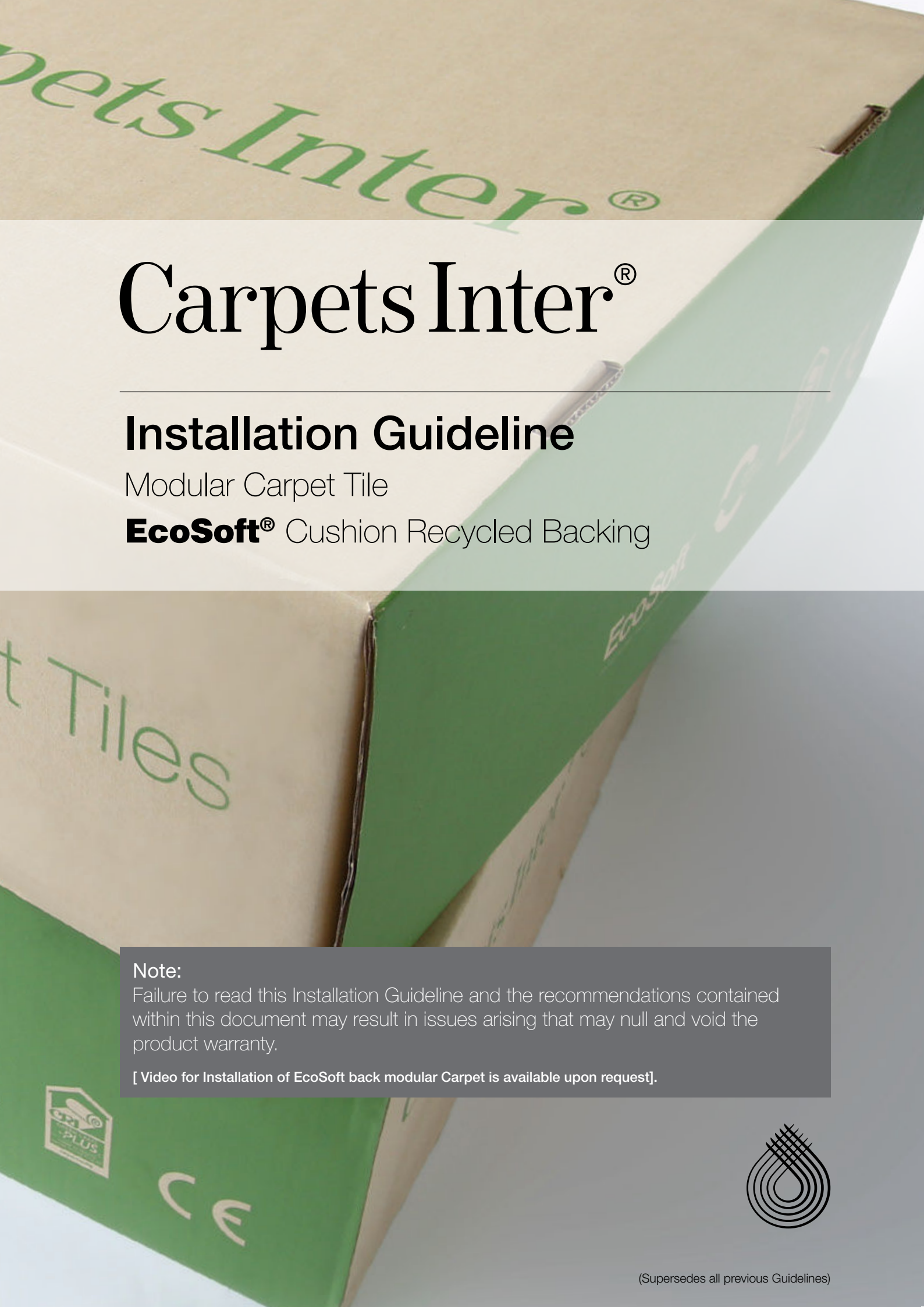



# Carpets Inter®

## Installation Guideline

Modular Carpet Tile

**EcoSoft®** Cushion Recycled Backing

Note:
Failure to read this Installation Guideline and the recommendations contained within this document may result in issues arising that may null and void the product warranty.

