

# GLUE-DOWN INSTALLATION BOEN X-PRESS

## PRODUCT DESCRIPTION

The BOEN X-PRESS engineered pre-finished hardwood flooring is composed of 3 layers. The top layer is a 3,6 mm layer of hardwood and the middle layer and bottom layer is made of spruce.

The surface of the hardwood flooring strips is pre-finished and has a Uniclic tongue and groove profile on the long sides and a 5G BOEN X-PRESS profile on the short ends.

EN 14342

Thickness:

14mm

Density:

« 550 kg/m<sup>3</sup>

Reaction to fire:

Dfl-S1 (14 mm with top-layer oak Cfl-S1)

Emission of Formaldehyde:

E1

Content of Pentachlorophenol:

Not detected

### Approved Commercial Uses

BOEN flooring may be used as a floor covering in public or private business, educational or religious buildings and offices.

Installation in any and all areas where food or drinks are consumed or areas contiguous

to outside entrances must be coated with a compatible wood finish urethane, in accordance with the finish manufacturers application procedures. BOEN recommends

BonaKemi or Bona Traffic in these cases.

Contact BonaKemi for details ([www.bona.com](http://www.bona.com)).

BOEN does not warranty the performance of any site-applied finish. Please contact the finish manufacturer for suitable products, procedures, and warranty.

**STORAGE INSTRUCTIONS**

The multi-layer hardwood flooring strips are packed in PE film in a cardboard box and must be treated with care in order to avoid damage. It is imperative to protect the cartons from moisture during transportation and storage. The cartons must be stacked horizontally. Recommended storage temperature is normal indoor conditions.

The cartons must only be opened directly before installation work begins.

**Wood surface**

Our quality controllers have graded and inspected the hardwood flooring prior to packaging.

Any questions or claims regarding grading or visual defects must be made prior to the installation of the floor. Remember that the finished result is the responsibility of the installer. Wood is a natural product with natural differences in color and grain. We therefore cannot accept any subsequent claims. Installation should be carried out in accordance with DIN standards, i.e. DIN 18365 and DIN 18356.

## **JOBSITE PRECONDITIONS IN THE ROOM**

### **Climatic conditions**

It is a precondition of installation that the room is heated and dry. All windows and doors must be installed and all pouring of concrete and rendering work must be completed well in advance.

If the relative humidity (RH) in the room is too high, the hardwood flooring will absorb the excess moisture and as a result, the wood will swell.

The relative humidity (RH) should not exceed 65 % with a room temperature of 64°F (18°C).

Prior to installation, the cartons should be stored in the room in which they are to be installed for a minimum of 48 hours prior to being opened.

Carefully inspect the outside surroundings for improper drainage and predictable or obvious sources of moisture.

Check windows and doors for proper drainage and waterproof caulking. Inspect concrete subfloor for cracks or buckling. Sometimes the water table (water beneath the surface) may rise and force water up through the concrete floor with hydrostatic pressure.

Check the ventilation system in the crawl space, basement, and attic. Inspect pipes, water heater tank, dishwasher, and any other plumbing fixtures in the affected area.

Remember to take seasonal changes in relative humidity into consideration when installing a BOEN floor.

Signs that the moisture content is too high include discolored (darker) concrete and evidence of actual water droplets.

It is essential that an expansion gap of 8 – 10mm is left between the edge of the floor and all walls and projectiles. These gaps are later covered by skirting's and moldings. To avoid what is known as "curving" in larger rooms, it is advisable to use a template during installation.

## **SUB FLOOR REQUIREMENTS**

14 mm multi-layer hardwood flooring can be glued to any professionally installed subfloor.

This includes concrete and screed, as well as chipboard or plywood boards. The sub-floor must meet the normal requirements for the installation of any hardwood flooring, i.e. dry, level to within 1/8" in an 8ft. radius, even, self-supporting and clean. After any necessary improvements have been made to the sub-floor the hardwood flooring is ready for installation in accordance with the appropriate standards and technical specifications.

### **Levelling**

Special care must be given to the evenness of the sub-floor so as to avoid air pockets as short-strip hardwood flooring cannot compensate for any fluctuation in the sub-floor.

### **Temperature**

The surface temperature of the sub-floor should be a minimum of 59°F (15°C).

