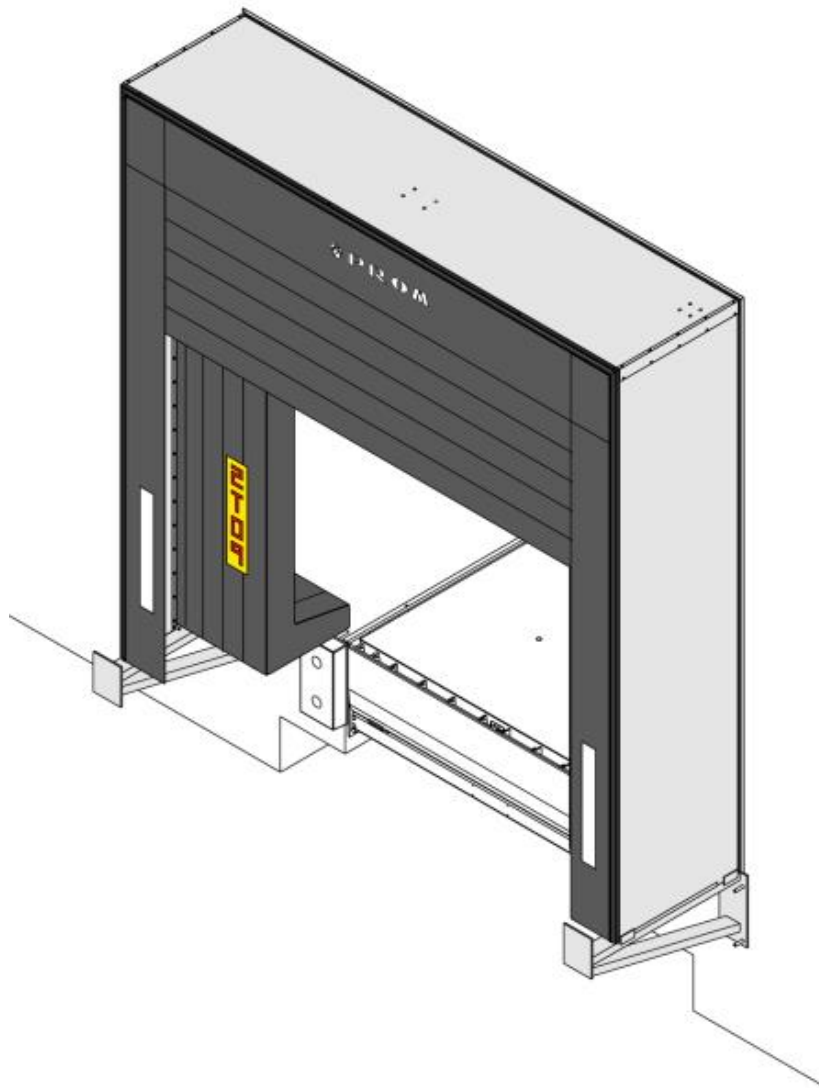


**Data sheet**



**Table of contents**

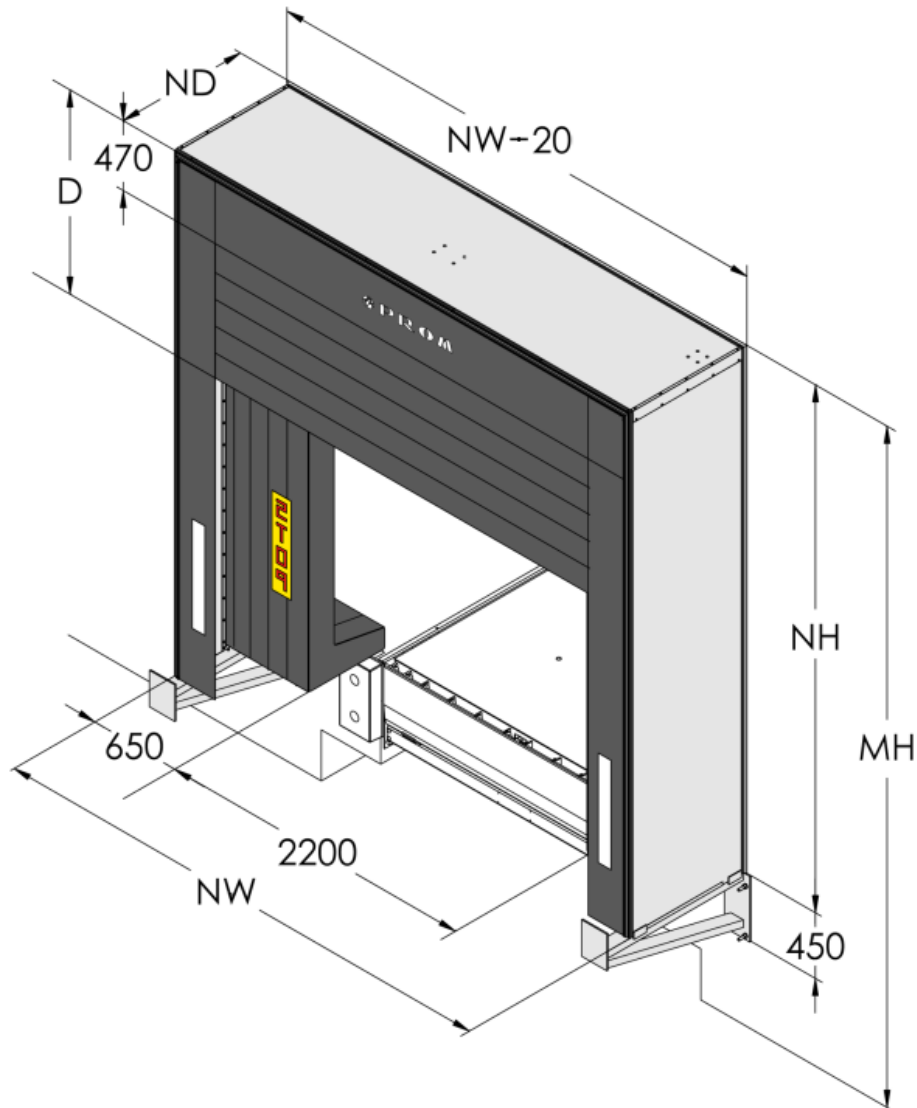
1.	General information.....	3
1.1.	Design features .....	4
1.2.	Table of dimensions.....	6
2.	Options .....	7
2.1.	Cushions made entirely of PVC.....	7
2.2.	Additional front cover of the cushion .....	7
2.3.	Stripes.....	8
2.4.	Bottom zone sealing cushion .....	8
2.5.	Electric sealing blind .....	9
3.	Design variants .....	10
4.	Fasteners to the building.....	11
5.	Assembly drawings .....	13
6.	Selection of sealing .....	15

