

# GHL-J & GHL Flexible Graphite Laminate

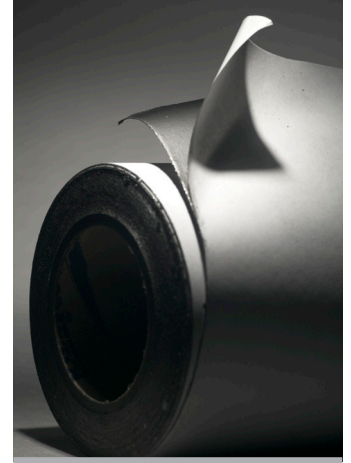
Technical Data Sheet 438

## Product Family - Laminates (Multi-Layer Graphite)

- GHL-A, GHC - Adhesively Bonded (GTA, GTC)
- GHA, GHA-C - Cured for Low Outgassing (GTA, GTC)
- GHL-J, GHL - Adhesively Bonded, Inhibited (GTJ, GTB)
- GHA-J, GHB - Cured for Low Outgassing (GTJ, GTB)

## Product Overview

GRAFOIL<sup>®</sup> GHL-J flexible graphite laminate consists of multiple layers of GRAFOIL<sup>®</sup> GTJ flexible graphite. GRAFOIL<sup>®</sup> GHL flexible graphite laminate consists of multiple layers of GRAFOIL<sup>®</sup> GTB flexible graphite.



## Applications

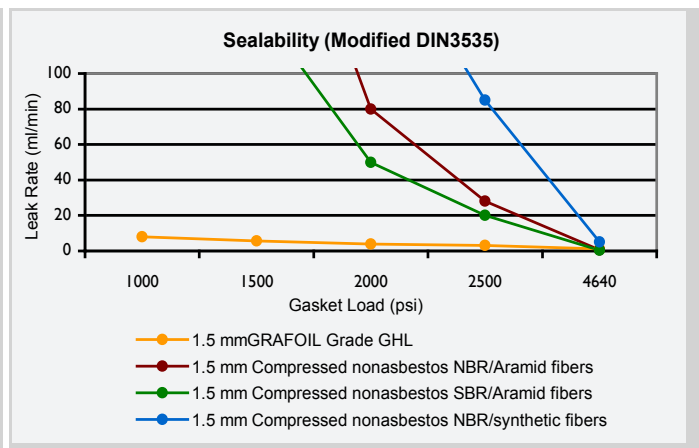
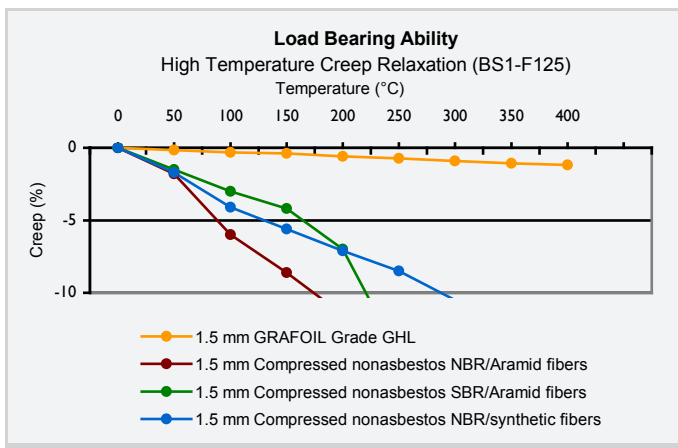
- Chemical
- Petrochemical
- Refinery
- Steam Service
- ASME class 150 & 300 Flanges

## GHL-J Laminate Construction

- 1) GRAFOIL<sup>®</sup> GTJ flexible graphite (per Technical Data Sheet 437)
- 2) Micro-thin, phenolic-based adhesive
- 3) GRAFOIL<sup>®</sup> GTJ flexible graphite (per Technical Data Sheet 437)

## GHL Laminate Construction

- 1) GRAFOIL<sup>®</sup> GTB flexible graphite (per Technical Data Sheet 436)
- 2) Micro-thin, phenolic-based adhesive
- 3) GRAFOIL<sup>®</sup> GTB flexible graphite (per Technical Data Sheet 436)



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

## Typical Properties\*

Characteristic	GHL-J Typical Value	GHL Typical Value
Thickness of Laminate	0.060" (1.52 mm) 0.120" (3.05 mm)	0.060" (1.52 mm) 0.120" (3.05 mm)
Width	24" (610 mm) 39.4" (1000 mm) for 0.060" & 0.120" thick	24" (610 mm) 39.4" (1000 mm) for 0.060" & 0.120" thick
Length	24" (610 mm) 39.4" (1000 mm) for 0.060" & 0.120" thick 100' (30.5 m) fo 0.060" thick	24" (610 mm) 39.4" (1000 mm) for 0.060" & 0.120" thick 100' (30.5 m) fo 0.060" thick
Bulk Density (Graphite)	70 lb/ft <sup>3</sup> (1.12 g/cc)	70 lb/ft <sup>3</sup> (1.12 g/cc)
Compressibility at 5000 psi (35 MPa) load	43%	43%
Recovery after 5000 psi (35 MPa) load	11%	11%
Creep Relaxation Method: BSI-F125 at 6000 psi (40 MPa) loadup to 400°C	< 3% for 70 lb/ft <sup>3</sup>	< 3% for 70 lb/ft <sup>3</sup>
Sealability Method: Mod DIN 3535 at 580 psi N2 at 32 MPa load	< 1.5 ml/min for 70 lb/ft <sup>3</sup>	< 1.5 ml/min for 70 lb/ft <sup>3</sup>
Temperature Use Range	-400°F to 975°F (-240°C to 525°C)	-400°F to 975°F (-240°C to 525°C)

Notes:

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



**Seal & Design  
Able Division**

5533 Steeles Avenue West Unit 11  
Toronto, Ontario M9L 1S7  
Ph: (416) 741-0750  
Gasket@AbleSealAndDesign.com



**Seal & Design  
Corporate Headquarters**

4015 Casilio Parkway  
Clarence, NY 14031  
Ph: (716) 759-2222  
Info@SealAndDesign.com  
[www.SealAndDesign.com](http://www.SealAndDesign.com)



**Seal & Design  
Higbee Division**

6741 Thompson Rd N  
Syracuse, NY 13221  
Ph: (315) 432-8021  
Sales@Higbee-Inc.com