Installation Guidance Note: Tessera Carpet Tiles and Planks

General advice

Sub-floor preparation

The quality of the finished installation will depend on the quality of the sub floor. Irregularities in the subfloor will be apparent in the finished flooring. All subfloors should be smooth, sound clean and permanently dry in accordance with BS5325. Particular attention should be paid to the following:

Subfloor preparation should be carried out in accordance with BS5325:2001 Code of practice for the installation of textile 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 and permanently dry.

- All cementitious floors must have a residual moisture content of less than 75%, when measured according to Annex A of the standard.
- Irregularities or undulations in the subfloor can result in the bond of tiles or planks drifting during installation. Particular attention should be given to the preparation of the subfloor and surface regularity. Surface regularity should be within the SR1 surface regularity standard 3mm under a 2m straightedge (BS8204-1:2003 +A1: 2009 Annex C).
- Problems associated with plasticizer migration from PVC materials can lead to dimensional instability in carpet tiles. All subfloors of this type must be removed before installation.
- It is impossible to ensure that wood block floors are not loose or contain latent defects through aging. It is therefore strongly recommended that these are removed and that the subfloor is correctly prepared and, if necessary, a surface damp proof membrane or an asphalt screed applied before installation of carpet tiles.
- 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 tile/plank installation fitted onto such flooring systems. Ridges between uneven raised access floor panels will telegraph through to the finished tile installation. Uneven or loose floor panels should be levelled or re-fixed before installing Tessera tiles or planks.

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 18 to 27°C for 48 hours prior to, during, and for 24 hours after installation. Prior to installation, the carpet tiles must be allowed to acclimatise in opened boxes, no more than six boxes high, for at least 24 hours in the above conditions. This is particularly important if the tiles have been stored or delivered in conditions of extreme temperature and/or humidity. Where the floor coverings 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.



Underfloor Heating

Carpet tiles are excellent thermal insulators (Tog value typically 0.7 – 2.0) and this should be taken into account when using with underfloor heating systems. When used with underfloor heating systems the temperature at the surface of the subfloor must not exceed 27°C. A separate guidance note "Installation of Forbo Floor Coverings on Underfloor Heating Systems" provides more information on the conditions for installation in such circumstances.

Inspection

As with any floor covering, the use of different production batches will always result in visible shade differences. It is essential that different batches are not mixed in the same area. When ordering tiles, each floor area (plus spares) must be specified from the same batch.

Prior to installation, boxes should be checked to ensure that the correct tile type, colour, batch number and quantity have been received and that the tiles are in good condition. No claim will be accepted for incorrect colour, pattern or obvious damage if the tiles have been fitted.

The batch number is clearly marked on the packaging and on the reverse side of each carpet tile and must be checked before commencement of installation.

Adhesive Recommendations and Application

Carpet tiles must be adhered using a high grab, all-over tackifier adhesive system; Forbo Eurocol 542 Eurofix Tack Plus is recommended.

The tackifier adhesive must be spread evenly over the entire floor area with particular attention to edges – this will ensure any perimeter tile cuts are fully bonded. Failure to fully bond all full tiles and tile cuts may result in individual tiles shifting and lifting.

Where perimeter tiles are not constrained by fixtures e.g. walls, edge strips etc., it is recommended that such tiles are adhered using a permanent adhesive; Forbo Eurocol 540 Eurosafe Special is recommended.

Adhesives must be applied according to the manufacturer's instructions and it is essential that tackifier adhesives are allowed to dry to a clear, tacky finish before laying the carpet tile. Failure to do so could result in a permanent non-release bond.

Highly absorbent subfloors such as sand/cement screeds and plywood etc. should be primed with Forbo Eurocol 044 Europrimer Multi. The primer should be allowed to dry fully before proceeding with the application of Eurocol 542.

Installation

The following instructions are intended to draw the fitter's attention to current "Best Practice", and must be followed for the relevant product guarantees to be valid. Installation must be carried out in accordance with the requirements of BS 5325:2001 or any subsequent revision and the guidelines contained in the Contract Flooring Association "Guide to Contract Flooring" manual.

