FINGER JOINTS

DEFINITION AND ROLE

Glued laminated joints (or finger joints) are products that generally consist of 3 strips of joined or unjoined timber strips, and are glued along their sides. They can consist of 2, 4, 5, 7, 9 or 11 layers. The outer layers are said to have an inside face and an outside face, the inner layers are called intermediary or median layers.

There are several types of products on the market consisting of three layers, including:

- KKK: Three joined layers, joined at the face
- DKK: Two joined layers and one massive layer on the face
- DKD: Two massive outer layers and one median joined layer
- AKA: Two massive premium outer layers sorted according to colour with a joined median layer Abbreviations used: K = Keilgezinkte Strip/Joined strip; D = Durchgehende Strip/Whole strip; A = premium

There are no standardised standard dimensions, however the most common dimensions are:

- Length: from 60 cm to 6 m
- Width in mm: 65; 75; 86; 95; 105; 115; 120; 125; 145
- Thickness in mm: 63; 72; 84; 96

STRESSES

Finger joints are mainly used to produce joinery. Moreover, finger joints that are in use can be subject to significant temperature and humidity variations. The glue-lines can be exposed to bad weather.

REQUIRED PROPERTIES

The finger joints must be dimensionally stable, and ensure robustness of finishing work. They must be able to accommodate mechanical assemblies without any risk of alteration over time.

PRINCIPLES OF IMPLEMENTATION

Finger joints are designed for the making of finished products. For sheltered structures, D3 and C3 glues are sufficient and, for structures exposed to bad weather, D4 glues are required.

USAGE CLASS

Depending on the use, the required usage class varies between 1 and 3.



Photo: Finger joints@ P. Martin, ATIBT

