

# Installation

Instructions

A Dinesen floor is a unique piece of nature. It is a living material which must be treated with care. Our instructions explain in detail how you get the best result so the floor can last for centuries.

If you need any additional advice about Dinesen floors, you are very welcome to contact us.

To order and purchase products in the maintenance series, please go to our webshop at [dinesen.com](https://dinesen.com)

# Contents

|     |  |    |
|-----|--|----|
| 1   | Important information before installation      | 4  |
| 1.1 | The building                                   | 4  |
| 1.2 | Installation                                   | 4  |
| 1.3 | A natural material                             | 5  |
| 1.4 | Layers   | 6  |
| 2   | Information tables                             | 7  |
| 2.1 | Maximum permissible joist spacing              | 7  |
| 2.2 | Installation methods                           | 7  |
| 2.3 | Screw sizes                                    | 7  |
| 2.4 | Screw spacing on solid substructure            | 8  |
| 3   | Installation – mechanical                      | 9  |
| 3.1 | General  | 9  |
| 3.2 | Installation principles                        | 9  |
| 3.3 | Screwed from above                             | 10 |
| 3.4 | Hidden screws                                  | 11 |
| 4   | Installation – full-surface gluing             | 12 |
| 4.1 | Full-surface gluing general                    | 12 |
| 4.2 | Cast substrate                                 | 13 |
| 4.3 | Plywood, oriented strand board (OSB) chipboard | 13 |
| 4.4 | Comfort pad                                    | 14 |
| 4.5 | Installation                                   | 14 |
| 5   | Pitfalls                                       | 17 |
| 6   | Dinesen instructions                           | 17 |
| 7   | Literature                                     | 17 |

# 1 Important information before installation

## 1.1 The building

- The building must be dry and free of construction humidity in accordance with Dinesen's "Before installation" instructions. Never have the floor planks delivered until the building is sealed, dry and warm, and the humidity levels are under control.
- Planks should not be stored before installation, as this may result in undesirable movement in the them. Please contact Dinesen for additional advice on this issue.
- The temperature must be between 18 and 25 °C.
- The air humidity must be between 35 and 65% RH and must not exceed 50% RH in winter. A hygrometer is available from Dinesen.
- Ensure documentation of the moisture content in the subfloor, as concrete moisture may harm wooden flooring, cf. Dinesen's "Before installation" instructions.
- Concrete moisture must not exceed 85% RH, and a vapour barrier must be used. If you leave out the vapour barrier, the residual moisture content must be less than 65% RH.
- For the vapour barrier, use at least 0.20 mm PE foil or similar.
- The substructure must be straight with a maximum deviation of 2 mm, measured across a 2-metre straightedge.

## 1.2 Installation

- Carry the planks inside immediately after delivery; do not leave them outside under any circumstances.
- Always inspect floor planks for transport damage. Note any damage on the freight bill and contact Dinesen as soon as possible. We always recommend that you conduct quality assurance of the workmanship – including acceptance control.
- Install the planks immediately, except in winter when the planks should be placed in the room in which they are going to be installed for 24-48 hours prior to the installation, to ensure that the planks can reach a material temperature matching the recommended temperature span of 18 to 25 °C.
- All floor planks can be full-surface glued to a suitable subfloor.
- Pay attention to colour, knots and grain when you install the floor so the individual planks are placed in a way that produces an overall harmonious appearance.
- Floor planks in Douglas and Pine can be knocked close together. Use a tapping block, approximately 1 metre, and a large, heavy hammer to drive the floor planks together. In some cases
- Floor planks in Oak and Ash should be installed with a pre-defined gap from the start. See Table 1, or contact Dinesen for additional advice on this issue.
- Dinesen Layers must be installed without gaps – if the floor is laid with full-surface gluing, a maximum gap of 1 mm is permissible.
- The floor planks are always installed at a distance of 10-15 mm to walls, pipes etc. Remember to remove the spacing blocks after use.
- Never apply glue to the long sides of floor planks!
- Always sand the floors before finishing, cf. Dinesen's "After installation" instructions. This does not apply to planks ordered with surface finish.

