

Exotic
Hardwood
Flooring

Indusfloor

**Installation Instructions
Engineered Collection - Nobile 14**

Prefinished Engineered Flooring Nobile 14 (Lamela 4mm)

Thank you for purchasing your exotic hardwood flooring from IndusFloor; we wish you many years of true enjoyment !!

IndusFloor prefinished flooring has been designed and manufactured from natural timber and is coated to enable installation without the need for sanding and polishing.

Installer/Owner Responsibility

Indusfloor's range of flooring are natural hardwood products; therefore defects in the flooring can occur in the manufacturing process or naturally as a characteristic of the wood. Indusfloor's exotic range of flooring is manufactured within accepted industry standards, allowing for up to 5% defective product based on the original hardwood flooring purchase order. It is necessary to purchase at minimum an additional 5% of flooring product above the actual square metre requirements to allow for off cuts and wastage.

Prior to installation, the owner/installer assumes all responsibility to install the flooring at the final stage of the project so as to minimise any damage, for final inspection and quality of the product.

Flooring should be carefully examined for finish, and quality. The owner/installer must exercise good judgment and common sense before and during installation. Flooring with obvious defects or imperfections should be trimmed and used in hidden places or discarded. Do not install hardwood flooring that is unacceptable; contact seller immediately. Final grade, manufacturing, finish quality checks and final approval of the product is the sole responsibility of the owner and installer. Once installed, the floor is considered as having been accepted by the owner and installer. If any floor is installed with obvious defects or imperfections at time of installation, Indusfloor will NOT in any case be liable for the installer/owners lack of judgment, quality of labour, installation and any associated costs.

The installer must determine that the job site environment and sub- floor surfaces meet applicable construction and material industry standards. Indusfloor declines any responsibility for job failure resulting from deficiencies associated with sub-floor or job-site environment. The use of filler or putty may be used to correct minor flooring defects during installation and is considered a normal procedure.

If the installer is commissioned and contracted by the owner, owners should choose their installers carefully and ensure they have ample experience in the industry and knowledge of installation of hardwood floors. Installing hardwood flooring is a highly skilled operation. Indusfloor in no way responsible for the owner's choice of installer or any failure by the installer to satisfy the owner.

Basic Tools and Accessories

- Rubber mallet
- 3-M Blue Tape
- Broom
- Chalk line
- Pencil
- Tape measure
- Table saw or band saw
- Jamb saw or hand saw
- Hammer
- Leading brand of hardwood flooring cleaner
- Quality moisture meter with manufacturer's relevant exotic species calibration figures

Additional Tools for Glue-Down Installation

- **Appropriate Moisture Sealer** (if required)
Eg: SIKA - <http://aus.sika.com/>
- **Trowel**
Correct trowel as requested by glue manufacturer for engineered flooring product. Always confirm with adhesive manufacturers recommendations.
- **Urethane Adhesive Cleaner**
Many of the leading glue manufacturers offer their own adhesive cleaner. Please use them. If none is available, a light application of mineral spirits to a terry cloth will help.
- **Direct stick acoustic underlay** (if required)

Additional Tools for Floating Installation

- Pull Tool or Crowbar
- Sound and Moisture Control Underlayment
- Tapping Block (used with care)
- 3-M Blue Tape
- Glue – For floating floor

Step 1: Pre-Installation

1.1 - Site Inspection

Many of the problems encountered with timber flooring can be related back to the critical area of site assessment.

Before installing a timber floor, the site conditions must be suitable and the building must be structurally complete and enclosed, including installation of exterior doors and windows. Concrete, masonry, drywall, and paint must also be complete, allowing adequate drying time as to not raise moisture content within the building.

During the final pre-installation inspection, sub floors must be checked for moisture content using the appropriate metering device for wood and/or concrete.

Note: Installation of the timber flooring should be completed at the final stage of the project so as to minimise any damage.

Step 2: Properties of Hardwood Flooring

As timber is a natural product it is easily capable of expanding and contracting, depending on the amount of relative humidity present in the surrounding atmosphere. As such, factors such as relative humidity (atmospheric moisture), moisture ingress (subfloor or other), direct sunlight, air conditioning and lack of adequate ventilation can cause timber to expand or contract.

Care must be taken to correctly assess the suitability of the site prior to the installation of timber flooring, as well as maintain a suitable environment where the timber floor has been installed.

Being a natural product, timber can change colour with exposure to sunlight and as it ages. Natural timbers are not uniform in colour and texture and variations in timber species and the presence of natural features such as grain and streaks, are considered a normal and natural part of this product.

