PART 1 GENERAL

1.01 SUBMITTALS

A. Submit product literature that includes information on the performance and operation of the joint, materials of construction, dimensions and weights, elastomer characteristics, and pressure ratings.

B. Upon request, provide shop drawings that clearly identify the joint dimensions including all supplied accessories.

1.02 QUALITY ASSURANCE

A. Supplier shall have at least ten (10) years experience in the manufacture of non-metallic expansion joints, and shall provide references and a list of installations upon request. Supplier shall be a member of the Fluid Sealing Association.

PART 2 PRODUCTS

2.01 ELASTOMERIC EXPANSION JOINTS

A. The Expansion Joint 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. Steel wire shall be imbedded in the body for additional strength.

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. Expansion Joints shall be designed for low-pressure applications not to exceed the rated working pressures for liquids, air, and solids conveying. The inside diameter shall have enlarged cuffed ends to slip over the specified pipe O.D. and to be secured with hose clamps. Manufacturer shall provide stainless steel hose clamps.

D. The Expansion Joint shall have three integral arches, in either open arch or filled construction. Joint dimensions, movement, and spring rates for all variations shall follow Fluid Sealing Association guidelines, unless otherwise specified in the purchase order. Joint shall be manufactured in the USA.

2.02 FUNCTION

A. The elastomer construction of the joint acts to absorb vibration, preventing it from being transmitted to the piping, as well as compensating for lateral deflection. The integral arch allows for axial compression and elongation of the joint, to compensate for expansion and contraction of the piping.

2.03 MANUFACTURER

A. All Vibration Pipe shall be Redflex™ Series SL-53 Slip-on Expansion Joints as manufactured by the Red Valve Company, Inc. of Carnegie, PA 15106, USA, or approved equal.
PART 3 EXECUTION

3.01 INSTALLATION

A. Joint 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 joint.

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 joint.