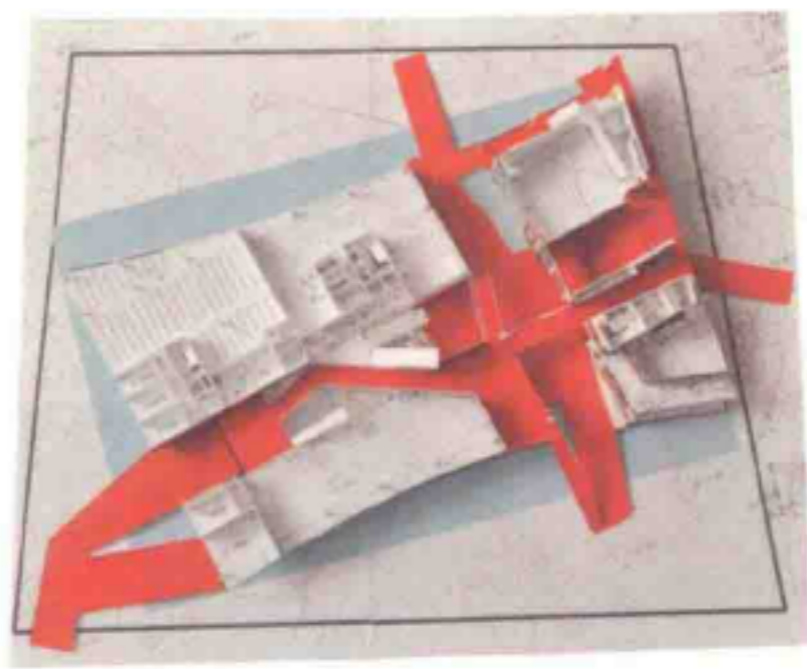


Library of South University of Science and Technology

南方科技大学图书馆

项目名称: 南方科技大学图书馆 项目地点: 中国 深圳 设计时间: 2010-2012 建设时间: 2011-2013 用地面积: 8627.9m² 建筑面积: 10727.8m² 建筑层数: 3 建筑高度: 16.5m 项目组: |设计总负责: 孟岩 |项目总经理: 张长文 |技术总监: 姚殿斌 |项目负责人: 林怡琳 苏爱迪 |建筑设计: 黄志毅 王俊 朱伶俐 谢盛奇 李嘉嘉 陈兰生 |室内设计: 王辉 刘爽 李图 吴锦彬 委托人: 深圳市建筑工务署、南方科技大学建设办公室 施工图合作: 深圳市建筑科学研究院有限公司 摄影师: 陈冠宏

Project Name: Library of South University of Science and Technology **Location:** Shenzhen, China **Design:** 2010-2012 **Construction:** 2011-2013 **Site Area:** 8,627.9 m² **Floor Area:** 10,727.8m² **Building Story:** 3 **Building Height:** 16.5m **Project Designers:** | **Design Director:** Meng Yan | **Project General Manager:** Zhang Changwen | **Technical Director:** Yao Dianbin | **Project Director:** Lin Yilin, Su Aidi | **Architecture Designers:** Huang Zhiyi, Wang Jun, Zhu Lingli, Xie Shengqi, Li Jiajia, Chen Lansheng | **Interior Designers:** Wang Hui, Liu Shuang, Li Tu, Wu Jinbin **Client:** Shenzhen Public Works Bureau, South University of Science and Technology Infrastructure Office, (LDI) Structure/ MEP (Mechanical, Electrical, Plumbing) **Interior:** Shenzhen Institute of Building Research Co., Ltd. **Photographer:** Alex Chan



当书不再是唯一知识传播载体的情况下，图书馆的意义也在发生改变。我们在满足图书馆的传统功能要求的同时力图挖掘图书馆与当代社会特征紧密关联的公共性。

图书馆位于校区中心，略微内凹的弧形轮廓，对环境形成谦逊的姿态。师生每日往返于教学区与生活区时，会从不同方向途经此地。顺应这种动线，生成了穿越建筑的十字形游廊系统。以期像传统的岭南骑楼一样，既能适应深圳的炎热多雨，又能吸引人走进去参与空间活动。主入口门厅、学术报告厅、社团活动室和书吧等公共功能被有意安排在南北向通廊的两侧。二层游廊自西向东途经书吧、天井、多功能厅、竹园、阅览区、半室外台地，最终到达东面的百树园。流线交叉给人们的日常穿越带来相遇和交流，停留、阅览和参与学术活动自然成为生活的一部分，使实体图书馆有机会比虚拟阅读更鲜活有趣。顶层是供开架阅览使用的近3800m²的开敞式大空间。为便于模数化的藏书区和阅览区日后互换，整层结构板均按藏书区荷载来设计，柱跨统一为8400×10800 (mm)。

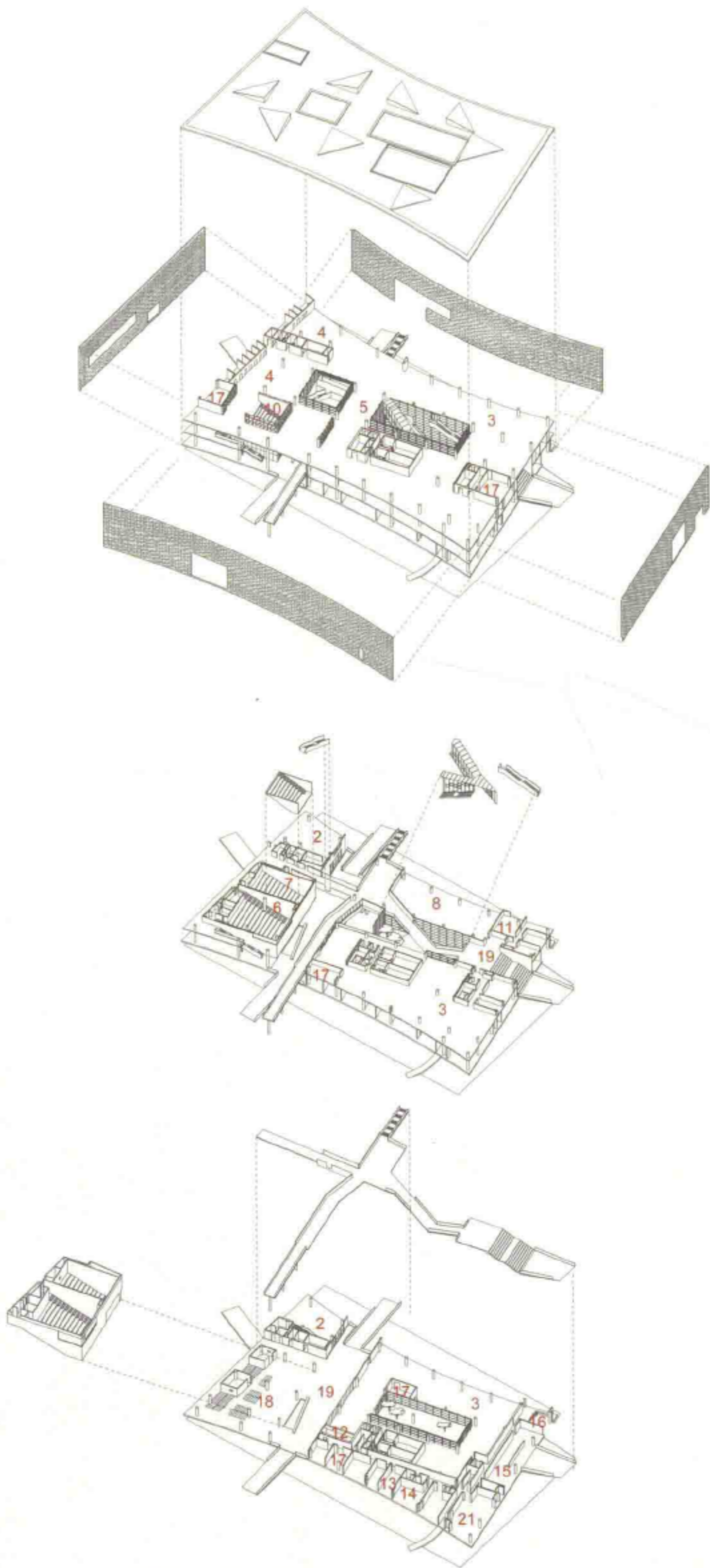
图书馆外墙意图使用GRC(即玻璃纤维增强混凝土),在综合考虑立面尺度、结构承载力、可加工的构造尺寸、当地遮阳需求等因素后，GRC单元格被设计为尺寸1800×675×400(mm)的轻质高强的空心模块，中间填充保温隔热材料，经脱模养护而成。由于种种原因，甲方在施工前要求更换为传统材料。最后实施的是银灰色半单元式铝制模块错缝拼装。铝板模块集防水保温自遮阳于一体，延续了原尺寸和拼装方式。与外墙不同，十字形游廊选用了橘色高强度水泥纤维板作为天花和墙面装饰材料。橘色主题从室外公共空间延续至室内的公共区，将人们自然地由游廊引入到建筑中来。

