Designation: A 74 – 98

Endorsed by the
Cast Iron Soil Pipe Institute
American Association State
Highway and Transportation Officials Standard
AASHTO No.: M 263-77

AMERICAN SOCIETY FOR TESTING AND MATERIALS
100 Barr Harbor Dr., West Conshohocken, PA 19428
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Standard Specification for Cast Iron Soil Pipe and Fittings[1]

This standard is issued under the fixed designation A 74; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers cast iron soil pipe and fittings for use in gravity flow applications. It establishes standards covering material, principal dimensions, and dimensional tolerances for extra heavy and service cast iron soil pipe and fittings. These pipe and fittings are not intended for pressure applications as the selection of the proper size for drain, waste, vent, and storm drain systems allows free air space for gravity drainage.

1.2 This specification covers pipe and fittings of the following patterns and, when so designated, shall apply to any other patterns that conform with the requirements given herein.

1.2.1 *Pipe*:

	Tables
Extra heavy, 5 ft (1.5 m), 10 ft (3.0 m) lengths	1, 2
Service, 5 ft, 10 ft	1, 2
Outside dimensions (for detailing)	X1.1

1.2.2 *Fittings*:

	Tables
¼ bends; long ¼ bends	3, 4
¼ bends, long low-hub	5
¼ bends, low heel; high heel	6, 7
¼ bends, short sweep; long sweep	8
¼ bends, reducing long sweep	9
⅕ bends	10
⅙ bends	10
⅛ bends; long ⅛ bends	11
1⁄16 bends	11
Y branches	12, 13
Y branches, cleanout on main	14
Y branches, cleanout on branch	15
Y branches, inverted	16
Y branches, combination ⅛ bends, single	17
Y branches, combination ⅛ bends, double	17
Y branches, combination ⅛ bends, cleanout	18
Y branches, upright	19
Sanitary T branches, single	20
Sanitary T branches, double	20
Sanitary T branches, cleanout	21
Tapped sanitary T branches, single	22
Tapped sanitary T branches, double	22
T branches, single and double	23
Tapped T branches, single	24
Tapped T branches, double	24
Horizontal twin tapped T	25
T branches, cleanout	26
Vent branches, single	27
Offsets, ⅛ bend	28
Double hubs	29
Long double hubs	29
Reducers	30
Increasers	31, 32
S traps	33
P traps	34, 35
Deep seal P traps	36
Running traps	37
Screw plugs (brass)	38
Blind plugs	39
Iron-body ferrules	40
Side inlets	Fig. 3
Closet bends	41
Tapping bosses	42

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

2. Referenced Documents

2.1 *ASTM Standards:*

A 48 Specification for Gray Iron Castings[2]

A 438 Test Method for Transverse Testing of Gray Cast Iron[2]

A 644 Terminology Relating to Iron Castings[2]

E 8 Test Methods for Tension Testing of Metallic Materials[3]

E 23 Test Methods for Notched Bar Impact Testing of Metallic Materials[3]

2.2 *Federal Standard:*

Fed. Std. No. 123 Marking for Shipment (Civil Agencies)[4]

2.3 *Military Standard:*

MIL-STD-129 Marking for Shipment and Storage[4]

2.4 *ANSI Standard:*

B1.20.1 Pipe Threads[5]

[1] This specification is under the jurisdiction of ASTM Committee A-4 on Iron Castings and is the direct responsibility of Subcommittee A04.12 on Pipes and Tubes.

Current edition approved Jan. 10, 1998. Published September 1998. Originally published as A 74 – 17 T. Last previous edition A 74 – 96.

[2] *Annual Book of ASTM Standards*, Vol 01.02.

[3] *Annual Book of ASTM Standards*, Vol 03.01.

[4] Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

[5] Available from American National Standards Institute, 11 West 42nd Street, 13th Floor, New York, NY 10036.

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