



# Certificate of Compliance

This certificate is issued for the following:

**Polyethylene (PE) Fittings for Underground Fire Protection Service**  
(see attached tables)

**Prepared for:**

ISCO Industries LLC  
100 Witherspoon St.  
Louisville, KY 40202  
USA

**Manufactured at:**

ISCO Industries  
10711 Freeport Court  
Louisville, KY 40258  
USA

ISCO Industries  
5610 Almeda-Genoa Rd  
Houston, TX 77048  
USA

ISCO Industries  
701 Mid Atlantic Pkwy  
Martinsburg, WV 25404  
USA

FM Approvals Class: 1613 (February 2017)

Approval Identification: PR459638      Date Approved: May 20, 2021

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://www.approvalguide.com)

Said Approval is subject to satisfactory field performance, continuing Surveillance Audits, and strict conformity to the constructions as shown in the Approval Guide, an online resource of FM Approvals.

A handwritten signature in black ink that reads 'D. B. Fuller'.

David B. Fuller  
VP, Manager of Fire Protection  
FM Approvals  
1151 Boston-Providence Turnpike  
Norwood, MA 02062 USA



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# Certificate of Compliance

## ISCO Industries, Polyethylene Pipe and Fittings

<i>Product Designation</i>	<i>Nominal Pipe Size, in.</i>	<i>Pressure Rating, psi (kPa)</i>	<i>Remarks</i>
Class 200 Tees Molded	2, 3, 4, 6	200 (1380)	a, c
Class 250 Tees Molded	2, 3, 4, 6	250 (1725)	a, c
Class 335 Tees Molded	2, 3, 4, 6	335 (2310)	a, c
Class 200 Tees Molded	4, 6	200 (1380)	a, d
Class 250 Tees Molded	4, 6	250 (1725)	a, d
Class 335 Tees Molded	4, 6	335 (2310)	a, d
Class 200, 90° Elbows Molded	2, 3, 4, 6	200 (1380)	a, c
Class 250, 90° Elbows Molded	2, 3, 4, 6	250 (1725)	a, c
Class 335, 90° Elbows Molded	2, 3, 4, 6	335 (2310)	a, c
Class 200, 90° Elbows Molded	4, 6	200 (1380)	a, d
Class 250, 90° Elbows Molded	4, 6	250 (1725)	a, d
Class 335, 90° Elbows Molded	4, 6	335 (2310)	a, d
Class 200, 45° Elbows Molded	3, 4, 6	200 (1380)	a, c
Class 250, 45° Elbows Molded	3, 4, 6	250 (1725)	a, c
Class 335, 45° Elbows Molded	2, 3, 4, 6	335 (2310)	a, c
Class 200, 45° Elbows Molded	4, 6	200 (1380)	a, d
Class 250, 45° Elbows Molded	4, 6	250 (1725)	a, d



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<b>Product Designation</b>	<b>Nominal Pipe Size, in.</b>	<b>Pressure Rating, psi (kPa)</b>	<b>Remarks</b>
Class 335, 45° Elbows Molded	4, 6	335 (2310)	a, d
Class 200, End Caps Molded	2, 3, 4, 6, 8	200 (1380)	a, c
Class 250, End Caps Molded	2, 3, 4, 6, 8	250 (1725)	a, c
Class 335, End Caps Molded	2, 3, 4, 6	335 (2310)	a, c
Class 335, End Caps Fabricated	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200, Sweep Elbows 1-90°	4, 6, 8, 10, 12, 14	200 (1380)	a, c
Class 250, Sweep Elbows 1-90°	4, 6, 8, 10, 12, 14	250 (1725)	a, c
Class 200 Concentric Reducer	4 DIPS x 3 IPS	200 (1380)	a, c, d
Class 250 Concentric Reducer	4 DIPS x 3 IPS	250 (1725)	a, c, d
Class 200 Concentric Reducer	3 x 2, 4 x 3, 6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	200 (1380)	a, c
Class 200 Forged Concentric Reducer	12 x 8, 12 x 10, 14 x 12, 16 x 12, 16 x 14, 18 x 12, 18 x 14, 18 x 16, 20 x 18, 24 x 18, 24 x 20	200 (1380)	a, c
Class 250 Concentric Reducer	3 x 2, 4 x 3, 6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	250 (1725)	a, c
Class 250 Forged Concentric Reducer	12 x 8, 12 x 10, 14 x 12, 16 x 12, 16 x 14, 18 x 12, 18 x 14, 18 x 16, 20 x 18, 24 x 18, 24 x 20	250 (1725)	a, c
Class 335 Molded Concentric Reducer	3 x 2, 4 x 2, 4 x 3, 6 x 4, 8 x 6	335 (2310)	a, c
Class 335 Fabricated Concentric Reducer	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	335 (2310)	a, c



