

TECHNICAL BULLETIN

# RIEBERLOK®

The following provides a comparison of Westlake Pipe & Fittings Certa-Lok® Restrained Joint Integral Bell (RJIB) pipe to a RieberLok gasket installed in non-restrained C900 pipe.

**Maximum Pull Force:**

- Restrained joint pipe is needed for Horizontal Directional Drilling (HDD) applications. Certa-Lok RJIB is the ideal product for HDD, with pull forces exceeding those of RieberLok gasketed pipe; in some cases by a factor of two times.
- Certa-Lok maximum pull force is calculated using a 2:1 safety factor of the ultimate tensile force. RieberLok does not publish a pull force safety factor.

MAXIMUM PULL FORCE (LBF)				
Size	DR18		DR14	
	Certa-Lok	RieberLok	Certa-Lok	RieberLok
4"	7,800*	4,300	9,800*	5,500
6"	20,100	8,800	22,300	11,000
8"	27,500	15,000	31,000	20,000
10"	49,500	23,000	52,600	30,000
12"	60,000	32,000	60,000	42,000
16"	68,500	n/a	72,000	n/a

\*RJ coupled pipe, RJIB not available in 4" size.

Note: RieberLok values obtained from RieberLok website, Jan 11, 2021

**CERTA-LOK BENEFITS:**

- Certa-Lok RJIB pipe uses a spline lock system which locks the joint in both upstream and downstream directions, allowing pipe to be pushed or pulled without danger of over bellng the joint.
- RieberLok gaskets are designed to lock the pipe when being pulled only. Pushing the pipe, as often happens during trenchless installations, may result in over bellng which can cause joint failure. An additional external restraint is required to prevent over insertion when a RieberLok joint is pushed.
- Certa-Lok can be disassembled and reassembled quickly and easily multiple times if needed. Pipe joined with RieberLok cannot be disassembled without damaging the pipe. This does not accommodate unplanned installation challenges.
- Certa-Lok product family includes restrained transitions and sweeps.

**AGENCY CERTIFICATIONS:**

- Every 20' piece of C900 pipe is hydrostatically pressure tested at the factory assuring compliance with AWWA, NSF and UL standards.
- Field replacement of pipe gaskets voids the manufacturer's certification to the C900 standard.

**WARRANTY:**

- Westlake Pipe & Fittings has always provided a product warranty that covers the pipe and all of its components.
- RieberLok initially warranted only their gasket; however, it has now extended its warranty to include pipe replacement.
- Using the RieberLok product with Westlake Pipe & Fittings pipe voids all Westlake Pipe & Fittings product warranty.

**JOINT RESTRAINT:**

RieberLok's metallic 'teeth' dig deeply into the pipe spigot to achieve restraint.



Westlake Pipe & Fittings Certa-Lok RJIB has no metallic parts which can corrode or damage pipe; a plastic spline is used to achieve restraint.



**PROVEN PERFORMANCE:**

- Millions of feet of Certa-Lok have been successfully installed over 20 years in a variety of applications, including water and sewer, agricultural irrigation, water wells, and mining.

**AVAILABILITY:**

- Certa-Lok RJIB is available from major waterworks distribution branches nationally.
- Certa-Lok RJIB is produced in 3 geographically dispersed Westlake Pipe & Fittings plants across the U.S.
- Additional pipe is readily available if needed on a job site.