

### **INSTALLATION INSTRUCTIONS**

Read installation instructions first before installing. Check parts to ensure that no damage has occurred during transit and that no parts are missing. Check the pipe diameter and restraint coupling specifications (on label) to ensure that you have the proper product for your application.

# Armor Lock<sup>TM</sup>

## **Stainless Steel Restraint Coupling**



Armor Lock™ is compatible with steel, CI, DI, PVC and HDPE pipe.

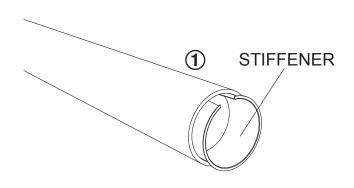
Pipe stiffeners are required on HDPE pipe.

For applications on thin wall PVC and pipelines subject to vacuum conditions, contact Romac Engineering.

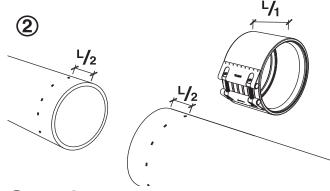
*SIZE (inches)	WORKING PRESSURE (PSI)	TEMPERATURE LIMITATIONS FOR APPLICATIONS ON HDPE PIPE (ΔT) °F	BOLT TORQUE (ft-lbs)	ALLOWABLE DEFLECTION	MAX OD DIFF	WRENCH SIZE (MM hex key)
4.50	235	86°	12	4°	0.10	6
4.80	235	86°	12	4°	0.10	8
6.63	235	86°	12	2°	0.10	8
6.90	235	59°	25	2°	0.10	10
8.63	235	59°	25	2°	0.10	10
9.05	235	59°	25	2°	0.10	10
10.75	235	59°	30	2°	0.10	10
11.10	235	59°	30	2°	0.10	10
12.75	150	68°	30	2°	0.10	10
13.20	150	68°	30	2°	0.10	14

\*Pipe ODs must be within 0.1" in diameter.

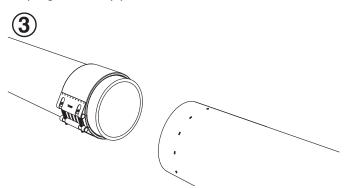
**Step 1** • Clean and eliminate any irregularities on the pipe ends. For applications on HDPE, install a pipe stiffener in each pipe end.



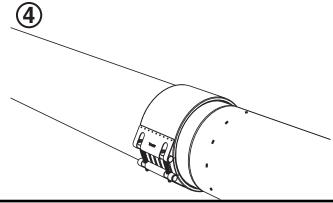
**Step 2** • On each pipe end, make a mark at a distance equal to half the width of the coupling.



**Step 3** • Without opening the coupling, slide the coupling over one pipe end.



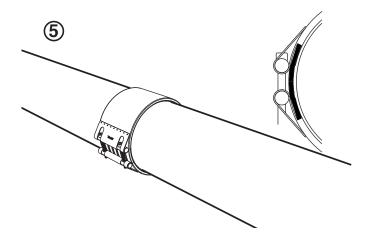
**Step 4** • Bring the other pipe end to a facing position. Make sure the pipes are aligned concentrically and that both pipe ends are correctly supported. See tolerances indicated on the label.



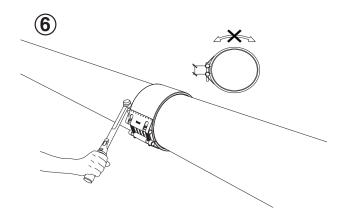
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**Step 5** • Place the coupling between the marks and make sure that the armor is under the bolts.



**Step 6** • Do not rotate the coupling or the pipe during tightening. Tighten the bolts alternately and evenly to the required torque. If there are three bolts, start with the center bolt, and begin tightening.



NOTE: Do not exceed the torque requirements indicated on the product label.

Step 7 • If necessary, you may hydraulically test the coupling up to 1.25 times the working pressure shown on the product label.

#### **HELPFUL HINTS**

- Be sure that the bolts are tightened to the proper torque shown on the label.
- 2. Eliminate any rocks or debris between pipe and gasket.
- Eliminate any dirt on threads of bolts or nuts. 3.
- Pressure test for leaks before backfilling.
- Backfill and compact carefully around restraint.
- Reusing parts with stainless steel hardware may lead to a loss in pressure holding ability due to wear.
- Make sure you have the proper size restraint coupling. 7.