

# DATA SHEET FOR DECKING



Certified quality



Low weight



High strength



No corrosion



Chemical resistance



Electrical insulation



Easy to machine



Little or no maintenance



Sustainable manufacture



Thermal insulation

## Medium Duty Plank

CE marked



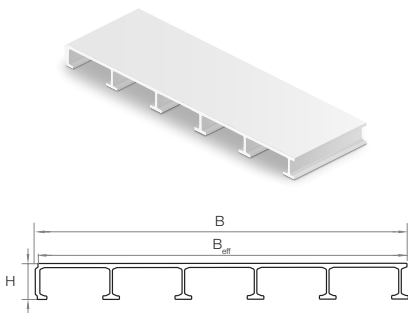
Fiberline Medium Duty Plank is designed with an excellent price-performance ratio. The plank weighs only 6.58 kg/m, making it easy to handle on-site. Like other products from Fiberline, plank MD is made of GFRP. This material has noteworthy properties such as a long, proven service life as well as high corrosion resistance and strength. Fiberline plank MD is also available with anti-skid surface - here.

### Application

Plank MD is typically used for applications like floor coverings at walkways where loads and spans are limited. Furthermore, the plank can easily be used as a facade cladding system in areas where high corrosion and chemical resistance is required.

### Quality and standards

Our profiles are certified according to a number of recognised standards, including CE, aBG and EN13706. This is your guarantee that you get a high, consistent quality every time you shop with us.



Fiberline Medium Duty Plank is also available with anti-skid surface in light grey.

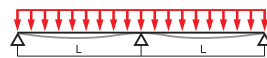
H	B	B <sub>eff</sub>	A	I <sub>x</sub>	Weight	E0o
mm	mm	mm	mm <sup>2</sup>	x 10 <sup>6</sup> mm <sup>4</sup>	g/m	x 10 <sup>3</sup> MPa
40	505	500	3.650	0,7	6.570	23



### One span, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	325.63*	276.03	325.63
0.50	75.79	50.53	162.81
0.75	24.57	16.38	83.43
1.00	10.72	7.15	46.93
1.25	5.58	3.72	30.03
1.50	3.25	2.17	20.86
1.75	2.06	1.37	15.32
2.00	1.39	0.92	11.73
2.25	0.98	0.65	9.27
2.50	0.71	0.47	7.51



### Two spans, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	260.5*	260.5*	260.50
0.50	130.25*	99.73	130.25
0.75	53.39	35.59	83.43
1.00	24.26	16.17	46.93
1.25	12.88	8.59	30.03
1.50	7.61	5.07	20.86
1.75	4.85	3.23	15.32
2.00	3.28	2.18	11.73
2.25	2.31	1.54	9.27
2.50	1.69	1.13	7.51

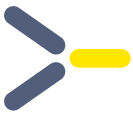


### Three spans, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

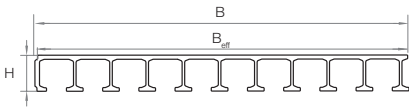
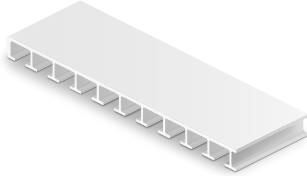
Spannweite L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	271.36*	271.36*	271.36
0.50	126.03	84.02	135.68
0.75	43.57	29.05	90.45
1.00	19.52	13.01	58.66
1.25	10.29	6.86	37.54
1.50	6.05	4.03	26.07
1.75	3.85	2.57	19.15
2.00	2.60	1.73	14.67
2.25	1.83	1.22	11.59
2.50	1.34	0.89	9.39

\* The load bearing capacity at failure determines the dimension.



## Heavy Duty Plank

CE marked



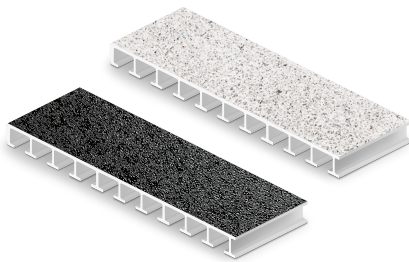
The strong Fiberline Heavy Duty Plank is suitable for applications where load requirements are 5 kN/m<sup>2</sup> and point loads are 10 kN, e.g. decks for bike paths and pedestrian bridges. Plank HD is corrosion-free and has a long service life, even under demanding and corrosive conditions, e.g. swimming pools, industry and cooling towers settings as well as offshore. Other advantages include great strength, low weight and electrical insulation. Plank HD is also available with anti-skid surface.