### **Concrete sub floor**

The concrete subfloors have to be tested prior to installation. Concrete subfloors must not contain more than 3 lbs. moisture on a dry-weight basis (calcium chloride test).

Subfloor must read 4.5 or less with Tramex meter. Follow ASTM2170 - subfloor relative humidity not to exceed 75% with in-situ probe.

For open pores in concrete sub-floor and other imperfections we recommend using a suitable leveling compound, specially designed for use with hardwood flooring. These products must be used in accordance with the manufacturers' instructions.

### **Wood sub floor**

Moisture content of wood subfloors must be less than 12% Moisture Content (MC). To prepare the subfloor for installation, re-nail any loose areas with squeaks. Sand or plane any high spots and fill any low areas. Document and keep ALL test results.

Subsequent excessive moisture after pre-installation documented testing is evidence of moisture intrusion and will not be covered under BOEN warranty.

### **Cleaning of the sub floor**

The subfloor must be clean.

### **Humidity**

Relative humidity at the job site must be, and remain, minimum 30%, maximum 60%. Temperature setting must be, and remain, within 15° F of normal operating range.

**General information**

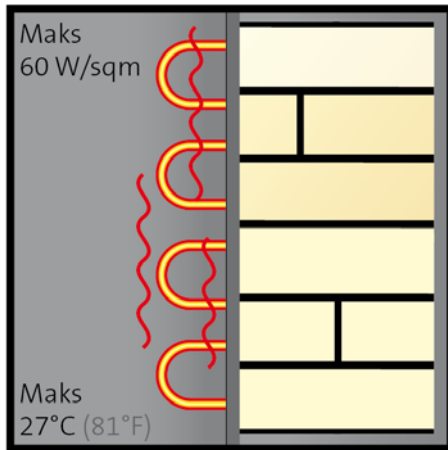
In general – and particularly in the case of new buildings – it is preferable to install the hardwood flooring as one of the last tasks. If this is not possible, it is essential that the surface of the floor be protected using builders paper, hardboard or cardboard. (Never use plastic film, as this does not allow for the diffusion of moisture.)

The laying out of the floor must be carefully considered before beginning the installation process. When installing long-strip pattern, it is an advantage to install the strips lengthwise to the main source of light, so as to take into account the lights' angle of incidence.

To obtain a good final result it is very important to be precise in the installation of the first rows of strips. The strips are always placed in the adhesive in front of the previous row and pushed and rotated into place along the side and end of each strip.

## SUB FLOOR HEATING

Installing 14mm hardwood flooring combined with under-floor heating



With a thermal resistance of 0,15 W/sqm, the 14mm, multi-layer hardwood flooring is suitable for gluing to a sub-floor which incorporates an under-floor heating system. The heating effect must not exceed (60W/sqm). The surface temperature of the hardwood flooring must not exceed 81°F (27°C). The heating system must distribute the heat evenly throughout the entire floor irrespective of the heat setting.

Certain wood species, e.g. Maple, Beech and Jatoba, are more susceptible to fluctuations in temperature and humidity. This can cause gaps to form between the strips, during the winter months when the heating is used. This can be minimized by keeping a constant air temperature of 68°F -72°F (20 – 22°C) in the room with a relative humidity of 30 – 60 %.

**CAUTION!** Carpets and rugs with backings made of insulating materials (e.g. rubber/foam) must not be used, as they cause an accumulation of heat which can damage the wood.

## **GLUE-DOWN INSTALLATION of BOEN X-PRESS 5G**

The 14 mm 3-strip and 1-strip, multi-layer hardwood flooring must always be glued directly to the sub-floor. The tongue and groove must NOT be glued. The choice of adhesive is dependent on the type of sub-floor and conditions associated with the buildings' construction. Only adhesive that is specifically recommended for hardwood flooring should be used i.e. adhesive containing the minimum amount of water.

The adhesive is applied using a course toothed spatula. The dimension of the teeth of the spatula is important. The adhesive should be applied in accordance with the manufacturers' instructions. Do not apply more adhesive than can be "worked" in the course of 10 – 15 minutes.

Installing BOEN floors with the Glue down method requires no expansion breaks in the floor and is not limited in size.

