

Surface qualities

CLT surface quality Surface quality appearance with respect to product characteristics			
Characteristics	VI	IVI	NVI
Surface finish	sanded	sanded	≤ 10 % of the surface may not be sanded
Timber species	one single species	one single species	addition of other timber species allowed
Moisture content	≤ 11 %	≤ 15 %	≤ 15 %
Narrow side bonding	occasional open joints permitted ≤ 1 mm	occasional open joints permitted ≤ 2 mm	occasional open joints permitted ≤ 3 mm
Discolouration	slight discolouration permitted ≤ 1 %	slight discolouration permitted ≤ 3 %	permitted
Knots — sound	permitted	permitted	permitted
Knots — black	occasional occurrences permitted ≤ 15 mm Ø	permitted ≤ 30 mm Ø	permitted
Loose knots, knot holes	occasional occurrences permitted ≤ 10 mm Ø	permitted ≤ 20 mm Ø	permitted
Resin pockets	occasional occurrences permitted ≤ 5 x 50 mm	occasional occurrences permitted ≤ 10 x 90 mm	permitted
Bark ingrowths	occasional occurrences permitted	occasional occurrences permitted	permitted
Rough edges / wane	not permitted	not permitted	permitted ≤ 20 x 500 mm
Hartwood pith	occasional occurrences permitted ≤ 400 mm length	permitted	permitted
Cracks and gaps between lamella (at reference moisture of 11%)	occasional occurrences permitted ≤ 1 mm	occasional occurrences permitted ≤ 2 mm	occasional occurrences permitted ≤ 3 mm
Boreholes from inactive insect attack	not permitted	not permitted	occasional occurrences permitted
Quality of surface finish	occasional small defects permitted	occasional defects permitted	occasional defects permitted
Quality of end grain	occasional small defects permitted	occasional defects permitted	occasional defects permitted
Manual retreatment of end grains with sand paper	yes	no	no
Surface retreatment (plugs, fillers, strips, etc.)	permitted	permitted	permitted
Chamfer on L-panels in grain direction	yes	yes	no
Sanding scratches / sanding directions	Sanding marks on L-panels run in grain direction, on C-panels across grain direction.		
CNC cutting on visual quality (VI) surface	CNC cutting on visual quality (VI) surface will be carried out exclusively with milling and cutting tools that cause no soiling through chain oil.		
Crack formations	Crack formations and open joints caused by swelling and shrinking due to later equilibrium moisture in normal use status is wood specific and cannot be prevented.		
Validity	The quality requirements to the surfaces listed above are valid: • on delivery • for top and bottom surfaces only All end grains / edges are to be considered as NVI quality.		