PREPARATION

Ensure you have read the <u>terms & conditions</u> page before purchase & installation.

1. ORDER ADVICE

Order 5 - 10% more than is required for your space. 5% for an open plan design, 10% for multiple living area design (more corners).

This will ensure you have excess to allow for cutting wastage when installing.

When measuring your space prior to order, please ensure you measure for trim/transition requirements (T-Molding, Reducer, Quarter Round, Stair Nosing).

* If your room is over 10m (only along the width of the planks) ensure you use a T-Mold trim trim or other (cork / flexible filler / etc) to allow for expansion. Along the length of the timber we allow 20m without an expansion joint (there is minimal expansion along the timber length).

We recommend 'Bostik Ultraset' products. Bostik is a market leader in providing all in one adhesive solutions (ie. Adhesive + Moisture Barrier + Acoustic Membrane).

2. FLAT SUB-FLOOR

Ensure your cement / wood sub-floor is flat.

'Flat' means no more than 3mm variation in height (valleys/peaks) over a 3 metre span.

If it is not, you will need to grind away peaks and/or fill valleys with the appropriate leveling compound (ie. Bostik UL 100).

3. SUB-FLOOR MOISTURE

Moisture in the sub-floor must be tested prior to installation. Ensure test locations are near plumbing fixtures and exterior walls. Test moisture in 4 locations within a room.

Follow the advice below and photograph the result and keep on file for warranty purposes.

NOTE: Ensure your leveling compound is sufficiently dry before installation (at least 1 week).

PREPARATION (CONT.)

Cement Screeds:

Slabs should be below 4% moisture content by impedance meter or below 85% in-slab relative humidity prior to considering installation.

If above these reading, wait for it to dry OR apply Bostik Ultraseal prior to applying adhesive.

Anhydrite / Pump Screeds:

Moisture must not exceed 0.3% (on a 'Tramex Concrete Encounter' Meter).

Tiled Sub-Floor:

Step 1. Grind flat if large grout lines / heavy texture.

Step 2. Apply tile primer **Bostik PrimeGrip** (ensure this is applied before leveling to give leveling compound better grip).

Step 3. Apply leveler compound (if necessary to flatten sub-floor).

NOTE: If your tiles are flat, applying the Bostik PrimeGrip is essential to ensure the adhesive sticks well to the tiles. It is to be applied 24 hours before installing the floors (not sooner).

Wood Sub-Floor:

Ensure structurally sound, flat and sub-floor nails at or below the surface.

The timber sub-floor moisture must not exceed 12% prior to installation.

4. CLEAN UP

Ensure the sub-floor surface is dry, clean & free of any loose material (vacuum well).

5. ACCLIMATISATION

Ensure flooring is the last item to go into your home after a new build / renovation. This is to both protect the flooring and ensure you can achieve the below environmental conditions for acclimatisation...

Ensure the environment is constant, at least 18°C, between 35 - 65% relative humidity for at least 3 days before installation, as well as 3 days after installation. This is to ensure your flooring does not expand or contract too much affecting the adhesive **or** causing too much expansion/contraction into your expansion joints **or** making your expansion joints too large if the floor contracts too much from being installed into a high humidity environment.

A low-cost relative humidity/temp gauge can be purchased from us if needed.

PREPARATION (CONT.)

5. ACCLIMATISATION (cont.)

Place the appropriate number of boxes in each room (i.e. 20sqm room = 20sqm of flooring).

Lay boxes horizontally (flat surface) and do not open the boxes.

Do not stack more than 2 boxes high.

If the timber moisture is drier than the environment, it will slowly absorb moisture from the air (expand) and equalise to the inside environment.

Conversely, flooring will shrink when at a higher moisture level to the relatively drier environment.

The ideal time will vary, however allow at least 3 days to acclimatise.

To measure the moisture of the boards. Purchase a...

'AccuMASTER XT Moisture Meter' (~\$60)

OR

'Crommelin' brand, (~\$50 Online or local warehouse)

When there are large differences in timber moisture vs environmental humidity. Be guided by below...

If moisture is on the low end at 6% and you are in a high humidity environment (65%+), allow 7 days acclimatisation.

If moisture in the timber is at the high end 10% in low humidity (<40%), again, allow 7 days.

