

Atlas wood connector

The node connection for beam suspension



Can be used in almost all fields of timber construction

The only hook connection that can be completely prefabricated, enabling quick and simple connections on site similarly to a conventional hook connector. Atlas wood connectors are used in nearly all areas of wood construction, irrespective of the wood's grain direction, and save the user a great number of additional connection means. What is unique here is that a fixing screw is screwed into the Atlas wood connector from above, so that the components can be braced against each other. In addition, the Atlas consists of two identical parts that can be slid inside each other without restraint and smoothly, which is a great advantage during installation work.

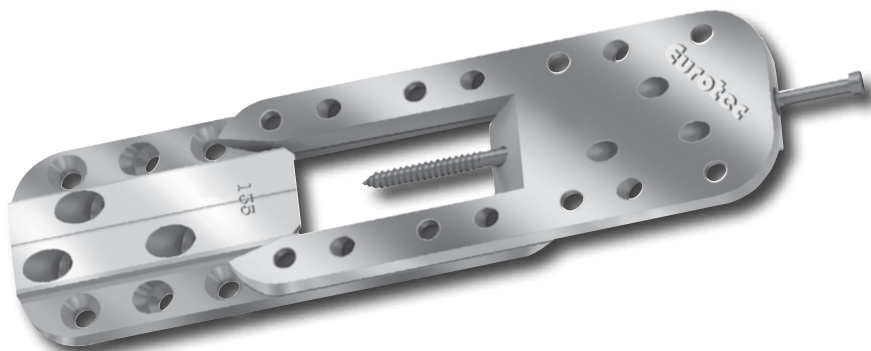
The fixing screw that is used forms these two parts of the Atlas wood connector into a hook connector and at the same time is security against unintentional loosening of the connector.

The connection that is made in this way can be statically loaded in four directions with high tested values. Installation can therefore be both visible (for broad root with chamfer connections) and hidden (milled recess).

To allow problem-free installation, every system pack includes all system screws and the matching DuoBit, together with assembly instructions.



Atlas wood connector

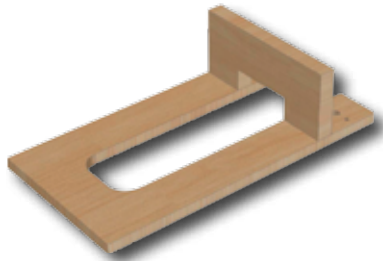


Art. no.	Name	PU	Included in delivery
30036	Atlas HF 70	20 (= 10 connectors)	120 fully threaded screws TX15 - 4,2 x 60 mm, blue galvanised 10 fixing screws TX15 - 4,2 x 50 mm, blue galvanised Assembly instructions; 1 DUO-bit TX 15
30056	Atlas HF 100	20 (= 10 connectors)	160 fully threaded screws TX20 - 5,0 x 80 mm, blue galvanised 10 fixing screws TX20 - 4,8 x 80 mm, blue galvanised Assembly instructions; 1 DUO-bit TX 20
30076	Atlas HF 135	20 (= 10 connectors)	220 fully threaded screws TX20 - 5,0 x 80 mm, blue galvanised 10 fixing screws TX20 - 4,8 x 120 mm, blue galvanised Assembly instructions; 1 DUO-bit TX 20
30096	Atlas HF 170	20 (= 10 connectors)	280 fully threaded screws TX20 - 5,0 x 80 mm, blue galvanised 10 fixing screws TX20 - 4,8 x 120 mm, blue galvanised Assembly instructions; 1 DUO-bit TX 20
30116	Atlas HF 200	12 (= 6 connectors)	144 fully threaded screws TX25 - 6,0 x 100 mm, blue galvanised 6 fixing screws TX25 - 6,3 x 180 mm, blue galvanised Assembly instructions; 1 DUO-bit TX 25