- If the floor is not sanded and finished immediately after it is installed, cover it with grey flooring cardboard (400 g/m<sup>2</sup>). Keep the surface clean and free of nails, screws, wooden blocks etc. that might dent the floor.
- Keep an eye on temperature and air humidity. If the planks are stored at an air humidity above 50% RH, they will absorb moisture and thus become wider. This will result in larger contraction gaps than normal.
- Only use Dinesen products or products approved by Dinesen for surface finishing and maintenance as alternative products can cause unfortunate consequential damages. See Dinesen's "After installation" instructions.
- If underfloor heating has been cast into the concrete layer, it must undergo pressure-testing and remain switched on at the normal operating temperature for at least 30 days before floor planks are installed.
- Dinesen does not accept claims concerning the appearance of individual planks once the floor has been installed.
- Dinesen does not accept claims concerning damage due to construction humidity.

### 1.3

### A natural material

Wood is a natural material that expands and contracts continually, depending on the relative air humidity and temperature. If the indoor climate remains completely stable throughout the year, the planks will remain dimensionally stable, neither expanding nor contracting. That is, however, very difficult to achieve, even with expensive climate systems. Therefore, periodical contraction gaps should be accepted as the floor planks respond to the changing seasons. The movements of the planks will usually be most pronounced during the first year after installation. If the wood is unable to expand it will compress, and subsequent drying will cause the plank to contract beyond the initial dimensions. This may result in slightly larger contraction gaps between the planks than were initially present. Generally, new, well-insulated buildings with underfloor heating and balanced ventilation create a drier environment, while older, poorly insulated buildings will have a more humid environment across seasonal variation.

Normal and recommended climate conditions are defined as 18-25°C and 35-65% relative air humidity.

- 📌 When you install the floor, we recommend that you consider – and take into account – the expected indoor climate and seasonal variation. See Dinesen's recommendations in the table below.

Recommended installation distance under normal climate conditions(18-25 °C and 35-65% RF)

| Width                    | 100   150 mm    | 200   250   300 mm                             | 350   400   450   500 mm                       |
|--------------------------|-----------------|--|--|
| Douglas/Pine             | Mounted tightly | Mounted tightly                                | Mounted tightly                                |
| Oak/Ash                  | Mounted tightly | Mounted with 1 mm space between each plank row | Mounted with 2 mm space between each plank row |
| Layers Oak, Ash, Douglas | Mounted tightly | Mounted tightly                                | Mounted tightly                                |

Table 1

With pattern floors, such as Herringbone floors, the non-linear pattern may sometimes require deviations from the recommended installation distance. Contact Dinesen for additional information.

Below is an overview of the reaction of the floor planks to varying degrees of air humidity at a normal temperature of 18-25 °C. The recommended intervals and tolerances in air humidity are highlighted in grey.

The overview applies to a correctly installed floor, cf. the guidelines in this and the other instructions from Dinesen, and the information is only intended as a general guide.

The reaction of the planks also depends on the installation method. For example, a full-surface glued floor will move less than a floor installed with hidden screws.

| Climate condition | Reaction   |
|-------------------|--|
| 60-70% RF         | Slight transverse warping should be expected   |
| 50-60% RF         | No contraction gaps, slight warping should be expected   |
| 40-50% RF         | The floor planks are stable and level  |
| 30-40% RF         | Moderate contraction gaps (approximately 1% of plank width) and slight warping should be expected  |
| 20-30% RF         | Contraction gaps of 1% of the width or more and moderate transverse warping should be expected. There will also be minor drying cracks       |
| < 20% RF          | More pronounced transverse warping and drying cracks will appear. The floor will be depleted, and the lifetime of the planks will be reduced |

