What we are trying to provide for you is a way of achieving a 100% success rate in the area of kiln control. The basis for success lays in building a good foundation for the electrical component placement. Always use a vented wall between your components and any warm kiln wall as shown in figure 04. A vented wall is made by offsetting a piece of sheet metal an inch or so from the kiln wall. Leave the space on the bottom and top open so there will be a natural draft of cool air being drawn through the space when things warm up. This system eliminates about 95% of all the problems you might encounter in the overheating department.

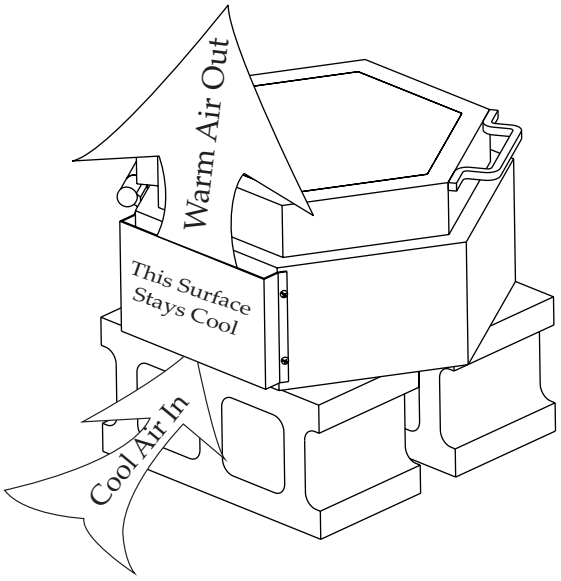

Fig. 04 This is a vented wall, a piece of sheet metal set off from a hot kiln wall. This natural cooling system provides a safe place to build your controlling system and place your electrical components.

Because how and where to locate components is such an important issue it will be useful to follow this assembly to completion. In the sequential set of images below, figures 05-1 to 05-4, we go from making a simple vented wall to making a real components box fitted out with the marinite connection board, mercury relay, romex connectors, a socket, and main "kill" switch. These components are then enclosed in a screened box. Lastly the controller box is hung on the side furthest from the heat, plugged into the socket and this baby is ready to start automatically controlling the heat.

1.

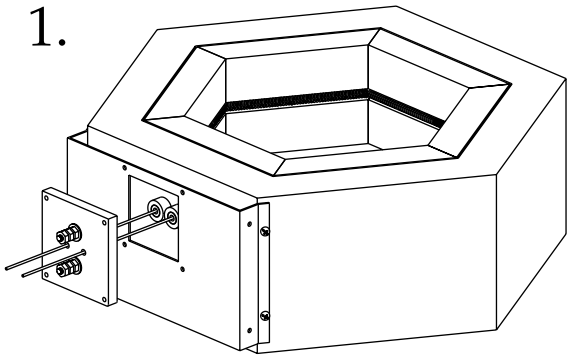

Fig. 05-1 Cut a hole in the vertical vent wall for the marinite board and slide board over the element leads.

2.

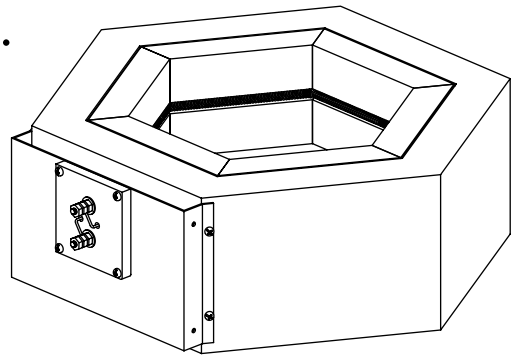

Fig. 05-2 After bolting the marinite board in place wrap the element leads around the connector bolts.

3.

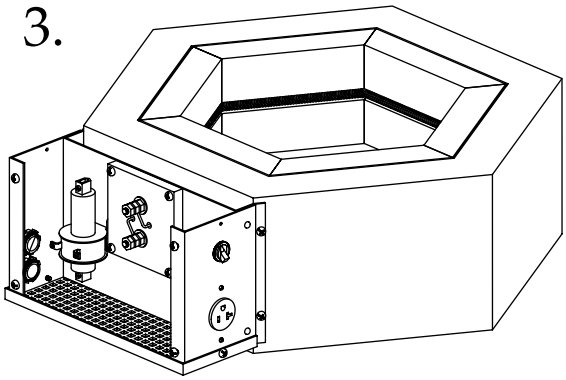

Fig. 05-3 Mount parts required within the component box.

4.

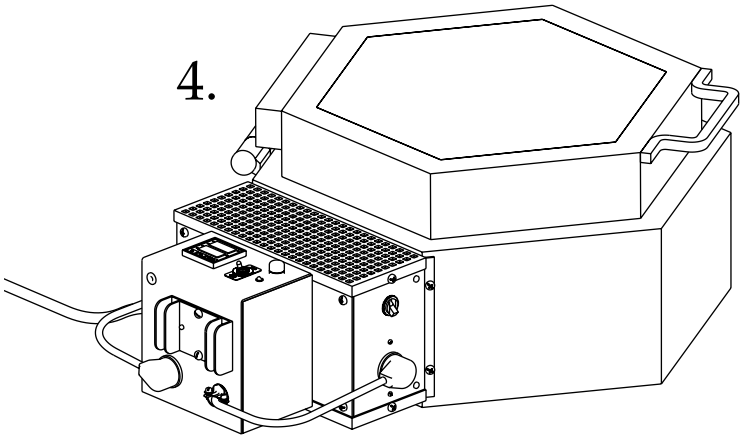

Fig. 05-4 The controller box is attached to the component box and is the furthest from the heat of the kiln.