



name of file: F_002

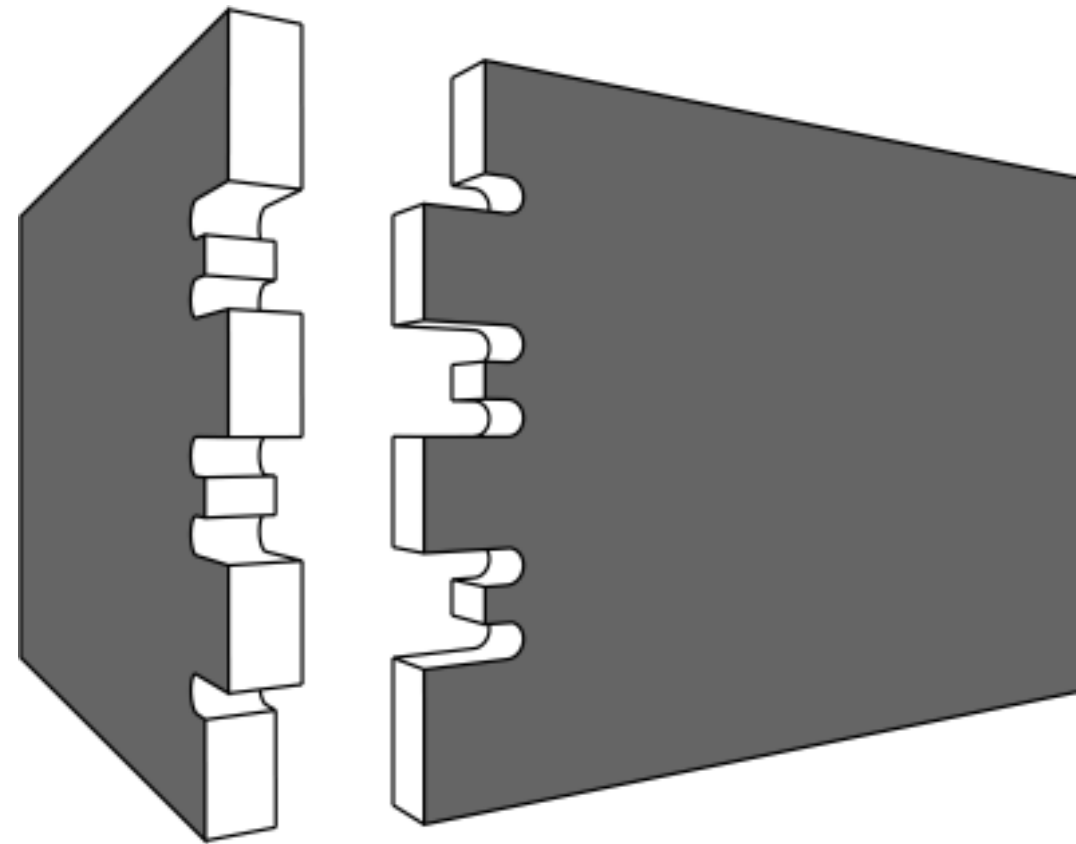
Finger Tenons

Due to the superior stability of finger tenons, it is hard to imagine traditional furniture construction without them.

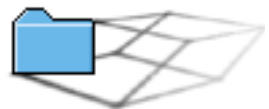
Finger Tenons are the simplest of the CNC-compatible tenons. They differ from their traditional models - the European finger tenon or the Japanese “Go-mai-hozo-gata” - through the deeper drawn cuts at the inner corners of the tenon base. The thus created jugged out tenons are characteristic for CNC-compatible manufacturing and give the joint its individual character. The width of the tenons should be at least three times the diameter of the router bit.