General

Any carpet tile can be susceptible to a certain amount of pile distortion when they are taken out of their boxes. This may result in visual differences in appearance between tiles, during, and immediately following, installation. Tile edges may also be more evident immediately after installation.

Note: these are not manufacturing defects, and after fitting and assuming normal prevailing conditions (under dynamic foot movement) this visual differential will diminish as the pile recovers to its natural position. Recovery will normally take place soon after installation. However, in some cases it can take up to six weeks for the pile to fully condition and develop a uniform visual appearance.



Floor protection

Tiles should be protected from dirt and dust before, during and after installation. Failure to do so may affect the performance warranty. When using protective sheeting ensure that all edges are sealed to prevent building debris and dust settling on the carpet tiles. Ensure that any adhesive tape residues on the carpet tile pile surface are removed before use.

Conditioning

Prior to installation, the carpet tiles must be allowed to acclimatise in opened boxes in the laying area at a steady temperature of 18 to 27°C, no more than six boxes high, for at least 24 hours. This is particularly important if the tiles have been stored or delivered in conditions of extreme temperature and/or humidity.

Setting Out

The location of the starting point in an installation is usually determined by the fitter to maximize the yield. This may be anywhere in the room, but would normally be located as near to the true centre as possible. Small cuts in either the field or perimeter should be avoided.

Having established the starting point for the installation, making some check measurements or dry laying a few rows of tiles will help to identify any potential problems or necessary adjustments to avoid small perimeter cuts.

Pile Direction

The arrow marks on the reverse of every tile indicate the direction of pile lay. The preference of the specifier as to "monolithic", "tessellated" or other visual effects must be confirmed before tiles are installed.

Options for the direction of tile and plank installation will vary between product designs. The installation options are indicated on product sample books and below, but if there is any doubt check with Forbo Flooring prior to installation.

Note: the term 'broadloom' is often used as an alternative description of monolithic. Whichever term is used, it refers to the installation direction of the carpet tiles. It does not mean that the installation will be viewed as seamless. Tile edges are most visible in new installations. The quality of Tessera carpet tiles' construction will help to reduce the visibility of tile edges over time (with traffic and regular vacuuming) however, tile edges may remain visible during the life of the product in non or low trafficked areas.

When laying tile or planks in a monolithic format follow the direction of the arrows, which should, where possible, point towards the main light source.

Fitting tiles

Ensure that each tile butts up to its neighbour as tightly as possible without placing the tile under any pressure which may cause peaking.

Fitting edge tiles and cuts

It is important when fitting tiles and cuts to skirting boards or other fixed perimeters that the tile/cut is fitted to any fixed perimeter without exerting any pressure. Any tiles/cuts fitted under pressure may be subject to lifting from the tackifier adhesive – this will cause loss of bond to that tile/cut and the surrounding installation area.

Pile trapping – ensure that each tile butts up to its neighbour as tightly as possible without causing peaks. It is essential that no pile material becomes entrapped between tiles.

Fitting to stair treads and risers

Appropriate stair nosings must be used for every tread. Tiles must be bonded securely to the stair tread using a permanent bond adhesive (Forbo Eurocol 540 Eurosafe Special).

Tiles to risers should be permanently bonded using a suitable contact adhesive.

It important that tiles are fitted to treads with the pile direction (arrows) facing inwards towards the riser and fitted to risers with the pile direction (arrows) facing downwards towards the tread.



Fitting Microtuft carpet tiles

The low profile pile of microtuft constructed products means that poor floor preparation will accentuate microtuft visible edges, and It is important that there is no height deviation between tiles.

The edges of a microtuft tile, particularly the leading and trailing edges, are likely to show loose fibres where the tufted loops are cut. This occurs in all tufted loop pile carpet tiles but are more visible with a microtuft tile due to the low profile of the loop having less neighbouring pile height to hide into.

To minimise this characteristic, it is recommended to install microtuft quarter turn. This reduces the instances where a cut loop on one tile meets a cut loop on the next tile so that any edges with loose fibres are less visible. Any tiles which create any noticeable unsatisfactory edge visuals should be replaced.

