# **Installation Guidance Note: Enduro Dryback**

### **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 Dryback Tiles & planks should be carried out in accordance with the national code of practice for the installation of resilient floor coverings if applicable. 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.

The open time of the adhesive will depend on site conditions and porosity of the base. It is best practice to conduct an adhesive bond test before starting the installation. Bond testing will assist in identifying both the working characteristics of the adhesive (waiting and working time) for the site conditions, and any potential bonding problems.

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.

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 and adhesive 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.

Ensure that all recommendations for substrate and jobsite conditions are met prior to beginning the installation. Beginning the installation is an implied acceptance of site conditions by the parties involved and liability for any failure directly related to inadequate site conditions becomes the responsibility of the installer and/or flooring contractor.

Store Enduro Dryback tiles and planks in cartons stacked, maximum 5 cartons, and laying flat.

Prior to installation tiles 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.

As with all newly installed floor coverings Enduro Dryback should be protected from heavy traffic, particularly high point load wheeled traffic, for 72 hours and must not be washed for 48 hours after installation.



# **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. To enable a secure bond of the adhesive to the substrate, the underfloor heating system should be turned off, or set to the lowest temperature, for a minimum of 48 hours prior to installation of the Forbo flooring material. 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. A rapid temperature change could result in bonding problems.

## Adhesive recommendations and application

When installing Enduro Dryback tiles & planks a low emission EC1 adhesive is recommended, such as Forbo Eurocol '640 Eurostar Special'. If alternative products are to be used consult with the supplier for more information, guidance and warranty.

**Note:** Contact Forbo Flooring Technical Services department for further advice on adhesives and installation in areas liable to be subjected to abnormal temperature variation in use, for example, retail premises with glazed window fronts, conservatories etc.

Use a trowel to apply the adhesive.

**Note:** Trowels will wear during use, check the trowel both before and during use to ensure that the proper, specified trowel notch is used and maintained.

**Note:** The adhesive must be spread evenly over the entire floor area with particular attention to edges – this will ensure that the sheet is fully bonded at the perimeters.

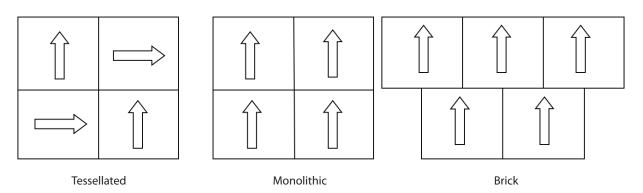
Place the material into the adhesive (after the appropriate waiting time) and roll with a 50-70 kg roller, rolling in all directions to ensure a firm bond. It is important to only spread sufficient adhesive that can be covered within the open time of the adhesive.

Areas that cannot be rolled with the large roller e.g. abutments such as door frames or skirting boards should be rolled with a hand roller or pressed into the adhesive with a rubbing hammer.

Always clean away excess adhesive with a damp cloth before it is allowed to dry.

# Installation

Enduro Dryback may be laid either in bond (monolithic) or brick pattern:



Tiles and planks do not require shuffling prior to installation, but dry laying will identify best use of design.

Like the natural material, some designs will vary in tone and colour. This is intentional and gives the floor a more authentic appearance.



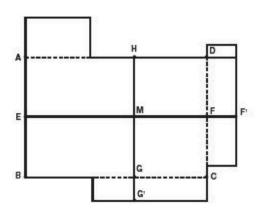
# **Setting out**

Forbo tile products are installed using conventional tile installation techniques. The correct starting point for setting out a tiled floor is traditionally the centre of the area - although this may not be the final starting point when tile laying begins. Some adjustment of the starting point may be required, for example, to avoid small perimeter cuts, where the tiles are to be laid with a border.

In corridors and small spaces, it may be simpler to work lengthwise from one end, using the centre line as a guide.

The centre line is drawn as follows: a chalk line is snapped from centre of wall A-B (=E) to the centre of wall C-D (=F). The centre of line E-F is found (M). Draw a perpendicular line through M using the 3:4:5 method to establish G-H (Figure A). Starting at centre point M, measure out lengthwise and width wise to the walls.

Wherever possible, cuts of less than 60mm or so should be avoided as these are more likely to come loose at some stage in the life of the installation. Adjust the position of lines E-F and G-H if necessary.



# Laying tiles or planks

Begin laying tiles at the starting point, ensuring that the tile is laid exactly along the layout lines. If the first few tiles are not installed accurately, the entire installation will be affected.

**Note:** In a large area, two or more fitters may be placing tiles at the same time. As finger pressure in butting the tiles or planks together may be slightly different, we suggest to start from a common point and work away from it to avoid tiles or planks going out of bond.

Lay the tiles into the adhesive after the required waiting time and within the open time applicable to the adhesive being used and roll with a 50-70 kg roller, rolling in all directions to ensure a firm bond. It is important to only spread sufficient adhesive that can be covered within the open time of the adhesive.

**Note:** the adhesive must be spread evenly over the entire floor area with particular attention to edges – this will ensure that the sheet is fully bonded at the perimeters.

Areas that cannot be rolled with the large roller e.g. abutments such as door frames or skirting boards should be rolled with a hand roller or pressed into the adhesive with a rubbing hammer.

Remove fresh adhesive residue immediately with a clean white damp cloth. Dried adhesive residue can be removed with a clean white cloth and soapy water.

- a. When laying fully adhered tiles or planks tiles or planks the time it takes to mark and cut the border tiles must be taken into consideration when planning the installation. Without adequate planning, it is likely that the working time of the adhesive in the area of the border tiles will be exceeded before the tiles are installed, which will result in an inadequate bond of the border tiles. The successful installation of border tiles is best accomplished by following one of two strategies:
- b. When laying out tile, determine the edge of a field tile a comfortable distance from each wall and then snap chalk lines around the perimeter of the room. When spreading adhesive, use these lines as a guide to stop spreading adhesive and install the field tiles up to the adhesive spread lines. Once the field tiles have been installed, the border tiles and be "dry" fitted (before spreading the adhesive). After the border tiles have been cut, adhesive can be applied in the area of the border tiles and the tiles can be placed into the adhesive.

Plan the sequence of spreading adhesive so that the border tiles can be cut and placed into the adhesive before the adhesive working time has been exceeded.

Only spread sufficient adhesive that can be covered and rolled within the specified open time.



# 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.

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 at: www.forbo-flooring.com/floorcare

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.

