

## European grading rules for sawn beech (French rules)

BOULES	Grain	Knots	Red coloration	Splits	Other particularities		
F B-A	Straight- grained	Not accepted	Accepted if limited to 20 % of the board width		Accepted if limited to 30% of boards in a batch: intergrown sound knots, non-straight splits, bark pockets, sound dead knots. They will give rise to the usual volume reductions at the time of measurement. 70% of all boards in any batch must be free from any defects on one side.		
F B-AR	Definition as for FBA with no limits to red coloration, which must however be regular and not too dark.						
F B-1	Tolerance of light curve in grain	Intergrown sound knots accepted in up to 50% of the boards	Limited to 25% of the width of the board	Non-straight splits, bark pockets and deterioration will give rise to the usual volume reductions at the time of measurement. Only one of these defects is acceptable on any one board.	Accepted, as long as 50% of the boards remain clear		
F B-1R	Definition as for FB1 with no limits to red coloration, which must however be regular and not too dark.						
F B-2	Reasonable curve with slight presence of slope grain	Intergrown sound knots accepted in up to 70% of boards	Limited to 33% of the width of the board	Non-straight splits, bark pockets and deterioration due to fungal and insect attack are tolerated with volume reductions unless one board does not present more than two of these defects	Accepted, as long as 50% of the boards remain clear		
F B-2R	Definition as for FB2 with no limits to red coloration						

F B-3	Intergrown sound	All other defects are accepted with no limit on the
	knots accepted	diameter.
	with no limit on	
	the diameter	

SQUARE EDGED	Knots	Red heart	Other particularities			
F F-A	Not accepted	Not admitted	Bow tolerance 15 mm/m			
F F-AR (3-4 clear sides freshly sawn)	Definition as for FFA with no limits to red coloration. Red heart tolerated upon commercial agreement					
F F-1	On one side or edge 2 intergrown sound knots are accepted, limited to 25% of the pieces of the batch. These knots must not exceed 1/4 of the width of the piece or 20 mm	Not admitted	Bow tolerance 15 mm/m. All other defects or singularities on the other 3 sides are not admitted.			
F F-1R	Definition as for FF1 with no limits to red coloration					
F F-2	On each side and edge 3 intergrown sound knots are tolerated unless they are bigger than 1/3 of the width of the piece or 40 mm	Not admitted	Other defects are permitted except bark pockets, stain, rot, fungal attack, insect attack.  Bow tolerance 15 mm/m.			
F F-2	On each side and edge 3 intergrown sound knots are tolerated unless they are bigger than 1/3 of the width of the piece or 40 mm					

Reference: European Norm EN 975-1 "Sawn timber - Appearance grading of hardwoods - Part 1 (oak and beech)" adopted by the European Committee for Standardization (CEN) in 1995 (improved in 1999) and applied by national organisations (see http://www.cenorm.be/)