

# **APPENDIX**

## **A**

### **APPROVED MATERIALS**

## **Appendix A**

### **Approved Materials**

The approved materials list contains names of manufacturers whose products and materials are approved for use in the Tucson Water system. There are two sections of Approved Materials contained in this appendix. One section is for Pipelines and one section is for Product Facilities. A product is considered approved if it appears on either list.

Pipe and appurtenances listed are in general from 4" to 12". Service materials are from 3/4" to 2".

All materials provided for use in the Tucson Water system must be new.

Pipelines and appurtenances larger than 12" are project specific and require submittals to Tucson Water for approval for use in the system.

Submittals are not required for products contained in the Approved Materials List. Unless required by contract specifications or the controlling agency.

A product approval application is included at the end of the approved materials list.

## Appendix A Approved Materials

### DISTRIBUTION SYSTEMS

#### PIPE

CCP	AMERON
DUCTILE	GRIFFIN US PIPE PACIFIC STATES AMERICAN
DUCTILE IRON PIPE	INTEGRAL RESTRAINT SYSTEMS GRIFFIN (TYTON JOINT, FASTITE SNAPLOK AND BOLTLOK) TALON RESTRAINED JOINT GASKET US PIPE (FIELD LOK, TR FLEX) PACIFIC STATES (RESTRAINED TYTON, THRUST FASTGRIP LOCK) AMERICAN (FASTITE FLEX RING, LOK RING)
PVC	VINYL TEC J.M. EAGLE CERTAIN TEED PW (PACIFIC WESTERN) DIAMOND NORTH AMERICAN
PVC SCH 40 & 80	SPEARS (FITTINGS) CRESTLINE APACHE
HDPE (Potable)	PERFORMANCE PIPE (FORMERLY PLEXCO) NUMEX VANGUARD CSR POLYPIPE JM EAGLE
NOTE:	IPS 2" & LARGER MAINLINE
HDPE (Reclaimed)	PERFORMANCE PIPE (FORMERLY PLEXCO) CSR POLYPIPE
COPPER PIPE	TYPE "K" MADE IN USA 4" to 16"

## Appendix A Approved Materials

### GATE VALVES

WATEROUS-AFC (US PIPE AND METROSEAL)  
CLOW  
MUELLER  
M & H  
US PIPE  
AVK  
PRATT  
AMERICAN DARLING/AFC  
KENNEDY  
EAST JORDAN IRON WORKS

### TAPPING SLEEVES DUCTILE IRON

WATEROUS-AFC  
CLOW  
KENNEDY  
MUELLER  
M & H  
FORD  
US PIPE T-28

### TAPPING SLEEVES EPOXY COATED

INTERNATIONAL  
SMITH BLAIR  
ROMAC  
FORD  
JCM  
POWERSEAL  
CASCADE

### TAPPING SLEEVES STAINLESS STEEL AND STAINLESS STEEL MECHANICAL JOINT

POWERSEAL  
JCM  
ROMAC  
CASCADE  
SMITH BLAIR  
FORD

## Appendix A Approved Materials

### PIPE RESTRAINTS

#### DUCTILE IRON AND PVC

UNI FLANGE Section U  
EBAA IRON 1600 & 1700  
EBAA IRON RESTRAINED COUPLING  
MEGALUG  
MEGA FLANGE  
STAR PIPE PRODUCTS 4000 & 3600  
SIGMA (PV-LOK & ONE-LOK)  
ROMAC (GRIP RING)  
TYLER TUF GRIP

