

# The Company With Connections



## PIPE TO STRUCTURE CONNECTOR FOR STORMWATER SYSTEMS

# A·LOK STM



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The A\*LOK STM is a flexible pipe-to-manhole connector designed for the prevention of soil and water infiltration into stormwater sewer systems. It can be used with both round and elliptical shaped pipes and curved and flat wall structures. It is available for 8" diameter and larger pipes.





# **MATERIAL**

The standard connector is extruded from a polyisoprene compound engineered to conform with the requirements outlined in section 4.1.1 of ASTM C-1478 "Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes, and Laterals". Alternative compounds are available for unusual applications upon special order.



## **KEY ADVANTAGES**

The A•LOK STM Connector functions on pure compression, making field installation quick and easy. Just clean and lubricate the connector and pipe, center the pipe in the connector, and insert. This rapid installation permits immediate backfilling, enhancing project safety and overcomes the normal problems encountered with water, running sand and other unstable trench conditions. This results in shorter job projections, while mininizing traffic interruption and cost overruns.

The  $\mathbf{A} \bullet \mathbf{LOK}$  STM provides up to  $10^\circ$  of omnidirectional deflection while still maintaining a watertight seal. This design allows the connector to compensate for shear due to settlement or ground movement preventing water and soil infiltration into the sewer system. This proper pipe-to-structure connection minimizes the chance of pothole formation and sediment build-up in the storm system, saving states and municipalities money over the life of the structure.

On larger diameter pipe when size prohibits a gasket from being installed in a flat plane, an **A**•LOK STM Connector can be configured for casting in a curve with the connector staying perpendicular to the center line of the pipe. This design has resulted from years of extensive research and development and causes no loss of compression or deflection.

## **PRODUCT REFERENCES**

#### A.) ASTM C-1478

Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes, and Laterals.

#### B.) ASTM C-1244

Standard Test Method For Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test

#### C.) ASTM C-478C

Standard Specification for Precast Reinforced Concrete Manhole Sections



# PERFORMANCE STANDARD

The A•LOK STM meets or exceeds all material and test requirements of ASTM C-1478: "Standard Specification for Storm Drain Resilient Connectors Between Reinforced Concrete Storm Sewer Structures, Pipes, and Laterals".

See following chart:

#### **RESILIENT MATERIAL TEST OF ASTM C-1478**

TEST	RESULTS	<b>ASTM METHOD</b>
Chemical resistance 1 N Sulfuric acid 1 N Hydrochloric Acid	no weight loss no weight loss	D 543 at 22°C 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 (Shore A durometer)
Accelerated oven-aging	decr. of 15%, max. of original tensile strength, decr. of 20% max. of elongation	D 573, 70±1°C for 7 days
Compression set	decr. of 25%, max. of original deflection	D 395, Method B, at 70°C for 22h
Water absorption	increase of 10%, max. of original by weight	D 471, immerse 0.75 by 2-in. or 19 by 25-mm Specimen in distilled water at 70°C for 48h
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

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