

# Foreign Competition Report for the U.S. Building Products Industry

Issue 2 - 2010



**Jordan, Knauff & Company**  
INVESTMENT BANKERS

**Unmatchable Experience in the Middle-Market**



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## INTRODUCTION

We are pleased to present the second issue of the Foreign Competition Report for the U.S. Building Products Industry (the “Report”). The purpose of this Report is to provide building products companies a measure of the extent to which their segment is under pressure from foreign competition. By increasing awareness of these competitive challenges, we hope that U.S.-based building products manufacturers will be able to make impactful plans to prepare for this competition and to continue to thrive. Our approach to foreign competition is a market rational one. In other words, we do not advocate limiting or restricting the import of foreign products. Rather, we understand that other countries will be able to leverage their lower labor and structural costs and produce certain products more efficiently than can be done in this country. Natural market forces will cause all products to be manufactured by the most efficient hands.

Our intention in creating this Report is to allow companies to identify product areas that may be under greater pressure from imports and focus their attention on the portion of their own product spectrum that is the least likely to be imported from another country. Fortunately, these will tend to be the most differentiated, highest margin products that a company offers. On the other hand, to the extent that companies may decide to outsource a certain portion of their products to an offshore provider, examining the largest producers listed in each product segment will offer guidance as to the best countries in which to seek a foreign supplier.

Imported goods have come to play a key role in the U.S. economy. In 2009, some \$1.56 trillion in goods of all types were imported into this country, with \$296 billion of those goods coming from China.<sup>1</sup> These numbers are down approximately 26 percent and 12 percent respectively, versus the prior year. Among the factors driving foreign competition are decreased tariffs and other trade barriers and an increase in the size and efficiency of cargo ships bringing products from overseas. This increase in ship size is particularly important because it results in lower average shipping costs and shorter shipping times.

Throughout this Report, the word ‘foreign’ should be taken to mean any non-U.S. company – including those located in Canada and Mexico – or a manufacturing division of a U.S. supplier that is located in any non-U.S. country. From a purely domestic company’s perspective, it is not important whether an imported product that takes advantage of lower costs in a foreign country is being produced in a facility that is owned by a U.S. or a foreign company. When the words ‘overseas’ and ‘offshore’ are used in this Report, they refer to companies located outside of North America. Typically, they will refer to Asian countries, so we will mention European companies specifically when a given trend or statistic applies to them. References to China will include trade statistics and trends for Taiwan as well.

With regard to the statistics included in this Report, it is important to differentiate between growth rates and actual amounts of imports. There are numerous cases, for example, where China is not the largest importer within a given segment in dollar value of goods but they are, by far, the fastest growing importer. This is important because, in most of these cases, the growth rate of imports from China is sufficient to indicate that they will become the number one importer within a relatively short period of time. Many observers point out that Chinese competitiveness has shrunk over the last several years. Wages and other costs there are rising and the long favorable currency exchange rate with the U.S. dollar has moved in a direction that makes Chinese goods less competitive in this country. We believe that there are so many

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<sup>1</sup> “USA Trade Online.” STAT-USA and the Foreign Trade Division of the U.S. Census Bureau. [www.usatradeonline.gov](http://www.usatradeonline.gov).



low-cost areas for production in Asia and elsewhere that, to the extent China becomes less competitive, other countries will become relatively more competitive. Companies in the United States should accept as a permanent reality that parts of the rest of the world will be a source of low-cost skilled and unskilled labor for the foreseeable future. Finally, this Report is intended to evolve with the needs of its readers. If there are additional product areas that readers would like to see included in future issues, we hope they will bring that fact to our attention. We will make every effort to include that additional requested data in future versions.

Figure 1 below shows the risk from foreign competition faced by door and window products with various characteristics, including their uniformity, labor content and typical lead time. This chart, the concept of which is fully applicable to other building products segments as well, shows that the products at greatest risk from foreign imports are those that are produced in long, uniform runs and that require a great deal of labor and have a high value to weight or volume ratio. It is easy for overseas producers to manufacture such products in great volumes, overcoming the shipping distance. Situations where such products can be ordered in advance make foreign manufacturers and their typically lower pricing particularly compelling.

While a given segment might be relatively insulated from foreign competition at the present time, all U.S.-based manufacturers would be well-advised to account for foreign producers in their strategic plans. We predict that partnerships between overseas and North American producers will become more common in the future. The foreign partner will produce the most uniform goods with the longest lead times, while the North American partner will manufacture higher margin products made in shorter runs or with shorter required lead times. Such partnerships will provide a competitive advantage to the companies that participate in them.

**Figure 1: Threat of Foreign Competition in the Door and Window Industry**

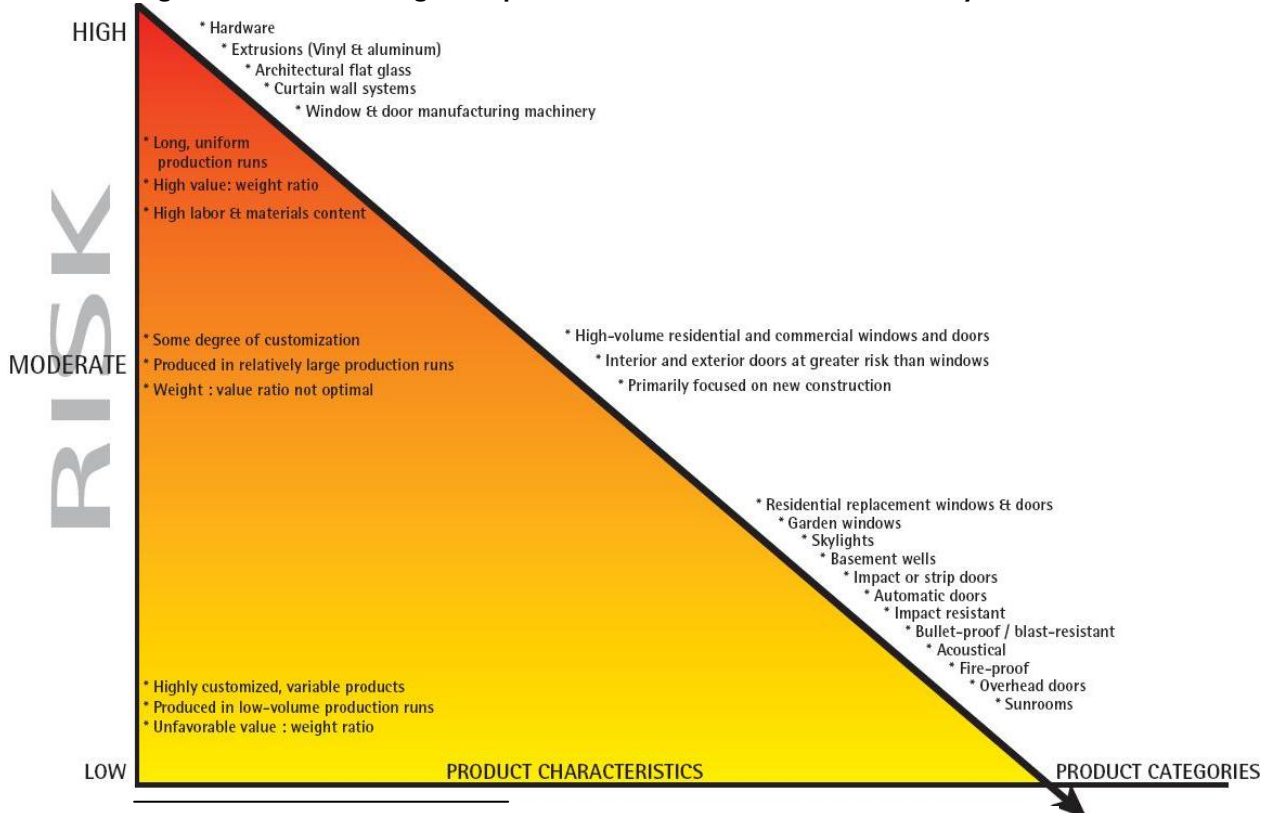


Chart data compiled by JKC. Originally published in *Door & Window Manufacturer*, January 2007.



## WINDOWS & DOORS

From 2002 to 2007, window and door imports grew steadily at a compound annual growth rate (“CAGR”) of 10.6 percent. The decline in the U.S. window and door segment over the last several years, however, is also reflected in a sharp drop in imports. From 2007 to 2009, imports decreased by roughly 40 percent. As may be seen in Figure 1 below, total imports in this segment in 2009 were roughly \$1.14 billion, approximately the same as they were in 2002. Given the estimated size of the total U.S. window and door industry of \$35.3 billion<sup>2</sup>, this would indicate foreign penetration of this market of roughly 5 percent.

