

# R-1 90° STANDARD RUBBER ELBOW FITTING

## Specification #RV-R-1

### PART 1 GENERAL

#### 1.01 SUBMITTALS

- A. Submit product literature that includes information on the performance and operation of the fitting, materials of construction, dimensions and weights, elastomer characteristics, and pressure ratings.
- B. Upon request, provide shop drawings that clearly identify the fitting dimensions including all supplied accessories.

#### 1.02 QUALITY ASSURANCE

- A. Supplier shall have at least ten (10) years experience in the manufacture of rubber fittings, and shall provide references and a list of installations upon request.

### PART 2 PRODUCTS

#### 2.01 RUBBER FITTINGS

- A. Fitting shall have a rubber inner tube, a body constructed of multiple plies of fabric impregnated with synthetic rubber, and a protective outer cover of synthetic rubber to provide resistance to deterioration from weather and ozone. Special covers shall be applied when specified in the purchase order to resist weather, ozone, and corrosive fumes. For extra strength spiraled steel wires shall be imbedded in the body of the fitting from flange to flange.
- B. The temperature and chemical compatibility requirements, as specified in the purchase order shall determine the elastomer and fabric materials.

Class I - to 180° F: PGR, Neoprene, Hypalon, or Buna-N with Nylon or Polyester reinforcement.

Class II - to 250° F: Chlorobutyl, EPDM with polyester reinforcement.

Class III - to 400° F: Solid Viton®, with Kevlar® reinforcement.

- C. Flanges shall be constructed integrally with the body to resist stresses. Flanges shall be full-pattern so that gaskets are not necessary. Flanges shall be drilled to ANSI B16.5, Class 150#, or as specified in the Purchase Order. Redflex™ rubber fittings shall have a maximum working pressure of 50 psi and shall be constructed to withstand 10" Hg vacuum service. Fitting shall be manufactured in the USA.

#### 2.02 FUNCTION

- A. The elastomer construction of the elbow acts to absorb vibration, preventing it from being transmitted to the piping, as well as compensating for lateral deflection. The elastomer construction also reduces noise and offers superior abrasion resistance to alloy fittings. The 90° angle between flanges allow the connection of offset pipe flanges. Fitting shall be manufactured in the USA.

#### 2.03 MANUFACTURER

- A. All Rubber Fittings shall be Redflex™ Series R-1 as manufactured by the Red Valve Company, Inc. of Carnegie, PA 15106, USA, or approved equal.

## PART 3 EXECUTION

### 3.01 INSTALLATION

- A. Fitting shall be installed in accordance with manufacturer's written Installation and Operation Manual and approved submittals.

### 3.02 MANUFACTURER'S CUSTOMER SERVICE

- A. Manufacturer's authorized representative shall be available for customer service during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the fitting.
- B. Manufacturer shall also make customer service available directly from the factory in addition to authorized representatives for assistance during installation and start-up, and to train personnel in the operation, maintenance and troubleshooting of the fitting.