**[ Video for Installation of EcoSoft back modular Carpet is available upon request].**

(Supersedes all previous Guidelines)

# PREFACE

These guidelines are to be read in conjunction with the following standards:

a. AS/NZS2455.1: 2007 Textile floor coverings-Installation practice : Part 1: General
b. AS/NZS2455.2: 2007 Textile floor coverings-Installation practice: Part 2: Carpet Tiles
c. CRI 104 – Sept 2015 Standard for Installation of commercial carpet
d. BS 5325 Installation of textile floor coverings - Code of practice

## EcoSoft® Modular Carpet Tile

Ecosoft® modular carpet tile is a modular floor covering system that is the perfect choice to enhance the aesthetic appeal of accommodation and working environments. The unique dense PET felt backing is manufactured from 80% recycled waste plastic bottles and provides exceptional underfoot comfort, sound absorption, healthy and energy efficient work spaces.

This practical, hard wearing and versatile modular carpet is easy to install and maintain. It is the ideal solution for carpeting commercial facilities, such as offices, education, healthcare and public spaces subjected to heavy traffic flow.



Monolithic Configuration (0.50m x 0.50m)

# PREPARATION

1. Substrate:

   EcoSoft® modules can be installed onto level screed or raised access floors and stairs (refer Appendix C); however the product is unsuitable for installation onto vertical surfaces (i.e.: walls). Before installation, the floor surface must be clean, dry and free of dust. The floor must be properly cured, level and smooth. All concrete floors should be tested for moisture and alkalinity (pH) at several locations prior to beginning the installation. Concrete floors should be tested for moisture in accordance with ASTM F1869 or ASTM F2170.

   Dry Slab:

   Moisture should not exceed 5 lbs./1000 $ft^2$/24 hrs. for the Vapor Emission Rate (MVER) (ASTM F1869) or 75% RH for the Relative Humidity (ASTM F2170). The surface of a concrete floor should have a pH value of between 7 to 9 in accordance with the ASTM F710.

   Wet (Green) Slab: (refer Appendix B)

   Relative Humidity (RH) of up to 99% and dries progressively within 12-18 months.

   **Should the Relative Humidity or Alkalinity reading be above tolerance, please consult your Carpets Inter representative for professional advice before proceeding to install.**

## 2. Pattern & Layout:

Check the product code(s) on the delivered cartons match the delivery order and that the quantity of each item is as per the quantity demarcated on the installation schematic. Open the carton and confirm that the product inside matches the visual schematic provided, and ensure that difference dye batches of EcoSoft are not be mixed in same area. Please pay special attention to the tile pattern for placing the correct item in the appointed location and the specified installation configuration to achieve the desired appearance for the product being installed. (e.g., monolithic, checkerboard, vertical Brick, etc.,…).



## 3. Conditioning of Product:

The environment of the space to be installed should be maintained within the temperature range of 10-35 degrees C with a relative humidity (RH) of between 40% to 60% for a minimum period of 2 to 3 days prior to, during and after installation. Heating and Air Conditioning systems should be operational within the space during this period. The subfloor surface temperature should be between 18-29 degrees C. All carpet tiles must be removed from the cartons and allowed to adjust to the ambient temperature for at least 24 hours prior to installation.

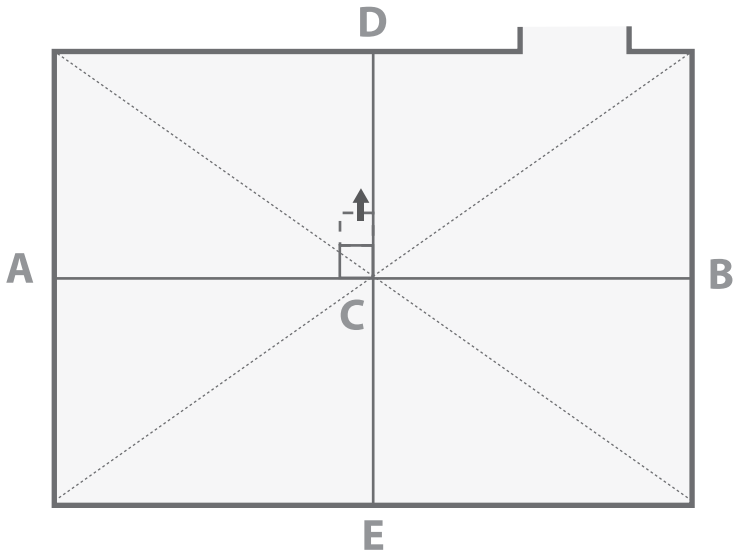
# INSTALLATION

The Installer should measure the location(s) to be carpeted match the planning and estimation drawings used to calculate the supplied material quantity.

