DuoSpan[™] 99mm Joist & DuoLift[™] Joist Supports



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Millboard Product Technical Sheet DuoSpan™ 99mm Joist & DuoLift™ Joist Supports



DuoSpan 99mm Joist

Material	Aluminium alloy 6063
Profile	99x68x3600mm
Weight	5.4kg
Temper	T66
Finish	Mill
Extrusion standard	EN 755-9
Max unsupported joist span (domestic applications)*	1800mm*
Max unsupported joist span (commercial applications)*	1350mm*
Point load deflection criteria	1/360
Thermal Expansion	0.0235 mm/m/°C

^{*} Recommended - Refer to loading tables for accurate results based on point loading and UDL criteria

DuoLift Joist Supports

Material	100% Recycled 30% Glass Filled Nylon6
DuoLift Joist Cradle, Self-Levelling Joint and Riser diameter	114mm
DuoLift Foot diameter	220mm
Height range	15-350mm*
Working temperature	-30°C to +120°C
Biological/Chemical	Resistant to Moulds, Algae, Alkali, Bitumen, UV
Flamability	UL94 Class HB
Loading Capacity	5kN
Factor of Safety	1.4-1.9

^{*}Refer to 'Installation Guide for DuoSpan Joists & DuoLift Joist Supports' for accurate height specifications

DuoSpan Joist Insert

Material	Recycled Plastic (Polypropylene & Polyethylene)
Profile	25x50x3000mm (approx. size)
Weight	3.7kg
Finish	Black
Thermal Expansion	0.1899 mm/m/°C
Screw Pull out	7.5kN

Plas-Pro Fascia Support

Material	Recycled Plastic (Polypropylene & Polyethylene)
Profile	100x25x3000mm
Weight	8kg
Finish	Black
Thermal Expansion	0.1511mm/m/°C
Screw Pull out	8.14kN

Millboard Deck Boards

	Test Method	Unit	Enhanced Grain result	Weathered Oak result
Material	-	-		ne with fibre and stone filler
Board profile	-	mm	176x32x3600	200x32x3600
Joist centres (Domestic Applications)	-	mm	400	400
Joist centres (Commercial Applications)	-	mm	300	300
Weight per sqm	-	KG/m²	16.7	16.4
Slip resistance (Dry)	BS EN 14231	PTV	49-60	54-79
Slip resistance (Wet)	BS EN 14231	PTV	36-42	41-56
Point Loading (Domestic application –400mm)	BS EN ISO 14125	kN	5.52	5.65
Point Loading (Commercial application – 300mm)	BS EN ISO 14125	kN	7.14	5.78
Flexural Stress (Domestic application – 400mm)	BS EN ISO 14125	MPa	21.36	19.46
Flexural Stress (Commercial application – 300mm)	BS EN ISO 14125	MPa	22.75	18.32
Fire Classification	EN 13501-1	-	Bfl	- s1

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What is it?

The DuoSpan 99mm Joists used with the DuoLift Joist Supports makes for a comprehensive subframe system that has been designed by engineers which enables construction of complex decks with ease, for applications on roof terraces and ground level decks.

Comprised of aluminium Joists, aluminium brackets and plastic joist inserts, the system combines lightweight ease of handling, almost perfect straightness and optimum stability once installed.

Where to use:

The DuoSpan 99mm Joists used with the DuoLift Joist Supports are suitable for roof terraces and ground-level terraces, the DuoLift Joist Supports require a substrate that is solid, stable and structural (not directly onto soil).

Loading Info:

Allowable Load (for **residential** applications), recommended centres: 400mm joist centres, DuoLift Joist Supports every 1800mm centres along joist (based on a UDL of up to 2.5kN/m² and a point load of 2.0kN as per Eurocode 1 Action on Structures BS EN 1991-1-1:2002 - please see DuoSpan loading tables for more information on this).

Allowable Load (for **commercial** applications), recommended centres: 300 mm joist centres, DuoLift Joist Supports every 1200 mm centres along joist (based on a UDL of up to 5kN/m^2 and a point load of 3.6 kN as per Eurocode 1 Action on Structures BS EN 1991-1-1:2002 - please see DuoSpan loading tables for more information on this).

Accessories information:

DuoSpan 99mm Joists fixed together using DuoSpan aluminium brackets and provided fixings, specialist designed fixings are cathodic barrier coated with a 1000-hour salt spray resistance for minimal galvanic corrosion.

DuoLift Acoustic Separation Pads are agglomerated cork and recycled rubber pads used to offer a layer of protection between joist supports and membranes, as well as providing an acoustic benefit. Full list of accessories are listed opposite.

DuoSpan profiles

Contents	Code
DuoSpan 99mm Joist	K9968J360

DuoSpan insert

Contents	Code
DuoSpan Joist Insert	K2554B240

DuoLift Joist Supports

Contents	Code
DuoLift Joist Cradle 15-60mm	PMCP010 (box of 10)
DuoLift Self-Levelling Joint 20mm	PMLP010 (box of 10)
DuoLift Riser 45mm	PMRP010 (box of 10)
DuoLift Foot 45mm	PMFPP010 (box of 10)
DuoLift Acoustic Separation Pad 3mm	PMAP010 (box of 10)

DuoSpan Brackets (incl. fixings)

Contents	Code
DuoSpan 99 90° Angle Bracket	K99RP010 (box of 10)
DuoSpan 99 Flexible Bracket	K99FP010 (box of 10)
DuoSpan 99 Straight Connector	K99LP010 (box of 10)

Accessories

Contents	Code
DuoSpan Bracket to Plas-Pro Screw (5x25mm PZ2)	FD25P100 (box of 100)
Plas-Pro to DuoSpan screw 5x50mm T25	FD50P100 (box of 100)
Durafix 4.5x45mm	FT45P250 (box of 250)
Durafix 4.5x35mm fascia screws	FT35P100 (box of 100)

Plas-Pro

Contents	Code
DuoSpan Joist Insert	P0210B300

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