

# **EBAA-Seal**<sup>®</sup> Improved Mechanical Joint Gasket



EBAA-Seal Gasket.

The EBAA-Seal - *Improved* Mechanical Joint Gasket creates a superior seal while using the minimum torque values associated with mechanical joints. This is achievable by the gasket's shape and the gasket material quality.

The specifically engineered shape allows the gasket to deform or deflect up to 30 percent more than a standard mechanical joint gasket. This allows a better transfer of bolt torque into gasket compression between the gasket and the sealing face of either the pipe wall or joint gasket race. Since a standard mechanical joint gasket is already similar to the shape of the gasket race, the gasket does not deflect as it enters the gasket race. This requires the torque values to be at the top of the mechanical joint torque range to achieve a proper seal, and on large diameters this can be time and labor consuming.

The gaskets, as our restraint devices are manufactured in the United States of America. This allows us to specify quality gasket materials to be used in the manufacturing process and since they are made domestically we can monitor the process as well to assure we are providing a gasket that is to the quality of our MEGALUG® restraints and the EBAA Iron, Inc. name.



The EBAA-Seal deflects and compresses better to the MJ gasket recess than the SMJ gasket, generating greater sealing capabilities with less bolt torque values.

### **Features and Applications:**

- For use at Mechanical Joints; Sizes 4 inch through 48 inch
- In accordance to ANSI/AWWA C111/A21.11-00
- 30% More Gasket Deflection than Standard Mechanical Joint Gasket, creating a superior seal between the fitting and the pipe
- Sealing capabilities comparable to that of a push-on joint
- Gasket is bidirectional and has no front or back
- Seals at the joint are created with minimum bolt torque requirements, allowing joint assembly to be done right the first time, in less time

For use on water or wastewater pipelines subject to hydrostatic pressure and tested in accordance with either AWWA C600, C605 or ASTM D2774.

#### **Sample Specification**

To improve the sealing capacity, the gaskets for all mechanical joints conforming to the requirements of ANSI/ AWWA C110/A21.10, C111/A21.11, or C153/A21.53 shall be of a design that causes the gasket to deflect approximately 30% during assembly of the mechanical joint. The gasket material shall conform to the requirements of ANSI/AWWA C111/A21.11, section 11-6.4, of the latest revision. Mechanical joint gaskets shall be EBAA Iron, Inc.'s EBAA-Seal - Improved Mechanical Joint Gasket or equal.

## Series EBAA-Seal Submittal Reference Drawing







Nominal	Pipe	А	В	D
Pipe Size	Outside Diameter	+/01	+/01	+/- 1%
4	4.80	0.62	0.88	4.68
6	6.90	0.62	0.88	6.73
8	9.05	0.62	0.88	8.85
10	11.10	0.62	0.88	10.87
12	13.20	0.62	0.88	12.95
14	15.30	0.62	0.88	14.99
16	17.40	0.62	0.88	17.07
18	19.50	0.62	0.88	19.13
20	21.60	0.62	0.88	21.20
24	25.80	0.62	0.88	25.34
30	32.00	0.73	1.25	31.47
36	38.30	0.73	1.25	37.67
42	44.50	0.73	1.25	43.78
48	50.80	0.73	1.25	49.98
	N	OTE: All dimensions ar	e in inches and are subject to	change without notice.

# Installation Instructions for Mechanical Joint Assembly per AWWA C600

1. Clean the socket and the plain end. Lubrication and additional cleaning should be provided by brushing both the gasket and plain end with soapy water or an approved pipe lubricate meeting the requirements of ANSI/AWWA C111/A12.11 just prior to slipping the gasket onto the plain end for joint assembly. Place the gland on the plain end with the lip extension toward the plain end; follow by the gasket with the narrow edge of the gasket toward the plain end [The gasket provided may have been the EBAA-Seal® Improved Mechanical Joint Gasket. This gasket is bidirectional and has no front or back. The use of a pipe wall stiffening insert is required on High Density Polyethylene pipe.].

NOTE: In cold weather it is preferable to warm the gasket to facilitate assembly of the joint.

- 2. Insert the pipe into the socket and press the gasket firmly and evenly into the gasket recess. Keep the joint straight during assembly.
- 3. Push the gland toward the socket and center it around the pipe with the gland lip against the gasket. Insert bolts and hand-tighten nuts. Make deflection after joint assembly but before tightening bolts.
- 4. Tighten the bolts to the normal range of bolt torque [45-60 ft-lbs for 3 inch, 75-90 ft-lbs for 4 inch through 24 inch, 100-120 ft-lbs for 30 inch and 36 inch, and 120-150 ft-lbs for 42 inch and 48 inch.] while at all times maintaining approximately the same distance between the gland and the face of the flange at all points around the socket. This can be accomplished by partially tightening the bottom bolt first, then the top bolt, next the bolts at either side, finally the remaining bolts. Repeat the process until all bolts are within the appropriate range of torque. In large sizes (30-48 inch), five or more repetitions may be required. The use of a torque-indicating wrench will facilitate the procedure.



EBAA IRON Sales, Inc. P.O. Box 857, Eastland, TX 76448 Tel: (254) 629-1731 Fax: (254) 629-8931 (800) 433-1716 within US and Canada contact@ebaa.com www.ebaa.com

* * * * * *	
*****	
*********	
************	
*******	