

millboard®

Live. Life. Outside.

ARCHITECTURAL GUIDE

Contents

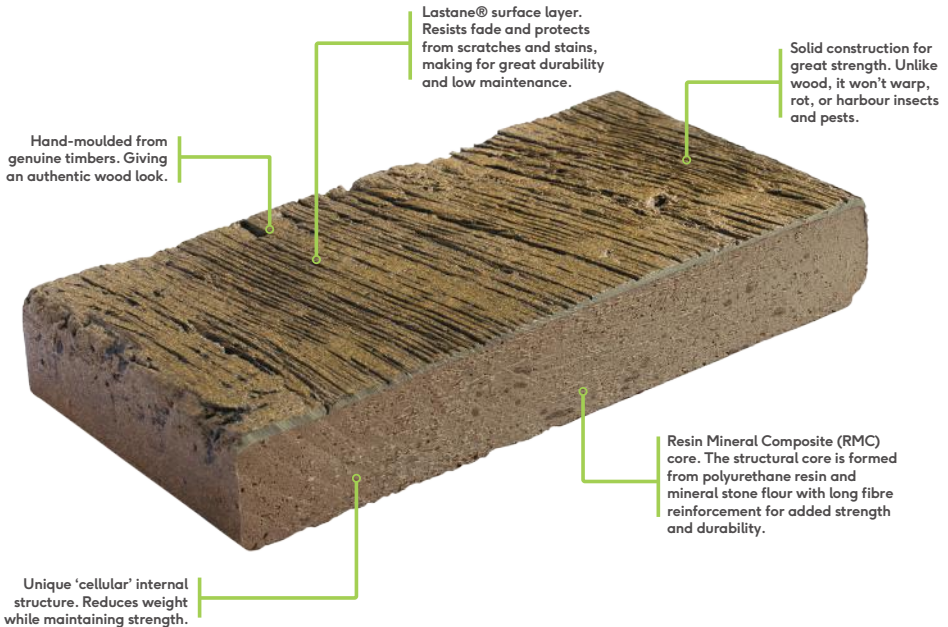
What is Millboard?	3
Specifying Millboard	4
Carbon footprint	5
Slip resistance	5
The Collection	6
Application details	8
Technical data	22
Plastic subframe test data	26
FAQs	28
Safety data	30

Great reasons to choose Millboard

	UV & weathering stability. Tested in all weathers at temperatures from -20° to 70°		Dimensional stability. Very minimal movement in the boards
	Stain resistant. Non-porous, so will not absorb dirt, drinks, food, fats etc.		Slip-resistant. High grip surface much safer than wood, especially in the wet
	Manufactured in the UK using UK non-wood fillers		Environmentally friendly. Base materials have low impact on global warming and ozone depletion
	Splinter-free. No real wood content, so no splinters		Low maintenance. No stains from food or drinks spills. No algal growth. No painting required
	Resistant to algae. Unlike wood, there is no protein content to assist algal growth		Does not warp or rot. No timber content that will rot or can be eaten by insects
			Low carbon footprint 1.31kg/m ²

WHAT IS MILLBOARD?

Millboard offers the best of both worlds in outdoor decking: a natural timber look with realistic wood grain, tone and texture, combined with outstanding durability and performance.



Millboard is designed to create outdoor spaces where people love to spend time. Spaces that add distinction to a whole property.

Millboard decking dramatically reduces the need for repair and replacement. Unlike wood, it won't rot, splinter, warp or twist, and needs no paints, varnishes, sealers and stains to maintain its good looks.

Millboard is hand-moulded from original timber, then hand-coloured by our craftsmen, so while every length of decking is consistent in quality, no two pieces are identical.

Millboard decking is a composite material produced from polyurethane resin and mineral stone flour, more commonly referred to as a Resin Mineral Composite (RMC). The RMC is reinforced with glass fibres for exceptional strength, and contains high-quality pigments and UV inhibitors for durability and lasting beauty.

The unique Lastane® surface resists stains, scratches and algal growth, and offers outstanding slip-resistance – even in the wet.

Millboard is the only decking material to earn the coveted British Board of Agrément accreditation.



Millboard in your designs

When you specify Millboard decking, your projects will look good now and for years to come. It is hand-moulded and hand-coloured to ensure every board is unique, just like wood. But unlike wood, Millboard decking's visual appeal stays far more constant, giving a beautiful natural look from day one which will be still be there decades later.

Your clients will appreciate how its resistance to stains, scratches, algae and weathering makes it easy to maintain: no painting or sealing – just the occasional brush with soapy water or a low-powered jet wash. And thanks to the same Lastane® coating that keeps Millboard looking good, it doesn't get slippery when it's wet.

Millboard has excellent environmental credentials, too, so is ideal for use as part of a sustainable design strategy.

Specify with confidence

In their purpose-built laboratory, our chemists have developed and tested all aspects of Millboard, from the strength and durability of its components to its slip resistance and ability to withstand whatever the weather throws at it. But you don't have to take our word for it: Millboard has also been tested by a range of independent testing houses, including the BRE, SATRA and EXOVA.

Our dedicated project team, including two City & Guilds qualified carpenters, are on hand to help you with specification detail.

BIM (Building Information Modelling) assets to model a project Decking Specification Documents, NBS Q55 Construction specifications that would be required for inclusion in NBS documents.

All available for free download on millboard.co.uk

Carbon footprint

Millboard is focused on continued sustainability and is the first premium outdoor flooring in the world to have an independently verified carbon footprint:

Lucideon testing to ISO 14064 has verified the embodied carbon of Millboard decking to be 1.31kg/CO₂e per m².



1.31kg/CO₂e per m²

Thanks to its superior durability, Millboard uses far fewer materials than would be needed to repair and replace wood decking over the equivalent period. It also eliminates the need for frequent application of paints, varnishes, sealers and stains.

Millboard is lightweight and manufactured in the UK, meaning lower transportation emissions compared to imported products. The Millboard Company Ltd is an ISO 14001 certified company, complying with international environmental management practices.

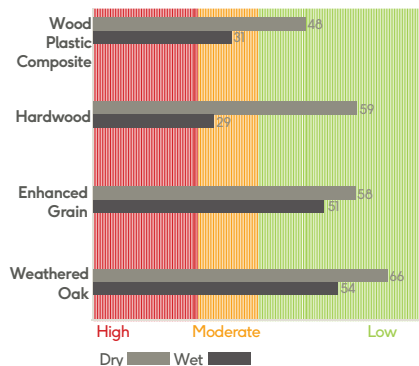
Slip resistance

The Lastane® coating gives Millboard decking far better anti-slip performance than natural wood. Slip resistance can be measured using Pendulum tests.

Pendulum results are referred to as Pendulum Test Values (PTV) or Slip Resistance Values (SRV).

The table shown relates to walking in a straight line on a level surface. Other activities/inclined surfaces produce different figures.

