Section E: Fire Hydrants	Effective Date: 01-01-2025
E 1 Fire Hydrants	



E 1 - FIRE HYDRANTS:

Effective Date: 01-01-2025

SPECIFICATION/ MATERIAL:

All fire hydrants shall fully comply with all provisions of American Water Works Association C-502 (Dry Barrel Fire Hydrants) latest revision thereof, Factory Mutual Approved (FM) and Underwriter Laboratory Listed (UL) as noted by (UL/FM) (AWWA, U.L. and F.M. COLOPHONS MUST BE CAST IN UPPER BARREL OF EACH HYDRANT) and meet the following specific provisions:

- It will be compression type, opening counterclockwise, against the pressure and closing with the pressure.
- Drain outlets shall be provided.
- Hydrant bonnet assembly shall be provided with a
 grease or oil reservoir and lubrication system that
 automatically circulates lubricant to all operating stem
 threads and bearing surfaces each time the hydrant
 is operated. The system shall be completely sealed
 from the waterway and from external contaminants.
- The grease or oil used for lubrication shall be nontoxic and safe for use in potable water systems.
- All hydrants will be of the traffic "breakaway" type with safety stem coupling and breakable flange that permits full 360° rotation of the nozzle section. Cut down bolts are not acceptable for this requirement.
- Main valve opening of the hydrant will not be less than 5-1/4" and open against the pressure.
- Hydrant nozzles will consist of two (2) hose nozzles and one (1) pumper nozzle. Primary outlet shall be a 5" Storz quick connection. Sided outlets shall have American National standard fire hose coupling threads.
- All nozzles shall be field replaceable with non corrosive locking devices.
- · Caulked nozzles are prohibited.
- · Nozzle chains shall be provided.
- An all bronze hydrant valve seat ring shall thread directly into an all bronze ring and shall be located between the lower hydrant barrel and base securely retained in this position.
- Upper valve plate must be B62 bronze, or epoxy coated, if used.





E 1 - FIRE HYDRANTS (CONTINUED):

SPECIFICATION/MATERIAL (CONT.)

- The hydrant will be designed with an anti-friction bearing, so located that it will reduce the torque required to operate the hydrant.
- All internal stem pins or bolts and nuts shall be stainless steel.
- The safety stem coupling shall be of either Cast Iron, Bronze, or Stainless Steel.
- The operating stem, safety stem coupling and main valve assembly shall be capable of withstanding an application of 200 ft-lbs. of torque against either the full open or closed position with no damage to components. Downward stem travel shall be limited by a travel stop location in the upper housing of the hydrant or a stop in the shoe assembly.
- Operating nut and nozzle cap wrench nuts shall conform to existing specifications for this utility.
- The opening between the operating nut and dome shall have a weather shield or seal.
- The ferrous waterway of the hydrant's shoe must be epoxy coated.
- The shoe assembly must be designed to allow all of the MJ gland tee bolts to be inserted from the shoe body side.
- Centerline of pumper connection shall be a minimum of eighteen-inches (18") above ground line.
- Ground line shall be three-inches (3") or less below break flange.
- Main rubber valve shall be EPDM (ethylene propylene) rubber.
- Affidavit of compliance to this specification shall be available upon request.
- 316 stainless steel fasteners.

BURY LENGTH:

 Fire hydrant length, also known as the bury length, shall be as shown of CFPUA Standard Details.

COLOR:

 Hydrant final color shall be red using a factory applied powder coating.

INLET SIZE AND TYPE:

• Inlet shall be six-inch (6") flanged connection.

ADDITIONAL REQUIREMENTS:

 Only factory authorized repair parts and extensions will be acceptable.

MANUFACTURER:

- AMERICAN AVK NOSTALGIC 2780 SERIES
- AMERICAN FLOW CONTROL B-84-B
- AMERICAN FLOW CONTROL WATEROUS PACER
- CLOW MEDALLION
- KENNEDY GUARDIAN K81-D
- MUELLER SUPER CENTURION A-423
- MUELLER MEDALLION WITH VERTICAL SHOE
- US PIPE METROPOLITAN M-94

RESTRICTIONS:

 Hydrant shoes are required for a main line bury depth greater than 5'. When neccesary the vertical shoe assembly shall be installed a minimum of 3'-6" and 4'-0".

