

成都来福士，成都，中国 CapitaLand Raffles City Chengdu, Chengdu, China, 2012

建筑设计：斯蒂文霍尔建筑师事务所

Architects: Steven Holl Architects

切开的通透体快

成都来福士位于成都市中心一环路和人民南路交会处，“切开的通透体快”创造了巨大的公共广场，是多功能的城市综合体。项目旨在建造一个都市公共空间，而不是仅仅打造一个地标性摩天大楼。项目面积约 28 万 m² 的建筑形态源于自然光线的分布。为保证周边城市体块获得最小化的日光直射，机构骨骼式的混凝土框架被以特定的几何角度准确切分。建筑结构为白色混凝土，1.83m 开口满足地震对角线要求；而被“切开”的剖面为玻璃。

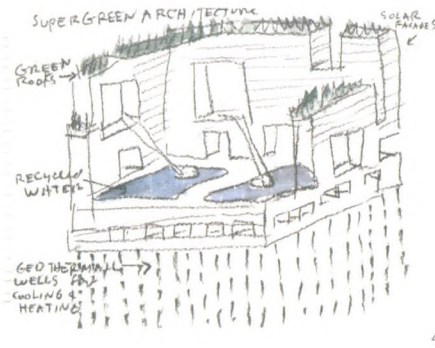
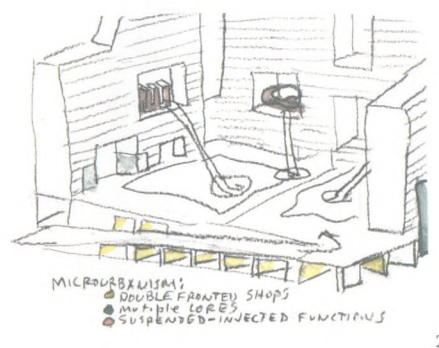
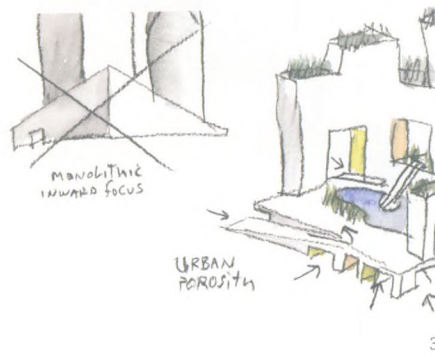
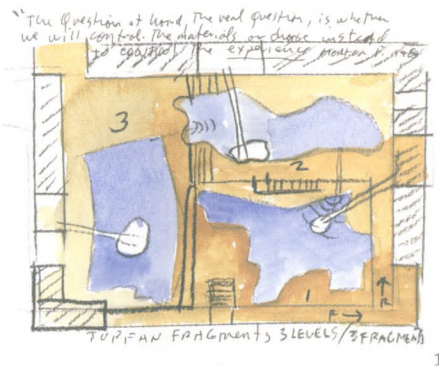
大型公共区形成的地块中心组成三座“河谷”，设计灵感来自当地的伟大诗人杜甫（713-770）的诗句“支离东北风尘际，漂泊西南天地间，三峡楼台淹日月，五溪衣服共云山”。三个广场上流水花园的设计以时间观念为基础，分别寓意着中国的年月日。三个水池充当下方 6 层高的购物中心的天窗。

“微型都市生活体”的理念在大都会场地内创造了适合人居住尺度的建筑，双门商店朝向大街和购物中心开放。三个巨大的开口分别是斯蒂文霍尔建筑师事务所设计的历史馆、利布斯·伍兹设计的光之馆和中国雕塑家韩美林设计的本土艺术馆。

成都来福士由 468 个地热井供热和制冷、广场中巨大的池塘可回收雨水，天然草地和睡莲带来了天然的冷却效果。项目采用高性能的玻璃、高效节能设备和当地材料等多种措施达到 LEED 黄金认证标准。

关于人口

斯蒂文霍尔建筑师事务所的方案切开的通透体快的核心是多孔城市。该地段的醒目位置，毗邻人民南路，为创建一个城市平台的可能性提供了一系列独特的优势，城市平台将以 12,000m² 广场的形式坐落在这个项目的中心，而所有的功能和活动都将围绕着它来组织。这一公共空间自然地融合了人民南路的开放空间，成为遍布全市的局部开放空间网络的独特补充。这个公共平台有 5 个主要入口，每一个都是由临近环境的特定视图和人行通道提炼出来的。这些入口是由建筑形式的空隙提供的，增强了多孔的理念。这些开口不仅能使人达到多层广场，而且还可以使人达到项目中大量的末端部分，因此将多孔的概念应用于该项目的内部功能空间。切开的通透体快的核心提案使得城市中的社交平台的景观蓬勃发展，并已成为一个成都的本地人和游客都常去的地点。□（陈雨潇 译；入口一段由斯蒂文霍尔建筑师事务所北京区总监罗伯特撰写）