## 1. Setting Out

### 1.1: Process – All Modules:

Measure and locate the center (datum) line within the space to be installed by using crossed diagonals. The installation process will begin from the center of the room. This will achieve symmetry and equal sized fillers to opposing walls. Find out the side of the longer wall and mark out a line parallel to the longer wall running through the center C (AB). Then mark a line (DE) to pass through center 'C' at a 90° right angle (perpendicular) to line AB (see diagram below).



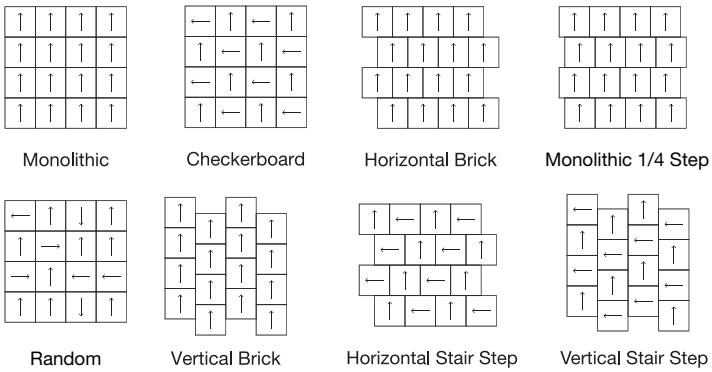

### 1.2: Direction of Lay:

Directional arrows are printed on the underside of each module. Determine the direction of lay before commencement, ensuring that all modules are laid into the applied adhesive with the arrow facing in the same direction. Obviously some pattern styles are linear to enable this approach, however for configurations such as checkerboard (two directional) or random (4 directional), follow the product guideline accordingly (Please consult the appointed interior architect and/or designer before proceeding).

## 1.3: Configuration:

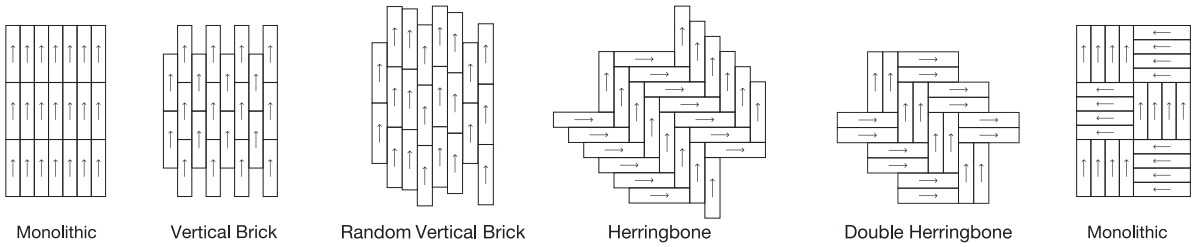
### 1.3.1: Square Module:

The most popular configurations for 50cm x 50cm Square Modules are as shown here;




### 1.3.2: Plank Module

The most popular configurations for 25cm x 100cm Plank Modules are as shown here;




## 1.4: Near-Solid or Light Color Shade Textures

It is expected that the joint lines of solid and/or near-solid modular carpet tiles will be visible. This is not considered or accepted as a product defect, because it is due to the inherent characteristic of a geometric modular shape. It is the same as you will see in other modular flooring materials, such as wood planks, resilient (LVT/SPC) and/or hard floor (e.g.: homogenous, ceramic, etc.,). To support the desired outcome to the client's project, our website, our sample folder and our collection portfolio specifications will advise the recommended install configurations for either a 50cm x 50cm Square and/or 25cm x 100cm Plank module.

## 1.5: Solid Plain Color Modular Tiles

For 50cm x 50cm Square solid color tile, we recommend a checkerboard installation. For 25 cm x 100 cm Plank solid color tile, we recommend a herringbone installation. These installation configurations create a subtle texture on the floor by utilizing the visibility of the seams.

However, if you prefer a carpet tile that masks most joints, then it is recommended to select an alternative CI Collection that has a higher contrast of pattern, texture & color, which naturally disguises and will mitigate the visibility of modular tile joints in most applications.

## 1.6: Due Diligence of Flooring Contractor

The information shared within this guideline are “recommendations” only and the installation flooring contractor must always dry-lay an area of approximately 4 cartons (20m$^2$) and must obtain the approval and sign-off by the Interior designer and project manager, before proceeding with a permanent application. Irrespective, during installation the carpet installer must be responsible to observe any ‘bold’ patterning lines occurring where the same color (dark or light) yarn meets at the tile edge to create a noticeable wider line at the butt-join and in such case responsibly relocate the adjacent module into another position.