**Figure 1: Total Window & Door Imports (2002 – 2009)**

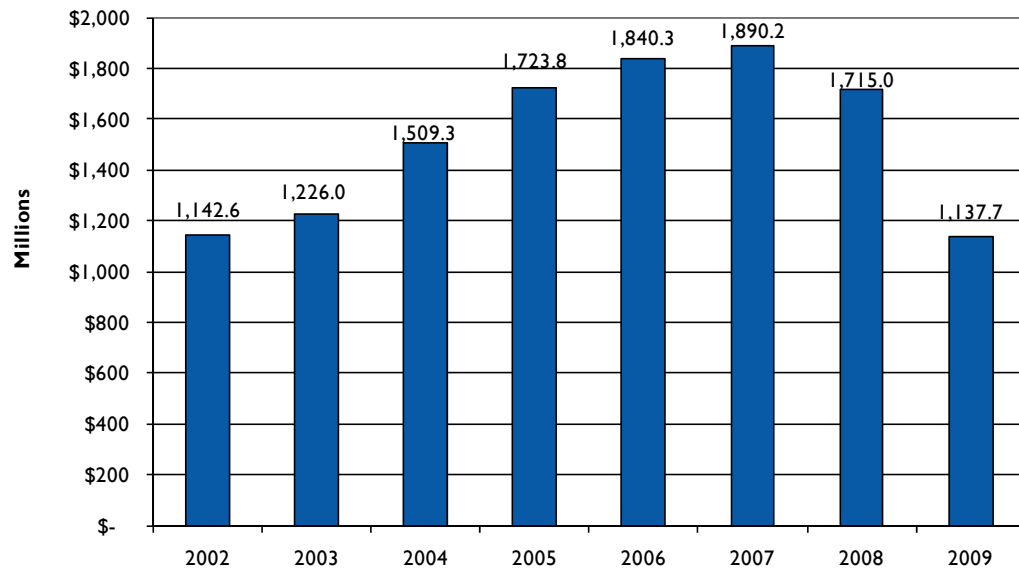


Figure 2 on the next page illustrates the growth rate of imports from the top four countries of origin for windows and doors. While China is not currently the largest importer of windows and doors into the U.S., their annual growth rate far exceeds that of the other top importers, at roughly 16.8 percent between 2002 and 2009. This CAGR is down significantly versus the 29.1 percent annual growth rate in last year’s survey for the period between 2002 and 2008. If imports from all four countries continue at the same rate as they have in the past, China’s U.S. window and door exports will exceed those of Canada by 2015. However, given the steepness of the decline in China’s import growth for 2009, versus other countries, it appears that other countries captured market share at China’s expense.

<sup>2</sup> “Windows & Doors to 2012.” The Freedonia Group. November 1, 2008.



**Figure 2: Window & Door Import Growth (2002 – 2009)**

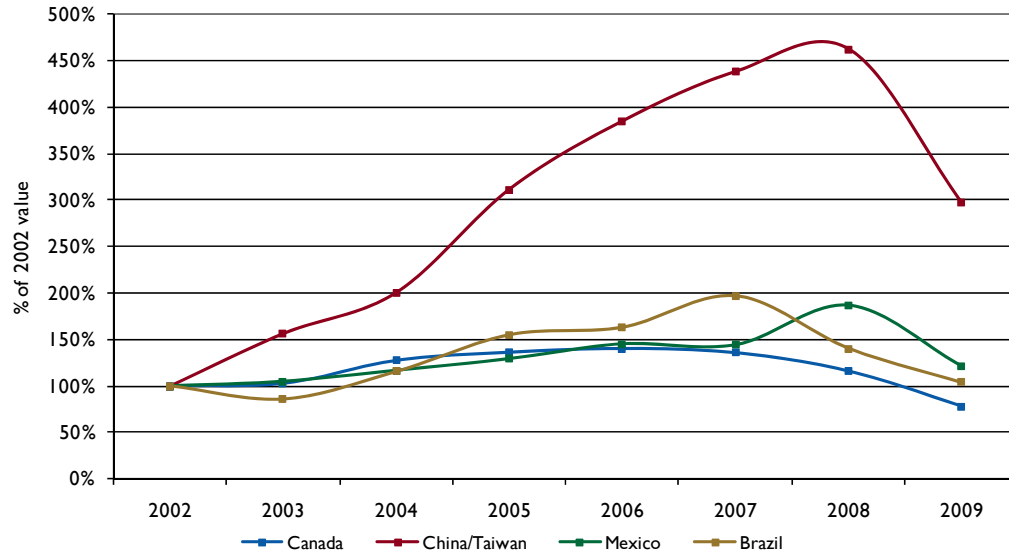


Figure 3 below shows the total dollar imports from each of the top four importers of windows and doors, along with the total from all other importing countries. In 2009, Canada exported \$527 million worth of windows and doors to the U.S., with wood being the most common material. Despite Canadian window and door imports declining 32.7 percent from 2008 levels, Canada increased its percentage of total U.S. window and door imports. As a group, the top four importers gained less than 1.0 percent of additional market share of total window and door imports, indicating that market share of secondary suppliers was relatively stable.

**Figure 3: Window & Door Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 783,400,213	45.7%	\$ 527,048,734	46.3%
China/Taiwan	321,564,215	18.7%	206,560,118	18.2%
Mexico	194,318,105	11.3%	126,171,239	11.1%
Brazil	77,732,852	4.5%	57,426,918	5.0%
All Other Countries	<u>338,026,783</u>	<u>19.7%</u>	<u>220,537,709</u>	<u>19.4%</u>
<b>Total</b>	<b>\$1,715,042,168</b>	<b>100.0%</b>	<b>\$1,137,744,718</b>	<b>100.0%</b>

Figure 4 on the next page illustrates the breakdown of window and door imports by material. While wood continues to be the most common window and door material being imported, its share dropped from 2007 to 2008 by nearly 7.0 percent and another 0.7 percent from 2008 to 2009. Most of the wood imports are doors, rather than windows. Vinyl and iron/steel products both gained share over the same period.



**Figure 4: Percentage of Total Window & Door Imports**

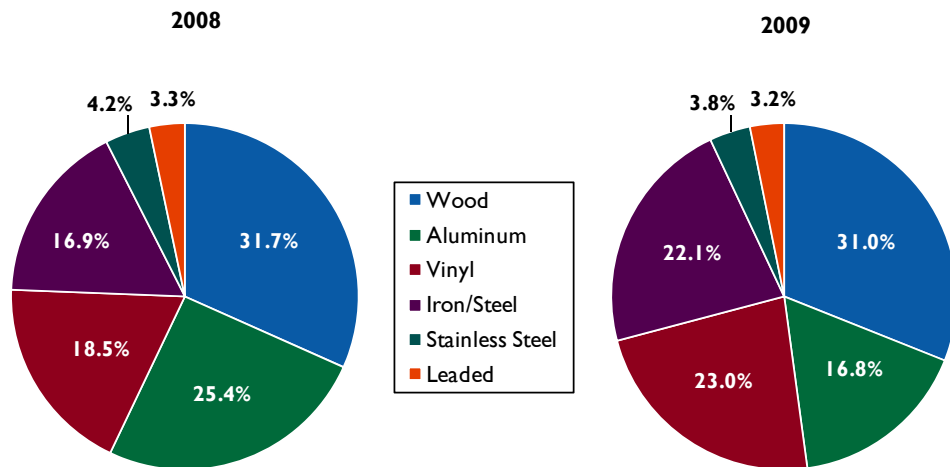
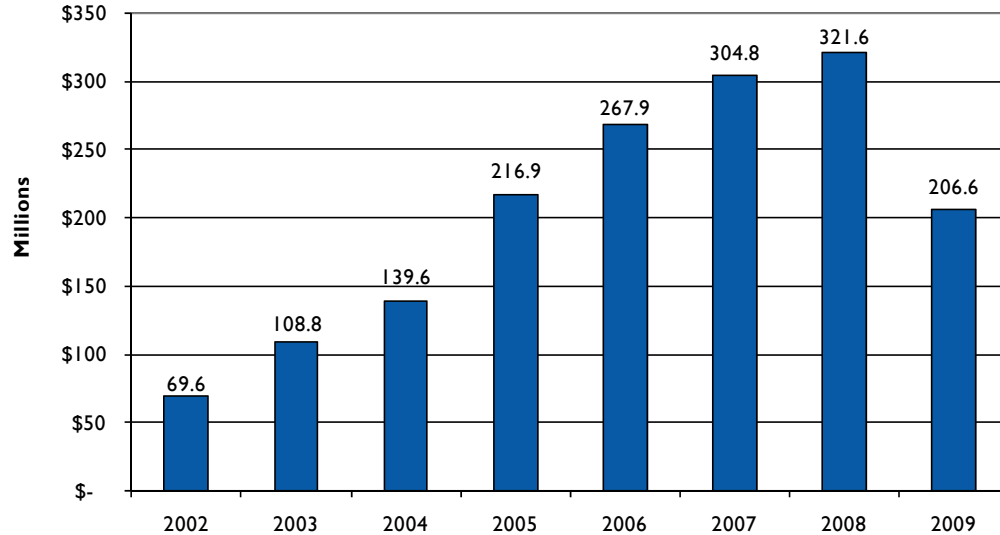


Figure 5 below illustrates the growth of window and door imports from China. The CAGR of Chinese imports between 2002 and 2009 was 16.8 percent, after having grown at a CAGR of 29.1 percent from 2002 to 2008. In last year's Survey, the growth in Chinese imports along with the softness in the U.S. market implied an increased market share at the expense of U.S. companies. However, in 2009 Chinese imports had the largest decline (35.8 percent) out of every major window and door importer. The Chinese import decline also outpaced the world's import decline of 33.7 percent.

