

Installation Guide

Important Note

- Instructions—these instructions are to be read before any installations.
- Standard-- Installation jobs should comply to AS1884:2012 and this instruction. This instruction guides installation of a floating floor system. Should it be intended to direct stick the product, please refer to your retailer or Resistance Hybrid representative or website for possible alternatives. Should you have any queries in relation to these recommendations, please contact your retailer or Resistance Hybrid representative.
- 3. Temperature-- Resistance Hybrid flooring is developed for exceptional stability in low and high temperatures, however, after installation extreme temperatures (under 5°C or over 50°C) should be avoided by use of interior temperature control and window coverings. Always use window covering on floor to ceiling window to avoid direct sunlight over floor to ceiling window causing extreme temperate on certain spots. Failure to do this may affect the performance of the floor and warranty.
- 4. Waterproof-- Resistance Hybrid product is waterproof, but 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 such as saunas or outdoor areas.
- 5. Load-- if loads are likely to exceed 200kg/object area or if the load is greater than 30kg/cm2, a floating floor system should not be used. If these conditions cannot be met, the use of Resistance Hybrid direct stick product should be considered.
- 6. Underlay backing some products manufactured with acoustic underlay at the back, check and avoid double underlay unless extra underlayment in density of 700kg/m3 or above
- 7. Underfloor Heating It is not recommended to install over any electrical radiant heating system, due to the speed of sudden temperature changes, which has the potential to negatively affect the floor. Installation over electrical radiant heating systems will not be covered by the manufacturer's warranty.

INSTALLATION TOOLS

• Tape measure • Pencil • Chalk line • Crosscut power saw • 3M Scotch-Blue™ 2080 Tape

• Rubber mallet • 6mm spacers

SUBFLOOR PREPARATION & MOISTURE

Most Resistance Hybrid products manufactured with 1mm acoustic underlay backing. As a floating floor, the floor can be installed over most existing floorcovering (e.g. ceramic tiles, linoleum, PVC etc.) provided the subfloor or extra underlay is flat, dry and density 700 kg/m3 above. In the case of ceramics in a residential installation, grout line tolerances are no more than 3mm wide and 3mm deep, otherwise grout joints should be filled to the level of the tiles with a suitable leveler. Carpet is not a suitable subfloor. Please contact your retailer Resistance Hybrid representative to confirm suitability and further installation recommendations.

Moisture won't damage this product, but it can get in the walls and structure of the home. It's still a good idea a moisture barrier is installed in the crawl space and even under a Resistance Hybrid flooring over a concrete subfloor. Concrete subfloors must be tested in accordance with AS1884-2012 for moisture using the relative humidity in-situ probe test and PH. When installed as a floating floor, RH levels can be up to 95% and PH levels should not exceed 10.

Subfloor should be dry, smooth and level to 0.5mm per 3m radius free of any surface irregularities including dust, dirt, oil, grease, paint or other materials or roughness for best installation results.



Concrete floors must be cured, completely dry, with a surface free of irregularities. When a straightedge 2 meters long is placed at 2.2 meters apart, no part of the surface shall be more than 3mm below the length of the straightedge. 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.

PERIMETER/EXPANSION GAPS

Houses and buildings, as well as adjacent hardwood or laminate floors, expand and contract, it is recommended to leave a standard expansion gap of min 6mm between the perimeter walls and any adjacent any vertical surfaces (e.g. walls, cabinets, sliding doors, island benches, plumbing fixtures etc.). For installation over large areas or in between multiple rooms that exceed 30m in length or 15m in width, leave not less than a 10mm expansion gap. A trim or scotia can be used to cover this gap, ensuring the floor is not pinned to the substrate or vertical surfaces. Silicone or caulking compound is not recommended.

Note: For installations that include the floor passing through multiple pinch-points, for example doorways and transitional areas from smaller passageways to larger rooms, consideration should be given to additional expansion allowance at these points.

ACCLIMATIZATION

Resistance Hybrid flooring does not need to be acclimatized, however it is still recommended to store and install material in an environment that has been acclimated to acceptable living conditions and if boxes are exposed for over 2 hours to extreme temperatures (under 5°C or over 50°C) within the 12 hours prior to installation (which may be due to storage in vehicles or transport to site), acclimatization is required at a room temperature between 18°C to 28°C for a minimum of 12 hours, in unopened packages prior to installation. When acclimatization needed, make sure not to stack more than 3 packs high and they are spaced at least 200mm apart to allow airflow between stacks. The temperature must remain within above 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 30-60% to prevent condensation forming under the laid flooring. Boxes should be stored no more than 3 high to avoid damage and achieve best acclimatization.

