GRAND SURFACES

Installation Instructions

Hardened Wood Flooring

woodura®

REINFORCED WOOD SURFACE TECHNOLOGY

The patented Woodura® surface technology is based on fusing a thin sheet of wood with a Compositek™ core through a powder mix layer. The powder mix perfectly fills up the natural openings of the wood and enhances the wood appearance. It also eliminates the need for wood-filler and creates a significantly stronger surface with a hardness three times greater than a traditional solid wood floor.

LOCKING SYSTEMS

www.valinge.se

www.grandsurfaces.com

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Installer/Owner Responsibility

At Grand Surfaces, we want to ensure a smooth and enjoyable installation experience for our customers. It is essential to carefully review and follow the safety instructions provided, retaining them for future reference.

- The responsibility lies with the installer and owner to verify that the work-site, sub-floor, and sub-surface conditions meet or surpass the requirements outlined in these instructions. Failure to meet these requirements may result in installation problems or inadequate product performance, for which the manufacturer cannot be held responsible.
- Before installation, it is crucial to thoroughly inspect all materials for any defects. Please note that the warranty does not cover visible defects in material that has already been installed. Our flooring is manufactured in accordance with industry standards, allowing for manufacturing and natural deficiency tolerances of up to 5% of the total installation. To ensure your satisfaction with the product, carefully examine the color, finish, and style before beginning the installation process.
- Wood is a natural product, and each piece possesses unique characteristics. Variations in color, grain, and other features are inherent and not covered under warranty. Therefore, it is important to inspect all materials before installation. If you are dissatisfied with the appearance, refrain from installing the flooring and promptly contact your dealer. Please note that the flooring warranty does not cover visible defects that arise after installation.

Important Information:

Building regulations, recommendations, and working methods undergo frequent revisions. Prior to initiating your project, we strongly advise checking your current local regulations regarding sub-floor preparation and underfloor heating with the official trade organization or a skilled craftsman. This ensures compliance and helps achieve the best results for your installation.

Caution – Wood Dust

Cutting, sanding, or machining wood products produces wood dust. While wood products are not hazardous under OSHA Hazard Communication Standard 29, the International Agency for Research on Cancer (IARC) and the state of California have classified wood dust as a human carcinogen.

Important precautionary safety measures:

• Equipment should be equipped with a dust collector to reduce airborne wood dust. • Wear an appropriate NIOSH designated dust mask to reduce exposure to airborne wood dust. • Avoid contact with eyes and skin. • In case of irritation, flush eyes or skin with water for at least 15 minutes. • In cases of severe irritation, seek immediate medical attention.

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Pre-Installation & Jobsite Conditions

Important information

Carefully read all the instructions before you begin the floor installation.

- Grand Surfaces Hardened Wood Floors can be installed in most places in both residential and commercial areas. However, it is important to note that they are not suitable for humid or wet areas like bathrooms or saunas and should not be installed in such locations.
- Grand Surfaces Hardened Wood Floors are compatible with a wide range of hard surfaces, including resilient floor coverings like LVT, SPC, and VCT. When installing over linoleum, it is crucial to ensure that it is securely glued down, firmly fixed, completely level, and free from any loose areas.

Important information — DO NOT INSTALL OVER SOFT SURFACES

Instructions for transport and storage, indoor climate, and final preparation

- Packages should be transported and stored horizontally — acclimatize unopened packages in a dry, well-ventilated area of the job site for at least 48 hours before installation.
- Maintain a room temperature of at least 64°F (18°C) and relative air humidity (RH) range between 35-65% during storage and installation.
- Only open the packages when you have started installation.
- Floor panels from several different packages can be mixed to get your preferred look.
- Examine each floor panel in daylight before installation to look for any damage or visible defects in color or texture. Problems with defects need to be brought to the attention of the supplier before installation.
- Use protective paper without a polymer layer on top of the floor during installation.
- No not attach any adhesive tape to the floor.
- As the buyer, you are responsible for approving the product — even it is installed by a professional installer. If the product is installed, it is seen to have been approved.
- The maximum floor width is 80 linear ft (25 linear meters) in either direction before a transition is required.
- In all areas bigger than 6727 ft2 (625 m2) an expansion joint is essential to avoid gaps appearing in the joints due to changes in humidity and temperature.

Fixtures and fittings

- Never fix or bolt any kitchen units, fittings, or partitions to a floating floor — it will prevent expansion and contraction that occurs with seasonal changes and humidity. Instead, fix any fitting to the sub-floor first and then install the floating floor around them, leaving the appropriate space as an expansion gap.
- Modern kitchen units are usually fixed to the wall with support legs resting on the floor at the front of the units — this is generally ok for the floor. The exception is kitchens with heavy worktops such as marble or granite — where the support legs should not rest on the floor as it

can restrict the expansion and contraction. As an alternative, chipboard of the same thickness as the floor can be installed under kitchen units.

- It is ok to install the floor under the fridge, freezer, and dishwasher — always ensure that they are placed on plastic drip trays to avoid unseen leaks.
- If the kitchen contains a wood-burning stove or similar, install chipboard or similar under the heat-resistant floor plate or hearth under the stove. The heavy stove rests on the chipboard and not the floor, preventing problems with expansion and contraction. The chipboard should be slightly smaller in dimensions of the hearth to act as an expansion gap when you install the floor around the stove. It will also make it easier to replace floor panels near the stove, if necessary.

End Joints

- The floor needs to always be installed staggered, even in small areas — not only does this look better, but it's also essential for structural stability.
- Staggered end joints mean that no two adjacent end joints are aligned or close to each other — they should be staggered by at least 16" (400 mm) to prevent any gaps or other structural problems occurring.

Door Openings

- When installing the floor through a door or archway, always divide the floor with an expansion gap and cover that with a threshold or molding.
- If there is an existing threshold that is fixed to the sub-floor, leave expansion gaps on either side of it. Alternatively, remove the existing threshold, install the floor, and replace the threshold — leaving an expansion gap underneath it.
- If the threshold or molding is too high for the door to open and close freely after installing the floor, the door can be sanded or cut to fit.
- It may be possible to install the floor through door openings or aches without using a threshold or expansion gap, however, this type of installation requires a skilled professional.

