

TG-251 Metal-Reinforced Laminate

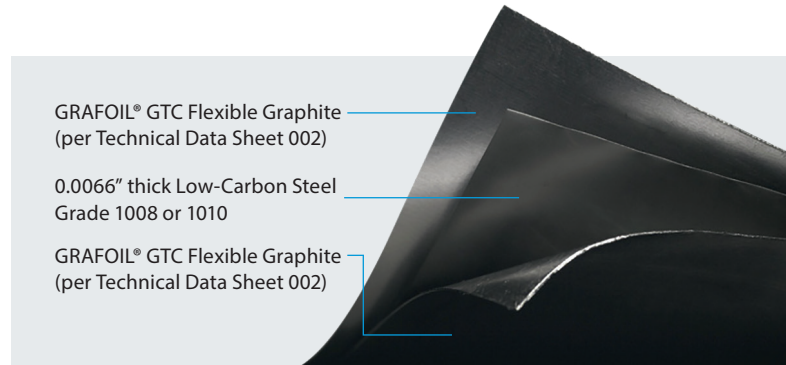
TECHNICAL DATA SHEET 018

Product Family - Laminates (Metal-Reinforced)

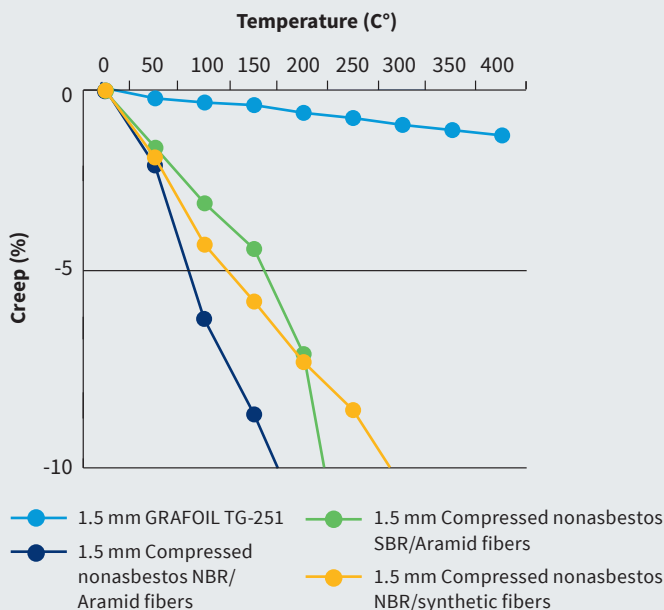
- GHR - GTB with Flat Stainless Steel
- GHE - GTB with Tanged Stainless Steel
- **TG-251 - GTC with Thicker Low-Carbon Steel**

Applications

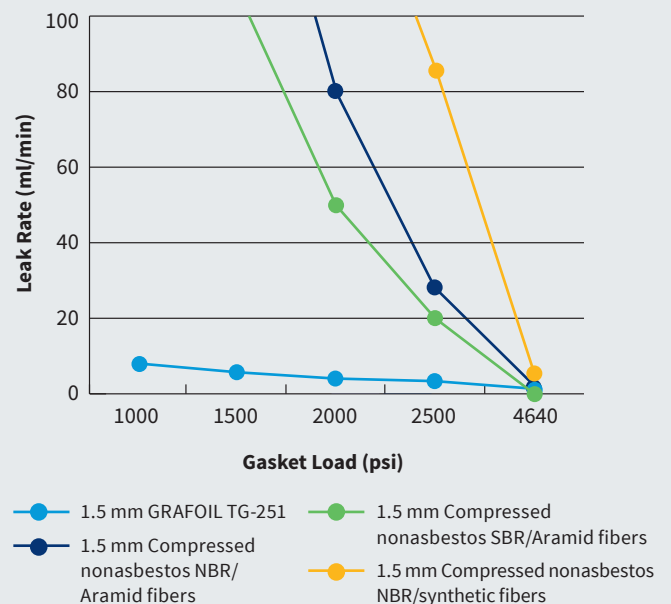
- Exhaust sealing
- Gasoline/diesel head gaskets
- EGR valve sealing
- Turbo charger gaskets



LOAD BEARING ABILITY
High Temperature Creep Relaxation (BS1-F125)



SEALABILITY (MODIFIED DIN3535)



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

Typical Properties*

CHARACTERISTIC	TYPICAL VALUE
Thickness of Laminate	0.027" (0.686 mm)
	0.037" (0.94 mm)
	0.047" (1.19 mm)
Width	24" (610 mm)
Length	24" (610 mm)
	100' (30.5 m)
Bulk Density (Graphite)	70 lb/ft ³ (1.12 g/cc)
Compressibility at 5000 psi (35 MPa) load	34%
Recovery after 5000 psi (35 MPa) load	31%
Creep Relaxation Method: BSI-F125 at 6391 psi (44.1 MPa) load up to 400°C	<3% for 70 lb/ft ³
Air Aging, 5 hours at 540°C	
Weight Loss	5%
Compressibility	39%
Recovery	24%
Fluid Soaking	
Distilled Water, 22 hrs @ boiling	No separation between GRAFOIL® material and steel
50/50 Glycol/Water, 48 hrs @ boiling	No separation between GRAFOIL® material and steel

Notes:

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