

#### THERMORY Excellence in Wood

#### We are one of the world's leading providers of durable, eco-friendly wood

Thermory brings a touch of real wood to people's lives around the world. We manufacture and supply real wood products originating only from well-maintained forests. Our wide product range helps to carry out the visions of architects and home owners in more than 50 countries.

#### The touch of real wood

We love thermally modified wood. Thermal modification gives wood a beautiful rich colour and aesthetic appeal. It makes our wood more durable, stable, and resistant to the environment, while retaining the real warm touch of the wood.

### Resistance par excellence

Our products have high resistance to heat, water, fungus and mould. This makes the wood usable in places where most other natural materials would fail – outdoors, high-moisture areas, saunas and on top of heated floors.

#### Lifespan in outdoor conditions\*

Thermory ash

Class  $1 / \ge 25$  years

Teak, Ipe

Thermory pine

Class 2 / 15-25 years

Bangkirai

Oak, larch, cedar

Class 3 / 8-15 years

Plantation teak, pressure-treated wood

Durability Class, European Standard EN 350

Life next to a northern sea Restaurant Noa, Estonia

#### The challenge

PIKKUSED 1400 / 1800

The restaurant is located on the coast of Tallinn Bay and is exposed to the sea and salty winds. The demanding environment requires very high standards for the durability of the wooden siding. The ambitious architecture and the sophisticated clientele also set their additional demands on the overall quality and lasting appearance of the building.

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#### he solution

Due to its stunning appearance and excellent durability, thermally modified wood became the first choice of KAMP architects. The architects worked together with Thermory's team to select the right colours and profiles. Thermo-ash cladding from the Dubai series was used in different profiles and thicknesses, and the indoor floors included a medium-modified ash flooring from the Salsa series. KAMP Architects

### "Working together with Thermory has been a very positive and effective experience!"



#### **Case study #2**

One of the largest wooden residential developments in the world The Waterfront - Stavanger, Norway

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#### The challenge

Thousands of square meters of wooden facade equals thousands of square meters of potential maintenance. How to lower the facade's maintenance costs and preserve the original appearance long-term?

#### The solution

The cooperation between AART architects and Thermory lasted throughout the design and construction periods. Thermo-pine Madrid and Arizona were used for the facade, the decking and even for roofing. In regard to the facade, maintenance is estimated to be required only every 15 years – a much longer period than with any other wooden materials.

AART Architects

### "Thermally modified wood has proven to be the perfect match for the Waterfront."

# Ancient wisdom, modernized

Thermally modified wood was the secret of Northern seafarers who used the process to render their ships resistent to the corrosive effect of salty waters. We have developed, innovated and enhanced this technique into the 21<sup>st</sup> century. Our experts have spent years perfecting the technique in order to bring this unique finishing into modern homes and public spaces.

#### Wood's moisture content\*

\* After 70 days in outdoor conditions; study by VVT, 1994





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SPERSON CONTRACTOR

A place to relax Ezerec Spa, Bulgaria

#### te challenge

Spa centre – a relaxing place with pools, jacuzzis and saunas. That also means a lot of water, heat and moisture. How could real wood be suitable for this environment?

#### The solution

Thermal modification significantly reduces the wood's ability to absorb water. The process decreases the wood's equilibrium moisture content up to 45% compared to unmodified timber. This greatly improves wood's dimensional stability. Thermally modified wood also has significantly lower thermal conductivity, thus keeping the wood cool and comfortable when used for outdoor decking, poolsides and sauna benches. This is in addition to the beautiful aesthetics of Thermory ash – the rich dark colour and the elegant grain of real wood. Veselka Zarkova, Tehnotop Lto

### \*Our customer is very pleased with the choice. Thermory quality is superior to others.

#### A gift from nature. A gift to nature

Our raw materials come from sustainably managed forests in the USA, Canada, and Europe. These areas are certified and controlled on the state level. We do not use any tropical timber in order to save the endangered rain forests. Nor do we add any chemicals or plastic to the timber, which would result in troublesome waste at the end of its lifespan.

### Production energy kWh/m<sup>3</sup>

550

800

520

Sawn timber		124	500
	California and		1 St. 1.

Impregnated wood

Thermally modified wood

Concrete

Steel

Drywall panel

Wood-plastic composites

1350

1300

27000

Life Cycle Assessment Of Finnish Thermally Modified Wood Cladding, Finnish ThermoWood Assoc. 2008

Wooden dunes Memorial of the Battle of Puebla - Mexico



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#### The challenge

The sheer size and scope of the project, 6,500 m<sup>2</sup> of decking, resulted in substantial environmental considerations. The Pueblo city administration specified that the memorial's raw material had to come from sustainable sources and that its post-life cycle environmental impact had to be minimal.

#### the solutio

Thermory's thermo-ash Karakum was selected as the decking material. The City of Puebla thus gained a handsome new public space made of sustainable material. The surface requires minimal maintenance and is totally chemical free. At the end of its life cycle, the decking can be utilized as firewood.

