Eurotec®

# Atlas wood connector

The node connection for beam suspension

Europ. Techn. Bewertung
European Technical Assessment
ETA-12/0068

## What can it be used for?

- Can be used for almost all areas of timber construction, regardless of the timber's grain direction, i.e. vertically and horizontally!
- Secondary and main beams
- Secondary beam – support
- Bolt construction
- Hall construction
- Façade construction
- Conservatories

## Advantages

- Quick and simple connections
- Consists of two identical parts that can be slid inside each other smoothly without restraint
- Can be statically loaded in four directions with high tested values

## Assembly

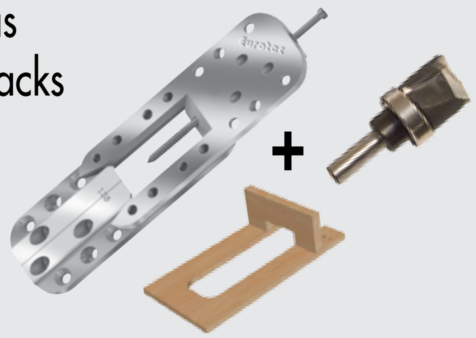
- Installation can be both visible (for shadow-groove connections) and invisible (milled in).
- System screws and the suitable DUO bit are included in the delivery.
- See the installation instructions on p. 160

# Atlas wood connector

| Art. no. | Name | Included in delivery | PU |
|---|---|---|---|
| 30036 | Atlas HF 70 | 120 Fully threaded screw TX15 - 4,0 x 60 mm, blue galvanised<br>10 Fixing screws TX15 - 4,2 x 50 mm, blue galvanised<br>Assembly instructions; 1 Stück DUO-Bit TX 15 | 10 |
| 30056 | Atlas HF 100 | 160 Fully threaded screw TX20 - 5,0 x 80 mm, blue galvanised<br>10 Fixing screws TX20 - 4,8 x 80 mm, blue galvanised<br>Assembly instructions; 1 Stück DUO-Bit TX 20 | 10 |
| 30076 | Atlas HF 135 | 220 Fully threaded screw TX20 - 5,0 x 80 mm, blue galvanised<br>10 Fixing screws TX20 - 4,8 x 120 mm, blue galvanised<br>Assembly instructions; 1 Stück DUO-Bit TX 20 | 10 |
| 30096 | Atlas HF 170 | 280 Fully threaded screw TX20 - 5,0 x 80 mm, blue galvanised<br>10 Fixing screws TX20 - 4,8 x 120 mm, blue galvanised<br>Assembly instructions; 1 Stück DUO-Bit TX 20 | 10 |
| 30116 | Atlas HF 200 | 144 Fully threaded screw TX25 - 6,0 x 100 mm, blue galvanised<br>6 Fixing screws TX25 - 6,3 x 180 mm, blue galvanised<br>Assembly instructions; 1 Stück DUO-Bit TX 25 | 6 |

| Art. no. | Name | Included in delivery | for |
|---|---|---|---|
| 29606 | Schablonen-Set HFSS 70 | 1 Milling and assembling jig with stopper HFS 70<br>1 Cutter with thrust ring HFF 70<br>4 Fully threaded screw TX15 - 4,0 x 60 mm, galvanised<br>2 Hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm<br>Assembly instructions | Atlas HF 70 |
| 29161 | Schablonen-Set HFSS 100 | 1 Milling and assembling jig with stopper HFS 100<br>1 Cutter with thrust ring HFF 100<br>4 Fully threaded screw TX20 - 5,0 x 40 mm, galvanised<br>2 Hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm<br>Assembly instructions | Atlas HF 100<br>Atlas HF 135<br>Atlas HF 170 |
| 29626 | Schablonen-Set HFSS 200 | 1 Milling and assembling jig with stopper HFS 200<br>1 Cutter with thrust ring HFF 200<br>4 Fully threaded screw TX25 - 6,0 x 60 mm, galvanised<br>2 Hexagon socket screws M 5 x 16 mm, 1 Allen key 4 mm<br>Assembly instructions | Atlas HF 200 |

