

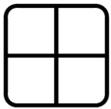
We have pleasure in enclosing your O&M Manual. This document contains important information to help ensure a successful installation, and provides guidance on how to maintain your product. This document should be passed directly to the end user so that the flooring can be correctly maintained in the future. If you require further information please contact Customer Services on T: +44 1622 719090 E: info@quadmod.com W: www.quadmod.com

Contents

For each separate product ordered you will receive a separate O&M Manual.

If the product you ordered is supplied in multiple formats the O&M Manual will contain installation guidelines for each format; please make sure you refer to the appropriate guidelines for the format you have ordered.

- Product Specification
- Installation Guide
- Maintenance Guide



DEFENDER CT

Product Specification

Issue 2020.v1



Quadrant

Product Specifications		
Format	Tiles (bitBAC)	
Description	Loop Pile Carpet with Dirt & Moisture Control	
Pile Fibre	100% Econyl Nylon with Monofilament Scraper	
Dye Method	Solution Dyed	
Method of Manufacture	Tufted	
Machine Gauge	1/10 th	
Pile Weight	800 g m ²	
Tuft Density	154,050 m ²	
Pile Height	3.0 mm	
Total Thickness	6.2 mm	
Total Weight	4,330 g m ²	
Backing	Modified Bitumen	
Product Size	500 mm x 500 mm	
Pack Size	20 Tiles 5 m ² per box	
Availability	Stocked	
Minimum Order Quantity	1 box 5 m ²	
Recommended Laying Pattern	Monolithic	
Installation Method	Loose-Lay on Tackifier	
Recommended Adhesives	F Ball & Co	F41
	Uzin	U2100 Universal Tackifier
Lead Time	Ex-Stock 2 Weeks Ex-Production 4-6 Weeks	

Performance Specifications		
Format	Tiles (bitBAC)	
Wear Rating	EN 1307	33 Heavy Commercial Use
Castor Chair Rating	EN 985	≥ 2.4r Continuous Use
Flammability Rating	EN 13501-1:2020	B _{FL} S1
Impact Sound Insulation	EN ISO 10140	ΔL _w 22 dB
Sound Absorption	EN ISO 11654	α _w 0.15
Thermal Resistance	EN 12667:2001	< 0.17 m ² kW Suitable for UFH
Electrostatic Properties	EN ISO 6356	≤ 2 kV Antistatic
Colourfastness to Light	ISO EN 105-B02	> 5 (on a scale of 1-8)
Formaldehyde Emissions	EN 717-1:2005	Class E1
VOC Emissions	BREEAM GN22 v2.3 2018	Meets Exemplary Criteria
EPD	ISO 14025 EN 15804	EPD-BAL-20170200-EN
LEED v.4 Compliance	Potential Credits	Materials & Resources
		Indoor Environmental Quality

This guide is for experienced installers. Adherence to these procedures should result in a quality installation. Quadrant will not be responsible for poor workmanship, problems created by improper site conditions or installation, improper subfloors, improper applications, adhesives, varnishes and the use of maintenance products not recommended, or detectable defects verifiable prior to installation. Quadrant will be responsible, within the scope of the product specifications and warranties, for defective materials, but that does not include materials installed with defects identified prior to installation. If these instructions do not cover a particular site condition or if you require further information please contact Customer Services.

Pre-Installation

Care should be taken when handling boxes to avoid damage. When stored, boxes should be stacked flat & square, with no overhang, and stacks should not be so high that they become unstable or place undue pressure on the bottom boxes. Boxes should never be stacked on their side. Protect the flooring from extreme temperatures.

Boxes are individually labelled with Quality, Colour & Batch Number. Batches should not be mixed in the same area unless authorised by the specifier.

The product must be conditioned in its packaging in the area in which it is to be laid for a minimum of 48 hours before installation. The ambient temperature within the area during conditioning and installation should not exceed 26°C or fall below 18°C and Relative Humidity should be maintained between 40% and 70%. These conditions must be maintained throughout the installation and for a minimum of 48 hours after installation.

Refer to the individual Product Specification to check whether the product you are installing is suitable for use over underfloor heating systems. If it is the system should be switched off at least 72 hours prior to installation, and remain switched off throughout, and for 72 hours after, the installation. Subsequently the surface temperature should be gradually increased to operating temperature and should never exceed 28°C.

Prior to beginning the installation all other trades should have their work completed and the area should be clear, clean and dust free.

Only remove outer packaging when ready to install the materials.

Inspect the materials in daylight for any visible faults or damage and report any visible faults to Quadrant immediately and do not install the affected materials.

