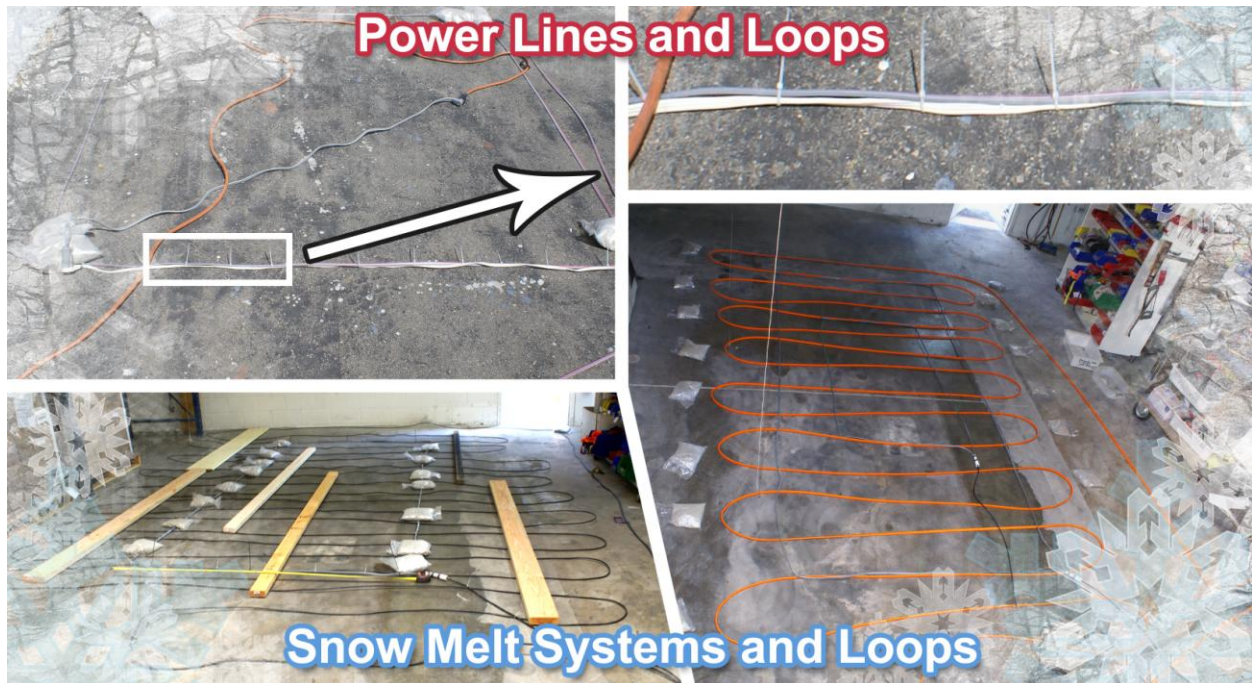


Power Lines and Loops – BD Loops Debunks Industry Myth



If you install loops you have probably been told to keep loops away from power lines. We've seen a wide variety of recommendations when it comes to how far away loops need to be kept from power lines, recently a 3ft standoff distance seems to be the most popular. This 3' standoff recommendation even appears in industry association training manuals.

BD Loops has been fighting this power line standoff distance myth for years, we understand that keeping a 3ft standoff distance from power lines makes the installers job needlessly difficult. Often times power lines are run under the driveway or directly next to it which makes following the standoff guidelines and properly protecting the full driveway width/gate path with loops impossible. **When installers follow the 3ft standoff guideline they are often installing less safe systems.**

We have done extensive testing on loops and power lines and found that 60Hz systems do not affect vehicle detectors because most detectors run at a frequency of 50kHz to 120kHz which is far outside the range of harmonic distortion (which is what would cause interference). In these tests we have tied our loops directly to power lines and **every detector module we have tested did not experience cross talk or false detections** during the test, **even with overloaded circuits and the detectors set to their highest sensitivity settings.** We tied our loops directly to both 110V and 220V systems, and have yet to record electrical interference with loop function. View the full power lines and loops test at www.BDLoops.com.

