

TS3 staircase at Naikoon Contracting, Vancouver



In early January 2019, the first staircase was built using TS3 technology. The showcase project was built in Naikoon Contracting's new office building in North Vancouver.

The project

With the technologies of Timber Structures 3.0 Wood components are bonded on the face side, among other things. In this way, load-bearing directions can be produced. This enables the use of TS3 not only in floor slabs, but also in folded structures such as stairs. stairs, for example. The staircase at Naikoon Contracting consists of twenty individual cross-laminated timber components that were glued together on site. on the construction site. The two-flight staircase with an angle landing has 16 treads. The first flight is 2.8 meters long, the second is second measures 2.3 meters.

The construction

For the successful application of the TS3 technology the end faces of the components to be bonded must not be depressed or damaged and were impregnated with the TS3 pretreatment. The finished components were positioned on the and fasteners on the construction site. Subsequently all joints were sealed and finally bonded.

The challenges

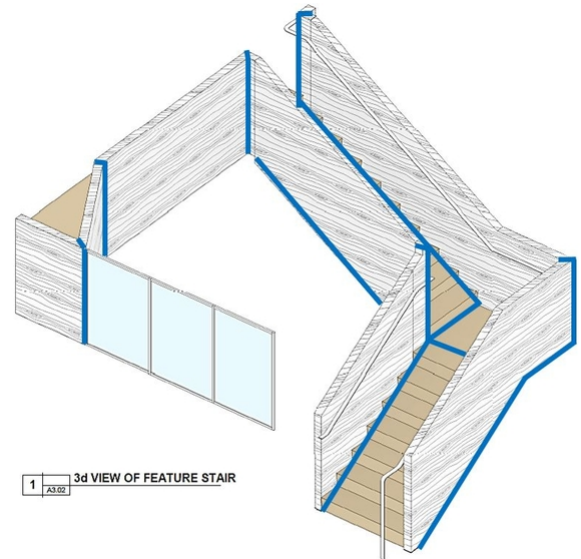
The accessibility for the grouting of the joints was in part difficult and could only be solved thanks to the flexible filler necks. Another major challenge was the sealing of the miter joints, so that no adhesive escaped from the joint.



The first staircase with TS3 technology

Construction data

- Cross laminated timber: 40 m²
- TS3 impregnation



Panel division

Client

Aspect Structural Engineers
Vancouver BC, Canada

Timber engineer

Naikoon Contracting
Vancouver BC, Canada