#### PIPE RESTRAINTS HDPE PIPE

VICTAULIC  
JCM  
SMITH BLAIR  
ROMAC

#### AIR RELEASE VALVES 3/4" to 6"

VALMATIC  
GA INDUSTRIES  
ARMSTRONG  
CRISPIN  
APCO  
FLOMATIC  
ARI  
POWERSEAL

#### PRESSURE REDUCING VALVE 4" to 12"

CLA VALVE  
AMES  
BERMAD  
WATTS  
WILKINS

#### CHECK VALVES 4" TO 16"

HAMMOND  
NIBCO  
GRINNEL  
AFC-WATEROUS  
GA INDUSTRIES  
VALMATIC  
CRISPIN  
KENNEDY  
DELLA  
MUELLER  
CLOW

## Appendix A Approved Materials

### DUCTILE IRON FITTINGS

CLOW  
TYLER  
STAR PIPE  
PIPELINE COMPONENTS  
SIP INDUSTRIES  
NAPAC  
SIGMA  
UNION FOUNDRY

### DUCTILE IRON COMPACT FITTINGS

TYLER  
SIGMA  
STAR PIPE  
SOUTHBAY  
UNION FOUNDRY  
GRIFFIN  
TRINITY VALLEY  
NAPAC

### FLEXIBLE COUPLINGS

CLOW  
VIKING JOHNSON  
POWER SEAL  
SMITH BLAIR  
JCM  
FORD  
APAC  
ROMAC  
CASCADE

### REPAIR CLAMPS

ROMAC AND ROMAC MACRO  
VCM INDUSTRIES  
CLOW  
POWER SEAL  
SMITH BLAIR  
FORD METER BOX  
APAC PRODUCTS  
JCM  
CASCADE

## Appendix A Approved Materials

### FIRE HYDRANTS

MUELLER (STANDARD ISSUE)  
W/ AQUAGRIP VERTICLE SHOE  
WATEROUS WB-77 TREND  
CLOW MEDALLION  
M & H 129  
AMERICAN DARLING  
KENNEDY K81D  
AVK 2700

### FIRE HYDRANT ADJUSTERS

GRADE-LOK

### METER BOXES

DFW

### VALVE BOXES

SIGMA  
EAST JORDAN IRON WORKS  
STAR  
SIP INDUSTRIES  
PROSELECT

### MAGNETIC DETECTOR AND MARKING TAPE

REEF INDUSTRIES  
ALARMA TAPE  
PROLINE  
HYTECH  
NORTH TOWN  
LINETEC  
TERRA TAPE  
HARRIS  
CHRISTY'S

### TRACER WIRE

BARON  
SERVICE WIRE  
REGENCY  
AEF

### SERVICE LINE MATERIALS COPPER CTS 3/4" to 2"

TYPE "K" AMERICAN MADE

## **Appendix A**

### **Approved Materials**

CORPORATION STOPS, UNIONS ANGLE  
METER STOPS, SERVICE SADDLES,  
AND U BRANCHES

MUELLER  
JONES  
McDONALD  
FORD  
JCM  
POWER SEAL  
ROMAC  
SMITH BLAIR

COATINGS

ROSKOTE OR RYSKOTE  
TENEMEC  
AMERCOAT  
RUSTOLEUM

FLANGE INSULATING KITS

ADVANCE PRODUCTS AND SYSTEMS INC.  
CALPICO  
CENTRAL  
HMS  
PIKOTEK  
PSI  
COPPER STATE BOLT  
APS/BOLT BROKERS

COUPLINGS 3/4" TO 2"

HARCO (UNIVERSAL TRANSITION COUPLING)

**CORROSION MATERIALS**

VENDOR/MANUFACTURER

MATERIAL

ERICO/CADWELD

EXOTHERMIC WELDING MATERIALS – WELD  
METALS, WELDERS, SLEEVES

CONTINENTAL/THERM-O-WELD

EXOTHERMIC WELDING MATERIALS – WELD  
METALS, WELDERS, SLEEVES

CALPICO

EXOTHERMIC MATERIALS – “T” CAPS, #22  
PRIMER, #10 MASTIC  
FLANGE INSULATION KITS  
NON-CONDUCTIVE TAPES –  
2” (V1-10, VINYL IDENTIFIED)  
4” (V1-20, VINYL IDENTIFIED)

