

# Series 2800

Bell Restraint Harness  
For 14" - 54" PVC Pipe

ANSI/AWWA C900-16  
U.S. Patent Nos 4,627,774 5,071,175

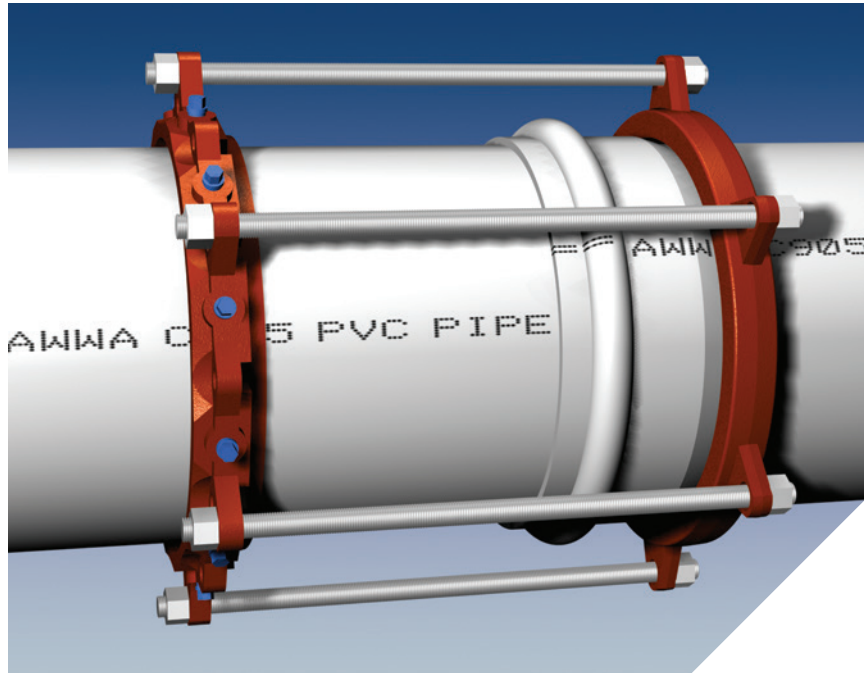


Image Depicts Series 2816 on 16 inch PVC Pipe.

## Features and Applications:

- For use on ANSI/AWWA C900-16 PVC pipe when restraining PVC pipe bells
- Minimum 2 to 1 Safety Factor
- Actuating gripping wedge design for dynamic axial restraint
- **MEGA-BOND®** Restraint Coating System  
For more information regarding MEGA-BOND, refer to [www.ebaa.com](http://www.ebaa.com)
- Constructed of ASTM A536 ductile iron  
For use on water and wastewater pipelines subject to hydrostatic pressure and tested in accordance with either AWWA C600 or ASTM D2774.

## Pressure Ratings (PSI) and Weights (lbs)

| Nominal Pipe Size | Series Number | Approximate Shipping Weight | DR14 | DR18 | DR21 | DR25 | DR32.5 | DR41 | DR51 |
|-------------------|---------------|-----------------------------|------|------|------|------|--------|------|------|
| 14                | 2814          | 118.9                       | 235  | 235  | -    | 165  | 125    | 100  | -    |
| 16                | 2816          | 137.9                       | 235  | 235  | -    | 165  | 125    | 100  | -    |
| 18                | 2818          | 152.9                       | 200  | 200  | 165  | 165  | 125    | 100  | -    |
| 20                | 2820          | 178.6                       | 200  | 200  | -    | 165  | 125    | 100  | -    |
| 24                | 2824          | 272.6                       | 200  | 200  | -    | 165  | 125    | 100  | -    |
| 30                | 2830          | 464.3                       | -    | -    | 165  | 165  | 125    | 100  | 80   |
| 36                | 2836          | 580.8                       | -    | -    | 125  | 125  | 125    | 100  | 80   |
| 42                | 2842          | 907.3                       | -    | -    | -    | -    | 125    | 100  | 80   |
| 48                | 2848          | 1,030.1                     | -    | -    | -    | -    | 125    | 100  | 80   |
| 54                | 2854          | 2,477.1                     | -    | -    | -    | 150  | -      | -    | -    |

NOTE: For applications or pressures other than those shown, please contact EBAA for assistance.

