

CONSTRUCTION REQUIREMENTS

Note: The buildings on the UCCS campus are divided into two categories: General Fund and Auxiliaries. General Fund Buildings include academic and administrative functions. Auxiliary buildings include residence halls, athletic, and dining facilities. In some cases, construction standards differ depending on the building category. Confirm building category with Facilities Services Project Manager.

- Generators

DIVISION FORTY-TWO: GENERATORS

A. General Overview

1. Require company specializing in package engine generator systems with minimum five years experience.
2. Require that supplier have a local service facility within 75 miles of project with factory authorized service technicians.

B. Acceptable Manufacturers:

1. Cummings
2. No Exceptions Taken

C. Equipment:

1. Water cooled diesel, sized to operate at 6,400 site elevation and ambient conditions.
2. UL Listed, battery, battery charger
3. Ground fault protection
4. Engine shutdown on high water temperature, low oil pressure, overspeed, engine overcrank, and a means of emergency shutdown.
5. Provide remote annunciator panel and coordinate installation with Engineer and Contractor.
6. Provide locking doors on enclosure.
7. Exterior oil and coolant drains with interior valves for ease of service.
8. Provide cambered for prevention of water accumulation.
9. Stainless steel hardware
10. Easy access lifting points for future serviceability.
11. Engine Starting on DC
12. Engine Jacket Heater:
13. Radiator is of glycol coolant type
14. Provide filters for fuel, lube oil, and intake air
15. Lube oil cooler
16. Fuel transfer pump
17. Fuel priming pump
18. Gear driven water pump.
19. Provide lockable fuel cap.
20. Provide unit with suitable spring-type vibration isolators. Mount on structural steel base with concrete housekeeping pad designed by Engineer.

21. Weather protective housing/enclosure; enclosure color – tan, green or gray – discuss standard options to UCCS before specification
22. Exhaust silencer
23. Provide generator monitoring to campus Building Automation System (BAS)

D. Installation

1. Provide wiring and shop drawings to Engineer and UCCS for review.
2. Provide proper clearances around generator assembly per manufacturer's recommendations.
3. Contractor to install per manufacturer's requirements.
4. Contractor shall provide all fuel for testing and then, after a successful test, fill the fuel tank.

E. Warranty

1. Provide minimum of two years warranty on equipment upon contractor's substantial completion date.

F. Commissioning/Startup

1. Test alarm and shutdown circuits by simulating conditions.
2. Provide test results to UCCS.