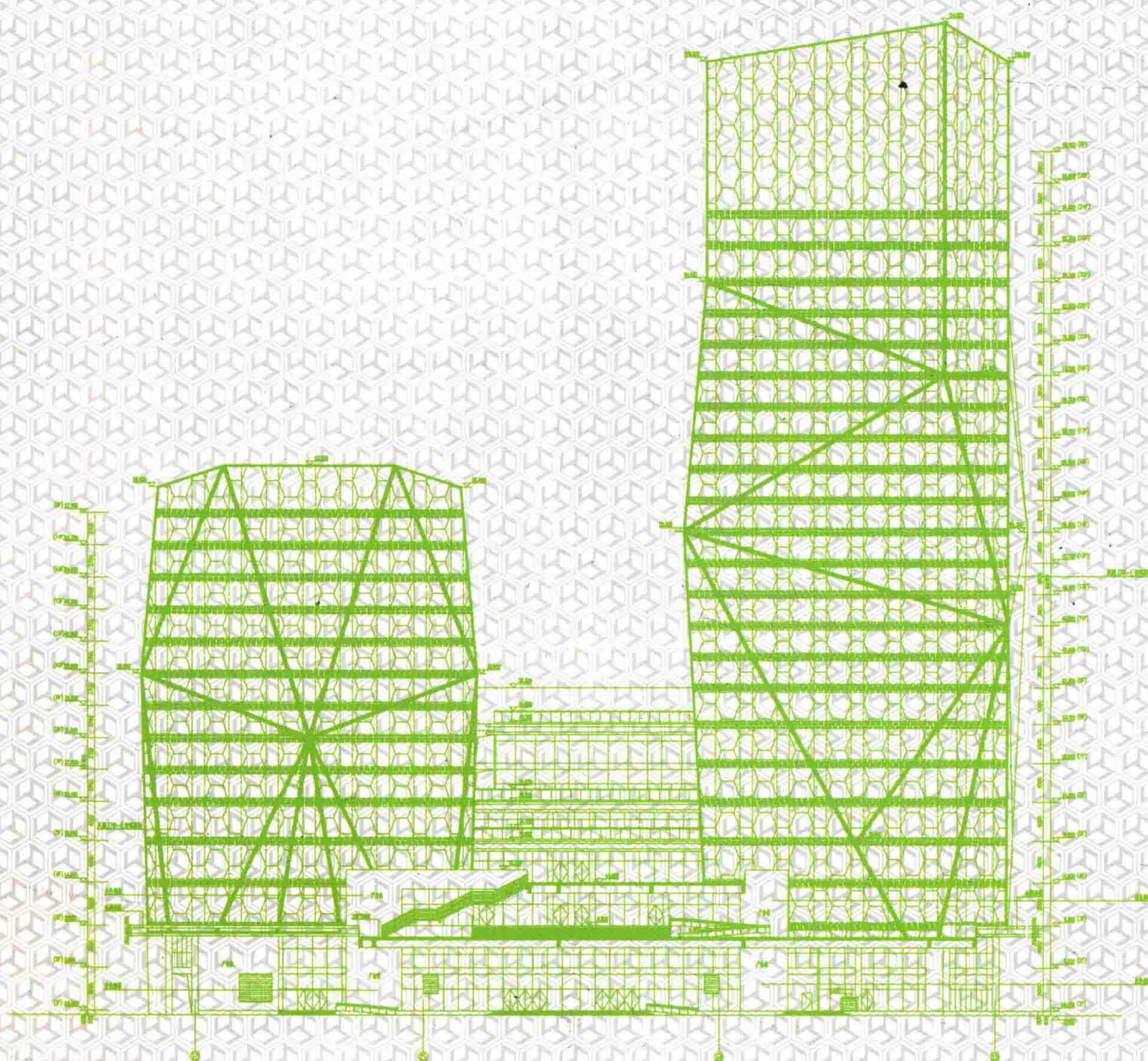


建筑设计详解

Architectural Design
Process Demystified



中国林业出版社
China Forestry Publishing House

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PREFACE 前言

From concept to building is not a process of simple duplication or deliberately piling up, but a transformation of abstract beauty in concept to beauty of building in form, an expression of conceptual connotation to concrete beauty of building. From concept to building is a process to realize our vision of a better city in line with the law of beauty.

