EXCEPTIONAL HYGIENE

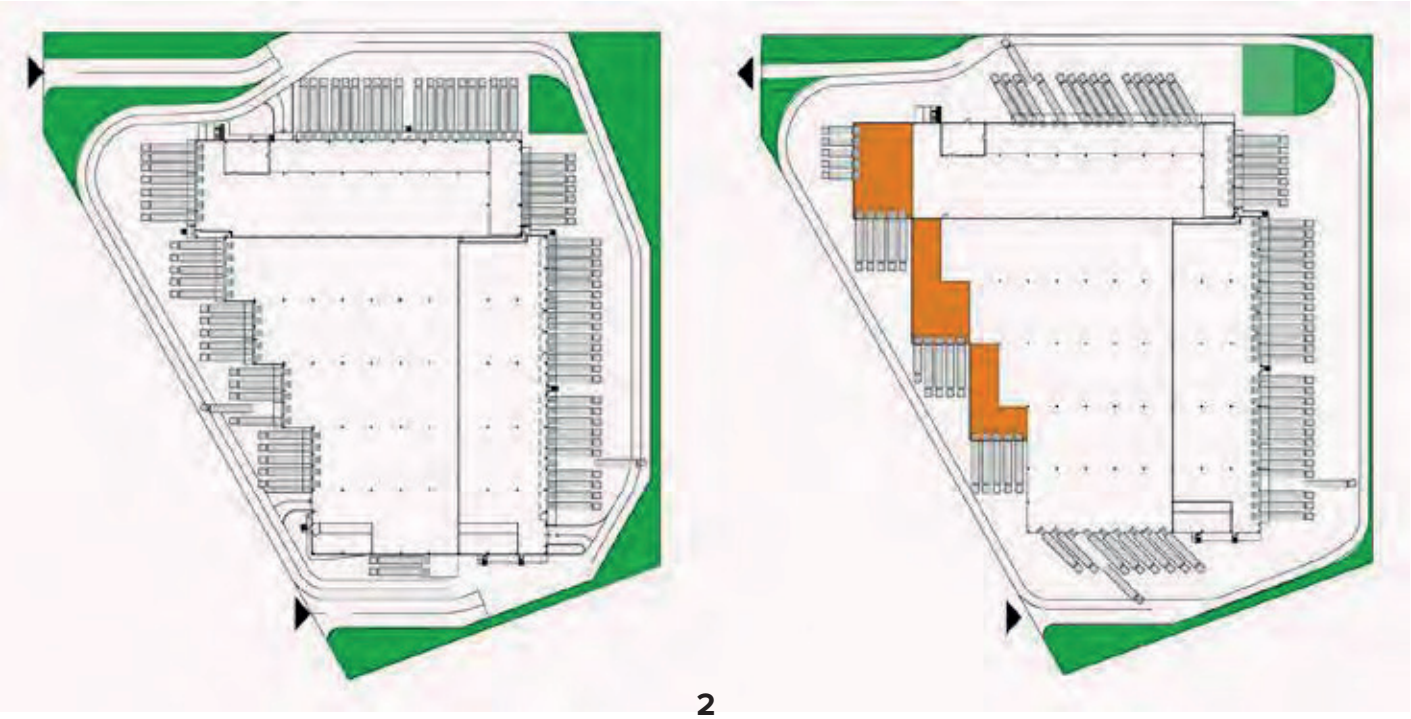
Loading Technology

General knowledge on loading technology

Loading areas provide safe areas for the quick and safe loading or unloading of goods. Well planed and designed loading areas enhance the speed and effectiveness of loading operations while minimizing risk of accidents

