

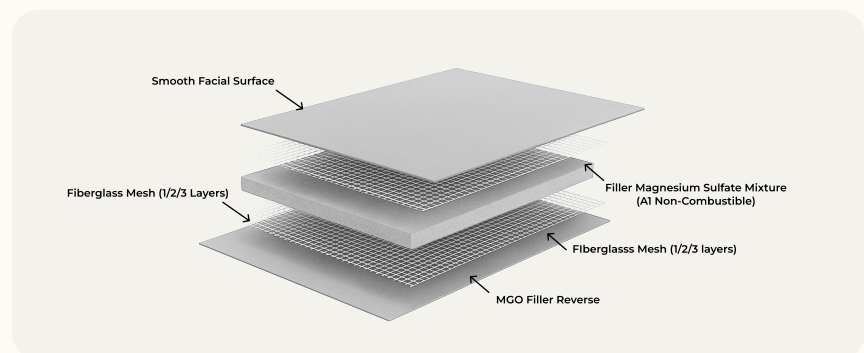
Product Overview

Straton Flooring 19mm board is a versatile, glass fibre reinforced recycled wood fibre and magnesium cement-based flooring system for internal and external applications. Straton Flooring 19mm board can be used in both dry and wet areas as a substrate for both carpet and tiles and is suitable for domestic and residential activities for self-contained dwellings.

Composition & Innovation

Fabricated from a combination of latest innovative and recycled materials, Straton Flooring 19mm board is an environmentally friendly, fireproof floorboard, which is also relatively lightweight but exceptionally strong as compared to other alternatives. board that It provides a solid substrate for most residential and some commercial applications.

Because of its modern characteristics, Straton Flooring 19mm board is an excellent alternative product to plywood/particleboard flooring and fibre cement flooring.



Product advantages

- Stronger than plywood/particleboard
- Relatively lighter than similar FC applications
- Contains no crystalline silica in its composition
- Corrosion resistant
- Uses conventional wood working tools to cut and shape

Why Straton Sub- Flooring?

Built with eco-friendly Magnesium Cement

Recyclable & low energy

Low maintenance

Asbestos Free & Non-Toxic

Termite resistant

Builder friendly

Tested to Australian Standards

Environment Friendly

Lightweight, durable and stronger alternate to PC boards

Installation requirements

It is essential that the installer, specifier, or party responsible for using Straton Flooring 19mm board undertakes the project with the applicable and intended use as detailed by Straton in this documentation.

-All external applications used with this substrate board must comply with the requirements of the Building Code of Australia (BCA) and all other relevant standards and regulations.

Applications

-Flooring and Decking (Suitable for internal dry areas and internal/external wet areas)

-Panel dimensions: 2400mm (L) x 600mm (W) x 19mm (T)

Features



FIREPROOF

Sustainable, non-flammable building material for commercial and residential construction. The fireproof capability can be reached 2-3 hours, and it's no combustion at 800°C and no flame out at 1200°C.



ENVIRONMENTAL EXPOSURE

Straton Board is freeze/thaw tested for 36 months. Build anytime of the year.



FUNGUS RESISTANT

ALUCOBEST antimicrobial characteristics make it resistant to mold, mildew, fungus and rot. Without chloride elements solve the problems of light corrosion and expansion.



BUILDER FRIENDLY

Stronger, more durable and lighter than other products, beautiful finishes, unmatched screw and nail holding capabilities, scores and cuts easily.



ENVIRONMENTAL-FRIENDLY

ALUCOBEST is the most eco-friendly of all building panels. It's made from natural compounds & safe for landfills or recycling as "nutritional waste."



HEALTH SAFE

Magnesium Sulfate Boards do not contain fly ash, formaldehyde, crystalline silica or toxins.

Technical specifications

Tested to Australian Standard AS/NZS2908.2

Compliance with AS2908.2

Straton Flooring 19mm board conform to the requirements of AS/NZS2908.2: Cellulose-Cement Products Part 2: Flat Sheets. The 19mm Straton Flooring board is classified Type A, Category 3, in accordance with AS2908.2 'Cellulose-Cement Products'.

Appearance

Straton Flooring 19mm board has a smooth glass fibre-reinforced face and comes with a rebated tongue and groove edge along the lengths (two sides only) of each board.

The manufacturing tolerances for Straton Flooring 19mm board are as follows:

- o Width (+/- 1.5mm)
- o Length (+/- 1.5mm)
- o Thickness (+/- 0.25mm)

Straton Flooring 19mm board is classified as non-combustible and has been tested in accordance with AS1530.1.