**Figure 5: China/Taiwan Window & Door Imports (2002 – 2009)**



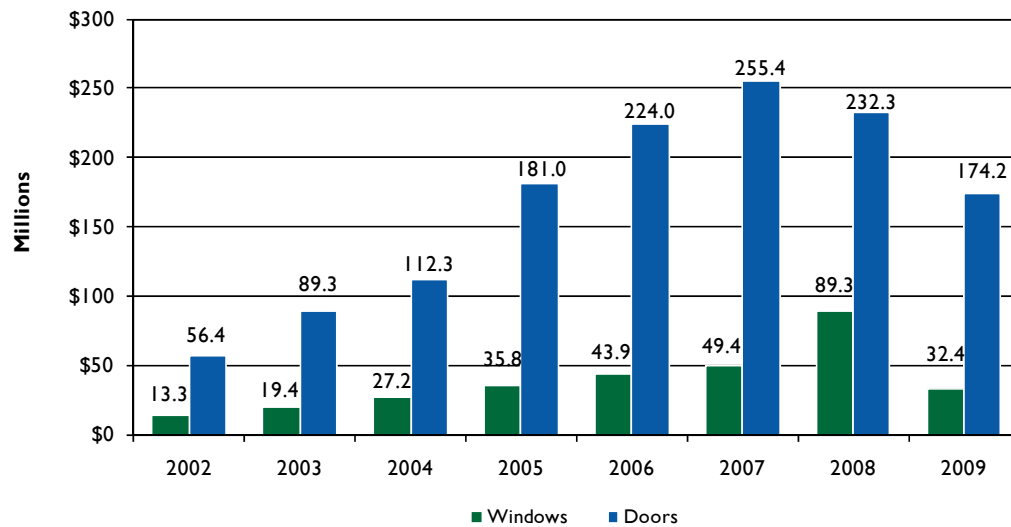
It is interesting to further separate Chinese door imports from window imports, as the prevalence of imports in each category is markedly different. Figure 6 on the next page illustrates the strength of door imports in 2008 and the sharp decline experienced in 2009. The decline in both Chinese window and door imports in 2009 has brought their import numbers back down to their approximate 2005 levels. The majority of this decline can be attributed to the lack of demand in the U.S. market. Also interesting is the decline in the portion of Chinese window imports as a percentage of total Chinese imports. In 2002, windows reported 19 percent of Chinese imports. By 2008, windows had increased to 28



percent of imports. In 2009, however, that trend reversed itself and windows dropped back to 16 percent of Chinese imports. The rise in window imports in 2008 was highly unexpected, since windows are less attractive as an import product.

Where these numbers go in 2010 will be the direct result of a number of factors: 1) Consumer demand for new housing, 2) the level of remodeling and repair projects, 3) the demand for customized window and/or door products and 4) the ability of Chinese manufacturers to offer a high quality product while maintaining their price advantage. The competitive threat within this area still remains for products that can be standardized, manufactured in high volumes and shipped efficiently.

**Figure 6: China/Taiwan Window & Door Breakdown (2002 – 2009)**



## VINYL PROFILES

The vinyl profile segment includes not only profiles for use in manufacturing windows, but those used in decking and railing as well. While windows, as an example, do not ship particularly well from overseas, the profiles used to produce vinyl windows lend themselves very well to overseas production. They ship well and they typically come in only a handful of colors, with white being the most common. Figure 7 below illustrates the current level of vinyl profile imports from Canada, China and the United Kingdom, the top three importers. We believe, based on anecdotal evidence, that the statistics shown for vinyl profile imports from China underestimate the size of that segment.

**Figure 7: Vinyl Profile Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 68,467,104	97.0%	\$ 61,238,927	95.7%
China/Taiwan	903,568	1.3%	2,045,636	3.2%
UK	805,258	1.1%	353,847	0.6%
All Other Countries	386,395	0.5%	344,688	0.5%
<b>Total</b>	<b>\$ 70,562,325</b>	<b>100.0%</b>	<b>\$ 63,983,098</b>	<b>100.0%</b>

Many companies in the U.S. that purchase vinyl window profiles have indicated to us that they are interested in sourcing profiles from overseas, but they feel compelled to maintain a U.S.



supplier. If a rush order needs to be fulfilled, the exclusive use of an overseas producer can become a liability. In order to capture a greater share of their customers' purchases, Chinese manufacturers have begun to enter joint ventures with North American profile extruders. In this way, they are able to provide offshore pricing on all orders for which there is sufficient lead time. For rush orders, the North American facility can manufacture the needed profiles and deliver them much more quickly. Customers are typically willing to pay more for a rush order, providing suppliers with strong margins on such orders. Under normal circumstances, it would not be cost effective to keep a duplicate for every die in an alternate location. It is important to remember, though, that these dies are produced in China using extremely low-cost skilled labor.

Vinyl profiles produced in China suffer from a somewhat dubious reputation in the market. In the past, there were problems with vinyl profiles produced in China that contained lead. Concerns about lead linger and most U.S. manufacturers are not in a position to have a person on the ground in China to ensure the ongoing quality of profiles to be imported. Another area of concern regarding Chinese vinyl profiles concerns the amount of titanium dioxide used in these products. While North American extruders use 8 parts per million (ppm) of titanium dioxide in their profiles, Chinese extruders typically use only 6 ppm in their products. Also, Chinese profiles are derived from coal, which is plentiful in China, while U.S. profiles are oil-based. These small differences cause Chinese profiles to wear somewhat more quickly than U.S.-made profiles. For this reason, it is not a good idea to mix profiles made in the U.S. and those made in China on an individual product, such as a sunroom. After a couple of years, the customer will likely notice that the profiles are wearing unevenly and color differences are beginning to be apparent.

## GLASS

While there are numerous product segments that can be included in any discussion of glass imports, for the purposes of this Report, we have chosen to focus on float glass, surf ground or polished sheets, toughened non-vehicular safety glass, non-vehicular laminated safety glass and multiple-walled insulating glass units. Because it is produced in large, relatively uniform batches, glass is a product that lends itself well to foreign production. Over the past twenty years, much of the glass producing capacity in the U.S. has been shut down as imported glass products have become more price competitive. For two hundred years, Western Pennsylvania has been home to an important cluster of glass producing companies. Between 1902 and the present, the number of glass factories in the Pittsburgh area alone has dropped from 150 to just 50 today.<sup>3</sup> Much of this contraction in capacity is due to foreign competition. In 2007, China became the number one exporter of glass to the U.S. There has been recognition on the part of Chinese glass companies that the glass they produced in the past did not meet the standards required in the U.S. and Europe. As a result, numerous older glass plants in China have been shut down and replaced with more modern facilities.

One area where Chinese glass manufacturers are lacking in capacity is in producing low-e glass. Because the Chinese government has kept energy prices artificially low in the past, 93 percent of the 44 billion square meters of existing buildings in China were built without energy efficient windows.<sup>4</sup> As China's economy continues to grow, it has become impossible for the government to keep energy prices down and they have begun to increase. Since there was little

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<sup>3</sup> "Glass Houses." Tribune Review., January 23, 2005.

<sup>4</sup> Companiesandmarkets.com, a VerticalEdge Ltd. brand. September 4, 2008.



demand in the past for energy efficient products, China’s construction of low-e glass facilities has not kept pace with its growth. It is estimated that Chinese companies will import roughly 50 percent of the 100 million square meters of low-e glass they will require this year.<sup>5</sup> Such a large market creates significant opportunities for large glass manufacturers with the capability to supply low-e glass for use in China’s domestic market.

Figure 8 illustrates the growth of total glass imports to the U.S. from 2003 to 2009. During that period, glass imports have grown at a CAGR of 3.1 percent. From 2003 to the peak in 2007, the CAGR was 12.5 percent. In 2009, glass imports from China decreased by 13.7 percent. This is more a result of the slowdown in the U.S. market than a lack of focus on this market by Chinese companies.

**Figure 8: Total Glass Imports (2003 – 2009)**

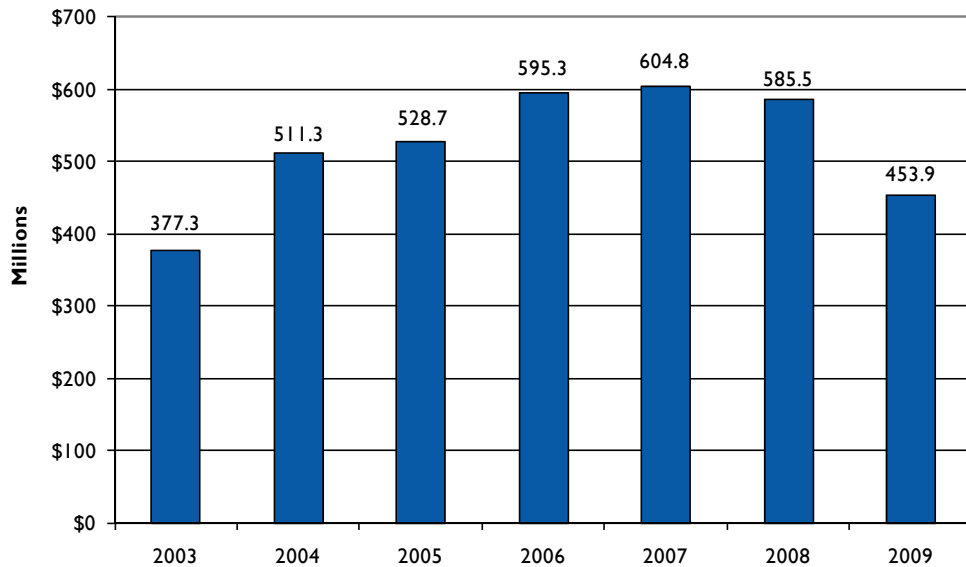


Figure 9 below contains the total import figures for China, Canada and Mexico, the top three exporters of glass to this country. In the glass segment, China is not only the fastest growing exporter, but also the number one exporter. Its exports to the U.S. have grown at a CAGR of 21.2 percent since 2003, a growth number that has been declining given the weakness in demand. China’s market share among glass importers increased by 3.3 percent from 2008 to 2009, with much of that market share being taken from Canada. Overall, the top three importers of glass lost 0.7 percent of market share to the group of all other glass importers in 2009.

