





Walking barefoot over immaculate floorboards? Exposed wooden structures? High demands on safety and strength?

We offer connectors for many outdoor applications such as balconies, wooden decks, facades, pergolas directly exposed, wooden structures, garden fences, furniture, boat, and yacht interiors.

- Invisible installation from the first to the last deck board
- I Flawless and smooth surfaces
- I Allows for the swelling and shrinkage of wooden deck boards
- I High quality and safety with stainless steel screws and connectors





 $\label{thm:continuous} Goetheturm\ in\ the\ Frankfurt-Sachsenhausen\ city\ for est$



Covered deck



Yacht interiors



UNO 30



RICON®
Stainless steel A2



KNAPP®-DOWEL



DUO 30 Stainless steel A5



QUATRO 65



Z-DECK



WALCO®



QUATRO 65

For decking boards and wall panels

I Recommended for spacing no smaller than 7 mm



OUATRO 65/25 Art.-N0. K081



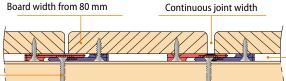
- I Concealed from the first to the last board
- I Constructive wood protection of the substructure against rotting
- I Rear ventilation due to distance between boards and joists
- I Used also for wooden facades and formwork
- I Easy installation with installation template
- I Allows swelling and shrinkage of the boards
- I UV and weather resistant plastic



www.knapp-connectors.com/en/quatro65







9 mm rear ventilation gap

QUATRO overlaps joists in width and thus protects the joint from collecting water/rotting the wood and thus expanding the longevity of structure

Self-tapping Stainless steel CS-screw A2 5x25 mm for board thicknesses 24-26 mm

Board thickness from 24 mm



Self-tapping Stainless steel CS-screw A2 5x30 mm for board thicknesses >26 mm

Approximate quantity per square meters		
board width	pairs/m²	m²/package unit
150 mm	ca. 17 pairs	6 m ²
100 mm	ca. 25 pairs	4 m ²

Tips:

- I Even the best connecting system cannot compensate for poor quality of wood. Make sure that the wood is dry and especially avoid boards from the core of the trunk and boards with a tendency to twist.
- I Recommended length of boards: max. 3 m.
- I Pre-drill, especially for hardwoods such as oak.
- Follow the installation recommendations of your quality wood supplier



QUATRO 65 Installation

I Pre-drilling and continuous positioning of the joint spacing with the mounting template





Pre-drill with the template



Fasten to the boards with screws



Fasten to the joists with screws



Use QUATRO 65 as spacer



Mount the final board



Z-DECK

For decking boards that are completely exposed to the weather

I Recommended for rebated boards and gab of 7 mm or more



- Robust even suitable for beach and boat decks
- I Boards can be replaced quickly and individually
- Optimum wood protection through self-cleaning joint design
- I More stable than visible screwing from above
- I Increased resistance agains twisting of the boards
- I Connectors and screws made of stainless steel





Approximate quantity per square meters		
board width	pairs/m²	m²/package unit
150 mm	ca. 28 pairs	9 m²
100 mm	ca. 40 pairs	6 m ²

Tips:

- I Even the best connecting system cannot compensate poor quality of wood. Make sure that the wood is dry and especially avoid boards from the core of the trunk and boards with a tendency to twist.
- I Pre-drill, especially for hardwoods such as oak.
- $\hbox{{\it I} Follow the installation recommendations of your quality wood supplier}$





www.knapp-connectors.com/en/z-deck

Z-DECK Installation

I Create groove with rebate groove profile cutter





Routing with the router (optional)



Drive in



Screw in



The Z-DECK is completely mounted





Garden furniture with KNAPP®-DOWEL



Wooden facades with UNO 30

Garden fence with UNO 30 and TUCK

KNAPP® connectors overview for indoor an outdoor use:



QUATRO 65 Ouatro 65/25 Art.-No. K081 Quatro 65/30 Art.-No. K080

Z-DECK Art.-No. K082





WALCO® Connectors for facades/wall panels and modules up to 21,3 kN





RICON® Stainless steel Universal connector, stainless steel A5 Use class 3 in 15 sizes from 66/16



KNAPP®-DOWEL

selftightening

plastic dowel



Art.-No. K117 UNO 30 Set



DUO 30 Stainless steel A5 hook connector, stainless steel A5



Art.-No. K350 Art.-No. K066

6x28 mm Art.-No. K067 8x36 mm Art.-No. K169





Knapp GmbH | Wassergasse 31 | A-3324 Euratsfeld | Tel.: +43 (0)7474 / 799 10 Fax: +43 (0)7474 / 799 10 99 E-Mail: info@knapp-connectors.com