Example of application

→ Zoom-Table



→ to the data files

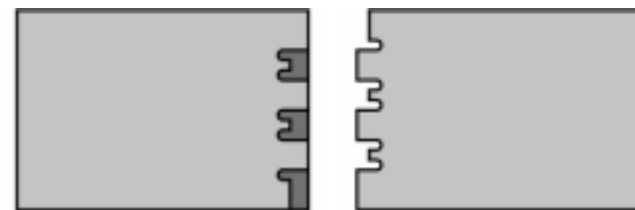
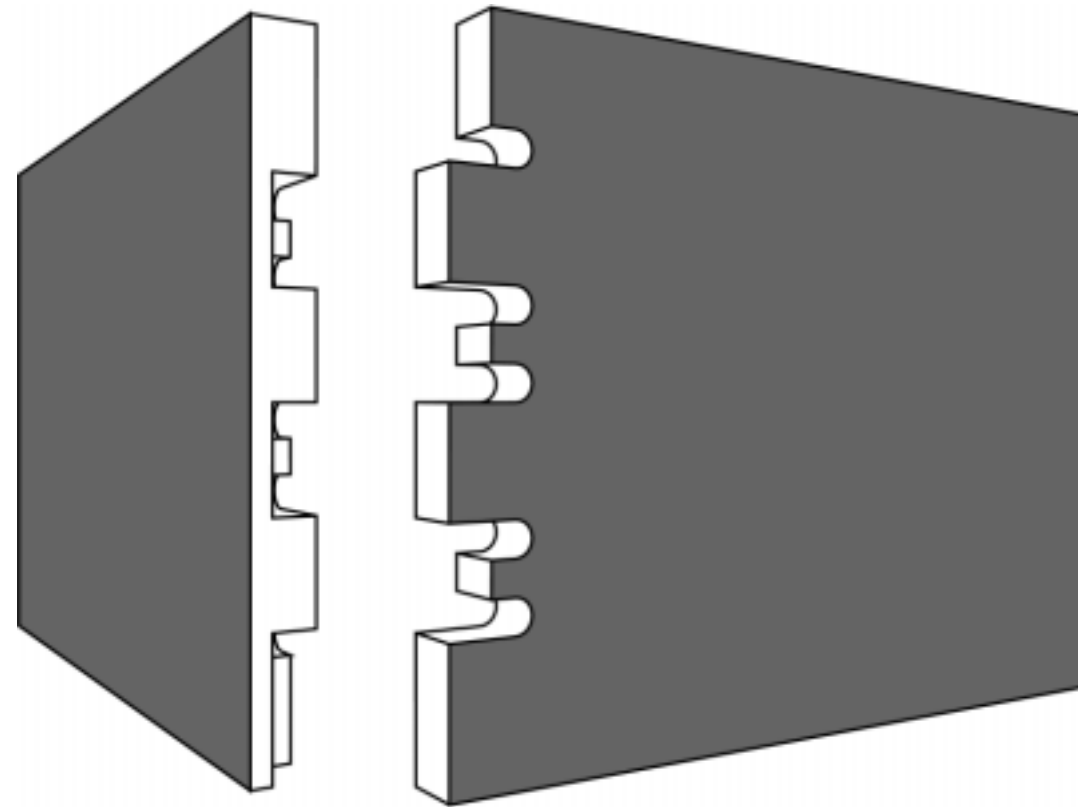




Lapped Finger Tenons

The Finger Tenon Joint can also be executed as a lapped variant. The Lapped Finger Tenons are used wherever one of the two surfaces must not be interrupted by the joint for aesthetical or functional reasons, for example, drawer fronts or cupboard sides.

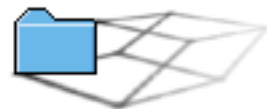
Like all other tenons, the lapped finger tenons can be made using solid wood or various board materials like multiplex plywood or MDF.



