

Material Specification – 23 for BRASS AND BRONZE GOODS

1. GENERAL

Brass and bronze goods not in contact with potable water shall be manufactured in accordance with AWWA C800 using copper alloy UNS No. C83600, commercially known as 85-5-5, in accordance with ASTM B 62 with the following additional requirements or exceptions.

Components in contact with potable water shall be manufactured in accordance with AWWA C800 using lead-free copper alloy UNS No. C89520 or copper alloy UNS No. C89833 in accordance with ASTM B 584 and shall be certified to comply with NSF/ANSI 61, NSF/ANSI 61 Annex G, and NSF/ANSI 372.

Each manufacturer shall submit samples to Denver Water for testing. If the manufacturer is approved, the sample shall be kept by Denver Water and used as the standard by which future purchases shall be compared.

2. TAPPING SADDLES

Double bronze strapped tapping saddles for use with DI and AC pipe shall be as listed below. Outlet threads shall be AWWA Standard taper threads.

Manufacturer	Model	Size (Inches)
A.Y. McDonald	3825	4 to 12
Ford Meter Box	202B-xxx-xxx-NL	4 to 16
Mueller	BR2B	4 to 24

Bronze saddles for PVC pipe shall provide full support around the circumference of the pipe and have a bearing area of sufficient width along the axis of the pipe so that the pipe will not be distorted when the saddle is tightened. Bronze saddles shall be as listed below:

Manufacturer	Model	Size (Inches)
A.Y. McDonald	3805	4 to 12
Ford Meter Box	S90-xxx-NL	4 to 12
Mueller	H-13000 Series (C900)	4 to 12
	H-13400 Series (C900)	4 to 12
	S-13000 Series (C900)	4 to 8

3. METER YOKES (LINE SETTERS)

Meter yokes shall be copper flare by copper flare as listed below:

Manufacturer	Model	Copper Meter Setter Size (Inches)
A.Y. McDonald	737-3xxWXCCxx	3/4
	737-4xxWXCCxx	1
	721B612WWxx xx5	1 1/2, Bypass
	721-612WWxx xx0	1 1/2, No Bypass – IRR Meters
	721B712WWxx xx6	2, Bypass
	721-712WWxx xx0	2, No Bypass – IRR Meters
Ford Meter Box	V83-xxW-22-xx-NL	3/4
	V84-xxW-22-xx-NL	1
	VBB76-12B-xx-xx-NL	1 1/2, Bypass
	VBB76-12-xx-xx-NL	1 1/2, No Bypass – IRR Meters
	VBB77-12B-xx-xx-NL	2, Bypass
	VBB77-12-xx-xx-NL	2, No Bypass – IRR Meters
Mueller	B-2489N	3/4
	B-2489N	1
	B-2423N	1 1/2 and 2, Bypass
	B-2422-00N	1 1/2 and 2, No Bypass – IRR Meters

4. CORPORATION STOPS

Corporation stops shall be AWWA Standard taper thread by copper flare as listed below:

Manufacturer	Model	Size (Inches)
A.Y. McDonald	74701	3/4 to 2
Cambridge Brass	302NL Series	3/4 to 1
Ford Meter Box	FB-600-x-NL	3/4 to 2
Mueller	B25000N	3/4 to 2

5. CURB STOPS

Curb stops shall be copper flare by copper flare as listed below:

Manufacturer	Model	Size (Inches)
A.Y. McDonald	76100	3/4 to 2
Cambridge Brass	202NL-CxCx Series	3/4 to 2
Ford Meter Box	B22-xxx-NL	3/4 to 2
Mueller	B25204N	3/4 to 2

6. COUPLINGS

Couplings shall be as listed below:

Manufacturer	Type	Model	Size (Inches)
A.Y. McDonald	Mac-Pak Compression Fittings	74753-22	3/4 to 2
	T Compression Fittings	74753T	3/4 to 2
Ford Meter Box	Iron to Copper Pack Joint	C84-66-NL	1 1/2 x 1 1/2
		C84-77-NL	2 x 2
	Copper to Copper Pack Joint	C44-66-NL	1 1/2 x 1 1/2
		C44-77-NL	2 x 2
	Iron to Iron Pack Joint	C85-66-NL	1 1/2 x 1 1/2
		C85-77-NL	2 x 2
Brass to Brass Pack Joint (Iron to Iron)	C55-66-NL C55-77-NL	1 1/2 x 1 1/2 2 x 2	
Flared Adapter Coupling	C28-66-NL	1 1/2 x 1 1/2	
	C28-77-NL	2 x 2	
Flared Coupling Adapter Loc-Pak	CF35-66-NL	1 1/2 x 1 1/2	
	CF35-77-NL	2 x 2	

7. COMPRESSION FITTINGS

Compression fittings shall be as listed below:

Manufacturer	Model	Size (Inches)
A.Y. McDonald	74758-22	3/4 to 2 1/2

Mueller	H-15403N	3/4 to 2
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8. STOP AND WASTE VALVES

Stop and waste valves shall be as listed below:

Manufacturer	Model	Size (Inches)
Ford Meter Box	Z22-333SW-NL	3/4
	Z22-444SW-NL	2
Mueller	H-15214N	3/4 to 2

9. GATE VALVES

Gate valves smaller than 3-inches, that are used with copper pipe shall be all bronze with non-rising stems and solid wedge disc rated at 125 psi WSP and 200 psi WOG.

10. CERTIFICATIONS

The manufacturer shall furnish a sworn statement that the inspection and all specified tests have been completed and that results comply with the requirements of these Standards. A copy of the Certification shall be provided to Denver Water.

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Brass and Bronze Goods*