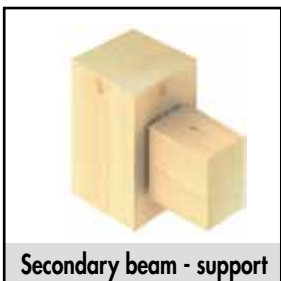
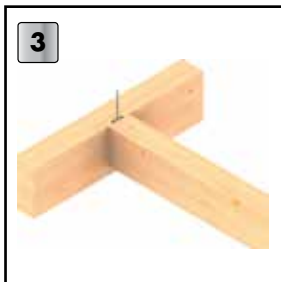
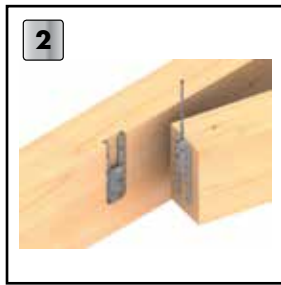
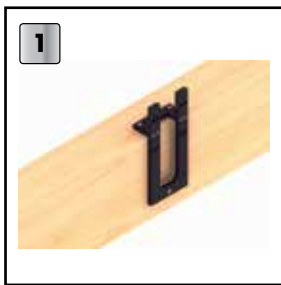
Art. no.	Name	for	Included in delivery
29606	Template set HFSS 70	Atlas HF 70	1 milling and assembling jig with stopper HFS 70 1 milling cutter with thrust ring HFF 70 4 fully threaded screws TX15 - 4,0 x 60 mm, blue galvanised 2 hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm Assembly instructions
29161	Template set HFSS 100	Atlas HF 100 Atlas HF 135 Atlas HF 170	1 milling and assembling jig with stopper HFS 100 1 milling cutter with thrust ring HFF 100 4 fully threaded screws TX20 - 5,0 x 40 mm, blue galvanised 2 hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm Assembly instructions
29626	Template set HFSS 200	Atlas HF 200	1 milling and assembling jig with stopper HFS 200 1 milling cutter with thrust ring HFF 200 4 fully threaded screws TX25 - 6,0 x 60 mm, blue galvanised 2 hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm Assembly instructions

Template

for Atlas wood connector



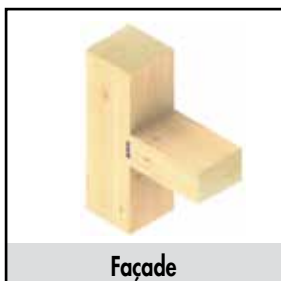
Art. no.	Suitable for	PU
29658	Atlas HF 70	1
29657	Atlas HF 100	1
29660	Atlas HF 135	1
29661	Atlas HF 170	1
29659	Atlas HF 200	1



Secondary beam - support



Bolt construction



Façade

Milling cutter

for Atlas wood connector



Art. no.	Suitable for	PU
29676	Atlas HF 70	1
29686	Atlas HF 100, HF 135, HF 170	1
29696	Atlas HF 200	1

