

## Solar Energy South Africa

# Exhaust frequency of the generator room

- ☑ High energy density and long cycle life
- ☑ Modular structure

No need to replace the battery

Shorter charging time

Meets 99% EV car



## Overview

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What temperature does a generator exhaust system emit?

Generator exhaust systems must also be engineered and properly installed to accommodate thermal expansion. Generator exhaust systems emit exhaust at temperatures anywhere from 500°F up to 1300°F depending on the unit size, manufacturer, and type of fuel burned.

Why do generator exhaust systems need to be properly designed?

Generator exhaust systems need to be properly designed to ensure correct engine performance and safe operation. System design has become more complex with the desire to keep emissions low, along with the desire to utilize the heat energy in the exhaust gas.

What temperature should a generator exhaust be recirculated?

Under fully loaded conditions, the temperature of flue exhaust from generator sets can be in excess of 900 F and the radiator (engine-driven or remote) discharge air temperature can be in excess of 160 F. Any recirculation of these high-temperature airstreams can cause the ventilation air temperature to exceed the ambient temperature.

Who designs and installs a generator exhaust system?

The proper design and functionality of a generator exhaust system falls on the responsibility of the engineering firm of record. If a field fabricated system is being utilized, the design and installation of the system must be a collaboration between the engineering firm and the installing contractor.

Where should exhaust air be sourced for a generator?

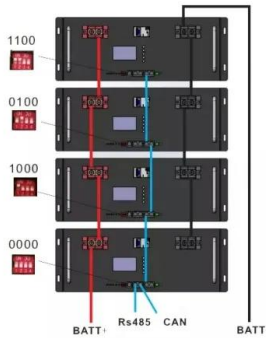
For generators with remote radiators, it is recommended that the exhaust air should be sourced as high as possible and directly above the generator sets. Significant bypass of ventilation airflow directly into the discharge airflow will lead to reduction in cooling effectiveness and elevated temperatures within

the room.

What temperature should a field fabricated generator exhaust be insulated?

To protect potential personal contact with the system, the outer shell temperature must be below 140°F. These temperature calculations can and should be performed by the UL listed manufacturer based on specific product design criteria. Field-fabricated generator exhaust also requires insulation.

## Exhaust frequency of the generator room



### Diesel Generator Room Requirements: Design ...

Here are some diesel generator room requirements and design considerations to keep in mind when installing and operating your generator. Where should a diesel generator be placed? Generator exhaust contains ...

### Air Change Rates in typical Rooms and Buildings

Ventilation Systems Design of systems for ventilation and air handling - air change rates, ducts and pressure drops, charts and diagrams and more. Related Documents Air Change Rate Calculate air change rates - ...



### [Generator Room Ventilation Requirements](#)

The generator room ventilation systems are of different types. Choosing the one that suits the generator room and other factors is important. The requirements may vary, and here are the different types that should be ...

### Proper Ventilation for Generators: What You Need to

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Determine the volume of air in the room and the generator's output to calculate the necessary air

exchange rate. Outdoor Generator Ventilation Essentials. While setting up a generator outdoors may seem ...



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