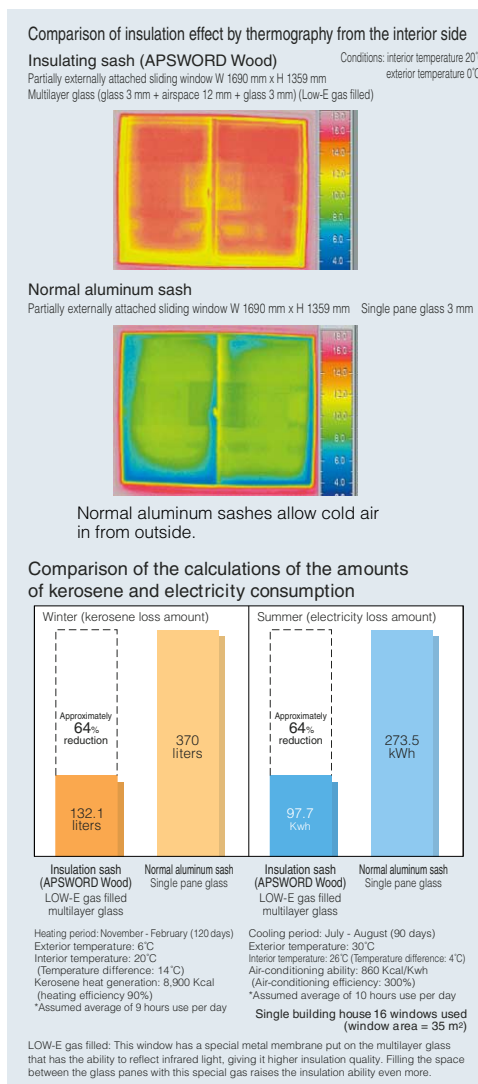


## ● Environmentally friendly products — High environmental function

### ○ APSWORD Wood raises aperture insulation and air-tightness levels to reduce condensation and contribute to housing energy efficiency

Raising insulation and air-tightness levels of apertures such as doors and windows contributes to improving the living environment and energy efficiency.

APSWORD Wood windows are made with layers of aluminum on the outside and natural wood on the inside and, with this unique insulation construction, their insulation ability is a level above others. Furthermore, the natural wood used is not material from trees cut out of natural forests, but rather is harvested from tree plantations, and, when the time comes to replace these windows, the wood and aluminum are designed with a sliding joint construction, so they can be separated easily for recycling.



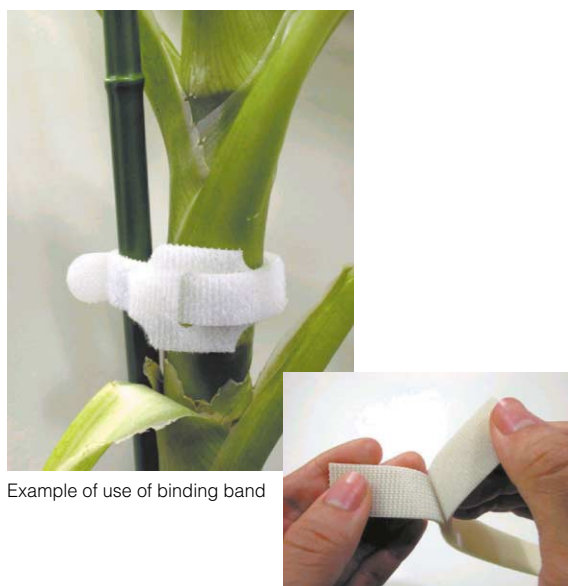
### ○ Development of biodegradable Hook and Loop Fasteners

Our company and the UNITIKA Group (UNITIKA LTD., UNITIKA FIBERS LTD., UNITIKA TSUSHO LTD.) have jointly developed the world's first biodegradable Hook and Loop Fastener.

This biodegradable fastener is made primarily from biodegradable poly lactic acid resin\*, a plant derived material that has low environmental impact and will degrade and decompose in compost or a natural environment. For this reason we expect that it will be valuable for a variety of agricultural and forestry uses, civil engineering uses, as electric line binding bands, and in medical and food products for disposable clothing and materials.

