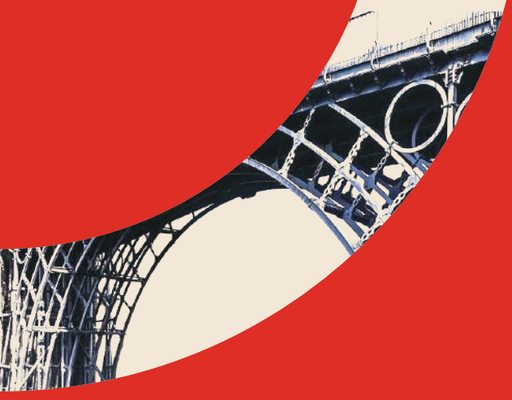


Open Door

Transform buildings,treasure the past.

Call for proposal stream finalists
案例征集入选者

RIBA

BRITISH COUNCIL

OPEN DOOR
Transform Buildings Treasure The Past

基本信息 *BASIC INFORMATION*

Basic Information

Project location: Kulangsu, Xiamen, China

Year of design: 2015

Designer: Beijing Guowenyan Cultural Heritage

Conservation Center (CHCC)

GFA: 2,930 m2

Year of completion: 2019

Geographical location © Zhang Guangwei

Bird view © Wang Muxin

Renovation Workflow of Former Japanese Consulate in Kulangsu

鼓浪屿日本领事馆旧址保护修缮工作流程

Preparations 前期工作

Plan approval 方案批復

Project establishment report 立項報告

Information Collection 信息收集

- **Research on historical documents**: historical literature; historical photos; tesearch report;
- **Site survey**: Characteristic elements; damage evaluation; traces of historical renovations; wires and other facilities; data collection - 3D scanning and video recording; courtyard plants;
- **Survey of stakeholders**: Xiamen University; Kulangsu Administrative Committee; community residents; cultural heritage administration; tourists

Research on technologies and materials 工藝材料研究

磚 Bricks | 瓦 Tiles | 抹灰 Plastering | 油漆 Paint | 木材 Timber | 寶瓶 Stone vases | 落水管 Downspouts | 透气孔 Air vents | 花板 Carved boards

Goals 目標定位

- 遺產价值呈現 Heritage value display
- 使用功能布局 Distribution of functions
- 業主意愿和需求 Owner's intention and requirements
- 歷史功能延續 Continuation of historical functions

Drawings 圖紙繪制

- **Status Drawings**: General floor plan, site treatment plan; plant treatment plan, floor plan, elevation, profile, door/window detail, staircase detail and roof treatment detail

Testing 工程檢測

- 安全性鑒定 Safety assessment
- 木結構无損檢測 Non-destructive testing of wooden structures

Deliverables 成果輸出

- 修繕設計方案 Renovation design solutions
- 展示利用方案 Display and utilization solutions
- 結構加固方案 Structural reinforcement solutions

審批 Review & approval

施工圖設計 Construction drawing design

Implementation 工程實施

施工階段（整合保護、利用和結構安全）

Construction stage (integrating conservation, utilization and structural safety)

F/2 veranda © Wei Qing

修缮背景 CONTEXT

The former Japanese Consulate in Kulangsu (referred to as "the Japanese Consulate" below) is one of the intact buildings of foreign consulates preserved from the 19th century in Kulangsu. The building and its neighboring buildings - the former Japanese Police Station and Staff Quarters - comprise the then Japanese Consulate's building complex. It is included in the sixth list of national cultural heritage sites.

As the main building in the courtyard, the Japanese Consulate building was established in 1898. It features the veranda style made of fair-faced red brick walls. Chinese artisans carried out both the design and construction work. Historically, the building served as the official residence of Japanese consuls other than as a consulate. Its interior was adjusted and refurbished, with the addition of Japanese tatami rooms. After China's victory in its war against Japan's invasion, the property right was assigned to Xiamen University. It was used as the faculty members' residence for dozens of years before remaining idle again. The Japanese Consulate is a building that integrates western and Japanese cultures and reflects modern and local techniques. It is a living witness of the interaction between different cultures and concepts in the international historical community of Kulangsu.

修缮设计理念 CONCEPT

We have been trying to uncover the heritage's historical and original state and making careful evaluations throughout the project, from survey, design to construction. In addition to consulting literature, historical documents, drawings and photos, we considered the traces exposed after the commencement of construction. We determined how to conduct the renovation based on value analysis.

While we respected the original design and aimed to restore it, we retained valuable renovations that witnessed history, and displayed important historical traces and marks in hidden parts. Instead of treating the building as a product of a historical period, we identified in details the core characteristics of several critical stages of its value accumulation to ensure the preservation and continuation of the features of each era and the value carrier.

二层外廊 © 魏青

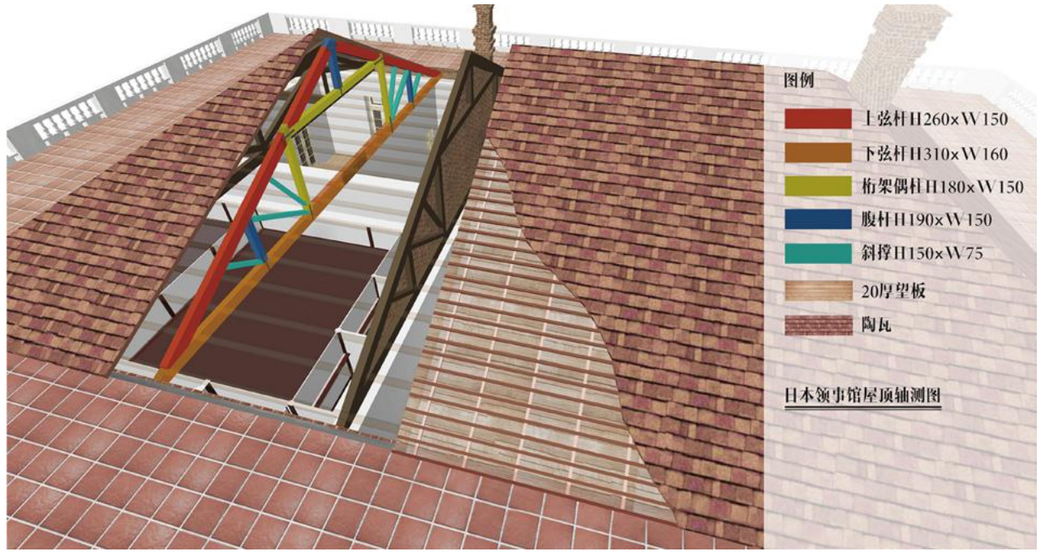
结构设计 *STRUCTURE DESIGN*

Starting from structural integrity, we developed reinforcement measures to ensure the safety of structural components for proper use and appropriately improve their anti-seismic performance.

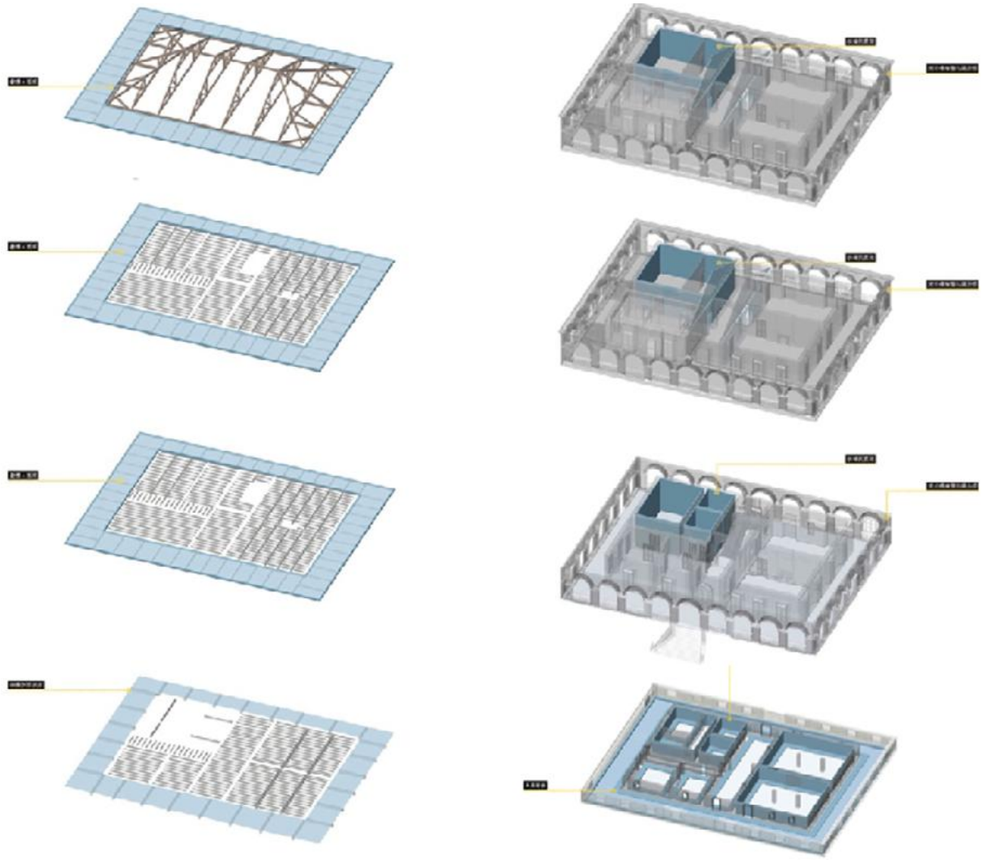
We reinforced walls of inadequate bearing capacity through “mortar replacement”. We strengthened the walls in the southwest area, which was used more for service purposes historically. This way, we improved the building’s overall anti-seismic performance with minimum intervention while ensuring safety. In terms of horizontal structural components, we reinforced the ceiling panels of Floor 1 and 2 with laminates. We removed two layers of bricks from the end connecting with the walls and added ring beams. We used carbon fiber sheet to strengthen the top of the moist insulation layer that was reinforced in the 1990s, and install sandwich beams at the bottom and one side of the interior walls.