1-4 概念草图/Concept sketches

5 从人民南路看切开的通透体块/Sliced Porosity Block as seen from Ren Min Nan Lu



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6 外景/Exterior view
7 总平面/Master plan

8 位于综合体中心的公共广场与成都开放的社交环境融为一体/A public plaza, at the centre of the complex, merges with Chengdu's network of open and social places.

9 太阳能板向周围建筑提供自然光/Sun slices provide natural light to neighboring buildings



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Sliced Porosity Block

In the centre of Chengdu, China, at the intersection of the first Ring Road and Ren Min Nan Road, the Sliced Porosity Block-CapitaLand Raffles City forms large public plazas with a hybrid of different functions. Creating a metropolitan public space instead of object-icon skyscrapers, this three-million-square-foot project takes its shape from its distribution of natural light. The required minimum sunlight exposures to the surrounding urban fabric prescribe precise geometric angles that slice the exoskeletal concrete frame of the structure. The building structure is white concrete organised in six-foot-high openings with earthquake

diagonals as required while the "sliced" sections are glass.

The large public space framed in the centre of the block is formed into three valleys inspired by a poem of the city's greatest poet, DU Fu (713-770 CE), who wrote, "From the northeast storm-tossed to the southwest, time has left stranded in Three Valleys." The three plaza levels feature water gardens based on concepts of time – the Fountain of the Chinese Calendar Year, Fountain of Twelve Months, and Fountain of Thirty Days. These three ponds function as skylights to the six-story shopping precinct below.

Establishing human scale in this metropolitan rectangle is achieved through the concept of "micro

urbanism," with double-fronted shops open to the street as well as the shopping centre. Three large openings are sculpted into the mass of the towers as the sites of the pavilion of history, designed by Steven Holl Architects, the Light Pavilion by Lebbeus Woods, and the Local Art Pavilion.

The Sliced Porosity Block is heated and cooled with 468 geothermal wells and the large ponds in the plaza harvest recycled rainwater, while the natural grasses and lily pads create a natural cooling effect. High performance glazing, energy-efficient equipment and the use of regional materials are among the other methods employed to reach the LEED Gold rating.

Entrance

Urban Porosity is at the centre of Steven Holl Architect's proposal in the Sliced Porosity Block.

The prominent location of the site, adjacent to Ren Min Nan Lu, provided a unique set of advantages that would potentiate the creation of an urban platform, in the shape of a 12,000m² plaza at the centre of this project, around which all programme functions and activities would be organized.

This public space merged naturally with the open space of Ren Min Nan Lu, becoming a singular addition to the network of vernacular open spaces distributed throughout the city.

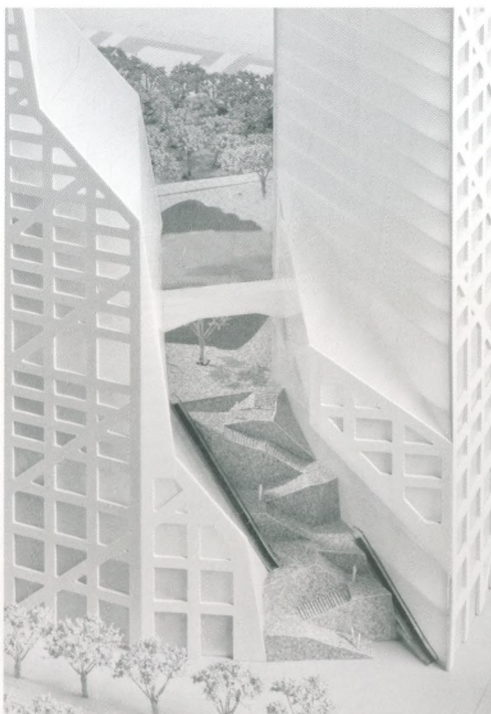
There are 5 main entrances to this public platform, each one drawn from specific view and pedestrian corridors in the immediate surroundings. These entrances were provided by voids operating the architectural form, enhancing the principles of Porosity.

