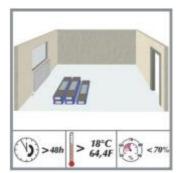
This guide outlines important steps to ensure your new laminate floor is installed to the highest standard. Following these recommendations—based on Floor NZ Best Practice Guidelines and AS/NZS 1884:2013 Standards—will help achieve a quality finish and maintain the laminate appearance over time. Careful planning and attention to detail during installation will make all the difference in how your laminate looks and performs.

## Key installation practices referencing to:

- Floor NZ Best Practice Guidelines for Resilient Floor Coverings Planning and Installation
- NZ Flooring Installation Standard NZS/AS 1884:2013
- (1) All Kaindl Aqua Pro laminate flooring is recommended to be installed with a minimum room temperature of 18 °C and a relative humidity of ≤70% for at least 48 hours. The product must be acclimatised in the room for a minimum of 48 hours.



(2)

Leave the Kaindl laminate flooring in the packaging during the acclimatisation time, laying flat, up to 5 boxes high, stacked squarely and away from heating, cooling or windows with direct intense sunlight. Open the boxes approximately 30 minutes prior to the installation to be sure that the planks are completely acclimatised.

- (3) Kaindl Aqua Pro laminate flooring is temperature and humidity sensitive, and when installed in an area with different temperature or humidity than requested the characteristics of the planks could change.
- (4) The planks should be laid without the use of adhesives or other means of attachment the tongue and groove are designed to be mechanically locked together. Under no circumstances should the planks be glued, nailed or otherwise affixed to the subfloor. Avoid placing heavy items like aquariums, pool tables, or bookcases that may restrict the floor's natural expansion and contraction.
- (5) Subfloor is required to be clean, sound, flat (plane), smooth and dry. Flat (Plane)

The subfloor is required to be flat to a maximum tolerance of 2mm/m. Irregularity in floor level of more than a maximum of 2mm/m must be either sanded / ground down or filled in with levelling compound.

# **Existing Flooring**

Kaindl Agua Pro laminate cannot be installed over existing floor coverings.

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#### Clean Subfloor

The subfloor needs to be completely clean and free of any debris prior to installing the underlay or laminate.

### Dry

The moisture content of the subfloor must be less than 75%RH (cement screed). Where in slab heating is present results must be respectively 1.5%CM / 60%RH. Always measure, record and keep your moisture content results. A new cement screed floor must dry at least 1 week per 1cm thickness up to 4cm. Thickness over 4cm requires twice as much drying time. For example, a 6cm concrete subfloor must dry at least 8 weeks.

In instances where excess substrate moisture is detected a 200um PE film must be installed between the sub-floor and the new floor covering. Joins should be overlapped 300mm and taped. Kaindl Sound System underlay and laminate flooring can be installed over this film.

Timber substrates must have a moisture content of less than 14% when tested in accordance with AS/NZS 1884. If the test results show more than 14% the cause of excess moisture must be identified and remedied prior to Kaindl Aqua Pro laminate flooring installation. Timber subfloors must have (and maintain) sufficient cross flow ventilation, please ensure that all vents and crawl space under the subfloor are kept clear.

# (6) Installation in conjunction with underfloor heating

Kaindl Aqua Pro laminate flooring can be installed over in slab hydronic floor heating systems, however over subfloor heating systems should be avoided.

In all instances where in slab heating is present, a 200um PE film must be installed between the heated sub-floor and the new floor covering. PE film joins should be overlapped 300mm and taped. Where PE film extends to the perimeter of the room, the film to wall junction should also be sealed with tape. Kaindl Sound System underlay and Aqua Pro laminate flooring can be installed over this film. The surface temperature of the substrate your laminate floor covering is installed over should not exceed 26°C.

Increase the temperature by no more than 5°C per day until the maximum heating level is reached.

