



**FACILITY PLANNING  
FACTOR CRITERIA  
FOR  
NAVY AND MARINE CORPS  
SHORE INSTALLATIONS**

**Appendix D  
Naval Mobile Construction  
Battalion Facilities**

**NAVFAC P-80.2  
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**DEPARTMENT OF THE NAVY  
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TABLE OF CONTENTS

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	<u>PAGE NUMBER</u>
I. GENERAL .....	D-1
II. FACILITIES REQUIREMENTS .....	D-3

## I GENERAL

This Appendix provides planning factor criteria for facilities required by Naval Mobile Construction Battalions when deployed in a peacetime mode at overseas locations, such as NS Roosevelt Roads PR or NS Rota, Spain. The criteria described herein provides for a complete and self-contained package, composed of facilities which: are adequate but austere, generates the minimum impact on host installation requirements, limits any civilian personnel overhead support and minimizes O&M fund requirements for maintenance. At the same time, these facilities will allow the deployed Battalion to maintain combat readiness. These facility requirements have been prepared in conjunction with COMCBLANT and COMCBPAC. The individual category codes and space allowances are listed in Section II. If more detailed description of these facilities is needed, refer to the corresponding category code in the main volumes of NAVFAC P-80. For explanation of Primary Units of measure (PUM), refer to P-80 Appendix B, page B-1, Volume 2.

## II FACILITIES REQUIREMENTS

### 123 10 FILLING STATION (PUM-OL)

Provide two outlets, one for diesel fuel and one for MOGAS. Each outlet should be located on a separate island to permit the formation of four traffic lanes and should be provided with a 5,000 gallon storage tank, air and water. For administration and storage of battery fluid, coolants and lubricants, provide one 6'X6' building.

### 131 15 COMMUNICATION CENTER (PUM-SF)

Provide a facility of 1,400 Gross SF. The following are individual functions housed within the communications center. Suggested space allotments are shown for guidance.

Telephone switchboard	150 SF
MARS station	225 SF
Communication Shop & Storage	1,000 SF

All functions may not be required at a specific site. In such cases the Gross SF of the building should be adjusted accordingly. A waiting area with two phone booths should be provided in MARS station area. The building (except storage area) should be climate controlled.

### 132 10 ANTENNA-COMMUNICATIONS (PUM-EA)

This is supporting facility for communications center (Code 131 15).

### 141 35 ARMORY (PUM-SF)

Provide 912 Gross SF of building area with an attached 400 SF shed for weapons cleaning. This allowance includes a factor to compensate for heavy weapons. The armory compound should consist of a 100 feet by 200 feet paved area enclosed by perimeter fencing and equipped with security lighting (category codes 872 10 and 812 40).

### 171 10, 171 20, 171 25 INSTRUCTION BUILDING (BATTALION) (PUM-SF)

Provide 8,000 Gross SF. This is a multipurpose building providing space for academic and applied instruction, and also serving as an auditorium/theater. The space should be flexible, with movable soundproofed dividers, in order to generate either 4-60 man classrooms, 2-120 man classrooms, a combination of the above or a single assembly/theater space.

### 214 51 ORGANIZATIONAL MAINTENANCE SHOP ("A" COMPANY) (PUM-SF)

The size of this facility should fall within the range of from 15,700 to 21,600 Gross SF (maximum). The individual shop components, with the corresponding maximum individual space allowances are listed below. All these components may not be required to be located in this building at specific sites. For instance administrative functions might be

accommodated within the "A" Company administrative space and/or some equipment operations might be spread out through the various job sites. In such cases the Gross SF requirement should be adjusted downwards, within the given SF range.

<u>FUNCTION</u>	<u>GROSS SF ALLOWANCE</u>
1. <u>Administration</u> To accommodate 11 admin personnel and technical library	1,760
2. <u>Heavy Equipment (H/E) Shop</u> Provide 10 stalls (5 bays of 20'X70' each)	7,000
3. <u>Light Equipment (L/E) Shop</u> Provide 10 stalls (5 bays of 16'X70' each)	5,600
4. <u>5,000 Shop (Generators, etc)</u> Should be located next to L/E shop. Add a 200 KW generator load tester (brinetank)	1,100
5. <u>Machine Shop</u> Locate centrally and close to H/E Shop	700
6. <u>Electrical Shop</u> Locate centrally.	400
7. <u>Welding/Body Shop</u> Locate next to H/E Shop	1,050
8. <u>Tire Shop</u>	800
9. <u>Battery Shop</u> Locate next to L/E Shop	400
10. <u>Toolroom</u> Locate centrally	600
11. <u>Direct Turnover (DTO) Repair Parts Storage</u> Locate Centrally. This is a feeder storage from the Automotive Parts Storage (S-4 function)	400
12. <u>Grease Rack Shed</u>  Locate next to H/E Shop. Provide 2 stalls (1 bay of 20'X70')	1,400
13. <u>Miscellaneous</u> 15% of Administration, toolroom and DTO storage	390
<b>TOTAL (MAX) GROSS SF 21,600</b>	

Supporting facility requirements for "A" Company Organizational Maintenance Shop are listed under category codes 214 55, 214 00, 214 77, 852 10 and 252 35.