According to the latest design concepts in current international construction industry and from the perspective of professional architectural design, this book is a collection of carefully selected cases mainly involved in shopping centers, commercial complexes, urban complexes, office buildings, hotel buildings, art and cultural buildings and transportation buildings and so on. In content layout, each case is analyzed in keywords, features and design concept in the company of a large variety of technical drawings such as plans, sections and analysis graphics. With rich content and full and accurate information, the book tries to give architects and readers in related industries visual enjoyment and design inspiration.

从概念到建筑，不是简单复制的过程，也不是刻意堆砌的过程，而是将概念的抽象美转化成建筑的形式美、将概念的抽象内涵转化成建筑的具象表达。从概念到建筑，是按照美的规律，实现“我们让城市更美好”的愿景的过程。

本套书依据国际现行建筑行业的最新设计概念，站在建筑设计的专业角度，精心挑选案例。本书案例主要涉及了购物中心、商业综合体、城市综合体、办公建筑、酒店建筑、文化艺术建筑以及交通建筑等建筑形态。内容编排上，分别从案例的关键点、亮点、设计概念等方面入手，并配合大量的各种技术图纸，如平面图、剖面图、分析图等。本书内容丰富、资料详实，希望能给建筑设计师及相关行业读者带来视觉享受和设计启迪。

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- 240 New Loja High-speed Railway Station, Spain 西班牙洛哈新高铁站

People Oriented
人本理念

Interaction
互动交流

Enterprise Logo
形象标识

Green & Eco-friendly
绿色环保

Xinglin Bay Business Operation Center 7# Building 杏林湾营运中心 7 号楼

Keywords 关键词

Super High-rise
超高层

Prismatic Shape
棱柱造型

Detailed Design
细部设计

Location: Xiamen, Fujian, China
Developer: XINGLIN JIANSHE
Architectural Design: Hordor Design Group
Total Land Area: 12,757.57 m²
Base Area: 4,631 m²
Overground Floor Area: 76,319.5 m² (commercial floor area 14,099.5 m², office floor area 62,220 m²)
Underground Floor Area: 20,155.2 m²

项目地点：中国福建省厦门市
开 发 商：厦门市杏林建设开发公司
建筑设计：厦门合道工程设计集团有限公司
总用地面积：12 757.57·m²
建筑占地面积：4 631 m²
地上建筑面积：76 319.5 m² (其中商业建筑面积14 099.5 m²,
办公建筑面积62 220 m²)
地下建筑面积：20 155.2 m²

Features 项目亮点

The concept originates in glittering and translucent white crystal. Crystal is clean and transparent, and each crystal prism stands upright in the cluster of druse, which conform with the surrounding environment in this case.

主楼的形体概念来自于晶莹剔透的白水晶。水晶干净而透明，晶簇群上的每一个晶柱都昂然挺拔，极符合本地块项目营运次中心的地位和精神。

■ Overview

Xinglin Bay Business Operation Center is located on the south of BRT line and the northwest of sea water. Across the water is Garden Expo Park, boasting convenient traffic, rich landscape resources and open view. 7# Building is a 140.5m super high-rise office building which has two floors underground and 30 floors overground, located in the central position of the center and adjacent to large commercial center and greenbelt, enjoying the view of Guanren Mountain.

■ 项目概况

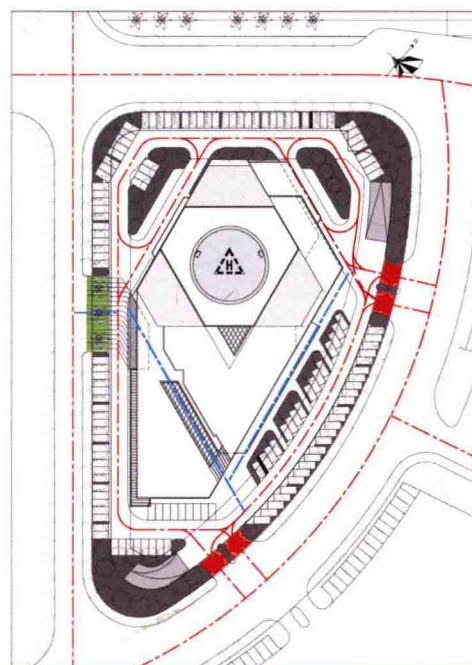
该项目地处杏林湾营运中心区，位于杏林园博园水域中心地带，北临BRT快速公交线路，东南全线临海，与园博园隔水相望。交通便利，景观资源丰富，视野开阔。7号楼地块项目处于该营运中心的中间位置，北有大型商业中心，西临营运中心绿化带，西南方向可远眺官任山景，为地上30层、地下2层、建筑高度148.5 m的超高层写字楼。

■ Overall Planning

Overall planning revolves around “two axis, two centers”, which serve as a guidance for landscape design to strive for the largest landscape scale that ensures sea view for the east, mountain view for the west and park view for the south. Situated in the northwest of the base, the main building overlooks the lush greenery in the bordering greenbelt and faces the high-rise building group on the east side in a modest yet dauntless imposing stature.