Examples of application

- Zoom-Table
- Chest of drawers

→ to the data files





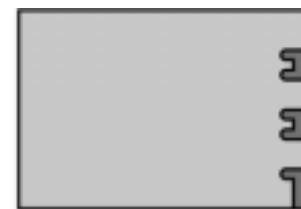
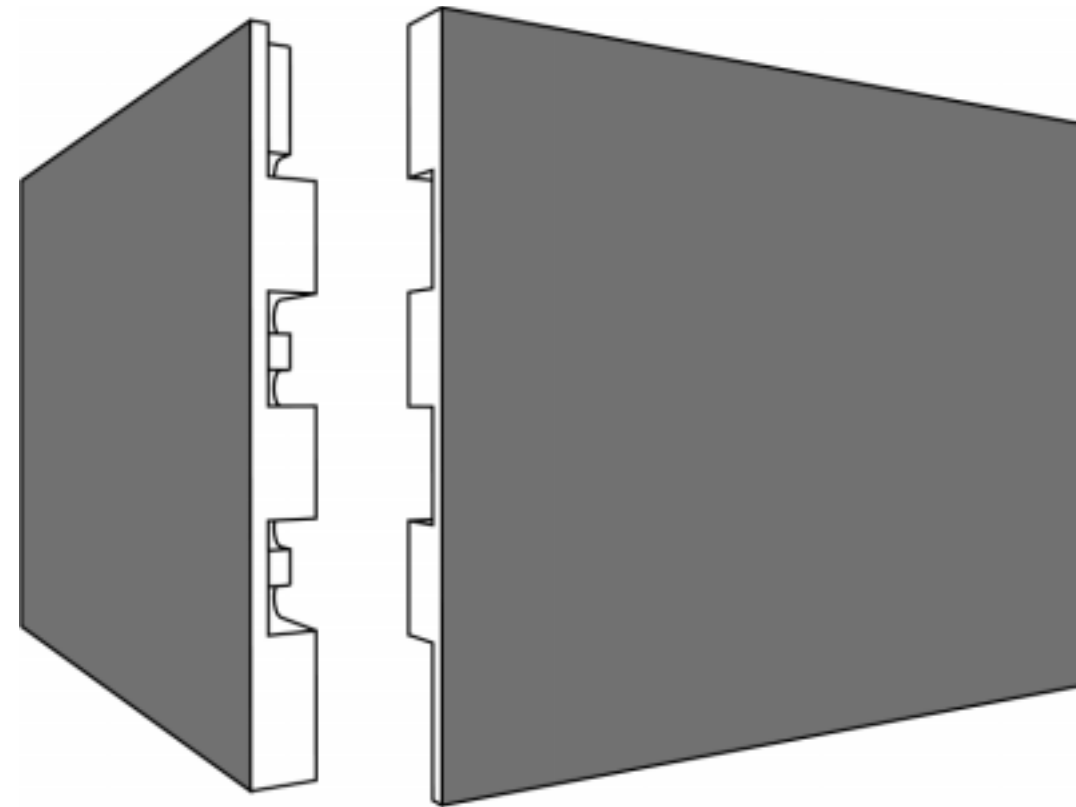
name of file: F_007

Secret Finger Tenons

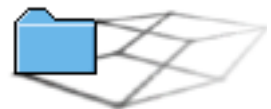
The Secret Finger Tenon Joint hides the tenons in its interior from curious glances. As opposed to the traditional secret tenon mitre joint, the CNC-compatible version leads to a rabbet at the front edge. Secret joints are traditionally looked upon as the height of a cabinet-maker's craftsmanship. Sweat and skill of the craftsman are hidden from the eyes of the world in the interior of the joint. It is said: Out of awe for his material, the cabinet-maker humbly conceals his own efforts in making a piece of furniture.

Example of application

→ Chest of drawers



→ to the data files



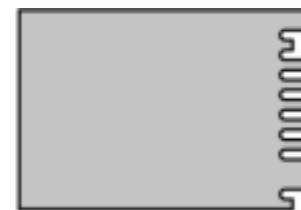
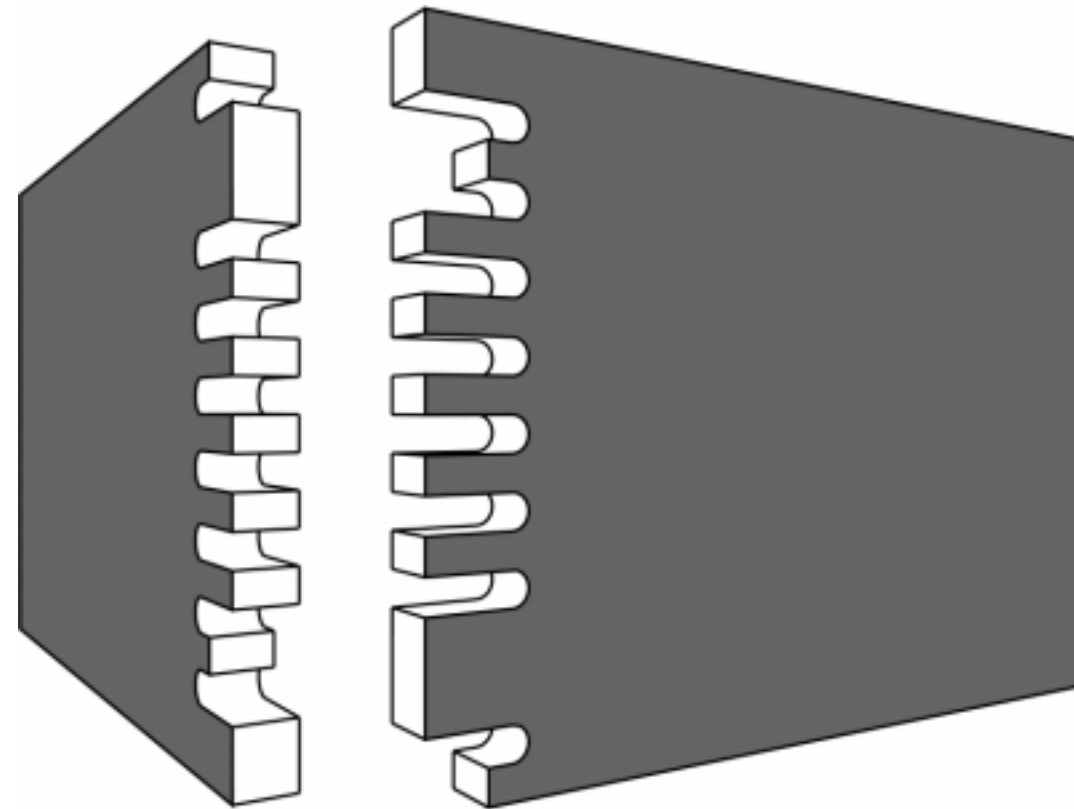


