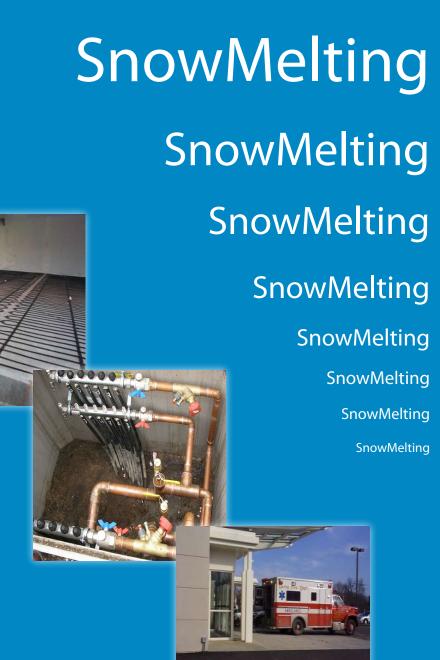


AquaHeat



Residential & Commercial

Why?



RESIDENTIAL

Residential snow melting provides a very safe and convenient luxury! Imagine eliminating shoveling the drive way, walk way and the stairs. For homeowners the convenience must be weighed against the added installation and operating costs. Most homes have enough over capacity in their systems to melt stairways and small sidewalk areas. Driveway and patio areas may require a larger boiler independent of the heating system.

COMMERCIAL

Commercial snow melting usually is considered because of safety issues for customers, patients, students and employees (hospitals, schools, universities, office buildings, parking garages, warehouse shipping docks, government buildings, helicopter pads, museums, and stadiums). In addition to the safety issues, some large building complexes with central boiler plants are dumping energy in the form of condensate. Why not snow melt entry ways, walk ways, parking garage ramps and stairs using the heated condensate energy, providing a benefit without increasing the operating cost with the additional benefits of safety and insurance cost savings.

Design

Snow melting systems must be very carefully designed. Whether you are doing residential or commercial snow melting, the specific project objective must be considered during the design phase. Factors to consider; outdoor temperature, wind speed, area to be melted, local climate, rate of removal, cost of operation, and local codes.

It is important to note, pex pipe has minimal structural strength and must be accounted for in any structural calculations. The load bearing capacity of a heated slab must be calculated to ensure proper reinforcement by local building standards.

No area is too small or too large to be snow melted! It is essential for each project to be engineered to meet the specific requirements for the geographical area and the project's objective in rate of snow removal.

System

There are three types of snow melting systems; manual on/off, semi-automatic and automatic. Manual systems are the least expensive, but also perform the slowest, because you must turn it on yourself and wait for the system to warm up before melting the snow. A semi-automatic system turns itself on and off automatically and keep the area at a set temperature regardless of the presence of snow or ice. A fully automatic system is the most convenient since it is always running and can detect the presence of snow and ice, however this system is the most expensive, because of the cost of operation.

Installation

Proper site preparation along with an accurate engineered design allows many different types of materials to be snow melted; concrete, asphalt, interlocking brick pavers to flagstone. It is very critical to system performance to make sure that a minimum of 2 inches of closed cell high density foam ground insulation barrier to ensure quicker slab response time and optimum energy usage. In addition, it is critical have good drainage to prevent ice build ups. These drains always should be located in warm zones.

Components











CARRIER PIPE

Our system starts with by using Microflex pre-insulated pex tubing as the primary supply and return piping from the heat source to the manifold stations that provide the heated glycol to the system

PIPE:

Next we use crosslinked polyethylene black UV protected tubing #96000 with a (25) twenty five year manufactures warranty. Our Black Pex-C UV protected tubing has shown its advantages over other pipe with regard to ease of installation, durability during construction and longevity in continuos use. Most snow melt projects will use 5/8" or 3/4" inch tubing set on 6 or 9 inch centers.

MANIFOLDS

We offer two different manifolds one for (#2015) residential and light commercial and one for (#2016) heavy duty large commercial projects. The primary difference in the two manifolds is their flow capacity in GPM which simply means the #2016 can pump more volume and run longer circuits than the #2015 manifold. Manifold choices are based on the system designed required outputs.

CONTROLS

Our #33550 controller offers multiple control options all in one control; manual, semi-automatic and automatic. The #33550 detects outdoor and ground temperature plus moisture. It also energizes relays when snow and ice occur. Several sensors are available; ground, gutter or outdoor with the ability to accept multiple sensors. It also includes a built in timer for manual snow melting with an optional external timer to start the system.







Performance

Our ComfortPro AquaHeat snow melting system package is a top performer because of quality engineering and design, matched with quality components and backed by our 25 year factory pipe warranty. In addition, our products are supported by factory representatives with many years of snow melting experience.

Your Next Project

Contact us at 800-968-8905 or at www.comfortprosystems.com for our help with your next snow melting opportunity. We can assist with all design and specification questions.

Project Showcase

