Analysis of the undulation of the south facade inside the building © CHCC

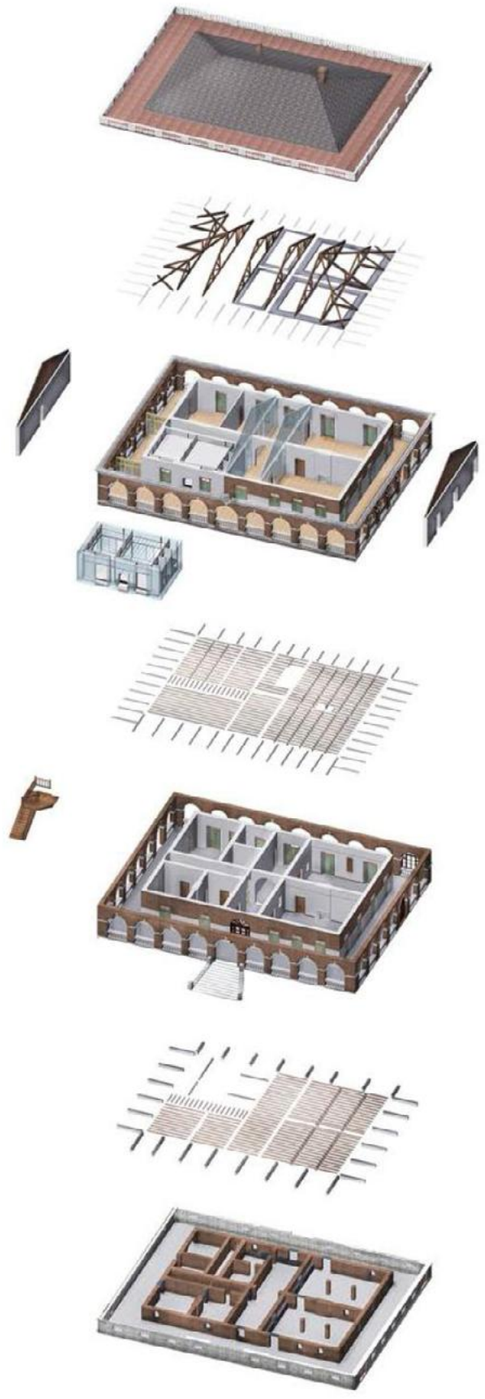
Analysis of the facade wall distress © CHCC



Roof truss and structure of the Japanese Consulate © Zhang Guangwei

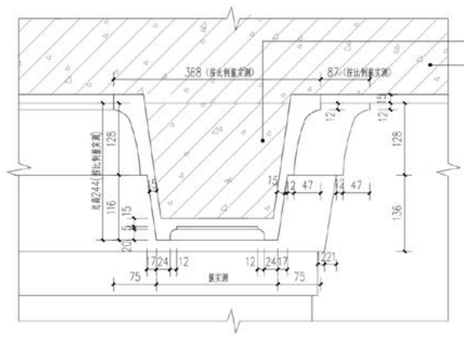


The area where structural reinforcement was performed with sandwich beams, wall panels and concrete laminates (the blue part) © CHCC



Schematic diagram of the decomposition of structure and main characteristic elements of the Japanese Consulate ©CHCC

Moldings before renovation © Zhang Guangwei



Detail of molding joints © CHCC

F/1 veranda under renovation © Zhang Guangwei

特色空间恢复 *RESTORATION OF FEATURED SPACES*

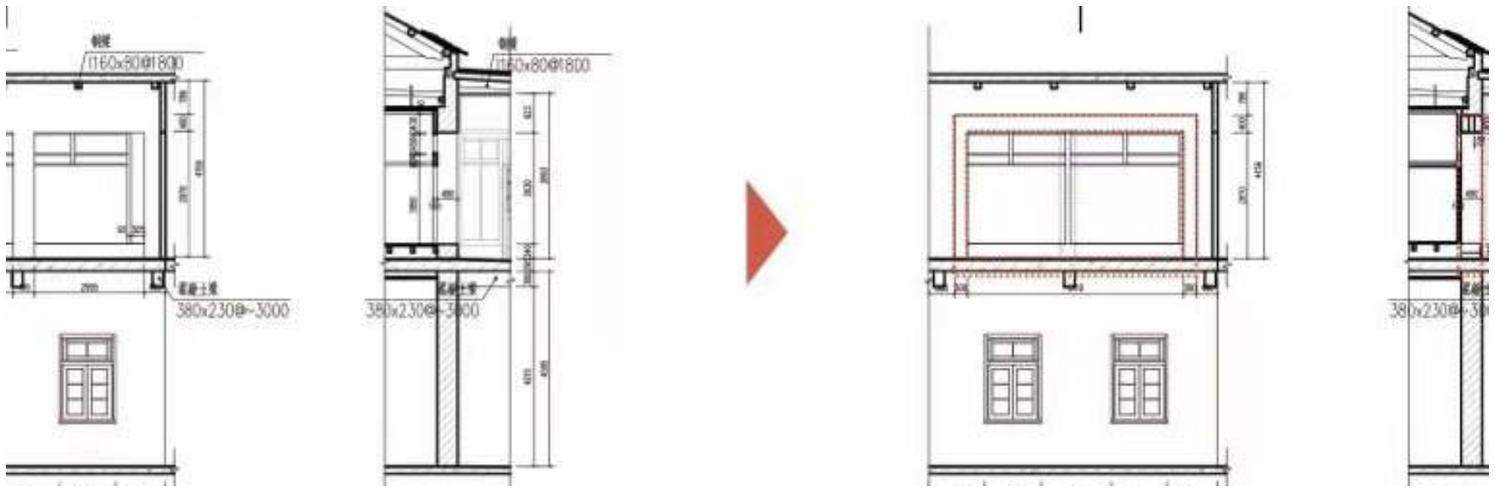
For the design of the veranda, an element of the typical characteristics, we balanced structural safety and the creation of a historical ambience. We reinforced the fair-faced brick walls through mortar replacement to continue the historical style. We strengthened the concrete slabs with laminates and restored the moldings strictly according to the historical style. After reinforcement, we added terrazzo flooring to the concrete floor to be consistent with the interior of neighboring buildings.

F/1 veranda after renovation © Zhang Guangwei

F/2 veranda outside the tatami room © Wei Qing

Tatami room after renovation © Wei Qing

Tatami room © Wei Qing

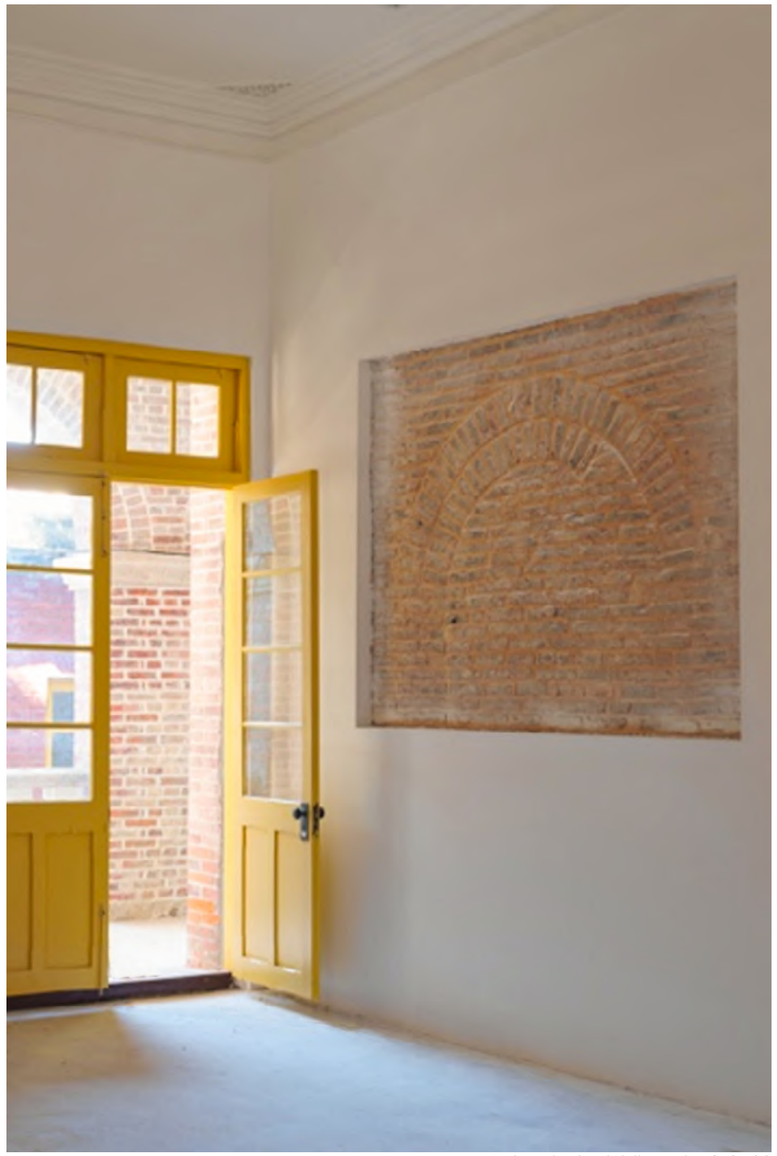


Beam reinforcement outside the tatami room © CHCC

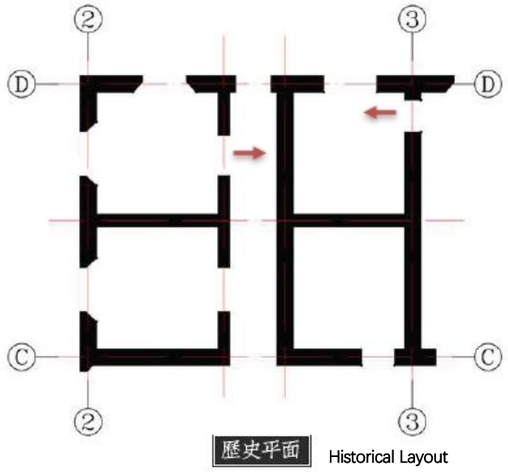
We set hidden beams based on the building reinforcement. Through value appraisal, we removed the brick pillars left from earlier renovations and exposed the tatami room bearing the value of diverse culture.

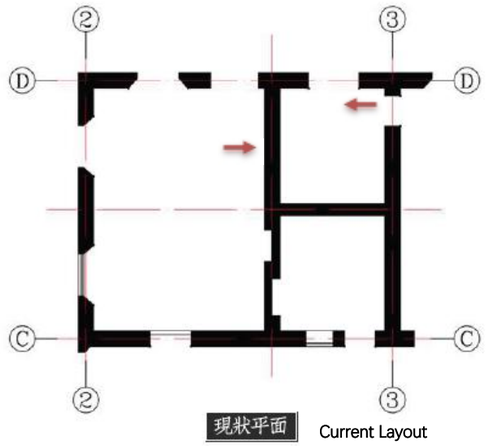
When treating the traces of earlier renovations discovered in the construction works, we selected the parts highly relevant to the historical drawings. We displayed them through structural reinforcement and construction instead of simply restoring them or covering the traces with plaster again.

