

Flash doors and solid wood doors are used in approximately equal proportions. It is also estimated that imports increased from about 1 per cent in 1985 to 5 per cent in 1988.

## **Manufacturers**

### Aluminum Doors and Windows

It is estimated that there are about 160 aluminum door and window manufacturers in Japan. However, the market is dominated by 6 major manufacturers -- Toyo Sash, YKK, Shin Nikkei, Sankyo Aluminum, Fuji Sash, and Tateyama Aluminum -- who control 90 per cent of the market.

Toyo Sash was established in 1949 and is the latest entry to the aluminum sash industry. Their annual sales are about ¥ 300 billion (C\$3 billion); 94 per cent of their sales are doors and windows.

YKK is the largest manufacturer of fasteners. As it is a private company, financial data is not available. The company's annual sales are estimated at ¥ 505 billion, out of which ¥ 350 billion is aluminum building materials including doors and windows.

Shin Nekkei is a subsidiary of Nippon Light Metal, the largest aluminum producer in Japan. Annual sales are ¥ 150 billion of which 43 per cent is aluminum building materials. They also produce plastic sashes for the Hokkaido market and sashes from unique combinations of materials like urethane molded aluminum sashes, aluminum/plastic co-extruded sashes, and aluminum/wood sashes.

Sankyo Aluminum is the third-largest producer of aluminum sashes and the top producer of aluminum sashes for commercial buildings. Their annual sales total ¥ 220 billion.

Fuji Sash was established in 1969 and is a leading producer of aluminum curtain wall for highrise buildings. Total annual sales are about ¥ 160 billion.

Tateyama Aluminum produces aluminum products including aluminum windows and doors. Annual sales are ¥ 105 billion.

### Steel Doors

The preceding aluminum manufacturers also produce steel doors, but there are six small- to medium-sized companies that have the major market share. They are Sanwa Shutter, Tanaka Sash, Tejima Kogyo, Nippon Kentetsu, Toyo Kohan and Bunka Shutter. There are also another 700 to 800 steel door manufacturers in Japan who produce doors for these major manufacturers under subcontract.