■ 总体规划

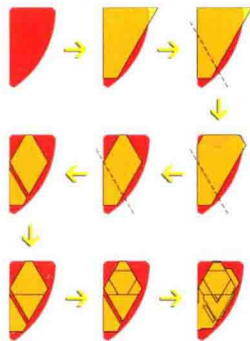
本案以营运中心“两轴两心”的总体规划结构为景观设计的依据，做到东面观海，西面观山，南面观园，争取最大的景观面。将主楼置于西北面，下临中心绿化带，给建筑增添了一份绿意葱茏，而对东面的高层建筑群，则显示了一种谦恭退让的态度而不失区域次中心气度，很好地明确了自己在区域中的定位。



Traffic Drawing 交通分析图

- 基地主要出入口
- 基地人行出入口
- 车行流线
- 人行流线

作为150m超高层建筑项目，车流畅通的重要性可想而知。设计中以6m（部分地段5.5m）的环路贯通基地，连结东侧的两个主要出入口，结合绿地和停车的布置，做到商业和办公分流，楼宇入口引导明晰。



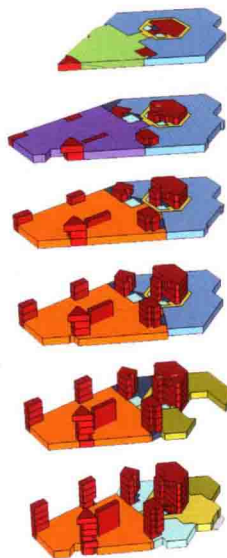
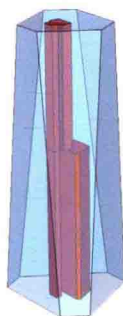
地块内的绿化设计，首先是围绕分租停车位布置的。此处的绿化客观上既成为基地内外的分界，也为人行道和停车位上的车辆提供了遮阳作用。

其次，在主楼西面和东面的两个出入口处，设计了部分结合停车的块状绿地，一面引导了车流，一面可结合长椅等设施布置，成为基地内的两处室外休闲场所。

最后，基地东北角和南面结合地下车库出入口布置的绿地，都为有限的基地面积争取了最大的绿化空间。



Landscape Analysis Diagram 景观分析图



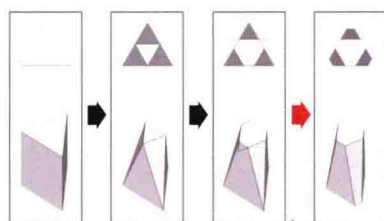
- 普通交通
- 商业
- 交通
- 餐饮
- 会议
- 配套设施
- 商务办公
- 商务服务
- 健身

基于上文对项目的定位分析，设计功能以150m超高层商务办公建筑为主，辅以低层的商业和商务配套功能。布局上将商务配套功能多置于主楼低层，而将对外商业部分置于裙房。裙房结合形体的穿插、光线的设计，形成热闹并富于趣味的商业内街，弥补了该区与相邻地块跨度大、商业气氛不够浓郁的不足。更通过此商业内街带动该地块乃至周边的商业活力，以期更好地为商务功能服务。

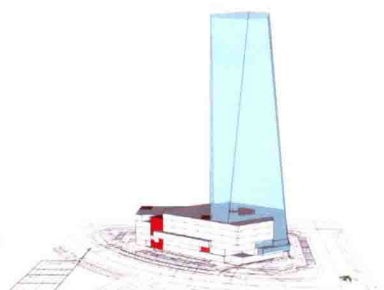
Function Analysis Diagram 功能分析图



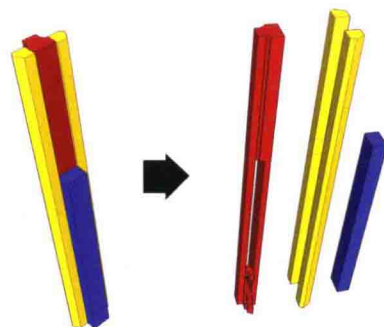
水晶晶柱+底座 → 主楼+裙房



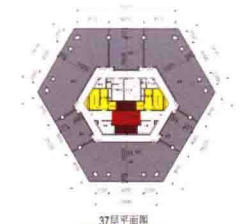
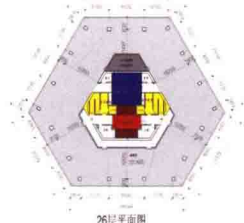
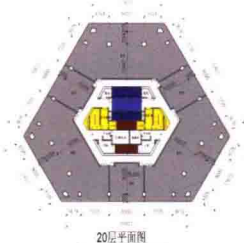
晶体+不规则切面 → 玻璃幕墙+有规律地削切



