

WOODY

TIMBER CONNECTOR FOR WALLS, FLOORS AND ROOFS

TIMBER'S ORIGINALITY

Connector for fast and precise assembly of prefabricated walls, floors or roofs made of TIMBER FRAME or CLT. The 28 mm deep dovetail allows a tolerance unachievable with metal plate systems.

STANDARD GEOMETRY

Milling on the timber element is easy to implement in the CAD/CAM drawing and is performed with standard CNC milling cutters (cylindrical or 15° dovetail milling cutter). The main CAD/CAM software have special macros for automated drawing.

NO ERRORS

Pre-holes on the timber element allow precise installation of the connector without the need to take measurements. The symmetrical geometry of the connectors avoids installation errors.

INSTALLATION

The connectors can be installed on any timber surface. In the case of installation on the side surface of the framed wall, the connector can be installed directly above the OSB, gypsum fibre or multi-layer timber panel.



USA, Canada and more design values available online.



VIDEO



DESIGN
REGISTERED

SERVICE CLASS

SC1

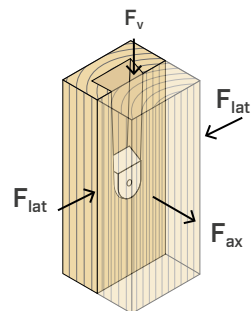
SC2

MATERIAL



multilayer timber

EXTERNAL LOADS



VIDEO

Scan the QR Code and watch the video on our YouTube channel



FIELDS OF USE

Assembly of walls, floors or roofs with TIMBER FRAME or CLT or LVL panels. It is also ideal for the fast and precise installation of stairs, façades or other non-structural components.

Can be applied to:

- TIMBER FRAME
- CLT, LVL
- solid timber or glulam components



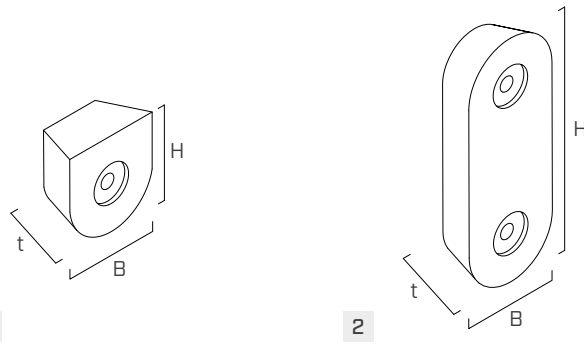
SLENDER STRUCTURES

In the configuration with open milling, installation on timber components (TIMBER FRAME or CLT) with a thickness of 100 mm is possible.

CLT

Also ideal for speeding up the installation of CLT walls, floors, roofs or stairs. The WOODY165 connector can be assembled in a horizontal position to fit small thickness values.

CODES AND DIMENSIONS

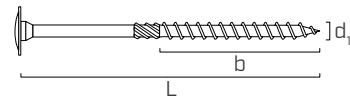


CODE	B [mm]	H [mm]	t [mm]	B [in]	H [in]	t [in]	n _{screw} [pcs]	pcs
1 WOODY65	65	65	28	2 9/16	2 9/16	1 1/8	1	1
2 WOODY165	65	160	28	2 9/16	6 1/2	1 1/8	2	1

FASTENERS

TBS – flange head screw

CODE	d ₁ [mm]	L [mm]	b [mm]	TX	pcs
TBS880	8	80	52	TX 40	50
TBS10100	10	100	52	TX 50	50

