



# **Installation instructions**

# Hardened Wood XXL Flooring

# woodura<sup>®</sup>

#### REINFORCED WOOD SURFACE TECHNOLOGY

Woodura® is a reinforced wood surface created by fusing a thin sheet of wood with a wood fiber core and a powder mix layer. The powder mix perfectly fills up the natural openings of the wood, enhances the wood appearance and creates a significantly stronger surface with a hardness about three times greater than a traditional solid wood layer.

www.woodura.com





LOCKING SYSTEMS

www.valinge.se





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# **Installer/Owner Responsibility**



It is extremely important that you read and understand this information completely prior to starting, since improper installation can void the warranties. It is the responsibility of the installer and owner to ensure that the job site environment, sub-floor and subsurface conditions involved meet or exceed all requirements as outlined in these installation instructions. Manufacturer declines all responsibility for product performance or installation failure due these environmental conditions not being met.

Carefully inspect ALL material prior to installation for defects. Material installed with visible defects is not covered under warranty. Flooring is manufactured in accordance with industry standards, which allows manufacturing and natural deficiency tolerances up to 5% of the total installation. Examine the flooring for color, finish and style before installation to insure you have the correct product.

Wood is a natural product that can vary in color, grain and contains natural characteristics that varies plank to plank and is to be expected. We do not warrant against these natural variations from plank to plank. If not satisfied with the flooring prior to installation, contact your dealer – DO NOT install the flooring.

Accepting or rejecting the material must be done prior to installation. Flooring warranties DO NOT cover materials with visible defects once they are installed.



### 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.

**Precautionary 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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Disclaimer: The colours of any flooring may differ in printed materials compared to the real product



# **Pre-Installation & Jobsite Conditions**

### **Important**

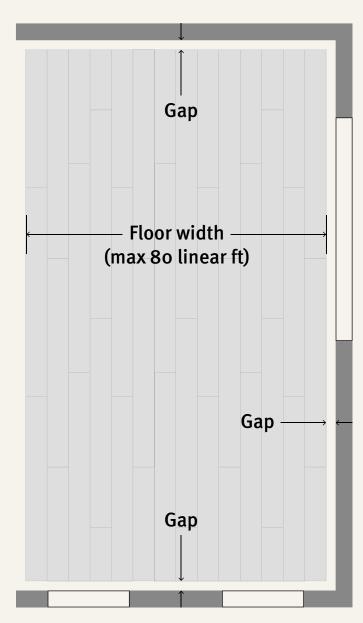
Read through the entire installation instruction carefully before you begin to install the floor.

- Välinge Hardened Wood XXL can be installed in all indoor areas and in most commercial areas, except it is not suitable for installation in humid/wet areas (bathrooms, saunas, etc)
- Välinge Hardened Wood XXL can be installed over most hard surfaces including resilient floor coverings such as LVT, SPC, VCT, linoleum provided they are glued down, sufficiently fixed, completely level and have no loose areas
   Note! (DO NOT INSTALL OVER SOFT SURFACE)
- Transport and store the cartons horizontally. Unopened cartons should be acclimated at the jobsite in dry, wellventilated area for a minimum of 48 hours
- During storage and installation, maintain a room temperature of at least 64°F (18°C) and a relative air humidity (RH) range from 35-65%.
- Open the packages while 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
- Protective paper, without a polymer layer, successive placed over the floor surface during the installtion
- Please note that no tape should be attached to the floor
- All concerns reagarding deviations on the product should be discussed with the supplier before installation
- When a product is installed by yourself or a skilled craftsman, you as a buyer is considered to have approved the product
- An installed plank is an approved product

# Room designs and floor size

In all areas bigger than 6727 sqft (625 sqm), expansion joint must be installed to avoid joint openings, due to changes in humidity and temperature. In for example kitchens all permanent pieces of furniture and such as cupboards and kitchen islands must be installed on the subfloor and not on top of the wooden floor.

