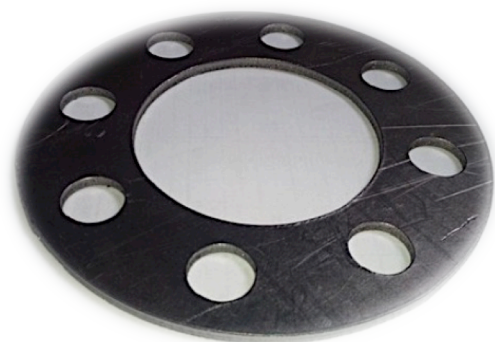


- GRAFOIL® Multi-Layer materials are single-layer pure flexible graphite of the same grade bonded together by a micro-thin phenolic based adhesive.
- Graphite purity range 97% to 99.8%
- Continuous operating temperature ranges from - 240°C to 525°C, also function up.
- Chemical resistant to aggressive chemical.
- The most efficient sealing gaskets and packing
- Good and healthy replacement for asbestos
- Unlimited shelf Life
- Low outgassing



Product Family - Laminates (Multi-Layer Graphite)

GHL-A, GHC – Adhesive Bonded (GTA, GTC)

Product Overview

GRAFOIL® GHL-A flexible graphite laminate consists of multiple layers of GRAFOIL® GTA.

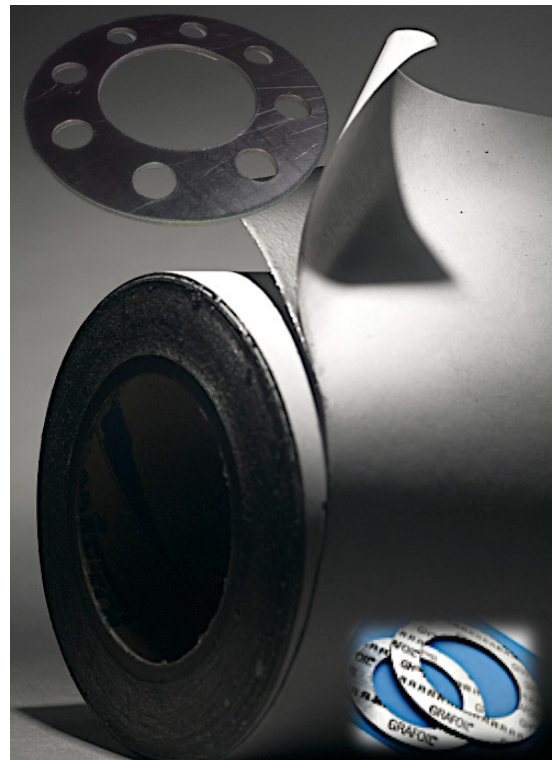
GRAFOIL® GHC flexible graphite laminate consists of multiple layers of GRAFOIL® GTC.

GHL-A Laminate Construction

1. GRAFOIL® GTA Flexible Graphite
2. Micro-thin, phenolic-based adhesive
3. GRAFOIL® GTA Flexible Graphite

GHC Laminate Construction

1. GRAFOIL® GTC Flexible Graphite
2. Micro-thin, phenolic-based adhesive
3. GRAFOIL® GTC Flexible Graphite



Typical Properties*

Characteristic	GHL-A Typical Value	GHC Typical Value
Thickness	0.060" (1.52 mm)	0.060" (1.52 mm)
	0.080" (2.03 mm)	0.080" (2.03 mm)
	0.120" (3.05 mm)	0.120" (3.05 mm)
Width	39.4" (1000 mm)	39.4" (1000 mm)
Length	39.4" (1000 mm)	39.4" (1000 mm)
	100' (30.5 mt) for 0.060" (1.52 mm) thick	100' (30.5 mt) for 0.060" (1.52 mm) thick
Bulk Density	70 lbs/ft ³ (1.12 g/cc)	70 lbs/ft ³ (1.12 g/cc)
Ash Content	0.2%	3%
Carbon Content	99.8%	97%
Moisture	0.1%	0.1%
Leachable Chloride	< 10 ppm	< 10 ppm
Oxidation Weight Loss After 1 hour at 670°C	12%	12%
Compressible at 5000 psi (35 MPa) load	43%	43%
Recovery after 5000 psi (35 MPa) load	13%	13%
Tensile Strength	800 psi	650 psi
Continuous Operating Temperature	-240°C to 450°C	-240°C to 450°C
Creep Relaxation At 3000 psi (20MPa) load For 22 hours at 100°C	< 3%	< 3%
Sealability ASTM F2387 580 psi N2 At 32 MPa load	1.5 ml/min	1.5 ml/min
Certification	Certify to Grade	Certify to Grade

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

Product Family - Laminates (Multi-Layer Graphite)

GHL-J, GHL – Adhesive Bonded, Inhibited (GTJ, GTB)

Product Overview

GRAFOIL® GHL-J flexible graphite laminate consists of multiple layers of GRAFOIL® GTJ.

GRAFOIL® GHL flexible graphite laminate consists of multiple layers of GRAFOIL® GTB.

