

# Installation Guidance Note: Tessera Carpet Tile and Plank

## General advice

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 AS/NZS 2455.1:2019 Textile floor coverings – Installation Practice, Part 1: General and AS/NZS 2455.2:2019 Textile floor coverings - Installation practice, Part 2 Carpet tiles.

Particular attention should be paid to the following: Areas to receive flooring should be clean, dry, free from other trades, fully enclosed and weather tight. Areas to receive flooring shall be adequately lit to allow for proper inspection of the substrate, installation and for final inspection.

- All cementitious floors must have a residual moisture content of less than 75%, when measured according to Annex 5.2 **Subfloor condition and preparation** of the standard.
- 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 before installation of carpet tiles.
- Raised access flooring panels **tend to** settle shortly after installation and this should be **considered** 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.

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 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 flooring contractor and or the installer.**

## Underfloor heating

Carpet tiles are excellent thermal insulators (Tog value typically 0.7-2.0) and this should be **considered** 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 FPS1 pressure sensitive adhesive is recommended. Use a V1, 1.6 mm x 1.6 mm trowel or long nap roller (minimum 10 mm) to apply the adhesive. If alternative adhesives are to be used consult with the supplier for usage information, guidance and warranty.

The adhesive must be spread evenly over the entire floor area with 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 F54 or 640 Eurostar Special is recommended.

Adhesives must be applied according to the manufacturer's instructions and it is essential that tackifier adhesives can 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 etc. should be primed with a specifically designed floor covering subfloor primer. The primer should be allowed to dry fully before proceeding with the application of the adhesive.

## **Installation**

The following instructions are intended to draw the installers 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 AS/NZS 2455.2.2007 or any subsequent revision and the guidelines.

## **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.*

As with any cut pile carpet, cut pile carpet tiles may be subject to some pile shedding following installation. This is not a product fault and if any pile shedding does occur, it will effectively cease after several cycles of vacuum cleaning and normal use.

## **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°C 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 - do not slide or force tiles into place.

**Pile trapping** – It is essential that no pile material becomes entrapped between tiles. Any trapped pile will distort the overall tile adhesion bond which may affect the long-term tile bonding as well as negatively affecting the tile edge aesthetic.

### **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.

### **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 F54 or 640 Eurosafe Special).

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

It is 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.

### **Tiles with resilient backings e.g. Softbac®**

**Softbac®** is an additional resilient backing layer that can be added to Tessera carpet tiles (excluding Struktur 1) to provide increased impact sound reduction properties. Softbac® is available on a made to order basis and subject to minimum order quantities and colour availability.

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

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.

### **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.com.au/downloads](http://www.forbo-flooring.com.au/downloads)

**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 handover clean is started.**

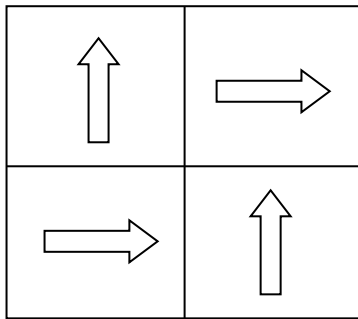
**Performance and construction**

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

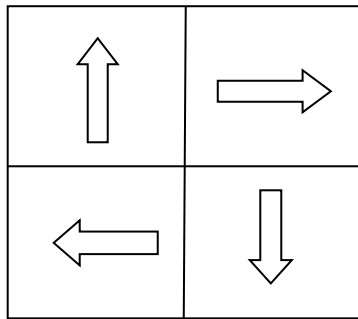
**If in any doubt contact us:**

Forbo Flooring Systems Pty Ltd  
Tel: 1800 224 471  
info.au@forbo.com  
www.forbo-flooring.com.au

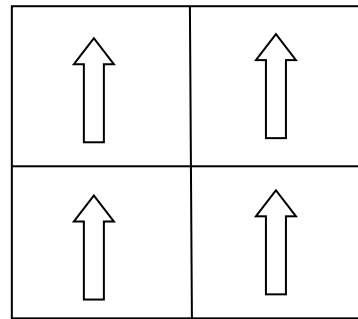
**Tessera tile installation options:** – refer to product brochures for suitable options by product range.