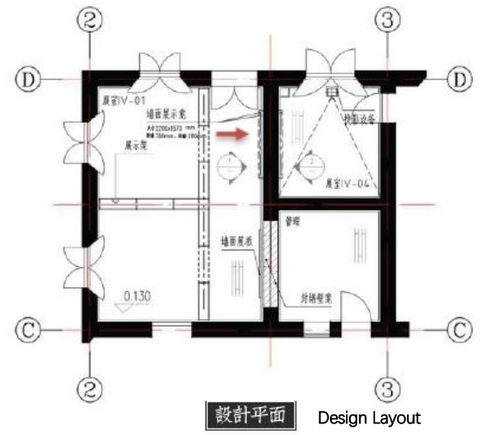
Door arch © CHCC



Arch at the food delivery site © CHCC

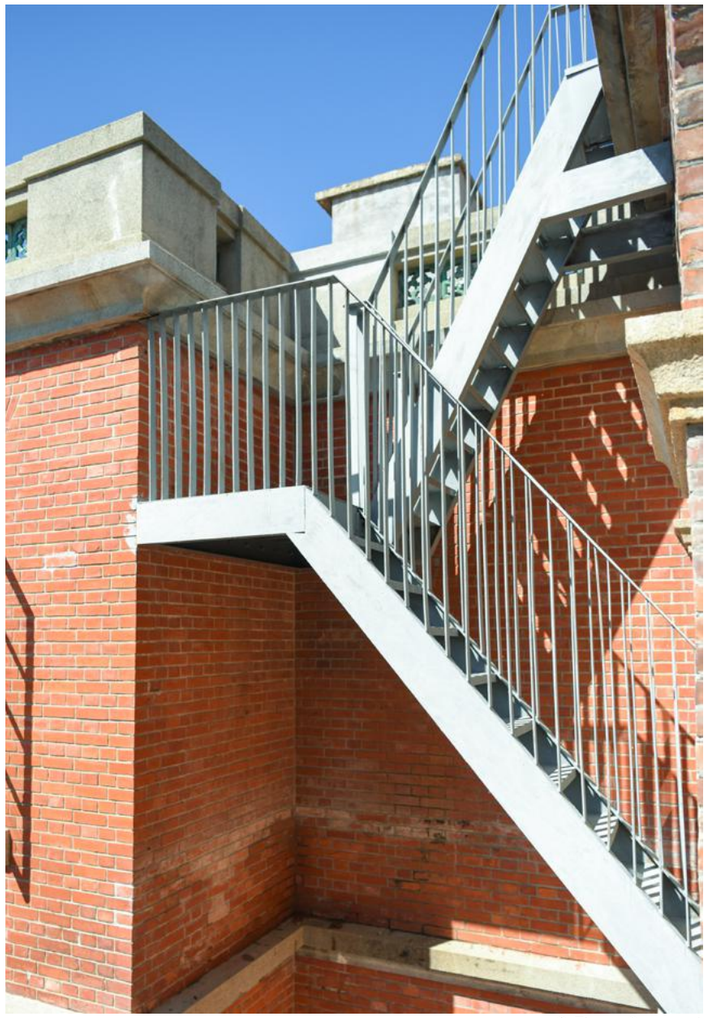




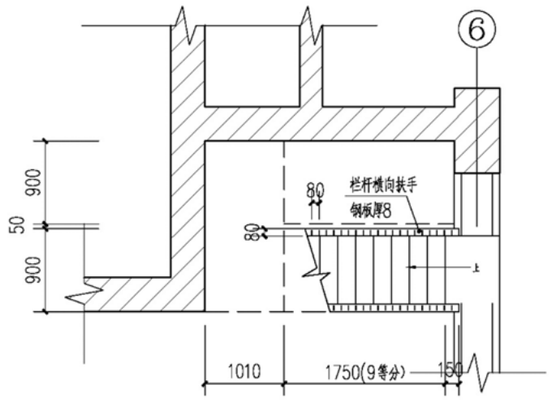


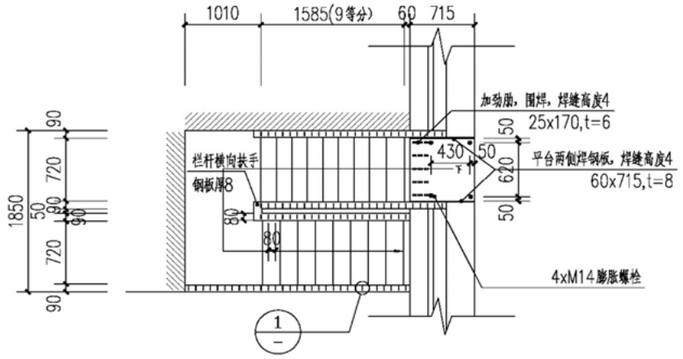
Room-blocking arches in the southwest area on Floor 1 © CHCC

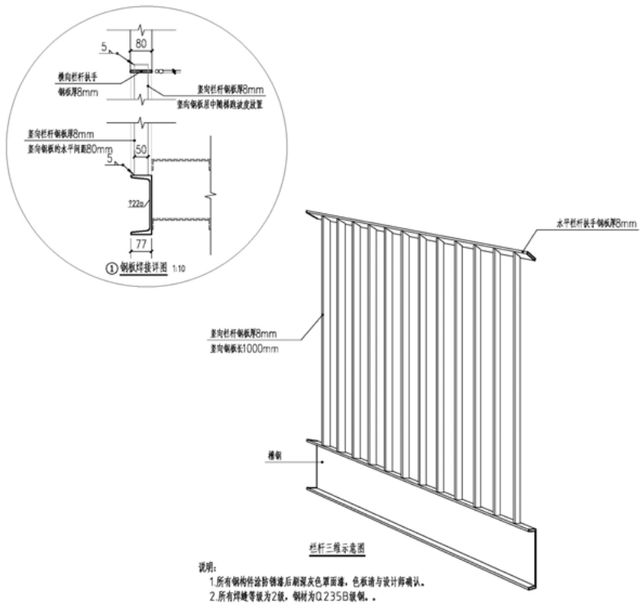
© Zhang Guangwei



© Zhang Guangwei



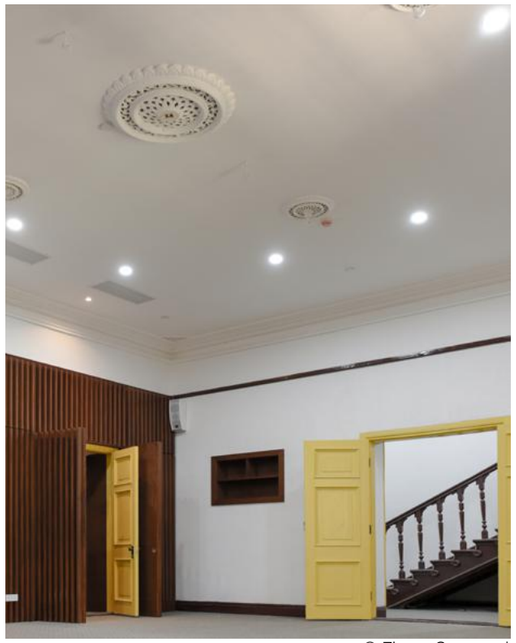




Design drawings © CHCC

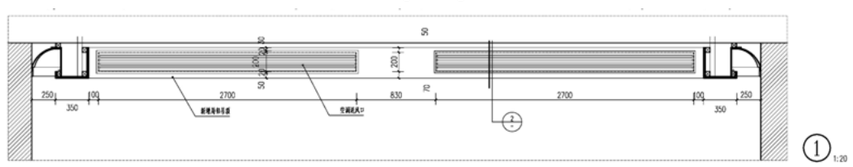
健全使用功能 *MPROVEMENTS IN FUNCTION*

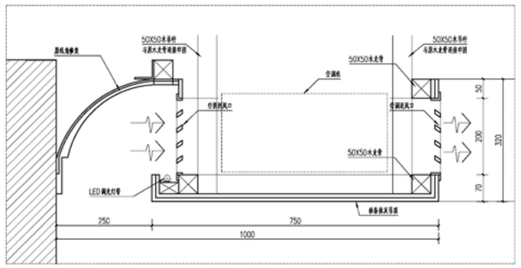
We removed the concrete slab marquee and repaired the brick surface. With the opened doorway, we added stairs leading to the roof at the corner.

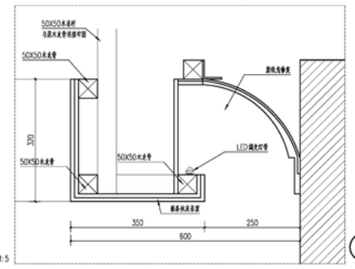


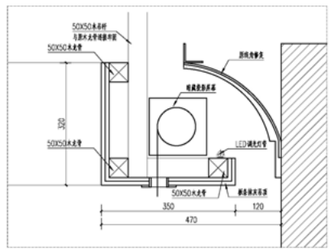
© Zhang Guangwei

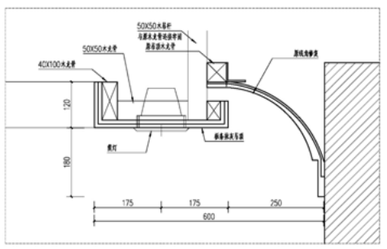
© Zhang Guangwei









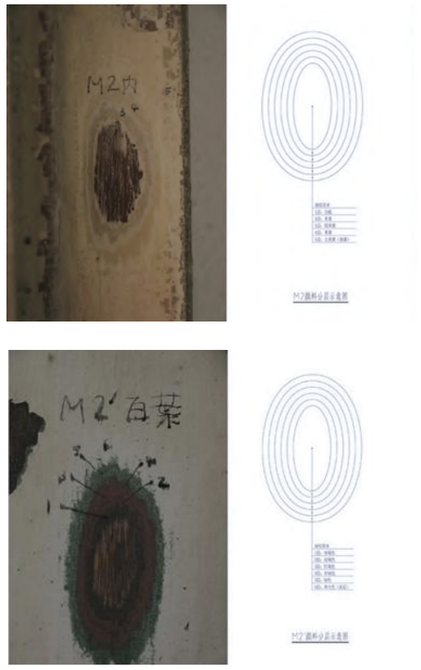


Design drawings © CHCC

We added suspended ceilings and comprehensive functional notches and averted historical moldings.

Staircase in the middle of F/2 © Cheng Gu

Fragments of doors/windows © Zhang Guangwei

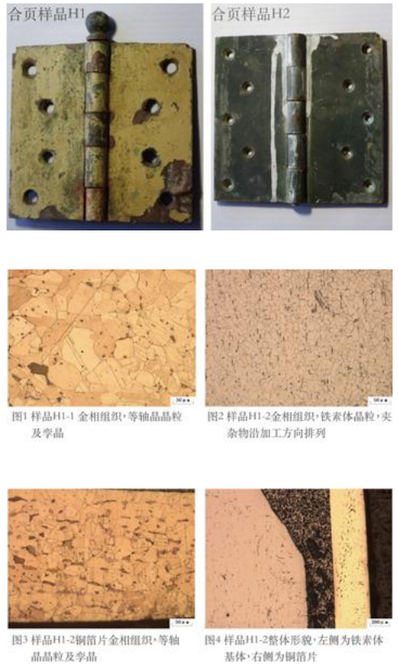


Analysis of door/window paint layers © Zhang Guangwei

Fragments of the vase railings © Zhang Guangwei

Painting color selection © Zhang Guangwei

Renovated vase railings © Cheng Gu

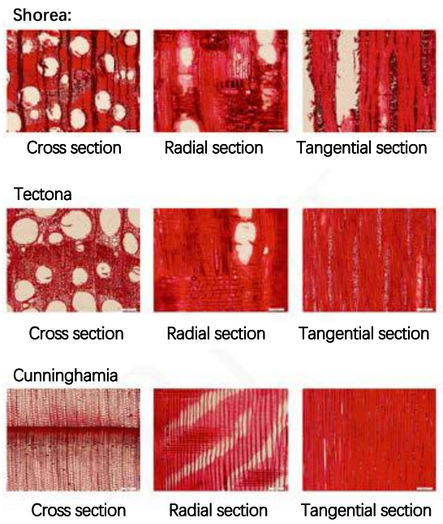


Research on hardware materials and technologies © Zhang Guangwei

Renovated window shutters © Zhang Guangwei

工艺细节 DETAIL DESIGN

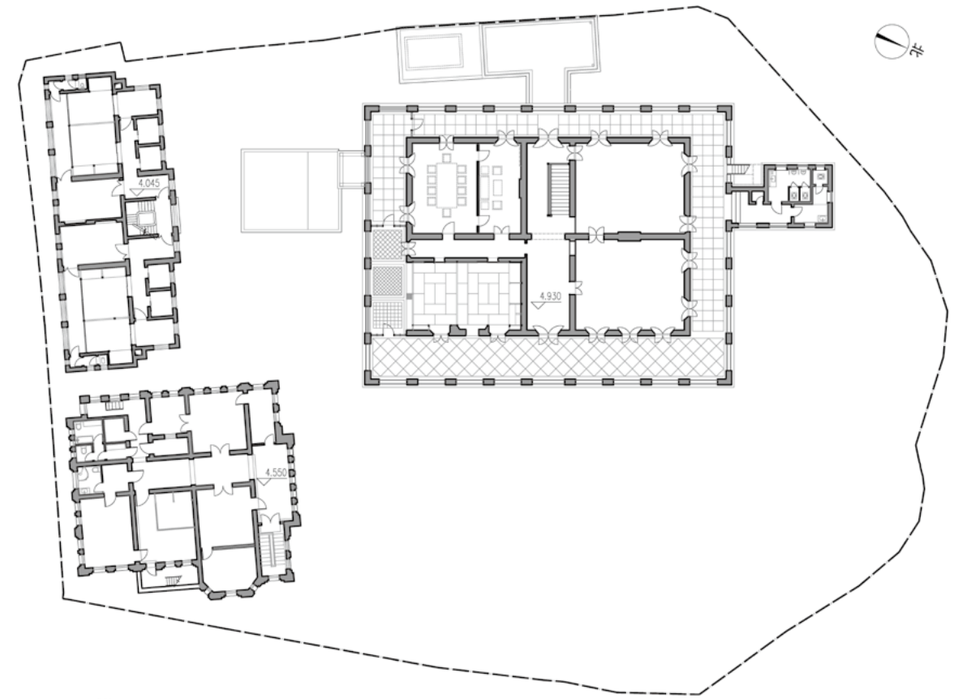
To guide the implementation of detail design, we conducted research and scientific test on real objects to analyze the technologies and materials of bricks, tiles, doors, windows, timber, paint layers and hardware.