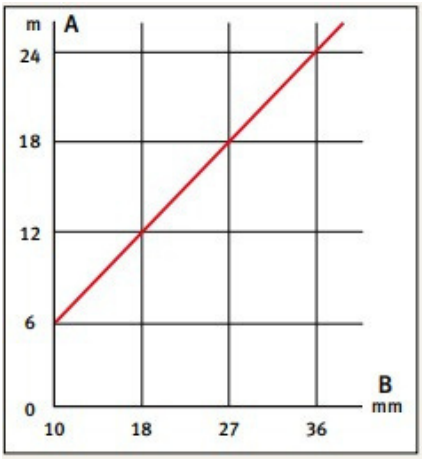
Skirting boards

- Never attach the skirting boards directly to the floor as it can restrict the expansion and contraction and cause structural problems.
- Attach the skirting boards to the wall instead — using nails, screws, or adhesive.
- Mitre joints are recommended for the best results.
- The width of the expansion gap decides the thickness of the skirting board and not vice versa.
- Read the skirting board thickness section for more details.

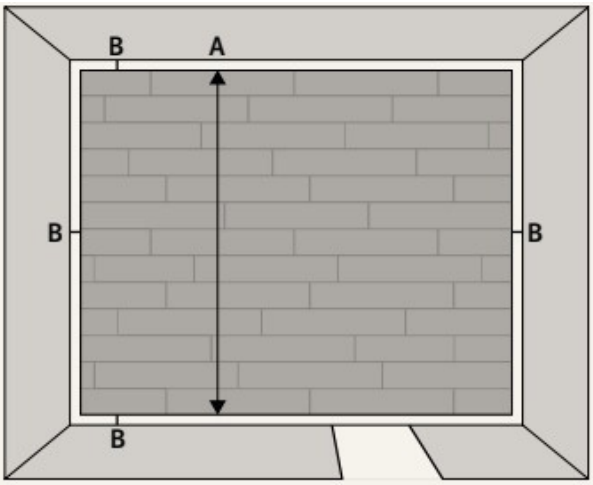
Expansion Gaps

- Wood floors expand and contract due to temperature and seasonal changes. This is why an expansion gap is critical when you install near walls and other fixed objects — every edge needs an expansion gap between it and the floor.
- The floor needs to be able to expand at thresholds, door frames, pipes, pillars, stairs, tiles, other wooden flooring, etc.

- The floor will also contract in the winter, so the width of the skirting board needs to take this contraction into account.
- Remember that an expansion gap between two rooms or floor areas will be double the width of the expansion gap between the floor and a fixed object — such as a wall. This is because both floor areas need space to expand and contract.
- A room's RH (relative air humidity) value changes due to seasons and the floor needs to able to expand and contract within this range.
- Calculate the width of the expansion gap by using the formula: 1.5mm x the room's width in meters. In the illustration below: 1.5mm x A meters = B mm
- For example: a room that is 4 meters (13.1 ft) wide needs a 6mm (0.24 inch) expansion gap. Calculated as follows: 1.5mm x 4 = 6mm (0.24 inch)
- As a rule of thumb, an expansion gap between 8—10mm (5/15—3/8") can be used for rooms less than 6 meters (19.7 ft) wide.



Graph shows: A wood floor's movements as it absorbs and emits moisture.



Skirting Board Thickness

- Remember that the width of the expansion gap decides the thickness of the skirting board and not vice versa.
- Larger floor areas will need a bigger expansion gap, which means that a thicker skirting board will also be needed.

Top Tip: If you're building new or renovating, one simple way to avoid overly thick skirting boards is to leave a gap between the plasterboards on the wall and the sub-floor. This will allow you to use the thickness of the plasterboard in your expansion gap measurement and will require a much thinner skirting board — as shown below in illustration B. would otherwise be necessary.

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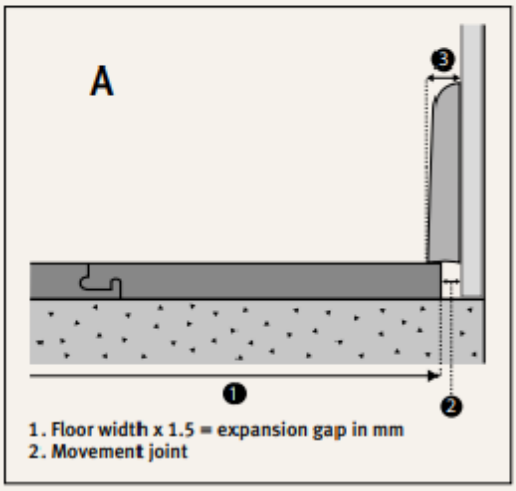
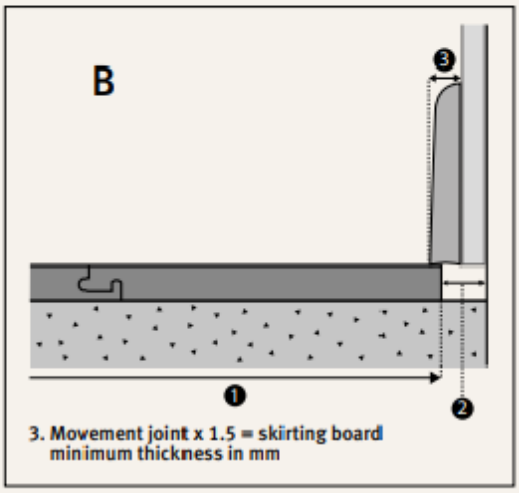
How to calculate the skirting board thickness





Minimum skirting board thickness for various floor widths

Floor width 1	Movement joint 2	Cover allowance	Skirting thickness 3
4 m (13,1 ft)	6 mm (0,24 in)	3 mm (0,12 in)	15 mm* (0,59 in)
6 m (19,7 ft)	9 mm (0,35 in)	5 mm (0,20 in)	15 mm* (0,59 in)
8 m (26,2 ft)	12 mm (0,47 in)	6 mm (0,24 in)	18mm* (0,71 in)
10 m (32,8 ft)	15 mm (0,59 in)	7 mm (0,28 in)	22 mm* (0,87 in)
12 m (39,4 ft)	18 mm (0,71 in)	9 mm (0,35 in)	27 mm* (1,06 in)
15 m (49,2 ft)	22 mm (0,87 in)	11 mm (0,43 in)	33 mm (1,3 in)
18 m (59,0 ft)	27 mm (1,06 in)	13 mm (0,51 in)	40 mm (1,56 in)

** Because a minimum of 5/16 - 3/8" (8-10 mm) movement joint is recommended.*

Sub-Floor

- Hardened wood floors can be installed on almost any type of subfloor — for example, wooden or cement concrete floors.
- Make sure the sub-floor is level, flat, dry, and clean.
- Any unevenness in height greater than 1/16" over a length of 6 ft needs to be leveled — use
- patching or leveling compound or ground/sand the area.
- Wood subfloors must have a moisture content (MC) less than. 13% at 68°F (20°C).
  Concrete or slab subfloors must have a maximum relative humidity (RH) of 80% RH at 68°F.

