XTREME SOLUTIONS

BETRUSS

be anything.

EN

beMatrix®

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beTruss

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The world of stand building never ceases to evolve. Stands become increasingly large in size, more conspicuous, with influences from the AV sector demanding more bearing capacity of the actual structures.

Since beMatrix closely monitors trends in the industry, we offer another great solution: the Xtreme solutions. The sky is the limit, literally. Towering stands, large spans, ... it's all possible now!

© beMatrix

Spaces

01

In the world of live events and exhibitions, we've noticed the desire of our clients to build bigger. These types of designs **demand more load bearing capacity on the structures**. Let's take a look at the different beMatrix options to build small, medium or large spans in a safe and efficient way.

Small Spans

For small and limited spans you're all set using the **b62 frames** combined with the **corner profile square 62.**

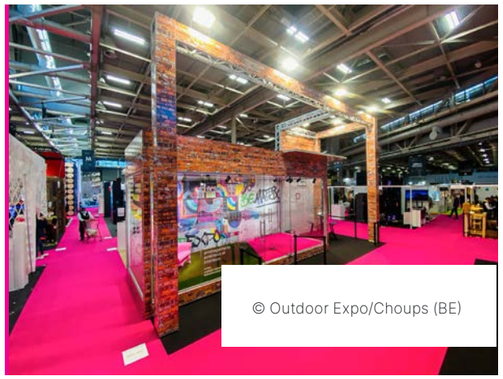
© beMatrix (BE)

Medium spans

For medium spans that **do not carry heavy items** like LEDskin® (not load bearing), we recommend using **beConstruct**, our newest construction profile.

Large spans

Want to take your build a step further? Is your design **load bearing**? Then **beTruss** is your solution for large spans. It's even possible to add LEDskin® tiles to the beTruss provided that LEDskin® and beTruss are built at the same time.



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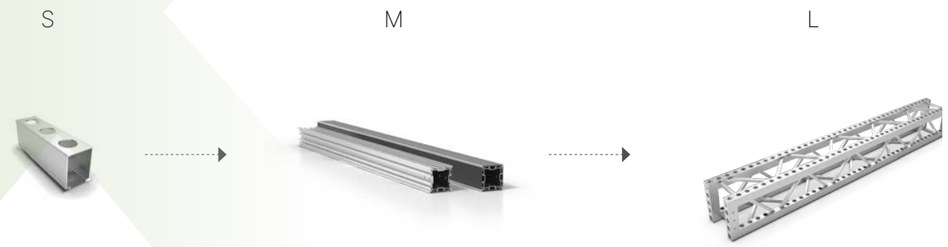


beMatrix
open for business
SideLED
Singlesided lightbox
b62 Frame
Hard panel Infill
wall solution
b62 FRAME
MOTIONskin®
Dynamic lightbox

02 beTruss

Patented design

b310, beMatrix DNA

beTruss allows you to build **stands of any size**, no matter how big, with one single (stand construction) system. No more breaking a sweat over mounting points! From now on, you can erect your load bearing stand with ease, in no time at all.

Identical to the b62 frame system, all dimensions are based on **62 × 62 mm**, so perfectly usable with existing frames thanks to the especially designed load bearing connector.

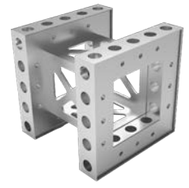
beTruss has the same **modular beMatrix DNA** and therefore all its benefits:

- 62 mm dimensions and D30 holes, enabling a perfect integration with the existing beMatrix range (frames, LEDskin®, lightboxes, etc).
- Both panels and textile can be attached to the b310 range, allowing the entire stand to get the same finish.
- Your stand design will be ready in no time. All necessary components are waiting for you in the beMatrix library, ready to start.
- But most of all: the built-up will be fast and simple, since you will only need one system to set up the entire structure.

