

For Immediate Release

Sumitomo Forestry Co., Ltd.

“Prototype model house,” “border-type wood tiles” and “dual construction method for vibration control and seismic resistance”

**Awarded the Good Design Award 2013**

—Pursuing the potential allure of wood and proposing eco-friendly, safe housing and lifestyles—

Sumitomo Forestry Co., Ltd. (President and Representative Director: Akira Ichikawa; Head Office: Chiyoda-ku, Tokyo) announced that the group received awards for three products at the Good Design Award 2013, which is sponsored by the Japan Institute of Design Promotion (JDP).

The three products which received commendations were (1) the “**prototype model house**,” which is a recommended model house set up at housing exhibition sites nationwide using uniform plans and exterior designs, (2) “**border-type wood tiles**,” which are made using offcuts from flooring and stair material manufacturing and also from disposed *shochu* (an alcoholic beverage) distilling barrels, and used as dressed lumber for interior use, and (3) the “**dual construction method for vibration control and seismic resistance**,” which combines earthquake resistant technologies and vibration control technologies developed by Sumitomo Forestry Home Tech Co., Ltd. (President: Kunihiko Takagiri; Head office: Chiyoda-ku, Tokyo), a group company wholly-owned by Sumitomo Forestry. This is the fourth consecutive year the Sumitomo Forestry Group received the award.

As a winner of this year’s Good Design Award, the Sumitomo Forestry Group aims to provide eco-friendly and safe housing and lifestyles by leveraging the group’s latest technologies and pursuing the potential allure of wood.

**Overview of products that received awards****1. Prototype model house Sumitomo Forestry Co., Ltd.**

The prototype model house is a recommended model house based on a uniform design concept, such as for the exterior and room plans. There are designs for both single family and two family homes. Identical model houses are being deployed at sites nationwide with the aim of improving design quality to supply housing that boast both high quality soft (design, user convenience, etc.) and hard (product structure, etc.) features.

**Features****i. Uniform design model houses being deployed nationwide**

As a first step, the model house was showcased at the Shin-Yurigaoka exhibition site (Asao-ku, Kawasaki, Kanagawa), that was opened in January 2013, and from there the concept has been deployed nationwide. As of the end of September 2013, the model house is being exhibited at 26 locations.

**ii. Overflowing feel of wood texture, these homes express the uniqueness of Sumitomo Forestry**

Housing exteriors combine Sumitomo Forestry’s unique external wood wall and tiles. The design takes into consideration a wide range of factors from room plan to color coordination, interior, and landscaping. In the garden area of the model house, some parts of the Hagukumi garden idea have been adopted for garden design plans, which are based on the concept of creating a garden that nurtures the five senses and the body. The model house promotes total house development, including the garden area.

**iii. Improved design quality to provide high-quality housing**

By standardizing the style of the model house, Sumitomo Forestry was able to improve design quality, such as for the exterior and room plans. It facilitates the realization of comfortable living spaces, with high quality soft (design, user convenience, etc.) and hard (product structure, etc.) features.

**Excerpt from release comment**

We highly commend this clever plan that manages to maintain the uniqueness of each house achieved using the Big-Frame Construction Method while leveraging the advantages of mass-produced structural parts and materials. This is something that could only be accomplished by this competitor, who pursues standardized construction methods for housing based on the extensive use of

wood. Designs using this construction method make it possible to further exhibit originality.

## **2. Border - type wood tile** **Sumitomo Forestry Co., Ltd.**

The goal is to maximize the use of trees that have been cultivated over a long period of time and also to get a broad range of people to use precious woods. The scrap precious wood offcuts are used to create simple wall materials. This product reflects the uniqueness of the Sumitomo Forestry Group, which conducts business operations that utilize wood, a natural material that is reusable and gentle on humans and the earth.

### **Features**

#### **i. Reusing precious wood**

Offcuts from the manufacturing of flooring and stair materials are reused and processed into small wood pieces. These are then assembled into a wood panel and are turned into dressed lumber for interior use. The wood pieces are made from offcuts from oak, teak, maple, walnut, and cherry wood building materials, and also from dismantled distilling barrels, some of which were used to make the *Ichiko* brand of *shochu*, and are made of oak from trees over 100 years old.

