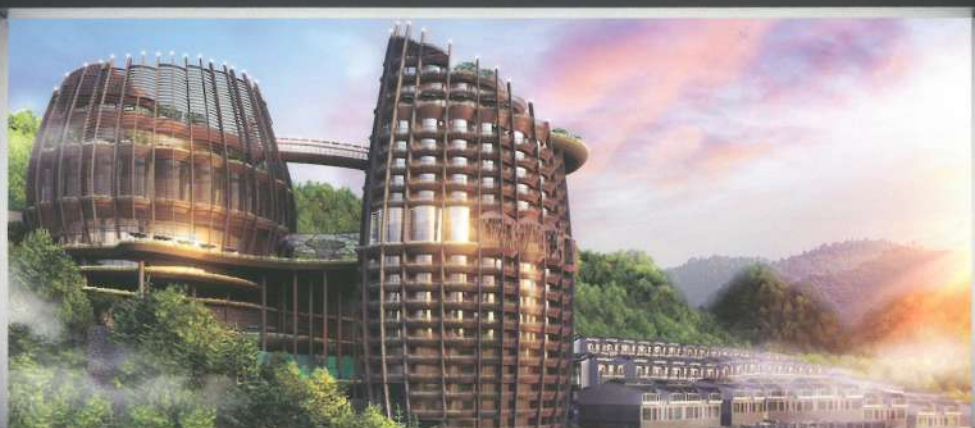


# architecture @ 20



The next generation of architecture in Asia +  
New building technologies



# GALLIUM VALLEY SCIENCE PARK



**Project Name** Gallium Valley Science Park  
**Location** Hangzhou, China  
**Client** Hangzhou Gallium Valley Technology Co. Ltd.  
**Architecture Firm** LWK + PARTNERS  
**Principal Architect** Ferdinand Cheung  
**Site Area** 63,300 square metres  
**Gross Floor Area** 158,250 square metres  
**Building Height** 50 metres  
**No. of Storeys** 11  
**Construction Start** January 2020  
**Scheduled Completion Date** December 2021



Open spaces and leisure amenities

Designed by LWK + PARTNERS, Gallium Valley Science Park is an important part of the Cloud Valley, where it is at the heart of China's technology cluster. The complex is expected to accommodate 6,000 professionals, housing laboratories; co-working and meeting spaces; sports facilities; exhibition venues; food and beverage outlets; as well as retail outlets for its future users. The project is also designed to cater to people's diverse needs of work, play and social elements to promote work-life balance. Recreational facilities include a gym, a swimming pool, an elevated jogging track, a basketball court and open spaces for events.

The project design proposes a new office-park typology by emphasising shared spaces on multiple levels. A communal 'sky-loop' platform on the third level will connect office spaces with amenities like restaurants and roof gardens. For the higher blocks, major recesses will be introduced to the building envelopes facing the central courtyard, creating communal terraces on every floor to allow fresh air and sunlight into core spaces like lift lobbies and pantries. Open areas will also be created by shifting, cutting out and breaking down the orthogonal architecture. While trees and green spaces will be found throughout the project, a permeable paving will help in maintaining subterranean cover, completing the park environment. Various entry points will facilitate access while linked bridges in the park provide connections.

The interior design will feature clean, connected lines, where a simple palette of wood and bronze elements will give spatial accents. Gallium Valley Science Park will be equipped with smart lighting, automated HVAC (heating, ventilation and air conditioning), smart lifts, etc.