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Vapor Diffusion Retarders (VDR)

Important information — A VAPOR DIFFUSION RETARDER (VDR) NEEDS TO BE INSTALLED.

Vapor Diffusion Retarders are important to control moisture in floors. They come in two classes — Class I & Class II and are obligatory for certain types of subfloors when installing a floor on top.

Class I are to be used on the following:

- Concrete or slab subfloors
- Wood subfloors over concrete
- Screed or sleeper systems
- Radiant heat systems (underfloor heating)

The Vapor retarder needs to be at least 0.2 mm thick, age resistant PE-foil (6 mil polyethylene film, foil). The foil needs an 8" (20 cm) overall between the joints and needs to be taped and folded up at each wall. Once the skirting boards are installed, the retarder will be trimmed to fit.

- If the RH in the substrate is over 80%, the vapor diffusion retarder will not protect against moisture sufficiently.

Class II is to be used on the following:

- Wood subfloors over an unconditioned space
- Lightweight concrete mix or gypsum-based topping compounds
- Existing floor covering such as ceramic, terrazzo, slate, and marble installed on concrete

A ventilated moisture barrier — for example, from manufacturers like Platon and Mataki — is recommended if there is a risk of additional moisture or the RH in the subfloor is over 80% and needs to be installed following the manufacturer's instructions.

- Hardened wood floors installed on this type of substrate require a load distribution board — such as masonite, plywood, or chipboard — with a minimum thickness of 0,24" (6 mm) on top of the moisture barrier.

Important information — NO VAPOR DIFFUSION RETARDER (VDR) IS NEEDED ON TOP OF WOOD SUBFLOOR THAT HAS A CLASS I or II VAPOR RETARDED ON INSTALLED ON THE UNDERSIDE OF THE JOISTS.

- Installing the floor on an existing floor covering — such as vinyl, linoleum, adhered cork, or resilient flooring — may not require a vapor retarder.

For more information about vapor diffusion retarders, please read: NWFA Guidelines on underlayment and moisture control at NWFA.org

Underlayment

- Installing an approx. 2mm thick underlayment is recommended for noise reduction.
- An underlayment material with a compressive strength of at least 60 kPa is recommended.

• The underlayment must be installed on top of the vapor retarder.

Important information — Certain Class I underlayment sheet/vapor retarders may include 6-mil polyethylene film.

Underfloor heating

- Hardened wood floors can be installed on water-based or electrical floor heating systems.
- The floor heating system must be flat and distributed evenly in the subfloor.
- A room sensor (thermostat) and a floor sensor (for maximum temperature limitation) must be installed to prevent the surface temperature from exceeding 80°F (26°C).
- Underfloor heating must never be installed under kitchen units or similar installations.
    - For water-based floor heating systems with the pipes positioned in profiled particle floorboards, covering with heat-distributing aluminum sheets and a 0,24" (6 mm) load-bearing profiled — for example, tongue/groove — particleboard or plywood is recommended

Important information — ALL FLOOR HEATING SYSTEMS REQUIRE A CLASS I (PE-FOIL) VAPOR RETARDER BETWEEN IT AND THE UNDERLAY MATERIAL OF THE SUBFLOOR

For more information about underfloor heating, please read: NWFA Guidelines on radiant heat standards at NWFA.org

Room Climate

- Ambient climate for wood floors should be 35-65% relative air humidity (RH) at 68°F (20°C).
- A low RH can cause small cracks to appear in the joints between the planks.
- An indoor air conditioner for temperature and vapor is the optimal way to control the room — especially during the winter.
- Complaints regarding unevenness, joint openings, or board size cannot be inspected if the room climate RH and temperature are outside the limits — it can be inspected only after the room climate has had normal values for at least 4 weeks.
- Wood is hygroscopic — meaning that it absorbs moisture — and is affected by fluctuations in the room climate RH and temperature. The changes normally resolve once the room climate returns to the recommended levels.
- Underfloor heating will cause increased shrinkage in a wood floor due to the drying effect. During winter, humidifiers are recommended.

Full Surface Bonding

- As an alternative to a floating installation, Hardened Wood floors can be installed with full-surface bonding using an approved adhesive.
- All floor installation instructions and adhesive manufacturers' instructions must be followed carefully when installing floors with full surface bonding.

Recommended full surface bonding products

- Bona: Bona Titan — plus Bona R590 when a moisture barrier is also required.
- Bostik: Bostik Maxi Bond Parquette — contact Bostik technical support when a moisture barrier is also required. Both these products are an elastic 1-component silane adhesive for wooden floors. Recommendations for adhesives are based on extensive testing by the manufacturers. Test the adhesive carefully before installing flooring or contact the adhesive manufacturer's technical customer service if you have any questions. Important information — WE DO NOT ASSUME LIABILITY OR ACCEPT WARRANTY CLAIMS FOR ANY LOSSES INCURRED BY USING AN ADHESIVE INCORRECTLY. For more information about full surface bonding, please read: Installation instructions glue down Hardened wood floors at www.valingeflooring.com

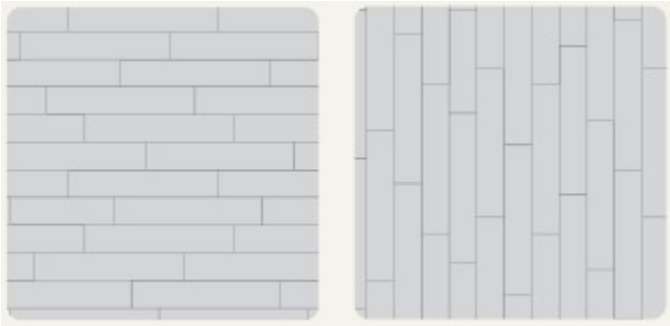
Final Preparations

Checklist:

- Remove the old skirting boards
- Remove or trim existing door casings before installing the floor
- Inspect the planks for color, finish, milling, and grade
- Remove any damaged planks • Leave the correct expansion gap (calculated on page 6) between the floor and all fixed structural elements such as walls, thresholds, pillars, or pipes
- Measure the room and calculate the number of rows required
- Choose the installation direction to suit the room's proportions — as a general rule, lay the floor in the same direction as the main light source

Recommended tools and equipment:

- Safety glasses
- NIOSH Approved Dust Mask
- Vacuum Cleaner
- ½ inch Spaces (see table for gap distance)
    - Sliding miter saw, jigsaw, laminate flooring guillotine (such as Mega STRATICUT 400), or hand saw
- Metal or Diamond Saw Blade
- Fine pencil
- Tape measure
- Set square 45° & 90°
- Moisture Meter
- PE Film (Floating)
- White glue (D3) for adjustment at radiator pipes



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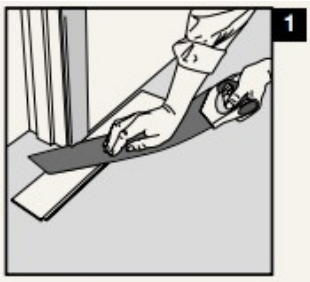
Floating floor installation

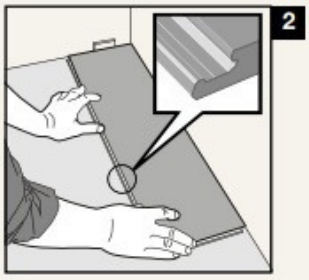
Long and short side locking techniques

- The long sides of the planks are connected by angling the tongue into the groove — where the lower lip has a locking design

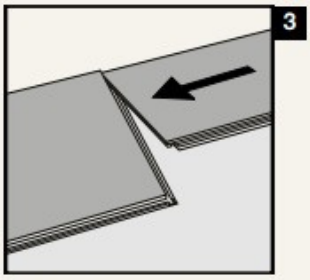
- The short sides of the planks are connected with Välinge Innovation's patented 5G® Fold Down™ locking system and simply fold down — locking with a reassuring "click"



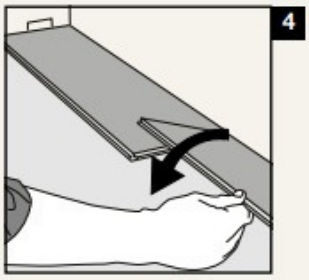
Door frames can be removed and raised, but it's usually easier to cut them. Use a loose plank as a template and saw off the excess. Ensure that the floor is not pressed between the subfloor and the door frame.



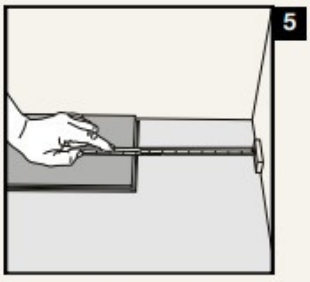
Now it's time to lay the first plank in the first row. Start in a left corner and lay a plank with the tongue side facing the wall. Now insert a wedge between the wall and the plank's left short side so there is a gap at least ½" (8-10mm) wide.



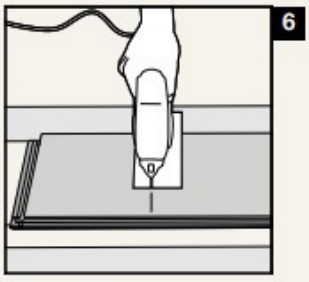
Position the second plank to the right short side of the first plank.



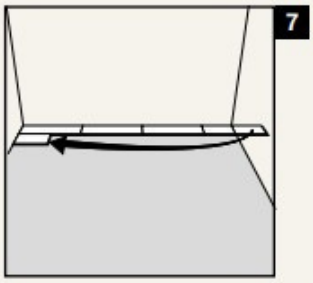
Fold down the second plank, making sure it's positioned tightly to the first plank — press down firmly and listen for the click that means it's locked in place.



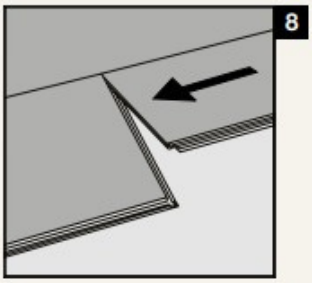
Continue installing the first row. When you are close to the wall on the right side, place a wedge at the wall and measure the length to determine the size of the row's last plank.



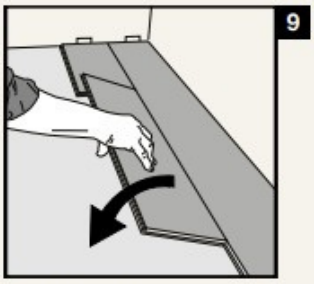
Cut the row's last plank to size. If you are using a jigsaw, cut it face down. If you are using a hand saw, cut it face up.



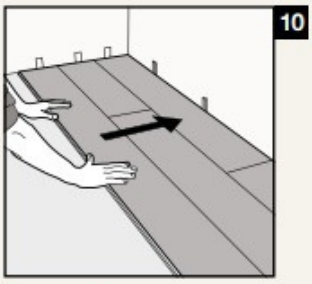
To begin the second row, use the remainder of the cut plank you used to finish the first row.



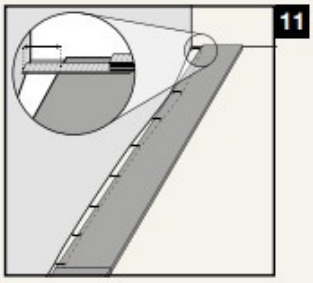
Position the second plank to the right short side of the first plank.



Fold down the second plank, making sure it's positioned tightly to the first plank — press down firmly and listen for the click that means it's locked in place.



Continue to install the row as before. When you have completed 2–3 rows insert wedges between the wall and the first row so there is a gap at least ½" (8-10mm) wide.



The first and last row may need to be adjusted if the wall is uneven. To achieve this, trace the wall profile to the first or last plank, cut, and install.

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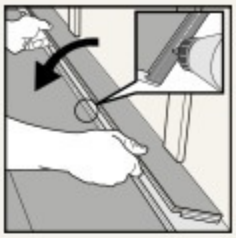
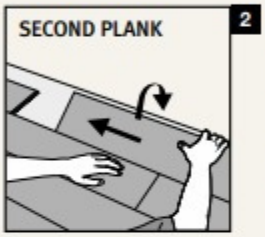
When angling is not possible



Remove the locking element/hook as shown in the diagram. Use white PVAc glue to connect the planks. Press/place wedges between the glued strip and the wall.

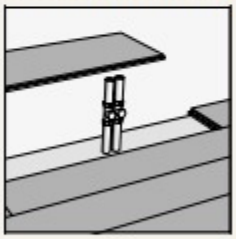
Reverse installation

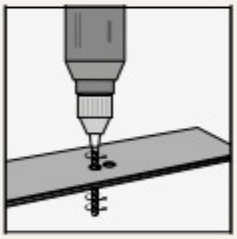
When installing in reverse, start from the left. Angle the long side groove into position at the tongue of the adjacent plank from the previous row and fold down to lock into place.

