DuoSpan[™] 99mm Joist & DuoSpan[™] 136mm Beam



The information in this document was correct at the time of going to print, due to our culture of continuous improvement we reserve the right to change the information at any time without prior notice should further tests reveal different results.



Millboard Product Technical Sheet DuoSpan™ 99mm Joist & DuoSpan™ 136mm Beam



DuoSpan 99mm Joist

	<u> </u>
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

DuoSpan 136mm Beam

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Material	Aluminium alloy 6063
Profile	136x63x3600mm
Weight	7.9kg
Temper	T66
Finish	Mill
Extrusion standard	EN 755-9
Max unsupported Beam span (domestic applications)*	1800mm*
Max unsupported Beam span (commercial applications)*	1350mm*
UDL 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

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	-sl

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What is it?

The DuoSpan 99mm Joists used with the DuoSpan 136mm Beams makes for a comprehensive subframe system that has been designed by engineers which enables construction of complex decks with ease, for applications on ground level decks and boardwalks.

Comprised of aluminium Joists, aluminium beams, 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 DuoSpan 136mm Beams and Plas-Pro Posts is for use in areas over soft substrates, areas where the Plas-Pro Posts can be concreted or driven into the ground.

Loading Info:

Allowable Load (for residential applications), recommended centres: $400 \, \text{mm}$ joist centres, Joists and Beams supported every $1800 \, \text{mm}$ centres (based on a UDL of up to $2.5 \, \text{kN/m}^2$ and a point load of $2.0 \, \text{kN}$ 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: 300mm joist centres, Joists and Beams supported every 1200mm centres (based on a UDL of up to $5kN/m^2$ and a point load of 3.6kN 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 & 136mm Beams 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. A full list of accessories are listed opposite.

DuoSpan profiles

Contents	Code
DuoSpan 99mm Joist	K9968J360
DuoSpan 136mm Beam	K1363B360

DuoSpan insert

Contents	Code
DuoSpan Joist Insert	K0205B300

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)
Hold-down Clip	K48CP030 (box of 30)

Plas-Pro Post

Contents	Code
Plas-Pro Post 100x100x3000mm	P1010B300

Plas-Pro

Contents	Code
Fascia Support	P0210B300

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)

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