Concept sketch

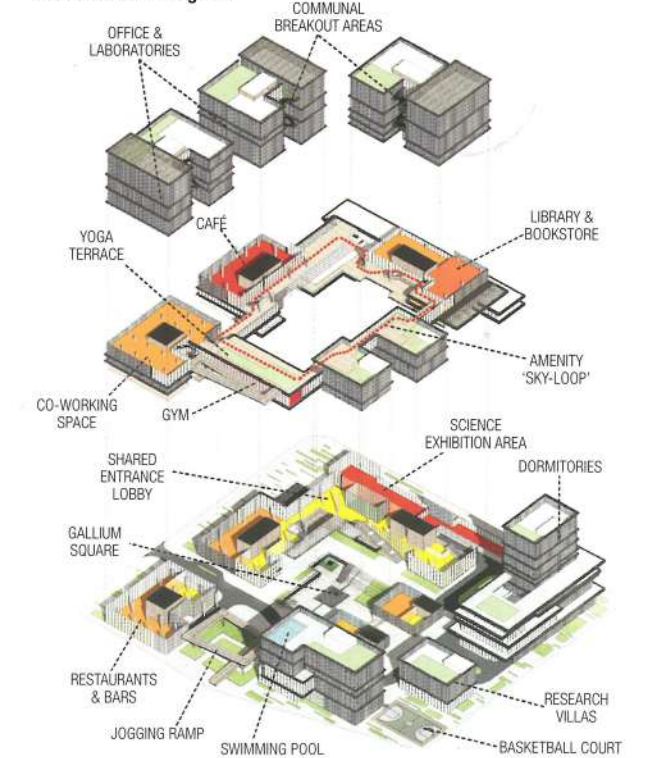


Open areas will be created by shifting, cutting out and breaking down the orthogonal architecture



A new office-park typology

Axonometric diagram





## OLYMPIC VANKE CENTRE



**Project Name** Olympic Vanke Centre  
**Location** Hangzhou, China  
**Client** China Vanke Co Ltd.  
**Architecture Firm** LWK + PARTNERS  
**Principal Architect** Ferdinand Cheung  
**Mechanical & Electrical Engineer** China United Engineering Corporation Limited  
**Civil & Structural Engineer** China United Engineering Corporation Limited  
**Site Area** 13,969 square metres  
**Gross Floor Area** 95,521 square metres  
**No. of Storeys** 23 (Tower A); 21 (Tower B)  
**Construction Start** January 2020  
**Scheduled Completion Date** March 2021

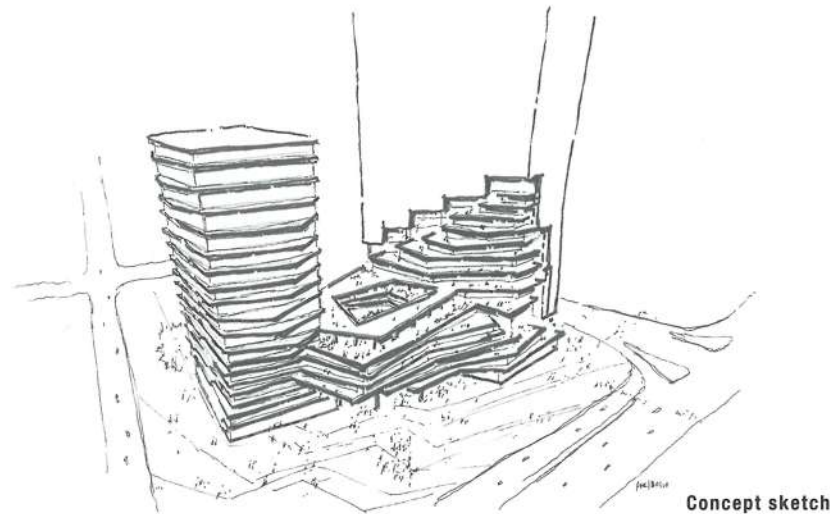


Located at the entrance of the 2022 Asian Games Village, Olympic Vanke Centre will include two office towers, a shared podium and three underground levels for parking. This innovative working hub by LWK + PARTNERS is envisioned to reinterpret the podium-tower typology as well as promote interactions and passive designs.

Pivoted around a landscaped void at the heart of the site, the lifted podium will open up to outdoor terraces. The convergence of the two towers at the lifted podium will be highlighted by the continuous deep-set spandrel fins, which will portray sharp shadows by the changing angles of the sun relative to the spiralling building form. The external supergrid of the curtain wall enclosing the higher tower will regulate the noise pollution from traffic, whereas the horizontally sliced timber planes of the window wall enclosing the lower tower will offer privacy.

The façade of the two towers will employ passive sun-shading systems to limit direct insolation and reduce interior heat gain. Moreover, each unit will be equipped with dedicated air-conditioning systems, where individual temperature control will allow tenants to optimise their own indoor environment, adding incentives for energy-saving practices.

The taller tower of the project is expected to house corporate tenants, while the lower tower will feature cubicle work stations with a generous common area intended as a breeding ground for start-ups and entrepreneurs. The podium will include two levels of food and beverages and other shared amenities, such as a gymnasium, cafeteria and entertainment spaces. This programmatic stacking blurs the work-life distinction. A semi-public podium roof garden will serve as a bridging leisure space between the two office towers.



