



GORE® GR

SHEET GASKETING



Gasketing for Steel Pipes & Equipment

UNMATCHED SEALING RELIABILITY

Gain the benefits of PTFE gasketing without the problems of creep and cold flow. Unmatched in sealing reliability, GORE® GR sheet gasketing provides a level of high-temperature and blowout resistance that's superior to any other PTFE sheet gasket.

GORE® GR sheet gasketing is made from 100% expanded PTFE. Because it is dimensionally stable, yet conformable, it is ideal for real-world flange conditions.

GORE® GR sheet gasketing has the benefits of conventional PTFE sheet gasketing without creep and cold flow that is commonly associated with that material. It conforms to rough sealing surfaces, yet compresses into an extremely tough gasket that makes a tight, long-lasting seal.

GORE® GR sheet gasketing is ideal for sealing steel pipe and equipment flanges for many aggressive chemicals.

TECHNICAL DATA

MATERIAL

100% expanded PTFE, with multi-directional strength.

TEMPERATURE RANGE

-450°F to +600°F (-268°C to +315°C)

CHEMICAL RESISTANCE

Resistant to all media in range of pH 0-14 (except molten alkali metals and elemental fluorine, particularly at elevated temperatures).

OPERATING PRESSURE

Vacuum to 3,000 psig (200 bar)

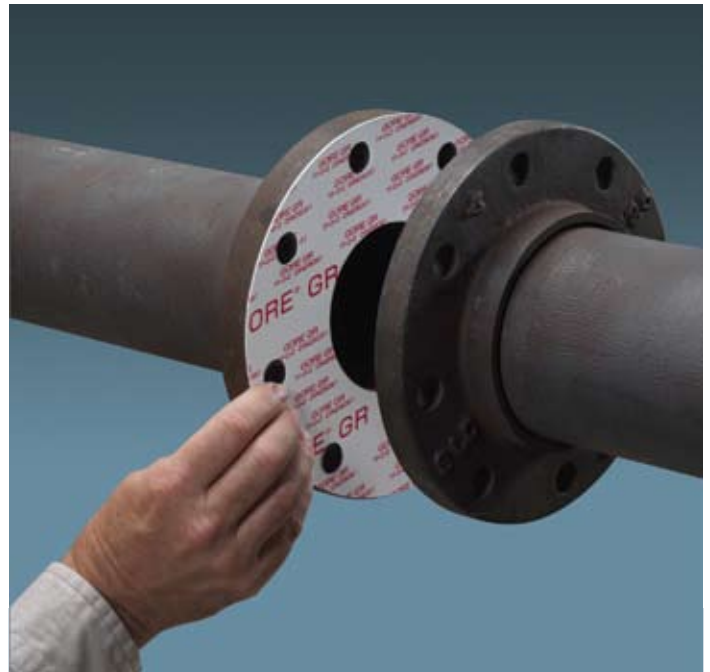
STABILITY

Not subject to aging and can be stored indefinitely.

PHYSIOLOGICAL SAFETY

Product is made from raw materials listed by the US Food & Drug Administration (FDA) in 21 CFR Parts 175 – 186 for PTFE resins, adhesives and inks.

We do not manufacture our products according to current Good Manufacturing Practice (cGMP) requirements for food contact substances or drug packaging materials.



KEY FEATURES

- 100% proprietary ePTFE
- Increased resistance to creep and cold flow
- Chemically inert
- Soft and conformable
- Dimensionally stable
- High tensile strength
- Excellent blowout / high-temperature resistance

KEY BENEFITS

- Highest sealing reliability in its class
- Seals irregular flanges
- Retains stress; minimum retorque



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PROPERTIES

GORE® GR SHEET GASKETING

STRESS TO SEAL

32 rms surface
30 psig pressure

2800 psi
(19 MPa)

CREEP RELAXATION

ARL4 4 days @ 600°F
% relaxation

1/16" (1.6 mm) = 31%
1/8" (3.2 mm) = 43%

SEALABILITY

ROTT Constants:

G_b (psi)

1/16" (1.6 mm) = 685
1/8" (3.2 mm) = 770

"a"

1/16" (1.6 mm) = 0.271
1/8" (3.2 mm) = 0.274

G_s (psi)

1/16" (1.6 mm) = 6.19E-02
1/8" (3.2 mm) = 9.38E-07

MAXIMUM SURFACE STRESS

ROTT with Crush

1/16" (1.6 mm)
1/8" (3.2 mm)

>40,000 psi (>276 MPa)
>40,000 psi (>276 MPa)

HIGH TEMPERATURE RESISTANCE

HOBT2 with cycling test

Class 150 pressure (435 psi)
Class 300 pressure (1010 psi)

T_{gr} Values:

1/16" (1.6 mm) = 638°F
1/8" (3.2 mm) = 549 °F

STANDARD THICKNESSES

1/32" (1 mm)
1/16" (1.6 mm)
1/8" (3.2 mm)
1/4" (6.4 mm)

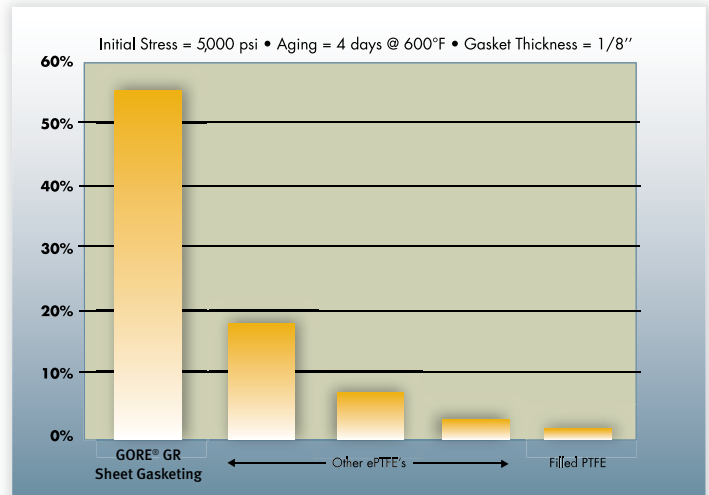
AVAILABLE SIZES

60" x 60" Sheet
(1524 mm x 1524 mm)
Cut Gaskets

REDUCES CREEP AND RETORQUING

Due to the unique structure of the gasketing material, GORE® GR sheet gaskets are highly resistant to creep relaxation. They contain no binders, fillers or additives. Independent third-party testing and years of field usage confirm that GORE® GR gaskets exhibit less creep. The result is the high reliability in service.

ARL4 TEST RESULTS – RESIDUAL STRESS



Supplied By: _____

For detailed selection criteria, technical information, installation guideline and the complete listing of local sales offices, please visit gore.com/sealants.

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