PRE-INSTALLATION JOBSITE REQUIREMENTS

Flooring should be one of the last items installed in any new construction or remodel project.

Crawl spaces must be a minimum of 46 cm from the ground to the underside of the joists. A ground cover of 6–20 mil black polyethylene film is essential as a vapor barrier with joints lapped 15 cm and sealed with moisture resistant tape. The crawl space should have perimeter venting equal to a minimum of 1.5% of the crawl space square footage. These vents should be properly located to foster cross ventilation. Where necessary, local regulations prevail.

Room temperature and humidity of installation area should be consistent with normal, year-round living conditions for at least one week before installation of flooring. After installation, a room temperature range between 60° and 107° Fahrenheit and a humidity range of 30-50% is recommended.



INSTALLATION PROCEDURES

Prior to Laying:

- Prior to installation, inspect material in daylight for visible issues. Check if subfloor and site conditions comply with the specifications
 described in these instructions. If you are not satisfied, contact your supplier immediately and do not install.
- 2. Prepare the sub floor in accordance with Australia Standard 1884-2012 and as set out in these instructions.
- 3. Plan the direction of the area to be installed to maximize the visual appearance once installed. The direction of the tile/plank grain should be confirmed, and the installation should be balanced from the center of the area to minimize waste.
- 4. Measure the room at right angle to the direction of the flooring. For best visual effect, planks or tiles in the final row should be at least at least 1/3 the width of the plank or tile. For this purpose, planks in the first row can be cut to smaller size. Purposely mix and arrange boards in a pleasant blend of shades. Lay boards, preferably following the direction of the main source of light. We recommend laying on wooden floors crossways to the existing floorboards.
- 5. This flooring replicates the look of a natural product which has natural variations in color, texture, and sheen/gloss. For best visual effect, work from 3-4 boxes and shuffle planks or tiles. Avoid installing similar planks or tiles next to one another. After laying the first a few boxes of product, view from a distance that allows you to clearly see the overall effect. If any doubt, contact your retailer or Resistance Hybrid representative immediately and it is the installers' responsibility to determine the expectations of what the finished floor will look like with the end user. You may want to position a few rows before starting installation to confirm your layout decision and working line.
- 6. Carefully inspect all boards for any defects. Planks installed with visible defects are not covered under warranty. It's the responsibility of the installer/owner to verify that the product and accessories supplied is the correct product, colour, pattern and
- 7. quantity. Please do not install any plank or tile that is considered questionable in appearance or dimensions. Allwood Wholesale holds no responsibility for any visible defects after the flooring has been cut and/or installed.

Installing the First Row:

- Begin installation from an external wall. This is usually the straightest and best reference for establishing a straight working line.
 Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is out of straight.
- 2. Starting from the left with the tongue-side facing the wall, carefully place the first board in place, using spacers to leave a 6mm expansion gap between wall and edges of the plank or tile.
- 3. The end joints of this product feature an integrated Valinge 5G-i locking system with pushdown technology for an easy and speedy installation. Align the tongue and groove on the end joint of the next piece and press down. As the panel reaches its final position, the tongue flexes back and into the wedge groove on the folded panel, locking it in the vertical position. An integrated locking tongue is pushed inward when the next panel is folded down. Tap with your hand or a rubber mallet in a downward striking angle to ensure successful and secure engagement. Continue in this manner until reaching the final board in the first row.
- 4. Cut the final board piece to length while maintaining the appropriate expansion gap along the perimeter of the room or fixed vertical surfaces.



Continuing the Installation

- 1. Begin the second row with the cut plank from last row if it is 150mm or longer.
- 2. Position the first board in place by angling it up slightly, pushing forward and interlocking the side tongue. The long side of the plank or tile MUST BE SNUG against the adjoining plank or tile with NO GAPPING. If everything is aligned correctly, there will be a slight click from the end joint as the panel is successfully engaged and reaches its final position after being lowered into place. If slight gapping presents or planks not lay flat, STOP new plank, disengage the long/top side join and then carefully slide the short/end join apart. Do not pull up on this join as it will damage the locking mechanism! Reinstall the plank.
- 3. Lower the board and slide it to the left to within approximately 1 mm of the end joint of the adjoining plank.
- 4. Tap the joint with the rubber mallet using a downward angle striking motion towards the adjoining end joint until the tongue and groove lock together on the side and ends.
- 5. Carefully inspect the long edge and short ends of the plank for any gapping before moving on to the next.
- 6. Work across the length of the room installing planks in the second row. It is critical to keep these first two rows straight and square, as they are the "foundation" for the rest of the installation. Check often for squareness and straightness while installing the floor as failure to do so can result in gapping.
- 7. Continue installing, being certain to maintain a random pattern repeat, assisted by offsetting end joins by at least 150mm. Maintain the appropriate expansion gap against all fixed vertical surfaces.
- 8. Install the remaining boards and rows in the same manner.
- 9. Cut the last board to size.
- 10. Whenever practical, use cut pieces from previous rows as the starter board to reduce waste
- 11. Maintain proper spacing (at least 150mm for planks, and equal to half its length for tiles) between end joints for best appearance.