**Figure 9: Glass Imports (2008 and 2009)**

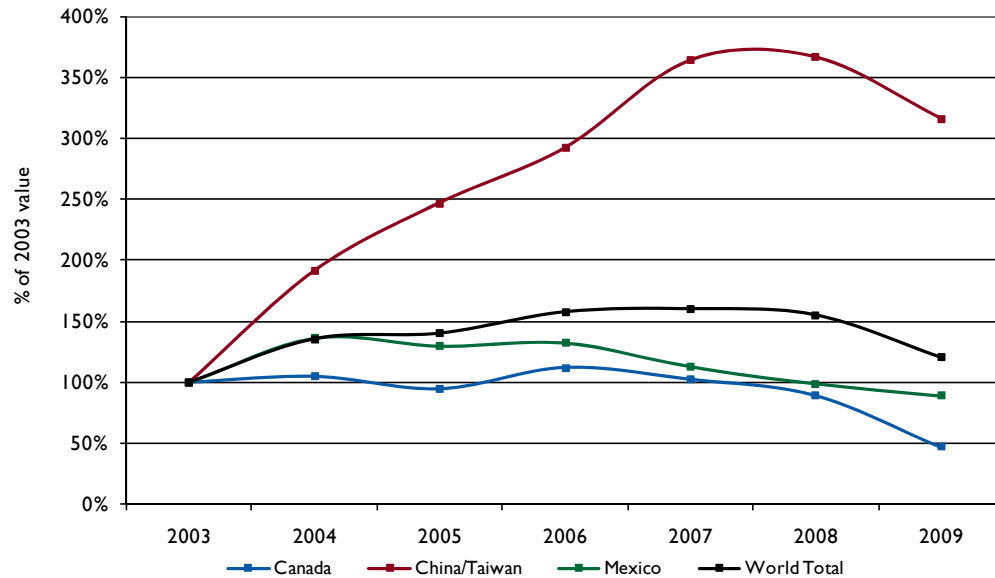
	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
China/Taiwan	165,950,173	28.3%	143,249,718	31.6%
Canada	129,694,440	22.2%	68,566,590	15.1%
Mexico	113,663,690	19.4%	102,252,152	22.5%
All Other Countries	176,144,016	30.1%	139,845,724	30.8%
<b>Total</b>	<b>\$ 585,452,319</b>	<b>100.0%</b>	<b>\$ 453,914,184</b>	<b>100.0%</b>

<sup>5</sup> Ibid.



Figure 10 illustrates the excess of China's glass export growth over that of its nearest competitors. From 2003 to 2009, China's glass exports to the U.S. have grown to roughly 316 percent of their 2003 levels. The glass segment is another one in which Chinese companies are growing their market share at the expense of all other foreign producers and of U.S. companies.

**Figure 10: Glass Import Growth (2003 – 2009)**



## FLOORING

Flooring is an area where Chinese manufacturers have become the number one importer and the chief competitor of U.S.-based flooring manufacturers. The International Trade Commission has confirmed that flooring imports into the U.S. are growing more quickly than domestic production. This means that foreign suppliers are growing their market share at the expense of U.S. manufacturers. The growth of imports has been driven by a shift in preferences toward finished flooring (which has a higher labor content), exotic species and engineered flooring. Illegal logging, which is more common in other countries, also enhances the price advantages of foreign suppliers. Finally, the growth in popularity and acceptance of laminate flooring benefits flooring importers.

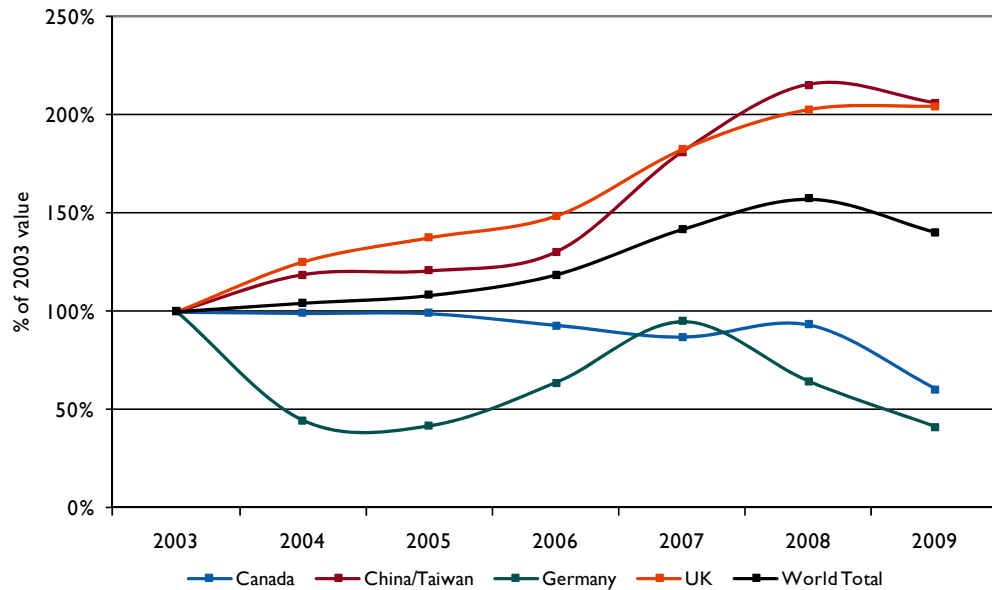
### Vinyl Flooring

In 2008, the vinyl flooring market realized \$1.64 billion in sales.<sup>6</sup> The recession has encouraged consumers to make flooring decisions based more heavily on value, durability and long lifecycle. Figure 11 on the next page illustrates the strong growth in vinyl flooring imports both from China and the rest of the world. Vinyl flooring imports from the United Kingdom showed the strongest growth in 2009, but imports from the U.K. remain a fraction of those from China.

<sup>6</sup> Helm, Darius. "Vinyl Flooring 2009," Floor Focus. 2009.



**Figure 11: Vinyl Flooring Import Growth (2003 – 2009)**



As may be seen in Figure 12 below, China is the number one exporter of vinyl flooring to the U.S., with more than three times the export volume of second ranked Canada. From 2008 to 2009, Chinese manufacturers increased their share of total imports by 3.1 percent. As a group, the top four producers realized a lower total market share of vinyl flooring exports to the U.S., with Canada posting a 5.6 percent decrease in its share of total exports.

**Figure 12: Vinyl Flooring Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
China/Taiwan	\$ 285,160,177	44.3%	\$ 272,615,157	47.4%
Canada	130,571,293	20.3%	84,751,636	14.7%
UK	44,439,418	6.9%	44,807,958	7.8%
Germany	29,260,882	4.5%	18,796,482	3.3%
All Other Countries	<u>154,723,349</u>	<u>24.0%</u>	<u>153,932,202</u>	<u>26.8%</u>
<b>Total</b>	<b>\$ 644,155,119</b>	<b>100.0%</b>	<b>\$ 574,903,435</b>	<b>100.0%</b>

### Wood Flooring

It is estimated that the wood flooring industry in the U.S. represents \$2 billion<sup>7</sup> in sales out of the \$20 billion<sup>8</sup> floor covering industry. Chinese, Brazilian and Canadian manufacturers have shown strong growth in the wood flooring market. Consumption of wood flooring has risen strongly in the U.S. in the last 30 years, but production has increased far less than consumption. The difference represents flooring needs that are met by foreign manufacturers. In the tropical wood area, in particular, the U.S. is very dependent upon foreign producers. Consumers in this country are the largest users of exotic woods in the world, but U.S. companies produce a very small fraction of the global demand for tropical woods. In addition

<sup>7</sup> "Hard Surface Flooring to 2013." The Freedonia Group. July 2009.

<sup>8</sup> "Wood Flooring - Solid Products, Changing Industry." Decosimo Corporate Finance.



to wood flooring, tropical woods are important in decking, millwork and furniture and are becoming more popular in decorative plywood and veneer products.

The wood flooring industry has benefitted from a strong trend toward carpeting being replaced by hard surface flooring. Hardwood flooring products have improved over time and become easier to install, increasing their popularity. Flooring is a product where sufficient value is added in the manufacturing process that it is cost effective to ship raw wood to a low labor cost country, where it is fabricated into flooring and shipped back to this country.<sup>9</sup>

**Figure 13: Wood Flooring Import Growth (2004 – 2009)**

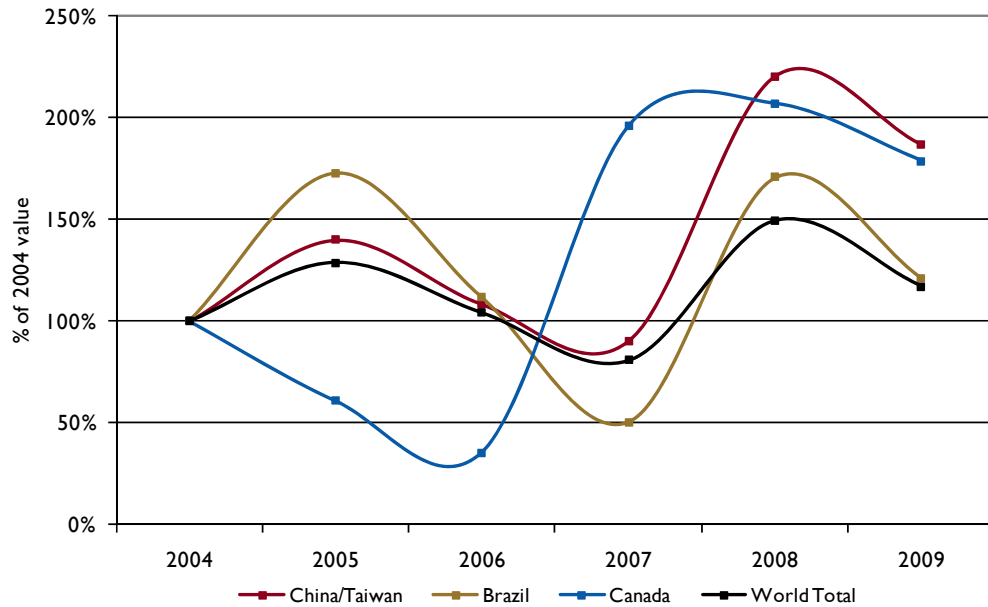


Figure 13 illustrates that Canada and China have enjoyed the highest overall cumulative growth in flooring exports to the U.S. since 2004. However, as may be seen in Figure 14 below, China is the largest exporter of wood flooring to this country by a wide margin. Its share of the total U.S. flooring market increased significantly in 2008 and again in 2009, at the expense of U.S. and Brazilian manufacturers and those located in countries whose exports are too small to make the ranks of the top three.