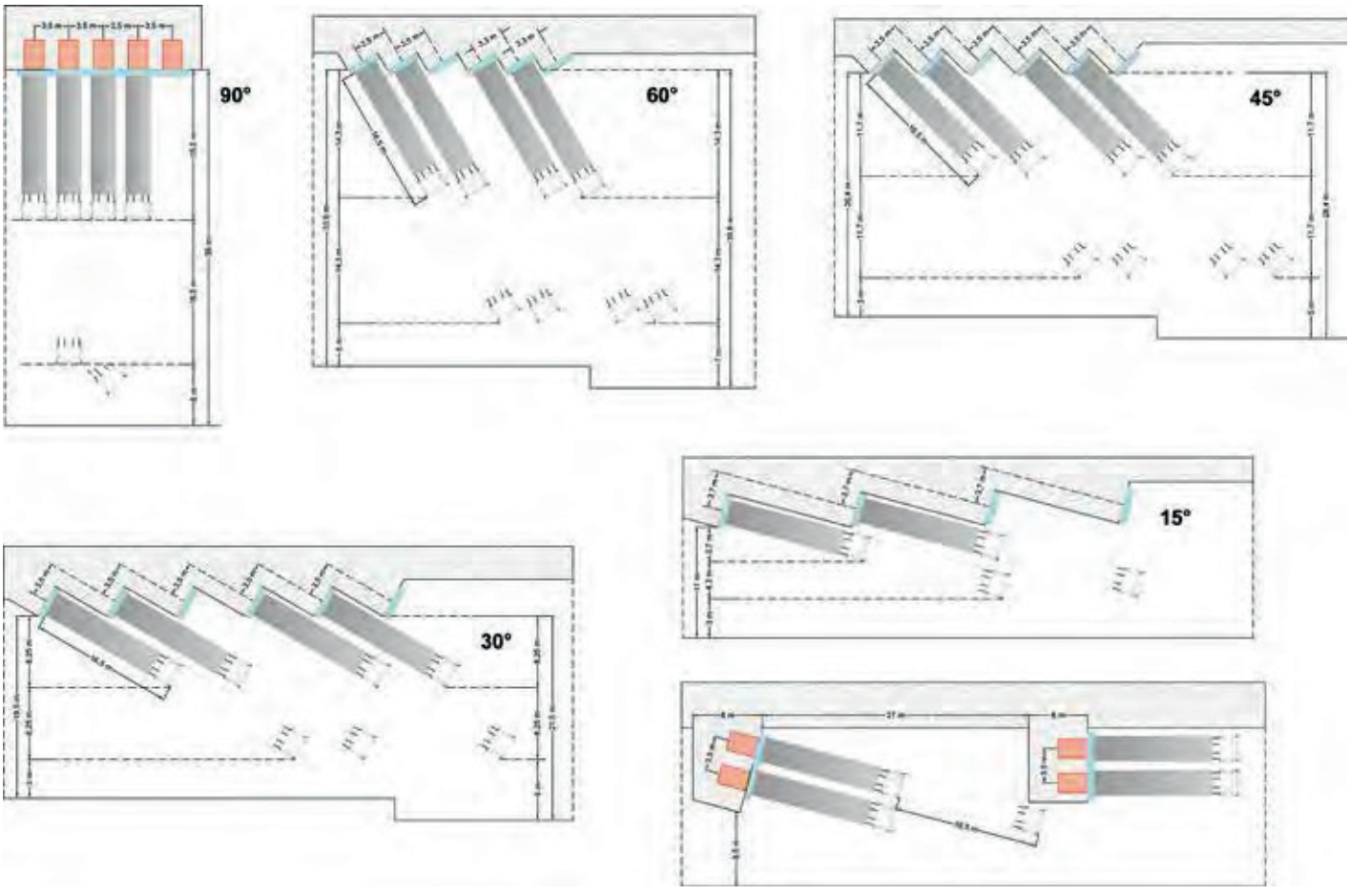
In the planning phase of loading areas , dimensions, as well as maneuvering space requirements of loading vehicles must be kept in consideration Cost effective and efficient loading areas are only possible through well-defined requirements and smart solutions

In the left image below is a sample storage and loading area There design of the same area is shown in the image to the right. Better designs wield more efficient operation and better results.



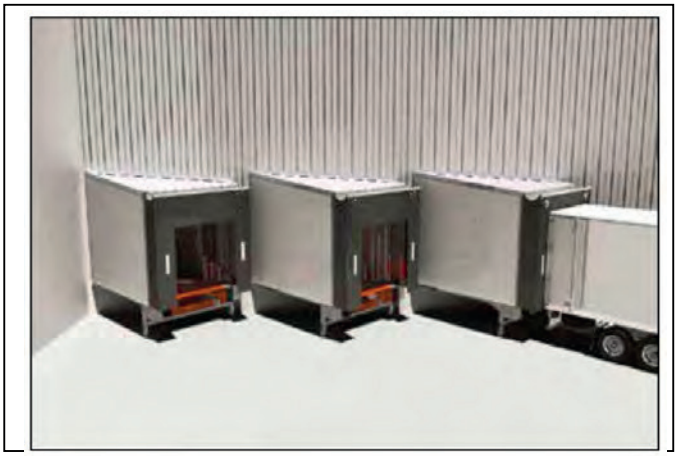
Designing loading areas

When designing a site layout plan, both the approaching directions of the vehicles and the required maneuvering area rare important factors.
Another point to consider is the distance between adjacent loading sections so that there is sufficient space to open vehicle doors. It is important for vehicle drivers to have a clear view in their mirrors when entering or leaving the loading station. In areas with limited space, loading areas may be designed in a saw blade arrangement or as a closed platform.



