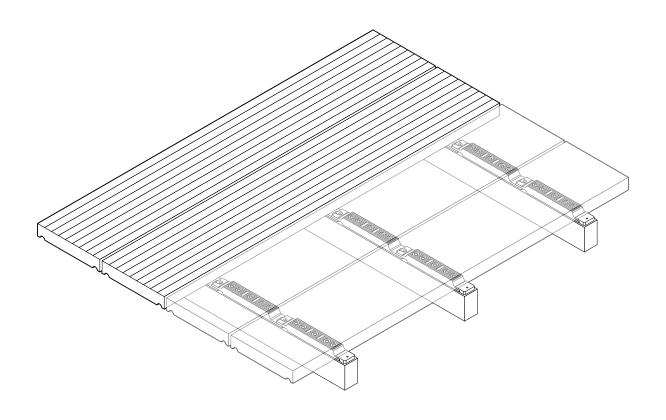




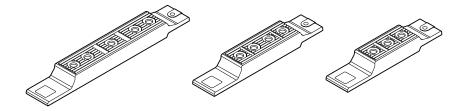
## DECK-DRY® SYSTEM OF CLASS A.1

# INSTRUCTIONS FOR THE INVISIBLE ASSEMBLY OF WOODEN TERRACES



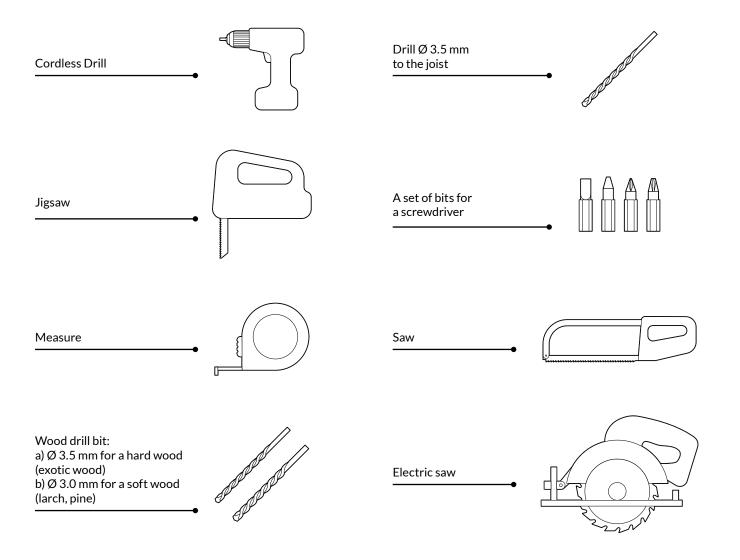
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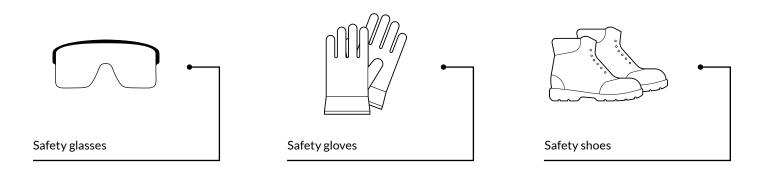
Deck-DRy.

### **TOOLS NEEDED**



It is recommended to use DECK-DRY joists compatible with the A.1 system and DECK-DRY boards (with drips at the bottom).

### SAFETY RECOMMENDATIONS



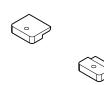
All work should be performed in accordance with the construction practice and health and safety rules.

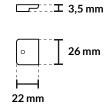


### **COMPONENTS OF CLASS A.1**

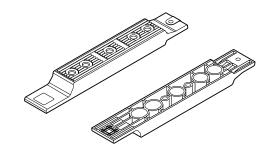
# DECK-DRY STARTING ELEMENT Compatible with all sizes of

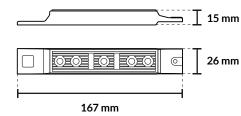
Compatible with all sizes of connectors



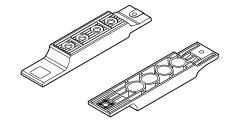


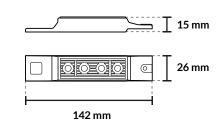
Invisible connector
DECK-DRY 140
BOARD WIDTH:
138 - 145 MM



