

# THERMORY®

THERMORY® Ash is produced at 419°F in a special computer-controlled kiln. The process uses only heat and steam, no chemicals are added.

During the modification process, chemical and structural changes occur within the timber which improve some of its basic characteristics. The resulting product is more durable and stable – an ideal material for use in exposed areas such as external facades.

Thermory procures White Ash from North America and Europe, from regions that take care of the forest responsibly and sustainably.

Highly durable (Class 1), dimensionally stable in changing weather conditions and thus ideal for use in outdoor settings.

Thermal modification is chemical-free and enhances the wood throughout, not just the outer surface.

## Data sheet

## Ash Cladding

USE

THERMAL MODIFICATION

INTERIOR / EXTERIOR CLADDING

INTENSE (THE TEMPERATURE IS AT LEAST 419 DEGREES)



STABLE



REAL WOOD PRODUCTS



HIGH DURABILITY



SUSTAINABLE



THERMALLY MODIFIED



CHEMICAL FREE NON TOXIC



**BENCHMARK**  
by THERMORY®



Benchmark Ash Cladding  
(after installation, uncoated wood). Profile C4J.  
Design Mari Hunt, b210 Architects | Photography Elvo Jakobson

© THERMORY 2023





Benchmark Ash Cladding (oiled)  
 Profile C5 (brushed) 1 x 3/6/8 in.  
 Restaurant NOA, Estonia | Design KAMP Architects | Photography Eivo Jakobson

<b>WOOD SPECIES</b>	White Ash ( <i>fraxinus</i> )	
<b>COMMONLY USED CUSTOMS CODE</b>	44092999000	
<b>CHARACTERISTICS OF THERMALLY MODIFIED ASH (SAWN, PLANED AND PROFILED)</b>		<b>CORRESPONDING STANDARD/TEST REPORT</b>
<b>DURABILITY CLASS (TESTED BY CATAS)</b>	1 - very durable	EN 113-2:2020 (Test No 307874 / 1 06.09.2021)
<b>INITIAL MOISTURE CONTENT (%)</b>	4.0-6.0	Internal factory test 01.10.2022
<b>EQUILIBRIUM MOISTURE CONTENT AT 25°C, (%)*</b>	35%RH – 3.5 ; 65%RH – 4.7; 90%RH – 7.1	Test report 02.08.2011
<b>CHANGE IN WIDTH AND THICKNESS IF TAKEN FROM RH 35% TO RH 65% AT 77°F*</b>	0.34%	Test report 02.08.2011
<b>BENDING STRENGTH (LBF/IN<sup>2</sup>)*</b>	9795 ± 2168	EN 14358:2016 (Test No 11-40/EK/1451-2, 04.11.2022)
<b>MODULUS OF ELASTICITY (LBF/IN<sup>2</sup>)*</b>	2,279,191	EN 14358:2016 (Test No 11-40/EK/1451-2, 04.11.2022)
<b>OVEN-DRY DENSITY (LB/FT<sup>3</sup>)*</b>	37.65	Test No 11-40/EK/44-2, 10.04.2018
<b>JANKA HARDNESS*</b>	1320	EN 1534:2010 (Test No 11-40/EK/44-2, 10.04.2018)
<b>FLAME SPREAD</b>	Class B	ASTM E84

\* The values given are the mean results of testing, apply only in the aforementioned conditions and are not partially applicable. The tests were conducted by Tallinn University of Technology.



<b>COUNTRY OF ORIGIN</b>	Estonia
<b>CERTIFICATION</b>	FSC® certified products – please check for available dimensions and profiles; PEFC® certified products – please check for available dimensions and profiles.
<b>SURFACE</b>	Planed, sawn, brushed and embossed/pressed pattern surface possible on our Cladding.
<b>COLOR</b>	Exotic Brown. Color variations in thermally modified wood are a result of variations in growth conditions of the tree and are fully acceptable. Wood will weather to grey unless a UV penetrating oil is applied and maintained.
<b>COATING</b>	Other colors can be achieved by using a penetrative oil with an additive color.
<b>GRADING</b>	Grade: Select. Boards are graded by the better face (smooth surface, no hit & miss, no wane). The back face and lower ½ of the sides may have defects as long as the defects do not affect installation and are not visible after the installation. More information from file “Thermory Ash Grading Rules”.
<b>STANDARD THICKNESSES</b>	0.79 in and 1.02 in (depending on profile).
<b>STANDARD WIDTHS</b>	2.05 in – 6.1 in (depending on profile).
<b>STANDARD LENGTHS</b>	2.6 ft –9.5 ft (lengths are subject to availability).



Benchmark Ash Cladding (natural, aged).  
Hidden installation with PaCS Clad (powered by Grad).  
Poolhouse, Belgium | Distribution & Photography Carpentier Hardwood Solutions NV

## HANDLING

Thermory® cladding boards should be stored inside, out of the sun, rain and other elements. When this is not possible, boards need to be elevated off the ground, stacked uniformly and covered with a waterproof tarp. Leave the ends of the tarp open so moisture is not trapped inside, making certain the stored wood is not subjected to the elements or sun as UV rays will fade the material. Under no circumstances should Thermory® boards, even in original packaging, be subjected to rain or any moisture as they cannot dry properly when stacked and/or packaged.

## WASTE MANAGEMENT

Thermory naturally enhances wood using only heat and steam. Thermally modified wood does not need to be treated as hazardous waste.

Last updated: May 2024  
All previous versions are null and void.