STANDARD SIZES FOR
ROUGH-DIMENSION EXPORTS
TO EUROPE AND JAPAN

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Abundant U.S. resources could help answer the demand for standard-sized rough dimension in Europe and Japan.

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Hardwood exports have increased throughout the last 10 years as the United States has become a major supplier of hardwood products in the international marketplace. Most of these exports have been in lumber, veneer, and unprocessed log form.

Exports of further manufactured products such as rough-dimension material have been limited, while the potential to supply rough dimension from the United States seems excellent. We have abundant resources (medium- and low-grade lumber), kiln-drying capacity, and rough-dimension production capacity.

The potential demand for U.S. rough dimension, especially in Europe and Japan, appears to be excellent on the basis of demand for U.S. lumber and inquiries for material such as strip stock and squares. Another major reason for a favorable outlook is that these countries currently use standardized short- and medium-length rough-dimension stock that is produced at their domestic primary processing facilities.

In this article, European and Japanese standard-sized rough-dimension products are described, and their apparent sizes are listed. One set of proposed standard sizes of rough dimension that could be manufactured in the United States for these markets is presented. Also, the benefits of the production and sale of standard sizes of export rough dimension are highlighted.

What they are making
Visits to Japan and Europe revealed that primary processors were making green rough-dimension in standard sizes directly

Table 1. — Apparent overseas rough dimension — boards, shorts, and strips
(AD or KD-10–12 percent moisture content)

<table>
<thead>
<tr>
<th>Product</th>
<th>For Europe</th>
<th>For Pacific Rim (mostly Japan)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Boards</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>6, 7, 8, 9, 10 ft (183, 214,244, 275, 305 cm)</td>
<td>6.7, 8.9, 10 ft (183,214,244, 275,305 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>6 in. + (15 mm+)</td>
<td>6 in. + (15 mm+)</td>
</tr>
<tr>
<td><strong>Shorts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>15.75-108 in. in 4-in. increments, some 2-in. increments (40-270 cm in 10-cm increments, some in 5-cm increments)</td>
<td>12-108 in. in 6-in. increments (30-275 cm in 15-cm increments)</td>
</tr>
<tr>
<td>Width</td>
<td>2 in. +, 2-3/8 in. +, 2-3/4 in. +, 3-1/8 in. + (50 mm+, 60 mm+, 70 mm+, 80 mm+)</td>
<td>2 in. + (50 mm+)</td>
</tr>
<tr>
<td><strong>Strips</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>6, 7, 8, 9 ft (183,214,244,275 cm) some allowed 48-72 in. in 4-in. increments (120-180 cm in 10-cm increments)</td>
<td>6, 7,8,9 ft (183,214,244,275 cm) some allowed 48-72 in. in 6-in. increments (120-180 cm in 15-cm increments)</td>
</tr>
<tr>
<td>Width</td>
<td>2 in. +, 2-3/8 in. +, 2-3/4 in. +, 3-1/8 in. + (50 mm+, 60 mm+, 70 mm+, 80 mm+)</td>
<td>2 in. + (50 mm+)</td>
</tr>
</tbody>
</table>

*Some of these are squares.
*Some of this material is used for strip flooring.
from short logs. They process rough-dimension pieces from live-sawn boards in the green state and then sort, stack, stick, and dry the dimension in a conventional kiln. Unacceptable defects and accompanying wild grain are removed during the green processing, improving the overall potential for better drying results (less drying degrade).

The actual products made are called boards, shorts, and strips. Sizes found during our investigations are shown in Table 1. The boards were usually edged, live-sawn, clear products that were mostly 6, 7 or 8 feet long, depending on the length of the short log. The strips and shorts were further processed pieces cut from the live-sawn boards with defects. As shown in Table 1, the strips and shorts were manufactured into standard lengths and random widths (2-inch minimum). In Europe, some distributors then sort the pieces into width groupings of 2x (2 inches to just less than 2 3/8 inches), 2 3/8-, 2 3/4- and 3 1/8+ inches.

For some species such as the open-grained oaks and ash, premiums are paid for the edge-sawn material. Therefore, when ripping and crosscutting the live-sawn boards of these species into strips and shorts, care is taken to produce as much edge-sawn dimension as possible. The edge-sawn dimension is then stacked and sold in separate packages.

Proposed standard sizes
Working with the sizes in Table 1 for the European and Japanese markets, a condensed set of standard sizes was developed that could be used for both markets. The proposed sizes are shown in Table 2 in English and metric measurements.

