

22. Never move loads carried by the suction lifter over people.
23. Avoid exerting lateral pressure to the suction pad when carrying the load.
24. If the level of vacuum decreases, put the load down immediately and reattach the suction lifter.
25. Never activate the release devices when carrying the load.
26. As soon as you have doubts about the load capacity of the suction lifter, remove and reattach it.

**WARNING:** There is a risk of tripping or slipping when lifting, moving and setting down the load and thus a loss of control over the tool and load! Wear safety shoes. Wear robust protective gloves. Wear close-fitting, tear-resistant work clothing.

#### SETTING DOWN THE LOAD

27. Make sure that the raised load is well secured when setting it down. Release the suction lever(s). The rubber pads will return to their original flat position. Only then take the suction lifter off the suction surface.

**WARNING:** Risk of injury caused by the load falling, tipping over or rolling away. Unexpected movements of the load may occur when setting down and releasing the load! Make sure that the raised load is well secured when setting it down. .

28. NOTE If the rubber pad(s) remain stuck to the object carried, raise the rubber pad on

the side with a finger so that air can get underneath it. This effect occasionally occurs with new rubber pads and will not impair the function. Improper loosening of the rubber pad will render it unserviceable. Never use pointed or sharp objects (e.g. screwdriver) for lifting the suction pad.

#### STORAGE

29. Never set the suction device down with the rubber pad resting on a sharp object/s.
30. Always store the suction lifter in a clean, dry and dark location and, if possible, in a storage case.

#### MAINTENANCE AND CARE

31. Always keep the lever-activated suction lifter and especially the suction pad clean and free from oil, grease and dust.
32. Never expose the rubber pad to sunlight for a prolonged period of time. Otherwise it will lose its elasticity quicker and may become brittle.
33. Clean the surfaces of the suction pads at least once a week with Cleaner recommended by Hire Company or Manufacturer only.
34. Do not use aggressive chemicals (e.g. solvents, petrol, rubber detergents or softeners) to clean the rubber pad.

**WEAR safety shoes**

**WEAR robust protective gloves**

**WEAR close-fitting tear-resistant work clothing.**

Please keep this leaflet safely as it may be required for future reference

## Hand Held Suction Glass Lifters

The rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment.

The suction lifter is a hand tool and is used exclusively for lifting, carrying and holding objects with flat, airtight surfaces by hand, typically glass. Other applications are not permitted.

The suction lifter must only be used as advised by the manufacturer. The suction lifter must not be modified or remodelled. The suction lifter must only be used by suitably trained operatives. The suction lifter must be regularly serviced in accordance with the manufacturers recommendations.

**WARNING IMPROPER USE OF THE DEVICE MAY LEAD TO DANGERS!**



#### GENERAL GUIDANCE

1. All work on the suction lifter (start-up, operation, maintenance, troubleshooting and fault rectification) must only be carried out by qualified personnel or people instructed and trained for the intended work.
2. Never use the suction lifter as a support for people.
3. Never use the suction lifter in conjunction with a crane or other lifting equipment. The corresponding prohibitory sign is attached to the suction lifter.



**PROHIBITED FOR USE ON LIFTING EQUIPMENT (E.G. CRANES, FORKLIFT TRUCKS).**

4. All Suction Lifters have a specified maximum load capacity. These values must be determined from the manufacturer or the manufacturer's data attached to the device (safety data plate) prior to using the Suction Lifters and this must not be exceeded.
5. Note that the air pressure decreases the higher you are above sea level and therefore also reduces the load capacity. Starting from 1,600 m above sea level, the use of suction lifters is only possible to a limited extent. The holding capacity is significantly reduced up to its total loss in cold, humid or dirty conditions, in particular if the suction pad is not maintained or is damaged, and when lifting

(Continued overleaf)



## Before Starting Work...



or carrying other materials than flat glass (e.g. decorative glass, plastic, stone, metal etc.). Always check the suitability of the lever-activated suction lifter for its intended use. Secure the objects to be lifted or carried against falling or slipping.

