



# National Plastic Heater

Call Toll Free 1.877.674.9744

## MEGAPLATE<sup>®</sup> MICA INSULATED STRIP HEATERS

**MEGAPLATE** mica insulated strip heaters are economical heat sources, suitable for providing heat to flat surfaces. The sheath temperature limitation is 900° F. These heaters can be made to include pressure plates that improve uniformity and heat transfer. **MEGAPLATE** heaters are available in many electrical termination styles, and can accommodate holes and cut-outs.



- **Construction overview**
- **Termination styles**

# MEGAPLATE MICA INSULATED STRIP HEATERS

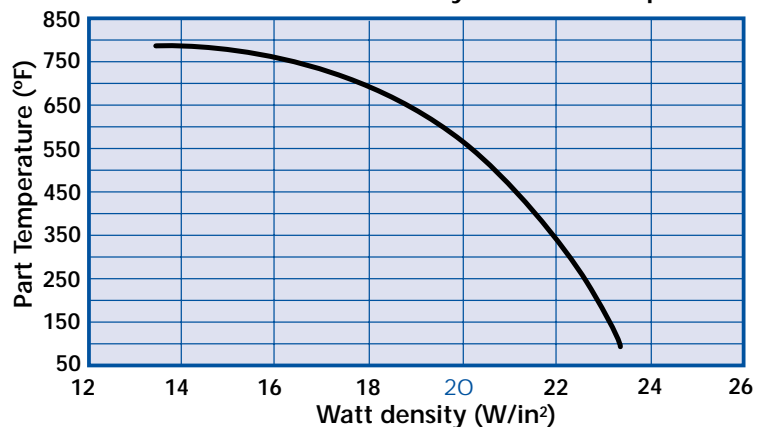
- **Packaging and sealing machines**
- **Food tables and warming equipment**
- **Plastic extruders**
- **Blow-molding machines**
- **Ovens, hot plates, incubators**
- **Other process applications**

## Construction and features

- Economical
- Uniform heat distribution
- Various termination styles
- Holes and cutouts
- CSA and CE certified

**MEGAPLATE** mica insulated strip heaters utilize the finest quality muscovite and phlogobite mica, different high-grade alloys of resistance wire, and stainless steel sheathes. The proper components are selected and the heater is designed according to the requirements of each application.

Maximum allowable watt density for a mica strip heater



One critical issue with flat heaters is that they tend to detach from the surface they are mounted on due to thermal expansion. To prevent this, an adequate number of mounting screws should be used at the ends as well as the middle of the heater.

Incorporated pressure plates could be used to give rigidity to the top sheet, improve heat transfer, and maintain a uniform heat distribution.

The maximum allowable watt density with respect to the application temperature is shown in the diagram. However, 20 watts/in<sup>2</sup> is a standard safe value.

**MEGAPLATE** heaters are available in different termination styles, and could accommodate holes and cutouts.

# MEGAPLATE MICA INSULATED STRIP HEATERS

## Electrical terminations

- Lead wire terminals
- European plugs
- Terminal boxes
- Screw terminals

### Lead wire terminals exiting through the top sheet



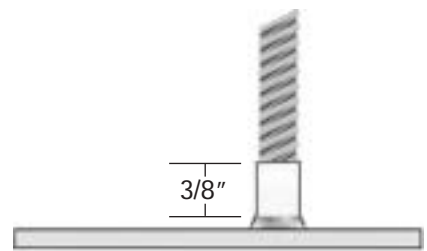
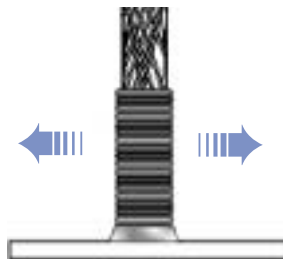
**GM Style**  
SS armor leads exiting 90° with copper elbow.



**E Style**  
SS braided leads with strain relief.

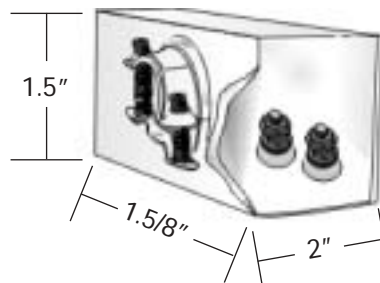


**H Style**  
SS armor leads exiting straight.



## European plugs

**K Style**  
European plugs eliminate all possible exposure to live connectors. They facilitate quick replacement.



## Terminal boxes

**G Style**  
Terminal boxes eliminate the risk of electrical shock and electrical short by enclosing the terminal in a heavy duty stainless steel box. Prewired boxes are available with armor or SS braided leads.



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## Screw terminals



Screws are the most commonly used terminals on strip heaters. Care should be taken not to tighten these screws excessively; otherwise, the connection between the resistance wire and the screw could be damaged. #10-32 screws are standard; other sizes are available.



**A Style**  
Screw terminals at opposite ends.



**B1 Style**  
Parallel screw terminals along the width.



**B2 Style**  
Parallel screw terminals along the length.

## Lead wire terminals exiting from the side or the end

Single or double ended mica high temperature wire with or without stainless steel braid. To eliminate the bump over the wire at the exit point and to have a smooth surface, a pressure plate could be used.



**L & LF Styles**



**J & JF Styles**

Mounting slots, holes and cutouts can be incorporated into the design of the strip heaters without compromising watt density and heater performance. However, there are design limitations to be considered and the factory should be consulted prior to placing any orders.



**NPH**

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