



Accoya® wood DATA SHEET

Accoya is a modified wood setting the benchmark for wood performance, finish and sustainability. It has been proven through intensive testing and in 1000s of projects worldwide to outperform the competition.

Approved Manufacturer Training Program

Accsys run a training program for manufacturers of Accoya products. We strongly recommend all companies manufacturing products from Accoya participate in the program.

Key features

Accoya wood is produced from sustainably sourced, fast growing wood and manufactured using Accsys' proprietary patented modification process from surface to core.

 HIGHLY STABLE	 HIGHLY DURABLE	 IDEAL FOR COATING
 EXCELLENT MACHINABILITY	 BAREFOOT FRIENDLY	 NON TOXIC
 SUSTAINABLY SOURCED	 NATURAL WOOD	 100% RECYCLABLE
 THERMAL INSULATOR	 INSECT RESISTANT	 STRUCTURALLY CERTIFIED

Standard lengths & grades

94.5", 118.1", 141.7", 165.4", 189.0"

Intermediate lengths of 70.9", 106.3", 129.9", 153.5" and 177.2" and 4.5m also available on a lower volume basis. Finger Jointed available in 165.4", 189.0", and 236.2" lengths.

- > All A1, A2 and B grade dimensions are actual rough sawn.
- > Companies processing Accoya can supply a wide range of standard and custom profiles from these sawn sizes.
- > Accoya is available in four primary grades:
 - A1:** 4 sides primarily clear. C22 strength grade.
 - FJ/A1:** Finger Jointed to clear lengths.
 - A2:** 3 sides primarily clear. C16 strength grade.
 - B:** Where there is greater tolerance for defects such as knots, resin pockets, wane or edge damage.

Standard dimensions & grades

Heights	Widths				Grades
	4"	5"	6"	8"	
4/4	✓	✓	✓	✓	A1, A2, B
5/4		✓	✓	✓	A1, A, B
6/4		✓	✓	✓	A1, A2, B
8/4	✓	✓	✓*	✓*	A1, FJ/A1*, A2, B
10/4	✓*	✓*	✓*	✓*	A1, FJ/A1*, A2
12/4	✓*	✓*	✓*	✓*	A1, FJ/A1*, A2
16/4	✓				A1, A2

* See Finger Joint leaflet for actual FJ dimensions

Material	
100% Solid Accoya wood	
Durability	
EN 350 Class 1 (the highest rating) and exceeding the performance of durable woods in long term ground contact field tests according to AWP A E7 method in Florida, USA and similar tests to national standards in Australia, Japan and New Zealand	
Equilibrium Moisture Content	
3–5 % at 65% relative humidity, 20°C	
Density	
Average 32 p.c.f., 65% RH, 20°C, Range 27 to 37 p.c.f.	
Shrinkage	
WET – 65% RH / 20°C*	WET – Oven Dry*
Radial – 0.4%	Radial – 0.7%
Tangential – 0.8%	Tangential – 1.5%
*Average Values	
Material Fire Rating	
Class C in USA (ASTM E84) and D in Europe (EN149915) like most softwoods. Accoya wood can be fire treated to meet higher requirements.	
Thermal Conductivity	
EN 12667, $\lambda = 0.12 \text{ W/m} \cdot \text{K}$ ASTM C177, $\gamma = 0.102 \text{ W/m-K}$	
Bending Strength	
Accoya A1 quality is classified as European C22 strength grade and Accoya A2 quality is classified as C16.	
Bending Stiffness	
ASTM D143, MOR = 13,144 psi	
Janka Hardness	
ASTM D143, Side 4100 N (922 LBF), End grain 6600 N (1484 LBF).	
Brinell Hardness	
EN 1534 (2010) value 2.4	

Insect decay

Accoya wood is indigestible to a wide range of pests and an effective barrier to attack. Five year ground contact testing by independent laboratories in Florida USA, Northern Territory Australia and sites across Thailand has shown less termite damage on Accoya than on naturally durable species such as FEQ Burmese Teak and Spotted Gum.

Salt water contact and immersion

Accoya is not detrimentally affected by salt water contact or immersion. Field testing over 10 years immersion have shown some attack on Accoya by marine organisms but less than that sustained on other durable woods in test.

Machinability

Processing does not affect the unique properties of Accoya wood, as it is modified to the core. It is relatively easy to process and comparable to a softwood or medium density hardwood such as Yellow Poplar (Tulip Wood). With the right training no special tools are required for cross cutting, ripping, planing, routing and drilling. Further details can be found in the Accoya Wood Information Guide.

Gluing

Both load bearing and non-load bearing applications have been tested using adhesive systems for laminating, finger jointing and frame corner joints. While good results can be achieved with most common adhesives, PU, EPI, epoxy and PRF give the best results. Results using polyvinyl acetate (PVAc) can vary greatly. MUF adhesives should be avoided. Contact your adhesive supplier for more information.

Finishing

A finish or coating does not need to be applied to Accoya to achieve longevity and dimensional stability. Details on natural weathering of uncoated Accoya can be found in the Wood Information Guide. Most commonly used coating systems can be used on Accoya wood. Testing has been performed with a full range of oil-based and water-based coating systems. Leading coating manufacturers have found that their film form coating systems last longer on Accoya. Contact your coating supplier for more information.

Fastening

The use of corrosion-proof steel fastenings that conform to EN 10088-1 is recommended such as A2, A4 quality stainless steel. Use of other metals and alloys is included in the Accoya Wood Information Guide.

Certified as compliant with US Building Code for decking and porch boards in termite zones for Above Ground and Ground Contact: ICC ESR 2825

Approved by WDMA as compliant with WDMA 15.4

Certified as compliant with Cradle-to-Grave with Platinum Level Material Health Certificate

For more information please refer to the Wood Information Guide at www.accoya.com

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