

Installation Guidance Note: Enduro Click

General advice

The appearance, performance and durability of the installed floorcovering will be determined to a large extent by the quality of the prepared subfloor and the conditions in which they are laid. As with any resilient floor covering irregularities in the subfloor will be apparent in the finished flooring.

The installation of Enduro Click should be carried out in accordance National Code of practice for the installation of resilient floor coverings. Areas to receive flooring should be clean, free from other trades, fully enclosed and weather tight. Subfloors should be clean and free of contaminants, smooth, sound, even and permanently dry.

Always conduct moisture tests on all substrates. All ground-based level floors should have an effective moisture barrier.

Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and for final inspection.

The maximum tolerance in terms of flatness and evenness of the substrate is an 5mm deviation under a 2m straight edge (measured by moving the straight edge in all directions across the substrate) and 1mm under a 20cm straight edge.

It is essential that the laying area is at a steady temperature of minimum 18°C for 48 hours prior to, during, and for 24 hours after installation. The material should be conditioned in the same environment for at least 24 hours prior to the installation. Where the floorcoverings have been stored or transported immediately prior to delivery in temperatures below 10°C the acclimatisation period should be extended to 48 hours. Enduro Click should be removed from their pallets and acclimatized in the laying are stacked no more than 20 tiles high.

Prior to installation panels should be checked to ensure that the correct colour, batch number and quantity have been received and that the material is in good condition. No claim will be accepted for incorrect colour, pattern or obvious damage if the material has been fitted.

Use material from the same batch/dye lot. The use of different production batches will always result in visible shade differences. The batch number is clearly marked on the material packaging and must be checked before commencement of installation.

Enduro Click is occupier ready on completion of the installation. However, if the newly installed floor is going to be subjected to heavy site traffic, particularly high point load wheeled traffic, prior to occupation the floor should be protected during this phase (see "on completion" at the end of this guide).

Acceptable substrates

Enduro Click may be installed on the following substrates (subject to the conditions in this guide):

- New or existing concrete, cement screed or terrazzo substrate
- New or existing wood panel or particle board substrates
- Existing ceramics tiles
- Old in-situ floor finishes (resin) at least 2 mm thick
- Old floor paint
- Old compact resilient floor coverings (semi-flexible tiles, vinyl asbestos tiles, sheet vinyl flooring and linoleum).
- Existing wood block floors

For any subfloor not listed above or if any doubt exists, contact Forbo flooring technical services.



Concrete slabs, cementitious screeds or terrazzo floors: New and existing ground floor slabs must be cast on a damp-proof membrane in accordance with the National Code of practice for the installation of resilient floor coverings. If an effective damp proof membrane is not present or any doubt exists, a surface damp proof membrane should be applied.

Enduro Click can be laid on substrates with cracks less than 3 mm wide on unheated subfloors, provided that there is no difference in level. For cracks that do not meet these criteria contact Forbo flooring for further guidance.

Where required, smoothing and levelling compounds rated for heavy traffic areas should be applied to screeds and slabs. Smoothing compounds are not required for clean, sound and smooth concrete surfaces, provided that they satisfy flatness tolerances stated above.

If a smoothing compound is not being applied to the surface of the slab/screed a suitable primer should be applied to keep the subfloor dust free.

Wood panel substrates (tongue-and-groove boards) - plywood or particle board floors should be prepared in accordance with the National Code of practice for the installation of resilient floor coverings. Differences in height between boards greater than 1mm should be sanded flush.

Old ceramics tiles: laid on a sound concrete or cement screed substrate, soundly adhered to the bedding screed (sealed ceramics tiles) or substrate (adhesive-bonded ceramics tiles) require no further treatment where the tiles are level and the grout joint width is less than 5 mm and no more than 2 mm deep. Small localised differences in level between tiles may be repaired/levelled with a suitable smoothing / levelling compound.

Where the above requirements are not met, a general heavy duty self-smoothing/levelling compound suitable for the room's intended purpose should be applied across the entire surface area.