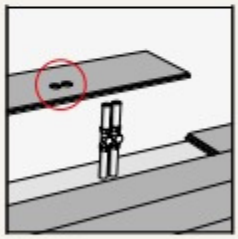


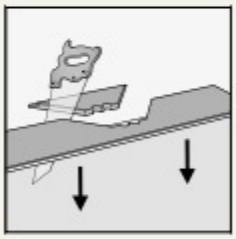
Angle the long side groove of the second plank into position at the tongue of the adjacent plank from the previous row and fold down. Now slide the second plank to the left to position it to the right short side of the first plank. Press down firmly and listen for the click that means it's locked in place.

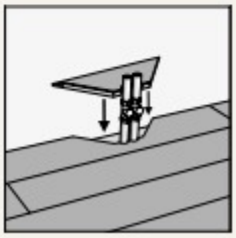
Installing around pipes

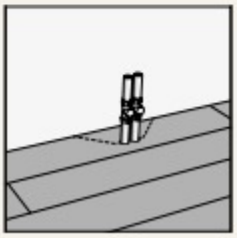


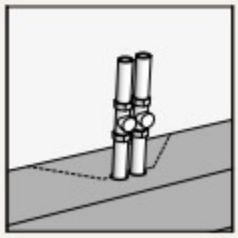






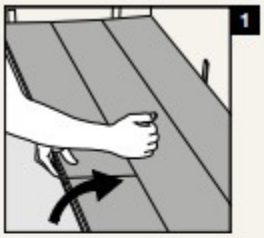






Mark the center point of the pipes on the plank. If the required expansion gap is 10mm, drill holes 20mm bigger than the pipe diameter. Cut as shown below. Apply white glue and install the floor pieces. Cover the holes with pipe collars or fill with a joint sealer.

Dismantling an installed plank

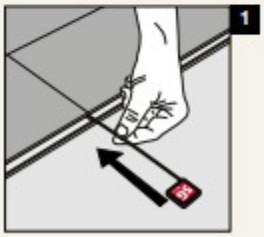


When a plank is locked, it is not possible to dismantle it by hand. Lifting up and knocking gently on a plank will unlock the row — fold up to fully release the long side.

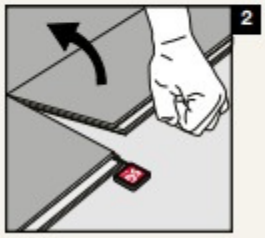
Once the whole long side is released each plank can be dismantled by angling the short sides up vertically.

Using the dismantling tool

Another way to disassemble the plank is by using our 5G dismantling tool.



Position the dismantling tool into the gap between the tongue and groove on the short end of the plank. Push the dismantling tool into the short side.



The short side should now be unlocked and the plank can be lifted.

Looking after the floor

After Installation

- Once the floor is installed, it is not recommended to place carpets on the floor for the first few months.
- If the floor has lighter colors from rugs or other covering, it will change color quickly when they are exposed to daylight.
- Use protective pads on the base of furniture legs and protective mats under caster chairs with hard wheels.
- Always use a protective mat at entrances.

Floor Treatment After Installation

Pre-lacquered Hardened Wood floors do not need any surface treatment after installation. Cleaning the floor before use is recommended — use a hardwood floor cleaner for lacquered floors, such as Bona Hardwood Floor Cleaner.

Important information — ALWAYS USE A DETERGENT SPECIFICALLY FOR UV ACRYLIC WEAR LAYER HARDWOOD FLOORS. NORMAL SOAP CAN LEAVE A FAT RESIDUE ON THE FLOOR SURFACE — MAKING IT DIFFICULT TO CLEAN.

Pre-oiled Hardened Wood floors in homes do not need any surface treatment after installation. Cleaning the floor before use is recommended — use a hardwood floor cleaner for oiled wood floors, such as

GRAND SURFACES

Bona Hardwood Floor Cleaner. Important information — ALWAYS USE A DETERGENT SPECIFICALLY FOR OILED HARDWOOD FLOORS. NORMAL SOAP CAN LEAVE A FAT RESIDUE ON THE FLOOR SURFACE — MAKING IT DIFFICULT TO CLEAN. Important information — IN COMMERCIAL AND HIGH-TRAFFIC AREAS SHOULD RECEIVE ADDITIONAL SURFACE TREATMENT IMMEDIATELY FOLLOWING INSTALLATION. 1. CLEAN THE FLOOR AND MAKE SURE IT IS DUST FREE 2.TREAT THE FLOOR WITH A HARDWAX OIL FROM OSMO

Daily Cleaning

For daily cleaning use mainly dry methods, such as vacuum cleaner, dust mop or microfiber mop. Stains/dirt can easily be removed by using a magic melamine sponge.

Regular Cleaning

Clean the surface with a microfiber cleaning pad and a Hardwood floor cleaner for lacquered wood floors or oiled wood floors (e.g Bona Hardwood Floor Cleaner) to clean the floor.

Maintenance

Pre-lacquered Hardened Wood floor

When needed, a hardwood floor refresher for lacquered wooden floors, such as Bona Hardwood Floor Refresher, can be used to freshen up the surface and remove micro scratches.
A floor refresher is suitable for restoring a worn lacquer — giving a protective layer for easier cleaning and maintenance. It is not, however, a substitute for a refinish.

Important information — USING A HARDWOOD FLOOR REFRESHER WILL MAKE A LACQUERED FLOORS GLOSS VALUE INCREASE. THE MORE USED, THE HIGHER GLOSSIER IT WILL BECOME AND IT WILL MORE NOTICEABLE ON A MATT LACQUERED FLOOR. MAKE SURE THAT THE FLOOR IS CLEAN FROM POLISH, WAX, AND GREASE STAINS BEFORE APPLYING THE REFRESHER.

Pre-oiled Hardened Wood floor

Pre-oiled floors should be maintained regularly using a maintenance oil or hard wax oil from Osmo.

GRAND SURFACES

Installation Instructions – Glue Down

Hardened Wood Flooring

woodura®

REINFORCED WOOD SURFACE TECHNOLOGY

The patented Woodura® surface technology is based on fusing a thin sheet of wood with a Compositek™ core through a powder mix layer. The powder mix perfectly fills up the natural openings of the wood and enhances the wood appearance. It also eliminates the need for wood-filler and creates a significantly stronger surface with a hardness three times greater than a traditional solid wood floor.

