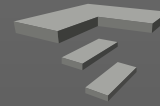


Double deck

How to create
a matrix double
deck construction



sento magnum

Smart Doubledecking



beMatrix[®]
re!nventing stand building systems

Double deck

Introduction

The possibilities with the beMatrix frame system are endless. However, one component was still missing: a double deck construction. To be able to offer this possibility to stand builders, beMatrix started a cooperation with producer of smart doubledecking systems: Sento Magnum. A joint venture that combines two leading systems within the industry, to bring clients up to a second floor, and perfectly fit the Sento Magnum system on beMatrix frames.



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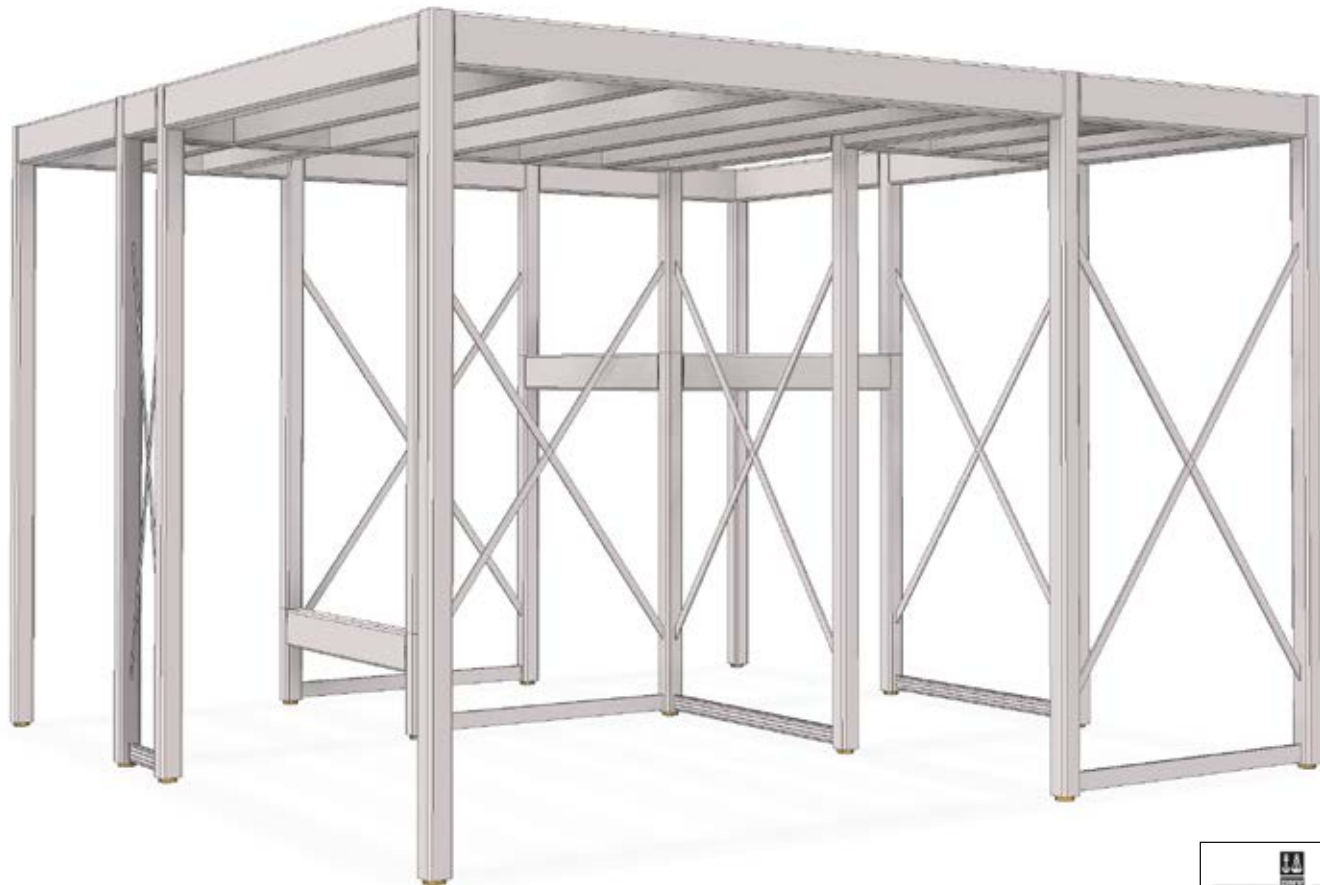
Double deck

What is it?

