

European grading rules for softwood sawn timber (French rules, CTBA)

	Knots	Gum pockets	Shakes	Wane	Checks (cracks) from drying	Other particularities	Applications
GRADE 0 (former grades OA and OB)	Not present in the best side and the two edges. Intergrown knots are tolerated in small number, with a maximum diameter of 15 mm on the opposite side.	Not admitted	Small edge shakes of small length and depth are tolerated only the opposite side	Excluded, except on pieces taller than 3 m, where a slight edge wane is tolerated on the opposite side, on 10% of the batch	Very slight superficial checks admitted	All other particularities, sawing imperfections or alterations are excluded	All applications in which the aspect of the wood holds primordial importance: fine carpentry, furniture, decoration...
GRADE 1 (former grade 1) A maximum of two structural particularities are admitted on both side and three on the opposite side by element-type (rectangle of 1m x 0,10m)	Limited to 1 sound knot of max 20mm on top face and of 3 sound knots of max 25mm diameter on counter-face. Tolerance of small black knots which will stay during processing.	Small gum pockets tolerated	Edge shakes: length limited to 5% of the length	Not admitted on short pieces - tolerated on pieces longer than 3 m, on one edge. The length must be smaller than 20% of the piece's length and the width smaller than 20% of the piece's thickness	Length must be limited to one and half times the piece's width	All other imperfections or alterations are excluded	All applications in which the aspect of the wood holds primordial importance: furniture, internal and external carpentry...
GRADE 2 (former grade 2) A maximum of three structural particularities are admitted on both sides and five on the opposite side by element-type (rectangle of 1m x 0,10m)	Limited to three sound intergrown knots of 30 mm diameter on the side and 5 knots of 40 mm on the opposite side. Presence of some small non-intergrown black knots on the opposite side.	Some small gum pockets on the side, bigger on the opposite side, are tolerated.	Heart and edge shakes of maximum length equivalent to the piece's width, and not exceeding 5 to 8% of the piece's length	Not admitted on short pieces - tolerated on pieces longer than 3 m, on one edge. The length must be smaller than 20% of the piece's length and the width smaller than 20% of the piece's thickness	Tolerated if not exceeding 2 times the piece's width (three times on the opposite side)	Slight tolerance of curly grain on the opposite side. Some black inactive pin holes are admitted in a limited number of pieces in a batch, on the opposite side. All other alterations are excluded.	Structural or construction material and general carpentry work. Special packaging, For structural applications the pieces must comply with the NF B 52-001 norm.

GRADE 3 (former grade 3A)	Sound or black, the knot's diameter must not exceed on the two sides: 1/2 of the sides' width on pieces narrower than 90 mm 45 mm on pieces up to 150 mm wide 1/3 the sides' width on pieces wider than 50 mm - On the edges, emerging knots not exceeding 2/3 of the edge's width	Gum pockets 60 to 80 mm long are tolerated	Heart and edge shakes may have a length equivalent to 2 times maximum of the piece's width, not exceeding 8% of the piece's length	Not admitted on pieces shorter than 3 m. On pieces taller than 3 m, admitted if the length is equivalent to maximum 1/3 of the piece's length, with the width not exceeding half of the thickness (limited to 10-15 % of the pieces in a batch).	Admitted if the length does not exceed three times the width of the piece	Bark pocket and curly grain admitted if not altering the mechanical resistance of the piece. Some slight traces of rot are tolerated, and some non-through pin holes. Some traces of mistletoe. Blue stain can be tolerated.	Structural or construction material and general carpentry work. industrial packaging...For structural applications the pieces must comply with the NF B 52-001 norm.
GRADE 4 (former grade 3B)	Admitted without limitation in number and diameter		Heart and edge shakes admitted	Not admitted on pieces shorter than 3 m - admitted without length limitations on one side or two edges		Active pin holes, rots and dots are excluded	Boxes, regular packaging, pallets, ...

Reference: Centre Technique du Bois et de l'Ameublement (see CTBA - <http://www.ctba.fr>)