

Installation Guidelines

PLEASE READ COMPLETELY BEFORE STARTING INSTALLATION

- This installation guide and our warranty must be read in conjunction with any additional Clever Choice installation guides posted on www.cleverchoice.com.au or guides provided to you by the seller. These instructions do **not** allow for every possible use or installation of this product.
- If you have any questions about suitability for application not covered in these instructions, please contact your supplier or Clever Choice immediately. Check www.cleverchoice.com.au for up-to-date details and articles relating to installation, care and maintenance.
- Clever Hydro is for indoor residential and commercial use only. Installations outside these recommendations are **not** covered by warranty.
- Clever Hydro is **not** to be glued directly to the subfloor. All installations are to be carried out as a floating floor, which also provides proven noise reduction and a solid timber feel when installed over Clever Choice range of closed cell underlays.
- Clever Hydro is a digitally printed product and colour may differ from the sample depending on the time of manufacturing and also depending on the age and position of the display sample in store.
- Clever Choice recommends that the installation of our flooring is carried out by a certified installer holding a *MSFFL2023 Install Laminate, Timber and Bamboo Flooring*.
- All installations of Clever Hydro should be in accordance with AS1884-2012 Floor Coverings – Resilient Sheet and Tiles – Installation Practices and these instructions. These instructions are intended to assist in achieving an optimum installation
- Clever Water protection 48hr, 72hr & 96hr apply clever products with surface water protection, and these products are not waterproof. The surface of the product is protected from spills of surface water in a small area of the floor. Surface protection does not include protection from continuous water exposure, flooding or wet mopping. Surface water protection applies to surface water only, and not water that enters the core of the board, from subfloor or runoff from wet areas.
Warning - Floating floor installation systems should NOT be used if loads are likely to exceed 200kg/object area or if the load is greater than 30kg/cm².

1. The Installer

1.1 Storage & Handling

- All products should be handled with care and unopened cartons should be stored in dry conditions. Ensure the cartons are elevated at least **100mm** off ground floor slabs and away from external walls at least **48 hours before** installation. This will prevent extra moisture from entering the cartons.
- For optimum performance, install the flooring as soon as the cartons are opened, do not wait several hours, as the boards will acclimatise on the floor once clicked together.
- Conditions within the dwelling should reflect the normal living conditions of the home. For instance, if the floor is being installed at a time of the year when air-conditioning or heating is being used, then these conditions should be replicated prior to floor installation and then maintained relative to the season. Temperature should be between 18°C-27°C and Relative Humidity between 40%- 60%. Advise builder or home owner to maintain these conditions after installation.
- Boards should not be installed in extreme weather conditions
- When installing, use a thermometer and hydrometer to monitor the temperature and humidity in the house.
- Extreme Temperatures prior to Installation - Should your Clever Hydro Floor be exposed within 12 hours prior to installation for over 2 hours to extreme temperatures (under 5°C or over 50°C) (which may be due to storage in vehicles or transport to site), acclimatisation is required at a room temperature between 18°C to 27°C for a minimum of 12 hours, in unopened packages prior to installation. Ensure individual stacks are no more than 3 packs high and they are spaced at least 200mm apart to allow airflow between stacks. The temperature must remain within this range for the entire installation period and a minimum of 48 hours after installation completion. The ambient relative humidity in the installation area should be maintained at 40-60% to prevent condensation forming under the laid flooring.
- Floor should never be exposed to temperatures greater than 42 degrees.

1.2 Appropriate Window Furnishings

- While Clever Hydro is very stable, harsh direct sunlight can cause the products to expand and contract abnormally, and will cause discolouration to the surface.
- Check all external windows and doors have appropriate furnishings such as blinds, shutters, curtains and window tinting to prevent harsh direct sunlight and heat affecting the floor.

1.3 Heat Sources

- Prolonged exposure excessive dry heat can cause Clever Hydro Boards to contract and expand abnormally, which can cause gapping between boards.
- Use of internal cooling & heating systems such as ducted heating and fireplaces, must be regulated to prevent excessive dry environments.