The Sento Magnum doubledecking is an aluminum system produced to build double floor constructions. It consists of several types of aluminium profiles which are produced in a variety of lengths. Their construction allows for exceptional flexibility when it comes to shapes of constructed platforms.

beMatrix frames are added to this structure for stand creation.

The double deck system has been tested by DNVGL, one of the largest certification companies in the World (see technical report below).

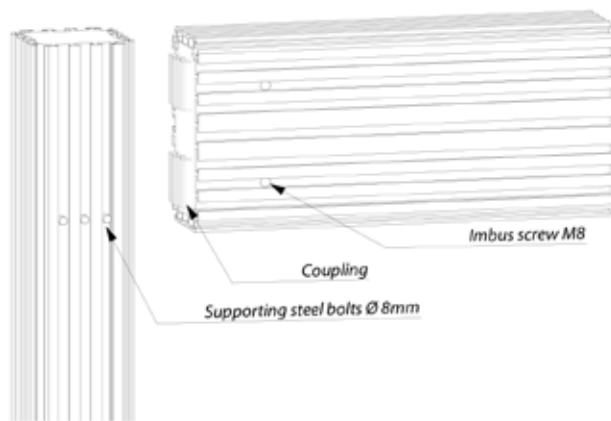


[Click for the Technical Report](#)

Double deck

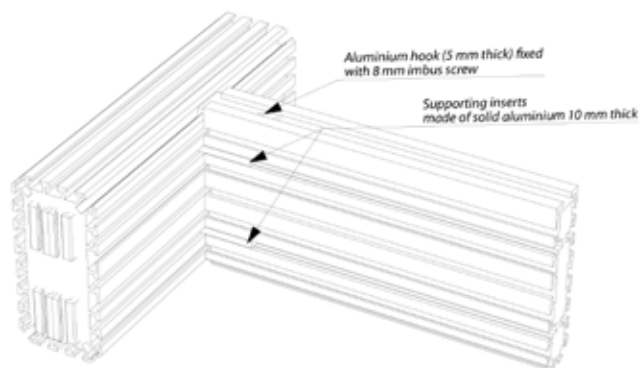
Connections

Sento Magnum's double deck system is fast and stable. It is based on a coupling system avoiding the time consuming fastening of bolts and nuts.



Connections between primary beams and columns are done using an original coupling.

A coupling, mounted into a beam, is inserted into grooves of a column and then, while it rests on supporting steel bolts, fastened by tightening side imbus screws.



Connections between secondary and primary beams resembles hanging.

A hook inserted in the top groove of a secondary beam enables hanging it on a primary one and then securing the connection with sliding supporting aluminium inserts into grooves of a primary beam.

Double deck

beMatrix compatibility

Sento Magnum and beMatrix have developed a special connector that perfectly joins the two systems.



Connector

Specially designed for firm connection of beMatrix frames to the Sento Magnum profiles.



Adjustable frames

By using adjustable frames, the Sento Magnum construction can be matched with beMatrix sizes.