b310 frame

b310 square

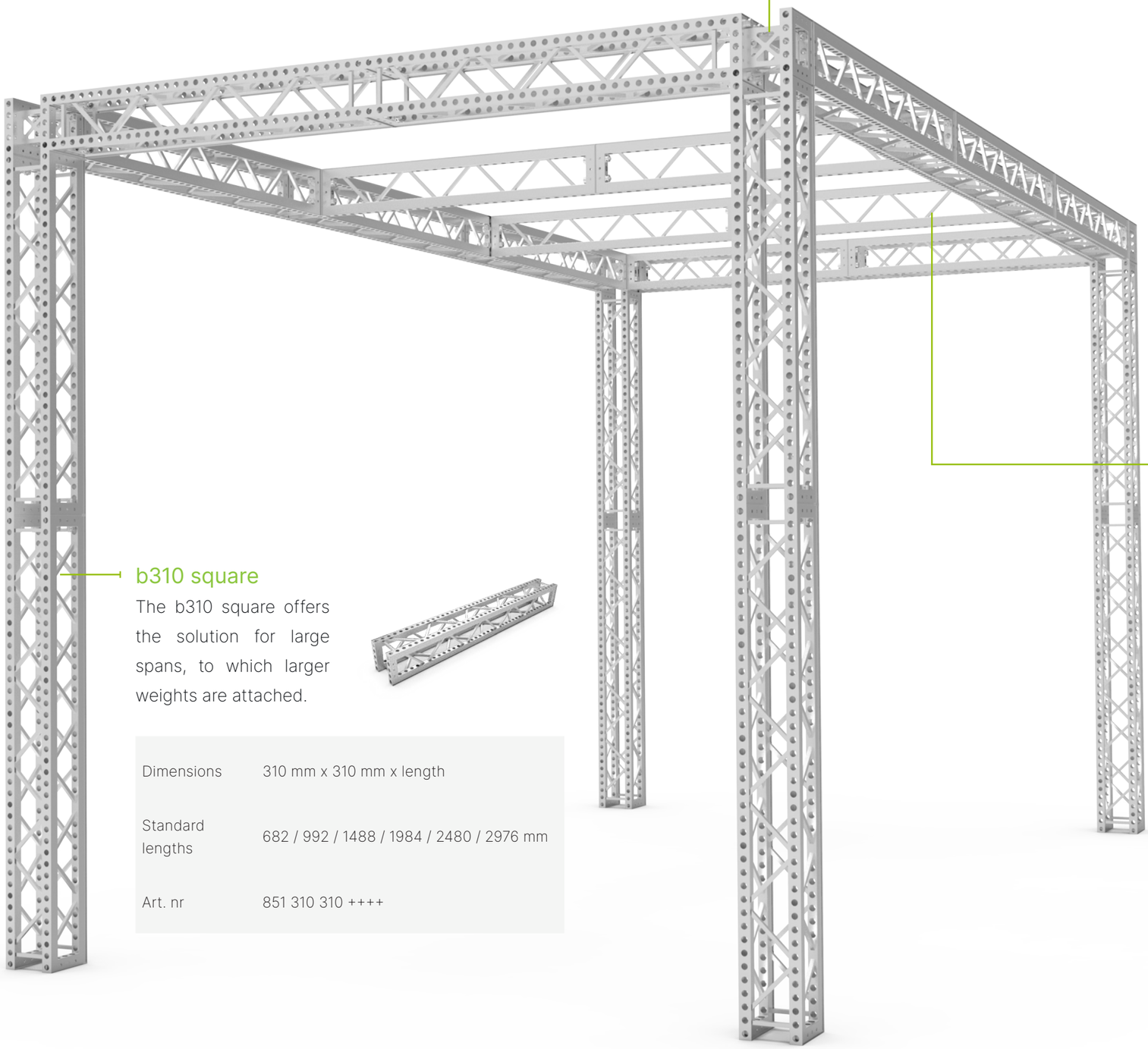
b310 corner piece



b310 180° connector

b310 90° connector

Structure



b310 square

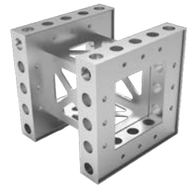
The b310 square offers the solution for large spans, to which larger weights are attached.

Dimensions	310 mm x 310 mm x length
Standard lengths	682 / 992 / 1488 / 1984 / 2480 / 2976 mm
Art. nr	851 310 310 ++++

b310 corner piece

Corners and cross connections are made using the b310 corner piece. The connection of the corner piece is done by means of two toolless connectors for large or small holes.