Step 3: Recommended Sub-Flooring Installations

GLUE DOWN OR FLOATING

Concrete Slabs: Glue-down or float
Acoustic Concrete: Glue-down or float

Plywood: Glue-down or float (do not staple over particle board or similar product)

Cork: Glue-down or float

Ceramic, Terrazzo, Slate Or Marble: Glue-down or float

Note: See Step 4 & 7 for detailed sub-floor preparation.

Step 4: Sub-Floor Preparation

All Sub-floors Must Be:

- Ensure that the subfloor is dry and free of wax, paint, oil and debris. Replace any water damaged or delaminated sub-flooring or underlayments. Remove dust and sweep area prior to installation
- Ensure subfloor is Level/Flat. If sub-floor is concrete and a leveling compound is needed, refer to the manufacturer's recommendation for applying the leveling compound. Any area containing the leveling compound must be completely dry, before proceeding with the installation of the wood floor. If sub-floor is plywood or equivalent, high areas or joints can be sanded flat.
- If plywood or equivalent, sub-floor must be structurally sound prior to installation. Sub-floor must be properly secured with nails or screws every 6 inches (approx 15cms) along joists to reduce the possibility of squeaking after final installation.

Note: Appropriate moisture tests are necessary and must be performed as outlined below. Refer to Step 5.

Step 5: Testing For Moisture Content

For Wood and Other Sub-Floors Types:

Using a quality pin moisture meter, measure the moisture content of both the sub-floor and the hardwood flooring. Sub-floors must not exceed 12% moisture content and the difference between sub-floor and hardwood flooring cannot exceed 4%. If sub-floors exceed this amount, an effort should be made to locate and eliminate the source of moisture before

Step 6: Preparation For Specific Sub-Floor Types

6.1 – Installation over Concrete Slabs

Indusfloor's range of engineered be glued directly to high compression strength concrete slabs or floated using the appropriate adhesive. All concrete sub-floors must be tested for moisture content, especially adjacent to exterior walls and plumbing fixtures. Visual checks are not acceptable.

GLUE-DOWN Application:

In glue-down applications, a moisture barrier is not essential unless moisture readings from the sub-floor are at unacceptable levels.

Minimum thickness sub-floor material recommendations are satisfactory for 16 inches (approx 40 cms) on center joist spacing. Thicker sub-floor recommendations will allow up to 19.2" (approx 49cms) joist spacing. When joist spacing is greater than 49cms on center, flooring will exhibit minimum performance. Minimum performance may result in movement, gaps, and/or noises. A second layer of sub-flooring material will provide optimum results. Hardwood flooring should, whenever possible, be installed perpendicular to flooring joists.

FLOATING Application:

In floating applications, a moisture barrier is essential and the sub-floor must be level.

6.2 – Installation over Resilient Tiles or Sheeting (Vinyl)

GLUE-DOWN Application:

To use the glue down method, vinyl or tiles must be in fair condition, level and permanently bonded to the sub-floor with Do not glue-down hardwood floors on resilient floors that exceed two layers. Clean surface thoroughly with a good adhesive bond using an abrasive pad. If necessary, remove wax coating when present on vinyl, using an appropriate stripper. Perform appropriate moisture tests.

FLOATING Application:

Vinyl or tile must be in fair to good condition, level, and permanently bonded to the sub-floor with full spread adhesive. If floating application, a moisture barrier is required along with

the Floating Application.

6.3 – Installation over Cork (Acoustic)

GLUE-DOWN & FLOATING Applications:

For both installation methods, Make sure cork is level and permanently bonded to the sub-floor. If floating application, a moisture barrier is required along with the Floating Application (but not necessary in a glue down)

Note : cork is not a moisture barrier.

6.4 – Installation over Ceramic, Terrazzo, Slate, or Marble

GLUE-DOWN Application:

The above mentioned tile products should be level and permanently bonded to the sub-floor. Clean and abrade surfaces to remove any sealers or surface treatments to ensure a good adhesive bond. Tiles that are loose must be re-adhered to the sub-floor. Appropriate moisture tests should be carried out to determine if a moisture barrier is required.

FLOATING Application:

The above tile products should be level and permanently bonded to the sub-floor by the appropriate methods. A moisture barrier is required along with the appropriate foam padding. Moisture tests to be performed

Step 7: Installing The Floor

Important Information & Helpful Hints

- Remove flooring from several different cartons to maximise colour and shade mixture.
- Stagger the ends of boards at least 6" in adjacent rows.
- For floating application, stagger seams 12 to 15 inches. No two end joints should be within three rows of each other.
- Installation parallel to the longest wall provides the best visual effect.