Mayra & Jose Manuel Gallardo Saucedo Novandi

### "Thermory provides you with excellent products and a high quality service."

### Designed to the last detail

Our passion is bringing the touch of real wood to as many people as possible. We work continuously to make the visions of architects and homeowners become reality. From raw material to installation, from inspiration to maintenance - every minute detail, right down to the finish, is meticulously designed and double-checked.

# Entermory services

Vision, engineering

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Manufacturing

Installation

Engineering materials Showroom Decking Cladding Flooring Sauna Furniture Decor mosaic tiles Accessories Installation videos Accessories Maintenance videos

Maintenance

#### B1-1, B2-B clips



The B1-1 and B2-B clips are hidden fasteners for decking boards. The clips allow exceptional holding power thanks to the claws located on the tabs. The result is a stable, smooth and safe deck surface with no visible screw heads.

#### Thermory PaC-System™



Thermory has developed the PaC-System<sup>™</sup> solution to ensure quick and easy installation. This solution reduces installation time and thus the labour cost. Simply "Press and Click" the beautiful thermo-wood boards into place once the Thermory under-construction battens with attached clips have been installed.

# Thermory JENTM

For a tight, clean look, most Thermory profiles can be manufactured with end-matching (JEM<sup>™</sup> – Joint End Matched), enabling random lengths to be installed quickly and efficiently. The JEM<sup>™</sup> system's load bearing strength eliminates the need for board ends to be supported by the under-construction below. In addition to its clean and beautiful design, JEM<sup>™</sup> also saves measuring and cutting time and greatly improves the overall yield. Thermory at work

Located on 7.5 hectares, the Thermory factory is where we store, select, thermally modify, and process 40,000 m<sup>3</sup> of lumber a year – mainly ash and softwoods. We use world's leading technologies for thermal modification perfected by Thermory master craftsmen for over 15 years.

### Thermory annual production capacity: 50 000 m<sup>3</sup>

Flooring 5%

Cladding 15%

**Current product mix** 

Sauna 25%

Decking 55%

#### **Thermal modification process**



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#### **Two levels of modification**

#### **Medium-modified**

Peak temperature 190°C Species: ash, pecan, birch, aspen, alder Suitable for only indoor usage, e.g. flooring, indoor cladding, sauna.

#### **Intense-modified**

Peak temperature 215°C Species: ash, pine, spruce, aspen, alder Suitable for both indoor and outdoor usage, e.g. flooring, indoor and outdoor cladding, decking, fences, sauna etc.

### THERMORY DECKING

D4 / D4sg / D4sg2 / D31 / D30 / D30sg / D33 / D34 / D38 / D45J / QuickDeck / ...




**Thermo-pine** Arizona



**Thermo-spruce** Sahara







### THERMORY CLADDING

C1 / C3 / C5 / C7 / C7J / C4J / C8 / C9 / C11 / ...

**Thermo-ash** Dubai



**Thermo-pine** Madrid



**Clear thermo-pine** Bodrum







### THERMORY FLOORING

F1 / F2 / F3 / F6 /...

**Thermo-ash** Intense: Tango



**Thermo-ash** Medium: Salsa



**Thermo-pecan** Samba















### THERMORY SAUNA

**STS / STP / PHL /...** 

**Thermo-alder** Honolulu / Cairo



**Thermo-aspen** Jakarta / Bangkok

**Thermo-magnolia** Rio / Dakar





### Our team

Our people are united in their enthusiasm for real wood and its benefits. Our team consists of more than 200 people whose shared task and goal is to enrich more lives with the touch of real wood.

# Eind us globally!

Over the last 15 years, we have covered 60,000,000 square meters with real wood products. Our presence is well established in dozens of countries across the world – either directly or through our professional partners who stand for our quality, vision and dream.

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## Thermory network<sup>O</sup>



Our partners in more than 50 countries have advanced our creations over the world. Thermory wood is present in thousands of places across the world: in homes and public spaces, in all different styles of buildings and environments, in high-humidity and extreme heat, in cold and in warmth. Our wide product collection meets the needs of hundreds of diverse tastes and styles.

TUSA – Thermory USA / Mark Challinor and Kevin DeMars

"Thermory is not for everyone, but for those who appreciate a distinguished exterior hardwood, it has no equal." Mr. Masahiro Hakamata, Nichika Ltd. (Japan)

"Thermory is the most experienced in thermally modified wood with a wide variety of wood species. In the course of growth, they are still flexible and listen to the voice of customers trying to maintain a good balance between the quality, volume and the price to stay competitive in the world market."



Odd Paulsen, Managing Director of Moelven Wood Prosjekt AS (Norway)

"Moelven and Thermory have a well established relationship. For us, nothing is more important than a strong and high-quality partnership that is reliable also in the long-term."

### Excellence in Wood

Thermory offers the best of real wood. Products which are beautiful, durable, functional and environmentally sound. The special touch of Thermory´s thermal modification improves the properties of real wood greatly thus making it an excellent choice.

www.thermory.com



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#### THERMORY Excellence in Wood

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