

GENERAL INFORMATION

EGLX Tank Heating panels are most commonly installed in one of four orientations. The illustrations on the right show the two orientations that may be used on both horizontal and vertical tanks.

Heating panels may be installed in either the horizontal or vertical plane. When installed in the horizontal plane, the heating panel termination box and cold leads may be at either end. In the vertical plane, the heating panel termination box may be at the top or the bottom.

The selected orientation of the heating panel and the location of the heating panel termination box and cold leads should always be predetermined by the location of the system control / junction box.

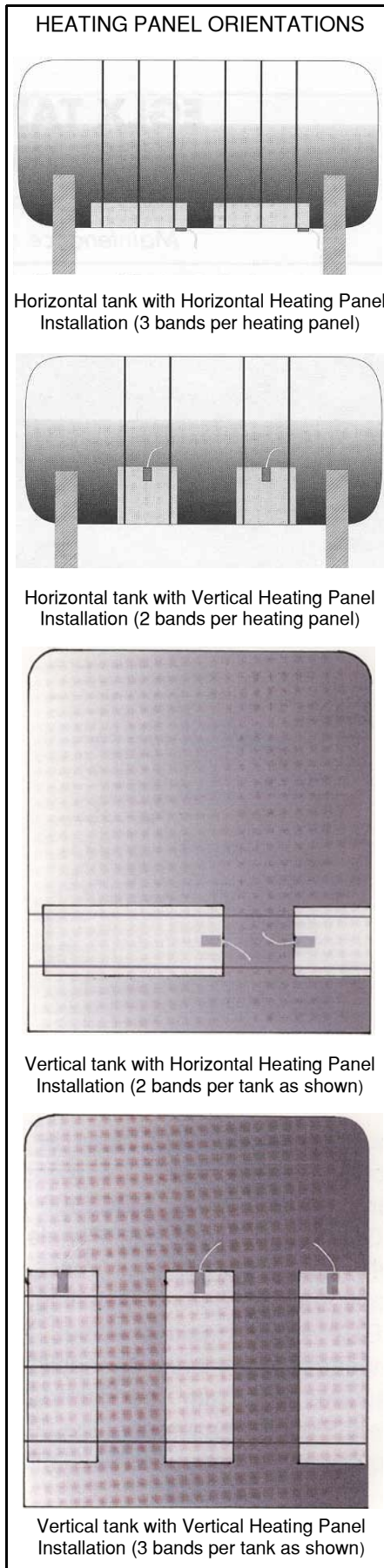
When using type "CL" heating panels, the position and orientation of each heater must be made such that the heater cold leads can be run around the tank surface to the control / junction box. Standard cold lead lengths on the "CL" panel are 10 feet. Custom length cold leads can be ordered if required.

When the "PC" type panel is being used heating panel and termination box orientation is determined by where the installer wants the elbow fitting and cold lead to exit the thermal insulation.

The effectiveness of the heating system is enhanced by an even distribution of heating panels around the tank's circumference. EGLX Tank Heating Panels should be installed with equal spacing between each heater. Mark the location of each heating panel on the tank surface prior to installation.

TOOLS AND EQUIPMENT

- 3/4" wide metal bands, banding tool and retention clips. Use Stainless Steel bands on all tanks greater than 8 ft. dia.
- Type IAAT3 adhesive backed aluminum sealing tape (consult HTD)
- Pliers
- A piece of strong rope, cord or strapping that is long enough to wrap around the circumference of the tank.



STEP 1

Determine the location of the Control / Junction Box on the tank surface.

Mark the location of each heating panel on the tank surface, relative to the Control / Junction Box location. When using "CL" type panels, heating panel locations must allow for the cold leads to run across the tank surface to the Control / Junction Box.

Run a length of strong rope, cord or strapping around the circumference of the tank and tie or clamp the ends together to form a tight band. (**Fig 1**). Horizontal heating panel installations may require two such bands.

STEP 2

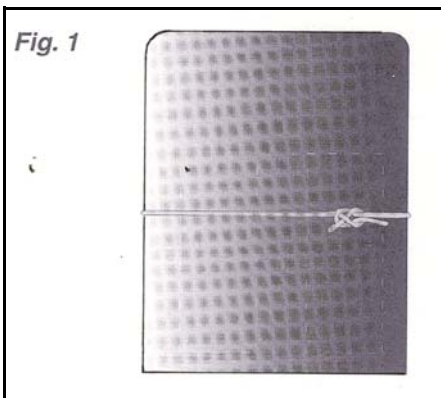
Slide the EGLX Tank Heating Panel between the band and the tank at each premarked location. (**Fig 2**). All EGLX Tank Heating Panels should be provisionally located during this Step and the installer may adjust the distance between panels to gain optimum spacing. Each heating panel must have unobstructed and direct contact with the tank surface. Heating panels cannot be installed over tank fittings, nozzels, tank outlets, flanges etc. One EGLX Tank Heating Panel may be installed slightly higher than the other heating panels in the system. (see *Dual Sensor Installations* and **Fig 10**)

STEP 3

Return to each EGLX Tank Heating Panel, adjust the position to the exact location desired and apply two 30" long strips of IAAT3 sealing tape as shown in **Fig 3**. When all panels are taped into position, the rope, cord or strapping can be removed.

