# HOW SAFE IS YOUR Electric Service

# Service Panel Upgrade: When to upgrade?

- Old fuse box
- Circuit breakers keep tripping
- Dimming of lights
- Water intrusion
- Rusted panel or Meter base

We install 100amp, 150amp, 200amp



# Safety Tips

Never touch anything electrical when you have wet hands.

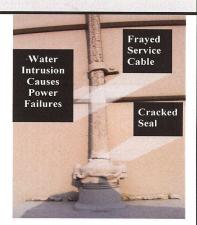
If power is lost during a storm, **turn off or unplug** electrical appliances so that there's not a power surge when the electricity comes back on.

If there's flooding, watch out for water around electrical items, and never use appliances if they're wet.

If outlets or switches feel warm, **shut off the circuit** and have them checked by an electrician.



RESIDENTIAL - COMMERCIAL - INDUSTRIAL



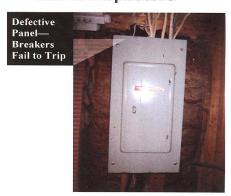
Faulty electrical systems are dangerous.

Federal Pacific "Stab-Lok"

panels are listed as

Defective by

Home Inspectors



"FOR FREE ESTIMATE CALL"

330-638-9971

Visit us online at www.ALLelectricInc.com

# **Safety Tips, More Info:**

## Safety tips:

- Replace or repair loose or frayed cords on all electrical devices.
- Avoid running extension cords across doorways or under carpets.
- In homes with small children, unused wall sockets and extension-cord receptacles should have plastic safety covers
- Consider having additional circuits or outlets added by a qualified electrician so you do not have to use
  extension cords.
- Follow the manufacturer's instructions for plugging an appliance into a receptacle outlet.
- Avoid overloading outlets. Plug only one high-wattage appliance into each receptacle outlet at a time.
- If outlets or switches feel warm, shut off the circuit and have them checked by an electrician.
- When possible, avoid the use of "cube taps" and other devices that allow the connection of multiple appliances into a single receptacle.
- Place lamps on level surfaces, away from things that can burn and use bulbs that match the lamp's recommended wattage.
- Never touch anything electrical when you have wet hands.
- Don't use electrical appliances such as hair dryers or radios in a wet place or near water.
- If power is lost during a storm, turn off or unplug electrical appliances so that there's not a power surge when
  the electricity comes back on.
- If there's flooding, watch out for water around electrical items, and never use appliances if they're wet.
- Never play with kites or toy planes near overhead power lines.
- If a toy happens to get caught in a power line, don't attempt to remove it yourself.
- Never prune trees that are near power lines, yourself.

#### **Electrical Circuit Interrupters**

Protective devices capable of responding to overloads and short circuit, such as circuit breakers, have been available for a number of years. Newer technologies now provide enhanced protection from arcing or ground-faults, which may prevent fires or shock.

#### AFCIs (arc-fault circuit-interrupters)

When an electrical switch is opened or closed, an arc, or discharge of electricity across a circuit, occurs. Unintentional arcs can occur at loose connections or where wires or cords have been damaged. Such arcs can lead to high temperatures and sparking, possibly igniting combustibles. AFCIs (arc-fault circuit-interrupters) protect against fire by continuously monitoring the electrical current in a circuit and shutting off the circuit when unintended arcing occurs. These devices are designed to discriminate between unintended arcing and the type of arcing that occurs when a switch is operated.

#### **GFCIs** (ground-fault circuit-interrupters)

A ground-fault is an unintentional electrical path between a source of electrical current and a grounded surface. Electrical shock can occur if a person comes into contact with an energized part. GFCIs (ground-fault circuit-interrupters) can greatly reduce the risk of shock by immediately shutting off an electrical circuit when that circuit represents a shock hazard (i.e., a person comes in contact with a faulty appliance together with a grounded surface). GFCIs can be installed in a circuit breaker panelboard or directly in a receptacle outlet.

## Facts and figures

- AFCI installation is required by the <u>National Electrical Code</u>® (NEC) in bedrooms of new residential construction (effective as of January 1, 2002). Bedrooms were selected as the first area in which to implement this requirement because of a history of fires there.
- **GFCI** installation is required by the *NEC* for receptacles in kitchens, bathrooms, outdoor areas, basements and garages in new residential construction because of a history of shock hazards in these areas.

## Safety tips

- All AFCIs and GFCIs, whether circuit-type or breaker-type, should be installed by a qualified electrician.
- Test AFCIs and GFCIs after installation and once a month thereafter to make sure they are working properly.
- Replace defective AFCIs and GFCIs immediately. A defective device may create a false sense of security to those who do not know that it is non-functional.

Choose AFCIs and GFCIs that carry the label of an independent testing laboratory and always follow the manufacturer's instructions.