

Certain diesel engine fire pump applications are located near structures or people where sound attenuation is a very important part of the installation. AMERIFLO offers sound attenuation enclosures for all diesel engine driven fire protection packages. These enclosures provide not only a sound attenuation option, but also protect the diesel engine package from weather ❶, salt water spray and to provide security as protection for the diesel engine.

Insulated louvers on the side and top of the enclosure provide fresh air intake to ensure that the diesel engine has adequate combustion air to operate properly. The front and rear of the enclosure feature locking doors that allow access to the entire pump and engine assembly. A smaller side door is also located on the side that allows for easy access for other maintenance issues that may arise.

Mineral wool insulation is 4 inches thick and is applied to the entire interior of the enclosure. Unlike other enclosures provided by other diesel engine manufacturers, the diesel engine and pump are located within the enclosure. This type of installation also provides for sound attenuation of the pump assembly as well, providing a quieter installation.

Average sound pressure levels provided by the attenuation enclosure are approximately 85 dBA at a distance of 3 feet [1 meter]. ❷



TYPICAL INSTALLATIONS:

- Residential buildings
- Commercial
- Hospitals
- Hotels
- Oil & gas
- Airports
- Power stations
- Sea water

TYPICAL APPLICATIONS:

- Water curtains
- Sprinkler
- Monitor systems
- Water curtains

❶ AMERIFLO sound attenuation enclosures are not intended to protect against freezing conditions or extreme heat. The enclosures do not include heating or air conditioning units. AMERIFLO diesel engine operating temperature range is 40°F to 120°F [5°C to 48°C] as specified by NFPA 20. For high ambient temperatures and installations installed in direct sunlight, AMERIFLO recommends that a canopy be installed above the enclosure to limit direct sunlight.

❷ Sound pressure level estimates are based on typical diesel engine sound pressure levels. Installation background noise, leakage paths of sound created during installation and sound reflectivity of the job-site can effect average sound pressure levels. These factors are beyond the control of AMERIFLO and as such, AMERIFLO makes no guarantee of limiting sound pressure levels. The Sound Pressure Level (SPL) measurement provided is the overall level of 4 sides and 4 corners, measured 3 feet [1 meter] from the enclosure and 5 feet [1.5 meters] above the ground with diesel engine only (no pump) running at no load in a free-field.

SOUND ATTENUATION ENCLOSURES

ITEM	STANDARD	OPTIONAL
STRUCTURE	<p>Marine grade aluminum</p> <p>4 inches of mineral wool insulation</p> <p>Lockable doors with strip insulation to minimize noise escape located on three sides of the enclosure for easy access to the diesel engine and pump assembly</p>	
INSTALLATION	<p>Sound attenuation enclosure fully encloses diesel engine and complete pump assembly ensuring trouble-free and silent operation</p> <p>Sound attenuation enclosure has integral vibration isolation base as a standard feature</p>	
FINISH	<p>I-Beam base assembly</p> <p>RAL3020 High Visibility Red (Powder Coated Finish)</p>	
VENTILATION	<p>Inlet and outlet ventilation ports fully meet the heat dissipation requirements for diesel engine operation required while maintaining a maximum temperature of 50°F [10°C]</p>	
SILENCER	<p>AMERIFLO Critical Grade Silencer (ADEX35 Series) located on top of the enclosure</p>	<p>Hospital Grade (ADEX45 Series Silencer)</p>
WORKING TEMPERATURE	<p>68°F to 100°F [20°C to 38°C]</p>	
FUEL LINES	<p>Fire resistant rubber hose</p>	<p>304 SS lines</p>
BATTERIES	<p>Located outside of the enclosure</p>	<p>Extended wire leads</p>
RAW WATER COOLING LOOP	<p>Galvanized cooling loop from pump discharge with drain piped out of the sound attenuation enclosure</p>	<p>Sea Water 316 SS High Pressure (400 PSI)</p>
EXHAUST	<p>The exhaust piping has insulation wrapped both on the interior and exterior of the sound attenuation enclosure</p>	
ENGINE PARAMETER DISPLAY	<p>LED high resolution AMERITOUCH controller located on the interior of the sound attenuation enclosure</p>	
ELECTRICAL CONNECTIONS	<p>Optional bulkhead wiring connection with conduit for AC & DC wiring options</p>	