2G 5G

LOCKING SYSTEMS

www.valinge.se

www.grandsurfaces.com

GRAND SURFACES

Installer/Owner Responsibility

At Grand Surfaces, we want to ensure a smooth and enjoyable installation experience for our customers. It is essential to carefully review and follow the safety instructions provided, retaining them for future reference.

- The responsibility lies with the installer and owner to verify that the work-site, sub-floor, and sub-surface conditions meet or surpass the requirements outlined in these instructions. Failure to meet these requirements may result in installation problems or inadequate product performance, for which the manufacturer cannot be held responsible.
- Before installation, it is crucial to thoroughly inspect all materials for any defects. Please note that the warranty does not cover visible defects in material that has already been installed. Our flooring is manufactured in accordance with industry standards, allowing for manufacturing and natural deficiency tolerances of up to 5% of the total installation. To ensure your satisfaction with the product, carefully examine the color, finish, and style before beginning the installation process.
- Wood is a natural product, and each piece possesses unique characteristics. Variations in color, grain, and other features are inherent and not covered under warranty. Therefore, it is important to inspect all materials before installation. If you are dissatisfied with the appearance, refrain from installing the flooring and promptly contact your dealer. Please note that the flooring warranty does not cover visible defects that arise after installation.

Important Information:

Building regulations, recommendations, and working methods undergo frequent revisions. Prior to initiating your project, we strongly advise checking your current local regulations regarding sub-floor preparation and underfloor heating with the official trade organization or a skilled craftsman. This ensures compliance and helps achieve the best results for your installation.

Caution – Wood Dust

Cutting, sanding, or machining wood products produces wood dust. While wood products are not hazardous under OSHA Hazard Communication Standard 29, the International Agency for Research on Cancer (IARC) and the state of California have classified wood dust as a human carcinogen.

Important precautionary safety measures:

• Equipment should be equipped with a dust collector to reduce airborne wood dust. • Wear an appropriate NIOSH designated dust mask to reduce exposure to airborne wood dust. • Avoid contact with eyes and skin. • In case of irritation, flush eyes or skin with water for at least 15 minutes. • In cases of severe irritation, seek immediate medical attention.

GRAND SURFACES

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GRAND SURFACES

Pre-Installation & Job site Conditions

Important

Read through the entire glue down installation instructions carefully before you begin to install the floor.

- Grand Surfaces Hardened Wood can be installed in all indoor areas as well as most commercial premises. However, it is not recommended for installation in humid or wet areas such as bathrooms or saunas.
- Grand Surfaces Hardened Wood Flooring can be securely glued to various professionally installed subfloors, including concrete, screed, chipboard, or plywood boards.
- Transport and store the cartons horizontally. Unopened cartons should be acclimatized at the job site in a dry, well ventilated area for a minimum of 48 hours.
- During storage and installation, maintain a room temperature of at least 64°F and a relative air humidity (RH) range of 35-65%.
- Open the packages only when you begin installing the floor.
- Mix planks from several packages before installation, in order to achieve the desired floor pattern.
- Check all planks in daylight before installation for recognizable faults in color and texture.
- Place a protective paper, without a polymer layer, over the floor surface during the installation.
- **Please note that no tape should be attached to the floor.**
- All concerns regarding deviations on the product should be discussed with the supplier before installation.
- When a product is installed by either yourself or a skilled craftsman, you as a buyer are considered to have approved the product.
- Any installed plank is an approved product.

Subfloor

Waterproof Hardwood Flooring can be glued to any professionally installed subfloor. This includes concrete and screed, as well as chipboard or plywood boards. Ensure that subfloor is level, flat, dry, and clean. Any deflection in the subfloor greater than 1/16” over 6’ length should either be smoothed with patching or a leveling compound or ground/sanded down mechanically.

Concrete/slab subfloors:

The surface temperature of the subfloor should be a minimum of 59°F.

- Subfloors of concrete should have max 80% relative humidity (RH) at 68°F

Wood subfloors:

Prepare the subfloor for installation, re-nail any loose areas that are squeaky. Sand or plane any raised areas and fill any low areas.

- The moisture content of wood subfloors must be less than 13% Moisture Content (MC) at 68°F.

Install a Class I liquid impermeable vapor retarder over the slab when calcium chloride readings are greater than 3 lbs, relative humidity readings are greater than 80%, or calcium carbide readings are greater than 2.5%. In on- and below-grade applications, due to the ever-changing moisture variability with a concrete slab, and the likelihood of sub slab moisture barrier degradation over time, a Class I impermeable vapor retarder is always recommended.

After any necessary improvements have been made to the subfloor the Hardened Wood Flooring is

ready for installation in accordance with the appropriate standards and technical specifications.

For more information about vapor diffusion retarders, please read: NWFA Guidelines on Underlayments: Moisture Control NWFA.org

Underfloor Heating

Waterproof Hardwood Flooring can be installed on water-based or electric floor heating systems. The underfloor heating system must be flat and well distributed in the subfloor. Both a room sensor (thermostat) and a floor sensor (for maximum temperature limitation) must be installed to prevent the surface temperature from exceeding 81°F. Underfloor heating must never be installed under kitchen cupboards or similar installations. Water-based floor heating systems with the pipes positioned in profiled particle floorboards with heat distributing aluminium sheets must be covered with a loadbearing profiled (i.e. tongue/groove) particleboard or plywood, of at least 0.47" thickness. For more information about underfloor heating, please read: NWFA Guidelines on Radiant Heat Standards NWFA.org

Room Climate

The ambient climate for wood floors should be 35-65% relative humidity (RH) at 68°F. At low RH, fine cracks can occur in the joints between the planks. The best way to control the climate is with an indoor air conditioner for temperature and vapor, especially during wintertime. If given limits for indoor climate parameters such as temperature and relative humidity in the air (RH) at the floor level, exceed or fall short, remarks on evenness, joint openings or board size cannot be reviewed.

The floor can be inspected when the room climate (temperature and RH) has been stable for at least four (4) weeks and has returned to normal values within the limits. Climate variations are natural and because of the hydroscopic material properties of wood and any changes will fully or partly revert when the room climate conditions fulfill the requirements above. Underfloor heating causes additional drying of the wood flooring material, which leads to extra shrinking. During wintertime (heating period) the use of humidifiers is recommended.

