

## **SUGGESTED SPECIFICATION FOR INTERNAL PIPE JOINT SEALS**

### **PART 1 GENERAL**

#### **1.01 GENERAL**

When required in the contract document, the Contractor shall provide all labor, equipment and materials to seal pipe joints subjected to 20 feet or less of head with an internal rubber seal manufactured by Cretex Specialty Products, Waukesha, WI, [www.cretexseals.com](http://www.cretexseals.com) or approved equal.

### **PART 2 PRODUCTS**

#### **2.01 INTERNAL RUBBER SEAL**

Internal rubber seals used for sealing pipe joints shall consist of the following components.

#### **2.02 RUBBER SLEEVE**

The flexible rubber sleeve shall be extruded from a high-grade rubber compound conforming to the applicable requirements of ASTM C-923, with a minimum 1500-psi tensile strength, maximum 18% compression hardness (durometer) of 48+5.

The sleeve shall be available in two heights 7.5 inches & 12 inches, a minimum thickness of 3/16 inches and shall be capable of an expansion when installed of not less than 2 inches. The top and bottom section of the sleeve shall contain an integrally formed expansion band recess and multiple sealing fins.

Any splice used to fabricate the sleeve shall be vulcanized and have a strength such that the sleeve shall withstand a 180 degree bend with no visible separation.

#### **2.03 EXPANSION BANDS**

The two or four piece expansion bands used to compress the sleeve against the pipe shall be 16 gauge stainless steel conforming to ASTM A-240, Type 304, with a minimum width of 1-3/4 inches.

The expansion mechanisms shall have the capacity to develop the pressures necessary to make a watertight seal and shall have a minimum adjustment range of 2 diameter inches. Studs and nuts used for this mechanism shall be stainless steel conforming to ASTM F-593 and 594, Type 304.

#### **2.04 RESTRAINING BAND**

The two or four piece restraining band used to prevent excessive ballooning of the sleeve caused by hydrostatic pressure, shall meet the same requirements as stated above 2.03 Expansion Bands.

### **PART 3 INSTALLATION**

#### **3.0 INSTALLATION**

The surface of the pipe extending approximately 5 inches on either side of the joint shall be reasonably smooth, non-porous and free of

## **SPECIFICATIONS:** Internal Joint Pipe Seal



any lime or other deposits, loose material and excessive voids. Any voids, cracks or porous surfaces shall be repaired with the appropriate material.

After the rubber sleeve has been placed in the proper position, two or four piece stainless steel expansion bands shall be installed in the band recesses and individually tightened as required to provide a watertight seal.

Detailed installation procedures shall be in accordance with the manufacturers instructions.

Cretex Specialty Products

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