



Assured Flow Sales, INC.

Phone: 941/921-3435  
Fax: 941/953-9695  
P.O. Box 49633  
Sarasota, FL 34230

## **SPECIFICATION FOR FIRE HYDRANT CONNECTOR PIPE**

- A.)THE CONNECTOR PIPE SHALL BE COMPACT DUCTILE IRON, AWWA C153, ANSI A21.53, 350 PSI AND POSITIONED BETWEEN THE FIRE HYDRANT AND GATE VALVE.
- B.)THE CONNECTOR PIPE SHALL BE OF THE OFFSET DESIGN SO THAT THE FIRE HYDRANT CAN BE ADJUSTED TO ENSURE PLACEMENT AT PORPER GRADE. THE OFFSET SHALL BE \_\_\_\_ INCHES.
- C.)THE CONNECTOR PIPE SHALL HAVE AN ANCHORING FEATURE AT BOTH ENDS SO THAT WHEN USED WITH SPLIT GLANDS. A RESTRAINED JOINT IS PROVIDED.
- D.)THE CONNECTOR PIPE SHALL BE CEMENT LINED IN ACCORDANCE WITH AWWA C104, ANSI A21.4.
- E.)THE CONNECTOR PIPE SHALL BE GRADELOK AS MANUFACTURED BY ASSURED FLOW SALES, INC.



## **Assured Flow Sales, Inc.**

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Sarasota, FL 34230-6633

### **Gradelok      Features & Benefits**

1. ALL COMPACT DUCTILE IRON CONSTRUCTION (350 PSI).
  - A. **Strong** But **Lightweight** & Compact.
  - B. Provides A Connection Of Similar Metals From Main To Hydrant For **Higher Corrosion Resistance**.
  
2. ANCHORING FEATURE PROVIDED ON BOTH ENDS.
  - C. Provides A **Positive Restrained Joint**.
  - D. **Fits All Hydrants** With A 6" Mechanical Joint Shoe.
  - E. **Reduces** Overall Labor Costs.
  - F. Eliminates Costly & Time Consuming Thrust Blocking & Mechanical Restraining Devices.
  
3. TAR COATED OUTSIDE & CEMENT LINED INSIDE.
  - A. Provides Corrosion Protection.
  
4. OFFSET DESIGN WITH 6", 12" & 24" CENTER TO CENTER
  - A. **Allows** Up To A 48" **Adjustment** Anywhere In 360 Degrees.
  - B. **Reduces** Hydrant **Inventory**. STOCK ONE BURY DEPTH!!!!
  - C. **RAISE** Or **LOWER** Hydrant Elevation.
  - D. Also Provides Horizontal Adjustment.
  - E. Does Not Restrict Final Grade To 6" Increments.
  - F. **Eliminates** The Need For Most **Extensions Kits**.
  - G. Final Grade Setting On The Bury Line. Thus Maintaining The Required 18" Clearance Between The Groundline & Centerline Of The Nozzels.

## WHY THE GRADELOK IS BENEFICIAL TO A MUNICIPAL WATER SYSTEM

1. WHY IS IT IMPORTANT TO MAINTAIN AN 18" CLEARANCE BETWEEN THE GROUNDLINE AND THE CENTERLINE OF THE NOZZELS?
  - A. The Fire Department Wrenches Are Approximately **15"** and This Enables **Them To Spin The Caps Off Quickly** In Emergencies.
  - B. With The Centerline Of The Pumper Nozzle At **18"** Above Grade, **ONE** Fireman Can Easily Attach The Suction Hose By Holding The Hose Between His Knees And Threading The Coupling By Hand. If The Nozzle Is Too High Or Too Low It Would Require **Two** Men.
  - C. The **18"** distance Is The **Most Effective** To Enable The Traffic Feature To **Break Property** Upon Impact.
  - C. The **Traffic Flange** Is Always **Exposed** And Can Be **Easily Checked** For **Damage** And **Leakage** During Routine Maintenance.
  - E. If The **Traffic Flange** Is **Buried** Under The **Soil** The **Bolts** Can **Corrode** And Go Undetected Until the Time Of An Emergency.
  - F. If The **Traffic Flange** Is **Buried** Under **Concrete Or Asphalt** The Chances Of It **Breaking Correctly** Are **Greatly Reduced**.
  - G. If The **Traffic Flange** Is Set **Too High** It Is Very **Expensive To Correct** The Problem And **Very Unlikely** That The **Hydrant Will Break Correctly** Upon Traffic Impact.
  - H. **AESTHETICS**, Fire Hydrants Should Last Well Over 75 Years And They Are One Of The Few Parts Of A System That The Public Will See, So Why Not **Install Them Correctly The First Time**.

## WHY THE GRADELOK IS BENEFICIAL TO A MUNICIPAL WATER SYSTEM

2. WHY TRY TO **ELMINATE** THE USE OF FIRE HYDRANT **EXTENSION KITS**?
  - A. The Use Of Extension Kits Is Not Generally Planned And Therefore An **Expensive Oversight**.
  - B. A Very Large Percentage Of Extension Kits Are **Installed Incorrectly**. The Barrel Flanges And Stem Coupling That Come With The Hydrant Are Of The Traffic Model Design. **The Barrel Flanges And Stem Coupling That Come With The Extension Kit Are Not Of The Traffic Model Design**. Unfortunately The Instructions Rarely Make It To The Jobsite And When The Extension Is Installed The Traffic Model Flanges And Coupling Are Left At The Old Groundline And **The New Extension Flanges And Coupling Are Installed At The New Groundline**. **When This Occurs It Is Very Unlikely That The Hydrant Will Break Correctly**.
  - C. There Are So many Different Styles Of Hydrants, Each Requiring A Different Model Extension Kit It Is Often **Difficult And Time Consuming To Locate The Correct Extension Kit**.
  - D. With Extension Kits You Are Always **Limited To 6" Increments**.
  - E. Each Time An Extension Kit Is Added To A Hydrant You Will Get More Play In The Stem Which Can Cause Water Hammer. Also, Each Time An Extension Is Added To A Hydrant You Add Another Location For A **Possible Leak**.
  
3. WHY TRY TO **ELIMINATE** THE USE OF TIE RODS AND **THRUST BLOCKS**?
  - A. It Is A **Costly And Time Consuming** Operation.
  - B. **Tie Rods** Are Nothing More Than A **Temporary Measure** In Corrosive Soils.
  - C. Where Hydrants Utilize Drain Holes **Concrete** Can **Plug** The **Drain Ports**.
  - D. If Repairs To The Hydrant Become Necessary The Concrete Is Expensive And Time Consuming To Remove.



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## Certificate of Compliance

This is to certify that Gradelok® is produced in accordance with and meets all applicable terms and provisions of specification ANSI/AWWA C111/A21.11 and ANSI/AWWA C153/A21.53, as per UL/FM Investigation.

All Gradelok® Fittings supplied by Assured Flow Sales, Inc. are coated with NSF 61 approved paint and are classified for use with potable water.

The manufacturing location is approved as an applicator for NSF 61 paint, as they follow the procedures laid by NSF 61.

*Benjamin R. James*  
President  
Assured Flow Sales, Inc.