Introduction

Japan Imports of Softwood Lumber

Wood Market Trends in JAPAN: 2005

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2005 Edition
Introduction

Japan Imports of Softwood Logs

Cubic Metres

US  Canada  New Zealand  Russia  Other


Wood Markets Asia 2005
Wood use in Japan

**Trend 1** The Yen strengthens against N.A. currencies

**Trend 2** Increased demand for housing performance/longevity

**Trend 3** Japan’s aging population stimulates “healthy house”

**Trend 4** Western-style housing remains strong

**Trend 5** Post & beam construction largely moved to “pre-cut”

**Trend 6** Post & beam construction continues to move to EWP’s

**Trend 7** “Hybrid” construction becomes established

**Trend 8** Housing styles increase in diversity

**Trend 9** Government regulation in housing increases

**Trend 10** Home “reform” (R&R) increasing

**Trend 11** Secondary wood product demand remains strong

**Trend 12** Consumers become extremely price sensitive

**Trend 13** Japan adapts to the emergence of China
**Wood Markets Asia 2005**

**Trend 1**

The Yen strengthens against N.A. currencies

Inflation adjusted softwood lumber imports in Japan from Canada

**Trend 2**

Increased demand for housing performance/longevity

<table>
<thead>
<tr>
<th>Building Systems</th>
<th>Wood Structural Members</th>
<th>Engineered Structural Members</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>score</td>
<td>score</td>
</tr>
<tr>
<td>Durability</td>
<td>268</td>
<td>Strength</td>
</tr>
<tr>
<td>Strength</td>
<td>265</td>
<td>Price</td>
</tr>
<tr>
<td>Construction method</td>
<td>177</td>
<td>Utility (falldown)</td>
</tr>
<tr>
<td>Design</td>
<td>162</td>
<td>Species</td>
</tr>
<tr>
<td>Structural material</td>
<td>122</td>
<td>Colour</td>
</tr>
<tr>
<td>Green vs. dry</td>
<td>163</td>
<td>Tretability</td>
</tr>
<tr>
<td>Detached</td>
<td>81</td>
<td>Finish</td>
</tr>
<tr>
<td>Size of house</td>
<td>37</td>
<td>Durability</td>
</tr>
<tr>
<td>Size of structural members</td>
<td>26</td>
<td>Weight</td>
</tr>
<tr>
<td>Country of origin</td>
<td>10</td>
<td>Stairs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Security of supply</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Source of supply</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Increased demand for housing performance/longevity

- Research in Japan shows longevity expectancy is now 56 years (Nikkan Mokuzai Shimbun Wednesday, May 14, 2003)
- This is up from 26 years in 1998! (Cohen and Gaston, 2000)
TREND 2

Increased demand for housing performance/longevity

Product Opportunity

- Performance labeling
- Promotional efforts to equate platform-frame & hybrid systems to performance
- Promoting the performance properties of EWP

TREND 3

Japan’s aging population stimulates “healthy house”

As of April 1, 2003 19% of Japanese were aged 65+
3. **Japan’s aging population stimulates “healthy house”**

**Product Opportunity**

“Healthy House”
- Low formaldehyde panels and EWP’s
- Solid and composite flooring, ready to assemble
- Accessibility-related building products
- Imported houses incorporating one or more of the above

4. **Western-style housing remains strong**

[Graph showing Total Starts from 1974 to 2004 with different data points for various years.]
Western-style housing remains strong

- Growing demand for “J-grade” (or at least higher grade) lumber and panels
- Increased specification of N.A. type products on platform frame homes
  - doors and windows (size issue)
  - interior finish and furniture (style issue)
Post & beam construction largely moved to “pre-cut”

Pre-cut facilities:

1986 181
1998 890
2004 577

Homes built with pre-cut product:

1986 23,000
1998 210,000
2004 320,000

Product Opportunity

- Kiln dried lumber
- Kiln dried lamstock
- MSR lumber for roof trusses

“Japan’s drying capacity is below 15% (of demand) nationwide.” Japan Lumber Journal
Post & beam construction continues to move to EWP’s

Type Preferences (out of 7)
- Green solid horizontal: 2.6
- Dry solid horizontal: 5.8
- Lam lumber horizontal: 5.3
- Green solid vertical: 2.5
- Dry solid vertical: 5.8
- Lam lumber vertical: 5.1

Japan imports of laminated lumber

Post & beam construction continues to move to EWP’s

Japan imports of laminated lumber

Domestic | Imports
Post & beam construction continues to move to EWP’s

Product Opportunity
- Lamstock / glulam
- Treated lamstock / glulam

Imported lamstock accounts for over 80% of the furnish for Japanese glulam production
“Hybrid” construction becomes established
“Hybrid” construction becomes established

- Increased use of structural panels
- Sales of pre-fab systems, including P&B retrofit
- Engineered panelized houses
- Connection systems

Housing styles increase in diversity

1950
- Extended hierarchical
- multi-generational
- paternalistic
- group focus
- royal lineage
- resists change

21st Century
- Expanded Family
- 3 + generations
- privacy + group
- caregiver & baby sitter
- Financial base

