

# SOCON CavLift - Technical Information



## Transport and logistics

The SOCON CavLift is transported on a trailer, which is pulled by a "Sprinter". This vehicle also serves as the logistics truck for transporting other necessary equipment, such as a compressor, generator and hose connections. It is possible, for instance if there is restricted space at the presentation site, to operate the compressor inside the truck. This has the added benefit of providing sound insulation and so reducing the noise level when the compressor is running.

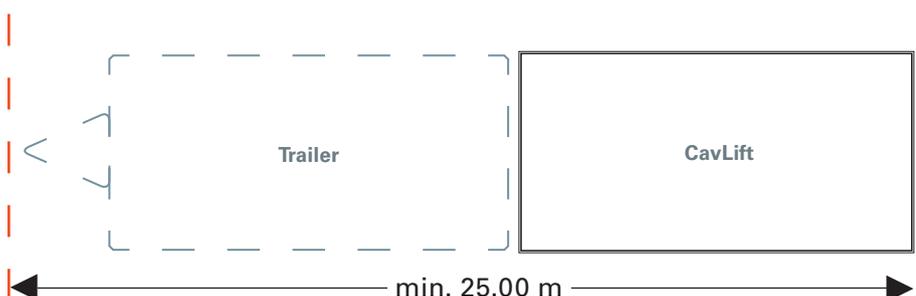
If the logistics truck cannot be positioned in the immediate vicinity of the CavLift, appropriately dimensioned hose and cable connections are necessary (max. distance 50m).



## Setting up and dismantling

To set up the system, first the CavLift cabin is raised from the trailer by an internal hydraulic system and subsequently the compressed air cylinders and the Panhard rods for stabilisation are fitted. Horizontal, level asphalt is the ideal base for setting up the CavLift. Setting up the unit on a sloping surface is not usually possible. However, if this cannot be avoided a sufficient amount of solid ballast must be provided or available on site to compensate for any difference in height and achieve a level surface.

As the transport trailer is withdrawn from under the CavLift after setting up, sufficient space must be available for manoeuvring the trailer during setting up and dismantling:



## Dimensions (Container)

Width:	2.50m
Height:	2.05m
Height (assembled):	2.60m
Weight:	3.5 tons

## Overall floor space required

(excluding canopy): 8.80m x 4m

## Power supply

1x 400V 16A	Air compressor (AC supply), if possible to be provided by the Organizer
1x 230V	Audio- and video system
1x 230V	(Presentation screen, canopy lightning)
1x 230V	Other electrical loads

Power connection: 3x 230V 16A

## Additional equipment from SOCON

8x	Ramps
1x	Canopy tent (5x5m)
20x	Hardhats
1x	Cloakroom stand (6m)
1x	Presentation screen and portable computer system
2x	Long benches and tables
2x	Cable drum
50m	Flexible hose

## Miscellaneous:

Capacity: max. 10 persons, 45 per hour

Length of simulation: 10 minutes

## Time needed for setting

up/dismantling: 2 hours

Normally the CavLift is delivered and assembled one day before an event takes place. Assuming no more than one day has been booked, the unit is dismantled immediately after the end of the presentation event.

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## Compressed air & power supply

It is of advantage if an electricity and a compressed air supply as well as appropriate connections are available at the presentation site because then it not necessary to use the generator/compressor in the logistics truck. In this case the logistics truck does not have to be positioned in the immediate vicinity of the CavLift.

The overall power supply is provided through at least four electrical connections. If no power supply is available locally then the CavLift must be supplied with electricity using the truck generator. For this reason it is essential in the planning phase to ascertain a suitable location for the logistics truck and compressor/generator.

The compressed air is stored in two compressed air tanks installed in the CavLift; the compressed air stored here is sufficient for a maximum of two CavLift rides. Two compressed air connections are located on the front side of the CavLift so that a connection can be made either on the right or the left.



One of the four CavLift feet

## Procedure

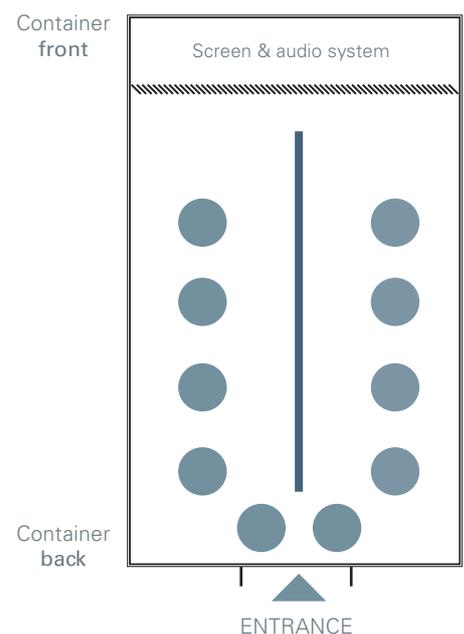
1. At the stand the visitors are first given a hardhat and enter the cabin when instructed to do so by the operating staff. While visitors are waiting, a safety film is shown for their information on a presentation screen.
2. The program starts as soon as all the visitors have entered the cabin and the door is closed.
3. Visitors in the next group are then given a hardhat and can have a look around the stand while they are waiting.
4. As soon as the ride has finished all the occupants leave the cabin and the next group can enter.



