

Informative Bulletin

Flooded Buildings and Water Damaged Electrical Equipment

Note: Electrical permits and inspections are required as per Section 25 of the Manitoba Hydro act, including replacement or recommissioning of electrical equipment exposed to water. In addition, permits and safety inspections are required prior to re-energizing electrical services that have been disconnected due to flooding or at the request of the Building Official, Fire Chief or Manitoba Hydro.

Shut Off Power: If flood water rises and might enter your building, turn the power off at the main switch. If water is near electrical sources, stay away and call the utility company or emergency services. Do not enter flooded areas which contain energized electrical equipment.

Restoring Power: After flooding, do not attempt to turn your power back on until your house or building has been inspected by a qualified electrician. If you are not sure if the service switch was turned off prior to flooding, do not enter the premises without getting it checked by a licenced electrician.

- Floodwater is considered "contaminated water" (containing chemicals, sewage, oil, and minerals), which can worsen the damage beyond simple moisture
- Water-damaged electrical equipment is extremely hazardous; never try to dry and reuse it yourself, as even seemingly dry items can cause shocks or fires

For more information, please see "Evaluating Water-Damaged Electrical Equipment" published by the National Electrical Manufacturers Association (NEMA).

Caution to building and home owners:

Do Not Touch: Avoid touching any wet electrical equipment, including panel boards, transformers appliances, cords, outlets etc.

Call a Professional: Contact a licensed electrician to inspect and evaluate the condition of the equipment and wiring

Why "Drying Out" Isn't Enough: Contamination from silt, chemicals, or sewage in the water compromise insulation and safety mechanisms.

Fire Risk: Undetected damage can lead to shorts and electrical fires later.

What to Expect from Professionals:

A qualified electrician will assess if equipment can be salvaged, but often recommends replacing items like circuit breakers, GFCIs, and outlets, and may replace entire sections of wiring, even if no visible damage appear

Certain electrical equipment exposed to water ingress may not be reconditioned as even seemingly dry items can cause electrical shocks or fires. The safest action is to immediately disconnect power.

Examples:

- Molded case circuit breakers,
- Light switches,
- Wiring devices,
- GFCI/AFCI Breakers and receptacles,
- Fuses,

- VFDs,
- Dry Type transformers.
- Wire or cable rated for dry locations

Specific Types of electrical equipment evaluated by a licensed electrician may be reconditioned and placed back into service.

Examples:

- Motor Control Centers
- Panelboards/Switchboards
- Conduit, Tubing, and Cable Tray
- Motors
- Appliances (Furnaces, washer, dryer, over, etc.)
- Wire or cable rated for wet locations