Failure to follow the specified or a manufacturer’s recommended installation configuration (refer above) as stipulated on the reverse side of each individual Collection folder and on all specification data sheets may result in unwanted visual effects.

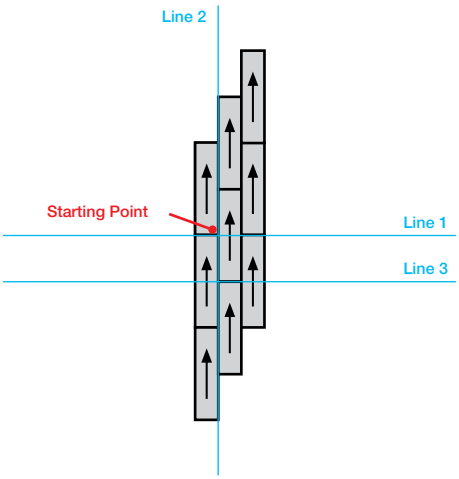
For specific instructions or advice, please consult your local Carpets Inter representative Office.

## 1.7: Plank Module – Special Guidelines

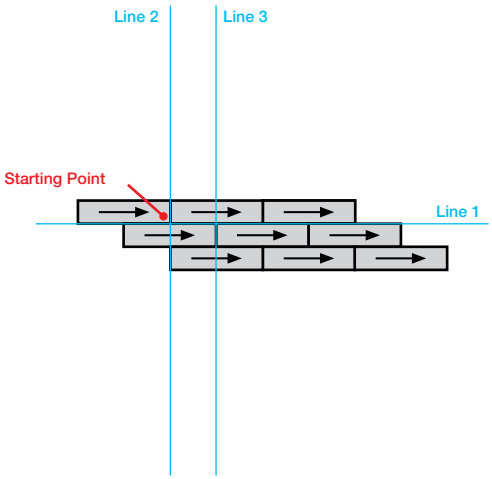
### 1.7.1: Brick Configuration

We recommend that a Plank Module is installed as a Vertical Brick or a random Vertical Brick configuration, as this is a more commonly used installation method and will achieve an effect similar to LVT or wood flooring.

