

Aircraft Support Equipment Shop/Storage Facility. FAC: 2181

CATCODE: 218712

OPR: AF/A4L

OCR: WR-ALC/642 CBSG

1.1. **Description.** This facility encompasses powered and non-powered AGE maintenance, inspection, repair and servicing functions, and powered munitions AGE, if assigned. It also maintains and holds powered AGE in readiness.

1.2. **Requirements Determination.** The AGE shop inspects, maintains, repairs, and services powered and non-powered AGE directly supporting aircraft and powered munitions AGE, if assigned. It normally includes maintenance stalls with work benches, an indoor wash rack, tool crib, bench stock, sealed lead acid battery servicing area, engine exhaust education system, administrative space, and personnel locker space.

1.3. **Scope Determination.** Table 1.1 lists space requirements for maintenance shops and standby storage facilities. These space requirements include total covered and open storage. Open storage is identified as Aircraft Support Equipment Storage Yard (**CATCODE 852273**) and is measured in square yards. Additive to the space requirements in Table 1.1 are requirements for maintenance and storage of munitions trailers and equipment that are maintained in or near the weapon storage areas. Requirements for munitions AGE are to be obtained from MAJCOM/A4 and A7. For powered munitions trailer maintenance and storage facilities, allow 192 m² (230 yd²) per authorized trailer for each facility.

1.4. Dimensions. See Table 1.1.

1.5. Design Considerations.

1.5.1. Standby storage facilities are necessary for AGE awaiting dispatch after repair. Depending on climate, the facility may be a heated or unheated building, AGE Storage Yard (**CATCODE 852273**), or a combination of these. Separate sub-pool standby storage facilities are authorized where AGE operating locations are widely dispersed. Equipment Fueling Stations (**CATCODE 123335**) are necessary for servicing powered AGE.

1.5.2. A separate area for LOX handling equipment is needed. When powered munitions, trailers are assigned, there is a separate maintenance shop normally at or near the munitions storage area. It includes maintenance stalls with work benches, an indoor wash rack, tool crib, bench stock, administrative space, and personnel locker space. When powered munitions, trailers are assigned, there is an enclosed storage facility near the trailer maintenance shop to house trailers not in use.

1.5.3. Office areas require sound insulation, and portions of this facility may need special ventilation and/or exhaust evacuation. Corrosion control is normally performed in a Corrosion Control Facility (**CATCODE 211159**). Include an environmental protection, eye wash, and an emergency shower near the battery shop.

1.5.4. Special ventilation and floor drainage with oil/water separation is necessary in the maintenance area. An overhead hoist to support a minimum of 2,720 kg (6,000 pounds), electrical power (120 VAC, 240 VAC, and 480 VAC), compressed air source (0-120 psig), and waste oil disposal system to reclaim petroleum based oil, synthetic oil, and hydraulic fluid are required. Consider a storage area for shop support equipment (e.g., portable hoists, hacks, refrigerant recovery system, antifreeze recycle).

1.5.5. A separate oil free area is necessary for LOX handling equipment. Ensure the floor is concrete. Electrical power (120 VAC and 220 VAC) is needed in the area. Ensure this area is covered and should preferably be inside a facility. Refer to **CATCODE 213335** for fuel storage tank authorization.

1.5.6. For the powered munitions trailer maintenance facility, electrical power (120 VAC, 220 VAC, and 440 VAC) and compressed air (0-827 kPa [0-120 psig]) are necessary. Space receptacles for 440 VAC power to allow for operation of trailers in and around the facility. A 9,070 kg (10 ton) overhead hoist for trailer support equipment should be considered. Ensure the wash rack includes hot and cold water.

1.5.7. AGE facilities comply with local, state, and federal requirements and other guidance as defined in AFMAN32-1084 in respect to air emissions, as required by AFI 32-7040.

1.5.8. Locate facilities to comply with explosives safety standards.

Table 1.1. Space Requirements for AGE Shop/Storage Facility.

Number of Authorized Pieces of AGE	Gross Area					
	Shop		Covered Storage ¹		Open Storage ¹	
	m ²	ft ²	m ²	ft ²	m ²	yd ²
Up to 100	502	5,400	480	5,170	48	57.4
101 to 150	641	6,900	721	7,760	72	86.3
151 to 200	748	8,050	962	10,350	96	115
201 to 250	855	9,200	1,200	12,940	120	143.8
251 to 300	962	10,350	1,440	15,530	144	172.3
301 to 350	1,070	11,500	1,680	18,110	168	201.3
351 to 400	1,180	12,650	1,920	20,700	192	230
401 to 450	1,280	13,800	2,160	23,290	216	258.8
451 to 500	1,360	14,605	2,400	25,880	240	287.5
501 to 550	1,410	15,180	2,640	28,460	264	316.3
551 to 600	1,460	15,755	2,880	31,050	288	345
601 to 650	1,520	16,330	3,130	33,640	313	373.8
651 to 700	1,570	16,905	3,370	36,230	337	402.5
701 to 750	1,620	17,480	3,610	38,810	361	431.3
751 to 800	1,680	18,055	3,850	41,400	385	460
801 to 850	1,730	18,630	4,090	43,990	409	488.8

851 to 900	1,780	19,205	4,330	46,580	433	517.5
901 to 950	1,840	19,780	4,570	49,160	457	546.3
951 to 1,000	1,890	20,355	4,810	51,750	481	575

NOTES:

1. Total storage includes covered and open storage. Total open and covered storage space may not exceed the numbers listed.