No.	Tree species	Latin name	Family name	Latin name	Place of origin	Conifer/Broadleaf	Hardness	Properties	Wood properties	Application
1	China fir	Cunninghamia sp.	Taxodiaceae	Taxodiaceae	South of the Qinling Moutains-Huai River of China, as well as Vietnam	Conifer	Soft	Easy to process, not prone to cracking after drying, not prone to warping, aromatic, highly resistant to corrosion	Straight wood texture and fine structure	Buildings, bridges, shipbuilding, mining pillars, wood piles, poles, furniture, industrial raw materials of wood fiber, etc.
2	False cypress	Chamaecyparis sp.	Cupressaceae	Cupressaceae	The Japanese false cypress is native to Japan, and the species in Taiwan is a variety of it	Conifer	Medium	Easy to process, smooth and clean cutting face, superb brightness after painting; easy to glue; strong nail-holding ability; strong and durable	Strong, anti-corrosive and aromatic wood	High-end furniture, high-end decoration for offices and residences, wooden handicrafts
3	Cupressus	Cupressus sp.	Cupressaceae	Cupressaceae	South of Inner Mongolia, Jilin, Liaoning, Hebei, Shanxi, Shandong, Jiangsu, Zhejiang, etc.	Conifer	Medium	Easy to process, smooth and clean cutting face, superb brightness after painting; easy to glue; strong nail-holding ability; strong and durable	Fine wood texture, strong, resistant to water, resinous, resistant to corrosion	Buildings, vehicles, ships, bridges, furniture, utensils, etc.
4	Shorea	Shore sp.	Dipterocarpaceae	Dipterocarpaceae	Native to hilly countries south of the Himalayas; rare and second-class protected plants of China	Broadleaf	Hard	Aromatic and strong wood	Holy tree of Buddhism; keruing is a superior natural perfume that is very precious; the wood is of fine quality	A variety of applications
6	Tectona	Tectona sp.	Verbenaceae	Verbenaceae	Southeast Asia, known as a national treasure of Myanmar	Broadleaf	Medium	Containing silicon that blunts knives and thus difficult to cut; good nail-holding ability, good comprehensive performance	Strong resistance to many chemicals; not warping or cracking under big changes in humidity; resistance to water and fire; able to withstand the eating of termites and marine borers from different seas; extremely resistant to corrosion	High-end furniture and floors, good materials for interior and exterior decoration

Timber analysis © Zhang Guangwei

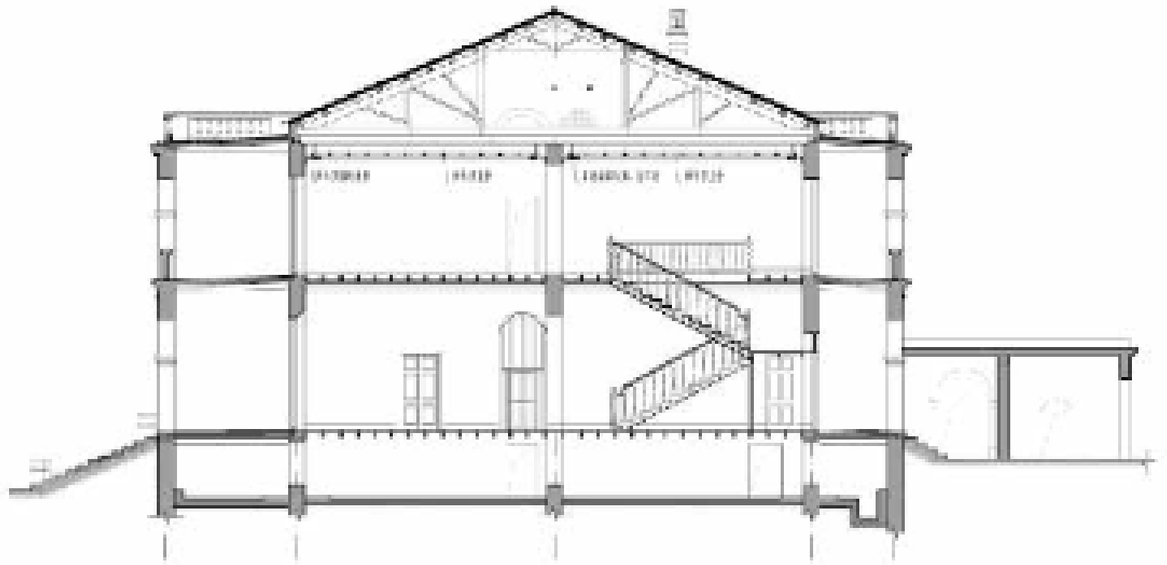
Semi-arch © Cheng Gu



F/2 floor plan © CHCC

F/1 floor plan © CHCC

F/2 veranda © Zhang Guangwei



Longitudinal section © CHCC

Architectural model © Zhang Guangwei

活化利用 *REVITALISATION*

We displayed the site of the renovation works and set display boards, banners showing the historical components and informative brochures and folders. Upon the renovation project from 2015 to 2017, the building now serves as the Advanced Institute of Humanities and Arts of Xiamen University. It provides space for domestic and foreign poets, writers and artists to carry out group activities and is open to the public for visit or patriotism education from time to time.

© 张光玮

鼓浪屿日本领事馆旧址保护修缮工程

Former Japanese Consulate in Kulangsu, Amoy, CHINA

Team Biography
团队简介

The Cultural Heritage Conservation Center (CHCC) comprises Beijing Guowenyan Cultural Heritage Conservation Center Co., Ltd., Beijing Guowenyan Information Technology Co., Ltd. and the Cultural Heritage Conservation Center of Architectural Design and Research Institute of Tsinghua University. It is a flagship consortium focusing on Chinese cultural heritage conservation and research. As a demonstration base for theoretical exploration and technological development of Chinese heritage conservation, we have undergone a series of reforms and brought together a group of key young personnel devoted to cultural heritage conservation. Since our restructuring in 2013 up to now, by engaging in the development of core technologies from a comprehensive, multidisciplinary perspective, we have developed solutions to the all-around and systematic protection and use of cultural heritage sites. We are continuously promoting the deep development of Chinese cultural heritage conservation.

Project Details
项目详情

The renovation of the former Japanese Consulate in Kulangsu was an attempt in response to multi-dimensional challenges. Instead of treating the building as a status in a period, we identified in detail the core characteristics of several critical stages of its value accumulation to ensure the preservation and continuation of the characteristics of each era and the value carrier. We tried our best to make the intervention a just-right restoration without interfering with the building.

The building is a living witness of the communication, exchange, influence and integration between different cultures and values in the special “international settlement” Kulangsu in the late 19th century and early 20th century. The main structure is made of ancient Minnan red bricks and granite, while the space features the veranda style and layout popular in cities with open ports earlier. The internal structure is a mix of the typical wood trusses, I-beams and concrete slabs in modern architecture. The decoration blends the Victorian-style fireplace and the Japanese tatami. The building was in a very precarious condition. Renovations, additions, interior partitions and blocking in different periods left varied marks on the building. Years of wear and tear and natural corrosion caused breakage, leakage, erosion and the twining of banyan trees and other plants to structural components such as the roof, walls and floor slabs.

Given those characteristics of the building, we maintained our judgment of its original conditions and value throughout the project. We did our analysis not only based on our site surveys and relevant literature, historical data, drawings and photos but also in consideration of the hidden marks exposed after the commencement of construction works. The project team meticulously examined the original components, carefully cleared the site, cautiously removed the additions, and then developed suitable engineering measures.

We released the iconic veranda space of the building. We considered its current state in which the building had undergone many interventions, its original condition in different historical stages, and the new function of holding public art activities it would perform in the future. Based on that, we made prudent choices in designing the spatial layout, treating the historical marks, selecting materials, and upgrading the mechanical and electrical structures.

Our key technical measures include: We selected the structural reinforcement solution with the minimum disturbance to the appearance and interior of the building. For example, we concentrated the anti-seismic wall reinforcement measures in the area mainly providing kitchen and bathroom functions in the original floor plan. Furthermore, we reinforced only the inside of the walls and averted interior moldings. We considered the requirements for restoring the ceiling moldings later when we strengthened the veranda floor slabs with laminates. We made appropriate adjustments for the interior wall, roof and floor finishes by creatively considering the historical marks, engineering measures and requirements for use. For example, for the veranda's concrete floor slabs affected by the laminate reinforcement, we chose the terrazzo flooring design to be consistent with adjacent buildings and the veranda floor before the tatami that was renovated in the same period. We ensured the continuation of historical characteristics by designing the air-conditioner installation and outlet points corresponding to the existing ceiling form and the interior moldings. We set interior wood walls that correspond to the steel reinforcement of the short shear wall in the hall, etc.

Since its completion in 2019, the building has served as the Advanced Institute of Humanities and Arts of Xiamen University. It provides space for domestic and foreign scholars and art collectives to carry out group activities. It is also open to the public from time to time, receiving recognition from a broad base of users.