Pendulum Test Values



The Collection Board size: 176 x 3600 x 32mm

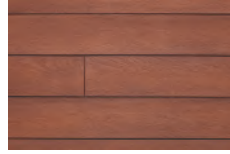
MILLBOARD ENHANCED GRAIN



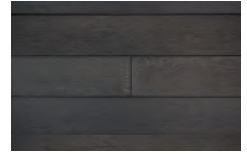
GOLDEN OAK - MDE176G



COPPERED OAK - MDE176C



JARRAH - MDE176J



BURNT CEDAR - MDE176R



LIMED OAK - MDE176L



SMOKED OAK - MDE176D



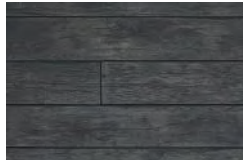
BRUSHED BASALT - MDE176B

The Collection Board size: 200 x 3600 x 32mm

MILLBOARD WEATHERED OAK



VINTAGE OAK - MDW200V



EMBERED - MDW200E



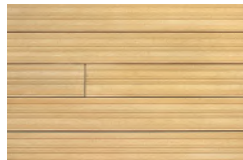
DRIFTWOOD - MDW200D

The Collection Board size: 200 x 3600 x 32mm

MILLBOARD LASTA GRIP



COPPERED OAK - MDL200C



GOLDEN OAK - MDL200G



These swatches are representative only; due to the replications of natural hardwood, the complete deck may have slight variations in colour tone and graining.

Essential Finishing Touches

MILLBOARD SQUARE EDGING



Square edging: 50 x 3200 x 33mm



JARRAH - MEUN32J



COPPERED OAK - MEUN32C



LIMED OAK - MEUN32L



GOLDEN OAK - MEUN32G



VINTAGE OAK - MEUN32V



SMOKED OAK/DRIFTWOOD - MEUN32D



EMBERED/BURNT CEDAR - MEUN32R



BRUSHED BASALT - MEUN32B

Essential Finishing Touches

MILLBOARD BULLNOSE EDGING



Bullnose board (MEBB): 150 x 3200 x 32mm

Bullnose edging flexible (MEBF): 50 x 2400 x 33mm



JARRAH - MEBB150J/MEBF50J



COPPERED OAK - MEBB150C/MEBF50C



LIMED OAK - MEBB150L/MEBF50L



GOLDEN OAK - MEBB150G/MEBF50G



VINTAGE OAK - MEBB150V/MEBF50V



SMOKED OAK/DRIFTWOOD - MEBB150D/MEBF50D



EMBERED/BURNT CEDAR - MEBB150R/MEBF50R



BRUSHED BASALT - MEBB150B/MEBF50B

Essential Finishing Touches

Board size: 146 x 3200 x 16mm

MILLBOARD FASCIA BOARD



JARRAH - MFN320J



EMBERED/BURNT CEDAR - MFN320R



DRIFTWOOD/SMOKED OAK - MFN320D



BRUSHED BASALT - MFN320B



LIMED OAK - MFN320L



VINTAGE OAK - MFN320V



GOLDEN OAK - MFN320G



COPPERED OAK - MFN320C

Working specification for all decking boards

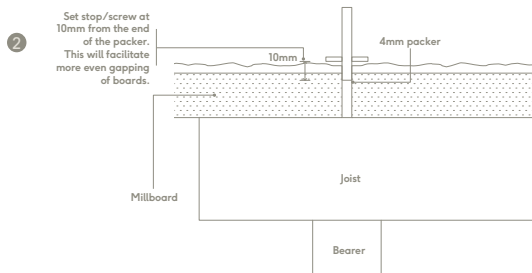
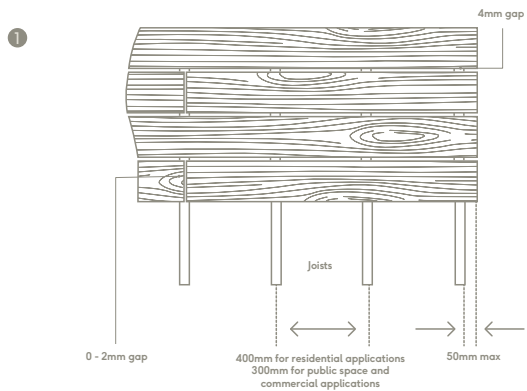
For all applications we recommend our boards are installed with a 4mm gap between the boards and a 2mm gap at butt ends, this is to facilitate drainage. The maximum unsupported overhang for the boards is 50mm, each cut board must be supported by a minimum of three joists. Each board must be screwed down with 2 x Durafix fixings where a board crosses a joist, 3 x Durafix fixings are recommended at the end of the boards.

Residential applications (1.5kN/m² uniform distributed load):

Joists must support boards at 400mm centres if boards are at 90° to joists, if boards are at 45° then joists need to be set at 300mm centres.

Commercial applications (4kN/m² uniform distributed load):

Joists must support boards at 300mm centres if boards are at 90° to joists, if boards are at 45° then joists need to be set at 240mm centres.



application
details

Working Specification for Edging and Fascia

Millboard edging trims must be supported along their full length with an edge joist to support them **4**.

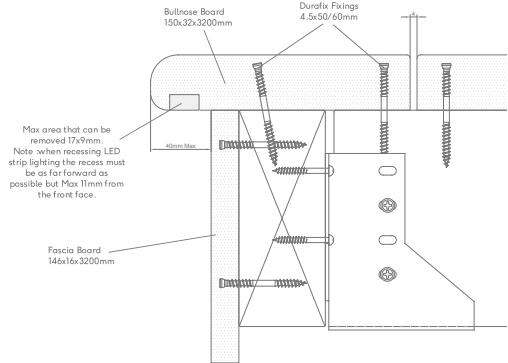
The standard Edging (50x33x3200mm) will bend to a radius of 3m. The Flexible Edging (50x33x2400mm) and fascia (146x16x3200mm) trim will bend to a radius of 1.2m.

Millboard edging trim must be fixed at 300mm intervals along its length while easing the profile around the bend. The edge trims come in 8 colours which can be used to match the decking boards or used as a contrast for design or to assist partially sighted persons, which may be a requirement on applications open to public usage.

For details on structures for curved deck sub frames please see figure **5** (Creating curved corners)