Installing the Last Row:

- 1. The last row may need to be cut lengthwise (ripped).
- 2. Place the last row of boards to be fit on top of the last row of installed boards. Use a piece of plank or tile as a scribe to trace the contour of the wall.
- 3. Mark where the board will be cut. If the fit of the wall is simple and straight, simply measure for the correct fit and cut.
- 4. After boards are cut, position boards and tap all joints (long AND short ends) with the rubber mallet.

Note: The last row plank width should be no less than 50mm on the long seam. Remember to allow for the appropriate expansion gap to the wall

Installing Mouldings:

Be sure that all mouldings are fastened directly to the wall or subfloor; do not place any fasteners through the floating vinyl flooring. Care must be taken when fitting wall mouldings that they do not push down on the floor. This will affect the floors ability to expand and contract and may lead to product failure.

Installation under moldings (such as door jambs) may require that the top lip of the groove on the end be reduced in size. Using a small knife, carefully shave off the ledge of the groove, place the board in place and tighten with a pull bar. The installer must be sure that the required expansion gap has been maintained and the flooring is not pinched, if fit is not correct, re-trim as necessary. Place a bead of wood glue on the bottom lip of the groove. Insert the tongue into the groove and engage with a pull bar. Hold the board in place with painter's tape (3M Scotch-Blue™ 2080 Tape) until the glue is dry. Do not use masking tape or duct tape as they may damage the floors finish.



In-floor Radiant Heat:

Before installing over newly constructed 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 maximum moisture content of the screed is 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 floor. After installation, ensure the surface temperature of the subfloor never exceeds 27°C. Refer to the radiant heat system's manufacturer recommendations for additional guidance.

Post-installation

- 1. Flooring should be one of the last items installed in a project. If constructions works are still underway, the floor should be protected from site debris, dirt, soil, traffic etc. by use of a protective surface (e.g. sheet plastic, hard boards etc. Rosin paper and 3M Scotch-Blue™ 2080 Tape to hold the rosin paper to the floor (other blue tapes may damage the finish). Clean the floor thoroughly before laying the rosin paper to ensure that no debris is trapped underneath. DO NOT USE plastic film or other non-breathing coverings as this can cause the floor to become damaged from humidity buildups.
- 2. Dust mop or vacuum your floor to remove any dirt or debris.
- 3. It is suggested that you clean the floor using a recommended PH neutral cleaner.
- 4. Install any transition pieces that may be needed (reducers, T-moldings, etc.).
- 5. Use window coverings to protect the floor from extreme heat and fading under direct sunlight, especially at floor to ceiling window area. Extreme temperature fluctuation of the flooring or at certain spots in floor to ceiling window area could cause lipping or gapping at end joints.

MAINTENANCE

- Sweep or vacuum daily using soft bristle attachments. Do NOT use vacuums that use a beater bar or turn beater bar off. Do NOT use electric brooms with hard plastic bottoms with no padding.
- Use walk off mats at entrances to prevent dirt and grit from being tracked on to the floor.
- Clean up spills and excessive liquids immediately.
- Damp mop as needed, and use cleaners recommended with no wax, oils or ammonia.
- Use proper floor protection such as felt protectors under furniture.
- Use a non-staining mat at entrance ways (please ensure the mat doesn't have rubber backing, Rubber may discolor the floor).
- Do not use abrasive cleaners, (nylon scouring pads, steel wool), bleach, wax or solvents to maintain the floor.
- Do not drag or slide heavy objects across the floor.
- Avoid exposure to long periods of direct sunlight. Close blinds or drapes during peak sunlight hours. Floor covering subjected to
 excessive heat and light is subject to thermal degradation. Use appropriate precautions to minimize potential effects. For further
 information on maintenance and warranties, please consult the Resistance Hybrid Flooring Maintenance and Warranties guide
 online or in store.