### ***IMPORTANT!***

***Do not open packages before installation starts!***

Inspect boards before installation and lay aside boards with defects.

**To the installer!** It is the installers responsibility to make sure the final result is according to grade and the installation has been performed under control in regards to; Relative Humidity of the room, moisture content of the subfloor and that the floor is levelled. Any unusable boards should be set aside for later replacement.

### **Prior to Installation**

Sweep or vacuum subfloor thoroughly.

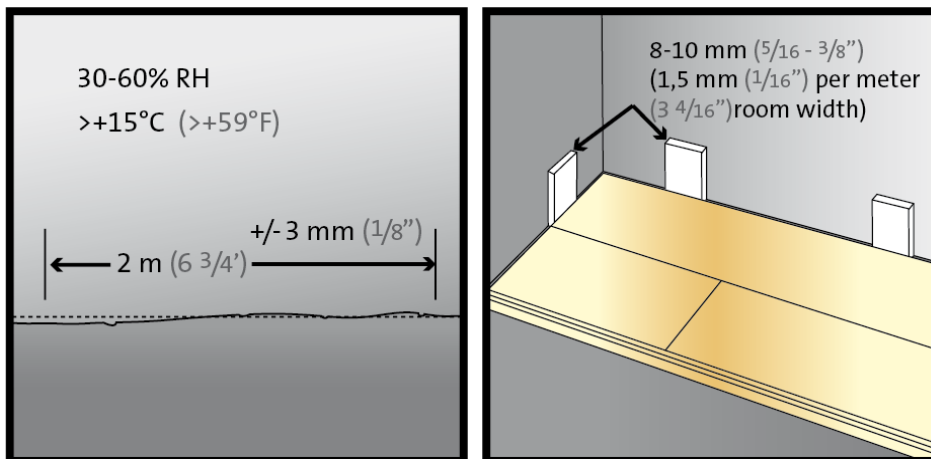
### **Tools and Materials Required**

- BOEN X-PRESS 5G
- Tape
- Chalk Line
- Hammer
- Tapping Block
- Wood flooring adhesive
- Recommended trowel from the adhesive manufacturer
- Expansion Shims
- Floor Protectors

## Installation instructions

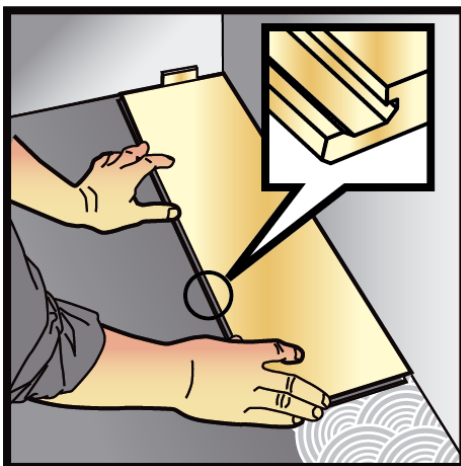
1. Lay the first board with the tongue towards the wall and the groove facing outwards.

BOEN recommends a clearance to the wall of 1/2" (1,5 mm per meter room width) min. 8 - 10 mm. Using starting wall as reference, snap chalk line on subfloor. Align straight edge (BOEN board or any solid material with straight edge) with chalk line and secure to subfloor.



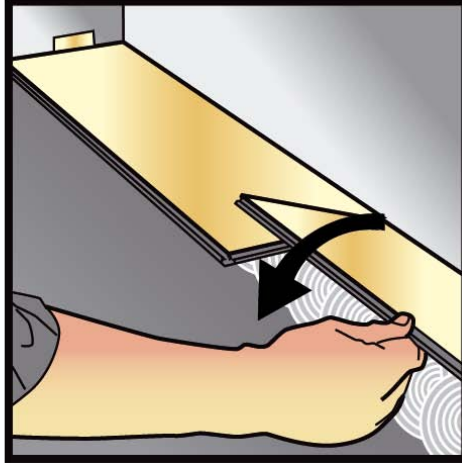
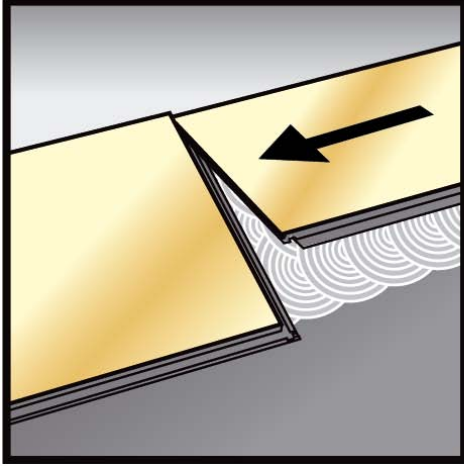
Start with tongue side facing wall and long groove side directly up against straight edge. Spread adhesive enough to cover one board width. Use only as much adhesive as can be used during manufacturer's open time of adhesive.