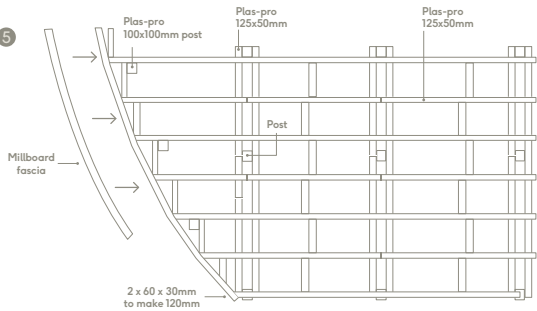


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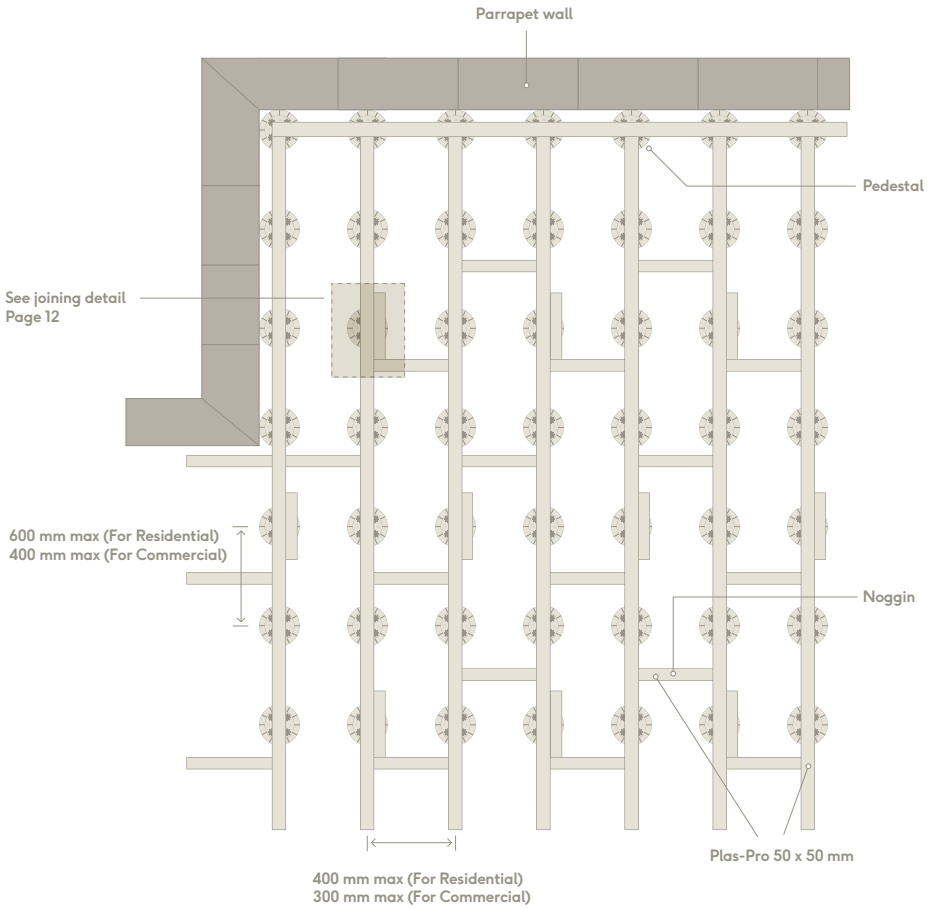
Creating a curved subframe

5



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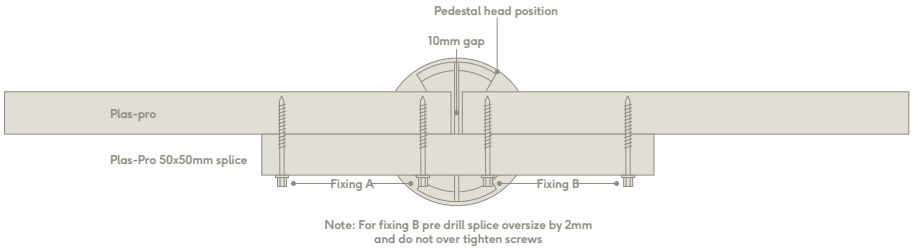
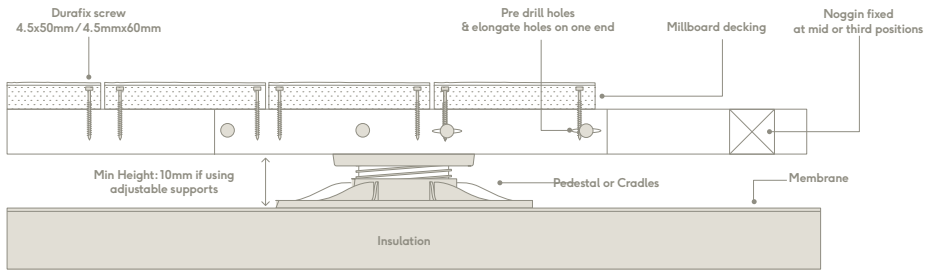
Roof terrace standard subframe laying pattern

application
details



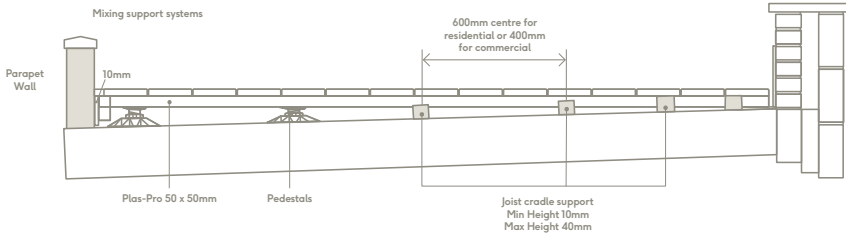


Joining roof subframe battens

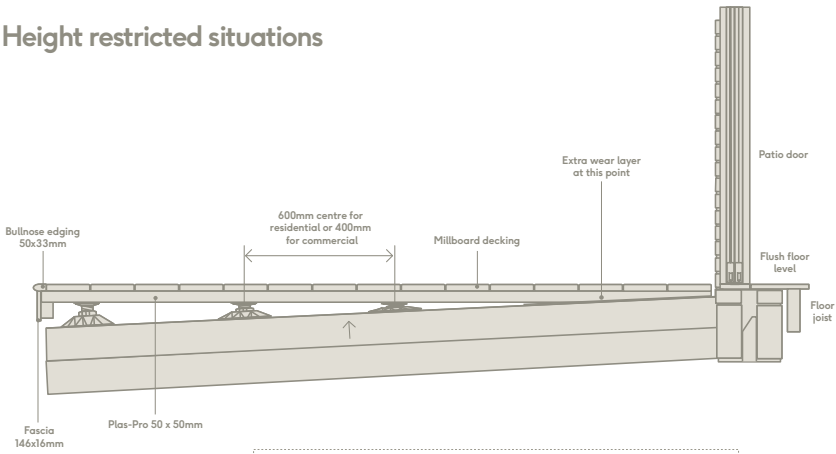


application
details

Mixed support systems

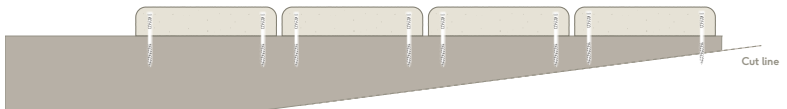


Height restricted situations



WARNING

Make sure screws that protrude through the Plas-Pro are cut off before laying the battens on to the roof membrane. We recommend a protective layer under the battens.



