

**Base Engineer Maintenance Shop. FAC: 2191**

CATCODE: 219944

OPR: AFCEC/COS

OCR: AFCEC/CFT

1.1. **Description.** The Base Civil Engineer (BCE) is responsible for a wide variety of design, construction, operation, maintenance, and environmental planning functions on base facilities and utilities systems. This facility is the primary production center of BCE activities including carpentry, masonry, liquid fuels, plumbing, heating, refrigeration, electrical, metal, Energy Management and Control Systems (EMCS), hospital maintenance, entomology, and others. Each element needs the space, layout, and equipment for shop, administrative, and training activities.

1.2. **Requirements Determination.** The BCE complex should provide a professional, functionally integrated environment for personnel performing management, training, administrative, design, and planning tasks and for personnel performing functions such as carpentry, metal working, electrical, pavements and grounds, and other skilled labor tasks. This facility is an integral part of the BCE complex. Additional information may be obtained from AFCEC/COS and AFCEC/CFT. Refer to **CATCODE 213335** for fueling station and pump authorizations.

1.3. **Scope Determination. Table 1.1.** provides general guidelines for **CATCODE 219944** based on the size and resources of the organization. Allow additional space for unique mission requirements and for BCE activities in high threat areas to accommodate war-related offices and equipment.

1.4. **Dimensions.** See **Table 1.1.** below.

1.5. **Design Considerations.** See **Table 1.1.;** ensure facility design complies with local, state and federal requirements and other guidance as defined in AFMAN 32-1084

**Table 1.1 Space Requirements for BCE Facilities – BCE Maintenance Shop**

Functions	Net Building Area	
	m <sup>2</sup>	ft <sup>2</sup>
Heavy Repair Element (CEOH)		
Structures (CEOHS) <sup>1</sup>	883	9,500
Facility Systems Element (CEOF)		
Fire Alarms <sup>1</sup>	93	1000
Electrical Shop <sup>1</sup>	112	1,200
Power Production <sup>1</sup>	139	1,500
Infrastructure Systems Element (CEOI)		
HVAC <sup>1</sup>	186	2000
EMCS <sup>1</sup>	28	300

Water & Fuel System Maintenance <sup>1</sup>	37	400
Entomology <sup>1</sup>	167	1,800
1. This is an average zone/facility size. Each Squadron should adjust these sizes based on local requirements.		