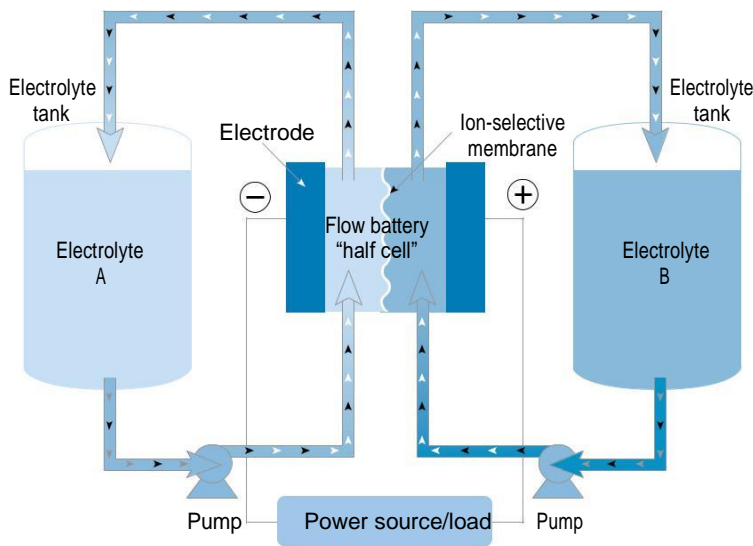
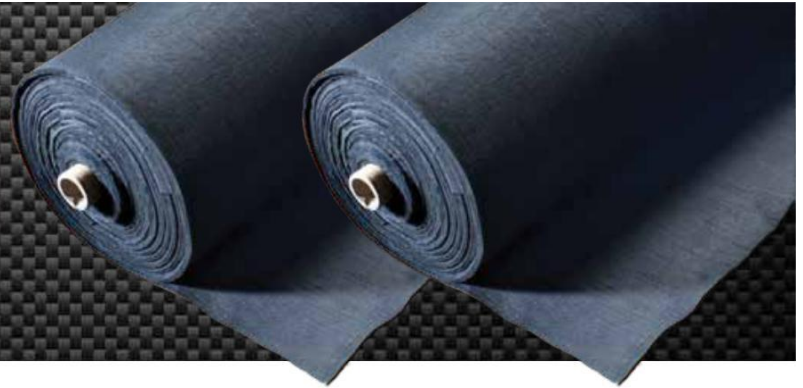




AvCarb® Felts for Battery Applications

Moving Energy with Carbon



AvCarb PAN-based carbon and graphite felts are used as electrode backings in a variety of battery designs including vanadium redox flow batteries. AvCarb supports the needs of advanced battery makers with highly uniform carbon felts that ensure reliability and durability of the electrochemical system. The high conductivity, high purity, and chemical resistance of AvCarb battery felts make them ideal for the demanding design criteria of flow battery developers.

Typical ¼" (6.5 mm) material roll widths are 32 inches (810 mm) and roll lengths are 105 feet (32 m). Standard products are listed below, but AvCarb's manufacturing processes have flexibility to customize for specific customer requirements. Surface treatments are also available to improve the performance and functionality of the felt in the electrochemical cell.

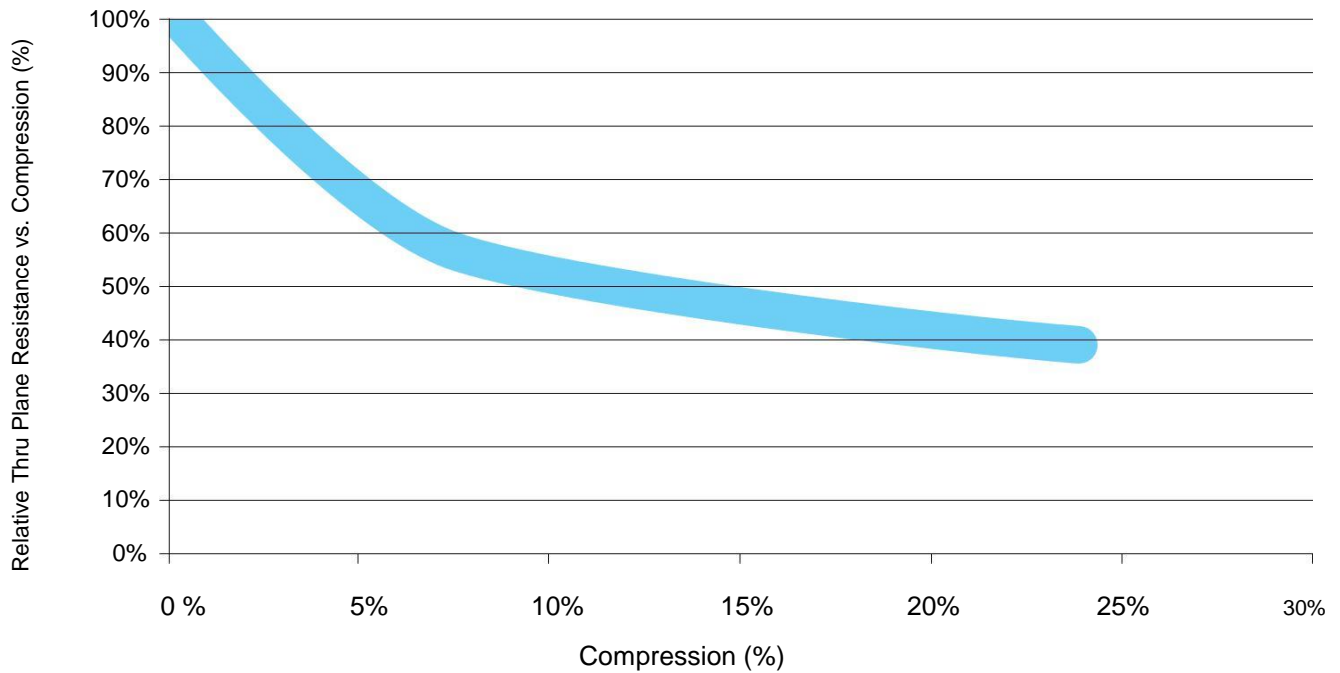
Typical Material Characteristics

Property	Units	C100	C200	G100	G200
Thickness	in (mm)	1/8 (3.2)	1/4 (6.5)	1/8 (3.2)	1/4 (6.5)
Areal Weight	g/m ²	285	530	245	480
Bulk Density	g/m ³	0.09	0.08	0.08	0.07
Electrical Resistivity (thru plane)	Ωmm	<4	<4	<3	<3
Carbon Content	%	95	95	99 min	99 min
Ash Content	%	<0.4	<0.4	<0.2	<0.2



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Electrical Thru-Plane Resistance vs. Percent Compression of Graphite Felt



Contact Us to Discuss Your Application Requirements