

# HARLECH INSTALLATION INSTRUCTIONS

www.woodpeckerflooring.co.uk | 02920 888 223

### PREPARATION

#### BEFORE DELIVERY

The conditions must be ideal before any flooring is fitted. Wet trades like screeds, plastering and decorating need to be complete and the building must be thoroughly dried out. Windows and doors should be fitted and watertight.



EXPERT TIP: A rule of thumb for the drying time of a sand and cement-based screed is one day per millimetre for the first 50mm, and 2.5 days for each millimetre thereafter. So, a 50mm screed should take about two months to dry out, and a 100mm screed will take six months. Plaster takes up to six weeks to dry completely.

#### PREPARING THE SUBFLOOR

The surface immediately beneath a Woodpecker natural wood floor must be in good structural condition, free from damp rot, fungal or insect infestation, and contaminating residues. It must be flat with uneven areas not exceeding 3mm over a 2m area. Naturally, the surface should be vacuumed and totally free of debris before fitting begins. Hot pipes should be well insulated to prevent localised hotspots, which can cause wood flooring to warp or shrink.

If installing over floorboards, ensure the voids beneath have a height of 600mm from the ground to the bottom side of the joists. We recommend using a suitable Woodpecker damp proof membrane to protect the floor from moisture. Check that the voids are vented around the perimeter and that these vents are positioned to allow air flow under the entire floor. As a rule of thumb, all venting should equal a minimum of 1.5% of the total m² of the installation. Keep the vents open throughout the year too.

N.b. The subfloor should be prepared for installation in accordance with the industry standards outlined in BS-8201-2011.

## HEATING AND AIR CONDITIONING

The room temperature and humidity levels need to be stable before Woodpecker flooring is delivered to site. Heating and/or air conditioning systems should be on and working for at least two weeks before the floor is fitted. Make sure underfloor heating is turned off for at least 48 hours prior to fitting.

#### ATMOSPHERIC CONDITIONS

The room temperature shouldn't be lower than  $18^{\circ}$ C, with a floor temperature higher than  $15^{\circ}$ C ( $59^{\circ}$ F). The Atmospheric Relative Humidity should be between 40 and 60%.

Note that wood floors are not suitable for wet rooms, or in areas where there is a regular flow of water.

#### **ACCLIMATISATION**

Nature is in no hurry when it produces trees, and likewise, an impressive wood floor installation is never rushed. The sealed, unopened boxes should be laid flat, in the centre of the room for three to four days beforehand. DO NOT store the flooring outdoors, in an outbuilding, or anywhere with damp or condensation problems. The conditions where the flooring is acclimatised should be as close as possible to the typical living conditions.

#### INSPECTION

At Woodpecker the highest quality control procedures are in place, however our products are made from natural materials so it's essential that every plank is carefully checked before installation. If there are any problems, get in touch with us so that we can rectify them. We are unable to consider any defects after the floor has been installed.

#### MOISTURE TESTING

Moisture is the enemy of natural wood, and can cause damage. Even when a subfloor looks dry, it may contain excess moisture in the substrate. Using a professional moisture meter such as the Protimeter MMS will tell you whether or not it's safe to go ahead with installation.

#### Readings shouldn't exceed:

- 70% Relative Humidity (RH) for cement-based concrete.
- 11% Wood Moisture Equivalent (WME) for wooden subfloors or joists.

#### EXPANSION GAPS

As wood is a natural substance, it will expand and contract with changes in temperature and humidity. That's why when a wood floor is fitted, expansion gaps need to be left wherever the boards meet a wall, structural support, stairs, breakfast bar, fireplace, central heating pipe...etc. Gaps must also be considered at doorways to allow for the differing expansion between rooms.

Place spacers at regular intervals when fitting and then remove them before skirting boards, beading or trims are put in place. Allow a 2mm gap for every metre span of the floor with a minimum of 10-15mm gap regardless. For areas over 5m in width, extra provisions should be made for expansion.

# SOME EXTRA TIPS BEFORE YOU BEGIN

#### LAYING THE FLOOR

All Woodpecker floors feature beautiful colour variations which naturally occur in real wood. To ensure the overall effect has a good balance of colour and details, take care to blend planks from several packs.

The natural texture of Woodpecker flooring will really come to the fore if the planks are laid in the same direction as the light entering the room. However, if the floor is being fitted over existing parquet, it should be positioned at right angles to the previous flooring planks.

#### THE FIRST ROW

Before installation can begin a few calculations need to be made, and you might have to do some cutting before you can start laying. When you've chosen your starting wall, measure the width of the room from there and divide that by the width of the flooring panels. This will give you the number of rows of boards you'll lay and the width of the last row. If your last row is going to be under 60mm wide, cut the boards in your first row lengthwise accordingly so that your last row isn't too narrow.