鼓浪屿日本领事馆旧址保护修缮工程

Former Japanese Consulate in kulangsu, Amoy, CHINA

Team Biography
团队简介

CHCC 文化遗产保护团队是由北京国文琰文化遗产保护中心有限公司、北京国文琰信息技术有限公司和清华大学建筑设计研究院文化遗产保护中心组成的，专注于中国文化遗产保护与研究的旗舰联合机构。作为中国遗产保护理念探索与技术研发的示范基地，我们历经一系列改革，汇集了一批致力于文化遗产保护事业的年轻骨干力量，从 2013 年重组完成至今，以多学科的综合视角介入核心技术的研发，形成对文化遗产地全面、系统保护利用的解决方案，不断推进中国文化遗产保护事业的深层次发展。

Project Details
项目详情

鼓浪屿日本领事馆旧址保护修缮工程是回应多维度挑战的一次尝试。不将建筑看作一个时期的一个状态，而是对价值积累的若干重要阶段的核心特征进行细化认定，确保各时代特征及价值载体的保存和延续。力求让这一次的干预只是恰到好处的修复而不至喧宾夺主。

该建筑是 19 世纪末 20 世纪初鼓浪屿这个特殊的“公共地界”内不同文化和价值观之间交流、交换、影响与融合的实证。主体建材为闽南传统的烟炙砖和花岗石，空间却是早期开埠城市流行的外廊样式与平面格局，内部结构混搭了近代建筑典型的木桁架、工字钢和混凝土板，而装饰上既有维多利亚风格的壁炉，又有日式的和室。不同时期的改造、加建、室内分隔、封堵等也在建筑上留下斑驳痕迹。多年的使用损坏和自然侵蚀导致屋顶、墙体和楼板等结构构件局部断裂、渗漏、腐蚀、被榕树等植物侵入缠绕，状况非常危险。

这些特点，使得对历史原状与价值的判断贯穿了项目始终。解析的依据不仅源于现场勘察、文献、史料、历史图纸和照片等，更结合了施工进场后所暴露的隐藏痕迹。项目组仔细甄别原始构件，小心进行现场清理，谨慎拆除后期加建，进而制定适宜的工程措施。

建筑标志性的外廊空间被释放出来。在空间布局、历史痕迹、材料选择和机电升级等不同尺度上审慎选择，关照了建筑被多次干预的现状、在不同历史阶段的原状，与未来承载艺术公共活动的新功能。

重要的技术措施包括：结构加固选择了对建筑外观和室内扰动最小的方案，如将抗震板墙加固措施压缩在原平面中以厨卫服务功能为主的区域，且采取内侧单面加固方式；板墙遇到室

内装饰线脚的时候进行避让；在环廊楼板进行叠板加固时兼顾后期对天花线脚的恢复要求；对室内墙、顶、地完成面，则创造性的结合历史痕迹、工程措施和利用需求，进行适度调整。如：由于叠板加固而受到影响的环廊混凝土楼面，参考相邻建筑及同时期改造的和室前环廊地面，统一设计了水磨石地面；结合现存天花形式和室内线脚设计相应的空调安装方式和出风口节点，保证历史特征的延续；结合大厅短肢墙钢板加固设置相应的室内木板壁，等。

自 2019 年完工以来，建筑作为厦门大学人文艺术高等研究院使用，成为国内外学者、艺术团体社群活动的空间，也不定期开放给公众参观，受到了广泛的赞誉。

基本信息 *BASIC INFORMATION*

项目地点：中国厦门鼓浪屿

设计时间：2015

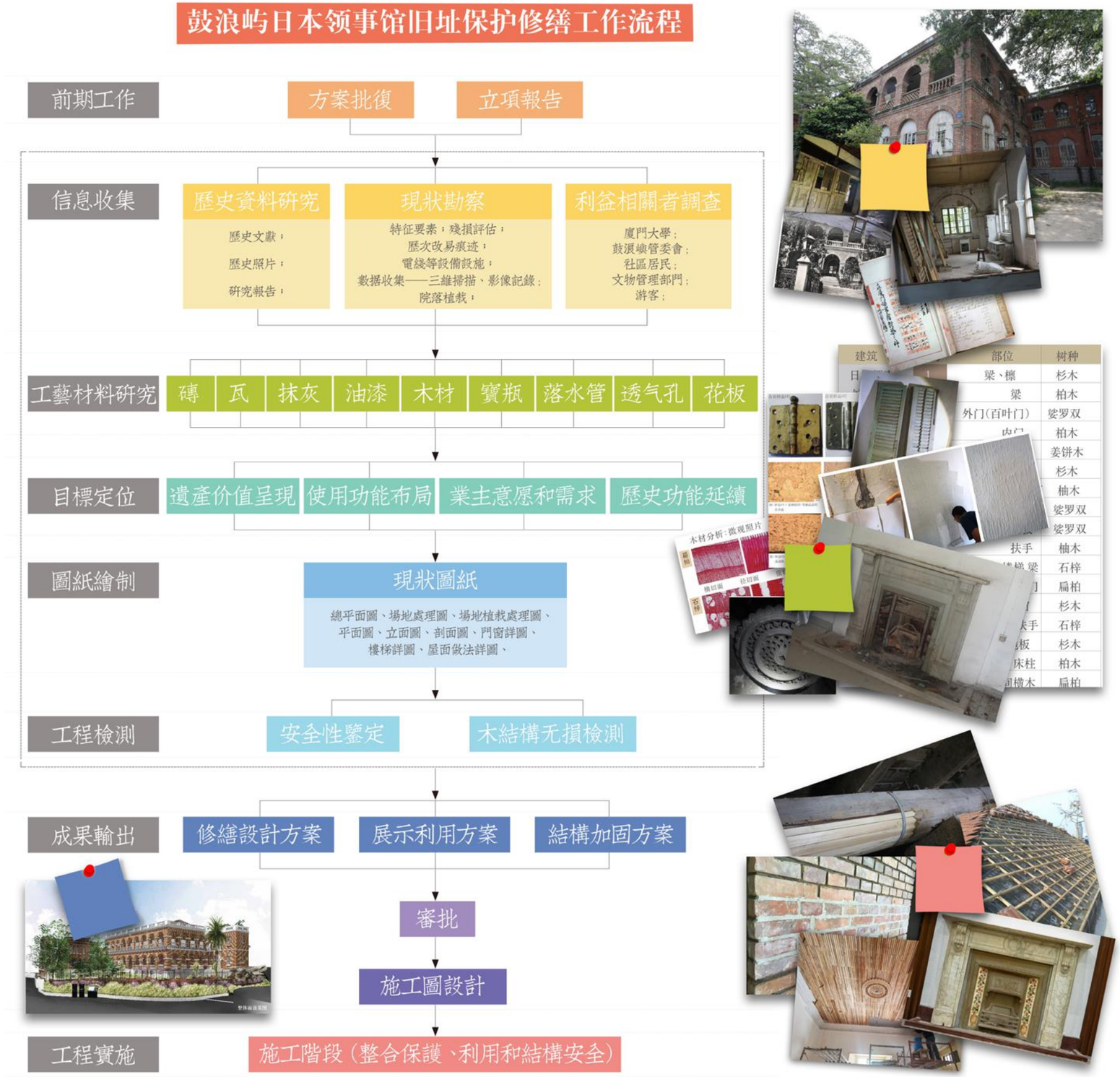
设计单位：北京国文琰文化遗产保护中心（CHCC)

建筑面积：2930 ㎡

竣工时间：2019

地理位置 © 张光玮

鸟瞰 © 王穆信



修缮保护工作框架 © 张光玮

修缮背景 CONTEXT

鼓浪屿日本领事馆旧址（以下简称“日领馆”）是鼓浪屿岛上完整留存的 19 世纪外国领事馆建筑之一，与其相邻的警察署旧址和警署宿舍旧址共同组成了历史上的鼓浪屿日本领事馆建筑群，是第六批全国重点文物保护单位。

日领馆作为院落中的主体建筑，始建于 1898 年，建筑为清水红砖砌筑的外廊样式，设计和施工都是中国工匠。在历史上，这栋建筑除了做领事馆也曾作为日本领事官邸使用，内部经过调整和重新装修，增加了日式和室。抗战胜利后，产权交予厦门大学，作为教职员工住宅使用了几十年，后又空置多年。日领馆是一座融合了西方及日本文化、同时又体现了近代和本地技术的建筑，是鼓浪屿国际历史社区多种文化与价值观念交融的实证。

修缮设计理念 CONCEPT

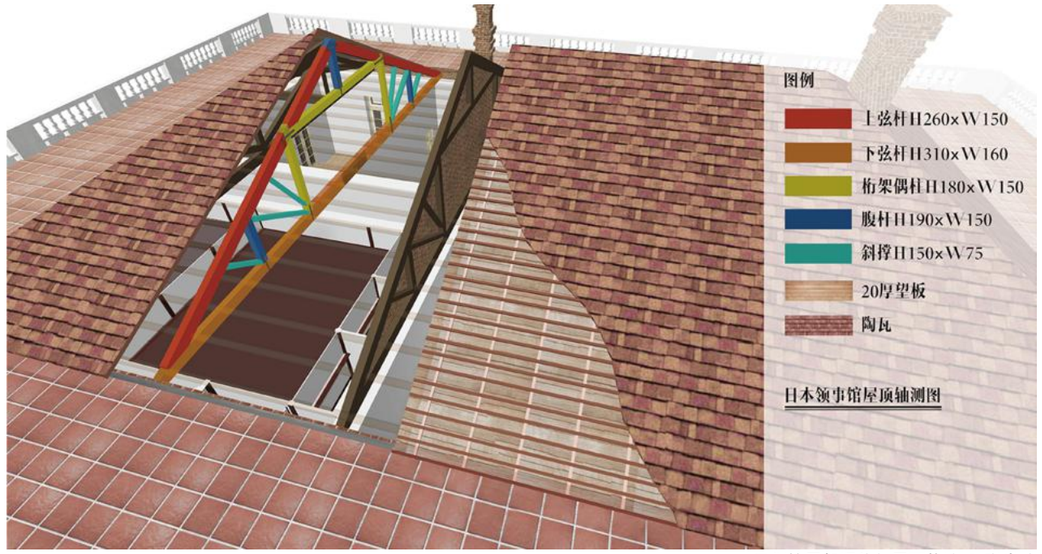
本项目对文物历史原状及其价值的判断贯穿了从前期勘察设计到施工进程各阶段，不仅限于通文献、史料、历史图纸和照片等，更结合施工进场打开后暴露的更多现场痕迹，通过价值解析确定工程措施。

在尊重并恢复最初的设计意图之上，也保留了部分可见证历史时期的有价值的改造部分，展示位于隐蔽部位的重要历史特征痕迹。不将建筑看作一个时期的一个状态，而是对价值积累的若干重要阶段的核心特征进行细化认定，确保各时代特征及价值载体的保存和延续。

二层外廊 © 魏青

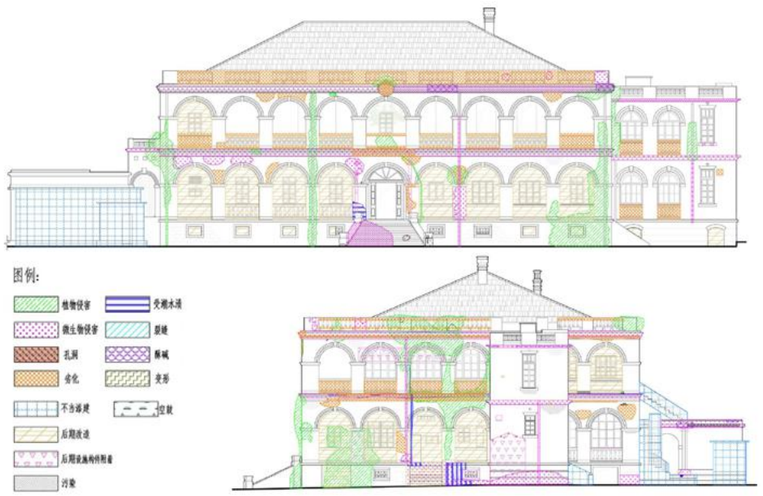
从结构整体性入手，加固措施以保证构件在正常使用阶段的安全性和适当提高抗震性能为原则。