Nowadays, as books cease to be the primary carrier for the transfer of knowledge, the meaning of “The Library” is also shifting. Recognizing this, the design not only incorporates the conventional programs of libraries, but also attempts to excavate what is embedded in libraries—the public nature that is closely associated with today’s society.

Located at core of the campus, the library features a slightly curved façade, maintaining a humble stance towards its surroundings. Students and teaching staff who commute between the academic area and the living area on a daily basis will always pass by the library, regardless of which direction they are heading. Such circulation gives rise to a corridor system that crisscrosses throughout the building, referencing the traditional Cantonese commercial arcade adapted to hot and rainy climates, attracting the public to walk to the inside. Along the north-south corridor are the public programs, including the main entrance lobby, academic auditorium, association activity room, book bar, and so forth. The corridor on the second floor extends from the west to the east—it passes by the book bar, skylight, multi-function hall, bamboo garden, reading area, semi-outdoor platform, and then finally ends at the Baishu Garden on the east. Overlapping circulation allows people to meet and communicate with each other; they can stop by to read or participate in academic activities, which will naturally become a part of their daily life. These create opportunities for a physical library to become more lively and inviting than a virtual library. On the top floor, 3,800 square meters of clear space serves an open-shelf reading area. In order to facilitate the role of exchange between the modularized book collection area and the reading area, the structural load of this floor is customized for book collection areas; the column span is unified as $8,400 \times 10,800\text{mm}$.

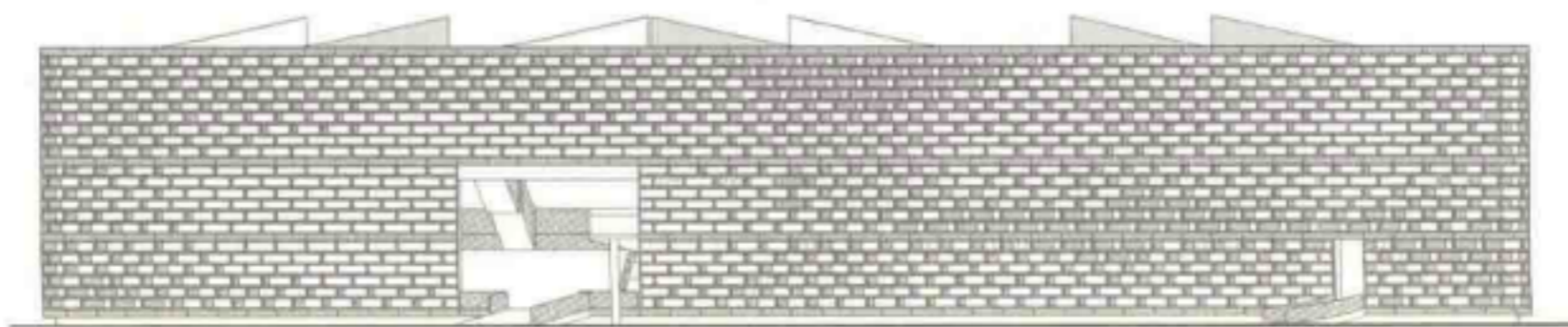
GRC (Glass Fiber Reinforced Concrete) was originally specified for the library façade. With the consideration of façade scale, structural load, sizes of fabricated structural components, local shading requirement, and other factors, the GRC unitized component was designed into a light and high-strength hollow module that had a dimension of $1,800 \times 675 \times 400\text{mm}$; its hollow core was then filled with insulating materials, with mold release and curing treatment. Due to various reasons, the client requested the material to be changed before construction. Eventually, silver gray, semi-unitized aluminum modules were assembled together in a staggered fashion. The aluminum modules were both water-proof and sunlight resistant, and were assembled following the original approach. For the crisscrossing corridors, orange high-strength fiber cement boards were applied to the ceiling and the wall. The orange color extends from the outdoor public space to the indoor public area, inviting people at the corridors to enter the building.