## FLOOR PROTECTION DURING CONSTRUCTION

Always protect the surface of the flooring during installation. Use paper or cardboard that will allow the floor to breathe and tape this to the boards. Never use plastic or polyethylene sheeting to cover the flooring as this will trap moisture and could cause damage.

#### PIPES

Measure the position of any central heating pipes and mark them on the relevant plank, considering your expansion gap. Drill a hole 16mm (5/8") larger than the pipe's diameter. Saw at a  $45^{\circ}$  angle to the pipe hole. When you've fitted the board around the pipe, apply glue to the sawn out piece of wood and fit it with a pull bar, again taking into account the expansion gap spacers.



#### DOOR JAMBS

If there is a wooden door jamb, we recommend undercutting it according to the thickness of the flooring, plus the possible underlay. Install the flooring underneath the door jamb but leave the necessary expansion gaps.

#### TRIMS

When fitting trims, always fix them to the walls. Never fix them to the floor itself as this will prevent the natural expansion and contraction of the flooring into the expansion space.

### INSTALLATION

Harlech can be installed in one of three ways: floated, nailed or stuck down.

However, if you are fitting over underfloor heating then Harlech needs to be glued down for extra stability.

There are also some extra points to consider with underfloor heating. If the system is embedded in a solid floor then Harlech can be bonded directly to the surface. In the case of an electric foil heating system, Woodpecker Solitec self-adhesive underlay can be used.

Make sure the underfloor heating has been running for at least a fortnight before the floor is fitted and switch it off for 48 hours before installation. Once the floor has been fitted, the underfloor heting should not be switched on for another two to three days. Then the temperature raised gradually at no more than I degree celcius per day. The temperature of the floor should never exceed 27 degrees C.

#### FLOATING

A floating floor can be installed over concrete, anhydrite, existing wood floor chipboard, ceramic tiles, terrazzo, metal, PVC, linoleum, slate, marble, particleboard, OSB and plywood – but not carpet.

The type of underlay you need will depend on the subfloor condition. However, for most installations we recommend using an underlay with a built-in damp proof membrane, such as Floormate or Aquastop. See our full range at www.woodpeckerflooring.co.uk

Underlay should be laid edge-to-edge perpendicular to the direction of floorboards. Stick it together with tape. If the underlay does include a damp proof membrane, use Woodpecker Vapour Tape to prevent moisture from rising between the seams. We do not recommend overlapping the underlay.

#### FOLLOW THESE STEPS TO INSTALL

- I. Check all planks for possible damage or defects. We can't be held responsible for imperfect boards once they've been fitted.
- 2. Start installing along the longest wall or an outside wall which is likely to be straight and square with the room. Using one of the longest boards, install your first plank with the tongue facing away from the wall. Take great care with the alignment as misaligned starter rows can cause side and end gaps.
- **3.** Use the remainder of the last plank in the first row to start the second row. If the off-cut is less than 200mm in length, cut a longer piece for the first board in your second row. As you continue to install, make sure that all boards are staggered so there's no less than a 300mm gap between joins in adjacent rows. This makes for a more appealing floor and reduces waste.
- **4.** Use the Woodpecker Flooring Grade PVA to glue the joints, taking care that you apply the correct amount of adhesive to the bottom of the groove. Applying too much will cause the adhesive to squeeze out onto the surface and too little will reduce the strength of the bond and could lead to squeaking. Our naturally inspired flooring has been precision engineered for

stability but it's still important to check for a close fit at all end and side joints, and tap or pull them into place where necessary.

**5.** Allow the adhesive to cure for approximately 2 hours before permitting foot traffic or moving furniture onto the floor.

NOTE: Never use a rubber mallet or hammer directly on the flooring to fit the tongue-and-groove. This can damage the flooring and/or finish.

#### NAILING DOWN

Harlech can be secret nailed to an existing timber subfloor including solid wood flooring, plywood, OSB, particleboard and most vinyl tile or non-cushioned resilient floors that have been installed on a wood subfloor and are securely adhered.

The subfloor needs to be of a suitable width and thickness in order to hold 50mm cleats fired into it at a 45° angle. Joists should be kiln dried to avoid cupping or expansion and must be spaced in accordance with building regulations. The space between joists is predetermined but we recommend a maximum of 400mm intervals otherwise.

When secret nailing to the subfloor, or joists, always use the Woodpecker Moistop Barrier Paper, overlapping it by 200mm. The bitumen backing self-seals around the nail punctures for a watertight barrier. Use Woodpecker Vapour Tape to secure the joins in the paper.

Flooring should be fitted at  $45^\circ$  or  $90^\circ$  to the subfloor and nailed over every joist, through the barrier paper. You can have header joints that are above a joist, as long as the boards either side fully span at least two joists. Cleats should be no more than 400 mm apart.

EXPERT TIP: Never use adhesive to glue between boards if it's being nailed down. The glue will inhibit the natural flexibility of the flooring and could cause cracks.