**Figure 14: Wood Flooring Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
China/Taiwan	\$ 267,562,077	51.2%	\$ 226,905,946	55.3%
Brazil	103,465,619	19.8%	73,404,709	17.9%
Canada	59,166,310	11.3%	51,154,373	12.5%
All Other Countries	92,393,087	17.7%	58,645,791	14.3%
<b>Total</b>	<b>\$ 522,587,093</b>	<b>100.0%</b>	<b>\$ 410,110,819</b>	<b>100.0%</b>

<sup>9</sup> Ibid.



### Ceramic/Other Flooring

Ceramic flooring represents a relatively new market segment for foreign manufacturers. As may be seen in Figure 15 below, Mexico is currently the top exporter of ceramic tile to this country, followed by Germany, whose exports by over 50 percent in 2009. Given the relatively low numbers represented in these trade statistics, we believe that a classification issue may be distorting the total size of this market.

**Figure 15: Ceramic/Other Flooring Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Mexico	\$ 7,134,869	22.4%	\$ 7,974,955	32.1%
Italy	5,017,813	15.8%	3,102,939	12.5%
Germany	4,204,091	13.2%	6,482,485	26.1%
China/Taiwan	2,979,199	9.4%	2,814,887	11.3%
All Other Countries	12,491,163	39.2%	4,458,546	18.0%
<b>Total</b>	<b>\$ 31,827,135</b>	<b>100.0%</b>	<b>\$ 24,833,812</b>	<b>100.0%</b>

### FENCING

It is difficult to define the size of the fencing industry in this country because of the diversity of materials that are used in fencing products, but a recent estimate placed the industry at roughly \$6.6 billion in size.<sup>10</sup> The fastest growing material in the fencing industry is vinyl fencing, which currently accounts for 35-40 percent of the fencing market.<sup>11</sup> The growth of vinyl products in all building products segments has been quite strong. The portion of U.S. household home improvement spending targeted toward vinyl products of all types was 8 percent in 1990 and rose to 30 percent by 2006.<sup>12</sup> The demand on the part of aging consumers for economical, low maintenance products has helped further fuel the growth of the vinyl segment.

As may be seen in Figure 16 on the next page, Chinese fencing imports have enjoyed strong growth, as has been the case in other product segments. In the aluminum fencing segment, imported products are offered at compelling prices. At a trade show several years ago, a Chinese company was offering powder coated aluminum fencing at 15 percent of the retail cost of comparable fencing in this country.<sup>13</sup> As with other segments of the building products industry, though, fencing manufacturers enjoy an important natural insulation from foreign competition – the need for swift delivery of customized products. By emphasizing that they offer fencing in a wide variety of colors that can be delivered with a short lead time, fencing manufacturers leverage the benefits of their flexibility and proximity to their customers.

<sup>10</sup> "Fencing to 2012." The Freedonia Group. October 2008.

<sup>11</sup> Ibid.

<sup>12</sup> Plastics News. August 21, 2006.

<sup>13</sup> The Fabricator. March/April 2005.



**Figure 16: Fencing Import Growth (2004 – 2009)**

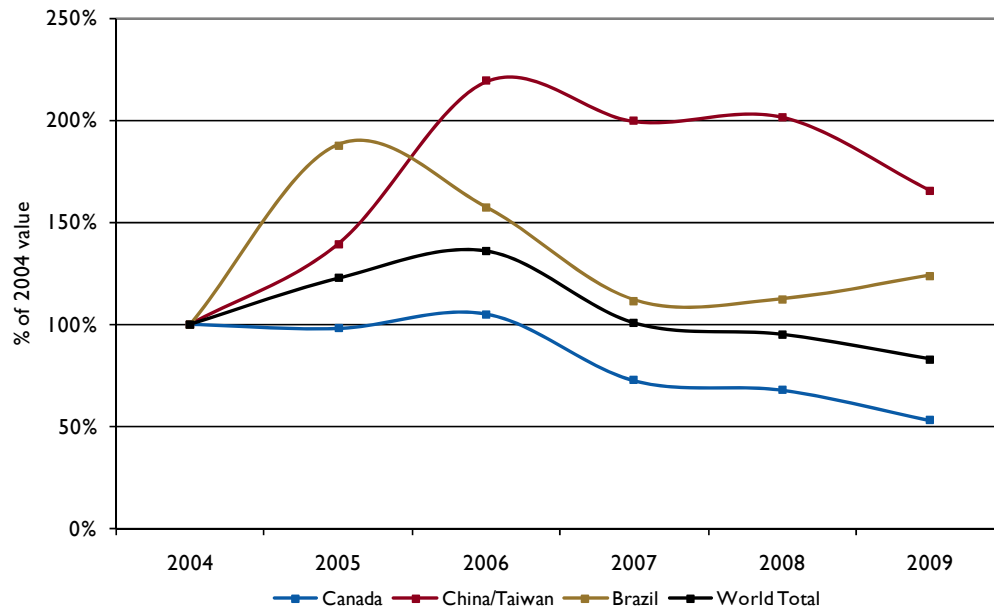


Figure 17 below illustrates Canada’s position as the largest exporter of fencing to the United States, albeit with a dwindling advantage over second ranked Brazil and third ranked China. While Brazil’s imports are currently less than those of Canada, Brazilian manufacturers have increased their share of total exports of fencing by nearly 7.0 percent since 2007. The top three exporters - Canada, Brazil and China - share over 90 percent of the market, with the remainder being served by all other exporting countries.

**Figure 17: Fencing Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 111,039,538	45.4%	\$ 86,970,441	40.7%
China/Taiwan	64,361,546	26.3%	52,831,404	24.7%
Brazil	52,624,219	21.5%	58,027,002	27.1%
All Other Countries	16,741,023	6.8%	15,999,785	7.5%
<b>Total</b>	<b>\$ 244,766,326</b>	<b>100.0%</b>	<b>\$ 213,828,632</b>	<b>100.0%</b>

## SIDING

Figure 18 on the next page illustrates the growth of siding imports from Canada, China and the rest of the world. As may be seen, China’s siding export growth far exceeds that of Canada and the remaining countries, none on which exports a significant amount of siding to this country. Siding manufacturers in the U.S. have historically been somewhat insulated from foreign competition as a result of customer demand for fast delivery of siding in a wide variety of custom colors and designs. While Canadian manufacturers are able to overcome their distance from U.S.-based customers, Chinese manufacturers are not. They compete in the siding market on the basis of price and the quality delivery of siding in a few stock colors, which accounts for their up and down volume in exports.



**Figure 18: Siding Import Growth (2004 – 2009)**

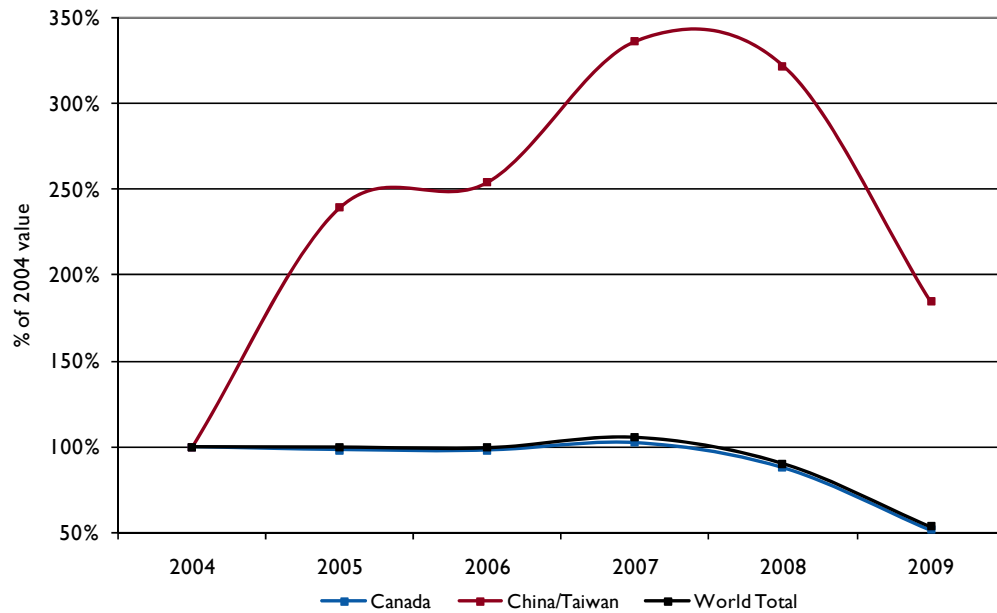


Figure 19 contains details regarding past levels of siding imports. Given the estimated \$10.4 billion size of the U.S. siding industry, the approximate foreign penetration of the U.S. siding market is 1.2 percent.<sup>14</sup> From 2008 to 2009, both Canada and China experienced declines in their portion of the total imported siding market.

