



# HydraTech HydraTite® Box Sealing System

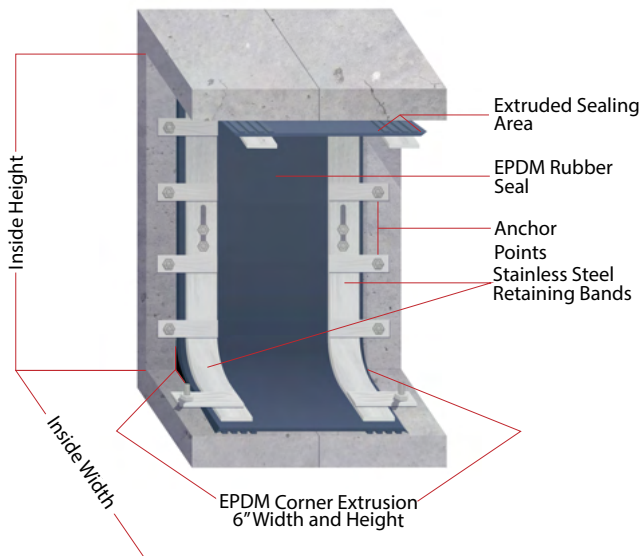
Issue 1.20

**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.

**CORNER FITTING** • Non-permeable cementitious filler material (hydraulic cement or equivalent). For conduits with 90 degree inside corners, prefabricated stainless steel corners or extruded EPDM corner forms are to be used.

**WEDGE ANCHORS** • Steel clamps that press the retaining band against both the EPDM seal and the inside of the host pipe.

HydraTech's engineering staff designs each HydraTite System to ensure conformance for all project specifications. Each HydraTite seal is then custom-made per the design specification. The HydraTite System offers the design flexibility needed to ensure the ideal system is utilized.



## SYSTEM PROPERTIES

Operating Pressure	300psi
Max Operating Temp	250°F
Head Pressure	150 feet

### EPDM

Durometer Shore A	ASTMD2240	65+/-5
Tensile Strength (min)	ASTMD412	1,450psi
% Elongation (min)	ASTMD412	350

### Suffix A13 ASTM D573 Heat aged 70hrs @ 70°C

Durometer Shore A	+/-15
Tensile Change	+/-30
Elongation Change (max)	-50

### Suffix B13 ASTM D395B Compression set 22hrs @ 70°C

Permanent set (%)	25 max
-------------------	--------

### Suffix C12 ASTM D1171

Ozone Resistance (%)	85min
----------------------	-------

### 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

The HydraTech HydraTite Systems is a performance-driven product that provides mechanical, trenchless remediation for the interior of the pipe. The HydraTite system is backed by our engineering staff that services each installation with assessments, solutions, and technical support. The HydraTite system offers a proven, efficient, cost-effective, long term solutions to the most challenging demands of the industry.

HydraTech Engineered Products LLC

10448 Chester Road, Cincinnati, OH 45215 Phone (513) 827-9169 Fax (513) 827-9171

www.hydratechllc.com



# HydraTech HydraTite® Box Sealing System

Issue 1.20

## PRODUCT DESCRIPTION

- HydraTite Internal Joint Seal is a mechanical, trenchless remediation, designed for box culverts.
- 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 airtight 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.
- The HydraTite System is a recognized method of joint repair by AWWA manual M28.

## APPLICATIONS

(Box) Joint Repairs  
Irregular Shapes  
Expansion Joint Remediation  
Pipe Transition of Various Shapes

## MARKET SERVED

Portable Water  
Sanitary Sewers  
Storm Sewers  
Cooling Water  
Service Water  
Circ. Water

## ADVANTAGES

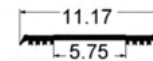
- Mechanical Trenchless Remediation
- Maintenance-free
- Turnkey installation
- Low profile ensures minimal flow loss
- Patented interlocking design for lining long length of pipe
- Rapid Installation and return to service ideal for immediate or emergency situations
- Seal Flexibility accommodates shifting, vibration and thermal expansion and contraction
- Non-corrosive Components

- Design flexibility provides an ideal remediation for multiple applications
- Minimal surface prep required
- TestValve ensures every installation has pressure tested fit
- NSF/ANSI 61 approved for potable water
- Installed by fully trained application specialists
- Full contract support services available

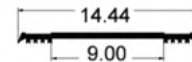
## DESIGN FLEXIBILITY

**WIDTHS** • The HydraTite seal is available in three widths:

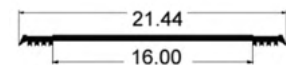
### STANDARD



### EXTRA-WIDE



### DOUBLE-WIDE



**RUBBER** • The Seal is supplied in either EPDM or Nitrile. The EPDM is used in applications for potable water, wastewater, and sea/brackish water. The Nitrile seal provides superior resistance to gas, oil, and petroleum-based reagents making it ideal for natural gas applications.

**STEEL** • The retaining bands are manufactured to project specifications using either carbon steel, 304 stainless steel, 316L stainless steel or AL-6XN.

**RETAINING BANDS** • The retaining bands can be supplied as one piece or multiple pieces to accommodate entry restrictions. Systems can also be designed that incorporated extra retaining bands to provide additional support.