214 55 VEHICLE WASH PLATFORM (PUM-SF)

Provide four 20' x 40' concrete aprons with water and steam outlets, gasoline separator and 10' x 10' supply storage building.

213 20 MAINTENANCE/OPERATIONS BUILDINGS ("B") COMPANY) (PUM-SF)

Provide a facility 10,200 Gross SF. The individual functions within this building and their corresponding space allowances are listed below.

<u>FUNCTION</u>	<u>GROSS SF ALLOWANCE</u>
1. <u>Administration (Company HQ)</u> To accommodate 10 admin personnel. This space should be categorized as 610 72 (Company Headquarters) but is listed here because it is an integral part of the company operations.	1,500
2. <u>Carpentry Shop/Storage</u>	3,000
3. <u>Steel Shop</u>	1,500
4. <u>Utilities/Plumbing Shop</u>	800
5. <u>A/C Refrigeration Shop</u>	800
6. <u>Sign/Paint Shop</u>	300
7. <u>Electric Shop</u>	800
8. <u>Covered Material Storage</u>	1,000
9. <u>Pest Control Facility</u>	<u>500</u>

TOTAL GROSS SF - 10,200

Supporting facility for "B" Company Maintenance/Operations Building is Miscellaneous Open Storage or Laydown Area (Code 852-40).

219 20 PAINT SHOP ("A" COMPANY) (POM-SF)

This facility may vary from 800 to 1,600 Gross SF (maximum) depending on the scope of operations. If possible, it should be located in the general vicinity of Operational Hazardous/Flammable Storage Facility (Code 143-78).

143 77 OPERATIONAL STORAGE (READY ISSUE/SHOP STORES/MISC.) (PUM-SF)

The following storage facilities are required for Construction Battalion operations.

<u>FUNCTIONS</u>	<u>GROSS SF ALLOWANCE</u>
1. <u>MLO Warehouse</u>	12,000
2. <u>CTR/CSR Warehouse</u>	3,000
3. <u>Storage Shed</u> Should be equipped with racks and attached to CTR/CSR Warehouse (Function 2 above)	2,000
4. <u>Ready Issue (Green) Warehouse</u>	4,000
5. <u>Miscellaneous Storage (Beds, etc.)</u> Functions 4 and 5 may be accommodated in one building.	4,000
6. <u>Automotive Repair Parts Storage</u>	8,000
7. <u>Tire Storage</u> Functions 6 and 7 should be accommodated in one building and located contiguous to the "A" Company Organizational Maintenance Shop. Parts storage should be equipped with erector units. Tires should be rack mounted and triple decked.	4,000
<b>TOTAL GROSS SF</b>	<u><b>42,000</b></u>

In cases where the installations contain the Alert Battalion, add an additional 20,700 Gross SF (dehumidified) for Part II (90 day contingency maintenance).

**143 78 OPERATIONAL HAZARDOUS/FLAMMABLE STORAGE (PUM-SF)**

Provide a facility of 1,400 Gross SF allocated as follows:

"A" Company requires approximately 200 Gross SF

"B" Company requires approximately 200 Gross SF

MLO requires approximately 1,000 Gross SF

If possible, locate flammable storage building in the general vicinity of Paint Shop (code 219 30).

**852 40 MISCELLANEOUS OPEN STORAGE OR LAYDOWN AREA (PUM-SY)**

Provide 9,560 SY of open storage allocated as follows:

For MLO/S-4 functions - 8,900 SY

For "B" Company functions - 660 SY

Supporting facility for Open Storage are Fencing (code 872 10) and security lighting (code 812 40).

540 10, 550 10 DENTAL FACILITY/DISPENSARY (BATTALION) (PUM-SF)

Provide 3,030 Gross SF, if a dental van continues to be used, and 3,570 Gross SF if the van is not used. Within these allowances, provide 300 Gross SF for secure medical supply storage and 270 Gross SF billeting for two duty personnel.

610 72 BATTALION HEADQUARTERS BUILDING (PUM-SF)

Provide 11,735 Gross SF. This building accommodates the entire Battalion staff, HQ & HQ Company, master-at-arms, post office and barber shop.

610 73 COMPANY HEADQUARTERS/OPERATIONS BUILDING (PUM-SF)

Under this code are provided two separate facilities:

1. "A" COMPANY OPERATIONS BUILDING. This facility may vary from 3,000 to 5,215 Gross SF (maximum) depending on the scope of operations. The individual functions within this facility and their corresponding maximum space allowances are listed below.