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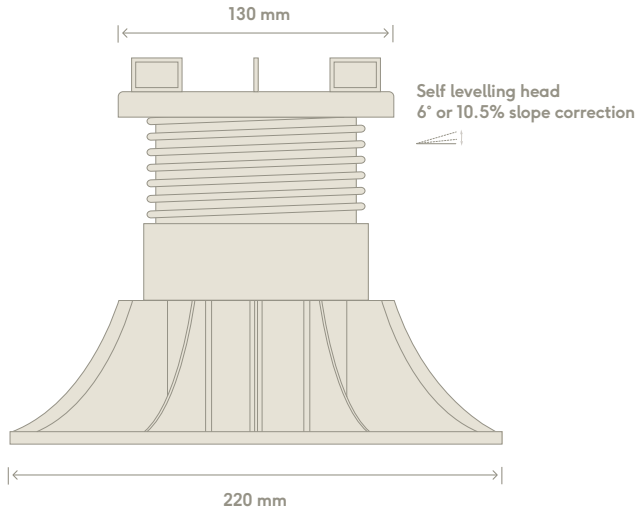
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Typical pedestal section

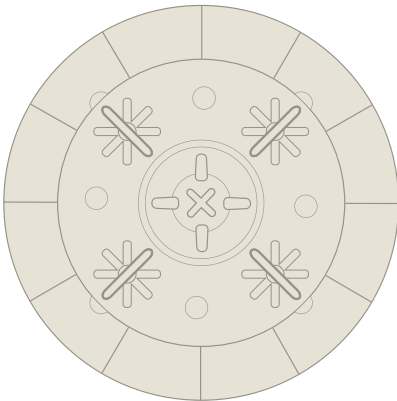
Side View

Sizes:

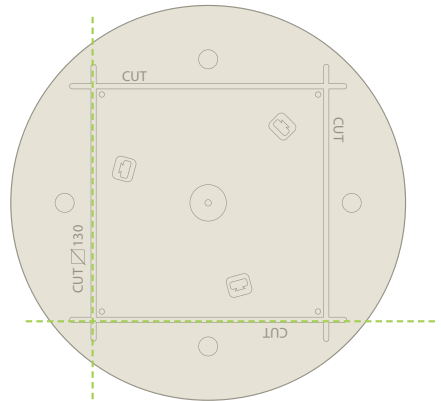
- 40 - 56 mm
- 50 - 70 mm
- 70 - 110 mm
- 110 - 160 mm
- 150 - 210 mm
- 100 mm extension collars



Top View



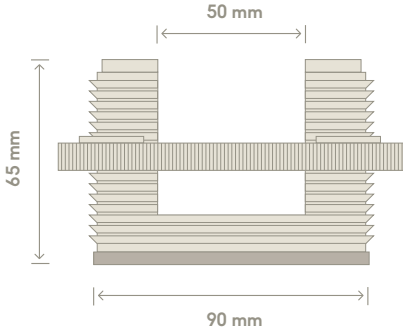
Bottom View - Dotted line shows cut marks



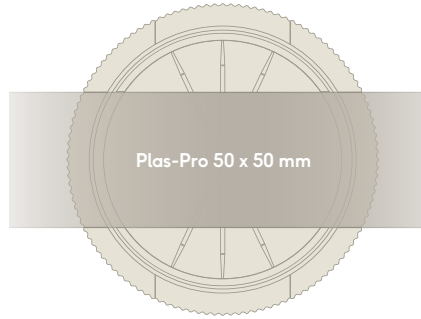
application
details

10-40mm joist cradle

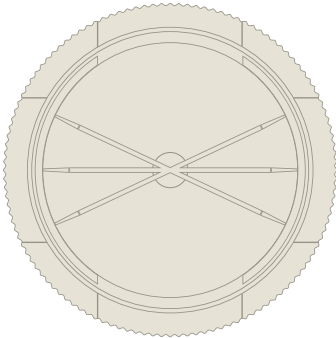
Side View



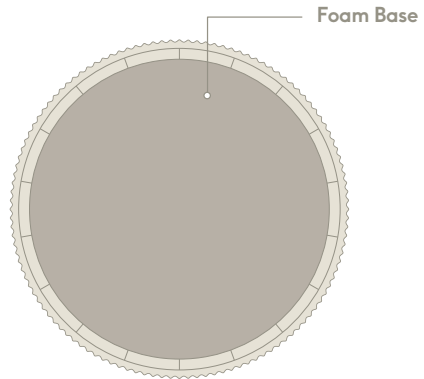
Top view with Plas-Pro



Top View



Bottom View



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Joist cradle data

Material	Recycled Nylon (glass filled)
Height Range	10-40mm
Compressive Strength	6Kn/m ²
Base Diameter	90mm
Bearer Capacity	45-50mm
Bearer/Cradle Connection	Loose Laid
Biological Chemical	Resistant to moulds, algae, alkali, bitumen
Working Temperature	-20°C - 120°C
Cradle Spacing	600mm centres along joist (residential) or 400mm centres along joist (commercial). Joists at 400mm centres (residential) or 300mm centres (commercial)

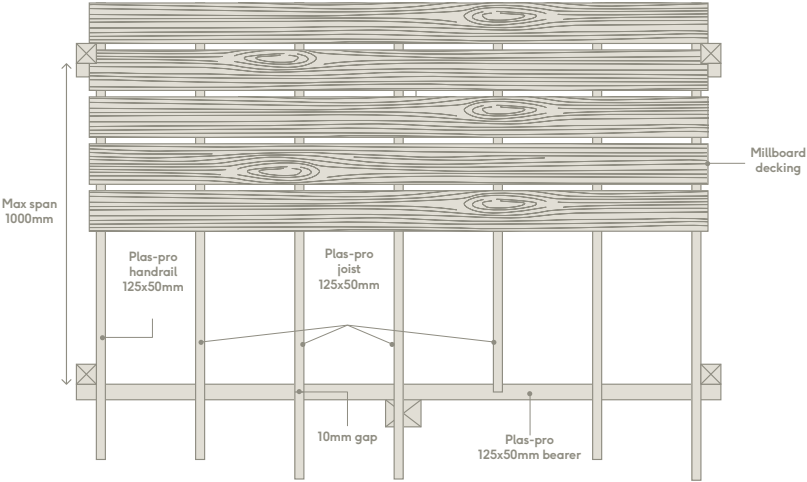
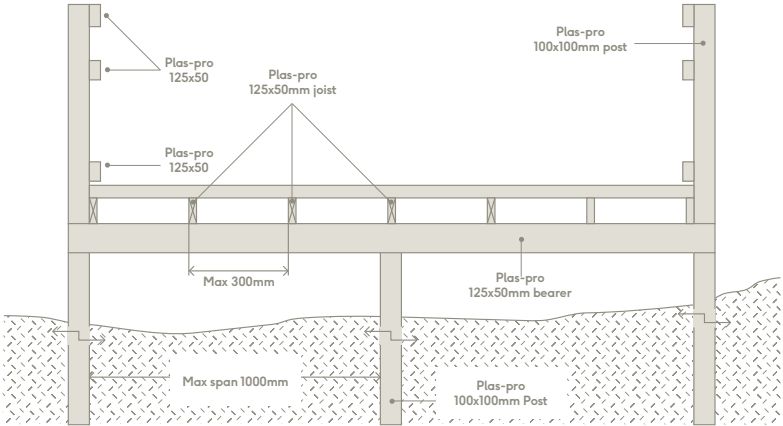
Fully tested to conform to the loading conditions for flooring as described in bs 5399