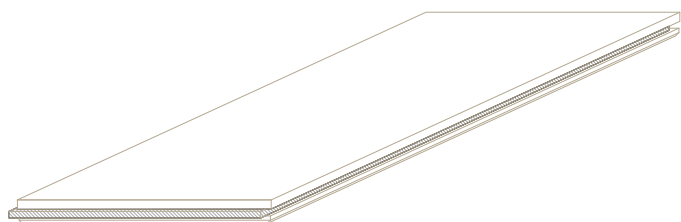
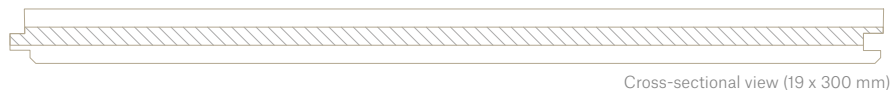
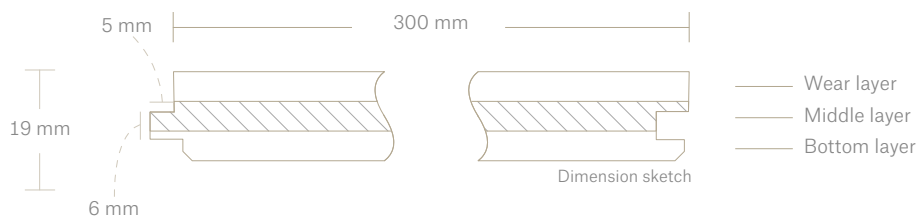
Table 2

## 1.4

### Layers

Layers is Dinesen's version of a three-layer engineered lamella floor, where all the lamellae are made of solid wood. The use of three cross-laminated layers produces a more structurally stable plank, where the floor is much less affected by the surrounding environment and movement patterns. It is important to note, however, that minor movements should be expected.

Layers can not be installed with a gap between the planks unless you have prior approval from Dinesen.



## 2 Information tables

### 2.1 Maximum permissible joist spacing

|                          |       | Homes etc. | Small shops | Conference rooms etc. |
|--------------------------|-------|------------|-------------|-----------------------|
| Douglas/Pine             | 28 mm | 86 cm      | 70 cm       | 60 cm                 |
|                          | 35 mm | 120 cm     | 100 cm      | 80 cm                 |
| Oak/Ash                  | 22 mm | 60 cm      | 49 cm       | 42 cm                 |
|                          | 30 mm | 95 cm      | 77 cm       | 67 cm                 |
| Layers Oak, Ash, Douglas | 19 mm | 40 cm      | 40 cm       | 40 cm                 |

Table 3

- With a C-C distance of more than 60cm we recommend that the boards are screwed and plugged from above

Generally, Dinesen recommends 40–60 cm as the optimal C-C distance.

Lay the first and the last row of joists 50-80 mm from the walls. Lay the second row of joists no more than 50 cm from the first/last row of joists.

### 2.2 Installation methods

|                     | Joists/beams               | Concrete | Plywood/chipboard<br>(min. 22 mm) |
|---------------------|----------------------------|----------|-----------------------------------|
| Screwed from above  | ✓                          | ⊘        | ✓                                 |
| Hidden screws       | ✓<br>Plank width max. 300* | ⊘        | ✓<br>Plank width max. 300*        |
| Full-surface gluing | ⊘                          | ✓**      | ✓**                               |

Table 4

- \*Oak and Ash planks in widths of 22 x 250 mm and 22 x 300 mm must always be full-surface glued or screwed from above.

\*\* See paragraph 3.

### 2.3 Screw sizes

Screwed from above

|                          |       | Joists/beams | Plywood/chipboard<br>(min. 22 mm) |
|--------------------------|-------|--------------|-----------------------------------|
| Douglas/Pine             | 28 mm | 5 x 60 mm    | 5 x 40 mm                         |
|                          | 35 mm | 5 x 60 mm    | 5 x 50 mm                         |
| Oak/Ash                  | 22 mm | 5 x 60 mm    | 5 x 40 mm                         |
|                          | 30 mm | 5 x 60 mm    | 5 x 40 mm                         |
| Layers Oak, Ash, Douglas | 19 mm | 5 x 50 mm    | 5 x 40 mm                         |

Table 5

- With 19 mm and 22 mm Oak and Ash planks, only drill the plug hole 7-8 mm deep (instead of the normal 10 mm) to make sure the plank is strong enough for the screw.