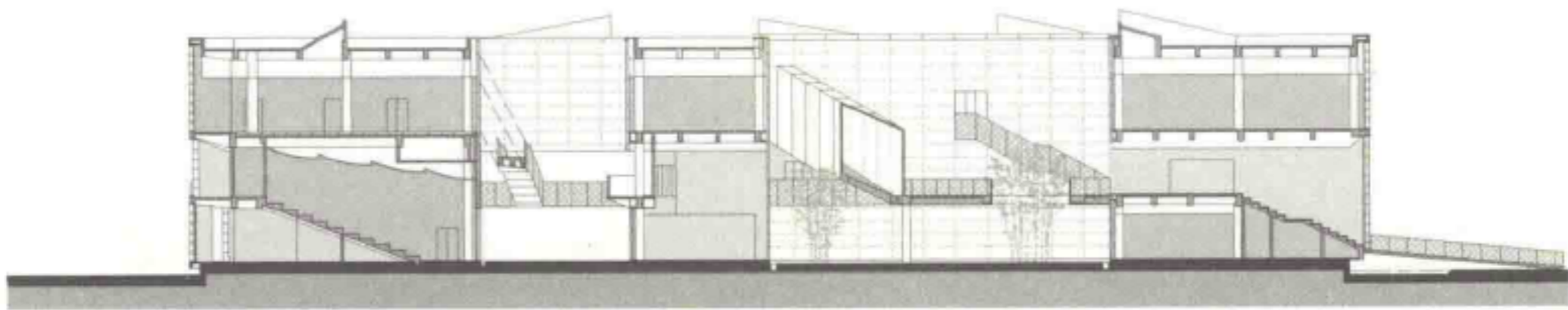


- | | |
|-----------|------------------------------|
| 1 门厅 | 1 Lobby |
| 2 书吧 | 2 Book Bar |
| 3 开架阅览区 | 3 Open Access Reading |
| 4 电子阅览区 | 4 E-reading Area |
| 5 检索休息厅 | 5 Reterieval Hall |
| 6 学术报告厅 | 6 Entrance Hall |
| 7 社团活动室 | 7 Lecture Hall |
| 8 多功能室 | 8 Multi-function room |
| 9 研修室 | 9 Lab |
| 10 下沉阅读角 | 10 Sunken Reading Conner |
| 11 校园信息中心 | 11 Campus Information Center |
| 12 总服务台 | 12 Service Counter |
| 13 办公室 | 13 Office |
| 14 会议室 | 14 Meeting Rome |
| 15 采编部 | 15 Acquisiting Room |
| 16 卸货平台 | 16 Loading Dock |
| 17 设备用房 | 17 Equipment Room |
| 18 自行车库 | 18 Bike Garage |
| 19 室外通道 | 19 Outdoor Corridor |
| 20 庭院 | 20 Courtyard |
| 21 校园总消控室 | 21 Fire Control Room |

