



When to use Quartz Tubes

Quartz Infrared Heating Elements may sometimes be thought of as a direct competitor to Ceramic Infrared Heating Elements. Why would we sell a product that would compete with our own? One reason is that Mor Electric Heating, the Master Distributor for Infrared Internationale of North America, makes a strong effort to sell any and all electric heating products, thereby offering a wide variety of choices and alternatives for all applications. Their job is to help the customer find the product most suited to their needs, whether we manufacture it or not.

Quartz Infrared Heating Elements are just another source of infrared heat which, in most cases, does not compete with ceramic elements. Quartz elements are made up of a series of quartz tubes running parallel within a highly reflective aluminized steel housing, and should not be confused with Quartz Lamps in this comparison. Ceramic heaters and quartz tubular heaters are very different from each other in many ways as the chart below indicates.



	Ceramic	Quartz Tubes
<u>Response time</u>	Slow	Fast
<u>Lifespan</u>	Excellent	Good
<u>Durability</u>	Good	Poor
<u>Efficiency</u>	96%	61%
<u>Zoning capability</u>	Yes	No
<u>Maximum operating temp</u>	1292° F (700° C)	1600° F (871° C)
<u>Cost comparison</u>	Medium	Medium
<u>Installation time</u>	Moderate	Moderate
<u>Wavelength</u>	Medium	Medium

A quick glance at this chart can easily show the strengths and weaknesses of each product. Quartz tubes are obviously fast acting and hotter, best used in applications that need a lot of heat in on/off cycles. Ceramics are longer lasting, much more rugged, and are a better use of heat not only in operating efficiency but because of the opportunities for zone control.

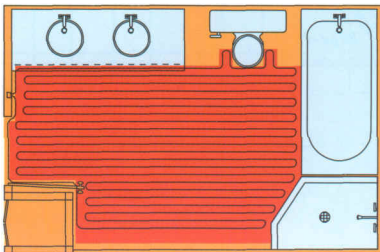


EASYHEAT®

EASYHEAT is a manufacturer of high quality electrical products to solve your cold weather problems. Most **EASYHEAT** products are UL Listed and CSA Certified.



- Pipe Tracing for frozen pipe prevention and temperature maintenance
- Roof and Gutter De-Icing products to prevent ice dams and ice build-up on roofs
- Snow Melting Systems automatically remove snow and ice from walkways, driveways and commercial applications such as parking garage ramps
- Electric Thermal Storage systems
- Electric Floor Warming systems for removing the chill from ceramic, slate and marble floors

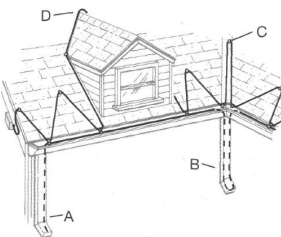


WarmTiles Floor Warming System

Ceramic, slate and marble floors can be cold, even at room temperature. Warm Tiles electric floor warming systems make cold floors pleasantly warm by gently warming flooring materials such as marble, ceramic and porcelain tile, slate, granite and poured or dimensional stone. Suitable for new construction or remodeling, the system radiates gentle warmth through a network of low profile cables placed in the mortar just below the tiles. Although installing a Warm Tiles system is an easy task, we recommend using a knowledgeable installer. Warm Tiles fits in any room: bathrooms, kitchens, nurseries, living rooms-wherever you want tile floors. Operating on ordinary current, it costs less than one cent per square foot per day when cables are installed together with the specially designed thermostat.

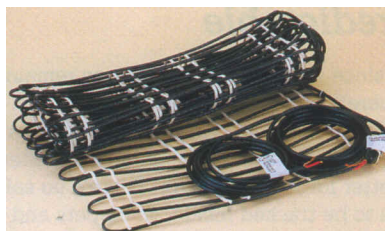
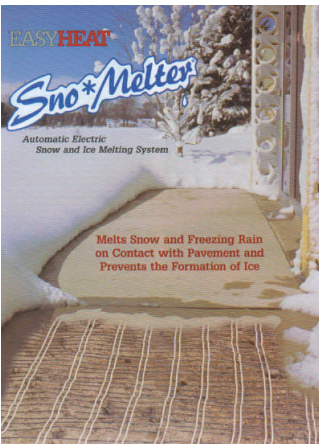


ADKS Roof and Gutter De-Icing Heat Trace Cable



Even in below freezing weather, snow on the roof will often thaw because of heat from the sun and house. As this melted snow reaches the roof overhang it re-freezes. Here there is no heat loss so the roof surface is much colder. As this melted snow refreezes an ice dam is formed. Water backs up under shingles, and leaks into the house. ADKS roof de-icing cable prevents water and ice damage by providing a clear path for melting water. It keeps roof edges, gutters and downspouts ice-free. Versatile design adapts to most roof and gutter configurations. The cable should be installed over the unheated portion of the roof - normally the roof area above the overhang. Each ADKS kit includes the Electric Roof De-icing Cable (Residential Grade, 120 Volt, 5 Watts/foot) and 6 foot power cord with plug and enough roof clips and cable spacers to complete the installation.

Sno-Melter Mats



These mats provide snow and ice removal by heating the surface above freezing. Sno-Melter electric mats are embedded in concrete or asphalt, either as part of a new installation or when re-paving and are controlled with snow melting controls. Because the snow melting mats operate for relatively short periods each winter, operating costs are less than most other snow and ice removal methods.



