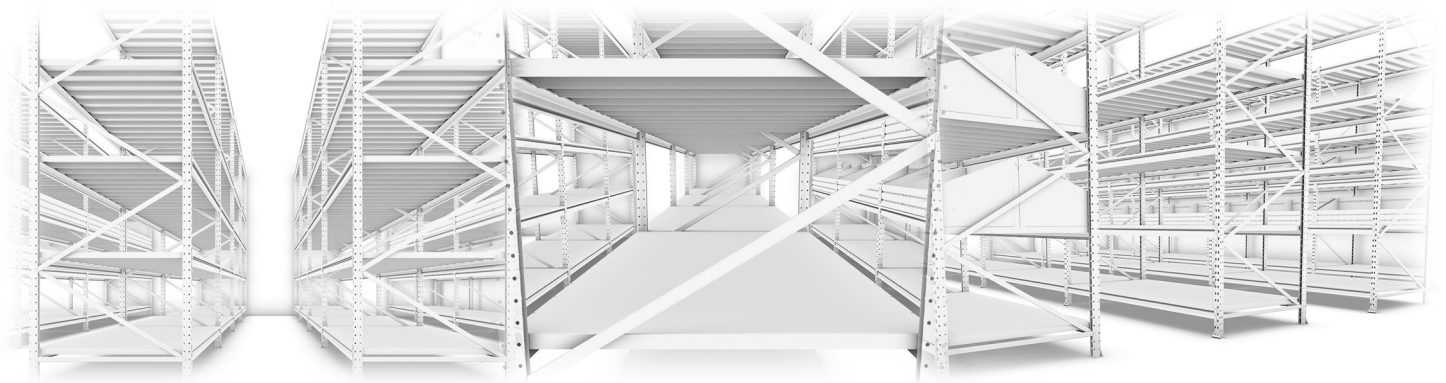




Assembly instructions



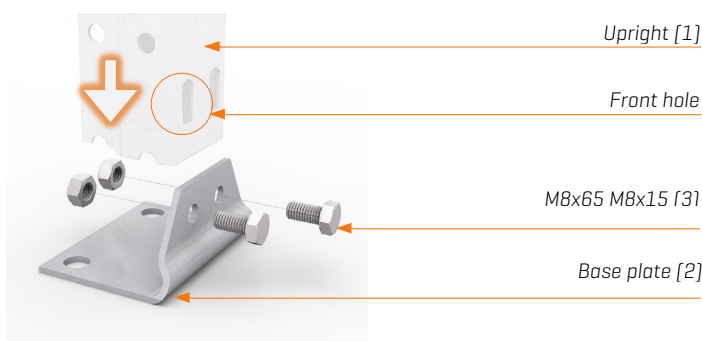
1 Positioning the uprights



Place the two uprights [1] in parallel and with their open sides facing each other, either on some supports or directly on the floor.

To make it clearer, the assembly will be shown in an upright position from now on

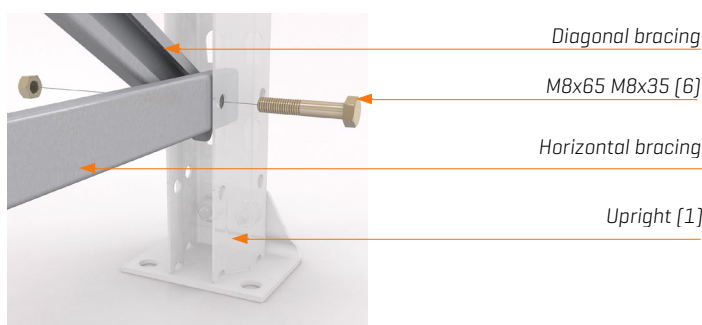
2 Attaching the base plate



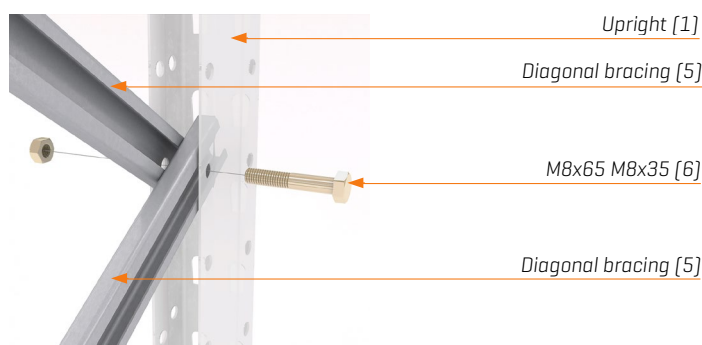
Attach the base plate [2] to each upright [1] using two M8x15 bolts [3] with their respective nuts.