name of file: F_001

Fingertip Tenons

The Fingertip Tenons are slenderer than the Finger Tenons. Ideally the width of the tenons equals the diameter of the router bit. In order to avoid that the tenons slip through, a special positioning tenon is placed at either end of each row of tenons. In the case of broader rows of tenons, additional positioning tenons can be inserted.

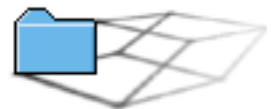
Due to the greater number of tenons for an equal width, the Fingertip Tenons, as opposed to the Finger Tenons, have a higher friction tight which leads to a higher durability of the joint.



Example of application

→ C...Stool

→ to the data files

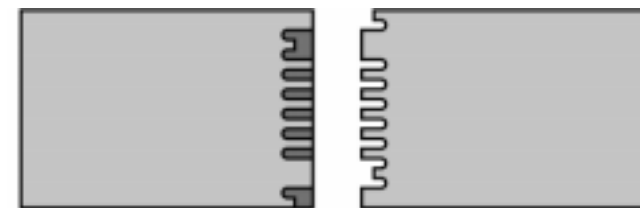
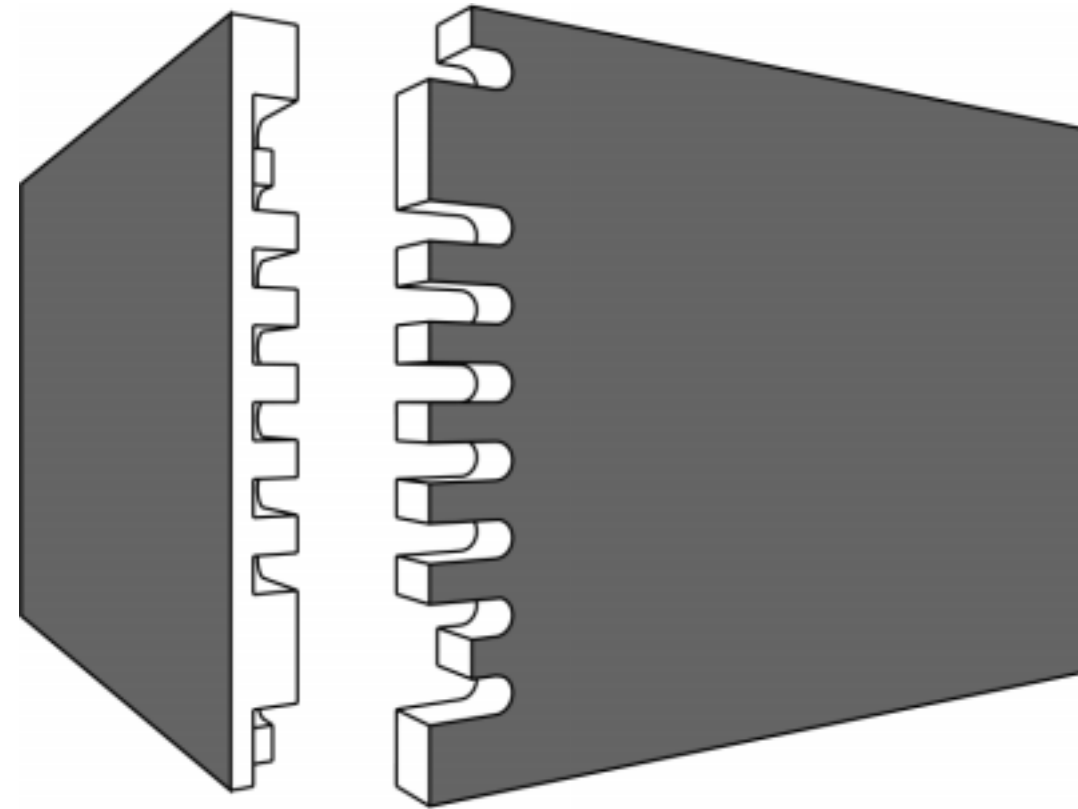




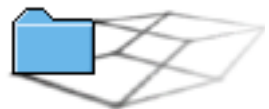
Lapped Fingertip Tenons

The lapped version of the Fingertip Tenons is used wherever one of the two surfaces must not be interrupted by the joint for aesthetical or functional reasons.

