



# Data Sheet - Accoya® Radiata

Accoya<sup>®</sup> 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.



# **Standard Dimensions & Grades**

Dimensions      Grades        25 x 100 mm      (0.98 x 3.94 in)      A1, A2, A3        25 x 125 mm      (0.98 x 4.92 in)      A1, A2, A3        25 x 150 mm      (0.98 x 5.91 in)      A1, A2, A3	
25 x 125 mm (0.98 x 4.92 in) A1, A2, A3	
() ,, () ,	3
$2E_{\rm V} = 1E0$ mm (0.00 v E 0.1 km) $A_1 = A_2 = A_2$	
25 x 150 mm (0.98 x 5.91 in) A1, A2, A3	}
25 x 200 mm (0.98 x 7.87 in) A1, A2, A3	3
32 x 100 mm (1.26 x 3.94 in) A1, A2, A3	8
32 x 125 mm (1.26 x 4.92 in) A1, A2, A3	}
32 x 150 mm (1.26 x 5.91 in) A1, A2, A3	3
32 x 200 mm (1.26 x 7.87 in) A1, A2, A3	}
38 x 100 mm (1.50 x 3.94 in) A1, A2, A3	3
38 x 125 mm (1.50 x 4.92 in) A1, A2, A3	}
38 x 150 mm (1.50 x 5.91 in) A1, A2, A3	3
38 x 200 mm (1.50 x 7.87 in) A1, A2, A3	3
50 x 100 mm (1.97 x 3.94 in) A1, A2, A3	3
50 x 125 mm (1.97 x 4.92 in) A1, A2, A3	}
50 x 150 mm (1.97 x 5.91 in) A1, A2, A3	3
50 x 200 mm (1.97 x 7.87 in) A1, A2, A3	3
63 x 100 mm (2.48 x 3.94 in) A1, A2, A3	3
63 x 125 mm (2.48 x 4.92 in) A1, A2, A3	3
63 x 150 mm (2.48 x 5.91 in) A1, A2, A3	
63 x 200 mm (2.48 x 7.87 in) A1, A2, A3	
75 x 125 mm (2.95 x 4.92 in) A1, A2, A3	
75 x 150 mm (2.95 x 5.91 in) A1, A2, A3	}
75 x 200 mm (2.95 x 7.87 in) A1, A2, A3	3

# **Standard Lengths**

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

Please contact your Accoya<sup>®</sup> sales manager for stock availability and delivery time.

- All dimensions are actual rough sawn.
- Accoya<sup>®</sup> 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
- Other grades and dimensions can be made. Please contact your Accoya<sup>®</sup> Sales Manager for more information.
- Please refer to Accoya<sup>®</sup> Structural Design Guide to Eurocode 5 for information on the Accoya<sup>®</sup> Structural C24 equivalent grade available at www.accoya.com/downloads





All Accoya® is produced from well managed, sustainable sources, including FSC®, PEFC<sup>TM</sup> and other regionally certified woods.

The mark of responsible forestry

www.accoya.com





# Data Sheet - Accoya® Radiata

# Material

100% soild 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 Radial 0.4% Tangential 0.8% Wet - Oven Dry Radial 0.7% Tangential 1.5%

#### **Fire Rating**

Class C (ASTM E84). Accoya® wood can be fire-treated to meet higher requirements.

#### **Bending Strength**

EN 408, 39 N/mm<sup>2</sup>

# **Thermal Conductivity**

EN 12667,  $\lambda$  = 0.108 Wm<sup>-1</sup>K<sup>-1</sup> (Netherlands & Germany - EN 12667,  $\lambda$  = 0.12 Wm<sup>-1</sup>K<sup>-1</sup>)

Bending Stiffness EN 408, 8790 N/mm<sup>2</sup>

Janka Hardness ASTM D143, Side 4100 N, End grain 6600 N

# Insect Decay

Accoya<sup>®</sup> wood is not digestible by a wide range of pests, therefore it is 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). Weight loss averaged only 1.43% for Accoya<sup>®</sup> wood versus control sample averages of 32.06%.

#### Machinability

Processing does not affect the unique properties of Accoya<sup>®</sup> 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. Gluing with MUF D2/D3 PVA adhesive is not recommended but D4's may be used for mechanically supported joints. Specific recommendations for your project are available upon request.

#### Finishing

Most commonly used coating systems can be used on Accoya<sup>®</sup> wood. Testing has been performed with a full range of oilbased and water-based coating systems. Leading coating manufacturers have found that their products last three or more times longer when used on Accoya<sup>®</sup> 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.

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.



# the world's leading high technology wood

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