The upright must be positioned so that the flat edges of the holes are facing downwards.

3 Attaching the horizontal and diagonal bracings

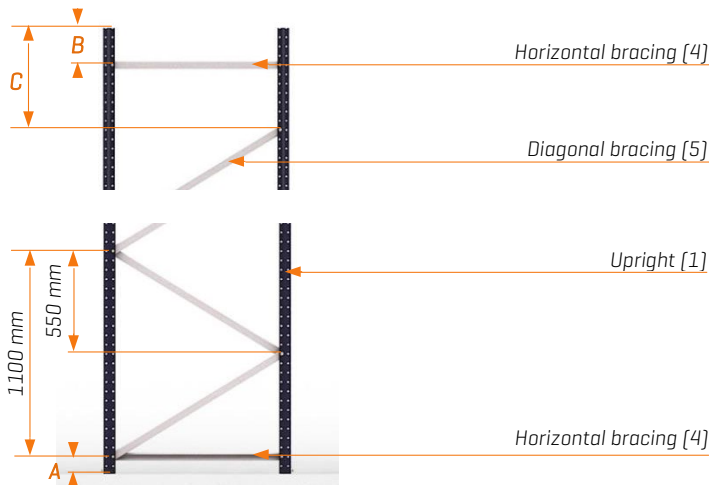


Position the first horizontal [4] and diagonal bracings [5] with their open sides facing each other, then secure them to the upright with a M8x35 bolt [6].



Next, place the remaining diagonal bracings [5] with their open sides facing the same direction and again secure them M8x35 bolts [6].

Conventional picking rack. Assembly instructions



The diagram shows the correct positions of the diagonal [5] and horizontal bracings [4] on the frame.

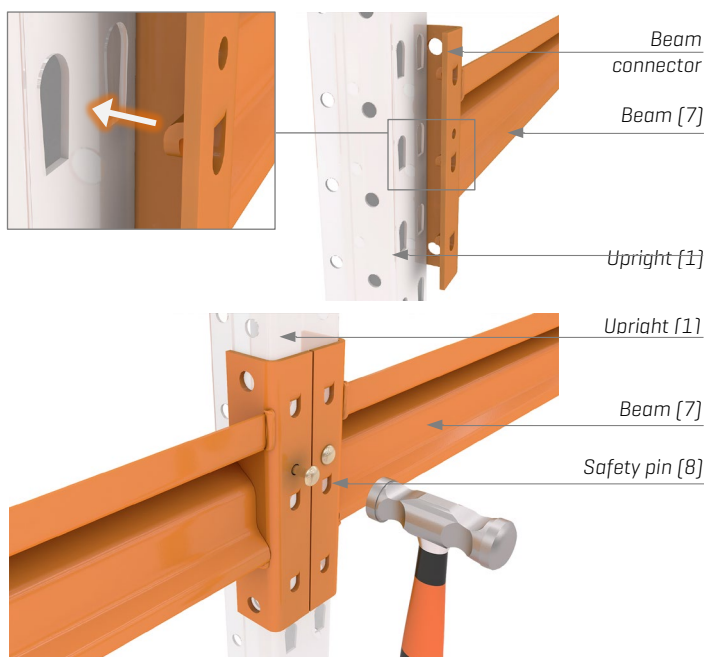
Dimension "A" must measure 150 mm, except for frames with a height of 4,000 mm, in which case "A" must equal 100 mm.

Dimensions "B" and "C" will depend on the height of the frame [See Annex I, Details of the dimensions and components in function of frame height].

Finally, the assembled frame should appear like the example in the diagram.



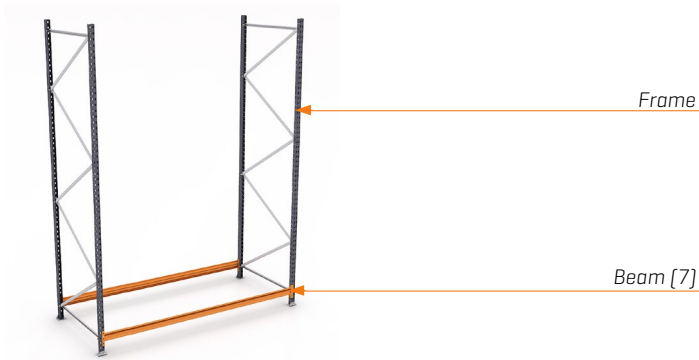
4 Attaching the beams



The basic structure is achieved by attaching the beams [7] to the bracings [1].

