

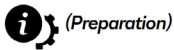


WISE

INSTALLATION INSTRUCTIONS
FOR AMORIM WISE
AMORIM CORK FLOORING

Version 2.0 | August 2020

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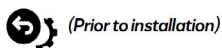
(Preparation)

Introduction

There are two recognised installation methods for Amorim WISE; Floating and Glue Down. Primarily, Amorim WISE is a floating floor but under certain conditions where the overall span may exceed 18 meters in either direction, floor areas superior to 325m², in areas which will be exposed to excessive heat ($\geq 45^{\circ}\text{C}$), direct sunlight or where required expansion gaps are not possible or practical, it must be glued down with the recommended adhesive to achieve a successful installation. The Amorim WISE connection system is a 2G System, also commonly known as an angle/angle click system.

Subfloor Requirements

This technical information is intended to give recommendations for common subfloor conditions and its proper preparation. For further subfloor requirements please consult NZS AS 1884:2013. Amorim WISE can be installed in interior installation sites, on or above grade, on concrete or wooden subfloors, in almost all domestic areas and in most commercial areas except in saunas and persistently wet areas. It is possible to use Amorim WISE in bathroom areas, or areas where spillages frequently occur since it will not swell when exposed to water. However, in order to prevent the water from penetrating under the laid floor (which can cause adhesive deterioration and create conditions for growing of fungus, mould or smell), an appropriate water resistant adhesive must be used and the joints around the walls and furniture must be sealed with a polyurethane sealant appropriate to the NZBC (E3 Internal Moisture).



(Prior to installation)

Site Inspection

Prior to installation, please inspect the planks in daylight for any visible faults or damage and also check if the subfloor and site conditions are in accordance with the specifications described within these instructions. Amorim or Quantum cannot be held responsible for claims associated with improper subfloors, improper applications, improper installations, adhesives, and the use of maintenance products not recommended, or detectable defects verifiable prior to installation.

Transport, Storage and Acclimatisation

Transport and store the cartons horizontally, never on their ends. Packaged planks should be acclimatised at the job site in a dry, well-ventilated area for a minimum of 48 hours so the flooring may acclimate. Remove planks from packages just before starting installation. During storage and installation, maintain temperature and relative humidity to a level consistent with the conditions which will prevail when the building is occupied. In most cases, this means maintaining a temperature range from 18°C to 28°C and relative humidity range from 35% to 65%. In order to reach this climate, use heating or air conditioning for the appropriate duration of time before starting the installation.

Floating Method Parameters

Amorim WISE can be installed as a Floating Floor where the planks are not fixed to the subfloor by an adhesive, provided it is installed within the stated parameters. The skirting boards / mouldings cannot be pressed down onto the planks restricting the movement of the floor. Also provide a 5mm to 10mm perimeter expansion gap to the walls and other fixed objects. Skirting boards / mouldings should cover a minimum of 7mm of the floor. Transitions between two rooms and asymmetrical floor areas require additional expansion gaps in floor areas superior to 325m² or with dimensions larger than 18 meters in either direction. These requirements can be avoided if Amorim

WISE is installed as a Glue Down. In areas which will be exposed to excessive heat ($\geq 45^{\circ}\text{C}$) or direct sunlight the flooring must be glued to the subfloor with the use of a recommended adhesive.

Glue Down Method Parameters

When the "Floating Method Parameters" are not practical, it is necessary to follow the Glue Down Method using the correct adhesive. The key to success when installing Amorim WISE as Glue Down is to achieve a good bond between the subfloor and the floor covering. Proper preparation of the surface is the most important factor in achieving this bond. Whatever levelling compound is used to level, smooth or repair a subfloor surface, it will only be as strong as the surface to which it is bonded. The surface, therefore, must be sound, clean and free of oil, grease, wax, dirt, curing compounds, latex and gypsum compounds, dust, paint, or any contaminant, which might act as a bond breaker. The methods required to properly prepare the subfloor vary with the type of subfloor, its surface and condition. Several methods of preparing a subfloor are available. Some methods are used because they are cheaper, easier or faster, depending upon the size of the job. However, taking short cuts in proper subfloor preparation can derive in installation problems and failures. Using this Glue Down method requires no perimeter expansion like is required for a Floating Installation. For further surface preparation detail, refer to NZS AS 1884:2013 3.1.1.5