## Appendix A Approved Materials

ROYSTON MFG.	EXOTHERMIC MATERIALS – “T” CAPS, #22 PRIMER, #10 MASTIC
GENERIC – NON VENDOR SPECIFIC	COLORED PVC MARKING TAPES #1 CAST IRON METER BOXES PHENOLIC RESIN BOARDS – MICARTA NUTS, MACHINE SCREWS, FLAT WASHERS, LOCKING WASHERS
THOMAS & BETTS	ALUMINUM COMPRESSION CONNECTORS – #60107, #60102, #60097, #60500, #60501, #60507  HEAVY WALL HEAT SHRINK INSULATOR – #HS12-6, #HS12-6L, #HS12-6-4
SEYMOUR PAINT	PRECAUTION BLUE SAFETY PURPLE
SPRAYON PAINT	APWA BLUE
COTT MFG.	BIG FINK CATHODIC PROTECTION TEST STATIONS – DARK BLUE PURPLE LOCKING DEVICE – ASS-LD-0001
<u>CASING SPACERS</u>	CASCADE SMITH – BLAIR UNIFLANG (RESTRAINED) ADVANCED PRODUCTS AND SYSTEMS (APS)

### BACKFLOW PREVENTION ASSEMBLIES

- AN APPROVED MATERIAL LIST IS AVAILABLE FROM THE BACKFLOW PREVENTION SECTION OF TUCSON WATER AT (520)791-2650.

## Appendix A Approved Materials

### PRODUCTION FACILITIES

#### PIPE

STANDARD STEEL	KELLY
CCP	AMERON
DIP	GRIFFIN US PIPE PACIFIC STATES AMERICAN
DUCTICLE	GRIFFIN US PIPE PACIFIC STATES AMERICAN
DUCTILE IRON PIPE	INTEGRAL RESTRAINT SYSTEMS GRIFFIN (TYTON JOINT, FASTITE, SNAPLOCK AND BOLTLOK) US PIPE (FIELD LOK, TR FLEX) PACIFIC STATES (RESTRAINED TYTON, THRUST LOCK) AMERICAN (FASTITE FLEX RING, LOK RING)
PVC	VINYL TEC JM CERTAIN TEED PW (PACIFIC WESTERN) UPONDOR (C-900 ONLY) DIAMOND NORTH AMERICAN NAPCO
PVC SCH 40 & 80	SPEARS
COPPER PIPE	TYPE "K" MADE IN USA TYPE "K" RIGID COPPER FOR (2" PRV BYPASS)

## Appendix A Approved Materials

### BUTTERFLY VALVES

M&H  
AMERICAN DARLING  
CLOW  
MUELLER  
PRATT  
DE ZURIK  
KFLOW

### GATE VALVES

MUELLER  
M&H  
PRATT  
AMERICAN DARLING/AFC  
CLOW

### TAPPING SLEEVES – DUCTILE IRON

WATEROUS-AFC  
CLOW  
KENNEDY  
MUELLER  
M&H  
FORD  
US PIPE T-28

### EPOXY COATED

INTERNATIONAL  
SMITH BLAIR  
ROMAC  
FORD  
JCM  
POWERSEAL

### PPE RESTRAINTS DUCTILE IRON AND PVC

CERTAINTED  
UNI FLANGE SECTION U  
EBAA IRON 1500 & 6500  
MEGALUG  
MEGA FLANGE  
STAR PIPE PRODUCTS  
PACIFIC STATES  
SIGMA (PV-LOK & ONE LOK)  
ROMAC

### COMBINATION AIR RELEASE VALVES 3/4" TO 4"

APCO  
VAL-MATIC  
GA INDUSTRIES

## Appendix A Approved Materials

PRESSURE REDUCING VALVE  
4" TO 12"

CRISPIN  
WATTS (AMES)

CHECK VALVES 4" TO 16"

