

# Boden-floor

Made in Austria

## INSTALLATION GUIDELINES

### PLEASE READ ALL INSTALLATION GUIDELINES BEFORE PROCEEDING WITH INSTALLATION

#### A. INSTALLER/OWNER RESPONSIBILITY - IMPORTANT

Inspect all flooring material carefully for correct product and visible defects BEFORE INSTALLATION. Warranties do not cover visible defects once they are installed. (Based on industry standards a defect/irregular tolerance of up to 5% is allowed).

As all wood is unique, with no two pieces alike, review and compare the new flooring with the "sample board" from which the floor was selected to ensure it meets the homeowners expectations prior to the installation. If flooring is not acceptable, contact your distributor immediately and arrange for replacement.

It is the responsibility of the installer/owner to ensure subfloor and jobsite conditions are environmentally and structurally acceptable for wood floor installation. Problems or failures related to deficiencies in subfloor or job site damage after installation are not covered by our warranty.

- Receive the floor and make sure it meets owner's expectations.
- Grade out and separate any pieces with visible defects/irregularities.
- Test the subfloor and jobsite itself, including ambient temperature/relative humidity and all other variables that may adversely affect a wood floor.
- Record the flooring moisture content upon delivery and at time of installation - RETAIN THESE RECORDS
- Acclimate flooring to appropriate site conditions. *Follow NWFA Installation Guidelines for Acclimation on Jobsite (Section I, Chapter 2)*
- Record and retain a permanent job record.

**IMPORTANT:** Boden-Floor is designed to perform within a typical residential environment. Wood installed in areas where relative humidity is below 30% may cup and shrink. (A humidifier may be necessary to keep the relative humidity within recommended levels of 30% to 50% year round.) Flooring installed on wet subfloors may crown and buckle.

**CORRECT ANY OVERLY DRY OR WET CONDITIONS BEFORE INSTALLATION**

#### B. PRE INSTALLATION/JOB SITE REQUIREMENTS

##### ACCLIMATION IS CRITICAL

Allow floors to acclimate to the appropriate jobsite conditions. Proper acclimation is particularly important in extremely dry climates (e.g. Utah, Arizona, Nevada, Idaho, Colorado). See *NWFA Installation Guidelines, Section I, Chapter 2 for more acclimation details.*

Upon delivery, check wood flooring moisture content (MC) with a moisture meter to establish a baseline for required acclimation. Record MC at time of delivery AND at time of installation. **RETAIN THESE RECORDS.**

Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least ONE WEEK before installation of wood flooring. Room temperatures of 60°F to 80°F and a humidity range of 30% to 50% should be maintained year-round.

The moisture content (MC) of hardwood should generally be between 6% to 9%. If plywood is used for subfloor, the MC should be no more than 2% between the flooring and plywood subfloor.

#### HANDLING AND STORAGE

Hardwood flooring should be one of the last items installed on any new construction or remodel project. All work involving water or moisture should be completed before installation of flooring.

Do not deliver wood flooring to the job site until the building is entirely closed and until appropriate temperature and humidity conditions have been achieved. Appropriate temperature and humidity conditions are defined as those conditions to be experienced in the building after occupancy.

HVAC should be in operation before, and during installation (refer to *NWFA Installation Guidelines Section I, Chapter 1, Part 1* for further information). Room temperature and humidity of installation areas should be consistent with normal, year-round living conditions for at least ONE WEEK before installation of wood flooring. Room temperatures of 60-80°F and a humidity range of 30%-50% is recommended year-round.

**KEEP FLOORING DRY:** Protect flooring from moisture during storage and transportation. Store material in a flat, dry and totally enclosed area. Garages, exterior patios, for example are not acceptable areas to store wood flooring. The moisture content (MC) of hardwood should generally be between 6% to 9%. For wide width flooring, there should be no more than 2% difference in moisture content between properly acclimated wood flooring and wood subfloor.

#### C. SUBFLOOR TYPES AND CONDITIONS

Types: (Refer to *NWFA Installation Guidelines, Section II* for Subfloor Information)

- CD: Exposure 1 plywood, minimum 3/4" thick.
- Solid board: 1" x 6" wide, square edge, kiln dried.
- OSB: Exposure 1 (minimum 3/4" thick).
- Concrete (refer to *NWFA Installation Guidelines, Section II, Chapter 5 & 6*).

The subfloor must be clean, dry, and flat to within 3/16" per 10' radius. If necessary, sand or plane high spots, and fill low areas using a cement based patching/leveling compound. Secure any loose boards or panels to prevent squeaking. The surface temperature of the subfloor, at time of installation should be at least 60°F but never exceed 80°F.

Damage due to moisture issues is not a product failure and is not covered by our warranty.