While we are on the subject of power lines, another obstacle installers sometimes face is having to work with inspectors, architect, and system designers who falsely believe that loops fall under electrical codes

such as the NEC. **Loops do not fall under NEC.** Nobody has been, or will ever be electrocuted by an inductance loop. Feel confident in asserting that loops do not fall under NEC to inspectors.

Loops and Snow Melt Systems

Summer is finally here which means installers who work in colder climates may find themselves installing loops in brand new driveways with a snow melt system. Last year we were finally able to run in house tests on how loops perform with snow melt systems. We procured 2 popular types of 220V snow melt cables/systems and tied our loops directly to the systems in a variety of sizes and configurations.

We discovered that loops can be installed over snow melt systems. Most loops installed with snow melt systems are **unlikely** to experience false detections or interference. Larger loops (larger than 6x12') are slightly more prone to interference than smaller loops, but with most loop detectors this isn't an issue at all.

That being said, detector choice is very important when installing loops with snow melt cables. In our testing there were quite a few detector modules that NEVER experienced false detections or interference with either snow melt system.

The first type of snow melt system we tested was PENTAIR's Pyrotenax MI (Mineral Insulated) Heating Cable System. This system caused false detections and interference on 3 of the detector modules that were tested. The interference and false detections only occurred when the detectors were set to the highest sensitivity levels. In real world applications detector modules are rarely set to their highest sensitivity setting, so generally there will be no issues with installing loops over a snow melt system.

The second snow melt system was PENTAIR's Raychem ElectroMelt System (with self-regulating heating cables). This system caused no interference or false detections on any of the detector modules. This type snow melt system is better suited for being used with inductive loops.

Conducting these snow melt tests has convinced us that a preformed loop with an outer jacket will provide the best chance of success when installed with a snow melt system, for three major reasons:

- a. Snow melt systems must be installed close to the surface to work properly, this means you need to use a loop that can be tied directly to the snow melt system, because standing the loop off from the snow melt system will put you right at or above the surface.
- b. Preformed loops with an outer jacket are more rugged than loops wrapped by hand. This is important because the snow melt cables will get hotter in any area where the loop comes into contact with it. In the case of the Mineral Insulated cable we tested, the snow melt cables can become so hot that the outer jacket/coating of the snow melt system can melt.
- c. Rigid, narrow loops make a difference – BD Loops are rigid and easy to form, and the wire our loops are made with is narrow. This means very little of the loop wire will be in direct contact with the snow melt system which will help prevent the snow melt cable from being damaged.

The full reports/test results for the above mentioned tests *Loops and Power Lines* and *Loops and Snow Melt Systems* can be found on www.BDLoops.com in the "Education & More" section.

For the past 8 years BD Loops has been the driving force behind dispelling myths surrounding inductance loops in the door and gate industry. BD Loops has been working with multiple industry associations and manufacturers to help improve the quality inductance loop education available to installers. Many industry myths and common practices taught to installers make installing loops much more difficult than it should be. To see common industry myths that BD Loops has dispelled visit BDLoops.com and view our article “Myths and Facts about Saw-Cut Loops”.

BD Loops is a manufacturer of preformed direct burial and saw-cut inductance loops for the gate, door, and parking industries. With over 15 years in business the quality of BD Loops is unparalleled. BD Loops products are available through over 400 distributors in the U.S. and Canada. BD Loops offers 46 standard preformed loop sizes, all standard and custom loop sizes are ready to be shipped the same day. The company has several letters of recommendation testifying their professionalism and design, and is a member of the following associations: AFA, IDA, NAFA, IPI, NPA, CODA, and IMSA. Feel free to call BD Loop's knowledgeable staff with any questions about loops or their applications. By visiting the BD Loops website (www.BDLoops.com) you are sure to [learn something new](#) whether if you are new to installing loops or a veteran installer. While you are at the BDLoops.com website sign up for our free informative [monthly installer newsletter](#). Use our [distributor locator](#) to find a distributor near you.