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# Advancing Flat Glass

## ► A new study forecasts increasing demand for advanced flat glass.

tempered safety glass for motor vehicles), a number of opportunities remain for advanced flat glass, particularly for laminated flat glass used as hurricane glass, burglary glass, ballistic glass and motor vehicle safety glass.

Solar control flat glass, the second-largest group of advanced flat glass products, will continue to post above-average growth through 2012. In particular, demand for smart glass is expected to finally have a significant impact outside of the electrochromic mirrors and liquid crystal display privacy glass that have been available for some years.

**Table 1.** U.S. advanced flat glass demand (million dollars).

	2002	2007	2012	% Annual Growth	
				2002-2007	2007-2012
<b>Advanced Flat Glass Demand</b>	<b>4787</b>	<b>5607</b>	<b>7150</b>	<b>3.2</b>	<b>5.0</b>
Safety & Security Glass	3244	3496	4160	1.5	3.5
Solar Control Glass	1114	1529	2145	6.5	7.0
Other Advanced Glass	429	582	845	6.3	7.7

The much-awaited commercial rollout of suspended particle device (SPD) smart glass technologies is now expected to occur, sparking well-above-average growth for the category through 2012. Other types of solar control glass, such as low-emissivity glass and reflective glass, will post slower but nonetheless strong growth.

The primary market for advanced flat glass remains motor vehicle production, which accounted for more than 50% of total demand in 2007. The market is dominated by laminated windshield glass and tempered glass for side and rear windows, but better growth opportunities exist in electrochromic mirrors, heads-up displays and laminated safety glass for side windows. ☉

*Advanced Flat Glass (published 06/2008, 255 pages) is available for \$4500 from The Freedonia Group, Inc. For additional information, contact Freedonia at 767 Beta Dr., Cleveland, OH 44143-2326; (440) 684-9600; fax (440) 646-0484; or visit [www.freedoniagroup.com](http://www.freedoniagroup.com).*

**A**ccording to *Advanced Flat Glass*, a new report from The Freedonia Group, Inc., demand for advanced flat glass is projected to increase 5.0% annually to \$7.2 billion in 2012. Gains will derive from a variety of factors, including the recovery of residential building construction activity from a weak 2007 base, ongoing rapid growth in a variety of emerging technologies (such as smart glass and self-cleaning glass), and strong gains in laminated glass applications. Solid advances for certain niche products in the large motor vehicle market will also contribute to growth.

Security and safety glass products, including both tempered and laminated flat glass, represent the largest group of advanced flat glass materials, accounting for 62% of total demand in 2007. While certain of these products are relatively mature (such as