Tiles with Resilient Backings e.g. Softbac®

These should be installed according to the general instructions outlined above, but special note must be taken of the following:

- (i) Prior to installation, carpet tiles with resilient backings (e.g. Softbac®) should be removed from their boxes as part of the conditioning process and stacked not more than 12 tiles high. The stacked tiles must be allowed to acclimatise for at least 24 hours in the atmospheric conditions which will prevail during use. This is particularly important if the tiles have been stored or delivered in conditions of extreme temperature and/or humidity.
- (ii) Because of the potential "spring-back" effect which can lead to gapping, it is essential that resilient backed tiles are tightly fitted. It is essential that no pile material becomes entrapped between tiles.

Note: Softbac® tiles should be firmly placed against adjacent tiles. Do not slide or force Softbac® tiles into place.

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 vacuumed and any traces of adhesive residues removed from the floor and skirtings.

Note: Upright vacuum cleaners with a mechanically powered brush should be used on all carpet tiles.

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.

Note: some protective sheet products with a tacky film in contact with the textile floor coverings can leave an adhesive residue when removed. This can be difficult to remove and attract dirt when the floor covering is put into use. The potential for this effect should be checked with the protection product manufacturer before use and advice on suitability confirmed. Forbo will not accept any claims for soiling problems associated with the use of such products.

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 Tessera ranges are available for download at: www.forbo-flooring.co.uk/tesseradownloads

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.

Performance and Construction

These details vary according to carpet selection. Refer to Forbo Flooring Product Literature for Further information.

If in any doubt contact us:

Forbo Flooring UK Ltd
Tel: 0800 121 4780
Samples: 0800 731 2369
Info.flooring.uk@forbo.com
www.forbo-flooring.co.uk

Additional Reference documents and information:

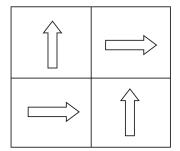
Forbo Floor Coverings Installation Guide: www.forbo-flooring.co.uk BS8203:2017

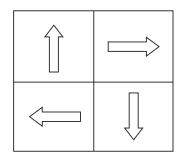
The CFA Guide to Contract Flooring (Tel: 01159 411126)

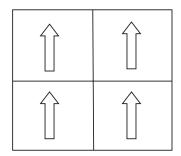


Tessera tile installation options: -

Refer to product brochures for suitable options by product range.



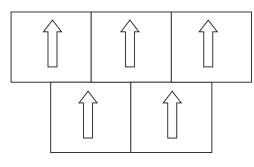




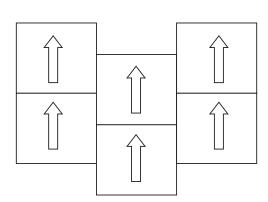
Tessellated

Quarter Turn

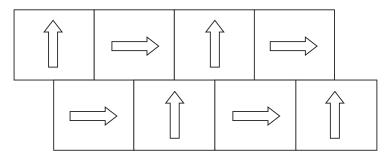
Monolithic







Half drop

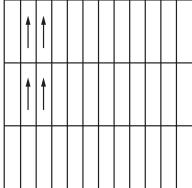


Quarter Brick

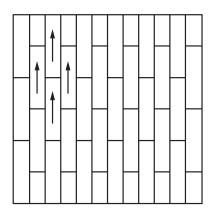


Tessera Plank installation options: -

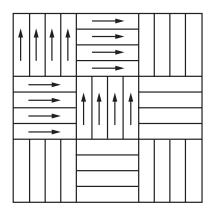
Refer to product brochures for suitable options by product range.



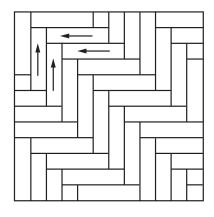
Monolithic



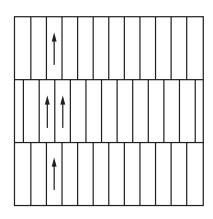
Half Drop



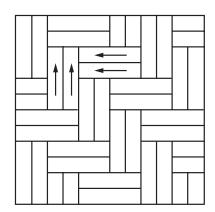
Weave



Herringbone



Brick



Double Herringbone