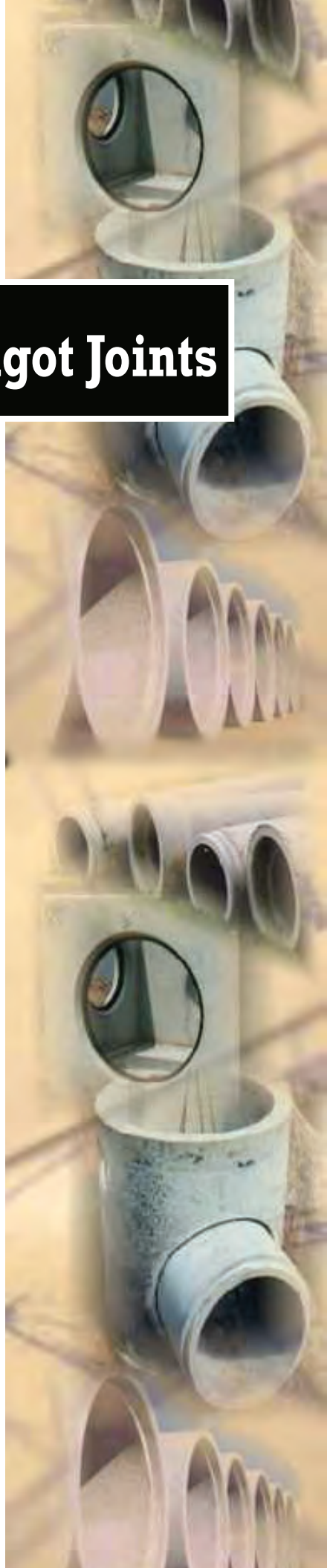
VERTEX, INC.
Manufacturer of Elastomeric Seals

STS Gasket™ for Bell-and-Spigot Joints



STS Gasket™ for Bell-and-Spigot Joints

VERTEX, INC.
www.vertexseals.com

The **STS Gasket** is a flexible, watertight solution for any horizontal or vertical joints for any stormwater or wastewater application. It is designed to provide a watertight seal in standard O-ring confined grooves or single offsets for joints in pipes, manholes or boxes.

The **STS Gasket** is equally effective in O-Ring grooves or on the step of single offset joints. O-Ring gaskets can be affected by dirty or uneven surfaces, poor or improperly applied lubricants, misaligned pipes or excessive force that can cause distortion resulting in weak or uneven seals.

The base portion of the **STS Gasket** is manufactured with a uniform flat surface that conforms to the groove or step surface. This allows for better distribution of the loading forces during coupling and deflection. The symmetrical shape of the ribs makes the **STS Gasket** suitable for both high and low pressure joints while providing a dual sealing system. The unique design of the ribs allows for ease of installation when coupling the spigot to a mating pipe bell while the lower insertion force reduces the potential for damage to the pipe. The flat base of the gasket helps to balance any point loading. After the gasket is installed and the spigot is inserted in a mating pipe bell, the ribs of the **STS Gasket** deflect and the base compresses to provide a watertight seal and resistance to backing out.

Product References

ASTM C-443-12
Standard Specification for Joints for Concrete Pipe and Manholes Using Rubber Gaskets

ASTM C-361-14a
Standard Specification for Elastomeric Seals for Joining Concrete Structures

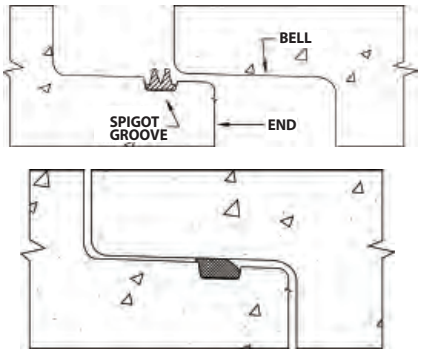
ASTM C-1619-11
Standard Specification for Elastomeric Seals for Joining Concrete Structures

ASTM C-1628-11
Standard Specification for Joints for Concrete Gravity Flow Sewer Pipe Using Rubber Gaskets

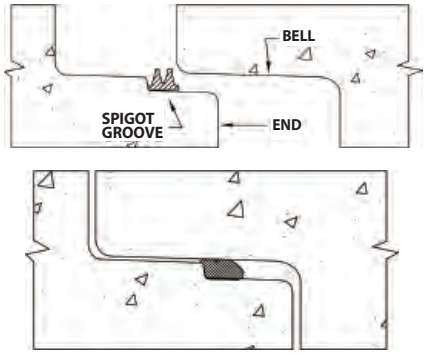
Key Advantages

- Can be used with all wastewater and stormwater applications
- Provides a dual sealing function
- Fast and easy installation
- Resistant to slippage while mating structures
- Suitable for high and low pressure pipe joints

Confined Joint



Single Offset Joint



Performance Standard

Test	Results	ASTM Method
Chemical Resistance *1 N Sulfuric Acid* *1 N HCl Acid*	 No weight loss No weight loss	 At 22° for 48h
Tensile Strength	1200 psi or 8.5 MPa, min	D 412
Elongation at Break	350% min.	
Hardness	+/- 5 from mfg's. specified hardness	D 2240
Accelerated Oven-aging	Decr. of 15% max. orig. tensile strength Decr. of 20% max. elongation	D 573
Compression set	Decr. of 25% original deflection	D 395, Method B
Water absorption	Incr. of 10% max. of original by weight	D 471
Ozone resistance	Rating 0	D 1171
Low-temp brittle point	No fracture at -40°C	D 746
Tear resistance	200 lbf/in. or 34 kn/m	D 624, Method B

The **STS Gasket** is engineered to conform with the physical requirements outlined in ASTM C-443 "*Standard Specification for Joints for Concrete Pipe and Manholes Using Rubber Gaskets*". Alternative compounds are available upon special request.

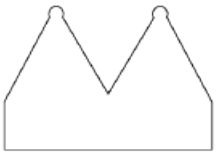
Dimensional Data

HMRC-STS-1.25"

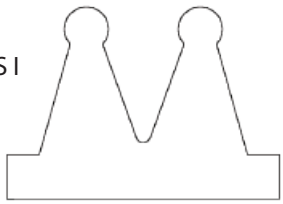
HMRC-STS-I-TT

HMRC-STS-I-WW

HMRC-STS III



HMRC-STS I



Installation Instructions

Step 1:

Inspect and clean dirt or debris from the bell and spigot.

Step 2:

Place the gasket in the groove or offset.

Step 3:

Equalize the gasket around the circumference of the spigot.

Step 4:

Apply a lubricant to the entire bell joint and the gasket.

Step 5:

Align the bell and spigot and couple carefully until the spigot is pushed home.