FESTOOL

No. 714

Laying wooden decking using the Festool Deck Connector

A Description

Who doesn't dream of it? A beautiful wooden terrace: neatly laid, a wonderful surface without visible screwheads. Festool has developed a new deck connector system with various black-plated connection fittings for the optimal laying of wooden terraces.

The terrace flooring can now be laid quickly, securely and simply using the new deck connector system and the DOMINO jointer DF 500 (UK). There are four different connection claws available.

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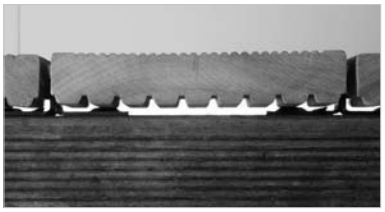
The 4 mm distance (Fig. 714/02) ensures the correct ventilation of the new terrace system. The long retaining clips (Fig. 714/03) hold the boards in a secure position also in the case of expansion and shrinkage.



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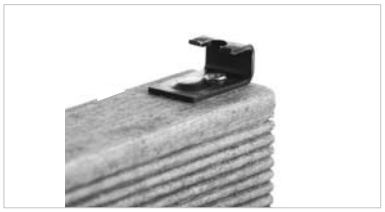
Deck Connector:
Using the single claw (Fig. 714/03) the first board is fixed on the outside. The single claw is connected flush with the substructure.
In addition, this single claw can also be used for fastening stud boards for stairs.



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The double claw (Fig. 714/04) is the standard connector for 2 boards.

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A combination claw (Fig. 714/05) is used for the longitudinal connection of 2 boards. What makes this special is a secure longitudinal connection can be established on a single substructure. The boards sit securely in the wide claw which sits above the substructure.

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An angle claw (Fig. 714/06) is used for terrace finishings and stair designs. The angle claw is secured at the front at the substructure. The board is then screwed from below.

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B Tools/Accessories

You need the following tools and accessories for laying the wooden decking:

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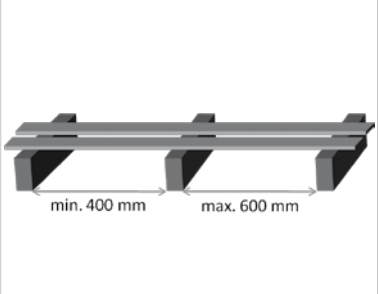
Designation	Order No.
DF 500 Q Plus	574228
Cutter 6 mm	493491
Single claw	496999
Double claw	496998
Combination claw	497000
Angle claw	497001

C Preparation/Set-up



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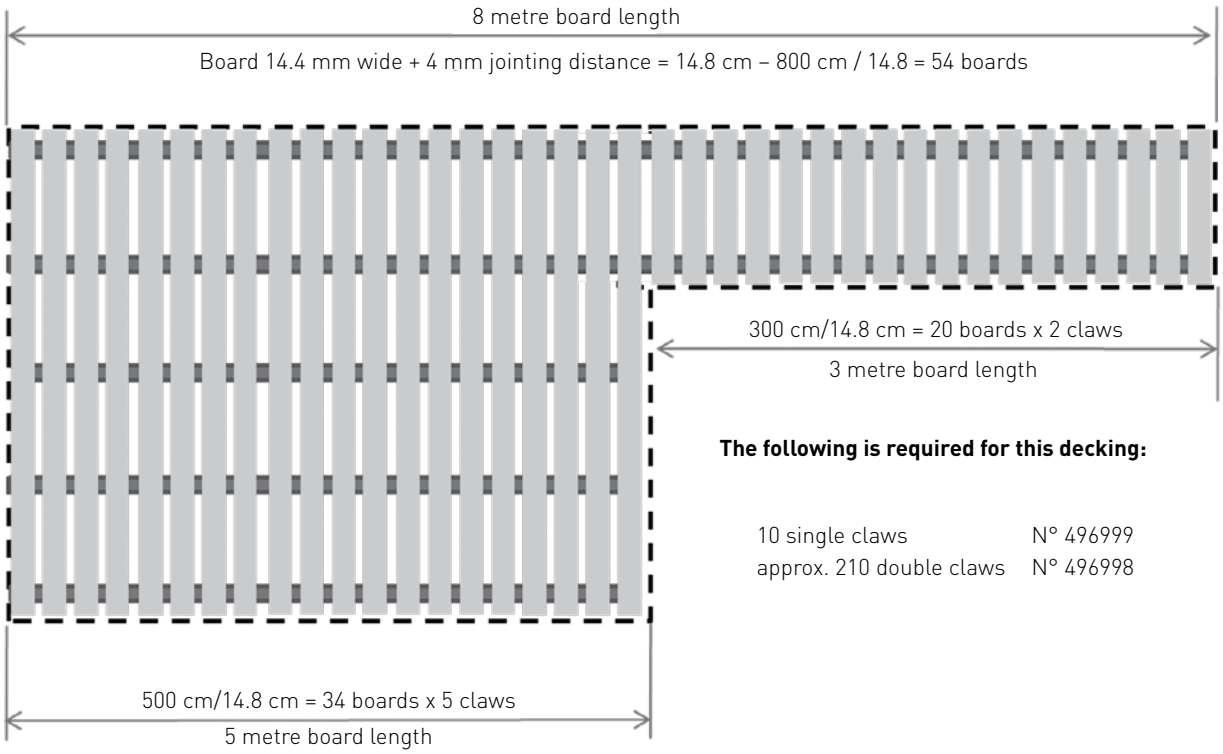
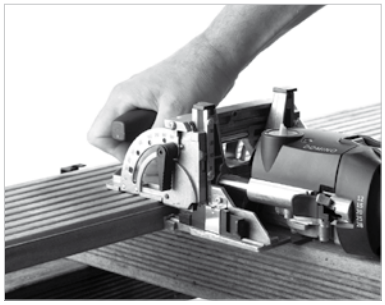
The correct design and plan of the substructure is key when doing a wooden terrace.
It is important to select the correct distance between the timber.
In general this distance depends on the board thickness. The thinner the board the smaller the distance of the substructure must be.
Usually the distance is a minimum of 400 mm for 20 mm thick boards to a maximum of 600 mm for 28 mm or thicker boards.
If the distance of the substructure is defined, the quantity of required material can also be calculated.
It is best to create a "deck plan" to calculate the materials such as timber and connectors.

