Table 9

Output of Leading Composite Flooring Manufacturers — 1989 ('000 m^2/month)

Manufacturer	Capacity	Volume
Eidai Sangyo	—	726
National Mokuzai[1]	990	726
Asahi Woodtech	726	528
Kyodo Veneer	660	495
Sanyo Kokusaku[2]	495	330
Juken Sangyo[2]	495	313
Others	2 954	2 356
Total	6 320 +	5 474 +

1 National Mokuzai is the production arm of Panasonic and also supplies Toyo Plywood and Mitsui Wood Products.
2 Sanyo Kokusaku Pulp and Juken are suppliers for various other companies.

Source: KF International.

New Developments

As seen from the production statistics presented in the previous section, solid-strip flooring in Japan will continue to decrease mainly as a result of decreasing domestic materials.

Today, a number of manufacturers are looking at Siberian oak as an alternative source for solid-strip flooring. Siberian white oak is considered to have a fine grain feature similar to Japanese white oak; but at present there is a question as to supply reliability. Another alternative under consideration is North American oak but its coarse grain may be unsuitable to Japanese preferences.

Until very recently, a major portion of composite flooring was made of plywood with very thin surface veneer finishing measuring between 0.3 mm to 0.5 mm. The thin nature of plywood flooring was plagued by a lack of durability and would easily snap under pressure. This relegated the product to the lower end of the market.

Technical advances, primarily in plywood slicer technology, have led to the availability of higher-end composite flooring products with thicker veneer finishing of up to 3 mm. With the thicker veneer finishes, scratches and chipped areas can be easily repaired by sanding.

Although these high-end composite flooring products are not any less expensive than imported solid-strip flooring, they have several distinct advantages over the imported products:

- higher dimensional accuracy;
- high durability;
- warp resistance;
- smooth-surface finish;
- ease of handling and maintenance; and
- uniform surface pattern.

Among the above advantages, dimensional accuracy and ease of handling are the critical factors in the Japanese market since the number of skilled carpenters has been steadily decreasing.

Imports

Japan's flooring imports are divided between several different product categories in publicly available trade statistics. The category that reflects the majority of flooring imports is "Wood, n.e.s. planed, grooved, tongued, etc." Since 1982, imports under this category have risen steadily to reach 137 000 m^3 by 1987 for a value of ¥ 10 billion (see Table 10).

Table 10

Imports of "Wood, n.e.s. planed, grooved, tongued, etc."

Year	Quantity *(m^2)*	Value *(¥ millions)*
1982	37 633	4 594
1983	52 178	5 156
1984	70 113	7 305
1985	76 463	7 465
1986	100 784	7 076
1987	137 219	10 273
1988	22 013	3 612
1989 est.	47 756	4 732

Source: Ministry of Finance.

In 1988, the category was revised and "wood simply planed and sanded" was separated out. The category was redefined as "wood continuously shaped (tongued, grooved, rebated, chamfered, V-jointed, beaded, moulded, or the like) along any of its edges or faces, n.e.s." As a result of this change, reported imports were significantly less. For 1989, imports are estimated to reach only 47 000 m^3 valued at ¥ 4.7 billion.