# Silicone Rubber Heaters with Pressure Sensitive Adhesive (PSA) backing application guidelines

#### **Substrate surface preparation**

For maximum bond strength, the substrate surface should be thoroughly cleaned and dried.

- All substrates must be considered contaminated and must be cleaned prior to application of the Heater with PSA backing.
- If the substrate has dirt or loose paint on it, that is what the PSA adheres to not the substrate itself. If the PSA does not make enough contact with a clean, dry substrate, it will not stick well, leading to premature separation from the substrate and potential failure of the Heater.
- Perform the final substrate cleaning step immediately before applying the Heater. Dust and other contaminants can collect quickly on the substrate and prevent the PSA from adhering properly.

Typical cleaning solvents are heptane and isopropyl alcohol. Test the substrate surface to be cleaned in an inconspicuous area to ensure the solvents clean the surface properly and do not harm the surface. Carefully read and follow the manufacturer's precautions and directions for use when using cleaning solvents. This cleaning recommendation may not be compliant with the rules of certain Air Quality Management Districts in California; consult applicable rules before use.

### **Application temperature**

Ideal temperature application range is 70°F to 100°F (21°C to 38°C). Application of the pressure sensitive adhesive backed product to substrate surfaces that are initially below 50°F (10°C) is not recommended because the adhesive can become too firm to adhere readily. However, once properly adhered, low temperature holding is generally satisfactory.

#### **Application Process**

Application of firm and even pressure to the Heater, as it is being applied, is important to obtaining a good bond. It is important that the entire surface of the pressure sensitive adhesive backing be in contact with the substrate and that firm pressure is used to ensure that good contact is made between the adhesive and the substrate. In some applications, a rubberized roller may be used to apply the Heater, but care must be taken to ensure that this does not damage the surface and termination of the Heater.

After application, the bond strength will increase as the pressure sensitive adhesive gradually develops improved contact with the surface. At room temperature, approximately 50% of the

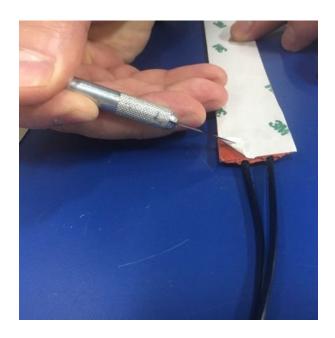
ultimate strength will be achieved after 20 minutes, 90% after 24 hours, and 100% after 72 hours.

## **Application steps**

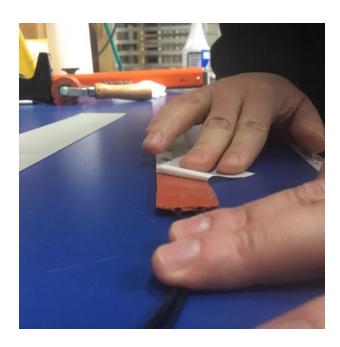
1. Prepare the applications tools and clean the substrate surface:



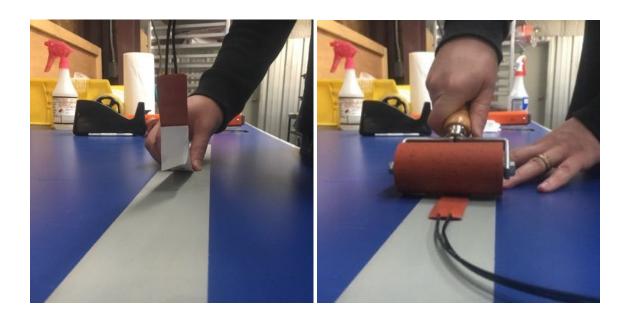
2. Slightly peel off protective backing paper from the corner of the heater at the lead end. Peel it back along the surface, not away from it:



3. Grab the corner of backing paper and continue peeling it back, along the surface, to expose a few inches of PSA. Do not touch PSA, especially at the edges:



4. Flip the Heater and press the end with exposed PSA firmly against the substrate surface using rubberized roller:



5. Grab the backing paper and continue peeling it off, while keeping the Heater flat against the substrate surface. As you peel the backing paper off, immediately apply pressure to the heater with your hand or roller. Once backing paper is removed, press the Heater against the substrate surface firmly, using rubberized roller