对承载力不足的墙体以“砂浆替换法”进行加固，选取历史上使用功能偏服务性的西南房间区域进行板墙加固，提高整体抗震性能，实现安全前提下的最小干预。水平构件方面，一、二层顶板使用叠板法进行加固，入墙端去除两匹砖以增设圈梁；对 90 年代做过加固的隔潮层顶板用碳纤维布加强，底板配合室内单侧板墙设置夹基梁。

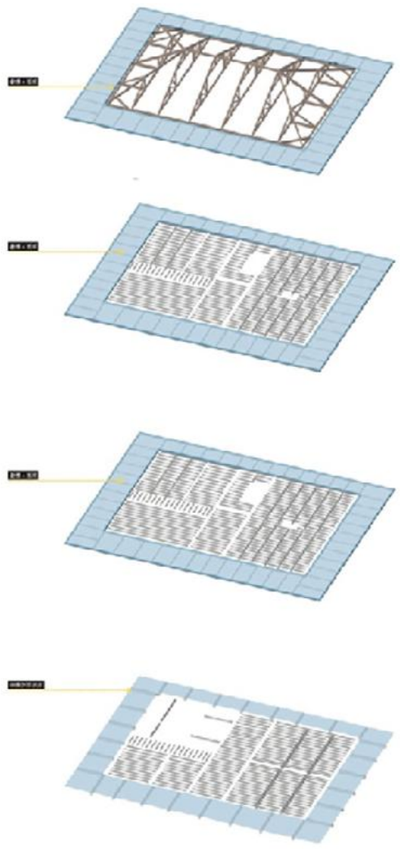


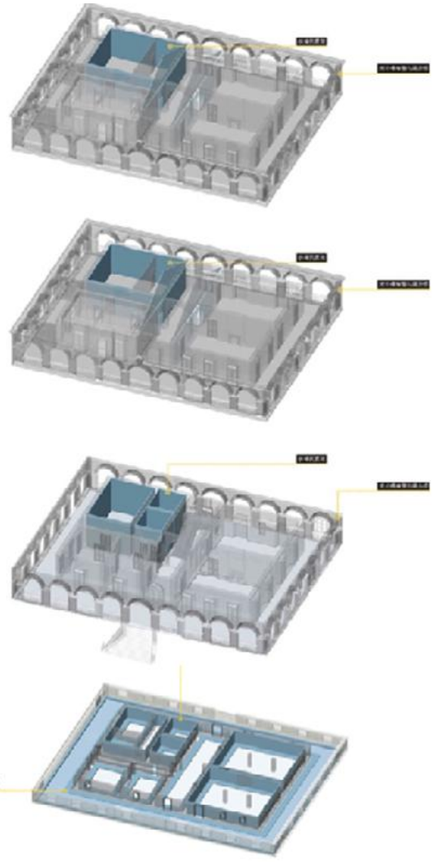
日领馆屋架照片与屋面构造 © 张光玮

建筑内部南立面起伏分析图 ©CHCC

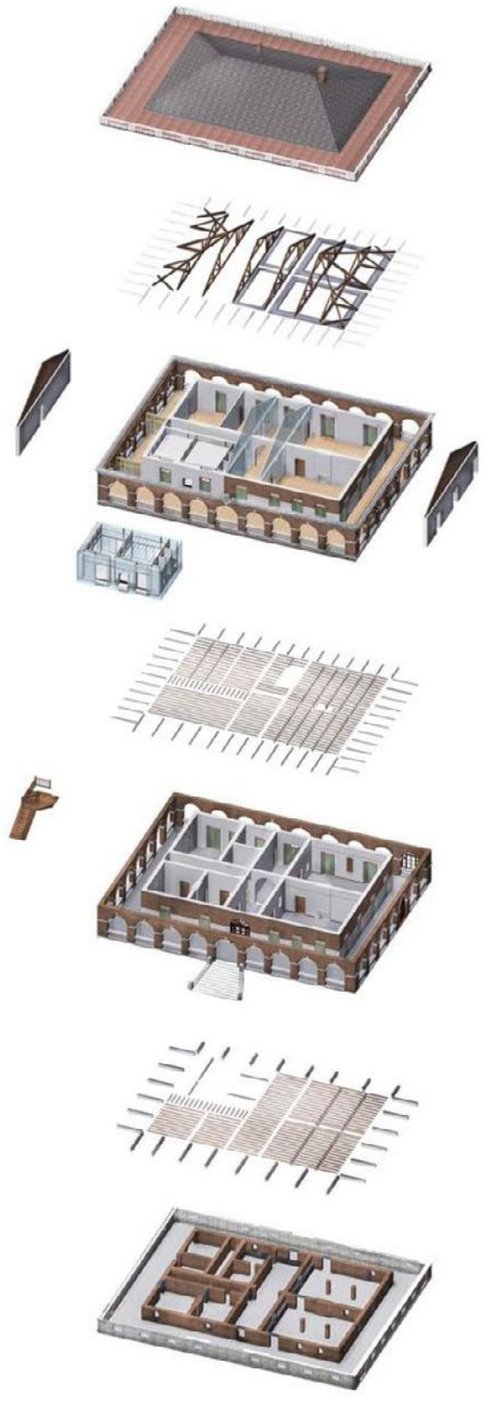


立面墙体病害分析图 ©CHCC



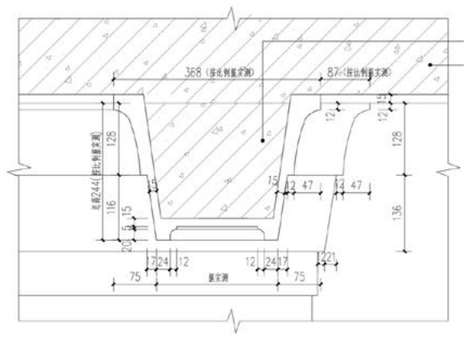


使用夹基梁、板墙和混凝土叠板进行结构加固的区域图示（蓝色部分）©CHCC



日领馆结构与主要特征要素分解示意 ©CHCC

修复前的线脚 © 张光玮



线脚节点详图 ©CHCC

修复中的一层外廊 © 张光玮

特色空间恢复 *RESTORATION OF FEATURED SPACES*

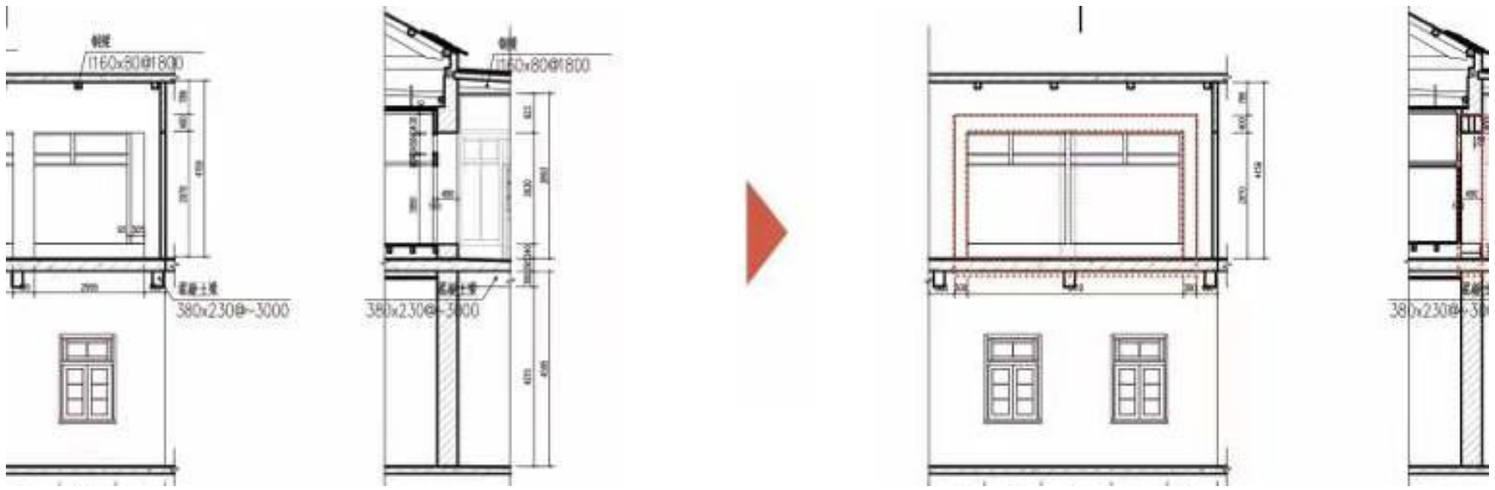
对典型特征要素——环廊的设计，兼顾结构安全与历史氛围的营造，清水砖墙以砂浆替换法加固、延续历史风貌，混凝土板以叠板法加固，并严格按照历史样式恢复线脚、加固后砼楼面参照相邻建筑室内做法，增设水磨石铺地。

修复后的一层外廊 © 张光玮

二层和室外廊 © 魏青

修复后的和室 © 魏青

和室床间 © 魏青

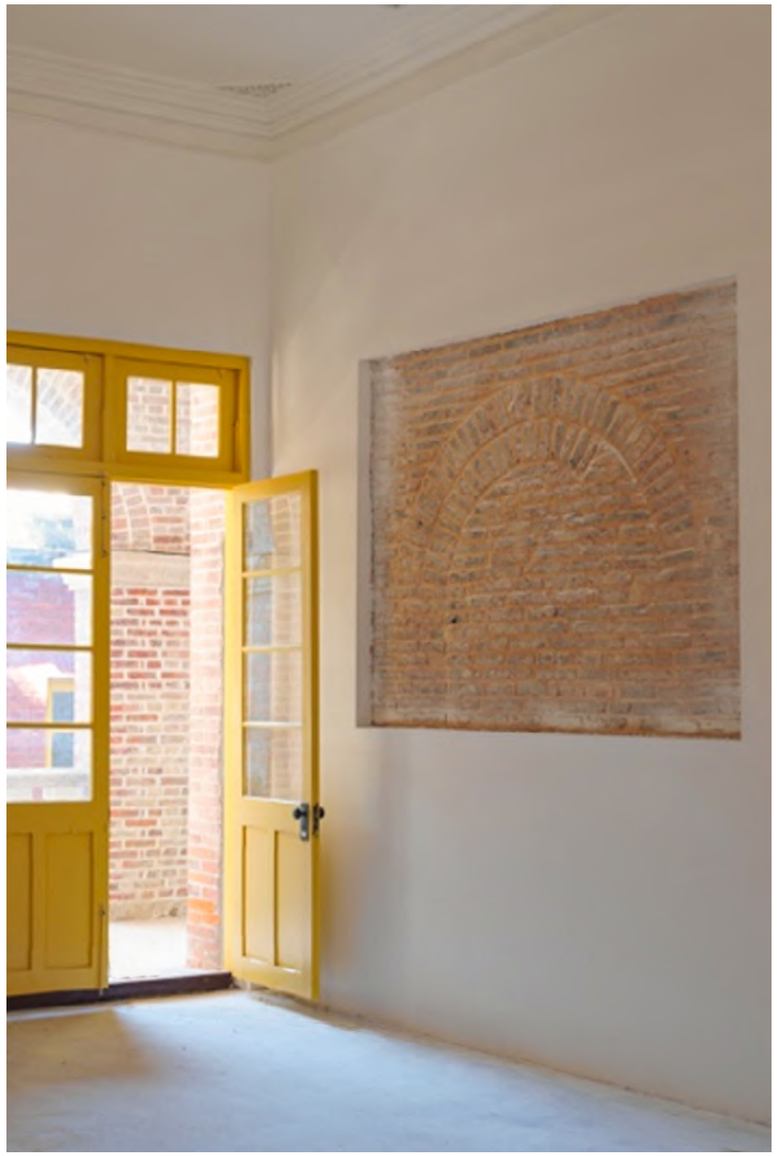


和室外横梁加固示意 ©CHCC

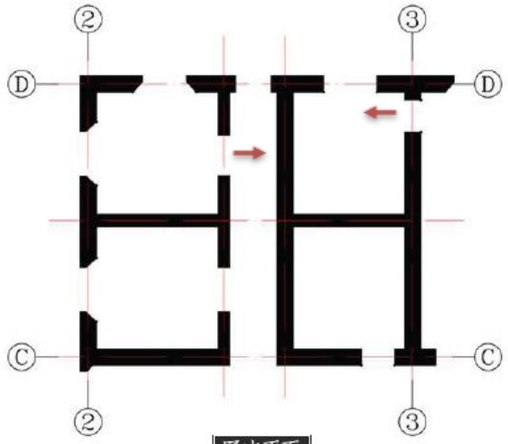
结合建筑本体加固设置隐藏横梁，通过价值评估，将早期改造遗留砖垛去除，展露作为多元文化价值载体的和室。