Working area (front) with cover open

## Safety

- In addition to showing the safety film in the canopy tent, the visitors' attention is drawn to potential hazards by numerous warning signs inside and outside the cabin.
- Inside the cabin are two clearly visible emergency stop switches. Activating either of the switches cut offs the pneumatic system. The program, however, continues. The access door opens outwards and can be easily opened from the inside.
- A fog machine operates intermittently; inhalation of the vapour is absolutely safe. Two, time-triggered ventilators ensure there is a constant exchange of air in the cabin during the ride.
- The air pressure range of the CavLift pneumatic system works at a maximum of four bars.

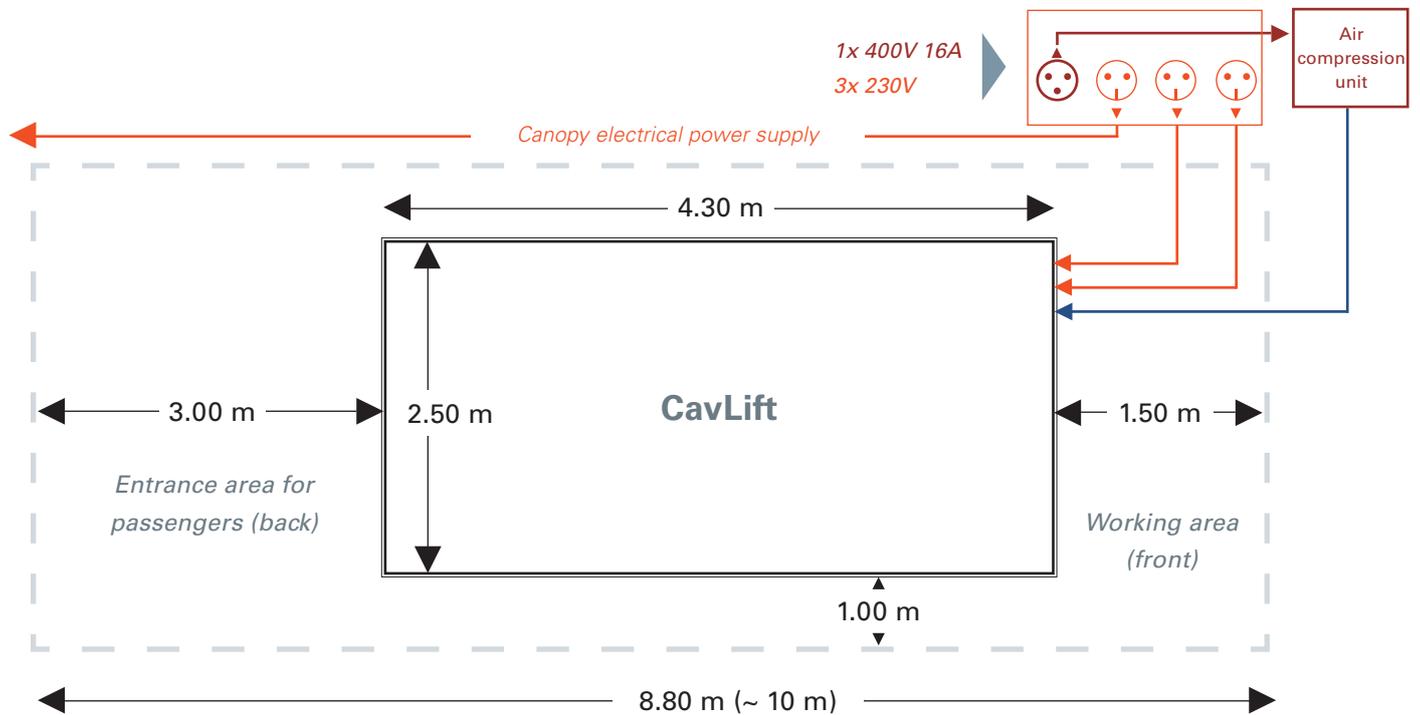


Passenger formation layout  
(max. 10 persons)