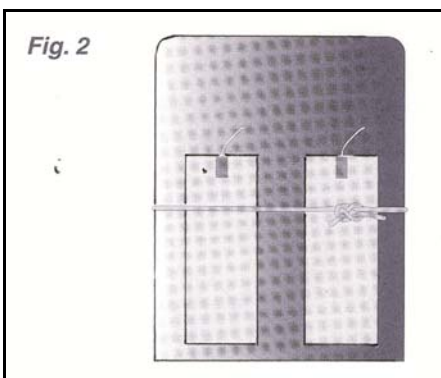
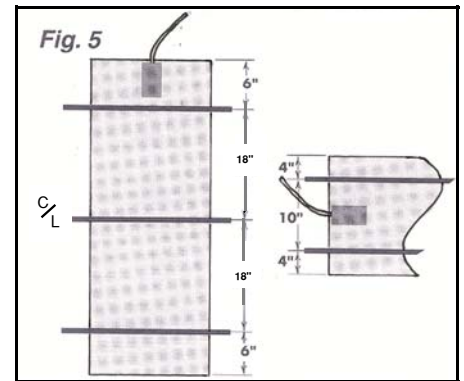
STEP 4

Using strips of IAAT3 sealing tape, seal the edges of each EGLX Tank Heating Panel as shown in **Fig 4**. This step will prevent thermal insulation and debris from migrating between the heating panel and tank surface. Thermal insulation or debris between the heating panel and tank may lead to unsafe operating conditions and overheating. **This is a critical and essential step on all installations that will involve the use of any type of thermal insulation that is sprayed or foamed into position.**



STEP 5

Run the steel bands around the tank and over the back of the EGLX Tank Heating Panels, as shown in **Fig 5**. Tighten the bands and use a retention clip on each band to provide a secure, permanent attachment of the heating panels to the tank surface. Vertically installed heating panels require a minimum of three bands and horizontally installed heating panels require at least two bands (**Fig 5**).

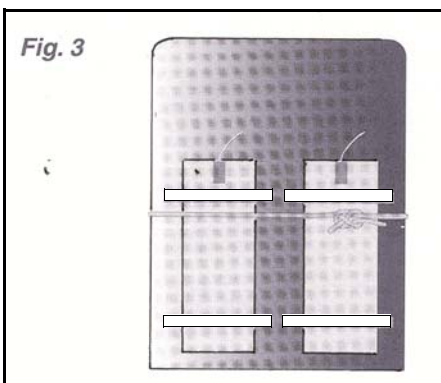


STEP 6

Use an Ohm Meter to check the resistance of each heating panel. The readings taken should be within $\pm 10\%$ of the values shown in **Fig 6**. These values should be recorded in the Maintenance Log Record (supplied with the EGLX Maintenance and Operation Guide). Use a 500 vdc Megger to measure the Insulation Resistance (IR) value of each heating panel. Readings in excess of $20M\Omega$ are acceptable. Any heating panel with an unacceptable resistance or IR reading should be removed and replaced.

Fig. 6

Nominal Resistance Values		
	EGLX 500	EGLX400
120 V	29 Ω	36 Ω
240 V	115 Ω	144 Ω

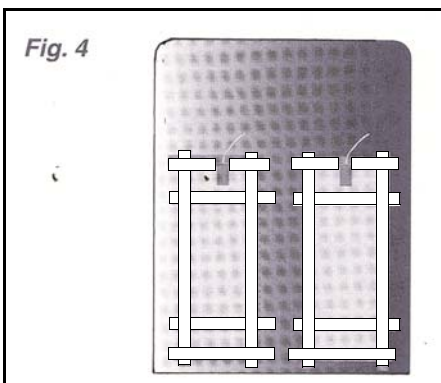
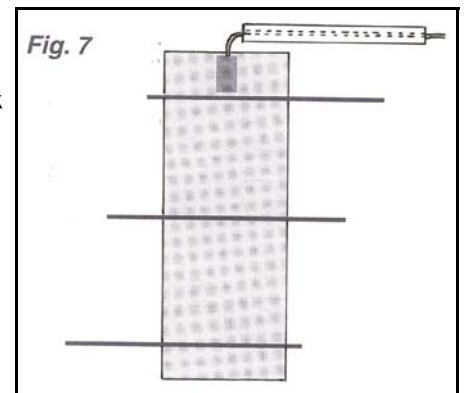


STEP 7

For EGLX type "CL" heating panels in unclassified areas the cold lead cable, as supplied, may be run across the tank surface and routed directly into the Control / Junction box.

In hazardous area locations, the cold lead cable should be run in flexible conduit in all areas where the cable is on the outside of the thermal insulation.

Cold lead cables should be taped to the tank surface using IAAT3 sealing tape as shown in **Fig 7**.



STEP 8

The EGLX type "PC" heating panel is fitted with a 90° elbow that routes a short length of cold lead cable safely through the tank insulation (**Fig 8**). This design allows the installer to hook up the heating panels with conventional electrical wiring and conduit around the outside of the tank insulation to the Control / Junction Box. Interconnecting wiring and conduit should meet the requirements of the NEC for the type of installation being undertaken.

