

External Connection

TechTALK

Grounding a Justrite Safety Cabinet

To ensure safety in your facility, it's important to eliminate the chance of an electrostatic discharge while handling flammable fluids.

If you are going to dispense Class 1 flammable liquids from a container held within safety cabinet, you need to ground the cabinet. As an industry best practice, we recommend grounding the cabinet when dispensing Class 2 combustible liquids if the

liquids are near, at, or above the liquid's flashpoint temperature.

When grounding a safety cabinet, you have <u>internal</u> and <u>external</u> considerations to make.

For <u>exterior cabinet grounding</u>, locate the safety cabinet's ground screw just below the green dot on the right hand side of the cabinet. Use a 5/16" (8 mm) wrench or nut driver to loosen screw. Attach the ground wire and retighten screw. Attach the other end of the ground wire to a

ground bus (as shown) or ground rod. You need the cabinet to ground to earth. Refer to NFPA 77 for further information.





For internal cabinet grounding, when dispensing liquids inside a safety cabinet, as shown in picture



- 1. Bond between safety can and drum.
- 2. Bond between drum and upper vent hole.
- 3. External ground as explained above.

at left, it is important to ensure good electrical continuity through metal-to-metal contact when attaching the ground wires. With painted products, you may have to remove some of the paint in order to contact metal. Some ground clamps have cone points or sharp teeth designed to pierce the paint. Wiggle the clamp until you are sure the clamp's sharp points are through the paint and making contact to metal. To be on the safe side, sand off a small area of paint where you attach the clamp.

Recommendations:

- Use commercially available grounding wires, as they are hardy and made for industrial service duty.
 - Make sure all connections are secure.
- After making connections, discharge yourself by touching ground before opening containers.

Following these guidelines can help you comply with the law when dispensing Class 1 flammable liquids, and help you eliminate the chance of a static electrical discharge and the dangerous ignition of vapors.

Product family: Safety Cabinets

Document name: TT Safety Cabinet Grounding Control: GC 3-26-09 rev 5/1/12