### Application

When it comes to potential applications for plank HD, only the imagination sets the limit. Pedestrian bridges, walkways, parking areas, stairs, cladding and covers are just some of the many possibilities.

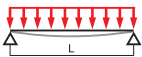
### Quality and standards

Our profiles are certified according to a number of recognised standards, including CE, aBG and EN13706. This is your guarantee that you get a high, consistent quality every time you shop with us.



H	B	B <sub>eff</sub>	A	I <sub>x</sub>	Weight	E0 <sub>o</sub>
mm	mm	mm	mm <sup>2</sup>	x 10 <sup>6</sup> mm <sup>4</sup>	g/m	x 10 <sup>3</sup> MPa
40	505	500	4.783	1,07	8.530	20,5

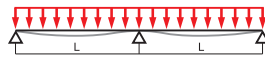
Fiberline Heavy Duty Plank is also available with anti-skid surface in light or dark grey.



### One span, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	545.9*	440.16	545.90
0.50	118.18	78.79	272.95
0.75	38.06	25.37	147.28
1.00	16.56	11.04	82.84
1.25	8.60	5.74	53.02
1.50	5.02	3.35	36.82
1.75	3.18	2.12	27.05
2.00	2.13	1.42	20.71
2.25	1.50	1.00	16.36
2.50	1.10	0.73	13.25



### Two spans, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	436.72*	436.72*	436.72
0.50	218.36*	157.48	218.36
0.75	83.31	55.54	145.57
1.00	37.65	25.10	82.84
1.25	19.94	13.29	53.02
1.50	11.76	7.84	36.82
1.75	7.49	4.99	27.05
2.00	5.05	3.37	20.71
2.25	3.57	2.38	16.36
2.50	2.61	1.74	13.25

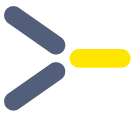


### Three spans, uniform distributed load

(Included material safety factor, factor for environmental surroundings and temperature factor)

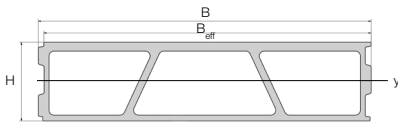
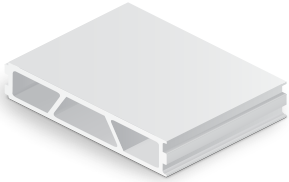
Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.25	454.92*	454.92*	454.92
0.50	198.19	132.13	227.46
0.75	67.82	45.21	151.64
1.00	30.25	20.17	103.55
1.25	15.91	10.61	66.27
1.50	9.35	6.23	46.02
1.75	5.94	3.96	33.81
2.00	4.00	2.67	25.89
2.25	2.82	1.88	20.46
2.50	2.06	1.38	16.57

\* The load bearing capacity at failure determines the dimension.



## Ultra Duty Plank

CE marked



The Ultra Duty Plank is our strongest bridge decking, designed to meet the most stringent load requirements for pedestrian and cycle bridges. The UD plank reduces the weight of the structure and is easy to work with at the installation site. It is also corrosion-resistant against a range of chemicals and salt water. Asphalt or PPMA/Epoxy strewn with sand or gravel can be used as a wearing surface.

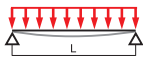
### Application

The plank is designed for bridges with occasional traffic of vehicles up to 12 tonnes but can also be used for walkways, access roads and coverings. The UD plank can be mounted on underlying structures made of steel, reinforced concrete or fibreglass and can be fixed in the transverse or longitudinal direction by bonding with a dual-component epoxy adhesive. This results in a strong and rapid bond that lasts for many years.

### Quality and standards

Our planks are certified in accordance with several accepted standards, including CE, the German aBG standard and EN13706. This is your guarantee of a high and consistent quality every time you shop with us

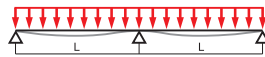
H	B	B <sub>eff</sub>	A	I <sub>x</sub>	Weight	E0o
mm	mm	mm	mm <sup>2</sup>	x 10 <sup>6</sup> mm <sup>4</sup>	g/m	x 10 <sup>3</sup> MPa
80	339	333	7118	7,22	12.900	30



### One span, uniform distributed load

(included reduction factors  $\gamma_M$ ,  $A_2$  and  $A_3$ )

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.75	366.44	244.29	389.47
1.00	179.11	119.41	292.11
1.25	98.97	65.98	233.68
1.50	59.85	39.90	194.74
1.75	38.74	25.83	153.86
2.00	26.43	17.62	117.80
2.25	18.80	12.53	93.08
2.50	13.83	9.22	75.39
2.75	10.46	6.98	62.31
3.00	8.10	5.40	52.36



