

## Data Sheet - Accoya® Radiata

The Wood Component Company

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.



Outstanding durability



Consistent quality throughout



UV resistant



Dimensionally stable



Retained strength & hardness



Naturally insulating



Insect barrier



Perfect for coating



Naturally beautiful wood



Sustainably sourced



Excellent machinability



Non toxic & recyclable

### 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/m<sup>3</sup>, Range 432 to 592 kg/m<sup>3</sup>

### 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,  $\lambda = 0.108 \text{ Wm}^{-1}\text{K}^{-1}$

(Netherlands & Germany - EN 12667,  $\lambda = 0.12 \text{ Wm}^{-1}\text{K}^{-1}$ )

### Bending Stiffness

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

### Janka Hardness

ASTM D143, Side 4100 N, End grain 6600 N

Accoya® 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® 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. 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® 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

Stainless Steel fixings should only be used