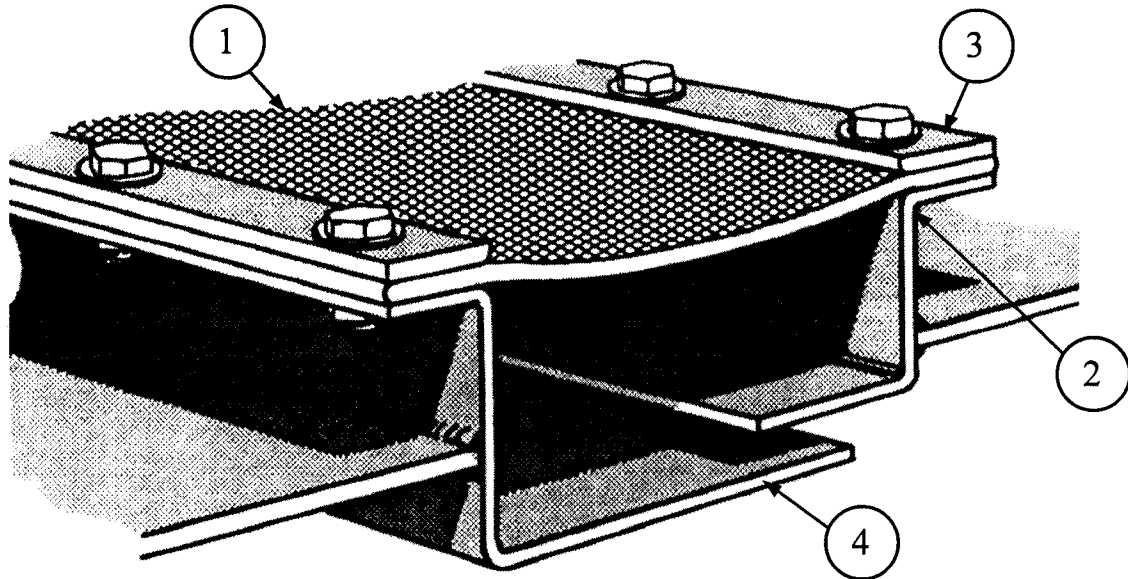


# FLEXTECH INDUSTRIES DESIGN FEATURES

## Construction:

Flextech fabric expansion joints are constructed with either belt or integral flange style. They are offered in a variety of sizes and design configurations, utilizing various types of flexible elements for optimum flexibility and sealing performance. Individual elements of a fabric expansion joint are as follows:



### 1. Flexible Element

This bellows element provides a flexible gas seal and enables the joint to accommodate movement in three geometric planes. There are three types of designs of flexible elements, Elastomeric, Fluoroplastic and multi-layer type.

#### Elastomeric - Type

This type of flexible element is manufactured of various elastomeric materials and reinforced with a single or double ply of high strength fabric. Choice of elastomer and fabric as well as design configuration is dependent on system temperature, pressure and corrosion considerations.

#### Fluoroplastic - Type

This type of flexible element is comprised of multiple layers of PTFE, FEP, and PFA fluorocarbons and is reinforced with high strength, high temperature fabric. For highly corrosive applications this material can be supplied as 100% pure

#### Multi Layer - Type

This type of flexible element is comprised of multiple layers of high temperature fabrics, thermal insulating barrier, and an outer cover of materials capable of withstanding operating and external atmosphere conditions. For corrosive service an inner ply of TFE or FEP can be incorporated into this construction.

### 2. Frame Work:

Flextech offers a wide choice of frame design in carbon steel or 304, 316, and 316L stainless steel construction. Frames are available for bolting or welding to ducts and designed for inside or outside expansion belt replacement.

### 3. Clamping Bars

Clamping bars are made from carbon steel and provide the positive attachment of the flexible element to the frame works. The clamping bar can be readily removed to permit replacement of the flexible element.

### 4. Liner

Liners are recommended to protect the inner ply of multi-layer (composite) type flexible elements from abrasion and flow.

A liner is also used to reduce flutter of the fabric element caused by turbulence, reduce accumulation of dust or ash in the expansion joint cavity, and to reduce temperature of the flexible element.

