



## ZINSCO ELECTRICAL PANELS

### What is a Zinsco Panel?

Zinsco is a brand name for a style of popular electrical panels that were installed in homes from the 50's through the early 80's. Zinsco is now defunct, but many homes still have these panels.

### How do I tell if I have a Zinsco Panel?

Look for the name Zinsco, GTE Sylvania or BC Kerney on the panel. Breakers can have



green, red and blue colored handles, but not always. However, not all Sylvania and GTE-Sylvania branded panels are dangerous. So if you have one, an electrician will need to inspect it to see if

it has the problematic design.

### Why are these panels problematic?

The overall design of the panel includes aluminum bus bars, which are subject to corrosion and overheating as energy demands increase. Once a breaker becomes taxed, subsequently melting to the bus bar, there is an inability of the breaker to adequately trip, and power continues to surge into the panel and associated downline circuits

### The panel and breakers look fine is it okay?

Most of the time it is impossible to determine the conditions that could be present as the critical components are not visible. Removal of the breaker would be required to expose the bus bar and to allow for

proper inspection of the breaker casings.



Even then without proper testing it is not possible to predict future performance and failures. Given the history and the higher than normal failure rate its best to consult with a licensed electrical contractor, even then replacement should be anticipated.

### What are the risks?

Continued use of a Zinsco panel poses a fire hazard to the home and a shock risk to the occupants of the property. Loss of personal property and injury could result. It should be noted that failure of the panel and components can happen at any time and without notice. Evidence of faulty conditions may not be visible or evident. In short, these panels may fail to protect a home and its occupants from dangerous over currents and the associated risks.

### What are the common failure mechanisms?

- The aluminum components in the panel are subject to corrosion that can result in overheating and melting

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of the bus bar.



- Circuit breakers can become damaged from overheating and blow out the casing as a result of an “arc explosion”
- Circuit breakers have a higher risk of not tripping in an over-current condition which can allow the circuit wiring and components to overheat and result in a fire and shock hazard.
- Due to the materials use these panels are susceptible to accelerated deterioration from moisture. This is especially true for exterior panels or panels located in unconditioned spaces.



- Breakers may fail to drop power even when they are switched off. Due to failures inside the breaker or at the bus bar connection the breaker may continue to conduct power to the circuit even when it is in the off position.

### **The Home I am looking at has a Zinsco panel what should I do?**

We recommend you consult with one or more qualified and licensed electrical contractor for a review of the electrical system including the panel in the home. You should obtain their professional opinion and follow their advice which in most cases will be recommending replacement of the panel.

### **Can I get replacement Breakers?**

Replacement parts for these panels are no longer manufactured or available. There may be some new old stock available but even then, the reliability of the components is suspect. Be cautious of new replacement breakers being sold on-line as there have been reports of counterfeit breakers being sold.

### **What is the cost for replacement?**

Replacement costs can vary depending on the home and the conditions found. It is best to consult with a licensed electrical contractor during your due diligent period to determine the extent of repairs that may be required and the associated cost.

### **The homeowner and their agent say the panel is working fine and will not replace it, what should I do?**

This is a common argument on the part of the homeowner. They maintain that they have had no problems for as long as they

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have lived in the home and that there is no evidence of problems or failures at present therefore the panel does not require replacement. While there may be no evidence of current or past problems at this home the failure rate of this panel and breakers is known to be higher than other panels and the risk for failure is up to 25% greater. We recommend that you consult with your real estate professional on how best to address this situation as part of your negotiations. It is always helpful to obtain the written opinion of an independent professional to help strengthen your case. Finally, ask the homeowner if they want to accept the risk for potential future conditions that could result as a result of the suspect equipment. Any and all statements should be obtained in writing.

### **I heard that the power company may replace the panel for free is this true?**

Maybe, power companies installed many of these panels up until the mid 70's. These panels were owned and maintained by the power company. To qualify the panel must state or be marked that it is owned or the property of the local utility.



If in doubt contact your local utility and request more information or an inspection. Duke Energy currently has a program for replacement of these panels, more

information can be obtained here. [Panel Replacement Program](#)

### **Summary**

There were a lot of homes built with these panels during the 1960s and 70s. Many are still in use. Given the history and what is know about these panels.



The best practice is to consult with a licensed electrical contractor and obtain their professional opinion and have the electrical system and panel inspected. Always, we recommend following their professional advice.