**Maximum floor width:** 25 Linear meters (80 linear ft) in either direction before a transition is required.



# Expansion space (floating): Please follow the following expansion gap chart:

- Up to 15 linear feet (225sqft): 1/4" expansion
- 15 Linear feet (225sqft) to 50 Linear Feet (2500 sqft): Add 1/16" for each additional 5 ft (25 sqft) over the original 225 sqft (example ¼" + 1/16")
- 50 linear feet plus (2500 sqft+) minimum of 1" expansion



#### Subfloor

Hardened Wood XXL can be installed on almost any type of subfloor such as wooden floors or cement concrete floors. Ensure that subfloor is level, flat, dry and clean. Any deflection in the subfloor greater than 1/16" over 6' length should be either smoothed with patching or leveling compound or ground/sanded down mechanically.

- Moisture content of wood subfloors must be less than 13% Moisture Content (MC) at 68°F (20°C)
- Subfloor of concrete/slab on or below grade max of 80% RH at 68°F
- **①** *Note!* Vapor diffusion retarder is required.

### Vapor diffusion retarders

Vapor diffusion retarder (Class I & Class II) is obligatory for certain types of structural floors irrespective of age when installing a wood floor on.

#### Class I:

- · Concrete/slab subfloors
- Wood subfloors over concrete
- Screed/Sleeper systems
- Radiant heat systems (underfloor heating)

The vapor retarder shall be at least 0.20 mm thick, age resistant PE-foil (6 mil polyethylene film, foil). The foil should be at least 8" (20 cm) overlap between the joints, taped, folded up against the walls and will be cut after floor skirtings are installed.

If the relative humidity (RH) in the substrate is over 80%, a plastic sheeting vapor barrier (PE -foil) does not give sufficient protection against moisture.

#### Class II:

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

If there is a risk of additional moisture or the RH in the substrate is over 80%, we recommend a ventilated moisture barrier. Ventilated moisture barrier are made by a number of manufacturers, e.g. Platon and Mataki, and must be installed in accordance with the manufacturer's instructions.

When installing Hardened Wood XXL on this type of substrate, a load distribution board eg masonite, plywood or chipboard, min. 6 mm thickness must be installed on top of the moisture barrier.

- • Note! No vapor retarder should be installed over the wood subfloor and under the wood floor, where a Class I or Class II vapor retarder has been installed on the underside of the joists
- When installing over an existing floor covering such as vinyl, linoleum, adhered cork or resilient flooring, no vapor retarder may be necessary
- **∠** For more information about vapor diffusion retarders, please read: NWFA Guidelines on Underlayments: Moisture Control NWFA.or



### **Underlayment material**

Install an underlayment material as a noise reduction. We recommend that the underlayment material have a corresponding compressive strength (CS value) of minimum > 60 kPa. We recommend a thickness of approximately 2 mm. Underlayment material must be installed over the vapor retarder.

**•• Note!** Some Class I underlayment sheet- good vapor retarders may include 6-mil polyethylene film.

### **Underfloor** heating

Hardened Wood XXL 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 80°F (27°C).

Underfloor heating must never be installed under kitchen cupboards or similar installations.

We recommend to cover the water based floor heating systems with the pipes positioned in profiled particle floorboards with heat distributing aluminium sheets with a loadbearing profiled (i.e. tongue/groove) particleboard or plywood, in at least 0,24" (6 mm) thickness.

- Note! At all floor heating systems, a Class I vapor retarder (a PE-foil) must be placed between underfloor heating system and the underlay material at any type of subfloor.
- ☑ For more information about underfloor heating, please read: NWFA Guidelines on Radiant Heat Standards NWFA.org

#### Room climate

Ambient climate for wood floors should be 35-65% relative air humidity (RH) at 68°F (20°C). At low RH, fine cracks can occur in the joints between the planks. The best way to controll the climate is with an indoor air conditioner for temperature and vapor, especially during winter time. If given limits, for indoor climate parameters as temperature and relative humidity in the air (RH) at the floor level, is exceeded or falls short of, 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 is quite natural and belongs to the hydroscopic material properties of wood and changes will quite or partly get back when the room climate conditions fulfill the requirements above.

Underfloor heating means an additional drying of the wood flooring material which causes extra shrinking.

During wintertime (heating period) the use of humidifiers are recommended.

## **Full surface bonding**

Hardened Wood XXL can also 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 followed carefully at all times, as well as the general recommendations and instructions from the adhesive manufactures must be followed.

### We recommend following products:

Bona: Bona Titan

Bostik: Bostik Maxi Bond Parquette

All of the products is an elastic 1-component silane adhesive for wooden floors.