**Figure 19: Siding Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 200,951,320	95.4%	\$ 118,221,222	94.7%
China/Taiwan	7,393,550	3.5%	4,234,542	3.4%
All Other Countries	<u>2,228,680</u>	<u>1.1%</u>	<u>2,447,357</u>	<u>2.0%</u>
<b>Total</b>	<b>\$ 210,573,550</b>	<b>100.0%</b>	<b>\$ 124,903,121</b>	<b>100.0%</b>

## ROOFING

Figure 20 on the next page includes the growth of roofing imports from 2004 to 2009. Chinese roofing exports to the U.S. experienced very strong growth on a percentage basis in 2009, despite the U.S. economic condition. Over the same period, imports from Canada, Mexico and the rest of the world rose modestly or not at all. For any country that increased its sales over the latter portion of that time period, though, it is likely they did so at the expense of the market share of U.S. companies and their fellow exporting countries.

<sup>14</sup> "Siding to 2012," The Freedonia Group, July 2008.



**Figure 20: Roofing Import Growth (2004 – 2009)**

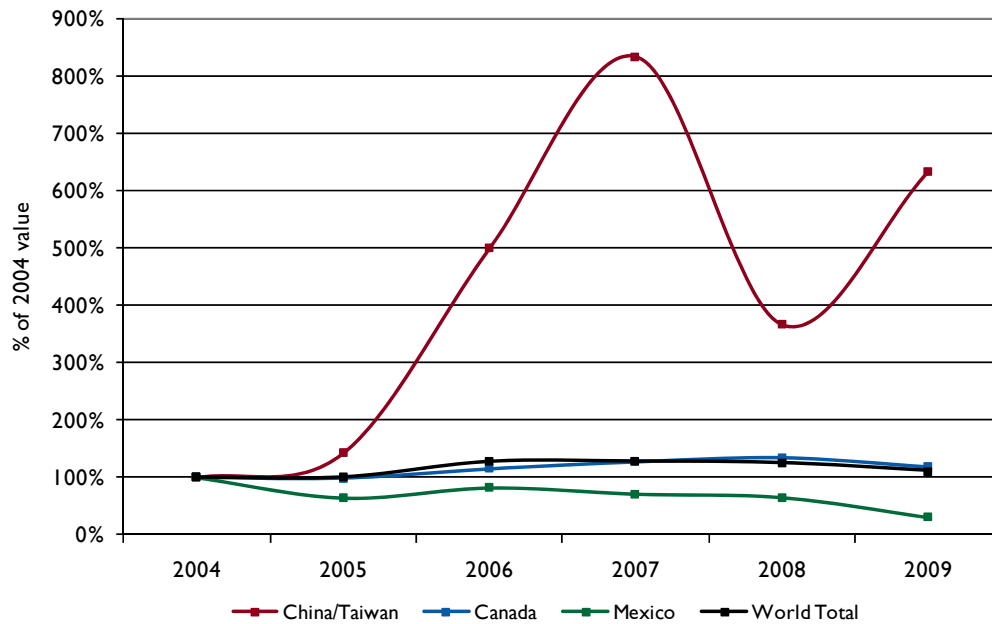


Figure 21 below includes data regarding the level of roofing imports from Canada, Mexico, China and all other countries. Given the estimated \$13.7 billion size of the U.S. roofing industry, the foreign penetration of the roofing segment is roughly 1.5 percent.<sup>15</sup> Like manufacturers of other building products, roofing manufacturers have enjoyed a relatively high degree of protection from foreign imports as a result of customers demanding swift delivery of products in a wide variety of custom colors and designs. Canada is currently the largest exporter of roofing to the U.S., but the growth rate of Chinese imports, with the exception of 2008, has been very strong. China surpassed Mexico in 2009 and will likely eventually serve as a greater source of competition for U.S. and Canadian siding producers.

**Figure 21: Roofing Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 179,167,047	80.6%	\$ 157,531,948	79.2%
Mexico	15,138,206	6.8%	7,115,869	3.6%
China/Taiwan	5,909,634	2.7%	10,219,180	5.1%
All Other Countries	22,165,863	10.0%	23,947,859	12.0%
<b>Total</b>	<b>\$ 222,380,750</b>	<b>100.0%</b>	<b>\$ 198,814,856</b>	<b>100.0%</b>

<sup>15</sup> "Roofing to 2012." The Freedonia Group. August 2008.



DECKING

Figure 22 below illustrates the growth of imported decking materials from 2004 to 2009. China's import volume is still relatively small, which should foster to higher growth numbers once U.S. demand increases.

**Figure 22: Decking Import Growth (2004 – 2009)**

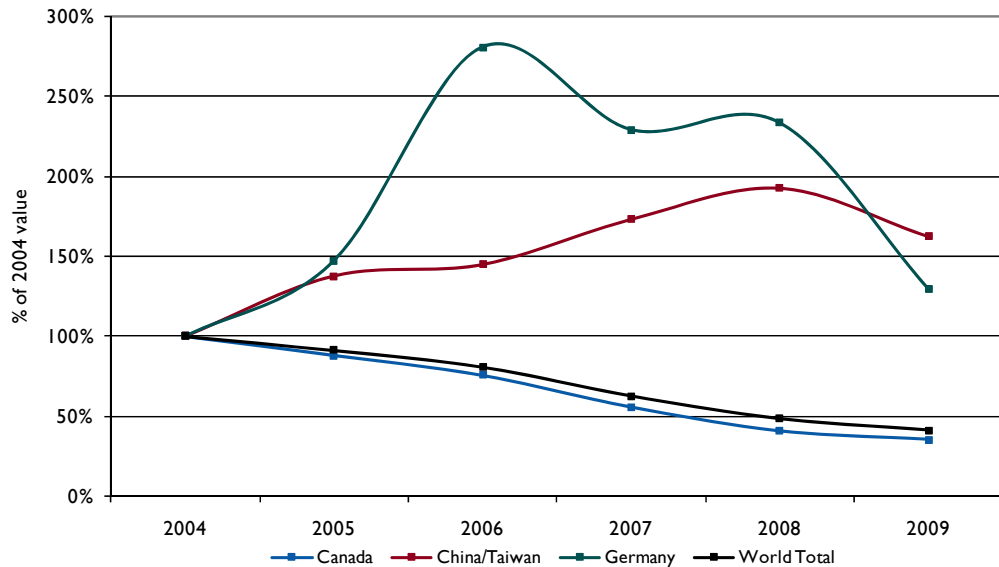


Figure 23 below contains details regarding imported decking material for 2008 and 2009. This figure shows that, while their imports are lower in dollar terms, Chinese manufacturers continue to hold a steady percentage of total imports. Their share decreased by 0.2 percent, while Canada's increased by 1.6 percent during the same period. With the U.S. decking market estimated at \$4.1 billion in size, the approximate foreign penetration of the decking segment is 2.9 percent.<sup>16</sup>

**Figure 23: Decking Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 110,953,759	80.2%	\$ 96,558,334	81.8%
China/Taiwan	20,289,774	14.7%	17,105,664	14.5%
Germany	2,247,358	1.6%	1,249,804	1.1%
All Other Countries	4,897,810	3.5%	3,123,620	2.6%
<b>Total</b>	<b>\$ 138,388,701</b>	<b>100.0%</b>	<b>\$ 118,037,422</b>	<b>100.0%</b>

<sup>16</sup> "Wood and Competitive Decking to 2013." The Freedonia Group. April 2009.



COLUMNS

As illustrated in Figure 24 below, growth of Chinese imports of architectural columns between 2003 and 2009 has far exceeded that of any other country. Imports from Canada, Mexico and the rest of the world declined at a much faster rate in 2009 than China’s 6.9 percent year-over-year decline. Clearly, given the slowness of the U.S. market during the last several years, this growth on the part of exporters of columns to the U.S. has come at the expense of the market share of U.S.-based manufacturers.

**Figure 24: Column Import Growth (2003 – 2009)**

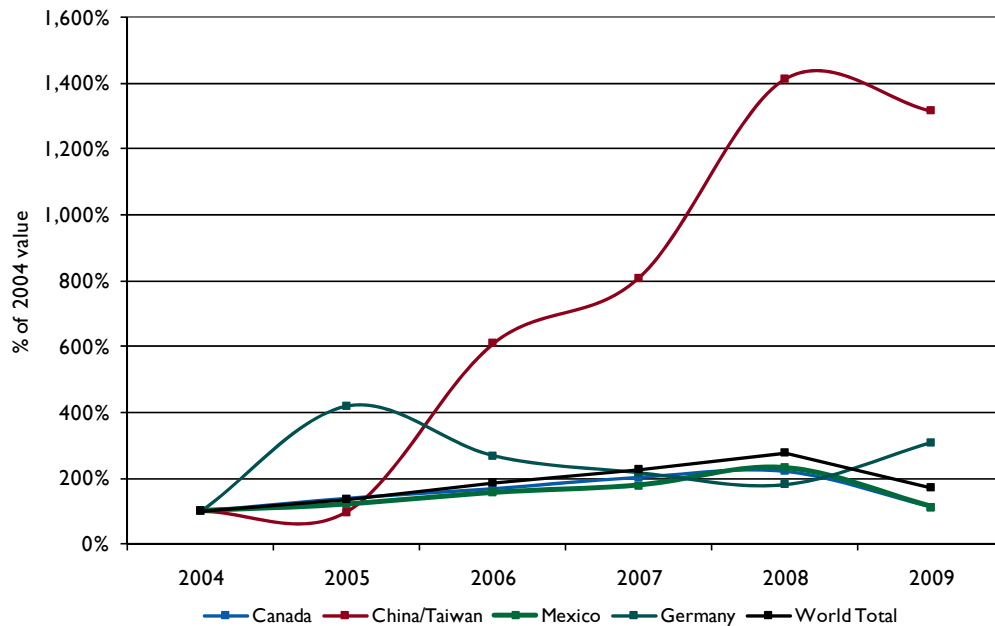


Figure 25 below contains details regarding imports from Canada, China, Mexico, Germany and all other countries in 2008 and 2009. Canada was by far the largest exporter of architectural columns to this country in 2008, but after Canada’s 48.8 percent decline in 2009, China has closed that gap considerably. China’s share of column exports decreased less than 7.0 percent from 2008 to 2009, while its overall percentage of the import market increased by 10.7 percent. If Chinese column exports increase in the future at the same rate that they did from 2004 to 2009, they will easily surpass Canadian column exports in 2010.