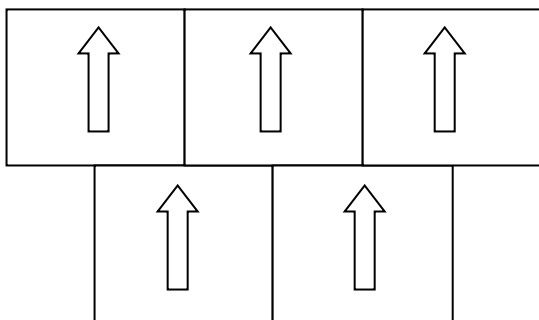
**Tessellated**



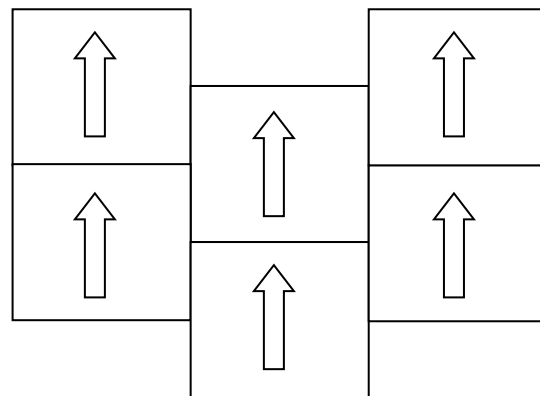
**Quarter Turn**



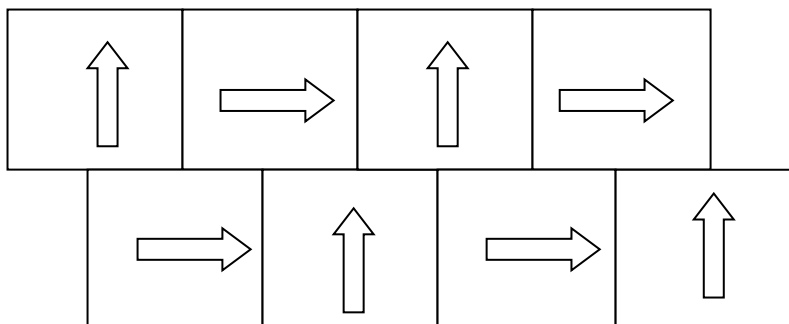
**Monolithic**



**Brick**

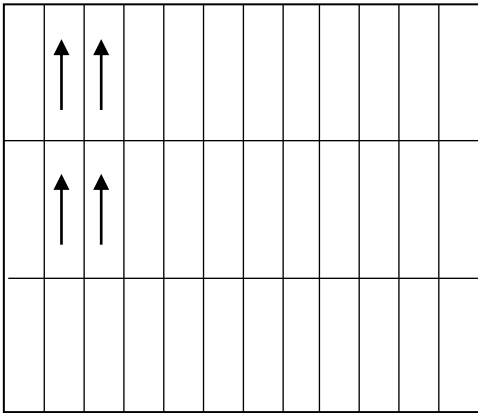


**Half Drop**

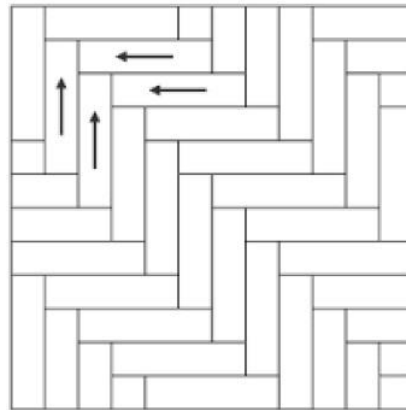


**Quarter Brick**

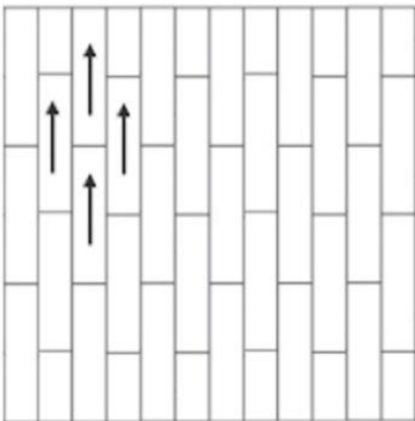
**Tessera Plank installation options:** – refer to product brochures for suitable options by product range.



**Monolithic**



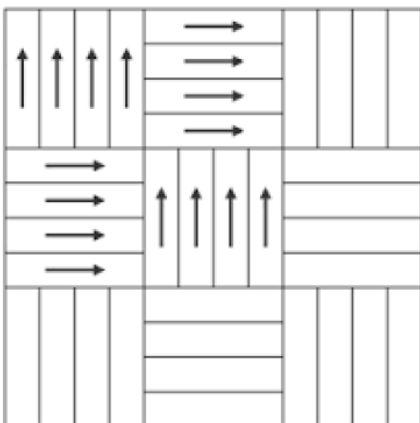
**Herringbone**



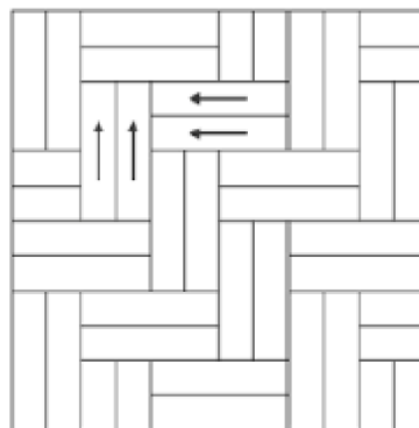
**Half Drop**



**Brick**



**Weave**



**Double Herringbone**