If you are at 7.5% and your humidity is stable at 50%, 3 days will be enough to acclimatise.

Do not install if you have weather events around the time of installation where there are spikes in environmental moisture (ie. heavy rain/high RH).

You need a consistent environment 7 days prior to installation.

PREPARATION (CONT.)

6. UNDERCUT DOOR JAMBS

Your flooring will be placed under door jambs (with 10mm expansion space).

Using an electric multi-tool or undercut hand saw (sold in our online store), hold a small section of timber plank + underlay next to the door jamb and proceed to cut to this height.

7. REMOVE SKIRTING (optional)

Ideally, you should overlay skirting over the expansion space. This will give the best visual results.

If you plan to keep skirting in place to save time, you will need to use a 'Quarter Round' or alternative like 'Aluminium/Brass Angle' to cover this expansion space.

Ensure skirting is at least a 14mm thick to allow for the 10mm minimum expansion gap under it.

If your skirting is less than 14mm thick, you will need to use a Quarter Round trim.

Note: Using less that a 14mm thick skirting with a 10mm expansion space may result in a temporarily exposed gap if your flooring contracts in drier weather.

PREPARATION DONE

INSTALLATION

IMPORTANT ADVICE / TIPS

Open and work with 3 packs of flooring at a time to enable grading/colour blending of the natural timber variations (knots/grain/colour).

Do not open packs of flooring until the day you install. You can open to inspect, then tape the box again for acclimatisation.

Allow a 10mm minimum expansion gap to any fixed items (walls, pillars, pipes, island bench, etc).

Glue down installation required if you wish to place heavy items on top of the floor (kitchen units, island benches).

You should consider a 15mm expansion gap if you are in tropical climates of high humidity, with large seasonal variances (i.e. North QLD, North WA, NT).

As a general rule, 1mm of expansion is required for every 1 metre of flooring (ie. 10m = 10mm expansion space).

Our timber up to joinery cupboards are permitted to have a 5mm expansion gap (only with glue down method).

Note: A larger expansion gap will require skirting boards thick enough to cover this gap.

Remember, expansion space is required around all fixed objects (pipes, door stops, pillars, stairs, etc).

Although rare, if you find a bowed/twisted board, these can be cut and used as end/starter pieces.

Ensure when tapping in boards, they are flush. If you do not take care, having just 1 board out of alignment will translate to all boards 'down-wind' of that board.

Use blue painters tape to keep freshly laid boards in place. After 2 hours, remove this tape. DO NOT use stronger tape than this or it may set and damage the timber (ie. duct tape).

Work in rows of 2 or 3 (depending on the width of the room) to ensure you can complete the rows before the adhesive 'skins' (around 30-120 minutes depending on the temp/humidity).

Refer to the adhesive manufacturers guidelines on the correct use of the adhesive.

Remove any misplaced adhesive immediately as it is difficult to remove once cured.

NOTE: <u>Avoid</u> working on top of the flooring when using the glue down method, this can result in an uneven surface an potential for hollows of adhesive under the timber (ensure however you still set the timber into the adhesive using your hands and body weight).

WHAT YOU NEED...

•	Items with a * are sold by MiltonLane at engineeredflooring.com.au
•	Other items are common to hardware stores.
	Tape Measure
	Painters Tape (Blue)
	Chalk Line
	Rubber Mallet (White Non-Marking) *
	Moisture Meter (Timber & Concrete)
	Electric Multi-tool OR Undercut Hand Saw *
	Jigsaw (for profiling boards at door frames)
	Sliding Mitre Saw (for cross cuts)
	Table Saw (for length-wise cuts not essential, but quicker & more accurate than Jigsaw/Circular Saw)
	Pull Bar *
	Tapping Block *
	Spacers (10mm) *
	Safety Glasses & Dust Mask
	Cloth Towels
	Trims / Transitions (T-Mold/Reducer/Quarter Round/Stair Nosing) *
	Relative Humidity & Temp Sensor *
	Adhesive * (Bostik Ultraset Range)
	Stanley Knife + Pry Bar + Wide Chisel (if removing skirting boards)

Step 1 - Measure

Find an external wall that is an important focal point of the room/area.

A long wall is usually a good choice.