1990
- Nuclear modular
- two generations
- focus on individual
- privacy important
- promotes change
- personal power

- open house design
- multi purpose rooms
- separate rooms in house
- single purpose rooms
- self contained floors (interior duplex)
- universal design
- elderly
Housing styles increase in diversity

- Greater diversity in housing styles in demand
  - Traditional and modern P & B
  - Larger, 3-story homes suitable for multi-generation independence
  - High-end apartments suitable for elderly couples and singles
  - Mid-end, affordable quality, built-for-sale homes
  - Recreation homes

Product Opportunity

- Increased demand for platform-frame and “hybrid” wood products and systems
- Log homes
- Products with traditional Japanese look but modern conveniences
Government regulation in housing increases

- BSL and HQAL of 2000
  - Including so-called “performance indicators”
  - Now extend to P & B construction
  - Marketing based on performance guarantees
    - Including repair & renovation options
- New regulations focusing on indoor air quality
- Proposal for new regulations focusing on green space requirements

Product Opportunity

- Structural products that offer performance specifications and/or guarantees
- Products certified with low-formaldehyde emissions (structural and non-structural)
- Solid wood flooring; more generally increased demand for wood over non-wood products
- Increased demand for repair & renovation wood products
Concerns Regarding Existing Homes
- Not senior friendly
- Poor sound and thermal insulation
- Lack of storage space
- Inadequate earthquake resistance
- Need to update/upgrade water spaces
  - Kitchen
  - Bathroom

Home “reform” (R&R) increasing

<table>
<thead>
<tr>
<th>Project Type</th>
<th>Mean</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen</td>
<td>23.25%</td>
<td>¥1,250,925</td>
</tr>
<tr>
<td>Bath</td>
<td>18.9%</td>
<td>¥1,076,346</td>
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<tr>
<td>Addition</td>
<td>12.2%</td>
<td>¥2,335,714</td>
</tr>
<tr>
<td>Deck</td>
<td>4.1%</td>
<td>¥438,549</td>
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<tr>
<td>Structural</td>
<td>1.6%</td>
<td>¥807,142</td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>2.4%</td>
<td>¥433,000</td>
</tr>
<tr>
<td>Seismic</td>
<td>3.1%</td>
<td>¥1,009,846</td>
</tr>
<tr>
<td>Exterior</td>
<td>12.2%</td>
<td>¥1,388,857</td>
</tr>
<tr>
<td>Senior Friendly</td>
<td>4.9%</td>
<td>¥357,190</td>
</tr>
</tbody>
</table>

Source: Center for International Trade in Forest Products, 2004
TREND 10

Home “reform” (R&R) increasing

Product Opportunity

- Value-added wood products
  - Flooring, doors, cabinets, windows and moldings
- Structural products/systems
- Renovation kits that fit into an elevator for apartments
Secondary wood product demand remains strong

Japan Imports of Windows and Their Frames

Japan Imports of Doors and Their Frames
Secondary wood product demand remains strong

Secondary wood product demand changes

Product Opportunity

- Composite and solid softwood flooring
- Light colored wainscoting, office and home furniture
- Easy to install kitchens and bathrooms for R&R
- Doors, windows and cabinets, particularly for platform-frame
- Outdoor WRC products (low maintenance)
- Edge-glued panels and joint venture with China
Consumers become extremely price sensitive
Consumers become extremely price sensitive

**Product Opportunity**

- Structural
  - Continued strength in the demand for EWPs
- Non-structural
  - Increased outsourcing of components/products to China, etc. (joint-venture)
  - Increased use of edge-glued panels / veneers

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Japan adapts to the emergence of China

**Japanese Imports of Glulam Lumber**

(January – June, 2004)

<table>
<thead>
<tr>
<th></th>
<th>m³</th>
<th>Δ% 03-04</th>
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</thead>
<tbody>
<tr>
<td>Austria</td>
<td>82,476</td>
<td>119.6</td>
</tr>
<tr>
<td>Finland</td>
<td>64,816</td>
<td>92.8</td>
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<tr>
<td>China</td>
<td>57,919</td>
<td>248.1</td>
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<tr>
<td>Sweden</td>
<td>36,547</td>
<td>93.0</td>
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<tr>
<td>Germany</td>
<td>28,291</td>
<td>63.4</td>
</tr>
<tr>
<td>Canada</td>
<td>14,092</td>
<td>127.5</td>
</tr>
<tr>
<td>Russia</td>
<td>12,117</td>
<td>105.4</td>
</tr>
<tr>
<td>USA</td>
<td>3,657</td>
<td>62.8</td>
</tr>
<tr>
<td>Total</td>
<td>304,143</td>
<td>106.8</td>
</tr>
</tbody>
</table>

*Source: Japan Ministry of Finance*
Japan adapts to the emergence of China

Product Opportunity

- Joint ventures
  - Raw material supply from North America, Europe, Russia
  - Machinery and management from Japan
  - Finished product to Japan and domestic
- Opportunities for lamstock, door and window stock, edge-glued panels, hardwood for floors, etc.
Wood Markets Asia 2005

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