

# Air Handling System / Engine Dynamometer

Taylor Dynamometer designs custom ventilation systems for dynamometer test cells to include test cell temperature and pressure control. Under typical operating conditions, the room temperature can be maintained to within 20°F (-7°C) of the outside ambient conditions.

#### **Custom Ventilation Systems include:**

- Fans, heaters, hoods and dampers (as required to operate system)
- Multi-function control system that enables:
  - Standard operation
  - Remote operation for connection to Data Acquistion & Control System or a Test Cell Command Center
  - Purge mode used to vent the room of smoke or fumes in the event of an engine or accessory failure
- Motor starters and/or drives for the supplied equipment
- Layout design for the mechanical contractor to build and install ductwork (ductwork not included)
- Optional exhaust hood or direct capture exhaust system (purchased separately)

Taylor Dynamometer Air Handling (HVAC) Systems consist of two basic configurations:

### **Direct Capture Exhaust System Configuration**

The ventilation system will use a recirculation configuration that mixes the warm air with outside air to control room temperature and pressure.

# **Exhaust Hood Configuration**

A makeup air heater may be employed to control the room temperature during engine/vehicle warm-up and cool down.

Information needed for pricing systems:

- AC electrical voltage and frequency
- Test cell volume (cubic feet/cubic meters) or overall interior dimensions
- Nearest major city to proposed facility installation (for ambient conditions)
- Maximum engine size (displacement and the exterior envelope)
- Available access points to the outside (roof penetration, two roof penetrations, one or two outside walls for penetration, etc.)

To complete the design after purchase, the above information will be required as well as building floor and structural plans.



**HVAC Controller** 

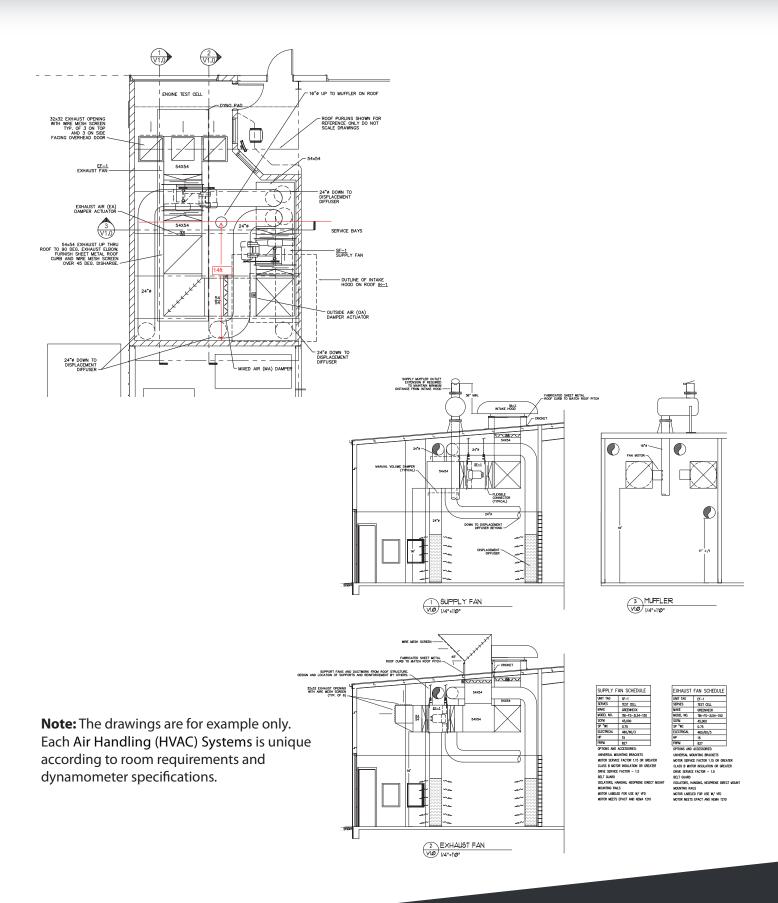












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