GLUE-DOWN Application:

An exterior wall is usually the straightest and best reference line to start the installation. Direction of finished flooring should be at right angles to the floor joists whenever possible. Establish a starting point by leaving a minimum of 1.5cm expansion gap around all vertical obstructions. Measure this distance from the starting wall (in at least two places) close to the starting wall's opposite corners. Mark these points and snap a working chalk line parallel to the starting wall allowing the required expansion space between the starting wall and the edge of the first row of flooring. To maintain the expansion gap throughout the installation, use spacers between floor board and wall.

Boards should be installed left to right with the edge of the groove lined up against the chalk line, side-tongue facing out to the right. Whenever possible, the tongue along with width and length of the board should be facing out so that the tapping block or pull tool always uses the tongue of the flooring. If the groove is facing out and a tapping block or pull tool is used, the edge of the board may be damaged.

Firmly seat the first row in the adhesive, as additional rows will be pushed back to this original row. When installing boards, avoid sliding materials through adhesive when placing them in position. Engage the end joint first, as close as possible to side tongue-and-groove, and fit boards together. Check for a tight fit between all edges and ends of each board. Occasionally lift a board to check for adequate adhesive transfer. Stagger the ends of boards at least 6" in adjacent rows creating a stair-step pattern (see figure 1).

3-M Blue Tape should be used to hold planks tightly together and reduce minor shifting of floors during installation. Remove all adhesive from the surface of the flooring with urethane adhesive remover or mineral spirits as you go. Adhesive is very difficult to remove from prefinished hardwood floors if allowed to dry and may damage finish on flooring. All adhesive must be removed from flooring surfaces prior to applying 3-M Blue Tape. Remove tape within 24 hours.

Allow expansion gaps around all vertical obstructions. Wood expands and contracts with changes in humidity. Wood will buckle and/or cup if an adequate expansion space is not provided. Always allow for expansion when making end or side cuts around vertical objects.

Continue across the room until finished; remember to provide adequate spacing for expansion gap. Once completed install molding and trim. Thoroughly clean, sweep, and vacuum installed floor before further use. If floor is to be covered, use a breathable material such as cardboard or rosin paper. **Do not cover with plastic.**

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For the best performance of your floating floor, use a stair-step pattern installation (see figure 1), staggering seams 12" to 15". No two end joints should be within three rows of each other.

Install first two rows by applying a thin bead of glue in the groove on the side and end of each board (see figure 2). Press each board firmly together and lightly use a tapping block if necessary. Clean excess glue from between boards with a damp cloth or mineral spirits. Tape each board together at side and end seams using 3-M Blue Tape. Allow glue to set before continuing installation of subsequent rows.

Always remember to allow for the expansion gap and clean excess glue from between boards. Often the last row will not end with a full plank. When this happens, place a full row of planks on top of the last row installed. Insert a spacer against wall, and using a full width plank, trace distance from wall to final row (see figure 3). Cut planks for final row to designated width. Apply glue and fit into place. Trim excess polyethylene film and/or padding so it will not be visible once moldings are installed. Tape may be removed within one hour. Allow 12 hours before placing furniture on floors and 24 hours before introducing heavy objects or full traffic.