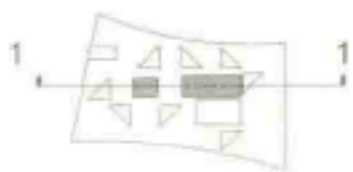
轴测分解图 Axonometric Diagram

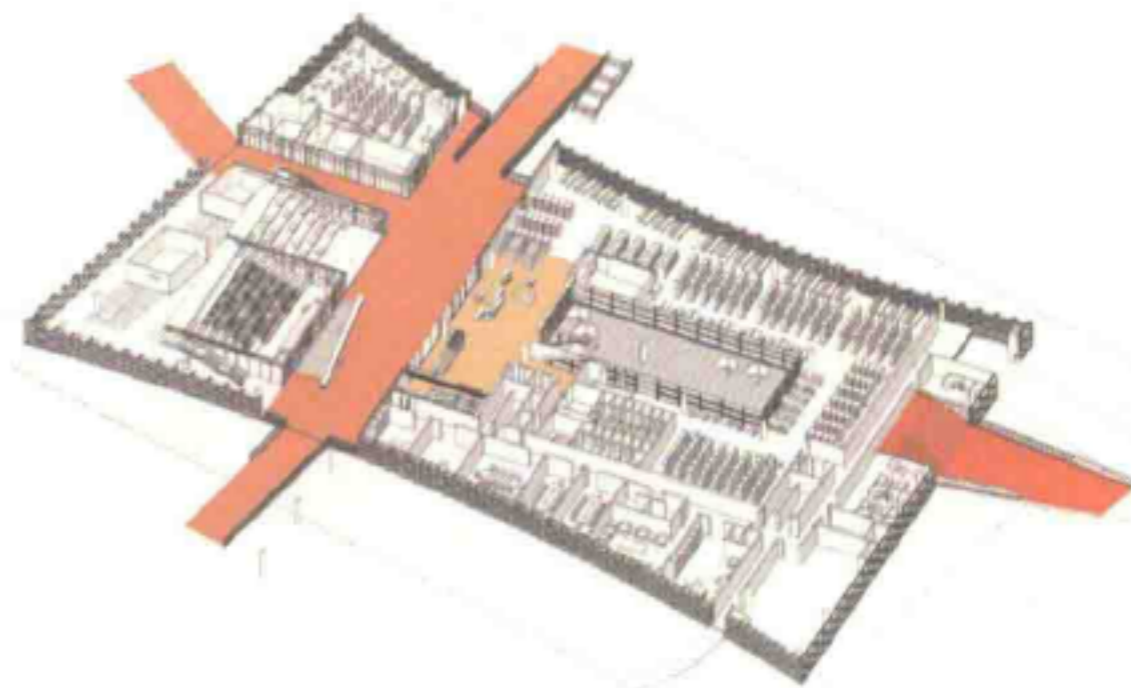


南立面图 South Elevation

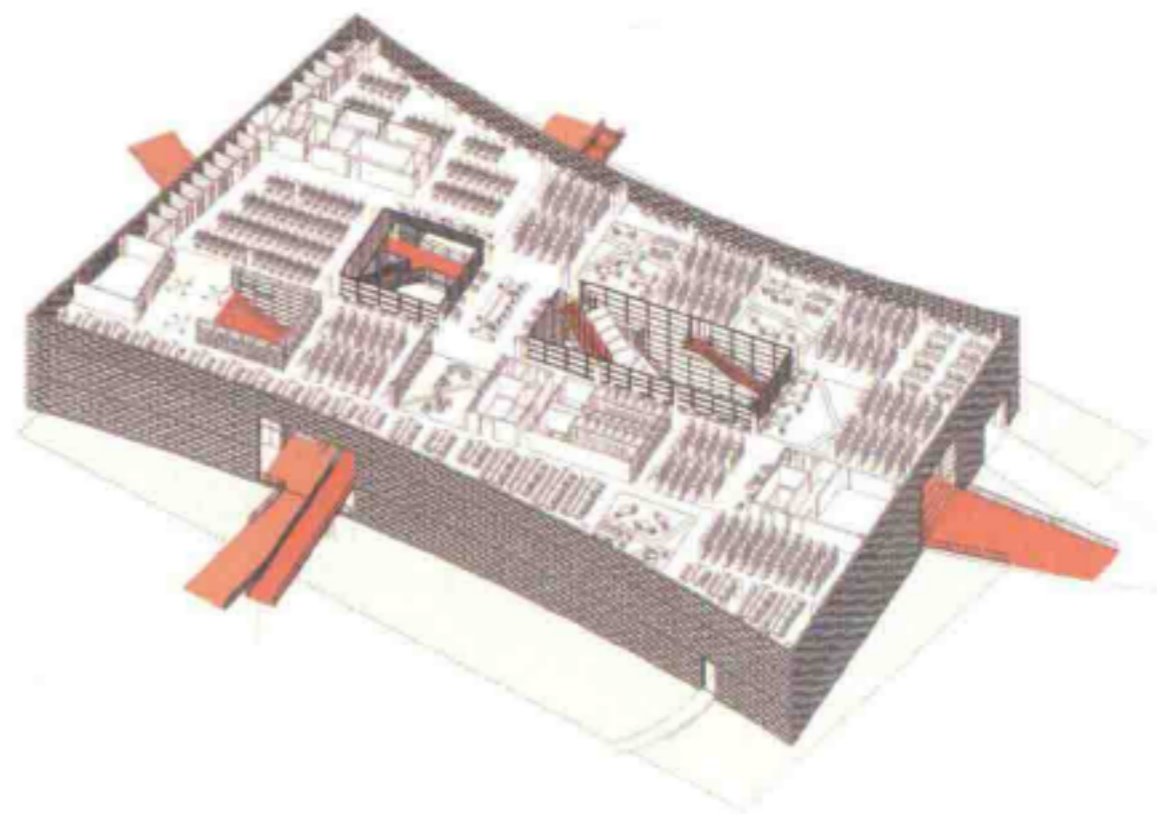
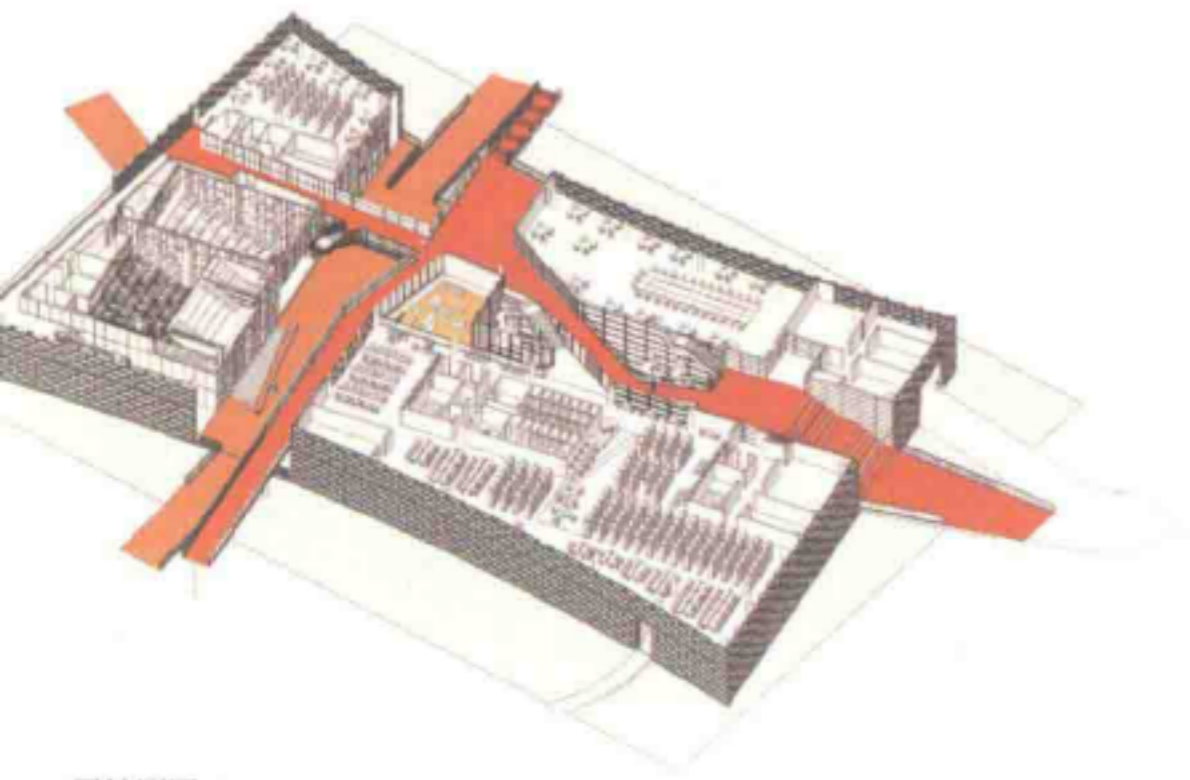
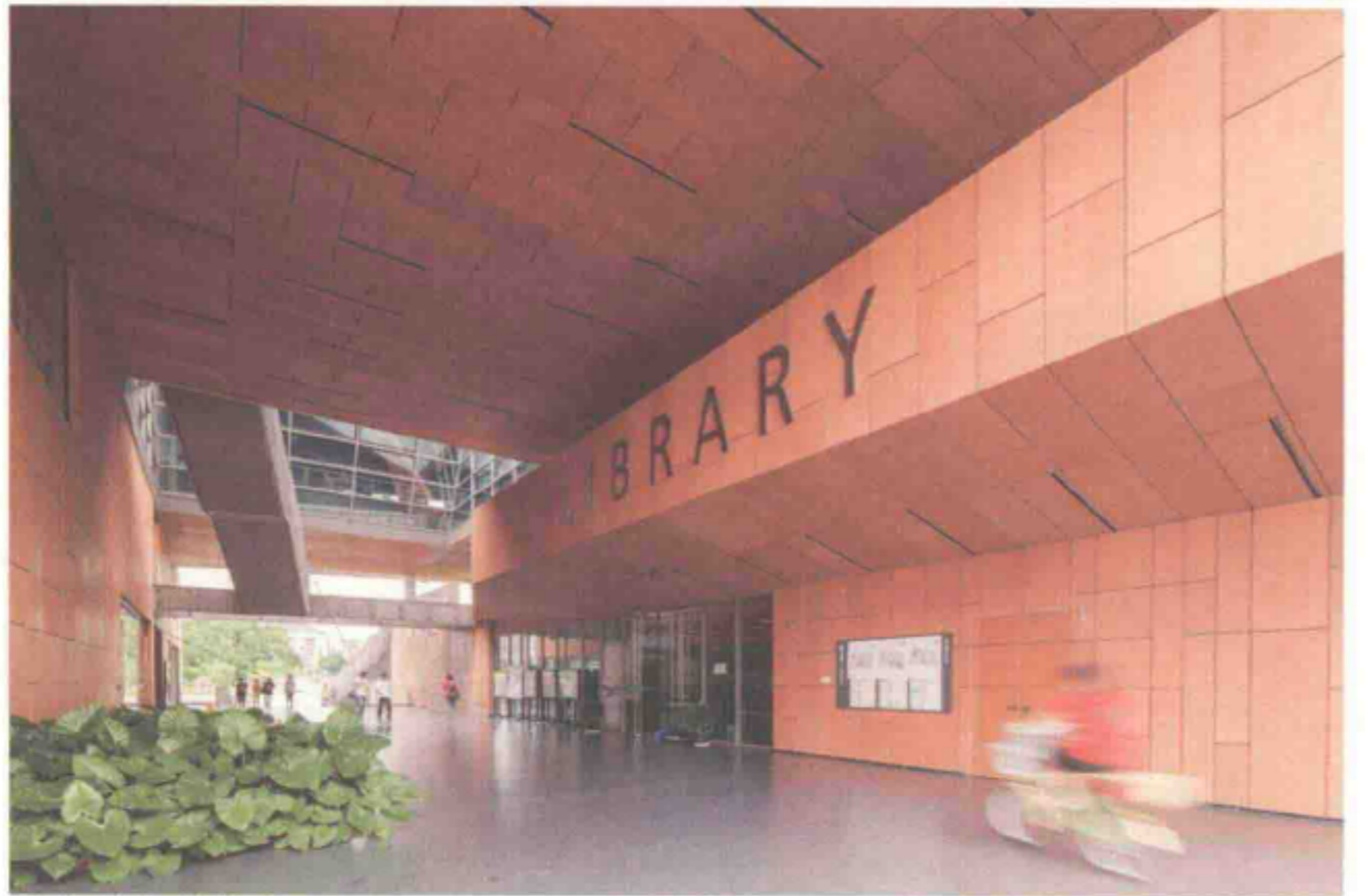