[LEAFLET](#)



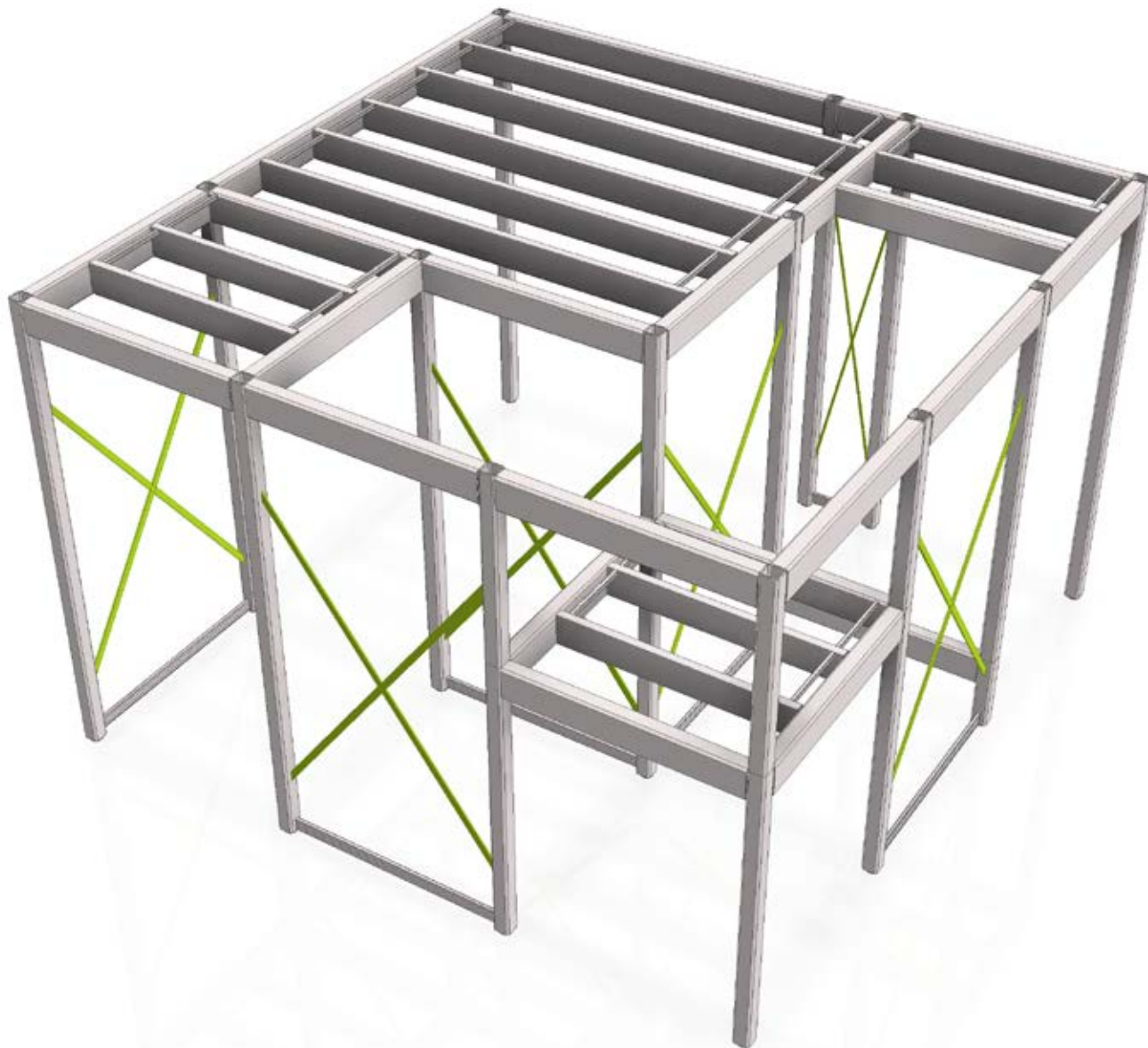
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Double deck

Stability

Providing proper stability is a crucial element for all double-deck systems. Sento Magnum is well equipped to assure safe and solid usage of an upper deck. Cross beams (green) are added to the structure for extra rigidity.



Double deck

How to finish

A double deck construction can easily be finished. Both the walls, floor, ceiling and poles can be covered, so you get the look of a custom stand with the capability of a system.



Walls

The beMatrix frames can be finished with textile, panels or any other possible infill (f.ex. wood, plexi, etc).



