Metsäliitto Wood Products Industry (Finnforest) is an effective solutions provider to targeted customer segments. Finnforest products are based on Nordic premium timber supplied by the forest owners of the Metsäliitto Cooperative. Our sales are 1.3 billion euros, and we employ 4,400 people in 20 countries. We are a part of the Metsäliitto Group, the eighth largest forest industry group in the world.

New pearl in St Petersburg: Mariinsky Concert Hall

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Wood makes it beautiful and functional, naturally

Wood is a unique material that fits as well for a small log cabin as large public buildings. In the hands of a professional designer and constructor wood can be transformed to stable, light and stunning structures that please the eye. Furthermore, wood is a renewable resource: it's growth in the Finnish forests exceeds the rate of harvest. Wood is the ultimate building material, and if sustainably managed can help reduce the impact of climate change.

5/2007

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Modern wooden architecture that cherishes eyes and ears

A magnificient instrument arose in St Petersburg, finalized with modern wooden structures

As the planning of the new concert hall of Mariinsky theatre began, the artistic director Valery Gergiev knew at once what he wanted. Having visited the wooden concert halls in Savonlinna and Lahti, Finland, he was very impressed with the acoustics delivered by both buildings.

Maestro Gergiev wished that the designers of the new concert hall – the French architect Xavier Fabre and the world-famous acoustics expert, Dr Yasuhisa Toyota – take advantage of the structural, asthetic and acoustic properties of wood. It was natural therefore, that Finnforest's materials and know-how be involved right from the beginning.

The wall elements, suggestive of a large basket made of twine, were built of 6 layers of Kerto, Finnforest's own laminated veneer lumber, with a decorative surface finish of furniture quality birch plywood. The wall structure is ideal from the acoustics point of view, both reflecting and absorbing sound and music. Additionally, the wall has elements where the sound absorbtion can be adjusted.

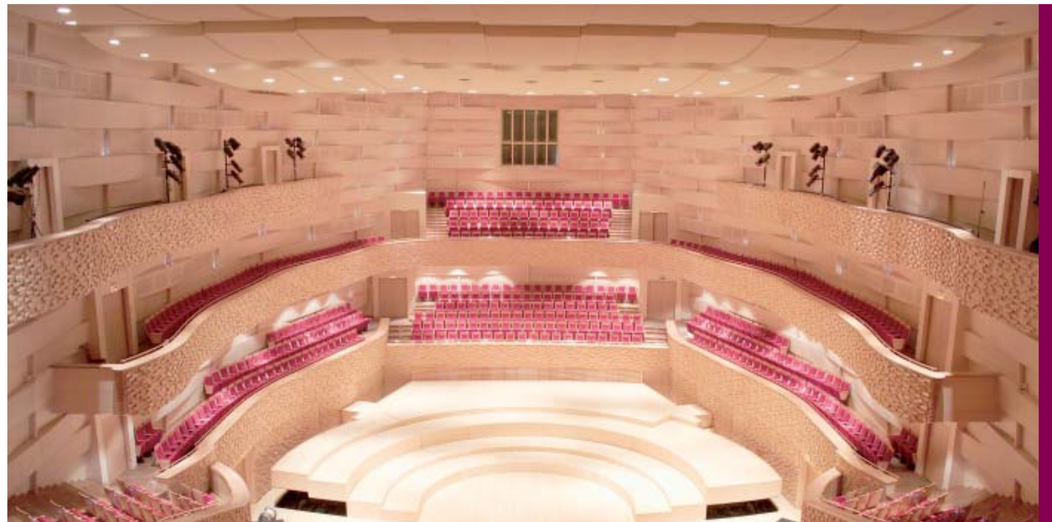
The ceiling only looks like a tent canopy with its convex, up to 18 meters long ceiling elements. With Dr. Toyota's challenging, acoustics driven requirement for mass – 120 kilograms per square meter – the elements ended up weighing 2 tons. And when he called for 40 kg/m^2 wall elements, it's easy to see why Finnforest's extensive know how on innovative wood solutions was used to turn theory into practice.

The opening night of the concert hall took place with the first concert on November 29th 2006. And right after the first performance it went without saying that a uniquely beautiful and sensitive instrument had been born – the new Mariinsky Theatre. The instrument repeats every pianissimo and fortissimo precisely…

Just as the maestro wanted.

The wavy line has been designed to catch, conduct and break sound and music. Additionally, the downwards curved wooden elements reflect noise.

- Architect Xavier Fabre



The magnificently sounding hall was born as a cooperation between experts

Target of the project:
To build an acoustically first-rate concert hall to replace the storage building of Mariinsky theatre, by preserving the old facade.

Client:
Neviss Komplex, St Petersburg/Russia

Architect:
Fabre & Speller architects, Paris/France

Structural designers:
Setec Bâtiment
NPO Georekonstrouktsia-foundamentproekt

Acoustics designer:
Nagata acoustics, Dr. Yasuhisa Toyota,
Los Angeles/USA

Wooden elements:
Delivered by Finnforest Merk, Germany. Massive elements consist of 220 mm of Kerto laminated veneer lumber by Finnforest, coated with 12 mm Finnforest birch plywood. Length of elements up to 18 meters. In element production was used 600 m^3 of Kerto and 2500 m^2 of birch plywood.