# (6) Expansion joints

Laminate flooring consists largely of wood. Wood is a hygroscopic material and always adapts to the ambient humidity, which in turn results in a change in dimension. It is essential that provision is made for expansion joints.

### Maximum span without additional expansion gap

The largest possible continuous installation area without additional expansion is 10m in the direction of the panel width, and 10m in the direction of the panel length - this is in addition to the perimeter expansion of 12mm.

When installing Kaindl Aqua Pro laminate, a minimum 12mm expansion gap must be left at all fixed vertical surfaces, including around cabinetry, island benches, any fixed furniture or pipes, or transitioning to a different room. In areas of higher humidity (i.e. Upper North Island) a larger expansion gap of 14 – 16mm may be required.

## **Expansion for flooring transitions**

Transitions to other flooring types (e.g. Kaindl Aqua Pro laminate to carpet / vinyl / tile) necessitate the use of transition strips which not only permit any necessary movement on the part of the laminate but also protect the laminate edges. Allowance must be made for expansion on stairs.

Robert Malcolm offers expansion trims, reducer trims and stair nosings to ensure expansions and transitions are made to a professional standard.

# (7) Underlay

Kaindl Aqua Pro laminate flooring must be installed in conjunction with Kaindl Sound System 2.2mm underlay – this underlay acts as a vapour, anti microbial and impact sound barrier. Sheets are to be tightly butted together and joins sealed with Kaindl 50mm Aluminium Tape. This tape must also be used to seal the perimeter of the underlay.

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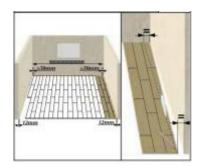
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## (8) Check planks

Always carefully inspect the planks for damage before installation. Check for colour correctness, pattern accuracy, damage to edges or locking profile, or any small damages or possible visible imperfections on the surface. The installation should be completed in daylight or equivalent good lighting as it is possible that small damages may not be visible in poor lighting.

## (9) Plank mixing

Prepare at least 4 packs of flooring. Mix planks from different packs during installation. We recommend alternate fitting of the planks from 4 different packs at the same time. Keep alternating the planks across the entire floor area. This guarantees the best possible colour and pattern distribution of your Kaindl Aqua Pro laminate flooring.

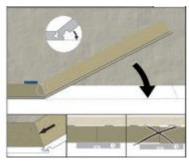


(10)

# First plank row parallel towards the wall

Please ensure a minimum of >50mm width of the first and last row.

The planks must follow the course of the wall; unevenness more than 5mm must be marked on the first row of planks using a spacer. The planks will need trimming lengthways following the marking. The last row of planks at the opposite wall should be no less than 50mm wide, if so, the width of the first row of planks should be cut down lengthways to avoid this. Please make sure there is a minimum distance to the wall of 12mm, bear this in mind when calculating the last row. End stagger of joins in rows should be a minimum 300mm in length.



(11)

#### **Begin installation**

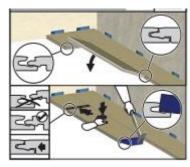
Remove the tongue of the first plank row and lay it against the wall. Connect the planks of the first row on the short side. Insert the plank into the groove of the first plank at an angle of 25° and lower the plank to lock into place. Ensure the row is straight.

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### (12) Offset installation

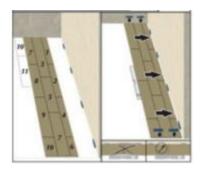
Mark the length, of the last plank in each row to allow for minimum offset to the following rows. For accurate cutting of the last plank in the row, rotate the plank 180°, and with the pattern side upwards, place beside the already installed row. Allow for distance from wall at end plank. Mark out offcut and saw off. Always saw from the upper surface of the plank (to avoid splintering the edges) only when using an electric jig saw or handheld circular saw should the patterned side be placed facing downwards. Start each row with the leftover piece from the proceeding row. The short end joins must be set in appropriate offset (minimum 400mm) – this offset provides stability to the installation.



