




TG-251 Metal Reinforced Laminate

Technical Data Sheet 018

Standard Grades

- GHH 
- GHJ 
- TG-251 

Product Overview

GRAFOIL Grade TG-251 is GRAFOIL Grade GTC flexible graphite chemically bonded to both faces of a flat, low-carbon steel core.

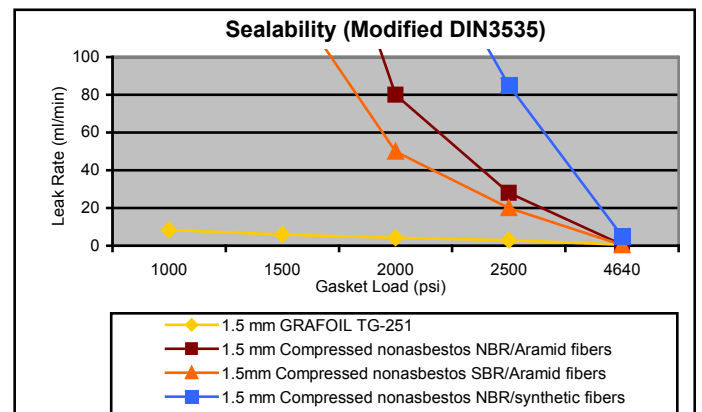
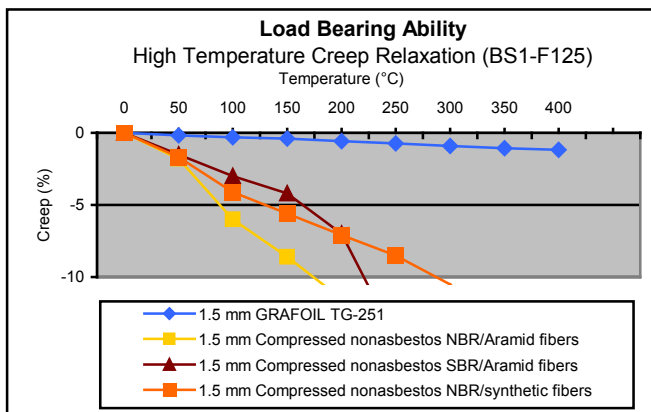
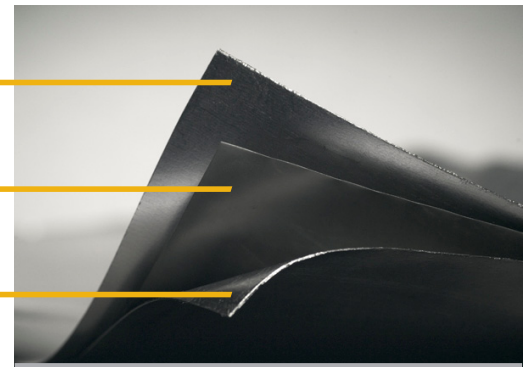
Applications

- Exhaust sealing
- Gasoline/diesel head gaskets
- EGR valve sealing
- Turbo charger gaskets

GRAFOIL Grade GTC
(per Technical Data Sheet 002)

Low-Carbon Steel

GRAFOIL Grade GTC
(per Technical Data Sheet 002)



While maintaining an effective seal, GRAFOIL material exhibits virtually no creep relaxation. As a result, the need for periodic bolt tightening is greatly reduced.

Laminate Construction

- 1) GRAFOIL Grade GTC (per Technical Bulletin 002)
micro-thin, phenolic-based adhesive
- 2) 0.0066" thick Low-Carbon Steel Grade 1008 or 1010
micro-thin, phenolic-based adhesive
- 3) GRAFOIL Grade GTC (per Technical Bulletin 002)

Typical Properties*

Characteristic	Value
Thickness of Laminate	0.037" (0.94 mm) Standard 0.047" (1.19 mm) Standard Non-standard thicknesses may be available upon request
Width	24" (610 mm) Standard Non-standard widths may be available upon request
Length	24" (610 mm) Standard 100' (30.5 m) Standard Non-standard lengths may be available upon request
Bulk Density (Graphite)	70 lb/ft ³ (1.12 g/cc) Standard Non-standard densities may be available upon request
Compressibility at 5000 psi (35 MPa) load	34% Typical
Recovery after 5000 psi (35 MPa) load	31% Typical
Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C	<3% Typical for 70 lb/ft ³
Air Aging, 5 hours at 540°C Weight Loss Compressibility Recovery	5% Typical 39% Typical 24% Typical
Fluid Soaking Distilled Water, 22 hrs @ boiling 50/50 Glycol/Water, 48 hrs @ boiling	No separation between GRAFOIL and steel No separation between GRAFOIL and steel

Notes:

* Properties listed are typical and cannot be used as accept/reject specifications.

+1 (800) 253-8003 (Toll-Free in USA)
+1 (216) 529-3777 (International)

www.graftech.com | www.grafoil.com
grafoil@graftech.com

Redefining limits

© 2011 GrafTech International Holdings Inc. This information is based on data believed to be reliable but GrafTech makes no warranties, express or implied, as to its accuracy and assumes no liability arising out of its use. The data listed falls within the normal range of product properties but should not be used to establish specification limits or used alone as the basis of design. GrafTech's liability to purchasers is expressly limited to the terms and conditions of sale. GRAFOIL, EXPANDOGRAF, GRAFKOTE, GTS, RIBBON-PACK and SUPER GTO are registered trademarks of GrafTech International Holdings Inc. GRAFOIL flexible graphite materials, and processes are covered by several US patents. For patent information visit www.grafoil.com/patents.