CWPA Proceedings, 2006, pp 47-50

TREATED WOOD MARKETS IN THE UNITED STATES—THREATS AND OPPORTUNITIES

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Summary

Two of the biggest threats and opportunities for treated wood in the United States are treated home framing packages and treaded outdoor products (decking, fencing, etc.). The threat comes from competitive materials—primarily concrete for framing (substituting for slab foundations and for exterior walls in the South), and wood-plastic composites for decking. The opportunity comes from maintaining framing and decking market shares against competitive materials, and in adding value to existing products (for example, wood-plastic decking products are sold for 2-3 times the price per lineal foot than treated wood).

Past studies by Forintek have demonstrated value propositions for the treated wood products industry for both framing and outdoor products. This has included builder and consumer surveys to determine awareness and willingness to adopt treated home framing in the U.S. South (a 2003 8.4 billion board feet lumber market and 7.2 billion square foot—3/8" basis—structural panel market), and consumer attitudes toward treated versus wood-plastic decking products (a 4.2 billion board feet lumber market). However, in both cases these positive attitudes were at the least "ahead of behaviour". Market share for treated lumber and panels for framing remain small and recent estimates for wood-plastic decking market shares are as high as 20-30% in the U.S.

This study reports on 2005 U.S. South builder interviews and a consumer focus groups. Results for treated framing indicate the need to increase the awareness of the effectiveness of treated framing products as well as its cost/benefit (as well as air quality advantages) relative to other termite control options. In this regard it was determined that the cost of treated framing must come down from existing levels. The value proposition has not been made.

Results for decking can best be summarized by noting the attributes promoted by plastic wood composites/non-wood decking vis-à-vis high-quality appearance, lack of checking and splintering, hidden fasteners, expected attractive lifetime of the deck, and so on. Given the high price premiums of wood-plastic composites, there is considerable room for innovation the treated wood products industry.

There is an important connection between the two noted market trends that *is* effecting the competitive position of Canadian treated wood products in the U.S. The increase in the market share of wood-plastic composites for decking is displacing SYP lumber, creating more aggressive competition with SPF for framing, and treated export markets such as Asia.

Treated home framing

In spite of multi-billion dollar termite damage in the U.S., and apparent builder and homeowner awareness of treated framing options, market penetration has remained small. In its place, wood market share erosion with particularly concrete has occurred (in the case of walls, due also to wind loading concerns), and continued use of alternative termite-combating methods such as spraying and baiting.

Wider spread market share loss in the U.S. South is of great concern to lumber and wood panel producers as this are represents well over 30% of the total U.S. consumption of these products (new starts and repair & renovation). U.S. new residential starts in particular are a critically important end-use for Canadian lumber exports.

In a 2006 study, Forintek interviewed large builders in three U.S. South cities where termites are known to be an issue. The purpose of these interviews was to determine barriers to entry for treated wood framing systems.

Responses are summarized for these three cities.

Phoenix

- Large development builders
- Average home $400,000 (compare to $225,000 five years ago)
- Light to moderate termite problems
- Mandatory soil treatment under slab ($300), 5-year warranty; extended warranty $1000-$1500; 'pest tubes' for $25 / mo
- Interest in fire retardants
- "green building program" in Scottsdale; credit for borate treated framing
- Willingness-to-pay around $0.50 / sq ft

Houston

- Mix of custom and production builders
- Average home low to mid $200,000s
- Pre-slab soil treatment required in city only
- Use of 'pest tubes'
- Willingness-to-pay around $0.50 / sq ft, up to 3x for high-end custom homes

Orlando

- Mix of custom and production builders
- Average home $400,000
- Higher-risk of termites
- Pre-slab soil treatment and 1st floor exterior walls in concrete block (for wind loading)

- Borate spraying more popular than other cities; less ‘pest tubes’
- Mold a bigger issue
- Willingness-to-pay higher than other two markets, especially on homes $400,000 plus—up to $1.50 / sq ft

To briefly summarize, Orlando was perceived as the best target city of the three for promoting increased use of treated framing products.

Specific recommendations include:

- Complacency not a good strategy
    - Look what happened to siding, and what’s happening to decks
- Needs:
    - Educate / promote effectiveness and air quality advantages of treated framing
    - Lower product cost
    - Product differentiation
        - Lower cost products for low, mid-end homes
        - Address apparent nterest in fire retardents; protection against cockroaches
        - Geographic segmentaion
    - Incorporation into pre-fabricated housing
    - Individual focus on repair & renovation (pro and DIY)
    - Promote to both builders & homeowners
        - Value
        - Air quality (look what happened with CCA)
    - Influence insurance underwriters, code officials.

<u>Decking</u>

Market studies done by Forintek in 2001 indicated that homeowners has a strong overall preference for treated wood decking, driven by its perceived ‘value’ (relatively low cost and reasonable life expectancy given some annual maintenance). Plastic-wood composites were not favored, particularly given their high cost.

After the ‘scare’ around the use of CCA-treated decking products, combined with more sophisticated second-generation wood-plastic composites, this situation changed dramatically. In spite of significantly higher product costs, market share of wood-plastic decking products started to soar in the U.S. (particularly in the U.S. Northeast and Midwest).

Attendance at the 2006 Deck Expo in Memphis, Tennessee yielded some interesting observations.

- The deck product sector is going through a period of high innovation and new product development. Very little of this is being seen by the solid wood decking products.

- In addition to the initial innovation offered by wood/plastic decks, these have continued to evolve into second and third generation products:
    - Addition of wood grain (more realistic look)
    - Addition of hollow back profiles and non-visible connector systems
    - Reduction and/or borate treatment of wood content due to durability issues
- Another innovation has been to offer decking products with no wood at all—100 percent plastic. Claims are:
    - No decay
    - No staining
    - Less ultra-violet color degradation
    - Warranties from 50 years to "lifetime"
- Raised decorative concrete tile is now an option for consumer-installed decks, giving the look of natural stone or terra cotta on a raised deck.
- Steel deck frames to get around the use of treated wood frames under plastic decking. This product does not fit into the DIY nature of the deck sector, however, it shows that further wood substitution is being considered.

Interestingly, of the 40-plus exhibitors of decking products at the Expo, only two were for treated wood!

Specific recommendations include:

- Innovative product formats, including colors, edge and surface profiles.
- Low maintenance products; colour retention, minimal checks and splits
- Brand complementary products such as fences, railings, and lattice. Branding on quality, design, colour, or other attributes.
- Market premium treated wood grades or brands. (Every piece of plastic lumber at a big box store is the same)
- Continue to offer a price advantage over non-wood alternatives.

For further information:

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