



Molded Bipolar Plates

- *All Carbon/Graphite composition*
- *Superior Strength*
- *Excellent Electrical Properties*
- *Lightweight*
- *Outstanding Performance Characteristics*

Porvair Fuel Cell Technology is proud to announce the availability of a fully molded, carbon – graphite Bipolar Plate for use in PEM fuel cells. This plate, which is based upon work licensed from Oak Ridge National Labs, has all of the superior properties found in machined graphite plates, but the cost structure of resin composite molded products.

<i>Material Property</i>	<i>PFCT Material</i>
<i>Density (g/cm³)</i>	1.15 – 1.25
<i>Flexural Strength (psi)</i>	4500 – 6000
<i>Electrical Conductivity (S/cm)</i>	500 – 700
<i>Contact Resistance (mohm-cm²)</i>	8 – 10

The PFCT plate is lightweight, which can provide full stack weight savings of up to 36 lbs., and is all carbon, which eliminates the chance for contamination, and improves durability. Outstanding electrical properties assure

excellent cell performance. Moldability of the product is excellent, with web thickness of less than 10 mils available, and the product can be molded with intricate and demanding flow fields.

Porvair Fuel Cell Technologies has developed the fully molded carbon – graphite Bipolar Plate to meet the needs of the fuel cell industry for high quality products, which can be produced at low cost. To obtain additional information on how this product can benefit your application, call Barbara at (828) 694-3305.

POWERFUL POSSIBILITIES