Depending on the degree of precision according to which the joint has been machined, we get a perfect fit joint that is durable simply by friction tight and can be detached at any time, or a joint that easily comes undone and needs to be glued. The exactness of the fit depends also on the correct tool, as well as feed and the depth of the Z-step.



→ to the data files

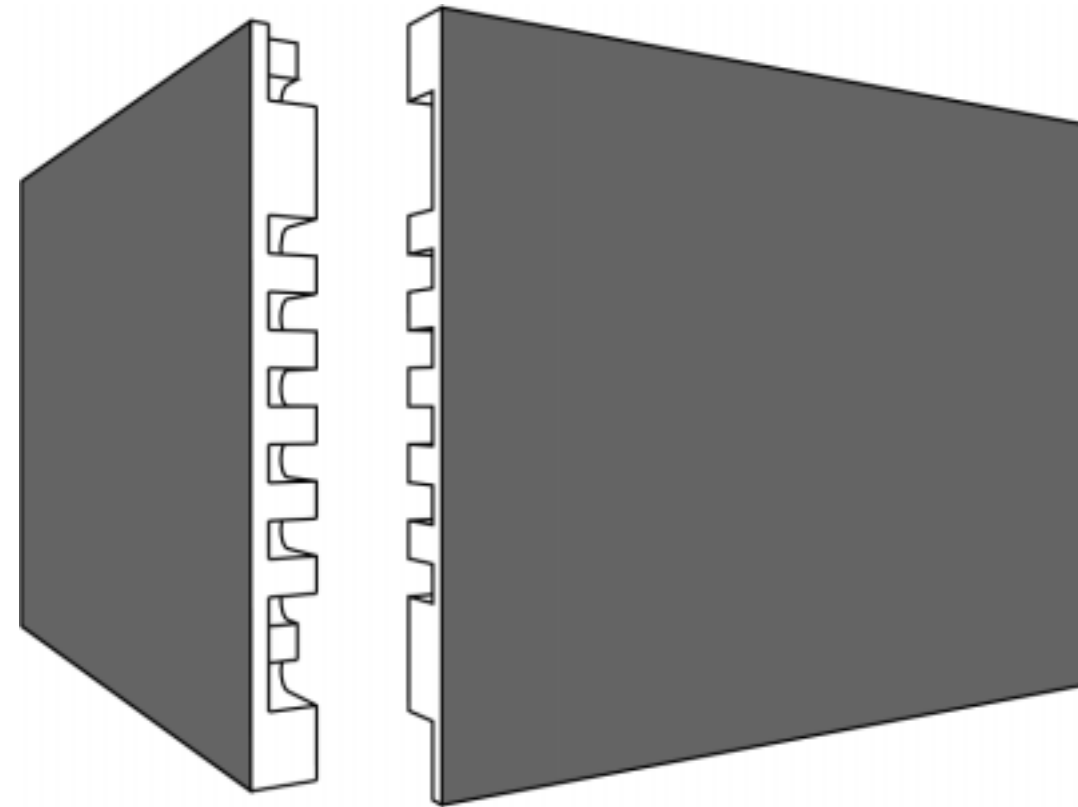




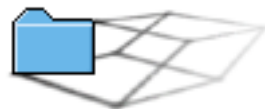
name of file: F_006

Secret Fingertip Tenons

The secret version of the Fingertip Tenons Joint leads to a rabbet at the front edge of the assembled joint. From a design-oriented viewpoint, this rabbet is an interesting design detail on furniture. For traditional wood and furniture construction the rule was not to let a joint show, however complicated its execution might have been. But today, in the age of industrial furniture construction with its invisible connectors in the form of dowels and lamellos, times have changed. The demonstratively shown joints are a sign for the quality of furniture made by a craftsman.