Existing resin floor finish: the old finish must be sound and fully bonded and at least 2 mm thick. If flatness, cleanliness and bond requirements are not satisfied, the old floor finish must be removed, and the subfloor prepared in accordance with the national code of practice.

Floor paint: existing paint finishes should be clean and sound. Sanding is not necessary if the paint is sound.

Old flexible floor coverings: semi-flexible tiles, vinyl asbestos tiles, sheet vinyl flooring, acoustic flooring and linoleum should:

- a. Be sound and bonded tightly to the sub floor.
- b. Have loose or broken areas removed and replaced with sound material or levelled with a good quality smoothing compound.
- c. Are level within the requirements stipulated
- d. Be abraded to remove old wax, seals and dirt (where adhesive systems such as tapes are to be applied) and then thoroughly cleaned.

If any doubt exists, or where full adhesion is required, existing floor coverings should be removed.

Note: Enduro Click can only be laid on a substrate that has previously received only a single layer of resilient floor covering. The performance rating of the old floor covering must satisfy the new rating required, particularly if the room is to be used for a different purpose.

Existing wood block floor: Enduro Click may be installed on existing wood block floors except for wood blocks laid at ground floor level. Blocks should be securely bonded to the base, smooth, even and free of any oil or wax based finishes. If necessary, the blocks should be sanded to remove any contaminants and/or unevenness between the blocks. If any doubt exists, contact Forbo Flooring Technical Services for advice.

Textile floor finishes: textile floor finishes must be removed, and the subfloor prepared in accordance with national codes of practice where applicable.

Underfloor heating

Forbo flooring products may be installed over underfloor heated floors providing the maximum surface temperature of the substrate does not exceed 27°C under any condition of use.



It is imperative that the underfloor heating systems have been previously commissioned and found to be functioning correctly prior to the floor finish being installed. Ensure that the underfloor heating system is switched off 48 hours prior to the floor covering installation commencing and remains off for at least 48 hours after the installation is complete.

During the period of decommissioning of the underfloor heating system, an alternative heating source should be provided, if required, to ensure that the area of installation is kept at a constant temperature of 18°C – 27°C.

The temperature of the substrate must not exceed 18°C during the installation of the flooring material.

If necessary, an alternate heating source should be used to maintain the room temperature at a minimum of 18°C prior to, during, and for 72 hours after installation.

The temperature of the underfloor heating system can be increased 72 hours following the installation. When raising the floor temperature, do so gradually so the substrate and flooring material can adapt to the temperature change together.

Adhesive recommendations and application

Enduro Click is installed without the use of a tackifier or any type of adhesive.

Installation

Forbo click underlay is recommended on all subfloors.

Forbo click underlay offers the following benefits:

- Bridging uneven spaces in the subsurface, e.g. When installing on ceramic tiles, wooden floors etc.
- Reduction of walking and impact sound levels
- Increased ease of walking and laying comfort

Note: failure to use a suitable underlay or the use of alternative underlays that have not been tested or approved by other manufacturers, can lead to warranty and guarantee claims being excluded in the event of damage.

The underlay is loose laid in the same direction as the panels. The protective film should be peeled back before the installation of the panels. This should be done gradually during the installation staying slightly ahead of the panel installation.

General

Enduro Click may be laid in individual areas up to 150 sqm without the need for movement joints.

When laying in extremely long, narrow rooms, movement profiles should be used at 25m intervals.

Rooms / areas which are separated by rising structural components, for example, pillars, separating walls, doorways, should be separated by expansion joints of at least 5 mm at the same level as the structural components.

When installing skirting boards or temporary and/or edging profiles, never fix the borders or profiles to the floor covering.

A continuous gap of 5 mm must be maintained at the perimeter and around all fixed objects in the room.

Note: Enduro Click should not be fixed as any part of the building work. The floor covering must not be fixed to the subfloor, to furniture or any other fixed built in components.

Finishing at doorways: at doorways or open walkways between large adjacent spaces the flooring should be finished at the door/space threshold with a suitable proprietary edging profile.