Lay board into adhesive.

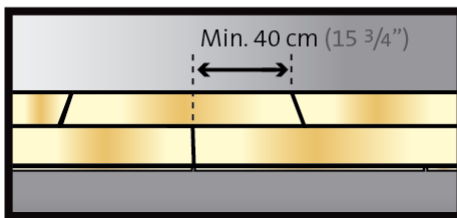
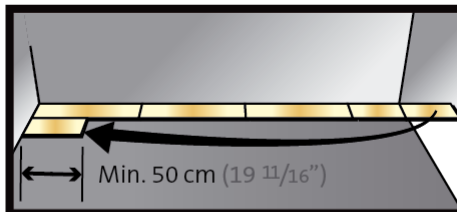
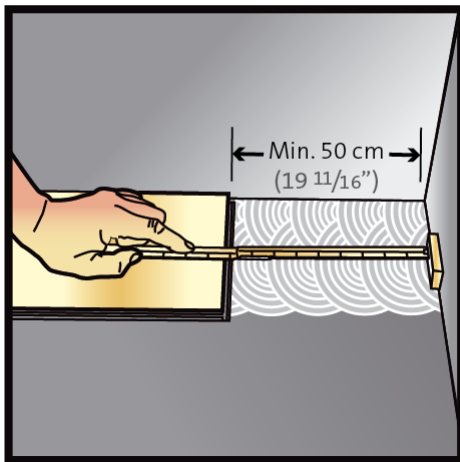




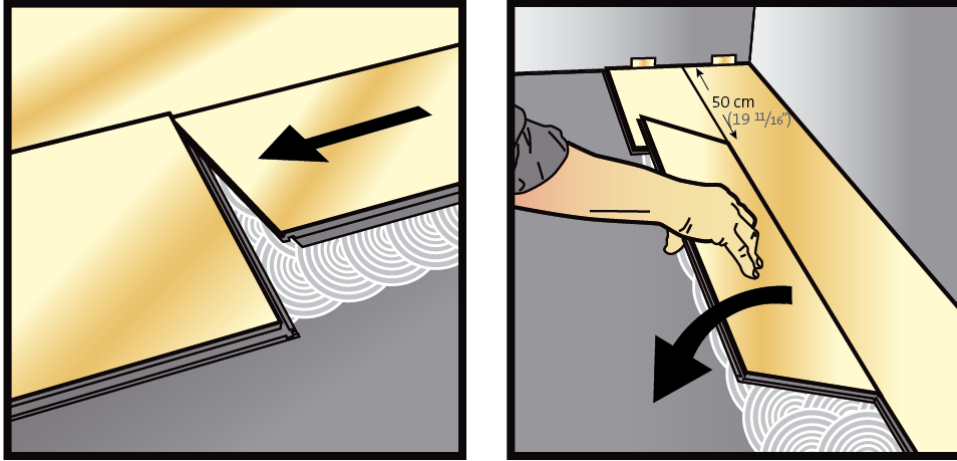
2. The next board is installed at an angle (approx. 30°) against the end- joint and pressed down.



