



FIRST OF ITS KIND

An architect thinks outside the concrete box to design Korea's first non-utilitarian parking garage.

By Jeonghoon Lee

Parking garage sites are very unique. They are located in the heart of the city where there is a high volume of traffic. However, how many of them are built and used properly?

When I first started designing the Herma Parking Building outside of Seoul, South Korea, I was shocked to find out about parking examples in the surrounding region. There was no parking structure that was functioning properly in the area. I carefully examined the reason

and found one ultimate problem: money.

In Korea, parking garage sites are sold for relatively low prices as compared to commercial sites. Only 20 to 30 percent of the overall gross floor area is allowed for commercial purposes. Under these circumstances, it is realistically impossible to anticipate the return of investment from the parking lot, and the owner focuses on selling the retail suites that take that 20 to 30 percent of the property. The land price is low, but the business value is not guaranteed. Therefore, the focus of the project becomes how to lower the construction cost as much as possible, instead of the urban context of the area





or the appearance of the building. The cheapest land and the cheapest building: these are the characteristics of parking garages in Korea.

These structures are disadvantageous for the residents in these urban centers as they have to face the buildings every day during their commutes, and the poorly-designed and constructed structures make the city look bleak. No matter how much they invest in decorating the retail suites, the overall exterior of the building is too ugly to overcome. There are three to four parking lot sites in the Jukjeon Residential Development Zone, but one of them is used as a used car showroom and another one is considered a slum that is not adding to the appearance of the area. The parking garage sites of suburban areas are not the centers of passenger facilities, but the symbols of extreme drawbacks of real estate sales.

Parking: A Fun Headache

Looking closer, parking garage sites are a headache for architects, but very fun at the same time. This is because the land is located in the center of traffic and surrounded by commercial facilities, which gives it the possibility to serve as a landmark. Also, various expressions are possible on the exterior surface, as parking garages do not need insulation finishes that residential construction requires. Various architectural materials and expressions can be tried to make a

statement in terms of public value. Again, though, money is the issue. Would it be possible to propose a better plan that fits the budget and creates an appealing urban identity for residents? This question was the starting point of my design for the Herma Parking Building.

Retail Inside Parking, or Parking Inside Retail?

The lot proposed for the parking building in Jukjeon Residential Development Zone applies building coverage rate (90 percent) and floor area ratio (1,500 percent) that are different from the legal requirements for commercial lots (60 percent building coverage rate). In this case, the ratio of parking lot facilities to retail facilities should be 80 percent to 20 percent. To guarantee the basic feasibility within the range of given laws and regulations, the size of retail space on the first floor had to be maximized. At the same time, a terrace space was suggested for the front side that faces a river, to improve feasibility. To ensure efficient use of the terrace area, it was necessary to design a front façade to change the overall image of the parking garage that is not exposed to passengers.

Old parking garages were built with the addition of retail suites. My design took a different approach—to build a retail building with an attached parking structure. It was difficult even for the most popular brands with luxurious

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interiors to succeed in the old parking lot buildings because they were built to primarily serve as parking with some attached retail facilities.

Herma Parking Building created a totally inclusive design for the parking facility. In doing so, the slummy image of old parking lot buildings was eliminated and replaced with a parking garage attached to a well-designed retail facility that enhanced the overall value of the building and the land. By designing a parking building that does not look like a garage, the owner was able to acquire appealing

retail suites to sell and the residents acquired a visually pleasing landmark for their town.

The Many Faces of the Garage

The exterior surface used plastic to create a partition that is closed against the city, yet delivers diversity by accepting or reflecting images under natural light. The polycarbonate used for this project has five layers, with purple coating on the outside and white coating on the inside. The outside is finished with IR and UV coating to create the feel of glass or a reflective metal surface according to the angle of light.

At sunrise, the direct light makes the surface appear off-white, while the indirect light around noon displays pure purple. At sundown, the surface reflects the color of sunset and turns into a golden color. In the evening, it reflects the interior lighting and the neon signs of the surrounding buildings to create an exotic view. Its name—Herma—comes from Hermaphrodite and Hermes of the Greek and Roman mythologies, inspired by the diversity of the exterior surface.

Another characteristic of this building is that it used variable sizes of materials unlike most buildings that use uniformly sized exterior finishes. The 635 pieces of polycarbonate panels used are different by a few centimeters in size. Also, the stainless steel patterns consist of about 960 openings that are different in shape. The individual pieces processed by CNC plasma cutting at the factory were modulized and welded onsite to minimize errors. Each member was assembled one by one onsite to create a unique aesthetic that was not available with the ordinary panel system.

Public Value: The Mission of All Architects

The construction process was not a walk in the park. I needed tenacity and passion to complete a unique

parking garage within the budget of ordinary parking garage. It took 11 months to complete this project, which had to be extremely economical. It was a realistic project, but I supervised the field workers every day, mingling and learning from them along the way. The building was not completed based on the drawings, but by the logic of field work and monetary shortage. We could not anticipate the date of completion because of the temperamental weather and poor environment. Every time the project was delayed, I had to deal with the petitions and complaints of the local people and settle the issue of additional cost with the contractors.

When the curtain finally opened after a long time, the neighborhood people and the workers let go of their doubts and started talking about the power and value of architecture. The field workers told me that they were proud to be a part of this project. This was the first time I thought much about the power and authenticity of architecture. Although it was a mere parking garage, it recreated the identity of the city and conveyed the pride of those who created an alternative for the urban architecture.

In Korea, architects are generally considered home sellers who build mass-produced homes. I personally believe that architecture creates urban culture and discourse and manifests contemporary philosophy through space. Through this project, I wanted to show that parking garages can serve as a major landmarks that define the city.

Epilogue

The project, initially planned to take five months, took 11 months to complete. Last winter was particularly snowy. The project was suspended for days several times because of the money issues and the strange weather.

A parking garage is a low-cost project in Korea. No one wants to pay a lot for it. It is a strange project carried out by an owner who wants to make a profit with minimal investment and a contractor who makes a low bid for inevitable reasons.

I challenged this convention to make a beautiful garage happen. I was courageous because I was ignorant of the reality. There are so many things that architects should do in this country. They cannot make what they envision without pointing out every little detail even though they provide everything in drawing. This garage embodies what architecture is to me.



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