Check that your nailing equipment does not have any sharp burrs which could scratch or damage the flooring, and make sure the pressure on the nailer is adjusted to allow the nail/cleat to be fully seated within the groove. At no time should the staple be driven into the flooring far enough that it causes the wood flooring to crimp or the cleat to be counter-sunk below the surface of the tongue. Always refer to the manufacturer's instructions for the complete setup and operation guidelines.

We advise that you only use the manufacturer's recommended cleats. The length of the nail/cleat will depend on the type of subfloor but make sure it's long enough to allow  $\frac{1}{2}$  of its overall length to be secured into the subfloor. The cleat must be seated flush with the groove but should not extend through the subfloor. Take care to adjust the compressor so the nails are properly set in the groove. If improperly set, the cleat will not be positioned correctly and may cause dimpling, peaking, squeaking, or cracking in the floor.

#### FOLLOW THESE STEPS TO INSTALL

- **I.** Check all planks for possible damage or defects. We can't be held responsible for imperfect boards once they've been fitted.
- 2. Start installing along the longest wall or an outside wall which is likely to be straight and square with the room. At a minimum of three to four points, measure out from this wall the width of 2 planks plus the tongue. Snap a chalk line connecting these points, parallel to the wall and perpendicular to adjacent walls. We recommend that a straightedge is firmly secured along the chalk line to provide a guide and to prevent the planks from shifting during installation. Bear in mind that most walls are not square so you may have to trim the edge of some planks along the walls.
- 3. Using one of the longest boards, start installing from the chalk line with the tongue facing away from the wall. Drill pilot holes through the face of the plank near the chalk line side, and secure planks with finishing nails. Take great care with the alignment as misaligned starter rows can cause side and end gaps.
- 4. Use the remainder of the last plank in the first row to start the second

row. If the off-cut is less than 200mm in length, cut a longer piece for the first board in your second row. As you continue to install, make sure that all boards are staggered so there's no less than a 300mm gap between joins in adjacent rows. This makes for a more appealing floor and reduces waste.

- **5.** Engage the nailer onto the tongue side of the plank, nailing 25mm from the end of each plank and every 150mm to 200mm along the length of the plank. Once you're sure the first two rows are straight and secure, continue to nail the remaining rows using the same nail pattern.
- **6.** It will not be possible to use the nailer on the last few rows so fasten the planks into place manually by nailing into the tongue or face-nailing through the surface.
- 7. After you have secured the planks in the last row, go back to the beginning of the installation and position the final two rows into place with face nails. Counter sink all the face nails and fill the holes with matching wood filler.

NOTE: Never use a rubber mallet or hammer directly on the flooring to fit the tongue-and-groove. This can damage the flooring and/or finish.

#### GIUING DOWN

Harlech can be glued directly to concrete, ceramic tiles, terrazzo, metal, slate, marble, particleboard, OSB or plywood. Ensure the existing surface is 'rough' or porous. Pre-sand any slick or sealed surfaces. When gluing to concrete, we recommend using Woodpecker I IP Surface Primer to ensure a strong bond between the subfloor and adhesive.

Designed specifically for our natural wood flooring, Woodpecker MS Parquet adhesive will hold the floor after a short open time of 30 minutes but remain flexible to allow for the expansion and contraction of timber between seasons. It's essential that there's a full bond between each floorboard and the surface beneath.

#### FOLLOW THESE STEPS TO INSTALL

- **I.** Check all planks for possible damage or defects. We can't be held responsible for imperfect boards once they've been fitted.
- 2. Start installing along the longest wall or an outside wall which is likely to be straight and square with the room. Spread adhesive from the wall to the width of 2 planks. Use a 3 or 4.8mm notched trowel, depending on the condition of the subfloor.
- **3.** Using one of the longest boards, install your first plank with the tongue facing away from the wall, and secure into position. Take great care with the alignment as misaligned starter rows can cause side and end gaps.
- **4.** Use the remainder of the last plank in the first row to start the second row. If the off-cut is less than 200mm in length, cut a longer piece for the first board in your second row. As you continue to install, make sure that all boards are staggered so there's no less than a 300mm gap between joins in adjacent rows. This makes for a more appealing floor and reduces waste.
- **5.** Once you're sure the first two rows are straight and secure, spread 700mm 900mm of adhesive across the length of the room. Never spread more than can be covered in 30 minutes. Our naturally inspired flooring has been precision engineered for stability but it's still important to check for a close fit at all end and side joints, and tap or pull them into place where necessary.
- **6.** After every 5 or 6 rows, use the Woodpecker Tension Straps to secure rows together and prevent movement or gapping.
- **7.** Allow the adhesive to cure for approximately 2 hours before permitting foot traffic or moving furniture onto the floor.

NOTE: Never use a rubber mallet or hammer directly on flooring to fit the tongue-and-groove. This can damage the flooring and/or the finish.