Adhesive Recommendation

The one-sided adhesive recommended for Amorim WISE (as Glue Down) is Ardex AF 480 MS using an A2 trowel (dependent on the site conditions). Failure to use the correct adhesive may result in movement in the flooring causing joints to open or possible delamination from the subfloor. Please follow the manufacturer's instructions carefully including if priming may be required. See below links to the data sheet: www.ardex.co.nz/product/ardex-af-480-ms

Expansion Joints – Concrete Floors

Installation of Amorim WISE or other resilient flooring products over joints in concrete subfloors may be appropriate for some joint types and not appropriate for others and can lead to the failure of adhesion between the floor covering and the subfloor. Different types of joints are used in the construction of concrete subfloors with requirements for the placement and performance of joints determined by the standards NZS 3109 and NZS 3604. According to NZS AS 1884:2013 Appendix E, Resilient floor coverings should not be installed over Contraction Joints, Expansion Joints or Isolation joints. They may however be installed over a Construction Joint or Shrinkage Control Joints.

Unsuitable Temperature and Ventilation Conditions

Amorim WISE should be installed at approximately the same temperature that it will be exposed to later on during use. Amorim WISE as Glue Down should not be installed at a subfloor temperature below 18°C and the relative humidity should be between 35% to 65% as this kind of climate can have adverse effects on the flooring itself and in its processing. For example, low temperatures lead to an increase in the setting time and reaction time of adhesives and levelling compounds; the drying time for primers and levelling compounds and the airing time for adhesives are likewise increased by high humidity. The corresponding time details given by the manufacturers of adhesives are based on a temperature of 20 °C and 50 % relative humidity as a general rule.

Moisture Testing

Amorim WISE must only be installed on subfloors where the moisture content complies with recommended testing as per NZS AS 1884:2013. The acceptable reading of a Hygrometer test on a concrete substrate is no higher than 75% relative Humidity. This limit is specified in E2 Clause 10.2 of the building Code, NZS AS1884:2013, Best Practice Guidelines for the NZ Flooring Industry and is recognised worldwide by Manufacturers specifications for resilient floor coverings. Acceptable Hygrometer testing methods are either a "Hood Test" or a "Drill and Plug Test" in accordance with NZS AS 1884:2013 A2.2. Timber subfloors should be tested using an "Electrical Resistance Test" complying with NZS AS 1884:2013 A2.4. Readings above 16% could indicate a higher than acceptable level of moisture. Despite its age, there is always a risk of moisture in subfloors. Subfloors must be permanently dry on concrete subfloors without radiant heat. Subfloors to be covered with Amorim WISE as Glue Down require sealing against rising damp if there is no basement. Water repellent concrete, crawl spaces, or similar materials are not sufficient to prevent the migration of humidity into the subfloor. Amorim WISE should not be installed where excessive moisture emissions may exist. When it is installed on concrete, ceramics or stone subfloors an effective moisture damp proof membrane should be used such as Ardex WPM300.

Alkaline Testing (pH)

In addition to moisture testing, you may also test the concrete for alkalinity. It is quite possible during curing, especially on newly poured slabs, that alkaline salts were carried to the surface by moisture. These alkaline salt deposits will adversely affect the adhesive bond. You can test for alkalinity of the concrete with a special pH testing paper. If you have a pH reading of 10 or higher, you must neutralise the alkalinity before beginning the installation.

Subfloor Types:

Radiant Heated Subfloors

For Amorim WISE, the temperature of the heated subfloor must not exceed 28°C. For detailed information, follow the instructions supplied by the subfloor heating system manufacturer/contractor, or contact your supplier to ensure the correct drying process is followed. Remember that rugs or mats placed on top of the floor may function as heat accumulators and will increase the floor surface temperature more than the maximum surface temperature recommended. Any Heated Subfloor has certain working conditions depending on the heating system and the subfloor. In order to avoid problems with functioning and durability during the construction phase, the norms and rules concerning installation are to be followed very strictly. The drying of a heated subfloor has to be made by turning the heating on/off with a pause before installation of the floor, following a documented protocol. After that you can begin the "heating phase". The beginning of the heating phase in concrete subfloors is to be made not before 21 days after complete curing of the substrate. The heating phase has to begin with a running temperature of 25°C during 3 days. The subfloor should be in place and cured for at least 60-90 days. The temperature should then be increased each day until the maximum temperature allowed according to the manufacturer system. This maximum value should be kept for at least 72 hours and maintained for 5-7 days without turning off. The decrease of temperature is made by reducing it gradually every day until 18°C on the surface is achieved. During the installation, the temperature of the surface should not exceed 18°C and should be kept for 3 days after finishing the installation. Then the temperature should be increased slowly to a max. of 28°C on the subfloor surface.

