

211 08 AIRFRAMES SHOP (NON-NARF) (SF)

Intermediate level maintenance of airframes is performed in this shop. These criteria are applicable where 50 or more aircraft are to be maintained; for less than 50 aircraft, the airframe shop requirement shall be individually justified. For additional guidance applicable at Marine

Corps installations, see the 211 Supplement - Marine Corps Aircraft Maintenance Facilities.

To determine the square-footage requirements for a given installation, the number of assigned aircraft of each type is multiplied by the sum of the corresponding Maintenance and Operations Intermediate Maintenance Level (I.M.O.) factors for aviation structural mechanic (AM), aviation structural mechanic, safety equipment (AME), aviation structural mechanic, structures (AMS), and aviation structural mechanic, hydraulics (AMH). Information pertaining to the I.M.O. factors will be released to approved requesters. The sum of the products for each type of aircraft becomes the "sizing factor" which is then matched to Column 1 of Table 211-08, and the required gross area for the airframes shop is read in Column 2. See the following example for a sample computation.

TABLE 211-08
Space Allowance for Airframes Shop

Column 1 Sizing Factor	Column 2 Gross Area
0 - 20	5,500
21 - 38	9,000
39 - 54	11,500
55 - 69	14,000
70 - 79	15,000
80 - 89	16,000
90 - 99	17,000
100 - 109	18,000
110 - 119	18,700
120 - 139	19,800
140 - 159	20,500
160 - 180	21,000

Example Computation - Airframes Shop

<u>A/C</u>	<u>No.</u> <u>A/C</u> (n)	<u>AM</u> (I.M.O.)	<u>AME</u> (I.M.O.)	<u>AMH</u> (I.M.O.)	<u>AMS</u> (I.M.O.)	<u>Tot.</u> (I.M.O.)	<u>Sizing</u> <u>Factor</u> (n x total I.M.O.)
Type A	96	0	.08	.16	.16	.40	38.4
Type B	4	0	0	.25	.25	.50	2.0
Type C	120	0	.07	.14	.21	.42	50.4
Type D	76	0	0	.19	.26	.45	34.2
	296						125.0

In accordance with data in Column 1, Table 211-36, 125 = 19,800 square feet required.

NAVFAC P-272 shows a small airframes shop containing a gross area of 11,500 square feet and a large shop containing 19,000 square feet. Airframes shops contain space for tire and wheel repair, sandblasting, cleaning and plating, painting, welding, machine work, structures work, hydraulics/pneumatic repair, fiberglass/plastics repair, ejection seat repair, nondestructive testing, tool and material storage, a technical library, administration, and training.

Exterior pavement is provided for vehicle access and nonorganizational vehicle parking. See Category Code 852 10, Parking Area. For design criteria, see NAVFAC DM-28.1.

211 09 AIRCRAFT BORESIGHT RANGE (NON-NARF) (EA)

One aircraft boresight range is required at Navy and Marine Corps air installations which service fighter aircraft equipped with fixed guns or gun pods. One boresight range has the capacity to boresight and fire-in 40 such aircraft each month on a single shift basis. A requirement for more than one boresight range at any station must be individually justified. The two types of ranges are: Type A, semienclosed and Type B, open. Type A is used unless there is existing land or restricted water area available for the 7,000-yard, 60-degree sector danger zone required by Type B. Where practicable, the boresight range should be oriented north and south to avoid firing toward the sun during early or late hours. Inhabited structures and station boundary should be separated by a minimum safety distance of 1,200 feet from the boresight range area. See NAVFAC P-272 and NAVFAC DM-28.1. In addition, a standard 12- by 20-foot line shelter is planned with this facility for crew shelter and storage of jacks and tiedown gear. See Category Code 211 15, Line Maintenance Shelter, for criteria.