3. Continue in this way until the first row is installed.

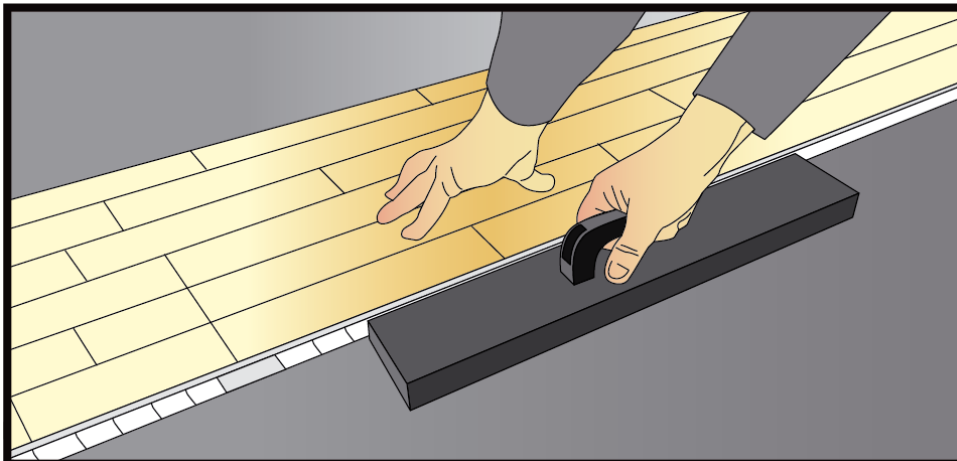


4. Start the second row with the off-cut from the first row, which must be a minimum length of 50 cm. Click this board to the previous row.

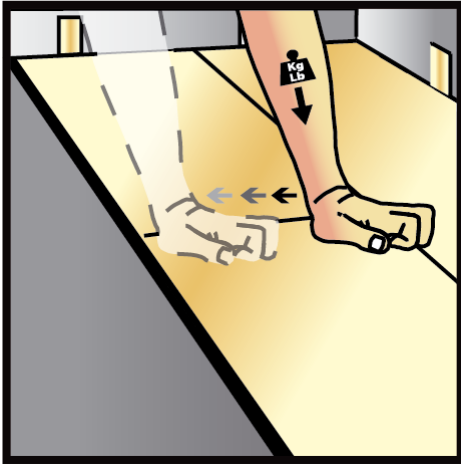


Once first two rows are installed, ensure expansion gap between walls and boards are shimmed securely.

5. Give the board a light tap with a wooden block while pressing down gently.



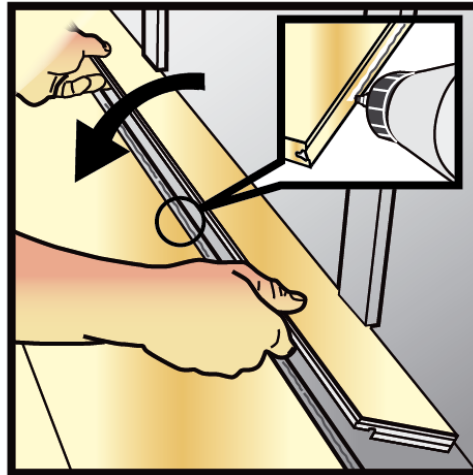
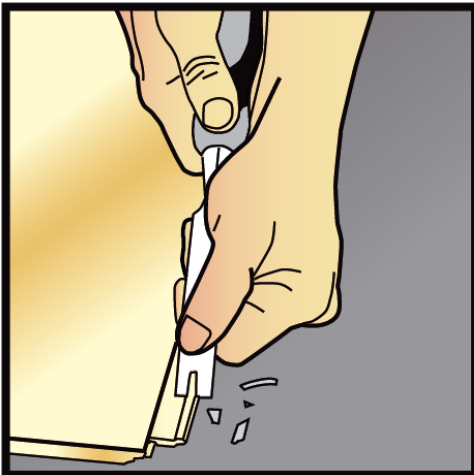
6. Enter the short end and fold down.