→ to the data files



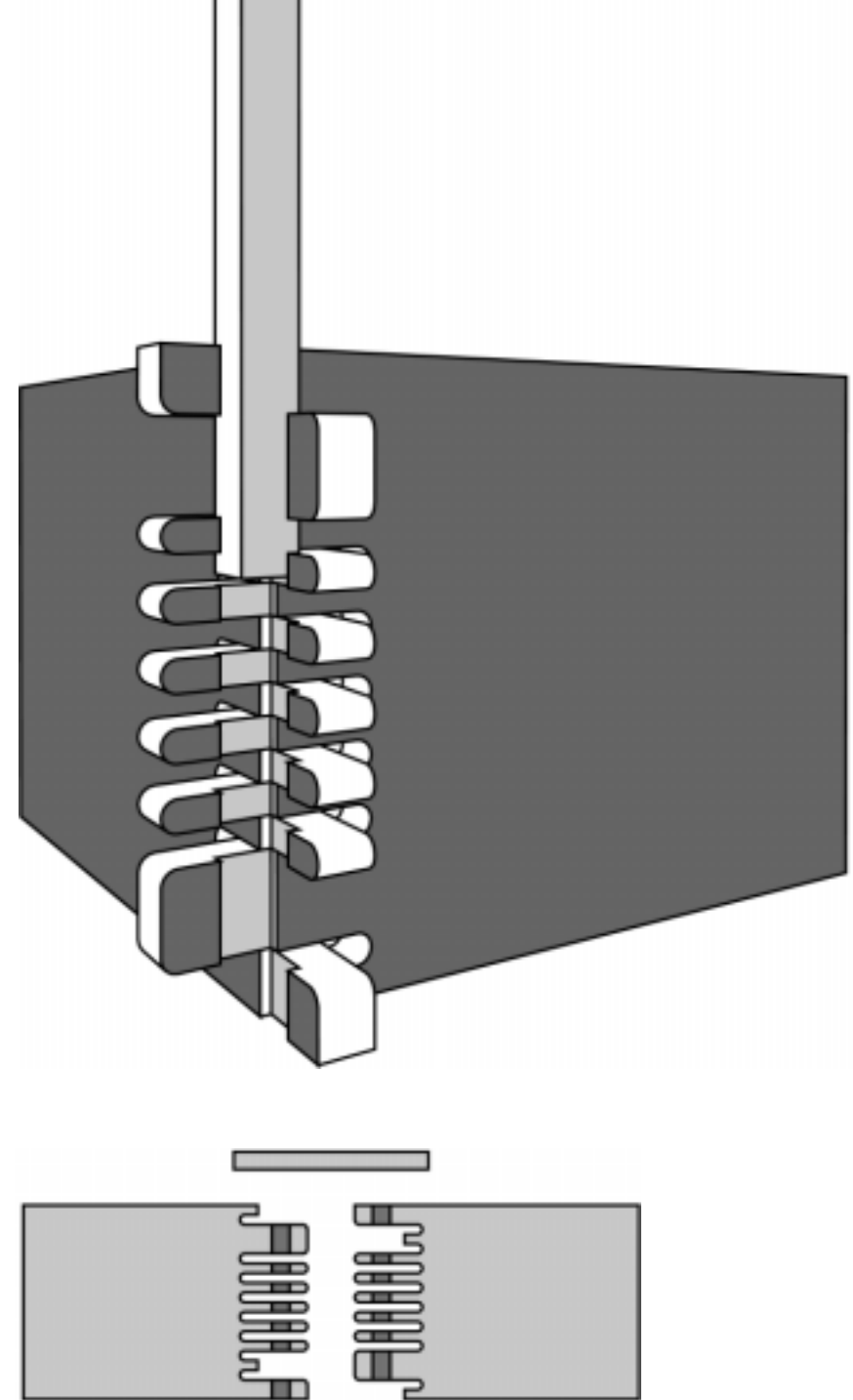


name of file: F_005

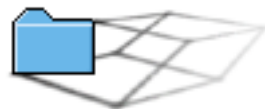
Fingertip Tenons with Key

A special form of the Fingertip Tenon is the variant with key. Its characteristic are the prolonged tenons that have a groove on the outside which perpendicular runs across the tenons. After assembling the joint, a key with a square end-grain cutting is inserted into the groove and thus secures it against tension.

There is no direct model for the Fingertip Tenons with Key. Ideas came from decorative forms of various corner locks, where surpassing tenons are employed as decorative elements.