Example:



The following is required for this decking:

10 single claws	N° 496999
approx. 210 double claws	N° 496998



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The following must be set on the DOMINO joining machine DF 500 (Fig. 714/09):

- Cutter with 6 mm diameter
- Adjust level stop to 25 mm and lower stop flap.
  (Perform test cut and if required increase the initial tension by manually readjusting the stop flap.)
- Set pendulum setting to maximum width
- Set routing depth to 15 mm.

The board is always turned over when routing so that the tolerances of the timber are excluded and the jointing claws sit without play.

It is best to perform a test cut!

D Procedure

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So that the boards can be routed easily later, the substructure should be carefully completed.
It is important to align the timber precisely and parallel.
So that the substructure is maintained the wood should not be positioned directly in the water in the event of rain.
In the application example this is already taken into consideration during the design stage of the steel structure.
If the decking is constructed directly on the ground, the timber should be laid on a water-resistant material.
For example: bituminous sheeting, concrete base, etc.

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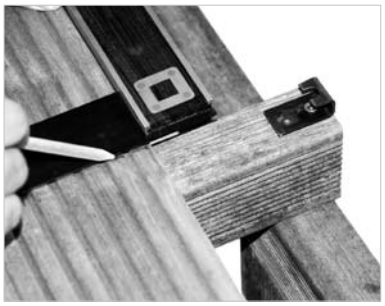
So that the first board is correctly fixed, the single claws are screwed in first to the substructure, in which the first board is inserted.



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Then the first board is positioned on the substructure with the visible side and the centre of the claw transferred to the bottom of the board (Fig. 714/12).
Completely plunge through the scribe mark as an elongated hole is then required on both sides.

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The board is cut on both sides along the scribe mark using the set Domino DF 500 (Fig. 714/13).

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The first board must sit precisely. If possible use a straight board that is not deformed too much.
This can be checked again using a string (Fig. 714/14).

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If the first board is positioned correctly and screwed in, several boards can be marked at the one time for the next work process.
It is best to mark a board on the substructure and use this as a layout template. Use a right angle where possible for transferring.
(Fig. 714/15).

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All boards are cut in succession after marking
(Fig. 714/16)....

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.....and can then be quickly screwed in (Fig. 714/17).

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The boards can be cut into lengths using the TS 55 and guide rail (Fig. 714/18) or also using the compound mitre saw, e.g. KS 88.

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Good luck laying your first board using the Festool Deck Connector System!

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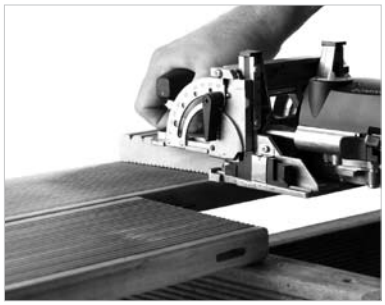
Tip 1:

A combination claw is available if the boards have to be laid crosswise or extended in the case of larger decking areas. This claw is cut and screwed at the continuous board exactly like a double claw.



