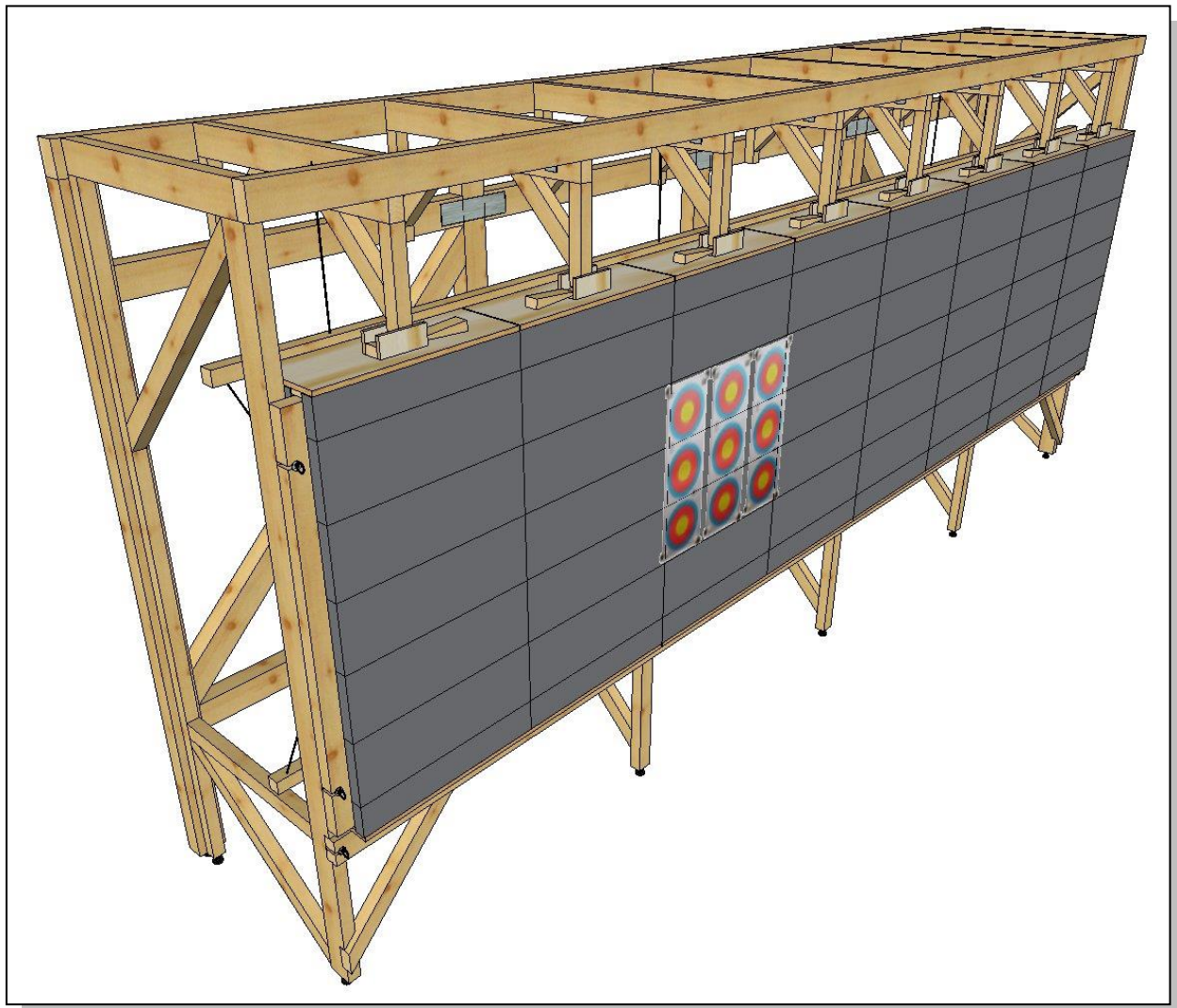# DANAGE DOMINO Shooting Wall.

Modular design = flexibility as standard.
Enables individually adapted dimensions, from short to "endless".

Introduction and princip assembly and maintenance instructions.

1. Princip.

Danage Domino Shooting Wall concept enables you to design and build your own "endless" wall with nothing but foam in the target area (no wood or other material).

The flexible modular construction princip is practically
-   unlimitedly scalable in length,
-   and partly scalable in height,

The shooting wall can be independently free standing - or fixed to a wall on the sides or back as well as ground or ceiling of your choice.

The design is based on Danage Domino Target System modules and supports;
-   Modules to be moved-, turned and switched individually, whereby foam lifetime is prolonging.
-   Individual vertical section of foam to be maintained individually.
-   Danage Domino PE (HD/XHD/X-XHD) and UP foam.
-   PowerStop.

This means less costs for spare parts and "working hours" - leaving you time for the fun part: Shooting.

2. So how to get started:

For you to design and build your own Shooting Wall, Danage offers you this document and the available "Danage Domino Standard Shooting Wall, production princips" as guidance.
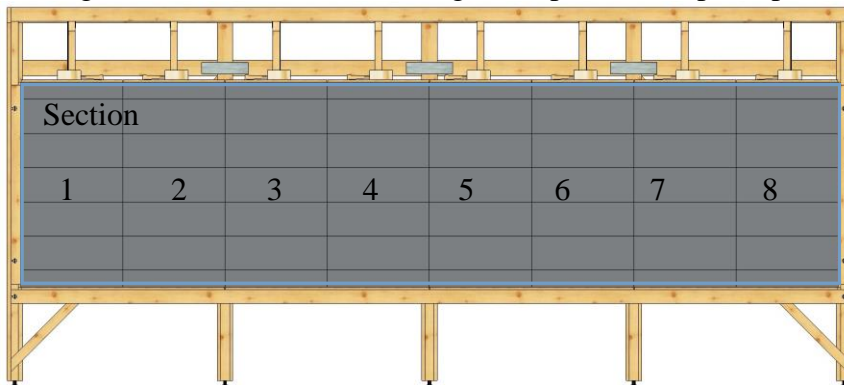
The princip is described and illustrated by a free standing Shooting Wall with 8 vertical sections of:
-   5 pieces 66x22 cm Long Part modules
-   2 pieces 66x11 cm Long part modules (1 pc. in top and bottom).