There are three hooks projecting from each beam connector which fit perfectly into the front holes on the bracings [1].

Once fitted correctly, beam connectors are secured using safety pins [8]. These are fully inserted into their correct position with a few light blows from a hammer.



Place the structure in an upright position and attach the first two beams [7] at the height of the first loading level.



Then attach the rest of the beams [7] until all the levels are in place, thus completing the assembly of the initial module.

Follow the same assembly process for all the modules that make up each row.

5 Loading level materials

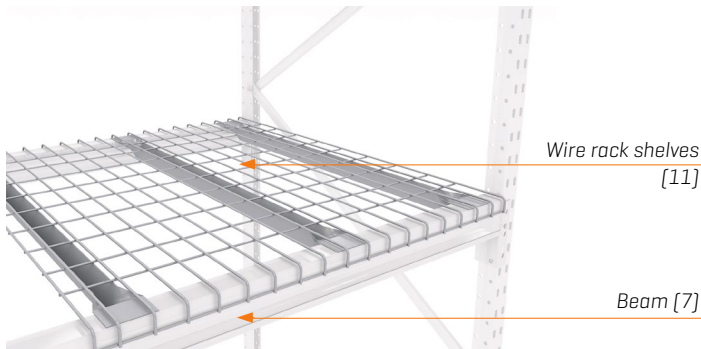


Different types of component can be fitted over the beams to create a loading level surface at each level.

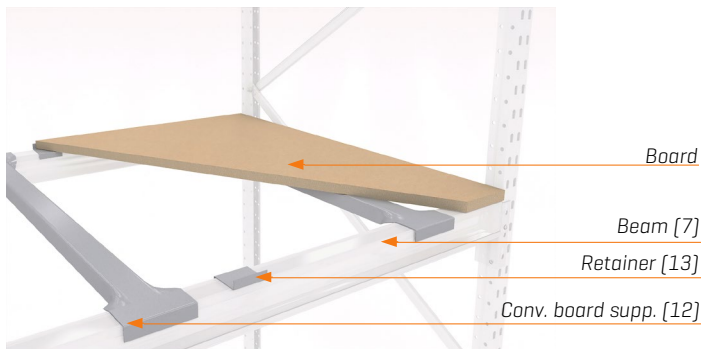
In the case of Z beams [7], metal panels [8]



or boards, with the Z beam supports [10], as specified in the project design.



In the case of conventional beams [7], wire rack shelves [11]

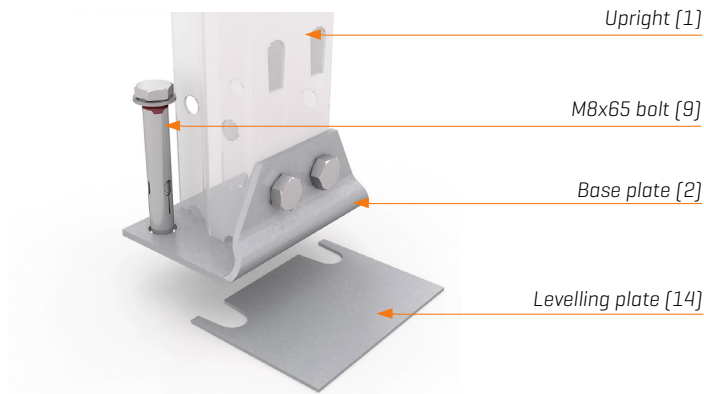


or boards, with conventional supports [12] as specified in the project design, plus four retainers [13] per level.



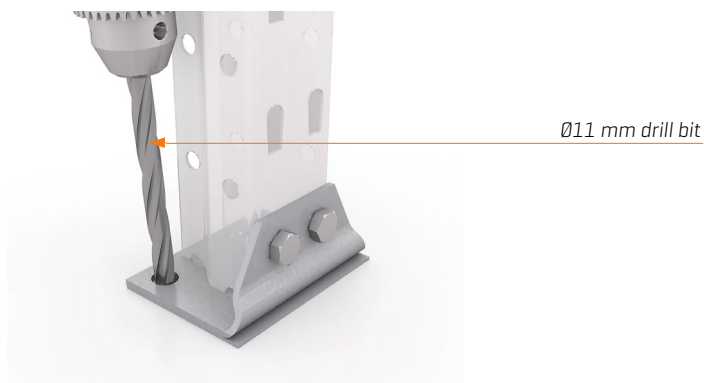
Finally, the assembled beams with their corresponding loading surfaces should appear like the example in the diagram.

