

CHEVRON ENGINEERED FLOORING INSTALLATION GUIDE

Owner/installer responsibility: READ CAREFULLY PRIOR TO INSTALLATION

Beautiful floors are a product of nature and therefore, not perfect. Hardwood floors are manufactured in accordance with accepted industry standards which permit a defect tolerance not to exceed 5%. The defects may be of a manufacturing or natural type. Prior to the installation of any hardwood flooring product, the installer must determine that the job-site environment and the sub surfaces involved, meet or exceed all requirements as stipulated in these installation instructions. We do not accept any responsibility for job failure resulting from or associated with sub surface or job-site environment deficiencies. The installer/owner has final inspection responsibility as to grade, manufacture and factory finish. He must use reasonable selectivity and hold out or cut off pieces with glaring defects, whatever the cause. When chevron flooring is ordered, 10% should be added to the actual square metres needed as allowance for cutting waste and/or mis-manufacture. Waste levels are the responsibility of the installer. Should an individual piece be doubtful as to grade, manufacture or factory finish, the installer should not use the piece. DO NOT INSTALL ANY QUESTIONABLE OR DEFECTIVE PRODUCT.

NOTE: CHEVRON DESIGN FLOORING IS A PATTERN PRODUCED BY ALTERNATING ROWS OF THE SUPPLIED PLANK ELEMENTS. IT IS A JOB FOR A PROFESSIONAL FLOORING CONTRACTOR SO WE RECOMMEND THAT YOU EMPLOY A PROFESSIONAL WHO OWNS A MOISTURE METER TO LAY YOUR FLOORING. IT IS THE INSTALLER'S RESPONSIBILITY TO CHECK THE MOISTURE OF THE CONCRETE AND OTHER CONDITIONS IN THE HOUSE BEFORE LAYING THE FLOOR

STAGE 1. Before You Start – Job Site Inspection

Acclimatisation and Storage (IMPORTANT)

The floor should be stored horizontally in the room that is being fitted for at least 7 days before installation – the longer the better. The period required to acclimatise the flooring should be determined by taking moisture readings of the flooring and also from within the room. The fitter should aim for the two to be in equilibrium. Failure to acclimatize may cause excessive expansion and contraction.

The temperature should be in the range 18-22°C and the relative humidity between 40 – 60% for a minimum of 14 days prior to the installation of the flooring as well as during and after the fitting. The fitter should carry out these tests. Never bring flooring into a house which is not to the above conditions. It is vital that the packs are stacked correctly and horizontally. Place at least 3 laths between the ground and first row. The best way to stack the packs is to place laths between each row. DO NOT OPEN PACKS UNTIL IMMEDIATELY BEFORE INSTALLATION. The wood floor is supplied "kiln dried" to correct moisture content. If the packs are opened too early, the boards can absorb moisture and expand, which can make them harder to install. If packs are opened, they should be resealed immediately after to stop moisture getting in and causing possible deformation within the planks.

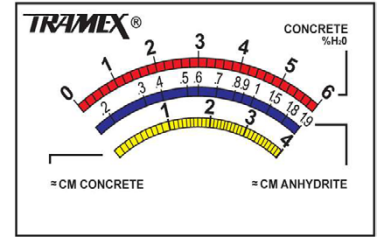
Sub-floor Evenness and Cleanliness

It is imperative to ensure that your cement or wood sub-floor is level as the chevron panels format size is large (to within 3mm over a 2 metre span) and that it is clean, dry and secure. Failure to do this may result in edge damage to the boards or noise related issues e.g. squeaking. It is the fitter's responsibility to ensure that the floor is level and clean. Any remaining residues or dirt should be removed.

IMPORTANT - Sub-floor Moisture

Cement Screeds (See Scale)

The moisture of the concrete floor must not be over 3% based on Tramex Concrete Encounter Red Scale in diagram) - this should be tested with an appropriate moisture meter e.g. Tramex Concrete Encounter. If the cement subfloor moisture level is too high, either wait until it is dry or use a PU Primer / Liquid DPM such as Seal Tight 100 which will seal moisture in cement floors up to 6% moisture. As per BS8201: 2011 a carbide bomb test should be used as the definitive guide for measuring screed moisture content. The Tramex meter is a quick test meter.