Subfloor Preparation

Subfloors should be prepared in accordance with BS 5325 or corresponding national and European standards.

All traces of previous floorcoverings and adhesives must be completely removed to reveal the original subfloor. Only in limited cases where the existing flooring is solid and non-absorbent (for example ceramic tiles) can our flooring be installed over an existing floorcovering, subject to suitable preparation of the surface.

The subfloor must be level, clean, dry, smooth, crack-free and free from surface contaminants. The surface should be moisture-free. Subfloors that do not meet these criteria will require additional surface preparation to ensure a perfect installation.

Our modular products are suitable for installation directly onto raised access floors providing the panels are clean, smooth and dust free, and the panels are level and horizontally aligned. Any discrepancies in levels and any surface defects are likely to show through the flooring and prevent joints from settling properly.

The final appearance of your flooring depends on the quality of the subfloor.

Laying Pattern

For each product we recommend specific laying patterns. The laying pattern represents the direction and stagger of the tiles or planks when installed. The specifier should select the preferred option from those recommended by Quadrant and advise the installers accordingly. The recommended laying patterns for each product are detailed on the Product Specifications which can be viewed or downloaded from our website at www.quadmod.com.

Adhesives

We recommend modular products are installed loose-lay with tackifier adhesive. We specifically recommend F Ball & Co and Uzin adhesives, however other manufacturers' adhesives may be used providing they are of a similar specification and quality. Always follow the manufacturers recommended application methods when applying adhesives. Our recommended adhesives for bitBAC Tiles and Planks are:

- [F Ball & Co Styccobond F41](#)
- [Uzin U2100](#) | [Uzin Universal Tackifier](#)

Installation

bitBAC Tiles & Planks must be installed with great care, especially cut piles, to avoid trapping pile between the joints, which will result in visible seams. Once installed the modules should only be uplifted and re-laid by an experienced floorlayer.

Measure the area to find the best setting out point that would utilise a maximum size perimeter tile or plank. In some cases, due to doorways or partitions, the starting point is not the centre of the room. After selecting the starting point, snap chalk lines to bisect this point at right angles. In order to check the right angle mark a point exactly 3 metres from the starting point along one of the chalk lines and 4 metres on the bisecting line. The measurement between the two should be exactly 5 metres.

Adhesive should be applied strictly in accordance with the manufacturer's recommendations to the whole floor area to receive carpet tiles. It is advisable to restrict the application to an area that can be completed without long interruption. Particular care should be taken when applying adhesive to raised floor modules to avoid surplus adhesive collecting in the joints between the panels.

After the adhesive has dried begin the installation at the intersection of the chalk lines. Complete the installation one quarter area at a time laying the tiles firmly and accurately along the anchor lines. Remaining tiles in the quadrant should be installed using the stair step method.

A tight installation without compression is required, however care should be taken to avoid exerting excessive pressure when butting one tile against another. This can result in peaked or buckled joints. Additionally, when installing cut pile carpet tiles, brush back the pile at the edges and tip into place. This avoids trapping pile fibre between tiles which accentuates joints.

As each tile is installed ensure that the installation remains square and conforms to the chalk lines. Failure to maintain a square, accurately registered installation leads to stepped tile joints and gaps between tiles which results in visible seams.

Perimeter tiles should be cut from the back using a straight edge and a sharp blade. With the tile face side down, accurately measure and mark the tile on the backing. Using a carpet knife and straight edge, cut through the backing.

To avoid disruption do not walk on or move furniture onto the carpet tiles until the area is completely anchored. Protect all completed areas as necessary to avoid damaging the carpets.

With certain lightweight qualities it may be necessary to roll the entire installation using a vinyl floor roller to ensure the tiles are sufficiently bedded into the adhesive base.

Post-Installation

Once installed it is advised not to use the floor until the adhesive has fully cured. As a guide foot traffic and furniture movement should be avoided for 6 hours after completion. Do not drag heavy objects across your floor and always place some kind of protection between an object and the floor when performing movements.

Before using your flooring we recommend you vacuum the entire area thoroughly using a dual motor upright vacuum cleaner with brush and beater bar to remove all dust and dirt.

Protect your flooring immediately after installation to avoid unnecessary damage by other trades.

The Health and Safety Executive advises the thermal environment of a workplace where the activity is light and mainly sedentary, should conform to the following criteria, tending towards the lower limits: an operative temperature of 20°C to 24°C during winter and 23°C to 26°C during summer. Levels of relative humidity in the range of 40 to 70% are recommended. At higher temperatures, the relative humidity should be at the lower end of this range.