FUNCTIONS	GROSS SF ALLOWANCE
a. <u>Administration (Company HQ)</u> To accommodate 5 admin personnel	530
b. <u>Operations</u> To accommodate equipment pool, projects supervision, licence exam, accident investigation and technical library.	875
c. <u>Dispatch Office</u>	660
d. <u>Ready/Training Facility</u> Space for 30 persons.	750
e. <u>C/E Functions</u> Provide erector system racks.	2,400
<u>TOTAL (MAX) Gross SF</u>	<u>5,215</u>

Supporting facilities for "A" Company Operations Building are paved laydown area (code 852 40) and parking for 300 pieces of equipment (code 852 10).

2. COMPOSITE (C/D) COMPANY HEADQUARTERS. Provide 1,200 Gross SF. This facility is to accommodate 9 admin personnel, blueprint files, general files, technical library and a reception area. Two or four private offices should be provided for Company Commanders and possibly their assistants. This facility may be provided in two separate building, if desired.



721 13, 721 40, 740 70 CPO BEQ W/MESS W/BRANCH CLUB (PUM-MN/SF)

Criteria for codes 721 13 and 721 40 are contained in NAVFAC P-80,

II. Provide facilities for 33 men. For the Branch CPO Club de 740 70) add 2,000 Gross SF.

721 11, 721 12 BEQ (COMBINED GRADE) (PUM-MN)

Criteria for these codes are contained in NAVFAC P-80, Vol. II. Provide facilities for 530 men. When planning for BEQs insure unit integrity (HQ&HQ/A/B/C/D Companies).

722 10 DINING FACILITY (PUM-MN)

The criteria for this code are contained in NAVFAC P-80, Vol. II. Provide for 530 men.

724 10, 724 30, 740 60 BOQ W/MESS W/OPEN MESS (PUM-MN/SF)

Criteria for codes 724 10 and 724 30 are contained in NAVFAC P-80, Vol. II. Provide for 26 officers. For Open Mess (code 740 60), add 600 to 900 Gross SF (contiguous to the lounge).

730 40 LAUNDRY (PUM-SF).

Provide 2,000 Gross SF (including boiler room). This facility accommodates the receipt, laundering and issue of material which cannot be normally handled by the exchange or other sources. The following equipment must provided:

1. Two washers/extractors (combination type)
2. Four dryers
3. One mangle (may not be required at all sites)
4. One sewing machine
5. Six pressing machines.

Consideration must be given for locating laundry in close proximity to dining facility (code 722 10) and utilizing a common boiler room. In such cases, space allowances for both codes must be adjusted accordingly:

740 10 CHAPEL (PUM-SF)

This facility should have a seating capacity in the range of 30 to 50 seats (1,100 to 1,875 Gross SF). The specific size should be determined individually by experience. No religious education facilities are to be provided.

Provide a maximum of 14,000 Gross SF multiple use facility to accommodate a limited number recreational functions and a limited resale outlet. The essential functions to be provided and their respective suggested ranges of space allocations are listed below:

<u>FUNCTION</u>	<u>GROSS SF</u>
1. <u>RECREATIONAL:</u>	
a. <u>Library</u>	200
b. <u>Special</u>	300
c. <u>EM Club (E1-E6)</u>	4,000
d. <u>Hobby Shop</u>	1,600
e. <u>Gymnasium (Partial)</u>	5,900
TOTAL (MAX) GROSS SF 12,000	

The Gross SF areas, of individual items suggested above, may be adjusted individually to suit a set of particular circumstances or where the use of a major recreational facility such as a gymnasium or large hobby shop at the host installation is feasible. However, the total aggregate space for recreational functions may be smaller than, but under no circumstances should not exceed 12,000 Gross SF.

2. RESALE (Location Exchange):

The space allotted for this function may be determined individually based on availability of host installation's facilities or other pertinent factors. It may be smaller than, but may not exceed 2,000 Gross SF.

750 10, 750 20 PLAYING COURTS AND FIELDS

Provide one each exterior volleyball, tennis and basketball court and, if feasible, one lighted softball field.

812 40 PERIMETER/SECURITY LIGHTING (PUM-LF)

Provide as required to support Armory (code 141 35) and Open Storage (code 872 10).

852 10 PARKING AREA (PUM-SY)

1. Provide a support "A" Company Organizational Maintenance Shop in accordance with criteria contained in NAVFAC P-80, Vol. 11 (for organizational vehicles).

2. Provide parking spaces for 300 pieces of equipment to support "A" Company Operations Building.

3. Provide parking for non-organizational vehicles based on individual survey for each specific site.

852 35 OTHER PAVED AREA (PUM-SY)

Provide paved area for 4th echelon/disposal parking to support "A" Company Organizational Maintenance Shop. (Code 214 51)

852 40 MISC. OPEN STORAGE/LAYDOWN (PUM-SY)

Provide 4,000 SY concrete paved area for requirement attachments (crane buckets, etc.) to support "A" Company Operations.

872 10 SECURITY/PERIMETER FENCE

Provide as required to support Armory (code 141 35) and Open Storage (code 451 10).