

China Sourcebook: An Introduction to the Chinese Residential Construction and Building Materials Market

Alicia Robbins, Paul Boardman, John Perez-Garcia and Rose Braden. 2004

Executive Summary

China Wood and Building Materials Market: A Sourcebook for Exporters

China's rapid economic development over the past two decades has dramatically changed its position in the world economy. China has emerged from virtual isolation to become the seventh largest trading nation and the sixth largest economy in the world. Policies to encourage international trading relationships and stimulate consumer spending have created a booming economy. Today, trade accounts for nearly 50% of China's Gross Domestic Product (GDP), with imports from the United States making up US\$20 billion. In 2001, China's GDP reached almost US\$1.13 trillion. While the economies of the US's other leading trading partners such as Japan and the European Union have declined or remained flat in recent years, China's GDP has generally remained greater than 5% for the past decade.

Foremost in the list of reforms that have helped stimulate China's economy is housing reform. The shift from state provided housing to private ownership relieved the government of the financial burden of providing its housing while at the same time creating a leading industry in China's economy. Beijing alone is calling for the development of the housing industry as a means of increasing its current 6% share of GDP in 2001 to 10% by 2010.

Between 1978 and 2000, per capita living space increased from 3.6 square meters to 10.3 square meters and total investment in fixed assets had increased to more than US\$387 billion. The Chinese government estimates that approximately 700 million square meters of residential floor space was constructed from 1997 through 2000. The government hopes to increase urban per capita living space to 25 m², or approximately 72 m² per household, by 2005. In order to achieve this plan, the government expects to construct 1.5 billion square meters of residential building space from 2001 to 2005. Domestic housing starts, which reportedly reached 22 million last year, are projected to grow to 24 million in 2002 and 26 million in 2003. This could result in approximately four to ten million urban annual housing starts, depending on the rate at which increases in per capita and household living space are achieved.

Because of the high population density of most urban areas, approximately 78% of China's urban residents live in multi-family housing, which ranges from low-end housing to full service apartments. It is estimated that 48% of urban residents live in six-story and under buildings, 28% in high-rise apartment buildings, and 3% live in luxury-style apartments. Less common is low-density housing, which includes high-end luxury villas geared to high income Chinese and the expatriates living in China. These villas, Most of which tend to be western-style architecture, account for only 1% of urban housing.

Concrete, steel and brick, have been the dominant building materials in the modern era. Wood frame construction, popular in traditional Chinese architecture, has not seen much penetration since housing reforms began, and will likely only be attractive or affordable to upper class Chinese and the expatriate community for the foreseeable future. The Foreign Agricultural Service has estimated wood frame construction housing starts to be significantly less than one percent of total housing starts for the next several years, while steel, masonry, and others forms will make up the majority of construction methods.

Wood frame construction faces several challenges. While wood is now recognized in the Chinese building code, consumers and developers repeatedly express concern about price, durability, wind load resistance, fire, moisture/decay, insects/termites, and seismic strength of wood frame construction.

Opportunities exist for US building materials and housing system companies to enter and expand in the Chinese market, but it will require a tremendous amount of work to overcome cultural barriers. Firms should be committed to establishing long-term contacts with whom to develop trading relationships and to make effort to adapt their products to meet Chinese needs. It is estimated that a growth rate of anywhere in the range of 15-30% will be sustained in building materials for several years to come, growing from US\$24 billion to \$71 billion between 2001 and 2005. The US has managed to increase its exports to China in this market, despite an overall decrease in imports of building materials.

One of the greatest opportunities to enter the market is in the 2008 Beijing Olympics. The government estimates that nearly \$22 billion will be invested in infrastructure for the Olympics. Furthermore, the government is promoting a "Green Olympics," providing good opportunity for green building and use of wood products in building materials and finishing.

Furthermore, the Ministry of Construction has recently approved "green building" guidelines, and is promoting energy saving, recycled or renewable and pollution-free building materials. This initiative could prove to be a useful marketing tool for imports of wood-based building materials. As of June 2000, clay bricks, a traditional building material in China, have been banned in the construction of all new buildings in medium to large cities by the Ministry of Construction, the State Economic and Trade Commission, and the State Administration of the Building Materials Industry. Coal is China's primary energy source, and in an effort to reduce air pollution the government is targeting brick production, which reportedly consumes a quarter of China's coal. As of June 2003, clay bricks will be banned entirely.

In 2000, the government banned the use of clay brick in home building. Prior to this ban, brick was one of the most preferred building materials and was a major competitor to wood frame housing, composing nearly 70% of Chinese construction materials. The Ministry of Construction is largely promoting the use of lightweight concrete blocks as a substitute to clay bricks and is hoping that the housing boom will carry over to China's steel industry. However, because there are no codes for steel frame houses and they serve a different market than wood frame housing, and because homebuyers in China (like those in the US) do not want to live in a home constructed entirely of steel, experts do not expect steel and concrete to pose much of a threat to the development of wood frame housing in China.

Most of the new housing will likely be built in the form of six-story walkups or high-rise buildings, but there also exists a potential for single, wood-frame homes. Weyerhaeuser's Kent Wheeler has said that China represents the only opportunity in the world to create a large wood frame housing market where one does not currently exist; this is largely because of China's aggressive housing reform policies, low amounts of housing currently available, high savings rates, increasing purchasing power, and a strong consumer desire for better housing. To penetrate the market, however, will require a significant amount of effort and marketing, as there is no current infrastructure to introduce potential Chinese homebuyers to wood frame construction. Despite this tremendous long-term potential, the Foreign Agricultural Service (FAS) estimates that for at least the next several years, wood frame construction will occupy less than half a percent of all housing starts.

It should be noted that China has nearly four times the population of the United States living on almost half the arable land. The American suburban model of the single-family home with a large surrounding lot is not likely a feasible model for a high percentage of Chinese real estate development. Not only is it not affordable for the majority of the population, but also there simply is not enough land for such expansion. Wood frame construction and single-family homes, in general, will be limited to a small subset of the population and most construction efforts will be focused on multi-family and multi-story buildings.

Other housing reforms that promise to change the current way that building materials are supplied include the newly policy to provide consumers with turnkey housing. Previously, Chinese homebuyers bought only the unfinished shell (maopei) of a home or apartment. Consumer complaints about graft, poor workmanship, and construction delays have prompted the government to require builders to pre-install features. This policy will take effect in Shanghai by 2005 and industry experts expect the policy to expand to other cities. The policy may result in a decline in the number of small interior finish companies as construction companies expand to fill the new niche.

Quality issues are a central area of concern in China's housing industry. The National Bureau of Statistics reports that only 30% of all construction in 2000 was of "high" quality. Many Chinese consumers have expressed concern over issues regarding the safety and durability of their homes, malfunctions, and comfort. As Chinese homebuyers become more selective and acquire more financial resources, quality is certain to become an important factor in consumers' decision-making process.

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