Tire Track Snow Melting

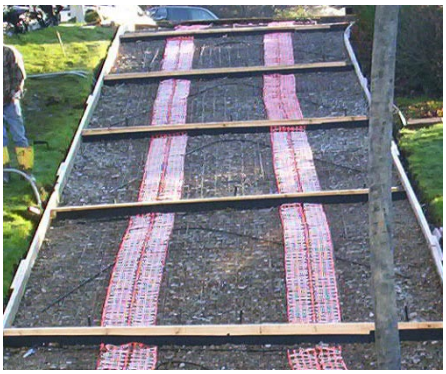
Delta-Therm's tire track snow melting systems create a heated path for homeowners to access their home safely while saving on materials, labor, and operating costs.

CHALLENGE: Combating winter storms isn't easy. Homeowner Kevin Murray of Reno, NV admits he would much rather be playing with his kids than clearing snow off of his 1,300 sq. foot driveway.

Most homeowners remove the snow using a snow blower, but that can be both time-consuming and treacherous on steep driveways. The two other traditional methods of snow removal - spreading salt or hiring a plowing service – have their own sets of problems. One is corrosive, the other is unreliable. Where can homeowners find a reliable cost-effective solution?

SOLUTION

Since Murray was replacing his driveway, he decided to research electric and hydronic snow melting systems that are embedded underneath concrete, asphalt, or pavers. He found that electric snow melting cables operate at 100 percent efficiency while hydronic systems - which require a boiler and anti-freeze (which cools the farther in travels from the boiler) - operate at approx. 85 percent efficiency. Electric snow melting cables are perfect for clients like Murray who face a lot of snowfall each year, elderly people and those residing in hilltop homes.



"Clients will say things like, 'I don't want to get to the bottom of the driveway and not be able to stop,'" said Bryan Lally, whose company Flynn Reynolds distributes Delta-Therm's cables on the hilly East Coast.

For Murray's driveway, Delta-Therm divided the space into separate zones based on the fact that he had a sidewalk running through the center of it, and a 100 square foot apron he chose to melt.

Murray chose Delta-Therm's mineral insulated tire track cable system. In this way, he melts snow and ice along his vehicle's path instead of melting the entire driveway. Many homeowners choose to do this based on the amperage requirements or to stay within a certain budget since it saves on materials, labor and operating costs.

His annual bill hovers around $160 per year, which is based on his 11 cents per kilowatt hour electric rate. The system has been both reliable and convenient.

"Since it's fully automated, I don't even have to think about it," Murray said.

Built to order and shipped from the factory only after rigorous testing, Delta-Therm's mineral insulated snow melting cable system uses a fully automated control that monitors surface moisture as well as surface and air temperature and turns the snow melting cables on/off.

The snow melting cables melt snow as it falls to prevent accumulation.

Although the system is totally automated, homeowners can opt to turn it on or off with the flip of a switch.

"There's a remote override switch which allows you to override the control panel and manually turn the system on for a fixed period of time, usually five hours," said Ray Barry of Yankee Electric, located on the East Coast. "It has a pilot light on it to tell that the system is operating."

Depending on the time table of contractors, electricians and driveway paving companies, a system like Murray's typically takes one week to install.

"The actual installing of the cables with the paving contractor, for a 100 foot driveway, could be installed in one day," said Barry.

The control and contactor panels installed in the home - usually in a utility area or mechanical space – do not need to be touched unless the homeowner desires to shut down or deactivate the system.

RESULTS

Murray's system was put to the test during the first two weeks of January, 2005 when Reno received a record breaking snowfall. Since Delta-Therm's snow melting cables are able to withstand a snow fall rate of two inches per hour, it was no problem for the system, and no worries for Murray.

The system consistently provides a snow-free path for Murray to safely navigate in and out of his driveway.

"The snow melting driveway system has vastly improved my quality of life," he said. "Instead of spending hours snow blowing my driveway, I get to spend time with my kids." ■

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