

RR-F-191/3E

Unless otherwise specified (see 6.1), color coating material shall be at the option of the manufacturer. Shall be zinc-coated in accordance with 3.1 prior to application of color coating. Unless otherwise specified (see 6.1) , color coating material shall be at the option of the manufacturer.

- 3.3 **Dimensions and Tolerances**-Tolerances for weight per foot requirements are minus 5 percent with no limit on plus. The tolerance for the dimensions for posts is minus 2 percent and plus 5 percent.
- 3.4 **Description**
- 3.4.1 **Class 1 steel pipe grades A & B**- Pipe conforming to ASTM F 1083 (schedule 40 standard weight) meets or exceeds the requirements for grades A & B. Steel pipe other than ASTM F 1083 (schedule 40 standard weight) shall meet the outside dimensions and minimum wall thickness required and shall have minimum yield strength of 50,000 psi. Grade A pipe shall be hot dipped zinc coated inside and with an average weight of not less than 1.8 ounces of zinc square foot of coated surface area. Unless otherwise specified (see 6.1), grade B pipe shall be hot-dipped zinc-coated with an average weight of not less than 0.9 ounces of zinc per square foot of exterior surface and shall be over coated with a clear acrylic or polyester. The internal surface of grade B pipe shall have a protective coating of hot-dipped zinc or zinc rich paint with a minimum thickness of three mils.
- 3.4.2 **Class 2-aluminum pipe**-Class 2 aluminum pipe material shall conform to ASTM B 429, alloy 6063, temper T6.
- 3.4.3** **CLASS 3-FORMED STEEL SECTION.-FORMED STEEL SECTION SHALL BE FORMED FROM SHEET STEEL CONFORMING TO ASTM A570, GRADE 35 FOR FS1 AND FS4, AND ASTM A 570, GRADE 45 FOR FS2 AND FS3.**
- 3.4.4 **Class 4-steel H-section**-Steel H sections shall be produced from steel conforming to ASTM A 572, grade 45.
- 3.4.5 **Class 5-aluminum H-sections**-Aluminum H-sections material shall conform ASTM B 221, alloy 6063, temper 6.
- 3.4.6. **Class 6-steel square section**- Steel square sections shall be produced from steel having a minimum yield strength of 40,000 pounds per sq. in.
- 3.4.7 **Class 7-aluminum square section**-Aluminum square section material shall conform to ASTM B 221, alloy 6063, temper T6.
- 3.5 **Posts**-Unless otherwise specified (see 6.1), posts shall conform to tables I thru VII. Length of posts shall be compatible with the specified fence height or shall be as specified (see 6.1). The term " Terminal posts" shall apply to end, corner, and pull posts. The term "Line posts" is defined as the vertical posts installed between terminal posts. The term "Gate posts" shall apply to the post supporting the weight of the gate.

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Size Outside diameter multiplied by (x) minimum wall thickness in inches:

SP1	1.660 O.D.	x	.111
SP2	1.900 O.D.	x	.120
SP3	2.375 O.D.	x	.130
SP4	2.875 O.D.	x	.160
SP5	4.000 O.D.	x	.226
SP6	6.625 O.D.	x	.280
SP7	8.625 O.D.	X	.322

Class 2 Aluminum Pipe

Size- outside diameter in inches x weight per foot of length (lb/ft):

AP1	1.625 O.D	x	0.786 lb/ft
AP2	1.869 O.D	x	0.940 lb/ft
AP3	2.351 O.D	x	1.264 lb/ft
AP4	2.846 O.D	x	2.004 lb/ft
AP5	3.960 O.D	x	3.151 lb/ft
AP6	6.559 O.D	x	6.564 lb/ft
AP7	8.625 O.D	x	9.878 lb/ft

Class 3

Formed steel sections

Size- Outside dimensions in inches x weight per foot of length (lb/ft)

FS1	1.625	by	1.250	x	1.35 lb/ft
FS2	1.875	by	1.625	x	2.40 lb/ft
FS3	2.250	by	1.700	x	2.78 lb/ft
FS4	3.500	by	3.500	x	5.10 lb/ft

Class 4 Steel H sections

Size-Outside dimensions in inches x weight per foot of length

SH1	2.25 by 1.70 x 3.43 lb/ft
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Class 5 Aluminum H sections

Size- Outside dimensions in inches x weight per foot of length

AH1	1.875	by	1.565	x	0.91 lb/ft
AH2	2.250	by	2.000	x	1.22 lb/ft

This is an excerpt from the Federal Specifications

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Table I-Posts of class 1 steel pipe, grades A & B

<u>Post Type</u>	<u>Fabric Heights</u>	<u>Size</u>
Terminal	Up to 6 ft	SP3
	Over 6 ft	SP4
Line	Up to 6 ft	SP2
	Up to 8 ft	SP3
	Over 8 ft	SP4
	<u>Gate Leaf Widths</u>	
Gate	Up to 6 ft	SP4
	Up to 13ft	SP5
	Up to 18 ft	SP6
	Up to 23 ft	SP7

Table II- Posts of class 2 aluminum pipe

<u>Post Type</u>	<u>Fabric Heights</u>	<u>Size</u>
Terminal	Up to 6 ft	AP3
	Over 6 ft	
Line	Up to 6 ft	AP2
	Up to 8 ft	AP3
	Over 8 ft	
	<u>Gate Leaf Widths</u>	
Gate	Up to 6 ft	AP5
	Up to 13ft	AP6
	Up to 18 ft	AP7
	Up to 23 ft	

Table III-Posts of class 3 formed steel sections

<u>Post Type</u>	<u>Fabric Heights</u>	<u>Size</u>
Line	Up to 8 ft	FS2
	Over 8 ft	FS3
Terminal	All Heights	FS4

Table IV posts of class 4 steel H-section

<u>Post Type</u>	<u>Fabric Heights</u>	<u>Size</u>
Line	All heights	SH1