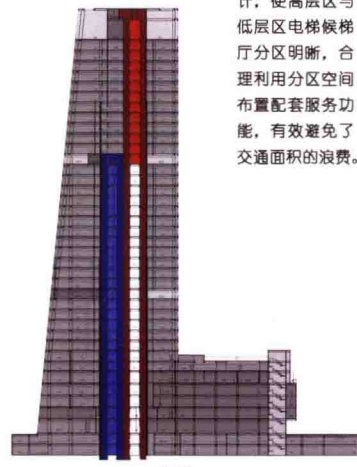
Shape Concept 形体概念分析图



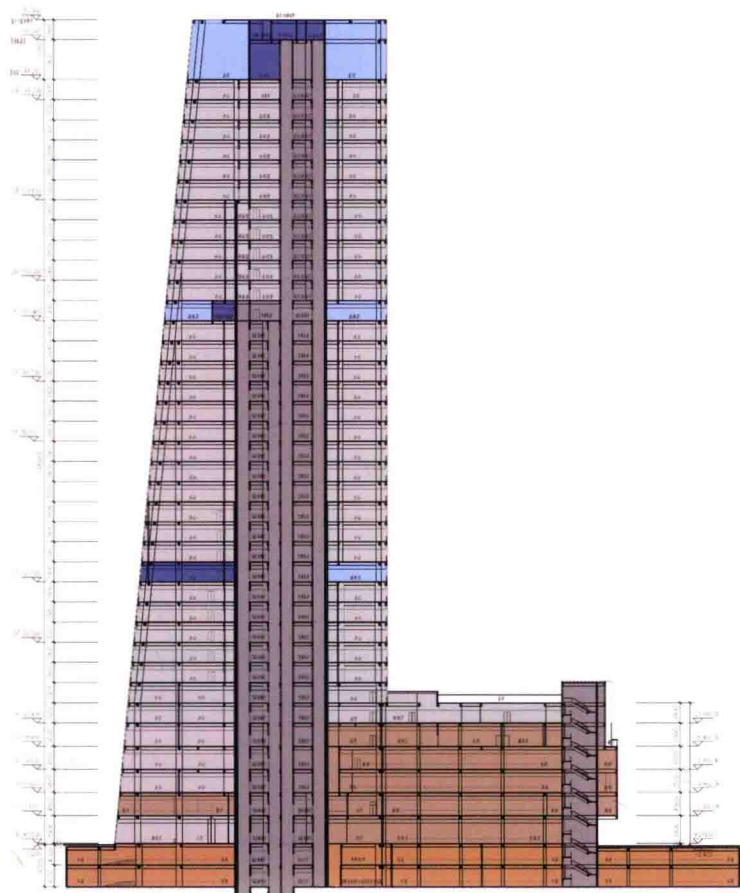
- 高层区电梯井
- 高层区候梯厅
- 低层区电梯井
- 低层区候梯厅
- 楼梯间



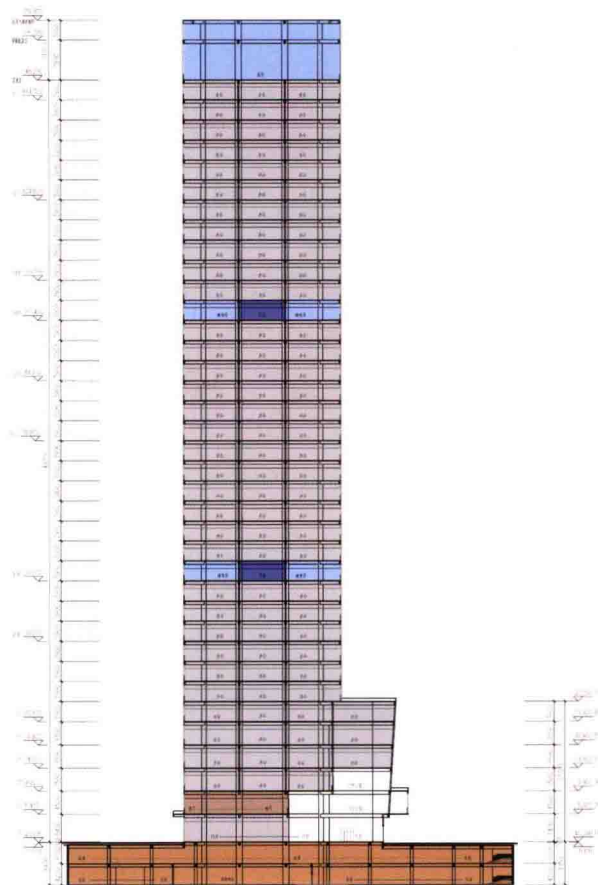
主楼核心筒的设计，使高层区与低层区电梯候梯厅分区明晰，合理利用分区空间布置配套服务功能，有效避免了交通面积的浪费。