## Sample Specification

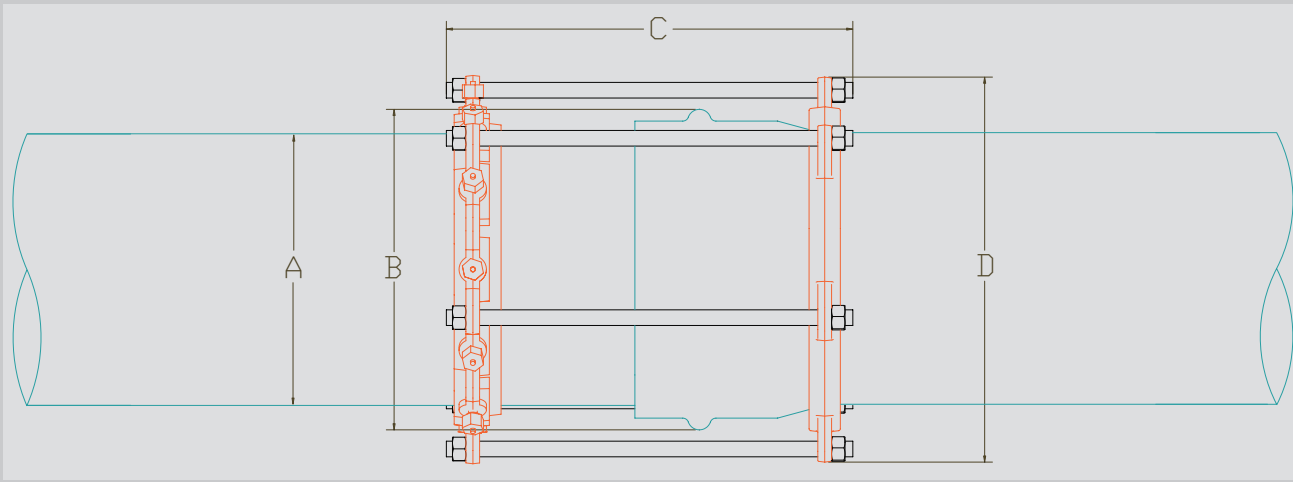
Restraint for PVC pipe (ANSI/AWWA C900-16) at the bell shall consist of the following: The restraint shall be manufactured of ductile iron conforming to ASTM A536. A backup ring shall be used behind the PVC bell. A restraint ring, incorporating a plurality of individually-actuating gripping surfaces, shall be used to grip the pipe, and a sufficient number of bolts shall be used to connect the bell ring and the gripping ring. The restraint devices shall be coated with MEGA-BOND. (For complete specifications on MEGA-BOND visit [www.ebaa.com](http://www.ebaa.com).) The restraint shall be the Series 2800, as manufactured by EBAA Iron, Inc., or approved equal.

A Microsoft® Office Word Document version of this Sample Specification may be downloaded from [www.ebaa.com](http://www.ebaa.com).