Glue Down Installation

Waterproof Hardwood Flooring can be installed with full surface bonding using an approved adhesive as an alternative to floating installation. Please note that when installing floors with full surface bonding all floor installation instructions must be always followed carefully, as well as the general recommendations and instructions from the adhesive manufactures must be followed.

We recommend the following products:

Bona: Bona Titan

Bostik: Bostik Maxi Bond Parquette

Both these products are an elastic single-component silane based adhesive for wooden floors.

If you need a moisture barrier we recommend using Bona R 590 together with Bona Titan. For Bostik Maxi Bond Parquette please contact Bostik technical support for information.

The recommendations for adhesives are based on extensive testing by the manufacturers. We recommend that you test the adhesive carefully before installing flooring or contact the adhesive manufacturer's technical customer service if you have any questions.

Note! We do not assume liability or warranty claims for any losses incurred in using an adhesive system incorrectly.

- Always glued directly to the subfloor.
- Leave an expansion gap of 5/16 - 3/8" between the floor and all walls.
- The tongue and groove must NOT be glued.
- There must be no expansion breaks in the floor regardless of size.
- Do not apply more adhesive than can be "worked" in the course of 10-15 minutes.
- Apply the adhesive with a wide-toothed spatula. The width of the spatula's teeth is important.
- To obtain a good final result it is very important to be precise in the installation of the first rows of planks. Always place the planks in the adhesive in front of the previous row then push and rotate them into place along the side and end of each plank.
- Immediately clean off any adhesive spilled on the wood flooring during installation. Follow the adhesive manufacturer's recommendations.

Preparations:

Checklist:

- Remove the old skirting boards
- Remove or cut off existing door frames before installing the floor
- Sweep or vacuum subfloor thoroughly
- Measure the room and calculate the number of rows required
- In narrow or long rooms, choose the installation direction to suit the room's proportions, usually lengthwise or in the main direction of light
- Do not open packages before installation!
- Inspect planks before installation and lay aside any with defects
- Tip: Dry-lay the first two rows to familiarize yourself with Hardened Wood Flooring

Tools & Equipment needed:

- Chalk line

- Straight edge
- Safety glasses and NIOSH approved dust mask
- Recommended spatula from the adhesive manufacturer
- Wood flooring adhesive
- Expansion wedges
- Sliding mitre saw or jigsaw or a laminate flooring guillotine such as Mega STRATICUT
- 400 Metal or diamond saw blade
- Fine pencil
- Ruler
- Set square 45° & 90°

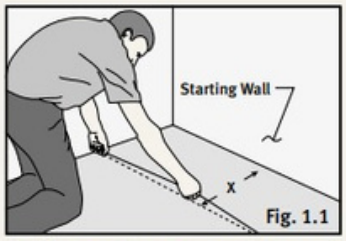
Installation Instructions:

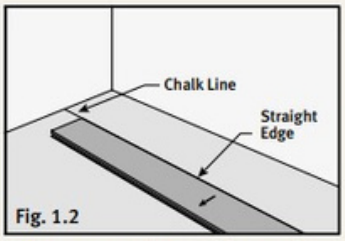
Connect the long sides by angling the tongue into the groove (tapping the lower lip will lock it in place). Connect the short ends with the Välinge patented 5G® Fold Down locking system as you lower the plank down.

Tip!

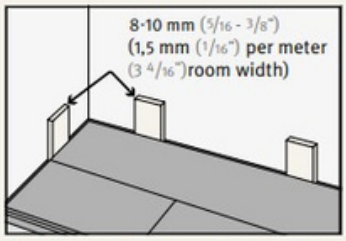
Door frames can be removed and moved up, but cutting them is usually easier. Use a loose plank as a template and saw off the bottom of the frame. Make sure the planks are not wedged between the subfloor and the frame.

Step 1 - Layout



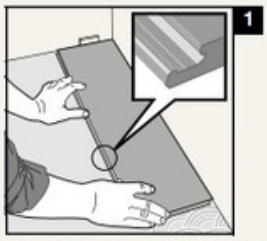


Using the starting wall as reference, snap a chalk line on the subfloor at distance X from the wall as shown in Fig. 1.1. Align the straight edge with the chalk line and secure to the subfloor.

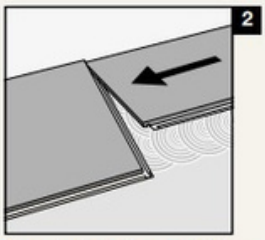


We recommend a clearance to the wall of min. ½" per 3' 4/16" room width.

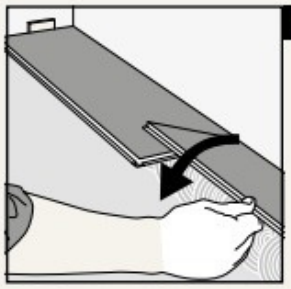
Step 2 - Installation



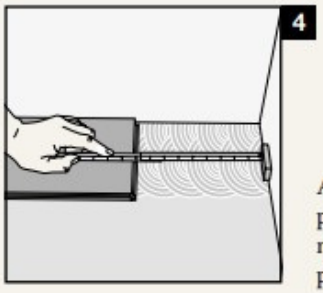
First plank, first row. Start in the left corner with the tongue side facing the wall and the long groove side directly up against the straight edge. Spread enough adhesive to cover one plank width. Use only as much adhesive as can be used during the manufacturer's maximum recommended time for keeping the container open.



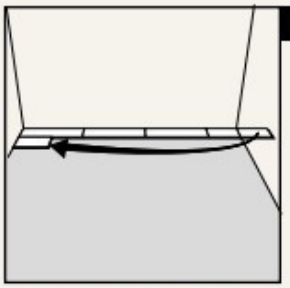
Second plank, first row. Line up the plank gently and tightly to the short end of the previous plank.

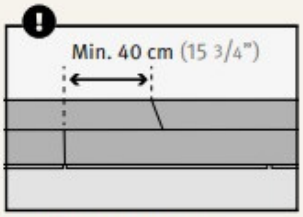


Lower the plank down in a single movement. Make sure the planks are tight against each other. Press down the plank.

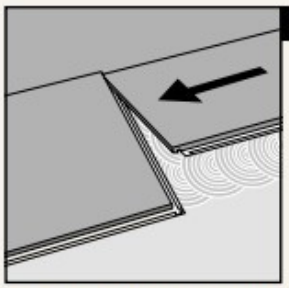


At the end of the first row, put a wedge to the wall and measure the length of the last plank to fit.





Start the second row with the offcut from the first row.
Note! *There must be at least 16" between the short end joints of the planks.*



Second plank, second row. Line up the plank gently and tightly to the short end of the previous plank. Lower the plank down in a single movement. Make sure the planks are tight against each other. Press down the plank.