Main Core Tube Analysis Diagram 主楼核心筒分析图

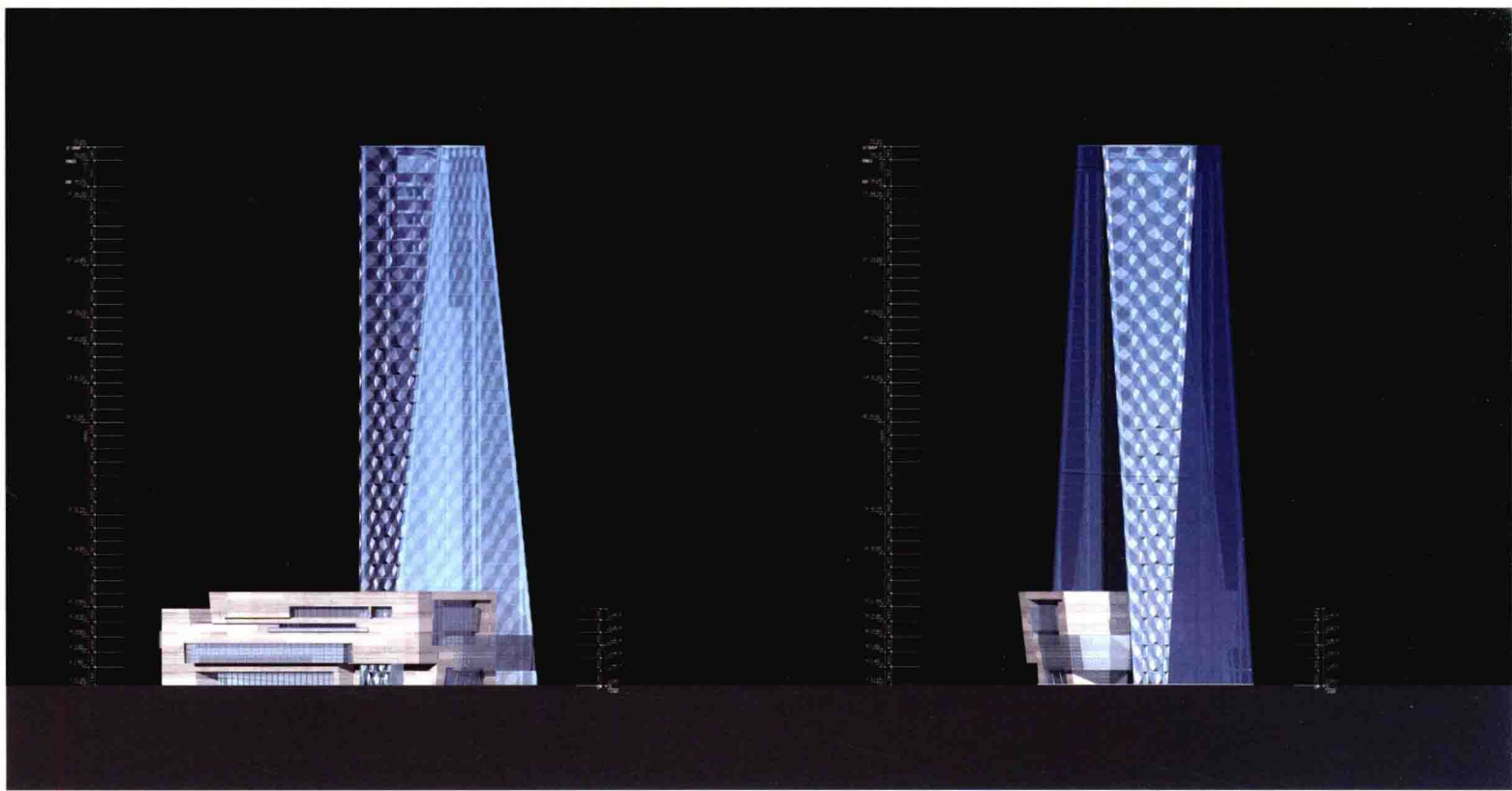


A-A Section A-A 剖面图



B-B Section B-B 剖面图



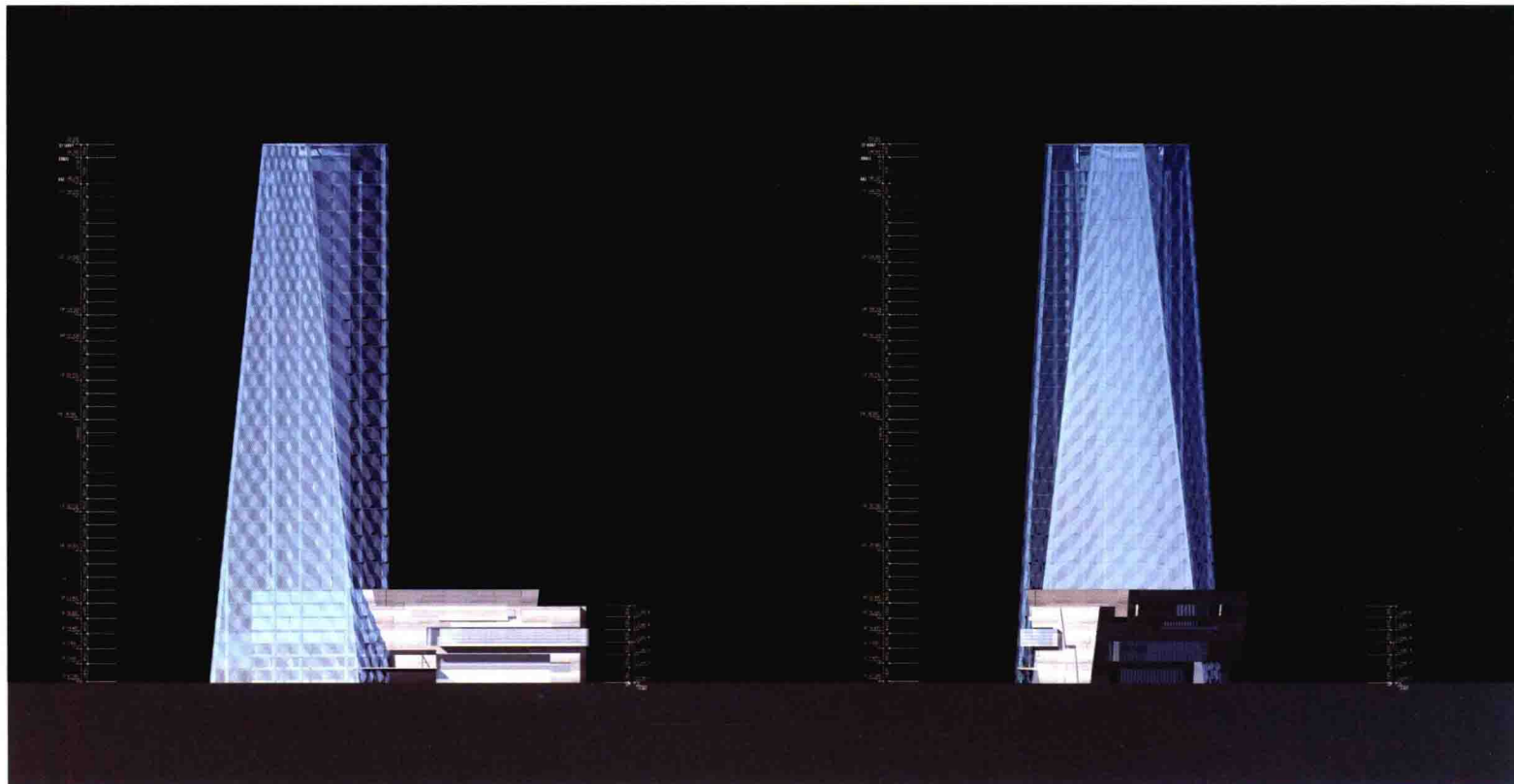


Elevation 1 立面图 1

■ Shape Concept

Through several rounds of scheme comparisons, designers finally used the shape comprised of crystal prism and triangle. The concept originates in glittering and translucent white crystal. Natural crystal is hexagonal drill-like that shaped in millions of years. Crystal is clean and transparent, and each crystal prism stands upright in the cluster of druse, which conform with the surrounding environment in this case. The main building transited from triangle to hexagon, upright, simple and modern, looks

quite harmonious with the surroundings. Crystal clear tower shapes a contrast with the horizontally extended annex building in volume and material, just as an elegant and graceful crystal prism placing on an exquisite plate. Pyramids are rotated in a regular rule on the façade, creating different sparkling effects when the sun strikes the building in different angles. Reasonable building orientation provides a comfortable and relaxed working environment with favorable landscape view.



Elevation 2 立面图 2

■ 形体概念

通过多轮方案比选，设计团队确定了以水晶棱柱体结合三角形母体的形体方向。主楼的形体概念来自于晶莹剔透的白水晶。天然水晶呈六棱钻头状，是大自然经过亿万年形成的结晶。水晶干净而透明，晶簇群上的每一个晶柱都昂然挺拔，极符合本地块项目营运次中心的地位和精神。主楼形体由三角形过渡至切角六边形，形体挺拔、简洁、极富现代感，建筑造型和外观与周边环境协调一致。晶莹剔透的塔楼竖向形体与水平横向延伸的裙房在体量与材质上形成强烈对比，恰如一个放置于精美底盘之上的水晶棱柱，高雅华贵。立面细部由一个个偏转了中心的棱锥面经过多次旋转、镜像，以一定规律组合而成，在不同角度的阳光照射下形成如钻石切面般粼粼波光的效果。合理布局的建筑朝向为使用者提供了舒适、宽松、良好景观视线的工作环境。



Riverside International New Town Chuangye Building 滨河国际新城创业大厦

Keywords 关键词

Green Ecology
绿色生态

Spatial Organization
空间组织

Intelligentization
智能化

Features 项目亮点

Following the innovative concept of putting green ecology and the whole environment at the first place, it creates a symbol of mildness, open-mindedness and people-oriented services.

贯彻绿色生态和整体环境优先的创新理念，体现出该项目既平和严谨，又注重人性服务、全面开放的市民中心形象。

Location: Zhengzhou, Henan, China
Commissioned by: Zhengzhou Committee of Economic and Technological Development Zone
Architectural Design: KLP KELLER HU PARTNERSHIP LIMITED
Main Designers: Larry J. Keller, Sun Zhen
Total Land Area: 50,759m²
Floor Area: 127,000 m²
Date of Design: January, 2013

项目地点：中国河南省郑州市
委托单位：郑州经济技术开发区管委会
设计公司：美国KLP建筑设计有限公司
主要设计人员：拉里·凯勒 (Larry J. Keller)、孙铮
用地面积：50 759m²
建筑面积：127 000 m²
设计时间：2013年1月

■ Overview

Zhengzhou Chuangye Building is located in the Binshui CBD of Zhengzhou Economic and Technological Development Zone. It is close to Jingnan 9th Road on the south and Jingkai 16th Street on the east, reaches Jingnan 8th Road on the north and borders Jingkai 15th Street on the west.