#### Hidden screws

|                             |       | Joists/beams<br>(Max C-C distance: 60 cm) | Plywood/chipboard<br>(min. 22 mm) |
|-----------------------------|-------|---|-----------------------------------|
| Douglas/Pine                | 28 mm | 3.5 x 60 mm                               | 3.5 x 50 mm                       |
|                             | 35 mm | 3.5 x 60 mm                               | 3.5 x 60 mm                       |
| Oak/Ash                     | 22 mm | 3.5 x 50 mm                               | 3.5 x 50 mm                       |
|                             | 30 mm | 3.5 x 60 mm                               | 3.5 x 60 mm                       |
| Layers Oak,<br>Ash, Douglas | 19 mm | 3.5 x 60 mm*                              | 3.5 x 50 mm                       |

\*Max recommended C-C distance: 60 cm

Table 6

## 2.4 Screw spacing on solid substructure

|                    | Plywood/chipboard<br>(min. 22 mm) |
|--------------------|-----------------------------------|
| Screwed from above | 60-80 cm                          |
| Hidden screws      | 40-50 cm                          |

Table 7

## 3 Installation – mechanical

### 3.1 General

Always determine which installation type is the most appropriate for the given floor so that you achieve the desired visual expression while also ensuring good and sufficient fastening.

Conditions – such as the anticipated indoor climate, usage patterns and humidity – may vary between projects. Big commercial buildings are not comparable to a summer cottage. Hence, you should always consult Dinesen to determine the ideal installation method.

Dinesen planks must always be installed on the subfloor and may never be installed as a floating floor. Furthermore, planks may never be glued on the long sides.

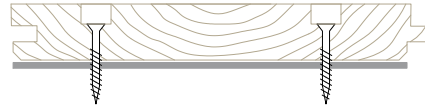


## 3.2

### Installation principles

#### Screwed from above

Screwing and plugging is a traditional installation method, and with two rows of screws per plank it ensures strong mechanical fastening to the subfloor. Screw holes are concealed with wooden plugs in the same wood type.



#### Hidden screws

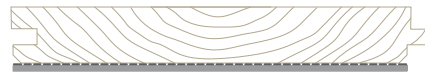
Narrower planks can be installed with hidden screws; a method that ensures good fastening to the subfloor. The screw is put in at a 45-degree angle through the tongue, so that the next plank conceals the screw head.



**NB:** The first and last row of screws in the lengthwise direction of the planks, parallel to the wall, must be screwed and plugged from above.

#### Full-surface gluing

All Dinesen floors can be full-surface glued using our recommended glue system from STAUF. Gluing ensures a very strong fastening of the planks to the subfloor.



## 3.3

### Screwed from above

Full lengths | Random lengths  
Fixed tongues | Loose tongue

- ① When you install the floor, we recommend that you consider – and take into account – the expected indoor climate and seasonal variation. See Dinesen's recommendations in the table below. 1.
- 1. The first row of planks is installed with the tongue facing into the room and a 10-15 mm gap to the wall. Use temporary spacing blocks. Take special care to ensure that the first row is completely straight.
- \* Special note for loose tongues:
  - 1a) The loose tongues are pushed into the groove of the first plank in the full length of the plank. Make sure there is no gap in between the individual tongues. Never glue the tongues. Tongues that are too narrow or too tight are discarded.
- 2. Use a 15 mm plug drill to drill a 10 mm deep hole 4-5 cm from each edge. Adjust the depth to the thickness of the plank. Be careful when drilling to make sure the holes are straight and do not fray. Fasten the floor planks with a Dinesen screw, cf. Table 4.
- \* Special note for random lengths:

- 2a) Glue the ends of the floor planks together using moisture-resistant PVAc glue. We recommend Dinesen Wood Glue. Apply the glue to the upper side of the tongue and the lower side of the groove lip. Wipe off any excess glue with a damp cloth. Never apply glue to the long sides of floor planks!
- 2b) Use the cut-off piece from the first row as the first piece in the next row. It may be necessary to switch planks around to avoid starting off the rows with very short pieces.

Joints in between joists (unsupported joints) are allowed, but never allow more than one unsupported joint for every three rows of planks in the same section.

3. Then lay the next plank in the same manner. Knock the floor planks tightly together, barring other instructions. Use a 1 metre long wooden tapping block to protect the tongue from direct blows. Then lay the next plank in the same manner. Knock the floor planks tightly together.

- ❗ Never apply glue to the long sides of floor planks!

Pay attention to colour, knots and grain when installing the floor to distribute the planks evenly and ensure a harmonious appearance. Once the whole floor has been installed, vacuum the holes.