Important Notes:

- Failure to observe these precautions can cause a build-up of moisture, partial evaporation of the levelling compound, or fast drying of adhesive.
- If the heat is turned on when the adhered material has not been conditioned properly on site for at least 7 days and is not completely dry, the material may shrink.
- Avoid abruptly turning on radiant heat when cooler weather prevails as it will subject the flooring to rapid movement of expansion and or contraction. Gradually increase temperature regardless of the season.
- The adhesive used must be suitable for heated subfloors.
- No responsibility will be accepted in case of malfunctioning of the heating system and related problems.
- The surface temperature of the subfloor must not exceed 28°C.
- Follow the instructions supplied by the subfloor heating system manufacturer/contractor, or refer to NZS AS 1884:2013 4.1.3

Concrete Subfloors

The moisture content of concrete subfloors must comply with the conditions outlined within these instructions under "Moisture Testing" and be finished and prepared in accordance with NZS 1884:2013 3.1

Wooden Floor – Chipboard OSB, Plywood

Timber subfloors must comply with the relevant requirements for flooring as identified in NZS AS 1884:2013 3.2. Fairly large surfaces can be installed without joints by gluing the tongue into the groove. Generally, only the joints between the boards are levelled or sanded. Whether or not a primer is necessary will depend on the surface quality of the boards concerned. If the joints are not glued, they will show later in the surface of the flooring. Wood subfloors or particle board subfloors must be mechanically fixed, e.g. by using screws. All tongue and groove joints shall be glued with suitable adhesive and the joints firmly closed. It is recommended that all timber floors, old or new be level sanded and a hardboard overlay (such as Trimtec or similar) be fixed as recommended by the manufacturer, compliant to AS/NZ1884:2013 prior to the installation of Amorim WISE as Glue Down.

In case of Installation on a wooden subfloor, remove any existing floor coverings first. No signs of mould and or insect infestations should be visible. Make sure that the plywood and OSB subfloor is mechanically fixed (screw). Make sure they are stable and show no movement and the joints between the panels are even and firmly closed. Existing laminate flooring, wood planks or engineered wood planks must be free of tensions. If there are any visible open seams and or height differences in the panels then it needs to be entirely removed. Existing wood planks, engineered wood boards, OSB panels, Plywood etc. must not be covered with PE foil acting as a vapour barrier. The area below the floor should also be sufficiently ventilated in an adequate way (back vented skirting boards) to maintain the equilibrium moisture content of the wood planks, engineered wood boards, OSB Panels and drywall elements. The crawl space under the wooden subfloor must be sufficiently ventilated.

Tongue and Groove Subfloors

Amorim WISE or any other resilient flooring should not be adhered directly to tongue and groove subfloors. This form of subfloor does not provide a suitable solid platform for resilient floor covering installation. A form of underlayment (such as TrimTec) should be used on a tongue and groove subfloor after it is tested for excess moisture.

Artificial or natural stone and ceramic tile floorings

Subfloors of this type are non-absorbent. All soiling (e.g. grease, waxes, soap, etc.) must be thoroughly removed mechanically and with detergents, especially if floors like this have already been in use for some time. Any loose tiles must be re-fixed. Subfloors of this type have to be roughened (e.g. by grinding), primed and levelled. The maximum grout joint should not be wider than 2mm and 1mm depth. If this is not the case or if there is any kind of embossing, skim coat the grout joint with a floor leveller. All types of concrete and ceramic subfloors must be even, dry and variations should not exceed those of the NZS AS 1884:2013 standard.

Coatings and paint

These are usually very low in pores or have none. If using Amorim WISE as a Glue Down, subfloors of this type have to be roughened (e.g. by grinding), primed and levelled.