## 1. General information

The PWI type pneumatic dock shelter is a new design in the wide range of PROMStahl products which combines optimal sealing performance with application versatility. It is intended for customers who pay special attention to power savings and want to protect their goods from the effect of atmospheric conditions. Differences between the dimensions of the warehouse door opening and the docked truck create empty spaces which must be sealed in the best possible way. The inflatable side and top cushions adhere closely to a vehicle forming almost an airtight connection. Such type of sealing is perfect for protecting coolers and air-conditioned warehouse rooms, etc. Application of the described sealing solution ensures significant power savings, improvement of working and sanitary conditions, thus increased personnel performance. Furthermore, unauthorised persons cannot enter or leave the warehouse without being noticed. The inflatable side and top cushions guarantee not only optimal sealing but also adapt automatically to truck dimensions. With this, it is possible to dock vehicles of different dimensions which have to be effectively sealed. The pneumatic dock shelter combines excellent sealing properties with a modern structure, while meeting rigorous design requirements. The applied materials are of top quality. The inflatable cushions are made of cordura, which is distinguished by its high resistance to all mechanical damages and the influence of moisture and mould, and PVC. The frame comprising aluminium sections resistant to tough operating conditions is enclosed by 40 mm thick sandwich panels. These advantages make the pneumatic dock shelter a good investment with short turnaround time. The device is delivered in preassembled parts, including sets of fasteners appropriate for the building structure, which provides quick and inexpensive installation in each building scenario.



### 1.1. Design features



- Nominal width (NW): 3300; 3500; 3600 mm
- Nominal heights (NH): 3600, 4000, 4700 mm
- Structure depth (ND): 920 mm
- Top cushion nominal height (D): 1350, 1750 mm
- Top cushion nominal width: 650 mm
- Mounting height (MH): 4700 mm (recommended)
- Cushion material: codura, PVC (0.5 mm) with textile interweaving, PVC sheathing (3 mm)
- Wall and roof material: 40 mm thick insulated sandwich panel

