

GENERAL

Heat shrink end seals form a water tight seal between the insulation jacket and service pipe. Heating the heat shrink end seal causes the adhesive to soften and the heat shrink end seal to shrink compressing the adhesive and forming a seal between the heat shrink end seal and insulation jacket and service pipe.

Proper installation of heat shrink end seals is critical to maintaining the insulation dry and providing a long life to the piping system.

When heat shrink end seals require field installation, the recommendations herein should be followed.

When cold or wet weather conditions are present, tenting and / or heating may be required to enable the proper installation of the heat shrink end seals. Refer to the Installation Manual Supplement for Cold / Wet Weather Conditions.

Refer to the appropriate PERMA-PIPE product Installation Manual for complete installation recommendations. This Installation Manual Supplement addresses the installation of heat shrink end seals only.

INSTALLATION

Heat shrink end seals should be installed in accordance with the manufacturer's recommendations. PERMA-PIPE uses four different types of heat shrink end seals depending on the diameter of the insulation jacket and service pipe. Installation recommendations from the manufactures of each of these three types of heat shrink end seals are included with this Installation Manual Supplement. The four types of heat shrink end seals are;

- Canusa PLX
- Canusa CSS
- Raychem IPEC
- Raychem DHEC

Check the manufacture and type of heat shrink end seal you will be installing and use the correct installation recommendation for that heat shrink end seal. Contact PERMA-PIPE if the heat shrink end seal is not one of the above.

HEAT SHRINK END SEAL

-HEAT SHRINKING TECHNIQUE

Before starting heat shrink end seal installation, become familiar with the following technique for shrinking a heat shrink end seal;

- Wear heat resistant gloves whenever working with the propane torch.
- The propane torch flame should be kept at least 6 inches away from the heat shrink end seal and at an angle to the surface. Holding the propane torch at an angle allows the flame to bounce off the shrink sleeve and decreases the local intensity of the heat. If the flame is held too close to the surface, the heat shrink end seal may burn and may tear around the burned areas or the service pipe or insulation jacket may be damaged.

CAUTION: When installing heat shrink end seals onto plastic (PVC, HDPE, FRP, etc.) service pipes and/or insulation jackets, be careful not to burn or char the plastic. Repair or replace any damage.

- Use your body as a shield to protect the flame from the wind. Keep the propane torch at an angle to the sleeve and pointed in the direction the wind is blowing to maintain a fairly even flame. **Do Not** increase the size of the flame, this could overheat and burn the heat shrink ends seal.
- Keep the propane torch in constant motion. **Do Not** burn the surface.

FINAL INSPECTION

After installation, visually inspect the heat shrink end seal to verify it has been properly installed and is completely sealed onto the insulation jacket and service pipe.