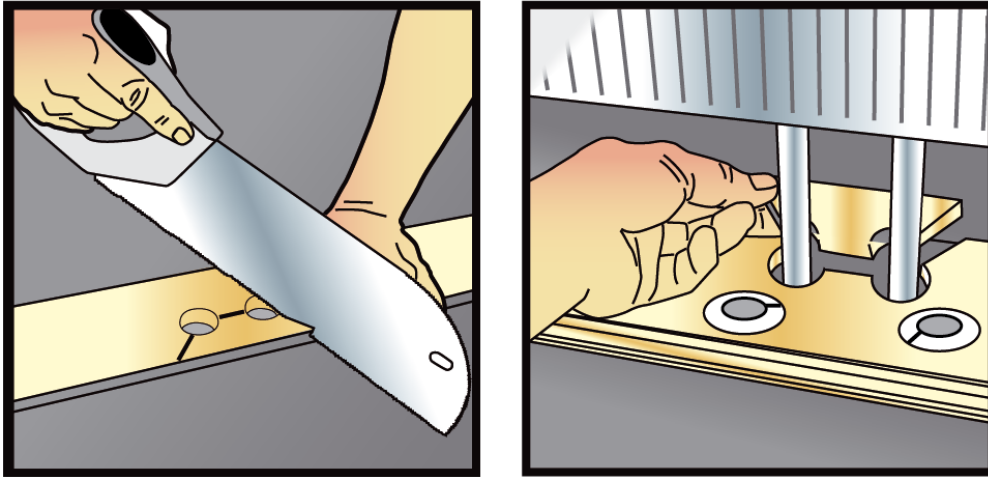
7. Adjust the distance to the wall, after the first 2 - 3 rows have been installed.

8. Use distance pieces or wedges.

9. Continue installation of the next row with the off-cut from the previous row, which must have a minimum overlap of 40 cm.



**10.** Apertures for piping etc. must be made as spacious as possible so as to allow for free movement of the floor. The apertures are then covered by pipe collars.



**11.** Skirting boards must be attached to the wall.

BOENclíc can be laid from both directions according to need. When laying parquet floating in corridors, we recommend installation lengthways. The parquet can also be easily dismantled.

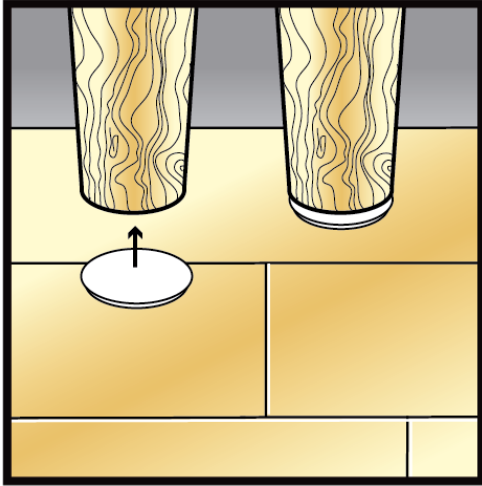
#### **Clean Up**

Immediately clean any adhesive spilled on wood flooring during installation.

#### **Maintenance**

Clean floor using dry dust mop or damp (lightly misted or well rung out) mop or cloth. Regularly use wood floor cleaner products for best results. Do not use soap or polish waxes.

**Caution: Please do not wet mop the floor.**



Place Peel & Stick Floor Protectors on furniture legs to prevent damage.  
See BOEN Floor Care Guide & Lifetime Guarantee for full details (available at [www.boen.com](http://www.boen.com)).

## **BOEN PROTECT ULTRA FACTORY LACQUER**

### **Cleaning**

For the standard cleaning remove dust and dirt with a mop, broom or vacuum cleaner. If it is necessary to wipe the flooring, apply 25 ml BOEN CLEANER on 5 ltr. of water and “damp mop” the floor. For very dirty floors, add 50 ml to 5 ltr. of water.

If there is resistant bonding dirt on the floor, such as e.g. grease spots or traces of heels, a manual or mechanic basic cleaning is required. Please use the polish remover BOENREMOVER. Then treat the parquet flooring with BOEN REFRESHER. Floorings which are sensitive to humidity (e.g. beech) need to be treated with D505 POLISH.

### **Treatment**

BOEN REFRESHER is a product which had been designed for regular cleaning and treatment of polished parquet and wood floorings. The product refreshes old and worn out polish, protects the polish and provides for a semi gloss shiny and hydrophobic surface. Before use, the flooring needs to be clean and free from polish, wax and other soiling. Apply a thin layer of BOEN REFRESHER with a sponge or cloth and have it dried out for 30 minutes, before you put furniture, carpets, etc. on the floor. You can also use the BOEN REFRESHER to clean only small surfaces.