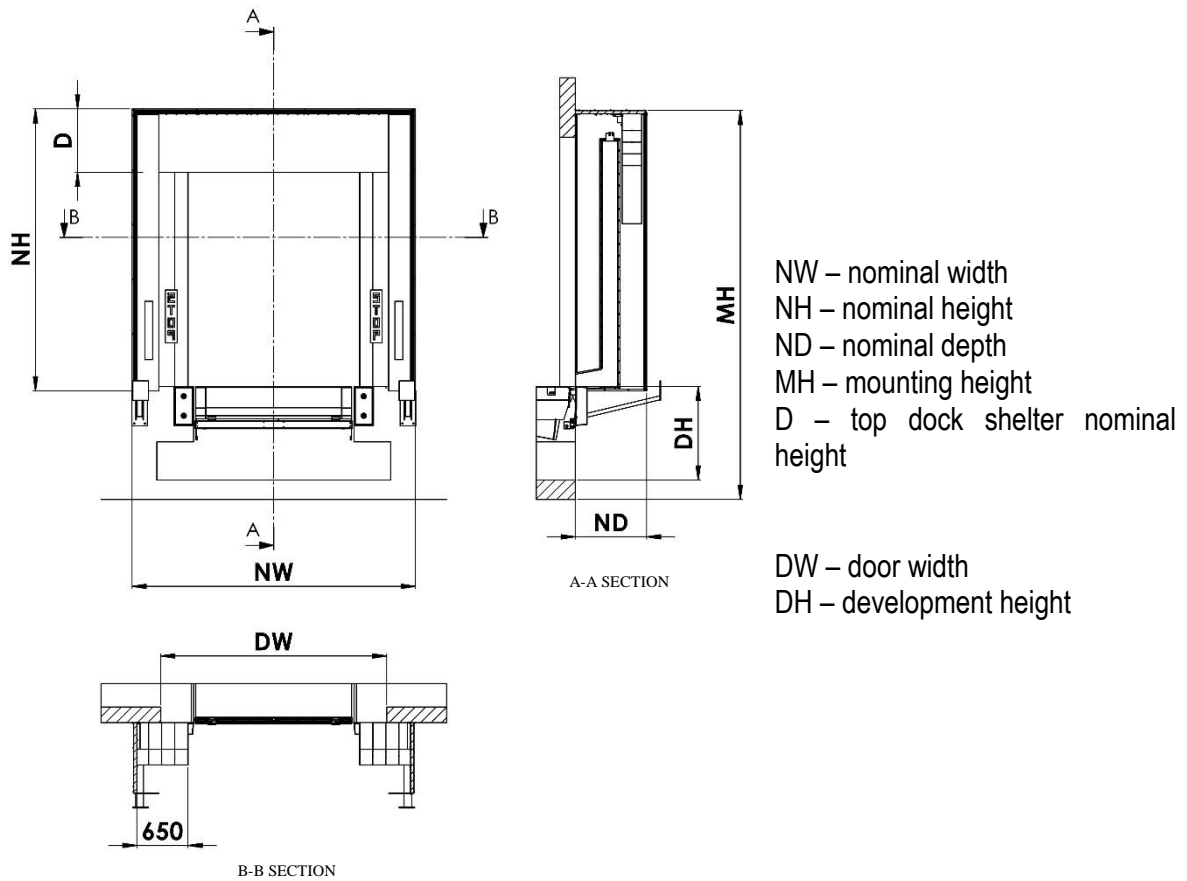
## Pneumatic dock shelter PWI.02

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- Stripes: white, yellow
- Assembly sets: concrete wall, insulated wall, sandwich panel, steel plate
- Blower: 230/400V, 50Hz, 0,55kW

The cushions in the resting position (not blown) are hidden behind the sealing claddings. This ensures that the truck driver can see the whole ramp when backing up the vehicle. When the vehicle is in the dock, the cushions inflate in 30 seconds providing perfect sealing from top and side of the trailer. Time of return to the initial position is 40 seconds. An unquestionable advantage of this solution is the fact that the cushions in the resting position (not blown) do not cover the loading area. This guarantees optimal access to the cargo space and working surface on the ramp. The docking station up to external height of 4000 mm can be equipped with integrated inflatable bottom cushions to provide sealing to the bottom space between the docked vehicle and the warehouse ramp. In order to ensure optimal durability of the device and avoid potential mechanical damage, it is recommended to use the PWI dock shelter together with PROM approach auxiliaries.

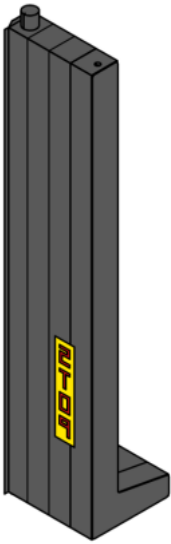
### 1.2 Table of dimensions



NW	3300;3500;3600
NH	3600;4000;4700
ND	920
D	1350;1750

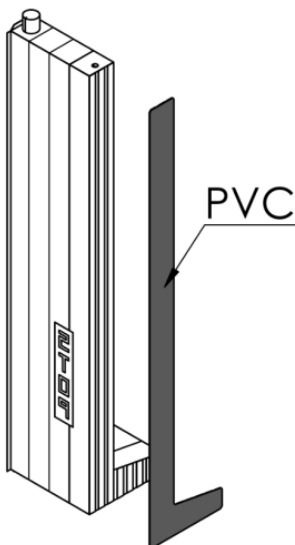
## 2. Options

### 2.1 Cushions made entirely of PVC



The solution increasing the resistance of the device cushions to the effect of atmospheric conditions and reducing the risk of damage by imprecise docking or use of untypical vehicles. The whole cushion is made of 0.5 mm thick PVC with textile interweaving.

