

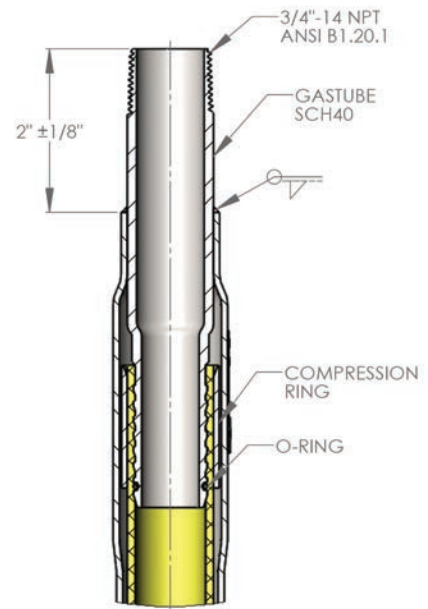
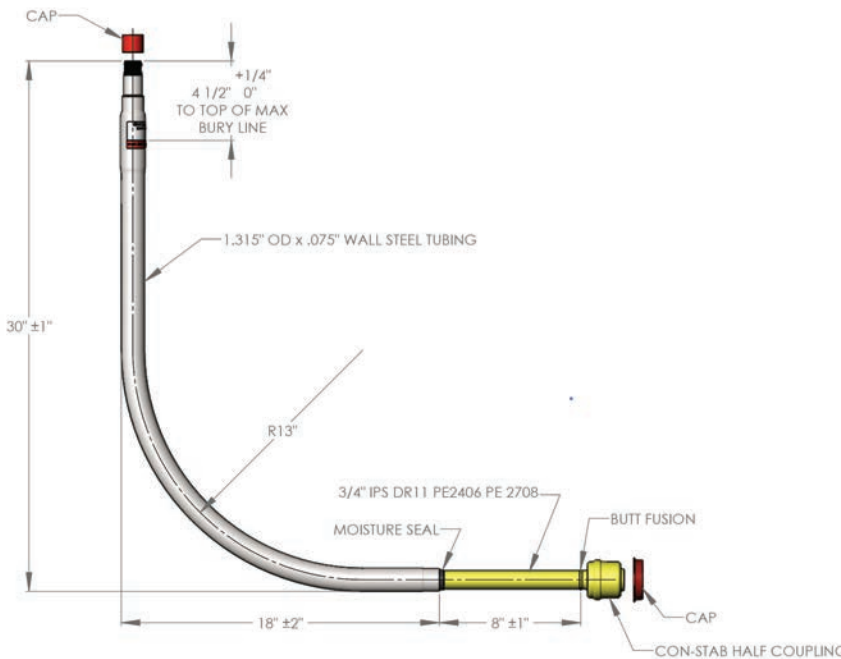
GEORG FISCHER | SERVICE RISER with STAB HALF COUPLING



| MODEL # | DESCRIPTION / SIZE | SDR | CONDUIT LENGTH | MASTER CARTON QTY. | MAKE SELECTION BELOW |
|--|-----------------------------|--------|----------------|--------------------|--------------------------|
| ANODELESS SERVICE RISER WITH STAB HALF COUPLING | | | | | |
| 360000105 | 3/4" STAB RISER MPT x IPS | SDR 11 | 30V x 18H | 6 | <input type="checkbox"/> |
| 360011088 | 3/4" STAB RISER MPT x IPS | SDR 11 | 30V x 30H | 6 | <input type="checkbox"/> |
| 360000131 | 1" STAB RISER MPT x IPS | SDR 11 | 30V x 30H | 6 | <input type="checkbox"/> |
| 360000139 | 1-1/4" STAB RISER MPT x IPS | SDR 10 | 30V x 30H | 3 | <input type="checkbox"/> |
| 360011172 | 1-1/2" STAB RISER MPT x IPS | SDR 11 | 30V x 30H | 2 | <input type="checkbox"/> |
| 360000146 | 2" STAB RISER MPT x IPS | SDR 11 | 34V x 34H | 2 | <input type="checkbox"/> |



Stab Coupling Inlet x MPT Steel Outlet



JOB NAME: _____

JOB LOCATION: _____

CONTRACTOR: _____

ENGINEER APPROVAL: _____

DATE: _____

DATE: _____

ITEM TAG: _____

PART NUMBER: _____

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PRODUCT SPECIFICATIONS:

ANODELESS SERVICE RISER
STANDARD
PE2708/ PE4710/ PA11

| | |
|----------|----------------|
| FAMILY: | RISER |
| PRODUCT: | ASR |
| TYPE: | SPECIFICATIONS |
| DOC: | PS-701/REV4 |
| PAGES: | 3 |

SCOPE:

This document describes the standard specifications and features related to GF Central Plastics Factory Assembled Anodeless Service Riser for pressure piping systems. Anodeless Service Risers are produced with PE2406/ PE4710, or PA 11 pipe. Anodeless Service Risers are designed to transport gas from an underground polyethylene service line to the above ground steel piping. Anodeless Risers do not require cathodic protections.

SIZES:

PE Sizes from 1/2" CTS through 12" IPS.

Steel Sizes from 1/2" IPS through 12" IPS.

REQUIREMENTS:

| | |
|------------------|---|
| ASTM D2513 | <u>Specification for Thermoplastic Gas Pressure Pipe, Tubing, and Fittings (Category I)</u> |
| ASTM D3350 | <u>Specification for Polyethylene Plastic Pipes and Fittings Materials</u> |
| ASTM F1973 | <u>Specification for Factory Assembled Anodeless Risers and Transition Fittings in Polyethylene (PE) and Polyamide (PA11) Fuel Gas Distribution Systems</u> |
| DOT/CFR Part 192 | <u>Department of Transportation, Pipeline Safety Standards - 49 CFR Part 192</u> |

REFERENCE DOCUMENTS:

| | |
|------------|---|
| PPI TR-19 | <u>Thermoplastics Piping for the Transport of Chemicals</u> |
| PPI TR-31 | <u>Underground Installation of Polyolefin Pipe</u> |
| ANSI B31.8 | <u>Gas Transmission and Distribution Piping Systems</u> |
| NFPA 58 | <u>Liquefied Petroleum Gas Code</u> |

CERTIFICATION/LISTINGS:

| | |
|------------|--|
| CSA B137.4 | <u>Polyethylene Piping Systems for Gas Service</u> |
| IAPMO | <u>Uniform Plumbing CodeTM</u> |

MATERIALS:

| | |
|--------------------|--|
| PE Pipe: | All pipe shall meet or exceed the requirements of ASTM D2513 and carry the appropriate pipe category rating (Table 4 of D2513). PE2406 pipe should be IAPMO/UPC & CSA listed where applicable and marked accordingly. |
| Steel Pipe/Nipple: | ASTM A53 or API 5L Grade 25, Grade B, or equivalent. (Sch. 40 & Sch. 80 Available) |
| Pipe Threads: | ANSI B1.20.1 |
| Protective Casing: | Steel Tubing per ASTM A513, Minimum wall .065" or equivalent (Sch. 40 Available) |
| Compression Ring: | Steel Tubing C1020/ C1035 per ASTM A513 or equivalent. |
| O Rings: | Buna-N (Nitrile) per ASTM D2000 |
| Epoxy Coating: | Electrostatically applied Fusion Bonded Epoxy coating 8 mils. Minimum average thickness. Gray. Cathodic Disbondment is evaluated in accordance with ASTM G8 Atmospheric Corrosion is evaluated in accordance with ASTM B117 |

TEST METHODS:

- ASTM D1598 Time-to-Failure of Plastic Pipe Under Constant Internal Pressure.
PE2708
Must exceed 170 hours in 80°C bath @ 670psi Hoop Stress, or
Must exceed 1000 hours in 80°C bath @ 580psi Hoop Stress, or
Must exceed 1000 hours in 23°C bath @ 1600psi Hoop Stress.
- PE4710
Must exceed 200 hours in 80°C bath @ 750psi Hoop Stress, or
Must exceed 1000 hours in 80°C bath @ 660psi Hoop Stress, or
Must exceed 1000 hours in 23°C bath @ 1600psi Hoop Stress.
- (All methods are considered equivalent)*
- ASTM D1599 Short-Term Hydraulic Pressure Failure of Plastics Pipe, Tubing, and Fittings.
Uniform pressurization until failure between 60 and 70 seconds from start of test. Must result in ductile failure at a pressure great enough to create a 2520psi Hoop Stress for PE2708 or 2900 psi for PE4710.
- ASTM D638 Tensile Strength Test
Test at a pull rate of 0.20 inches per minute. Test should result in a minimum of 25% elongation and permanent deformation in the PE pipe without separation or leakage at the transition between PE and Steel. Samples leak tested prior to, following, and while still under a tensile load.
- ASTM D1588 Constant Tensile Load Joint Test (CTLJT):
Constant tensile load and internal pressure applied to create a 1320 psi fiber stress for a minimum of 1000 hours. No failure or slippage at the transition joint. Samples leak tested prior to and following test @ 7 psi and 1.5 x's MAOP.
- ASTM F1973 7.4 Temperature Cycling Test:
Leak-free after 10 cycles between -20F and 140F when tested at 7 psig and 1.5 x's MAOP.
- ASTM E515 Standard Test Method for Leaks Using Bubble Emission Techniques:
Observation for leakage in a liquid medium using immersion or application technique.
- CSA Z245.20 External Fusion Bonded Epoxy Coating for Steel Pipe (Cathodic Disbondment Test):
Test method for evaluating cathodic disbondment of fusion bonded coatings by immersing samples with holidays in the coating into an electrolyte solution at 150F for 24 hours. A 3.5 volt DC current is applied to an electrode for the test duration. The acceptance criteria is no disbondment greater than 8

PRESSURE RATING:

Anodeless riser pressure ratings are dependent on the rating of the PE pipe. Pressure ratings are subject to de-rating depending on ambient temperatures. Central Plastics' Anodeless Risers are designed to meet or exceed the pressure carrying capabilities of the PE pipe installed in the riser.

PRESSURE TESTING:

Pressure testing can be conducted in accordance with the recommendations of the PE pipe manufacturer, which generally follow the guidelines stated in PPI Technical Report TR-31 (not to exceed 1.5 times the rated pressure for 8 hours).

MAXIMUM OPERATING TEMPERATURES:

The maximum operating temperature of PE pipe is 140°F. Pressure de-rating factors should be considered when operating systems above the 73°F stated pressure rating to maintain the 50 year substantiated long-term hydrostatic strength of the PE.

STORAGE/SHELF LIFE:

The polyethylene pipe supplied in Anodeless Service Risers may be subject to storage condition and/or time requirements by the pipe manufacturer. It is recommended that fittings which are stored for extended periods (two years or greater) be stored indoors in the original packaging to protect against UV degradation. We recommend following the guidelines set forth by the PE Pipe manufacturer in regards to outside storage of exposed PE Pipe.

CHEMICAL RESITANCE:

Polyethylene generally exhibits strong resistance to many chemical compounds. Known chemical resistance characteristics at specified temperatures can be found in PPI Technical Report TR-19.

INSTALLATION:

These risers are compatible for heat fusion joining with pipe or fittings manufactured from like or similar resin by butt, socket, or electrofusion methods. Mechanical fittings can be used to install Anodeless Service Risers depending on local requirements.

Burial depth marks on anodeless risers should be observed and are marked on the Anodeless riser with "DO NOT BURY" Burial depth markers should always be maintained above ground

It is recommended that a pressure test be performed after installation.

Adequate protection should be taken to insure there is no damage to the protective coating prior to burial. Any damage to coating should be repaired prior to burial

All state, local, and federal safety standards and codes should be observed. The installer assumes responsibility for assuring that this product is suitable for the intended application.

CUSTOM OPTIONS:

| | | |
|---------------------------------|----------------------------------|--|
| Custom Dimensions | By-Pass Outlet | Tracer Wire Connection |
| Factory Installed Valves | Attached Tracer Wire | Factory Installed Mechanical Connectors |
| Shear Protection Sleeves | Custom Designs | UV Protection Sleeves |
| Wall Brackets & Mounting Stakes | Specialized Packaging & Bundling | Specialized Corrosion Resistant Packages |
| Pressure Seal on Horizontal Leg | Options Metric Sizes Available | Available with any PE Pipe |

AVAILABLE RISER STYLES:

- Pre-Bent
- Pre-Bent w/Extended Length PE Pigtail
- Straight
- Flexible
- Steel x Flex
- Commercial & Industrial Sizes

AVAILABLE CONNECTION STYLES:

- Threaded (NPT & BSP)
- Flanged
- Chamfered for Welding
- By-Pass Connections

END OF LIFE/DISPOSAL:

Polyethylene fittings are 100% recyclable and suitable for recycling into post-consumer products. Electrofusion metallic components include copper and copper alloys, aluminum, and/or steel and are also recyclable.