Windows & Doors in China

Industry Study with Forecasts for 2017 & 2022

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Demand in China to grow 8.1% yearly through 2017

Sales of windows and doors in China are expected to rise 8.1 percent per annum to 570 billion yuan in 2017. Gains will primarily be fueled by strong growth in both residential and nonresidential building. Product upgrades and increasing concerns about energy efficiency will also contribute to window and door demand.

Metal still dominant window material, but plastic growing

Demand for windows is projected to rise 7.8 percent per year to 375.5 billion yuan in 2017. Plastic will be the fastest rising material used in windows, with plastic window demand advancing 8.8 percent per year through 2017. Demand will benefit from the superior insulation performance and competitive costs of plastic windows, especially in residential applications. Metal will remain the dominant type of material, accounting for more than 60 percent of overall window demand in 2017. Demand for metal windows will be stimulated by strong increases in office, industrial, and commercial building construction.

Demand for doors in China is forecast to rise 8.5 percent per year to 194.5 billion yuan in 2017. Wood is the dominant material based on its ubiquitous usage in interior doors for both residential and nonresidential buildings. Demand for wood doors is projected to increase 8.5 percent yearly to 150 billion yuan in 2017. The increasing use of wood doors made of wood/steel and wood/plastic composites, as well as product upgrades, will support further advances in overall wood door demand. Metal will retain its dominant position in the entrance door segment in both residential and nonresidential applications.

Nonresidential market to post strongest advances

The nonresidential market accounted for 54 percent of window and door demand in 2012. Window and door demand in the nonresidential market is projected to grow 9.5 percent per year to 328 billion yuan in 2017, boosted by strong growth in the industrial, office, and commercial segments. Demand for windows and doors in the residential market will grow 6.2 percent per year to 242 billion yuan in 2017, based on strong construction activity in both new single-family and multi-family housing.

Northwest region to exhibit fastest gains

China consists of distinct regional markets characterized by different climates, populations, and levels of economic development. The Central-East region, home to about 30 percent of the country’s population and 36 percent of economic output in real terms, supports the largest regional window and door market and will account for 45 percent of overall demand in China in 2017. Demand for windows and doors in the Northwest region is expected to enjoy the fastest growth, growing 9.1 percent per annum through 2017. Gains will result from robust increases in construction activity, spurred by rapid progress in industrialization and subsequent rising personal incomes expected for this region.
Metal Doors

Metal doors are also projected to grow strongly, increasing 8.6% per annum to ¥38 billion in 2017. Metal doors are used in multifamily housing units, as security or specialty doors such as sliding doors. For example, in multifamily buildings, almost every unit is installed with one security door (as the entrance door). In addition, the average price of a security door has nearly tripled over the past decade, with door quality improving as well as raw material costs rising. Manufacturers are introducing new products, such as stainless steel doors and vinyl-coated metal doors, to improve aesthetic features, leading to higher prices, which will also support demand growth in value terms.

Gains in metal door demand will also be driven by growth in the nonresidential construction market. Metal doors offer commercial architects, property managers, and designers the physical properties needed to withstand heavy use patterns, such as frequent openings and closings, and damages caused by impacts. For example, shipping docks on warehouses and manufacturing plants are most often made from metal due to their ability to withstand damages caused by trucks, materials handling equipment, unsteady loads, and operator error. Moreover, increasing concerns about security will lead to the installation of doors with thicker metal plates. These doors feature enhanced protection against entry by fire, blasts, fire, and physical attack, making them ideal for a wide range of applications, such as airports, banks, government facilities, manufacturing plants, shopping malls, utility plants, and warehouses.

However, advances in demand for metal doors will be restrained by greater competition from doors made from wood and plastic. For example, in residential bathroom and kitchen applications, metal doors are used less frequently than wood and plastic doors. The use of metal doors will also be restrained by the use of aluminum and zinc in window fabrication, which may be substituted for metal doors in some applications.
**Sample Profile, Table & Forecast**

**COMPANY PROFILES**

Xian Gaoke Building Materials Technology Company Limited
No. 19, Keji First Road
Technology Industry Development Zone
Xi’an, Shaanxi 710075
China
86-29-8831-8691
http://www.xagkbm.com

Annual Sales: ¥1 billion [US$160 million] (verified by company, 8/13)
Employment: 1,600 (verified by company, 8/13)

Key Products: unplasticized PVC window and door profiles, unplasticized PVC and aluminum windows and doors, curtain wall materials.

Xian Gaoke Building Materials (GKBM) makes and markets unplasticized polyvinyl chloride (uPVC) and aluminum windows and doors, profiles, curtain wall, fittings, fixtures, and other building materials. The Company is a wholly owned subsidiary of China-based Xian Gaoke Group Corporation, a state-owned enterprise.