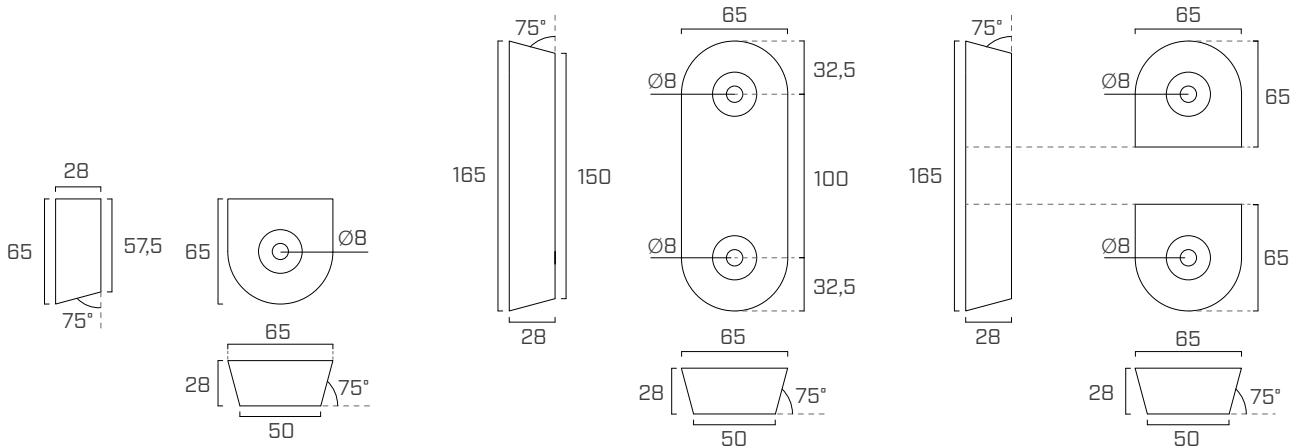


WOODY connectors can be used indiscriminately with the screws indicated in the table.

