Wood-Plastic Composite & Plastic Lumber

Industry Study with Forecasts for 2013 & 2018

Study #3145 | June 2014 | $5300 | 364 pages
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US demand to rise 9.8% annually through 2018

US demand for wood-plastic composite and plastic lumber is expected to rise 9.8 percent annually to $5.5 billion in 2018, creating a market for 2.6 billion pounds of plastic. A rebound in new housing completions from a low 2013 level and gains in residential improvement and repair expenditures will generate growth in demand. Demand gains will also be boosted by increased market penetration in decking applications, the leading use for composite and plastic lumber.

Decking to claim more than two-fifths of demand

Decking applications will account for more than two-fifths of composite and plastic lumber demand in 2018. Consumers will increasingly choose decks made from alternative lumber because it has greater resistance to degradation by moisture, changes in humidity, insect attack, or time, and because it requires minimal maintenance over its long service life. In 2018, decks made using composite and plastic lumber will comprise 19 percent of all decking demand. Ongoing changes to manufacturing technologies which will improve the color-fade resistance and the resemblance to natural wood, particularly expensive hardwoods such as ipe and redwood, will also boost composite and plastic decking demand. Further gains will result from efforts by manufacturers to expand the scope of decking accessories offered.

Wood-plastic composite lumber to grow the fastest

Increases in overall construction activity will support demand gains for both types of alternative lumber through 2018, but wood-plastic composite demand will rise at a quicker pace than demand for plastic lumber, albeit from a smaller base. As nearly two-thirds of composite and plastic lumber demand is generated by the residential market, expansion in residential construction activity will boost composite lumber demand. In large, high-growth residential applications such as decking, wood-plastic composite is increasingly preferred to plastic lumber. Several factors will support its rapid growth. For instance, composite lumber includes cellulose fibers and is better able to resemble the look and texture of traditional wood, an appealing trait to consumers looking for attractive but low-maintenance decks. Furthermore, because composite lumber frequently is manufactured using recycled plastics, wood and other materials, it is often marketed as environmentally friendly.

Among other applications, molding and trim is also expected to advance at a strong pace through 2018. Wood-plastic composite and plastic lumber use in molding and trim will benefit from renewed housing activity and from performance characteristics that are superior to those of lumber and engineered wood.
MARKETS

New Nonresidential Buildings

Demand for wood-plastic composite and plastic lumber in new nonresidential buildings is expected to grow 10 percent annually to $230 million in 2018. Rising nonresidential construction expenditures after a period of decline will drive demand increases for these materials. The commercial segment in particular, where double-digit annual real spending is expected, there are many opportunities for alternative lumber materials. One such opportunity is “al fresco” style outdoor deck seating at restaurants, where the ease of surface cleaning is useful to restaurants, which must keep health and hygiene a priority.

Additionally, because many manufacturers incorporate extensive amounts of recycled materials into their composite and plastic lumber, builders who select these materials can earn points toward Leadership in Energy and Environmental Design (LEED) certification from the US Green Building Council for the structures in which they are installed. Increased emphasis on sustainable design will boost demand for these materials in new nonresidential buildings, as will the desire of builders to incorporate materials which will not splinter or degrade when exposed to the elements.

Because the majority of demand in new nonresidential buildings stems from molding and trim applications, composite lumber material in greater demand is plastic lumber. However, accounts for the majority of demand in molding and trim applications and PVC plastic lumber is the most commonly used material. Plastic lumber accounted for 74 percent of demand in the nonresidential market in 2013. Demand is expected to grow 9.3 percent per year to $165 million in 2018, driven by rising nonresidential building construction spending.

Composite lumber products suffered from problems with manufacturing quality in the early stages of their adoption in the nonresidential building market.

TABLE IV-13

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WPC & Plastic Lumber Demand 2189 3265 3447 5500 7900
American Vinyl Concepts Incorporated
1915 Swarthmore Avenue
Lakewood, NJ 08701
732-286-9496
http://www.avconrail.com
Annual Sales: $10 million (estimated)
Employment: 25 (estimated)
Key Products: thermoplastic railing
American Vinyl Concepts, which does business as AVCON, is a manufacturer and marketer of aluminum and thermoplastic structural railing products. The privately held company maintains production operations at a plant in Lakewood, New Jersey.

The Company is involved in the US composite and plastic lumber industry via the production and sale of thermoplastic railing from such thermoplastic resins as acrylonitrile-styrene-acrylate. These railing products, which resist cracking, splitting, warping, corrosion, impacts, rotting, fading, and extreme weather conditions, are manufactured using the Company’s proprietary EXPANSION COLLAR technology that prevents damage caused by thermal expansion and contraction. In addition, AVCON reinforces its horizontal railings with metal. These products are sold through the FREEDOM, ORIGINAL, CLASSIC, and AQUA-SAFE collections.

The FREEDOM product line comprises Guardian and Defender railing, both of which are manufactured in 36- and 42-inch heights. AVCON’s ORIGINAL collection comprises railing in Protector, Sentry, Cavalier, and Continental styles, while the CLASSIC collection encompasses Daytona, Malibu, Cape Cod, and Harbor Master railing designs.

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**O**ther **S**tudies

**World Decorative Laminates**

Global demand for decorative laminates is expected to rise 5.6 percent per year to 107.7 billion square meters in 2018, valued at $40.8 billion. The Asia/Pacific region will dominate demand and be the fastest growing market, based on its leading position in engineered wood production, which is often given a laminate layer. This study analyzes the 8.1 billion square meter world decorative laminates industry, with forecasts for 2018 and 2023 by product, market, world region, and for 20 countries. The study also evaluates company market share and profiles industry players.

#302 .............. November 2014 ............... $6300

**Wood & Competitive Decking**

US decking demand will rise 2.4 percent annually through 2018 to 3.5 billion lineal feet, valued at $6.5 billion. Plastic and wood-plastic composite decking will grow the fastest, based on their low maintenance requirements and long life spans. The residential market will remain dominant while nonresidential decking grows the fastest. This study analyzes the 3.1 billion lineal foot US decking industry, with forecasts for 2018 and 2023 by material, market, application and US region. The study also evaluates company market share and profiles industry competitors.

#3194 ............. September 2014 ............. $5500

**Fiber-Reinforced Plastic Composites**

US demand for fiber-reinforced plastic (FRP) composites will climb 4.7 percent annually to 4.3 billion pounds in 2017, valued at $22.9 billion. Motor vehicles will remain the largest market while construction 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

**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.

#3092 ............. October 2013 .............. $5100

**World Building Boards**

Global demand for building boards will rise 6.2 percent per year through 2017 to 398 million cubic meters. China will see its share of global demand rise to half of the total, with solid gains also expected in North America and other regions such as South America and Eastern Europe. Structural boards will outpace nonstructural. This study analyzes the 295 million cubic meter world building board industry, with forecasts for 2017 and 2022 by product, market, world region, and for 15 countries. The study also evaluates company market share and profiles industry players.

#3074 ............. September 2013 .............. $6100