

THERMO SPRUCE

Grading rules

Thermo-spruce is a highly valued exterior cladding material among homeowners. The advantage of natural spruce over other widespread wood materials is that spruce absorbs less moisture. Thermal modification, on the other hand, adds even more good qualities – wood becomes more stable and resistant to the effects of the external environment, it removes resin and gives the material a beautifully golden hue, which highlights the dignity of spruce wood.

2024 //

The material is sorted into quality classes based on the conditions below.

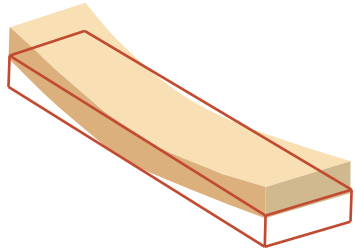
Up to 5% of the volume can be of lower grade.

Grading will be carried out **by the visible face** (if it's definated) or by the better face.

Defect	Grade AB		Grade BC	
	Visible face	Back face	Visible face	Back face
SOUND KNOTS	visual grading, not measured, has to maintain the integrity of the board	allowed	allowed	allowed
DEAD KNOTS	up to \varnothing 15 mm	allowed	allowed	allowed
BROKEN KNOTS	if not disturbing visually, evaluated form a distance min 1,5 m, up to 1/10 of the width of the board	allowed	allowed up to 1/5 of the board width	allowed
KNOT HOLE	not allowed	allowed	up to \varnothing 20 mm allowed in whole length	allowed
BARK KNOTS	sound, \varnothing up to 1/3 of the width of the board, bark not over half of the diameter	allowed	if not disturbing visually	allowed
BLACK KNOTS	\varnothing up to 1/5 of the width of the board	allowed	allowed	allowed
UNSOUND KNOTS	not allowed	allowed	if not disturbing visually	allowed
KNOT SHAKE	decking: up to 5 mm wide and 50 mm long/ cladding: up to 8 mm wide and 50 mm long	allowed	allowed	allowed
SPIKE KNOTS	\varnothing up to 1/2 of the width of the board	allowed	allowed	allowed
PIN KNOTS	allowed	allowed	allowed	allowed
PARTIALLY INTERGROWN KNOTS	bark up to 1/2 of the diameter	allowed	allowed	allowed
EDGE & ARRIS KNOTS	allowed	allowed	allowed	allowed
BROKEN EDGE KNOT	limited to 1/10 of the width	allowed	allowed	allowed
KNOT CLUSTER	visual grading, not measured, has to maintain the intergrity of the board	allowed	allowed	allowed
END SPLITS	max length = width of the board	allowed	allowed up to 300 mm from both ends	allowed

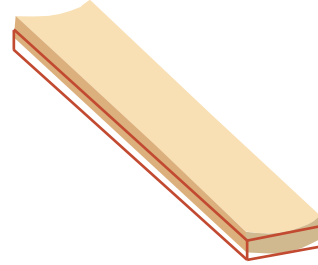
Defect	Grade AB		Grade BC	
	Visible face	Back face	Visible face	Back face
SHAKES	not allowed	not allowed	allowed up to 300 mm from both ends	allowed
SURFACE SHAKES	max 100 mm long	allowed	allowed	allowed
RING SHAKE	not allowed	not allowed	allowed up to 300 mm from both ends	allowed
WANE	not allowed	max 1/5 of width and 1/3 of the thickness of the	allowed up to 300 mm from both ends	allowed
MECHANICAL DEFECTS	not allowed	allowed	allowed up to 300 mm from both ends	allowed
HIT&MISS	not allowed	max 1/2 of the width of the board	allowed up to 300 mm from both ends	allowed
FEED-ROLLER MARKS	not allowed	allowed	allowed up to 300 mm from both ends	allowed
ROT/BLUE STAIN/BARK	not allowed	not allowed	not allowed	not allowed
SCAR	allowed up to 300 mm ²	allowed	allowed	allowed
RESIN POCKET	allowed up to 300 mm ³	allowed	allowed	allowed
PITH	allowed	allowed	allowed	allowed
SLOPE OF GRAIN	allowed	allowed	allowed	allowed
INSECT HOLES	not allowed	allowed	not allowed	allowed

BOW



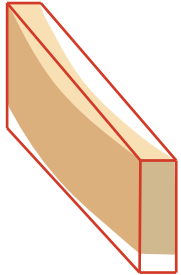
allowed up to 2 mm per linear meter

CUP



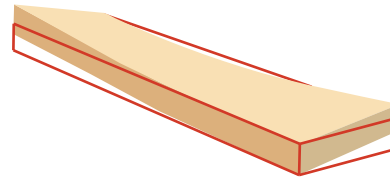
allowed up to 1% of the width of the board

SPRING, CROOK



allowed up to 7,5 mm per linear meter

TWIST



allowed up to 5% of board width per linear meter, has to be reversible during installation

TOLERANCES: thickness: $\pm 0,5$ mm; width: $+ 0,5/-1,0$ mm;
length: ± 2 mm per linear meter

www.standwood.com