

Federal Pacific Electric Panel Boxes Can Be Fire Hazards

Potentially Could Fail to Provide Proper Safety and Protection for Homes

The Federal Pacific Electric Company (FPE) was one of the most common manufacturers of electrical panel boxes in North America from the 1950s to the 1980s. Millions of their panels were installed in homes across the country. Over time, electricians and home inspectors found as many as 60% of all Federal Pacific Electric panels sometimes failed to provide proper protection to homeowners. Experts say that certain panels could appear to work fine for years, but after one overcurrent or short circuit, they could overheat and become fire hazards.

Federal Pacific Electric Panel Boxes Have 3 Reported Major Faults:

1. Federal Pacific Electric panels may not pass updated safety codes.

If a Federal Pacific Electric panel has been in a home for 15 years and not been serviced by a licensed electrician, the breakers may be fully depreciated. It is possible that the breakers would not properly trip and protect an electrical system from overheating!

2. Federal Pacific Electric panels may have been created with significant design flaws.

Federal Pacific Electric panels reportedly have defects not shared by other panels of similar age. For example, often certain breakers have loose connections rendering them useless. Should an overcurrent occur, the breakers could melt instead of trip.

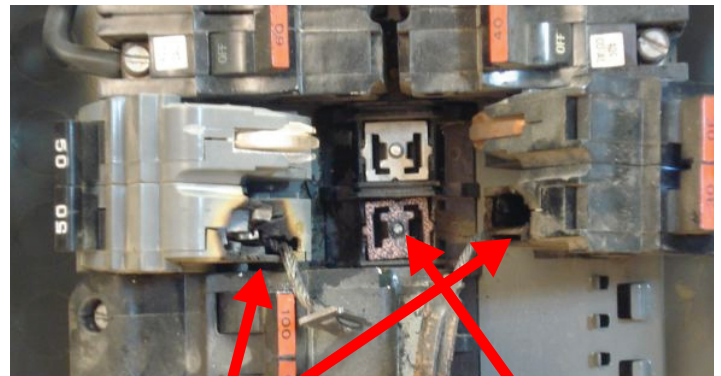
3. Federal Pacific Electric panels may have manufacturing defects.

Experts also report that Federal Pacific Electric panels may be unfit for homes because of manufacturing defects. The materials used to construct the breakers may be weak. As a result, the breakers may not trip, and the panel could be susceptible to catching on fire.

Example Of Damage Created by a Failed Federal Pacific Electric Panel

Below is a picture of a Federal Pacific Electric panel. The homeowner reportedly heard a loud pop followed by a sizzle noise and a burning smell. She called an electrician; this is what was found.

The homeowner had no way of knowing that too many electrical devices were plugged into one room. The devices required more electricity than the circuit could provide. The wiring severely overheated. Normally, a breaker would trip to cut off electricity and prevent a fire. The panel's breakers did not trip. Two breakers burned, as well as a bus bar.



Burned breakers

Burned bus bar

Federal Pacific Electric panels cannot always be counted on to protect homes from overcurrents or short circuits that could result in a fire.

Zinsco Panel Boxes May Produce Dangerous Situations

May Leave Homes and Homeowners at Risk

Many Zinsco panels are obsolete today. However, at one time, they were extremely popular and installed in many regions throughout North America. As time has passed, some electricians and home inspectors have discovered that certain Zinsco panels can fail to operate properly as much as 25% of the time and may leave homes and homeowners at risk to both fire and electrical shock.

Zinsco Panel Boxes Have 3 Reported Major Faults

1. Zinsco panels may not pass updated safety codes.

Older Zinsco panels would not receive today's UL listing. These panels would not be allowed to be sold to the general public because they no longer pass current safety codes. Safety standards that were once acceptable years ago are no longer considered safe.

2. Zinsco panels may have been created with significant design flaws.

Zinsco panels reportedly have defects not shared by other panels of similar age. For example, often certain breakers have loose connections rendering them useless. Should an overcurrent occur, the breakers could melt instead of trip.

3. Zinsco Electric panels may have manufacturing defects.

Design flaws have been identified in older Zinsco panels that may not be shared with other panels of similar age. For example, some components are aluminum; the connection between the breakers and buss bar may not be solid; and breakers can appear to be off, yet internally the panel still allows power to flow to the house.

Damage Created by a Failed Zinsco Panel Box

Problems with certain Zinsco panels cannot be seen by the naked eye. Even after the cover of Zinsco panels has been removed, everything can seem to be in fine working order. Upon exploring its components, electricians find that breakers cannot be removed from the buss bar. They've welded together, which indicates that the breakers have melted. In that condition, a breaker would be unable to trip and may be allowing an unsafe amount of electricity into the home! This could lead to a potential fire.

Please, do not attempt to remove breakers from your own panel to see if they've melted. Only licensed electricians should. Zinsco panels can be electrical shock risks; they can appear to be shut off but are still conducting electricity!



Some Zinsco panels may contain hidden damage that cannot be easily seen. Only professional electricians should explore the panel due to the risks of electric shock.

Examples of Damage Created by Zinsco Panels

The following are excerpts from accounts by electricians regarding their experience with Zinsco panels:

9/2/2003 *I was at a site to do an estimate and noticed a Zinsco panel. I asked the customer if it was alright to check it, and he agreed. He said the only trouble he knew about was the water heater didn't always give them real hot water. I pulled the panel cover off and everything looked okay. I checked the breakers with a volt meter, and it had proper voltage at all the circuits. Then, I started (carefully) removing breakers and found the top (water heater circuit) breaker had welded itself to the buss and came apart when I tried to remove it. (This could be very dangerous for a homeowner or home inspector!) I removed several other breakers and found them to be badly damaged, and the bussing was burnt in several locations. After seeing the situation it was not hard to convince the owner that it was time to replace the Zinsco panel.*

5/15/2003 - *I was asked to look at this customer's home to give them an estimate to replace a Zinsco panel. The panel looked okay, but when I removed some of the breakers, I found signs of degradation on the buss. The breaker next to it also had started deteriorating. They had not failed yet or caused the customer any noticeable problems. I then tried to remove another breaker, and it would not come out. The breaker was welded onto the buss so bad that the buss started to come out with the breaker. I pushed the breaker and buss back into place and let the customer know that he had a serious problem that needed to be addressed as soon as possible.*

4/15/03 – *I recently stumbled upon a Zinsco and asked the customer if it was okay to inspect. With the okay, I proceeded to pull the cover off. The breakers and panel looked to be in great shape. There was no obvious heat damage or signs of conductor damage. Upon removing the breakers, I found serious damage to the breakers and bussing. One had become welded to the buss. Another breaker fell apart when I tried to remove it. The panel did not have a main breaker, so there was no way to shut off power to the top section! This could have been extremely dangerous if a homeowner had tried to remove the breaker to replace it, or check it.*