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<b>Product Designation</b>	<b>Nominal Pipe Size, in.</b>	<b>Pressure Rating, psi (kPa)</b>	<b>Remarks</b>
Class 335 Fabricated Concentric Reducer (Shortened Version)	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18, 22 x 20, 24 x 22	335 (2310)	a, c
Class 200 Concentric Reducer	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14 18 x 16, 20 x 18, 24 x 20	200 (1380)	a, d
Class 250 Concentric Reducer	6 x 4, 8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14 18 x 16, 20 x 18, 24 x 20	250 (1725)	a, d
Class 335 Molded Concentric Reducer	6 x 4, 8 x 6	335 (2310)	a, d
Class 335 Fabricated Concentric Reducer	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18	335 (2310)	a, d
Class 335 Fabricated Concentric Reducer (Shortened Version)	10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16, 20 x 18	335 (2310)	a, d
Class 200 Flange Adapter, Molded	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, b, c
Class 250 Flange Adapter, Molded	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, b, c
Class 335 Flange Adapter, Molded	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, b, c
Class 335 Fabricated Beveled Flange Adapter	6, 8, 10	335 (2310)	a, b, c, d
Class 200 Flange Adapter, Molded	4, 6, 8, 10, 12, 14 16, 18, 20, 24	200 (1380)	a, b, d
Class 250 Flange Adapter, Molded	4, 6, 8, 10, 12, 14 16, 18, 20, 24	250 (1725)	a, b, d
Class 335 Flange Adapter, Molded	4, 6, 8, 10, 12, 14 16, 18, 20, 24	335 (2310)	a, b, d
Class 200 Ductile Iron Backup Rings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	b, c
Class 250 Ductile Iron Backup Rings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	b, c
Class 335 Ductile Iron Backup Rings ( Domestic)	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	b, c



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<b>Product Designation</b>	<b>Nominal Pipe Size, in.</b>	<b>Pressure Rating, psi (kPa)</b>	<b>Remarks</b>
Class 335 Ductile Iron Backup Rings (Import)	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	b, c
Class 335 Stainless Steel Backup Rings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	b, c
Class 200 Ductile Iron Backup Rings	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	b, d
Class 250 Ductile Iron Backup Rings	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	b, d
Class 335 Ductile Iron Backup Rings ( Domestic)	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	b, d
Class 335 Ductile Iron Backup Rings (Import)	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	b, d
Class 335 Stainless Steel Backup Rings	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	b, d
Class 200 Branch Saddle Reducing Tee	3 x 2, 4 x 2, 4 x 3, 6 x 2, 6 x 3, 6 x 4, 8 x 2, 8 x 3, 8 x 4, 8 x 6, 10 x 2, 10 x 3, 10 x 4, 10 x 6, 10 x 8, 12 x 2, 12 x 3, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 2, 14 x 3, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 2, 16 x 3, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 2, 18 x 3, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 16, 22 x 6, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 16	200 (1380)	a, c
Class 250 Branch Saddle Reducing Tee	3 x 2, 4 x 2, 4 x 3, 6 x 2, 6 x 3, 6 x 4, 8 x 2, 8 x 3, 8 x 4, 8 x 6, 10 x 2, 10 x 3, 10 x 4, 10 x 6, 10 x 8, 12 x 2, 12 x 3, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 2, 14 x 3, 14 x 4, 14 x 6, 14 x 8, 14 x 10,	250 (1725)	a, c





# Certificate of Compliance

<i>Product Designation</i>	<i>Nominal Pipe Size, in.</i>	<i>Pressure Rating, psi (kPa)</i>	<i>Remarks</i>
	16 x 2, 16 x 3, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 2, 18 x 3, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 20 x 16, 22 x 6, 24 x 6, 24 x 8, 24 x 10, 24 x 12, 24 x 16		
Class 335 Branch Saddle Reducing Tee	8 x 6, 10 x 6, 10 x 8, 12 x 6, 12 x 8, 12 x 10, 14 x 6, 14 x 8, 14 x 10, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	335 (2310)	a, c, d
Class 200 Branch Saddle Reducing Tee	6 x 4, 8 x 4, 8 x 6, 10 x 4, 10 x 6, 10 x 8, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	200 (1380)	a, d
Class 250 Branch Saddle Reducing Tee	6 x 4, 8 x 4, 8 x 6, 10 x 4, 10 x 6, 10 x 8, 12 x 4, 12 x 6, 12 x 8, 12 x 10, 14 x 4, 14 x 6, 14 x 8, 14 x 10, 16 x 4, 16 x 6, 16 x 8, 16 x 10, 16 x 12, 18 x 4, 18 x 6, 18 x 8, 18 x 10, 18 x 12, 20 x 6, 20 x 8, 20 x 10, 20 x 12, 24 x 6, 24 x 8, 24 x 10, 24 x 12	250 (1725)	a, d
Class 200 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, c
Class 335 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c