The foam area is 528 cm x 132 cm (L x H)
The middle of the center Long Part module is positioned 130 cm above floor.
Outer dimension, wooden structure: 545,50 cm x 244 cm x 97 cm (L x H x D).
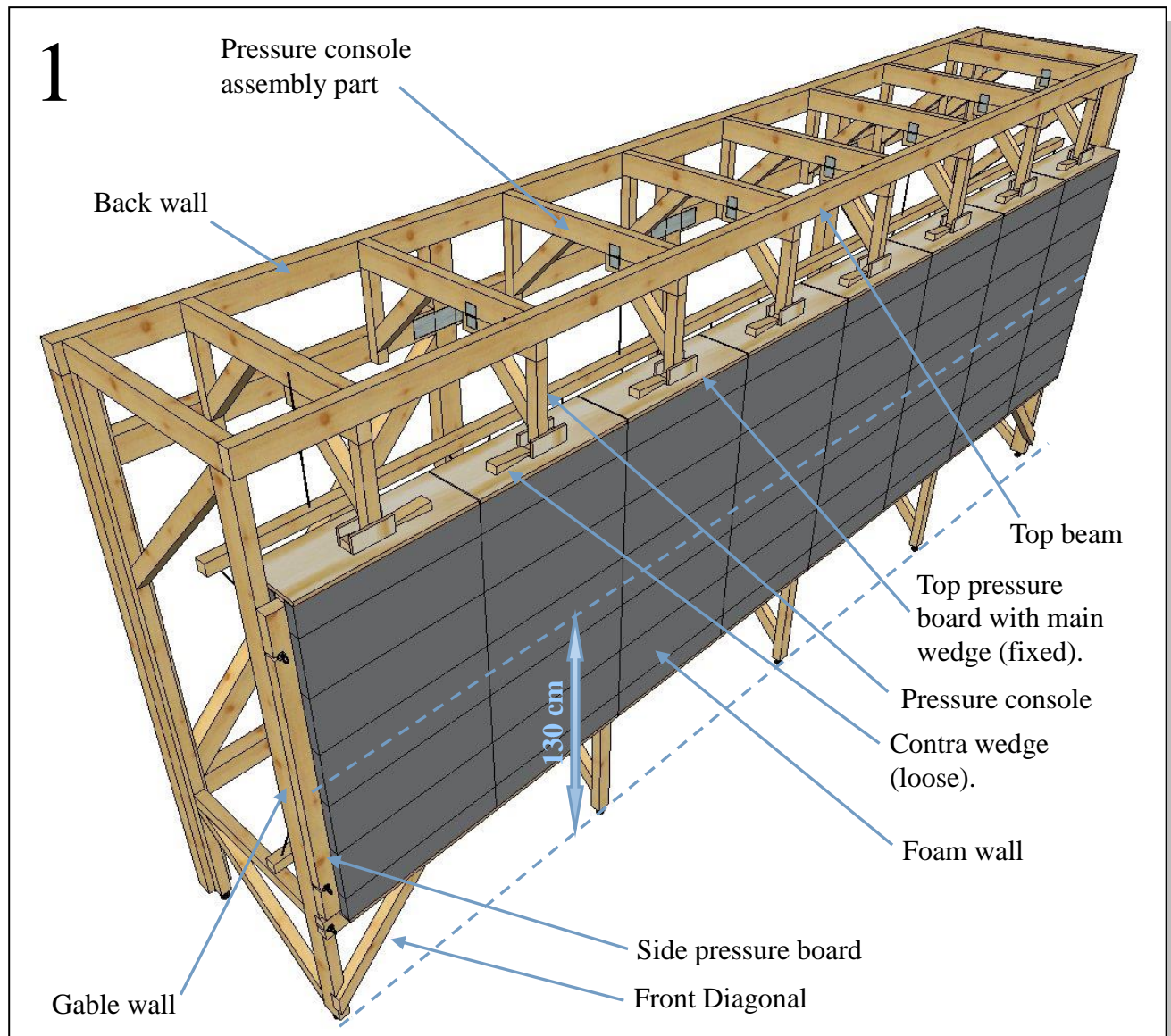
The scalability can be adapted within following span:
-   Length; any number of "full" 66 cm sections from 4 to endless (foam area length from 264cm), even odd lengths of 11 cm intervals is available.
    (enabling a foam area of e.g. 15 x 66 cm sections + 2 x 11 cm adjustment parts = 1012 cm length).
-   Height; Foam area is standard 132 cm, (can be less, e.g. 110, 99 or 88 cm).
-   Foam; DANAGE DOMINO foam dimensions and types can be integrated according to your wishes.
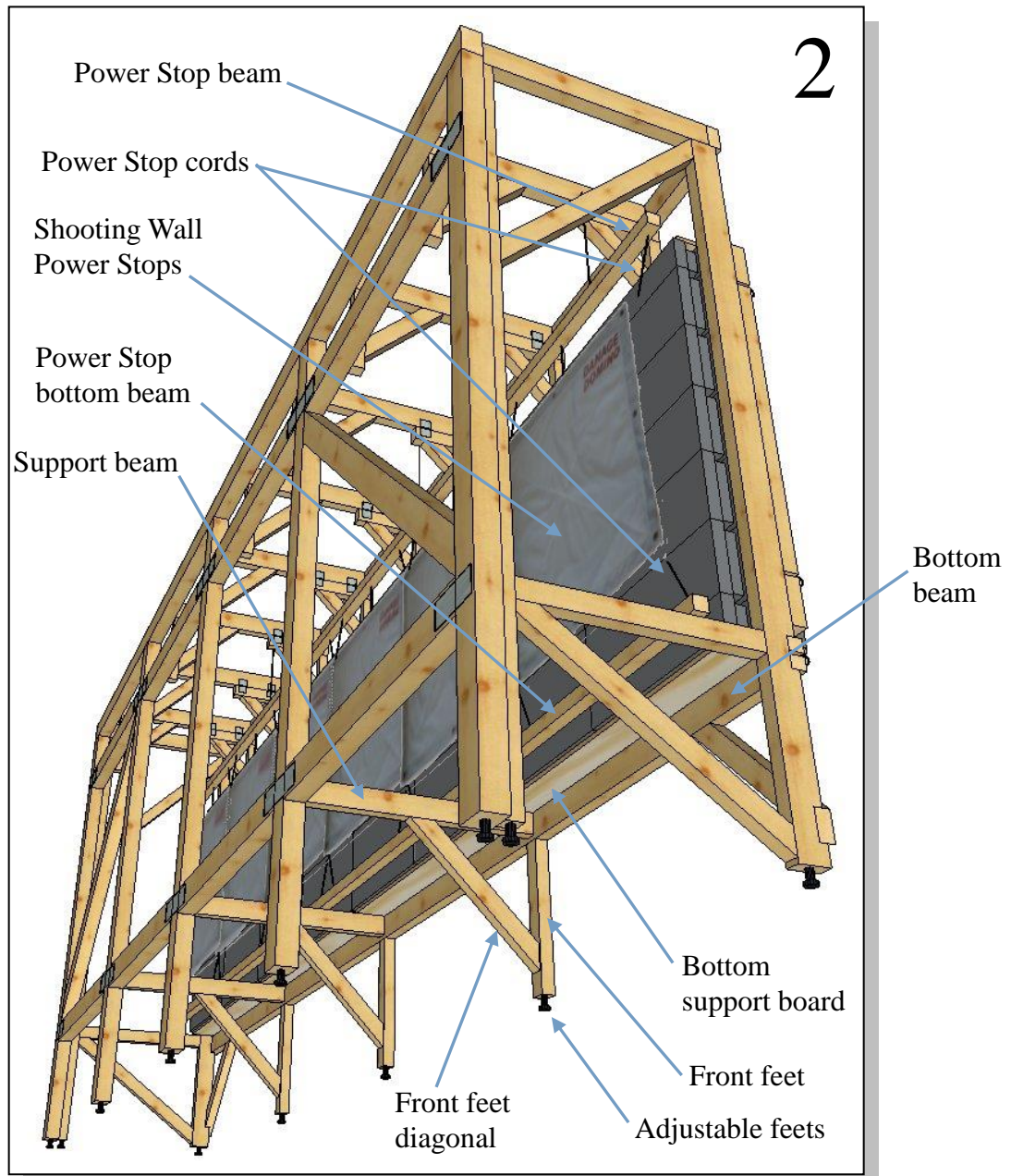
So for you, it is just to define what dimensions suits your needs the best way.

For detailed description, please see the following pages.

3. The Shooting Wall parts.

Image 1 and 2 introduces the parts of the Danage Domino Standard Shooting Wall, which in detail is further described in "Danage Domino Shooting Wall, production princips, 16-02 2016" also.


1

Pressure console assembly part

Back wall

Top beam

Top pressure board with main wedge (fixed).

Pressure console

Contra wedge (loose).

Foam wall

130 cm

Side pressure board

Front Diagonal

Gable wall

2

Power Stop beam

Power Stop cords

Shooting Wall
Power Stops

Power Stop
bottom beam

Support beam

Bottom
beam

Bottom
support board

Front feet

Front feet
diagonal

Adjustable feets

4. Length and height of the shooting wall.

The design supports any number of sections, from 4 to endless number of sections and adjustment parts as well. The changes needed of the wooden structures is described below, based on the deviation from the standard 8 section version of the shooting wall

The adaption to the different lengths, are mainly made in the middle of the wall - the outer 2 sections each side remains practically the same.

Please also see "Danage Domino Shooting Wall, production princips, 16-02 2016" for specific details.

In the front of the shooting wall.

Top pressure console

Shorter (less than 8 sections)

Longer (more than 8 sections)

3

Bottom beam
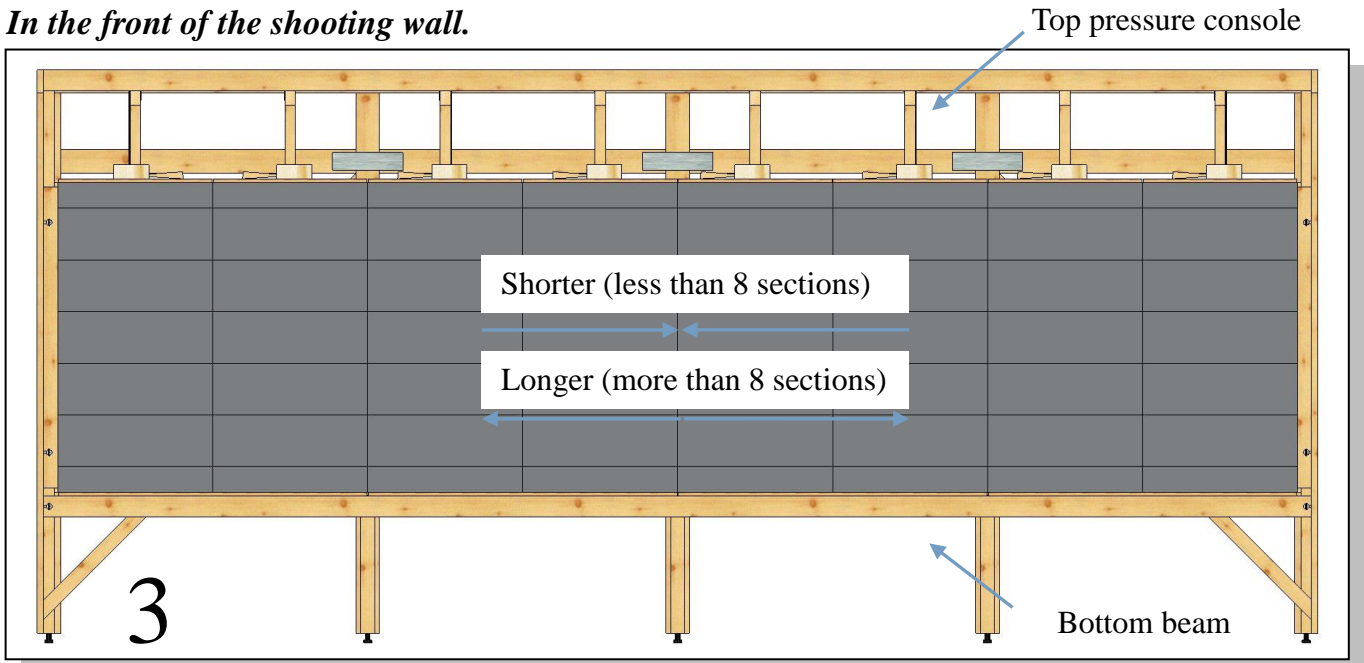
Shorter:
Leave out same number of top pressure console and board as the number of sections less than 8.
For each 2 sections less than 8, also leave out 1 bottom support boards and 1 Front leg.
(by 4 sections only 1 Front leg is needed).
Adjust the length of top and bottom beams accordingly.