Liquid / Anhydrite Screeds

For liquid / anhydrite based screeds (usually 45-50mm thickness with underfloor heating), the moisture content level of the screed must be below 0.3% CM Moisture (Tramex Concrete Encounter Blue Scale highlighting CM % Moisture in diagram). Please note PU Primers or Liquid DPM's are not suitable for use over Liquid / Anhydrite Screeds. Please also see Underfloor Heating Guidelines (Section 4)

Timber Subfloor

Suitable timber subfloors include flooring grade plywood or OSB Grade 3 (Kiln Dried approx. 12%). Construction grade plywood is not a suitable subfloor due to its high moisture content. If you are using board materials over timber joists, the moisture content of the joists should not be over 12%. If the timber subfloor has a moisture content higher than 12%, we recommend the use of Whiteriver Bitumen Paper under the board material layer which helps prevent moisture penetration from the timber subfloor. Bitumen paper is used at installer's/owner's risk.

Inspect Flooring

Chevron panels are made up of multiple pieces within the engineered plank element – for this reason it is normal to expect a degree of colour variation within the chevron plank elements. Prior to installation, the fitter and home owner should inspect each board in good light for any visible faults or damage and also check the colour, structure and finish. The installer/owner has final inspection responsibility as to grade, manufacture and factory finish.

It is always easier to rectify faults when they are uncovered early. The installer/home owner should always inspect the product in good daylight during the installation. Always make sure that installation and inspection are carried out in good lighting conditions. Boards with obvious visual faults that are or should be picked up before installation must not be used. Any faulty products can be exchanged with your supplier or ourselves. Any claims for installed planks with obvious visual defects cannot be accepted. Always select boards from different bundles to ensure an even appearance.

Longitudinal Bowing

In the case of engineered flooring, it is possible for some boards to be bowed on the length. This is more prone in higher humidity environments. These boards can be installed without any problem as longitudinal bowing is self correcting. It is industry practice to use weights when glueing down direct to substrate until the glue adhesive has fully set.

STAGE 2. Installation - ENGINEERED FLOORING

METHODS OF INSTALLATION

1. Glue Down Installation
2. Installation over Under-floor Heating

Laying Direction

The laying direction normally depends on the main sources of light fall in the room e.g. French windows. The boards should run parallel with the entering light for best appearance. Ensure that the boards are always laid lengthways in narrow hallways. In the case of L, T or U shaped hallways they may require placing an expansion gap and changing the laying direction of the flooring.

1. GLUE DOWN INSTALLATION

Suitable subfloors for glue down installation include cement screeds, ceramic tile, flooring grade plywood or OSB Grade 3 (Kiln Dried approx. 12%). Construction Plywood is not a suitable subfloor due to its high moisture content. All cement screeds must be properly cured, clean, dry and free of contaminants such like sealers and old adhesive residue. All subfloors must be structurally flat within industry standards of 3mm variance across 2mt. All sub-surfaces must have a sound but still 'rough' or porous surface in order to ensure a good bond with the adhesive. Old adhesive residues should be removed. A slick or sealed surface should be pre-sanded.

Glue down installation requires that a quality low water solvent free based adhesive be used, using a trowel and spread rate as specified by the adhesive manufacturer. The recommended adhesive for most installations is Griptight 50 PRO PLUS Adhesive or equivalent. See adhesive manufacturer's installation instructions for specific rules and guidelines regarding installation procedures and acceptable subfloors. Any questions regarding the acceptability of a concrete slab or any other type of subfloor or subfloor coating for application of an adhesive, is the sole responsibility of the adhesive manufacturer and the flooring contractor. Remove wet adhesive immediately as it can be very difficult to remove once cured. The recommended trowel is a B11 - 5.5mm V Notch trowel to ensure maximum coverage and a good bond between the subfloor and wood flooring. Larger notch trowels will result in less m2 coverage per kg.

NOTE: DO NOT GLUE IN THE TONGUE AND GROOVE

Expansion: Always remember to leave an expansion gap of 10-15mm at walls, pillars, doorways or fixed objects etc and around the entire perimeter. For pipes: Drill a hole with a diameter about 10-15mm larger than that of the pipe. In the case of large areas of engineered flooring, it may be necessary to leave additional expansion through the floor as well as around the perimeter. It is the fitter's responsibility to calculate what additional expansion may be required.

Note: It is extremely important to blend planks from several cartons to ensure a good balance of colour and graining.

