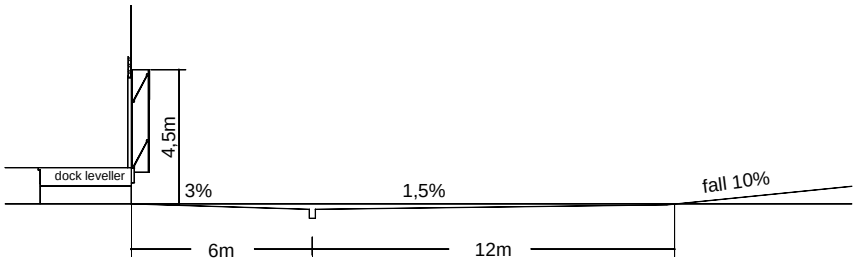
2. The Loading Area

Loading pit

It is important to make sure that the truck is horizontal during (un)loading. Therefore we advise to use a “flat” loading area if the required space is available. The advantages are:

- Horizontal position of the vehicle.
- Sloping away from the building.
- In case of a loading area running up or down the vehicle will be leaning; it is difficult to load (against the slope) or the load rolls out of the vehicle (down the slope).
- Rainwater from vehicle does not run into the door opening.
- No rainwater on the dock leveller from the roof of vehicle.
- No damage to industrial door or building.
- No overload on the dock bumpers and vehicle; less pressure on internal transport materials.



It is advised to build a flat lane of 18 meters directly in front of the docks before the slope begins. The height difference between the straight lane and the road should be bridged with a gradient percentage of a maximum of 10%. When this incline is larger than 10%, problems will rise when trucks drive in and out.

If there is not enough space in the loading area, you can look into other dock solutions, for example the enclosed dock or a saw tooth dock.
(See chapter 3. Dock designs for more information).

Height of Loading Docks

There is a big variety in models and truck dimensions, so it is likely that trucks with different heights will park at the same dock.

To determine the average floor height of the trucks, you should look at the lowest loaded truck and the highest unloaded truck. If there is an occasional truck with an extreme low or high floor, you do not have to calculate these dimensions in the average height. For these special trucks, you might consider one or more long dock levellers or scissor lifts.

Truck floor heights:

International transport (trailer-combination)	:1100 - 1400 mm
Distribution vehicles	:1000 - 1200 mm
Containers	:1200 - 1600 mm
Refrigerated vehicles	:1300 - 1500 mm
Volume transport	: 600 - 1000 mm

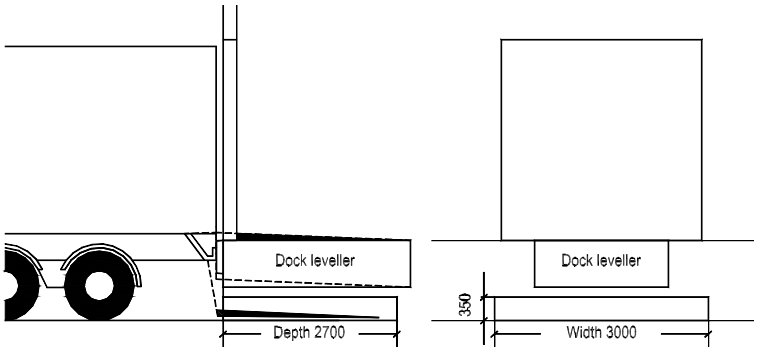
It is not always possible to make an exact estimate of the kinds of trucks that will dock. The most common platform height is 1250 mm, which is suitable for an average trailer park.

2. The Loading Area

Tail Lift Opening

Many vehicles are equipped with hydraulic tail lifts - to load and unload vehicles an opening is made beneath the dock leveller that is called the tail lift opening. During loading/unloading the tail lift slides into the tail lift opening so that the loading process can take place over the dockleveller.

To prevent dirt blowing into this opening a special tail lift sealing can be mounted.



Minimum width :3000 mm
Minimum depth :2200 mm (depending on length of tail lift)
Minimum height : 350 mm

Distance between Docks

In order to ensure a quick and efficient position of the vehicles in front of the building, it is required to take sufficient space for the side by side positioning of the vehicles into account.
With regard to this space, it is required that ample room for opening and closing of the doors of each vehicle is considered.
Furthermore, a too limited space will also result in problems related to parking and driving off.

The minimum distance to the centre between the openings will need to be 3750 mm.
However, we would advise to use wheel guides. In order to allow the receipt of wider vehicles with wide opening doors (i.e. refrigeration vehicles), it is recommended to take a minimum distance to the centre of 4000 mm into account.

In case of a wall, the space between the farthest truck and loading pit edge should be preferably 1750 mm.