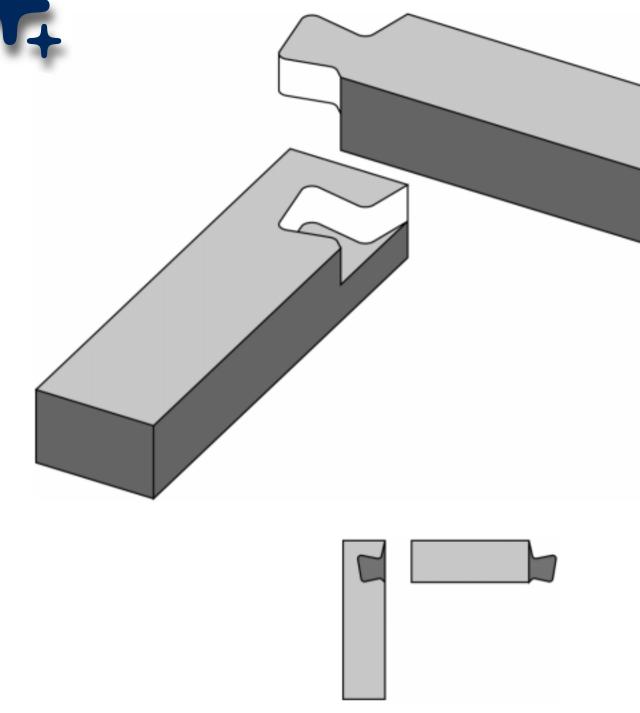


Halved Dovetail Corner

Scarf joints are next to tenon joints among the most frequently used joints in wood and furniture construction. While traditional scarf joints are considered to be not very durable, the technical qualities of CNC-compatible joinnts have been decidedly improved.

The halved dovetail corner is a corner joint that resists tensile forces. The geometry of the asymmetrical dovetail is decisive for the tensile strength. However, it is exactly this asymmetry of the dovetail that frequently seems to render the use of this joint problematic from a design viewpoint.



Example of application

→ Upright furniture

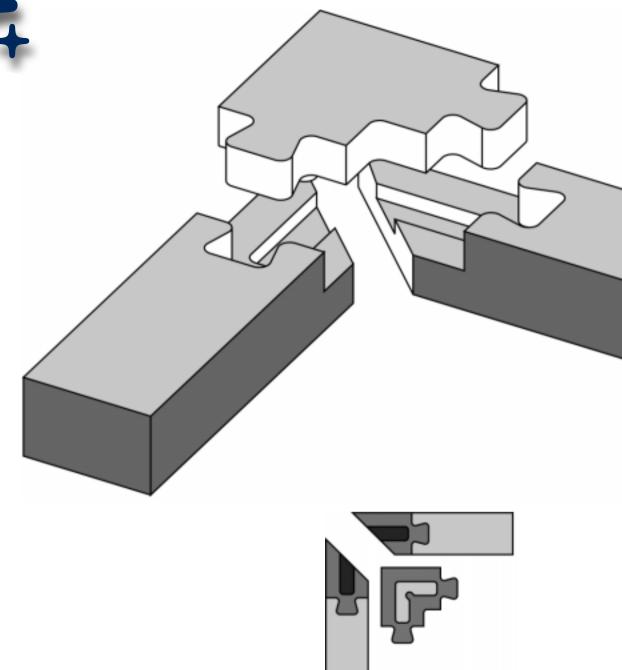






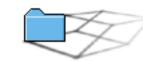
Dovetail Key Corner

For the Dovetail Key Corner, the framing timbers are joint with a shaped part, the dovetail key. The dovetails of the dovetail key take on the tensile stress and the mortised tenon on the underside of the key guarantees the exactness of the angle. The joint does not have to be right-angled, this type of corner joint can be used for any angle. The thickness of the key should be at most half the thickness of the framing timbers. Suitable materials for the corner key are multiplex plywood, acrylic glass or aluminium. Depending on the choice of material, the corner key will show more or less.



Example of application

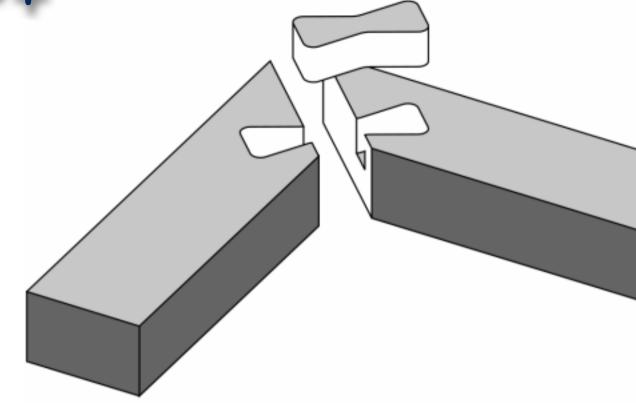
→ C...Frame and Panel

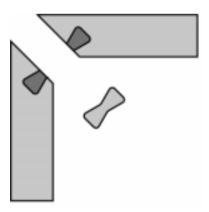




Mitre Joint with Dovetail Key

Today, frame corners are mostly joined with tongues, tenons or dowels that are suitable for machine processing. The dovetail keys have been completely forgotten, even though they have been used extensively in Europe as well in Japan as the "Chi-giri-iri-o-dome-tsugi". Like the traditional models, the Mitre Joint with Dovetail Key is held together by the dovetail key. The framing timbers are tightly wedged together. The dovetail key can be specially emphasised by the use of different woods or materials.





