	321.0	428.0	535.0	642.0	749.0	856.0	963.0	1070.0	1177.0	1284.0	1391.0	107.0
	Storage - 10% of Struc. Act.	10.7	10.7	20.0	21.4	32.1	42.8	53.5	64.2	74.9	85.6	96.3	107.0	117.7	128.4	139.1	10.7
Gym Module	Basketball Courts (Gymnasium)	947.2	1616.5	2285.4	2954.0	3734.8	4515.5	5296.3	6077.0	6857.8	7638.5	8419.3	9200.0	9980.8	10761.5	11542.3	780.8
	Support (Toilets & Storage)	94.7	161.7	228.5	295.4	373.5	451.6	529.6	607.7	685.8	763.9	841.9	920.0	998.1	1076.2	1154.2	78.1
subtotal		1041.9	1778.2	2513.9	3249.4	4108.2	4967.1	5825.9	6684.7	7543.5	8402.4	9261.2	10120.0	10978.8	11837.7	12696.5	858.8
Indoor Jogging Track		139.3	195.1	246.2	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	297.3	0.0
TOTAL NET OF MODULES		2064.0	3296.0	4815.9	6648.0	8927.9	11207.9	13487.9	15767.9	18047.8	20327.8	22607.8	24887.8	27167.7	29447.7	31727.7	2280.0
MISC. AREA (25% of the Net)		516.0	824.0	1204.0	1662.0	2232.0	2802.0	3372.0	3942.0	4512.0	5082.0	5651.9	6221.9	6791.9	7361.9	7931.9	570.0
ROUNDING FACTOR																	
MISC. AREA (30% of the Net)		619.2	988.8	1444.8	1994.4	2678.4	3362.4	4046.4	4730.4	5414.3	6098.3	6782.3	7466.3	8150.3	8834.3	9518.3	684.0
TOTAL GROSS AREAS:		2580.0	4120.0	6019.9	8309.9	11159.9	14009.9	16859.8	19709.8	22559.8	25409.8	28259.7	31109.7	33959.7	36809.6	39659.6	2850.0
NOMINAL GROSS AREAS:		26200.0	43700.0	64600.0	87700.0	117700.0	147700.0	177700.0	207700.0	237700.0	267700.0	297700.0	327700.0	357700.0	387700.0	417700.0	30000.0
TOTAL GROSS AREA IN METRIC:		239.7	382.8	559.3	772.0	1036.8	1301.6	1566.3	1831.1	2095.9	2360.6	2625.4	2890.2	3155.0	3419.7	3684.5	264.8
NOMINAL GROSS AREA IN METRIC:		2580.0	4120.0	6020.0	8310.0	11160.0	14010.0	16860.0	19710.0	22560.0	25410.0	28260.0	31110.0	33960.0	36810.0	39660.0	2850.0