Underlay

No underlay is required with Amorim WISE as the comfort layer is built into the product. If you wish to use an underlay such as Amorim Acousticork Eco21Db to further improve its acoustic performance, it must comply with the manufacturer's installation specifications. No other proprietary foam underlays should be used.

Before Installation:

Please inspect Amorim WISE in daylight for any visible faults or damage. Also check if the subfloor and site conditions are in accordance with the specifications described within these instructions. Subfloor preparation must comply with NZS AS1884:2013 or other applicable National Standards and Building Codes for Resilient Flooring. Information within this standard overrides any contradictory information within these instructions either stated or implied. Ensure that you are using the correct installation method and if the Floating method is being used that the installation fits within the stated parameters. If Glue Down method is being used that the correct adhesive and precautions are being used.

Subfloor Variation

As per NZS AS 1884:2013, Subfloors should be a U3 finish and not exceed 3mm over 3m and be flat. Although Amorim WISE has a tested tolerance greater than this at 5mm over 2m, the overriding standard must be adhered to.

Shade Variation

Shade variation is an inherent and attractive characteristic. To achieve the most pleasant blend of shades, shuffle the planks from multiple boxes before laying observing any obvious repeats in pattern.

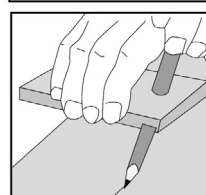
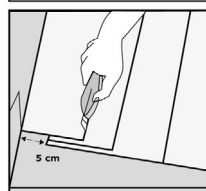
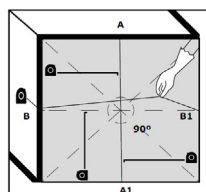
Installation with excessive heat or direct sunlight

Amorim WISE should be protected from heat and sunlight by the use of curtains and or blinds. In areas which will be exposed to excessive heat ($\geq 45^{\circ}\text{C}$) or direct sunlight the flooring must be glued to the subfloor with the use of a recommended adhesive. During installation in full sun it is recommended to mask windows etc. to prevent the floor from moving during installation and to maintain a consistent environment.

Installation in bathrooms or wet areas.

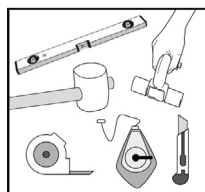
The NZ Building Code (E3 Internal Moisture) identifies a bathroom, laundry, toilet or a kitchen (areas with taps) as a "wet area" where moisture may accumulate or be generated. The installation method and finishing needs to be considered, particularly with joints around the walls and furniture or fittings that require sealing with a polyurethane sealant.

Set Out Measurements



- Check the wall where you are starting the installation and make sure it is squared to the opposite wall. Simply measure the room from the opposite ends of the wall as detailed. If measurements are different make the necessary adjustments on the first row. Draw a line using a chalk line.
- Make sure that the widths of the first and last rows planks are equal or bigger than 5cm of the plank.
- If the wall is very uneven, cut the planks with the corresponding width to eliminate the unevenness. Place the first plank on top of the second row and cut as indicated. Or draw the outline of the wall by "sliding" a cut off piece along the wall. Then cut the planks along the line.

Tools Required



Tape measure, craft knife (or guillotine), pencil, straight edge, chalk line, white rubber hammer or hand roller, 50kg pressure roller (for Glue Down).

Installation Check List

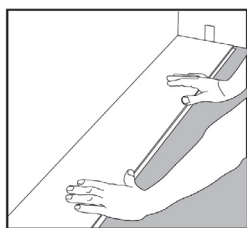
- ✓ Installation Instructions have been read in their entirety
- ✓ Concrete or Timber subfloor complies to NZS AS 1884:2013
- ✓ Correct Installation method has been decided and approved
- ✓ Planks have been checked for defects
- ✓ Moisture testing completed (where required)
- ✓ Product has been correctly acclimatised
- ✓ Correct Primer / Adhesive is used (if Glue Down)
- ✓ Floor has been properly rolled (if Glue Down)

References:

NZ Standards NZS AS 1884:2013 – Floor Coverings
Floor NZ Best Practice Guidelines – Resilient Floor Coverings
NZ Building Code E3 (Internal Moisture)
ardex.co.nz

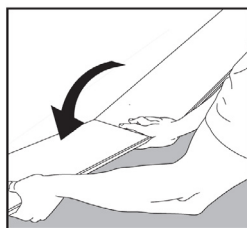
(Laying)

On wooden floors, we recommend laying Arorim Wise floors crossways to the existing floorboard. Arorim Wise floors locking system is easy to install. We recommend to start installation in the right-hand corner.



