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For Immediate Release

## Sumitomo Forestry's First Timber Elementary School Building

Completion of Miyanomori Elementary School in Higashimatsushima City

Miyanomori Elementary School, constructed by Sumitomo Forestry in Higashimatsushima City, will be completed on December 20. This is the first elementary school building, and the largest scale medium-to -large-sized wooden structure, that the company has been responsible for. Natural cedar was used as the main material in construction. The company used local materials from the Tohoku region, incorporating exposed woodwork\* throughout to create a space which highlights the unique characteristics of wood.

\*Leaving woodwork visible that is usually hidden behind the walls and ceiling

| Location                       | 2-1-1 Nobirugaoka, Higashimatsushima City, Miyagi<br>Prefecture  |
|--------------------------------|--|
| Building area/total floor area | 3724.44 m <sup>2</sup> / 3999.07 m <sup>2</sup>  |
| Design and supervision         | Sakari Sogo Plan and Coelacanth K&H Architects<br>Inc.   |
| Construction                   | Building construction: Sumitomo Forestry Co. Ltd.<br>Electrical work: Yurtek Co., Inc.<br>Mechanical work: Yamashita Setsubi Kogyo Co., Ltd. |
| Structure                      | Wooden, with partial RC and steel frame structure  |
| Total construction costs       | Approximately 1.8 billion yen (including electrical and facility installation)   |
| Start of work                  | September 25, 2015   |
| End of work                    | December 20, 2016  |



A concept known as "school of the forest" lies behind Miyanomori Elementary School. It was constructed on the nature-bound fringe of the new township created when residents were relocated to higher ground following the Great East Japan Earthquake. The classrooms feature a large opening which faces the mountain, creating an environment where students can experience the natural surroundings and the seasons while they study.

The school building is a mainly one-story wooden structure (partially two-story) using approximately 5,000 pieces of wood to create a building where students can learn surrounded by the beauty and aroma of wood. It is the first elementary school in Miyagi Prefecture to have both the educational buildings and indoor sports hall constructed from wood. Japanese cypress was used for the foundations, while Japanese cedar was used in the posts and beams. By incorporating mostly materials from the Tohoku region, the project also contributed to invigoration of the local forestry industry. [Photos 1 and 2 on the following page]

The building incorporates a circular traffic flow linking the entire building, thereby taking advantage of the characteristics of a one-story building. Various wings, including the classrooms, administration, library, indoor sports hall, and pool, are linked by corridors which are either steel-framed or use a reinforced concrete structure, providing a fire-break. [Photo 3 on the following page]

There will be 143 students when the school opens, with one classroom for each grade (two classrooms



for grade six only). It is scheduled to open on January 10, 2017.

The grade six students of the old Nobiru Elementary School started at the school in April 2011, following the Tohoku earthquake, and have studied in temporary facilities since then. Higashimatsushima City, which ordered the construction, aimed to have construction completed by December this year, hoping to give these students at least a few months studying in the new school. In order to realize this vision, Sumitomo Forestry completed the construction in approximately one year and three months as scheduled, leveraging its network and technological prowess fostered in the construction of wooden homes.

Wood has moisture absorption and high insulating properties, and is said to create a uniform level of humidity and room temperature. In addition, studies have suggested that this also helps to control the spread of influenza.\* Wooden schools are being rediscovered due to the warmth and gentle feeling of the wood when touched with hands or when sitting on the floor. Over time, the school will increase in character with use, which in turn will increase people's fondness for it.

Moving forward, Sumitomo Forestry Group will continue to make proposals that take advantage of the benefits and characteristics of wood, focusing on wooden construction for medium- to large-scale structures, and contributing to local communities.

\* Reference: "Wooden School Construction: Handbook for Building Three-story Wooden School Buildings" by the Ministry of Education, Culture, Sports, Science and Technology



## Reference

## **Miyanomori Elementary School**

The elementary school was created through the amalgamation of Higashimatsushima City Nobiru E.S. and Miyato E.S., which were damaged by the tsunami caused by the Great East Japan Earthquake. It inherits the history and traditions of the two schools to transmit this to future generations, working with the community with the aim to nurture children who love their hometown. This was expressed in the "school of the forest" concept that symbolizes this new form of school. The school name combines "Miya" and "No" from the names of the original schools to express unity of intention of the communities.

The natural area adjacent to the school, which is maintained by the Afan Woodland Trust of C.W. Nicol, will also be used for educational purposes.



Photo 1: Indoor sports hall



Photo 2: Classroom



Photo 3: Inner garden