

TECHNICAL BULLETIN

Deflection of Rieber Gaskets

The performance of the joint under angular deflection does not depend on the gasket alone. The quality of the bell (shape and length whether pipe or fitting), the length of the outside lip of the bell, and the level of insertion of the spigot all play a part in deflection. The performance of the joint under angular deflection will also depend on the pressure.

As a general criteria defined in ASTM D 3139 for the pressure test under angular deflection, the joint is deflected to the maximum unstressed limit where a "plastic to plastic" contact is achieved. We have verified this limit to be between 1 to 2 degrees maximum.

On the basis of the above considerations and the testing and information we have, the guidelines suggested for maximum angular deflection are:

a) Sewer Rieber, 1 degree @ working pressure

- b) PIP Rieber, 1.5 degrees @ working pressure
- c) IPS Rieber, 2 degrees @ working pressure
- d) C 900/905, 1.5 degrees @ working pressure

These are suggested guidelines only. The ASTM criteria is deflected until "plastic to plastic" contact is achieved.