施工中发现的墙体早期改造痕迹，选取局部与历史图纸相关较强的部分结合结构加固和构造做法外露展示，而不是贸然恢复或再次用抹灰掩盖。

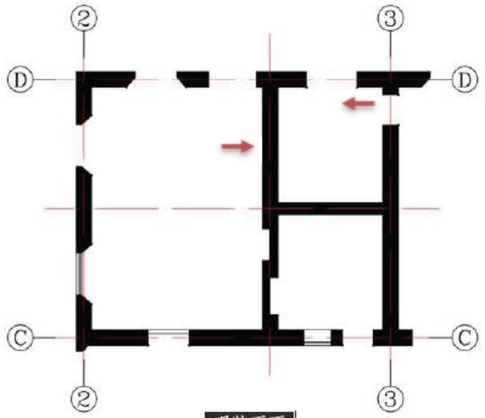
门券展示 ©CHCC



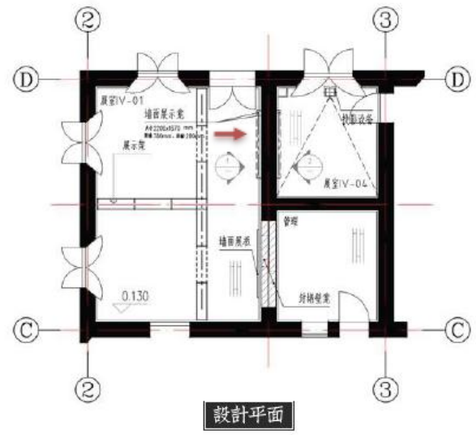
送餐券洞展示 ©CHCC



歷史平面



現狀平面



設計平面

一层西南区房间封堵券洞 ©CHCC

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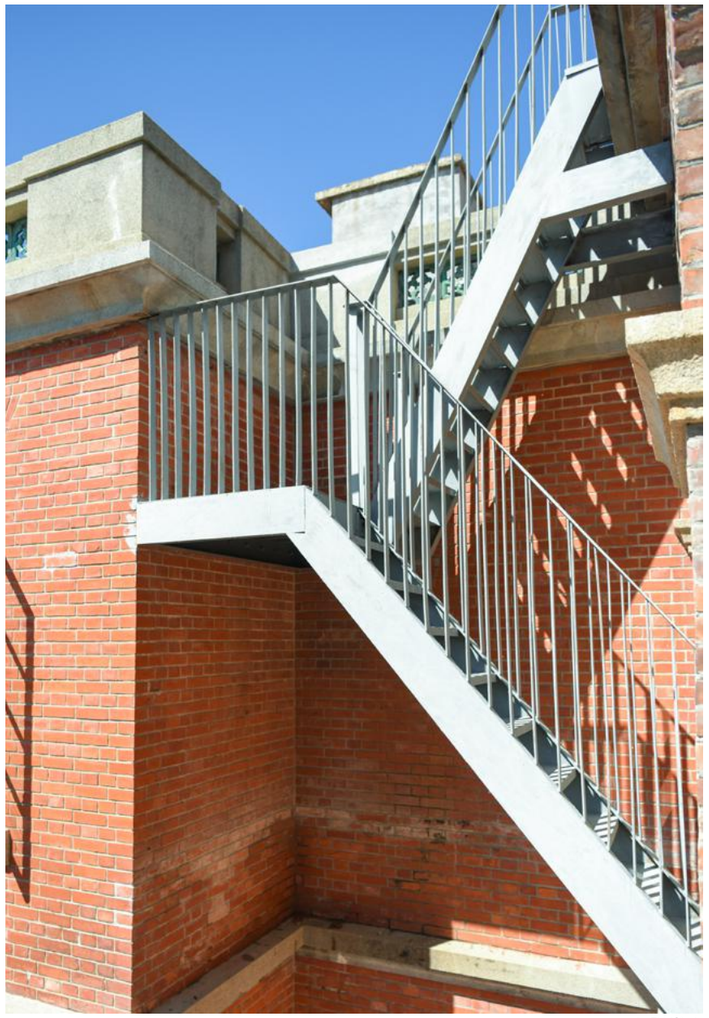

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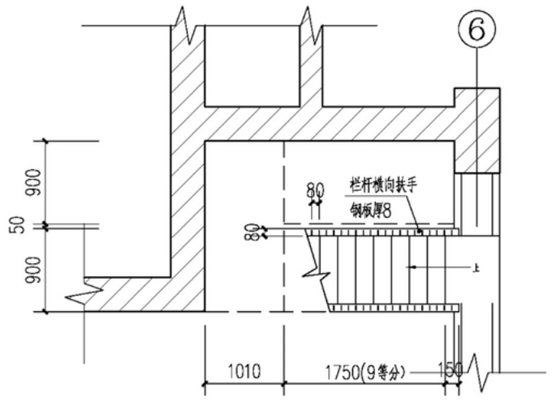
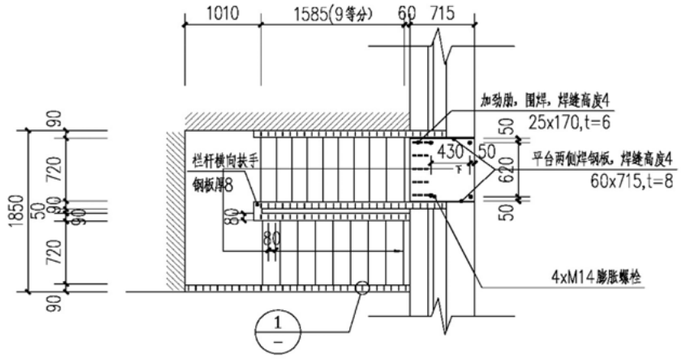
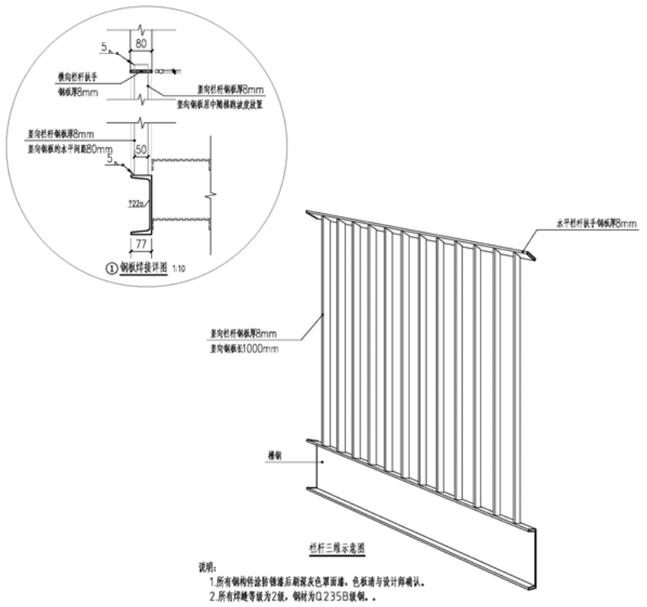


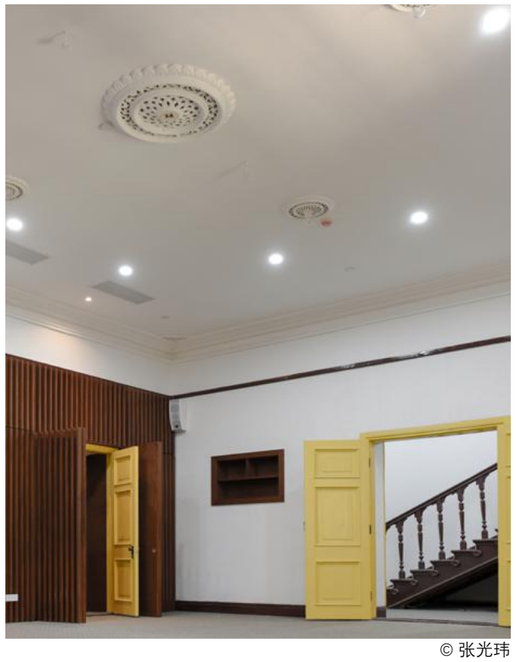




设计图纸 ©CHCC

健全使用功能 *MPROVEMENTS IN FUNCTION*

去除后期混凝土板雨罩并修复砖面，利用已开门洞在角落增设上屋面楼梯。



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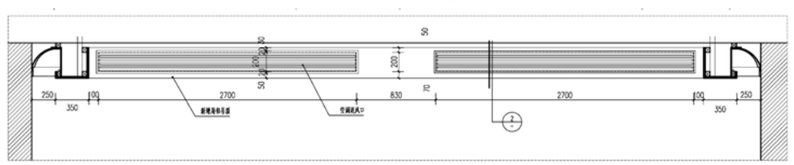
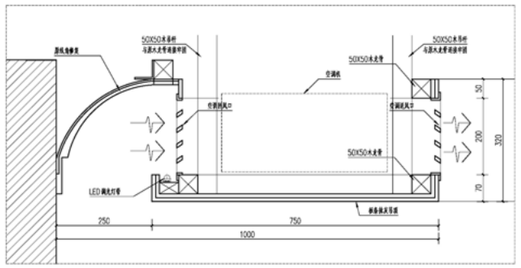
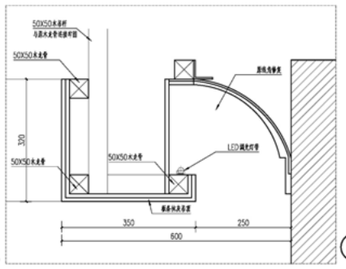
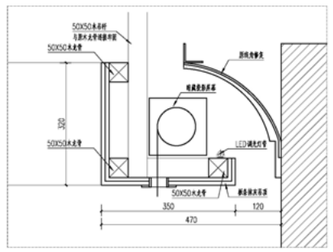
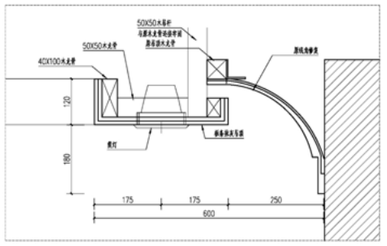