The Company is involved in the Chinese window and door industry through the manufacture of uPVC windows and door profiles, uPVC and aluminum windows and doors, and curtain wall. For example, GKBM’s uPVC window profiles are utilized in the production of fixed, casement, and sliding windows, while uPVC door profiles are used in the fabrication of patio and entry doors.

Manufacturing operations are conducted by the Company at two facilities in Xi’an, Shaanxi that make windows, doors, and window and door profiles. GKBM markets its products throughout China via sales offices and over 500 independent dealers. In addition, the Company sells window and door products to over 20 countries worldwide.

**TABLE V-4**

**WOOD DOOR DEMAND IN CHINA BY TYPE**

(billion yuan)

<table>
<thead>
<tr>
<th>Item</th>
<th>2002</th>
<th>2007</th>
<th>2012</th>
<th>2017</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building Construction Expenditures</td>
<td>132</td>
<td>3563</td>
<td>9260</td>
<td>16730</td>
<td>28500</td>
</tr>
<tr>
<td>¥ wood doors/000¥ construction</td>
<td></td>
<td></td>
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<tr>
<td>Wood Door Demand</td>
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</tr>
<tr>
<td>Composite Wood</td>
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<tr>
<td>Molded</td>
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<tr>
<td>Other Composite Wood</td>
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<tr>
<td>Solid Wood</td>
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<td></td>
<td></td>
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<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>% doors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood Window &amp; Door Demand</td>
<td>15.9</td>
<td>47.0</td>
<td>104.6</td>
<td>156.5</td>
<td>222.0</td>
</tr>
</tbody>
</table>

**STUDY COVERAGE**

This Freedonia study, *Windows & Doors in China*, offers historical data (2002, 2007, 2012) as well as forecasts (2017, 2022) for supply and demand, plus by product material and demand by region of China. Data are also presented by window and door demand by type of structure. The study also examines major market environment factors, evaluates company market share and profiles 30 competitors in the Chinese industry.
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Other Studies

Construction Outlook in China

Construction expenditures in China are expected to increase 8.9 percent per annum in real terms through 2018. Nonresidential building construction will remain the largest sector and will grow the fastest, followed in pace by nonbuilding construction and residential building construction, respectively. This study analyzes the 15.9 trillion construction industry in China, with forecasts for 2018 and 2023 by market, structure type, and geographic region. The study evaluates company market share and profiles industry participants.

#3221 .......... January 2015 .......... $5300

World Insulation

Through 2018, global demand for insulation will rise 5.0 percent annually to 24.9 billion square meters of R-1 value. The Asia/Pacific region will grow the fastest, driven by building construction activity and manufacturing and industrial output. Foamed plastic insulation will lead value gains. This study analyzes the current world industry, at 19.5 billion square meters of R-1 value, with forecasts for 2018 and 2023 by material, market, world region, and for 21 countries. The study also evaluates company market share and profiles industry players.

#3206 .......... October 2014 .......... $6500

Windows & Doors

Demand for windows and doors in the US is projected to rise 6.9 percent per year through 2018 to $31.9 billion. Plastic windows and doors will be the fastest growing products while metal types will remain the largest segment. Metal and wood products will face competition from plastic, due to the latter’s advantages in cost and energy efficiency. This study analyzes the $22.8 billion US window and door industry, with forecasts for 2018 and 2023 by material, product, market and US region. The study also evaluates company market share and profiles industry players.

#3171 .......... May 2014 .......... $5400

World Roofing

Global demand for roofing is projected to increase 3.7 percent per year through 2018 to 12.6 billion square meters. China and the US will account for over one-half of all global gains. Tile roofing will benefit from intensive use in the thriving Asia/Pacific market, while bituminous products will see rapid growth in the US market. This study analyzes the 10.5 billion square meter world roofing industry, with forecasts for 2018 and 2023 by product, market, world region, and for 18 countries. The study also evaluates company market share and profiles industry participants.

#3167 .......... May 2014 .......... $6400

Siding

Demand for siding in the US is forecast to increase 7.1 percent annually to 103.5 million squares in 2018, valued at $12.1 billion. Brick, concrete and stone siding will grow the fastest, driven by their durability and low maintenance, especially for new homes built in the South. Vinyl siding will remain dominant but will continue to lose market share. This study analyzes the 73.5 million square US siding industry, with forecasts for 2018 and 2023 by material, market and US region. The study also evaluates company market share and profiles industry participants.

#3144 .......... March 2014 .......... $5300