Dimensions	310 mm x 310 mm x 310 mm
Art. nr	852 310 310 310



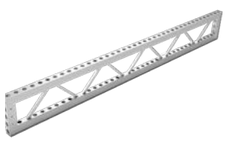
b310
180° connector

b310
90° connector

b310 frame

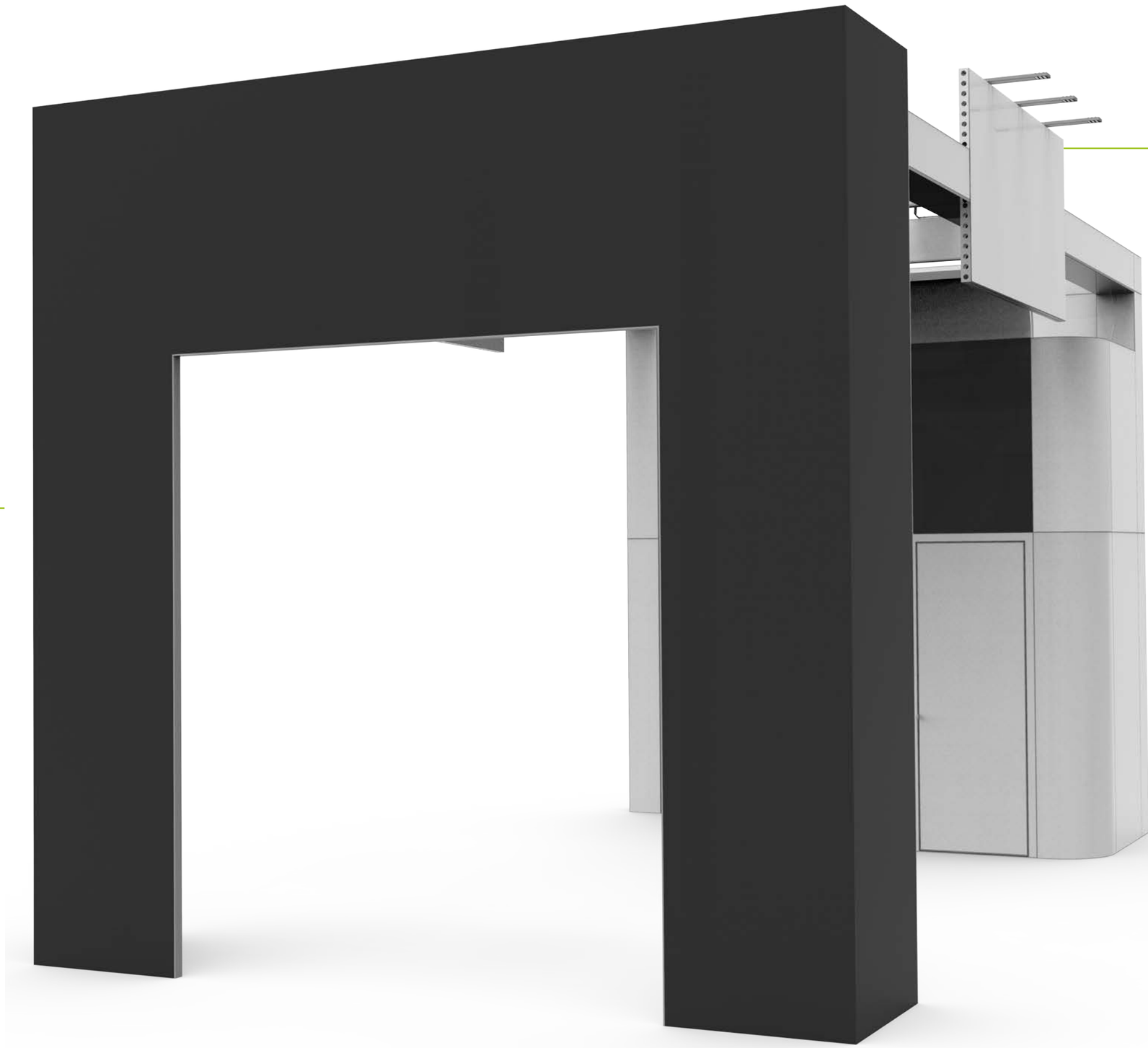
The b310 frame is designed to provide the necessary bearing capacity to the structure, within the same 62 × 62 mm dimensions, where the strength of the b62 frame is insufficient.

Dimensions	62 mm x 310 mm x length
Standard lengths	682 / 992 / 1488 / 1984 / 2480 / 2976 mm
Art. nr	850 62 310 ++++



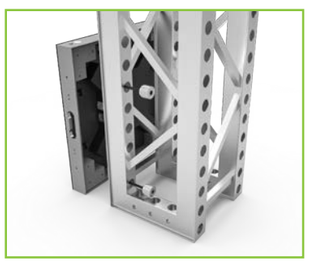
b310 180°
connector
with automatic
locking system

The skin



LEDskin®

beTruss is compatible with the full beMatrix range. It is therefore no surprise that LEDskin® can perfectly be integrated to the structure.