Longer:
Add same number of top pressure console and board as the number of sections more than 8.
For each 2 sections more than 8, also add 1 bottom support boards and 1 Front leg.
Adjust the length of top and bottom beams accordingly.

If length does not match a full number of sections:
"Foam adjustment modules" available in 11 cm intervals (11, 22, 33 cm) can be added in one or both ends of the shooting wall.
Thereby the length of the different wooden parts mentioned above is adjusted likewise.

Height of foam wall;
For foam walls of 110, 99 and 88 cm height, extend the front legs and pressure consoles accordingly.

At the back of the shooting wall.
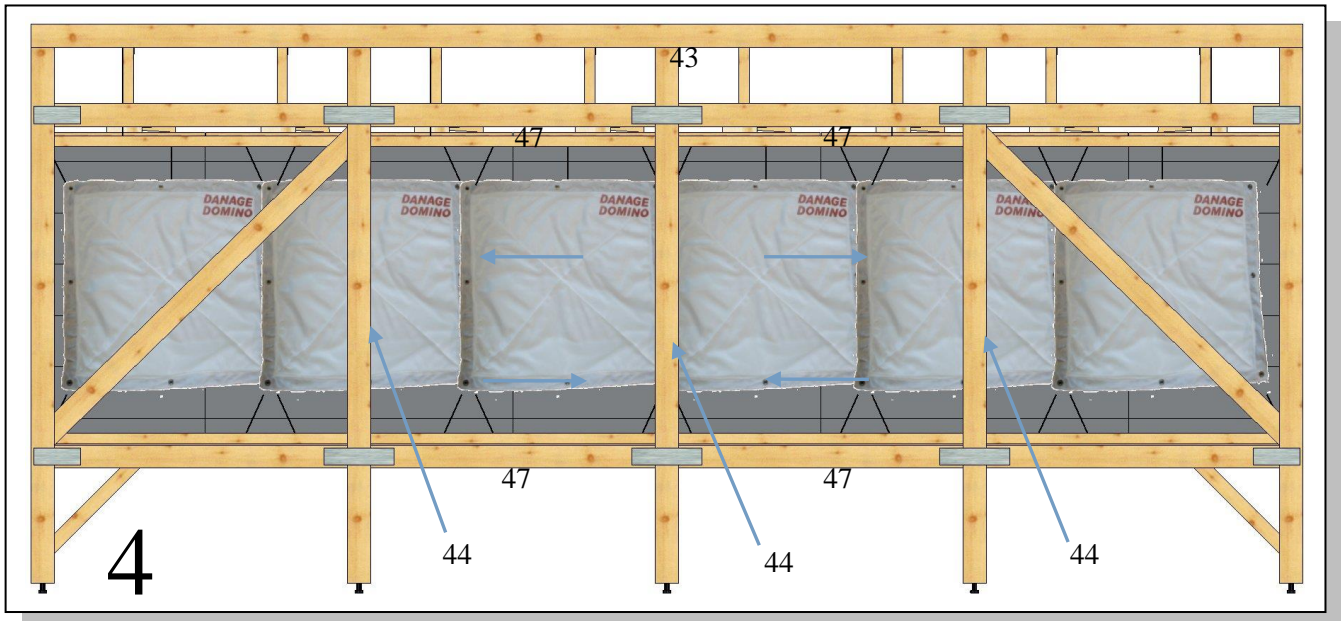
Shorter:
For each 2 sections less than 8 leave out 1 "44" and 2 "47" (by 4 sections only 1 "44" and no "47" is needed).
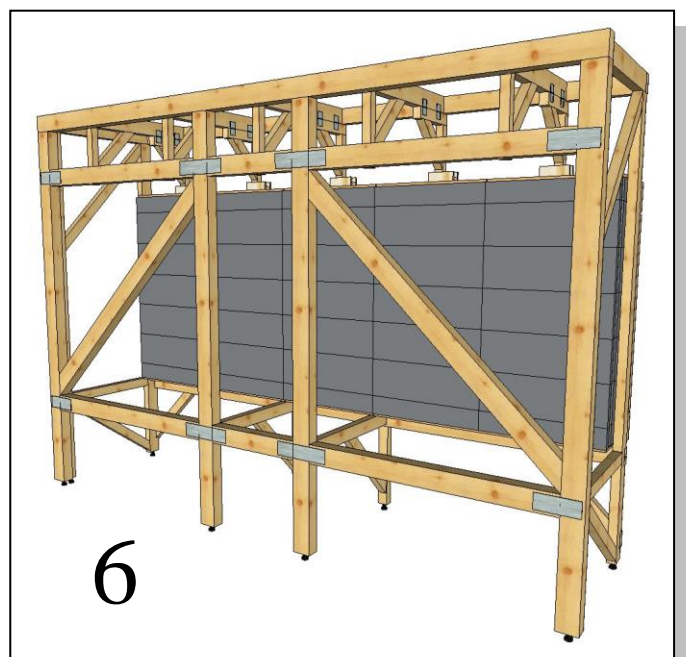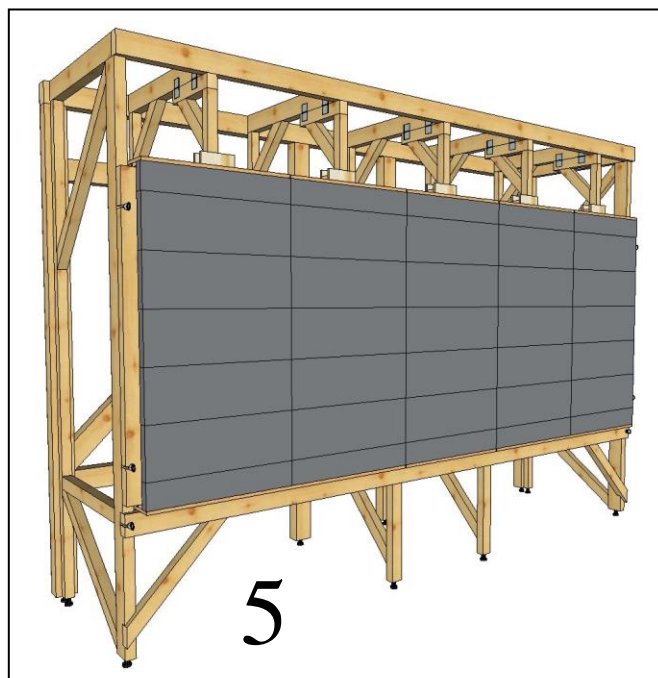Shorten "43" accordingly.

Longer:
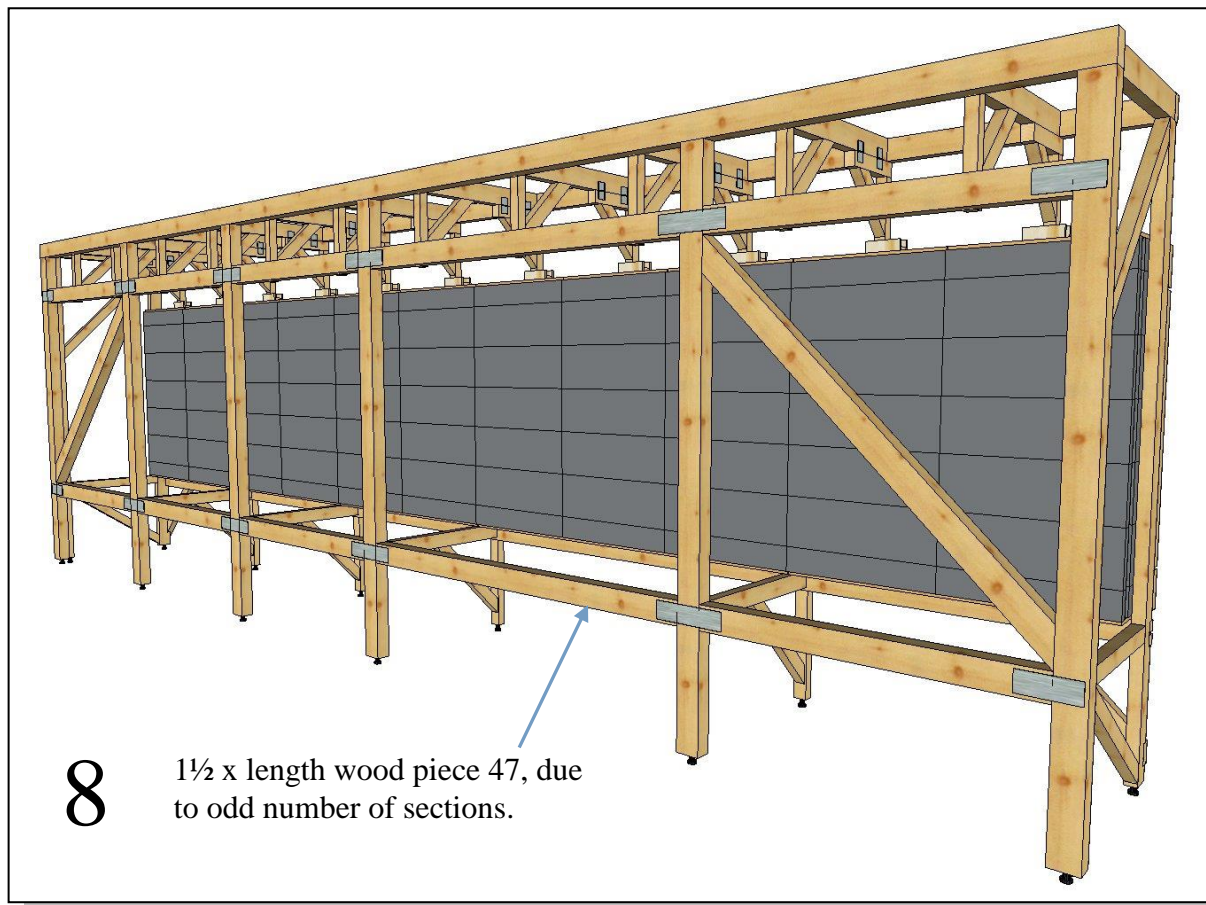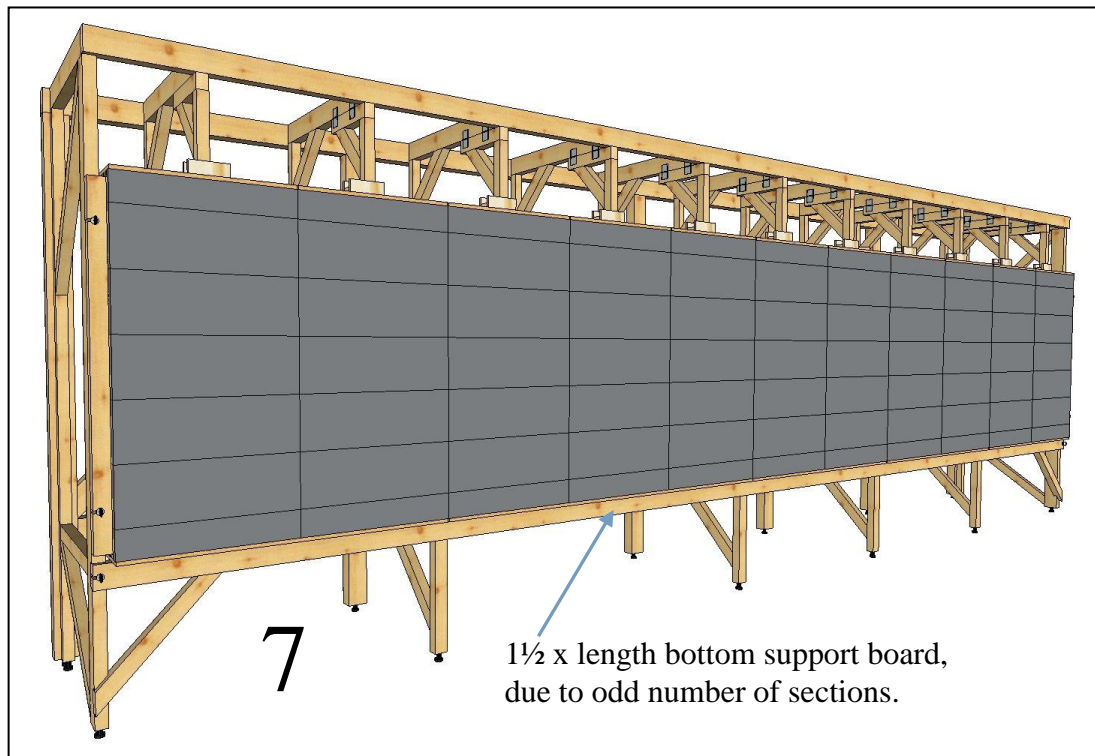For each 2 sections more than 8 add 1 "44" and 2 "47".
Prolong "43" accordingly.

Examples.

Shooting wall with 5 sections
(Shown without PowerStops).

Shooting Wall with 11 sections. (Shown without Power Stops).

7

1½ x length bottom support board,
due to odd number of sections.

8

1½ x length wood piece 47, due
to odd number of sections.

And so we could continue. But you get the idea, that the shooting wall can be built endless,
from 4 x 66 cm modules and up, to whatever length is needed.

5. Princip assembly instruction.
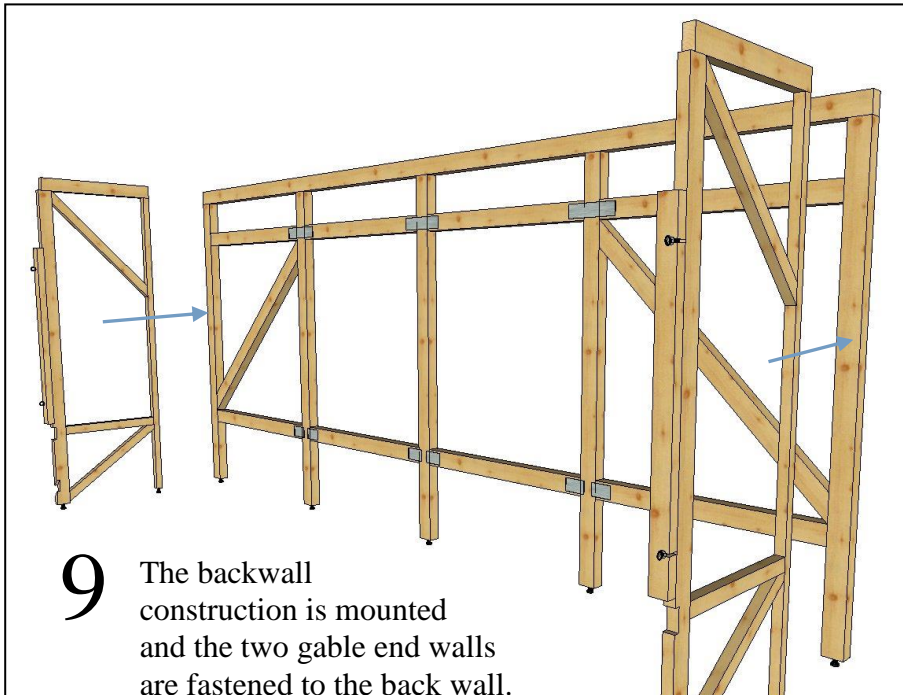
9 The backwall
construction is mounted
and the two gable end walls
are fastened to the back wall.
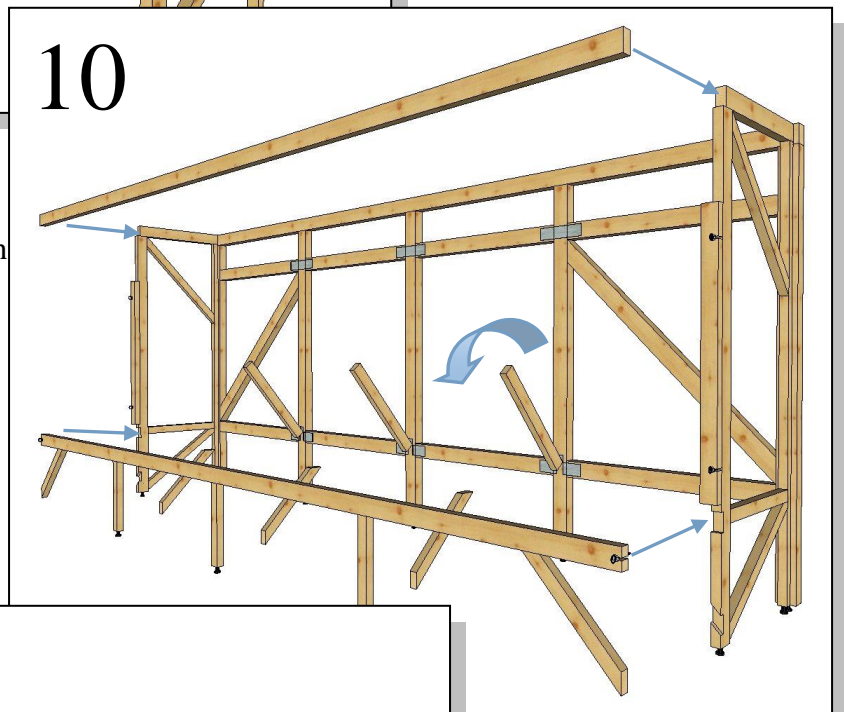
10. The support beams
is mounted on the backwall construction
(can be with hinges, so they are ready
and easily can be turned down, when
they are needed).
The top and bottom beams are mounted
together with the front legs and the
respective diagonals.
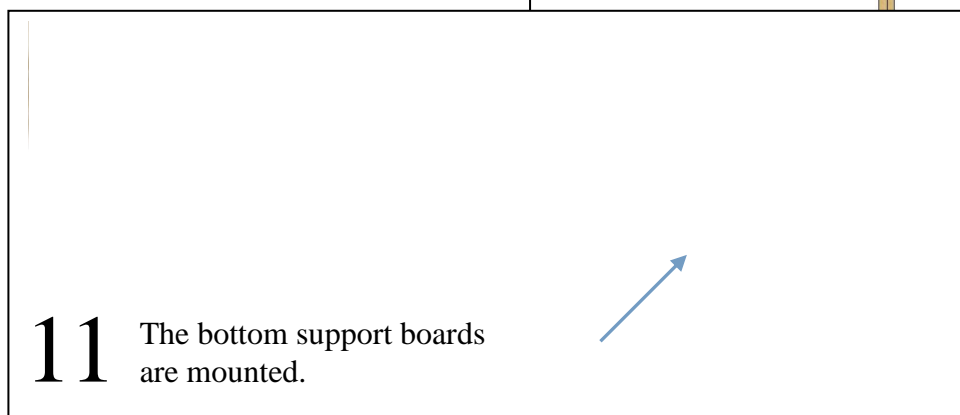
11 The bottom support boards
are mounted.

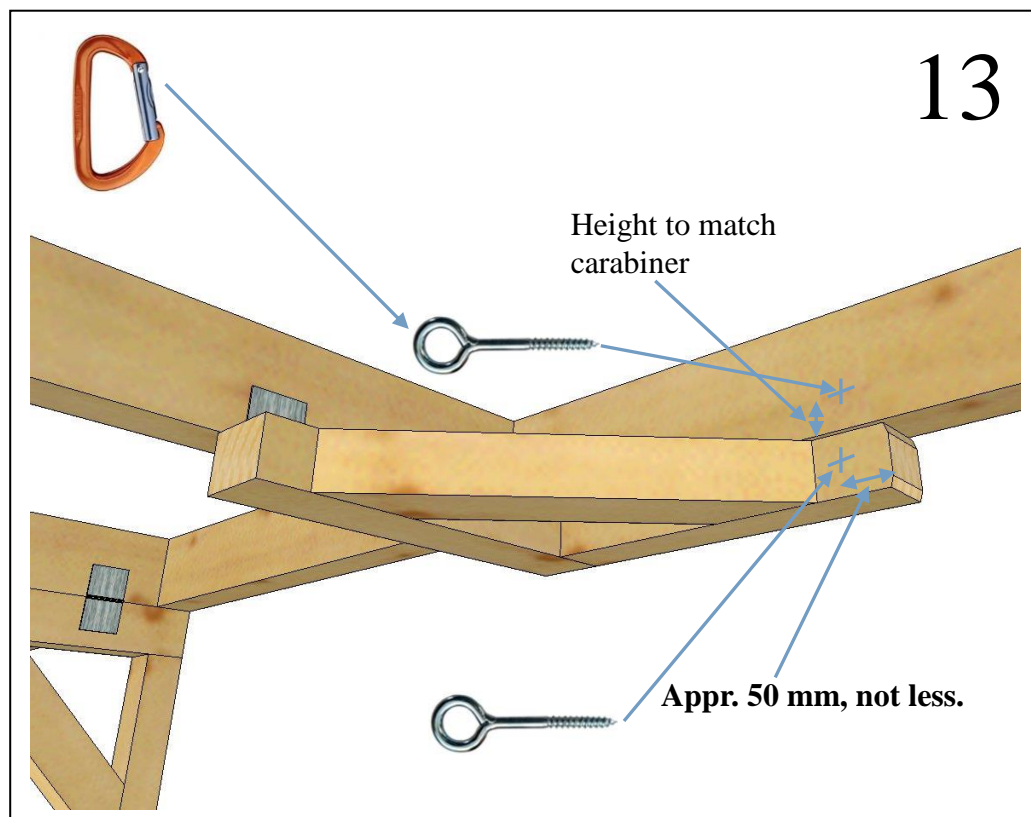Pressure console assembly part and pressure console is mounted.

Maintenance position
Choose either 12 (visible on front side) or 13 (hidden, but harder to reach) for you to get easy access to the mount and take out modules.

12 Height to match carabiner

Appr. 50 mm, not less.
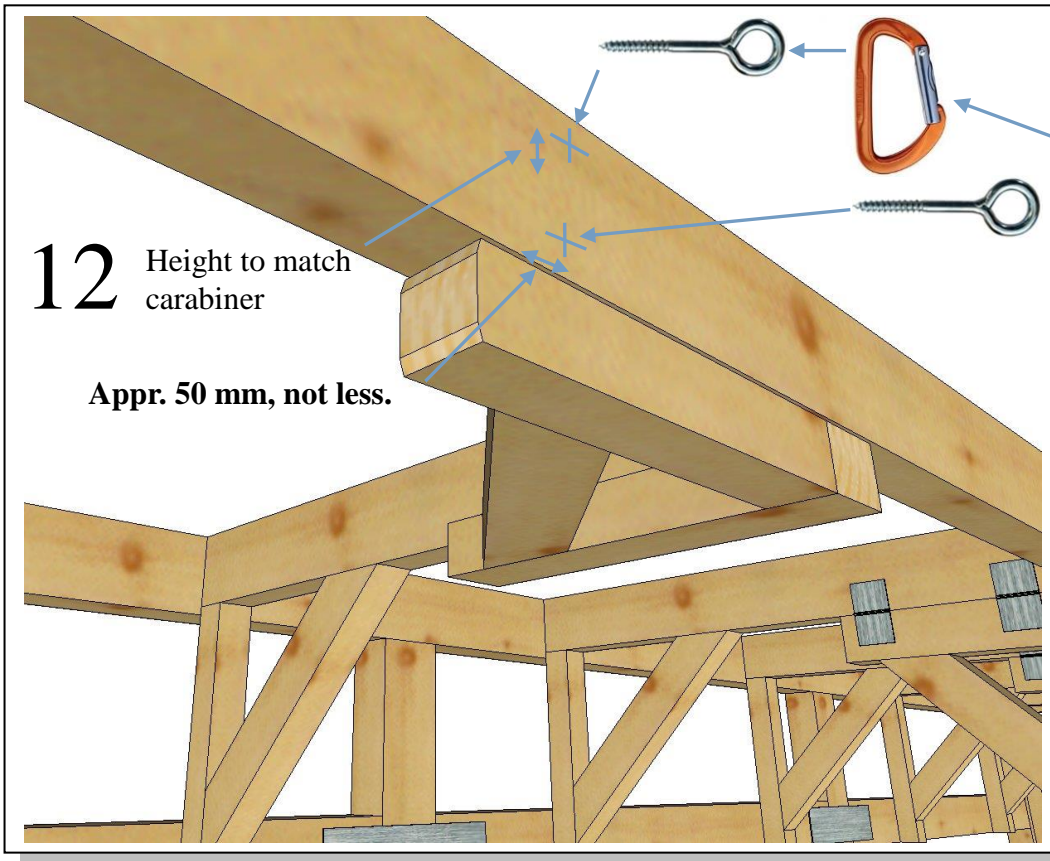
Hang carabiner in top eye-screw
(ready to receive the pressure console in case of maintenance).

13

13. An alternative is to place the eye-screws and carabiner at the back side.

Height to match carabiner

Appr. 50 mm, not less.

Mounting of the foam wall.

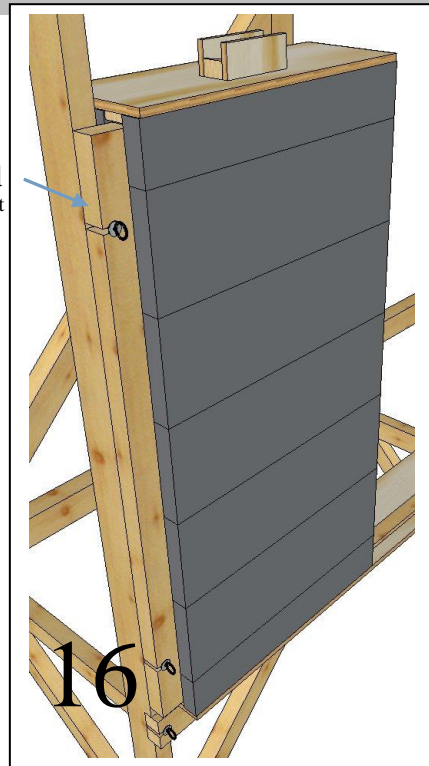Now the shooting wall construction is ready for mounting of the foam.