Glue the plugs carefully with moisture-resistant PVAc glue – we recommend Dinesen Wood Glue. Distribute the glue evenly around the sides. The grain of the plug should follow the grain of the plank. Use a small belt sander afterwards to make the plug level with the plank.



## 3.4

### Hidden screws

Full lengths | Random lengths  
Fixed tongues

Depending on width/thickness, some plank dimensions may be attached to the subfloor with hidden screws. See table 4.

- ❗ When you install the floor, we recommend that you consider – and take into account – the expected indoor climate and seasonal variation. See Dinesen's recommendations in the table below.
  - ❗ Oak and Ash planks in widths of 22 x 250 mm and 22 x 300 mm must always be full-surface glued or screwed from above.
1. Lay the first row of planks 10-15 mm from the wall with the tongue facing into the room. Use temporary spacing blocks. Use string to check that the first row is completely straight. Screw the first and the last plank in place from above, cf. the procedure described in section 3.3.
  2. Screw into the upper side of the tongue at a 45° angle. Use a Dinesen screw, cf. Table 6. See Table 7 for maximum permissible joist.
- \* Special note for loose tongues:

- 2a) Glue the ends of the floor planks together with moisture-resistant PVAc glue – we recommend Dinesen Wood Glue. Apply the glue to the upper side of the tongue and the lower side of the groove. Wipe off excess glue with a damp cloth.

Use the cut-off piece from the first row to begin the next row. It may be necessary to switch planks around to avoid starting off the rows with pieces that are too short.

Joints in between joists (unsupported joints) are allowed, but never allow more than one unsupported joint for every three rows of planks in the same section. Avoid end joints close to each other in adjacent planks.

3. Then lay the next plank in the same manner. Knock the floor planks tightly together, barring other instructions. Use a 1 metre long wooden tapping block to protect the tongue from direct blows. Then lay the next plank in the same manner. Knock the floor planks tightly together. Cut to size the last row to leave a 10-15 mm gap to the wall.

- ❗ Never apply glue to the long sides of floor planks!



## 4 Installation – full-surface gluing

Full lengths | Random lengths  
Fixed tongues | Loose tongue  
Pattern

To get a successful result, the floor must be properly installed and the instructions must be followed when using the products. We therefore recommend to have a floor specialist install the floor. We also recommend that a test be carried out on site to ensure that the products are suitable for the purpose.

- ❗ All Dinesen floors can be full-surface glued using our recommended gluing system. When you install the floor, we recommend that you consider – and take into account – the expected indoor climate and seasonal variation. See Dinesen's recommendations in the Table 1.

### 4.1 Full-surface gluing in general

Before the floor is full-surface glued, it is important to ensure that the general conditions in the building are under control and in accordance with instructions from STAUF and Dinesen as regards:

- The indoor climate
- The quality, straightness and moisture content of the substrate
- The use of tools
- Drying times for filling, primer, mastic asphalt etc.
- Mounting and curing times for primer and glue
- Floors with underfloor heating

In addition, it is important to follow Dinesen's instructions in general.

The moisture content of cast substructures must not exceed 85% RH, and the cast substructure must incorporate a vapour barrier. We recommend STAUF VPU 155 S primer.

**NB:** 85% RH corresponds to approx. 2.0 cm depending on the type of concrete etc.

Be aware of any stricter requirements in the national standard. If a vapour barrier is not used, the moisture content of the concrete must not exceed 65% RH. The moisture content of woodbased substructures must not exceed 10% RH.

Before installing the floor, the cast substrate must be carefully checked in accordance with the relevant guidelines. The substrate must be resistant to pressure and stresses, must not have any cracks, must be of sufficient surface-bonding strength, and must be permanently dry, flat, clean and free of substances that may impair the adhesive properties of the glue. In addition, the porosity and adhesiveness of the surface should also be checked as well as the moisture content, room temperature, air humidity and the temperature of the substrate.

The choice of concrete type can have a strong bearing on drying times. Any moisture in the concrete could damage the wooden floor.

- ❗ Please note that the drying process is slow. It may take up to several months for the substrate to be sufficiently dry. We strongly recommend that you carry out a destructive test of the cast substrate to check the residual moisture content before applying the recommended primer. In the case of alternative measurement methods and values for residual moisture content in relation to national traditions and standards, please contact STAUF or Dinesen for detailed information.