ACTUAL SQ. FT. BASED ON METRIC:		27770.9	44347.3	64798.7	89448.1	120125.2	150802.4	181479.5	212156.7	242833.8	273511.0	304188.1	334865.3	365542.4	396219.5	426896.7	30677.1
TOTAL GROSS AREAS @ 30%:		2683.2	4284.8	6260.7	8642.3	11606.3	14570.3	17534.2	20498.2	23462.2	26426.1	29390.1	32354.1	35318.0	38282.0	41246.0	2964.0
<b>PARTICIPANT LOADS:</b>																	
m <sup>2</sup> /part		CFE:															
4.65	Cardiovascular Area	11.0	27.0	51.0	80.0	120.0	160.0	200.0	240.0	280.0	320.0	360.0	400.0	440.0	480.0	520.0	40.0
Spaces per 1000 population:		11.0	9.0	8.5	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
4.65	Selectorized	16.0	23.0	30.0	46.0	69.0	92.0	115.0	138.0	161.0	184.0	207.0	230.0	253.0	276.0	299.0	23.0
Spaces per 1000 population:		16.0	7.7	5.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
6	Free Weight Area	15.0	33.0	50.0	80.0	120.0	160.0	200.0	240.0	280.0	320.0	360.0	400.0	440.0	480.0	520.0	40.0
Spaces per 1000 population:		15.0	11.0	8.3	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
Total pieces of equipment:		42.0	83.0	131.0	206.0	309.0	412.0	515.0	618.0	721.0	824.0	927.0	1030.0	1133.0	1236.0	1339.0	103.0
0																	
Pieces of equipment per 1000 population:		42.0	27.7	21.8	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6	20.6
4.65	Aerobic Exercise	24.0	33.0	56.0	90.0	135.0	180.0	225.0	270.0	315.0	360.0	405.0	450.0	495.0	540.0	585.0	45.0
Spaces per 1000 population:		24.0	11.0	9.3	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
11.6	Non-structured Exercise	8.0	10.0	14.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0	100.0	110.0	120.0	130.0	10.0
Spaces per 1000 population:		8.0	3.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0

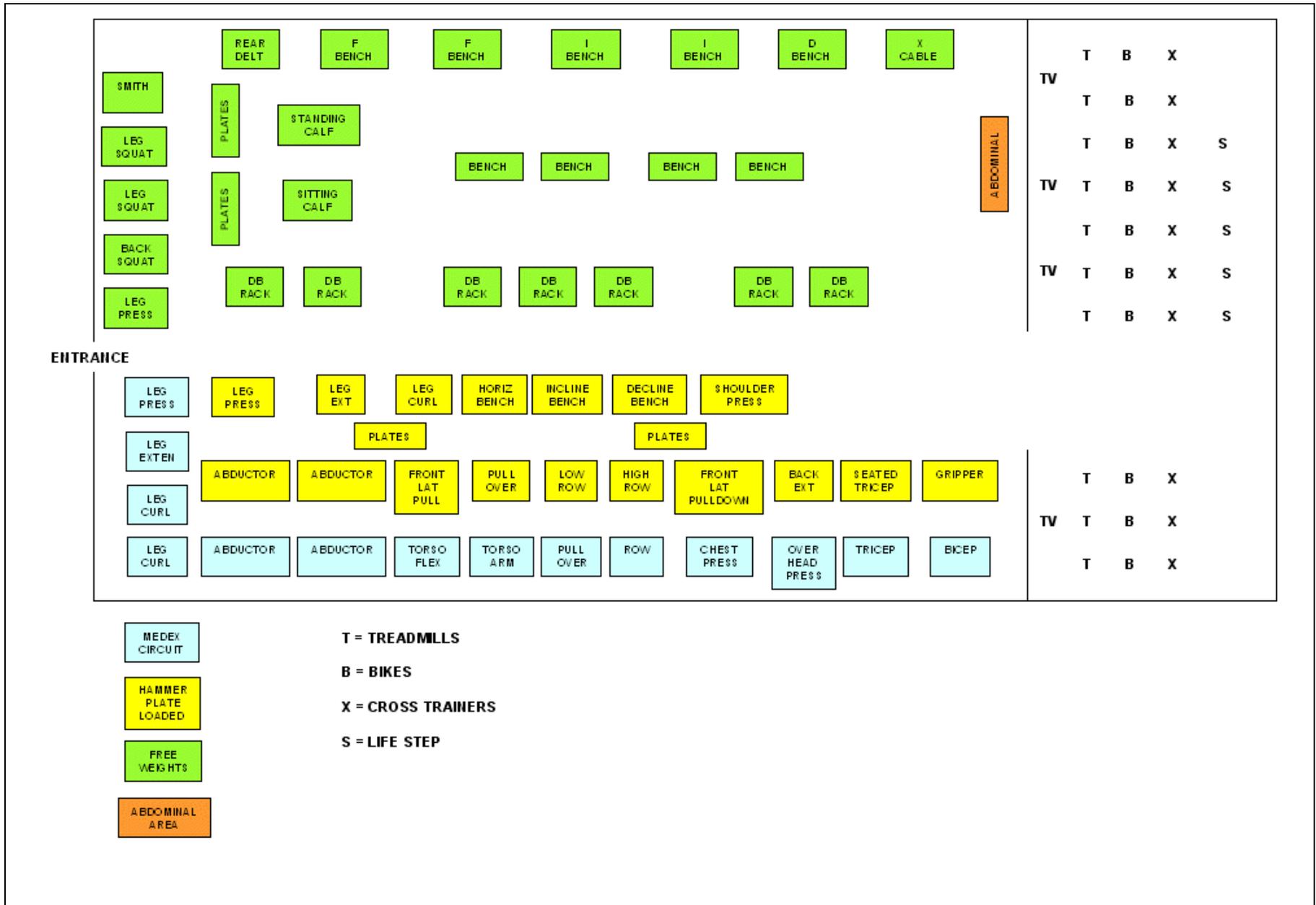


Figure 1. Sample Floor Plan