14. and 15.

Mount foam modules for the 1st section as shown.

14

15
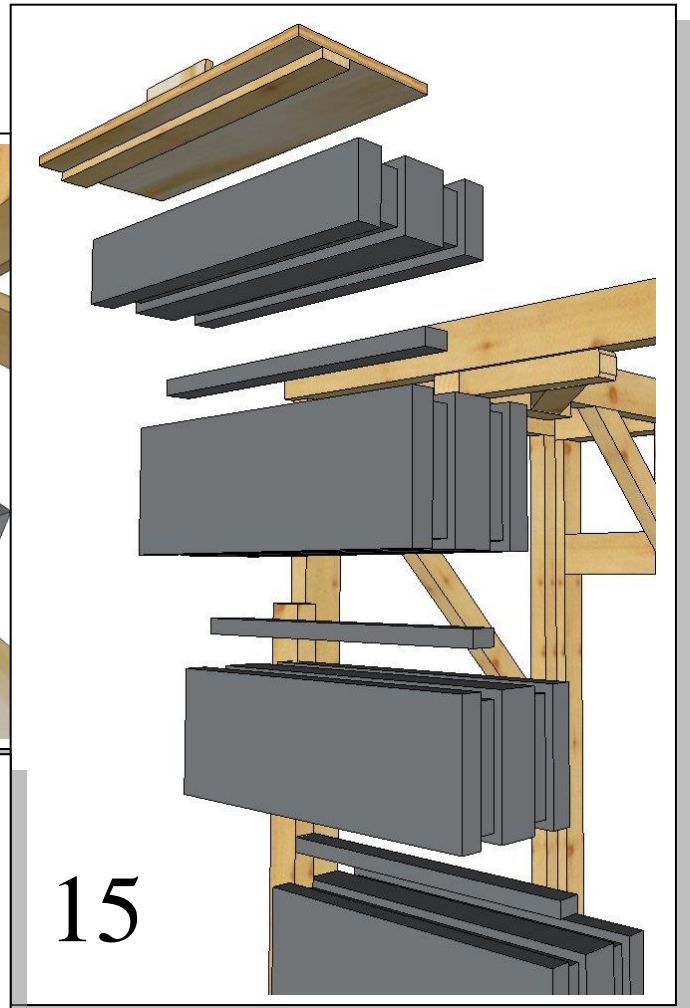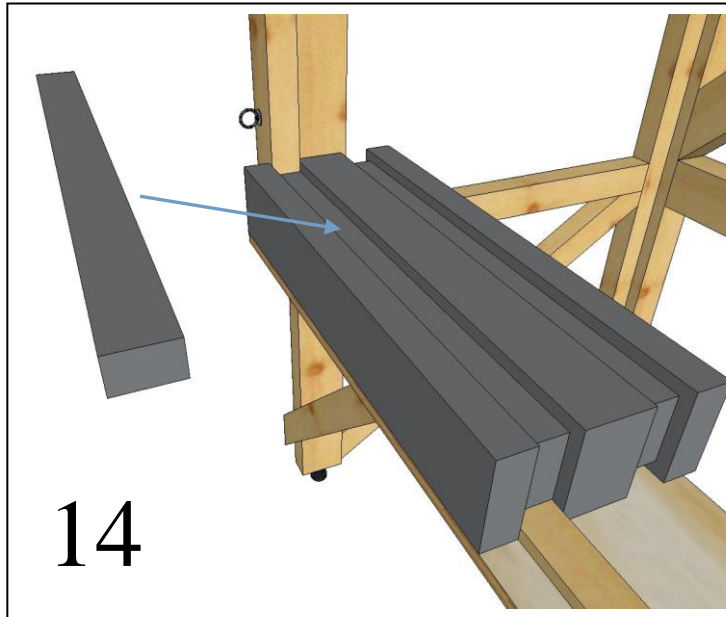
16.

Side pressure board helps to keep the 1st section of the foam wall stable.

Later used to keep pressure sideways in the foam wall.

16

17.

Swing pressure console down into the main wedge (till pressure console is in vertical position).
Keep the top pressure board / main wedge in position right above the foam modules.
If the pressure is not satisfactory, a contra wedge can be used to add more pressure.
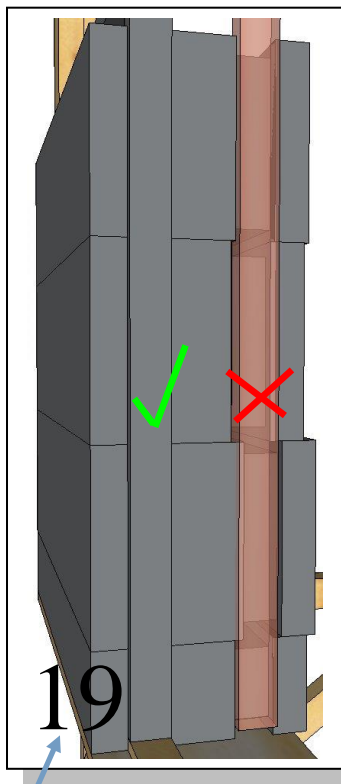
17
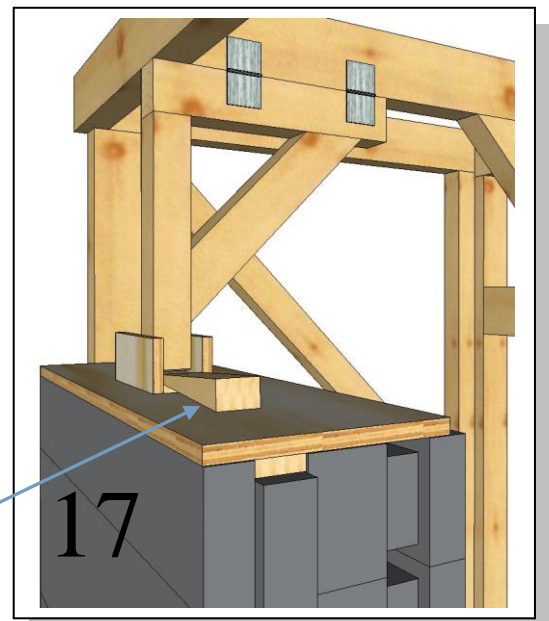
Mount Infill Parts into groove closest to the front (both horizontal and vertical);
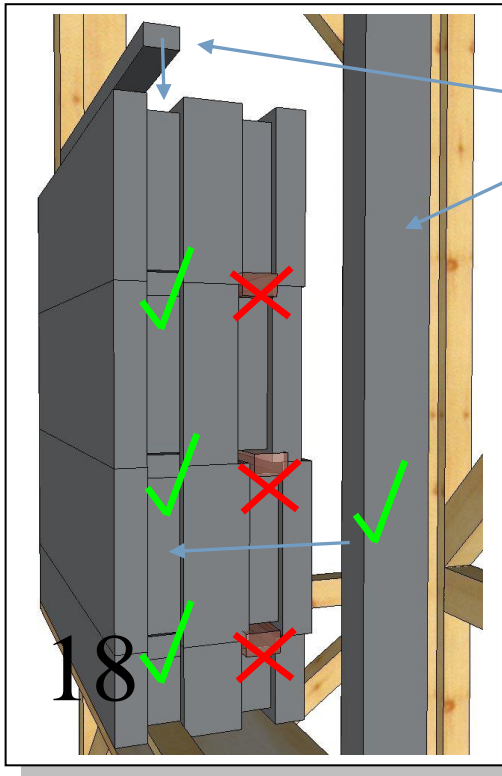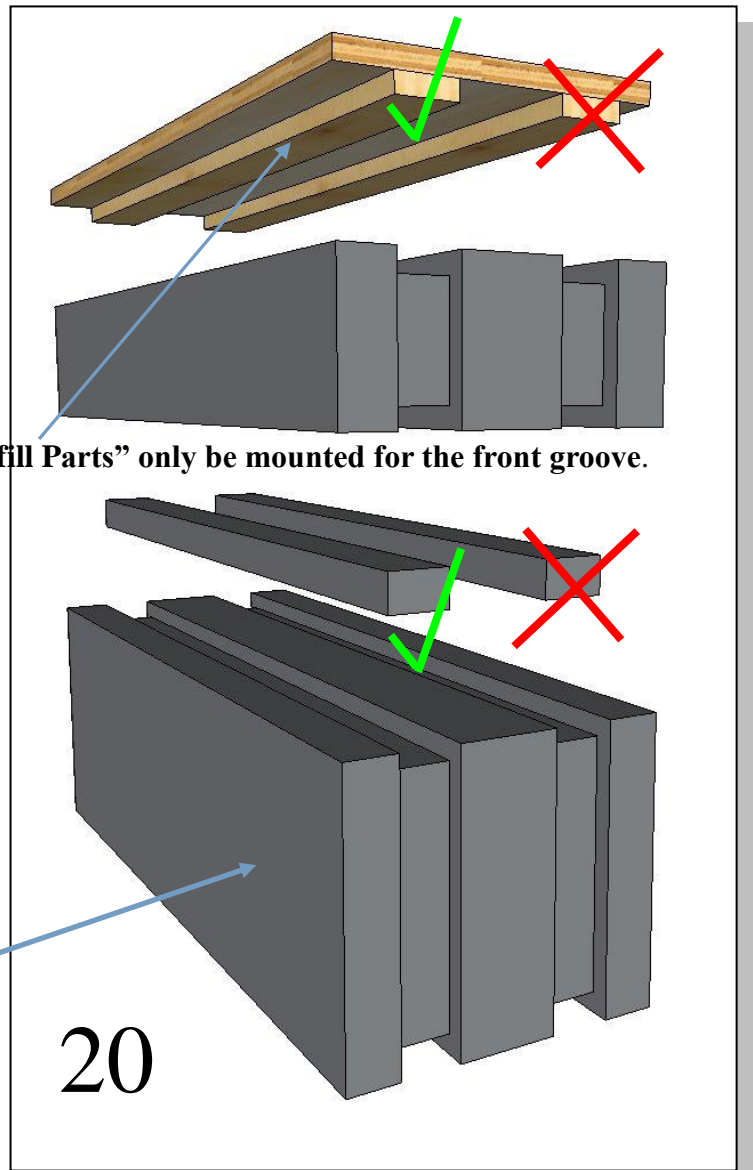

