

**ADVANCED GENERATOR ENCLOSURE [WPAPCSA0]**  
(Weatherproof, Aluminum, Powder Coated, Non-Sound Attenuation):

A weatherproof type enclosure shall be provided to house the engine/generator and accessories. The enclosure is to be in complete compliance with the National Electrical Code (NEC), and the National Fire Protection Association (NFPA) with regard to clearances around electrical equipment specified herein. The enclosure shall conform to the following construction and design criteria as set forth. Enclosure shall be manufactured by Advanced Manufacturing & Power Systems, Inc., DeLand, FL. (A.M.P.S.) Ph. (386) 822-5565. Substitutions must be submitted in writing to the engineer and be accepted as an approved equal prior to bid date.

- Rigidity wind test equal to 150 MPH
- Roof load equal to 50 lbs. per sq. ft.
- Rain test equal to 4" per hour

Enclosure shall consist of a roof, two (2) side walls, two (2) end walls, and be manufactured of formed aluminum components. The enclosure is to be provided with a tiedown frame for securely attaching the entire structure to the base/fuel tank as specified within.

Roof, sidewalls and end walls shall be of formed 0.090 marine grade aluminum. The roof is to be bolted to both side and end walls to form a complete weather and wind resistance assembly.

A minimum clearance of 20" shall be allowed for walkway space between the generator frame and interior side walls. A minimum walkway clearance of 30" shall be allowed between the generator end frame and the interior rear wall of the enclosure. The radiator front face shall be sealed to the front wall utilizing and 2" minimum rubber gasket material to minimize recirculation of radiator air discharge and prevent the transmission of vibration from the packaged generator set to the enclosure.

Wall framing shall be incorporated in the panels by forming an open back box structure. Skin material shall be minimum thickness .090" and be powder coated for maximum weather endurance. Exterior skin panels shall be integral to the wall structure and not separate pieces riveted onto framing members. Wall panels shall be no wider than 36" each and shall be removable without the use of special tools. Wall and roof panels shall be designed so that field replacement can be accomplished without disassembly of the entire structure if damage should occur.

A minimum of sixteen colors shall be available for enclosure exterior. Standard enclosure exterior color is White unless otherwise specified.

Roof assembly shall be peaked to aid in rainwater runoff. Cambered roof designs and roofs with thicknesses of less than 0.090" nominally shall not be considered. Roof

assemblies are to be mechanically fastened to the vertical wall sections. Glued or crimped roofs shall not be allowed nor considered as an acceptable alternative.

**ADVANCED GENERATOR ENCLOSURE [WPAPCSA0]**  
(Weatherproof, Aluminum, Powder Coated, Non-Sound Attenuation):

Air handling shall be as follows: Air will enter the enclosure through an all aluminum fixed blade louver(s) as required for proper airflow to generator set. Louver(s) shall be removable and attached into a galvanized steel frame to form a rigid, weather resistant assembly. The cooling air Inlet system shall prevent water intrusion into the enclosure with the generator set operating at full rated load while allowing for a maximum air restriction of less than 0.25" H<sub>2</sub>O. Radiator discharge shall be through a removable gravity operated extruded aluminum backdraft type damper. Air discharge devices shall in no event restrict airflow by more than 0.025" H<sub>2</sub>O. To ensure adequate airflow for cooling and combustion total static restriction over the entire system shall not exceed 0.50" H<sub>2</sub>O. Intake louver(s) shall be screened to prevent the entrance of rodents and other vermin.

A minimum of four (4) single personnel access doors shall be provided on non walk-in designs or a minimum of two (2) doors shall be provided on walk-in enclosures that allow adequate working clearance within the enclosure. One door shall be located in front of the generator main circuit breaker, as specified, to meet NEC code clearance requirements. Circuit breaker access door shall provide free open access to the breaker as required for proper operation and maintenance. Doors shall be manufactured of the same material as enclosure. Doors shall be fully gasketed to form a weather tight perimeter seal. Door hinges shall be full length stainless steel piano type and attached with stainless steel hardware. Door handles shall be of a corrosion resistant material and shall provide for a lockable, secure entry point into the enclosure. Drip ledges are to be provided above each entry door and shall overhang the door on both sides by a minimum of 3".

Enclosure manufacturer shall provide all necessary hardware to internally or externally mount the exhaust silencer(s) specified herein. Silencer mounting hardware shall at all times maintain the weatherproof integrity of the enclosure system. If the silencer is mounted internally it will discharge upward into the radiator discharge plenum where possible, otherwise an aluminum rain collar and rain dress shield shall be provided by the enclosure manufacturer.