6. Suction lifters must not be subjected to extreme heat (e.g. open flames, constant direct sunlight). Temperatures consistently above approx. 40°C must be avoided at all costs. Suction lifters must not be subjected to extreme cold (e.g. frost). Temperatures consistently below 0°C must be avoided at all costs. It is strongly recommended to observe the respective national Manual Handling Operations Regulations. These regulations do not only recommend the maximum weights to be lifted but also the load duration (or frequency), the adopted body posture and the conditions under which load handling takes place. Check before lifting whether you are physically capable of lifting the load under the given circumstances.
7. Alterations, additions and modifications of the suction lifter are not permissible. This applies in particular to the safety devices.
8. The use of the suction lifter in environments subject to explosion hazards (ATEX) is prohibited.

### USING THE SUCTION LIFTERS


9. You must not operate the device whilst under the influence of medications which affect perception and reactions, or under the influence of drugs or alcohol.

10. Never try to lift cracked or chipped glass.
11. The operator must be able to view the vacuum indicator (if mounted) at all times, in order to assess whether the existing vacuum is still sufficient.
12. Personal Protective Equipment (PPE) must be worn for all work with the suction lifter to minimise health risks. **WARNING:** Different health risks exist when working with the suction lifter, such as injuries caused by crushing, entrapment or falling objects! Wear safety shoes. Wear robust protective gloves. Wear close-fitting, tear-resistant work clothing.
13. Lever-activated suction lifters include at least one lever, a suction pad and for some models a vacuum indicator. By engaging the lever, a vacuum is generated between the suction pad and the gas-tight surface of the object to be lifted. If sufficient vacuum is generated, the object can be lifted and carried. If the operator notes that the vacuum is decreasing, the object must be put down immediately. Then release and reattach the suction lifter. The suction lifter is released from the object to be lifted by releasing the lever(s). **NOTE** It is the responsibility of the user to ensure that generating the vacuum causes no damage to the object to be lifted (e.g. glass breakage with thin glass or the bending of thin sheets). Make sure that the suction surface is suitable to withstand the intended force to be applied by the suction

lifter (e.g. handling at the housing, holding of devices).

14. As the suction pads are made of high grip rubber, a dark ring may remain on the object to be lifted after the initial application and after applications that last for a long period of time. This can normally be removed easily with Glass Cleaner.

### HANDLING

15.  **WARNING:** Risk of injury caused by the load falling due to a damaged suction lifter! Make sure that the suction lifter is working properly before each use. The rubber pads must be clean, dry and undamaged. Before each use, check all rubber pads for potential functional limitations due to reduced elasticity, e.g. due to ageing, wear, improper maintenance or storage.
16. In any instance whereby the rubber pads appear to be damaged or have reduced holding capacity they must be returned to the Hire Company immediately.
17. The suction surface and all rubber pads must be clean, dry and free of grease. The holding capacity is reduced up to its total loss on uneven, rough and porous surfaces. Contamination can damage both the surface and the rubber pad. If in doubt, perform a test lift to check the load carrying capacity of the suction lifter on the intended object to be carried. **WARNING** Risk of injury caused by the unexpected movement of the

load due to strong wind forces in strong air currents! Check the expected wind load on the object to be lifted before use (e.g. outdoors or draughts when indoors).

18. Generating the Vacuum:  
Press the suction lifter firmly onto the suction surface. The rubber pads must be free of tension and lie flat. Engage the lever(s) for generating the vacuum. You should noticeably feel the resistance produced by the vacuum. **NOTE** If no constant vacuum is achieved, you must test the function of the suction lifter on a flat, clean and grease-free pane of glass. If the function of the suction lifter is perfect on the test surface, then the suction surface of your load is not suitable.



**WARNING: Risk of injury caused by the load falling due to low vacuum!**

19. Never attach the suction lifter while the load is moving. Lifting, Carrying, Holding The suction lifter should only be used for lifting, carrying or holding objects for a short period of time. You must regularly check and guarantee the firm hold of the suction lifter for longer operating times.
20. For products with vacuum indicator, the vacuum can be monitored visually at the lever. When moving the load, a reduction of load capacity through to a premature release of the load may occur due to a loss of vacuum!
21. The load must not exceed the specified load capacity.