6 Securing the frames to the floor



The uprights [1] have to be fixed to the floor to increase the structure's safety. If the foundation surface is uneven, then levelling plates [14] must be introduced below the base plates [2] to ensure the structure is levelled and plumbed correctly.

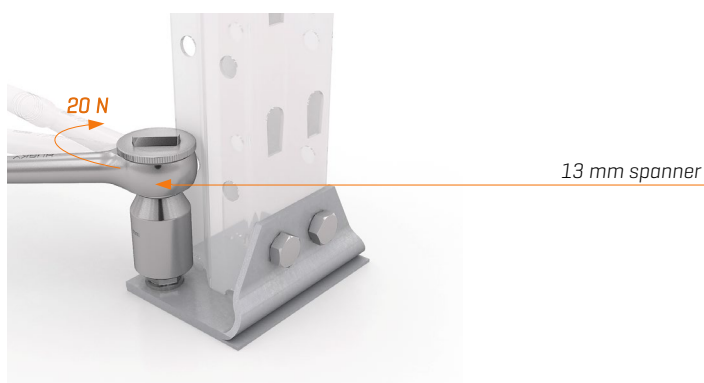
The frame is secured to the floor using an anchor bolt [9].



Drill a hole in the floor to a depth of at least 80 mm using a Ø11 mm bit.

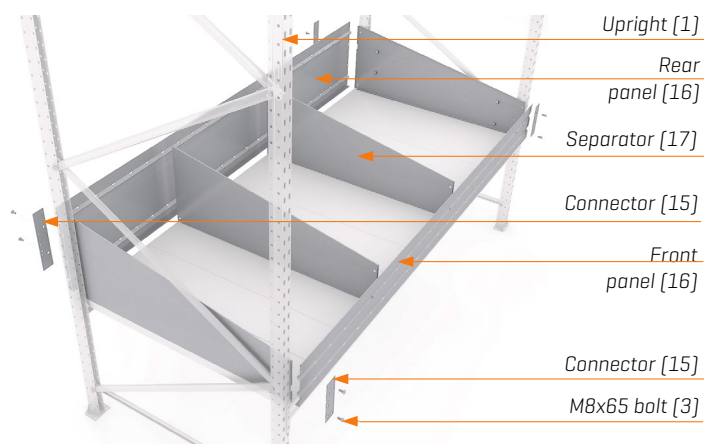
Remove any debris after drilling to ensure the anchor bolt enters correctly.

Strike the bolt with care until it is fully inserted.



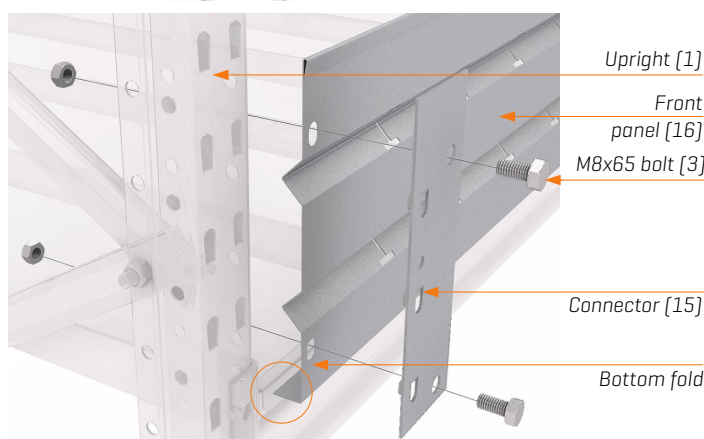
Finally, screw the bolt down until it is secured firmly in position. Apply a recommended tightening torque of 20 Nm.

7 Compartmentalised shelving system [optional]



If the loading levels need to be compartmentalised, then a classification system consisting of front, rear and dividing panels can be installed. As necessary, a single or double system can be used.