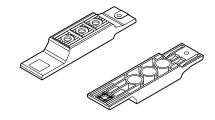


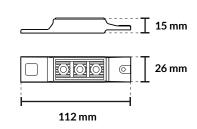
Invisible connector DECK-DRY 120 BOARD WIDTH: 113 - 121 MM





Invisible connector
DECK-DRY 90
BOARD WIDTH:
83 - 91 MM





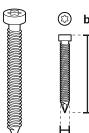
### SCREW FOR JOISTS

 $torx 5 \times 50 mm$ 

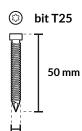


#### SCREW FOR PLANK 21 MM

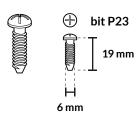
board thickness ≥ 25 mm screw 6 × 21 mm

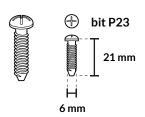


5 mm

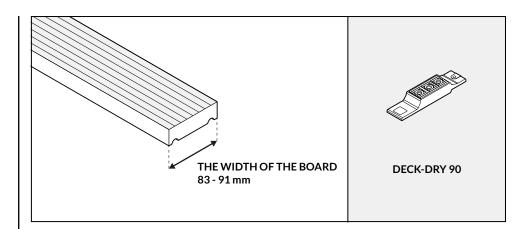


**Deck-DRy** 





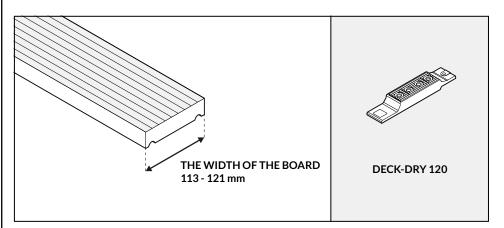
### **SELECTION OF ELEMENTS**

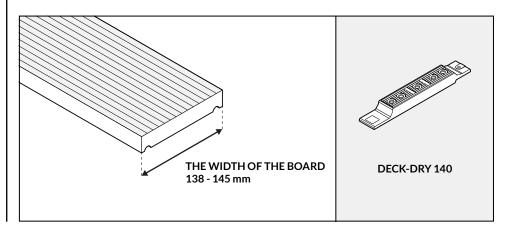


### SELECTION OF THE SIZE OF THE CONNECTORS

The type of invisible assembly connectors is selected based on the width of the terrace board.

- board width from 83 to 91 mmDECK-DRY 90
- board width from 113 to 121 mmDECK-DRY 120
- board width from 138 to 145 mm = DECK-DRY 140

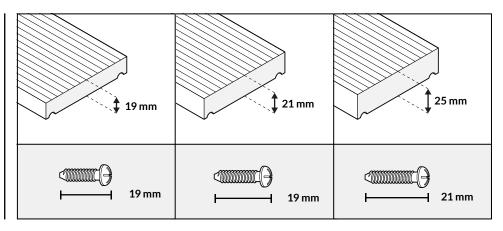




### SELECTION OF THE SIZE OF THE SCREWS

Select the size of the screws based on the thickness of the board.

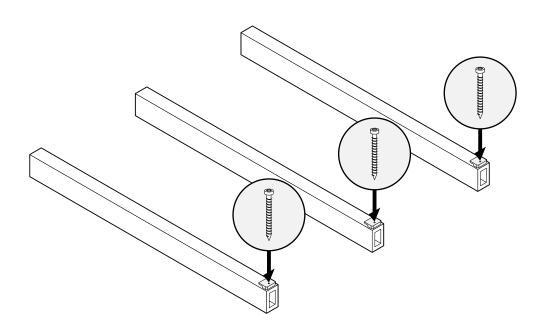
- board thickness 19 mm
   screws for boards, length
   19 mm
- board thickness 21 mm
   screws for boards, length
   19 mm
- board thickness 25 mm and above
   screws for boards, length
   21 mm





**Deck-DRy** 

#### **STEP 1 - STARTUP CONNECTORS**

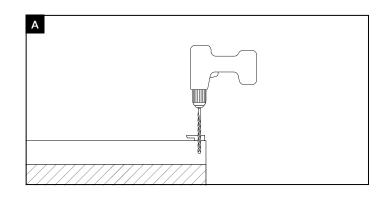


#### MAKING HOLES IN THE JOISTS

Place the DECK-DRY Startup connector against the edge of the joist and mark the location of the hole.