In the case of underfloor heating in cast substrates, the heating must have been turned on for min. 30 days at normal operating temperature before laying the floor planks. If there is underfloor heating, the heating must be turned off at least 24 hours before full-surface gluing. Leave the underfloor heating off for at least 7 days after the floor has been fully glued. Slowly turn up the heat and follow Dinesen's "Before installation" instructions.

## 4.2

### Cast substrate

#### Cement-based

- The strength must at least be equivalent to CT-C30-F5, with a pull-off strength of min. 1.5 N/mm<sup>2</sup>  
**NB:** If Dinesen Layers are glued, the strength requirement can be reduced to CT-C25-F4, with a pull-off strength of at least 1.2 N/mm<sup>2</sup>  
**NB:** When using Stauf Comfort Pad, the strength requirement can be reduced to CT-C25-F4 with a pull-off strength of at least 1.0 N/mm<sup>2</sup>
- Layer thickness without underfloor heating: min. 45 mm
- Layer thickness with embedded underfloor heating: min. 40 mm above the heating pipes/cables
- The maximum permissible moisture content when using a vapour barrier is 85% RH. We recommend STAUF VPU 155 S
- The substructure must be straight with a maximum deviation of 2 mm, measured across a 2-metre straightedge
- Underfloor heating must be pressure-tested and in operation for min. 30 days before installation

#### Self-levelling filler | Levelling layer

When using a self-levelling filler, it is necessary to ensure that the products being used are compatible, dry and sufficiently strong. As a minimum, the requirements must correspond to cement-based subfloor.

- ❗ Always follow the manufacturer's guidelines on this topic. In addition, always consider the placement and necessity of a vapour barrier.

#### Anhydrite-based substrates

Anhydrite substrates are sensitive to moisture and may contain additives that make them unsuitable or which require special measures. Special attention should therefore be paid to these types of surfaces when they are being used as a substrate for the full-surface gluing of Dinesen floors.

- The strength must at least be equivalent to CA-C30-F5, with a pull-off strength of min. 1.5 N/mm<sup>2</sup>  
**NB:** If Dinesen Layers are glued, the strength requirement can be reduced to CA-C25-F4, with a pull-off strength of at least 1.2 N/mm<sup>2</sup>  
**NB:** When using Stauf Comfort Pad, the strength requirement can be reduced to CT-C25-F4 with a pull-off strength of at least 1.0 N/mm<sup>2</sup>
- Layer thickness without underfloor heating: min. 45 mm
- Layer thickness with embedded underfloor heating: min. 40 mm above the heating pipes/cables
- The maximum permissible moisture content 65% RF. No vapour barrier must be used
- The substructure must be straight with a maximum deviation of 2 mm, measured across a 2-metre straightedge
- Underfloor heating must be pressure-tested and have been in operation for min 30 days before installation

### 4.3 Plywood, oriented strand board (OSB) or chipboard

Check that the construction, the board and the surface are suitable for the purpose. The board floor must be fitted to the subfloor according to the supplier's instructions. If the construction allows, the thickness of the board may be reduced to a minimum of 12 mm.

The surface should be lightly sanded before gluing. Check that the glue sticks properly to the surface.

For installing flooring on a floating subfloor, the board layer must be continuous and properly supported. When solid planks are glued onto floating subfloors, the thickness of the board must be at least 1.5 times the thickness of the floor planks to achieve adequate strength. With Layers, the thickness of the board can be reduced to 22 mm.

Full-surface gluing to a wood-based substrate can be combined with hidden screws, where the screw holds the plank in place until the glue has cured. In this way, the requirement that weights are applied to the floor can be partially waived – please note that weights in the peripheral zones are still necessary. We recommend using a screw interval of c/c 600 mm.

- Please note that screw fixing is only a supplement to full-surface gluing, and that it is the glue which is the main installation method.

Contact STAUF or Dinesen for further advice on other types of subfloors.

### 4.4 Comfort pad

Full-surface gluing can be combined with a 3 mm STAUF Comfort Pad which is glued to the subfloor. The comfort pad can be used on both cast substrates as well as wood-based boards. The requirements for subfloors are the same as those which apply for full-surface gluing

- Do not screw through the comfort pad.