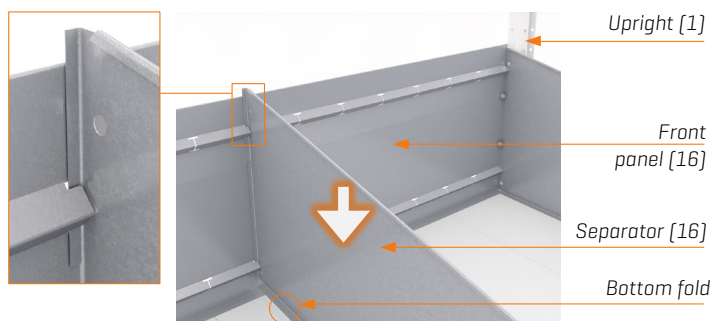
The system comprises front and rear panels that are attached to the uprights, as described below, using their corresponding connectors:



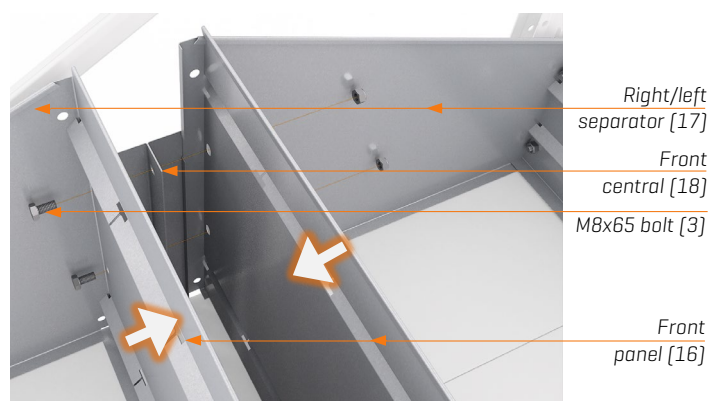
Place the connector with two or three hooks [depending on the type of panel] in the front holes on the upright.

Next, position the front panel [16] vertically by supporting its lower pleat on the loading level surface and fixing it to the connector with one or two M8x15 bolts [3].

Repeat this process at both ends of the front and rear panels.

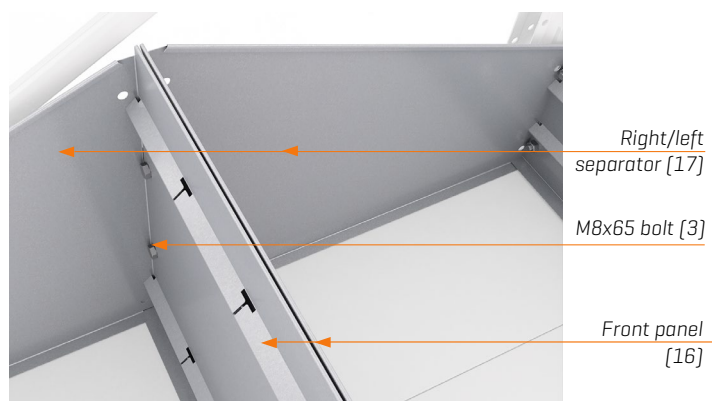


Position the dividers [17] by inserting them vertically in the slots of the longitudinal pleats in the rear and front panels [16] until they come into contact with the loading level surface.



Depending on the level's dimensions, a double compartmentalised shelving system can be installed and products accessed from both sides of the structure.

In this case, the rear panels must be connected using a central connector [18] and secured with two M8x15 bolts [3]. The vertical dividers must also be fitted at the same time to complete the assembly.



Once the components have been assembled and the nuts and bolts tightened, the structure should appear like the example in the diagram.

Finally, the remaining dividers should be distributed based on user requirements.