Properties

PROPERTY	TEST STANDARD	PERFORMANCE	REQUIREMENT
Fire Classification of construction products and building elements	EN 1350-1:2018	A1	No smoke and flaming droplets
Surface Burning Characteristics of Building Materials	ASTM E84	Pass	No flame spread and smoke developed
Combustibility of Materials	ASTM E136	Pass	Non-combustible
Non-combustibility	AS 1530.1	Pass	Non-combustible
Modulus of Rupture (Dry)	AS/NZS 2908.2	Average value: 14.7 MPa	As reported
Modulus of Rupture (Wet)		Average value: 11.7 MPa	As reported
Water Permeability		No formation of drops of water on underside of the sheet	Pass
Freeze / Thaw		No cracks, delamination, and other defects after 50 cycles of Freeze / Thaw	Pass
Heat / Rain Resistance		No visible cracks, delamination or other defects in the sheets	Pass
Soak-dry		No visible cracks, delamination or other defects in the sheets	Pass
Apparent Density		1.16 g/cm ³	As reported
Direct Screw Withdrawal	ASTM D1037-12 (2020)	1456 N (Max load to withdraw the screw from the panel)	As reported
Nail-Head Pull-Through		Max load 1636 N	As reported
Falling Ball Impact		> 1800 mm no visible fractures on bottom face	As reported
Thermal Conductivity	ASTM C518-12	0.18 W/(m·K)	As reported
Thermal Resistance		0.069 m ² ·K/W	As reported

Table 1

Must be kept in a dry condition until finishes are applied including appropriate water proofing.

General specifications and handling

Product information

Straton Flooring 19mm board product is safe to handle and easy to use. The board contains no harmful crystalline silica, asbestos or formaldehyde in its composition. There are no special tools or precautions required, unlike fibre cement, Straton Flooring board can be cut and machined using common wood working tools.

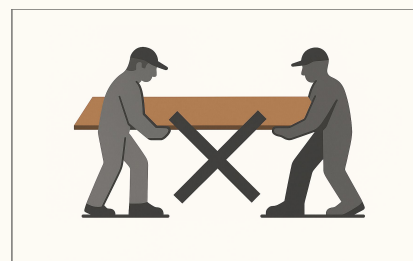
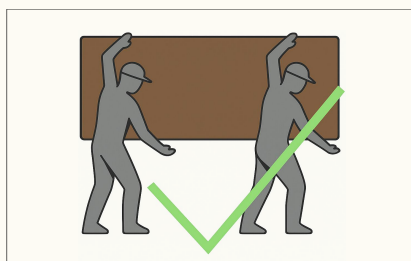
Health and safety practices

Straton Flooring 19mm board is manufactured from woven glass fibre, recycled wood fibres (50%), magnesium cement. As manufactured, the product will not release airborne dust, however during drilling and sanding operations, glass fibres and fine dust may be released. When using power saws in a confined space, dust extraction equipment is recommended to control dust levels. If power tools are used externally, wear an approved P1 or P2 dust mask, respiratory and safety glasses.

Handling and storage

Straton Flooring 19mm board must be stored in a dry and covered area. If stored externally, Straton MgS 19mm board must be stacked flat, and raised off the ground. The panels should be supported on level ground and must be protected from the weather. Care should be taken to avoid damage to the products edges and surfaces. If the product becomes wet, the product must be allowed to dry before fixing.

Straton endorses safe lifting practices. Boards should be handled by two people and carried on its edges to avoid damage to the product and most importantly to oneself. Boards should be lifted from the pallet by sliding sideways and carried on its side along edges. Individual boards should be stacked and handled carefully to avoid damage



Hole Forming

For smooth cut circular holes:

Mark the centre point of the hole on the sheet Pre-drill pilot outline Using a heavy-duty electric drill fitted with a hole saw, cut the hole to the applicable diameter.

Sheet cutting

On-site cutting can easily be achieved in a specially prepared area, when it is not possible to produce pre-cutting of panels off-site. It is recommended that a good quality wood working blade is employed to cut the panels. The saw is to be used in conjunction with a mountable guide with appropriate dust extraction attached for optimal results. Set the correct speed relative to the recommended saw size and ensure the blade is no greater than 5mm below the panel thickness to elevate chipping the board edge. Only cut one panel at a time.

