



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 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.

SAFETY

Complies with FDA 21 CFR 177.1550 (PTFE) requirements for food.

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)	>40,000 psi (>276 MPa)
1/8" (3.2 mm)	>40,000 psi (>276 MPa)

HIGH TEMPERATURE RESISTANCE	
HOBT2 with cycling test	T _{gr} Values:
Class 150 pressure (435 psi)	1/16" (1.6 mm) = 638°F
Class 300 pressure (1010 psi)	1/8" (3.2 mm) = 549 °F

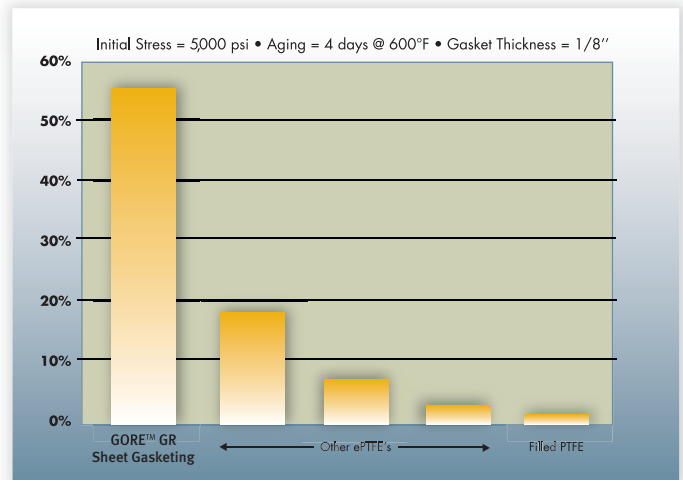
STANDARD THICKNESSES	
	1/32" (1 mm) 1/16" (1.6 mm) 1/8" (3.2 mm) 1/4" (6.4 mm)

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



CONTACT US FOR MORE INFORMATION

Detailed selection criteria, technical assistance, and installation guidelines are available from your local authorized Gore distributor or the application engineers at W. L. Gore & Associates, Inc. **800-654-4229**. Visit us at www.gore.com/sealants.

Supplied By:

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