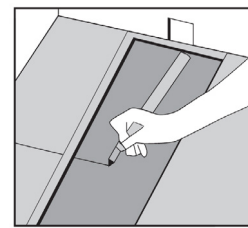
1

Turn the tongue side of the plank facing the wall. Maintain a gap of a 5mm on the short side.



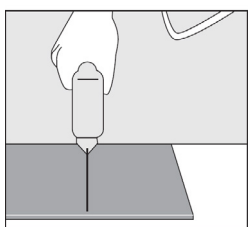
2

Hold the next plank against the first at an angle to the first one and lay it flat on the floor. Complete the first row in the same way.



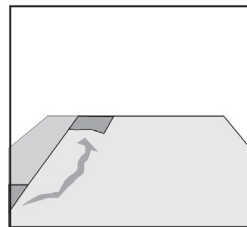
3

Cut the final plank of the final row to the correct length. Place the final plank face down and the short side without the locking strip towards the wall. The distance to the wall should be 5mm.



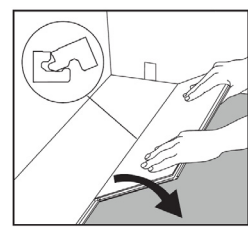
4

Mark where the plank is to be cut and place it on the work surface and cut to size using any kind of saw,



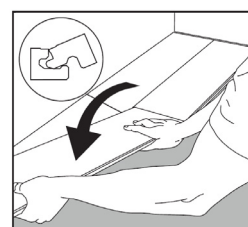
5

Make sure that the long sides of the planks make a straight line. Use the cut piece of the plank from the previous row to start the next one. However it must be at least 30cm long. If the piece is too short, start with a new board and cut it in half. Always ensure that the end joints are staggered at least 30cm.



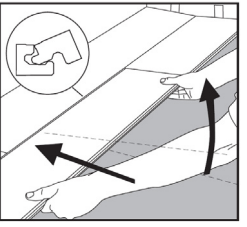
6

Place the first plank of the new row with the tongue side at an angle against the groove side of the plank in the previous row. Press forward and lay it flat at the same time.



7

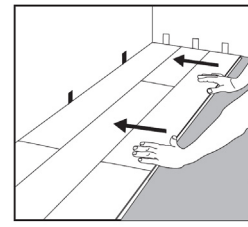
Place the short end of the plank at an angle against the previous installed plank and fold down. Ensure that the plank is positioned on the integral locking strip of the plank in the previous row.



8

Lift the plank (together with the previous one laid in the same row) slightly up (about 30mm), push it against the row in front and then put it down.

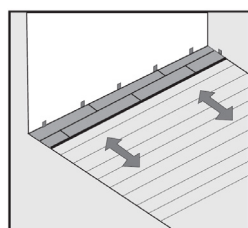
Tip: This movement requires some gentle adjustments on the pressing angle.



9

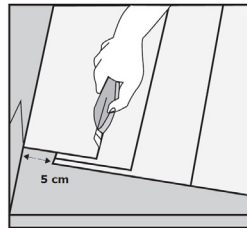
Adjust the distance to the wall to 5mm when three rows are complete.

(Last Row)



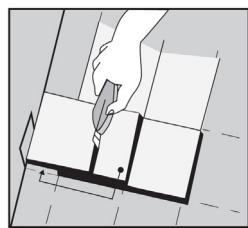
10

Proceed the installation as described above until reaching the opposite wall.



11

Measure and cut the planks in the last row to the correct size. Allow for a 5mm distance to the wall. No plank should be less than 5cm wide.



12

The last and first plank can be cut in the correct width. Place the last plank on top of the second to last plank. Mark the plank with the help of a piece of plank without locking the strip. Allow for 5mm distance to the wall for the expansion gap.

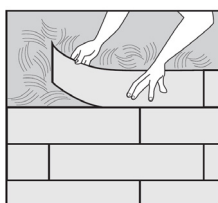
(Laying)

It is recommended that all timber floors, old or new be level sanded and a hardboard overlay (such as Trimtec or similar) be fixed as recommended by the manufacturer.