General specifications and handling

Framing

Straton Flooring 19mm board requires framing members to have a minimum fixing face width of 45mm for durable timber and corrosion resistant light gauge steel frames. If the frame members do not meet the minimum width recommended, a double joist must be provided at the sheet joint. Framing should be true, plumb, flat and level prior to installing Straton Flooring 19mm board.

The floor joist spacing for 19mm thick Straton Flooring 19mm board is to be a maximum of 450mm centres. All sheet square edges (including movement joints) must be continuously supported by framing. Timber framing must be in accordance with AS 1684 Residential Timber-Framed Construction and framing manufacturers' specifications. Metal framing must be in accordance with AS 3623 Domestic Metal Framing construction and framing manufacturers' specifications.

Fixing

Preferred method of fixing: Screws

Screws for Timber Framing: Type 17, CSK countersunk head, stainless steel or Class 3 10g x 50mm

Screws for Steel Framing: Drill point, CSK countersunk head, Class 3 or Class 4 10-16 x 30mm

Nails for Timber Framing: 50mm machine driven D Head 2.87mm ϕ x 50mm

Waterproofing and finishes

Any third party, good quality waterproofing and tiling system may be used over Straton Flooring 19mm board. To maintain the third party warranty, ensure the waterproofing system is carefully prepared and installed in accordance with the manufacturer's specifications. It is recommended to make all Straton Flooring 19mm board not only water resistant but waterproofed, to be as water tight as possible (i.e. water penetrations be minimised) as it can lead to damage the sub frame, such a timber to dry rot.

Loading

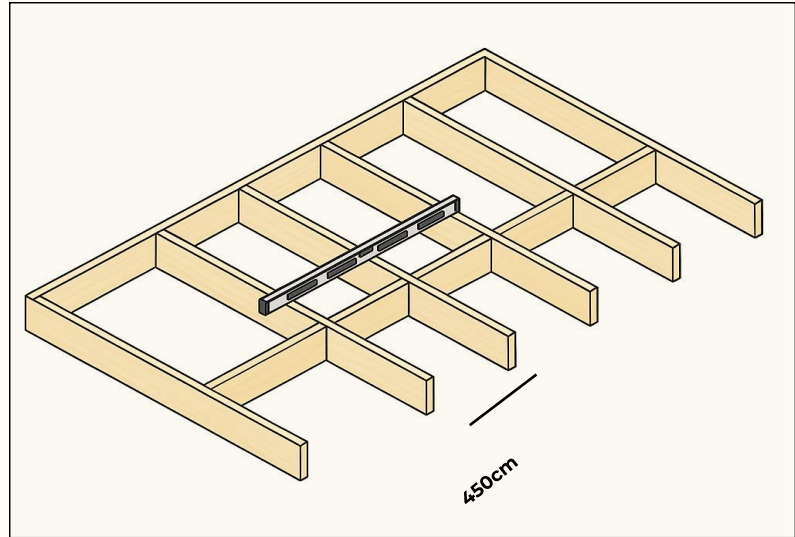
Straton Flooring 19mm board is structurally designed to withstand the domestic and residential activities for self-contained dwellings (Category A1) of Table 1 of AS/NZS 1170.1 - 'Structural design actions - Permanent, imposed and other actions' of 1.8kN concentrated load and a UDL (Uniformly Distributed Load) capacity of 2kPa at the floor joist spacing, outlined in Table 1.

Fall for external applications

All external flooring must have a fall to facilitate water drainage and to avoid water ponding on the floor surface. The flooring must have a minimum fall of 1 in 100 away from the building.

Step 01

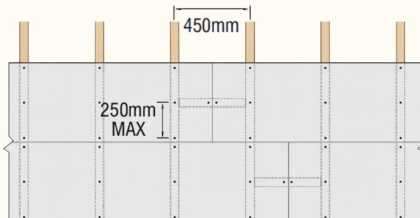
Measure floor joist centres at 450mm centres and ensure they are level for internal applications or have a minimum 1 in 100 fall for external applications (away from the building).