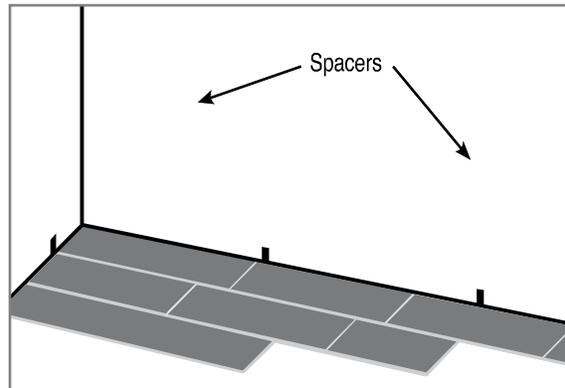


Figure 1

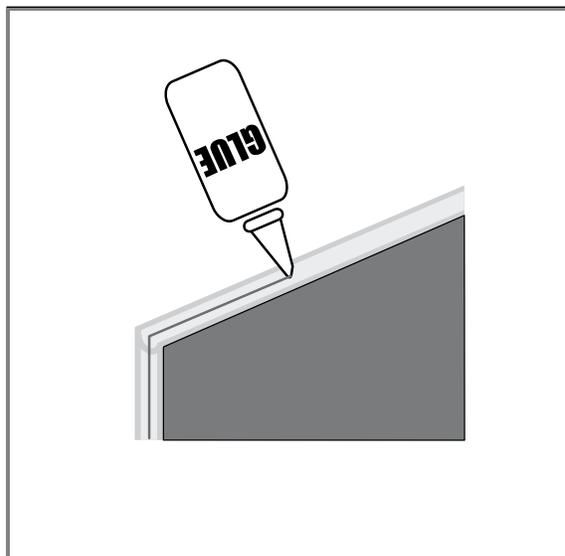


Figure 2

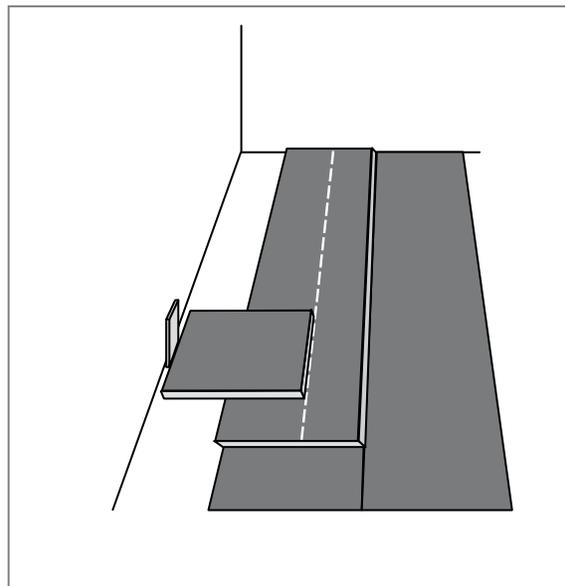


Figure 3

The Finishing Touches

- The expansion gap left between the wall and the Indusfloor engineered floorboards will need to be covered. This can be covered with an appropriate skirting which should be nailed to the wall and not fixed to the floor. If the flooring is installed with existing skirting's in place, use a fillet mould or scotia to cover the gap using the same method.
- Upon successful completion, precautions should be taken to protect the timber flooring from damage during the final stages of construction. The use of protective sheeting such as MDF (medium density fibreboard) to cover high traffic areas is appropriate where required. Care should be taken when installing the protective sheeting that no loose grit or obstructions get trapped underneath, as these will damage the coating when stepped upon.
- **DO NOT** cover the flooring with plastic sheeting of any kind, as this can cause the floor to sweat, leading to expansion of the flooring and possible damage to the coating.

Care & Maintenance

- Sweep, vacuum, dust & mop regularly to prevent sand or abrasive dust build up, which can scratch the floor's finish.
- Floors should be mopped with a damp / well wrung mop to remove dust. It is important that floors are not mopped with excessive water. The use of a pH neutral floor cleaner can help remove stubborn dirt.
- Blot up spills immediately with a damp mop.
- **DO NOT** use ammonia or oil-based wax, polish, abrasive cleaners, or furniture cleaners. Use of these products will void the warranty.
- Monitor the climatic conditions. In cases of extreme climatic conditions it may become necessary to increase humidity using a humidifier, or decrease humidity using an air conditioner. This is especially relevant during periods of where the residence is expected to be uninhabited for extended periods; precautions should be taken to control the climate with the use of air conditioning and/or humidity controls.
- Timber floors must be protected from direct sunlight with appropriate window treatments. Failure to do so may result in localised cupping and changes to the timber.

Protecting your Investment

- Place high-quality floor mats and area rugs near outside entrances to prevent dirt, sand and other unwanted substances from being tracked directly onto flooring, this can significantly reduce the amount of stones, grit and sand entering the area.
- It is recommended that felt protectors be fixed on movable furniture, including table, chairs and sofas, which sit directly on the hardwood flooring to prevent scratching. Support heavy furniture and appliances with wide-bearing glides or casters.
- Although Indusfloor's range of flooring is exceptional in hardness compared to other species, it's important to avoid the use of stiletto high heel shoes or shoes with soles in need of repair.

Warranty

Please visit our website and familiarise yourself with our warranty guidelines. If after reading our warranty document, you have further queries, please direct your concerns to the Indusfloor distributor where the original purchase was made. If the distributor is unable to satisfy your request, written correspondence should be directed to the Client Relations Department at IndusFloor.



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