

CSIR HELPFUL HINTS

Golf Cart and or Floor Cleaning Equipment Charging

Q: Where can golf cart and floor cleaning machines be stored and recharged?

A: In a properly ventilated space such as:

1. Fenced in area open to the exterior, may have a roof over the area, but have chain link fence or open louvers on at least two opposite walls equaling at least 50% of the total wall area.
2. Open courtyard under covered walkway.
3. Enclosed rooms with independent (not controlled by EMS) exhaust and supply system, exhaust and supply needs to provide continuous ventilation at a rate of not less than 1 (CFM/FT²) of floor area of the room, per FBCM 2007 Section 502.
4. System needs to be running during the charging process.
 - o Air intake shall be no higher than the tops of the battery cells and exhaust outlets at the highest level in the room. Having a sensor installed to initiate an alarm should the ventilation fan become in operative. The sensor may be connected to a local alarm (flashing light) or to a central system like the EMS. Sensor may also connect to a relay switch, which shuts down the power to the battery-charging unit.

Q: How many batteries can be charged at one time?

A: As long as you meet the minimum ventilation rate, no limit.

Comment: The above requirements apply to lead-acid base batteries.

Option one:

- Measure the total area of the walls then measure the area of openings, if the area of the openings is 50% or more of total area ok to charge batteries.

Option three:

- Measure the square footage of the room.
- Determine CFM capacity of the exhaust fan.
- Determine if exhaust fan is controlled by the EMS.
 - o If yes, make sure it is set to run continuously or remove from EMS control.
- Determine if exhaust fan is monitored by the EMS for proper operation.
 - o If not, then provide one of the following:
 - A sensor connected to warning light above the door to the room with sign that states "The exhaust system is not operational possible hydrogen gas enter with caution"
 - Sensor connected to relay switch which turns power off to battery charging units.
 - Sensor connected to the EMS, which send signal to that exhaust fans are not operating properly.