**BASEMENT AND CRAWL SPACES:** Keep dry and ventilated. Crawl spaces must be a minimum of 18" from ground to underside of joists. Exposed earth should be fully covered by a minimum 6 mil black polyethylene vapor barrier with joints overlapped and sealed with a moisture resistant tape.

**CONCRETE SUBFLOOR:** New concrete should be completely cured for at least 50-60 days. Test for excessive moisture. A reading of over 3lbs./1000 sq. ft. by Calcium Chloride test requires the application of a vapor retarder.

Ensure concrete has a minimum of 3000 PSI Compression. Over a lightweight concrete (less than 3000 PSI) use a floating installation. To check for lightweight concrete, draw a nail across the top. If it scratches or indents, it is probably a lightweight concrete.

**WOOD SUBFLOOR:** When floating over a wood subfloor, cover wall to wall with an underlayment overlapped 8" at seams (follow underlayment manufacturing instructions). It is recommended to tape overlapped edges with a cellophane tape. To prepare wood subfloor for installation, re-nail any loose areas to prevent squeaking. Sand or plane high spots and fill low areas.

The moisture content (MC) of a wood subfloor should not exceed 12%. In general the moisture content of hardwood flooring is between 6% and 9% and the MC difference between the subfloor and flooring should not exceed 2%.

**OVER RADIANT HEATED FLOOR:** Prior to installation over radiant heat systems it is important to refer to the *NWEA Installation Guidelines Section IV. Appendix H*. Failure to follow these guidelines can void your warranty and may produce unsatisfactory results. Use only over water-heated systems, not recommended over electrically heated systems.

**NWEA - National Wood Flooring Association:  
800-422-4556 (USA) / 800-848-8824 (Canada)**

Radiant Heat Subfloors can be concrete, wood or a combination of both.

The type of subfloor determines the subfloor preparation.

If the Radiant Heat subfloor is concrete the system should be fully operating at a normal temperature for a minimum of 21 days prior to floor installation, to dry out residual moisture.

The system must then be turned off 24 hours prior to installation and must remain off for 24 hours after installation so that the adhesive does not cure excessively fast. After the 24 hours, the system temperature can be gradually raised again (over a 7 day period) up to the desired level.

The maximum allowable subfloor surface temperature over radiant heat is 85°F.

Radiant heat is a dry heat. A humidification system is recommended to maintain wood flooring in its comfort zone. Surface checking, excessive gapping, etc. can be expected if the proper humidity level is not maintained between 30-50% year round, or the surface temperature exceeds 85°F.

To minimize the effect that rapid change in temperature will have on the moisture content of the wood floor, an outside thermostat is recommended.

## D. GENERAL INSTALLATION

REFER TO NWEA INSTALLATION GUIDELINES, SECTION III, CHAPTER 9

**Boden-Floor can be installed above, on-grade or below-grade. It must be installed by Full-Spread Glue Down method or Floating method.**

**Do not use nail or staples when installing Boden-Floor. It will void the warranty!**

### FULL-SPREAD GLUE DOWN METHOD

Carefully read and follow the instructions provided by the adhesive manufacturers for the use and application of their product. Check with your flooring retailer for other adhesives and sealers that are compatible with engineered floors.

The first step is to find a starting line from the wall the width of 2 or 3 boards plus a 1/2" expansion space. Fasten a holding board. This will help keep the first rows straight and firmly in place. Apply the adhesive to the subfloor and place the first plank down up against the holding board with the small click side facing the wall. Continue laying the first row by engaging the clicks. Tighten all joints by the use of a wooden or plastic tapping block and soft mallet. Never use a hammer directly on the plank as this can cause damage to the finish. Use a pull-bar to pull the last row into place and tighten joints. Remember to clean surplus adhesive as you work. Continue laying the second row, staggering end joints of boards from row-to-row a minimum of 16" apart.

**COMPLETING THE JOB:** Roll every 2 to 3 hours and on completion with a 100lb. to 150lb. roller to ensure all planks are flat and in contact with the adhesive. Always nail moldings to the adjacent wall, not the flooring! Clean, sweep, and vacuum installed flooring before use.

### FLOATING METHOD

When choosing the floating method for engineered wood, it is critical that the subfloor is flat to within 3/16" per 10' radius. Boden-Floor will not honor warranty claims for products damaged due to plank movement or flexing due to an uneven floor. (See *Section C: Subfloor Types and Condition on page 1*).

For floating installation, a 6 mil., age-resistant polyethylene plastic sheet is required as a moisture barrier. Lap up walls 4". It is also required that a 15lb. asphalt saturated felt (rag paper) be used as an underlayment above the moisture barrier to reduce sound. It is recommended to use "Boden-Floor 2 in 1" product that incorporates both moisture barrier and sound barrier. Follow underlayment manufacturer's instructions.

