

April 10, 2012

For Immediate Release

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

Sumitomo Forestry Home Tech Renovating Homes into Smart Houses

Smart Reforest Launched

Improving building performance through earthquake resistance and insulation, while simultaneously offering a system to visibly track energy usage to help save energy

Sumitomo Forestry Home Tech Co., Ltd. (President: Kunihiro Takagiri; Head Office: Chiyoda-ku, Tokyo), a wholly-owned subsidiary of Sumitomo Forestry Co., Ltd. (President and Representative Director: Akira Ichikawa; Head Office: Chiyoda-ku, Tokyo) that specializes in renovation, will launch Smart Reforest on April 13, 2012. This new renovation product converts homes into smart houses.

This product uses wood, a recyclable natural resource, as structural materials in the building foundation and as interior materials to enhance the level of living comfort. The renovation proposals aim to maximize the positive qualities of the wood materials, encourage the wise use of energy, and support a living arrangement to enjoy a smart life. Through renovations to improve earthquake resistance and insulation, it improves the fundamental functions of an existing home to provide safe, secure, and comfortable living quarters. In addition, this renovation product offers the latest in fixtures and equipment, and aims to generate, save, and store electricity, and reduce utility costs to zero. In conjunction with this product launch, the home energy management system (HEMS) campaign will be launched to help reduce electric power consumption in the home. Presentations will be conducted nationwide to introduce Smart Reforest.

■ Overview of Sumitomo Forestry Home Tech's Smart Reforest

The primary goal of Sumitomo Forestry Home Tech's Smart Reforest is to improve earthquake resistance and airtightness (insulation) through renovation thereby realizing an improvement in the performance of the building's structure. Furthermore, according to the wishes of customers, it proposes optimal fixtures and equipment suited to their existing home, centered on a solar power generation system, combined with, for example, a gas co-generation system, such as Ene-farm and ECOWILL, the Ecocute system, HEMS, and a residential storage battery system. This renovation transforms an existing home into one that can be lived in safely and comfortably for many years.

Renovation of the structural framework enhances the house's performance. Energy, which could not be stored up until now, can be stocked and used as electricity as needed in daily life. Furthermore, using HEMS will boost energy saving benefits by allowing residents to visually track their energy usage. The renovations proposed by Smart Reforest are gentle to the environment and the household budget.

■ Details of Smart Reforest

1) Enhance the basic performance of the home

(1) Ensure security and safety for the home with renovations to improve earthquake resistance

The "earthquake resistance hospital" conducts a diagnosis of quake resistance on the building for which renovations are planned. An on-site survey is implemented by visual observations and using specialized equipment, such as sensors, to gauge the safety of the building, and how well it will stand up to tremors, such as those caused by earthquakes. Diagnostic software is used to quantify the buildings quake resistance and a

diagnostic report is prepared based on the results of the survey.

Based on this diagnostic report, renovations are proposed to create a safe and secure home using reinforcement plans that employ Sumitomo Forestry's original and diverse quake-resistant construction methods, which have been certified by the Minister of Land, Infrastructure, Transport and Tourism and the Japan Building Disaster Prevention Association, and many of which have been patented.

For wooden houses built prior to 1981, based on the diagnosis, renovation is proposed that will improve earthquake resistance and boost the earthquake resistance evaluation score for the superstructure to 1.1 points or higher. This meets the requirements for an earthquake resistance evaluation score for the superstructure of 1.0-1.5 as stipulated in the earthquake resistance diagnosis policy, which conforms to the Japan Building Disaster Prevention Association's wooden house diagnosis evaluation and reinforcement methods. (A score of 1.0 is the standard set by the Building Standards Act to determine whether a structure will stand up to a major earthquake.) (Source: Wooden house earthquake resistance diagnosis and reinforcement methods issued by the Japan Building Disaster Prevention Association)

(2) Saving energy with renovations to boost performance

Renovation for insulation and airtightness

A thorough check will be made of places where heat can easily escape, such as windows, under the floor, and attics.

Furthermore, a thermal camera is used in areas where visual observation is difficult to identify problems such as gaps in the thermal insulation or openings where drafts enter. Based on the results of the insulation diagnosis, a renovation plan is drawn up using optimal insulation and airtightness renovation methods to repairs certain areas or the entire house.

Examples of insulation methods

- Window insulation: Method for installing double windows that makes use of the existing sash to install an inner window
- Ceiling insulation: Insulation method whereby thermal insulation with a moisture resistant film is laid snugly in the ceiling
- Floor insulation: Thermal insulation filling method for laying insulation boards under the floor; airtight insulation method for laying moisture permeable waterproof sheets in various places such as under tatami mats in Japanese-style rooms
- Wall insulation: Method for preventing the flow of air by inserting compressed thermal insulation in the upper and lower parts of a partition wall; thermal and sound insulation lining method to simultaneously fill walls with thermal insulation without tearing them down while also enhancing sound insulation properties

<Energy efficiency: renovation plans incorporating wind and sunlight

An analysis will be made of cross ventilation and lighting conditions in the current home and in the plans for renovation. Customers will be able to visually confirm the effect of the plan to adeptly incorporate the wind and sun. This will alleviate an overdependence on heating and air-conditioning systems.

2) Proposing a smart house using smart fixtures and equipment

According to the wishes of customers and the condition of the building, we will propose the use of smart fixtures and equipment, mainly a solar power generation system, and also includes options such as HEMS, a residential storage battery system, the Ecocute system, Ene-farm (residential fuel cells), ECOWILL (gas cogeneration and hot water heater system), and power outlets to charge electric vehicles.

<< Sumitomo Forestry Home Tech Co., Ltd.>>

1. Establishment : October 1, 1988
2. President : Kunihiko Takagiri
3. Capital : ¥100 million (wholly-owned subsidiary of Sumitomo Forestry)
4. Annual sales : ¥41.8 billion (fiscal year ending March 31, 2011)
5. Headquarters : 3-26 Hitotsubashi SI Building 8th Flr. Nishiki-cho, Kanda, Chiyoda-ku, Tokyo
6. Sales offices : 66 sales offices nationwide (as of April 1, 2012)
7. Employees : 1,427 people (as of April 1, 2012)
8. Business profile : Renovation of structures such as detached houses, historic houses, condominiums, stores, and business offices, and after-sales maintenance