剖面图 Section



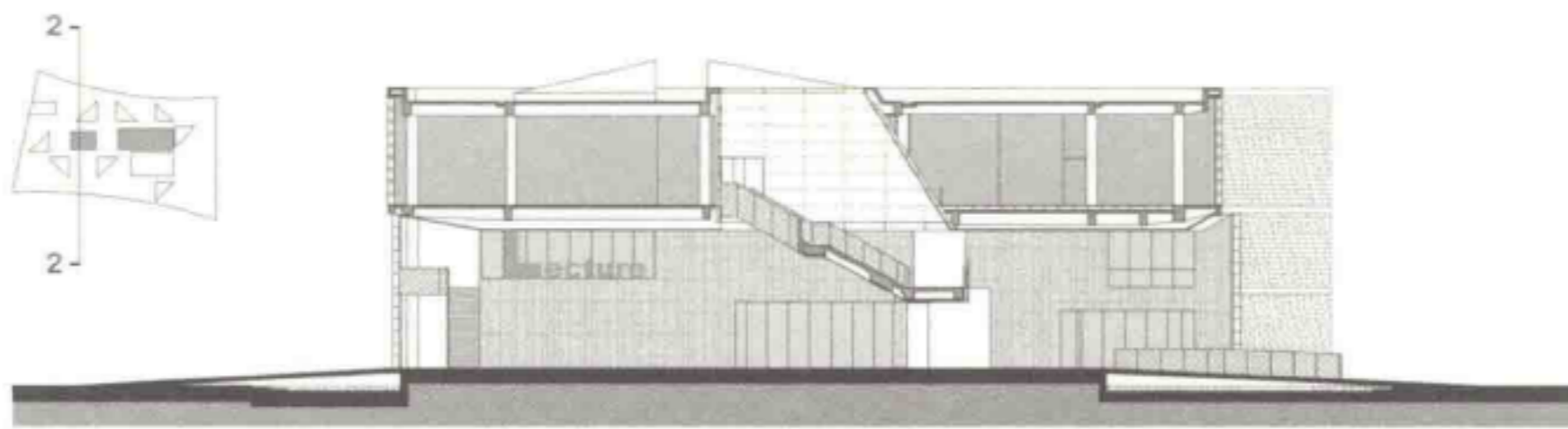


一层轴测图 1F Axonometric Diagram

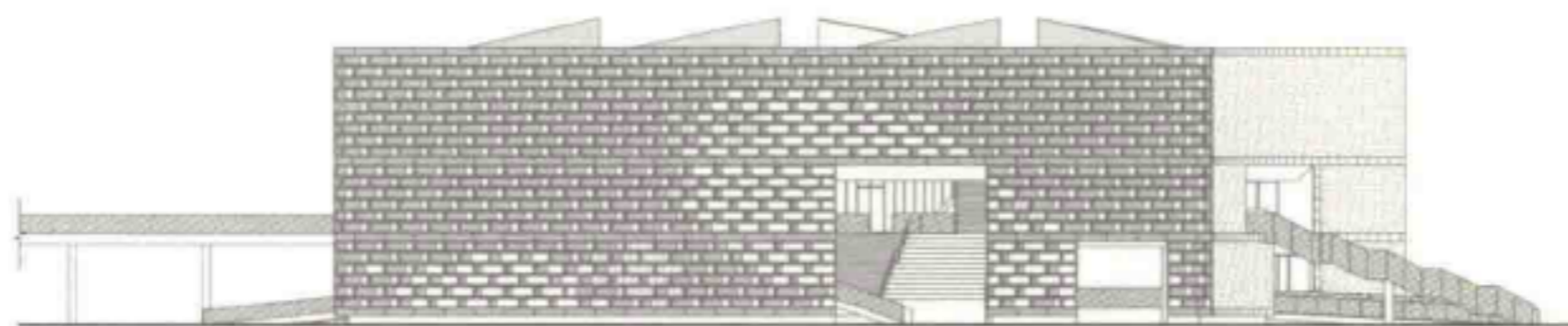


三层轴测图 2F Axonometric Diagram

三层轴测图 3F Axonometric Diagram

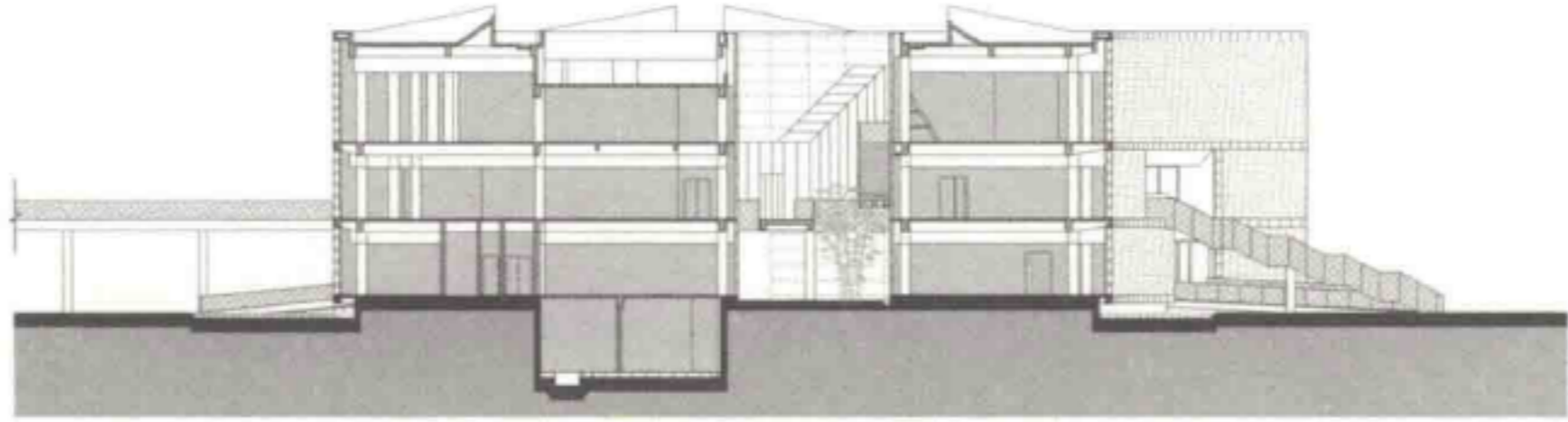
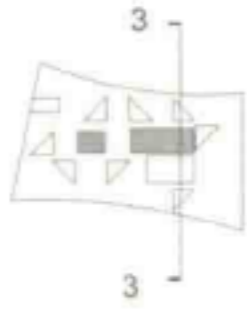