**Vertical Brick**




**Horizontal Brick**

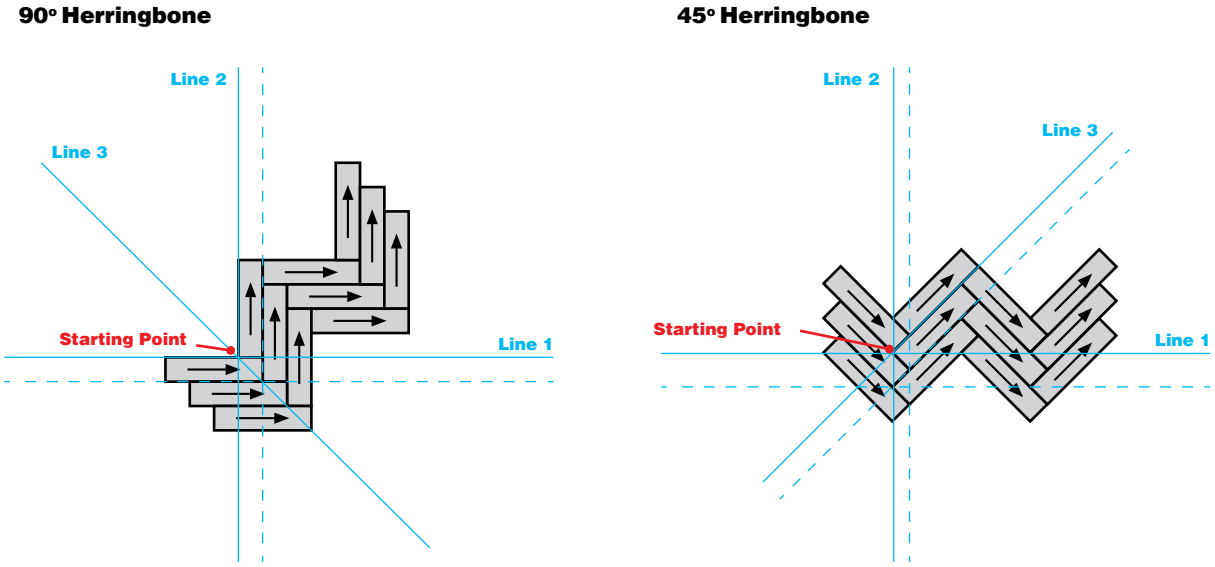



- At the center starting point, draw a line parallel to the longest wall (Line 1), a vertical line (Line 2) at a right angle to the first line and a line (Line 3) 500 mm. from and parallel to the starting line; Line 1 or 2, to demarcate working lines.
- Make a dry layout of the plank tile configuration from the center line to the wall running parallel to the long direction of the planks to confirm a balanced layout.
- Installation must start from the center point. It is critical in laying the initial row correctly aligned with the working lines, as they are the foundation for the rest of the installation and crucial to the end-result.
- Lay the next row by staggering the plank tile end by half the length of the plank to achieve a symmetrical look for Brick configuration. It is also possible to randomly stagger (offset) the planks which results in a look that resembles wood plank flooring.
- Periodically check alignment during installation (refer to ‘Square Module’ section 4 ‘Installation Tolerances’ on page 14).
- Additional working lines parallel to the starting working lines will assist to maintain the integrity of the pattern and avoid risk of running out of alignment and/or peaking or gaps at the joints.

## 1.7.2: Herringbone Configuration

Herringbone configuration is a distinctive graphic layout that creates a unique effect. Laying a herringbone pattern will require more care to setting-out since the increased number of modular rows must be aligned accordingly. Determine the center of the room; the starting point for herringbone installation must be as near to the center of the room as possible and must be positioned to utilize the largest cut tile size at the perimeter ensuring pattern symmetry.

The herringbone can be installed parallel or at 45° angle to the room




- At the center (starting) point, draw a line parallel to the longest wall (Line 1), a vertical line (Line 2) at a right angle to the first line and a diagonal 45° line (Line 3) to demarcate the working lines.
- Make a dry layout of the plank tile configuration from the center line to the wall running parallel to the long direction of the planks to confirm a balanced layout.
- Installation must start from the center point. It is critical in laying the initial row correctly aligned with the working lines, as they are the foundation for the rest of the installation and crucial to the end-result.
- Periodically check the alignment during installation (refer to 'Installation Tolerances' on page 14).
- Additional working lines parallel to the starting working lines will assist to maintain the integrity of the pattern and avoid risk of running out of alignment and/or peaking or gaps at the joints.



Herringbone Plank Configuration (0.25m x 1.00m)



Random Vertical Plank Configuration (0.25m x 1.00m)

# 2. Installation Method

## Full Stick-Down with Pressure Sensitive Adhesive

When installing EcoSoft® backed modular carpet we recommend using only the pressure sensitive adhesives listed in Appendix A, designed for installation over metal, wood and concrete subfloors. By using the recommended pressure sensitive adhesive and application method the installed product can be easily removed without affecting the subfloor condition upon end of life.

Before adhesive application, the floor surface must be clean, dry and free of dust. Old Carpet, underlay, loose laid vinyl, cushion back vinyl and any old adhesive contamination must be totally removed and the floor ground clean. Ensure that the floor is in the required condition as outlined on page 4 of this guideline.

In such cases that a tile(s) is/are removed with minimal force to access under floor or for interim maintenance, their backing structure will adjust from its original memory. Therefore before repositioning, the uplifted tile(s) should be reverse rolled [ ⌒ ] by hand and new adhesive should applied.

### 2.1: Dry Slab - Application Method:

i) Ensure porous floors are sealed with a recommended sealant and fully dry before commencing to apply the adhesive.

ii) Ensure to use a recommended adhesive type (refer Appendix A).

iii) The specified pressure sensitive adhesive should be applied to the substrate using a recommended V1 notched trowel (notches @1.6mm. deep x 1.6mm. wide). Check the trowel notch depth regularly and replace once worn down by more than 0.3mm. Do not apply using a roller.

iv) The adhesive is to be spread to all floor surface areas to be carpeted, including the peripheral areas adjacent to wall skirting (baseboard). Failure to apply adhesive thoroughly may result in smaller perimeter pieces constantly uplifting during regular vacuuming.

v) Allow the adhesive to partially dry (i.e.; wet to partial dry) without turning completely clear, then immediately install the Ecosoft® modular carpet tile from center point C. EcoSoft® Cushion Recycled Backing is breathable allowing for complete drying of the adhesive after the installation. This is important as it will avoid any moisture entrapment which could re-emulsify the adhesive and weaken the bond of the product to the subfloor.

vi) We recommend that the installed product is then rolled over within 60 minutes of placement using a 30 to 45kg carpet roller to ensure complete compression onto the adhesive coat.

vii) Wait at least 24 hours before using the area after completing the installation.

