



1441 East Island Highway  
NanOOSE Bay, British Columbia  
V9P 9A3  
Phone: 250-468-391  
Email: sales@sp1fittings.com

## Transition Fitting Specifications and Testing

### HDPE Pipe:

All SP1 Fittings Inc, HDPE Transition Fittings, are manufactured in Canada by only using North American produced, High Density Polyethylene Pipe with the following specifications.

- Manufactured in accordance to ASTM, AWWA, CSA, FM and API standards.
- Manufactured to meet or exceed PE resin specifications: PE3408, PE3608, PE4710 and PE100.
- ASTM D3350 with the minimum cell classification of 445574C.
- ASTM F714 and AWWA C906.
- Meets NSF-14/61, listing PM13570.
- Pressure Ratings listed on the specification sheets are for water at 73°F (23°C).

### HDPE Fittings:

All SP1 Fittings Inc, HDPE Transition Fittings, are cold pressed to HDPE Molded or Electrofusion Fittings manufactured only by high quality, High Density Polyethylene fittings manufactured with the following specifications.

- Manufactured in accordance to CSA, ASTM D2513, D3261, AWWA C901/906, NSF, and NSF/ANSI 372, where applicable, as well as FM standards by request.
- Manufactured to meet or exceed PE resin specifications: PE3408, PE3608, PE4710, and PE100.
- ASTM D3350 with the minimum cell classification of 445574C.
- Pressure Ratings listed on the specification sheets are for water at 73°F (23°C).

Testing for quality assurance has been successfully performed to satisfy all requirements for Industrial, Municipal, and Potable Water piping systems. ASTM standardized tests, AWWA tests (AWWA C901/C906), and additional tests have been performed on all SP1 Fittings Inc. Transition Fittings, to pass without failure.

The above includes Pull Tests exceeding 6000 lbs. as per the pipe manufacturers recommended maximum pull strength for pipe, and Full Hydro-Static pressure tests meeting the specifications of ASTM D2513, D1599, D1598, F-714.

SP1 Fittings Inc. pulls and tests Transition Fittings from individual batches to ensure they constantly pass, to meet or exceed the above testing methods and specifications.

All Transition Fitting are designed to handle the pressure rating of the HDPE pipe specified (SDR7.3, SDR9, SDR11, and SDR17) with a 2:1 safety factor at 73.40 degrees Fahrenheit, (23 degrees Celsius), with a minimum 50-year design life, as specified with the HDPE pipe manufacturers and PPI.

## **Threaded, and Grooved Stainless Steel, and Carbon Steel Ends:**

- Sizes range from ¾" to 12" Male National Pipe Thread (NPT), and 1" to 12" Cut Groove.
- All National Pipe Threads (NPT), are made to ANSI/ASME B1.20.1 – 2013.
- All Cut Groove Ends are cut to standard AWWA C606 Table 2 and Table 3 Radius Cut Groove specifications.
- Manufactured with Carbon Steel (A53 or A106 grade), Type 304, or Type 316 (ASTM A249 or ASTM A269), and C954 grade Aluminum Bronze (lead-free material), that meets ASTM B505/B505M and B271 specifications.
- Carbon Steel fittings come standard with 194T liquid sprayed White Epoxy coating that meets or exceeds NSF61 5.300, AWWA C116-01, C213-01, UL 262, and FM 1120/1130, where applicable.

## **QA and Warranty:**

SP1 Fittings Inc. ensures quality assurance of their products, with a 1 year limited warranty of manufacturing defects, with exception of failure due to; installation, fusion welds, and compatibility of products. All installation and fusion welds, must be completed in accordance to the pipe or fitting manufacturers specifications, and requirements, also listed by PPI.

**\*\* Note:** SP1 Fittings Inc. Transition fittings, do not meet ASTM D2513. These fitting CANNOT be used in natural gas applications. **\*\***