These openings would not only provide access to the multi-level plaza, but would also provide access to the large retail component of the project, therefore applying the idea of Porosity to interior programme spaces of the project.

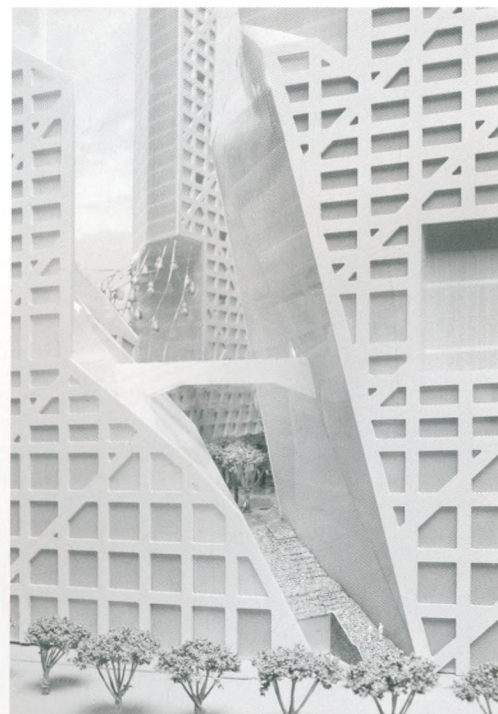
The Sliced Porosity Block's central proposal invigorates the landscape of social platforms in the city, and has become a much-visited venue by Chengdu's patrons and visitors alike. □ (Text of Entrance is written by Roberto Bannura, Director, Steven Holl Architects)



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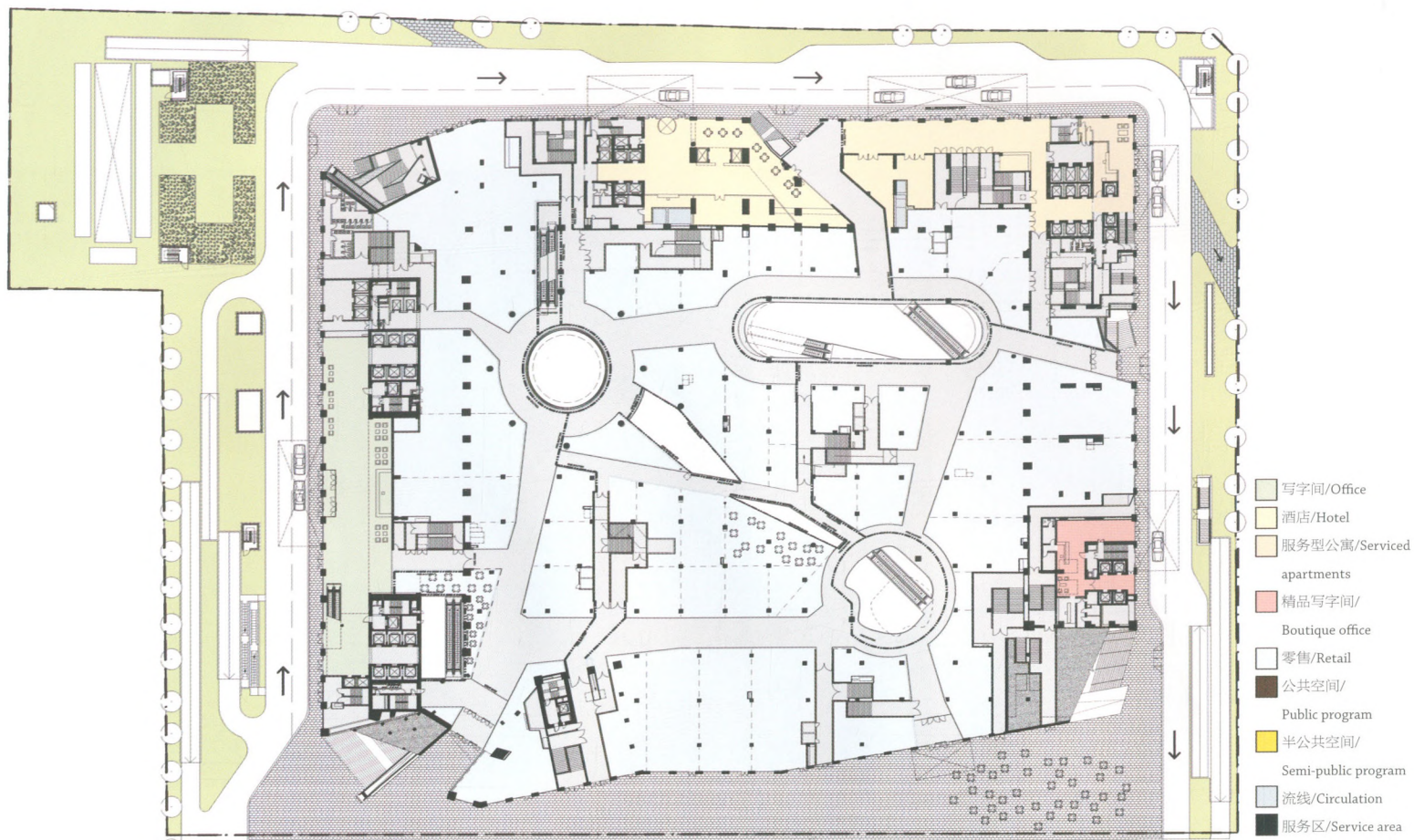


