

# THERMALLY MODIFIED WOOD DATA SHEET

## STYLISH AND ENVIRONMENTALLY FRIENDLY

Americana™ is a brand of thermally modified hardwoods from Bingaman & Son Lumber (BSL). Thermal modification is a chemical-free process that uses heat and steam to impart benefits of durability, rot-resistance, and beauty to wood. The process allows hardwoods to last for decades in harsh exterior environments or enliven interior spaces.



**Eco-Friendly**



**Effortless Beauty**



**No Chemicals**



**Premium Hardwood**



**Easy Installation**



**Longevity & Durability**



**Real Environmental Credentials**

### Bingaman and Son Lumber Company:

BSL is a 60-year-old family- and employee-owned hardwood lumber company based in Central Pennsylvania. With over 200 employees spanning 5 locations, BSL sustainably harvests 13 forest-grown hardwood species and processes them all the way from standing timber to finished product, entirely in Pennsylvania. For more information visit [bingamanlumber.com](http://bingamanlumber.com).

### Sizing:

In the Americana manufacturing process, nominal sizing is utilized whereby the board's actual size is contingent on the final moulded profile. Common thicknesses include 4/4 (net 0.75" thick), 5/4 (net 1.00" thick) and 8/4 (net 1.50" thick).

### Lengths:

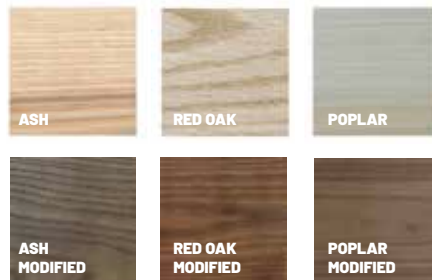
Random lengths, 6'-12' at 1' increments permitting max 5% 3'/4'/5' nested; longer, shorter, and fixed lengths available upon request

### Moulded Profiles:

For a full range of our Standard Profiles visit us at this link: [www.americanarealwood.com/technical-info](http://www.americanarealwood.com/technical-info). Custom profiles are available upon request.

### Americana™ Species:

Ash (*Fraxinus americana*), Red Oak (*Quercus rubra*), Poplar (*Liriodendron tulipifera*).



*Other species are available upon request\**

### Durability:

Americana™ thermally modified hardwoods achieve Durability Class 1 "Very Durable" after testing according to EN 113-2:2020 ("Inherent or enhanced durability of wood against wood-destroying basidiomycetes"). Mass loss due to fungal exposure (*C.puteana* & *T.versicolor*) is less than 5%.

### Grade:

Sound knots max 0.50" diameter permitted; no open knots on the sound face. Rustic grade available by request.

### Mechanical Properties:

The mechanical properties of Americana™ thermally modified hardwoods vary by species. Full reports of ASTM D1037 Static Bending are available upon request:

Species	Janka Hardness (lbs)(mean)	MoE (MPa)(mean)	MoR (MPa)(mean)
Ash	817.84 lbs	11,114.08	51.99
Poplar	613.45 lbs	12,640.07	74.92
Red Oak	1,310 lbs	13,100.04	94.80

### Dimensional Properties:

Species	Shrinkage (radial)(%)	Shrinkage (tangential)(%)	Equilibrium Moisture Content (EMC)(%)
Ash	1.03%	1.03%	5.48%
Poplar	1.12%	1.17%	5.22%
Red Oak	0.97%	1.64%	5.83%

*Shrinkage occurs during thermal modification prior to machining the final profile and does not affect the finished net size.\**

### Material Fire Rating:

Class C. Americana™ has a WUI Certificate from CalFire available for download here: [americanarealwood.com/technical-info](http://americanarealwood.com/technical-info).

### Environmental Certifications:

BSL is certified by SCS Global Services to manufacture and offer Forest Stewardship Council® (FSC®) Certified products (SCS-COC-003911). BSL foresters are certified through the Pennsylvania Sustainable Forestry Initiative (SFI). They maintain accreditation in the SFI core courses consisting of Environmental Logging, First Aid, and Logging Safety. All BSL harvests are conducted by SFI certified loggers and performed in accordance with Pennsylvania's Best Management Practices (BMP). Americana™ has a Declare Label with the International Living Future Institute available here: [declare.living-future.org/products/americana-thermally-modified-hardwoods](http://declare.living-future.org/products/americana-thermally-modified-hardwoods).

### Fastening:

You do not need to finish Americana™ thermally modified hardwoods to achieve extended longevity and durability. Without a finish or with an un-pigmented clear finish the wood will change color from dark brown to silver/gray. Pigmented semi-transparent stains or penetrating exterior paints can also be used to add a color to the wood. Maintenance of these colors depend on the finish, the number of coats applied, and the environmental conditions of the installation. Contact stain or paint manufacturers for best practices when using with thermally modified wood.

