

# DATA SHEET ACCOYA® RADIATA

Accoya® wood is the result of more than 80 years' research and development that has brought together a long-established and extensively proven wood modification technique - acetylation - and leading-edge proprietary technology to create a high performance wood.

## KEY FEATURES



DIMENSIONALLY STABLE



OUTSTANDING DURABILITY



IDEAL FOR COATING

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



BAREFOOT FRIENDLY



NATURALLY INSULATING\*



EXCELLENT MACHINABILITY



INSECT BARRIER



CONSISTANT QUALITY THROUGHOUT



NATURALLY BEAUTIFUL WOOD



FROM SUSTAINABLE SOURCES



RETAINED STRENGTH & HARDNESS



NON-TOXIC & RECYCLABLE

\* U-value advantage over non-acetylated wood

## STANDARD LENGTHS

94.5", 118.1", 141.7", 165.4", 189.0"  
(2.4m, 3.0m, 3.6m, 4.2m, 4.8m)

Please contact your Accoya® sales manager for stock availability and delivery time.

- All dimensions are actual rough sawn.
- Accoya® wood is available in many other standard decking sizes and siding patterns from our partners.
  - A1 : 4 sides primarily clear
  - A2 : 3 sides primarily clear

Other grades and dimensions can be made. Please contact your Accoya® Sales Manager for more information. Please refer to Accoya® Structural Design Guide to Eurocode 5 for information on the Accoya® Structural C24 equivalent grade available at [www.accoya.com](http://www.accoya.com).

## STANDARD DIMENSIONS & GRADES

THICKNESS	WIDTH				GRADES
	4" (100 mm)	5" (125 mm)	6" (150 mm)	8" (200 mm)	
4/4 (25 mm)	✓	✓	✓	✓	A1, A2
5/4 (32 mm)	✓	✓	✓	✓	A1, A2
6/4 (38 mm)	✓	✓	✓	✓	A1, A2
8/4 (50 mm)	✓	✓	✓	✓	A1, A2
10/4 (63 mm)	✓	✓	✓		A1, A2
12/4 (75 mm)	✓	✓	✓		A1, A2

MATERIAL	
100% Solid Accoya® wood	
DURABILITY	
Greater than 9 rating per AWPA E7. It is an effective barrier against a broad spectrum of fungi including cellar, wet rot, dry rot, soft rot, white, brown and pore fungi.	
EQUILIBRIUM MOISTURE CONTENT	
3 - 5 % at 65% relative humidity, 20°C	
DENSITY AND SPREAD	
65% RH, 20°C, Average 32 pcf, Range 27 to 37 pcf	
SHRINKAGE	
WET - 65% RH, 20°C	WET - OVEN DRY
Radial 0.4%	Radial 0.7%
Tangential 0.8%	Tangential 1.5%
FIRE RATING	
Class C (ASTM E84) and D (EN14915). Accoya® wood can be fire-treated to meet higher requirements.	
THERMAL CONDUCTIVITY	
ASTM C177, $\lambda = 0.102 - 0.120$ W/m-K	
BENDING STRENGTH	
ASTM D143, MOR = 13,144 psi	
BENDING STIFFNESS	
ASTM D143, MOE = 1,297,492 psi	
JANKA HARDNESS	
ASTM E143, Tangential = 972 psi, End Grain = 1,484 psi	
CERTIFIED	
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 I.S. 4.	
Certified as compliant with Cradle-To-Cradle with Platinum Level Material Health Certificate.	

## INSECT BARRIER

Accoya® wood is indigestible to a wide range of pests and an effective barrier to attack. For example, testing for termites according to AWPA E1 test standards yielded appearance ratings always  $\geq 9$  (Light Attack) versus control sample averages of 3.5 (worse than Heavy Attack AWPA E1-13 - Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites). Weight loss averaged only 1.43% for Accoya® wood versus control sample averages of 32.06%.

## MACHINABILITY

Processing does not affect the unique properties of Accoya® wood, as it is modified throughout and not leachable. It is relatively easy to process and can be compared to profiling a soft wood species. No special tools are required for cross cutting, ripping, planing, routing and drilling. Sanding before finishing is rarely required.

## GLUING

Both load bearing and non-load bearing applications have been tested using adhesive systems related to laminating, finger jointing and frame corner joints. While good results can be achieved with most common adhesives, PU, epoxy, PRF and EPI adhesives give the best results. Gluing with MUF and PVA adhesives are not recommended due to the high variation in performance. Specific recommendations for your project are available upon request.

## FINISHING

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 products last three or more times longer when used on Accoya® wood. Specific recommendations for your project are available upon request.

## FASTENING

In good joinery practice, use corrosion proof metal fasteners such as 304 or 316 stainless steel and 6063 anodized aluminum or other metal that conforms to AWPA E12. Use of other metals and alloys is included in the Accoya® Wood Information Guide.

Please note that all values are averages unless otherwise stated and should not be used for calculations in structural applications. For assistance in planning for structural projects, please contact us directly.