

# C I N T R A F O R

## Working Paper 98

[To Ordering Instructions](#)  
[Back to Publications List](#)

## Material Use in the US Deck Market: An Assessment of the Market Potential for Alaska Yellow Cedar

Ivan Eastin, Indroneil Ganguly, Steve Shook and Al Brackley. 2005

### Executive Summary

The deck building industry is going through a period of rapid growth and dramatic change with respect to the types of materials available to build decks. A 2001 study by the Freedonia Group estimates that the demand for decking materials will increase by almost 20% between 2000 and 2010. To better understand material use and contractor preferences within the deck building industry, CINTRAFOR, with funding support from the USDA Forest Service Wood Utilization Lab in Sitka, AK) recently completed a survey of 205 deck builders and 213 home builders across the US. In particular, this research project was interested in documenting the current usage of Alaska Yellow Cedar (AYC) in residential decking, evaluating builders perceptions of AYC lumber as a decking material, assessing the potential for expanding the use of AYC in deck building and developing a set of strategic marketing recommendations to promote the expanded use of AYC in deck building. Refinement of the marketing recommendations should be considered once an accurate supply projection for AYC logs is available.

### Survey Results

The deck building industry is dominated by small to medium-sized firms with over 63% of survey respondents indicating that their sales revenue was less than \$1 million in 2003. In contrast, over 11% of deck builders generated sales revenue in excess of \$5 million. The average deck builder constructed 93 decks with an average deck size of 456 square feet. Since the average construction cost for a new deck was \$6,161, the average construction cost for a deck in the US was \$13.51 per square foot. Approximately 45% of the construction cost was attributed to the deck surface while 33% was for the substructure and 21% was for accessories. Just over 40% of deck builder projects were new (first time) decks built on existing homes while 25% were new decks built on new homes and almost a third were replacement decks built on existing homes. However, the survey data clearly shows substantial differences in deck characteristics based on geographic location. For example, deck builders in the eastern US built more than twice as many decks per year as companies in the western US (126 decks vs. 52) although the average deck size was significantly higher in the west (530 square feet vs. 395 square feet). Despite this, the average construction cost was relatively similar between the regions (\$15.04 per square foot in the west vs. \$15.90)

Material use in the substructure was dominated by treated lumber with a market share of over 90%. Material use in deck surface applications was dominated by wood-plastic composite products followed by treated lumber and western red cedar. Finally, approximately 30% of deck accessories were built using wood-plastic composites and treated lumber while an additional 18% were built from western red cedar. Deck builders were also asked to indicate the relative importance of a variety of product attributes in their material specification decision. The most important attributes in the material specification process were long life, visual appearance, consistent material quality and product availability. In contrast, the lowest rated attribute was low price. In other words, deck builders base their material purchase decisions less on price, preferring to focus on material quality. This suggests that home owners are less price-sensitive in the purchase of a deck, preferring high quality, durability and ease of maintenance over low price.

### Strategic Marketing Recommendations

#### *Target Market*

The results of the market research suggest that the target market for Alaska yellow cedar should be deck builders located on the US west coast, comprised of California, Oregon and Washington. The survey results

show that decks built in this market are larger, more expensive and more likely to use naturally durable woods. The focus on deck builders is based on the fact that the demand for decking lumber in the repair and remodel market is expected to total 4.4 billion board feet in 2005 as compared to a demand of just 700 million board feet in the new construction market. In addition, our research results indicate that approximately 46% of the decks built on new homes are subcontracted out to deck builders. It is important to note that the survey results suggest that homeowners play a very important role in specifying decking material. For example, home builders indicated that home owners were responsible for specifying the decking material 30% of the time while deck contractors indicated that the homeowners specified the decking materials almost 50% of the time.

### *Product*

The product offering should reflect a premium product strategy. Based on the survey results we recommend that lumber manufacturers in Alaska supply a family of products that includes decking lumber, deck joists and accessory products. This recommendation is based on the survey results showing that the use of naturally decay resistant wood is substantially higher in deck surface and deck accessory applications as opposed to deck substructures.

### *Distribution*

Developing an efficient distribution channel for AYC decking products will be critical to the market development strategy. Our market research clearly shows that many deck builders cited the lack of availability as a primary reason why they have not been willing to use AYC or why they have not increased their use of AYC. Consequently, it will be important to match the expected supply of products with the size of the target market. Uncertainty over the short-term supply would argue for a more conservative strategy that constrains the size of the target market during the initial phase of the marketing campaign, allowing it to increase only as an increased supply of AYC products become available. Further, given the distance of Alaska suppliers from the target market, we would recommend that Alaska lumber producers consider establishing a relationship with stocking wholesalers that would allow for substantial volumes of product to be inventoried within a target market to reduce the logistical constraints of providing a reliable supply of products within a short timeframe.

### *Pricing*

The survey results suggest that deck builders using naturally durable wood species have a relatively low price sensitivity which supports our recommendation for implementing a premium pricing strategy. In contrast, deck builders placed the highest importance on lumber attributes such as durability, beauty, consistent material quality and reliability of supply. Emphasizing these lumber attributes will further support the premium pricing strategy. We recommend initially pricing AYC slightly lower than similar WRC and redwood products.

### *Promotion*

The promotional message must support the effort of positioning AYC as a high quality decking material. This means that the promotional message should emphasize the beauty, natural decay resistance, durability and consistent material quality of AYC. This can be effectively done by a direct comparison of AYC, WRC and RW across the major product attributes. As part of this strategy it may be useful to distinguish AYC from WRC and RW in terms of color, contrasting its light color to the darker colors of WRC and RW. This strategy will appeal to deck builders and home owners who are looking for a decking material that has beauty, durability and natural decay resistance but which provides a unique light colored appearance.

The promotional strategy must address the fact that many deck builders (and home owners) are unfamiliar with the properties and appearance of AYC. This can be accomplished through a variety of strategies, including working with stocking wholesalers to build sample decks in their show rooms and establishing a website to educate potential users on the properties, end-uses and benefits of using AYC.

The survey data further indicated that deck builders utilized a broad range of information sources to learn about new decking materials. As a result, we recommend that AYC producers consider a low-cost strategy to provide information on AYC across a broad range of media including the internet (through use of a website on AYC), attendance at trade shows (for example, the annual Deck Expo conference), material spec sheets for distribution through stocking wholesalers, advertising in industry magazines and advertising in consumer lifestyle magazines that emphasize the outdoor living. Finally, it may be useful to consider the possibility of

offering promotional incentives for stocking wholesalers who install sample AYC decking exhibits in their sales showroom area and who meet specified sales goals

**Full Report \$50.00: [To Ordering Instructions](#)**

**Back to [Publications List](#)**