Concept sketch



Street view



Urban permeability via massing, circulation and landscape arrangements



Different types of curtain wall employed for different functions



## WEST HUASHAN UNIPARK



**Project Name** West Huashan Unipark  
**Location** Jinan, China  
**Client** China Overseas  
**Architecture Firm** LWK + PARTNERS  
**Principal Architect** Ferdinand Cheung  
**Structural Engineer** Ove Arup & Partners Ltd  
**MEP Engineer** Meinhardt Group  
**Façade Engineer** Inhabit Group  
**LDI** Huayi Design  
**Site Area** 44,222 square metres  
**Gross Floor Area** 100,800 square metres  
**Building Height** 40 metres  
**Construction Start** January 2020  
**Scheduled Completion Date** June 2023



Street view

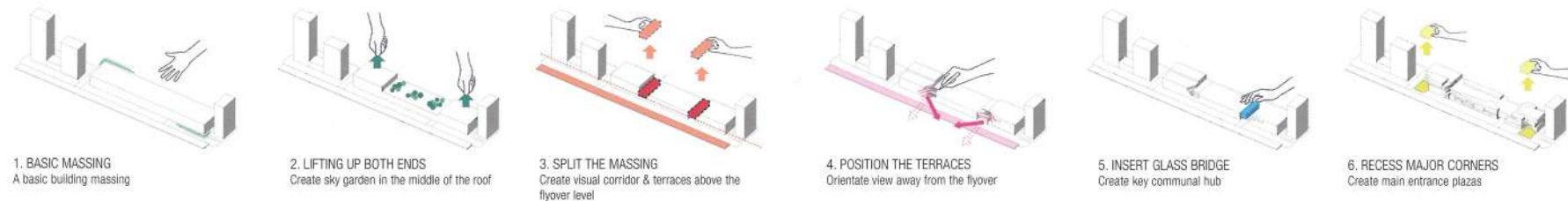
Designed by LWK + PARTNERS, West Huashan Unipark is a shopping mall in Jinan that is surrounded by the rich natural landscape near the Yellow River. Inspired by the silhouette of mountain ranges, the architects adapted it to the modern site by redefining the massing and roofline with distinctive bronze concave-shaped elements, integrating this contemporary architecture with its surrounding.

By strategically inserting a three-storey atrium and cascading outdoor decks to the linear massing, the 360-metre-long mall will have a number of multilevel attractions and destinations with natural lighting. An experiential programme will be offered with careful planning of inter-level circulation.

The mall has four main attractions inspired by natural landforms. With abundant daylight entering through the skylight, Forest is a triple-volume indoor atrium that will serve as a central platform for large-scale displays, events, performances and gatherings. Blossom will feature a series of outdoor decks lined with colourful seasonal plants where people can roam freely, which invites outdoor dining. These terraces will also increase visibility within the mall and encourage interactions between the indoor and outdoor spaces. Spring is a sunken fountain inspired by the history of Jinan being a city of hot springs, providing a public space for the community. Cloud is a sky garden acting as an outdoor playscape for sports and recreational activities. Overall, the shopping mall intends to offer diverse visual elements to provide a leisure retail-social environment.

The project takes advantage of the elongated site to create a street-level façade to maximise transparency and visual impact, bringing views of outdoor greenery indoors. An outdoor promenade spanning about the length of the façade will serve as a shopping street within the site.

## Massing strategies



An outdoor promenade



Cascading outdoor decks offer multilevel attractions with natural lighting



**Publication: Architecture@20**

**Publication Date: July 2020**

**Original Articles: Gallium Valley Science Park, Olympic Vanke Centre, West Huashan Unipark**

## 镓谷科学园

### 项目信息

地点：中国杭州

客户：杭州镓谷科技有限公司

建筑事务所：LWK + PARTNERS

主创建筑师：张家豪

建筑面积：158,250 平方米

楼高：50 米

楼层数目：11

预计竣工年份：2020 年 12 月

由 LWK + PARTNERS 匠心设计的镓谷科学园位处中国科技群的核心，是云计算产业园重要的部分。项目将建有 6000 个实验室、共享办公室及会议室、体育设施、展览空间、餐厅和商店。项目设计迎合人对工作、娱乐及社交的需求，促进工作与生活平衡的实践。娱乐设施包括健身房，游泳池，缓跑径，篮球场和活动场地。

