

GRADING RULES

Thermally modified radiatapine

Wood for you

MADE IN LEMPÄÄLÄ, FINLAND

This is how we sort

Wood is a natural material, and no two boards are exactly alike. That's where its charm lies – but it also means that every board needs a pair of eyes to decide which quality class it belongs to. We'll go over the following principles, so you know exactly what you're ordering.

1. We sort thermally modified radiatapine into two quality classes: **A** and **B**.
2. Sorting is always done according to **the better side** – that is, the surface that remains visible.
3. In sauna benches, the “better side” consists of **three visible sides**: the top and both edges.
4. In paneling, the “better side” is the **visible surface remaining in the room**.
5. The final quality is determined by the criteria presented on the following pages.

A quality

Our most demanding quality class. Knot holes, surface cracks, wane and mechanical damage are not allowed on the visible face. Suitable for sites where a calm, even surface is important.

B quality

A livelier option. Sound knots and small knot holes are allowed on the visible face – they are exactly what gives the wood its character. A great choice when you want wood to look like real wood.

DID YOU KNOW?

Thermally modified radiatapine withstands the varying conditions of the sauna exceptionally well: it does not get scorching hot, it repels water and it keeps its shape. Thermal modification darkens the wood to a deep brown tone and further improves its dimensional stability.

Types of defects and their permissibility

On the next page, we go through all the types of defects examined in grading. The table shows separately what is allowed on the visible face of the board and what is allowed on the back face. The back face always remains inside the structure, so that's where we allow more defects. The details and natural properties of the surface are assessed from a viewing distance of about 1.5 meters. At least 95% of the production batch meets the quality requirements specified in the table. The appearance of wood may change after installation. Wood responds to its surrounding environment, so changes not covered by the grading rules may occur in its surface and appearance over time. The grading rules apply to the quality assessment carried out during production.



The red lines in the image indicate the area considered the visible face. In a piece planed all round (PAR), the working surface is the better side of the piece.

Thermally modified radiatapine

Feature or defect	Quality class: A	
	Visible face	Back face
Knots	Sound knots up to 18 mm allowed	Allowed
Spike knots	Not allowed	Allowed
Split knots	Not allowed	Allowed
Knot holes	Not allowed	Allowed, not through
Bark knots	Allowed up to 100 mm ²	Allowed
Black knots	Not allowed	Allowed
Dead knots	Allowed up to 5 mm	Allowed
Tearout around knots	Not allowed	Allowed
Pin knots	Allowed up to 10 mm	Allowed
Arris knots	Allowed up to 50% of the board thickness	Allowed
Broken edge knots	Not allowed	Allowed
Canker and rind gall	Not allowed	Allowed
Resin pockets	Allowed up to 100 mm ²	Allowed
Cracks	Hairline cracks up to 1 mm wide with a total length of up to 20% of the board length are allowed.	Allowed
End cracks	A through crack up to 150 mm long is allowed.	Allowed
Ring shake	Not allowed	Allowed if it does not affect installability
Wane	Not allowed	Allowed if it does not affect installability
Hit & miss	Not allowed	Allowed
Trace of feed rollers	Not allowed	Allowed
Reaction wood	Allowed only to the extent that it does not significantly impede the fastening of the boards.	Allowed
Pith	Not allowed	Allowed
Slope of grain	Allowed	Allowed
Bluestain	Not allowed	Up to 5% of the surface area
Color defect	Natural color variation allowed	Allowed
Rot	Not allowed	Up to 5% of the surface area
Insect damage	Not allowed	Not allowed
Wood patch	Not allowed	Not allowed

* The table shows the permissible size and number of knots on the most knotty 1 m long section of the piece of timber. Knots with a diameter of less than 6 mm are pin knots and do not count towards the knot total.



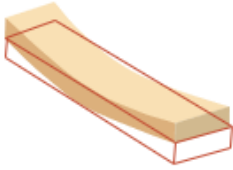
Thermally modified radiatapine

Feature or defect	Quality class: B	
	Visible face	Back face
Knots	Sound knots allowed	Allowed
Spike knots	Allowed	Allowed
Split knots	Allowed	Allowed
Knot holes	Through holes up to 5 mm in diameter allowed	Through holes up to 5 mm in diameter allowed
Bark knots	Allowed	Allowed
Black knots	Allowed	Allowed
Dead knots	Solid knots are allowed	Allowed
Tearout around knots	Allowed	Allowed
Pin knots	Allowed	Allowed
Arris knots	Allowed	Allowed
Broken edge knots	Allowed	Allowed
Canker and rind gall	Not allowed	Allowed
Resin pockets	Allowed	Allowed
Cracks	Hairline cracks up to 2 mm wide with a total length of up to 50% of the board length are allowed.	Allowed
End cracks	A through crack up to 300 mm long is allowed.	Allowed
Ring shake	Not allowed	Allowed if it does not affect installability
Wane	Not allowed	Allowed if it does not affect installability
Hit & miss	Not allowed	Allowed
Trace of feed rollers	Not allowed	Allowed
Reaction wood	Allowed only to the extent that it does not significantly impede the fastening of the boards.	Allowed
Pith	Allowed	Allowed
Slope of grain	Allowed	Allowed
Bluestain	Not allowed	Up to 5% of the surface area
Color defect	Allowed	Allowed
Rot	Not allowed	Up to 5% of the surface area
Insect damage	Not allowed	Not allowed
Wood patch	Allowed	Allowed
Finger joints	Allowed	Allowed

* The table shows the permissible size and number of knots on the most knotty 1 m long section of the piece of timber. Knots with a diameter of less than 6 mm are pin knots and do not count towards the knot total.

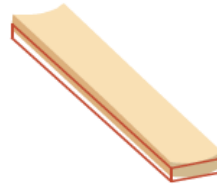


Shape and dimensional tolerances



BOW

Maximum 25 mm over a distance of 1000 mm allowed



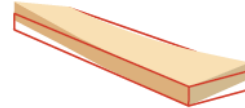
CUP

Maximum 3% of the board width allowed



SPRING, CROOK

Maximum 10 mm over a distance of 1000 mm allowed



TWIST

Maximum 10 mm over a distance of 1000 mm allowed

Dimension	Dimensional deviation when the moisture content of planed timber is 20%
Thickness and width ≤ 20 mm	± 0.5 mm
Thickness and width > 20 mm	± 1.0 mm
Width	$\pm 2.5\%$
Length when sorted by length	$-5...+100$ mm
Length when cut to size	± 2.0 mm

RESPONSIBILITY

Responsible production shows in the quality

The radiatapine we use is a natural, high-quality material. We pay attention to the origin of the wood and to responsible sourcing. We process the wood carefully in Lempäälä, Finland, where high-quality timber and skilled production go hand in hand. The result is long-lasting products where naturalness, quality and responsibility show in every detail.

