Installation Guidance Note: Allura Flex

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 thin floor covering irregularities in the subfloor will be apparent in the finished flooring.

The installation of Allura flex should be carried out in accordance with AS 1884:2012 "Floor coverings - Resilient sheet and tiles - Installation practices". 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 and permanently dry.

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

Installation over the following substrates falls outside the scope of AS1884:2012 and the recommendations below should be followed:

Raised Access Floors should be smooth, level and clean. Degreasing may be necessary on steel faced panels. Any old adhesive residues must be removed.

Raised access flooring panels have a tendency to settle shortly after installation and this should be taken into account when assessing the appearance of the Allura flex tiles or planks fitted onto raised access flooring systems. Ridges between uneven raised access floor panels and/or gaps between adjacent panels will telegraph through to the finished tile installation.

Panels should be checked before commencing installation to ensure that they are close fitting and level. Uneven or loose floor panels should be levelled or re-fixed before installing Allura Flex tiles or planks.

Note: Incidental low level light will exaggerate any unevenness in the subfloor.

Old resilient flooring 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. Be abraded to remove old wax, seals and dirt and then thoroughly cleaned.

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

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



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.

Acclimatisation

Prior to installation, boxes of tiles should be removed form the delivery pallet and stored not more than five boxes high in the laying area. It is essential that the material must be at a steady temperature of 18 to 27°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.

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.

- Always clean away excess adhesive with a damp cloth before it is allowed to dry.
- Store Allura flex® tiles and planks in cartons stacked, maximum 5 cartons, and laying flat.
- Do not remove more tiles from the box than can be installed within 1 hour.

Allura Flex 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, the floor should be protected during this phase (see "on completion" at the end of this guide).

As with all Forbo floor coverings, Allura flex can be used in conjunction with under-floor heating systems. A separate guidance note "Installation over Underfloor Heating Systems" provides more information on the conditions for installation in such circumstances.

Adhesive Recommendations and application

Forbo recommends only using a high grab plasticizer resistant tackifier adhesive such as Forbo's PS1 Tile Fix tackifier (pressure sensitive). Adhesive must be applied according to manufacturer's instructions and it is essential that a full spread of tackifier PS1 Tile Fix adhesive is allowed to dry clear and tacky before laying the floorcovering.

Failure to do so can result in a permanent non-release bond and cause the adhesive to seep through joins. In areas of extreme heat and humidity we recommend using a permanent adhesive 540 Eurosafe special as some tackifiers may reactivate. If alternative adhesives are to be used consult with the supplier for usage information, guidance and warranty. Forbo does not warrant other adhesives.

Note: porous substrates may require priming with a diluted application of the adhesive. Ensure that each tile butts up to its neighbour as firmly (net) as possible without causing edge peaks, cut the perimeter tiles firmly against the wall. Roll completed installation with a minimum 34kg, 2-3 wheeled roller. In heavy commercial usage areas, however, In high foot traffic areas, wheeled traffic and areas of high point loading and where tiles are not constrained by fixtures e.g. walls, transition profiles, use 540 Eurosafe special.

Forbo PS1 Tile Fix - Pressure sensitive adhesive

- Stir adhesive well before use
- Apply adhesive evenly over the whole surface using a V1(1.6 mm x 1.6 mm) V notch trowel
- Spread rate: V1 trowel approximately 5m² per litre Spread rates are a guide only, depending on the porosity of the subfloor, highly absorbent subfloors must be primed prior to the application of adhesive.
- Allow adhesive to dry and turn clear leaving an even tacky film
- · Install tiles and roll correctly
- Wet adhesive can be removed with a clean rag dampened with clean water.
- Dry adhesive can be removed with clean rag dampened with mineral turpentine

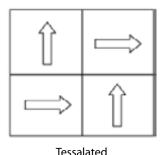
Areas that could be affected by intense heat magnification from direct sunlight passing through window areas - use a 2 part epoxy adhesive.

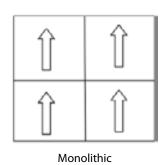
Always conduct an adhesive bond test before starting the installation. Bond testing will assist in identifying both the working characteristics of the adhesive (waiting and working time) for the site conditions, and also any potential bonding problems Always clean away excess adhesive with a damp cloth before it is allowed to dry.

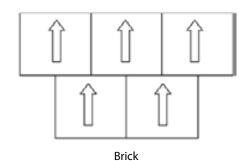
Installation

Most Allura flex designs are non-directional; however, the following installation advice is given:

- Stone, concrete and sand tiles may be laid either in bond (broadloom) or brick pattern
- Textile designs should be installed chequerboard.







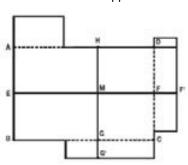
Traditional wood designs do not require shuffling prior to installation, but dry laying will identify best use of design.

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, or with designs such as Hungarian Point.



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. Lightly roll each row of planks with a hand roller to ensure a firm adhesive bond.

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.

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.

In situations where the tiles or planks are being fully adhered 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:

- a. 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.
- b. 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.

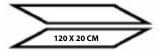
Fully adhered installation

Lay the tiles into wet adhesive* and roll with a minimum 34kg, 2-3 wheeled roller. Before the adhesive has dried. Always check for proper adhesive transfer. In order to achieve a secure bond, there must be a complete wet transfer of adhesive to the tile backing. Areas that cannot be rolled with the large roller e.g. abutments such as architraves or skirting boards should be rolled with a hand roller or pressed into the adhesive with a rubbing hammer.

*A short waiting time will often be necessary to allow the adhesive to develop body. The tile MUST be placed into the adhesive before it has had an opportunity to dry. This enables a complete wet transfer of the proper amount of adhesive to the tile backing and is essential for a secure bond.

Hungarian Point

This design is made up of left and right planks which are installed together in rows (option 1) or either side of a standard plank (option 2). Each box has an equal number of A and B planks packed face-to-face and back-to back in the box.



Install the first line of planks along the start line. Lightly roll each row of planks with a hand roller to ensure a firm adhesive bond. Once the first line of planks is installed install the next line of planks to the opposite side of the start line. Re-roll the planks with a hand roller if any small adjustments are made in aligning the planks.

Install the remaining rows, starting in the centre and working to both sides of the room, making sure that you work parallel to the drawn centre line.





Hungarian Point option 1

Hungarian Point option 2

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

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.au/download.

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.

If in any doubt contact us:

Tel: 1800 224 471 Fax: 1800 662 566 Info.au@forbo.com

Additional Reference documents and information:

Forbo Floor Coverings Installation Guide: www.forbo-flooring.com.au/installation AS1884:2012