## 2.2: Wet (Green) Slab - Application Method: (Refer to Appendix B)

A Wet (or 'Green') slab is when the concrete sub-floor has a relative humidity (RH) up to 99% and dries progressively within 12 to 18 months. Relative Humidity in the substrate is measured by using in-situ probes, details available in ASTM F2170 Standard Test measure for determining the relative humidity in concrete floor slabs. If faced with time constraints, as EcoSoft® Cushion Recycled Backing is breathable allowing for complete drying of the adhesive after the installation, Ecosoft® modular carpet tile can be installed onto a wet substrate. All adhesives are to be used in strict accordance with the adhesive manufacturers recommendations for wet slab application.

i) Apply a complete covering of adhesive specifically formulated for a Wet (Green) slab application (Refer; Appendix A). EcoSoft® backing allows any residual moisture to release from the flooring and permeate (dry out) up through the breathable EcoSoft® backed module.

ii) Use a recommended V1 notched trowel (notches @1.6mm. deep x 1.6mm. wide). Check the trowel notch depth regularly and replace once worn down by more than 0.3mm. Do not apply using a roller.

iv) We recommend that the installed product is then rolled over within 60 minutes of placement using a 30 to 45kg carpet roller to ensure complete compression onto the adhesive coat.

v ) Wait at least 24 hours before using the area after completing the installation.

## 3. Tile Placement:

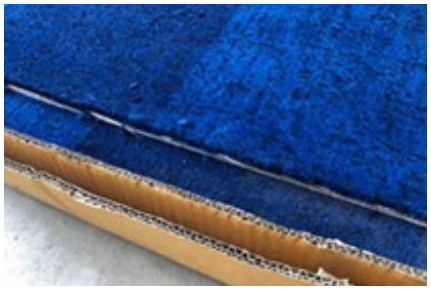
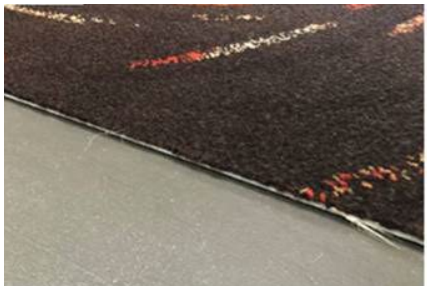
A pyramid method of installation is strongly recommended for the best result. Start installing the tiles butted together by hand from the center of the room and work in an outwards radius until reaching the perimeter.




Do not use force (i.e., a carpet knee kicker) to push the tiles together, as this will create unwanted tension in the EcoSoft® backed module and likely will result in joints 'peaking'. The modules are dimensionally stable and will abut flush by hand without adverse compression.



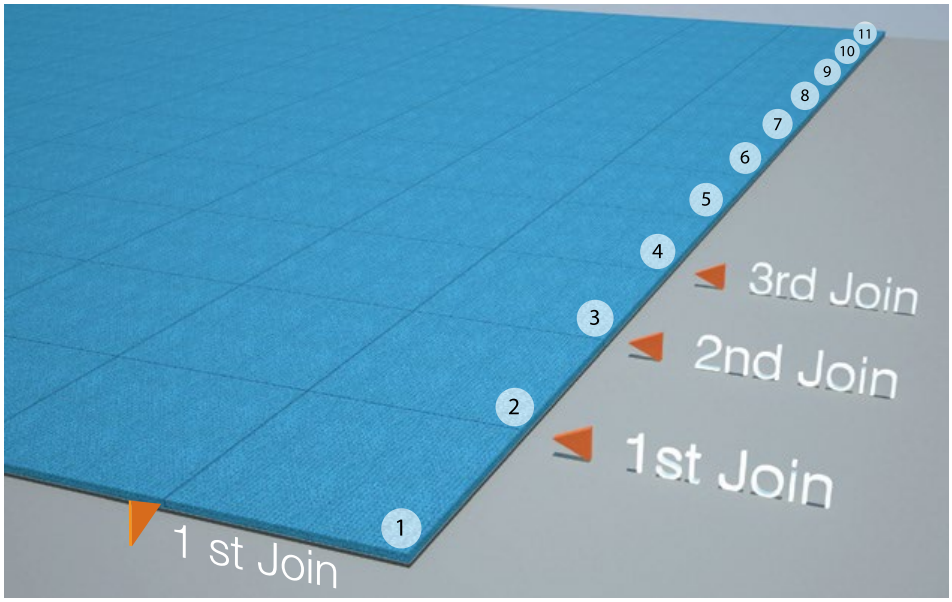

**Re: Royal Thai Brand Premise (EcoSoft) Back Axminster Tile:**
Upon unboxing the Woven Axminster Tile, there may be some remaining 'weft' tapes visibly protruding at the cut edges, specifically the north/south edges, which are a characteristic attributed to cut edges of woven backing.