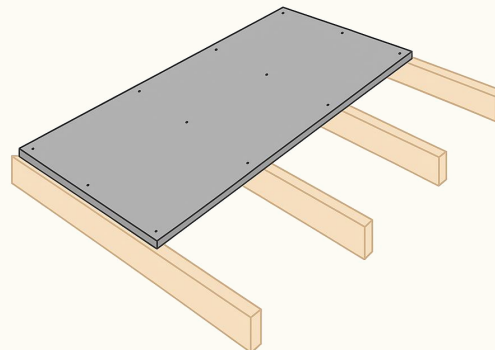
Step 02

- Sheets are fixed directly to the floor joists (max 450mm centres) with tongue and groove joints perpendicular to the joists in staggered or aligned pattern.
- For all wet areas, install sheets with shiny surface on the top side.
- Sheet ends must align with joists and may be staggered or aligned. Sheet ends must be aligned at control joints. Sheets may be laid in either direction relative to the slope. Leave a 10mm gap at wall junctions.

Use screws at 250mm centres or nails at 200mm centres. Refer to the detailed installation instructions.



Screw fix the first Straton sheet to the floor joist.



Orientation: Always use shiny side up for tiled areas.

Step 03

Apply any PU Construction Adhesive to all board edges prior to butt jointing the boards together. No predrilling of the sheets is required and screws are installed at a maximum of 250mm centres. Ensure all screw holes are filled with a suitable patch fitter [refer image 1.1]

Remove any excess joint sealant with a spatula and clean board surface with a damp cloth in preparation for tiling or other surface application. Apply waterproof membrane (if required) in preparation of the finishing layer (i.e.: tiles) according to manufacturer's specification [refer image 1.2]

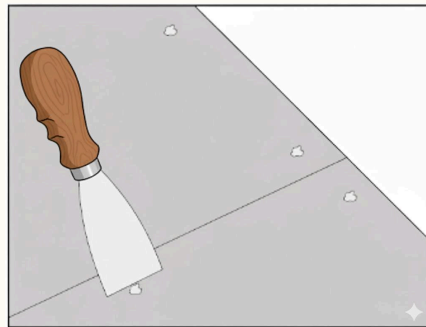


Image 1.1

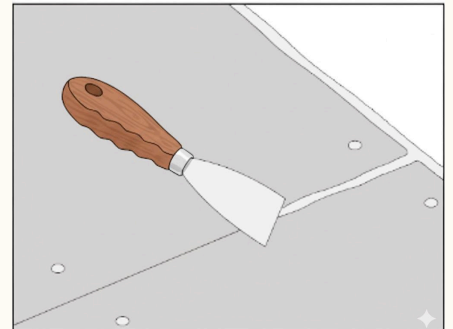


Image 1.2

Fastener edge distance screws [refer image 1.3]

Fastener edge distance nails [refer image 1.4]

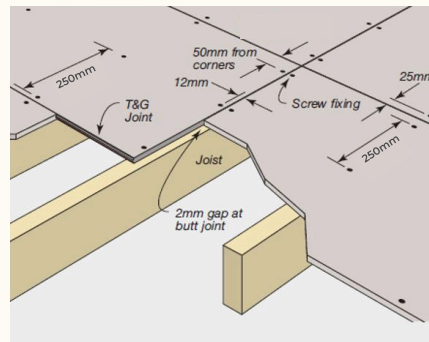


Image 1.3

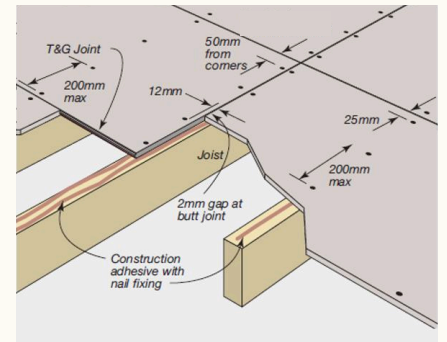
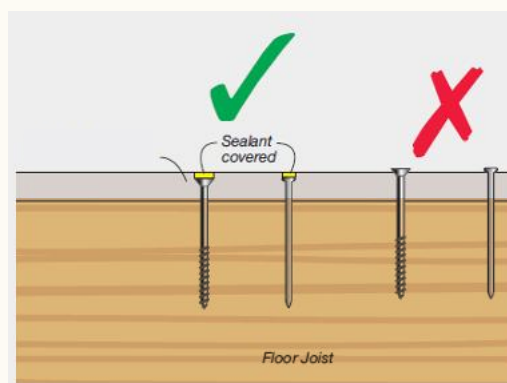