Pedestal technical data

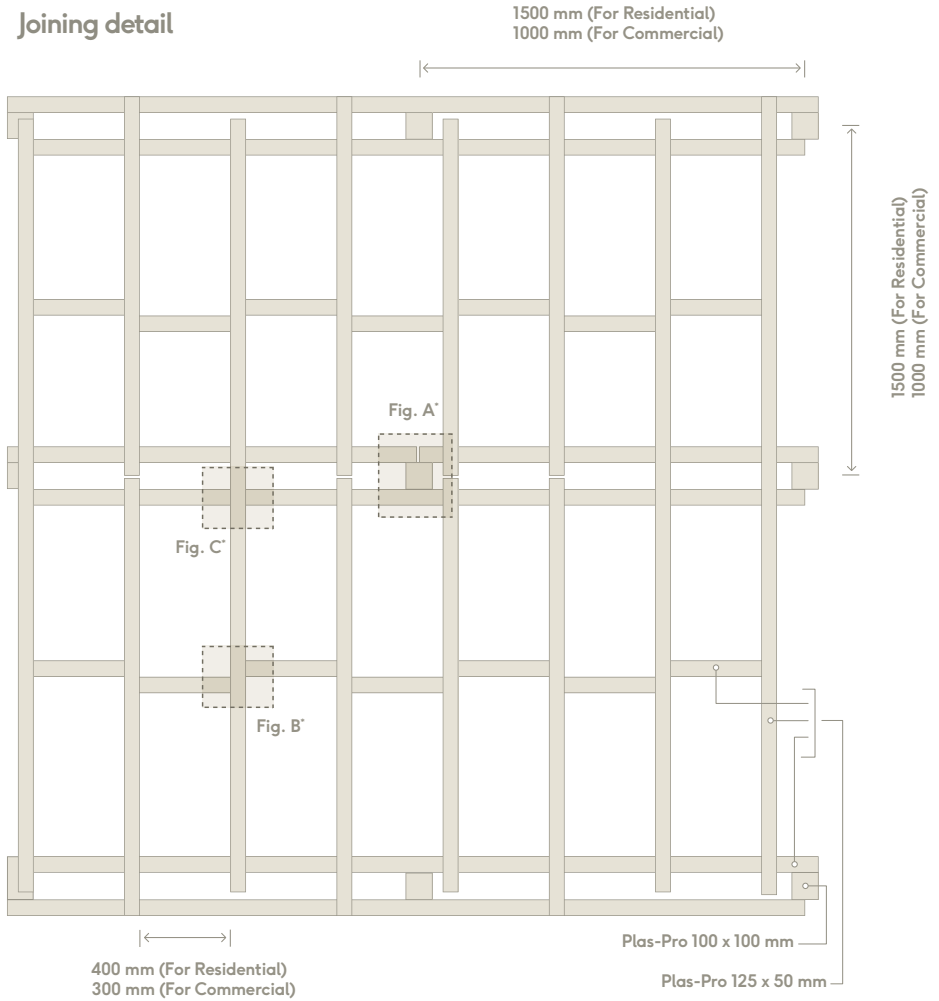
Material	PP Polypropylene (recyclable), UV resistant
Biological/Chemical	Resistant to moulds, algae, alkali, bitumen
Height Range	40mm - 1000mm
Compression	2100 Kg (certified compression data available on request)
Base Diameter	210mm / 220mm
Head Diameter	130mm
Spacer Tab Thickness	4mm
Working Temperature	-40°C - 120°C

application details

Boardwalk



Joining detail



application
details

Plas-Pro subframe construction:

100 x 100mm posts to be 1/3 in the ground 2/3 out of the ground with a minimum of 400mm in the ground

125 x 50mm bearers to be fixed to posts with 2 no. Durafix Hexhead screws with oversized pilot holes

125 x 50mm joists to be fixed to bearers at every intersection

125 x 50mm joists to have staggered joists across bearers with a 10mm gap between joist ends

Residential projects based on up to 1.5kN/m²

Commercial projects based on up to 4kN/m²

*Fig A, B and C detailed guides on pages 20 and 21

100 x 100 x 3000mm - Plas-pro post - P1010B300

125 x 50 x 3000mm - Plas-pro joist - P1205B300

50 x 50 x 2400mm - Plas-pro batten - P0505B240

60 x 30 x 2800mm - Plas-pro batten - P0603H280

Note: 60x30mm batten to be fully supported along its length, not to be used with cradles/pedestals

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Fig A. Fixing joists to the post:

Plas-Pro Subframe Screws, Hex drive 90x6.3mm
 Plas-Pro must always be pre drilled and also pilot holed

Step 1: Drill 15mm dia. hole at an angle 10mm deep (optional if head of fixing needs to be below the surface)

Step 2: Pilot hole 5mm dia. Drill 60mm deep

Step 3: Relief hole 8mm dia. Drill all the way through the joist

Step 4: Drive screw in

Visit website for up to date cad drawing www.millboard.co.uk/downloads

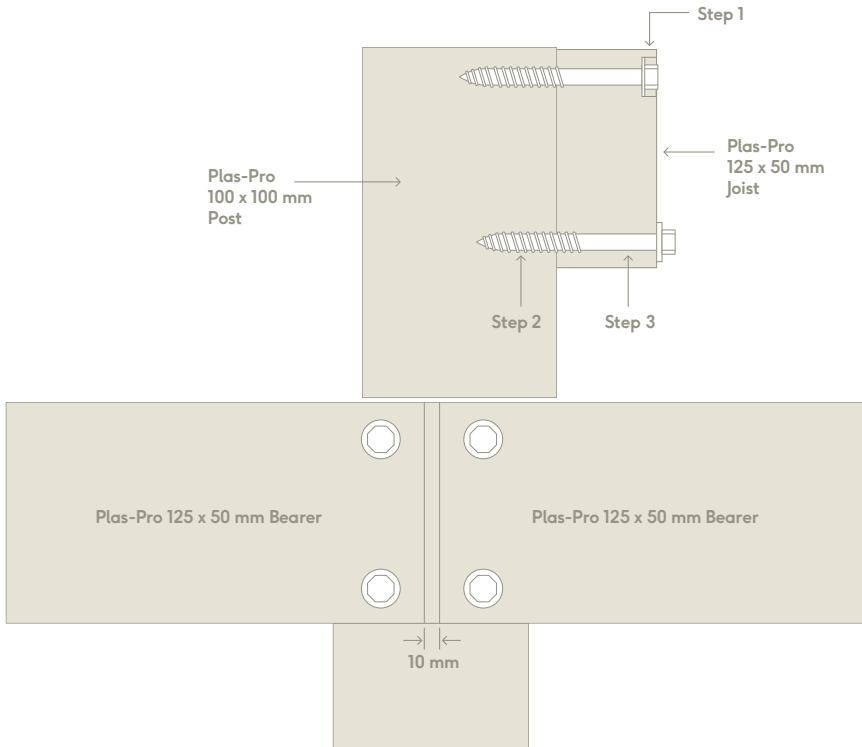
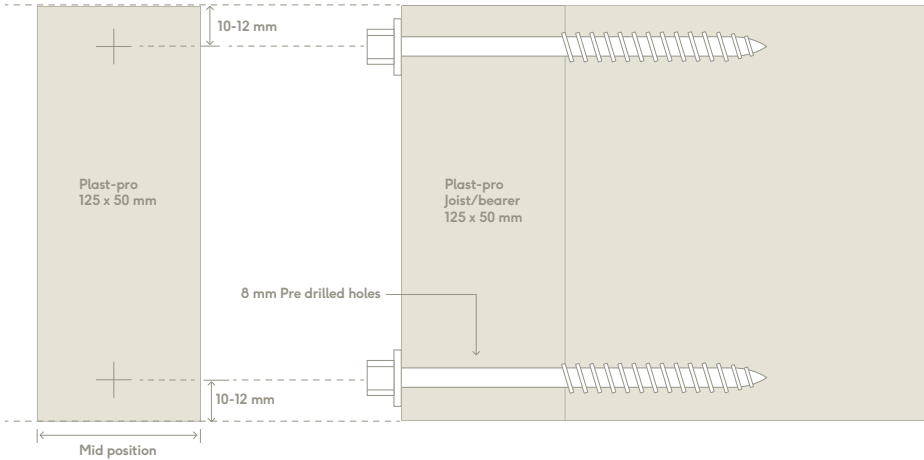
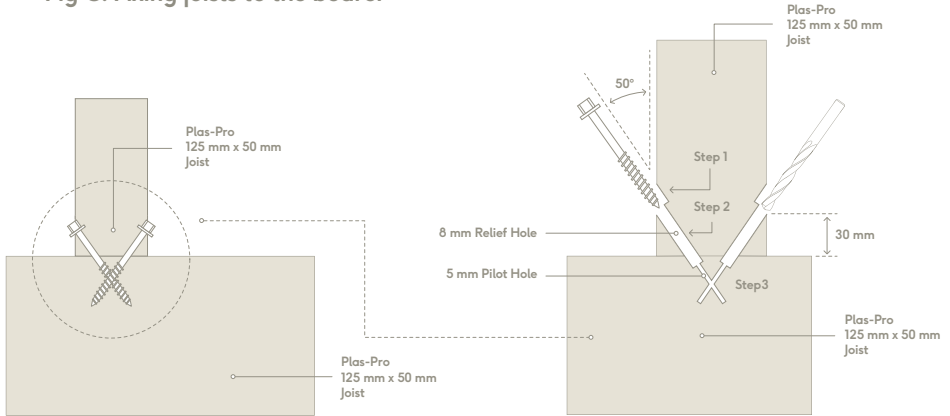