Note: Forbo Flooring recommends to fully adhere Enduro Click in areas liable to be subjected to abnormal temperature variation in use, for example, retail premises with glazed window fronts, open spaces in offices with large glazed areas, conservatories etc.



FLOORING SYSTEMS

Laying and cutting panels

Enduro Click can be cut with normal installation tools such as utility knives. Warming the product will make cutting easier, when cutting and fitting around shapes and pillars, for example, but in good site conditions the product can be successfully cut by scoring several times from the top surface of the tile or plank with a utility Knife and a straight blade. After scoring with a knife, bend the tile back along the cut line and complete the cut through the remaining thickness from the back of the tile.

In large areas cutting of perimeter tiles with a power cutting tools is also suitable.

Installation direction - always work from left to right in the installation area with the tongue sides of the panel point to the wall.

Install the panels with the face side towards the room's main light source. The optimum inherent stability of the installed floor will be achieved by installing the panels lengthways in long, narrow rooms.

Ensure a continuous expansion gap at least 5 mm wide is maintained at the room perimeter and to all fixed objects in the room, e.g. Pipe passageways, door frames etc. Tip: use leftover pieces of the floor covering as spacers.

In principle, this expansion joint must not be covered with silicone, electric cables or similar material.

The use of silicone sealant is allowed in the following circumstances:

- Perimeter joints in small rooms where wet spillages may be expected such as washrooms or kitchens up to 10sm, can be filled with silicone in order to prevent water penetrating through the expansion joints under the laid surface.
- For all larger areas, we recommend preparing the joint areas with sealing tape first and subsequently filling them with silicone mass and/or using a skirting board with a sealed lip.
- Door frames: with door frames that cannot be shortened, we recommend 3 mm expansion joints which can be filled with silicone using an infill strip. If door frames need to be shortened, please also ensure an expansion joint of 5 mm to the wall.

Install the first panel with the tongue side pointing to the wall and attach all other panels to the first panel.



Make sure that the face side tongue and groove connections fit exactly on top of one another. Lock them by slightly tapping them with a dead blow hammer.



Continue to lay the remaining tiles in the first row. The length of the last panel should be at least 30cm. The offcut from the last panel in this row should also be at least 30cm to be used as the first panel of the next row. Set this panel into the groove of the first panel of the first row at an angle of approximately 30° and lower it with slight pressure against the previous row.



Take the next panel and insert it, also at an angle of 30°, longitudinally into the panel of the first row that is already lying flat on the floor. Guide the panel as close as possible to the head side of the previously laid panel and lock the face joints with a white rubber hammer as described above.

Continue in this manner to install all the remaining rows. Ensure the face side (short) joints are staggered between the adjacent rows by at least 30 cm in order to achieve an optimal installation.

In order to install the last row, the distance between the wall and the previously laid row is measured and the panel is cut to this size (remember to allow for the 5 mm wide expansion perimeter gap).

Note: the last row should preferably be at least half a panel's width.

Note: If needed to disassembly a row, gently pull the panel(s) up and pull it out of the groove of the previous row. To disassembly the individual panels slide the panels out of groove. This avoids damaging the click system.

On completion of the installation

First impressions may have more impact on the client than hours of skilled fitting.

The completed installation should be cleared of scrap material and debris, the floor swept or vacuumed, and any traces of adhesive residues removed from the floor and skirtings.

If the floor covering is to be protected from other trades or site traffic prior to project completion, a protection product should be chosen that is appropriate for the type and level of traffic likely to be experienced and the potential for impact, scratching or indentation damage.

Gliders suitable for hard floors should be fitted to moveable furniture. Office chairs and other items of rolling furniture should be fitted with type w casters.

In many cases it is customary for the initial floor preparation to be left, or subcontracted, to a professional cleaning and maintenance contractor who will have the staff and equipment to do the job thoroughly.

If the optimum performance of any new floor covering is to be achieved, it is important that the correct cleaning and maintenance procedures are used from day one. Cleaning and maintenance guides for all Forbo flooring products are available for download on the website.

Cleaning and maintenance guides should be passed onto the main contractor, client or end user as appropriate on completion of the installation, and before any hand over clean is started.