Kerto® products can be further processed in the mill according to customer requests. Further processing is focal part of the customer service and supply chain. Processing in the mill saves time and minimizes waste on building site or in customer’s processes.

**OPTICAL OR CALIBRATED SANDING**

The visual appearance of the Kerto products can be improved by optical sanding. Optical sanding cleans and smoothens the surface by removing e.g. the glue stains. It can be made either one or two sided. In visible end use applications it must be notified, that on the front side of the panel or beam the scarf-joints of the surface veneer are glued with colorless glue, but on the bottom side darkbrown glue is used. Optical sanding reduces the thickness of the product on average 1 mm per sanded side. The structural design is made according to the sanded nominal thickness.

Calibrated sanding (thickness calibration) is always made twosided. The thickness is reduced on average 1,5 mm per sanded side, which must be notified in structural design. The thickness tolerance of the calibrated product is +/- 0,5 mm. In calibrated sanding the surface veneers are allowed to be sanded through revealing the dark glue line and thus the calibrated products are not recommended for visible applications as such without some opaque coating.

**EDGE PROFILING**

The long edges of Kerto panels can be profiled with half lap, easing, tongue and groove (TG2) or groove and groove profiles. Calibrating sanding is recommended for the profiled panels to ensure smooth joint between the panels. In table 1 and figure 2 are shown the edge profiles possible to machine in Lohja Kerto mill. Profiles can be done for panels which are 200 – 1820 mm wide and 2,0 – 24,5 meters long.

**Table 1. Dimensional limits for the edge profiles machined in Lohja Kerto mill.**

<table>
<thead>
<tr>
<th>Panel thickness</th>
<th>Profile depth</th>
<th>Profile width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easing (45°)</td>
<td>max. 45 mm</td>
<td>0 – 45 mm</td>
</tr>
<tr>
<td>Half lap</td>
<td>max. 60 mm</td>
<td>0 – 30 mm</td>
</tr>
<tr>
<td>T&amp;G or G&amp;G</td>
<td>27 – 75 mm</td>
<td>0 – 30 mm</td>
</tr>
</tbody>
</table>

**Figure 1.** Machined Kerto products in the mill waiting for the packaging and delivery to the customer.

**Figure 2.** Possible edge profiles on Kerto products from Lohja mill.
SPECIAL CUTTING

Panel or beam can be sawn to special shapes or diagonally to eg. tapered beams. Maximum product size in panel sawing is 1840 mm x 20000 mm.

CNC MACHINING

By CNC machining different kind of drillings, end sloping, holes and notches can be machined to beams. For machining a dwg-drawing in size 1:1 drawn with closed line is needed from each different type of machined beam.

COMBINED STRUCTURES

Kerto members can be used to combined structural members such as rib or box slabs or A-trusses. By using pre-fabricated structural members long spans are achieved and effectively built.

PROTECTIVE SURFACE TREATMENTS

By protective surface treatments the properties of Kerto LVL can be improved for example against weather exposure during the construction time. The surface treatments doesn’t affect the strength and stiffness properties of the products and they can be further treated eg. by painting or lacquering.

WeatherGuard moisture protection treated surface of Kerto rejects water and gives protection against the weather exposure during the building time. Swelling and other undesired moisture effects are clearly reduced compared to untreated product. The protection given by WeatherGuard is temporary and if end use application requires, the product should be further coated by usual protective treatments for wood.

MouldGuard mould protection treatment reduces clearly the risk of mould and blue stain compared to untreated Kerto LVL products. MouldGuard gives product a long term protection and is recommended for typical Service Class 2 conditions for example in roof structures, attics or in shelters and carages.

Figure 3. Kerto-S roof beam cut to special shape.

Figure 4. Manufacturing of a Kerto-Ripa box slab.

Figure 5. WeatherGuard moisture protection treated Kerto-S beam.