(13)

## Angle / Tap:

Place the plank lengthwise at an angle of approx. 25° and angle it into the prior row. Shift the next plank to the short side of the plank just installed. Push the plank down gently so that the tongue and groove engages. Pay attention to the positioning of the short sides to ensure the profile pieces are perfectly aligned. Once the plank is lying flat, place the tapping block on the profile and use a hammer to gently tap into place so that the tongue and groove have a tight connection on the short side. Please note that the tapping block should be positioned properly on the tongue so damage does not occur. Never hit the floor directly, as it can damage the locking system or bruise the surface — always use a tapping block instead. Once the short side is securely locked, ensure all lengthwise joins are tight. If necessary, use a tapping block to tighten any loose joins.



(14)

### Installation order

The planks are laid according to the numbering in the image (trim the width of the first row if necessary to achieve a minimum plank width of 50mm each side of the room). In this sequence the first 3 rows are laid out in the room. This way of laying ensures the rows are connected in straight lines. The preinstalled rows are then pushed against the wall. The distance between the wall and the plank rows is fixed with space wedges. After that, the laying can be continued row by row.

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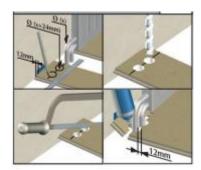




(15)

### No possibility to angle the planks

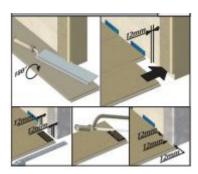
Special cases: If you are not able to angle the planks (e.g. under a door frame or a low fitted radiator) you must cut away the locking edge of lip of the bottom groove by using a wood chisel or small block plane. Run a bead of glue on the modified tongue and groove. Tap the planks tight together by using a hammer and push block or pull bar. If necessary affix temporarily with tape until adhesive is set.



(16)

### Installation towards heating pipes (minimum clearance 12mm)

Position the plank row so the transverse joint coincides with the pipe. Join the sawn off piece again tightly behind the heating pipe (using a spacer). Position the plank row so the transverse joint coincides with the pipe. First cut the plank to the correct length. Then lay the plank section beside the actual position, measure the recess with a ruler and draw in.



(17)

# Installation towards door frames

Minimum distance 12mm. Lay plank next to the door frame (with the patterned side facing downwards). Cut into the door frame with a straight back saw. Then slide the plank under the frame with the patterned side upwards. Don't forget to allow for expansion space of minimum 12mm.

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### (18) The final plank row

Lay a plank exactly on the previous row. Lay a second plank (original width) on top of it and draw an exact line for cutting. Cut away excess wood. Join the plank lengthways with a minimum expansion gap of 12mm. Insert the plank lengthways and lower down.

# (19) Installation in a Splash Area

If the installation is to take place in an area susceptible to spills or moisture getting behind skirting boards, the perimeter must be sealed within 1.5m of a sanitary fixture or appliance. A 10mm compressible polyethylene (PE) foam backer rod should be inserted to fill all expansion spaces in these areas. The backer rod should be completely covered with **Admil N600 Wet Area Sealant**, this provides a seal between the floor and adjoining vertical surface.

An acrylic sealant should not be used. A small bead of flexible sealant should be applied where the skirting meets the laminate floor, creating a barrier to prevent any spills or liquids from getting underneath or behind the skirting. Any fixed objects, door frames etc should be sealed in the same way with **Admil N600 Wet Area Sealant.** 

Fixtures (including but not limited to vanities, free standing baths or shower bases) should not be installed over Kaindl laminate flooring.

An expansion or transition bar should be installed in the doorway, to isolate any rooms containing splash areas from adjoining laminate flooring areas.

FAILURE TO FOLLOW THE ABOVE STEPS WILL HINDER YOUR INSTALLERS CHANCE OF A SATISFACTORY INSTALLATION AND COULD VOID THE MANUFACTURERS WARRANTY

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