

POLYCOR HDPE HDPE PIPING SYSTEM



POLYCOR HDPE

THERMACOR'S POLYCOR HDPE is a factory-fabricated, preinsulated piping system for below or above ground distribution of hot and chill water. The system is designed with a High Density Polyethylene (HDPE) carrier pipe, closed cell polyurethane foam insulation, and an HDPE jacket.

Carrier Pipe

- High Density Polyethylene (HDPE)
- SDR 32.5 SDR 7.3

Polyurethane Insulation

- Density
- "K" Factor
- Compressive Strength
- Closed Cell Content

Jacket

High Density Polyethylene (HDPE)



≤ 0.15 @ 75°F

≥ 90% @ 75°F

> 30 psi



POLYCOR HDPE

HDPE PIPING SYSTEM

SPECIFICATION GUIDE *

GENERAL

All underground and above ground piping materials transporting chill water and hot water shall be **POLY-COR HDPE** as manufactured by **THERMACOR PRO-CESS**, L.P. All preinsulated pipe, fittings, insulating materials, and technical support shall be provided by the Preinsulated Piping System manufacturer.

SERVICE PIPE

The carrier pipe shall be high density polyethylene (HDPE), conforming to ASTM D-3350. Pipe and fittings are manufactured from extra high molecular weight polyethylene compound and fabricated to Standard Dimensional Ratio (SDR) wall thickness in standard IPS sizes. Available pressure ratings range from 50 psi (SDR-32.5) to 255 psi (SDR-7.3) at 73°F, with operating temperatures from -50°F and lower, to +140°F by applying an appropriate design factor.

INSULATION

Insulation of the service pipe shall be rigid polyurethane foam with a minimum 2.0 lbs/ft³ density, 90% minimum closed cell content, and a "K" factor not higher than .15 at 75°F per ASTM C518. The polyurethane foam shall be CFC-free. The polyurethane foam shall completely fill the annular space between the service pipe and jacket, and shall be bonded to both. Insulation shall be provided to the minimum insulation thickness specified, within manufacturing tolerances.

JACKET

The outer protective jacket shall be High Density Polyethylene (HDPE). The HDPE jacket shall be seamless and pressure-tested for watertight integrity. PVC, FRP, HDUP or tape materials are not allowed. Jacket shall be provided to the minimum thickness specified below:

Jacket OD	Minimum Jacket Thickness
OD <u>≤</u> 14"	0.140"
14" < OD ≤ 20"	0.165"
20" < OD ≤ 26"	0.225"
OD > 26"	0.275"

FITTINGS

Carrier pipe fittings of the same material and pressure rating shall be heat fusion butt-welded to adjacent pipe sections. Fittings that are butt fusion welded in the field are not insulated. End seals at uninsulated fittings shall be the same as specified for the straight runs of pipe. If fittings are factory manufactured, fittings are preinsulated using factory PE fitting covers welded to the jacket.

FIELD JOINTS

Service pipe shall be hydrostatically tested as per the Engineer's specification with a factory recommendation of 1.5 times the specified pressure of the system. Straight joint sections shall be insulated using urethane foam to the thickness specified, jacketed with split sleeve, and sealed with a heat shrink sleeve. All joint closures and insulation shall occur at straight sections of pipe. All insulation and jacketing materials shall be furnished by THERMACOR.

INSTALLATION

Installation of the piping system shall be in accordance with the manufacturer's instructions. Factory trained field technicians shall be provided for critical periods of installation, unloading, field joint instruction and testing.

* For alternate specifications, please contact THERMACOR.

THERMACOR PROCESS, L.P.

1670 Hicks Field Road East Fort Worth, Texas 76179-5248 P.O. Box 79670

Phone (817) 847-7300 Fax (817) 847-7222 www.thermacor.com

Your Authorized THERMACOR Representative Is:

The information contained in this document is subject to change without notice. THERMACOR PROCESS, L.P. believes the information contained herein to be reliable, but makes no representations as to its accuracy or completeness.

THERMACOR PROCESS, L.P. sole and exclusive warranty is as stated in the Standard Terms and Conditions of Sale for these products. In no event will THERMACOR PROCESS, L.P. be liable for any direct, indirect, or consequential damage.