

Water-Damaged Electrical Equipment Infographic



THE IMPORTANCE OF: **REBUILDING & RENOVATING SAFELY**

Water and electricity do not mix. Follow this guide to quickly

see what equipment must be **replaced** and what electronics may be **reconditioned**. Any water-damaged equipment even if thoroughly dried will pose serious long-term safety and fire risk if not properly reconditioned.

WATER-DAMAGED ELECTRICAL EQUIPMENT



ESFI recommends that the evaluation of water-damaged electrical equipment be conducted by **qualified electricians**. Floodwaters contaminated with chemicals, sewage, oil, and other debris can affect the **integrity and performance** of electrical equipment. Ocean water and salt spray can be **particularly damaging** due to the corrosive and conductive nature of the saltwater residue. Returning power to water-damaged electrical devices or equipment without a proper evaluation could result in an **electrical fire, shock, electrocution, or further damage to your device**.

WATER DAMAGED ELECTRICAL EQUIPMENT

X MUST BE REPLACED

✓ MAY BE RECONDITIONED

	Arc-Fault and Ground-Fault Circuit Interrupters	X		Panelboards <i>See NEMA Standard: PB 1.1-2013</i>	✓
	Batteries	X		Receptacles	X
	High-Voltage AC Circuit Breakers	✓		Signaling, Protection, and Communications Systems	X
	Lighting, Ballasts, and LED Drivers	X		Surge Protective Devices	X
	Low- and Medium-Voltage Fuses	X		Switchboards <i>See NEMA Standard: PB 2.1-2013</i>	✓
	Low- and Medium-Voltage Switchgear	✓		Switches and Dimmers	X
	Low-Voltage Power Circuit Breakers	✓		Transformers <i>All dry type, control circuit, liquid-filled, cast-resin</i>	X
	Molded-Case Circuit Breakers	X		Uninterruptible Power Supply	X
	Motors <i>See Standard ANSI/IEEE 43-2013, A2 & A3, ANSI EASA AR100</i>	✓		Wire or Cable for dry areas	X
	Outlet and Junction Boxes <i>See NEMA standard OS 1-2008</i>	X		Wire or Cable for wet areas that have not been damaged / ends not exposed	✓

ESFI has teamed with the **National Electrical Manufacturers Association (www.nema.org)** to provide a detailed explanation on what electrical components can be reconditioned and which need to be replaced.

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Water damaged equipment that must be replaced:

- Arc-Fault and Ground-Fault Circuit Interrupters
- Batteries
- Lighting, Ballasts, and LED Drivers
- Low and Medium Voltage Fuses
- Molded-Case Circuit Breakers
- Outlet and Junction Boxes
- Receptacles
- Signaling, Protection, and Communications Systems
- Surge Protective Devices
- Switches and Dimmers
- Transformers
- Uninterruptible Power Supply
- Wire or Cable (for dry area)

Water damaged equipment that may be reconditioned:

- High Voltage AC Circuit Breakers
- Low and Medium Voltage Switchgear
- Low-Voltage Power Circuit Breakers
- Motors
- Panelboards
- Switchboards
- Wire or Cable (for wet areas that have not been damaged/ends not exposed)

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