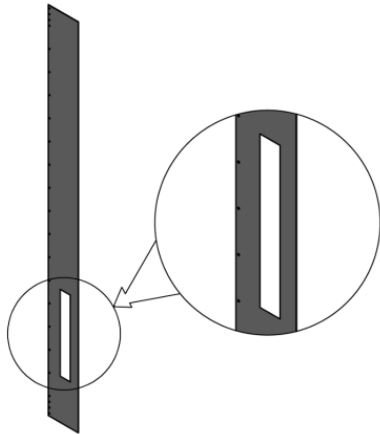
### 2.2 Additional front cover of the cushion



## Pneumatic dock shelter PWI.02

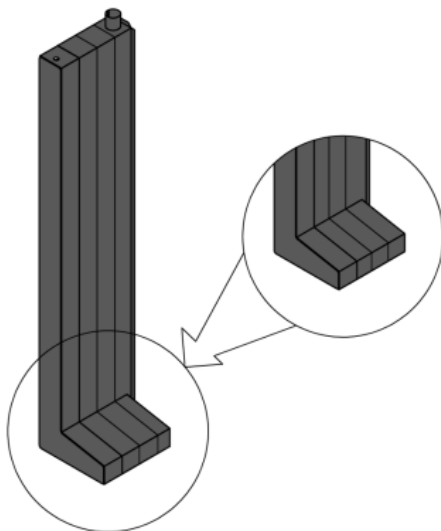
A 3 mm thick PVC cover with textile interweaving. It improves the strength of cushions in docks of very high loading intensity.

### 2.3 Stripes



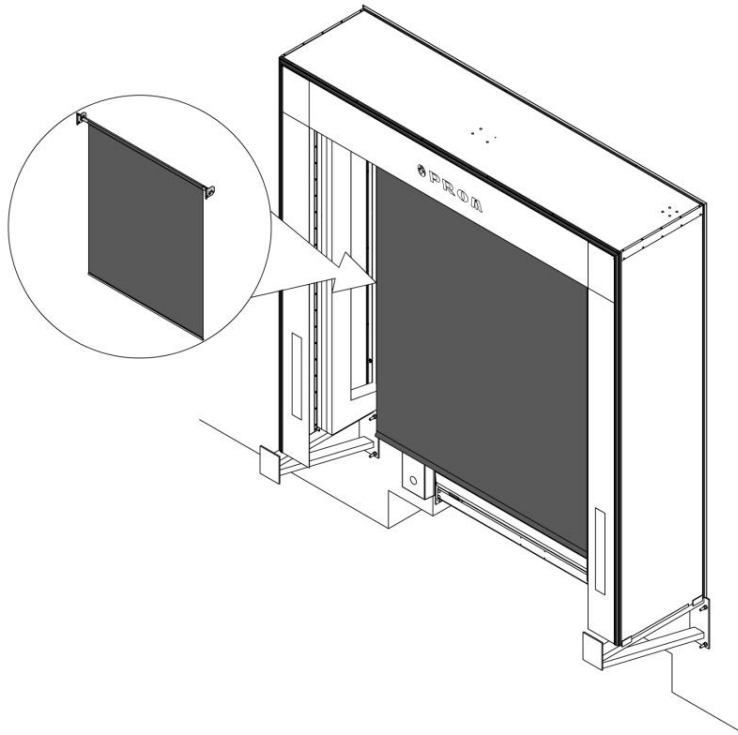
Standard white or optionally yellow stripes for easier docking of vehicles.

### 2.4 Bottom zone sealing cushion



An additional component available for the ramp version. It is located in the bottom part of the side cushion and seals the PWI shelter corner.

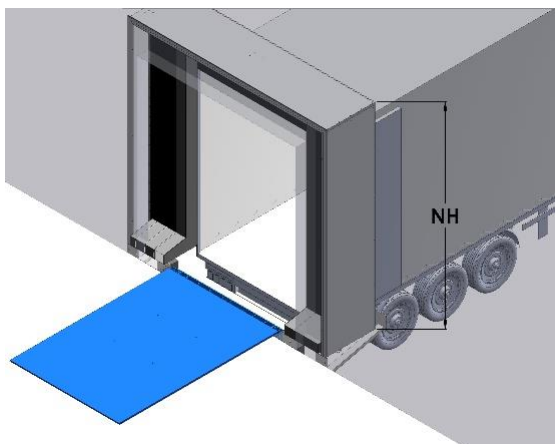
### 2.5 Electric sealing blind



An additional sealing blind with an electric drive for handling trucks of significant height differences. Directly controlled or integrated with the PROM docking leveller controller.

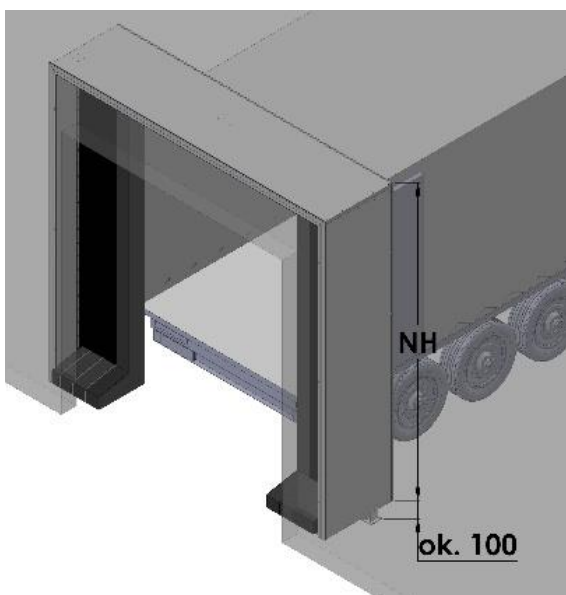
### 3. Design variants

#### Ramp model



Shelters of nominal height of 3600 and 4000 mm. Mounted in loading stations in which the warehouse floor and the truck cargo surface are almost at the same height.