Fig B. Cross section view



NOTE: Screw fixing method using Durafix hex head screws is for braces or noggins. If a joist is to be fixed then the use of truss clips with screws is recommended

Fig C. Fixing joists to the bearer



Millboard technical data

Physical & mechanical properties	Test method	Unit	Value/results
Line Load Bearing Test - Peak Load (180mm width, 300mm span centres)	BS EN ISO 14125	kN	9.32
Line Load Bearing Test - Peak Load (200mm width, 300mm span centres)	BS EN ISO 14125	kN	8.34
Line Load Bearing Test - Peak Load (180mm width, 400mm span centres)	BS EN ISO 14125	kN	6.56
Line Load Bearing Test - Peak Load (200mm width, 400mm span centres)	BS EN ISO 14125	kN	6.64
Line Load Bearing Test - Peak Deflection (180mm width, 300mm span centres)	BS EN ISO 14125	mm	10.75
Line Load Bearing Test - Peak Deflection (200mm width, 300mm span centres)	BS EN ISO 14125	mm	9.39
Line Load Bearing Test - Peak Deflection (180mm width, 400mm span centres)	BS EN ISO 14125	mm	14.39
Line Load Bearing Test - Peak Deflection (200mm width, 400mm span centres)	BS EN ISO 14125	mm	12.36
Line Load Bearing Test - Peak Stress (180mm width, 300mm span centres)	BS EN ISO 14125	Mpa	22.75
Line Load Bearing Test - Peak Stress (180mm width, 300mm span centres)	BS EN ISO 14125	Mpa	18.32
Line Load Bearing Test - Peak Stress (180mm width, 400mm span centres)	BS EN ISO 14125	Mpa	21.36
Line Load Bearing Test - Peak Stress (200mm width, 400mm span centres)	BS EN ISO 14125	Mpa	19.46
Point Load Bearing Test - Peak Load (180mm width, 300mm span centres)	BS EN ISO 14125	kN	7.14
Point Load Bearing Test - Peak Load (200mm width, 300mm span centres)	BS EN ISO 14125	kN	5.78

Physical & mechanical properties	Test method	Unit	Value/results
Point Load Bearing Test - Peak Load (180mm width, 400mm span centres)	BS EN ISO 14125	kN	5.52
Point Load Bearing Test - Peak Load (200mm width, 400mm span centres)	BS EN ISO 14125	kN	5.65
Point Load Bearing Test - Peak Deflection (180mm width, 300mm span centres)	BS EN ISO 14125	mm	5.65
Point Load Bearing Test - Peak Deflection (200mm width, 300mm span centres)	BS EN ISO 14125	mm	11.4
Point Load Bearing Test - Peak Deflection (180mm width, 400mm span centres)	BS EN ISO 14125	mm	19.33
Point Load Bearing Test - Peak Deflection (200mm width, 400mm span centres)	BS EN ISO 14125	mm	15.37
Bending Strength (Textured surface tested)	BS EN 310 :1993	fm N/mm ²	13.3
Bending Strength (Textured surface tested) after UV aging	BS EN 310 :1993	fm N/mm ²	11.4
Modulus of Elasticity (Textured surface tested)	BS EN 310 :1993	Em N/mm ²	896
Modulus of Elasticity (Textured surface tested) after UV aging	BS EN 310 :1993	Em N/mm ²	758
Resistance To Static Indentation	MOAT 27:1983	mm	0.1
Soft Body Impact	MOAT 43 :1987	mm	0 (no visible damage)
Hard Body Impact	MOAT 43 :1987	mm	0 (no visible damage)
Impact Resistance After Aging	BS EN 13245-1 : 2010	-	No cracking or damage to top coat

Millboard technical data

Physical & mechanical properties	Test method	Unit	Value/results
Fixing Pull Out	BS EN 1382 : 1999	F Max (N)	1610.8
Pull Through Resistance of Fixings	BS EN 1383 : 1999	F Max (N)	1124.9
Density	BBA	kg·m ³	529.75
Reaction To Fire	EN 13501-1 : 2007 + A1 : 2009	-	BFL-s1
Slip Resistance - WET (Weathered Oak)	BS EN 14231	PTV's	54
Slip Resistance - DRY (Weathered Oak)	BS EN 14231	PTV's	66
Slip Resistance - WET (Enhanced Grain)	BS EN 14231	PTV's	51
Slip Resistance - DRY (Enhanced Grain)	BS EN 14231	PTV's	58
Moisture Content	BS EN 322 : 1993	(%)	0.6
Ease of Cleaning	BBA	Bleach, Detergent	Completely removed, with no damage or staining
Resistance to Staining	BS EN 438-2 : 2005	Acetone	No visible change
Resistance to Staining	BS EN 438-2 : 2005	Coffee	Slight change of colour, only visible at certain angles
Resistance to Staining	BS EN 438-2 : 2005	Sodium Hydroxide	No visible change
Resistance to Staining	BS EN 438-2 : 2005	Hydrogen Peroxide	No visible change