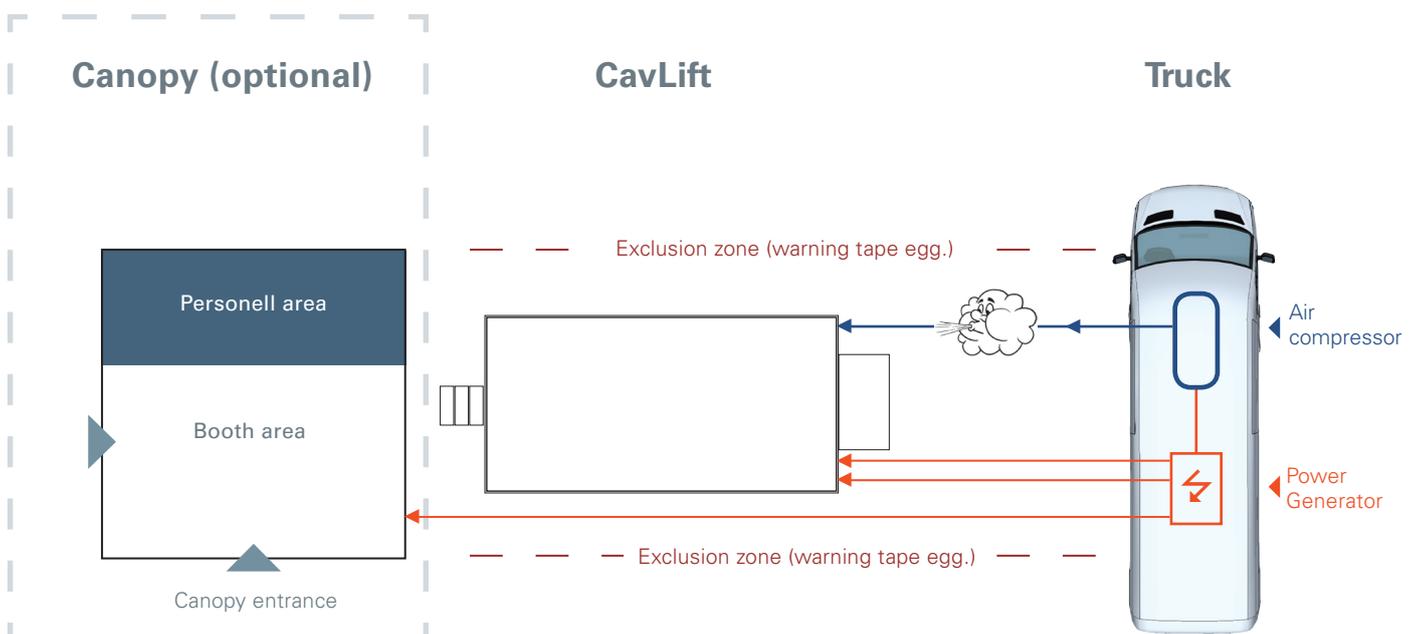
# SOCON CavLift - Build up sketch



## Space requirements without canopy and stand area / Power and compressed air supply



## Possible assembly concept including canopy (waiting area) – with no local power supply



# SOCON CavLift - photography



CavLift right side view



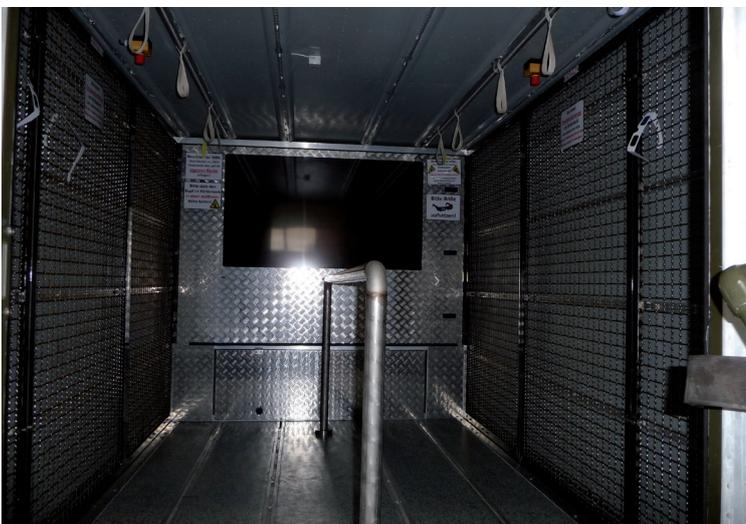
CavLift entrance area (container back)



CavLift in transport condition



CavLift working area (container front)



Inside the cabin



Inside the cabin during operating stage

# SOCON CavLift - photography

## Power- and air unit connections



## Possible assembly concept of stand/canopy (optional)

