Mocca Hut, Lattice Panels, Harmonic Plants

Sumitomo Forestry Group Receives the Good Design Award 2012

- Pursuing the Charm and Potential of Wood for Innovative Housing That Is Eco-friendly and Reassuring -

Sumitomo Forestry Co., Ltd. (President and Representative Director: Akira Ichikawa; Head Office: Chiyoda-ku, Tokyo) announced today that the Group received awards for three products at the Good Design Award 2012, sponsored by the Japan Institute of Design Promotion.

The Group received awards for the following three products: the *Mocca Hut*, a temporary building made from Japanese timber that is easy to construct and dismantle; the *Lattice Panels*, wall paneling framework that is durable and provides optimal ventilation—Sumitomo Forestry have been using this in housing structures for more than 10 years and actively employs Japanese timber; and *Harmonic Plants*, a method of landscaping proposed by group company Sumitomo Forestry Landscaping Co., Ltd. (President and Representative Director: Kanpei Tokunaga; Head Office: Nakano-ku, Tokyo; wholly-owned subsidiary of Sumitomo Forestry) that is biodiversity friendly and harmonizes with the local ecosystem. This is the third consecutive year Sumitomo Forestry Group received Good Design Awards for its products.

Encouraged by winning the Good Design Award, Sumitomo Forestry Group will continue to leverage the latest technologies and pursue the charm and potential of wood to provide innovative housing that is eco-friendly and reassuring.

Overview of Awarded Products

1. Mocca Hut: Sumitomo Forestry Co., Ltd.

Mocca Hut was developed in response to suggestions from residents living in areas devastated by the Great East Japan Earthquake who wanted a place that would serve as a central gathering place for the community. It started as the Living Room of the Town Project, which was a collaborative venture between local residents, the University of Tokyo, Tokyo Metropolitan University, Naruse-Inokuma Architects, and Sumitomo Forestry. The goal was to develop a temporary building that exudes a warmth and ambience suitable for a gathering place.

Product features

i. Impressive exterior with an interior space that exudes a warm feeling

A charming exterior that people are fond of and an interior space based on a roof truss design with exposed beams and columns and which does not use wallpaper and other interior finishings so that people can experience the warmth of the wood.

ii. Uses locally-produced materials

The majority of temporary buildings are made from steel but Sumitomo Forestry is utilizing local Japanese lumber to boost the consumption of domestic materials, to promote the recovery of industries in quake-devastated areas, and from the perspective of carbon dioxide fixation. The first phase consisted of setting up Riku Café, and the second phase comprised the establishment of Kitahara Life Support Clinic Higashimatsushima, both of which were built using laminated engineered wood from the Tohoku area.

iii. Easy construction

While a lot of detail was invested in the design of the exterior and interior space, as a temporary structure, it was essential to keep the price low, shorten the construction time, simplify the construction method, and make it easy to dismantle. To accomplish this, easy-to-obtain 105mm square wooden posts were used as the main structural members and connected with metal joints.

Extract from judges' comments

This is a prototype of the temporary wooden buildings constructed in the quake-stricken areas. It exhibits charming design details, despite being a temporary structure. In general, greater emphasis is placed on speed and cost for temporary housing and design tends to be overlooked. This product retains the performance characteristics required of temporary housing while also offering an appealing design. The house-like exterior and simple yet comfortable interior, along with the memories which linger there, are likely to leave an impression in people's minds.

2. Lattice Panels: Sumitomo Forestry Co., Ltd.

Lattice Panels are based on traditional Japanese *kizure* wooden latticework. These construction structural panels are an innovation of Sumitomo Forestry and combine three functions into one—structural load-bearing wall paneling, a ventilation layer, and as lathing for mortar-exterior walling. The product was derived after a number of tests, including for shape, thickness, and size. The purpose was to ensure long and reliable housing performance, to achieve an appealing price compared with plywood or other materials, to transmit the traditional architectural skills of *sakan* plaster workers, and to revitalize forests by using wood resources. *Lattice Panels* possess the characteristics of a base material but also exhibit functional beauty.

Product features

i. Function and performance

The 45-degree angled lattice shape serves as a structural load-bearing wall panel that is highly durable due to the criss-crossing of wood fibers. It also acts as a ventilation layer that meets the Level 4–the highest level–for evaluations based on the Japanese Housing Performance Indication System with respect to alleviated deterioration. Furthermore it serves as lathing for mortar-exterior walling that allows excess moisture to evaporate from the structural framework.

ii. Sustainability

Priority is placed on manually crafting products as opposed to using machines. Sumitomo Forestry only uses Japanese timber. In particular, forest preservation, including afforestation, protection of the biological environment, and water purification, is supported by enhancing the value of mountain forest resources by actively using cedar thinnings and the unused sapwood portions.

iii. Carrying on construction skills

Sumitomo Forestry has made it possible to pass on construction skills by applying traditional plastering techniques (mortar specifications) to meet modern-day performance requirements, such as a high level of airtightness and thermal insulation, and long-lasting durability.

Extract from judges' comments

This panel provides strong wall interior support. One of the aims is to sustain the supply of domestic timber over the long term. The lattice dimensions were selected from the standpoints of performance and forestry revitalization. After construction tests and trials, the company was able to achieve prices that could compete with plywood products. We highly commend the product as it addresses issues related to the forest environment and the passing on of construction skills.

3. Harmonic plants: Sumitomo Forestry Landscaping Co., Ltd.

Currently, some of the varieties of plants used in greenery projects have an adverse impact on naturally growing plants in the ecosystem. Attention has been focused on the potential hazard of disturbing the local genetic line. Accordingly, Sumitomo Forestry has defined a category of biodiversity-friendly greenery as "harmonic plants" and established novel landscaping plans.

Product features

i. Biodiversity-friendly

Sumitomo Forestry has a policy to avoid use of varieties that clearly have an adverse effect on the local ecosystem. The conservation level for the planned planting site is classified into four area types—Protected Area, Conservation Area, *Satoyama* Area (countryside close to rural communities), City Area—and "local seedlings," "native plants" and "cultivatable species" are used according to the impact on each area's ecosystem. Consideration is given to the color of the space by balanced incorporation of certain cultivatable species and introduced plants that do not affect the local ecosystem, rather than limiting planting only to native plants.

ii. Tackling issues related to local seedlings

In greenery projects for protected areas, such as natural parks, to prevent hybridization or a genetic disturbance to local flora, seedlings native to the region are crucial to carry on the local gene line. The Greenery Materials Sales Division of Sumitomo Forestry Landscaping plans to respond to these needs by setting up a traceability system that maps every step from production to shipment.

Extract from judges' comments

Taking into consideration the adverse impact to the local ecosystem, the company has systematized information on greenification, including indigenous flora, and categorized four distinct conservation levels, proposing optimal combinations for each ecosystem that consist of "local seedlings," "native plants" and "cultivatable species." In this way, the company is adept at planning the composition of the landscape, which extends from individual homes and throughout the region.

Overview of the Good Design Award

The Good Design Award has been administered by the Japan Institute of Design Promotion (formerly known as the Japan Industrial Design Promotion Organization) since 1998, taking over from the Good Design Products Selection System, which was established in 1957 by the former Ministry of International Trade and Industry. It is the only comprehensive assessment and recommendation system in Japan. Started with the object of creating culture and lifestyle for the era, the award has been encouraging a richer lifestyles and better business practices for over 50 years. Today, a large number of Japanese and overseas businesses and groups participate in the system.