1.4 Safety Equipment & Tools

- Please wear all required safety equipment for tools being used.
- Tools to consider - hand saw, chisel, pulling tool, utility knife, drop saw, table saw, electric planer, router, circular saw, jig saw, multi-tool / undercut saw, moisture meter, pencil, spacers, tape measure

1.5 Board Moisture Content

- Boards will expand and contract as the ambient relative humidity moisture level changes.
- As the moisture content increases or decreases outside of the recommended moisture content, the more the performance of the boards will change. Additional allowances may need to be made.
- Do **not** install the boards if they are wet due to transport or storage prior to installation.

1.6 Subfloor Preparation and Testing

- Ensure all subfloor surfaces are clean and free of loose materials and contaminants, ie Dust, grit
- Concrete sub floors must be tested in accordance with AS1884-2012 for moisture using the relative humidity in-situ probe test. RH levels can be up to 95%.
- Generally Clever Hydro Floors do not need to be acclimatised. However if boxes are exposed to extreme temperatures within the 12 hours prior to installation please refer to the Extreme Temperatures note in these instructions.
- Check that the subfloor is flat, smooth and level with a tolerance no greater than 2mm over 2m using a straight edge. Correct any changes in levels by either diamond grinding the surface of the slab, sanding the surface of the timber subfloor and/or using an approved levelling compound, as this removes high spots. Depressions and cracks must be filled using a suitable (taking into account the traffic loads) approved levelling compound in accordance with the manufacturer's instructions. All irregularities must be levelled.
- Existing timber, plywood and particleboard subfloors, must be checked for any loose boards/panels or excessive deflection or movement. If loose boards are found or movement is excessive, the subfloor should be re-affixed and damaged boards replaced, then if required, sanded to a level, smooth and dust free surface.
- The floor can be installed over most existing floorcovering (e.g. ceramic tiles, linoleum, PVC etc.) provided the floor is flat, dry and in the case of ceramics in a residential installation, grout line tolerances are no more than 2mm wide and 2mm deep. Otherwise grout joints should be filled to the level of the tiles with a suitable leveller. Carpet, carpet underlay and/or existing floating floors is not a suitable subfloor.
- After levelling, wait the manufacturer's recommended time to allow the compound to dry completely before laying your Clever Hydro Floor, to prevent moisture related issues.
- Suspected dampness in a concrete slab, must be checked by moisture meter using "plugs" drilled into the slab.
- Keep a record of the moisture content of the subfloor on your installation checklist.

1.7 Subfloor Heating

- Clever Hydro Floors should never be installed over any electrical radiant heating system - the speed of sudden temperature changes having the potential to negatively affect the floor.

Hydronic Radiant Underfloor Heating

- Before installing over newly constructed hydronic underfloor radiant heat systems, operate the system at maximum capacity for a minimum of 7 days to force any residual moisture from the cementitious topping of the radiant heat system. The moisture content of the screed prior to installation must be less than 1.5% (CM method). Shut down the floor heating at least 48 hours prior to installation. Make sure that the temperature in the room is at least 15°C during installation. It is recommended that the radiant heat be applied in a gradual manner (no more than 2°C per day) after installing the Clever Laminate Floor. After installation, ensure the surface temperature of the subfloor never exceeds 27°C. Refer to the hydronic underfloor radiant heat system's manufacturer recommendations for additional guidance.

1.8 Moisture risk areas Installation

- Although Clever Hydro has a 96hr water protection, it should not be used as a moisture barrier, and should not be installed in areas that have a continual risk of excessive moisture/flooding/steam such as saunas or outdoor areas.
- If a floor waste is installed in the area and it is intended to grade the floor to the waste, the sub-floor must be prepared within the tolerances set out in the Sub Floor Preparation, due to its rigidity, it cannot be manipulated to provide any fall to waste or accommodate variations in flatness of the floor greater than those tolerances.
- Separate and/or isolate the moisture risk areas from the rest of the floor area with a H trim or similar at the doorway or other adjoining areas
- Clever Water protection 96hr apply clever products with surface water protection, and these products are not waterproof. The surface of the product is protected from spills of surface water in a small area of the floor. Surface protection does not include protection from continuous water exposure, flooding or wet mopping. Surface water protection applies to surface water only, and not water that enters the core of the board, from subfloor or runoff from wet areas.

