

# 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

MUST BE REPLACED

MAY BE RECONDITIONED

	Arc-Fault and Ground-Fault Circuit Interrupters			Panelboards See NEMA Standard: PB 1.1-2013	
	Batteries			Receptacles	
	High-Voltage AC Circuit Breakers			Signaling, Protection, and Communications Systems	
	Lighting, Ballasts, and LED Drivers			Surge Protective Devices	
	Low- and Medium-Voltage Fuses			Switchboards See NEMA Standard: PB 2.1-2013	
	Low- and Medium-Voltage Switchgear			Switches and Dimmers	
	Low-Voltage Power Circuit Breakers			Transformers All dry type, control circuit, liquid-filled, cast-resin	
	Molded-Case Circuit Breakers			Uninterruptible Power Supply	
	Motors See Standard ANSI/IEEE 43-2013, A2 & A3, ANSI EASA AR100			Wire or Cable for dry areas	
	Outlet and Junction Boxes See NEMA standard OS 1-2008			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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