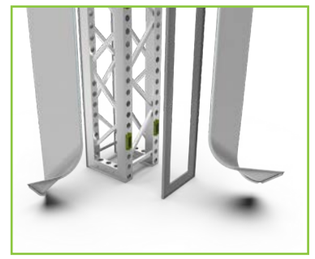


Panel

The b310 range can be finished with 3mm thick panels.

Seamless textile

For a seamless result, you can cover the sides with textile.

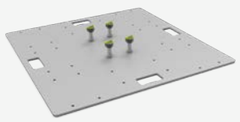


The b310 square & b310 corner piece can be fully finished with panels and textile by using the perfect cover on 2 of the 4 sides.

The add-ons

Baseplate
(use to compensate height difference)

Art. nr 901 28 0706

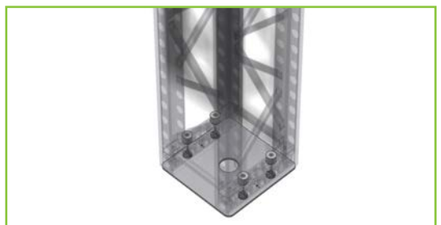


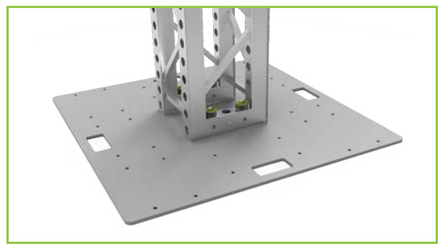
Baseplate
(use as a standalone for extra stability)

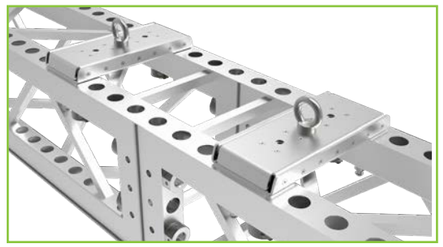
Art. nr 901 28 0707

Hanging bracket
(b310 square)

Art. nr 901 28 0704



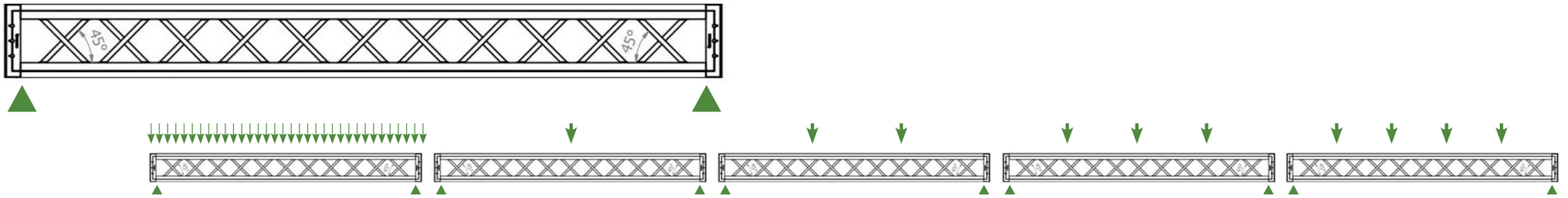




© beMatrix

Target load tables

b310 square, direction 1



SPAN (m)	UDL (kg/m)	Deflection (mm)	CPL (kg)	Deflection (mm)	TPL (kg)	Deflection (mm)	QPL (kg)	Deflection (mm)	FPL (kg)	Deflection (mm)
3	385.0	2.43	923.3	3.56	560.1	3.27	385.0	3.27	288.7	3.07
4	286.9	7.08	808.1	7.45	505.9	7.76	382.5	8.04	286.9	7.95
5	228.1	11.73	703.1	11.34	455.4	12.24	347.6	12.80	272.6	12.83
6	188.9	16.37	608.2	15.23	408.8	16.72	306.1	17.57	243.6	17.70
7	160.6	24.33	523.6	20.84	365.8	24.41	268.6	24.84	216.9	25.49
8	120.2	32.29	449.2	26.45	326.7	32.09	235.2	32.12	192.4	33.28
9	93.0	40.25	384.9	32.06	291.3	39.78	205.8	39.39	170.3	41.07
10	74.0	50.85	330.9	39.67	259.6	50.32	180.4	48.96	150.5	51.20
11	60.2	61.45	287.0	47.28	231.8	60.86	159.1	58.53	132.9	61.34
12	48.8	72.06	253.3	54.89	207.7	71.40	141.8	68.09	117.7	71.48
13	41.9	86.74	229.8	68.92	187.3	85.57	128.6	83.68	104.8	84.50
14	35.6	101.4	216.6	82.95	170.7	99.75	119.3	99.26	94.1	97.53
15	30.7	116.1	213.5	96.98	157.9	113.9	114.1	114.8	85.8	110.6