Make a screw hole in the joist using a  $\emptyset$  3.5 mm drill bit. Only drill holes for startup connectors.

Repeat the operation on all joists.

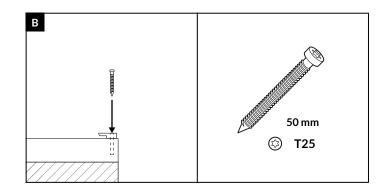


#### **INSTALLATION OF STARTUP CONNECTORS**

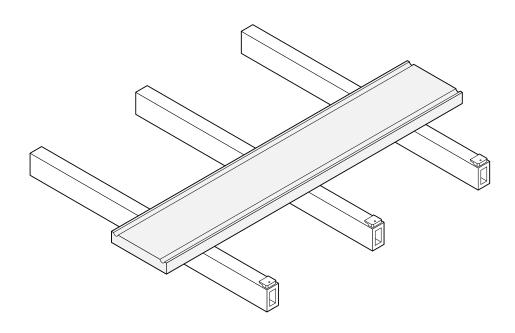
Tighten the DECK-DRY Startup Connector with the screw DECK-DRY for the joist  $\emptyset$  5.0 mm.

**Deck-DRy** 

Repeat the operation on all joists.

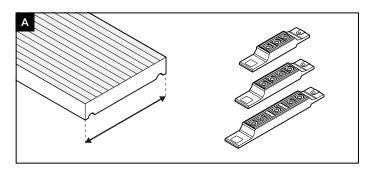


#### **STEP 2 - PREPARING THE ELEMENTS**



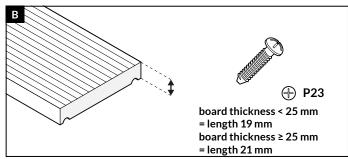
#### SELECTION OF THE SIZE OF THE CONNECTORS

Select the appropriate length of the connectors based on the width of the board (page 5).



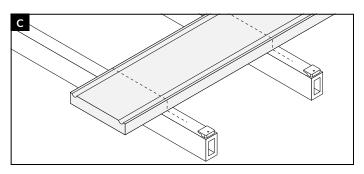
#### SELECTION OF THE LENGHT OF SCREWS

Select the length of the screws based on the thickness of the board (page 5).



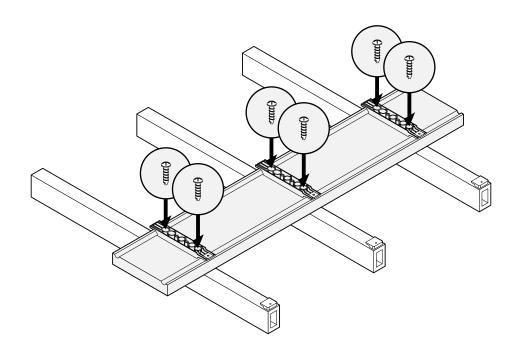
### DEFINITION OF THE PLACE OF ASSEMBLY OF CONNECTORS

All connectors of the invisible DECK-DRY assembly should be screwed to the boards with the spacing corresponding to the spacing of the joists. Place the board on the joists. Measure out and mark the places in which the connectors will be screwed.



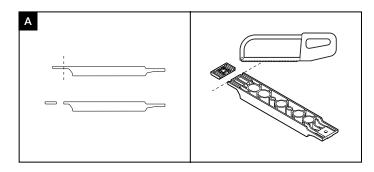


#### STEP 3A - PREPARATION OF THE FIRST BOARD - VERSION I



#### PREPARATION OF STARTUP CONNECTORS

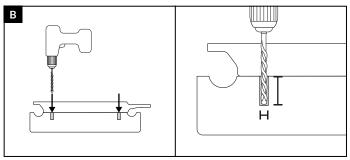
The connectors that will be attached to the first board should be cut with a saw as shown in the drawing.



#### **MAKING HOLES**

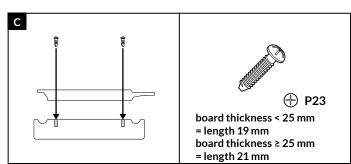
Bring the connectors to the board.