GHL-J Laminate Construction

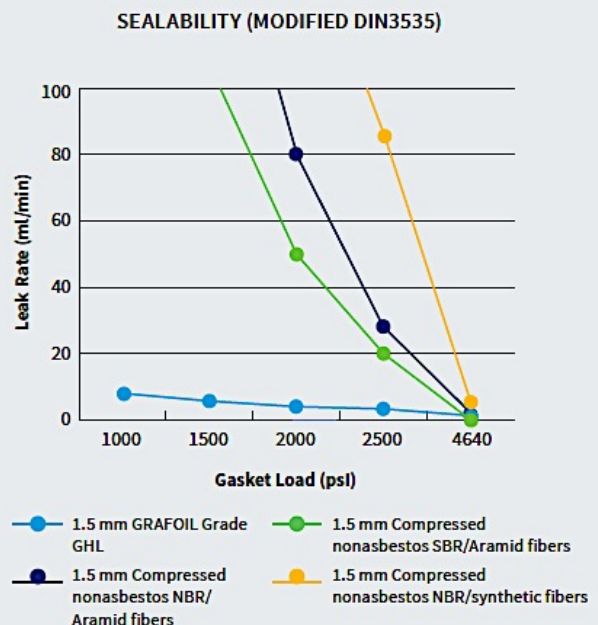
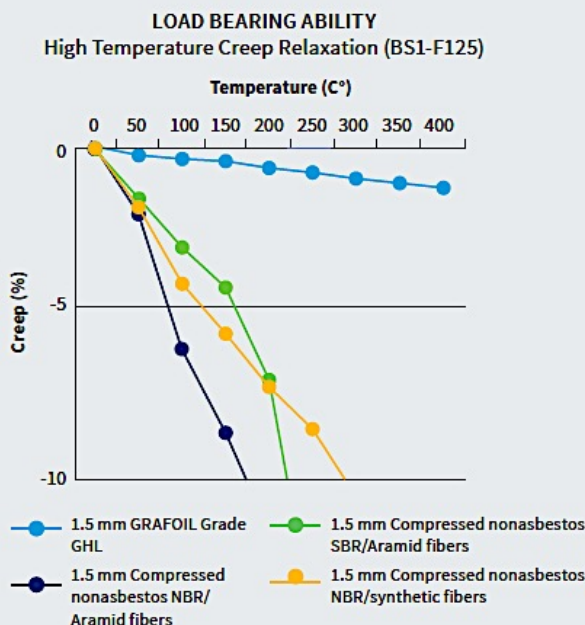
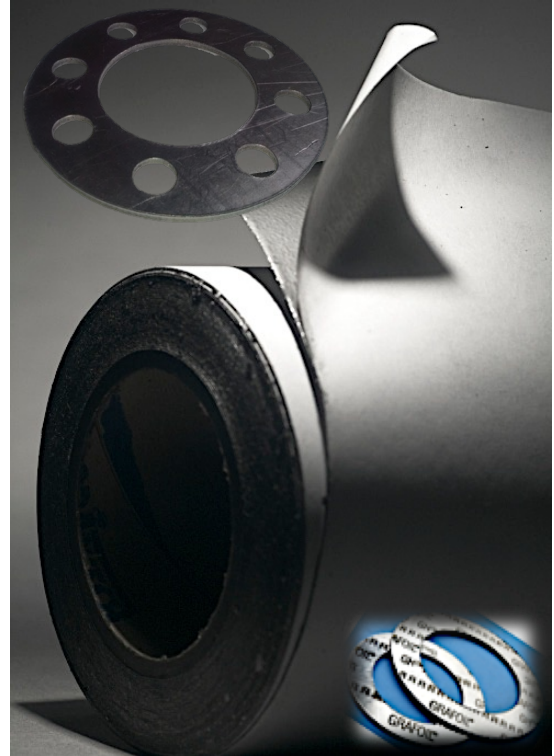
1. GRAFOIL® GTJ Flexible Graphite
2. Micro-thin, phenolic-based adhesive
3. GRAFOIL® GTJ Flexible Graphite

GHL Laminate Construction

1. GRAFOIL® GTB Flexible Graphite
2. Micro-thin, phenolic-based adhesive
3. GRAFOIL® GTB Flexible Graphite

Applications

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



While maintaining an effective seal, 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	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 both thicknesses	24" (610 mm) 39.4" (1000 mm) for both thicknesses
Length	24" (610 mm) 39.4" (1000 mm) both thicknesses 100' (30.5 mt) for 0.060" (1.52 mm) thick	24" (610 mm) 39.4" (1000 mm) both thicknesses 100' (30.5 mt) for 0.060" (1.52 mm) thick
Bulk Density	70 lbs/ft ³ (1.12 g/cc)	70 lbs/ft ³ (1.12 g/cc)
Compressible at 5000 psi (35 MPa) load	43%	43%
Recovery after 5000 psi (35 MPa) load	11%	13%
Continuous Operating Temperature	-240°C to 525°C	-240°C to 525°C
Creep Relaxation Method: BSI-F125 at 6000 psi (40 MPa) loadup to 400°C	< 3% for 70 lbs/ft ³	< 3% for 70 lbs/ft ³
Sealability ASTM F2387 580 psi N2 At 32 MPa load	1.5 ml/min for 70 lbs/ft ³	1.5 ml/min for 70 lbs/ft ³

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

Asia authorized distributor: Everjoy Industrial Supplies Pte. Ltd.

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