Excluding frequent Use factor (0.85)

UDL: Uniform distributed load / CPL: Center point load / TPL: Tripple point load / QPL: Quarter point load / FPL: Fifthpoint load

- Loading table only valid for static loads
- Loading table only valid for single spans with support at both ends.
- The self weight of the truss is already taken into account
- Loading table are calculated according and in compliance with to European standard (Eurocode EN1990)
- Loading table excluding frequent use factor
- Truss spans can be assembled from different truss lengths
- Loading table & defelections are based on good assembled and aligned connectors
- All static stsytems other than single spans need an individual structural calculation. Please contact a structural engineer or beMatrix for assistance.

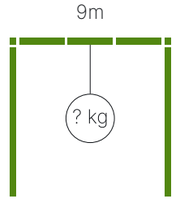
Example

What is the maximum weight & deflection in the middle of the beTruss at a span of 9m?

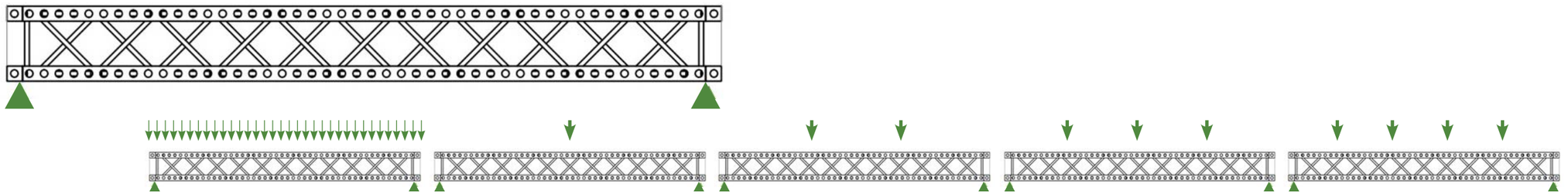
= 384,9kg x safety factor 0,85

= 327,2kg with a deflection of 32,06mm

Less deflection thanks to the use of beTruss.



b310 square, direction 2



SPAN (m)	UDL (kg/m)	Deflection (mm)	CPL (kg)	Deflection (mm)	TPL (kg)	Deflection (mm)	QPL (kg)	Deflection (mm)	FPL (kg)	Deflection (mm)
3	149.7	1.17	419.3	1.93	218.2	1.58	149.7	1.61	112.2	1.54
4	110.4	3.12	335.7	3.46	194.5	3.58	147.3	3.90	110.4	4.04
5	86.9	5.07	268.0	4.98	172.4	5.59	132.5	6.19	103.9	6.53
6	71.2	7.01	213.8	6.50	151.8	7.59	114.7	8.49	91.4	9.03
7	60.0	10.82	170.9	8.82	132.7	11.45	98.4	12.48	79.8	13.49
8	47.1	14.63	137.4	11.14	115.1	15.30	83.7	16.48	69.1	17.94
9	35.9	18.43	111.3	13.46	99.0	19.16	70.7	20.48	59.3	22.40
10	27.2	22.60	90.9	17.39	84.4	25.08	59.2	27.02	50.4	29.68
11	20.7	26.78	74.5	21.32	71.3	31.01	49.4	33.57	42.5	36.97
12	16.0	30.95	60.9	25.25	59.7	36.94	41.2	40.11	35.4	44.25
13	12.6	37.01	48.6	30.69	49.6	45.64	34.5	50.39	29.3	54.48
14	10.0	43.08	36.6	36.12	41.0	54.35	29.5	60.67	24.0	64.70
15	8.0	49.15	23.7	41.56	33.9	63.05	26.2	70.96	19.7	74.93

