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For freeze protection and process heating applications on Plastic Tanks

SilcoPad® Super low watt density heater pad

- ◆ *Specifically designed for safe operation on polyethylene, polypropylene and other types of heat-sensitive tanks*
- ◆ *Two sizes fit both horizontal and vertical tanks*
- ◆ *Will not overheat or burn out*
- ◆ *Super low watt density heat source will not harm the tank or tank contents*
- ◆ *Installation is quick, simple and effective*
- ◆ *FM approved for use in unclassified, hazardous and corrosive environments*

SilcoPad heaters are specifically designed to provide the unique product and system features essential for the safe and reliable application of heat to the surface of plastic tanks and other types of heat-sensitive, non-metallic tanks. SilcoPad heaters are most commonly used on polyethylene and polypropylene tanks for freeze protection and temperature maintenance applications up to 120° F. (When used on metal tanks, SilcoPad systems can be designed for temperature maintenance applications up to 160° F)

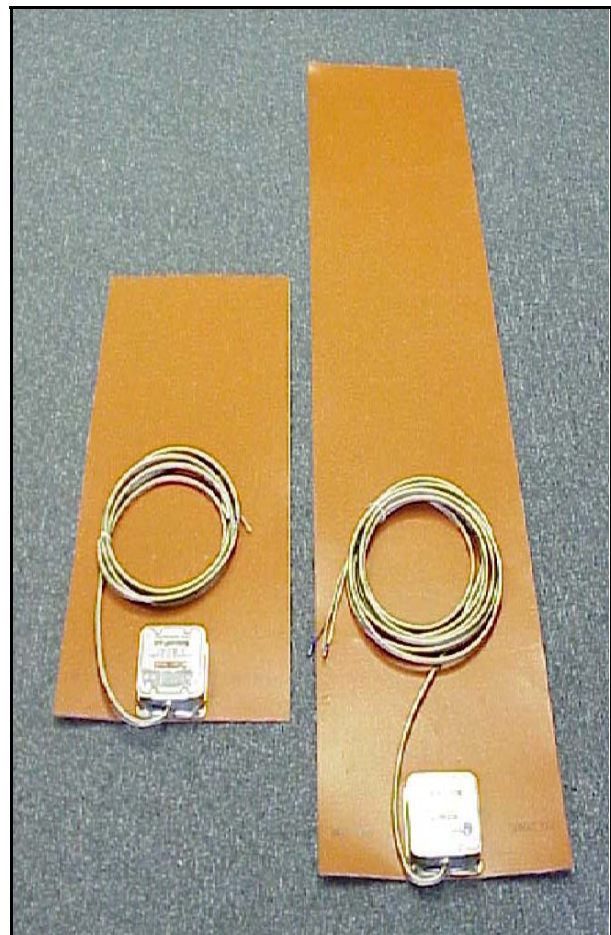
The SilcoPad design uses a *super low watt density*, parallel circuit heating element that is pressure laminated into a multi-layer silicone rubber dielectric construction to form a flexible, lightweight water-proof heater pad. Each SilcoPad heater is supplied with a rugged, encapsulated, factory made termination complete with a standard length of over-braided cold lead.

SilcoPad tank heaters are extremely safe, reliable and cannot overheat or burnout.

The gentle heat output of 0.5 w/sq.inch will not harm a plastic tank or contents. Additional security is also incorporated into every SilcoPad heater by the inclusion of a preset, automatic safety switch that is built directly into the pad. This factory installed device completely eliminates all potential for overheating, even if the heating system should remain energized while the tank is empty.

The SilcoPad heater construction also includes an aluminum ground shield for full compliance with the latest requirements of the National Electrical Code.

Factory applied adhesive backing is used to bond the heater pad directly to the tank surface, allowing one person to complete a simple and effective installation in a matter of just a few minutes.



For further information, please contact us at our New Jersey headquarters.



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PRODUCT SPECIFICATIONS

PHYSICAL, ELECTRICAL & THERMAL

PRODUCT FAMILY	SilcoPad
PRODUCT REFERENCES	SP 210 SP 420 & SP 420-16
SIZES	SP 210 14 x 30 inches SP 420 14 x 60 inches
PAD THICKNESS	0.1 inches
WEIGHTS	SP 210 3 LBS SP 420 5½ LBS
POWER RATINGS	SP 210 210 watts SP 420 420 watts
POWER DENSITY	0.5 watts.sq.inch
OPERATING VOLTAGE	120 VAC
NOMINAL CURRENT	SP 210 1.75 A SP 420 3.50 A
LEAKAGE CURRENT ON 120VAC	SP 210 0.2 mA SP 420 0.4 mA
TYPICAL MAXIMUM APPLICATION TEMPERATURES	Polyethylene 120° F Polypropylene 120° F PVC 140° F CPVC 150° F FRP 150° F
<p>The above maximum application temperatures are only typical for the materials listed. Service temperature ratings for each tank material depend upon operating pressure and may be lower. Maximum permissible operating temperatures for each specific type of tank must be determined by the Tank Manufacturer and/or end user.</p>	
MAXIMUM EXPOSURE TEMPERATURE	200° F
MINIMUM INSTALLATION TEMPERATURE	40° F
MINIMUM BENDING RADIUS	6 inches
MINIMUM TANK SIZE	12 inches diameter

ACCESSORIES

SEALING TAPE	Use type IAAT 3 adhesive backed aluminum tape to seal the four edges of each SilcoPad to the tank surface. This simple procedure prevents any thermal insulation from migrating between the tank surface and the heater pad.
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CONSTRUCTIONAL

HEATING ELEMENT	Nichrome resistance wires
HEATING ELEMENT DESIGN	Parallel circuit
DIELECTRIC MATERIALS	3 plys of 0.026 inch thick silicone / glass bond
DIELECTRIC STRENGTH	1.48KV for one minute
INTEGRAL GROUND PLANE	0.005 inch thick aluminum foil
GROUND PLANE RESISTANCE	3.26 mΩ/ft
TERMINATION BOX	4 x 4 inch steel enclosure
COLD LEAD CABLE	3 conductor # 16 AWG tinned copper with silicone rubber insulation and nickel-plated copper overbraid
STANDARD COLD LEAD LENGTHS	SP 210 10 ft SP 420 10 ft SP 420-16 16 ft
Custom cold lead lengths can be supplied as special order	
INSTALLATION METHOD	Factory applied adhesive backing with peel off protective paper

APPROVALS

FACTORY MUTUAL	Unclassified areas Class I Div 2 B, C, D Class II Div 2 F, G Class III Div 2
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T-RATING	T4A
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CONTROLS

PLASTIC TANKS	<p>The recommended controller for unclassified, non-hazardous area installations is type 2SPCP with dual electronic thermostats for process control and high temperature cut out.</p> <p>Use type 2HSPCP controller to provide the same features on all hazardous area installations.</p>
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