



International Journal for Innovative Engineering and Management Research

A Peer Reviewed Open Access International Journal

www.ijiemr.org

COPY RIGHT



ELSEVIER
SSRN

2021IJIEMR. Personal use of this material is permitted. Permission from IJIEMR must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. No Reprint should be done to this paper, all copy right is authenticated to Paper Authors

IJIEMR Transactions, online available on 18th October 2021.

Link: <https://ijiemr.org/downloads/Volume-10/Issue-10>

DOI: 10.48047/IJIEMR/V10/I10/16

Title: **HISTORY OF DESIGN OF INSTALLED AND ATTACHED MULTI-STOREY GARAGES AND PARKING LOTS**

Volume 10, Issue 10, Pages: 91-93

Paper Authors: **Allanazarov Koldosh Olimovich**



USE THIS BARCODE TO ACCESS YOUR ONLINE PAPER

To Secure Your Paper As Per **UGC Guidelines** We Are Providing A Electronic Bar Code

HISTORY OF DESIGN OF INSTALLED AND ATTACHED MULTI-STOREY GARAGES AND PARKING LOTS

Allanazarov Koldosh Olimovich

Teacher of Termez State University, Faculty of Architecture and Construction

Abstract: The proposed article deals with the design of multi-storey garages and parking spaces for permanent and temporary storage of cars. The article presents the principles and regulatory framework for the design of garages and parking lots, including detached, installed and mechanized buildings, as well as experience in the design and construction of these structures in our country and abroad.

Keywords: Garage, parking lots, parking lot, accommodation.

Introduction

The most convenient parking place for car owners is directly in the residential building or workplace. In residential buildings, they can be located in the basement or on the first floor, in offices and other buildings, in addition to extensions and additions.

Foreign construction practices provide many examples of successful combinations of garages with residential and office buildings. For example, in the Marina City tower houses in Chicago (architect B. Goldberg), the first 18 floors were designed for parking (Fig. 1); from the garage you can go to the apartment by elevator or stairs.

The combination of residential buildings, public buildings and administrative buildings with garages provides a large economy of the region, while it is associated with a significant increase in construction costs, which includes the strengthening of buildings, complexity of ventilation systems, fire protection. enhanced protection, sound and gas insulation, a more thoughtful scheme of evacuating people from buildings.

The main types of installed and attached garages and parking lots can be considered as ramp structures located in large installed garages that serve a group of buildings, both

under buildings and for other purposes, as well as under adjacent areas. The latter type of parking placement should be recognized as the most promising for construction in residential buildings. In the design of such parking lots, the sanitary breaks of residential and public buildings are significantly reduced, in which case they are calculated from sources of harmful waste, ie. ramps and ventilation shafts.

In most cases, the first floors of residential buildings are used to store cars. The main disadvantage of this method is the need to build them simultaneously with houses with limited capacity to accommodate parking spaces in rigid structural schemes of residential buildings

With the high cost of construction and the difficulties mentioned above, built-in garages have one advantage: they do not require special spaces and are convenient for car owners because they are located close to home. In modern foreign practice, the possibility of building parking lots, even in the narrow courtyards of medieval buildings, is being explored. In areas densely populated by old cities, the use of underground space is justified in both previously built and new administrative buildings.



1-group. Marina City Homes in Chicago. Ark B. Golberg. The lower 18 floors are designed for cars.

Underground space in previously built and new office buildings. An example of this is the completely new underground building of UNESCO, built in Paris. The building consists of six recessed courtyards, each measuring 25x15 m.

It is surrounded by office rooms and two-story two-story meeting rooms. Under these courtyards and buildings there are underground parking lots with a total area of about 9 thousand square meters. m. A straight ramp serves to allow cars to enter the parking lot. In home practice, its widespread use in recent years, especially in Moscow, has determined the placement of parking spaces in the basements of residential buildings.

An example of this is a cooperative underground garage with entrances from the elevator halls of four 20-storey tower-type buildings built in the Lebed district of Moscow. Entrance and exit from the garage is via four ramps and is located at a distance of 30-35 m from the residential buildings.

In the West, solutions are very common when parking spaces are located at the top of buildings, for other purposes, including roofs. An example is two car parks: one at the top of a

shopping mall in Hamburg, Germany, and the other at a market in Toulouse, France.



The parking lot on the roof of the Karstadt store in Hamburg (Figure 2) is designed for 145 cars. The roof is raised to a height of 29 m using elevators that are automatically fed for loading after the cars have been emptied. From the outside, cars park on either side of one-way roads. There are two passenger elevators and two escalators to transport customers from the cover to the front and back of the department store building.

The 650-car garage, designed by J. Enarvave Toulouse, has an indoor market on the first floor (Figure 3). The 6-storey garage is built without a fence and is located at the end of the building, one has two round ramps for ascent and the other for descent. Near the ramps, there are stairs to evacuate people and connect visitors to the market.

An example of adding a garage to a building for another purpose is a car park in Cologne, Germany. A multi-storey retail store and a 5-storey garage for 413 cars formed a single complex with functional and compositional interdependence. In general, both buildings complement each other well. Each storage layer has direct access to the pedestrian store. The connection between the parking surfaces is arranged along a spiral ramp.

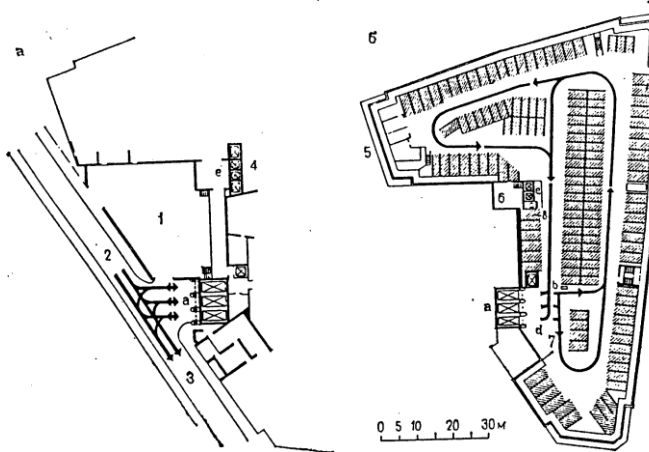
As an example of the successful placement of installed parking lots, the motel in San Francisco, USA was designed by William B. Tabler. In this 1200-room motel, almost all the floors are divided into two parts: the living quarters and the garage, located in the center of the building. The ascent and descent ramps are located in the center of the garage block. The residential part of the hotel is separated from the garage by a corridor that runs along the entire perimeter of the building and is connected to the garage buildings with special gas and fire locks.

3-group. The multi-storey garage in Toulouse, France, is combined with an indoor market located on its first floor. Plans of the first and usual floors.

Conclusion. The same principle of placement of parking spaces in the center of the building is set out in the design proposals of the architect J. Derin, who proposed the garage project. Various target structures located along the perimeter of the core can be added directly to the garage along a ring or connected by a transition bridge.

References

1. Gavrilova M. Methodical instructions, design of parking lots in residential complexes. Moscow 2015.
2. Shestokas V.V. and garages and parking lots.-M.: Create for publication .1984
3. Serebrov B.F. Multi-storey garages are parking lots



2-group.

Monskebergstrasse, Hamburg, Germany.
Access to elevators. a - first floor; b is the stopping point on the surface

1 - yard; 2 - input; 3 - output; 4 - freight and passenger elevators; 5 - ventilation and cooling; 6 - car room; 7 - control; 8 - cash registers and - elevators operated by photocell; b - service; c - cash registers; d - control; e - passenger elevators