建筑设计提出一种新型的「园林办公」发展模式，公共空间渗透多个楼层，包括位于三层的环型空中平台，连接餐厅、空中花园及其他康乐设施。设计团队特意把较高层建筑面向中央庭园的外壳做了大笔切割，为每层的电梯大堂、茶水间等公共空间引入自然风和阳光。整个项目都有树木和绿地，透水性铺面将有助保持地下覆盖，完善公园环境。园内的连接桥梁提供连接，提供多个入口方便出入。

室内设计以干净、连接的线条为特色，简单的木质和青铜元素的调色将赋予空间感。镓谷科学园将配备智能照明、自动暖通空调（供暖，通风及空调）、智能电梯等。

## 奥体万科中心

### 项目信息

地点：中国杭州

客户：万科企业股份有限公司

建筑事务所：LWK + PARTNERS

主创建筑师：张家豪

建筑面积：95,521 平方米

楼层数目：23（塔楼 A）；21（塔楼 B）

预计竣工年份：2021 年 3 月

奥体万科中心处于 2022 年杭州亚运会亚运村的大门，设有两栋办公塔楼，两栋塔楼共通，以及三层地下停车场。LWK + PARTNERS 团队重新演绎裙楼+塔楼类型建筑，鼓励积极参与和设计。

项目的设计意念以地块中心的景观空间为轴心展开；挑高的裙楼横向扇开，造成层层递进的户外平台，每层的开放程度亦各异。在挑高的裙楼上，两栋塔楼的交接点被深陷的肩鳍点亮，在螺旋形的塔楼形态衬托之下，日光照射方向的改变令其投射的黑影更戏剧化。较高的塔楼外部被表层网线覆盖，可以减少交通的噪音影响，而较矮的塔楼的全窗户外墙则以横向摆放的木板包围起来，保留私隐度。

两栋塔楼的外幕墙采用两种不同方式，被动地限制日光直接进入室内，从而减少室内气温上升的情况。除此之外，塔楼内每个出租单位均有其独立运作的空调系统，租户可以个别控制及优化自身的室内环境，鼓励采用节省能源的措施。

较高的塔楼预计将出租予大型企业客户，而较矮的塔楼将设有多个独立间隔，配以宽敞的公共空间，是初创企业及创业家的摇篮。群楼将设两层餐饮空间，并设有其他推进联系设施，例如健身室、饭堂和娱乐空间。这个循序渐进的迭加布局模糊工作和生活的分界线。半开放式的裙楼空中花园是连接起两栋塔楼休闲空间。

## 华山西环宇城

### 项目信息

项目名称：华山西环宇城

地点：中国济南

客户：中海地产

建筑事务所：LWK + PARTNERS

主创建筑师：张家豪

总面积：44,222 平方米

建筑面积：100,800 平方米

楼高：40 米

预计竣工年份：2023 年 6 月

由 LWK + PARTNERS 设计的华山西环宇城购物中心位处中国济南，四周环绕着黄河附近的自然景观。项目灵感来自山脉的轮廓，建筑师通过采用独特的青铜凹形元素重新定义了整个建筑和顶部线条，将这栋当代建筑与周围环境融为一体。

透过策略性地在线性体量加插三层中庭和层叠式室外平台，这座 360 米长的购物中心将拥有多个多层次的景点，引入自然采光，同时将采用室内层间流通的体验式方案。

购物中心四个主要景点的灵感都是来自自然地貌。「林见」是一个三层的室内中庭，日光通过天窗进入，拥有充足的日光，是大型展览、活动、表演和聚会的主要平台。

「花见」是一个两旁排满色彩缤纷植物的户外平台，可以自由漫步，亦可以在室外用餐。这些露台增加了购物中心内的可视性，并鼓励室内及室外空间的互动。「泉见」是一个的下沉式喷泉，为社区提供公共空间，灵感来自温泉之城济南的历史。「云见」是一个空中花园，提供体育和休闲活动的户外游乐场。整体而言，购物中心旨在提供多元化的视觉元素，以提供休闲的零售社交环境。

项目利用长形地块的优势，创造临街立面，将室外绿化带到室内，提高透明度和视觉效果。购物中心另设有一条横跨外立面长度的户外长廊作为购物街。