Assembly

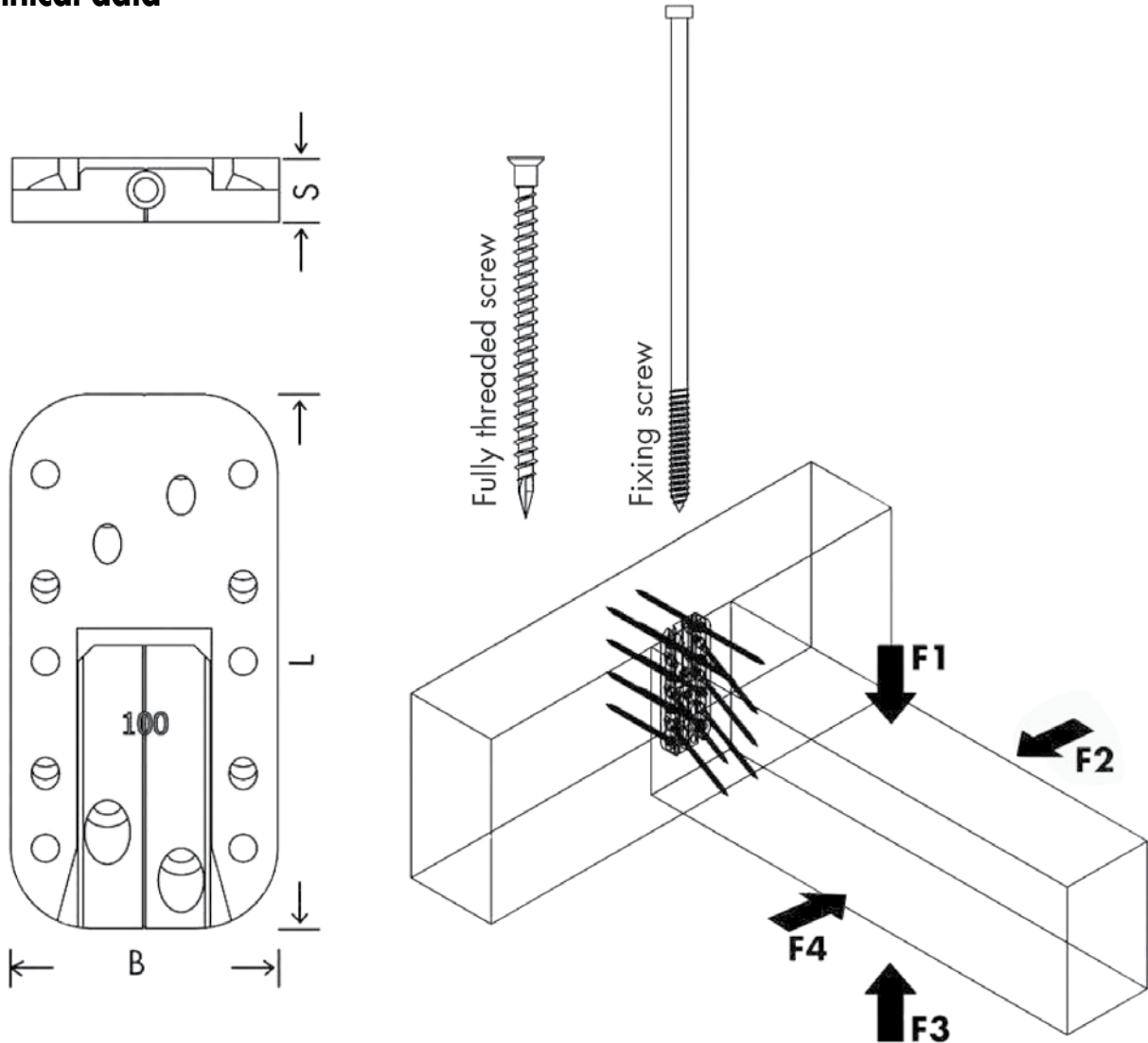
- Simply set the stopper for the milling and assembling jig to the required size of the Atlas wood connector, put the milling and assembling jig in place, fix it and cut out the pocket with the corresponding groove miller.
- The Atlas is then set into the milled recess and fastened with the supplied system screws. The milling and assembling jig is then placed in the same setting on the component that is to be connected and the identical second part of the Atlas wood connector is screwed in place. Pre-assembly is now complete and the component to be connected is suspended in place.
- In conclusion, the fixing screw is inserted into the Atlas. In this way the Atlas wood connector is pulled together, if necessary, and the position security of the hook connector is guaranteed. THAT'S IT!

The installation can therefore be both visible (for broad root with chamfer connections) and invisible (milled recess). The above assembly example shows the invisible installation. With visible installation, there is no need for milling and the milling and assembling jig is only used as an assembling jig.

Applications

For nearly all areas of wood construction, irrespective of the direction of the wood grain, it can be used vertically and horizontally! Secondary and main beams, secondary beam supports, bolt construction, hall construction, façades, conservatories, balconies... The Atlas wood connector's node connection is loaded in four directions with high statically verified values, and at the same represents security against unintended loosening of the connector.

