

European grading rules for sawn poplar

	Knots	Shakes	Heart traces	Wane	Rot or dote
Grade 1 A piece is classified as grade 1 when both sides are grade 1 or when one side is grade 1 and the opposite side is grade 2	Sound knots are excluded except if smaller than 8 mm	Edge shakes not exceeding 30 mm are permitted on each extremity	Excluded	Excluded	They are excluded, as well as damages due to insects
Grade 2 A piece is classified as grade 2 when both sides are grade 2 or when one side is grade 2 and the opposite side is grade 3	Small or medium sized, in limited number. Rotten or non-intergrown knots are excluded.	Edge shakes not exceeding 30 mm are permitted on each extremity	Admitted if straight	Admitted on 25% of the length but limited in width and thickness	They are excluded, as well as damages due to insects
Grade 3 A piece is classified as grade 3 when both sides are grade 3 or when one side is grade 3 and the opposite side is grade 4	Medium sized in limited number. Rotten or non-intergrown knots are excluded.	Edge shakes not exceeding 30 mm are permitted on each extremity	Admitted	Admitted on 25% of the length but limited in width and thickness	Traces of rot are permitted. Pin holes and other insect damages are excluded.
Grade 4 A piece is classified as grade 4 when both sides are grade 4	Knots size must be limited to 1/3 of the width of the piece. Rotten or non-intergrown knots are excluded.	Edge shakes not exceeding 50 mm are permitted on each extremity	Admitted without limitation	Admitted on 25% of the length but limited in width and thickness	Rot permitted. Pin holes and damages due to insects are excluded, except for non-active galleries.

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/>)