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# **RECOMMENDED ENGINEERING SPECIFICATION FOR BELLOWSFLEX SINGLE PLY**

# **METAL EXPANSION JOINT**

## PART 1 GENERAL

1.01 SECTION INCLUDES

1. BellowsFlex single-ply stainless steel bellows expansion joint. Provide appropriate model single-ply bellows expansion joint for attachment to mating piping
   1. Model BellowsFlex BF/50-FxF (150# carbon steel plate flange – 50 PSI working pressure)
   2. Model BellowsFlex BF/50-WxW (carbon steel weld ends – 50 PSI working pressure)
   3. Model BellowsFlex BF/150-FxF (150# carbon steel plate flange – 150 PSI working pressure)
   4. Model BellowsFlex BF/150-WxW (carbon steel weld ends – 150 PSI working pressure)

1.02 MANUFACTURER

A. Provide appropriate model single-ply bellows expansion joint as manufactured by Flex-Hose Co., or approved equal.

PART 2 PRODUCTS

2.01 Metal expansion joints(s)

## Expansion joints shall be made in the USA.

1. Bellows element shall be a single ply of stainless steel material
2. Flanged units shall have 150# carbon steel plate fixed flanges (ANSI OD and drilling)
3. Weld end units shall be a carbon steel schedule 40/standard wall pipe (minimum)
4. The rated working pressure of the bellows shall have a minimum 3:1 safety factor as per EJMA (Expansion Joint Manufacturers Association)
5. Optional tie rods are to be utilized in applications where over-extension of the expansion joint may occur.
6. Optional compression stops are to be utilized in applications where over-compression of the expansion joint may occur.
7. Where tie rods are require the flanges must be configured with three (minimum) tie rods equally spaced, to prevent over travel and react to thrust loads resulting from internal pressure.
8. For the Canadian market they must be CSA standard B51 certified, inspected and tested by the Technical Standards & Safety Authority of Canada with a 4:1 safety factor per EJMA