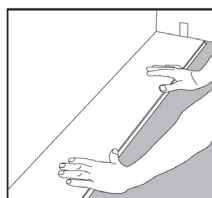
1

Stir the adhesive before using. Avoid adhesive lumps. We recommend starting laying in the right-hand corner. Apply the adhesive evenly on the subfloor with the recommended notched trowel. Avoid pooling of the adhesive.



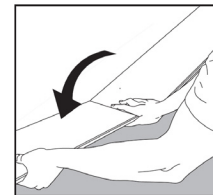
2

Lay the floor in the adhesive, following the technical data sheets and recommendations of adhesive producer. The backing of the tiles has to be moistened with adhesive. In case of doubt, check by lifting it. When laying the tiles, use only man-



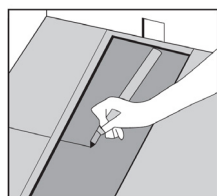
3

Turn the tongue side of the plank facing the wall.



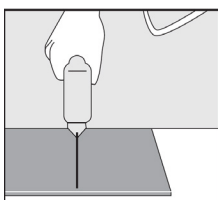
4

Hold the next plank against the first at an angle to the first one and lay it flat on the floor. Complete the first row in the same way.



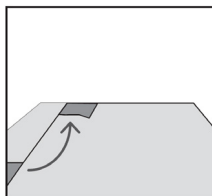
5

Cut the final plank of the first row to the correct length. Place the final plank face down and the short side without the locking strip towards the wall.



6

Mark where the plank is to be cut and place it on the work surface and cut to size using any kind of saw.



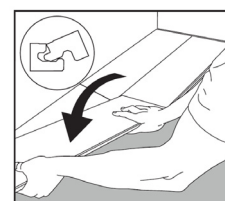
7

Make sure that the long sides of the planks make a straight line. Use the cut piece of the plank from the previous row to start the next one. However it must be at least 30cm long. If the piece is too short, start with a new board and cut it in half.



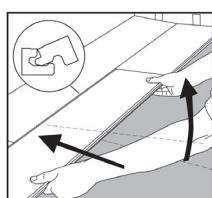
8

Place the first plank of the new row with the tongue side at an angle against the groove side of the plank in the previous row. Press forward and lay it flat at the same time.



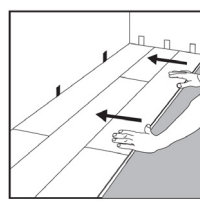
9

Place the short end of the plank at an angle against the previous installed plank and fold down. Ensure that the plank is positioned on the integral locking strip of the plank in the previous row.



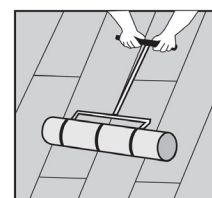
10

Lift the plank (together with the previous one laid in the same row) slightly up (about 30mm, push it against the row in front and then put it down. Tip: This movement requires some gentle adjustments on the pressing



11

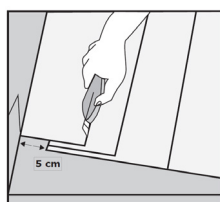
Proceed the installation as described above until reaching the opposite wall.



12

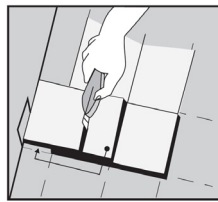
The floor must be rolled with a 50-Kg roller, every 30 minutes, and upon completion of installation, to ensure that the tiles are firmly bedded into the adhesive.

(Last Row)



13

Measure and cut the planks in the last row to the correct size. No plank should be less than 5cm wide.

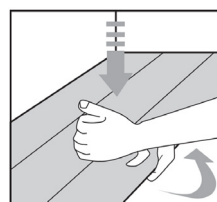


14

The last and first plank can be cut in the correct width. Place the last plank on top the second to last plank. Mark the plank with the help of a piece of plank without locking the strip.

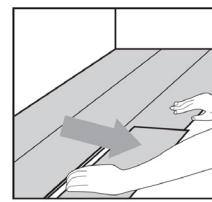
(After installation)

(Removing the floor)



15

To uninstall the floor, lift the planks (long side) a few centimetres and then slide the planks on the short side.



16

Do not bend connected planks backwards as this will damage it.