Drill holes for screws  $\emptyset$  6.0 mm in the board with a  $\emptyset$  3.0 mm or  $\emptyset$  3.5 mm drill (depending on the hardness of the wood) to a depth equal to the screw length minus 2 mm.



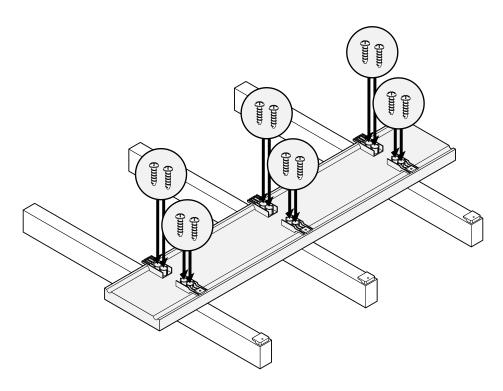
### INSTALLATION OF CONNECTORS TO THE STARTING BOARD

Screw the DECK-DRY invisible connector to the bottom of board with two DECK-DRY screws  $\emptyset$  6.0 mm.





#### STEP 3B - PREPARATION OF THE FIRST BOARD - VERSION II



#### PREPARATION OF STARTUP CONNECTORS

Select the "standard" DECK-DRY connectors for the first starting board.

The connectors that will be attached to the first board should be cut with a saw as shown in the drawing. Cutting the connector in half will allow you to freely manipulate the distance between the board and the joist edge.

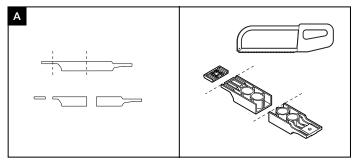
#### **MAKING HOLES**

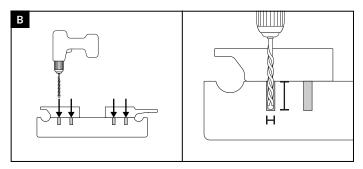
Bring the connectors to the board.

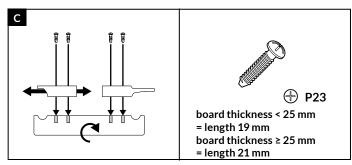
Drill holes for screws  $\emptyset$  6.0 mm in the board with a  $\emptyset$  3.0 mm or  $\emptyset$  3.5 mm drill (depending on the hardness of the wood) to a depth equal to the screw length minus 2 mm.

### INSTALLATION OF CONNECTORS TO THE STARTING BOARD

Screw both parts of the DECK-DRY invisible connector to the bottom of the board with four screws DECK-DRY  $\emptyset$  6.0 mm (two screws for each part of the connector).

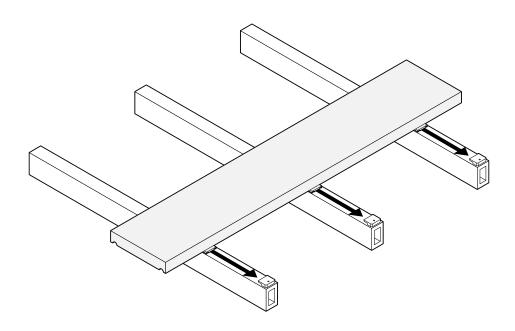








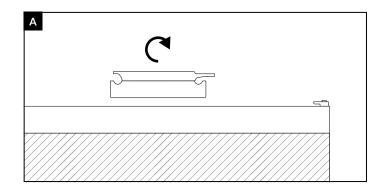
### STEP 4 - ASSEMBLY OF THE FIRST BOARD



#### **TURNING THE BOARD**

Turn the board with the connectors facing down.

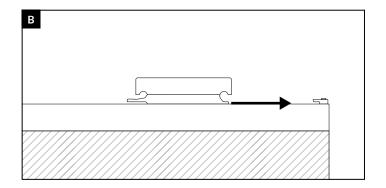
Make sure all connectors are fully laid on the joists.