Excluding frequent Use factor (0.85)

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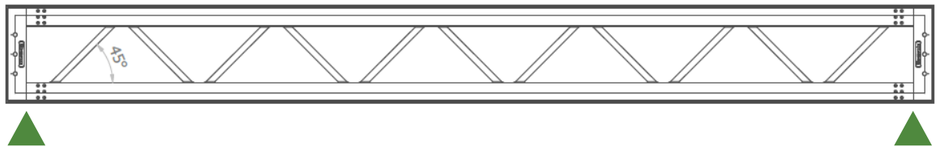
  Please contact a structural engineer or beMatrix for assistance.

b310 frame



span (m)	UDL (kg/m)	deflection (mm)	cpl (kg)	deflection (mm)
1	716.7	0.5	716.7	1.0
2	356.8	1.2	453.7	1.5
3	138.3	1.8	245.8	1.9
4	70.5	2.9	159.2	2.9
5	41.7	4.1	113.6	3.8
6	27.2	5.2	86.2	4.8
7	19.0	7.2	68.3	6.4
8	13.9	9.2	55.8	8.1
9	10.5	11.2	46.7	9.8
10	8.2	14.8	39.8	12.9
11	6.6	18.4	34.6	15.9
12	5.4	22.0	30.3	19.0

Excluding frequent Use factor (0.85)

UDL: Uniform distributed load / CPL: Center point load

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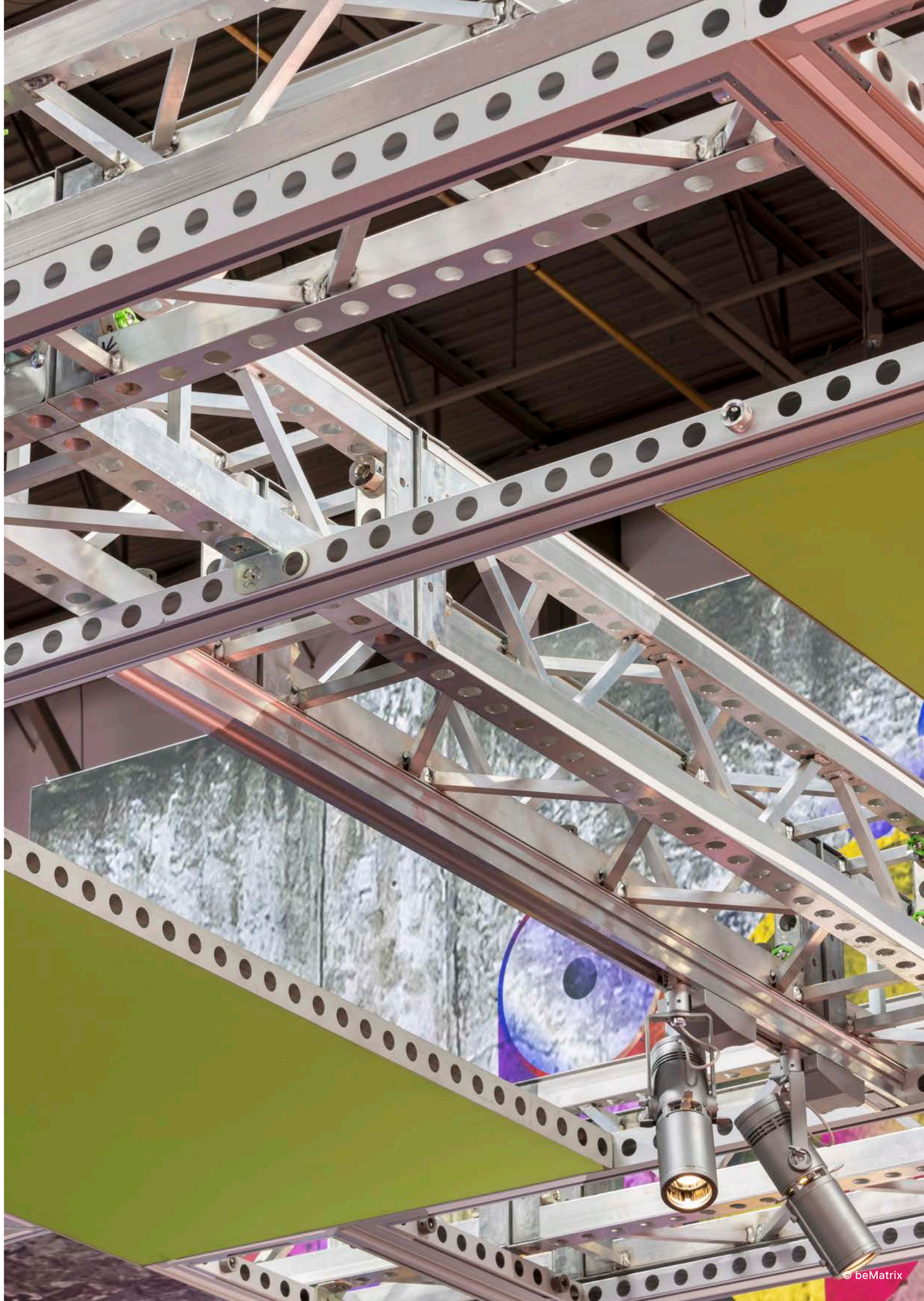
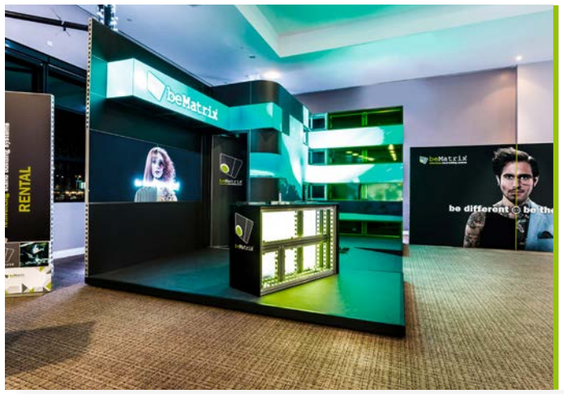


