

**CITY OF NEW YORK
DEPARTMENT OF BUILDINGS**

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of Materials and Equipment Acceptance (MEA) Division.

Richard C. Visconti, R.A., Acting Commissioner
MEA 168-00-E

Report of Material and Equipment Acceptance Division

Manufacturer – Klaus Auto-Parksysteme GmbH, Hermann Krum Strasse 2, 88319 Aitrach Germany

Trade Name(s) – Klaus Stack Parker.

Product - Two level automobile parking car lift, model G 61.

Pertinent Code Section(s) - Reference Standard Section 27-909, 27-991 and RS 18-3

Test(s) - Load Test and Computations sealed by Seymour Warren Gage, New York State P.E. License No. 31662.

Test Report(s) - Computations and test performed by Seymour Gage, P.E., letter dated May 3, 2000. Top platform was tested with a load of 16,000 pounds.

Description - The Klaus Stack Parker model G 61 is a two (2) level automobile lifting device, one vehicle above, and one vehicle below, on ground. With this parking system access to all parking spaced is horizontal. To facilitate parking of the vehicles, the parking platform is equipped with wheelstops. The parking system is operated with a master key and incorporates a deadman's control safety mechanism, with the operating elements being mounted in front of the lift. Operating instructions are attached to each operator's stand.

The stack parker consists of the following elements:

Steel columns of ST 37 steel (ultimate tensile strength of 37 kg/sq.mm) with base plates mounted to the floor. Sliding platform supports with plastic sliding bearings are mounted to the steel columns. The platform is attached to said sliding platform supports.

A mechanical synchronization control system ensures synchronous operation of the sliding platform supports during raising and lowering the platform by one hydraulic cylinder. An automatic mechanical safety lock prevents accidental descent of the platform from the upper position. The total lift height is 210 cm. The entire assembly weighs 900 kg and comes pre-welded and assembled in the field, with DIN 931 bolts with a tensile strength of 8 kg/sq.mm.

The platform consists of platform sections with adjustable wheelstops, a canted access plate, side members and cross members. All platform members exceed requirements of ST 37 steel.

The operating element is key operated, and contains an "emergency stop" button. The hydraulic system that raises and lowers the platform consists of a pump and motor controlled by a 220-volt AC relay and valve combination. Overload protection is provided by a hydraulic adjustable pressure valve with a maximum pressure of 210 kg/sq.cm, with a vehicle weight of 2,500 kg (6,697 pounds). The platform's rate of descent is regulated by the hydraulic system and provides constant rate of descent.

The lift is designed so that the highest position of an ascending platform is 3 cm above the safety lock. The platform raises and lowers in a horizontal position.

The cars are positioned in such a way that one set of wheels is stopped by an integral platform wheel stop, positioned at the back end of the platform. A double suspension safety locking system holds the full weight of the cars on the platform in the locked position, independent of the hydraulic and electric system.

Recommendation - That the above the Klaus Stack Parker model G 61 be accepted for indoor and outdoor use also with the following conditions:

Indoor Use:

- Installation of the lift shall be in sprinklered garages, which also have side wall sprinklers to protect the lower vehicle parked on the lift. The side wall sprinklers shall be protected from mechanical injury. The sprinkler pipe sizes shall be adequate to supply the additional side wall sprinklers.
2. Plans shall be filed and approved by the Department of Buildings for the alteration of the existing sprinklers system and tie-in of the additional sprinklers. Hydrostatic tests of the sprinkler system components shall be witnessed and approved by the Fire Department and Department of Buildings.
3. The floor loads shall be recalculated for the additional weight of the lift and the cars, and filed with the Buildings Department by a structural Professional Engineer for adequacy.
4. The indoor use shall be limited to garages with a minimum of 9'-6" ceiling height for Model G61 plus adequate distance for sprinkler coverage.

5. Garages that do not have pre-existing sprinklers, the sprinklers system shall be designed for "High Piled Storage".

Outdoor Use:

1. The car lift shall only be used in attended open parking lots.
2. The requirements of Section 27-4080 of the Administrative Code shall be complied with.
3. Each proposed use of the car lift shall be submitted to the Department of Buildings to determine whether it complies with the Zoning Resolution and whether the soil conditions are adequate. Each unit shall have suitable anchorage of its structural members and integral base plates into concrete footings, the strength, size, and depth of which shall be based on an assumed weight of 6,000 lbs. for each car.
4. Where the property is located in or about residentially zoned districts, this device shall not be located at the first row of cars or within 20 feet of the property line, whichever distance is greater.

For Both Indoor and Outdoor Use:

1. All regulations of Department of Consumer Affairs shall be complied with.
2. Each proposed use of the car lifts shall be submitted to the Department of Buildings to determine whether it complies with the Zoning Resolution.
3. Model G61 lift shall not be used to park or store any vans, trucks, recreational vehicles or any other type of vehicle other than passenger cars capable of seating up to 6 persons and weighing a maximum of 5,000 lbs. each car.
4. Drawings and specifications shall be filed with Department of Buildings Elevator Division for each site.

All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance August 16, 2000
Examined By Mark Juch