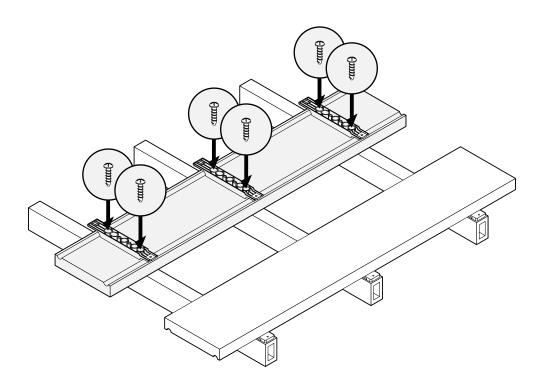
#### ADVANCE THE BOARD

Push the board against the Startup Connectors screws to the joists.

Connectors on the side of the cut ends should be blocked by the Startup Connectors.



#### STEP 5 - PREPARATION OF THE NEXT BOARDS



#### **DEFINITION THE INSTALL LOCATION OF THE CONNECTORS**

If the following boards have a different width than the first board, select the appropriate length of connectors for them based on the board width (page 5). The connectors that will be attached to the next boards should not be cut. Place the board on the joists. Measure and mark the places where the connectors will be screwed.

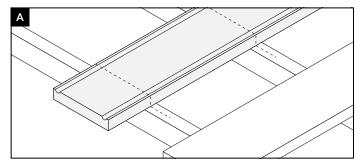
#### **MAKING HOLES**

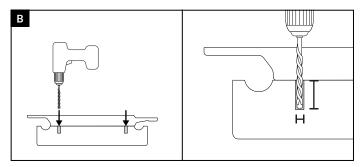
Bring the connectors to the board.

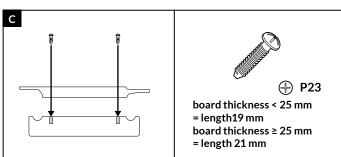
Drill holes for screws Ø 6.0 mm in the board with a  $\emptyset$  3.0 mm or  $\emptyset$  3.5 mm drill (depending on the hardness of the wood) to a depth equal to the screw length minus 2 mm.

#### INSTALLATION OF CONNECTORS TO THE STARTING **BOARD**

Screw the DECK-DRY invisible connector to the bottom of the board with two screws of the appropriate length for the given board thickness (page 5) DECK-DRY Ø 6.0 mm.

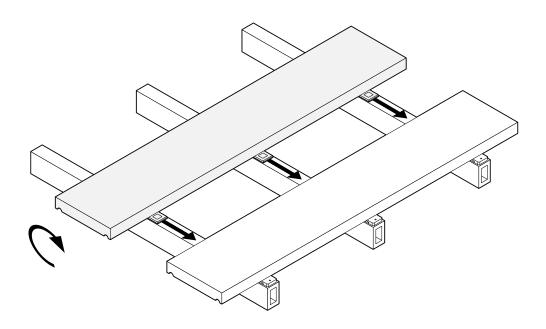








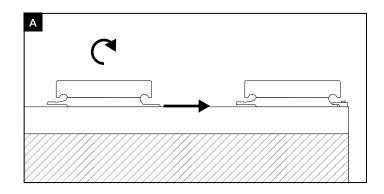
#### STEP 6 - INSTALLING THE NEXT BOARD



#### **ADVANCE THE BOARD**

Turn the board with the connectors facing down. Check that all connectors are laying on the joists.

Move the board to the previous board. The ends of the connectors of both boards should overlap.

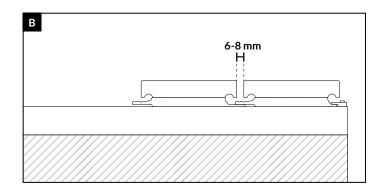


#### **DETERMINATION OF THE GAP**

Determine the gap between the two boards of the amount from 6 to 8 mm. The slot should allow for free insertion of screws and screwing the connectors to the joists with them.

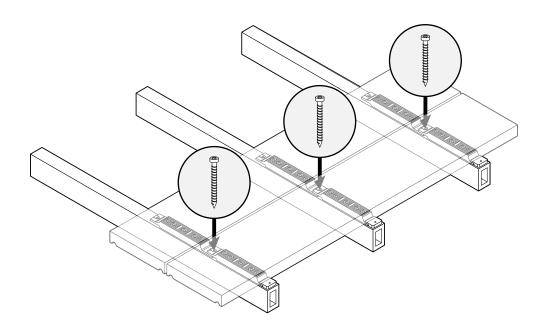
Remember that the width of the gap between the boards is an expansion joint that will change depending on the situation

on the season and weather conditions.