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# Certificate of Compliance

<b>Product Designation</b>	<b>Nominal Pipe Size, in.</b>	<b>Pressure Rating, psi (kPa)</b>	<b>Remarks</b>
Class 200 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d
Class 250 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 335 Fabricated Tee	8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	a, d
Class 200 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d
Class 250 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 335 Fabricated ≤90° Elbow (5 segments)	8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	a, d
Class 200 Fabricated ≤90° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Fabricated ≤90° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 Fabricated ≤90° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200 Fabricated ≤90° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d
Class 250 Fabricated ≤90° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 200 Fabricated ≤45° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Fabricated ≤45° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 Fabricated ≤45° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200 Fabricated ≤45° Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d





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<b>Product Designation</b>	<b>Nominal Pipe Size, in.</b>	<b>Pressure Rating, psi (kPa)</b>	<b>Remarks</b>
Class 250 Fabricated $\leq 45^\circ$ Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 335 Fabricated $\leq 45^\circ$ Elbow (3 segments)	8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	a, d
Class 200 Fabricated $\leq 45^\circ$ Elbow (2 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Fabricated $\leq 45^\circ$ Elbow (2 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 Fabricated $\leq 45^\circ$ Elbow (2 segments)	8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200 Fabricated $\leq 45^\circ$ Elbow (2 segments)	8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d
Class 250 Fabricated $\leq 45^\circ$ Elbow (2 segments)	8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 200 Mechanical Joint Adapter	2, 3, 4, 6, 8, 10, 12, 14, 16, 18	200 (1380)	a, b, c
Class 250 Mechanical Joint Adapter	2, 3, 4, 6, 8, 10, 12, 14, 16, 18	250 (1725)	a, b, c
Class 200 Mechanical Joint Adapter	4, 6, 8, 10, 12, 14, 16, 18	200 (1380)	a, b, d
Class 250 Mechanical Joint Adapter	4, 6, 8, 10, 12, 14, 16, 18	250 (1725)	a, b, d
Class 200 Wall Anchor	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 Wall Anchor	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 Wall Anchor	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c
Class 200 Wall Anchor	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	200 (1380)	a, d
Class 250 Wall Anchor	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	250 (1725)	a, d
Class 335 Wall Anchor	4, 6, 8, 10, 12, 14, 16, 18, 20, 24	335 (2310)	a, d
Class 335 Stub End	2, 3, 4, 6, 8, 10, 12, 14	335 (2310)	a, c



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# Certificate of Compliance

<i>Product Designation</i>	<i>Nominal Pipe Size, in.</i>	<i>Pressure Rating, psi (kPa)</i>	<i>Remarks</i>
Class 335 Stub End	4, 6, 8, 10, 12, 14	335 (2310)	a, d
Class 250 Reducing Flanges	8 x 6, 10 x 8, 12 x 10, 14 x 12, 16 x 14, 18 x 16	250 (1725)	a, b, c, d
Class 335 Reducing Flanges	6 x 4, 8 x 6, 10 x 8, 12 x 10 14 x 12, 16 x 14, 18 x 16, 20 x 18 22 x 20, 24 x 20, 24 x 22, 26 x 24	335 (2310)	a, b, c
Class 335 Reducing Flanges	6 x 4, 8 x 6, 10 x 8, 12 x 10 14 x 12, 16 x 14, 18 x 16, 20 x 18 24 x 20, 26 x 24	335 (2310)	a, b, d
Class 200 HDPE x Steel transition fittings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	200 (1380)	a, c
Class 250 HDPE x Steel transition fittings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	250 (1725)	a, c
Class 335 HDPE x Steel transition fittings	2, 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24	335 (2310)	a, c

**Remarks:**

- a. Pipe and fittings may be directly connected together by the butt fusion process. Manufacturer fusion instructions must be strictly followed for a proper fusion joint. The pipe and fittings may also be joined to other FM Approved steel flanged pipe and fittings by using the listed flange adapters.
- b. Pipe and adapter, with ductile iron gland ring attached, are directly connected by the butt fusion process. Manufacturer fusion instructions must be strictly followed for a proper fusion joint. The polyethylene fitting, gland ring, gasket, and T-Head bolts are provided in a kit for field installation, which allows attachment to a compatible flange with ductile iron pipe.
- c. FM Approved in Iron Pipe Sized Diameter Basis.
- d. FM Approved in Ductile Iron Pipe Size Diameter Basis.



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