

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 patios.

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 Decking

USE

EXTERIOR DECKING

THERMAL MODIFICATION

INTENSE
(THE TEMPERATURE IS AT LEAST 419 DEGREES)



DIMENSIONAL STABILITY



REAL WOOD PRODUCTS



DURABILITY



SUSTAINABLE



THERMALLY MODIFIED WOOD



ECO-FRIENDLY / CHEMICAL-FREE PROCESS



BENCHMARK
by THERMORY®



Benchmark Ash Decking, NOA restaurant, Estonia.
Photo: Terje Ugandi





Benchmark Ash Decking, 1x4, profile D31, Private house in Canada. Tampold Architects. Photo: Larry Arnal

WOOD SPECIES	White Ash (<i>fraxinus</i>)	
COMMONLY USED CUSTOMS CODE	44092999000	
CHARACTERISTICS OF THERMALLY MODIFIED ASH (SAWN, PLANED AND PROFILED)		CORRESPONDING STANDARD/TEST REPORT
DURABILITY CLASS (TESTED BY CATAS)	1 - very durable	EN 113-2:2020 (Test No 307874 / 1 06.09.2021)
INITIAL MOISTURE CONTENT (%)	4.0-6.0	Internal factory test 01.10.2022
EQUILIBRIUM MOISTURE CONTENT AT 25°C, (%)*	35%RH – 3.5 ; 65%RH – 4.7; 90%RH – 7.1	Test report 02.08.2011
GROWTH IN WIDTH AND THICKNESS IF TAKEN FROM RH 35% TO RH 65% AT 25°C*	0.28%	Test report 02.08.2011
BENDING STRENGTH (LB/F²)*	9795 ± 2168	EN 14358:2016 (Test No 11-40/EK/1451-2, 04.11.2022)
MODULUS OF ELASTICITY (LB/F²)*	2,279,191	EN 14358:2016 (Test No 11-40/EK/1451-2, 04.11.2022)
OVEN-DRY DENSITY (LB/F³)*	37.65	Test No 11-40/EK/44-2, 10.04.2018
JANKA HARDNESS*	1320	EN 1534:2010 (Test No 11-40/EK/44-2, 10.04.2018)
FLAME SPREAD	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.



Benchmark Ash Decking – Aged, Unoiled. Private Home, Beverly Hills, California.

COUNTRY OF ORIGIN	Estonia
CERTIFICATION	FSC® certified products – please check for available dimensions and profiles; PEFC® certified products – please check for available dimensions and profiles.
SURFACE	Planed or brushed surface possible on our Decking.
COLOR	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.
COATING	Other colors can be achieved by using a penetrative oil with an additive color.
GRADING	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”.
STANDARD THICKNESSES	0.79 in and 1.02 in (depending on profile).
STANDARD WIDTHS	3.5–6.3 in (depending on profile).



Benchmark Ash Decking, D4 1x6.
 South Harbor School, Copenhagen Denmark. Architect JJW Architects.
 Photo: Torben Eskerod

STANDARD LENGTHS

2.6 ft–12.8 ft (1 ft steps), lengths 13.8 up to 15.8 ft are subject to availability.

HANDLING

Thermory® decking boards should be stored 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.