18, 19, 20.
Infill Parts (foam strips) are used both horizontally and
vertically
between the foam modules.

Mount in the groove closest to Front only.
Thereby the front side is kept firm.

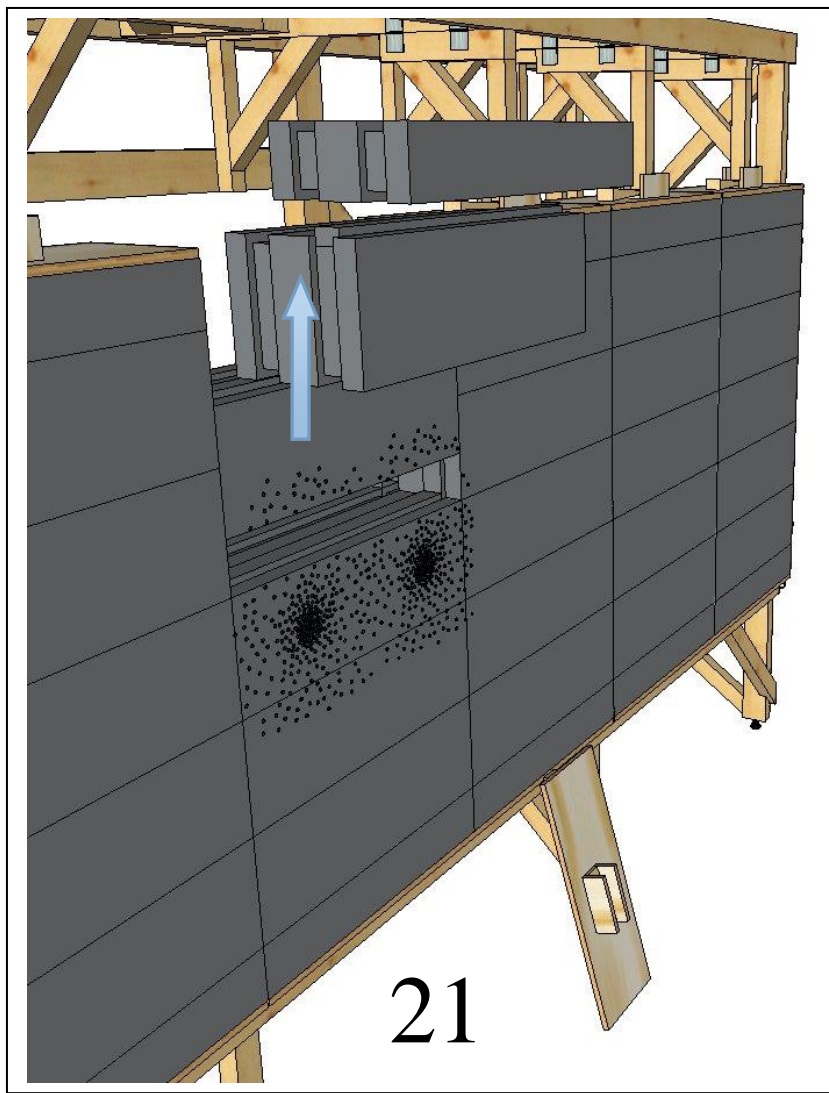Using both grooves might also make mounting difficult.

Wood "Infill Parts" only be mounted for the front groove.

Front of Domino
Shooting Wall or
any other Domino
Target Butt.

6. Princips of maintenance of worn foam modules.

Maintaining of foam can be done one section at a time.

21.
Loosen pressure console and the wedge(s).
In most cases possible by hand, if needed use a e.g. a rubber hammer.

Fix pressure console with carbine in vertical position. (See image 12-13).

Take up and out the foam parts.
In most cases possible by hand. If needed, release side pressure board and gently use a tool as a lever to take the foam parts up.

There are several possible options, for what to do with the foam modules, depending on the wear on them (see image 22 to 25 on next page):