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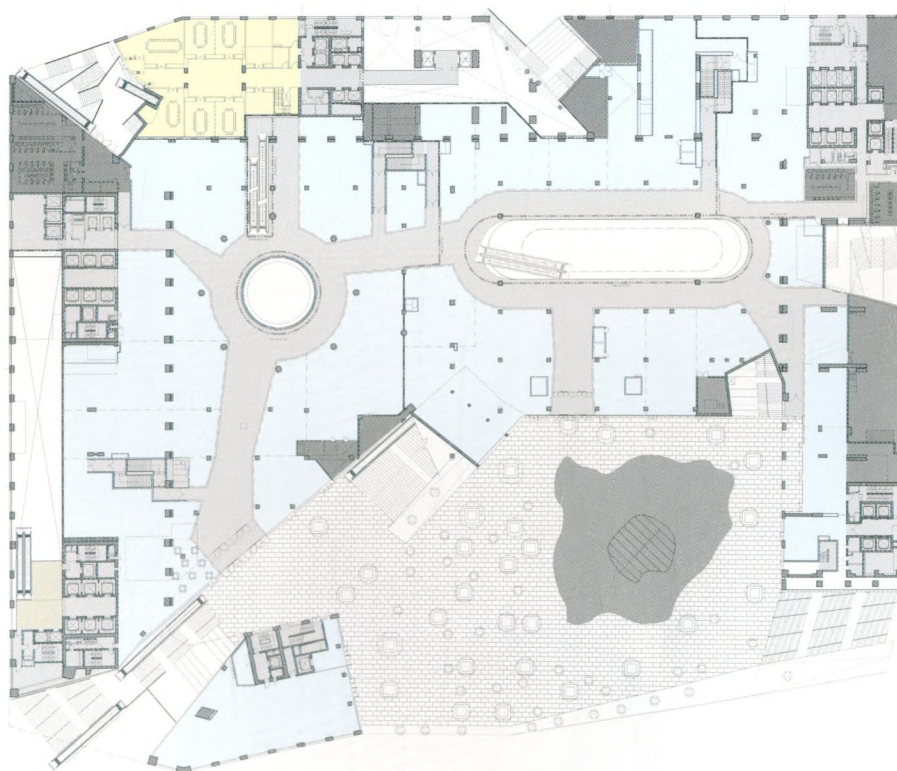
10 多功能综合体的中心是一个12,000m²的多层广场/A 12,000m² multi-level plaza is provided at the centre of this mix-use complex

11 广场与商店入口面对着远处的人民南路与天府广场/Plaza and retail entrance, facing Ren Min Nan Lu and Tianfu Square beyond