剖面图 Section

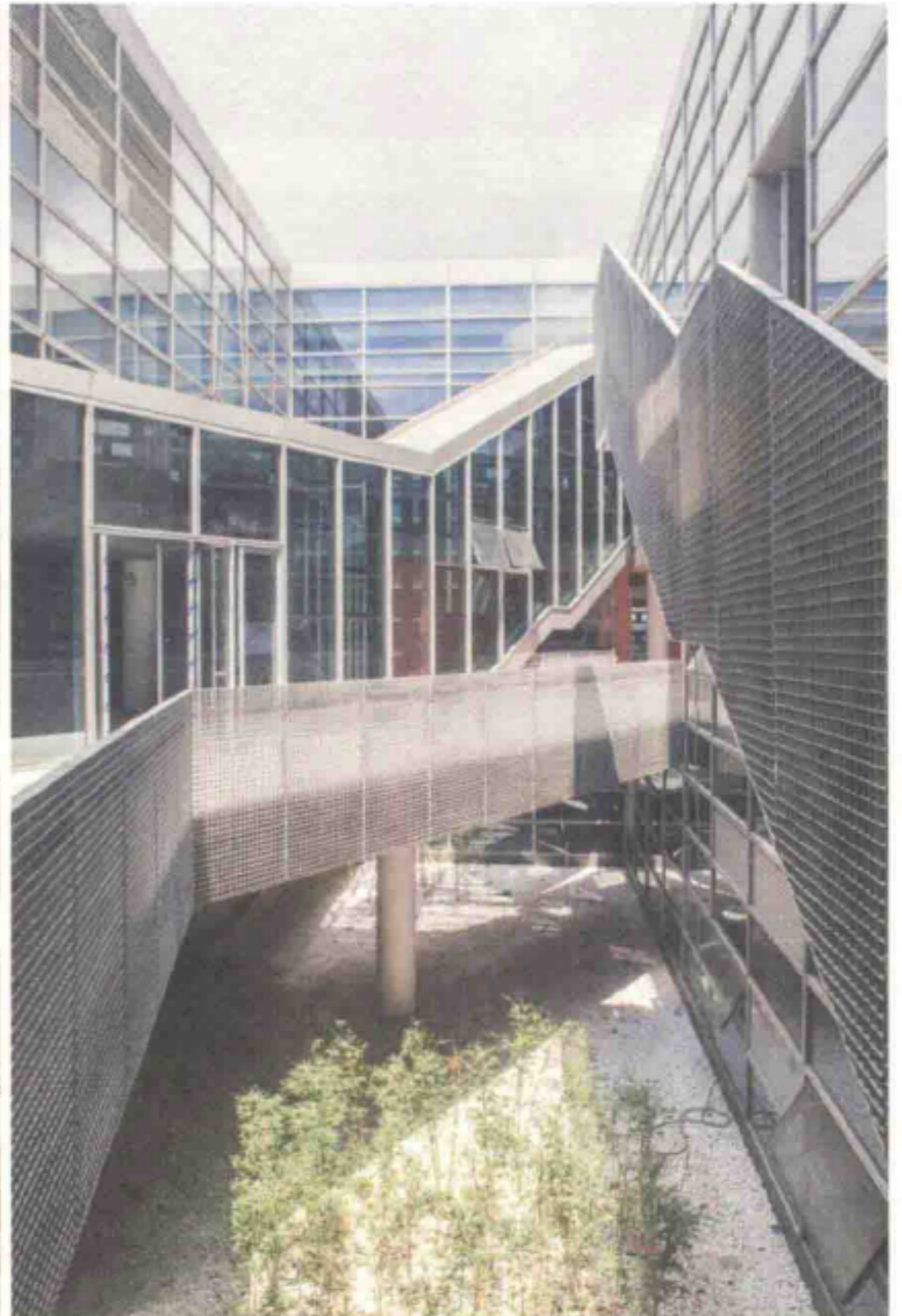


东立面图 East Elevation



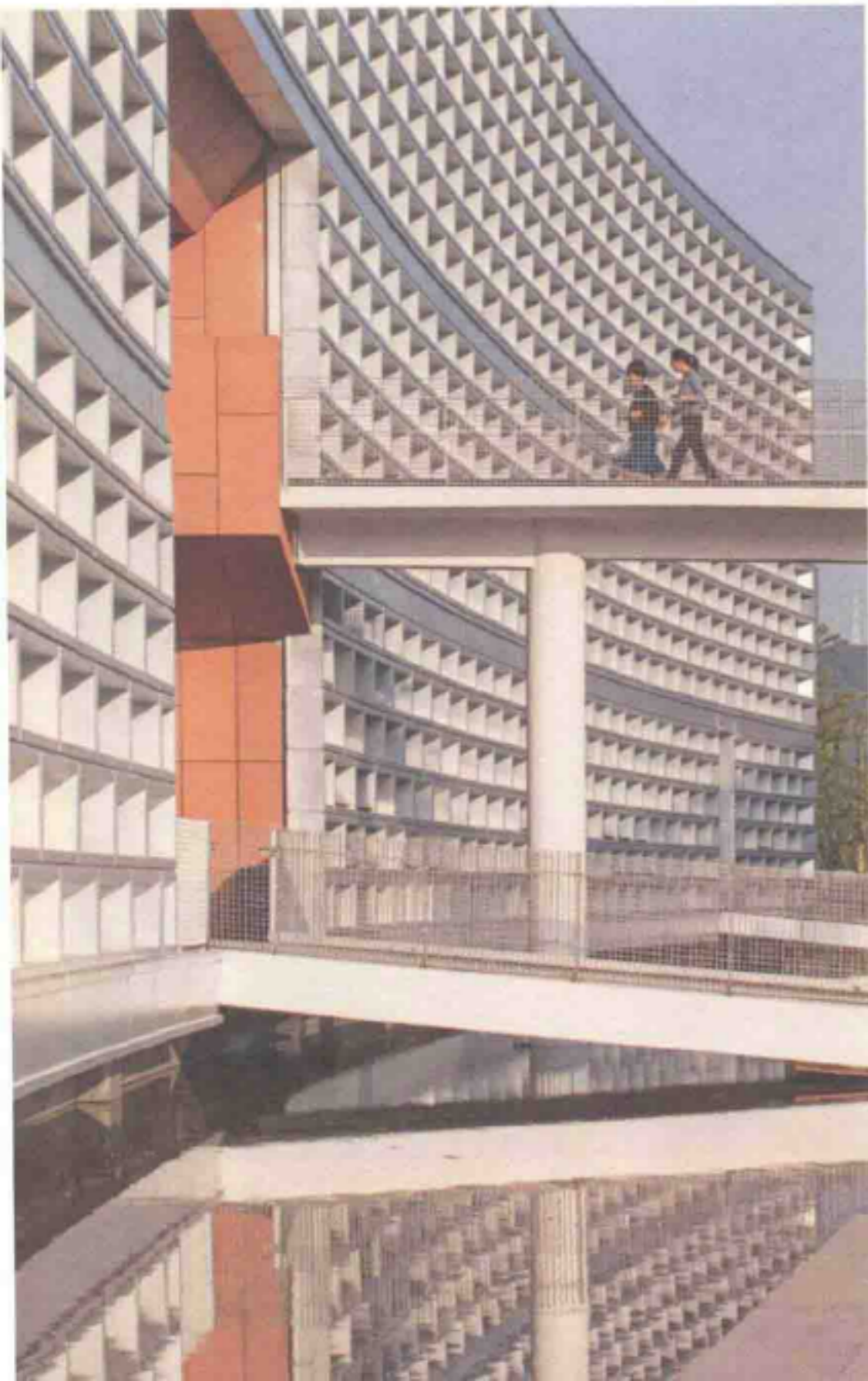
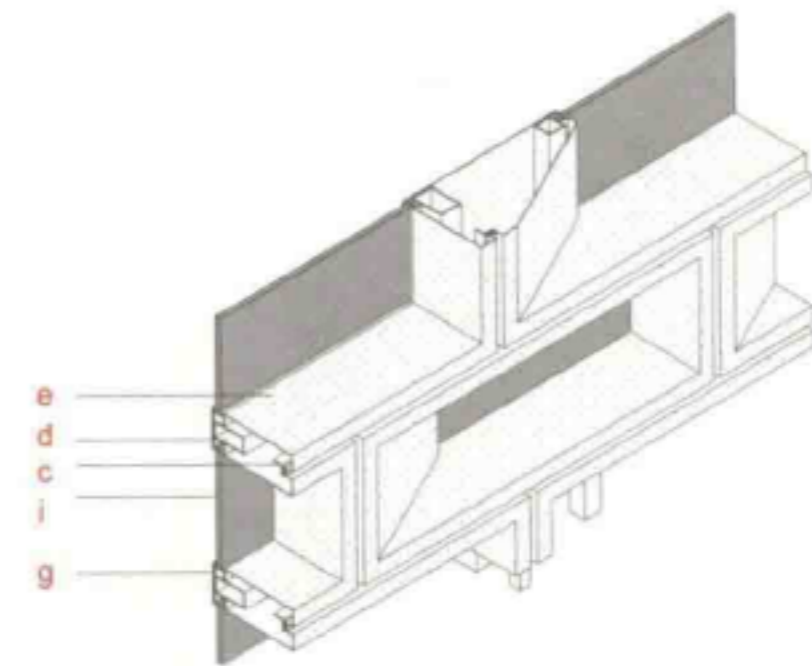