Lay the comfort pads closely together, but without any overlaps. Thus, a gap of 2-3 mm is recommended. Use rollers to ensure downward adhesion. Do not start gluing the planks down until at least 48 hours have elapsed.

Use spatulas and glue as described in Table 8.

## 4.5

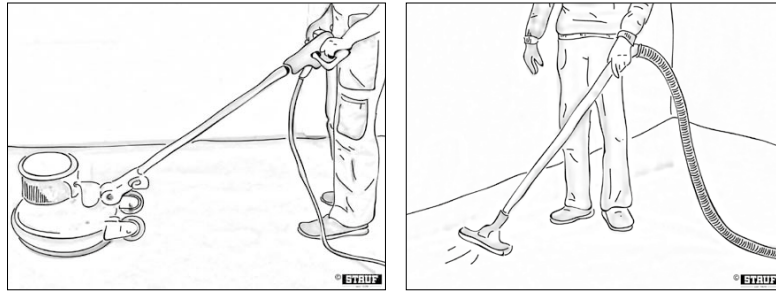
### Installation

#### Substrate preparation

Before installing the floor, it is necessary to prepare the substrate. The substrate must be clean, flat, permanently dry and without cracks and must have sufficient surfacebonding strength. Depending on the type and condition of the substrate, it may be necessary to prepare the substrate mechanically (machine brushes, sanding, levelling).

Construction joints, expansion joints, holes, marks and other joints can be closed with suitable material.

Contact STAUF for further advice.



#### Application of STAUF VPU 155 S primer

To establish a vapour barrier by using primer, the following process should be used:

Apply 150 g/m<sup>2</sup> of primer as a first layer with a mohair roller. Be sure to apply the primer in an even layer, and avoid large concentrations in the same place. Alternatively, use a foam roller, brush or smooth spatula.

1. Allow to dry for at least 45 min.
  2. Add pigment and apply 250 g/m<sup>2</sup> of primer according to the same method, but this time perpendicular to the direction of the first layer. The pigmentation ensures that the primer is evenly distributed across the surface without missing any spots.
  3. Allow to dry for at least 3 hours before installing the Dinesen planks.
  4. Check the surface before installing the planks.
- 📌 Please note that the specified drying times apply when the humidity and temperature are between 40-50% RH and 18-22 °C, respectively.

The planks must be installed within 48 hours of applying the primer. If this time limit is exceeded, it is necessary to sand the surface and apply a new, thin layer of STAUF VPU 155 S primer (100 g/m<sup>2</sup>).



### Application of STAUF SPU 570 glue

| STAUF spatula                     | STAUF Comfort Pad | Plank width |          | Layers |
|-----------------------------------|-------------------|-------------|----------|--------|
|                                   |                   | ≤ 200 mm    | > 200 mm |        |
| Nr 3; 800-900 g/m <sup>2</sup>    | ✓                 |             |          |        |
| Nr 4; 1200-1300 g/m <sup>2</sup>  |                   | ✓*          |          | ✓*     |
| Nr 14; 1400-1600 g/m <sup>2</sup> |                   | ✓           | ✓        | ✓      |

Table 8

\* Assess whether the condition and surface of the subfloor gives reason to use a larger quantity of glue.

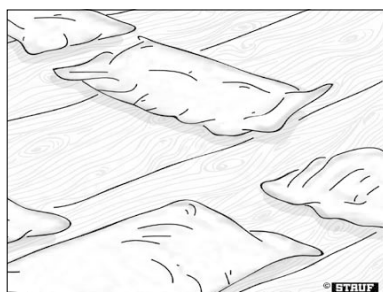
Once the substrate is prepared, apply STAUF SPU 570 glue. The correct quantity of glue and which notched trowel is used depends on the dimensions of the planks. Use spatulas and glue as described in Table 8.

Always make sure that you have used sufficient glue to ensure full-surface gluing of the planks to the substrate.

On request, STAUF PUK 455 is available as an alternative adhesive. Required amount and procedure are the same as for SPU 570.

Draw the correct notched trowel evenly across the adhesive layer to avoid large concentrations in one place or too thick a layer. Install the planks within the specified time-frame for the primer, and be aware of the glue's mounting and curing times.

