

Sealrite Expanded Graphite Material

Pure expanded mineral graphite products provide an excellent gasket material for high temperature, high pressure applications or for applications where the gasket width is relatively narrow. The material is resistant to most organic and inorganic acids and is suitable to seal a very wide range of media. It is almost completely impermeable to gases and fluids and is commonly used in very demanding application where low emission is paramount. The material has no ageing or embrittlement problems common with elastomeric based materials and displays long term stability of compressibility and recovery over a wide temperature range. Graphite however is not suitable for use with very strong oxidising compounds like highly concentrated nitric acid or chromic acid.

Expanded Graphite Sheets

Sealrite expanded graphite sheets is made from pure mineral graphite and formed into sheets through a laminar process. Commonly used for gaskets for flanges and connections in demanding application or as an asbestos gasket substitute. Sealrite offers expanded graphite sheets in the following styles:

Style 188: Pure homogeneous expanded mineral graphite

.This style offers the highest temperature rating for inert or reducing environment of up to 2000°C

Style 388: Expanded mineral graphite with steel foil sheet reinforcement

The steel foil insertion allows for better handling and higher operating pressure

Style 488: Expanded mineral graphite with tanged stainless steel 316 reinforcement

Stainless Steel 316 sheet allows the material to achieve substantially higher dynamic loading giving it a high blow out resistance and mechanical strength. The insertion also allows for better handling.

Specifications:	Style 388 SS 316 Foil Insert	Style 488 Tanged SS316
Density of graphite	1 g/cm ³	1 g/cm ³
Ash content	<2.0 %	<2.0 %
Chloride content	<30 ppm	<30 ppm
Gas permeability	<0.5 ml/min	<0.5 ml/min
Reinforced material thickness	0.05mm	0.10mm
Operating Temperature: -oxidising environment	-200°C to 500°C	-200°C to 500°C
Operating Temperature: -inert or reducing environment	-200°C to 750°C	-200°C to 750°C
Operating Pressure	100 bar	200 bar
Compressibility	45%	35%
Recovery	13%	17%
Tensile Strength	25N/mm ²	25N/mm ²
Standard Dimensions	1m x 1m 1.5m x 1m	1m x 1m 1.5m x 1m
Available Thickness	0.8mm to 3mm	1mm to 3mm