**Figure 25: Column Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 419,254,511	48.8%	\$ 214,576,915	40.3%
China/Taiwan	184,251,061	21.5%	171,469,579	32.2%
Mexico	123,990,292	14.4%	60,762,653	11.4%
Germany	14,908,682	1.7%	25,422,796	4.8%
All Other Countries	116,133,390	13.5%	60,617,273	11.4%
<b>Total</b>	<b>\$ 858,537,936</b>	<b>100.0%</b>	<b>\$ 532,849,216</b>	<b>100.0%</b>



CABINETS

Figure 26 below shows the growth of kitchen cabinet imports into this country from 2004 to 2009. While imports from China and Italy have enjoyed modest growth, imports from Canada and the rest of the world actually ended that time period much lower than in 2004. This was largely a result of a significant pullback in 2008 and 2009

**Figure 26: Cabinet Import Growth (2004 – 2009)**

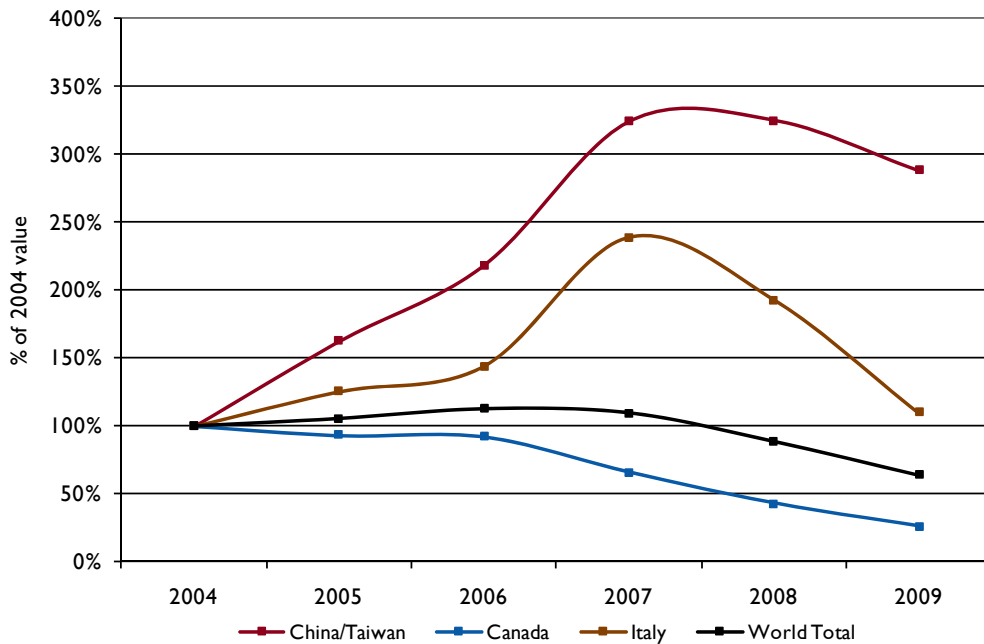


Figure 27 below contains details regarding the level of imported cabinets from China, Canada, Italy and all other countries in 2008 and 2009. China surpassed Canada as the top exporter of cabinets to the U.S. in 2008 and was again the top exporter in this category in 2009. Canadian cabinet imports dropped by roughly \$135 million from 2007 to 2008 and by \$100 million from 2008 to 2009. Given the growth rates described earlier, it is likely that Chinese manufacturers will maintain their number one spot in this segment for the foreseeable future. Given the estimated size of the U.S. cabinet industry of \$15.3 billion, foreign manufacturers have captured roughly 3.1 percent of the industry.<sup>17</sup>

**Figure 27: Cabinet Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
China/Taiwan	\$ 289,983,804	43.4%	\$ 256,926,459	53.4%
Canada	250,600,393	37.5%	150,513,011	31.3%
Italy	57,935,974	8.7%	32,967,587	6.9%
All Other Countries	70,063,368	10.5%	40,840,476	8.5%
<b>Total</b>	<b>\$ 668,583,539</b>	<b>100.0%</b>	<b>\$ 481,247,533</b>	<b>100.0%</b>

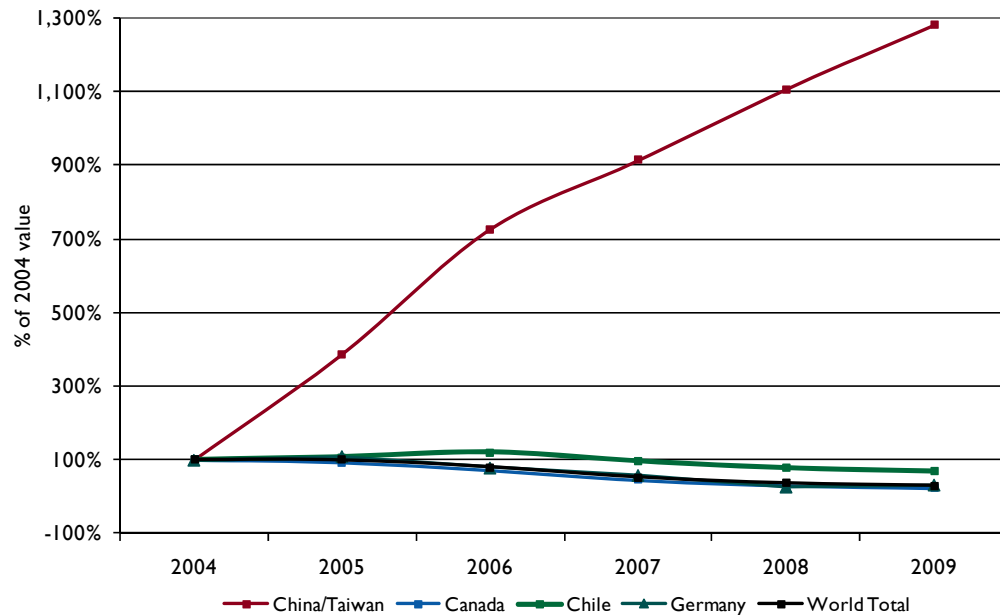
<sup>17</sup> "Cabinets to 2012." The Freedonia Group. June 2008.



## ENGINEERED WOOD PRODUCTS

The products included in the engineered wood products category of this Report include particle board, fiberboard and veneer panel. As may be seen in Figure 28 below, the growth of Chinese imports in these categories has been astronomical, increasing thirteen-fold between 2004 and 2009. China became the world's largest producer of medium density fiberboard ("MDF") in 1999. Currently, the majority of MDF and similar products produced in China are consumed in China's domestic market. Pressure from importers of Chinese MDF is likely to increase in the future as their domestic consumption slows, resulting in excess production capacity. Oriented strand board ("OSB") and other high quality MDF products have caught on more slowly in China because of the lack of availability of high quality materials to use in manufacturing those products. Thus, OSB producers in the U.S. are under less pressure from Chinese imports.

**Figure 28: Engineered Wood Products Import Growth (2004 – 2009)**



As may be seen in Figure 29, Canada is currently the number one exporter of engineered wood products to this country. However, Canadian manufacturers saw their sales drop some \$500 million between 2007 and 2008 and by \$200 million between 2008 and 2009. Chinese imports increased by roughly \$30 million, while total imports decreased 17.7 percent. This resulted in China capturing another 5 percent of total imports within this category.

**Figure 29: Engineered Wood Products Imports (2008 and 2009)**

	2008		2009	
	Value of Imports	% of Total	Value of Imports	% of Total
Canada	\$ 1,050,916,252	65.1%	\$ 806,020,340	60.7%
China/Taiwan	175,160,372	10.9%	202,792,216	15.3%
Chile	107,153,090	6.6%	95,310,567	7.2%
Germany	51,238,425	3.2%	61,127,342	4.6%
All Other Countries	228,966,655	14.2%	163,065,208	12.3%
<b>Total</b>	<b>\$ 1,613,434,794</b>	<b>100.0%</b>	<b>\$ 1,328,315,673</b>	<b>100.0%</b>



Figure 30 below illustrates the various CAGRs enjoyed by Chinese exporters by product category. As may be seen, Chinese export growth is the strongest in the areas of vinyl profiles, columns, engineered wood products and roofing and is the slowest in windows and doors, decking, glass, fencing and vinyl flooring.

