

## **FUSION STATEMENT**

### **Plastics Pipe Institute Joining PE Pipe Using Heat Fusion Technology**

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In addition to the material advantages of High Density (HDPE) Polyethylene Pipe (flexibility, corrosion resistance, light weight, etc.) the most compelling reason to choose HDPE pipe is that it provides a leak-free joint that is as strong as the pipe itself and can be connected (heat fused) in a matter of minutes.

#### **1. Heat fusion joining is RELIABLE.**

Fusion joining of PE pipe has been used for over 40 years in the distribution systems of natural gas utilities in North America and has a remarkable safety record. In Europe, where PE pipe is often the predominant water pipe, it has been used since the 1960's. After the 1994 San Francisco earthquake, authorities were astonished at how heat-fused HDPE joints withstood the stresses created by the tremors. The heat-fused joint is as strong as the pipe itself and is a pipe joining method that is absolutely leak-proof! The natural gas industry has used a simple visual verification method for over 40 years to inspect joints. This process, combined with normal hydrostatic testing, has yielded an extraordinary record for both safety and efficiency.

#### **2. Heat fusion joining, properly done, is SAFE and SIMPLE.**

Heat fusion of polyethylene pipe is just a matter of melting the ends of two piping components and pressing them together. The necessary equipment uses normal electrical sources, usually from a standard generator. The process involves cleaning the pipe ends, preparing the joining surfaces, heating with a temperature controlled apparatus, joining, and cooling the joint under pressure.

#### **3. Heat fusion joining of PE pipe is EASY TO LEARN.**

PPI has developed recommended fusion procedures that have been approved by member companies, and the process has a broad range of parameters to produce good joints as documented in PPI's publication TR-33 and in ASTM International's Standard Practice F2620. Inexperienced workers can be taught the basics in half an hour, and gain competence within a few hours. Equipment is widely available from distributors and contractors for sale or rental. Training is widely available from pipe manufacturers, distributors, and equipment manufacturers. Skilled general contractors specializing in construction and natural gas distribution systems are available nationwide. Visit the Plastics Pipe Institute website at [www.plasticpipe.org](http://www.plasticpipe.org) for a list of distributors.

A High Density Polyethylene Piping System – with heat-fused joints – is the answer to the long-term life of our distribution systems and the conservation of our precious natural resources.

**SAFE. SIMPLE. EASY TO LEARN. RELIABLE. See for yourself – ask your local PE pipe representative today for a heat-fusion demonstration!**