

Flexible Graphite Sheet

High-performance graphite sheet and roll material for industrial sealing, insulation, heat shielding, and custom converted components.

Material Base	Purified natural graphite
Supply Forms	Sheet, roll, reinforced sheet, laminated sheet, custom-cut parts
Typical Thickness	0.025 mm - 2.0 mm
Typical Density	Approx. 1.0 - 1.7 g/cm ³ depending on grade
Suitable For	OEM customers, sealing fabricators, industrial processors

Why this material matters

Flexible Graphite Sheet combines flexibility, compressibility, chemical stability, and heat resistance in a form that can be directly installed or converted into gaskets, sealing rings, die-cut parts, thermal barriers, and special-shaped industrial inserts.

Key Product Highlights

- Excellent flexibility for sheet, roll, and converted component applications
- Good compressibility and recovery for sealing-related use
- Stable performance in high-temperature industrial environments
- Available in plain, reinforced, laminated, and customized structures

Prepared by QDZRT Graphite for business introduction and quotation support.

Product Overview

Flexible Graphite Sheet is commonly positioned between raw graphite materials and finished sealing products. It offers more engineered performance than graphite powder while remaining more adaptable than rigid machined graphite parts.

Depending on thickness and structure, it can be used directly or further processed into gasket sheets, sealing rings, die-cut parts, wrapping materials, thermal barriers, and special-shaped industrial inserts.

In thinner gauges, this material is also referred to in many markets as graphite foil. Reinforced or laminated grades are often selected where better handling strength, dimensional stability, or downstream fabrication performance is required.

Why Buyers Choose Flexible Graphite Sheet

High Temperature Resistance	Suitable for industrial environments where many conventional sealing materials may lose stability under elevated temperatures.
Chemical Stability	Performs well in a wide range of oils, steam-related systems, and many industrial process media.
Compressibility and Conformability	Helps adapt to flange surfaces and interface irregularities, improving sealing reliability in practical installation conditions.
Processing Flexibility	Can be supplied as rolls, sheets, reinforced laminates, gasket blanks, and custom-cut finished parts.
Wide Industrial Use	Suitable for sealing, insulation, petrochemical equipment, power systems, mechanical assemblies, and thermal management applications.

Common Product Forms

Plain Flexible Graphite Sheet	Flexible Graphite Roll Material
Reinforced Flexible Graphite Sheet	Laminated Graphite Sheet
Graphite Gasket Blank Material	Die-cut Graphite Sealing Parts
Custom thermal barrier and industrial insert parts	

Customization and OEM Support

- Thickness adjustment for different sealing or insulation requirements
- Density selection based on application and installation conditions
- Plain, reinforced, or laminated structure options
- Custom sheet size, roll size, and cut-to-size supply
- Die-cut, punched, laminated, and shaped-part conversion

Enhanced Technical Parameters

The appropriate grade should be selected according to operating temperature, media, pressure, reinforcement requirement, and final conversion method. QDZRT Graphite supports both standard supply and customized solutions for project-based procurement.

Parameter	Typical Range / Option	Notes
Base Material	Purified natural graphite	Processed through expansion and calendaring
Product Form	Sheet / roll / reinforced sheet / laminated sheet / custom-converted part	Available for standard and OEM supply
Thickness	0.025 mm to 2.0 mm	Different grades available for different applications
Density	Approx. 1.0 to 1.7 g/cm ³	Varies according to thickness and grade
Standard Width	600 mm / 1000 mm typical	Custom widths available upon request
Supply Length	Varies by thickness and grade	Roll length or sheet size can be matched to the order
Structure Options	Plain / reinforced / laminated	Selected according to handling strength and end-use requirements
Carbon Content	Available upon request	Can be matched according to target application
Sulfur-Controlled Grade	Available	Suitable for applications requiring tighter material control
Ash Content / Other Detailed Data	Available upon request	Detailed specifications can be confirmed by grade
Conversion Capability	Slitting / cutting / punching / laminating / die-cutting / special-shaped fabrication	Supports downstream gasket and sealing production
Packaging	Rolls, flat sheets, gasket blanks, or custom export packing	Protective packaging available for transport and storage

Reference Standard Size Options

The following sizes are typical reference options. Specific thickness-density combinations can be selected according to actual purchasing and application requirements.

Thickness Range	Typical Density	Typical Standard Size
0.025-0.13 mm	Approx. 1.4-1.7 g/cm ³	600 mm x 100 m
0.15 mm	Approx. 1.3-1.7 g/cm ³	1000 mm x 100 m or 600 mm x 80 m
0.2 mm	Approx. 1.1-1.4 g/cm ³	1000 mm x 50 m / 100 m
0.25-0.5 mm	Approx. 1.0-1.4 g/cm ³	1000 mm x 50 m
0.6 mm	Approx. 1.0 g/cm ³	1000 mm x 60 m
0.8 mm	Approx. 1.0 g/cm ³	1000 mm x 50 m
1.0 mm	Approx. 1.0 g/cm ³	1000 mm x 40 m
1.5-2.0 mm	Approx. 1.0 g/cm ³	1000 mm x 1000 mm

Typical Applications

Application Area	Typical Use	Main Benefit
Industrial Sealing	Gasket sheets, flange sealing, valve interfaces, pump sealing support	Compressibility, conformity, and media resistance
Petrochemical Equipment	Static sealing and process equipment interfaces	Stable performance under heat and chemical exposure
Power and Energy Systems	Sealing layers, thermal barriers, heat-related assemblies	Thermal resistance and service stability
Mechanical Equipment	Custom-cut interface materials and shaped sealing parts	Easy fabrication and assembly adaptability
Thermal Management	Graphite foil and flexible sheet structures for heat spreading or shielding	Thin form factor with functional graphite properties

Frequently Asked Questions

What is flexible graphite sheet used for?	Flexible graphite sheet is widely used for industrial sealing, flange gaskets, valve and pump interfaces, thermal barriers, insulation structures, and custom converted graphite parts.
What is the difference between flexible graphite sheet and graphite foil?	In many markets, thinner flexible graphite sheet is also referred to as graphite foil. The exact naming may vary by thickness, density, and end-use application.

Can QDZRT Graphite supply reinforced flexible graphite sheet?	Yes. QDZRT Graphite can supply plain, reinforced, and laminated flexible graphite sheet according to handling requirements, dimensional stability needs, and downstream processing conditions.
Can you make die-cut graphite gasket parts?	Yes. The material can be converted into gasket blanks, punched parts, die-cut sealing parts, and special-shaped industrial components based on drawings or application requirements.
What information is needed for quotation?	For faster quotation, buyers can provide thickness, density preference, sheet or roll size, reinforcement requirement, application, operating condition, and whether further conversion such as die-cutting or lamination is needed.

Inquiry checklist

To receive a suitable recommendation and quotation, please share the required thickness, density, sheet or roll size, reinforcement type, application, and any needed secondary processing such as die-cutting or lamination.

QDZRT **Graphite**

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Prepared for product introduction, customer review, and quotation support.

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