

JAPAN'S MANUFACTURED HOUSING CAPABILITY: A Review of
the Industry and Assessment of Future Impact on the U.S. Market

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The Japanese have what is generally recognized as the most advanced manufactured housing capability in the world. With heavy reliance on computerized design and inventory control systems, assembly line production, robotics and sizable research and development budgets, Japan has developed a high-tech housing approach distinct from that found in the United States. Furthermore, these companies have substantial capital resources and several are divisions of larger multi-national conglomerates actively involved in international markets. The question of what degree of impact these companies will have in entering the U.S. housing market, and when, involves several considerations.

In 1984, 13.3% of Japanese housing production was manufactured in housing plants.¹ Some observers predict the manufacturers will have 50% of the market in Japan in as little as five years. The Japanese manufactured housing market is quite integrated. Only 25 prefab companies were active in 1984, producing some 146,679 housing units.² Of these manufacturing companies, the top five produced 73 percent of the prefab business, and the top four are the largest home builders in the Free World.³

The Japanese and American housing markets are quite distinct. Japan offers stable demand, predictable interest rates and relatively homogeneous national consumer tastes. The U.S. market is viewed as quite volatile by the Japanese with cyclical interest rates and demand. Furthermore, American consumers have different tastes, which can change in a local market as new fads take hold.

The demand for housing at home, particularly in the strong replacement housing market, will create a readily accessible market in Japan for the next decade of some 12 million units.⁴ So although their capability is impressive compared to American housing firms, they are still in a building phase within their own market.

The cost of establishing a Japanese manufactured housing plant is high. This points to two trends in assessing a move into the American market. Japan will first emphasize the export of building components applicable to conventional U.S. site-built construction. Japanese components are already in the Hawaiian and Californian markets, but this is just the beginning. For the past two years, Japanese attendance at the National Association of Homebuilder's national convention has been quite large. These attendees have represented firms interested in what products can be successfully marketed in the U.S.

Secondly, Japanese manufacturers will begin to bring their capability to the U.S. through joint-venture or on larger projects they develop themselves. Discussions have been underway with several larger firms such as U.S. Home Corporation and Ryland Homes to joint-venture manufactured housing capability. This is one way to safely introduce new technology appropriate to well established American markets.

Several Japanese firms have the capability, however, to utilize manufactured housing in large-scale developments they could initiate in the U.S. themselves. One firm currently has in excess of 30,000 acres of prime residential land in the southern Californian and Texan markets. Another has made headlines in Denver with a bid to buy 20,000 acres between Denver and Colorado Springs to develop a new town. By creating demand in a specific area that could be serviced by a medium-sized housing plant, the Japanese could side-step builders. Ironically, marrying housing technology with land sales would be an approach not in widespread use in Japan itself.

The long-term impact that Japanese housing technology will have on the American homebuilding market will be determined by a combination of influences. Several key questions to be addressed in this presentation are:

1. The degree of cost savings available with Japanese housing production.
2. The capitalization costs and benefits of Japanese housing plants.
3. The applicability of manufactured housing production given differing labor relationships in the U.S. versus Japan.
4. Potential transferability of Japanese house marketing techniques to the U.S.
5. Potential usefulness of Japanese breakthroughs in homebuilding materials in the U.S. market.

Conclusion

During the next decade, the American homebuilding industry will have to respond to Japanese manufactured housing techniques as these approaches inevitably begin to show up in the market. One option is for U.S. companies to utilize appropriate imported manufacturing techniques by joint-venturing with the Japanese. Another response may be the development of indigenous American housing manufacturing approaches that are more applicable to the decentralized U.S. market.

The options for reducing the costs of site-built construction in the U.S. have very nearly been exhausted. In a 50-state study, the HUD Joint Venture for Affordable Housing has demonstrated that only a two to three percent savings can be squeezed from innovative site construction techniques. Meanwhile, the average cost of a home over the past ten years has steadily risen to the point that more and more American families are being priced out of the market.

American homebuilders must begin to incorporate technological innovations to improve quality and streamline costs. Current practice cannot reduce costs enough to maintain a strong, long-term housing market. And manufactured housing is just beginning to make the physical and perceptual transition from being "mobile homes".

Auto makers would not think of building individual cars from scratch, when faced with the savings inherent in an assembly line approach. If American builders do not begin to incorporate the benefits of a manufactured approach, they may end up like custom car builders competing with the assembly line. During the next decade, Japanese companies will saturate the market at home and become more comfortable with methods to focus their technologies in foreign markets. It is time for U.S. builders to consider a more industrialized approach.

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1. Housing Statistics, Compiled by the Japanese Ministry of Construction, courtesy of Hajime Obata, Assistant Director of Housing Production.
 2. *ibid.*
 3. Briefing Statistics, National Association of Homebuilders Comprehensive Tour of the Japanese Housing Industry, Global Link, Inc., Marina Del Ray, California, 1984.
 4. Presentation, Mr. Tokutora Kawai, Managing Director, Daiwa House Company, Ltd., Nara, Japan, October, 1984.