

Ecoflex[®] 200 & Ecoflex[®] 200LB

Ecoflex 200 and Ecoflex 200LB are automotive support mat products made from high-alumina polycrystalline wool (PCW) fiber. Both of these non-intumescent mats offer outstanding performance under all inlet gas conditions, and temperatures up to 1000°C. They also exhibit excellent erosion resistance, allowing for robust designs in the most demanding gasoline and diesel applications.

Ecoflex 200 is a highly versatile material, suitable for numerous substrate support mat, end cone insulation, and thermal management applications.

Ecoflex 200LB is specially formulated with a lower organic binder content in order to reduce boardiness. This is designed to improve low temperature holding force in exchange for some reduced handleability during assembly. Ecoflex 200LB must be used with tape backing/scrim to facilitate the canning process.

Neither Ecoflex 200 nor Ecoflex 200LB are affected by fuel condensates and/or urea.

Fiber vs. Bonded Basis Weight

Ecoflex 200 and Ecoflex 200LB support mats are often measured in terms of fiber basis weight (FBW), which is the area density (in grams per square meter) of the fiber in the mat. This differs from bonded basis weight (BBW), which also accounts for binder and any other non-fiber component.



Product Availability

Fiber Basis Weight (g/m ²)	Bonded Basis Weight (g/m ²)		Nominal Free Thickness / Installed Gap (mm)
	Ecoflex 200	Ecoflex 200LB**	
1200	1320	1266	7.5 / 3
1600	1760	1688	8.5 / 4
2000	2200	2110	10.5 / 5
2400	2640	2532	12.0 / 6

Nominal Compositions

	Ecoflex 200	Ecoflex 200LB
Saffil PCW Fibers	90-93%	94-97%
Organic Binder	7.5-10%	3-6%
Loss on Ignition	7.5-10%	4.5-9.5%*

*Ecoflex 200LB overall organic content with scrim. Use of scrim will add 50-75 g/m² to bonded basis weight and will contribute to overall organic content.

**Ecoflex 200LB bonded basis weight, before the use of scrim.

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes.

Please refer to the product Safety Data Sheet (SDS) for recommended work practices and other safety information.

Canning Performance

Ecoflex 200 and Ecoflex 200LB are typically installed at a nominal gap bulk density (GBD) of 0.44 g/cm³. Nominal GBD for specific applications are determined by requirements for holding force and substrate strength.

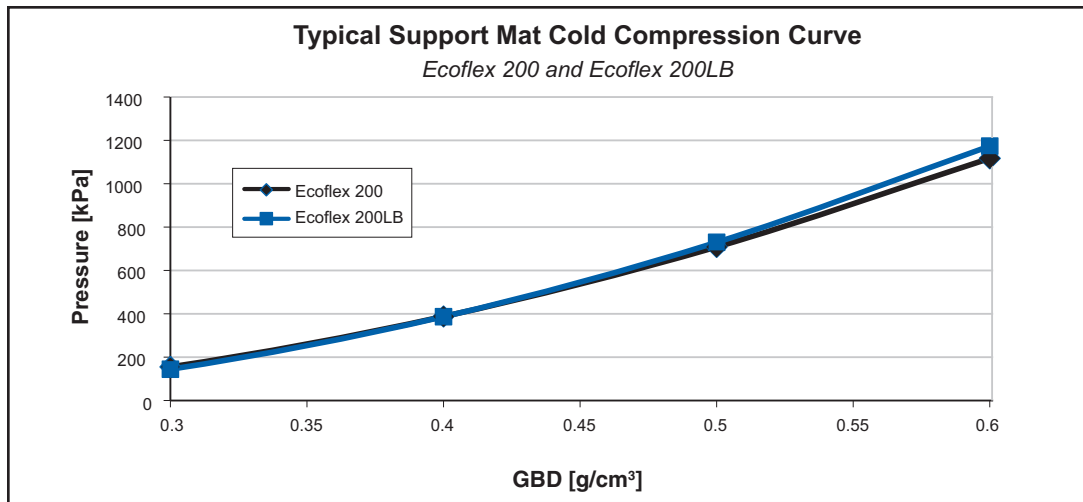


Figure 1: Typical cold compression for Ecoflex 200 and Ecoflex 200LB

Support Mat Aging Performance

Ecoflex 200 and Ecoflex 200LB present robust performance at operating temperatures upwards of 1000°C. Figure 2 presents typical aged mat performance for Ecoflex 200 and Ecoflex 200LB as a function of temperature. Factors such as design nominal gap and thermal shell expansion also influence support mat performance.

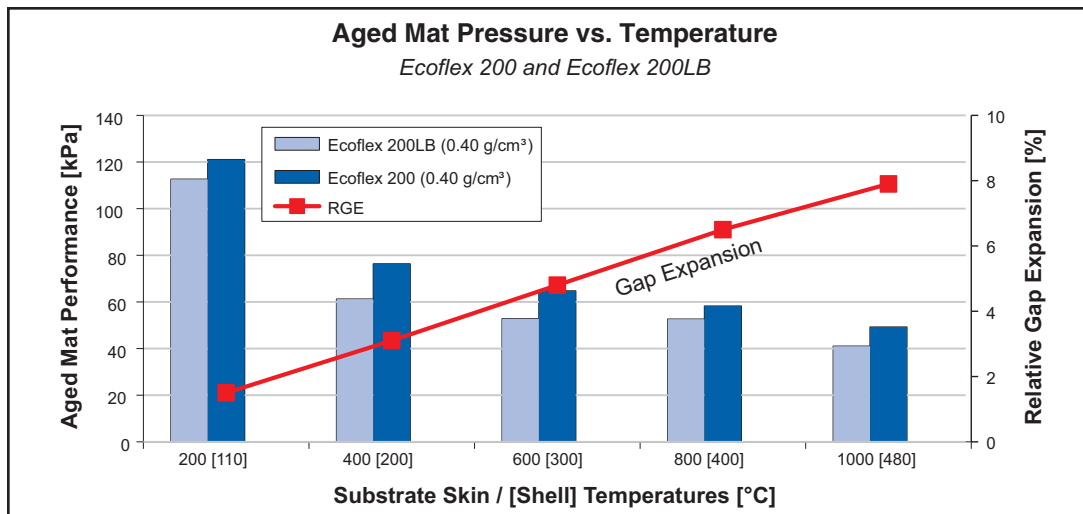


Figure 2: Support mat aging as a function of temperature

Unifrax provides a global network of application engineering services, and will provide a support mat recommendation tailored to any system design.

For additional information regarding Ecoflex 200 & Ecoflex 200LB or any of our catalytic support mats, please contact the Unifrax Emission Control Application Engineering Department at 716-768-6461 or aecoordinator@unifrax.com.