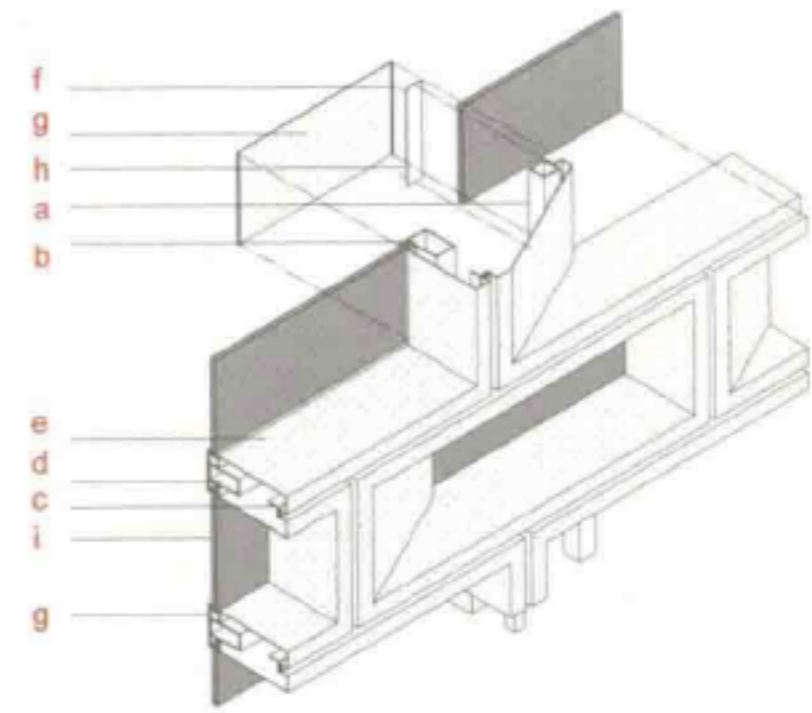
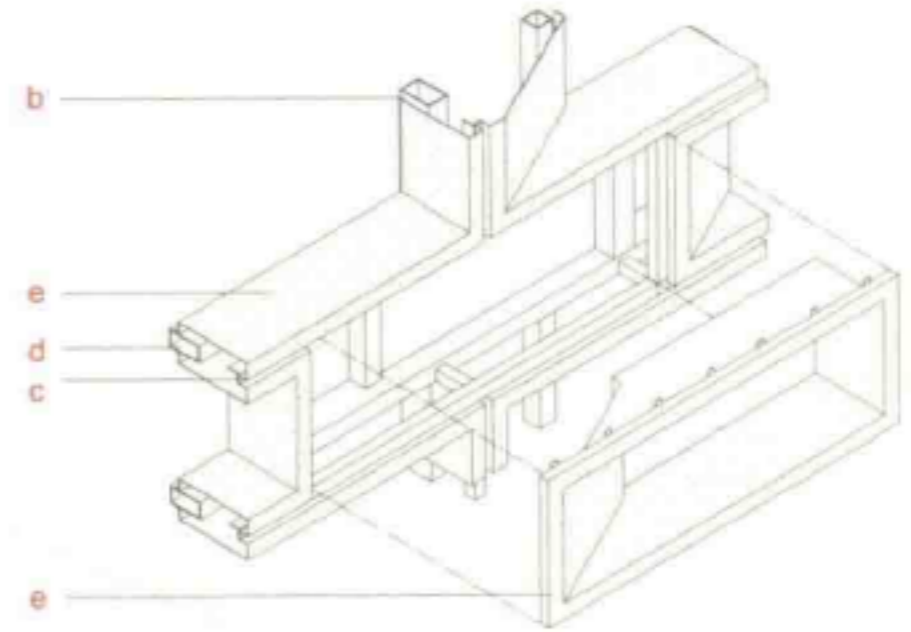
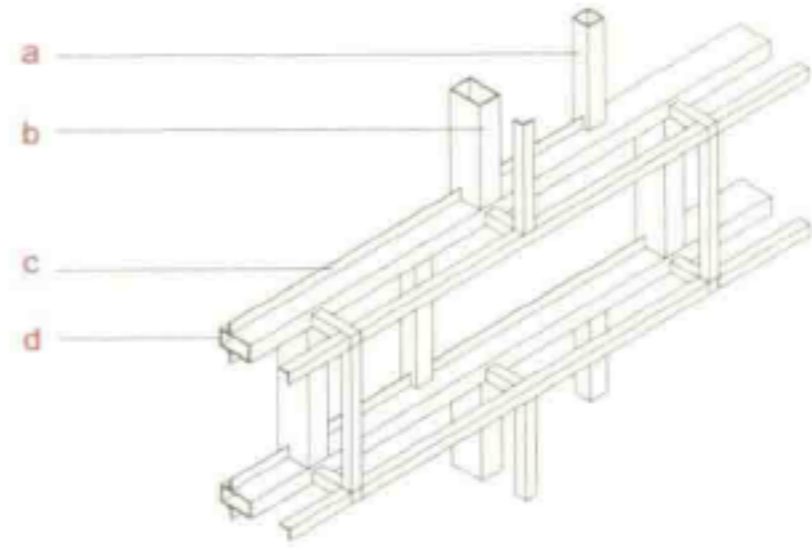