Technical data



Atlas permitted value					Secondary beam		Load F1	Load F3	Load F2 and F4
					Min. width	Min. height	Char. value of the load-bearing capacity $R_k^{a)}$		
Art. no.	Type	L	W	S	mm	mm	kN	kN	kN
30036	70	70	30	9	50	80	6,80	2,00	4,40
30056	100	100	50	12	80	115	17,40	8,56	10,60
30076	135	135	50	12	80	150	26,70	8,56	15,00
30096	170	170	50	12	80	185	33,40	8,56	16,00
30116	200	200	70	17	100	200	43,00	19,15	22,70

Calculation according to ETA-12/0068. Wood density $\rho_k = 350 \text{ kg/m}^3$. All mechanical values provided should be viewed as subject to the assumptions that have been made and represent example calculations. All values are calculated minimum values and are subject to typographical and printing errors.

a) The characteristic values of the load-bearing capacity R_k should not be treated as equivalent to the max. possible load (the max. force). Characteristic values of the load-bearing capacity R_k should be reduced to dimensioning values R_d with regard to the usage class and class of the load duration: $R_d = R_k \times k_{mod} / \gamma_M$. The dimensioning values of the load-bearing capacity R_d should be contrasted with the dimensioning values of the loads ($R_d \geq E_d$).

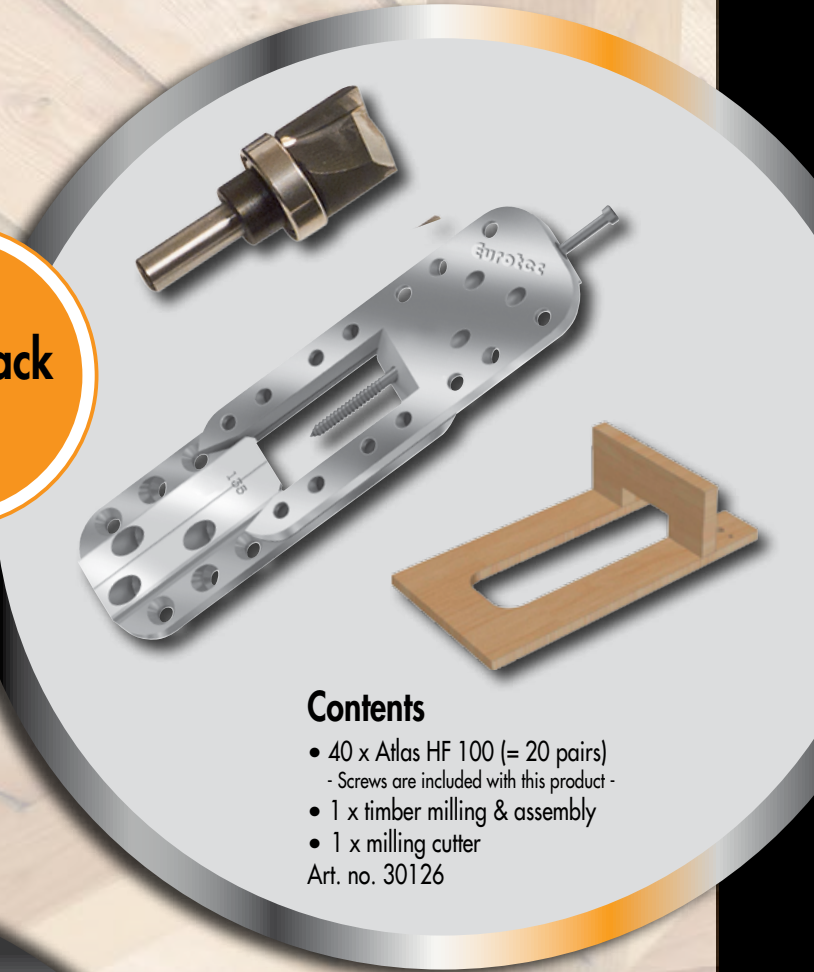
Example: Characteristic value for constant load (dead weight) $G_k = 2,00 \text{ kN}$ and variable load (e.g. snow load) $Q_k = 3,00 \text{ kN}$. $k_{mod} = 0,9$. $\gamma_M = 1,3$.
 → Dimensioning value of the load $E_d = 2,00 \cdot 1,35 + 3,00 \cdot 1,5 = 7,20 \text{ kN}$. The load-bearing capacity of the joint is therefore considered to have been demonstrated if $R_k \geq E_d$.
 → $\min R_k = R_d \cdot \gamma_M / k_{mod}$ D.h., i.e. the characteristic minimum value of the load-bearing capacity is calculated based on: $\min R_k = R_d \cdot \gamma_M / k_{mod} \rightarrow R_k = 7,20 \text{ kN} \cdot 1,3 / 0,9 = 10,40 \text{ kN}$
 → comparison with table values.