Inspiration

The 8 beMatrix principles



Quality guaranteed

All beMatrix frames are manufactured in-house, so we are in control of every step in the production process. Continuous optimisation and innovation initiatives ensure the system always complies with the market's demands.

Top finishing

The beMatrix stand building system comes with a large range of tools and accessories to finish your stand exactly the way you envisage it. With the infills, you can even hide the entire frame system so it becomes invisible to the eye. Thanks to our 'seamless' concept, not one seam will be noticeable.

Freedom to design

A beMatrix stand combines the benefits of a modular system with the possibilities of made-to-measure solutions. Almost any shape, contour and construction is conceivable and can easily be created. One single frame allows you to create all different kinds of stand concepts.

Lightweight

The aluminium frame system is lightweight, hence very ergonomic and eco-friendly: no need for the stand builder to carry around heavy structures, while the transport weight and CO2 emissions remain low.

Fast

Assembly and disassembly of the beMatrix system takes hardly any time. Its weight, simplicity and tool free assembly save loads of time, leaving you space to focus on the finishing details of your stand. Isn't that what makes you stand out most at a fair?

Long life cycle

The system is extremely sturdy, making it endlessly reusable. Wear and tear won't shorten its life cycle, since the frame is not visible to the eye once the entire stand is set up.

Ecologically sound

Because of its low weight, long life cycle and modular character, the beMatrix frame system is the eco-friendliest system today. Moreover, it is made out of untreated aluminium, so 100% recyclable and reusable without any quality losses.

International network

The bePartner network brings together real ambassadors of the beMatrix frame system, each with their own expertise: stand building, textile printing, LEDskin®, Double Deck... A creative cross-pollination offering you as our client nothing but benefits.

bePartners at your service

bePartner LEDskin®

Our LEDskin® bePartners all stock a minimum amount of LEDskin® and have years of expertise in the audiovisual industry. They are more than happy to help you perfectly integrate LEDskin® in your beMatrix stand.

bePartner printed textiles

Printing customised textiles takes real precision. Our bePartners for printed textiles have proven they totally master this specialised skill and guarantee perfect service, time and again.

bePartner build

Our bePartners build have a large stock of frames and accessories, integrate our latest innovations, are able to think outside the box and consider optimal service to be of paramount importance.

bePartner LEDskin® content

Do you already have LEDskin® available, but are you still looking for a partner to help you with content? Our content partners will advise and assist you, from content creation up to and including optimal display quality on your LEDskin® system.

bePartner printed panels

Printing infill panels for our beMatrix frames might seem simple, but this specialised job really has to be executed in a very precise way. Our bePartners for printed panels have already proven they totally master this specialised skill and guarantee excellent service, time and again.

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