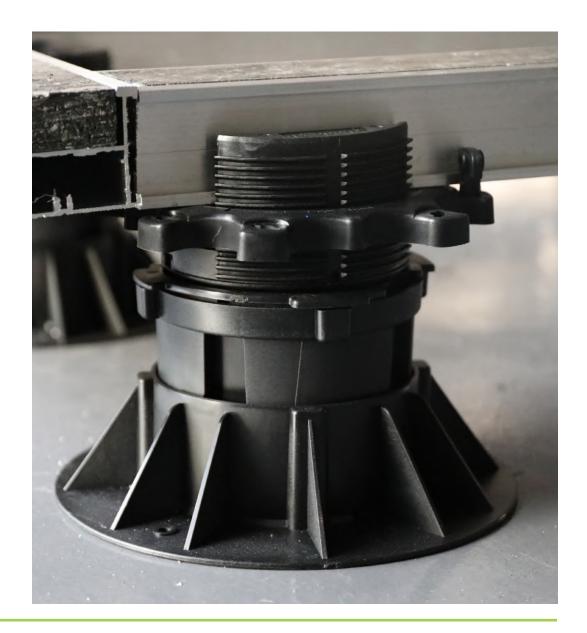
# DuoSpan<sup>™</sup> 51mm Joist & DuoLift<sup>™</sup> Joist Supports



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™ 51mm Joist & DuoLift™ Joist Supports



# DuoSpan 51mm Joist

Aluminium alloy 6063
51x68x3600mm
4.1kg
T66
Mill
EN 755-9
900mm*
510mm*
1/250
0.0235 mm/m/°C

<sup>\*</sup> 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		
Self-Levelling Joint and Riser diameter  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	Material	
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	Self-Levelling Joint and	114mm
Working temperature  -30°C to +120°C  Biological/Chemical  Resistant to Moulds, Algae, Alkali, Bitumen, UV  Flamability  UL94 Class HB  Loading Capacity  5kN	DuoLift Foot diameter	220mm
Biological/Chemical Resistant to Moulds, Algae, Alkali, Bitumen, UV  Flamability UL94 Class HB  Loading Capacity 5kN	Height range	15-350mm*
Flamability  Loading Capacity  Alkali, Bitumen, UV  Alkali, Bitumen, UV  SkN	Working temperature	-30°C to +120°C
Loading Capacity 5kN	Biological/Chemical	
	Flamability	UL94 Class HB
Factor of Safety 1.4-1.9	Loading Capacity	5kN
	Factor of Safety	1.4-1.9

<sup>\*</sup>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
<b>Joist centres</b> (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 51mm 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 51mm 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:  $400 \, \text{mm}$  joist centres, DuoLift Joist Supports every  $900 \, \text{mm}$  centres along joist (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: 300 mm joist centres, DuoLift Joist Supports every 600 mm centres along joist (based on a UDL of up to  $5 \text{kN/m}^2$  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 51mm 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 51mm Joist	K5168J360

## DuoSpan Insert

Contents	Code
DuoSpan Joist Insert	K0205B300

## **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 51 90° Angle Bracket	K51RP010 (box of 10)
DuoSpan 51 Flexible Bracket	K51FP010 (box of 10)
DuoSpan 51 Straight Connector	K51LP010 (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
Fascia Support	P0210B300

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