**Installation Recommendations**

for Ceramic Infrared Elements

**Installation:**

1. Insert mounting head into slot in reflector.
2. Arrange mounting hardware as shown for either one-piece mounting (left side of figure) or two-piece mounting (right side of figure).
3. Depending on mounting method:
   a. For one-piece mounting method: insert clip SPR-103-102 between the top of the reflector and the underside of the groove on the mounting head. Some force may be necessary.
   b. For two-piece mounting method: set wave spring SPR-103-101 down, putting all leads through the hole in the middle of the spring. Then insert flat clip FAS-109-104 in between the top of the spring and the underside of the groove on the mounting head.
4. We recommend an obround slot size of 0.593” x 1.688” to be used when designing mounting reflectors for ceramic infrared heaters.
5. One-piece mounting method to be used with reflectors of thickness between 0.028” and 0.037”.
6. Two-piece mounting method to be used with reflectors of thickness between 0.018” and 0.094”.
7. Do not install heaters in areas where combustible gases, vapor, or dust is present.
8. Do not install heaters with mounting hardware in vertical orientation. Hardware may shift and fall out during operation.

**Wiring**

1. Use high temperature terminal blocks, wire terminals, and wire with proper gauge in wiring compartment.
2. All electrical wiring of heaters should be done by a qualified electrician.
3. Insulate all live electrical connections per applicable safety standards.

**Caution:** Exposed electrical wiring on ceramic infrared heater installation is a violation of electrical safety codes including O.S.H.A.

**Operation:**

1. Do not allow anything to come into contact with heater until all electrical power has been disconnected.
2. Do not operate above rated voltage. Excess voltage may result in heater failure.
3. Do not exceed 1,400 °F on surface of the heater or on the reading of the optional thermocouple.
4. To prevent overheating and heater failure, the use of an adequate temperature controller is recommended.
5. Do not immerse heater in liquid.
6. Do not expose heater to severe vibration or shock.

**Maintenance:**

1. Disconnect heater from power before performing any type of service.
2. Replace mounting hardware when replacing heaters.
3. Heater terminal block connections must be kept tight. Loose connections can overheat and eventually destroy the connection, terminals, or may short out and result in heater failure.
4. If water comes in contact with the heater when it is hot, the heater will not fail. If water comes in contact with the heater when it is cold, a slow start to the next heating cycle is recommended. Trapped moisture inside the heater can boil rapidly and cause heater to break.
5. Clean only when heater is cool, and only with a damp, lint-free cloth. Anything more vigorous may damage the heater.