设计图纸 ©CHCC

新增吊顶及综合功能槽口，退让历史线脚。

二层中部楼梯间 © 程固

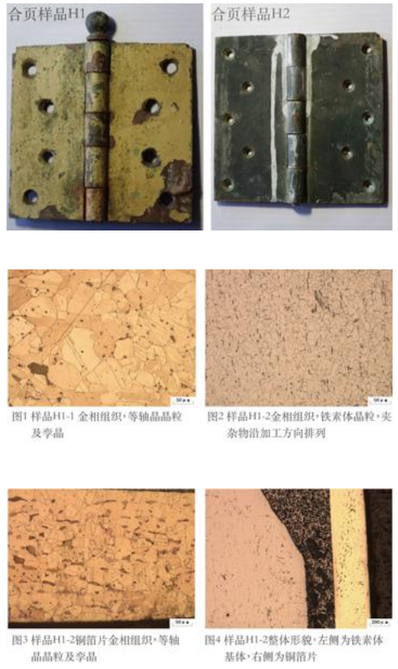
门窗残件 © 张光玮

门窗漆层分层分析 © 张光玮

宝瓶栏杆残件 © 张光玮

涂装选色 © 张光玮

宝瓶栏杆完成效果 © 程固

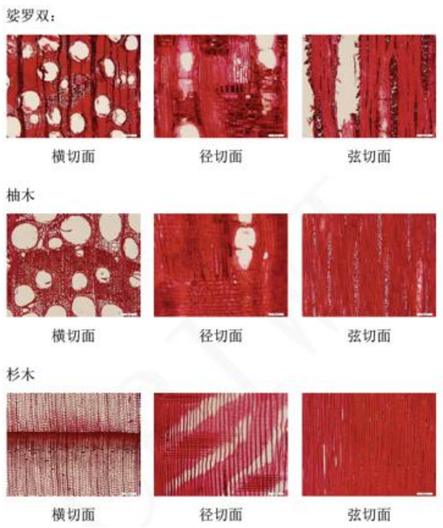


五金件材料工艺研究 © 张光玮

窗百叶完成效果 © 张光玮

工艺细节 DETAIL DESIGN

对砖瓦、门窗、木材、漆层、五金等工艺和材料进行实物研究和科学检测，以便指导细节实施。



序号	树种	拉丁名	科名	科拉丁名	产地	针\阔叶	软硬	特性	材性	用途
1	杉木	*Cunninghamia* sp.	杉科	Taxodiaceae	中国秦岭、淮河以南地区，越南也有分布。	针叶	软	易加工，干后不易开裂，不翘曲，有香气，耐腐力强。	木材纹理直，结构较细	建筑、桥梁、造船、矿柱，木桩、电杆、家具及木纤维工业原料等
2	扁柏	*Chamaecyparis* sp.	柏科	Cupressaceae	日本扁柏原产地日本，台湾为变种	针叶	中	加工容易，切削面光洁，油漆后光亮性特好;胶粘容易，握钉力强，其坚固耐用。	木材坚韧耐腐芳香。	高档家具、办公和住宅的高档装饰、木制工艺品。
3	柏木	*Cupressus* sp.	柏科	Cupressaceae	内蒙古南部、吉林、辽宁、河北、山西、山东、江苏、浙江等，	针叶	中	加工容易，切削面光洁，油漆后光亮性特好;胶粘容易，握钉力强，其坚固耐用。	木材纹理细，质坚，能耐水，有脂材，耐腐。	建筑、车船、桥梁、家具和器具等
4	婆罗双	*Shorea* sp.	龙脑香科	Dipterocarpaceae	原产喜马拉雅以南的丘陵山国，稀有、国家二级保护植物	阔叶	硬	气味芳香，木材坚固	佛门圣树，龙脑香是高级天然香料，十分名贵，木材材质优良	有多种用途
6	柚木	*Tectona* sp.	马鞭草科	Verbenaceae	东南亚地带，号称是缅甸的国宝	阔叶	中	含硅易钝刀，故加工时切削较难，握钉力佳，综合性能良好	对多种化学物质有较强的耐腐蚀性，，日晒雨淋干湿变化较大的情况下不翘不裂;耐水、耐火性强;能抗白蚁和不同海域的海虫蛀食，极耐腐	制造高档家具地板、室内外装饰的好材料

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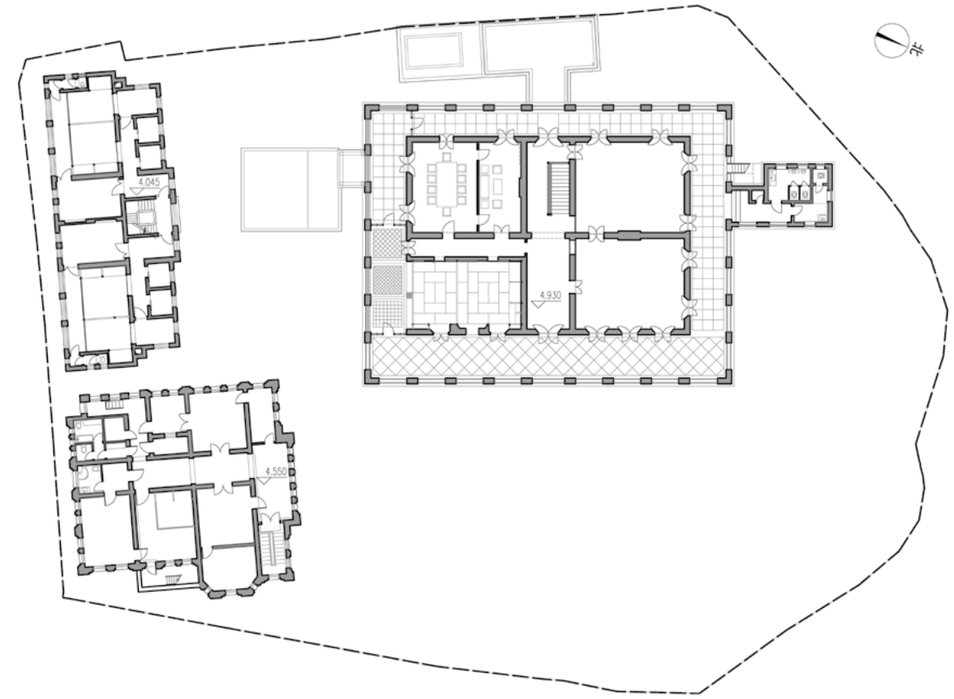
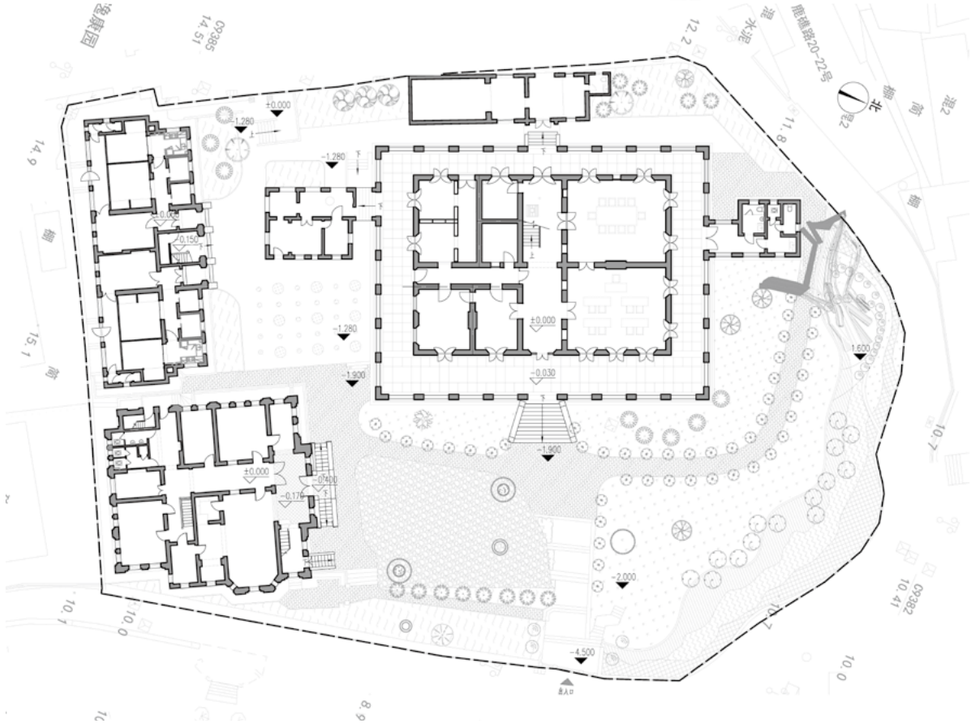
半圆拱券 © 程固

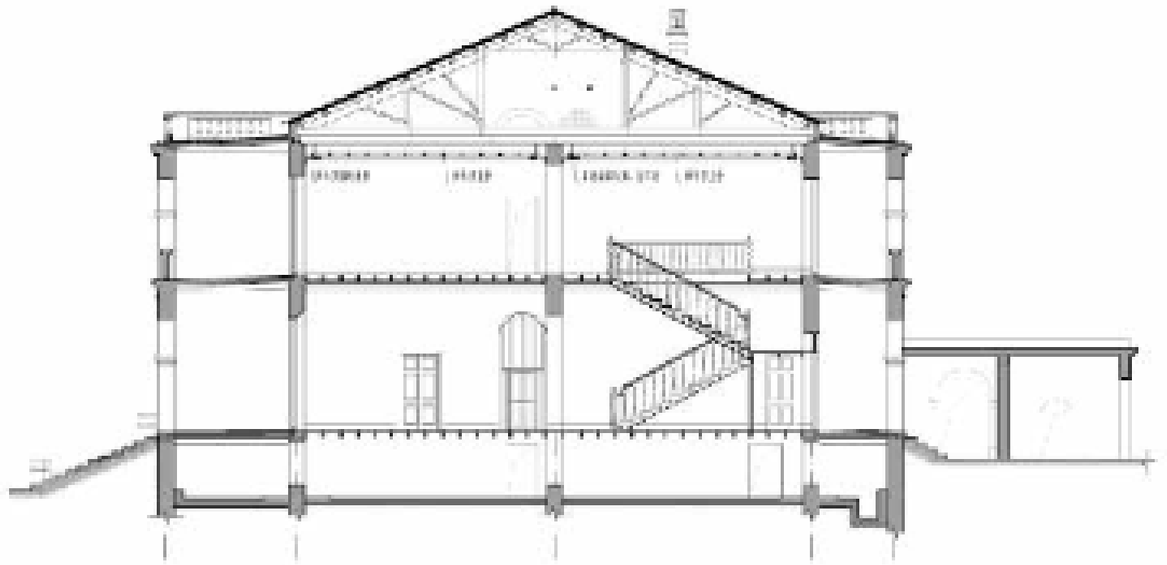


二层总平面图 ©CHCC



一层总平面图 ©CHCC

二层连廊 © 张光玮



纵剖面图 ©CHCC

模型照片 © 张光玮

活化利用 *REVITALISATION*

修缮施工现场也进行了临时展示，设置展板、历史构件展架和信息丰富的手册与折页。经过 2015 年至 2017 年的保护修缮工程，现作为厦门大学人文艺术高等研究院使用。成为国内外诗人、作家、艺术家提供社群活动的空间，也不定期开放给公众参观、或进行爱国主义教育。

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