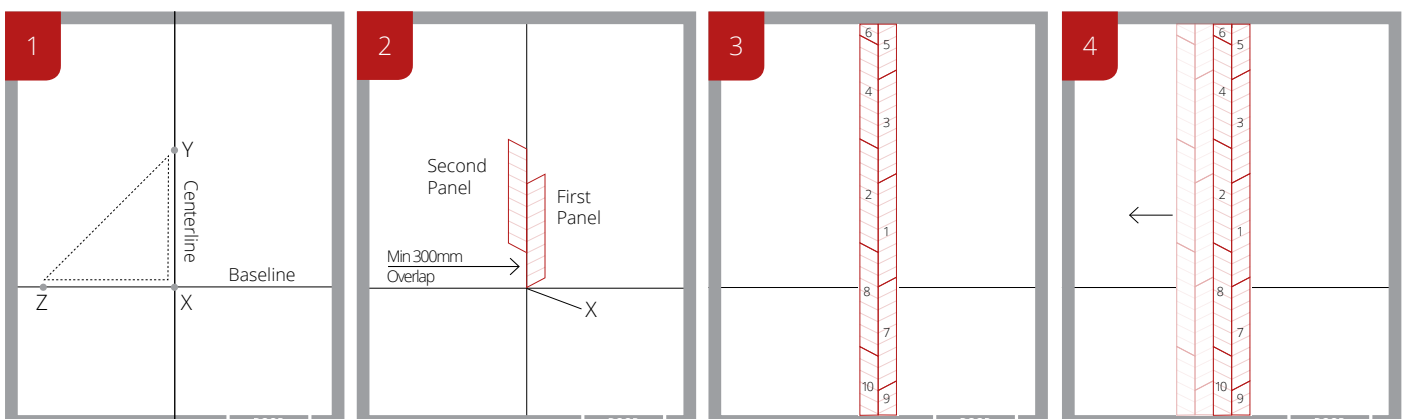
Note: It may be necessary to leave weights on flooring boards which are pushing up to ensure full contact with the subfloor while the glue cures. This is normal practice and these weights can be removed once the glue has fully set. Planks are supplied in equal amounts of "LEFTS" and "RIGHTS" to achieve the Chevron pattern – this is clearly marked on each carton.

BEGIN INSTALLATION

Installation of chevron panels should be undertaken by a competent fitter / tradesman. The most important aspect of fitting a chevron floor is to establish the correct angles from the outset. The precision of these angles and the installation of the first couple of rows are essential to achieving a nice installation.

1. Calculate the layout of the floor and the direction the pattern will run. Generally the pattern will follow the length of the room.
2. Start by establishing the centre point of the room and mark with a chalk line from the nearest wall as shown in diagram 1.
3. Establish a baseline by picking a start point "X" along the centre line 1000mm from wall at the start of the room and a second point "Y" 2000mm up from "X". Point "Z" to the left of "X" should be established while measuring the distance between X & Y. The distance between Y & Z should be exactly 2500mm. Snap a baseline between X & Z with a chalk line and extend it past X and Y on both sides to the outer walls of the room. The Baseline will be perpendicular to the centreline – see diagram 1.
4. Mark the starting point for your first board at the intersection of the baseline and the centreline and plan out the pattern to fit the room dimensions. Spread adhesive out to approx. the width of one plank either side of the centre chalk line using a trowel size according to the adhesive manufacturer's recommendations.
5. Install your first panel which should be a "RIGHT" plank at the intersection between centre and baseline at the point marked X on diagram 2. The tongue should be facing away from the wall positioned along the chalk line/straight edge.
6. Install the second panel which should be a "LEFT" plank with an overlap of minimum. 300mm along centre line as shown in diagram 2. NOTE: Care should be taken to ensure there are no gaps or openings between boards and that angle alignment is correct. Misaligned starter rows can cause side and end gaps.
7. Continue installation of the two starter rows in number sequence as shown in diagram 3. until you reach the far wall ensuring to leave your expansion space of 15mm from the wall. Complete the starter rows by installing the panels marked 7 & 8 in diagram 3 and working back towards the near wall. Please weights on these starter rows until the glue has set.
8. When you have the two starter rows completed, straight and the glue has set, you can start the next row. This should be started in the direction shown in diagram 4 one row at a time alternating between left and right panels and followed through until you meet the wall. Spread 500mm to 900mm of adhesive across the length of the room. Never spread more adhesive than can be covered in 30 to 45 minutes (This time may vary depending on quality of adhesive being used and temperature/humidity levels within the installation area). Check alignment squareness to ensure gaps do not open up between boards during installation. Continue to install planks and tap or pull them into place when necessary. Any badly bowed or twisted boards should be cut and used as a starter and end piece. Weights may be required to be placed on the floor in certain areas to ensure full contact until the adhesive is set.
NOTE: It may be necessary to use clamp straps for a period and pull the floor together if some minor gapping develops. Remember to leave an expansion gap of 15mm between the flooring and walls. As stated above additional expansion may be required through the floor for large areas of engineered flooring. This is to be determined by the installer
9. When you have completed installation to the wall on the left hand side of the room, install panels beginning with the starter row on the opposite side of the room. Panels should be fitted one row at a time alternating between left and right panels and followed through until you meet the wall as per point 8 above. It is vital that the first board in each row is perfectly aligned and that you continually check alignment as you install each row.
10. On both walls each side of the room you may be required to cut the final row along the length of the panel to fit against the wall. Do this by laying a plank in position and scribing a line on the plank (Don't forget to leave a gap of 15mm from the wall to allow for expansion and contraction). Cut planks for the last row and install. Spread adhesive on to exposed subfloor and position the final pieces into place. Remove all expansion spacers at wall and any temporary face nails before applying trim mouldings / skirtings.
11. Allow adhesive to cure for at least 24 hours before permitting foot traffic or moving furniture onto floor.

