

# HydraTite® Internal Joint Seal System

Stop infiltration and sink holes.



## ADVANTAGES:

- **Custom mechanical remediation with NO EXCAVATION REQUIRED**
- **Rapid installation and immediate return-to-service**
- **Seal flexibility accommodates shifting, vibration, ground settling, and thermal expansion/contraction**
- **Low profile ensures minimal flow loss**

HydraTite™ Internal Joint Seal system is a mechanical, trenchless remediation for repair of pipe joints. The HydraTite™ system consists of a proprietary rubber seal which spans the joint and is held in place by stainless steel retaining bands on either side of the joint. These retaining bands are expanded and locked in place using a wedge lock design which forms an air-tight clamp around the joint, eliminating all infiltration and exfiltration. Each HydraTite™ seal is designed and custom-made for each application to ensure complete compliance with project specifications.

**RUBBER** - The seal is supplied in either EPDM or Nitrile. The EPDM is used in applications for potable water, waste water, and seal/brackish water. The Nitrile seal provides superior resistance to gas, oil, and petroleum-based reagents, making it ideal for natural gas applications. The patented sleeving design allows for the interlocking of multiple seals. The design provides a means by which to line long lengths of pipe to remediate axial as well as circumferential defects. The HydraTite™ System can accommodate pipe diameters from 18 to 218 inches.

**STEEL RETAINING BANDS** - The retaining bands are manufactured to project specifications using either carbon steel, 304 stainless steel, 316L stainless steel, or AL-6XN. The retaining bands can be supplied as one piece or multiple pieces to accommodate entry restrictions. Systems can also be designed that incorporate extra retaining bands to provide extra support.

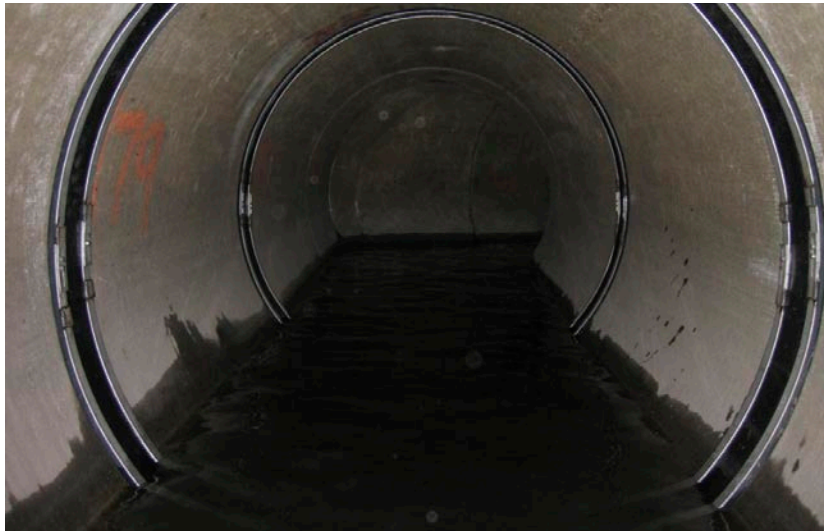
**BACKING PLATE** - A stainless steel backing plate can be incorporated behind the seal to provide support when spanning voids in the pipe wall. This design is utilized in the remediation of expansion joints, sealing off abandoned laterals, and the repair of deteriorated joints.



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## INSTALLATION PROCEDURE



**Prep Joint**



**Position Seal**



**Install Rubber Seal**



**Install Retaining Bands**



**Expand Band with Expander**



**Insert Wedges**



**Pressure Test Seal**



**Check for Leaks.**

### EPDM

Durometer Shore A	ASTM D2240	65+/-5
Tensile Strength (min)	ASTM D412	1,450psi
<b>Suffix A13 ASTM D573 Heat aged 70hrs @ 70°C</b>		
Durometer Shore A		+/-15
Tensile Change		+/-30
Elongation Change (max)		-50
<b>Suffix B13 ASTM D395B Compression set 22hrs @ 70°C</b>		
Permanent set (%)		25 max
<b>Suffix C12 ASTM D1171</b>		
Ozone Resistance (%)		85 min

### Stainless Steel

Properties	304	316L	AL-6XN
UNS Designation	S30400	S31603	N08367
Tensile Strength (min)	75,000psi	70,000psi	100,000psi
Yield Strength (min)	30,000psi	25,000psi	45,000psi
Elongation (min)	40%	40%	30%
Brinell Hardness (max)	201	217	233
Weld Wire TS	80,000psi	70,000psi	110,000psi

HydraTite™ seals are custom made for each project. Seals provide a low cost option for the repair of leaking joints, with projects normally completed in days not weeks. Superior quality and intricate design assures a tight, leak free seal. By eliminating the need for excavation, savings can be in excess of 50%. The HydraTite™ Sealing System serves as an internal joint seal and can be transformed into an interlocking sleeve system, custom designed to fit any length of pipe.