The lengths range from 12 to 72 inches in 4-inch increments, and from 84 to 108 inches in 12-inch increments. Overseas requirements for longer pieces can be satisfied with lumber. The widths are in groupings 2x, 2 3/8, 2 3/4, and 3 1/8+ inches, or they could be provided in random sizes with a 2-inch minimum. The thicknesses are listed at 4/4 and 5/4. It should be noted that atmospheric conditions in Europe and Japan dictate the need for a 10 to 12 percent kiln-dried moisture content rather than the customary 6 to 8 percent needed for most of the United States.

The goal in developing the proposed standards was to reduce the number of different sizes for production and inventory. The approximate amounts produced per size can be estimated and then refined based on eventual demand or overseas distributor recommendations.

Advantages of making standard size
The proposed standard sizes can be made from abundant, below-export grade lumber from which domestic producers can obtain good yields because:

- Many standard lengths can be cut at one time using either the longest length first or an optimizing cut-off technique.
- Random width cuttings can be produced.
- The gang-ripping-first option can be used.
- This material also can be made in the green condition and then dried, eliminating the need to dry non-usable material.
- The dimension can be manufactured to

The potential demand for U.S. rough dimension especially in Europe and Japan, appears to be excellent.

Table 2. — Proposed standard export rough dimension for European and Japanese markets (AD or KD-10-12 percent moisture content)

<table>
<thead>
<tr>
<th>Standard export rough dimension</th>
<th>English sizes</th>
<th>Metric sizes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>12-72 in. in 4-in. increments</td>
<td>30-180 cm in 10-cm increments</td>
</tr>
<tr>
<td></td>
<td>84-108 in. in 12-in. increments</td>
<td>210-270 cm in 30-cm increments</td>
</tr>
<tr>
<td>Width</td>
<td>2 in. + 50 mm</td>
<td>210-270 cm in 30-cm increments</td>
</tr>
<tr>
<td></td>
<td>2-3/8 in. + or random  60 mm +</td>
<td>70 mm + width</td>
</tr>
<tr>
<td></td>
<td>2-3/4 in. + width  70 mm +</td>
<td>80 mm + (50 mm+)</td>
</tr>
<tr>
<td></td>
<td>3-1/8 in. + (2 in. +) 25 mm</td>
<td></td>
</tr>
<tr>
<td>Thickness</td>
<td>4/4 in. 25 mm</td>
<td>80 mm + (50 mm+)</td>
</tr>
<tr>
<td></td>
<td>5/4 in. 32 mm</td>
<td></td>
</tr>
</tbody>
</table>

Requirements for successful marketing of standard sizes
The key requirements for successfully marketing standard sizes in Europe and Japan include developing: efficient low-cost product manufacturing, product pricing, aggressive marketing techniques, strong distributors in receiving nations, and strong promotional efforts at international trade fairs and exhibitions.

Product pricing, which will be affected by exchange rates and tariffs, is especially important. In setting prices, the exporter will need to position his or her product between the prices of export lumber (kiln-dried FAS/Sel) and specifically sized rough dimension. To minimize tariffs, the product should be left as rough as possible on the top and bottom surfaces.

All of these steps would be necessary for successful marketing of standard-sized rough dimension from the United States,

fill and maintain an inventory. Therefore, undercutting and overcutting of requirements can be tolerated.

The high yields will help lower product costs and the inventory advantages will make this product more acceptable overseas.

Advantages of buying standard sizes
The overseas user of the standard sizes will not have to purchase, grade (or even know our grades), sort, and stack lumber; air dry, pre-dry, kiln dry, and store lumber; or process lumber into dimension parts in a rough mill. Rather, the purchaser need only buy the standard-sized dimension and then match, glue, and cut specific dimension parts, or just cut what is needed from the standard size dimension.

Other advantages are reduced shipping volume, reduced waste disposal problems, and reduced requirements for raw material inventory. The overseas purchasing end-user also could order and receive quick shipments from distributors tied to U.S. producers who maintain inventories of the standard sizes.

even though similar products are currently being produced and used in the target markets.

Summary
Information was collected and presented on the production and sizes of standard-sized rough dimension produced and sold in Europe and Japan. This information was combined. Then, a condensed set of proposed standard sizes of rough dimension, that could be manufactured in the United States and sold in these markets, was presented.

There will be initial resistance to this product from both overseas distributors and end users because they are accustomed to receiving and using long, clear export-quality lumber or clear long strips that are 3, 4, and 5 inches wide from U.S. producers. We can continue to supply these lumber products, but with the addition of the standard-sized rough dimension, we can expand our product offerings from the United States, make the products from our abundant medium- and low-grade lumber, and create a value-added product for our dimension industry.

Reprinted from WOOD & WOOD PRODUCTS, May, 1987