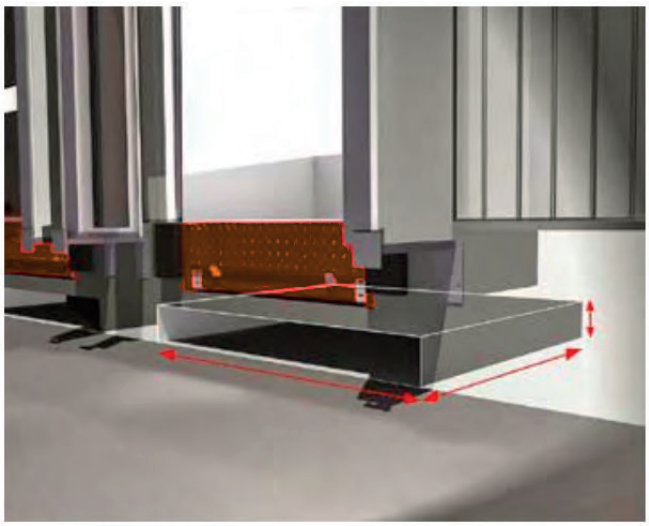
Loading bays

Loading bays are energy and cost-saving, insulated solutions for docking facilities. They offer the highest performance levels for the end-user, as they integrate dock levelers, dock stations and dock shelters into a single unit. Loading bays are ideal for loading areas with conflicting inside/outside temperatures, since they extend the loading area platform to the outside of the building saving space inside the building while at the same time helping maintain the indoor temperature. Loading bays are the ultimate solution when it comes to climate controlled environments. They are also cost efficient for maintenance due to easier accessibility and zero interference with the inside of the building.

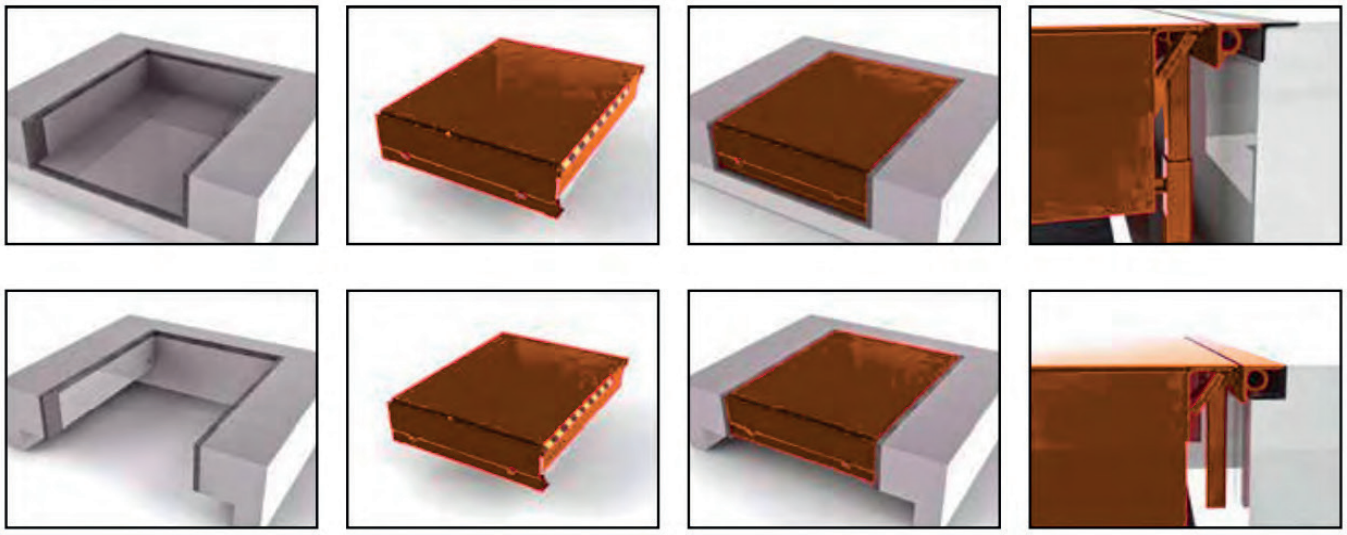


Platforms and hydraulic lifting systems

Height of the loading area platform is determined by the height of vehicles used. A lower slope between loading area and inner height of approaching vehicles facilitates a smoother loading and unloading process.
In order for vehicles with hydraulic lifts to approach loading areas, lifts must be lowered and entered into a slot created in the loading area. If it is not foreseen that vehicles with hydraulic elevators may approach, it is possible to experience difficulty with loading and unloading.