#### Road surface model

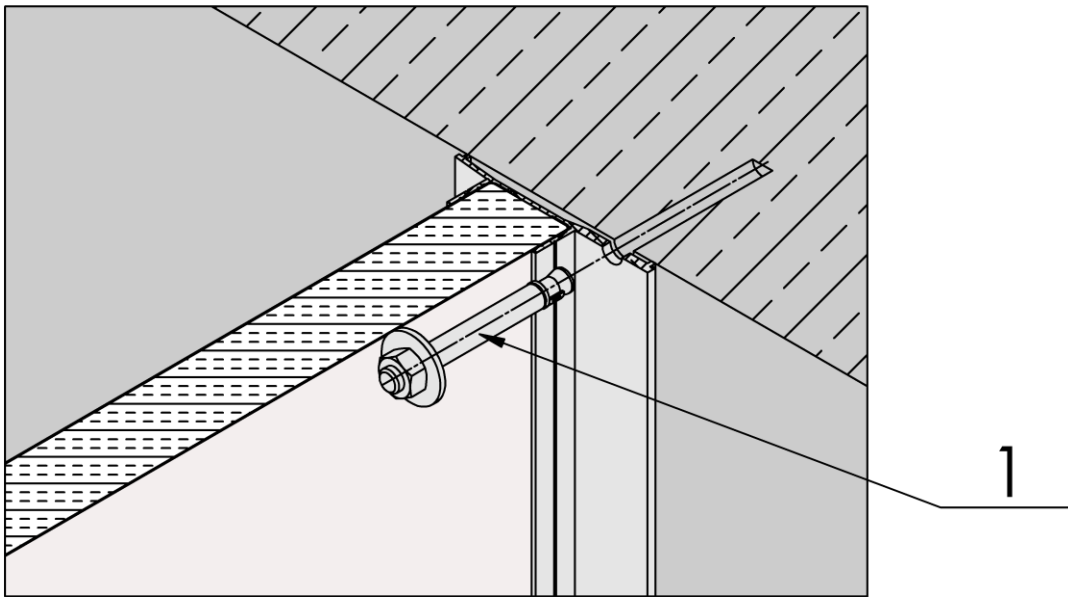


A shelter with external height of 4700 mm. Used in docks where goods are loaded from the road surface.