GEOMETRY

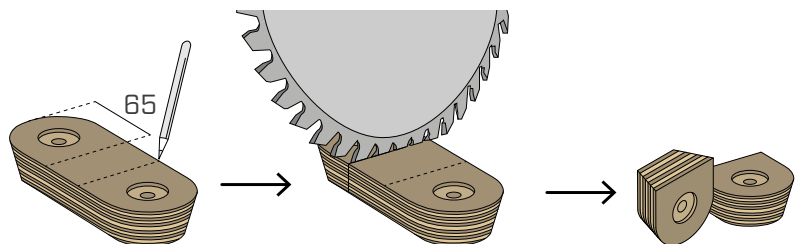
WOODY65

WOODY165



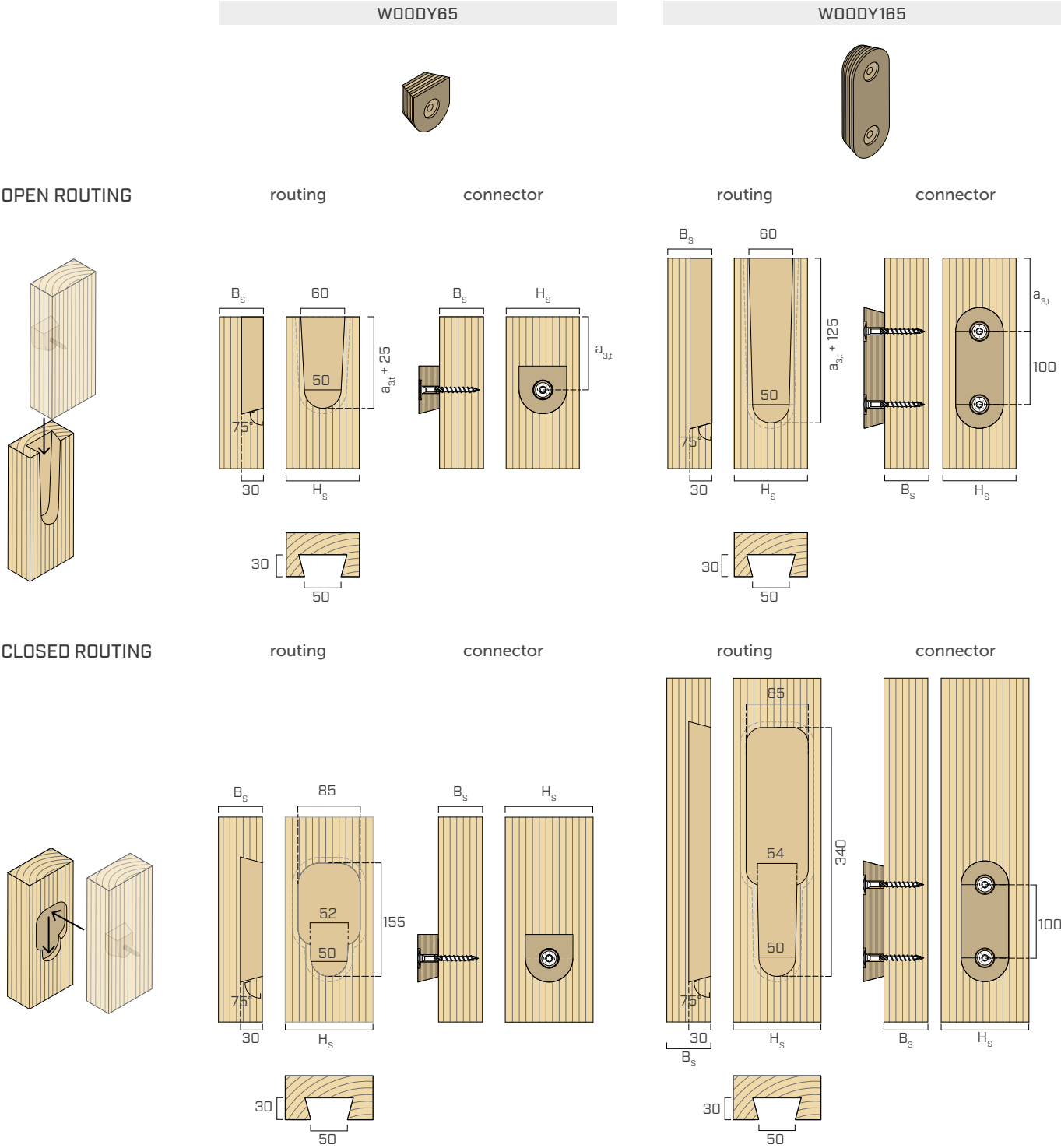
ONE CUT, TWO CONNECTORS: FROM WOODY165 TO WOODY65

The WOODY165 connector can be cut to obtain two WOODY65 connectors. This makes it possible to stock a single product and choose later which format to use.



INSTALLATION

The geometry of the routing on the element to be fastened can be chosen as required. A non-binding geometry is shown, produced by means of a dovetail milling cutter with a 15° inclination and a 3-axis CNC machine. Alternatively, a cylindrical milling cutter can be used with a 5-axis CNC machine. An open routing cut with top-down installation or a closed routing cut with side-down installation is possible. Leading CAD/CAM software have automated macros for routing and pre-drilling for screws.

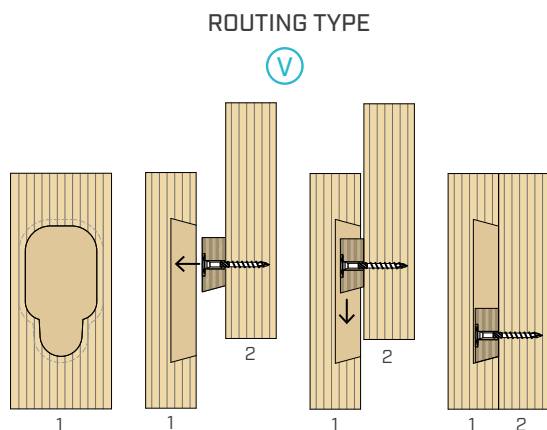


MINIMUM DISTANCES AND DIMENSIONS

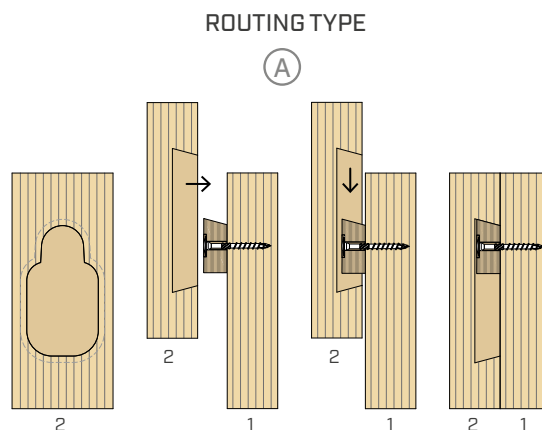
CODE	$a_{3,t}$	$B_{s,min}$	$H_{s,min}$	
			open routing	closed routing
	[mm]	[mm]	[mm]	[mm]
WOODY65	100	60	100	120
WOODY165	100	60	100	120

MILLING OPTIONS

The routing on the element to be fastened can be positioned in two ways depending on the assembly sequence.