1.9 Board Selection

- Check the correct flooring has been supplied and that you are satisfied that the boards match the colour selected at time of purchase. **Stop! Do not** start installing if you are **not** satisfied with the product.
- Please inspect every board for defect or damage before and during installation. Remove any boards from the installation area if they have a visual defect or if you will not accept the variation. It is our position that you, the installer and/or homeowner, accept the appearance and take responsibility for any visual variation or defect in boards you choose to install and not separate for replacement. Any defects should be reported to the retailer immediately for inspection and/or replacement.
- Clever Laminate is digitally printed and may have variations in shade. It should be installed from several cartons at the same time to ensure good colour and shade mixture.
- For best results, pre-select and set aside boards that blend best with all floor beadings, skirting boards or stairnoses and use these to ensure a uniform final appearance.

1.10 Expansion Gaps & Board Relief

- Undercut all architraves and plaster board (if skirtings are not being removed, undercut skirtings) to allow the boards' clearance for natural expansion.
- **Perimeter Expansion Gap** – leave a minimum of 8mm perimeter expansion gap (adjustments made when undercutting plaster), including around fixtures and cabinetry to allow the Flooring to move naturally in both directions (expansion and contraction depending on seasonal changes). Failing to do this may result in gaps appearing from under skirting or scotia during temperature changes.
- **Internal Expansion Gaps** – any installation exceeding 15m (width) and 25m (length) will require an internal expansion/contraction gap using a H-Trim or Universal Trim. Each room in the house will generally have its own Relative Humidity and temperature environment. Installing expansion trims between each room is necessary to allow boards in each room to move independently without being put under pressure. If the floor is installed outside these guidelines it will have too much weight and restrict the natural movement of the floor. This could cause issues like bouncing, cupping, splitting and/or squeaking. As a general rule, the larger the raft size the larger the expansion gap should be.

- **Solid Objects** – kitchens or built-in units are to be installed **prior** to the flooring being installed. They are **not** to be installed on top of Clever Hydro Flooring, as the weight of these structures will restrict the natural movement of the floor, causing such problems as, gapping, cupping or creaking. Ensure a minimum of 8mm gap is left around these solid objects, including pipes and any other permanently fixed objects.
- **Base Plates of Trims** - must be glued and screwed into place in all required areas as mentioned above, prior to flooring being installed to ensure they remain secure.

1.11 Laying Direction

- Although Clever Hydro Floors can be installed in any direction, as a rule, floors are usually installed perpendicular to a wall with a window.
- Installing the floor parallel to the longest walls or runs tends to make a room appear larger and flooring perform better during natural movement.
- Check that installation will remain within 15m (width) and 25m (length) or you will require an internal expansion/contraction gap using a H-Trim or Universal Trim. If the floor is installed outside these guidelines, it will have too much weight and restrict the natural movement and may cause issues like bouncing, cupping, gapping and/or squeaking.

1.12 Quality Underlay

- Clever Hydro is to be installed as a floating floor over a 2mm closed cell high density foam underlay with built in moisture barrier, such as Clever Comfort or Clever Sound (which also provides proven noise reduction and a solid timber feel). This will reduce the chance of excess movement and boards squeaking.
- Lay underlay by taping the overlapping moisture barriers together using the included tape. For additional moisture protection, also apply a wide adhesive tape to the joins.
- To reduce the moisture transmission rate from your concrete slab, use a 200-micron plastic taped on all joins and fitted up walls and fixtures to the thickness of the flooring to prevent any excess moisture from penetrating into the flooring.

