

OIL CREEK PLASTICS

HEATFLEX PIPE



Oil Creek Plastics, Inc. is proud to offer the first PE-RT radiant heating pipe made in the USA.

Tested, Tried, and True

PE-RT pipes have been used in European markets for more than twenty years with exceptional results. Oil Creek Plastics HEATFLEX pipe is made with DOWLEX™ 2344 Polyethylene Copolymer Resin, which offers the traditional benefits of polyethylene resin along with excellent high temperature resistance. The result is the next generation of radiant heating pipe.

Oil Creek Plastics HEATFLEX pipe, made with DOWLEX™ 2344 Polyethylene Copolymer Resin, delivers excellent long-term hydrostatic design strength, without the need for cross-linking. This increases flexibility, resulting in potential installation savings. Also, Oil Creek Plastics HEATFLEX pipe has excellent surface smoothness for improved flow properties.

Oil Creek Plastics uses state of the art machinery and equipment to produce a premium five-layer PE-RT pipe. The five-layer pipe consists of a layer of ethylene vinyl alcohol polymer (EVOH) sandwiched between two layers of DOWLEX™ 2344 Polyethylene Copolymer Resin and two layers of adhesive. This structure provides the outstanding long-term hydrostatic design strength demanded by hydronic heating applications. The outer layer of DOWLEX™ 2344 Polyethylene Copolymer Resin also provides a protective shield for the oxygen barrier. This ensures that the radiant heating system has the best protection available against oxidation due to oxygen permeation of the piping system.

Oil Creek Plastics five-layer HEATFLEX pipe is the ideal choice for domestic and industrial radiant heating systems in North America.

PE-RT PE-2708 Material Specifications

Physical Properties	Unit	Test Method	Values
Density	lb/ft ³	ASTM D-792	58.745
Thermal Conductivity at 140°F	BTU (h.ft ² F/in)	DIN 52612-1	2.7734
Thermal Expansion Coefficient °F (68°F to 158°F)		DIN 5375	0.0000394
Oxygen Diffusion Rate with O ₂ Barrier at 100°F	Mg/in ² x24h	DIN 4726	Better than 0.0002
Oxygen Diffusion Rate with O ₂ Barrier at 180°F	Mg/in ² x24h	DIN 4726	Better than 0.00004
Mechanical Properties	Unit	Test Method	Values
Tensile Yield	Psi	ISO 527-2	2,988
Ultimate Tensile	Psi	ISO 527-2	5,221
Percentage of Elongation	%	ISO 527-2	760
Modulus of Elasticity	Psi	ISO 178	138,511

About HEATFLEX

Applications Pipes for non-potable hot and cold water systems, including:

- radiant floor heating systems
- radiator connections
- baseboard hot water connections
- heating/cooling applications
- snow melt applications

Pipe Dimensions and Tolerances

All Oil Creek Plastics HEATFLEX PE-RT pipe is manufactured and tested according to the guidelines set forth in ASTM F2623.

Joining HEATFLEX pipe may be joined using insert fittings and clamps certified to ASTM F-877, F-1807, or F-2159. HEATFLEX pipe may also be joined using heat fusion technique which eliminates the need for fittings.

Continuous Pipe Dimension Production Testing

- In-line ultrasonic monitoring of ID, OD, and wall thickness.
- regular manual testing during the pipe extrusion and cooling procedure.



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HEATFLEX PIPE PE-2708

RADIANT FLOOR HEAT
MEETS ASTM F2623

Specifications

Tube	O.D.	W.T.	I.D.	Weight In lb/ft.	Water Content In Gal/ft.
	Nominal Dimension in inches				
5/16"	0.430	0.064	0.302	0.032	0.0037
3/8"	0.500	0.070	0.360	0.042	0.0053
1/2"	0.625	0.070	0.485	0.054	0.0096
5/8"	0.750	0.083	0.584	0.076	0.0139
3/4"	0.875	0.097	0.681	0.103	0.0189
1"	1.125	0.125	0.875	0.167	0.0312

Material

DOWLEX™ 2344 Polyethylene Copolymer Resin is an ethylene/octane-1 copolymer produced in the proprietary solution process of The Dow Chemical Company. It has a unique molecular structure with a controlled side chain distribution, which provides a combination of excellent stress crack resistance and Long Term Hydrostatic Strength properties.

Maximum Operating Temperature and Pressure

200 PSI at 73°F 100 PSI at 180°F

Oxygen Diffusion Standard DIN 4726

Chemical Tubing Resistance Chart

DIN 8075 Standard

Recycling Unlike PEX pipe and PVC pipe, Oil Creek Plastics' HEATFLEX pipe can be recycled, making it the most earth-friendly of all your radiant heat pipe choices. All production rejects and conversion waste at Oil Creek Plastics, Inc. is recycled rather than disposed of in landfills.

Warranty Lifetime Limited Warranty covering manufacturer related tubing defects. Pre-paid insurance policy covering repairs due to consequential damage, single occurrence, related to defects in materials or workmanship.

For more information on Oil Creek Plastics five-layer HEATFLEX pipe, visit www.oilcreek.com or call 1-800-537-3661.

For more information on DOWLEX™ 2344 Polyethylene Copolymer Resin, visit www.dowplastics.com or call 1-800-441-4369.

Benefits of using five-layer PE-RT radiant heating pipe from Oil Creek Plastics:

- **Protect your radiant heating system.** The five-layer design of HEATFLEX pipe ensures that the EVOH oxygen barrier is protected and remains intact, safeguarding your radiant heating system.
- **Save time and money.** PE-RT pipe is highly flexible even at low temperatures, which improves installation efficiencies.
- **Reduce pressure loss and deposit formation.** Oil Creek Plastics PE-RT pipe has excellent surface smoothness.
- **Customize your system.** Oil Creek Plastics PE-RT pipe can be printed with your company's name for tailor-made radiant heating system installations.
- **Recycle.** Unlike any other heating pipe, HEATFLEX is fully recyclable.
- **Trust it.** As with all Oil Creek Plastics products, HEATFLEX comes with a limited lifetime warranty, including a per foot labor replacement cost. To view the complete warranty visit www.oilcreek.com.

HEATFLEX Five-Layer Design

PE-RT

Adhesive-Polymer

EVOH

Adhesive-Polymer

PE-RT

NSF® rfh
Radiant Floor Heat



Product is certified to the Uniform Mechanical Code

™ Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow