

Safety and installation instructions

1. What are MasterWalls?

MasterWalls are wall elements in standard concrete or Climasono blocks that are manufactured in a semi-automatic way. They can take different shapes and dimensions and are easily adapted to the needs of every individual project. If desired, we can also integrate cavity hooks and other technical elements. Gables are by default sawn in advance.

2. How are MasterWalls put into place?

1. Tracing on the concrete surface

If desired, end stops can be applied to indicate the position of the walls.

2. Fitting and positioning

The wall element is placed on adjusting blocks which are fixed in mortar. Subsequently, the wall element is levelled using buttresses.

3. Vertical bonding

Once the wall elements are in the right position, the vertical joints are filled with nonshrinking grout. The customer can do this himself or rely on our specialists to do the job.

3. Which equipment is needed to put the wall elements into place?

In order to put the wall elements into place, the following equipment is needed:

- Tower crane
- Buttresses
- Drill / screwdriver / grinder
- Spirit level (2m)
- Folding rule
- Long board (4m)
- Ladder platform or mobile scaffold
- Mortar tub / barrow
- Plastic end stops
- Plastic adjusting blocks



- Traditional mortar
- Concrete screws M10 x 120mm
- Wood screws M8 x 80mm

Attention:

Make sure to only use certified materials which meet the security requirements and use collective and personal protective equipment. Always take into account the safety instructions applied at the construction site.

4. How are the wall elements being transported to the construction site?

The wall elements are placed on metal frames that are being transported to the construction site using a truck. Once the truck has arrived, the metal frames are put on a level surface. The wall elements themselves feature integrated lifting anchors for safe transport.

5. How are the wall elements unloaded?

The truck driver can unload the metal frames independently. He will always try to put them as close to their final position as possible. Once the walls are put into place, the metal frames are piled up and returned to MasterWalls.

Attention:

Always make sure to request the necessary permissions in case public domain is needed to unload the wall elements.

6. How are the walls being mounted?

Unless otherwise specified, the mounting always starts in a left corner at the front side. For every project, MasterWalls will provide a detailed installation plan.

With bilge layer:

The bilge layer always needs to be as flat as possible. On top of the bilge layer, there will be a water barrier. The adjusting blocks are placed on the water barrier.



Without bilge layer:

When there is no bilge layer, the adjusting blocks are mounted directly on the concrete surface.

Every wall element has two fulcrums (one on each side of the element) Make sure to place half of the adjusting block under wall element A and half of it under element B. In between the adjusting blocks, a layer of mortar is applied. Every wall element has integrated plugs making it easy to scaffold them.

During installation, the wall element remains attached to the lifting hooks until the scaffolds are fixed. Place the scaffold at the height of the plug and attach it to the wall using a bolt. Drill a hole through the lower part of the scaffold in the concrete surface and attach it with a bolt. Now use the scaffolds to level the walls. Be careful not to damage existing walls while mounting a new one.

Attention:

Always make sure that the walls are secured by a clamp or scaffold

7. How are the individual wall elements being connected to each other?

Every wall element contains sufficient connection loops. Maintain a distance of +- 3cm between the wall elements and make sure they are perfectly aligned. Once this is done, the connection loops will overlap. Subsequently, the walls are connected using an 8mm iron bar reaching from the top to the bottom of the wall element.

Lastly, the vertical joints are filled with non-shrinking grout.

8. Can wall elements also be installed on the first floor or higher?

Yes, they can. In this case, the wall elements aren't mounted on a bilge layer but directly on the cover layer of the floor plate. The wall elements are levelled using mounting blocks.

Attention:

While working at heights, always make sure to wear fall protection and take into account the safety prescriptions.



9. Are MasterWalls also available as a gable?

Yes, they are. Gables are always sawn in advance to make them fit. The installation is done in two or three different layers and can be compared to the installation of other wall elements. Solitary walls that are not connected to others need to be scaffolded in the standard way, just like traditional brickwork.

Attention:

While working at heights, always make sure to wear fall protection and take into account the safety prescriptions.