Ramp pit options



Ramp pit preparation

Appropriate ramp pit preparation saves time and prevents mistakes. An often encountered issue is that the dimensions in the technical drawings deviate from the in-situ well dimensions. In this case, the pit area is reconstructed and brought to the desired size by breaking concrete. This creates a waste of time, effort and money. A precast ramp pit; however, is tailored to the dimensions of the actual ramp. It can be applied to the building easily and it ensures smooth installation of the ramp.

Advantages

- Risk of errors minimized due to application of precast pit before concrete works.
- No need to fill with concrete.
- Time saving and quick installation.
- Ready to use as soon as installation ends.

Electro-hydraulic dock levelers

The basic elements of loading bays are dock levelers, sectional overhead doors and dock shelters. Dock levelers are steel platforms that connect building docks to vehicle beds which allow the passage of fork lifts enabling them to load goods.
The dock leveler swing and telescopic lip are CE marked and conform to EN 1398, , supplied with electro-hydraulic power pack underneath or with multifunction centralized console.

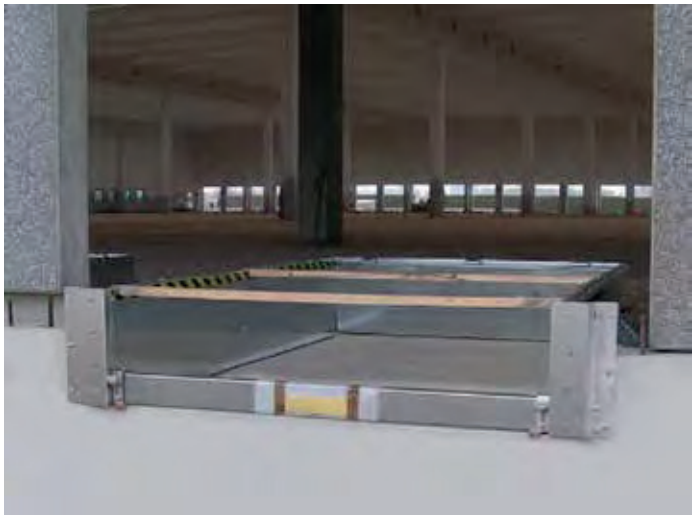
Swing lip dock levelers offer a more economic solution :

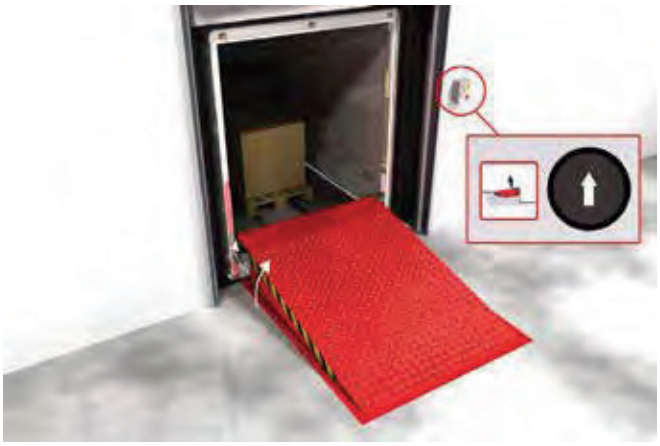
the vehicle docks to the loading bay and contacts the bumper, the leveler is raised, the lip is extended and laid onto the truck bed, and loading proceeds.

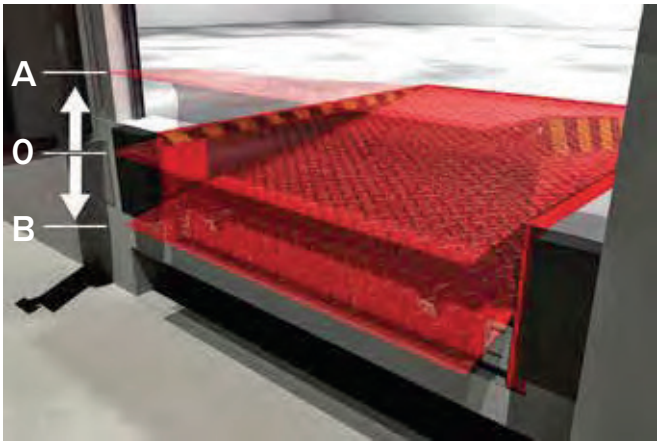
Dock leveler dimensions (mm)

Length	Pit Depth
2.000	600
2.500	600
3.000	600
3.500	600
4.000	600
4.500	900
5.000	900