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Then for two boards which should be joining the elongated hole is cut using the DF 500. For this the side stops (37 mm to the hole centre) of the DOMINO joining machine are used.

Important: Also position the DF 500 on the bottom side of the board.

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Now the same combination claw is turned 180° and inserted in the two boards and screwed.
Crosswise joining can be continued this way.

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Tip 2:

Should layers be integrated in the wooden decking, these can be made using the angle claw and the single claw.

The angle claw is screwed on at the front at the substructure and then the cover board is screwed from below.

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A single claw is screwed in the gap of the board width.
Now the stud board is routed as usual and then positioned stationary on the single claw.

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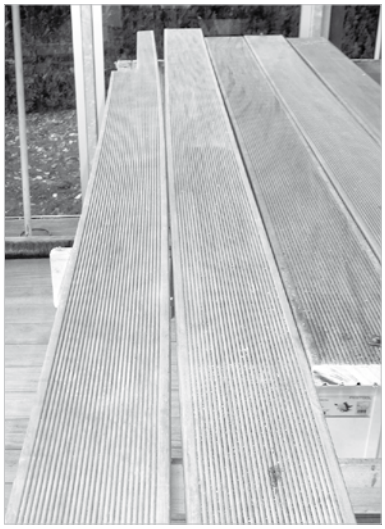
Finally a safety bolt (A2 - not in scope of delivery) is screwed in 15 mm below the level by the angle claw (Fig. 714/25).



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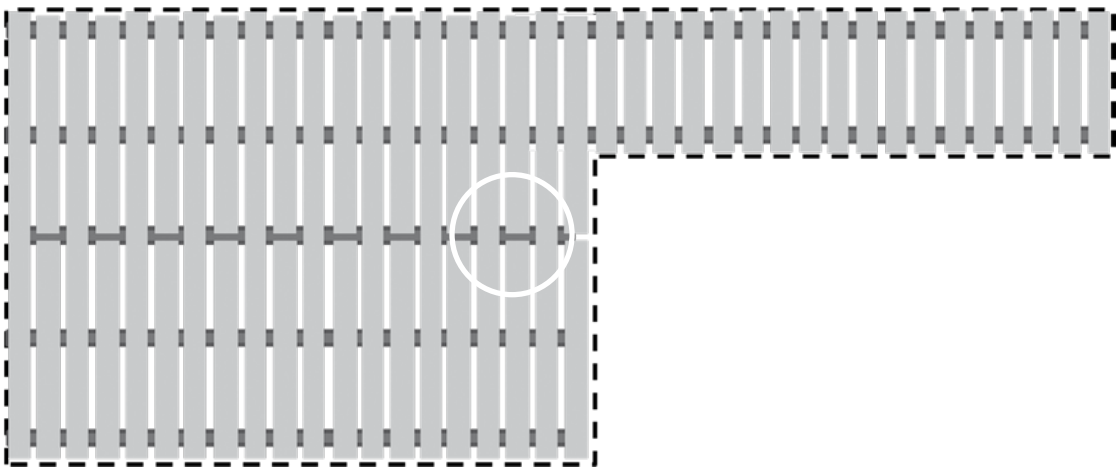
Tip 3:

Important for tropical wood:
If the boards are too crooked, it is best to reject these.
Even if these boards are straightened out with great effort and using fastening clamps, these boards always lead to complaints.
The built-up tension cannot be controlled - these boards always try to regain their original shape in summer and winter.
Result: The joint is always unattractive on these boards.

Crooked boards can only be installed for steps or for narrow bridges.

Another option is to design the tropical wood decking in a crosswise design.
Long straight boards are processed, short crooked boards are processed.



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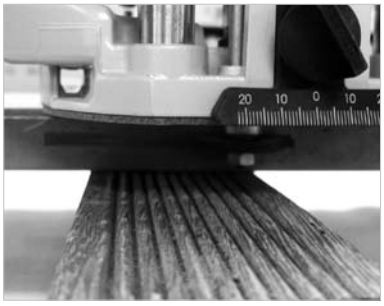

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Tip 4:

Cutting using the OF 1010:
If no DF 500 is available, the deck connectors can also be cut using a router and a 4 mm disk groove cutter.

For this simply turn the board over again, set the disk groove cutter to the correct routing depth and then partially groove over the substructure approx. 50 mm wide.

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Caution!
This groove is not to be compared with a flat dowel cut.
The groove is cut straight in the groove base using the router and a disk groove cutter, and not circular like a flat dowel cut.

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