### Two spans, uniform distributed load

(included reduction factors  $\gamma_M$ ,  $A_2$  and  $A_3$ )

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.75	311.58*	311.58*	311.58
1.00	233.68*	223.07	233.68
1.25	186.95*	132.36	186.95
1.50	125.76	83.84	155.79
1.75	83.98	55.99	133.53
2.00	58.55	39.04	116.84
2.25	42.31	28.21	93.08
2.50	31.49	20.99	75.39
2.75	24.03	16.02	62.31
3.00	18.74	12.49	52.36

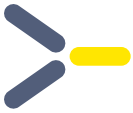


### Three spans, uniform distributed load

(included reduction factors  $\gamma_M$ ,  $A_2$  and  $A_3$ )

Span L [m]	Load capacity per meter width		
	Deflection L/200 [kN/m <sup>2</sup> ] around z-axis	Deflection L/300 [kN/m <sup>2</sup> ] around z-axis	Failure [kN/m <sup>2</sup> ] around z-axis
0.75	324.56*	324.56*	324.56
1.00	243.42*	191.19	243.42
1.25	166.39	110.93	194.74
1.50	103.80	69.20	162.28
1.75	68.59	45.73	139.10
2.00	47.47	31.65	121.71
2.25	34.11	22.74	108.19
2.50	25.29	16.86	94.24
2.75	19.24	12.83	77.88
3.00	14.96	9.98	65.44

\* The load bearing capacity at failure determines the dimension.



## Accessories for planks

All metal parts are stainless steel AISI 316



### HD-Clip

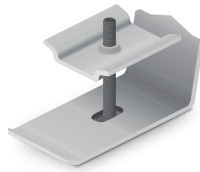
Product number: 149100

HD clip used for the subassembly of our HD planks.

Comes with M8x50 bolt (ISO 4014) and washer for assembly.

All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 20 pcs. in a pre-packed box.



### HD-Clamp 10-30 mm

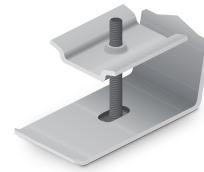
Product number: 149101

HD Clamp ensures easy assembly and removal of planks without the need for special tools. The bracket is used for subassembly. 10-30 mm flange

Comes with M8x50 bolt (ISO 4014) and wedge lock washer.

All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 20 pcs. in a pre-packed box.



### HD-Clamp 20-40 mm

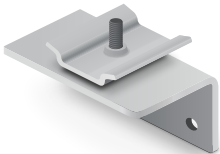
Product number: 149102

HD Clamp ensures easy assembly and removal of planks without the need for special tools. The bracket is used for subassembly. 20-40 mm flange

Comes with M8x50 bolt (ISO 4014) and wedge lock washer.

All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 20 pcs. in a pre-packed box.



### HD Angle

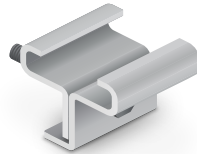
Product number: 149103

This bracket is used for the subassembly of Fiberline HD planks on wooden beams, as an example.

Comes with M8x30 bolt (ISO 4017) and washer (ISO 7089)

All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 20 pcs. in a pre-packed box.



### Coupling Clip

Product number: 149104

The bracket is used for the assembly of flanges on Fiberline planks HD and MD. The brackets allow for tightening.

Comes with Allen screw.

All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 10 pcs. in a pre-packed box.



### Base Plate Washer

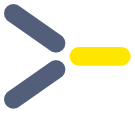
Product number: 149105

The bracket is used for the top mounting of Fiberline planks MD and HD. The washer measures ø30 and fits Ø21.5 hole.

Comes with M8x60 bolt (ISO 4014) and washer (ISO 7093)

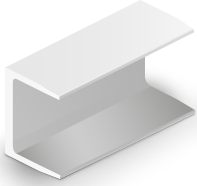
All parts are made of acid-resistant stainless steel (1.4404 / AISI 316L)

This item is sold as 20 pcs. in a pre-packed box.



## Accessories for planks

All metal parts are stainless steel AISI 316



### EDGE U-PROFILE U

Product number: 090145

The U-profile is used for the edge finishing of planks MD and HD, to give a nice finish to the solution. The U-profile is made of fiberglass that is corrosion-free and therefore has minimal maintenance requirements even under demanding conditions. It provides a long service life to the solution in fiberglass even under demanding conditions.