Control Below-Slab Leak Problems with Cathodic Protection



# What Can You Do About Below-Slab Plumbing Leaks?



#### Model CP-2000 Modular Rectifier

A breakthrough in corrosion technology makes this cathodic protection system available for apartment and condominium buildings.



Figure 1-Typical Installation

#### The Problem

Below-slab plumbing leaks (slableaks) caused by soil-related corrosion affect many residential properties. Below-slab leaks are expensive to repair, disruptive, cause moisture damage, and are a major cause of mold-related repair work.

#### Low Cost & No Disruption

As a preventive measure, or if you have already experienced slableaks, cathodic protection can significantly reduce or eliminate further leak problems. With our system there is no disruption to residents, because it is installed outside the dwelling space, see Figure 1.

#### Add Value to Your Property - Why Delay?

Backed by over twenty years of experience, our systems have added value to residential properties as a proven proactive maintenance effort. With the rising cost and exposure of leak-related damages property owners and managers are recognizing the economic sense of controlling rather than reacting to the slableak problem.

#### **Compatible with Other Options**

Are you considering water treatment inhibitors, repiping, or epoxy coatings? You can protect your existing piping now with our system, benefit from the results, and keep your options open. If you are considering water treatment inhibitors or epoxy coatings to protect the water-side surfaces of the piping, cathodic protection will compliment these methods by protecting the soil-side of the buried piping from ongoing corrosion.

#### Effective Alternative – It's about Time

The cathodic protection method is so effective at preventing leaks that the Federal Government has required it by law for all buried gas and oil pipelines. Why shouldn't it be required for below-slab water piping? Talk to your insurance company about a potential discount on your building's policy.

### **Give Us Your Most Problematic Property to Prove our Effectiveness**

www.LeakControlSystems.com 619.795.7011

Cathodic Protection is the practical choice to address existing or potential below-slab leak problems

# **How It Works**

Cathodic protection is a basic reversal of the corrosion process. When applied to below-slab piping the corrosion tendencies are transferred from the piping to a "sacrificial" metal that is consumed instead. See Typical Installation Figure 1 on opposite page.

The sacrificial anode in all hot water heaters is just one example of the everyday use of cathodic protection, see Figure 2. As long as the anode is intact, the steel hot water tank does not corrode (the only difference between a hot water heater with a 5-year warranty and a 10-year warranty is the weight of the anode). In a similar manner, the CP-2000 has been designed to protect the soil-side of below-slab copper piping from ongoing corrosion for at least ten years.

For a more scientific description of the process please see our website at www.leakcontrolsystems.com

## Results

For buildings with prior leak histories, the cathodic protection process results in a dramatic decrease in leak frequency. Actual case histories have shown the leak frequency of soil-related corrosion problems rapidly approaching zero, see Figure 3. As a preventative measure cathodic protection can save owners, managers, onsite personnel, and residents from the major headaches caused by future ongoing leak problems.

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Figure 2 - Example of everyday use of cathodic protection



**Architect's Specifications - Cathodic Protection** 

*Cathodic Protection System:* Modular rectifier system, Model CP-2000, as manufactured by Leak Control Systems, Inc. A cathodic protection system designed for use on commercial and residential properties to address external corrosion of piping buried below the concrete slab. Rectifier(s) shall be installed in utility room, electric meter room, tank heater room, or other location, as specified by engineer. Number of modular rectifiers, location, and quantity of anodes for each rectifier system shall be determined by engineer. System shall be designed to have a minimum life expectancy of ten years.

The term "modular rectifier system" refers to a Model CP-2000 rectifier and its associated ground bed. The term "engineer" refers to a registered Professional Engineer or a Corrosion Technologist as defined by the NACE Professional Recognition Program.