



The Company With Connections[®]



PIPE TO MANHOLE BOOT CONNECTOR FOR SANITARY SYSTEMS

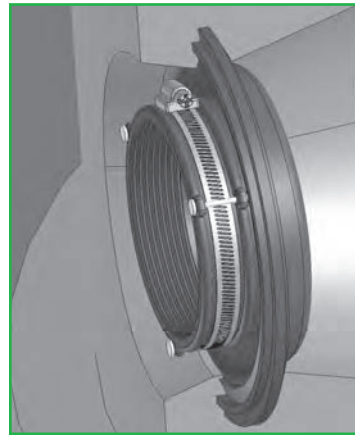
QUIK•LOK "The Boot with the Built-in Clamp"

QUIK•LOK

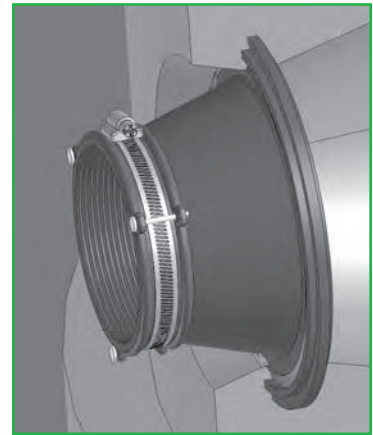
The **QUIK•LOK** Pipe to Manhole Boot Connector is a flexible connector specifically engineered to produce a positive watertight seal for pipes entering precast concrete structures and the structure itself. The **QUIK•LOK CONNECTOR** is manufactured to meet or exceed all material and test requirements set forth in ASTM C-923 titled "Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals" and ASTM C-1644.



QUIK•LOK boot as it will arrive with clamp attached ready to be placed in a mandrel.



QUIK•LOK boot cast into structure in shipping position.



QUIK•LOK boot extended at job-site ready for pipe.

MATERIAL

The **QUIK•LOK Connector** is molded from an EPDM compound engineered to conform with the requirements of section 4.1.1 of ASTM C-923. Alternative compounds are available for unusual applications upon special order.

All stainless steel hardware is in compliance with section 4.2, "Mechanical Devices" of ASTM C-923.

KEY ADVANTAGES

The **QUIK•LOK CONNECTOR** assures a positive watertight connection and provides up to 20° degrees omni-directional deflection and 1.00" of vertical or horizontal movement without loss of seal. This deflection permits pipe to structure settling without damage to the pipe or loss of the watertight seal and will also allow for many angles of incoming pipe.

The **QUIK•LOK** cast in Boot Connector is manufactured with the stainless steel takedown clamp as an integral part of the rubber connector.

The correct takedown clamp travels in the installation position from the time it leaves A-LOK, while it is cast in the structure and until it arrives at the job site. After pulling out the connector it's in position ready to be tightened down around the pipe on the outside of the structure.

Immediate backfilling is then possible, enhancing project safety and overcomes the problems encountered with water, running sand and other unstable trench conditions.

The **QUIK•LOK Connector** can be installed into concrete structures in the plant or with a field sleeve for cast-in-place, at the job site. Once installed in the concrete structure and ready to ship, the QUIK•LOK Connector travels in the cast in position to prevent damage during shipping and handling.

PERFORMANCE STANDARD

The **QUIK•LOK CONNECTOR** meets or exceeds all material and test requirements of ASTM C-923 titled "Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals" and ASTM C-1644 titled "Standard Specification for Resilient Connectors Between Reinforced Concrete On-Site Wastewater Tanks and Pipes".

RESILIENT MATERIAL TEST OF ASTM C-923

TEST	RESULTS	ASTM METHOD
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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PRODUCT REFERENCES

A.) ASTM C-923

Resilient Connectors Between Reinforced Concrete Manhole 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-478

Standard Specification for Precast Reinforced Concrete Manhole Sections

D.) ASTM C-1964

Standard Practice for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Post Backfill

PART 6 • DIMENSIONAL DATA

QUIK•LOK RING NO.	PIPE OD MIN.	PIPE OD MAX.
QL-04	4"	4.75"
QL-06	6"	6.875"
QL-08	8"	9.10"
QL-10	10"	11.25"
QL-12	12"	13.00"

PRODUCT SPECIFICATIONS

A flexible pipe to manhole connector shall be used whenever a pipe penetrates into a precast concrete manhole or structure.

The connector shall be the **QUIK•LOK CONNECTOR** as manufactured by A•LOK PRODUCTS, INC., Tullytown, PA, or approved equal.

The design of the connector shall provide a flexible, watertight seal between the pipe and concrete structure. The connector shall assure that a seal is made between:

(1) The connector and the structure wall by casting the connector integrally with the structure wall during the manufacturing process in a manner that it will not pull out during pipe coupling.

(2) The seal between the connector and the pipe shall be made by compressing the connector against the outside circumference of the pipe by means of a stainless steel take-down band.

The connector shall be made from materials that conform to the physical and chemical requirements outlined in Section 4, "Materials and Manufacture" of ASTM C-923 "Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes, and Laterals," and the overall design will meet or exceed Section 7, "Test Methods and Requirements" of ASTM C-923.

The connector shall be sized specifically for the type of pipe being used and shall be installed in accordance with the recommendations of the manufacturer.

INSTALLATION INSTRUCTIONS

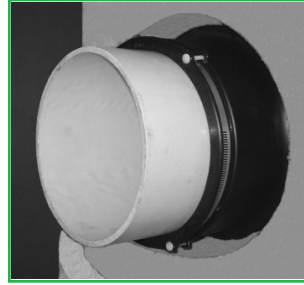
Experience has shown that successful performance of this product depends on proper plant installation, as well as the backfill and the care in the field installation of the manhole or wastewater structure and connecting pipes.

STEP 1



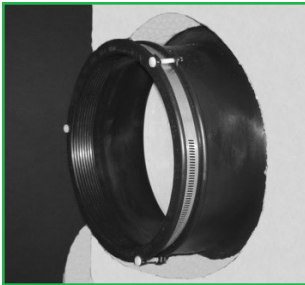
STEP 1: Remove all sharp edges on pipe, bevel edge and clean penetrating pipe section.

STEP 3



STEP 3: Center pipe and insert.

STEP 2



STEP 2: Pull out connector from cast position and clean off debris (stones, dirt, etc.) that could weaken the sealing area.

STEP 4



STEP 4: After inserting pipe, the stainless steel band should be tightened with the torque wrench to 60 in.-lb., then deflect pipe to flow or angle installation requires.

WARNING: To ensure the QUIK•LOK Connector remains a flexible watertight connector, it is A•LOK Products, Inc. strong recommendation that no mortar be placed between the pipe and wall of the concrete structure. The use of mortar in this area would decrease the effectiveness of the connector to compensate for shear caused by settlement or ground movement.

NOTE: The 60 in.-lb. Torque Wrench is available through A•LOK Products, Inc.

CAUTION: When installing pipe stubs for future pipeline installation, all stubs must be properly restrained to prevent any movement by means other than the QUIK•LOK Connector.

ANY QUESTIONS REGARDING QUIK•LOK CONNECTOR INSTALLATION, PLEASE CALL 1-800-822-2565