Please note: These are planning aids. Projects must only be calculated by authorised persons.

Our Atlas starter packs

There are two packages with different configurations to choose from

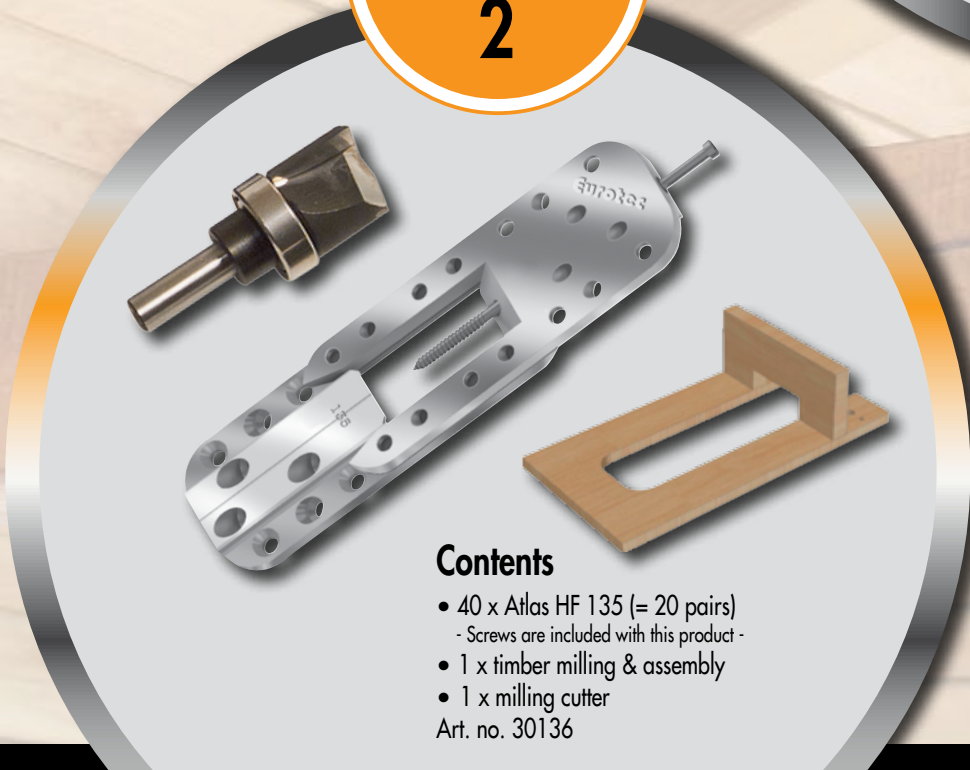
Atlas starter pack 1



Contents

- 40 x Atlas HF 100 (= 20 pairs)
 - Screws are included with this product -
 - 1 x timber milling & assembly
 - 1 x milling cutter
- Art. no. 30126

Atlas starter pack 2



Contents

- 40 x Atlas HF 135 (= 20 pairs)
 - Screws are included with this product -
 - 1 x timber milling & assembly
 - 1 x milling cutter
- Art. no. 30136