

# 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 diameter of the pipe and clamp specifications (on label) to ensure you have the proper clamp for your application.

## Armor Seal™ Stainless Steel Repair Clamp



The Armor Seal™ is not designed to withstand the weight or the axial forces of the pipe. Confirm that the product label matches your application.

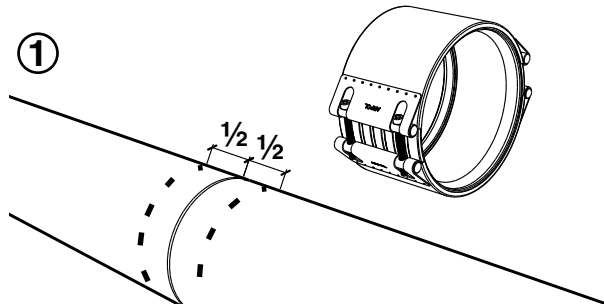
Armor Seal™ is compatible with steel, CI, DI, A/C, Concrete, PVC and HDPE pipe.

Pipe stiffeners are required when coupling HDPE pipe.

SIZE (inches)	RANGE (inches)	WORKING PRESSURE (PSI)	ALLOWABLE DEFLECTION	BOLT TORQUE (ft-lb)	WRENCH SIZE (MM hex key)
4.50	4.33 - 4.57	435	4°	8	6
4.80	4.65 - 4.92	290	4°	8	6
6.63 6.90	6.54 - 7.01	330	2°	15	10
8.63	8.27 - 8.74	260	2°	20	10
9.05	8.82 - 9.29	260	2°	20	10
10.75	10.43 - 10.91	215	2°	20	10
11.10	10.67 - 11.14	215	2°	20	10
12.75	12.60 - 13.07	230	2°	25	10
13.20	12.95 - 13.43	230	2°	25	10
17.40	17.05 - 17.52	230	2°	25	10
25.80	23.35 - 25.98	245	2°	40	14

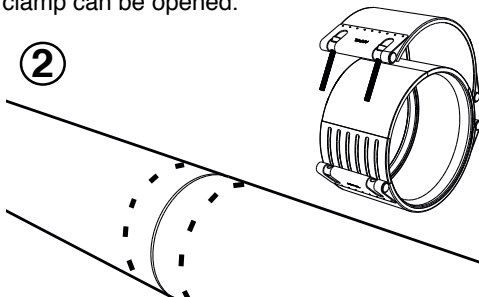
**Step 1** • Thoroughly clean pipe surface that will be covered by the clamp. Remove any irregularities on the damaged area or the pipe ends. To help position the clamp, place reference marks on the pipe slightly wider than the clamp.

①



**Step 2** • Loosen the bolts with the o-rings until the clamp can be opened.

②



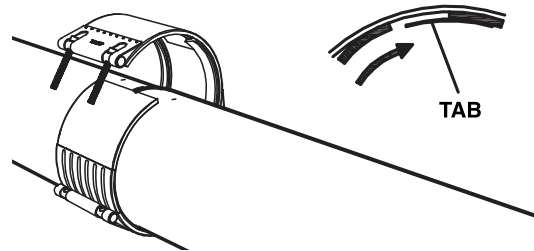
**Step 3** • Place the gasket around the pipe using the reference marks made in Step 1. Make sure the gasket slides between the tab and the shell.

**NOTE: Do not cut the gasket.**

Close the clamp and start the bolts.

If necessary, because of flowing water, Step 3 can be performed beside the crack or hole. Slide the clamp over the damage and begin the bolt tightening.

③

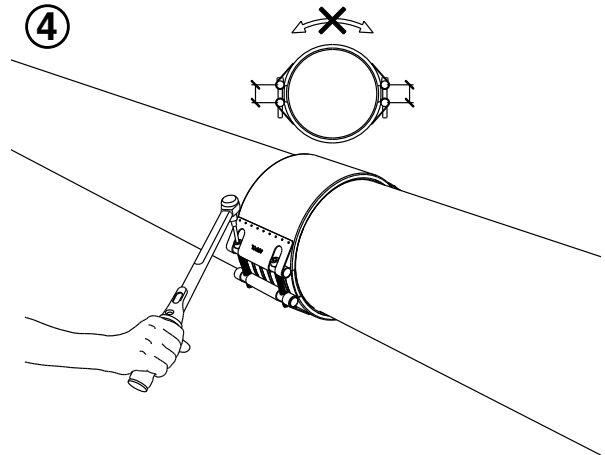


**Step 4** • Do not rotate the coupling or the pipe during tightening.

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

On clamps with three bolts, start at the center bolt, and begin tightening all bolts evenly. Keeping the torque as even as possible between bolts, apply the required torque.

④



**Step 5** • If necessary, you may hydraulically test the clamp up to 1.5 times the working pressure shown on label.

## Armor Seal™ Stainless Steel Repair Clamp

### HELPFUL HINTS

1. 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.
3. Eliminate any dirt on threads of bolts or nuts.
4. Pressure test for leaks before backfilling.
5. Backfill and compact carefully around clamp.
6. Reusing parts with stainless steel hardware may lead to a loss in pressure holding ability due to wear.
7. Make sure you have the right size clamp for the pipe being repaired.
8. Make sure the pipe damage is between the gasket ribs.