



The Company With Connections®



PIPE-TO-MANHOLE CONNECTOR FOR SANITARY OR STORMWATER SYSTEMS

G3 BOOT SYSTEM

A-LOK G3 BOOT SYSTEM

The Revolutionary G3 Band makes installation into a structure simple and fast. Just install the connector perpendicular to the hole and tighten the stainless steel nut. As the nut is tightened, a compressive force is applied to the G3 band ends, causing them to slide past each other into straight alignment. This movement increases the bands overall circumference and compresses the connector against the opening in the structure wall, creating a watertight seal. To insure the best seal, place the bolt in the 12 o'clock position of the hole opening and tighten the nut to the specified torque value.



**G3 BOOT SYSTEM
WITH
COMPONENT PACKAGING
AND TORQUE WRENCHES**

MATERIAL

The connector shall be made from materials that conforms 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.

PRODUCT REFERENCES

G3 Boot System meets or exceeds requirements of ASTM C-923

KEY ADVANTAGES

The G3 Boot System can withstand 15° of omnidirectional deflection and $\frac{1}{2}$ " of centerline offset while still maintaining a watertight connection. This flexibility eliminates infiltration due to pipe shear caused by settlement or ground movement.

The inner O-ring design of the G3 Connector eliminates rubber wrinkling, compensates for pipe irregularity and wall thickness to insure a watertight seal.

G3 Component Packaging, featuring a tough loop lock fastener that keeps installation instructions, take down clamp, boot and band secure together from factory to job site.

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 G3 Boot System featuring component packaging 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 placing the connector and expansion band into the center third of the concrete hole opening. The band is then expanded by tightening the expansion mechanism increasing the bands overall circumference and compressing the connector against the sides of the hole opening. (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.

DIMENSIONAL DATA

ITEM	PIPE O.D. RANGE	HOLE SIZE
	Min.-Max.	
G3-0804	3.50"-4.50"	8"
G3-1206	6.0"-6.875"	12"
G3-1208	8.0"-9.5"	12"
G3-1410	10.0"-11.25"	14"
G3-1612	12.0"-13.5"	16"

PERFORMANCE STANDARD

ASTM C-923 Section 4.1 RESILIENT MATERIALS TESTS

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, min.	D 412
Elongation at break	350% min.	
Hardness ^B	±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-temperature brittle point	no fracture at -40°C	D 746
Tear resistance	200 lbf/in.	D 624, Die B

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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.



- 1) Position G3-1208 Boot & Band in hole, then tighten to 25 ft-lbs using torque wrench.



- 2) Insert pipe into rolled in connector. For inside mount, affix clamp behind O-ring. Torque to 60 in-lbs and backfill.



- 3) For outside mount: pull pipe back, reposition pipe within the wall and affix clamp directly behind O-ring. Torque to 60 in-lbs and backfill.

WARNING: To ensure the G3 Boot System 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: A•LOK strongly suggests use of proper torque wrenches to secure the G3 Boot in the structure as well as to secure the takedown clamp around the connector and pipe. Both torque wrenches are 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 G3 Connector.

ANY QUESTIONS REGARDING G3 BOOT SYSTEM, PLEASE CALL 1-800-822-2565