When needing a moisture barrier we recommend to use the Bona R 590 together with the Bona products. For Bostik Maxi Bond Parquette please contact Bostik technical support for information.

The recommendation 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 by questions.

- Note! We do not assume liability or warranty claims for any losses incurred in using an adhesive system improperly.
- For more information about full surface bonding, please read: Installation instructions glue down Hardened wood floors at www.valingeflooring.com



# **Preparations**



#### **Check-list:**

- Remove the old skirting boards
- Remove or cut off existing door casings before installing the floor
- · Inspect material for color, finish, milling, and grade
- Remove damaged planks
- · Leave an expansion space between the floor and all fixed structural elements such as walls, thresholds, pillars or pipes in the room (see table on page 3 about gap distance)
- 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 length wise or in main light direction



# **Tools & Equipment needed:**



- NIOSH approved Dust Mask
- · Vaccum cleaner
- ½ inch Spacers (see table for gap distance)
- Sliding mitre saw or jig saw or a laminate flooring guillotine (such as Mega STRATICUT 400) or a 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







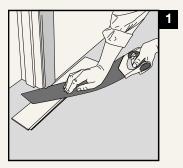


# Floating floor installation

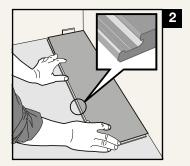
#### General

The long sides are connected by angling the tongue into the groove (where the lower lip has a locking tap). The short ends are connected with the Välinge patented 5G° Fold Down locking system as the tile is folded down.

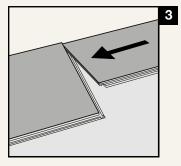
▶ Please watch: www.valingeflooring.com/downloads



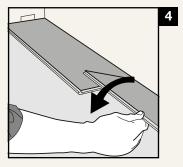
Door casings can be removed and moved up, but cutting them is usually easier. Use a loose plank as a template and saw of the door casing. Make sure that the floor is not pressed between the subfloor and the frame.



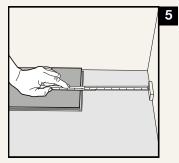
First plank, first row. Start in a left corner with the tongue side against the wall and work to the right. Press down a wedge to the left to create a joint of at least ½" (8-10mm).



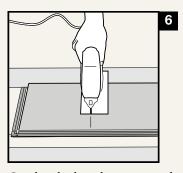
Second plank, first row. Place the plank gently and tight to the short end of the first one.



Fold the plank down in a single movement. Make sure the plank are tight against each other. Afterwards press or slightly knock at the short end just installed. You should hear a click as the short end locking system engages.



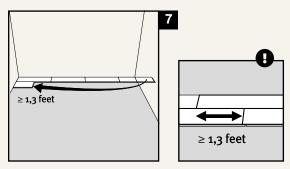
At the end of the first row, put a wedge to the wall and measure the length of the last plank to fit.



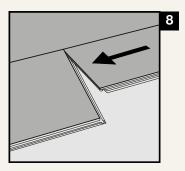
Cut the plank with a jig saw - decor side turned down or with a hand saw with the decor side upwards.

#### **Installation instructions**

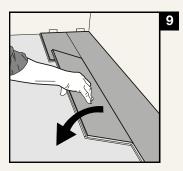




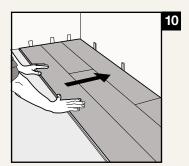
First plank, second row. Start with the rest of the cut plank from the first row. **①** *Note!* that it must be at least 1,3 ft (400 mm) of the plank between plank joints in row one and plank joints in row two.



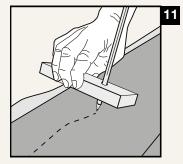
Second plank, second row. Place the plank gently and tight to the short end of the previous plank. You should hear a click as the short end locking system engages.



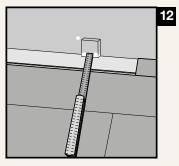
Fold the plank down in a single movement with a slight press to the left to the short end of the previous plank. Make sure the planks are tight against each other booth during and after this step.



After 2-3 rows, adjust the distance to the front wall by placing wedges to create a joint of at least  $\frac{1}{2}$ " (8-10 mm).



The first and last row may need to be adjusted at an uneveven wall. Copy the wall line to the first or last plank row with the shown tool, disasamble planks, adjust and reinstall.

