

VISUAL PROPERTIES

Kerto products are produced from Nordic conifer veneers. An inherent characteristic of spruce is that the branches are located as star like clusters in a stem (knot ringlet) and therefore there may be frequent knots in a peeled veneer.

The sorting of the veneers in Kerto production is mainly based on the strength properties of the veneers, not on the visual properties. Visually sorted face veneers are possible although there will still be a degree of natural variation of the visual properties such as frequency of knots, colour of the wood and surface patterns in these sorted face veneers.

During peeling, small peeling cracks are formed in the veneer. The peeling cracks may become visible due to swelling or shrinkage caused by moisture variations, or sanding. Scarf-joints of the face veneers may be overlapping and therefore the joint may be slightly open. Due to moisture variations this may also occur later in the surface of sanded products.

NOTE. Light colour melamine adhesive is used in scarf-joints of the surface veneers on front side of the product. On reverse side the dark brown phenol resin adhesive is used (the same glue than in glue lines between veneers).

NOTE. Before you use Kerto products for applications with special visual quality requirements, we recommend contacting us first.

STANDARD FACE VENEERS

Standard face veneers used in Kerto-S, Kerto-Q and Kerto-Qp products meet the requirements given in Table 1. Distance between the scarf-joints of face veneers is 1,9 m or 2,5 m.

TABLE 1. PERMISSIBLE DEFECTS ON STANDARD FACE VENEERS.

Defect	Maximum number of defects/m ²	Maximum size
Sound knots, Ø mm	not limited	40
Dry / dead knots, Ø mm	15	30
Knot holes, Ø mm	4	30
Pitch pockets, Ø mm	2	40
Other defects (bark, inner bark...), Ø mm	3	35
Splits, (width*length) mm	3	3*800
Rot, blues tain, insect defects	not allowed	

Under 8mm defects are not taken into account.
Front side: light colour melamine adhesive is used in the face veneer scarf-joints.
Reverse side: dark brown phenol adhesive is used in the face veneer scarf-joints.

NOTE. In face veneers used in Kerto-T products, rot is not allowed, but other above-mentioned defects are allowed without limitations.

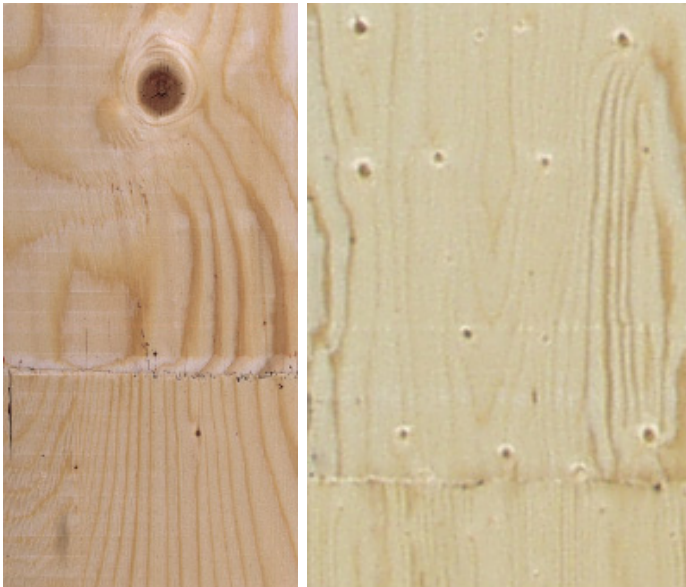


Figure 1. Front side, unsanded, light colour glue in scarf-joints.



Figure 2. Reverse side, unsanded and sanded, dark brown glue in scarf-joints.

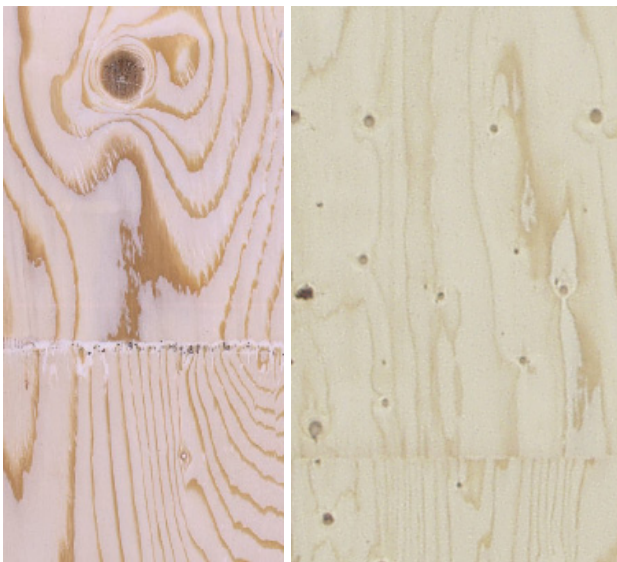


Figure 3. Front side, sanded, light colour glue in scarf-joints.

SORTED FACE VENEERS

Kerto products with sorted face veneers meet the requirements presented in Table 2.

Distance between the scarf-joints of face veneers is 1,9 m or 2,5 m.

TABLE 2. PERMISSIBLE DEFECTS ON SORTED FACE VENEERS.

Defect	Maximum number of defects/m ²	Maximum size
Sound knots, Ø mm	not limited	~30
Minimum distance of knots in a cluster of knots, mm		25
Knot holes, Ø mm	2	15
Pitch pockets, Ø mm	2	40
Other defects (bark, inner bark...), Ø mm	3	35
Splits, (leveys*pituus) mm	3	3*800
Rot, blue stain, insect defects	not allowed	
Under 8mm defects are not taken into account.		
Front side: light colour melamine adhesive is used in the face veneer scarf-joints.		
Reverse side: dark brown phenol adhesive is used in the face veneer scarf-joints.		



Figure 4. Sorted face veneers.

SANDING

Kerto products can have optical or calibrated sanding. Product label disappears from the surface when sanded. There are always some dark and/or light glue stains on the surface of an unsanded product. If the surface is to remain visible in the finished structure, the optical sanding is recommended to give the veneer surface a smooth and clean appearance. Optical sanding will reduce the thickness of the product about 1 mm / sanded surface and it can be made either 1- or 2-sided.

NOTE. Kerto products are bonded with high quality phenol resin adhesive which has a dark brown colour. If Kerto products are sanded the peeling cracks may become visible due to the glue penetrating into them.

Product thickness can be calibrated to a tighter than usual thickness tolerance by calibrated sanding. Calibrated sanding is always 2-sided. To reach the thickness tolerance, the face veneer may be sanded through which reveals the dark brown glue lines at least in part of the surface. Due to this calibrated sanding is not recommended on surfaces remaining visible in the finished structure or anywhere where the appearance of the product is essential.

NOTE. Calibrated thickness will be used in structural design of calibration sanded products.



Figure 5. Examples of sanded through face veneers on calibration sanded product.