# Series 2800 Submittal Reference Drawing

EBAA IRON

MADE IN USA

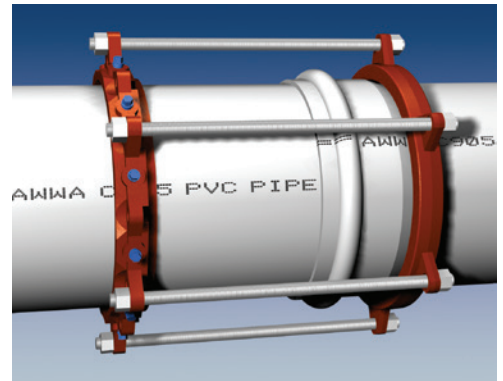
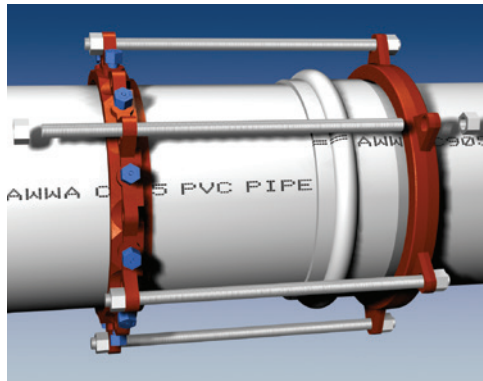
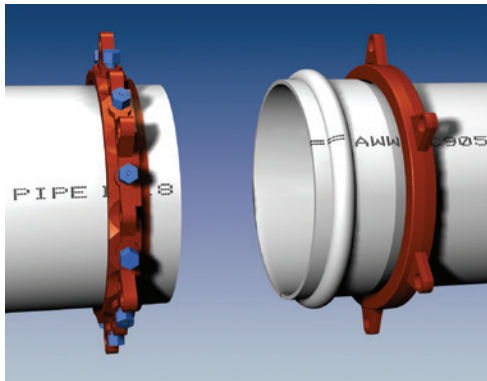


## Submittal Reference Drawing Dimensions

| Nominal Pipe Size | Series Number | A<br>Pipe<br>O.D. | B<br>Maximum Bell<br>O.D. Cleared | C<br>Thrust Bolt<br>(Number - Size) | D<br>Max. Restraint O.D.<br>(Casing Clearance) |
|-------------------|---------------|-------------------|-----------------------------------|-------------------------------------|------------------------------------------------|
| 14                | 2814          | 15.30             | 20.38                             | 5 - 1 x 26                          | 23.26                                          |
| 16                | 2816          | 17.40             | 22.75                             | 6 - 1 x 26                          | 25.51                                          |
| 18                | 2818          | 19.50             | 24.88                             | 6 - 1 x 26                          | 27.76                                          |
| 20                | 2820          | 21.60             | 27.13                             | 7 - 1 x 26                          | 30.01                                          |
| 24                | 2824          | 25.80             | 31.63                             | 8 - 1¼ x 32                         | 35.00                                          |
| 30                | 2830          | 32.00             | 39.25                             | 10 - 1¼ x 32                        | 42.88                                          |
| 36                | 2836          | 38.30             | 46.13                             | 12 - 1¼ x 32                        | 49.76                                          |
| 42                | 2842          | 44.50             | 50.50                             | 14 - 1¼ x 48                        | 54.12                                          |
| 48                | 2848          | 50.80             | 57.20                             | 16 - 1¼ x 48                        | 61.08                                          |
| 54                | 2854          | 57.60             | 66.75                             | 18 - 1¼ x 48                        | 71.00                                          |

NOTE: Dimensions are in inches and are subject to change without notice.

## Installation Instructions



- The Series 2800 is designed to restrain C900-16 PVC pipe bell joints. It consists of one restraint ring with individual actuating wedges to restrain the spigot end of the pipe, and one back up ring that slides onto the pipe and fits behind the pipe bell as an anchor point while the two rings are connected together by an array of connecting thrust rods.
- Slide the Series 2800 bell ring along the length of the PVC pipe to fit snugly behind the bell. Slide the Series 2800 restraint ring on the spigot end of the second pipe with the lip facing spigot end of the pipe.
- Assemble the pipe joint per the pipe manufacturer's instructions.
- Insert all of the connecting rods through the bolt holes provided and thread the nuts on each of the rods so that several threads show. Do not tighten these at this time.
- Hand tighten the actuating screws until all wedges are touching the pipe. Continue tightening the screws in an alternating manner until the torque limiting twist-off nuts twist off.
- Snug all of the nuts on the connecting rods. Make sure that the Series 2800 bell ring bears evenly against the back side of the pipe bell. Do not over tighten the connecting rods as to move the spigot end further into the bell.



**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