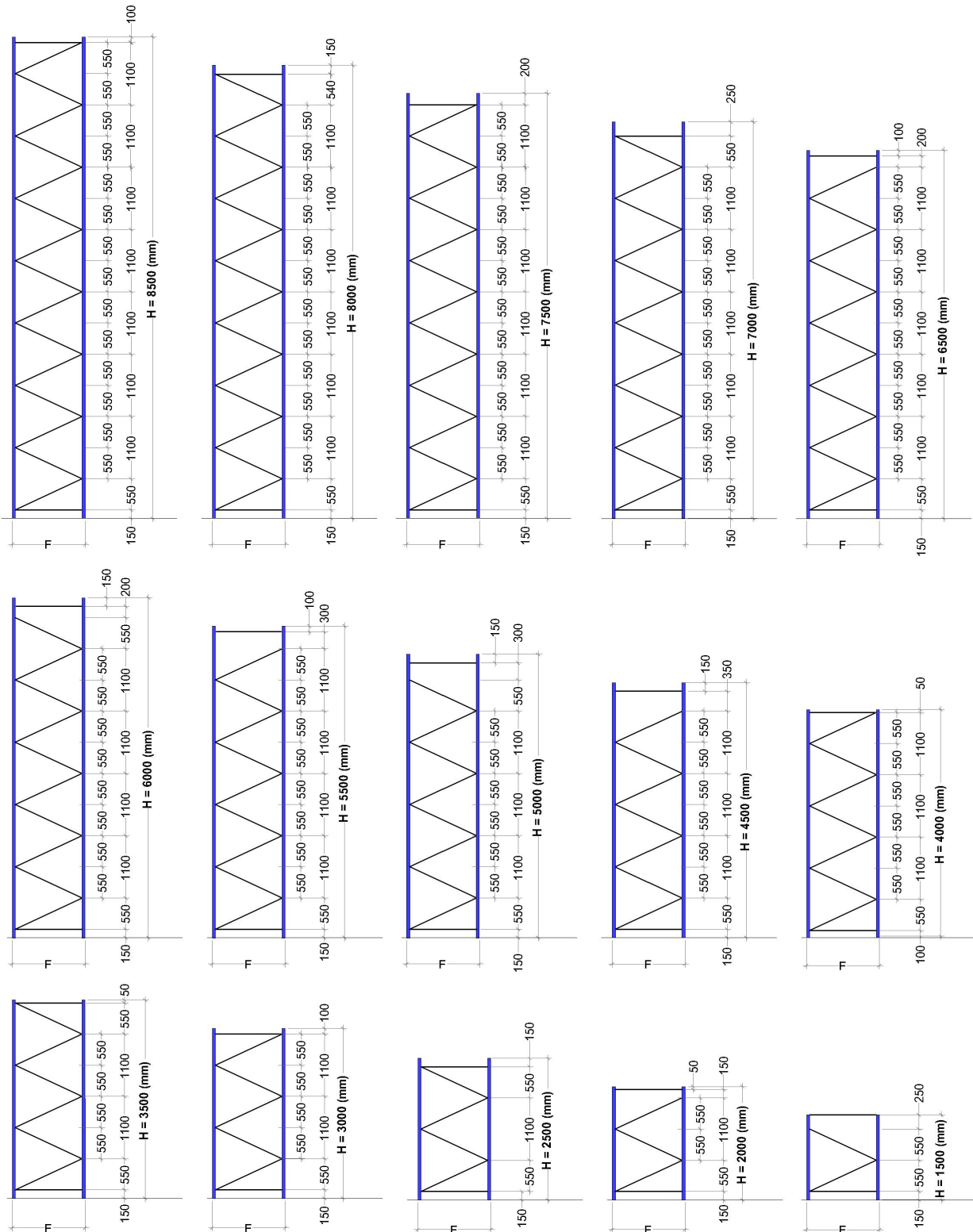


The diagrams to the left show loading levels featuring the correct installation of single and double compartmentalised shelving systems.

Annex I Details of frame dimensions and components

The distance between diagonal bracings is fixed at 550 mm for all frames. The angles between diagonal bracings generally range from 20° to 70°.

The diagram below shows how the components are arranged in the structure explained above, as well as the assembly dimensions and details for each frame height:



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The free ends of the horizontal and diagonal bracings (where there aren't any nodes) are bolted to the uprights. **Spacer fittings** are used to prevent any slack between horizontal/diagonal bracings and the upright by acting as a stop between them.

The table below shows the components of each frame according to height:

Height [mm]	Uprights Units	Base plates Units	M8x65 bolts M8x15 Units	Spacer fittings Units	Crossbars Units	Diagonal bracings Units	M8x65 M8x35 Units
1500	2	2	4	4	2	2	6
2000	2	2	4	4	2	3	7
2500	2	2	4	2	2	4	7
3000	2	2	4	2	2	5	8
3500	2	2	4	2	2	6	9
4000	2	2	4	2	2	7	10
4500	2	2	4	4	2	7	11
5000	2	2	4	4	2	8	12
5500	2	2	4	4	2	9	13
6000	2	2	4	4	2	10	14
6500	2	2	4	4	2	11	15
7000	2	2	4	2	2	12	15
7500	2	2	4	2	2	13	16
8000	2	2	4	2	2	14	17
8500	2	2	4	2	2	15	18