Image 1.4

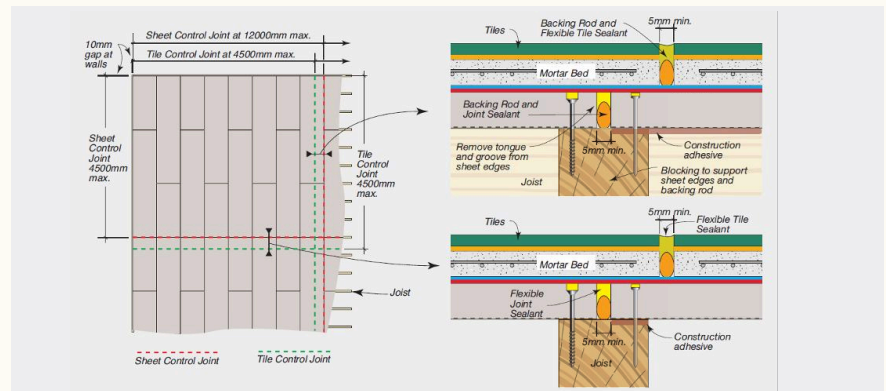
Fastener counter sinking detail figure



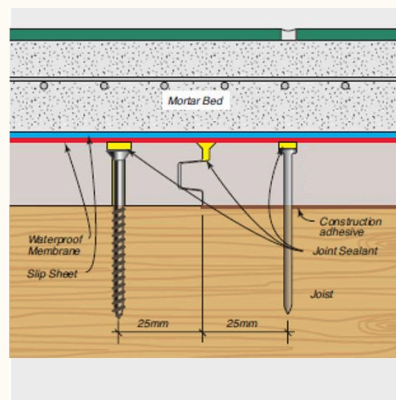
Step 04

Tiles may be fixed directly to the Straton Flooring board using a proprietary tile adhesive conforming to the AS 2358 'Adhesives for fixing ceramic tiles' and AS 3958.1 'Ceramic Tiles Part 1 Guide to the installation of ceramic tile'. Generally a two-part polymer modified cement is utilised for floor applications. Do not tile over control joints in the mortar bed.

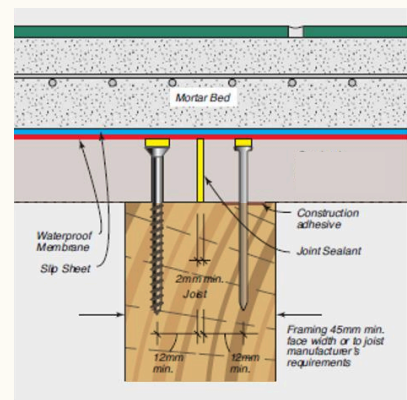
Ensure movement joints are created through both the Straton Flooring 19mm board panels and tiles, spaced at a maximum of 5 metres. The control joint is to be 5mm in width and filled with a polyurethane sealant over a foam backing rod. Provide movement joints where Straton Flooring 19mm board sheets adjoin another flooring substrate (i.e. timber flooring or a concrete slab).



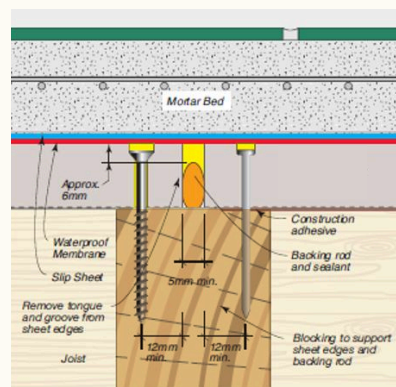
Sheet & Control Joint Layout – Sheets Staggered (Control joint locations of the sheeting and tile covering can be offset)



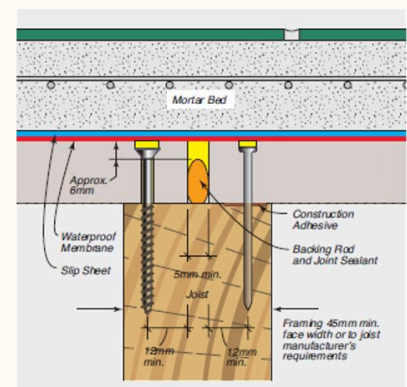
Typical T&G Joint Detail



Typical Butt Joint Detail



Control Joint at T&G with Mortar Bed & Tiles



Control Joint at T&G with Mortar Bed & Tiles

Quick Reference & Reminders

Critical Reminders

Most critical points to remember while installing Straton flooring.
Always use shiny side up for tiled areas.