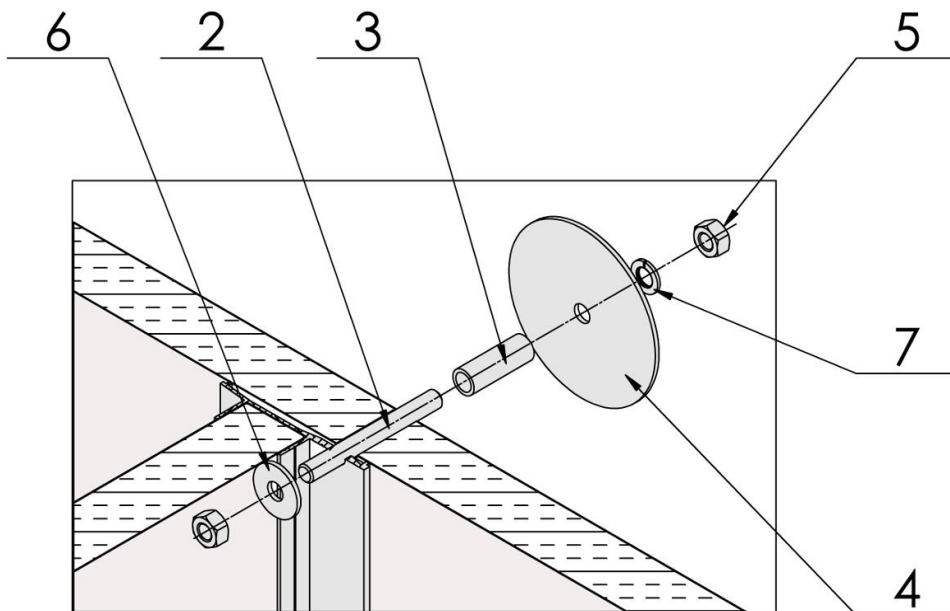
#### 4. Fasteners to the building

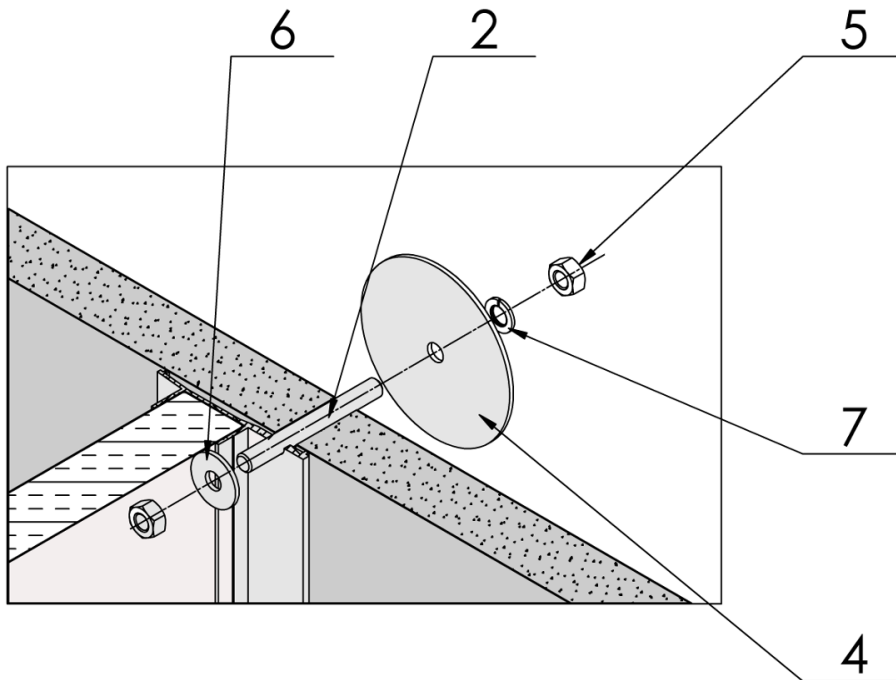
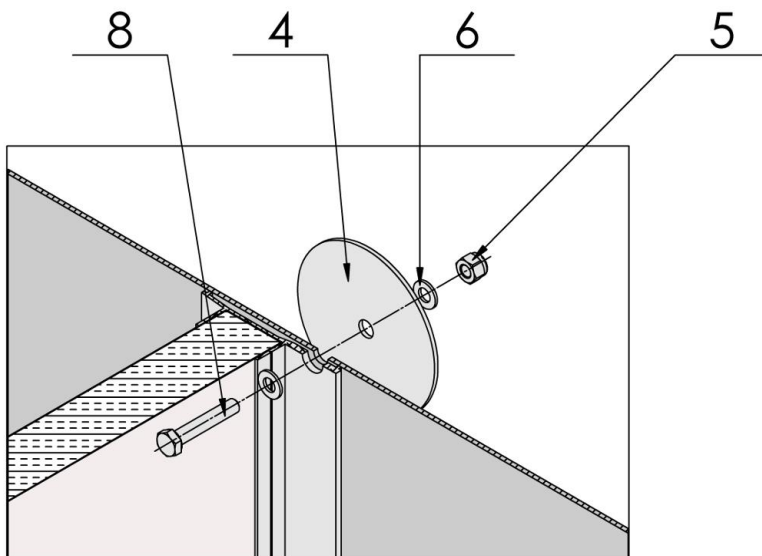
Mounting sets adopted to an individual building scenario can be delivered with the PWI shelter.

