

**ROGERS WATER UTILITIES
ROGERS, ARKANSAS**

**SPECIFICATIONS FOR
CASING SPACERS & END SEALS
DECEMBER 2004**

1. **SCOPE**

This product specification covers casing spacers (insulators) for use in water or sanitary sewer service. Casing spacers are used to facilitate installing a water or sanitary sewer pipe (carrier) inside a casing pipe. Casing spacers shall consist of two or more segments of the circular steel that bolt together forming a shell around the carrier pipe. Casing spacers should protect the carrier pipe and any protective coating or wrapping from during the installation, and properly supported within the casing pipe.

2. **GENERAL REQUIREMENTS**

- a. Band shall have a minimum 14 gauge 304 stainless steel band. Bands shall be two segments, 8 inch wide. For carrier pipes, 26 inch diameter and larger, bands shall be three or more segments and 12 gauge 304 stainless steel.
- b. Steel Riser shall be high grade 304 stainless steel, minimum 10 gauge thickness and shall be fabricated to support the carrier pipe and its liquid load. Riser shall be sized to position the carrier pipe in the casing, support all loads and provide proper contact for the isolation function.
- c. Casing spacers shall have ample riser height to limit vertical movement of the carrier pipe within the casing pipe. A maximum of 1 inch clearance shall be provided between the top runner and the ID of the casing pipe for carrier sizes of 6 inch through 12 inch. A maximum of 2 inch clearance shall be provided between the top runner and the ID of the casing pipe for carrier pipe sizes of 18 inch through 64 inch.
- d. The liner around the carrier pipe shall have a flexible PVC liner of 0.09 inch thickness with a Durometer "A" 85-90 hardness and a minimum 58,000 volt dielectric strength.
- e. Runners shall be of high-pressure molded glass reinforced polymer with a minimum compressive strength of 18,000 psi, 2 inch in width and a minimum of 8 inches long. Polyethylene runners are not an acceptable alternative.

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- f. The runners shall be attached to the band or riser by 3/8 inch welded stainless steel studs and lock nuts, which shall be recessed far below the wearing, surface on the runner.
- g. The band section shall be bolted together with 304 stainless steel studs, nuts and washers. Hardware shall be 5/16 inch for carrier pipes up to 36 inch diameter and 3/8 inch for carrier pipes 36 inch and larger.
- h. A minimum of three casing spacers shall be required for each joint of carrier pipe (each end and middle) within casing pipe.
- i. End seals shall be a pull-on or wrap around with stainless steel bands. End-seals shall be made of 1/8 inch compounded synthetic rubber.

3. **QUALITY ASSURANCE**

- a. The Rogers Water Utilities may, at no cost to the manufacturer, subject random casing spacers or end seals to testing by an independent laboratory for compliance with these standards. Any visible defect or failure to meet the quality standards herein will be grounds for rejecting.
- b. The above specification is considered sufficient for carrier pipe sizes of 6 inch through 12 inch and casing lengths up 200 feet. For larger size pipes and longer or unusual casings, the casing spacer manufacture shall submit recommended spacer design to the design engineer and the Rogers Water Utilities for review and approval.
- c. All casing spacers and end seals shall be domestically manufactured.

The following manufactures are approved for casing spacers and end seals.

APPROVED MANUFACTURERS LIST

Advance Products & Systems, Inc.	APS SS18-21
	APS SS112-2
Power Seal Pipeline Products, Inc.	48120 SS
CCI Pipeline Systems, Inc.	CSS8/CSS12
J-Four Pipeline Products, Inc.	63 SS