innovation in wood

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
- PERFECT 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 hardwood

STANDARD LENGTHS

2.4 m, 3.0 m, 3.6 m, 4.2 m, 4.8 m.

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
A3 : 1 side primarily clear
FJ : Finger Jointed

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.

STANDARD DIMENSIONS & GRADES

HEIGHTS	WIDTHS				GRADES
	100	125	150	200	
25	✔	✔	✔	✔	A1, A2
32	✔	✔	✔	✔	A1, A2
38	✔	✔	✔	✔	A1, A2
50	✔	✔	✔*	✔	A1, A3, FJ
63	✔*	✔*	✔*	✔	A1, A3, FJ
75	✔*	✔*	✔*	✔	A1, A3, FJ
100		✔**	✔**		FJ

* Also possible in Finger Jointed (46 x 95/121/145 mm) L = 6 m
** Only Finger Jointed and laminated (95 x 121/145 mm) L = 6 m

MATERIAL
100% Solid Accoya® wood

DURABILITY
EN 113 Class 1 (the highest rating). 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 512 kg/m³, Range 432 to 592 kg/m³

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
EN 12667, λ = 0.12 W/m·K

BENDING STRENGTH
EN 408, 40 N/mm²

BENDING STIFFNESS
EN 408, 8800 N/mm²

JANKA HARDNESS
ASTM D143, Side 4100 N, End grain 6600 N

INSECT DECAY

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 ≥ 9 (Light Attack) versus control sample averages of 3.5 (worse than Heavy Attack). 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 and PRF adhesives give the best results. The results of gluing with polyvinyl acetate (PVAc) and melamine urea formaldehyde (MUF) can vary greatly. 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, 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.

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.

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