Note! *Ensure that the short end is connected.*

Note!

- After the first 2-3 rows have been installed, ensure the expansion space between the planks and walls is aligned securely
- If recommended by the adhesive manufacturer, roll the flooring with 100 lb. roller to ensure contact between flooring and subfloor. Place a weight (e.g. unopened cartons) along the perimeters until the adhesive sets
- Remove the straight edge

Step 3 - Subsequent Rows

Once the starting rows are firmly in place, apply the adhesive using the "wet lay" method. Do not apply more adhesive than can be used within the opening time of the adhesive. Immediately place the flooring in "wet" adhesive and proceed with installation.

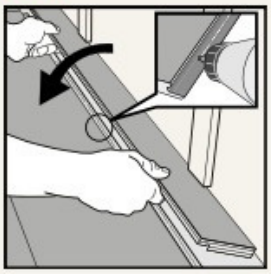
- Start each row with the cut-off end of last plank of the previous row.
- Ensure there is at least 16" between the plank joints at the short ends.
- Hardened Wood Flooring can be laid from both directions according to need.

Tip!

- After the first three rows are laid, have one installer work on installing flooring while others spread adhesive and cut planks as needed
- Installing Hardened Wood Flooring is easier when you work from the direction of already installed flooring, as shown in Fig. 3.1
- Working in this manner lessens the chance of accidentally transferring adhesive onto the flooring surface, thereby reducing clean-up time

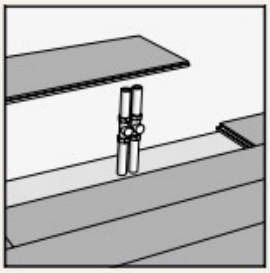
Fig. 3.1

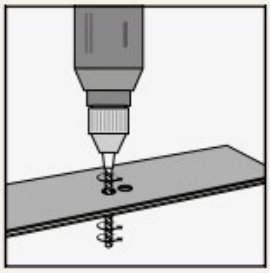
When angling is not possible

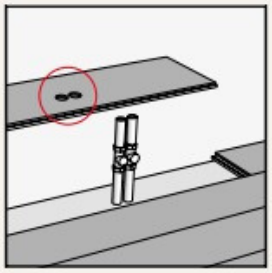


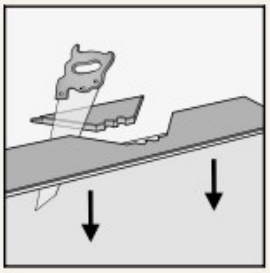
Remove the locking element/hook according to the picture.
Use white PVAc glue to connect the planks.
Position wedges between the glued plank and the wall.

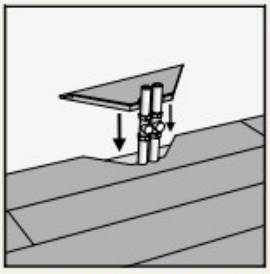
Installation around pipes

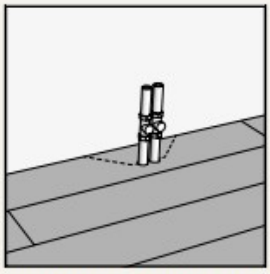


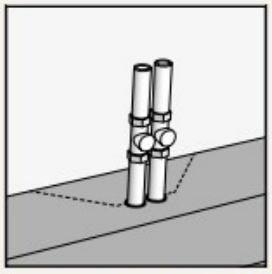












Mark the center point of the pipes on the plank. Drill holes 1" bigger than the pipe's diameter (if gap distance selected is ½"). Cut according to the picture. Fix with white glue and replace the floor pieces. Cover the holes with pipe collars or fill with a joint sealer.

After Installation

- Do not lay rugs or carpets on the floor during the first months after installation. Areas beneath a rug will show up lighter than the rest of the wood floor, which will darken slightly when exposed to sunlight.
- Protective felt pads are recommended under furniture legs and protective carpets under castor chairs with hard wheels.
- Always use protective entrance carpets.

Installation Treatment:

Pre-lacquered floor:

Pre-lacquered hardened wood floors do not need any surface treatment after installation. But we recommend cleaning the floor before using it. Use a hardwood floor cleaner for lacquered wood floors

(e.g. Bona Hardwood Floor Cleaner). Note! Use detergent specially formulated for UV Acrylic Wear Layer hardwood floors. Normal soap may form a fatty coating on the surface which makes the floor more difficult to clean.

Pre-oiled floor:

Domestic Areas

In domestic areas pre-oiled hardened wood floors do not need any surface treatment after installation. But we recommend cleaning the floor before using it. Use a hardwood floor cleaner for oiled wood floors

(e.g. Bona Hardwood Floor Cleaner). Note! Use detergent specially formulated for oiled wood floors. Normal soap may form a fatty coating on the surface which makes the floor more difficult to clean.

Commercial Premises

Note! In commercial premises we recommend that the first periodic maintenance should be performed immediately after installation. Pre-oiled hardened wood floors installed in commercial premises must be given additional surface treatment to meet the requirements to which they are exposed.

Clean the floor of any dust from installation before starting the oil treatment. Use a hardwood floor cleaner for oiled wood floors (e.g., Bona Hardwood Floor Cleaner). In commercial premises we recommend using hard wax oil from Osmo.

Daily Cleaning

For daily cleaning use mainly dry methods, such as a vacuum cleaner, dust mop or microfiber mop. Stains/dirt can easily be removed by using a magic melamine sponge.

Regular Cleaning

Clean the surface with a microfiber cleaning pad and a hardwood floor cleaner for lacquered wood floors or oiled wood floors (e.g. Bona Hardwood Floor Cleaner).

Maintenance

Pre-lacquered floor:

If necessary, a hardwood floor refresher for lacquered wooden floors (e.g. Bona Hardwood Floor Refresher) can be used to freshen up the surface and remove any surface scratches.

A refresher restores the surface of well-worn lacquer and gives a protective layer that simplifies cleaning and maintenance. A refresh is not a substitute for refinishing.

Note! Using a hardwood floor refresher increases the glossiness on lacquered floors. The more layers you put on, the higher the glossiness level. This is more evident on matt lacquered floors. The floor to be treated should be clean and free from polish, wax and any grease stains.

Pre-oiled floor:

Pre-oiled hardened wood floors need to be maintained regularly. For maintenance treatment we recommend using maintenance oil or hardwax oil from Osmo.