

Testing Times

LOCAL NEWS

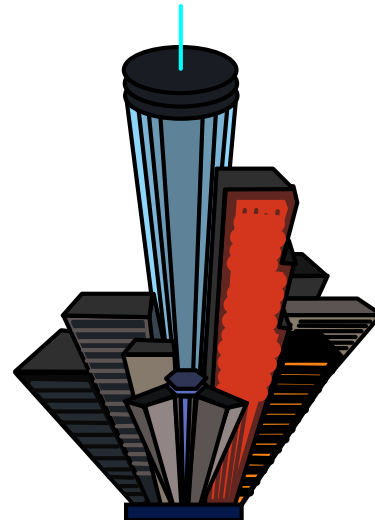
Building Safety

December 11, 1989. The Atlanta City Council passed an ordinance to retroactively amend the City of Atlanta Building Code. To highlight one part of this ordinance, 101.8 - Application To Existing Buildings (c) Requirements for Retroactive Mechanical and Electrical Systems (3):

"For existing buildings having electrical systems of 277/480 volts with 1,000 amps or more which are designed without ground fault protection and use electric busways, heat detectors shall be installed in each electrical room to disconnect the overcurrent device supplying that circuit. Such modification shall be installed by December 31, 1995."

In most cases, it is difficult and impractical to add heat detectors with a disconnecting means in every electrical room. Often, the simplest solution to comply with this new City Ordinance is to install ground fault protection on your main device(s) rated 277/480 volts and 1,000 amps or more. Because much of the electrical distribution equipment involved was built prior to 1971 (the first year ground fault protection was required by the National Electric Code), these main devices were not designed to be modified or retrofitted with ground fault systems. Therefore, in most cases the entire main device (fusible switch or breaker) must be replaced with a new main device including the necessary ground fault protection system.

Furthermore, after installation, The National Electric Code (NEC) requires that **all** ground fault systems be "*performance tested*" per Article 230-95(c). The City of Atlanta Bureau of Buildings Electrical Division requires written proof of this ground fault testing prior to issuing a permit to allow you to turn back on your power. This testing must be certified by an electrical engineer.



For additional information about this City Ordinance and whether it applies to your facility, contact the City of Atlanta Bureau of Buildings at (404) 330-6150. For information about a ground fault system retrofit, contact a qualified electrical contractor or the manufacturer of your equipment. If you would like information on testing your ground fault system (new or existing), please call Hood - Patterson & Dewar at (404) 296-5990.

Maintenance

Unscheduled power outages usually lead to unhappy occupants in any facility. An owner or property management company would like to minimize these inconveniences without spending a fortune. An **infrared survey** is the least expensive and most effective means of providing a reliable electrical distribution system. The infrared principle is very simple: electrical problems generate abnormal heat prior to failure. An infrared camera measures the difference in temperature between a normal electrical component and the component being tested. This comparison indicates to the trained technician if a potential

problem exists. Once a technician identifies an electrical problem, he will recommend the necessary repairs in a detailed written report. Maintenance personnel can then perform repairs at scheduled times and outages.

An infrared survey is a non-contact form of electrical testing that is performed during normal working hours and requires no equipment shutdowns. With an assistant to remove and replace electrical equipment covers, a trained infrared technician can scan 75 - 100 devices in a single day or the equivalent of a typical five-story office building. For most commercial

facilities, an infrared survey should be performed annually.

Justification for an infrared survey is easy because this service relates directly to the bottom line at any facility. An infrared survey increases electrical equipment life expectancy, decreases downtime, increases energy conservation, and reduces insurance premiums. All of these benefits lead to increased tenant satisfaction and increased profits for the owner and property management company.

For more information about this service, contact Hood - Patterson & Dewar at (404) 296-5990.



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