Due to the rigors of transportation (tile edge rub on inner carton), some weft tapes may get disturbed and as a result protrude from the tile seam - specifically on the north south edges. Post unboxing of the tiles these weft tapes can be easily trimmed either prior to or post placement of the tile onto the prepared adhesive bed by careful trimming at the base of the pile using napping shears
**WEFT TAPES SHOULD NEVER BE REMOVED FORCEFULLY PULLED BY HAND**

# 4. Tolerance

Ecosoft® backed modular carpet tiles are engineered to be dimensionally stable in commercial flooring environments under normal conditions. As such they will not distort. However for 'best practice' we recommend that during installation, the installer should intermittently measure the tolerance of the installed area. Typically there should be a very small gap between the adjoining back of each module (approx. 0.5mm.), resulting from the surface pile interface, such that from above the joint is flush and overall appearance is continuous.




**Square tile 50x50cm:-**
When running a tape measure over 11 tiles (10 joints), the distance (using 500 mm. x 500 mm. tile) should be the 11 x 500 mm. (width of the tile) plus Approx. 10 x 0.5 mm. (gap) = 5,505 mm.

**Square tile 100x100cm: -**
For 1000 mm x 1000 mm tiles, the distance should be 11 x 1000 mm plus Approx.10 x 0.5 mm (gap) = 11,005 mm

**Plank tile 25x100cm:-**
By vertical brick installation, when running a tape measure over 11 tiles (10 joints). The distance should be the 11 x 250 mm. (width of the tile) plus approx. 10 x 0.5 mm. (gap) = 2,755 mm.

If the measurement is less than this, then the installation may be too tight, and peaking may occur at the joints. To correct this you will need to uplift and relay, so regular measurement during installation will avoid possible uplift/replacement time, cost, and delay.

Alternatively, if the measurement is greater than 5,505 mm. (or 2,755 mm. for plank), the installation may be too loose and gaps may appear which in turn could lead to ragged edges on individual tiles (yarn sprouting). To correct this, you will need to uplift (nap the ragged edges) and relay, so regular measurement during installation will avoid possible uplift / replacement time, cost, and delay.

# 5. Upon Completion

## 5.1: Temporary Protection:

Caution — if impervious protective covering materials are applied over the newly installed product, condensation may collect under the covering and cause serious damage to the textile floor covering and/or bond strength of the textile floor covering to the substrate. Protective coverings that are self-adhering may leave adhesive residue on the surface of the floor covering. If in doubt, please contact your local CI distributor or alternatively email: info@carpetsinter.com as to the suitability of protective covering materials.

## 5.2: Cleaning and Maintenance:

For Cleaning and Maintenance of CI Modular Carpet Tile, please download our guideline for more information.

http://www.carpetsinter.com/s/Maintenance-Guidelines-for-Commercial-Carpets-Inter.pdf

# APPENDIX

# APPENDIX A

The manufacturers listed below provide recommended pressure sensitive adhesives for installing EcoSoft® modular carpet tile. Please check with the respective product distributor for their specific product recommendation, application instruction and warranty. Other manufacturers may also have acceptable products.

| Adhesive | Company | Address | Telephone |
|---|---|---|---|
| Chapco Safe-Set 2 | H.B. Fuller Construction Products Inc. | 1105 South Frontenac Street Aurora, IL 60504-6451 U.S.A. | +1 800 832 9023 |
| Holdfast 777 | Holdfast Adhesives Australia Pty Ltd. | 90-92 Bay Street, Botany NSW 2019 Australia | +61 419 424 665<br>+61 448 012 076 |
| Mapei Ultra/Bond Eco 800 | Mapei Pty Ltd. | 1144 East Newport Center Drive, Deerfield Beach , Florida 33442 | +1 888 876 2734 |
| MJS Max-Bond 2009<br>Nexus 840<br>Nexus 848 (for Wet/Green Slabs) | Nexus Adhesives Pty Ltd. | 42 Healey Road, Dandenong Victoria 3175 Australia | +61 3 9706 4022 |
| Polymer P999<br>RLA GS300 Green Solutions<br>Roberts R656<br>Roberts R640 | RLA Polymers Pty Ltd. | 215 Colchester Rd., Kilsyth, Victoria 3137 Australia | +61 3 9728 1644 |
| Parabond Signature Series 5080 | Royal Adhesives & Sealants | 863 SE Main Street, Simpsonville, SC 29681 U.S.A. | +1 800 763 7272 |
| Roberts 6300 | Q.E.P. Co., Inc. | 1001 Broken Sound Pkwy, NW, Suite A, Boca Raton, FL 33487 U.S.A | +1 866 435 8665 |

Carpets Inter takes no responsibility or any liability for any adhesive products, and has no third party interest in any adhesive product.