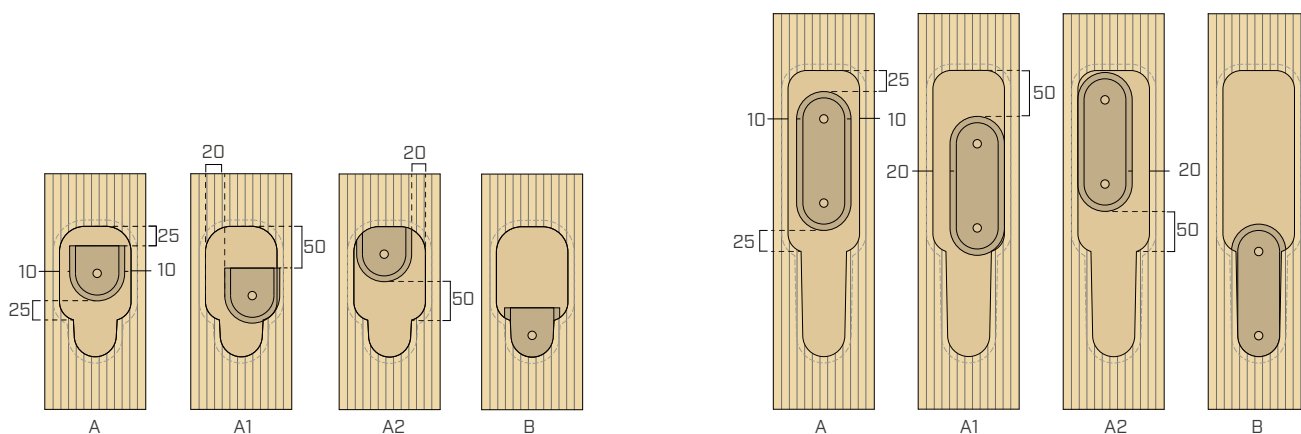
In the "V"-type routing, the seat for the connector is positioned at the bottom. The first wall to be installed (1) is the one with the routing, while the wall with the connector (2) is installed later.



In the "A" type routing, the seat for the connector is positioned at the top. The first wall to be installed (1) is the one with the connector while the wall with the routing (2) is installed later.

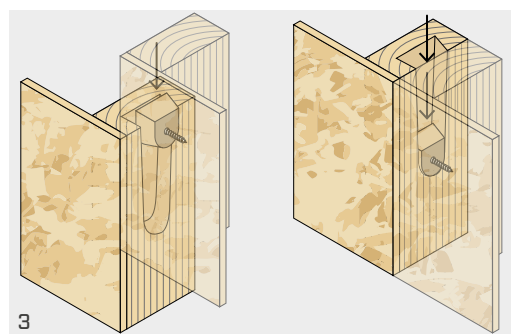
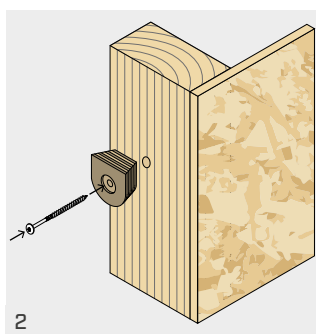
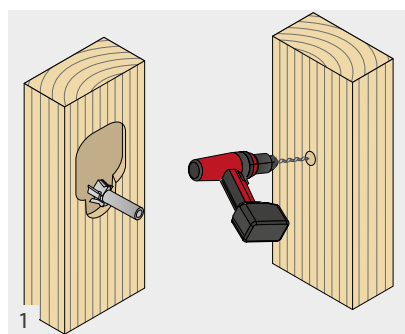
TOLERANCES

The routing geometry proposed here allows a wide installation tolerance: ± 10 mm horizontally and ± 25 mm vertically.



- A represents the connector inserted in the centre position of the routing
- A1 and A2 represent two possible positions during installation, in which tolerances are fully utilised
- B is the end position of the connector

MOUNTING



Carry out routing of the element to be fastened and pre-drilling hole with $\varnothing 5$ holes on the element where the connector will be installed. Leading CAD/CAM software have automated macros for routing and pre-drilling for screws. Assemble the connector by installing it at the pre-holes, which act as tracking elements.

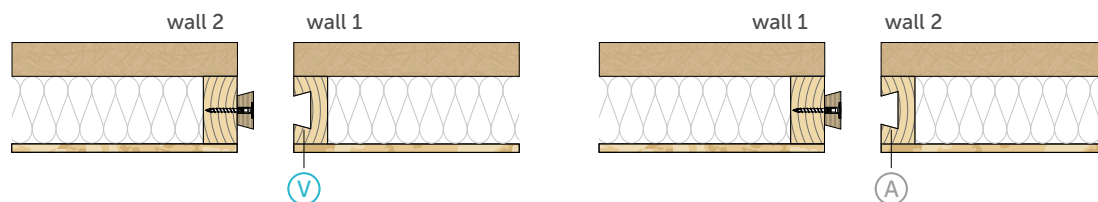
At the construction site, it is sufficient to install the walls, taking care to insert the connectors correctly into the grooves. The dovetail shape guides the walls into the correct position and allows the gap to be closed.