剖面图 Section

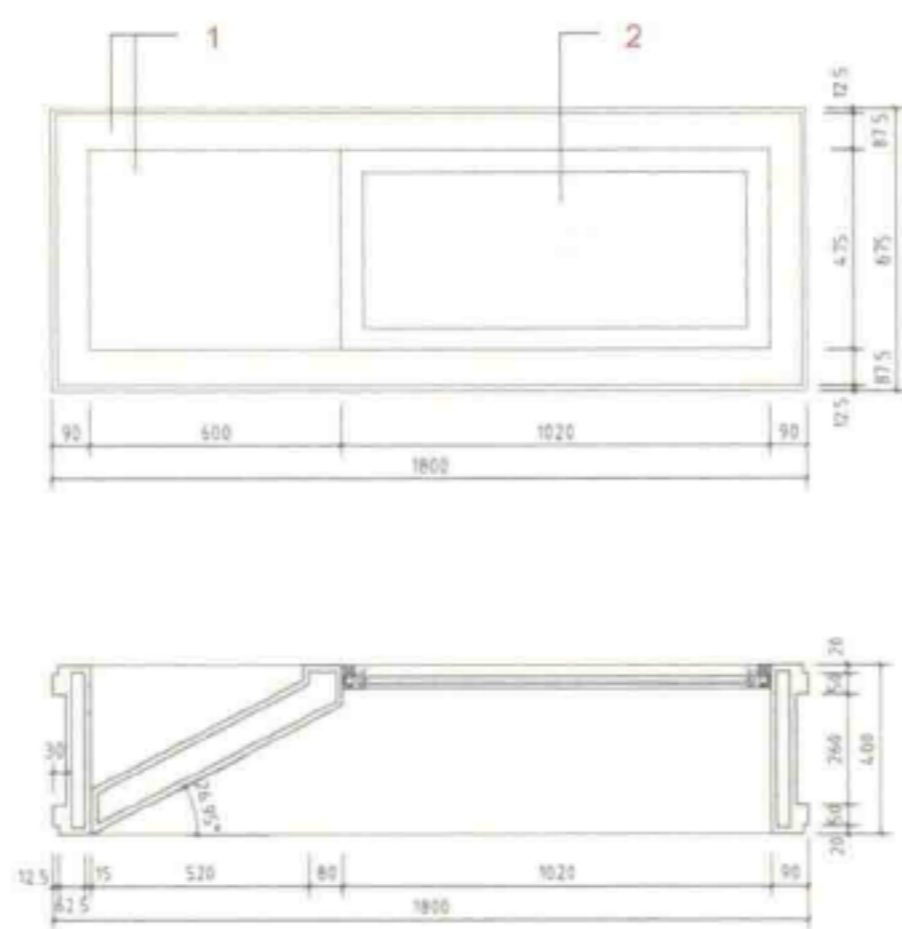


- a 70×5 钢方通
- b 150×100×6 钢通
- c L50×4 角钢
- d 150×75×6 钢通
- e 2.5mm 单层铝板
- f 十字槽盘头自攻螺丝钉 ST4.8×19
- g 2mm 铝板
- h 4mm 铝板
- i 6+12A+6Low-E 中空玻璃

- a 70×5 steel square tube
- b 150×100×6 steel tube
- c L50×4 steel angle
- d 150×75×6 steel tube
- e 2.5mm single-layer aluminum sheet
- f Phillips panhead tapping screw ST4.8×19
- g 2mm aluminum sheet
- h 4mm steel sheet
- i 6+12A+6Low-E hollow glass

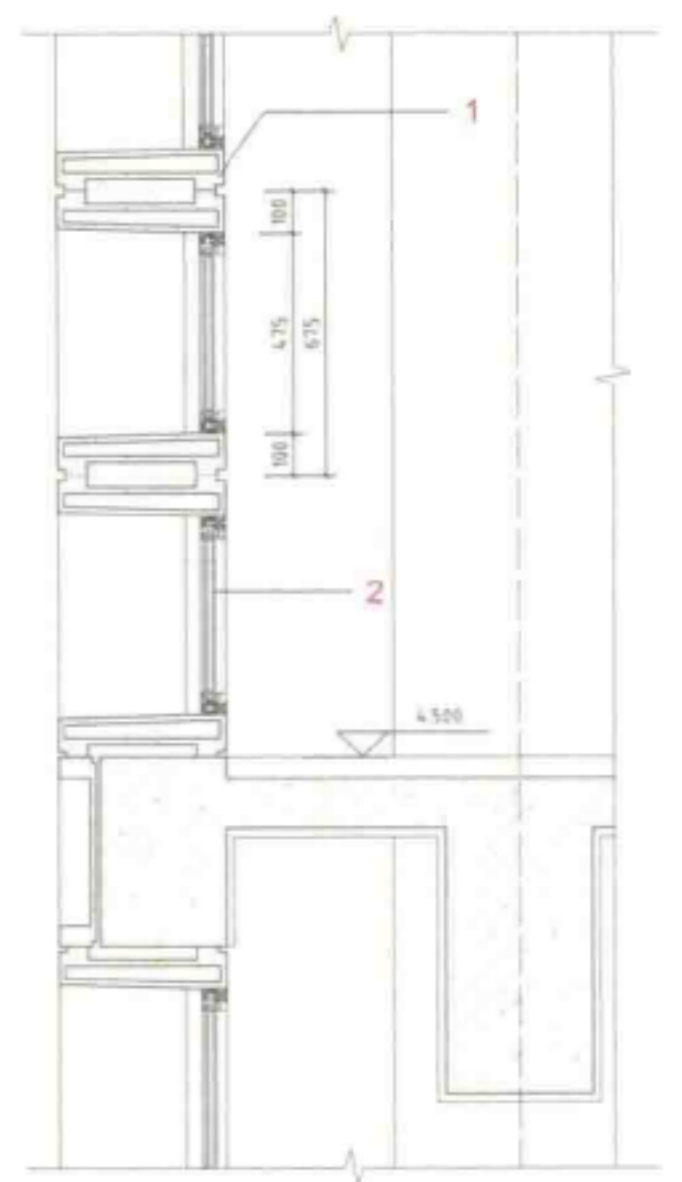


铝板整体成型 安装过程示意图 Assembly Diagram



1 玻璃纤维增强水泥预制块
2 低辐射中空玻璃窗

1 GRC Precast Block
2 IGU Window



典型 GRC 预制块外墙详图 Typical | GRC Precast Block