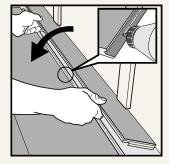


You can also use a folding rule to adjust the planks for the first and last row.



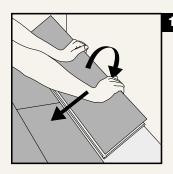
## When angling is not possible



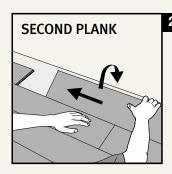


Remove the locking element/hook according to the picture. Use white PVAc glue to connect the planks. Press- place wedges between the glued plank and the wall.

### **Reverse installation**

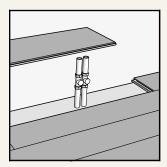


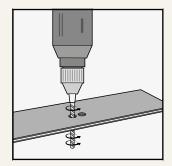
When installing plank reverse, start from the left and work to the right. Connect the longside by angling the groove into the tongue of the previous plank. Fold down the plank.

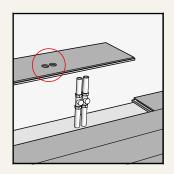


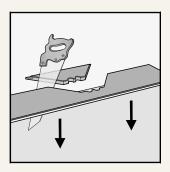
Connect the long side first, then slide the plank to the left to the 5G short end of the previous plank. Make sure the planks are tight against each other. Afterwards press or slightly knock at the short end just installed.

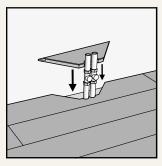
# Installation around pipes/ tubes

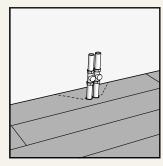


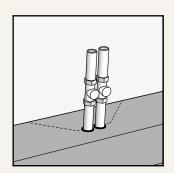








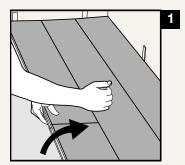




Mark the center point of the tubes on the plank. Drill holes 1" (20 mm) bigger than the tube diameter (if gap distance is chosen to be ½" (10 mm)). Cut according to the picture. Put white glue and replace the floor pieces. Cover the holes with pipe collars or fill with a joint sealer.



# Dismantling of an installed plank



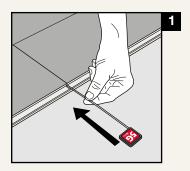
When a plank is locked, it is not possible to take it up by hand. Separate the whole row by carefully lifting up and slightly knocking just above the joint. Fold up and release the whole long side.



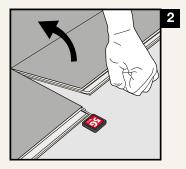
After the whole long side is released you can disassemble each plank by angling the short sides up vertically.

# How to use the dismantling tool

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



Put the dismantling tool into the space between the tongue and groove on the short end of the plank. Push the dismantling tool forward.



The plank is now loose and you can easily lift the plank up.

# **After Installation**

- Carpets should not be placed on the floor during the first months after installation. If there are already lighter parts from rugs etc, they change color quickly when exposed to daylight
- Protective felt pads are recommended under furniture legs and protective carpets under caster chairs with hard wheels
- Always use protective entrance carpets

#### Installation treatment

Pre lacquered Hardened Wood XXL floors does not need any surface treatment after installation. But we recommend to clean the floor before using it. Use a Hardwood floor cleaner for lacquered wood floors (e.g Bona Hardwood Floor Cleaner).

• Note! Use detergent specially developed for UV Acrylic Wear Layer Hardwood floors. Normal soap may form a fat coating on the surface wich makes the floor more difficult to clean.

### 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 melamin sponge.

### Regulary

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

#### Maintenance

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

Refresher is used to restore the surface of a well used lacquered floor and gives a protective layer that simplifies cleaning and maintenance. The Refresher is not a substitute for refinish.

- Note! When using Hardwood Floor Refresher the gloss value is increased on lacquered floors. The more layer you put on, the gloss level gets higher. This becomes extra clear on matt lacquered floors. The floor to be treated should be clean and free from polish, wax and possibly grease stains.
- ▶ For further information about installation treatment and maintenance please read the Care and Maintenance instructions for Flooring with Woodura surface at:

www.valingeflooring.com/downloads







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