

1. Scope

This specification covers the requirements for rigid steel conduit, large sweep bends, and couplings, zinc-coated by the hot-dip galvanizing or metallizing process.

2. Material ID Numbers

This material standard applies to the items listed in the following three tables:

Material ID No.	Nominal or Trade Size (in)	Nominal Inside Dia. (in)	Outside Dia. (in)	Nominal Wall Thickness (in)	Length Without Coupling (ft.-in.)	Min. Weight of 10 Unit Length with Couplings Attached (lb)
250267	1	1.063	1.315	0.126	9'11"	153.0
250308	2	2.083	2.375	0.146	9'11"	332.0
1001499	2-1/2	2.489	2.875	0.193	9'10-1/2"	527.0
250324	3	3.090	3.5	0.205	9'10-1/2"	682.6
250340	4	4.050	4.5	0.225	9'10-1/4"	972.3

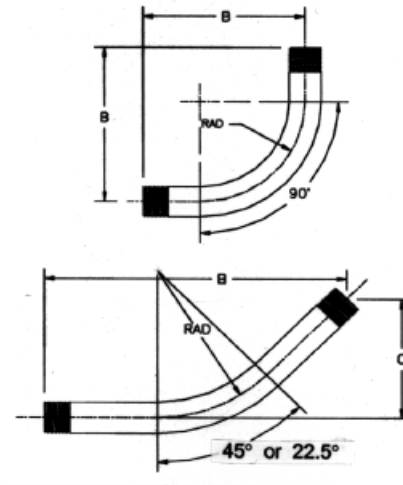
Rigid Steel Conduit - Dimensions and Weight

Material ID No.	Nominal or Trade Size (in)	Degrees of Curvature (deg)	Radius of Bend to Center of Conduit (in)	Min. Straight Length at Each End (in)	B (in)	C (in)
1001959	6	45	48	12	54-3/8	22-9/16
1001499	6	90	60	12	72	---

Rigid Steel Bends (Large Sweep) - Dimensions and Weight

Material ID No.	Nominal or Trade Size (in)	Outside Dia. (in)	Min. Length (in)
---	1	1.525	1-31/32
---	2	2.650	2-1/8
---	3	3.870	2-5/16
---	4	4.875	3-33/64
---	6	7.200	4-1/4

Rigid Steel Couplings - Dimensions



3. Reference Standards

Except as modified herein, the items covered by this specification shall meet the applicable requirements of the latest revisions of the following standards:

ANSI C80.1 Rigid Steel Conduit - Zinc Coated (GRC)

ASTM A-90 Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings

UL6 Standard for Safety for Rigid Metal Conduit

4. Dimensions

All items covered by this specification shall have the applicable dimensions and tolerances specified in ANSI C80.1 except as otherwise modified herein.

5. Zinc Coatings

5.1 The minimum average thickness of the zinc coating shall be in 1.72 mils, equivalent to 1-ounce per square foot of surface area. The minimum thickness of any point on the surface shall be 1.38 mils, equivalent to 0.8-ounce per square foot of surface area.

5.2 The minimum average thickness may be determined by magnetic thickness gauge or by the acid stripping method of ASTM A90. The minimum thickness at any point on the surface shall be determined only by magnetic thickness gauge.

6. Threading and Chamfering of Conduit and Bends

6.1 Each length of conduit and bend shall be threaded on both ends, and each end shall be chamfered or otherwise treated to remove burrs and sharp edges. Threads shall comply with the requirements of ANSI C80.1, Table 1.

6.2 If threads are cut after the zinc coating has been applied, the threads shall be treated with a protective coating to prevent corrosion before installation. This coating shall not impair electrical continuity through couplings or fittings after installation.

7. Couplings

7.1 Each length of finished conduit shall be provided with a coupling attached to one end.

7.2 Bends shall be provided without couplings.

7.3 The exterior surface of couplings shall be protected by means of a zinc coating. The interior surface shall be treated to inhibit corrosion from taking place prior to installation.

7.4 Couplings shall be made so that all threads on the conduit will be covered when the coupling is pulled tight on standard conduit threads.

7.5 Both ends of couplings shall be chamfered to prevent damage to the starting thread.

7.6 The outside diameter, length, pitch diameter, and chamfer diameter of couplings shall be as indicated in ANSI C80.1, Table 3.

7.7 Couplings shall be straight tapped.

8. Identification

Each length of conduit and bend shall be identified with the manufacturer's name or trademark and the words, "rigid steel conduit."

9. Inspection and Test

The materials purchased under this specification are subject to inspection and test upon receipt in accordance with the referenced standards.

10. Rejection and Replacement

10.1 Failure to meet the requirements of this specification shall, at the discretion of the District, constitute grounds for rejection of the lot as received in whole or in part.

10.2 The supplier shall, at his own expense, replace any rejected conduit, bends or couplings with an equal amount complying with this specification.

11. Packaging

11.1 The threaded ends of bends and conduits (end without a coupling) shall be covered with plastic thread protectors.

11.2 Conduit shall be packaged and delivered in a manner suitable for handling with fork lifting equipment.

11.3 Bends shall be shipped on nonreturnable wooden pallets suitable for handling with fork lifting equipment.