

Field Bending of Cellular-Core PVC Conduit

Use of a heat box is highly recommended to achieve the best results, as this will provide even heat and prevent any damage to the conduit. This recommendation is consistent with the NEC, where the following section would be pertinent:

352.24 Bends – How Made. Bends shall be so made that the conduit will not be damaged and the internal diameter of the conduit will not be effectively reduced. Field bends shall be made only with identified (recognizable as suitable for the specific purpose, function, use, environment, application, etc.) bending equipment.

If another method is used such as a torch (or any other source of concentrated heat), the recommended temperature for bending Cor-Tek cellular core Schedule 40 conduit is 200° - 250° F as shown below, based on experimental data.

For torch heating, the following steps are critical:

- Move the heat source along the longitudinal axis of the conduit and rotate the conduit (clockwise or counter clockwise) to distribute the heat as evenly as possible
- Heat should not be applied directly to one spot for an extended period of time
- Use an infrared thermometer to monitor the conduit surface temperature

Discoloration, burning, smoking and blistering will occur when heated incorrectly. Overheating of Cor-Tek cellular core conduit to temperatures approaching 300° F will produce sagging, and temperatures above 320° F will result in damage to the product.

The above is offered as guidance only, and assessment of the bending method to be used and installed finished-goods quality would be the sole responsibility of the contractor, engineer, or project owner, as applicable.