Note: It may be necessary to leave weights on flooring boards which are pushing up to ensure full contact with the subfloor while the glue cures. These weights can be removed once the glue has fully set.



2. UNDERFLOOR HEATING

Our chevron engineered floors are suitable for use over underfloor heating. Please follow below guidelines and information. It is very important that the moisture content of the subfloor which your floor will be laid onto is at the correct moisture level. To avoid cracks in new subfloors, you need a natural drying time of approx. one week per cm thickness of the screed. You can turn on the heat after the above has been achieved. Raise the temperature by 5 degrees per day till you reach maximum capacity and leave the heating on for 14 days. This is important as a relatively small moisture percentage can cause movement issues with your floor.

After these 14 days, switch the heating off for at least 1 week. If necessary, the floor can be levelled and primed at this stage. A floor should be levelled with a high quality latex levelling compound if outside tolerances of 3mm over 2 metres. A moisture check must also be done on the screed prior to any installation. The temperature below the floor must never exceed 26 degrees and the maximum difference of temperature per 24h is 5 degrees Celsius:

IMPORTANT: RETAIN SEVERAL LEFTOVER PLANKS FOR POSSIBLE FUTURE REPAIRS

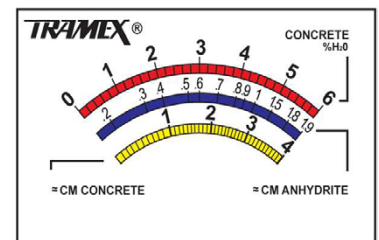
Glue Down Installation Recommendations

- Sealtight 100 PU Primer (If Cement Moisture is above 2.0% CM but less than 4.0% CM (< 6% on red scale below))
- Griptight 50 PRO PLUS Flexible Adhesive Glue

Note: For a glue-down installation, please turn heat off / to minimum 2 days before installation. You can turn on the heating system again two days after installation - again with maximum increments of 5°C per day. We recommend that a high quality flexible glue (suitable for U/F Heating) such as Griptight 50 PRO PLUS Adhesive is used for glue down installations.

GUIDELINES:

- Moisture must not be higher than 3.0% for cement screeds on the Red scale based on Tramex Concrete Encounter (or approx. 1.8% CM on yellow scale)
- For anhydrite or liquid/calcium screeds (pump screeds), the moisture level must be 0.3% CM or below based on Tramex Concrete Encounter Blue Scale)
- The floor needs to be level – (Max 3mm deviation over 2mt)
- Bring Flooring into house in normal living conditions i.e. Temp >18°, Humidity 40-60%
- Surface temperature of screed not to exceed 26° degrees celsius
- Use a quality flexible glue such as Griptight 50 PRO PLUS that is suitable for under-floor heating



STAGE 3: Care of your floor

Room Conditions

Timber likes pleasant room conditions similar to humans; a room temperature of 20°C and humidity of about 50%. A humidity controller may be required. All rooms, which have timber flooring, should ideally be maintained at the above.

Protecting your floor

To preserve quality and beauty of your floor we recommend you use protective pads and castor cups under chairs and furniture legs. If there is a door leading outside from the room where you have installed your hardwood flooring, use a doormat to catch the dirt and absorb the humidity. Never use a rubber mat, with Styrofoam or plastic backing. If you must move heavy pieces of furniture (e.g. refrigerator, piano etc.), never slide them directly over the flooring. Instead, place a piece of carpet face down between the legs and the flooring and pull on the carpet to move the furniture.

In the event of a proven manufacturing defect, the companies or sellers total liability shall under no circumstances exceed the value of the defective product. The company or seller shall not in any way be responsible for any additional consequential costs or losses.

If you are unclear regarding any of the above instructions, contact your local supplier.