Physical & mechanical properties	Test method	Unit	Value/results
Resistance to Staining	BS EN 438-2 : 2005	Shoe Polish	No visible change
Determination of Swelling in Thickness	BS EN 317 : 1993	(Gt)	0.1%
Taber Abrasion	ISO 7784-2	mg	261
Tensile Strength Perpendicular to the Plane	BS EN 319 : 1993	N/mm ²	1.53
Tensile Strength Perpendicular to the Plane (After Boiling defined in BS EN 1087-1)	BS EN 319 : 1993	N/mm ²	1.31
Dimensional Stability	BS EN 318: 2002	65-85rh (mm/m)	0.47
Dimensional Stability	BS EN 318: 2002	65,30 mm/m	-0.30
Colour Measurement	BS 3900 Parts D8-D10 (ISO 7724 Parts 1-3)	D65	Less Red/ Yellower
Acoustic Testing	AS 1191.2002, AS/NZS ISO 717.1:2004, AS ISO 354 - 2006	Rw	51

Plastic subframe material test data

Technical data in an overview		125 X 50mm			
Testing:	DIN EN ISO Standard	Result			
3 point bend	178	Flexural stress	-5° C	Mpa	35.1
		Bending e-modulus			2,261
		Flexural stress	23° C		24.0
		Bending e-modulus			1,424
		Flexural stress	65° C		16.5
		Bending e-modulus			856
Tensile	527-2	Strength		Mpa	15.6
		Tensile e-modulus			1,490
		Elongation		%	1.7
Timed tensile	899-1	Tensile e-modulus	1 Hour	Mpa	1,043
		Tensile e-modulus	24 Hours		975
		Tensile e-modulus	100 Hours		852
Timed 3 point bend	899-2	Bending e-modulus	1 Hour	Mpa	1,159
		Bending e-modulus	24 Hours		943
		Bending e-modulus	100 Hours		816
Pressure characteristics	604	Compression strength	1% Stretch	Mpa	2.5
			2% Stretch		5.3
			10% Stretch		27.9
			Compressive stretch at yield		29.0
		Pressure e-modulus			815
Charpy test	179	Impact resistance		Kj/m ²	12
Impact shore hardness	868	Shore hardness		-	62
Density test	1183-1	Density		g/cm ³	1.0529
Water absorption	62	23° C, 50%r.L		%	<1
		23° C in water			<1
		100° C in water			<1
Resistance	60093 ⁴	Surface resistance		Ω	1.5 X 10 ¹⁴
		Specific surface resistance			1.5 X 10 ¹⁵
		Flow/contact resistance			>2.0 X 10 ¹⁴
		Specific flow/contact resistance			>8.4 X 10 ¹⁴
Ball striking test	2039-1	Ball striking hardness		N/mm ²	39.52
Thermal expansion		Coefficient of thermal expansion		1/°C	0.0001510648
Screw pull out force	-	Drilled material		N	8,230
	-	Non pre-drilled		N	8,140

Plastic subframe material test data

Technical data in an overview		50 X 50 and 100 x 100mm			
Testing:	DIN EN ISO Standard	Result			
3 point bend	178	Flexural stress	-5° C	Mpa	21.2
		Bending e-modulus			1,289
		Flexural stress	23° C		11.6
		Bending e-modulus			581
		Flexural stress	65° C		4.6
		Bending e-modulus			162
Tensile	527-2	Strength		Mpa	9.65
		Tensile e-modulus			659
		Elongation		%	13.8
Timed tensile	899-1	Tensile e-modulus	1 Hour	Mpa	316
		Tensile e-modulus	24 Hours		
		Tensile e-modulus	100 Hours		202
Timed 3 point bend	899-2	Bending e-modulus	1 Hour	Mpa	380
		Bending e-modulus	24 Hours		271
		Bending e-modulus	100 Hours		235
Pressure characteristics	604	Compression strength	1% Stretch	Mpa	1.8
			2% Stretch		3.3
			10% Stretch		13.3
			20%Stretch		18.2
		Pressure e-modulus			
Charpy test	179	Impact resistance		Kj/m ²	412
Impact shore hardness	868	Shore hardness		-	53
Density test	1183-1	Density		g/cm ³	1.0062
Water absorption	62	23° C, 50%r.L		%	<1
		23° C in water			<1
		100° C in water			<1
Resistance	60093 ⁴	Surface resistance		Ω	3.2 X 10 ¹³
		Specific surface resistance			3.2 X 10 ¹⁴
		Flow/contact resistance			9.0 X 10 ¹³
		Specific flow/contact resistance			4.5 X 10 ¹⁴
Ball striking test	2039-1	Ball striking hardness		N/mm ²	18.44
Thermal expansion		Coefficient of thermal expansion		1/°C	0.00018993
Screw pull out force	-	Drilled material		N	7,500
	-	Non pre-drilled		N	7,500

Frequently asked questions

What does Millboard look like?

Its appearance is a highly convincing timber decking board, with realistic wood grain, tone and texture. This look is achieved through a process of hand-moulding genuine timber boards, which are then hand-tinted, making each piece of Millboard unique.

What is it made from?

Millboard is a composite material produced from polyurethane resin and mineral stone flour, more commonly referred to as a resin mineral composite (RMC). The RMC is reinforced with glass fibres for exceptional strength, and contains high-quality pigments and UV inhibitors for durability and lasting beauty.

How does the price compare to softwood?

At installation, Millboard is more expensive than softwood decking, being similar in price to a high quality hardwood. However, due to its greater durability and reduced maintenance requirement, the life cycle cost of Millboard is considerably less than that of softwood decking. Millboard provides a consistent quality and appearance, whereas the density of softwood decking may vary, and it may be warped and contain knots.

The subframe material and installation labour costs of Millboard are comparable to traditional decking.

What material is used for the sub structure?

We supply our non-rotting 'Plas-pro' recycled plastic sub structure system, which is far superior to wood, especially in damp conditions or areas with low air circulation.

In free-draining, relatively dry conditions only, treated softwood can be used, but this will obviously decay over time, and not last as long as the Millboard it supports.

What sort of spans should I use between joists?

400mm centres for residential applications, 300mm centres for commercial and public realm applications. Millboard decking will cantilever over the end of a joist by a maximum of 50mm.

Can normal woodworking tools be used?

Absolutely! No specialist woodworking equipment is needed – it can even be sawn by hand. As with all products that create dust when worked, we recommend that dust masks are worn and dust bags used on saws.

Can the Millboard system be used on a flat roof?

Yes, Millboard is perfectly suited for use as roof decking. For a single ply membrane roof, use our adjustable self-levelling head pedestal systems to avoid any point loading and raise the joists above any standing water, so prolonging their life while also acting to reduce sound transfer. Our pedestal systems allow water to flow freely across and then off the roof membrane.

Can I use a standard board as an edging piece?

Yes you can, where the edge is merely aesthetic, such as a balcony edge, if this is your preferred finishing option. However, where the edge is likely to sustain impact, such as a step, we do not recommend using a standard board. Our edging boards have been specifically designed with

high impact in mind and as such have a thicker Lastane® surface to withstand the knocks and scrapes associated with step edges and other associated applications.