#### \*Biodegradable poly lactic acid resin

This substance is made from plant material, corn and other flour, which undergoes lactic acid fermentation and then chemical synthesis. In the end it breaks down into water and carbonic acid gas in the natural environment. One feature is that carbonic acid can be absorbed by corn again, making this an environmentally friendly material on both local and global levels. We anticipate that in the future this material will replace plastics derived from petroleum.



Example of use of binding band

● Environmentally friendly products — Safe and worry-free

○ Preventing sick house syndrome: Implementing the highest standard (F☆☆☆☆) and using labels that indicate performance classification

In July 2003, measures to prevent sick house syndrome were added to the Architectural Standard Law that will limit the use of architectural materials that have a danger of emitting formaldehyde. At the same time, new JIS Standards and JAS Standards will add F☆☆☆☆ as their highest classification.

The YKK Group, will switch to highest rated F☆☆☆☆ materials with the lowest formaldehyde emission rates for interior architectural products that have a risk of emitting formaldehyde as prescribed by the new law. Products include wood interior architectural La Foresta interior doors, interior sliding doors, storage products, closet doors, flooring, stairs and front doors.

The switch began in April 2003 and was completed by the end of June in accordance with the implementation of the Reformed Architectural Standard Law in July.

In addition to implementing the F☆☆☆☆ standard, in order to make confirmation of the emission performance classifications smoother and simpler, we are following the labeling guidelines established by four concerned organizations (Federation of Construction Material Industries, Japan, Japan Housing Equipment & System Association, Association of Living Amenity, and Japan Association of Kitchen & Bath) and putting the performance classification label shown at right on standards compliant products before shipping them out.

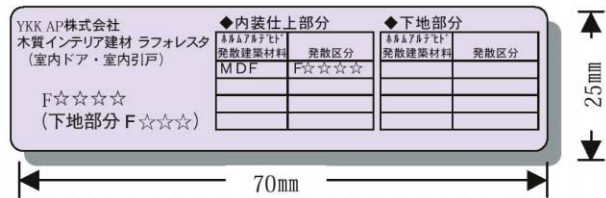


La Foresta swinging door



La Foresta three panel interlocking sliding door

◆ Indication label



○ Elimination of PVC in screen products

Until recently screen doors had been made with PVC (polyvinyl chloride). As a substance PVC can be recycled, but there is a danger of dioxin being released when incinerated. When screen doors are replaced there is a danger that the old screen will be disposed of with normal garbage and be incinerated, so we have developed and switched

to an environmentally friendly screen door that does not use PVCs. In 2002, we completed the switch to new materials, so now our screen door mesh is made from PP (polypropylene) and the spline is made from EVA (ethylene vinyl acetate copolymer) and TPO (thermoplastic olefinic elastomer).

○ YKK Fastener receives Oeko-Tex Standard 100 certification

The Fastening Products Group has received the Oeko-Tex Standard 100 class I certification from the Japan Dyer's Inspection Institute and is striving to develop environmentally friendly products.

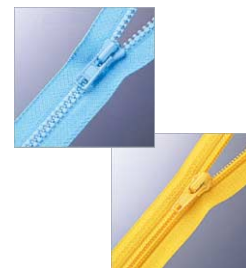
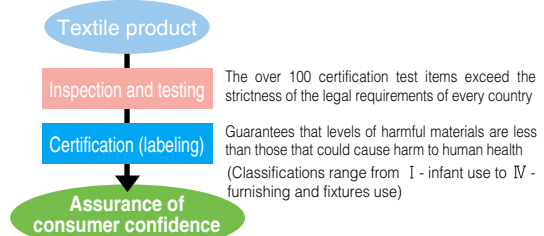
The Oeko-Tex Standard 100 has become a global standard. This ecolabel for textile products has been established as a standard by the International Oeko-Tex Association (office in Zurich, Switzerland), comprised of textile inspection groups from 16 countries mostly in Europe. This standard is stricter than the standards set by the governments of the member organizations' countries, and is widely recognized as an ecolabel throughout Europe where restrictions on organic products are already strict.