APCO  
GA INDUSTRIES  
VAL-MATIC  
CRISPIN

DUCTILE IRON FITTINGS

CLOW  
POWERSEAL  
TYLER  
STAR PIPE  
GRIFFIN  
TRINITY VALLEY  
CASCADE  
SIP INDUSTRIES  
SIGMA

FLEXIBLE COUPLINGS

DRESSER  
SMITH-BLAIR  
ROMAC HYMAC  
POWERSEAL  
SMITH BLAIR  
JCM  
FORD  
NAPAC  
CASCADE

CORPORATION STOPS, UNIONS,  
ANGLE METER STOPS, SERVICE  
SADDLES

ROMAC  
FORD  
MUELLER  
POWERSEAL  
SMITH BLAIR  
JONES  
MCDONALD  
JCM

PRESSURE GAUGES

ASHCROFT  
PERMA CAL  
WIKA

# Appendix A Approved Materials

CITY OF TUCSON  
TUCSON WATER DEPARTMENT

## PRODUCT APPROVAL APPLICATION

### Instructions

All information requested below must be submitted in full. Please label each section with the item number conforming to the list below. No application will be reviewed by the Committee until the submittal is complete. Failure to provide full disclosure may be grounds for disapproval or product.

Three (3) copies of the application should be sent to:

Mr. J.B. Celey  
Specification Committee Coordinator  
City of Tucson Water Department  
P.O. Box 27210  
Tucson, Arizona 85734-2710

### Item #:

1. Basic general information. Provide all information requested on attached form (Item 1).
2. Existing Installations of Product. The following data is requested on representative installations of your product. A sample form (Item 2) is attached or you may use your own tabular format. Failure to disclose representative installations can be ground for disapproval of product.
3. Describe materials of construction (including relevant industry standards – e.g., ASTM, ANSI, AWWA, etc.), special manufacturing processes and quality control measures used in the manufacture and installation of your product. Include copies of relevant referenced specifications or standards. Include Material Safety Data Sheets (MSDS) and National Sanitary Foundation (NSF) testing results in all products in contact with potable water or otherwise providing an exposure to operations or maintenance personnel.
4. Indicate if there are any special conditions (such as pipe size or pressure rating) for optimal performance of the product. Specify conditions or requirements for optimal performance. Where appropriate, include the engineering data required for proper application of the product. Indicate relevant safety factors, and pressure, temperature, or environmental limits.
5. Are current Tucson Water technical specifications adequate for inclusion of the product? Are exceptions to the City specifications being requested?
6. Provide Certifications of Compliance to applicable Tucson Water standard specification.

## **Appendix A**

### **Approved Materials**

7. Engineering Design Guide. Attach a copy of the Engineering Design Guide or Installation Guide for the proposed product. This document should indicate that it was prepared under the supervision of a Registered Professional Engineer in the state of the manufacturer. Should engineering certification not be a part of the standard printed documents, a letter should be provided from the manufacturer that the Engineering Design Guide was prepared under the supervision of a Registered Professional Engineer. The supervising engineer's name, seal, registration number and expiration date should be included in either the design guide as the accompanying letter.
8. Client References. Provide names, addresses, phone numbers and job identification of current and past clients. Tucson Water will contact selected references concerning product performance.
9. Copies of tests conducted by independent testing companies showing conformance with industry standard and Tucson Water specification established for the product.
10. Provide information relating to patents, licenses and/or franchises held on the product. Include specific descriptions and relevant data such as patent (license) number and date issued.
11. Provide any other related information. Although not required, our application submittal may include other data to assist the Committee in evaluating the product for use on Tucson Water projects. This information could include brochures, videotapes, product samples and/or photographs. The Committee cannot be responsible for return of these materials. (One (1) copy of video tapes and product samples is sufficient for committee review.)

**CITY OF TUCSON**

**TUCSON WATER DEPARTMENT  
PRODUCT APPROVAL APPLICATION**

Application Number \_\_\_\_\_  
Date Received \_\_\_\_\_  
Submittal Complete \_\_\_\_\_

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(Do not write above this line for City use only.)

**ITEM 1. General Information**

Product  
Name

\_\_\_\_\_

Representative Company Name

\_\_\_\_\_

Individual Contact(s) \_\_\_\_\_  
Street Address \_\_\_\_\_  
City, State, Zip Code \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
E-Mail Address \_\_\_\_\_

Manufacturer Company Name \_\_\_\_\_

Individual Contact(s) \_\_\_\_\_  
Street Address \_\_\_\_\_  
City, State, Zip Code \_\_\_\_\_

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**Appendix A**  
**Approved Materials**

Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
E-Mail Address \_\_\_\_\_

Product Applications(s)

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