## Our Atlas starter packs



### Set 1
Art.-Nr. 30126

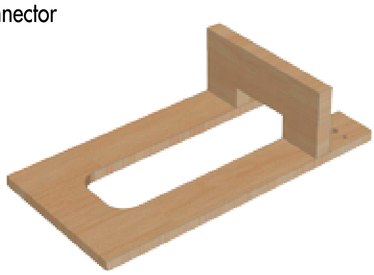
- 40 x Atlas HF 100 (= 20 pairs)
  Screws are included with this product
- 1 x Timber milling & assembly
- 1 x Milling cutter

### Set 2
Art.-Nr. 30136

- 40 x Atlas HF 135 (= 20 pairs)
  Screws are included with this product
- 1 x Timber milling & assembly
- 1 x Milling cutter

## Template

For Atlas wood connector

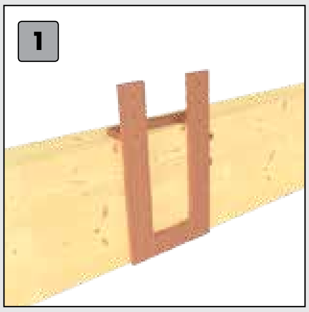


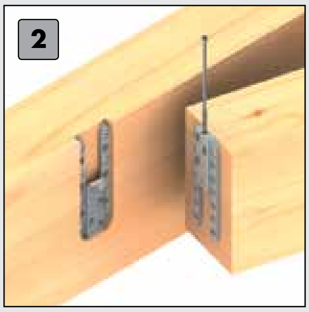
| Art. no. | Suitable for | PU |
|---|---|---|
| 29658 | Atlas HF 70 | 1 |
| 29657 | Atlas HF 100 | 1 |
| 29660 | Atlas HF 135 | 1 |
| 29661 | Atlas HF 170 | 1 |
| 29659 | Atlas HF 200 | 1 |

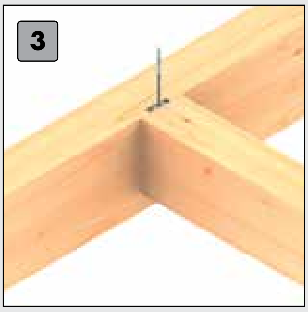
## Milling cutter

For Atlas wood connector

| Art. no. | Suitable for | Shaft diameter [mm] | PU |
|---|---|---|---|
| 29676 | Atlas HF 70 | 8,00 | 1 |
| 29686 | Atlas HF 100, HF 135, HF 170 | 8,00 | 1 |
| 29696 | Atlas HF 200 | 8,00 | 1 |



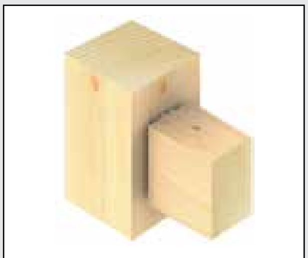

# Assembly

**1** Simply set the stopper for the template to the required size of the Atlas wood connector, put the template in place, fix it and cut out the pocket with the corresponding groove miller.

**2** The Atlas is then set into the milled recess and fastened with the supplied system screws. The template 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.

