

Raw material:	Pine (Pinus Sylvestris), Spruce (Picea Abies)
Thermal modification:	Thermo D-class (+212 °C)
End use:	Decking, exterior and interior cladding, landscaping
Moisture:	6 % ± 2 % after production, in our yard
Allowed planing tolerances:	Width     ± 0.5 mm Thickness ± 0.5 mm Length    -10 mm, +30 mm
Possible dimensional swelling and shrinkage because of relative air humidity:	5 - 6%

## Allowed deformation tolerances:



**Spring**  
Up to 2 mm per 1 m



**Bow**  
Up to 7.5 mm per 1 m



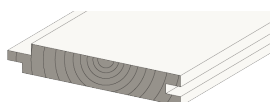
**Twist**  
Up to 5% of board per 1 m



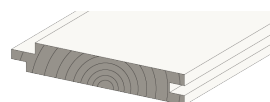
**Cup**  
Up to 1% of board width

## GRADING

Three sides are graded – the top and the edges. The back is not graded, so any defects there are allowed if they do not compromise the integrity of the board and do not affect the good side of the board.



Pine – heartwood up



Spruce – heartwood down

## AB GRADE

This grade is made from AB grade raw material that has been planed but not graded. AB grade may contain up to 30% B grade boards.

## A GRADE

The impact of a single defect is assessed by looking at the overall quality of the product.

Completely fallen branches are not allowed on the board, but split branches may occur. The ends of the boards may be cracked. Natural colour variations are allowed, the number of live knots is not limited, the heartwood line is visible. A few flaws are acceptable if the board looks good overall.

After installation, the visible parts of the tongue & groove must be intact. Cracks hidden in the groove are tolerated. 8 cm at the end of the board are not graded (this does not apply to boards with t&g at the ends).

The surface of the boards must be smooth and presentable. A board is not suitable if its general appearance differs significantly from the grade description.

## B GRADE

In general, B grade boards have a good appearance. However, individual pieces do not meet A grade requirements because the boards have one or more major defects.

Completely broken pieces are not accepted in B grade.

B grade can easily be upgraded to A grade by cutting off the defects.

## C GRADE

C grade consists of rejects that do not meet the parameters of B grade. The boards may be broken, have severe longitudinal cracks, many empty knotholes or other severe mechanical defects.

## IMPORTANT!

Boards that do not conform to the grade description cannot be cut or otherwise used. Until evaluated, the products must be stored off the ground on a level surface and protected from UV rays. If these instructions are not followed, the boards will not be replaced.

Thermowood products have a warm caramel colour. It is not necessary to coat the surface, but in outdoor conditions it will naturally turn grey when exposed to UV rays.

- *All grades may contain 3% defective boards.*
- *Any quality complaints must be made within 14 days of delivery.*
- *When purchasing BC grade, we recommend you to inspect the products in person, as BC boards are not exchangeable and cannot be returned.*

If you have any additional questions, please contact our sales managers or email us at [info@brolis.eu](mailto:info@brolis.eu).



**Sound knots**

A grade: Allowed, unlimited  
B grade: Allowed, unlimited



**Knot cluster**

A grade: Allowed, unlimited  
B grade: Allowed, unlimited



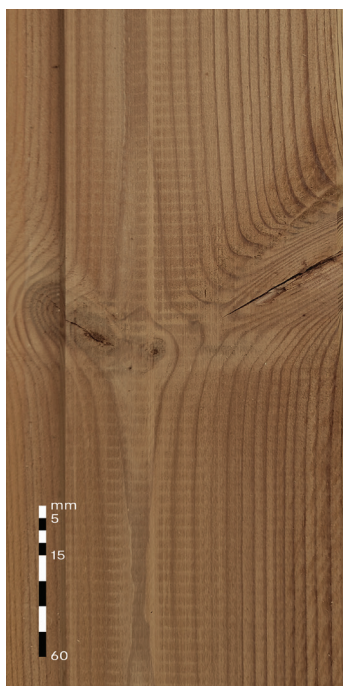
**Dead black knots**

A grade: Allowed, up to 1/10 board width  
B grade: Allowed, unlimited



**Knot shakes**

A grade: Allowed, up to 5 mm wide & 50 mm long  
B grade: Allowed, unlimited



**Knot shakes on the edges**

A grade: Allowed, up to 1/10 board width  
B grade: Allowed, unlimited



**Knots with perimeter crack**

A grade: Allowed, up to 5 mm wide & 50 mm long  
B grade: Allowed, unlimited





**Knotholes on the sides**

A grade: Allowed, up to 15 mm wide  
B grade: Allowed, unlimited



**Cracked knots**

A grade: Allowed, up to 1/10 board width  
B grade: Allowed, unlimited



**Knotholes**

A grade: Not allowed  
B grade: Allowed, up to 0 20 mm,  
max 1 pc. x board length, m



**Feed-roller marks (from 0.5 mm deep)**

A grade: Not allowed  
B grade: Allowed, unlimited



**Mechanical defects**

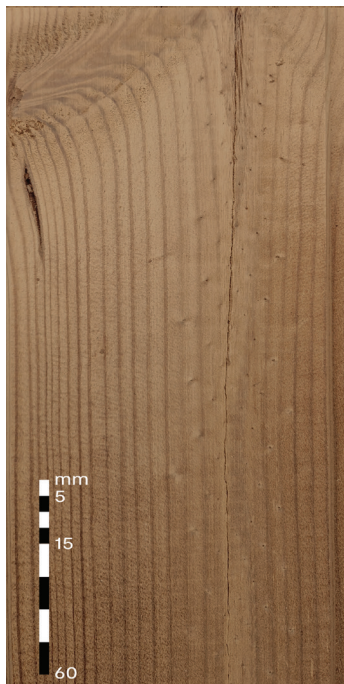
A grade: Not allowed, except 80 mm  
ends of board  
B grade: Allowed, up to 300 mm  
long, max 0,5 pc. x board length, m



**Surface cracks**

A grade: Allowed, up to 150 mm long  
B grade: Allowed, unlimited





#### **End splits**

A grade: Allowed, up to board width  
B grade: Allowed, up to 300 mm



#### **Bark knots**

A grade: Allowed, up to 1/3 board width  
B grade: Allowed, unlimited



#### **Sound heartwood**

A grade: Allowed, unlimited  
B grade: Allowed, unlimited



#### **Dead heartwood\***

A grade: Allowed, unlimited  
B grade: Allowed, unlimited  
\*it is removed if surface is brushed



#### **Resin pockets**

A grade: Allowed, up to 200 mm long  
B grade: Allowed, unlimited