# APPENDIX B

## Web Slab Adhesive and Application

| Moisture Content (MVER Method) | "PH Level (Surface of Substrate)" | Application Method (Refer to CI Guideline) | Substrate Treatment | | Generic Adhesive (Refer to CI Guideline) |
|---|---|---|---|---|---|
| | | | Burnished | Other | |
| < 5 lbs./1000 ft2/ 24 hrs.for MVER or < 75% RH | Between 7 <9 | V-Notch Trowel | Not Required | Not Required | Pressure Sensitive |
| < 5 lbs./1000 ft2/ 24 hrs.for MVER or 75% to 89% RH | Between 7 <9 | V·Notch Trowel | Not Required | Not Required | Pressure Sensitive |
| < 8 lbs./1000 ft2/ 24 hrs.for MVER or 90% to 95% RH | Between 7 <9 | V-Notch Trowel | Not Required | Not Required | Pressure Sensitive |
| > 8 lbs./1000 ft2/ 24 hrs. for MVER or > 95% RH | Less than 11 | V-Notch Trowel | Not Required | Moisture Barrier Required | High moiseture resistance adhesive |
| Moisture condition other than above | pH Level other than above | Contact Carpets Inter for specific advice | Contact Carpets Inter for specific advice | Contact Carpets Inte for specific advice | Contact Carpets Inter for specific advice |

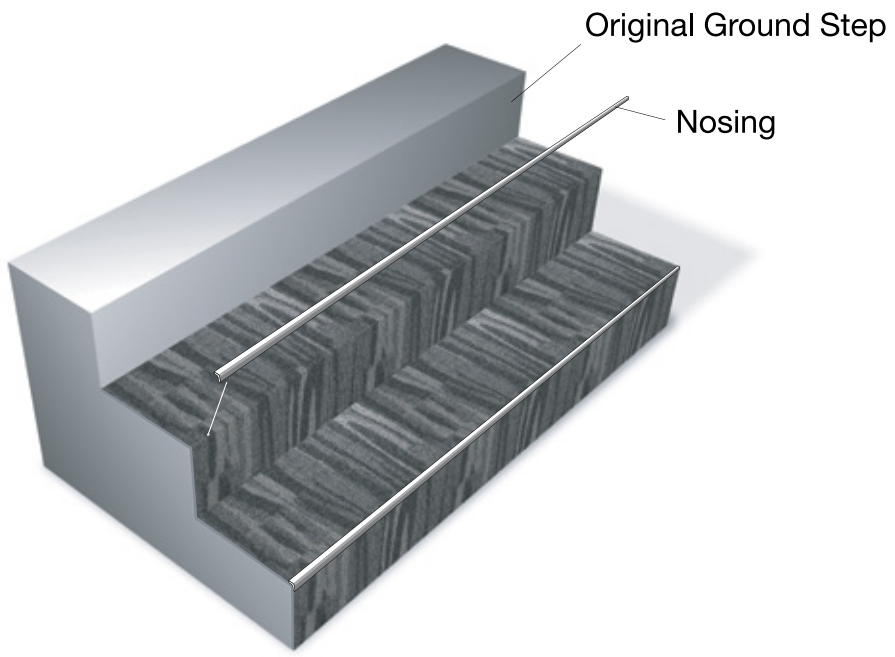
# APPENDIX C

## Stairs:

Ecosoft® Tiles can be installed onto stairs. It is highly recommended that individual pieces be cut and applied to the Step & Riser separately (refrain from bending at 90° right angle as the stiff tile backing will memory recall to its flat form and release).

The nosing (apex) of the step should have a step nosing profile affixed for both aesthetic and safety purposes. Exposed step edges should use a coordinating edge-profile. For step nosing and/or step lighting profiles please refer to your Carpets Inter rep for further guidance and recommendation.

The size and type of Nosing will depend on the style of stairway and the type of environment (refer to profile manufacturers product installation guide).




Carpets Inter takes no responsibility or any liability for any step nosing profile products, and has no third party interest in any manufacture/supplier step nosing profile product.

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