

About Ductile Iron Pipe

We are occasionally asked what AEROFLEX® closed-cell elastomeric pipe sizes fit ductile iron pipe.

Ductile iron pipe differs from standard carbon steel pipe in that it is less susceptible to cracking or breaking under stress. Unlike carbon steel, ductile iron contains graphite which provides it with flexibility when subjected to stress. Ductile iron is also corrosion-resistant when in contact with corrosive soils.

Common specifications and applications for ductile pipe are for municipal water mains, wastewater mains, fire protection mains, and industrial pressure systems where pipe failures can be catastrophic. Applications are usually direct buried below grade in a trench.

The outside diameters of ductile pipe differ from carbon steel (IPS) OD's. Below is a typical ductile pipe OD schedule for the "standard pressure class".

Pressure Class

Table 2. Nominal Thickness for Standard Pressure Classes of Ductile-Iron Pipe

SIZE Inches	OUTSIDE DIAMETER Inches	PRESSURE CLASS		NOMINAL THICKNESS
		150	200	
3	3.96	—	—	
4	4.80	—	—	
6	6.90	—	—	
8	9.05	—	—	
10	11.10	—	—	
12	13.20	—	—	
14	15.30	—	—	
16	17.40	—	—	
18	19.50	—	—	
20	21.60	—	—	
24	25.80	—	0.33	
30	32.00	0.34	0.38	
36	38.30	0.38	0.42	
42	44.50	0.41	0.47	
48	50.80	0.46	0.52	
54	57.56	0.51	0.58	
60	61.61	0.54	0.61	
64	65.67	0.56	0.64	

While the 3" and 4" ductile pipe sizes can be insulated with our 4-1/8" and 5-1/8" ID tubes, the insulation may fit slightly loose on the pipe. This is not a concern from a technical standpoint provided that all seams are completely sealed with an AEROFLEX adhesive to create a water vapor seal. Ductile pipe sizes from 6" through 64" should be insulated with AEROFLEX EPDM™ Rolls.

The [AEROFLEX Installation Guide](#) details the proper installation techniques for a successful application.

If our insulation will be direct buried, please reference [TB01 Best Practices for Direct Burial of AEROFLEX EPDM™ Insulation](#).

Source:

Ductile Iron Pipe Research Association (DIPRA) - <https://dipra.org>