Install cushioning underlayment running same lengthwise direction that you plan to install the flooring. Decide which direction the flooring will run. Starting from left to right across the floor, begin by snapping a chalk line the width of the plank plus the 1/2" expansion space, off the starting wall. Lay the first plank and align with chalk line. Take second plank, engage the clicking system and join to first plank. Continue same steps until first row is completed. When reaching the end of the first row, cut the last board to fit; use spacing wedges to maintain a 1/2" expansion space between wall and end of plank. Begin the second row by cutting board - if necessary - to ensure a staggered end joint of approximately 16" between end joints of adjacent planks. Join to first row, repeat until second row is complete. The floor can be installed in successive rows or with a stair-step approach. The stair-step approach ensures a tighter fit for the first few rows and limits board separation during the initial set-up. Always use a random pattern to begin installation. Tighten all joints by the use of a wooden tapping block to gently knock the boards in from the large click side. Do not use excessive force and never use hammer directly on the plank. Use special pull bar to tighten joints from the sides. The last row may need cutting lengthwise to fit (remember to allow expansion space). Use a pull-bar to pull last row in place and tighten joints. Use spacing wedges to maintain the space.

**We recommend, if possible the use of a NWFA (National Wood Flooring Association) certified professional when installing Boden-Floor**

After Installation it is important to maintain the environmental conditions in the home within the ranges outlined in these instructions (see *PRE-INSTALLATION/JOBSITE REQUIREMENT, Section B on page 1*). Failure to keep the humidity and temperature within the recommended ranges can result in damage to the floor.

**E. CARE & MAINTENANCE**

Boden-Floor is a high quality, natural wood engineered flooring with a waterbased, Urethane surface finish.

**NEVER USE a wax or oil based cleaning product on urethane finish.**

*Boden-Floor recommends Bona® cleaning products.*

All purpose cleaners are **not** recommended as they can dull your floor's finish or leave a hazy residue.

Boden-Floor products are easy to maintain; and with a little preventative maintenance, can look beautiful for years to come. All hardwood floors should be cleaned regularly. Simply sweep, dust mop, or vacuum to remove grit and dirt. When necessary, clean floor with Bona® hardwood floor cleaning product (carefully follow Bona cleaning instructions). Avoid using a wet mop as over time this can damage the finish. Remember: water and wood do not mix.

**DO's:**

- Sweep, vacuum, or dust mop regularly.
- Immediately wipe up liquid spills with cloth or paper towels.
- Maintain with Bona® hardwood floor cleaner for un-waxed/un-oiled finishes.
- Use felt protectors or furniture coasters under heavy furniture.
- Close curtains or blinds to limit direct sun exposure.
- Maintain room temperature (60-80°F).
- Maintain relative humidity in room/building between 30-50% year-round.
- Caster wheeled chairs should have wide casters.
- A protective mat should be placed under office chairs.
- In areas with icy or snowy winters, extra protection against **salt and grit** may be needed.
- Place mats and throw rugs at doorways, exteriors and interiors to help prevent the tracking of grit, dirt, and sand.
- Remember that cleats, sports shoes and high heels can dent any floor surface.
- Place an area rug in front of the kitchen sink to catch water.

**DON'Ts:**

- Use oil base soaps.
- Use paste wax based products (NEVER wax a lacquered finished floor).
- Drag sharp wooden legs or metal furniture legs as it can scratch/dent hardwood floors.
- Expose to direct sunlight for extended periods of time as it may dry/fade natural wood.
- Use steam cleaners. They are not recommended for use on natural wood flooring.
- Place porous flower pots or vases on the floor.
- Use steel wool or scourers.
- Move heavy furniture without protecting wood flooring by slipping a piece of cloth or pile under the legs or bottom of items.
- Wet-mop a wood floor. Standing water can dull the finish, damage the wood, and leave a discoloring residue.

COLOR CHANGE: Normal exposure to sunlight, heat, air conditioners, etc. will bring about natural changes in the original color as the floor ages. If possible, use blinds or drapes to protect floor from excessive sunlight. When some areas of the floor are covered, as in large furniture pieces and area rugs, the change under these pieces can be lighter than the surrounding floor, as they are not exposed to the same conditions. This is normal and is not a defect. Rotating the position of area rugs and furniture from time to time will allow the covered areas to slowly adjust in color to the surrounding floor.

SURFACE CHECKS: During the winter months of low humidity, minor surface cracks (checks) may appear in wood flooring, then often close up again in the summer months when the humidity is higher. This is a normal characteristic of natural wood and not a basis of a complaint against the manufacturer, especially if there is no structural failure. To minimize checking, follow the guidelines for maintaining the environment in the home on *page 1*.

VISIT OUR WEBSITE:

**WWW.BODEN-FLOOR.COM**

FOR ANY RECENT UPDATES OF INSTALLATION

GUIDELINES

**Boden-floor**  
Made in Austria

*Last update: 3/15/19*