

Showing how Endura-Form panels can be used in flat panel assemblies for heating and cooling large volumes of materials and can be used below ground. Multiple assemblies can be used. In the image shown here, three panel sections are used to heat a large tank of water. A glycol solution is used for heating.

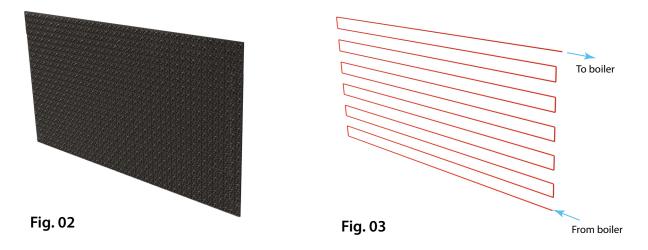


Figure 02 shows a layer of panels. The size here is 16' x 32' though assemblies of any size can easily be built. In actuality, the panel sections would be assembled on the flat and can be assembled on-site or off. **Figure 03** shows the heating grid by itself.



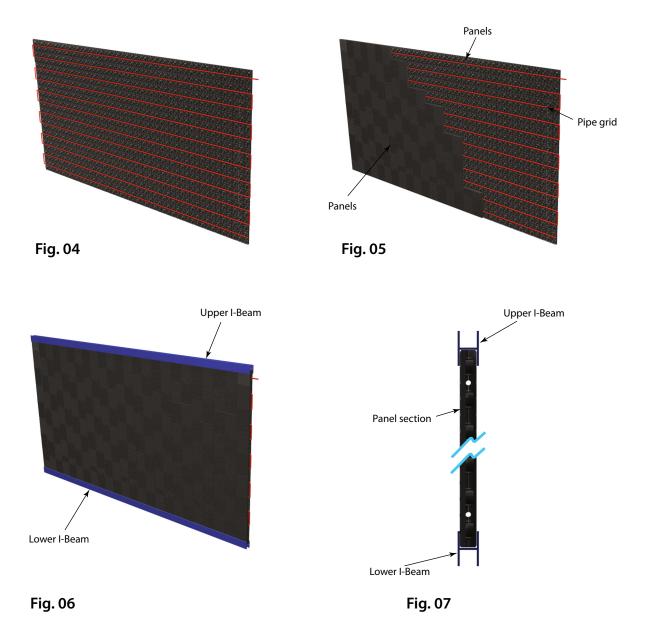


Figure 04 shows the heating grid in relation to the first layer of panels. **Figure 05** shows the second layer of panels partially in place thus securely sandwiching the piping in between. **Figure 06** shows the upper and lower I-beams in place. The I-beams serve to add extra rigidity to the panel sections and make handling easier. **Figure 07** shows an end view of how the I-beams fit to the panels.



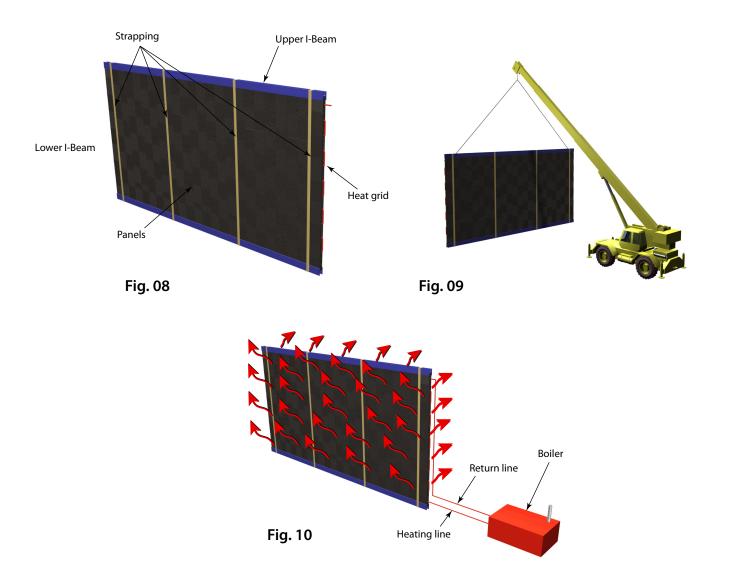


Figure 08 Shows a completed panel section with the addition of strapping to keep the I-Beams securely in place. **Figure 09** Shows the ease of handling for the completed heating units. **Figure 10** shows the general way a single panel unit could be connected to a boiler.



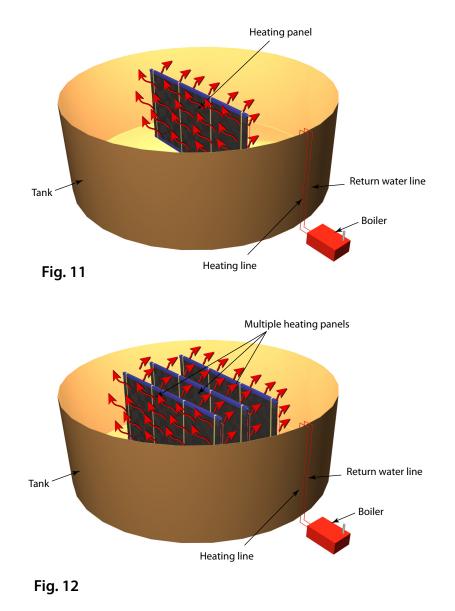


Figure 11 shows one possible configuration to heat a tank of liquid. Here a single heating panel assembly is used. **Figure 12** shows how multiple heating panel assemblies can easily be added to increase heating or cooling capacity. The multiple units can be connected to the boiler by a distribution manifold or multiple boilers could be used.