WaterMaster® Fire Hydrant Specifications for

Click here to enter name of municipality

1. Manufacturers shall provide sufficient documentation to assure that their dry-barrel fire hydrant will successfully meet the latest revisions of AWWA Standard C502. Fire hydrants shall be rated for Choose working pressure.

2. Hydrants shall have a minimum 5 1/4" valve opening.

3. Hydrants shall be of a true compression type, opening against the pressure and closing with the pressure. Composition of the main valve shall be a molded rubber having a durometer hardness of 91 +/- 5. The rubber seat valve shall fit a 5 1/4" opening and not be less than 1" thick.

4. Fire hydrants shall be **three-way** in design, having Choose a pumper nozzle size pumper nozzle, and Choose a hose nozzle hose nozzle. Nozzles shall “thread” counterclockwise into hydrant barrel utilizing O-ring pressure seals. A suitable nozzle lock shall be in place to prevent inadvertent nozzle removal. Wedging devices and/or ductile iron retainer rings to secure nozzles shall not be allowed.

5. The lubrication system shall be sealed from the waterway and any external contaminants by use of O-ring pressure seals. Anti-friction washers shall be in place above and below the thrust collar of the operating nut to further minimize operating torque. The grease reservoir shall be factory filled with an FDA approved food grade lubricant. Oil shall not be used.

6. The operating nut shall be a one-piece design, manufactured of ASTM B-584 bronze. It shall be Choose a size/shape in size/shape. The operating nut shall be affixed to the bonnet by means of an ASTM B-584 bronze hold down nut. The hold down nut shall be threaded into the bonnet in such a manner as to prevent accidental disengagement during the opening cycle of the hydrant. A resilient weather seal shall be incorporated with the hold down nut, for the purpose of protecting the operating mechanism from the elements.

7. The direction of opening shall be Choose direction. An arrow shall be cast on the top of the hydrant to indicate the opening direction.

8. The hydrant bonnet shall be attached to the upper barrel by no more than six bolts and nuts. All nuts and bolts below grade shall be 304 stainless steel.

9. The hydrant will have Choose depth depth of bury, unless otherwise noted.

10. Hydrants shall be of the "Traffic Model" design, provided with a safety coupling and flange design that will permit a full 360 degree facing of the nozzles. O-rings shall be the Quad-Ring® type and be installed in a groove on the bottom of the joint so that taping or gluing to the upper standpipe or extension is not required. The safety coupling shall be a one piece design. Multiple parts and cast iron not allowed.

11. The operating stem shall be a two-piece design, not less than 1 1/4" diameter (excluding threaded or machined areas). Threads shall be Acme type with no 60 degree V threads allowed. Travel stops shall be in the inlet/shoe and are not allowed in the bonnet area. Screws, pins, bolts or fasteners used in conjunction with the stem coupling shall be stainless steel.

12. The inside diameter of the hydrant barrels shall not be less than 7 1/4" and the hydrant shall be painted Choose item color.

13. Heavy duty drip shutoff (top plate) and valve seat shall be high strength manganese bronze. Valve seat shall be installed in a bronze seat ring. Drain shall be Choose drain, bronze lined and 3/8" diameter minimum. They shall operate without the use of springs, toggles, tubes, levers or other intricate synchronizing mechanisms. Lower valve plate shall be a one piece ductile iron casting and not require a separate cap nut. Drains shall be open and flushed during the first four turns of opening the hydrant before positively closing while operating the hydrant.

14. The shoe connection shall be Choose shoe connection or as specified. The inlet/shoe shall be fusion bonded epoxy coated per ANSI/AWWA C550 and with an NSF 61 approved coating having ample blocking pads for sturdy setting. Six stainless steel bolts and nuts are required to fasten the shoe to the lower barrel. The shoe/inlet shall be directly connected to the standpipe flange. Designs using a sandwich piece in between the standpipe and shoe/inlet shall not be allowed.

15. The top bonnet, upper standpipe, lower standpipe and shoe shall be ductile iron to ensure strength throughout the exterior of the hydrant. Gray Iron hydrant body parts will not be allowed.

Municipality reserves the right to accept only those materials which are in full compliance with these specifications and deemed most advantageous to its interests.

Upon request, supplier shall furnish flow data indicating friction loss in psi at a flow of 1,000 gpm from the pumper nozzle. Such friction loss shall not exceed 2.5 psi. Also, the municipality may request the manufacturing "point of origin" for any/or all hydrant parts. All cast components shall be made in the USA.

Failure to comply with any of these above requirements is sufficient cause for rejection of proposed hydrants.

Hydrant shall be EJ WaterMaster® Choose an item.

Click here to enter part number

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