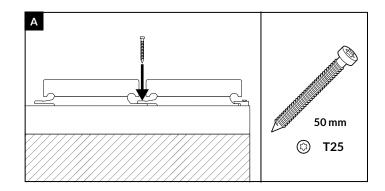
#### **STEP 7 - PREPARING NEXT BOARDS**



#### **INSTALLING TO JOISTS**

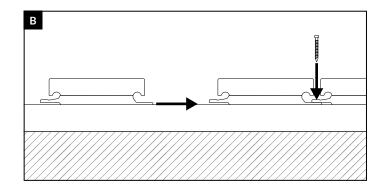
Screw the connectors to the joists through the gap between the boards using DECK-DRY Ø 5.0 mm joist screws.

Be careful not to damage the boards when screwing in.



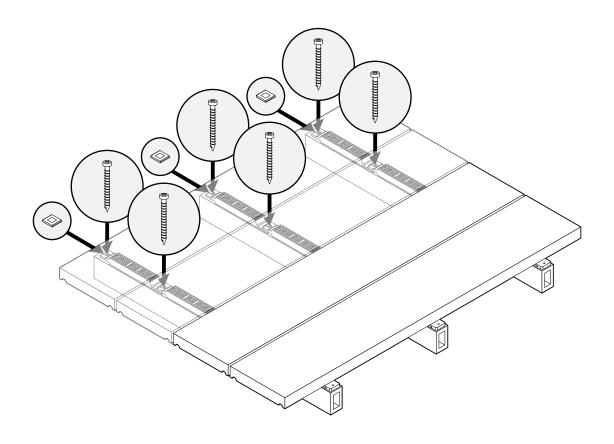
#### **NEXT BOARDS**

Repeat steps 4 to 6 until the last board is laid.



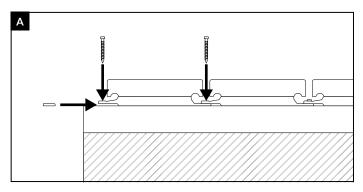


### STEP 8 - INSTALLING THE LAST BOARD



#### INSTALLATION OF THE LAST BOARD

Connectors of the last board screwing on both sides to the DECK-DRY screw for joists Ø 5.0 mm by placing the cut part of the connector.



The assembly is complete.

Remember about proper maintenance of the terrace, which will ensure a longer period of failure-free use.



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### **NOTES**

A very long period of failure-free use of the deck is ensured by compliance with the DECK-DRY Warranty Card and the following recommendations:

- At least once a year (and it is recommended that it be twice a year), on a day after a long period of rainless weather, when the deck is dry:
  - a. clean the gaps between the boards,
  - **b.** clean the vertical and frontal surfaces of the boards, clean possible grooves of the boards,
  - **c.** putty, in the months V-IX, gaps and cracks in the wood and round sharp edges,
  - d. and in the months V-IX, preserve the top and side, dry, after a few days of rainless weather, surfaces of the deck boards, performing these activities in accordance with the requirements and recommendations of manufacturers of maintenance and putty agents.
- 2. After assembling impregnated boards, they are not re-impregnated; the deck should be serviced (possibly with scraping) along with the first impregnation after assembly, in the months V-IX, within a period of about a year (i.e. 3-15 months) from the date of its assembly; the surface impregnation of the front vertical surfaces of the boards, which are the usual cross-sections of wood conductive vessels through which water can penetrate deep into the board, should be particularly carefully renewed.
- 3. It is necessary to "on an ongoing basis" remove impurities from the deck surface, e.g. mud, chewing gum, food waste, spilled liquids / drinks, fats, etc.
- 4. It is recommended to clean grooved boards with a brush or metal "cotton wool"; snow removal only with non-metallic tools that do not damage or "scratch" the surface.
- It is recommended to use oils for impregnation, glaze stains for soft wood, impregnants ensuring the legibility of the wood texture even after repeated use.
- **6.** Damaged boards should be replaced with new ones; it is recommended to calibrate the boards before assembly.
- 7. Possibility of use within one implementation / construction and, if necessary, replacement of deck boards different shapes of the groove of boards of one type: flat, fine or coarse-grooved.
- 8. Possible types of transverse joining of boards (according to pictorial / schematic drawings entitled "transverse joining of boards" or annex to the contract): 1. not present 2. straight 3. overlapping 4. single-variable alternating 5. multiple-variable 6. English; detailed solutions, details, the layout of the boards in the "English pattern", the selection of boards (e.g. regarding the shade, colors, dimensions of non-calibrated boards), their mutual arrangement, plane joining, etc. are determined during assembly by the contractor with the possibility of deviations from compliance with the design or with the arrangement of boards / joints in a given type of transverse joining of boards.
- 9. Deformations, detachments, etc. that may impede the use of the deck, occurring in the period before the lapse of the 1st year from the assembly of the deck, should be marked and secured until the service provided for in point 8 Warranty Card.
- 10. Remove dirt that may collect under the deck boards; depending on the conditions of use of the deck and plant species in the vicinity of the deck, this activity should be performed approx. every 10 years or when these impurities come into contact with the deck wood or prevent the proper operation of the drainage system, etc.
- 11. If, as a result of changing weather conditions, unevenness appears, which may occur during the 1st to 2-year use of the deck, its upper surface should be leveled by sanding; in principle, scraping is only performed on a smooth or flat-grooved board (so-called renewable groove); scraping is performed only once; after sanding, repeat surface impregnation.

