

SURGE PROTECTIVE DEVICES

Protecting Your Electronics ⚡ Protecting Your Home

The 2020 National Electrical Code now requires Surge Protective Devices in new or renovated homes. Learn how these devices protect your home and your electronics.

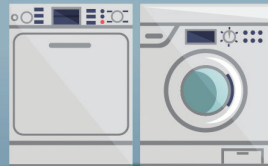
What is a Surge?

A power surge is a brief **overvoltage** event that can **damage** electrical devices and is a **common cause** for failure of electrical equipment.

SURGES CAN DAMAGE AND REDUCE THE LIFESPAN OF:



HEATING & AIR
CONDITIONING SYSTEMS



WASHERS & DRYERS



WATER HEATERS



RANGES &
REFRIGERATORS



LIGHTING



ENTERTAINMENT
SYSTEMS

\$15,000
DAMAGED EQUIPMENT

According to the **National Electrical Manufacturers Association**, the average home has \$15,000 worth of equipment that can be damaged by surge.

Common Causes of Surge:

IT IS ESTIMATED THAT **80% OF SURGES** ARE CAUSED BY INTERNAL SOURCES.

Internal Sources



LARGE APPLIANCES TURNING ON/OFF



FAULTY WIRING OR LOOSE CONNECTIONS



OVERLOADED CIRCUITS, SHORT CIRCUITS, OR GROUND FAULTS



POWER RECOVERY

External Sources



LIGHTNING



DAMAGE TO POWER LINES



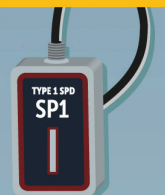
UTILITY POWER GRID SWITCHING

NEW 2020 NATIONAL ELECTRICAL CODE REQUIREMENTS

All new and renovated homes are **required** to be protected by Listed and Approved **Type 1** or **Type 2** Surge Protective Devices.

Type 1

Permanently connected Surge Protective Device. Protects against external and internal surges. May be installed **inside or outside** the home



Type 2

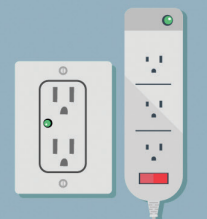
Permanently connected Surge Protective Device installed in, or next to, breaker box. Protects against **internal and external** surges.



Extra Protection

Type 3

Point of use Surge Protective Device. **Must be used in conjunction with Type 1 or Type 2 SPD** to meet 2020 code requirements.



Use **Type 1, 2, and 3 SPDs** for the best level of protection.



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