Fixing & Fasteners

- **Preferred Method:** Use corrosion-resistant **screws** for both timber and light-gauge steel frames.
- **Alternate Option:** 50mm nails may be used where screws are not practical.
- Maintain **minimum edge and corner distances** as per installation guide.
- Fixings must be **flush with the sheet surface** — **do not** overdrive or countersink.
- **Typical fixing spacing: Screws Max. 250mm, Nails max 200mm.**
Pre-drilling may be required near sheet edges to prevent splitting.

Joints & Movement

- All **butt joints** must be fixed directly over framing members.
- Leave a **2mm gap** between sheets for **joint sealant or flexible filler**.
- Incorporate **control joints** every 12m maximum, or at:
 - Changes in direction
 - Wall junctions
 - Penetrations and structural breaks
- Ensure joints align with control or movement joints in the finish layer.

Moisture & Waterproofing

- **DO NOT WET** boards at any stage before or during installation.
- Apply a **proprietary waterproofing membrane system** where required.
- Waterproofing must be installed by a **licensed waterproofing contractor**, and a **warranty/guarantee** should be obtained.
- **All decks must have fall** (minimum 1:100) for effective drainage and to prevent ponding.
- While Straton sheets are **corrosion resistant**, ensure **all fixings and framing** are corrosion-protected and suitable for the environment (e.g., galvanised or stainless steel for external use).

Handling, Storage & Preparation

- Use appropriate **Personal Protective Equipment (PPE)**: gloves, eye protection, dust mask.
- Perform all **cutting in well-ventilated areas**, ideally outdoors.
 - Recommended tools: score-and-snap knife or saw with dust extraction.
- **Storage requirements:**
 - Stack panels **flat on a level surface**, supported at **max. 300 mm centres**.
 - Keep panels **dry and off the ground**.
 - Store **under cover** or indoors wherever possible.
 - Ensure sheets are **completely dry before installation**.
- If external storage is unavoidable, wrap securely and protect from rain, ground moisture, and condensation.

Final Checks Before Finishes

- Confirm all fixings are tight, flush, and corrosion-protected.
- Verify all joints are sealed and waterproofing is fully cured before applying finishes.
- Inspect for **damage, swelling, or moisture exposure**—replace affected boards.
- Ensure **surface is clean, level, and free from debris** before applying floor finishes.

Note:

Installation must follow this summary and the detailed Straton flooring Installation Manual. Failure to comply may void warranty and result in reduced performance of the flooring system.

Straton Flooring 19mm board warrants for a period of ten (10) years ("the warranty period") from the date of purchase that all Straton products ("the product") will be free from defects due to faulty manufacture or materials, and will be resistant to cracking, rotting, fire and damage to the extent set out in Straton's published literature current at the time of installation, and strictly subject to the conditions set out below.

Nothing in this document shall exclude or modify any legal rights of any person under the Trade Practices Act or otherwise which cannot be excluded or modified at law.

The Warranty is strictly subject to the following conditions:

1. The product, and any other products including fasteners and jointing systems, applied to or used in conjunction with the product must be used and installed strictly in accordance with the recommended installation methods at the time of installation.

2. Under no circumstances will Straton be liable for defects arising from:

- (a) A failure to use and/or install the product, or any products, strictly in accordance with the product manual.
- (b) Defective materials not supplied by Straton; or
- (c) Impact.

3. Straton will not be liable for breach of Warranty, and no breach of Warranty claim will be accepted, unless the Claimant makes a written claim and provides proof of purchase within 30 days of the alleged defect becoming apparent.

4. This Warranty is not transferable under any circumstances without the prior written consent of Straton..

5. A Claimant's sole remedy for breach of Warranty is (at Straton 's option) that Straton will either replace or repair the defect, supply replacement product, or pay for the cost of replacement or rectification of the affected product.

6. Under no circumstances shall Straton be liable for any consequential loss, property damage or personal injury, economic loss or loss of profits, arising in Contract or negligence or howsoever arising. Without limiting the foregoing, Straton will not be liable for any claims, damages or defects arising from or in any way attributable to poor or defective workmanship, defective materials or poor design or detailing, settlement or structural movement and/or movement of materials to which the product is attached, incorrect design of the structure, in the event of but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, normal wear and tear, or growth of any organism on any product surface.

7. The express warranties set out above are in lieu of all other representations, warranties or conditions, express or implied including but not limited to implied warranties or conditions of merchantable quality and fitness for a particular purpose, and those arising by statute or otherwise in law or from a course of dealing or use of trade and which are excluded to the fullest extent permitted by law.