- 12. In the event that the freely laid deck deforms, despite the fact that the boards are twisted in a way that resists any possible stresses, it is recommended to fix the deck joist to the ground using, for example, an additional screw and expansion plug (if necessary, at the same time insulating the damaged area of the possible anti-water insulation) or using a clamp for a wooden or steel structure, etc.
- 13. In order to reduce wood deformation resulting from changes in humidity, during longer periods of drought (especially during significant sunlight and high air temperature), sprinkle the deck and the substrate with water; in order to extend the period of increased humidity under the deck, it is recommended to sprinkle a material (which does not adhere to the wood) that soaks up water and maintains moisture for a long time, e.g. kermasite.
- 14. It is recommended that: flower pots, garden boxes, stands for sun umbrellas, furniture, etc., should not be placed on the deck in one place for a long time this will prevent the degradation of the wood in places which, due to the lack of water evaporation, become constantly / damp for a long time, and thus exposed to degradation; it is recommended that the base of the above-mentioned elements has a fragmented surface enabling air circulation in contact with the wood; Consider, if possible, adjusting the deck for the permanent location of the above-mentioned elements by placing them on the deck base and appropriate shaping of the places for the installation of the above-mentioned elements in the deck.
- 15. It is recommended that the sharp ends of the legs: furniture, tables, chairs, armchairs, if they are placed on a deck, should be protected with pads that do not damage the wood of the deck planks, e.g. made of: rubber, soft construction plastic, non-absorbent plastic or made of wood with a hardness lower than that of the deck boards, etc.
- **16.** The deck should not be covered with foil, cardboard, etc.; the impregnation can be rinsed and / or wiped off.
- 17. Separate disassembly of each board is possible, eg to recover an object that may get under the boards; disassembly of the deck boards is possible in the summer period (with a period of reduced humidity) by unscrewing the screws in the gap between the boards and removing one or two other boards together with the washer.
- **18.** The efficiency of the drainage system should be ensured in the entire area of deck foundation and in the area adjacent to it, if water from this area could flood the deck.
- **19.** In decks made of pallets, ie dismantled parts, after several or a dozen disassembly and assembly of pallets the connecting elements worn / damaged due to twisting and / or unscrewing should be replaced.
- **20.** In the event of periodic storage of the deck outside the place of its assembly, the deck should be stored in an unheated room and out of sunlight.
- **21.** Boards trimmed to small dimensions, resulting, for example, as a result of adjusting the deck to the edge limitations and installation without drips, may be deformed and damaged more quickly.
- 22. The contractor is responsible for the results of the service; It is recommended that during the warranty and guarantee period: cleaning, filling, sanding, impregnation of the deck and service be performed by an Authorized DECK-DRY Service Center.
- 23. The recommendations in the manual are illustrative and intended for private use and private installation. In the case of installation by a professional company, it is allowed to deviate from the instructions in the manual, maintaining good construction practice.



www.ddgro.eu www.deck-dry.com service@ddgro.eu



Deck-DRy.