##### Concrete wall



##### ISO Panel

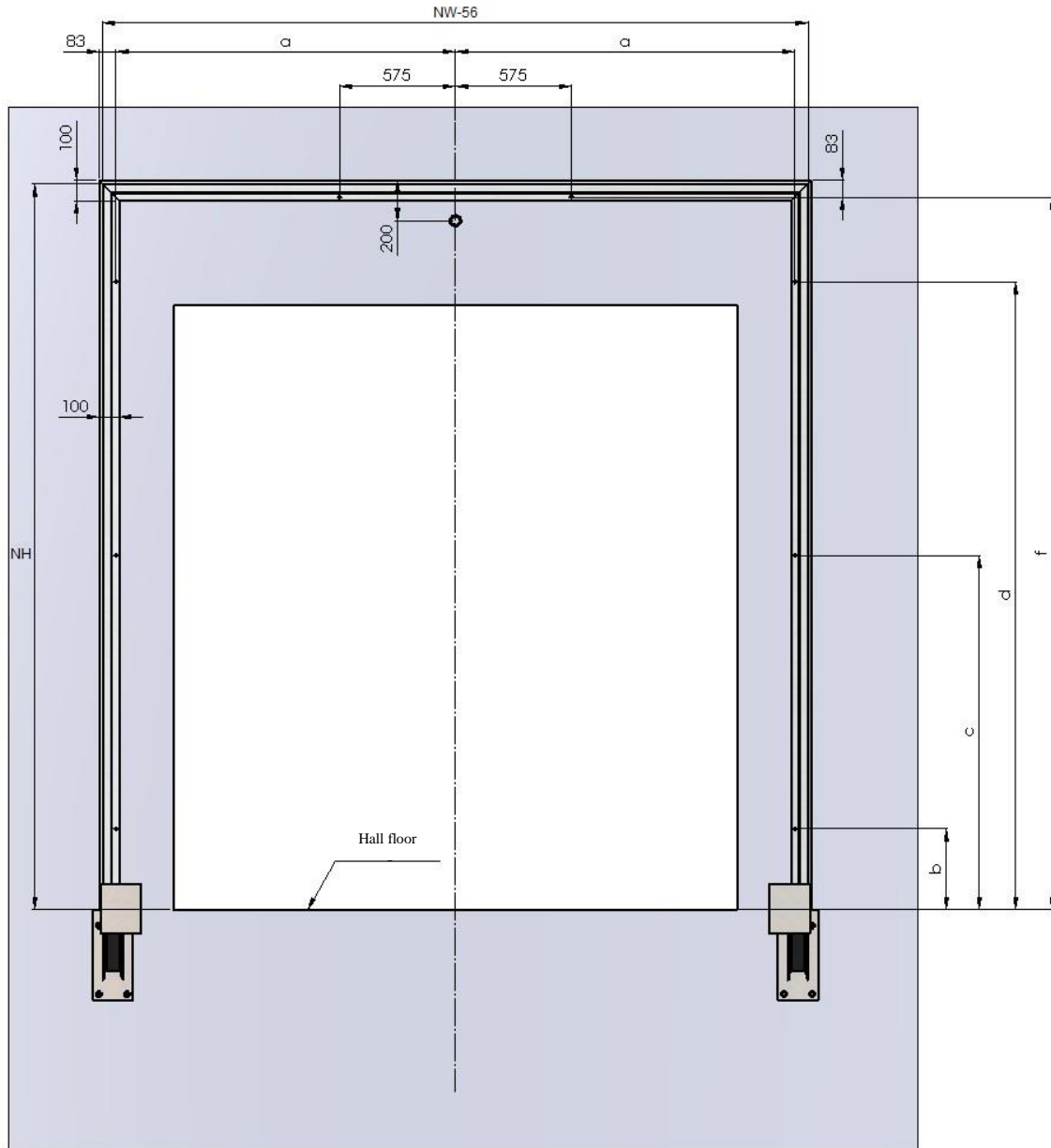


**Aerated concrete**

**Metal sheet**


1. Anchor M10x120 oc.
2. Threaded bar M8 oc.
3. Spacer
4. Washer D100 oc.
5. Nut M8 oc.
6. Round washer A8.4 oc.
7. Spring washer A8 oc.
8. r oc. ScREW M8x45 oc.

**5. Assembly drawings**

Position of mounting openings. Sealing of external dimensions: NH=3600 and NH=4000.