### **Recommendation regarding the frequency of maintenance**

- Moderate exposed floors, e.g. in sleeping and living rooms: 1 to 2 times per year
- Medium exposed floors, e.g. in hallway or offices accessible to public: depending on the exposure every 1 to 2 months
- Particularly highly exposed floors, e.g. in restaurants, on stairs, in shopping malls, in barracks, in schools: depending on the exposure 1 time per week or more often

### **Removing persistent dirt using**

- Household cleaning agent: Wine, fruit, berries, juice, cream, non-alcoholic drinks, beer, coffee, tea
- Cleaning petrol: shoe polish, traces of heels, tar, asphalt, oil, grease, chocolate
- Ethyl alcohol: ink, lipstick, ball-pen, printing ink, ink ribbon
- Cold water: blood

### **Important notes for sealed parquet floorings:**

If highly exposed parquet floorings are showing considerable wear appearances, we recommend grinding and resealing in time in order to maintain a proper surface in the long run. Agree a regular inspection with your parquet installer.

Cleaning and maintenance of your BOEN parquet flooring which had been finished with a mat coating.

## **BOEN MATT LACQUER**

### **Cleaning**

For the standard cleaning remove dust and dirt with a mop, broom or vacuum cleaner. If it is necessary to wipe the flooring, apply 25 ml BOEN CLEANER on 5 ltr. of water and “damp mop” the floor. For very dirty floors, add 50 ml to 5 ltr. of water.

If there is resistant bonding dirt on the floor, such as e.g. grease spots or traces of heels, a manual or mechanic basic cleaning is required. Please use the polish remover BOENREMOVER. Then treat the parquet using “Polish Matt” made by Bona.

### **Treatment**

For floorings with a matt white pigmented coating we recommend a first treatment with “Polish Matt” by Bona. “Polish Matt” is a product which had been developed for regular treatment of matt coated parquet and wood floorings. The product refreshes old and worn out polish, protects the polish and provides for a semi-gloss shiny and hydrophobic surface. Before use, the flooring needs to be cleaned and free from polish, wax and other soiling. Apply a thin layer of “Polish Matt” using a sponge or cloth and have it dried out for one hour, before you put furniture, carpets, etc. on the flooring. You can also use the „Polish Matt” to clean only small surfaces.

### **Recommendation regarding the frequency of maintenance**

- Moderately exposed floors, e.g. in sleeping and living rooms: 1 to 2 times per year
- Medium exposed floors, e.g. in hallway or offices accessible to public: depending on the exposure every 1 to 2 months
- Particularly highly exposed floors, e.g. in restaurants, on stairs, in shopping malls, in barracks, in schools: depending on the exposure 1 time per week or more often

### **Removing persistent dirt using**

- Household cleaning agent: Wine, fruit, berries, juice, cream, non-alcoholic drinks, beer, coffee, tea
- Cleaning petrol: shoe polish, traces of heels, tar, asphalt, oil, grease, chocolate
- Ethyl alcohol: ink, lipstick, ball-pen, printing ink, ink ribbon
- Cold water: blood

### **Important notes for sealed parquet floorings:**

If highly exposed parquet floorings are showing considerable wear appearances, we BOEN recommends grinding and resealing in time in order to maintain a proper surface in the long run. Agree a regular inspection with your parquet installer.

**Note:** For prefinished oiled floors please refer to Natural Oiled Floors Maintenance at [www.boen.com](http://www.boen.com).

For all types of surfaces see BOEN Maintenance Guide at [www.boen.com](http://www.boen.com).

**General information**

Wood is a natural product where differences in color and structure can occur, e.g. mineral efflorescence may form on exotic woods. Solar irradiation will lead to a natural change in the color tone of the wood (darker or lighter). In case of high exposure to sun light, e.g. in areas with large picture windows, some change in color must be expected. Ensure that the temperature and RH in the room remains constant.

**Surface protection, cleaning and care**

The surface of the hardwood flooring is pre-finished at the factory using either BOEN Protect ULTRA lacquer, Matt lacquer, BOEN Ecoline oil or natural oil. The anti-scratch lacquer Protect ULTRA is UV hardened, extremely scratch-resistant and very durable.

The Ecoline oiled surface is also UV hardened. Oiled floors require more frequent maintenance than lacquered floors. We recommend our special cleaning and maintenance products for the various types of floor surfaces. The most efficient method of cleaning the floor is using a dry mop or vacuum cleaner. If it is necessary to “wash” the floor use a moist mop and do not allow water to dry on the surface of the floor.