

Purad PVDF Vent

PART 1 GENERAL

1.1 Summary

Furnish a complete PVDF piping system to include pipe, related fittings and joining equipment for ventilation systems at low pressure.

1.2 References

The following standards apply to products used within this section.

ASTM D 1598	ASTM D 1599
ASTM D 2122	ASTM D 2657
ASTM D 2837-85	ASTM D 3222-81
DVS 2207-15	

The system design shall meet the requirements of ASME/ANSI B31.3 for design criteria where temperature and pressure fall within the limits of the code.

1.3 Definitions

Purad Vent (PVDF)
Polyvinylidene Fluoride

1.4 System Description

System shall be a Purad PVDF system made of uniform pipe and fitting resin.

1.5 Submittals

Submit the Following:

- A.** Product data for the system specified; relative to materials, dimensions of individual components, profiles and finishes.
- B.** Product certificates signed by manufacturer of Purad PVDF Vent piping product, stating compliance to stated requirements.
- C.** Welder certificates, certifying that welders comply with the installation procedures as outlined by ASTM D-2657 & DVS 2207-15. All required training should be scheduled and completed prior to job start-up.
- D.** Qualification of firms supplying Purad PVDF Vent: Firms must have a minimum of five years experience in design, installation and operation of thermoplastic piping systems.

1.6 Quality Assurance

Obtain components from a single source having responsibility and accountability to answer and resolve problems regarding proper installation, compatibility, performance, and acceptance.

1.7 Delivery, Storage and Handling

- A.** All Purad PVDF Vent pipe to arrive on-site inside one general grade sealed plastic bag.
- B.** All Purad PVDF Vent fittings to arrive on-site in one general grade sealed bag packed in boxes.
- C.** Store products on elevated platforms in a dry location with protection from the environment.
- D.** Lift, support and transport Purad PVDF Vent piping per manufacturers' recommendations.

1.8 Warranty

Warranty period is one year after date of delivery provided that such products are installed, used, operated, adjusted and serviced according to the manufacturers' recommendations

1.9 Extra Material

Turn over to owner at end of construction: necessary welding equipment as suggested by manufacturer for repair, additions and maintenance of Purad PVDF Vent piping system.

PART 2 PRODUCTS

2.1 Manufacturers

Subject to compliance with requirements products which may be incorporated in the work include: The Purad PVDF System as supplied by Asahi/America, Inc. of Malden, Massachusetts, (781) 321-5409. Produced by Agru Kunststofftechnik GmbH of Bad Hall, Austria.

2.2 Material

Pipe, valves and fittings shall be made from Solef resin produced by Solvay. The resin shall meet or exceed the requirements outlined for a Type II suspension grade homopolymer resin in ASTM D-3222.

2.3 Pipe

Pipes are designed to be low pressure ventilation pipe. The maximum operating pressure is 15psi from 68°F to 200°F

2.4 Fittings

Molded fittings shall meet requirements of the pipe as indicated in 2.3

2.5 Damper Valves

All damper butterfly valves shall be manufactured from materials compatible with the pipe and fittings as specified. All dampers shall have continuously adjustable, securable handles.

2.6 Flanges

All flanges shall be ANSI bolt hole pattern B16.5.

2.7 Unlisted Components

Any special fittings, welded areas, etc. not supplied as part of the normal product offering shall be classified as unlisted components. Products falling into this category shall be rated by the manufacturer.

2.8 Pipe Supports

Supports, guides, etc. for the pipe shall be of a design that does not scratch, puncture or wear the pipe.

Support spacing shall be per the manufacturers written specifications.

PART 3 EXECUTION

3.1 Installation

Purad PVDF Vent installation shall be performed by factory certified technician.

Install ventilation piping to comply with manufacturer's recommended procedures. All pipe and fitting joints shall be done according to Asahi recommendations using:

- A) Butt fusion
- B) Socket welding
- C) Hot gas welding

3.2 Installer Qualification

- A) Installers shall be pre-qualified through sufficient training in butt fusion & hot air welding techniques according to ASTM D2657 Section 8.
- B) Manufacturer and/or Manufacturer's Representative shall be hired by the installing contractor to provide on-site training in the assembly, installation, and operation of ventilation systems.

3.3 Testing

Testing shall be conducted in accordance with manufacturer's recommendations. The owner shall be notified at the time of test and can choose to be present.