- ⓘ Please note that the glue is fully cured after 48 hours, and everything should be done to avoid walking on the floor during the curing period.



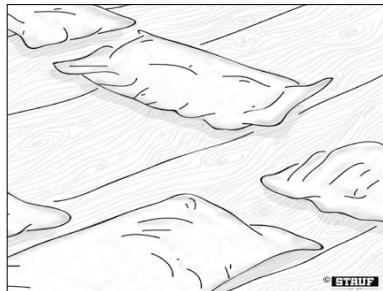
### Full-surface gluing in general

Supplementary mechanical fastening to wood-based substrates is only possible for planks with fixed tongues and must not take place through comfort pads.

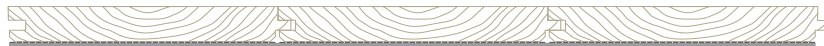
**NB:** Glue the ends of the floor planks together using moisture-resistant PVAc glue. We recommend Dinesen Wood Glue. Apply the glue to the upper side of the tongue and the lower side of the groove lip. Wipe off any excess glue with a damp cloth. Never apply glue to the long sides of floor planks!

It is recommended that temporary fixing straps are used to ratchet the planks tightly together, and to hold the planks in place until the glue has cured. Be careful not to damage the edges of the floor planks when applying the straps. To ensure a straight line for the rest of the floor, it is recommended that you first install 3-4 rows, allow the glue to dry and then install the rest of the floor

While the glue cures, the floor must be loaded with weights to ensure sufficient pressure across the entire floor surface. Place 15 kg sandbags, buckets filled with sand or similar on the planks. Distribute them evenly with approx. one load per square metre until the glue has cured. The weights should only be removed after 24 hours at the earliest.



The areas along the edges of the floor and the rows which were installed last are particularly important. The floor should not be used until the glue has cured. Sanding and finishing should not be performed until at least 48 hours after the full-surface gluing.





## 5

### Pitfalls

It is important to follow these instructions to the last detail. Following, is some additional advice for the installation process to help prevent general installation errors and damage.

- Always sort the floor planks into three piles based on their structure: knots, grain and colour variations. That makes it easier to ensure a balanced distribution when installing the floor so the end result will be a beautiful and harmonious appearance.
- When handling the floor planks, always lift them, never pull or drag them sideways over the edge of the plank below. That risks pulling splinters off the edges or weakening them so they may splinter at a later point.
- Make sure to use a tapping block that is large enough. The tapping block should be 1 metre long. If the tapping block is too small, the edges of the floor planks could be damaged, and over time, the edges might splinter. Always hit the middle of the tapping block, and use a large, heavy hammer – that will be necessary to drive large planks together.
- When shortening planks, always cut from the back to avoid any fraying on the front.
- With planks in random lengths, it is crucial to make sure that the first three floor planks are laid out absolutely straight to provide a perfectly straight starting point. Otherwise, the inaccuracies quickly accumulate and cause problems.
- Use the same installation method for the entire floor surface. Different methods of fixing to the substructure may cause unfortunate movements in the floor.
- When using plugs, make sure not to hit the plugs too hard, as that risks damaging them and causing tiny fragments to flake off over time. Always use a sharp plug drill, and note that it takes a high speed setting to avoid scratches in the plank.

## 6

### Dinesen instructions

Before installation

Installation

After installation

Pattern

See also our detailed instruction videos concerning sanding, finishing, floor-washing and maintenance on [dinesen.com](https://dinesen.com). The instruction videos are only to be seen as a supplement to our instructions.

## 7

### Literature

Træinformation: "Træ 79" ([traeinfo.dk](https://traeinfo.dk))

Dinesen's instructions are based on Danish building codes and regulations. Reservations are therefore made for national codes of practice. Please note that we can only offer advice about our own product, and thus, any additional advice lies outside the service we offer. Other building components and products require a degree of knowledge and insight that makes it necessary to seek advice from a specialist. Dinesen thus does not offer advice about the positioning of insulation and vapour barriers. As we have no control over the actual quality of workmanship, materials used and worksite conditions, these written instructions do not constitute an implied warranty of any kind. The illustrations in this document are strictly intended as a guide.

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