#### **ii. Select products to suit interior or application**

There are seven colors available, made from 5 tree species. Products can be selected by matching interior or application, for example, using a bright colored wood for children's rooms to create a tranquil space, and a deeper color wood for bedrooms to create a calm atmosphere.

#### **iii. Product developed out of environmental awareness**

Sumitomo Forestry is using offcuts produced during the manufacturing process for flooring and stair materials carried out by Sumitomo Forestry Crest Co., Ltd., which manufactures and sells materials for wooden housing and housing systems and fixtures. This product was developed out of a concern for the environment.

### **Excerpt from release comment**

We highly commend this product for taking advantage of the special qualities of natural materials and reusing dismantled barrels previously used to distill *shochu*, and also natural wood from different types of tree species, and also for finding new uses for offcuts and other recycled materials. The reuse of offcuts that come from the processing of proprietary products for the manufacturing of other products is significant as it could become a social norm for companies that specialize in timber. We also praise this product as it is likely to become a major guideline for the timber industry.

## **3. Dual construction method for vibration control and seismic resistance /**

### **Sumitomo Forestry Home Tech Co., Ltd.**

Sumitomo Forestry Home Tech's proprietary REP construction method, a seismic resistant technology, is employed in structures built using the wooden post-and-beam construction method and which have a low seismic resistance. Reinforcing of seismic resistance is conducted to bring a building's structural design score up to 1.0 or higher, based on a seismic diagnosis. Furthermore, a newly developed s-shaped vibration control damper, especially for housing built using the wooden post-and-beam construction method, is installed to fortify vibration control and enhance earthquake resistance.

### **Features**

#### **i. Double the security due to the combination of seismic resistance with vibration control**

The novel earthquake resistant technology not only prevents the collapse of a structure due to an earthquake but the vibration control device reduces swaying, thereby preventing secondary disasters caused by falling furniture. This construction method provides twice the safety by controlling the amount of structural damage.

#### **ii. Simplified construction**

The REP construction method, a novel seismic resistant technology, was developed to minimize the damage to the existing building and reduce construction time and cost. The newly developed s-shaped vibration control damper, used especially for housing built using the wooden post-and-beam construction method, aims to achieve the same goals. In comparison with conventional vibration control dampers, the height of the device was reduced to make it possible to install it in the upper part of openings in buildings, such as doorways. The device can be installed without removal of the ceiling or flooring. This reduces cost and construction time

compared with traditional methods, which required the demolition of existing ceilings and floors. The specifications of the newly developed s-shaped device make it easy to install.

### **iii. Installation benefits**

The dual construction method for vibration control and seismic resistance mainly reinforces the quake resistance performance of a structure, thereby reducing the degree of swaying by around 30%–40%. Furthermore, by installing the vibration control damper, the degree of swaying can be reduced by around 50%.

### **Excerpt from release comment**

A variety of earthquake resistant and vibration control devices have been developed for wooden houses since the Great Hanshin Earthquake and the Great East Japan Earthquake. However, this device excels as it is smaller in size toward the top making it easier to install in existing homes to reinforce seismic resistance.

An additional advantage is that parts used for attaching the device to posts, are separate from earthquake resistant and vibration control parts, therefore it can be adapted to fit in different sized spaces between the posts of existing buildings by adjusting the size of the structural plywood.

## **■ Overview of the Good Design Award**

The Good Design Award took over the mission that was first embarked upon by the Good Design Product Selection Program, established by the Ministry of International Trade and Industry in 1957. From 1998, the Japan Industrial Design Promotion Organization (currently known as the Japan Institute of Design Promotion) assumed sponsorship and began managing the program. It is Japan's only program that comprehensively evaluates and advocates design. For more than 50 years, the organization has aimed to develop a culture and lifestyle designed for a new age by serving as a guiding force to a richer lifestyle and good business practices. Today, many companies and organizations in Japan and abroad participate in the program.