1.13 Cutting & Staggering Boards & Ends

- The end joints in adjacent rows need to be more than 400mm apart and planks at the end of each row must not be shorter than 400mm, to ensure stability. If your last plank is shorter than 400mm, it is advised to re-cut the first plank in the row.
- When installing boards of random length, ensure that the staggered length is at least 400mm. This will help to ensure a more structural and favourable overall appearance of the floor.
- The remainder of the plank from your first row can be used as the first plank of the next row. Stagger the planks so no pattern is visible. You may need to adjust your off-cut or have 2 or 3 off-cuts to allow rows to be staggered.
- Should you have an irregular wall for the first row, the plank must be cut to follow the wall's irregularities.

1.14 Installing the Boards

- Flooring should be installed from left to right, with the tongue sides facing the walls. Starting in one corner of the room, place spacers between the plank and the wall: one spacer on the width and one spacer at each end where one plank joins another.
- A minimum 8mm expansion gap around the entire floor is required. Adjustments are to be made when going under doorframes and plaster board that has been undercut. Ensure there is another clearance for boards to pass under during natural movement.
- When laying the planks for the first row, place the first plank flat and against the spacers. The next plank being laid must be elevated at a slight angle to allow the Click to slip into the groove of the first plank.
- Once flat, push and gently tap the planks together ensuring they "click" in tight and sit level.
- For the second and consecutive rows, elevate plank on the long side at a slight angle to allow the Click to slip into the groove.
- The next plank should be laid the same way but with the Click on the left side of the plank falling just next to the previous plank. Once flat, you can lift and lock the planks together until they "click" in tight.
- When you reach the final plank in the row, place a loose plank precisely on the last laid plank. Place another plank on top, but with its edge a minimum 8mm from the solid object. Trace a cutting line along the middle plank, and saw it along that line.
- Lay the plank you just cut and ease it into position. Insert spacers between the wall and the last plank laid to be ensured floor doesn't shift during installation.
- Check that the skirting or scotia will cover the board by minimum 6mm to allow coverage during natural movement.

- To allow natural movement around obstacles (pipes, solid built-in units, etc.), use a pencil to trace around the object, making allowances for an even minimum 6mm clearance.
- For the final row, lay the board overlapping the second last row. Place a straight edge on top at the edge of the second last row. Using a pencil, draw a line along the board. Cut the board on the line, ensuring that a minimum of 8mm clearance will be allowed.

1.15 Changing Rooms and Size of Rooms

- Check that the trim base plates are fully secured between rooms. Any room that exceeds 15m (width) or 25m (length) will require expansion/contraction trims to be installed at the parameters.
- When going from one room to another, make sure to leave a minimum 8mm gap to the base plate of the trim. This will allow the floor to naturally move freely.
- Colour matching trims are available so that they can be installed to blend in with the floor for a pleasing appearance.

1.16 Fitting Scotia or Skirting

- Remove all spacers.
- Fold the moisture barrier along the edge of the walls under the skirting or scotia.
- Cover the expansion/contraction gaps around the perimeter of the floor ensuring a minimum of 6mm coverage of the boards is achieved.
- Fit the skirting or scotia to the walls and NOT the floor, ensuring a 0.5mm-1mm gap is left between it and the floor. This will allow the floor room to move, naturally and freely.

1.17 Fitting Finishing Trims

- Install the top plate of finishing trims to neatly finish off in all doorways, against fixed objects, kitchens, sliding doors and between rooms
- Colour matching trims are available so that they can be installed to blend in with the floor for a pleasing appearance.

1.18 Fitting Stairs & Slip Resistant Tape

- When installing to stairs, it is recommended to use an approved flexible flooring glue to stick the stairnoses and boards to the solidly constructed staircase.
- When fitting boards to each step, it is recommended to leave a minimum 5mm gap under the riser, that is fitted on top of the tread.
- Where the stairnoses are installed to a top landing leading into a room of flooring, remember to make allowances for natural movement. An expansion trim could be installed between the top stairnose and floor boards if needed.
- Slip resistant tape, complying with Australian standards, is available to be applied to the stairnoses of the finished staircase.

1.19 Checking Door Heights

- Check door and doorframe clearances to insure that doors will move freely without contacting the flooring surface.

1.20 Clean Up & Go Through Checklist

- Sweep the floor and clean up any mess.
- Go through checklist and ensure all steps have been followed and completed.