Internal walls are rarely square, hence use an outside wall.

If installing boards parallel to this wall, measure from this wall to the opposing wall.

If installing boards perpendicular to this wall, measure the distance between the adjoining walls.

With this measurement, you need to divide this number by the width of the board you are laying.

Example: 6350mm (room width) / 220mm (board width) = 28.86 planks

Therefore, you have 28 (and a bit) boards to install across this space.

The 0.86 you then multiply by the plank width 0.86 x 220mm = 189mm

You should be installing so that you do not have a very thin board at either end of your installation.

Hence, halve 189mm and you have roughly 95mm planks at the start and end of your installation in that room.

Step 2 - Starting Point

Once you have this measurement above, you will then know where to start laying.

Snap a chalk line, 1 board width + the part board, away from the starting wall (ie. 220mm + 95mm).

Starting in the corner, dry fit the first 2 rows and work left to right (remember expansion spacers).

Step 3 - Apply Adhesive

Move dry fitted planks to the side and stack in order your will lay (first plank on top). Be careful when stacking planks to maintain a clean surface on the timber as any grit on the timber can cause scratches.

Pour an appropriate amount of adhesive from the pale onto the sub-floor, trowel the adhesive accurately to a distance of 2 board widths from the chalk line.

Apply only enough adhesive that you can lay in 20 minutes (to prevent 'skinning' of the adhesive).

Ensure Trowel is at a 45° angle when applying adhesive. Improper technique can result in hollow spots and poor adhesion.

Change your trowel every 100sqm OR when the trowel teeth are wearing down.

Step 4 - Lay Planks

Place your spacer at the starting point to allow for the 10mm expansion space (ensure spacer is free of adhesive to prevent difficulty removing later).

If you need the larger expansion space of 15mm due to large temp/humidity variations between summer/winter in your region, you can cut your flooring into small pieces to use as spacers (if you have 15mm flooring).

Plan your lay to ensure you do not end up with a board smaller than 300mm at the end of each row.

Ensure to stagger joins at least 400mm apart between rows for maximum floor strength and for visual appeal.

Lay out and cut 2 rows at a time. This will be more efficient than row by row.

Place your planks carefully on the adhesive, ensuring you are accurate with their position to reduce the need for re-positioning/sliding through the adhesive.

If you make a mistake, just re-trowel that sub-floor region, scrap excess off the back of the plank and re-apply the board in it's correct position.

Press the boards in position firmly to set into the adhesive and 'collapse' the troweled ridges of adhesive and therefore apply minimum 95% coverage to the plank.

Periodically check the adhesive coverage is sufficient on the back of the planks.

Be careful to not apply too much force with the white rubber mallet when tapping to prevent joint and/or surface damage.

Ensure to immediately remove wayward adhesive off any visual surfaces with a damp cloth. Bostik products will come off once dry but best to work cleanly to reduce work later on.

Apply blue painters tape tightly across rows to prevent the planks 'creeping' while the adhesive dries.

Once these rows are in place, use off-cuts of flooring as your anchor points for these first 2 rows.

These anchors are to keep the flooring in place while tapping boards together. They can be secured with screws if on timber subfloor or a hot glue gun (or similar) if on a hard subfloor.

Step 4 - Lay Planks (cont.)

When you reach door jambs, you will need to mark on the board with pencil where to cut using a jigsaw. This piece will slide under the door jamb.

Ensure you know how much expansion space is under the door jamb before cutting to account for this. You may need to chip away plasterboard under the trimmed door jamb if there is material encroaching on the required expansion space.

Repeat this process until you reach the last row.

For the final row, rip cut the plank to fit, again allowing for expansion (using a table saw OR circular saw).

Once in place, use your 'Pull Bar' and mallet to pull this row in tight. Apply painters tape to hold in place (remember your expansion space requirements).

Move back to the starting point and remove the anchor board.

Complete these final rows.

Your installation is now complete.

Wait the time specified by the adhesive manufacturer before walking on the floors.

Bostik Products = 12 hours for light traffic, 24 hours for normal foot traffic.

After this time you are ready to install skirting / quarter round / trims.

Step 5 - Floor Care

Understand what products you can and can not use on your flooring.

Timber Care & Maintenance