Poles

Aluminium covers are available to hide the poles of the double deck construction.



Floor

The upper deck floor (22mm of chipwood) can adopt a large variety of floor coverings.



Ceiling

beMatrix frames can be used as ceiling. For more info: [LEAFLET](#).

The ceiling system allows the mounting of various elements, such as lighting or sprinklers.

Double deck

Staircase

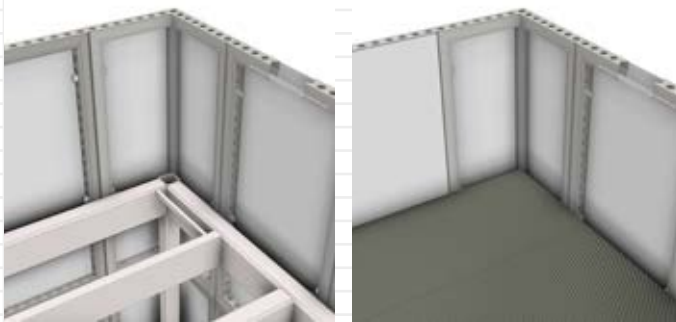
To access the first floor of your stand, a staircase has to be integrated into the Sento Magnum and beMatrix structure.



Double deck

Balustrade

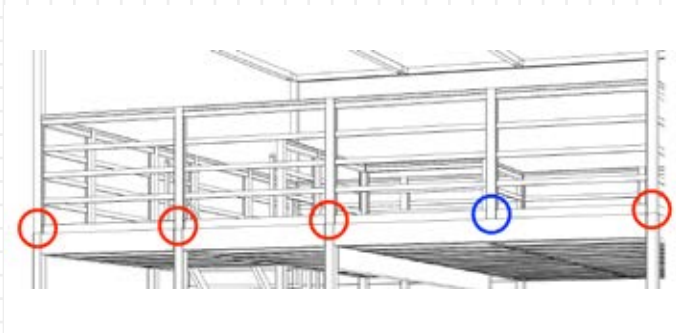
To create a balustrade for your double deck you can choose for both a beMatrix as a Sento Magnum solution.



The beMatrix solution

The frames can be raised higher and so creating a beMatrix balustrade. Our strong connectors guarantee the safety of this solution.

A big advantage of the use of beMatrix frames as balustrade, is that both the inside and outside of the frames can be finished with the infills of choice.



The Sento Magnum solution

Balustrades connected to a pilar (extensions)

Extensions made with a piece of steel rectangular pipe 50 x 50 x 3 mm inserted inside both profiles

Balustrades connected to a beam

A regular SENTO Magnum coupling is mounted in a baluster, thanks to which, it can be firmly fastend to a beam

The Sento Magnum solution can also be provided with different infills: glass, plexiglass, panels or aluminium profiles.

Double deck

FAQ



What kind of equipment is required to assemble the double deck system?

No special equipment is required for the assembly.



Are static calculations required for a construction?

Yes. Each configuration has to have its individual calculation. This is delivered within the rental price.



Can the system be bought?

No. It is only available for rent. We can offer you a competitive rental price instead.

To provide a competitive rental price for the double deck, the most efficient way to work is that your own local crew builds the deck with a supervisor provided by the Sento Magnum team. The combination building the deck simultaneously with adding the beMatrix frames is a great way to finish the project quicker. However if you want a Sento Magnum crew to build the deck, we can provide that too.



What is the acceptable load of the construction?

Each configuration is tested individually and, in most cases, can bear up to 5 kN/m².

Double deck

FAQ



Is the double deck system approved all over Europe and elsewhere?

Yes, the system meets static criteria required in the large majority of venues.



Who to contact?

You want to add a floor to your stand? Contact your account manager! He will evaluate with you the possibilities and will refer you if necessary.

[Click here](#) for contact details of the account manager for your country.

Double deck

References



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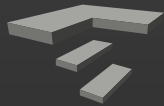
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