22 and 23.
When front of foam module is worn to some degree, module can be turned backside-front.
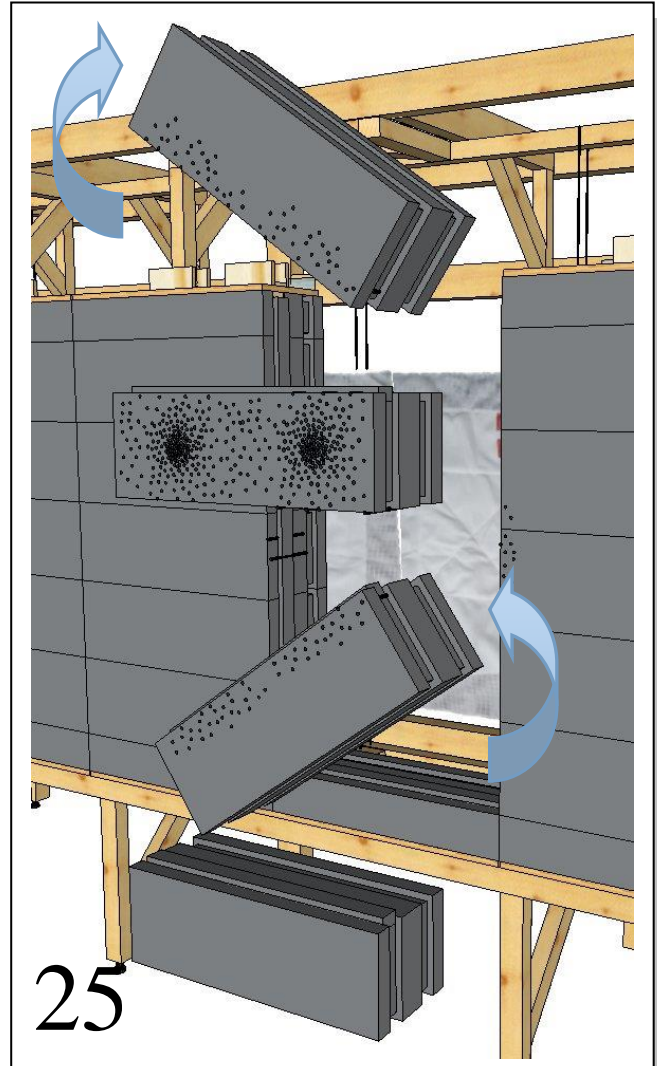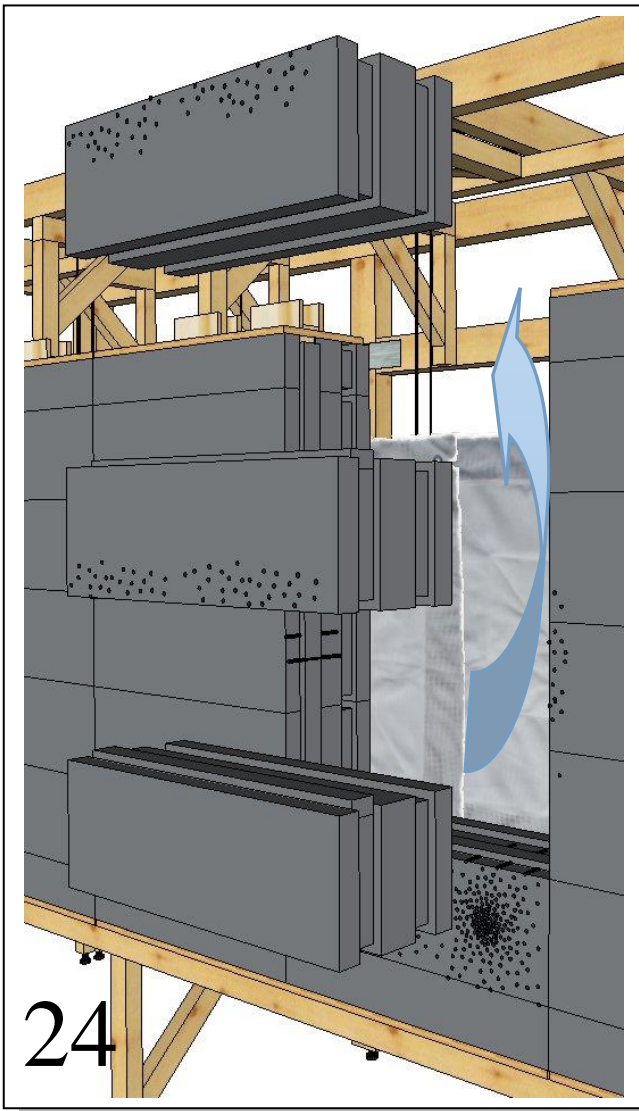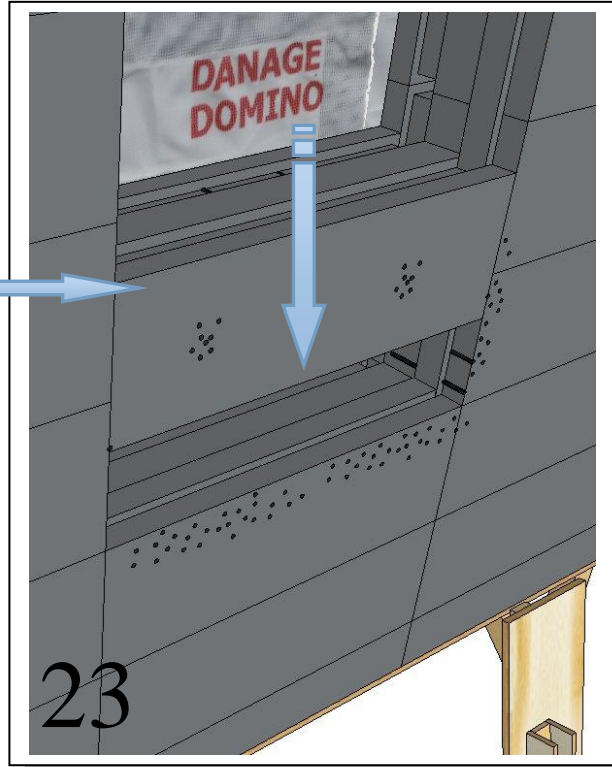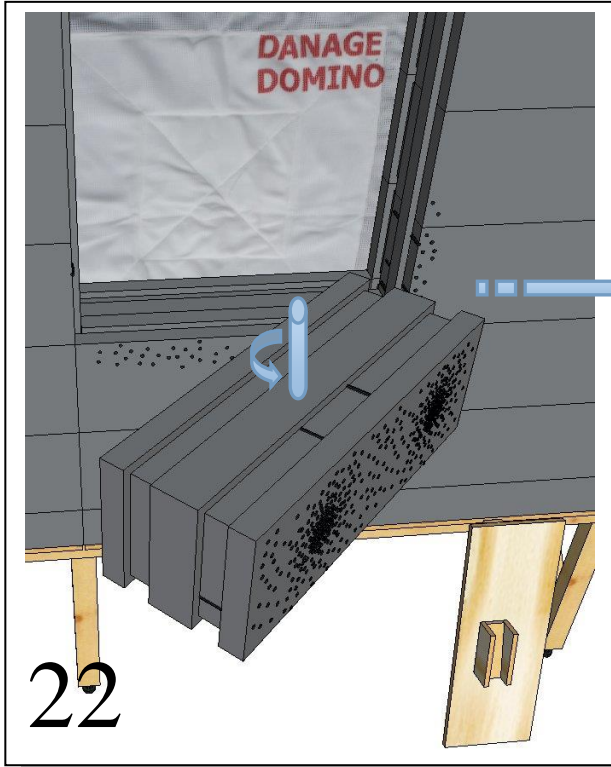*The backside only have a few shoot through holes.*

24.
When both sides of foam module is worn, it can be moved up / down in the foam wall.
Replaced with the less or little worn foam parts here.

25.
If one edge of the foam module is worn more than the other areas of that module, it can be turned.

Foam modules can be replace individually.

22

23

24

25

7. Flexibility.

Danage Domino Shooting Wall is a flexible shooting wall supporting nearly all Danage Domino PE- and UP foam modules. The UP-foam modules are available in 3 sizes: 22x22 cm, 44x44 cm and 66x22 cm. Please see these examples as possibility to use different foam modules for illustrating the versatility of the shooting wall.

PE-foam
26
UP-foam, 66x22 cm

27
66x22 cm modules
66x11 cm modules   44x44 cm modules
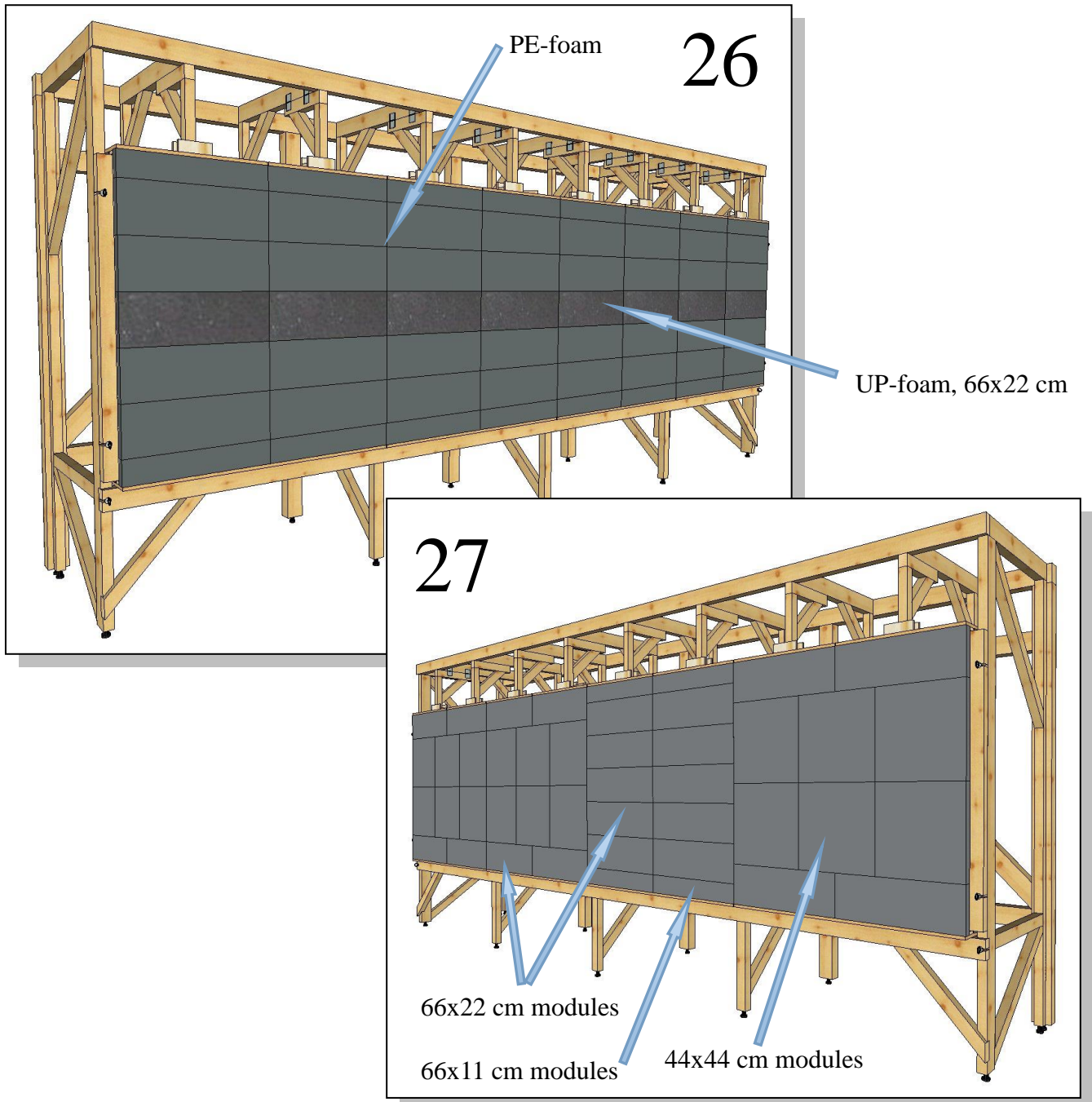
NB: The illustrations in this introduction are princip images.
Colors of the foam etc. are for illustration purposes only.
Not all details are shown and details can change.
The foam modules can / will vary in thickness, what ís shown on page 11. But the Danage Domino system is made so that the grooves in the foam modules combined with the infill parts make a nice flat front surface.