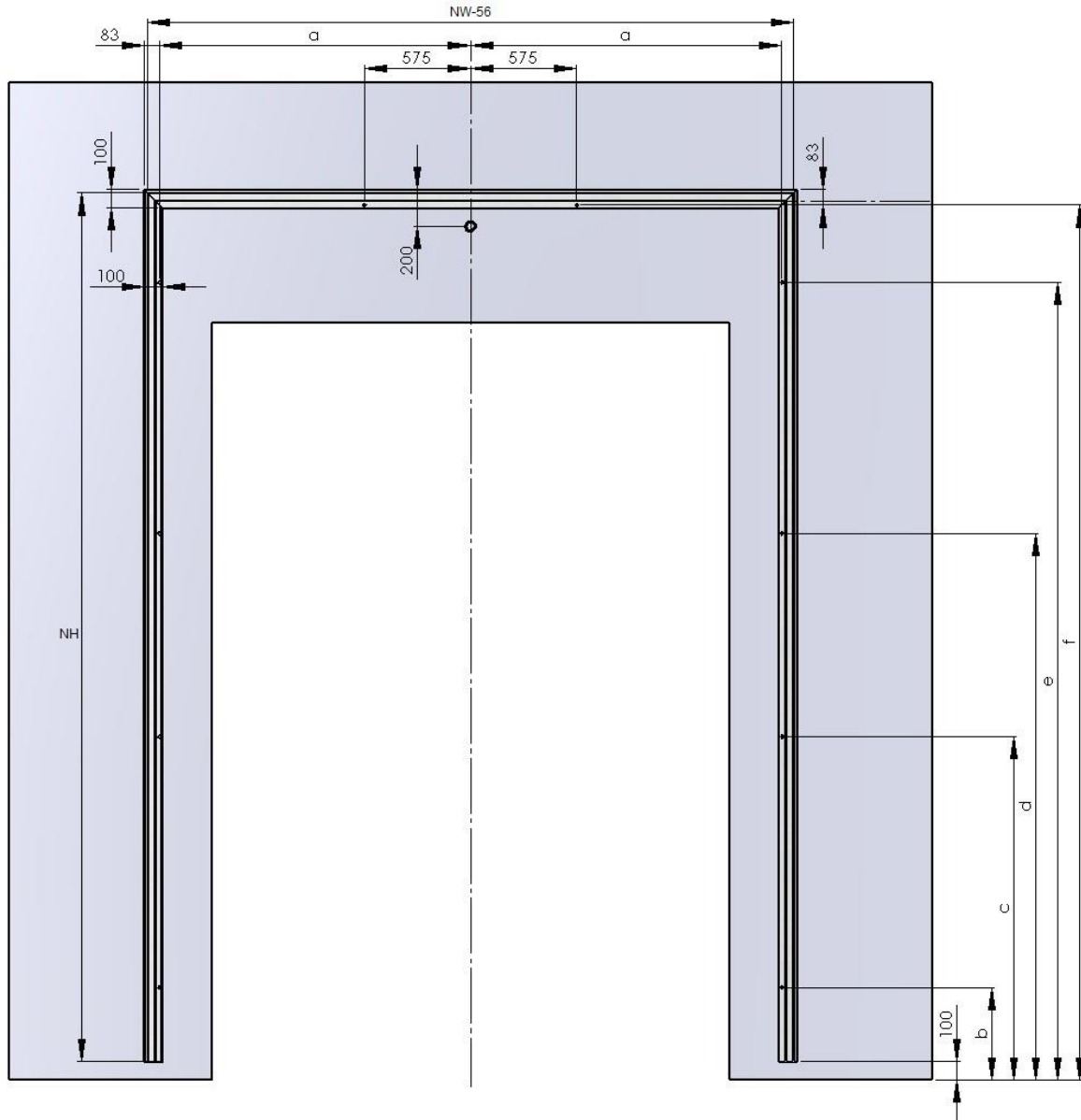


NW-56	a
<b>3244</b>	1559
<b>3444</b>	1659
<b>3544</b>	1709

NH	b	c	d	f
<b>3600</b>	400	1757	3115	3535
<b>4000</b>	400	1757	3515	3935

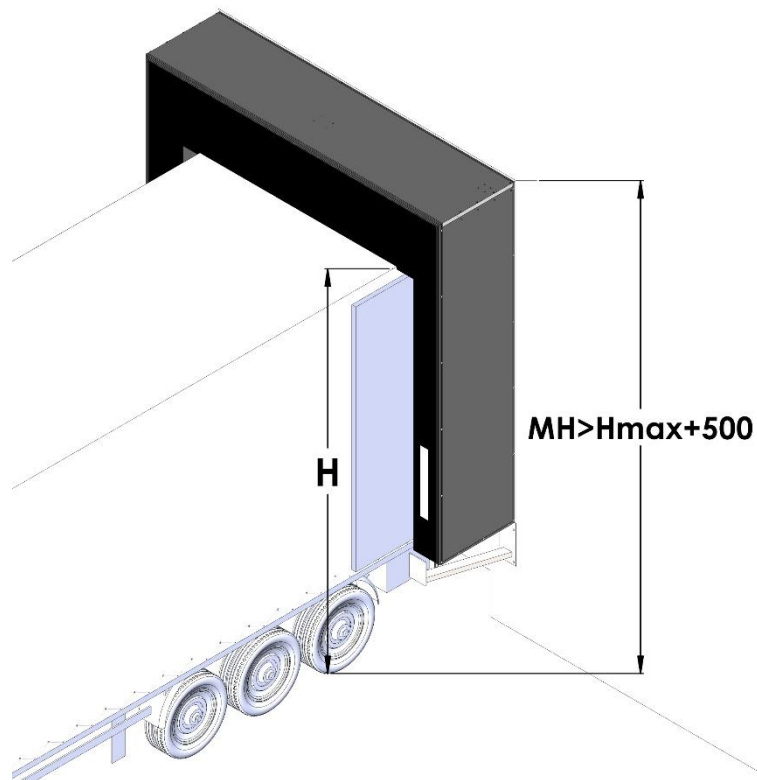
## Pneumatic dock shelter PWI.02

Position of mounting openings. Sealing of external dimensions: NH=4700.



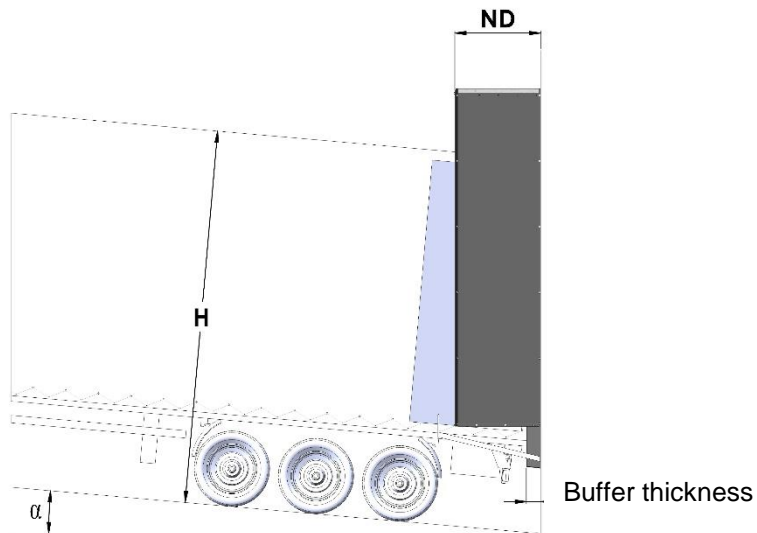
NW-56	a
3244	1559
3444	1659
3544	1709

NH	b	c	d	e	f
4700	500	1857	2957	4315	4735

**6. Selection of sealing****Assembly height**

To ensure proper sealing and functioning of the PWI dock shelter, the assembly height should be at least 500 mm higher than the maximum height of the docked vehicle.

### Sealing depth



The sealing depth must be selected so the side and top cushions are able to cover the vehicle along its entire height, considering the inclination angle of the manoeuvring yard and the vehicle, and buffer thickness.

$$\alpha[\%] \cdot H < 550 - \text{Buffer thickness}$$