Can you use it for load bearing applications (i.e. structural)?

It is not recommended to use Millboard in structural applications. Millboard decking would need to be fixed to a structural frame, either made of timber or 'Plas-pro' recycled plastic.

What tolerances should be allowed?

There will always be a slight variance in the board's dimensions due to the fact that we mould from natural oak, and due to the pressure of the foam. Despite this we calibrate the boards to maintain as consistent a profile as possible. The tolerances to allow are:

Width: $\pm 3\text{mm}$. Length: $\pm 5\text{mm}$. Thickness: $\pm 2\text{mm}$

The dimensions of the Weathered Oak style may vary more between moulds due to the fact that they are moulded from timeworn oak with minimal changes to the dimensions.

Can I butt-joint board ends tight to the next decking board?

Yes you can, due to the low levels of thermal expansion and contraction. Butt joints should be positioned with a 2-3mm gap after two consecutive butt joints, as recommended in the installation guide.

Is there a hidden fixing system?

Yes, the 'Durafix' screws Millboard supplies are designed to sink into the surface of the boards. The surface material then covers back over leaving only a small, virtually indistinguishable hole.

Can you bend it?

Millboard decking boards won't bend across their width, but curves can be created by using the flexible edging profiles and fascias.

Will it fade over time?

Produced from UV stable materials and containing no natural wood fibres, Millboard is highly resistant to fading.

Can you paint/stain it?

No, it is not needed! Durable, through-body coloured and UV stable, Millboard is a low maintenance product that does not require a protective coating. Paints and stains will not properly adhere to the surface.

How easy is it to clean?

Once the decking has been installed, and after the initial post-installation clean down, there will be very little maintenance required. As the surface is non porous, dirt, food and drink spillages will not become absorbed, unlike timber. Any dirt and stains will be restricted to the surface, and the simplest way to clean these is to brush with soapy water or use a low-powered jet washer.

Does it become slippery when wet?

Due to Millboard's resistance to algae growth and textured 'Lastane' surface material, it is inherently low-slip, achieving values of 58 in the dry, 51 in the wet.

How will salt water effect Millboard decking?

Millboard is suitable for use in a marine environment. Salt water will not corrode Millboard decking.

How environmentally friendly are Millboard decking products?

Millboard decking boards are ideal for use as part of a sustainable design strategy. Their extended design life dramatically reduces the need for repair and replacement. Timber decking boards typically last 10-15 years, and would need to be replaced more than once over the life-span of a single Millboard decking board. In addition, Millboard eliminates the frequent application of paints, varnishes, sealers and stains.

Lightweight and manufactured in the UK, using Millboard also results in lower transportation emissions compared to imported products.

The embodied carbon of Millboard decking has been verified as 1.31kg/CO₂e per m².

Millboard is an ISO 14001 certified company, complying with international environmental management practices.

Fire safety

All types of Millboard composite decking has been tested by BBA, certificate 17/5409 for use as Decking Boards and certification and testing has been to this end.

Millboard has been tested to BS EN ISO 13501-1:2007+A1:2009 and has a Bfl-S1 reaction to fire classification (fire test for flooring). Millboard is not recommended for use as cladding on buildings 18m (6 storeys) or above, and for other cladding use, it should be subject to Building Regulations to check suitability, use and proximity.

For a full Fire Safety report go to www.millboard.co.uk/downloads



Material safety data

1. Product name

Millboard

2. Product type

Material decking

3. Composition/Information on ingredients

Rigid polyurethane foam PUR manufactured according to the recommendations of the system supplier:

The Millboard Company Ltd
UK Head Office
Castle Court
Bodmin Road
Coventry
CV2 5DB
Tel 02476 439943
Fax 02476 611668

After curing the foam matrix consists of polyurethane. There may be small amounts of substances that are not bound in to the matrix, such as filler, blowing agents, surfactants and catalysts, present in the matrix.

4. Hazards identification

Polyurethane in the intact state is non-hazardous.

5. First aid measures

Acute overexposure to PUR dusts may cause mechanical irritation of the eyes, skin and respiratory tract.

Skin: Wash contaminated areas with soap and water (remove and launder contaminated clothing). Seek medical attention if rashes develop.

Eyes: Wash eyes with bath solution or water for 15 minutes. Seek immediate medical attention.

Ingestion: The consequences of ingestion by man are unknown. Empty the stomach by gastric suction.

Inhalation: Acute over-exposure to PUR dusts may cause mechanical irritation of the respiratory tract. Seek medical attention if adverse reaction occurs.

6. Fire-fighting measures

Water, foam, CO₂ or dry chemical extinguishing media are suitable. Always use the least amount of liquid in order to minimise run-off.

Combustion products: As well as carbon dioxide and oxides of nitrogen, small amounts of hydrogen cyanide may be formed.

Protection for fire-fighters: Self-contained breathing apparatus.

7. Accidental release measures

No hazard will result, but release is to be avoided.

8. Handling & storage

Wear gloves at all times. Some release agent may persist on the outside of the foam.

9. Exposure controls and personal protection

Never smoke or consume food without first thoroughly washing the hands.

Clothing: Overalls and other suitable clothing to prevent dermal contact.

Gloves: Rubber or butyl gloves if contact is prolonged. Other impermeable gloves are suitable for short-term use.

Eyes: Glasses or chemical safety glasses if dust is generated.

Respiration: Wear a dust mask if dusts are generated, ensure good natural ventilation.

10. Physical & chemical properties

Form: solid.

Colour: pigmented.

Odour: slight amine.

11. Stability & reactivity

PUR foam will not normally ignite without prolonged input of energy. It will not be immediately affected by strong acid or alkalis.

12. Toxicological information

Acute overexposure to PUR dusts may cause mechanical irritation of the eyes, skin and respiratory tract.

13. Ecological information

PUR foam degrades extremely slowly.

14. Disposal considerations

Most PUR foams are usually disposed of as landfill. Foam may also be sent for incineration. For further information contact your local authority.

15. Transport information

Transport is not regulated.

16. Regulatory information

Foam is not classified as hazardous.

17. Disclaimer

The information provided represents the current state of our knowledge and does not represent a guarantee of the properties of the foam which may be influenced by processing conditions.



IT'S MORE THAN JUST A BOARD.

Introducing Millboard's complete decking solution.

Our unique, hidden composite decking fixings make Millboard installation simple and preserve its unique difference to all conventional composite decking. The ideal companion for our all-weather flooring is Plas-Pro, a durable, hard-wearing and practical sub-frame material for spaces exposed to damp. Our adjustable pedestal supports are ideal for podium decks and terraces. Their smart design allows pipe work and services to be laid beneath Millboard composite decking, while also improving breathability and preventing rot.

Joist Cradles



Plas-Pro



Durafix® Stainless Steel fixing



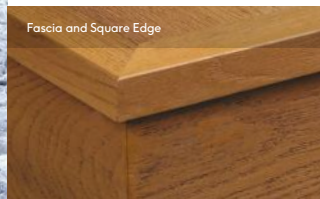
Pedestals



Fascia and Bullnose



Fascia and Square Edge



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