→ to the data files



Example of application

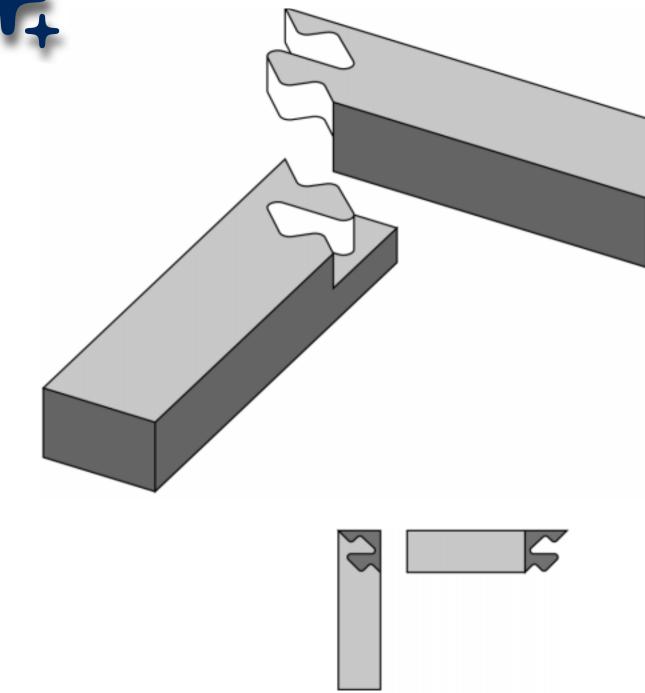
→ Side-Table



Jigsaw Mitre Joint

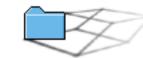
Corner joints with mitred framing timbers are considered to be particularly harmonious from a design viewpoint. From a technical viewpoint, however, the traditional mitred frame joints count among the "weak" wood joints.

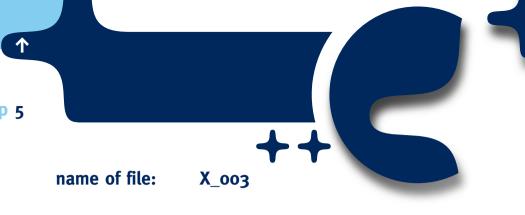
Like the dovetail corner scarf, the Jigsaw Mitre Joint distinguishes itself through its good technical qualities. The geometry of the two opposing shaped tenons, whose lines run parallel either to the frame or to the mitre, guarantees tensile strength and at the same time the harmony of the joint.



Example of application

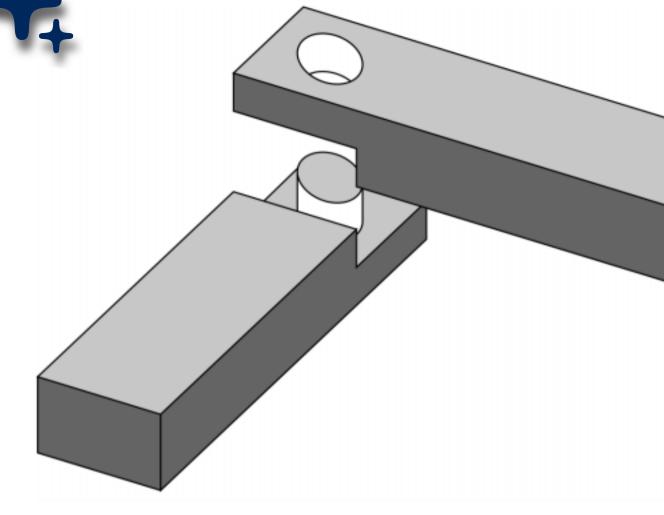
→ Frame-Shelf





Halving with Elliptical Tenon.

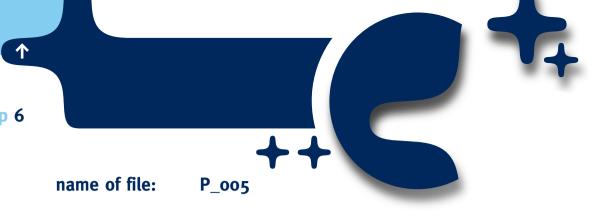
A shaped tenon, here in the shape of an ellipse, can be added to a common halving to improve its tensile strength. To avoid shearing of the tenon, its geometry needs to be chosen so that it uses the maximum fibre length possible. An open or a blind version can be chosen for the tenon. Like with all frame joints, the correct choice of the framing timber is of vital importance for the quality of the joint. To avoid an opening of the joint, the main direction of shrinkage of the wood must not correspond with the width of the framing timber.



Example of application

→ C...Frame and Panel





Double Jigsaw-Hook Corner

The Double Jigsaw-Hook Corner is a decorative corner joint with tensile strength. The hook that is fitted to the cross bar needs to be equipped with sufficient projecting wood to enable it to withstand the tensile stress. The hook at the cross bar also secures the joint against shifting sideways. The jigsaw tenon can take on a multitude of shapes, geometric, organic, or floral depending on to where it is applied.

Like for all frame joints, it is important that the width of the framing timbers does not surpass 10 cm.