APPLICATION EXAMPLES

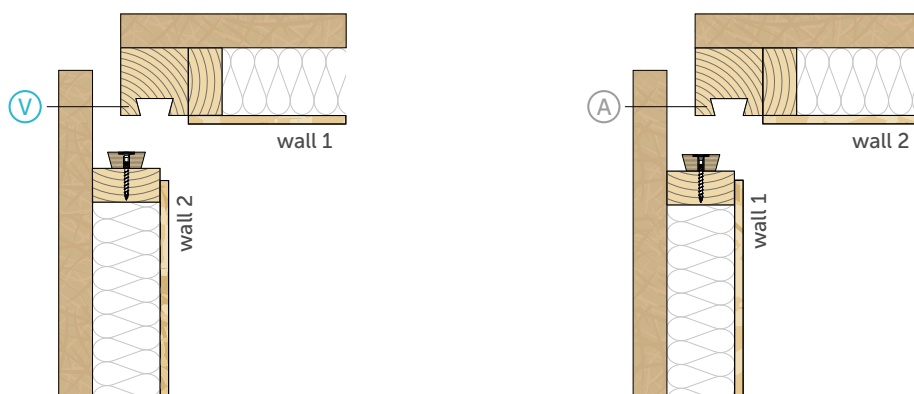
Here are some application examples for the most common geometries. All other geometries can be executed by applying the same principles, both for TIMBER FRAME and CLT walls.

The type V or type A routing determines the installation sequence of the walls. In the pictures, wall 1 is the one installed first, while wall 2 is installed later.

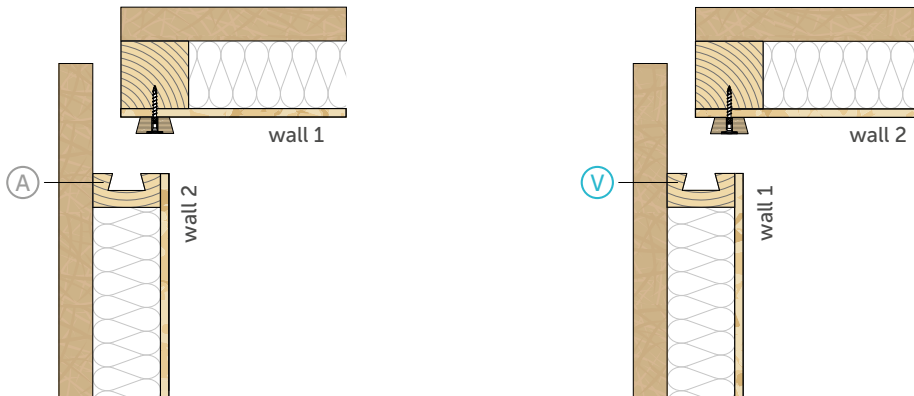
LINEAR JOINT



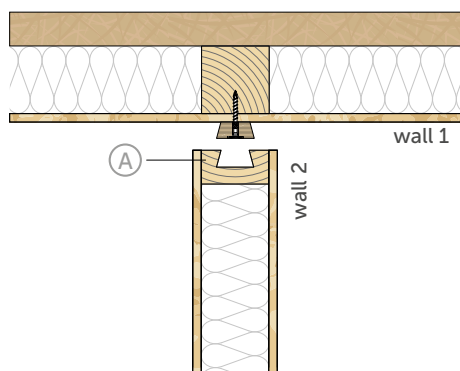
90° JOINT - CONNECTOR INSTALLED IN THE WALL THICKNESS



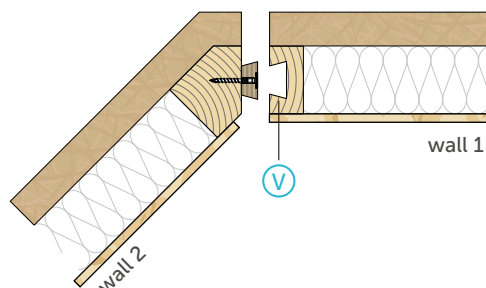
90° JOINT - CONNECTOR INSTALLED ON THE WALL SIDE



T-SHAPED JOINT



INCLINED JOINT



In the case of a connector installed on the side of the wall, no additional shim elements are required; the connector can be installed directly on the surface of the cladding board (OSB, gypsum fibreboard or plasterboard).