For more information on these products:
www.HeatersPlus.com/easy.htm

(New) Products



ETI (Environmental Technology Inc.) LCD-7 Snow Switch (Automatic Control For Snow Melting)

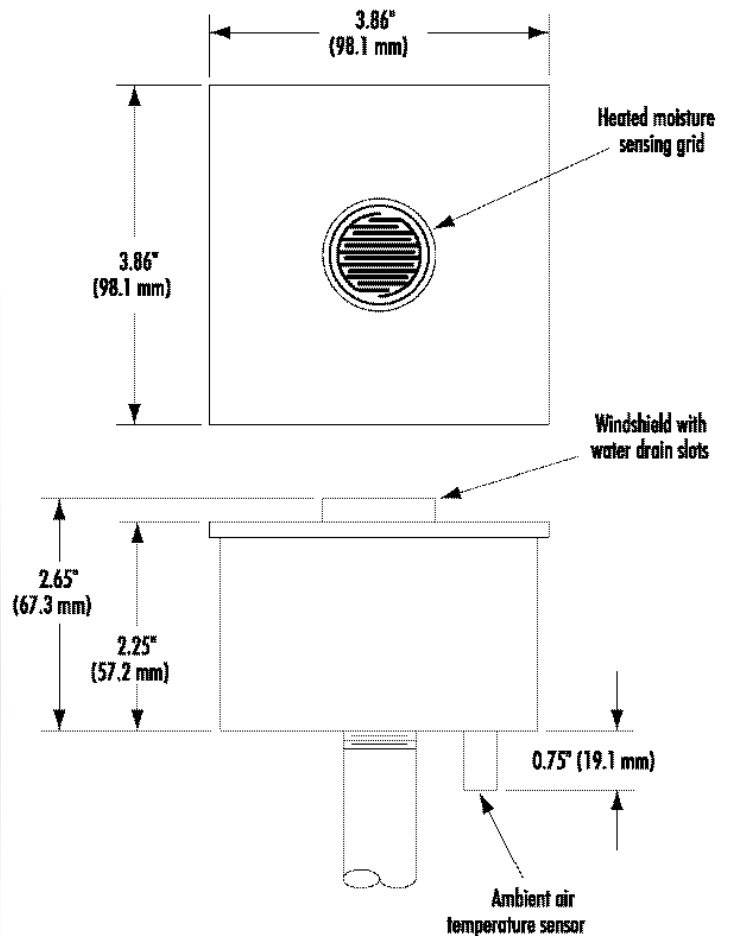
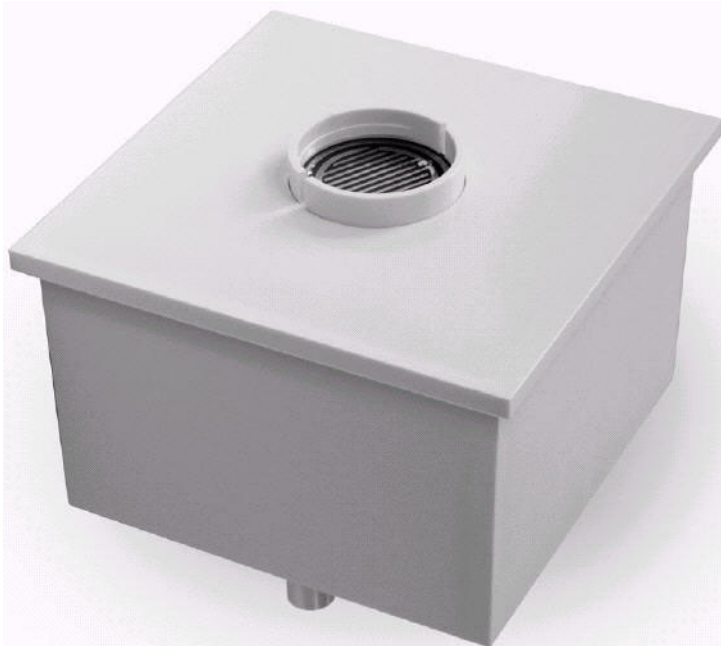
FEATURES

- Heaters operate at temperatures below 38°F only when required
- Cost effective automatic melting in even the smallest applications
- Simple installation and on-site testing
- Heater operation continues after snow stops to ensure complete melting
- Longer sensor life
- Extremely low standby power consumption—less than 0.6 watts idling
- Two year limited warranty
- Operating temperature range from -40° to +140°F
- Controls heater loads up to 16 amps at 120 and 240 volts
- Operates from 120 volts AC
- Housing has one 1/2" (16mm) NPT threaded opening.
- Rugged polycarbonate enclosure provides excellent protection at temperature extremes
- Needs only a 1 hour hold-on time to compensate for site differences compared to the 2 to 10 hours of earlier products.



BENEFITS

- Minimum energy cost
- Long trouble free life
- No annual maintenance
- Reliable snow melting
- Ultra low cost



For more information on this product: www.HeatersPlus.com/lcd-7.htm

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A big problem for quartz is their fragileness. They are easily broken, not only in use but in shipping. As they heat, they also emit light, which reduces the amount of actual heat energy emitted. Because they cannot be zoned, they are best used in applications which require even heating, in a limited area and short amounts of time.

The only drawback to ceramic elements is their slow response time. They should not be used when rapid on/off heat is needed.

Both emitters differ in sizes and available wattages which may make a difference in your selection. Our literature or website should be consulted for these differences. Both types of heaters are viable options for electrical heating applications and the differences above should be considered when designing an application.



What are the office cats Midnight and Sydney up to this month?



Sniffing noses in the snow.

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