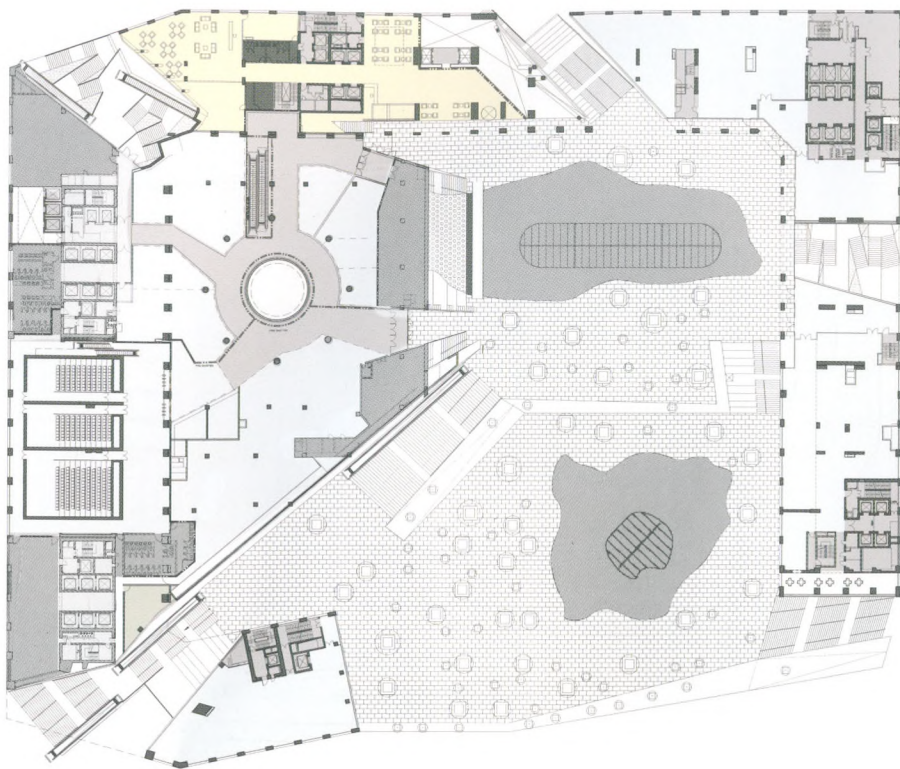
12-13 穿过太阳光板的都市通透体/Urban porosity through sun slices



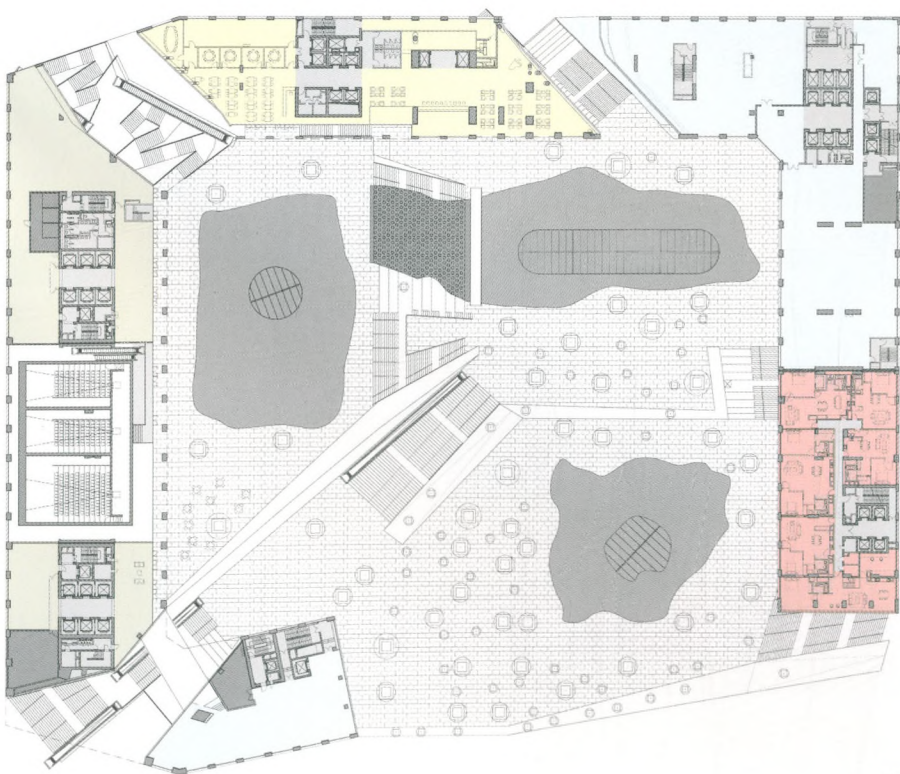
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项目信息/Credits and Data

客户/Client: 凯德集团/CapitaLand China

主创建筑师/Design Architects: Steven Holl, LI Hu

项目总负责人/Director in Charge: Roberto Bannura

项目建筑师/Project Architects: WU Lan (Beijing); Haiko Cornelissen, Peter Englaender, Jong Seo Lee (New York)

项目设计师/Project Designers: Christiane Deptolla, Inge Goudsmit, Jackie Luk, Maki Matsubayashi, Sarah Nichols, Manta Weihermann, Martin Zimmerli

