





# TYPES OF EXPANSION JOINTS

#### FABRIC EXPANSION JOINTS

Single or Multiple Layer construction, Limitless Dimensions, Any shape, Temperature up to 1 200°C

Belt with t-bolt



clamp bands

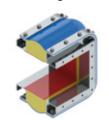
Belt rectangular



BELT TYPE

Belt with bolster

rectangular



Belt with bolster circular



Belt convex



## FLANGED TYPE

Flanged circular



Flanged rectangular



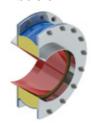
Flanged conical



Flanged with internal sleeve



Flanged with bolster

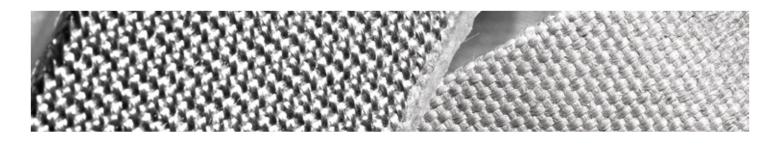


## SELECTION CRITERIA

- Ambient conditions
- Type of medium with chemical contents
- Temperature
- Pressure
- · Dimensions and Shapes

#### MAIN ADVANTAGES

- Compensate large movements (Axial, Lateral, Angular, Torsion)
- · No limits in dimensions
- · Low cost of raw materials
- Low cost of Installation and Maintenance
- Light and Handy (reduced load for the ducts and safe for the staff)
- · Corrosion resistance



#### **MATERIALS**

**Supporting layer:** Provides protection during handling and system operation + basis for arched or convoluted expansion joints where specific shapes are required (galvanized steel, stainless steel, inconel Wire Mesh)

**Insulating layer(s)**: Provides a thermal barrier + reduce condensate problems (Different types of Fiberglass and Silica cloth and blankets)

**Gas seal layer(s):** Provides a chemical barrier (PTFE, Viton®, EPDM, Silicone, Hypalon and Metal foils...)

**Cover layer :** Provides protection from the external environment, acts also as a complementary gas seal layer. (Fiberglass cloth coated with PTFE, Viton®, EPDM, Silicone, Hypalon ...)

Flange Reinforcements: Provides thermal and mechanical protection. (Fiberglass cloth)

#### **STANDARDS**

Fabric Expansion Joints are designed, manufactured and tested according to Internationally Recognized Codes and Standards :

**E.S.A** (European Sealing Association), **F.S.A** (Fluid Sealing Association) **RAL**...

#### QUALITY CONTROL

# Always carried out according to our clients particular requests

- · Identification and Control of Materials
- Drawings and Documents control
- · Manufacturing Process control
- Testing, Inspection and Documentation
- Final Inspection and preparation for Delivery

#### SERVICES

- Design Assistance
- Inspection
- · Dimensional measurements
- Installation
- Supervision
- Training