→ to the data files

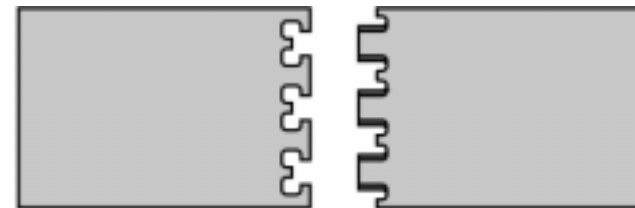
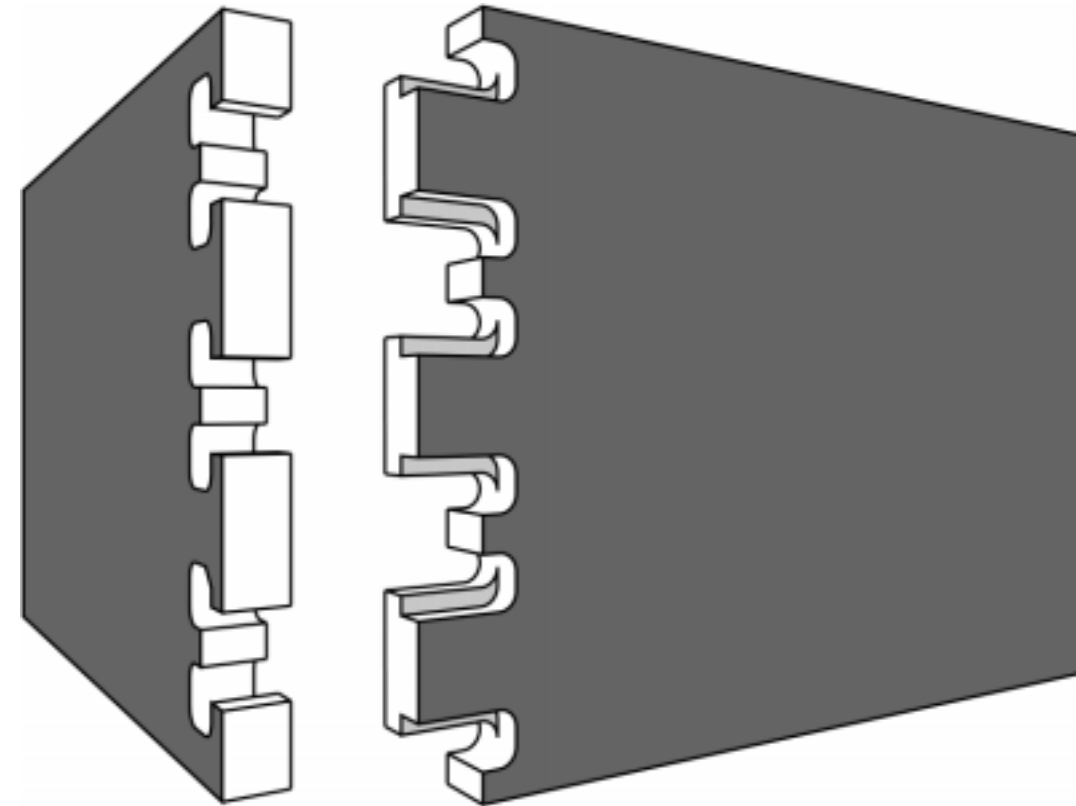




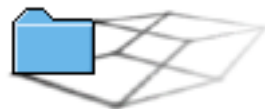
name of file: H_001

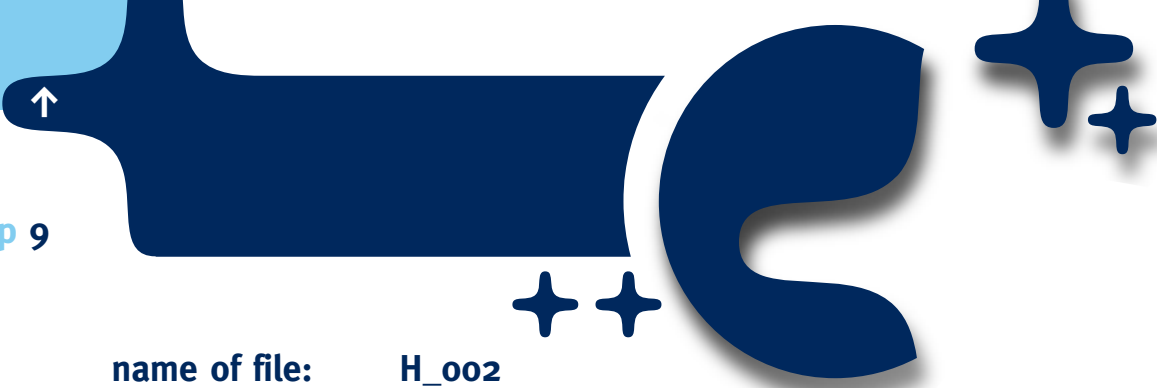
Hammer Tenons

Similar to the dovetail tenon joint, a characteristic of the Hammer Tenons is the fact that it withstands tension in one direction even without glue. This is not achieved through trapeze-shaped dovetails, but through tenons that are shouldered in their width, so-called Hammer Tenons. The best tensile strength of the joint is given when the thickness of the inner Hammer Tenon equals half the thickness of the board. A stop in the centre of the tenon base prevents the tenons from slipping through. The Hammer Tenons can be made using solid wood as well as various board materials or three-layer boards.