项目团队/Project Team: Justin Allen, Jason Anderson, Francesco Bartolozzi, CAO Guanlan, Yimei Chan, Sofie Holm Christensen, Esin Erez, Ayat Fadaifard, FU Mingcheng, Forrest Fulton, Runar Halldorsson, M.Emran Hossain, Joseph Kan, LI Suping, Tz-Li Lin, LIU Yan, Daijiro Nakayama, Pietro Peyron, Roberto Requejo, Elena Rojas-Danielsen, Michael Rusch, Ida Sze, Filipe Taboada, Ebbie Wisecarver, Human Tieliu Wu, Jin-Ling Yu

合作建筑师/Associate Architects: 中国建筑科学研究院/China Academy of Building Research (XUE Ming, WANG Zhenming, LU Yan)

机电与防火工程/Mep and Fire Engineer: Ove Arup & Partners

LEED顾问/LEED Consultant: Ove Arup & Partners

可持续概念顾问/Sustainability Concept Consultant: Transsolar

结构工程/Structural Engineer: 中国建筑科学研究院/China Academy of Building Research

照明顾问/Lighting Consultant: L'Observatoire International

工程造价/Quantity Surveyor: Davis Langdon

交通顾问/Traffic Consultant: MVA Hong Kong Ltd

功能/Program: 5座办公塔楼、服务型公寓、商铺、旅馆、咖啡厅、餐厅，以及大型城市公共广场/Five towers with offices, serviced apartments, retail, a hotel, cafes, restaurants, and large urban public plaza

基地面积/Site Area: 32,571m²

建筑面积/Floor Area: 地上/Above: 195,000m²; 地下/Below: 115,000m²

施工时间/Construction Period: 2008.10-2012.11

摄影/Photos: Iwan Baan, HE Shu, Steven Holl Architcts

14 首层平面/Ground floor plan

15 二层平面/1th floor plan

16 三层平面/2nd floor plan

17 四层平面/3rd floor plan

评论

张路峰：这一组看上去有点眼花缭乱的商业项目其实可以理解为一个简单的空间原型：一个倒置的“桌子”。“桌腿”部分是高层塔楼，相邻塔楼之间的玻璃幕墙使得相互之间有了关联，仿佛是一个被切开的环形整体，加强了场地中间的围合感。“桌面”部分是一个三层的台地空间，街道层的商业人流可以通过自动扶梯逐级攀登到各个平台，形成立体商业广场。多级入口层的处理手法将商业街道引入街区内部，增加了开设临街店面的机会，提升了用地的价值。在寸土寸金的商业中心区，这种空间原型对于高密度、高品质商业开发具有普遍意义。

范路：在成都来福士项目中，高层的建筑体块，围合出巨大的中心公共广场。这个多层的屋顶活动平台有5个不同形态的主要入口，连通周边的城市开放空间。从平面上看，这5个入口均以斜切的方式（4个均近乎45°角）穿过建筑形体。这既便利地引导了城市人流，更呼应了上部建筑的斜切形体处理与斜撑结构元素。



18 水池里倒映出周围景色，形成微气候，同时其底部的巨大天窗还向商场低层空间提供流转的自然光/Reflecting pond and sense of microclimate. Shimmering natural light is provided to lower floors of the mall through a large skylight at the bottom of the pond.

19.20 利布斯·伍兹设计的位于酒店塔楼中的光之馆/Light pavilion by Lebbeus Woods in hotel tower space



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Comments

ZHANG Lufeng: This group of dazzling commercial buildings can actually be interpreted as a simple spatial prototype: an upside down "table." The "table leg" part is represented by high-rise towers with glass curtain walls with relevance between adjacent towers, which present as a carved ring-shaped body that reinforces the enclosure of the spatial centre. While the "tabletop board" part is a three-tier platform, in which customers can reach each platform by elevator from street on the ground, hence forming a three-dimensional commercial plaza. Entrances of multi-tier structure may introduce commercial streets into the block, which increase the frontage commercial opportunities as well as enhancing the value of land. For the commercial centre of higher land cost, this space prototype has universal significance for high-density and high-quality commercial development.

FAN Lu: In the project of Capital Land Raffles City Chengdu, the group of high-rise buildings is located around a huge centre plaza. There are 5 entrances to this multi-level rooftop platform, connecting it to the public urban space around. In ground floor plan, these 5 entrances cut through building blocks obliquely - 4 in about 45 angles. With this arrangement, people could access the public platform more conveniently. In form, those oblique entrances echo to the chamfered building volumes and diagonal bracing structural elements.



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