■ 项目概况

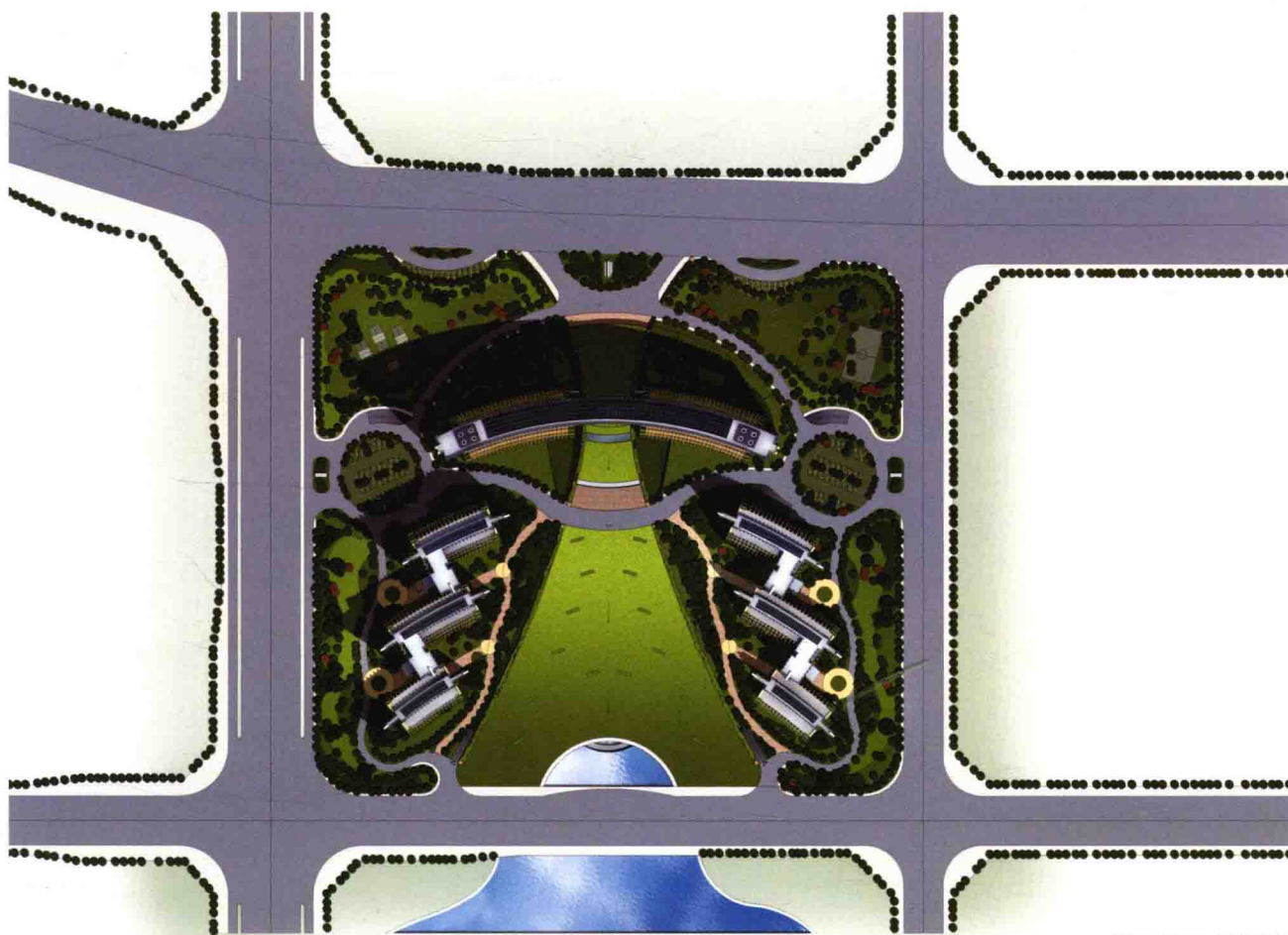
郑州创业大厦位于郑州经济技术开发区滨水商务中心区，南临经南九路，北至经南八路，东邻经开第十六大街，西至经开第十五大街。

■ Design Concept

The design follows the development idea of eco and services to create a governmental office building which will be in harmony with the surroundings, feature unique identity, promote local culture and serve the public. Based on the essence of Chinese culture — “harmonious, flexible and orderly” and the innovative ideas of “eco and green and environment first”, it will build a symbol of mildness, open-mindedness and people-oriented services.

■ 设计理念

项目遵循“生态”“服务”的核心发展理念，追求“融入环境、体现特性、传承文化、服务社会”的总体目标，设计立足于“中正平和，变通有则”的中原文化内涵，以绿色生态和整体环境优先的创新理念，体现了该项目既平和严谨，又注重人性服务、全面开放的市民中心形象。



Site Plan 总平面图



■ Design Features

Landscape: making full use of the landscape resources;

Sunlight: taking advantage of its superior location to get plenty of sunlight;

Sharing: creating eco and sharing spaces inside;

Green: bringing outdoor green landscapes into the building;

Intelligence: adopting standard 5A intelligent systems;

Humanity: people oriented, offering pleasant working spaces for the staff with ecological, efficient, intelligent and humanized designs. It aims to create a simple, elegant, economical and practical office building with well organized spaces and transportation.

■ 设计特色

景观办公：充分发挥景观优势并使之最大化；

阳光办公：利用地域优势、得到充足的阳光；

共享办公：创造内部的生态共享空间；

绿色办公：把室外绿化空间引入到建筑内部；

智能办公：采用5A标准智能化系统对大厦进行配置；

人性办公：以人为本，为办公人员提供舒适的交往空间，力求在建筑的生态化、高效智能化、人性化设计等方面突出个性，使建筑物造型庄严大方，结构简洁、经济实用，空间组织高效合理，交通流线顺畅便捷。