In order to meet the demands of our global accounts, YKK has attained Class I (for products for infants, the strictest class among classes from I to IV) certification for our fastening products.

Along with all our European companies, our Asian companies that send significant exports to Europe have also received certification for their fastening products. The YKK Group endeavors to promote the development of products for our customers that are environmentally friendly, safety and security.

What is Oeko-Tex Standard 100?

The world's leading ecolabel for textile products tells consumers that items bearing the label are made safe textile materials.



## ● Environmentally friendly products — Comfortable lifestyles

### ○ From "scrapping and building" to remodeling

In Japan, until recently the practice has been to "scrap and build" by tearing down buildings when they get old and replacing them with entirely new buildings.

As concern about the environment has increased, greater interest has developed in architectural renewal and reform. Lengthening the life spans of buildings contributes to the reduction of the amounts of waste materials and CO<sub>2</sub> produced.

With the environment in mind, our architectural products businesses are working proactively to develop various products suitable for remodeling and lengthening the life spans of houses.

#### ● New PLAMADO U: an add-on double paned resin interior window

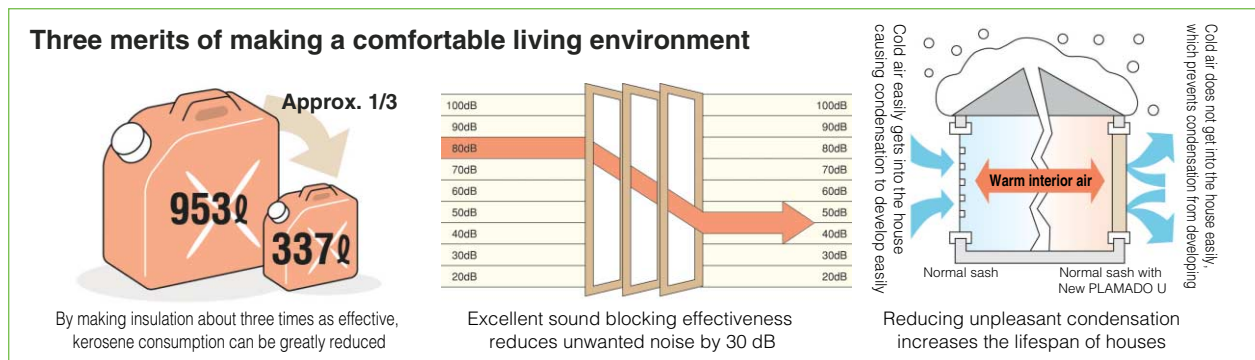
By directly inserting a resin sash with low heat conductivity into the interior framework of an existing window, building heating and cooling efficiency can be improved. Combining excellent insulation that reduces unpleasant condensation with the noise reducing effect of a sound-proofing sash, this product provides for year-round comfort.

The resin, which is free of wood powder, has a wood grain feel and is easy to recycle at the time of disposal.

Furthermore, this product can be made to fit any existing window size and type, even sashes from other manufacturers.



Example of installation of New PLAMADO U



### ○ Inkjet Fastener PRIFA

PRIFA is a fastener that can be printed with colorful graphics. Since patterns can be designed with computer graphic software, customers can have whatever pattern, illustration or logo that they like printed. Environmentally, this product uses waterless dye and a highly efficient washing method (the bubble vibrator method), so water resources are conserved. A dye ink (non-azoic dye) that does not affect the human body is used. Furthermore, the quality is high, the product is very durable and the dye does not fade when washed.

#### \* Stages of the production of PRIFA

- [1] Customer sends computer graphic design over the internet.
- [2] Dye is printed on to the fastener using a color printer. By combining four ink colors (red, blue, yellow, black) an unlimited number of colors can be created, making even precise color specifications possible.
- [3] Coloring is achieved without water by applying heat in a continuous dyeing device, followed by washing.



We can make fasteners that fulfill the imaginations of our customers.