

# Heat Tape Basics

## 1. Energy Consumption

- a. Energy usage can vary between six (6) watts and twelve (12) watts per lineal foot of heat tape.
- b. On average, heat tape consumes nine (9) watts per lineal foot.
- c. In warmer months when there is no snow on the roof, turn heat tape off at the breaker switch or unplug it. Do not rely on built-in thermostats to make sure heat tape is not operating.

## 2. Optimal Operation Times

- a. Turn heat tape on at the first significant snowfall.
- b. Best operation hours are from 6:00 AM to 6:00 PM\*.
- c. Daylight hours tend to be better for operating heat tape as warmer daytime temperatures (in contrast to freezing temperatures at night) promote the melting of snow and ice. Heat tape helps create a channel in which water can flow off the roof and run easily through gutters and downspouts.
- d. Carefully monitor the build-up of ice dams and accumulation of ice in downspouts. If this begins to occur, it may be best to operate heat tape twenty-four (24) hours per day.
- e. Do not put timers on heat tape that is protecting plumbing in a crawl space or underneath a trailer, or in drains that run through the wall of a home or garage. Leave these sections on 24/7.

## 3. Estimated Operational Cost per Hour (Per 100 Lineal Feet of Heat Tape) - Residential Application

- a. The following calculation is based on one (1) continuous hour of operation of heat tape.

- Total lineal feet of heat tape:	100	
- Average consumption value:	9	Watts per lineal foot
- Estimated usage in watts:	900	
- Estimated usage in kilowatt-hours:	0.9	Electric energy is sold in kilowatt-hours (kWh)
- Utility's unit price per kWh	\$0.105	<<< Note: Varies per rate classification

## 4. Estimated Monthly Cost and Energy Consumption - Residential Application

- a. For "Optimal Operation Times" based on 30 days per month

- Energy consumption in kWh:	324	
- Monthly Cost @ \$0.105 per kWh:	\$34.02	<<< Note: Varies per rate classification

- b. For "Continuous 24 Hour Operation" based on 30 days per month

- Energy consumption in kWh:	648	
- Monthly Cost @ \$0.105 per kWh:	\$68.04	<<< Note: Varies per rate classification

\*Note: If you are on the optional Time of Day rate, you may want to try operating heat tape from 6:00 AM - 4:00 PM so that you are not operating it during on-peak hours (4:00 PM - 9:00 PM). This 10 hour operation cycle would result in a cost to operate of \$25.92/month. But make sure to watch for ice dams and adjust this schedule if needed. Heat tape should be on when melting is occurring.