

## 2015/2016 - Certificate of Compliance Restraint • Waterworks Division

Tyler Union Waterworks manufactures and distributes ductile iron water main fittings with accessories. Tyler Union 3 inch through 48 inch fittings are cast with tested and traceable <u>ASTM A536</u> compliant ductile iron that is designed for use with and conforms to the all the applicable terms and requirements of <u>ANSI/AWWA C153/A21.53-06</u>, <u>ANSI/AWWA C151/A21.51</u>, <u>ANSI/AWWA C115/A21.15</u>, <u>ANSI/AWWA C111/A21.11-7</u>, <u>ANSI/AWWA C116/A21.16-09</u>, <u>ANSI/AWWA C110/A21.10-08</u>, <u>ANSI/AWWA C104/A21.4-08</u>, and Current revisions apply for each noted standard.

Tyler Union Waterworks TUF Grip™ Mechanical Joint restraints represent the culmination of 20 years engineering and testing. As a third generation restraint, TUF Grip™ is the best available technology in the Waterworks market for use in restraining PVC, Ductile, and HDPE pipe and mechanical joint fittings. TUF Grip™ mechanical joint restraint glands are cast with tested and traceable ASTM A536 compliant 65-45-12 ductile iron. Tuf Grip and all components are designed, proven and tested for 2:1 safety factor. TUF Grip™ Mechanical Joint wedge type restraints are approved by UL (Underwriters Laboratories), FM (Factory Mutual). TUF Grip™ Series 2000 Restraint for PVC Pipe is tested in accordance with ASTM F1674. TUF Grip™ Series 1500 Restraint is also tested in accordance with ASTM F1674 for related application.

## TUF Grip™ glands

- 3" 48" TUF Grip™ Series 1000 Restraint for Ductile Iron Pipe
- 4" 12" TUF Grip™ Series 1000 Split Restraint for Ductile Iron Pipe
- 4" 24" TUF Grip™ Series 1500 Dual Wedge Restraint for PVC\*, Ductile, HDPE\*\* Pipe and Steel Pipe.
- 3" 36" TUF Grip™ Series 2000 Restraint for PVC Pipe\*, HDPE\*\* Pipe
- 4" 12" TUF Grip™ Series 2000 Split Restraint for PVC Pipe\*

**NOTE:** TUF Grip<sup>™</sup> restraints, Mechanical Joint Gaskets and T-Bolts with nuts furnished by Tyler Union Waterworks are produced in accordance with and will meet all applicable terms and provisions of ANSI/AWWA C111/A21.11.

\*NOTE: PVC restraint pressure rating as per the pipe rated pressure. PVC pipe types include C-900, C-905, C-909, and ASTM D2241 (IPS OD)

\*\*NOTE: HDPE applications require a separate stiffener ring 4-16 for DI OD Pipe & 4-12 for IPS OD Pipe

NOTE: For each noted standard the applicable and current revisions apply for Tyler Union Waterworks products.

Tyler Union Waterworks 3000 Series Clamps for PVC pipe offer 360° contact with no pipe distortion or point loading. 3000 Series Clamps are rated to the listed pressure on the PVC pipe with a 2:1 safety factor. All sizes of clamps are made of high strength grade 65-45-12 ductile iron in accordance with the requirements and specifications of ASTM A536. Restrainers approved per applicable requirements of ASTM F1674, current revisions apply.

## 3000 Series Clamps...

- 4" 36" 3000PP Pipe to Pipe Clamp for PVC pipe
- 4" 36" 3000MJ Pipe to MJ fitting Clamp for PVC Pipe
- 4" 24" 3000PO Pipe to Push-on fitting for PVC pipe
- 4" 16" 3000PS Pipe Stop for PVC pipe

NOTE: Connecting rods, hex nuts, T-head bolts consist of low alloy high strength steel and comply with applicable requirements of ANSI/AWWA

C111/A21.11

NOTE: Clamping bolts are SAE Grade 5 and comply with applicable requirements of ANSI/AWWA C111/A21.11

NOTE: For easy identification, IPS pipe diameter clamps are GREY and DI pipe diameter clamps are BLACK

Tyler Union Waterworks SURE STOP 350° and SURE STOP-PVC° Gaskets are an easy way to restrain UNION TITE°, TYTON°, TRIM TYTON°, or TYTON Joint° fittings and valves. SURE STOP 350° and SURE STOP-PVC° Gaskets are produced and tested in accordance with ANSI/AWWA C11/A21.11. SURE STOP 350° and SURE STOP-PVC° Gaskets are NSF-61 approved and listed by Underwriter Laboratories (UL) and Factory Mutual.

- 3" 24" SURE STOP 350®
- 4" 12" SURE STOP-PVC®

All applicable design tests as required by AWWA have been performed and results maintained with all materials supplied being of the same quality, manufacture, and make as those tested.

Sincerely,	Project Name:	
Ajay Roy		
Ajay Roy	Project Material:	
Engineering and Quality Manager	Product Supplier: _	
Tyler Union Waterworks	Contractor: _	
Email: ajay.roy@tylerunion.com		
Tel.: (800) 226-7601	File: (	COC Restraint TU Products

## \*Tyler Union Waterworks Contact Information\*

<u>Tyler:</u> 11910 CR 492 ● Tyler, Texas 75706 ● (800) 527-8478 <u>Dallas:</u> 1201, Avenue 5 ● Grand Prairie, TX 75050

Anniston: 1501 W 17<sup>th</sup> St. ◆ Anniston, AL 36201 ◆ (800) 226-7601 Anniston: 1800 Greenbrier Rd ◆ Anniston, AL 36201 ◆ (800) 226-7601

New Lenox: 2200 West Haven● New Lenox, IL 60451 Elmer: 701 Kenyon Ave ● Elmer, NJ 03318

Corona: 1001 El Camino Ave. • Corona, CA 92879 • (866) 527-8471 Portland: 6204 N. Marine Dr. • Portland, OR 97203

www.tylerunion.com