Platform width available
between 2000-4000 mm



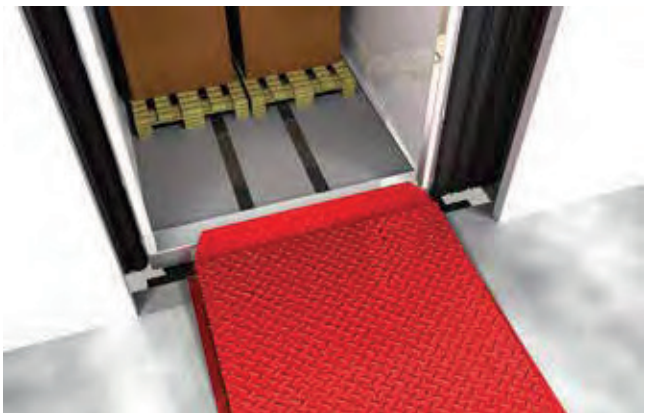




Telescopic lip dock levelers

Electrohydraulic dock levelers with telescopic lip are strong and dmost problematic cases such as mobile cages and containers. urable. They allow for safest loading of vehicles, for even the most problematic cases such as mobile cages and containers.
The pit depth is only 550 mm. Installation is performed with simple accessories in a traditional pit. They feature continuous head hinging and wind protection.

How It Works



The dock leveler, connected to a vehicle bed is "an inert bridge" that follows the vertical movements of a vehicle during loading. The leveler in rest position has a safe support and in this position can be crossed at full load. The functioning cycle is granted by a dead-man control unit with two buttons, with the

following operations

Keeping the "lift" button pressed down lifts the leveler up. When the leveler is above the truck bed, the "lift" button is released and the leveler stops. When the "forward" button is pressed, the telescopic lip extends forwards. Releasing the "forward" button, the lip stops and the leveler gently descents until connection to the truck bed.

Note: The extension of the lip can be adjusted by pressing the buttons "forward" or "retract", so as to move the lip from blocking the lowering of the leveler. The leveler should be returned to rest position before the lorry departs. In order to do this, the "lift" button" is pressed until the leveler is about 50 —100 mm above the truck bed, and then released. It is important to make sure that the lip is completely retracted (by pressing the "retract button" before returning the leveler to rest position. Once the "retract" button" is released, the leveler gently lowers into rest position.

Note: An optional "automatic return to rest position" command
is available.

Dock leveler dimensions (mm)

Length	Pit Depth	500 mm		1.000 mm	
		A	B	A	B
2.000	600	500	450	-	-
2.500	600	395	405	470	470
3.000	600	415	380	490	430
3.500	600	375	365	435	405
4.000	600	350	350	400	385
4.500	900	400	640	450	700
5.000	900	400	640	450	700

Platform width available
between 2000-4000 mm

Dock shelters

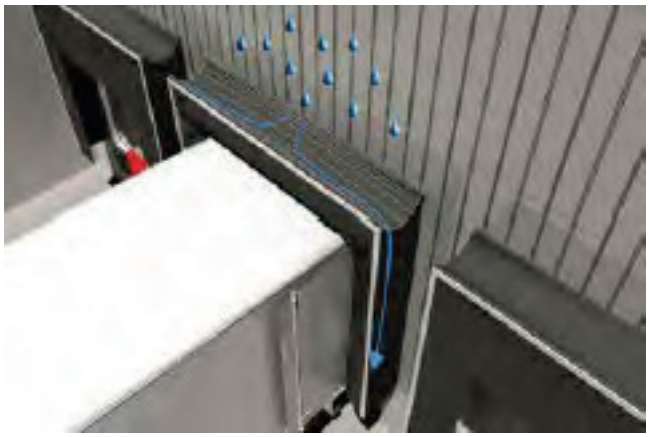
The dock shelter is a consolidated element of a loading bay that acts as a barrier against wind and weather conditions and transforms the inside of the vehicle into an extension of the indoor environmental conditioning.

Retractable dock shelters

Retractable dock shelters are composed of an external frame connected to an internal frame (that is fixed onto the building wall). They to retract when the vehicle backs out of axle, and return to their original

Inflatable dock shelters

Inflatable dock shelters are designed for providing insulation between environments with high temperature differences. They are made up of three inflatable cushions that lightly compress the roof and sides of the vehicle, granting maximum insulation.



EXCEPTIONAL HYGIENE

Saudi Arabia, P.O Box 53407,
Jeddah 21583 Al Khayyat Tower,
Office No. 230

+966 12 66 333 18
+966 12 66 332 38
info@exceptionalco.com

www.exceptionalco.com