These guidelines are designed to provide you with the basic information needed to create an effective maintenance programme, however for detailed advice and implementation please consult our national aftercare service provider Traffik UK Ltd (www.traffik.uk.com T: 01985 840400 E: info@traffik.uk.com). Quadrant cannot accept responsibility for claims arising from product that has not been specified, installed or maintained in accordance with our guidelines. A consistent, proactive maintenance programme can significantly improve appearance retention throughout the life of the flooring and defer the need for premature replacement. Planned maintenance not only maximises your return on investment but also represents sound environmental stewardship as lifecycle analysis shows that the overall environmental footprint of flooring is reduced by increasing the amount of time a floorcovering remains on the floor.

Preventative Maintenance

Outside maintenance helps minimise the immediate sources of soil. The cleaner you keep the areas around the perimeter of your building, the less dirt that will be tracked inside.

Walk-off mats, grates and removable mats help collect soil before it can be tracked throughout the building. Be sure soil barriers are large enough to allow for at least 5 steps across. Vacuum daily, clean frequently and change often for best results.

Use strong plastic sheeting with taped joints to protect the flooring during any building or enabling works as damage caused by contamination by products such as paint and varnish may prove difficult to remove.

To avoid damaging the floorcovering, protect sharp edges of furniture and avoid dragging items across the flooring.

Manage your HVAC system to remove any airborne particles before they are re-circulated, regularly replace or clean filters on air-handling equipment. Airborne soil includes industrial wastes, auto emissions, tobacco smoke and pollen.

Maintain your vacuum cleaners to ensure effective regular cleaning of your facility your vacuum cleaners must retain extracted dry particulate within the vacuum cleaner and not push it back into the area as fine dust.

Managing Spills & Stains

Promptly remove spills & stains because although spills are inevitable, permanent stains do not have to be. Most stains can be avoided or removed by immediate, or at least same day, treatment. It is good practice to have spot and stain removal products and equipment on hand for immediate use and to follow the manufacturer's detailed instructions carefully.

Vacuuming

Heavy to moderate traffic areas such as entrances, receptions, lift lobbies, lift cars, busy corridors and walkways, funnel points, cafeterias, vending areas, should be vacuumed daily. Light traffic areas such as offices and conference rooms should be vacuumed at least two to three times per week.

Vacuum to remove dry soil using an upright vacuum. Dual motor vacuums are very effective for thoroughly cleaning all floors. They use two motors to clean; one motor drives a beater-brush bar that knocks dirt loose, while the second motor provides suction that pulls dirt into the vacuum bag.

Vacuums must be capable of removing the dry soil without producing unacceptable pile distortion and without distribution of the particulate or volatile organic chemicals into the air.

Consideration should be given to the use of vacuums equipped with High Efficiency Particulate Air Filters (HEPA). These filters are capable of filtering particles down to 0.3 microns, which includes bacteria and spores but not viruses. The HEPA-filtered vacuums have a very healthy impact upon indoor air quality.

Vacuum bags should be emptied frequently, and never allowed to become more than one-quarter full. As bags fill up, vacuum efficiency decreases. When vacuuming heavy traffic areas, bags should be checked and emptied often. Change filters and brushes before they become clogged or worn.

Cleaning & Planned Maintenance

Cleaning should be carried out by professionals with experience cleaning your particular type of flooring. There is a significant risk of permanently damaging flooring if cleaning is not carried out using the correct methods, equipment, chemicals and procedures. We strongly recommend you implement a planned maintenance programme using a reputable and experienced carpet cleaning expert. The goal of planned maintenance is to keep your floors clean and maintain a consistent appearance level at the lowest possible cost, without sacrificing safety. For detailed advice and quotations please consult our national aftercare service provider Traffik UK Ltd (www.traffik.uk.com T: 01985 840400 E: info@traffik.uk.com).

A planned maintenance programme will consider:

- Prompt removal of spills and stains
- A properly executed vacuuming plan
- An interim cleaning programme
- A supplementary deep cleaning programme

Interim cleaning of carpet involves frequent low-moisture cleaning and pile revival and the removal of oily soil and sticky residues that would otherwise hold soil in the carpet and lead to over-cleaning. The two most effective methods of interim cleaning are Encapsulation and Dry Compound Cleaning.

Within an effective and consistent planned maintenance programme, periodic deep cleaning should be performed regularly according to the level of traffic in a particular area. The most effective form of deep cleaning is Hot Water Extraction.