**Figure 30: China/Taiwan CAGR of Imports by Product (2004 – 2009)**

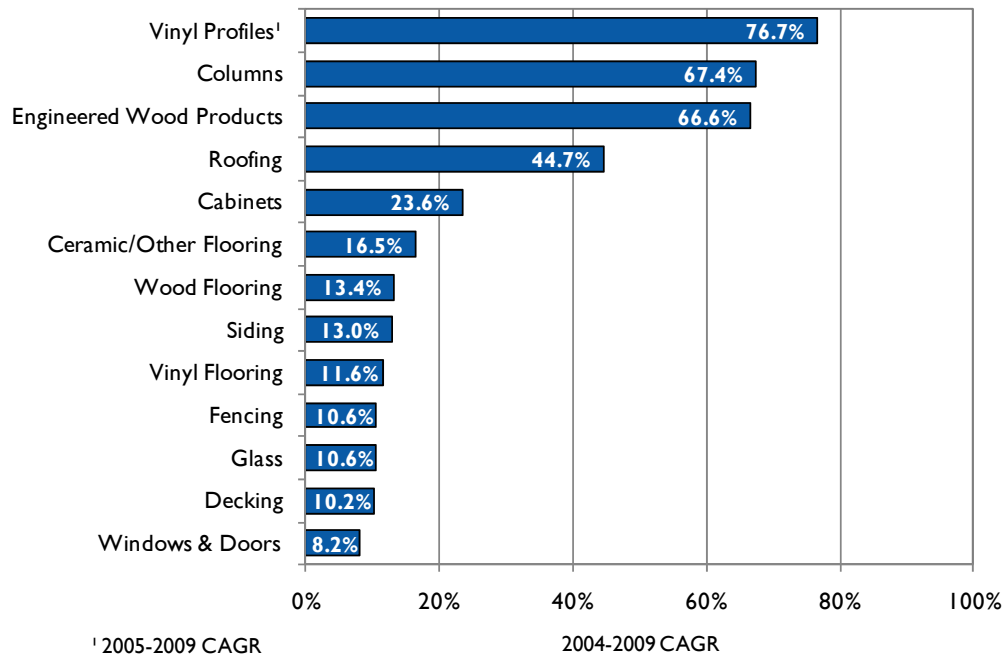


Figure 31 below details the CAGRs of the top exporters to the U.S. in each category. For example, in the window and door segment, China, Canada, Mexico and Brazil are the top importers and China has the highest CAGR at 8.2 percent. In the siding area, China and Canada are the top importers, and the highest CAGR is China's, at roughly 13 percent.

**Figure 31: Top Producing Importers by Product (2004 – 2009 CAGR)**

	China/Taiwan	Canada	Mexico	Brazil	UK	Germany	Italy	Chile	World Total
<b>Windows &amp; Doors</b>	8.2%	-9.4%	0.8%	-2.2%					-4.0%
<b>Vinyl Profiles</b>	76.7%	-24.3%			97.0%				-23.5%
<b>Glass</b>	10.6%	-14.8%	-8.1%						-2.4%
<b>Vinyl Flooring</b>	11.6%	-9.4%			10.3%	-1.5%			6.1%
<b>Wood Flooring</b>	13.4%	12.3%		3.9%					3.2%
<b>Ceramic/Other Flooring</b>	16.5%		11.3%			12.5%	-18.7%		0.1%
<b>Fencing</b>	10.6%	-11.8%		4.4%					-3.7%
<b>Siding</b>	13.0%	-12.4%							-11.8%
<b>Roofing</b>	44.7%	3.5%	-21.0%						2.2%
<b>Decking</b>	10.2%	-18.7%				5.4%			-16.2%
<b>Columns</b>	67.4%	2.5%	2.6%			25.2%			11.5%
<b>Cabinets</b>	23.6%	-23.7%					1.9%		-8.6%
<b>Engineered Wood Products</b>	66.6%	-25.3%				-20.0%		-6.9%	-21.4%



In Figure 32 below, we have presented an analysis of the year in which China has or will become the top exporter to the U.S. in each product category. Based on 2004 – 2009 CAGRs, China will eventually come to have the number one position among exporters serving all thirteen markets. While the projected year by which this will occur will change every year, the growth of the market share of Chinese imports will come at the cost of other importers and U.S. manufacturers.

**Figure 32: Projected Year in which China has or will become the Number One Exporter**

*(projected based on 2004 – 2009 CAGR for each country)*

	<b>China/ Taiwan</b>
<b>Wood Flooring</b>	<2004
<b>Vinyl Flooring</b>	2004
<b>Glass</b>	2007
<b>Cabinets</b>	2008
<b>Columns</b>	2010
<b>Engineered Wood Products</b>	2011
<b>Fencing</b>	2012
<b>Vinyl Profiles</b>	2014
<b>Windows &amp; Doors</b>	2015
<b>Decking</b>	2015
<b>Roofing</b>	2018
<b>Siding</b>	2023
<b>Ceramic/Other Flooring</b>	2033

## CONCLUSION

We hope that readers will find these statistics helpful in managing their companies in this recovering environment. Managers at companies large and small have an obligation to their shareholders, employees and other stakeholders to be as prepared as possible for foreign competition and other competitive challenges. To the extent that this Report can be improved to serve as a more valuable reference tool for industry participants, please share those suggestions for improvement with us. In particular, if any readers of this Report disagree with the estimated market sizes used, please forward to us your own estimate and the source from which it was obtained. If there are additional product areas that should be included in future issues, please share those suggestions as well. We will make every effort to include in future issues any additional data that would be helpful. Please contact us with any questions regarding this Report or if we can be of service to your company.



## CATEGORIES INCLUDED IN EACH PRODUCT SEGMENT

1. Windows & Doors
  - Doors and door frames, of plastic
  - Windows and window frames of plastics
  - Windows, French windows and their frames, of wood
  - French doors, of wood
  - Flush doors, of wood
  - Doors and their frames and thresholds, of wood
  - Leaded glass windows, multicell/foam glass panels, etc.
  - Doors, windows and frames, and thresholds stainless steel
  - Windows and their frames, iron or steel not stainless
  - Doors of iron or steel not stainless
  - Aluminum windows and their frames
  - Aluminum doors
  - Stained glass window
2. Vinyl Profiles
  - Window, door, decking or railing profiles of PVC
3. Glass
  - Float glass and surf ground or polished sheets
  - Toughened non-vehicular safety glass
  - Laminated non-vehicular safety glass
  - Multiple-walled insulating units of glass
  - Bricks and blocks of pressed or molded glass for buildings
  - Slabs, squares, tiles etc. of pressed mold glass
4. Vinyl Flooring
  - Floor coverings of vinyl tile
  - Floor coverings of polymers of vinyl chloride
  - Floor coverings of other plastics
5. Wood Flooring
  - Wood flooring, not assembled, coniferous
  - Maple wood flooring
  - Birch and beech wood flooring
  - Wood flooring, non coniferous
  - Wood flooring, end-matched Jatoba/Brazilian Cherry
  - Wood flooring, end-matched Ipe/Taheebo/Lapacho/etc
  - Wood flooring, end-matched Santos Mahogany/Cabreuva
  - Wood flooring, end-matched, Cumaru/Brazilian Teak
  - Wood flooring, end-matched, non coniferous
  - Maple wood flooring
  - Birch and beech wood flooring
  - Wood flooring, non coniferous
  - Plywood flooring at least one outer ply non coniferous
  - Parquet panels, of wood
  - Assembled flooring panels, of wood mosaic floors



- Assembled flooring panels, of wood multilayer
  - Assembled flooring panels, of wood
  - Wood flooring
6. Ceramic/Other Flooring
- Floor coverings, coated on a non-woven base
  - Agglomerated marble-cement floor and wall tiles
  - Ceramic flooring blocks, support or filler tile
7. Fencing
- Fence posts, treated paint/stain/creosote/other preservative
  - Fence posts rough, not treated, coniferous
  - Fence pickets/palings/rail coniferous wood pointed
  - Fence pickets/palings/rail non coniferous wood, pointed
  - Fence sections, assembled, of wood
  - Pickets, palings, posts and rails, sawn, of wood
  - Iron/steel fence posts w/corrugations, knobs, studs
  - Cloth, grill, netting and fencing of aluminum wire
8. Siding
- Siding for house or building exterior
  - Western red cedar resawn bevel wood siding
  - Resawn bevel wood siding, coniferous
  - Western red cedar wood siding
  - Wood siding, coniferous Western Red Cedar
  - Wood siding continuously shaped, non coniferous
  - Wood siding continuously shaped, non coniferous
  - Western red cedar shingles
  - Shingles of wood
9. Roofing
- Shakes of wood
  - Roofing and siding of asphalt, or similar material
  - Roofing tiles, ceramic
  - Sheet-metal roofing or siding of iron or steel
10. Decking
- Window, door, decking or railing profiles of PVC
  - Rods, sticks and profile shapes, of vinyl chloride polymers
  - Rods, sticks and profile shapes of PVC
11. Columns
- Columns, pillars, posts, beams and girders
12. Cabinets
- Wooden kitchen cabinets designated for permanent installation
13. Engineered Wood Products
- Particle board and similar board of wood
  - Fiberboard of wood or other ligneous materials
  - Veneer panel, one-layer particle board

**NOTICE:**

*This Report was prepared for informational purposes from data provided by STAT-USA and the Foreign Trade Division of the U.S. Census Bureau and other sources that are believed to be reliable but which could change without notice. Jordan, Knauff & Company shall not in any way be liable for claims relating to these materials and the firm makes no warranties, express or implied, or representations as to their accuracy or completeness or for errors or omissions contained herein. Legal, accounting and tax restrictions and changes to assumptions may significantly affect the outcome and suitability of the interpretation of the various statistics presented. This information is not intended to be construed as tax, legal or financial advice and may not be suitable for a given company's circumstances. A consultation with one's own tax, legal and financial advisors to determine suitability of decisions based on the results of this Survey should be undertaken. These materials do not constitute an offer to buy or sell any financial security or to participate in any investment offering or deployment of capital.*

## About Jordan, Knauff & Company

Jordan, Knauff & Company was founded in 2001 by G. Cook Jordan, Jr., and Thomas E. Knauff. The firm provides a comprehensive line of investment banking services to private American companies and has a particular focus on the building products industry. Jordan, Knauff & Company specializes in providing mergers and acquisitions advisory and debt and equity placement to companies across the U.S. in a variety of industries. Typical transaction sizes range from \$10 million to \$300 million in total consideration.

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