

Installation Standard For POLYETHYLENE (PE) FOR GAS YARD PIPING

IAPMO IS 12-2006

1.0 SCOPE

1.1 This standard shall govern the installation of polyethylene (PE) natural and liquified petroleum gas yard piping. Installation, material and inspection shall comply with the current edition of the Uniform Plumbing Code [UPC]TM published by the International Association of Plumbing and Mechanical Officials and shall also comply with this standard.

Note: The following sections of the Uniform Plumbing Code apply to PE gas piping:

218.0	Definition of PE
310.0	Workmanship
313.0	Protection of Piping, Materials, and Structures
314.0	Hangers and Supports
315.0	Trenching, Excavation, and Backfill
316.2.3	Plastic Pipe to Other Materials
Chapter 12	Fuel Piping
1204.3.2	Final Piping Inspection
1211.0	Gas Piping Installation
1211.1.7	Tracer Wire
1213.0	Liquified Petroleum Gas Facilities and Piping
Table 14-1	Materials:
Pipe and Tube:	
	PE3408
	PE2406
	ASTM D 2513
	Fittings:
	Copper Alloy ANSI B16.26
	PE3408
	PE2406
	ASTM D 2513
	Plastic Mechanical
	ASTM F 1924
	Metallic Mechanical
	ASTM F 1948

ABBREVIATIONS

ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
IAPMO	International Association of Plumbing and Mechanical Officials
UPC	Uniform Plumbing Code published by IAPMO

2.0 PRODUCT REQUIREMENTS

2.1 Minimum Standards

2.1.1 Materials. Pipe, tubing and fittings shall conform to the appropriate standards in Table 14-1 of the Uniform Plumbing Code. See note ahead of Chapter 2 of this standard. [UPC 301.1]

2.2 Pipe. PE pipe is plastic of 1/2 inch (12.7 mm) or larger size. One-half inch (12.7 mm) pipe shall be SDR 9. Pipe sizes less than 3 inches (76 mm) shall be SDR 11. Pipes 3 inches (76 mm) and larger shall be SDR 11.5 or lower*.

2.13 Tubing. PE tubing is plastic and shall be limited to the following:

Tubing Size		
Inches	(mm)	SDR*
1/4	(6.4)	6
3/8	(9.5)	8
1/2	(12.7)	7

*Note: The lower the SDR number, the thicker the wall.

2.1.4 Fittings. Heat fusion fittings shall be PE 2406, PE 3408, or other listed materials. Mechanical connectors for PE pipe and tubing and for transition fittings shall be approved compression type couplings or other special listed joints.

2.2 Markings

2.2.1 Pipe and Tubing. Pipe and tubing markings shall be in accordance with ASTM D2513. [UPC 301.1.2]

2.2.2 Fittings. Fitting markings shall be in accordance with ASTM D1924, ASTM D1948, ASTM D2513 or ASME B16.26. [UPC 301.1.2]

2.2.3 Position of Markings. The identifying markings on pipe, tubing and fittings shall be visible for inspection without moving materials.

2.3 Protection of Piping

2.3.1 Storage. Unprotected pipe should not be stored in direct sunlight. The pipe shall be stored in a way to protect it from mechanical damage (slitting, puncturing, etc.). Exposure to sunlight during normal construction periods is not harmful.