→ to the data files

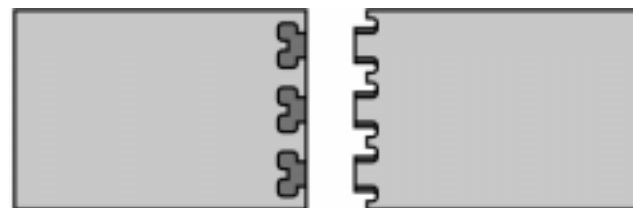
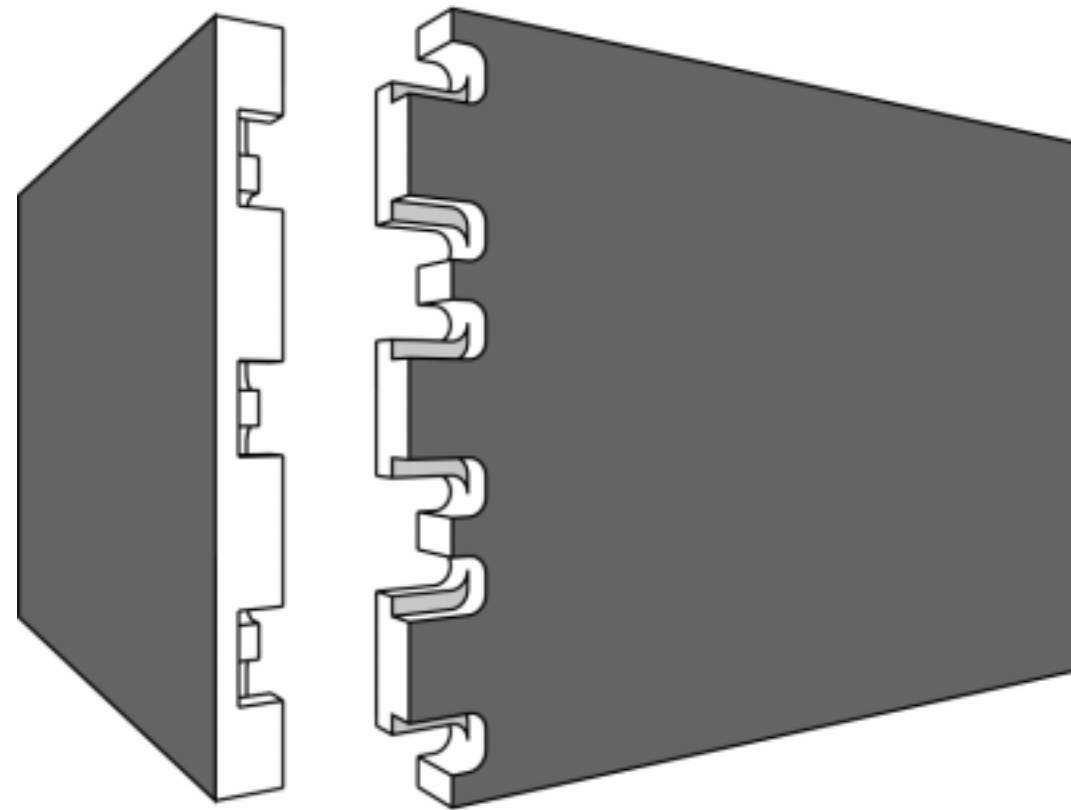




name of file: H_002

Lapped Hammer Tenons

Like most tenon joints, the Hammer Tenons can also be made as a lapped version. As the Lapped Hammer Tenons are durable against tension in one direction even without glue, as opposed to the Finger or Fingertip Tenons, there are particularly suitable for drawers when the front should not be interrupted for design reasons. The strength of the rabbet that covers the hammer tenons should be between $\frac{1}{4}$ and $\frac{1}{3}$ of the thickness of the material. If the sides are joined with the use of hammer tenons, they prevent a warping of the surface.



→ to the data files

