Portable Generator Safety

Fire Safety Hazards of Portable Generators

- Portable generators produce dangerous carbon monoxide (CO) gas, which is odorless and tasteless and can be deadly if inhaled.
- Generators should never be used anywhere indoors, even if the area is ventilated.
- Overloading a generator may result in damage to appliances or fire.
- Connecting a portable generator directly into a wall outlet can cause dangerous electrical back-feed.
- Generators that are exposed to water or that are not properly grounded can cause electrocution.
- Gasoline for portable generators is highly flammable and may cause a fire when exposed to an open flame or when spilled on a hot generator.
- Over-taxed or damaged cords attached to a portable generator may cause a fire.

Requirements for Use of Portable Gas Powered Generators

1. Monitor generators frequently and turn off when not in use.
2. Portable generators shall not be plugged directly into an electrical receptacle (wall outlet) or back-fed into a panel.
3. Portable generators must be outside and shall not be near doors, vents, or windows leading into a building. They shall not be located on balconies or roofs. Any change in wind could potentially send fumes back into the building via any opening.
4. The exhaust of the generator must be directed at least five feet in any direction away from any openings or air intakes and also away from the building.
5. Never place generator near combustibles, i.e. wood, housing, furniture, clothing, or gasoline cans.
6. Portable generators shall be properly grounded, dry, and shielded from contact from liquid.
7. Only heavy-duty electrical cords that are rated for outdoor use shall be plugged into portable generators.
8. Electrical cords shall not have any punctures or exposed wiring.
9. Cords running from portable generators shall be kept out of the way of foot traffic and shall not run underneath rugs.
10. The total electrical capacity of the generator must exceed the power requirements of the devices that the unit is supplying.
11. Fueling from a container is permitted only when the engine is shut down and the engine surface temperature is below the auto ignition temperature of the fuel.
12. Fuel for portable generators shall be stored away from the building, 5 feet from the generator, and in clearly labeled and approved containers.
13. Devices that are hard-wired into a building’s electrical system cannot be powered by a portable generator if no transfer switch is installed. Transfer switch installation shall be by a qualified technician in accordance with all local codes, permitting, and inspection requirements.