**3** 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 template is only used as an assembling jig.

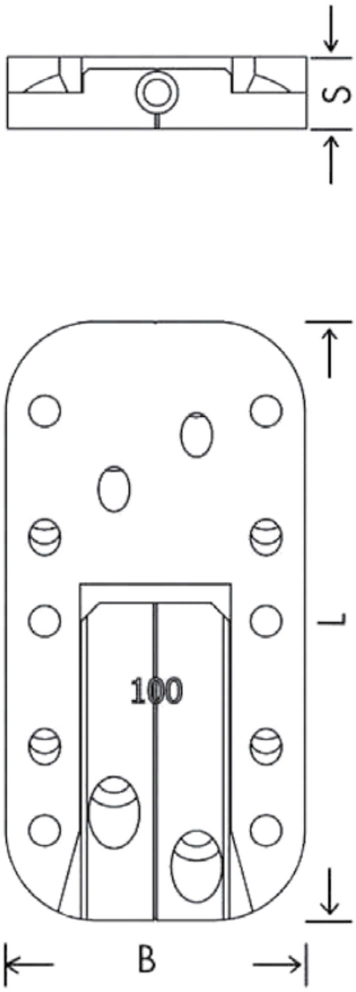


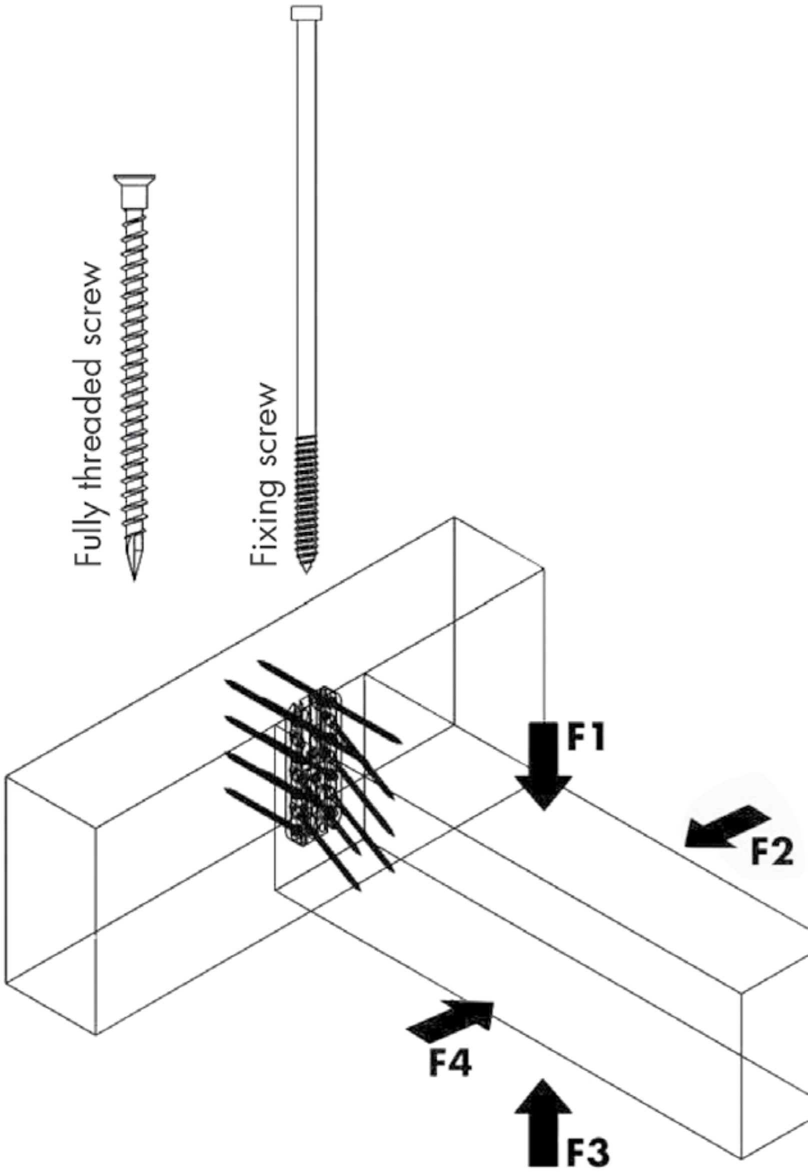
Secondary beam - support

Bolt construction

Façade

# 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)] | | 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 kg/m³. All echanical 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 kN and variable load (e. g. snow load) $Q_k$= 3,00 kN. $k_{mod}$= 0,9. $\gamma_M$= 1,3.
→ Dimensioning value of the load $E_d$= 2,00 · 1,35 + 3,00 · 1,5= 7,20 kN. The load-bearing capacity of the joint is therefore considered to have been demonstrated i $R_d \geq E_d$. → 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 $R_k = R_d \cdot \gamma_M / k_{mod}$ → $R_k$= 7,20 kN · 1,3/0,9= 10,40 kN → comparison with table values.

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