Atelier Archmixing

Facade Renovation for Building 8, Hengshanfang Xuhui District, Shanghai, China 2014

阿科米星建筑设计事务所 衡山坊 8 号楼外立面改造 中国,上海市,徐汇区 2014

This facade renovation project is a small part of a big urban regeneration program, Hengshanfang, which intends to transform a historical residential district with Lilong housing (residentials in lane: specific typology in Shanghai) built in 1934 and villas built in 1948 into a boutique commercial area. The site is located in Xujiahui, one of the busiest commercial centres in Shanghai, where constant change plays a crucial role in guaranteeing economic and urban vitality. Thus, for Atelier Archmixing, the biggest challenge is how to achieve iconic difference as well as commercial dynamics without sacrificing the coherence of a historical preservation area.

The old villa stands in the centre of the whole block, with a corner exposed to the main entrance, the intersection of two leafy streets, as well as a large and popular urban park. In order to balance integration and distinction, the architects decided to cover the three-story structure with a changeable skin, which remains elegantly quiet during the day while sending out charming allure during the night. Instead of using a conventional curtain wall or floodlighting, they applied illuminated brick, an originally designed and customized product to achieve this dramatic effect. The historical building, now a boutique shop, is covered with an envelope combining two different materials – traditional gray bricks mixing with this unique illuminated bricks, both sharing the same size and similar colors. Therefore, during the daytime, with a pure brick texture, it easily integrates into its surroundings. When night falls, the wall suddenly becomes shining, just like lighting up a lantern with rich patterns, successfully distinguishing itself, and at the same time attracting and amusing the pedestrians. What makes the building stand out in this downtown commercial area is the dramatic fact that this is an everyday transformation of the building itself instead of a neon light effect. Moreover, this sophisticated design of difference, changing from daytime quietness to nighttime brilliance, also conveys a sense of Shanghai character - no matter whether in a mode of withdrawn seriousness or open enchantment, it always stays restrained and elegant.

The illuminated brick is a complicated product composed of five different segments. A stainless steel box in the size of a normal brick serves as the main structure, inserted with a lighting facility made of three different layers, among which a new material called Photosensitive Mineral Resin Sheet plays a key role in creating delicate texture. These bricks were laid alternatively with gray bricks in mortar, just like building a traditional brick wall. Four elevations constitute a continuous skin to achieve unity and simplicity.

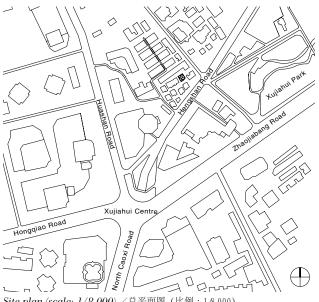
The illuminated facade is composed of overlapping rectangular lighting patterns of varied size and intensity, intersecting with window frames. Since the LED bricks are of the same size as those gray ones, they can form rectangular lighting areas of different texture. Rectangular is also the shape of windows and doors - it is applied as the basic form. To exaggerate this

covering effect and create different brightness patterns, smallsized and extremely dense lighting blocks are hidden in those large areas.

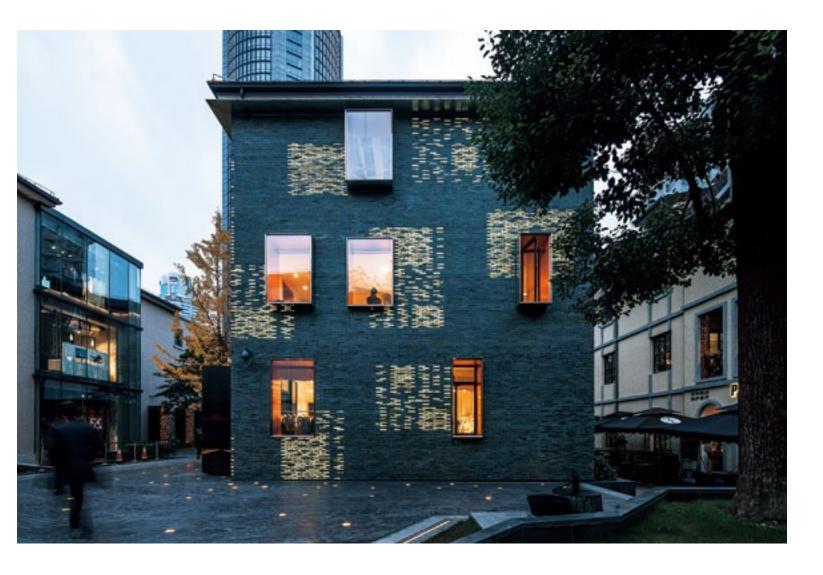
Both the doorway and shop windows project from the exterior walls to satisfy functional as well as aesthetic purposes. The entranceway is totally made of stainless steel plate. The same material is also applied to the prominent windows as exterior frame, but the interior surface is covered with sheet copper. While the stainless steel produces illusive reflections of the adjacent lighting bricks, the golden copper adds a charming sense of warmness and prosperity.

Opposite: View of the lane from the south. The illuminated bricks were designed for this facade renovation project, inspired by the iconic nightscape of Shanghai. All photos on pp. 153-155 by Tang Yu, courtesy of the architects.

对页:从南侧看甬道。发光砖是受到上海标志 性夜景的启发, 为改造项目特别设计的。







衡山坊历史保护区由建于 1934 年的里弄住宅和建于 1948 年的花园 洋房构成,拟改造成一个精品商业区。 衡山坊 8 号楼的立面改造就是这个 大城市更新的一部分。基地所在的徐 家汇商圈,是上海最繁华的商业中心 之一,其经济和城市的活力来源于不 断发生的变化。因此,这个项目对于 阿科米星来说,最大的挑战是:如何 在不牺牲历史保护街区统一性的情况 下,实现新旧建筑之间标志性的差异, 以及商业的活力。

这幢老洋房坐落在整个街区的中心,一角朝向商业区的主入口,紧邻衡山路天平路的十字路口,还有广受欢迎的徐家汇公园。为了平衡差异性和统一性,建筑师为这座变身为精品店的三层老洋房覆盖了一层可变的肌肤——白天优雅安静,夜晚魅力四射。这种戏剧性的效果由一种原创的发光砖产品而非传统的幕墙或照明灯实现,这种独特的发光砖与传统青砖有着相同的尺寸,并与青砖混合形成表皮。白天,它是纯粹的清水砖效果,

很容易融入环境;夜幕降临时,墙面会突然闪亮起来,仿佛神奇地点亮一盏质感丰富的灯一样。这不仅使建筑从周围环境中脱颖而出,也吸引了路上的行人,为他们带来惊喜。然而,使这座建筑从中心商业圈内脱颖而出的并不是寻常的霓虹灯效果,而是建筑本身在一日之内不断变幻的戏剧感。这种建筑从白天的"静谧"向夜晚的"璀璨"过渡的精妙设计,也传达出一种"上海性格":隐藏时的板正与放开时的漂亮都透着点儿矜持。

发光体组件由5个不同的部分组成:主体结构是与传统砖一样大小的不锈钢框,其上插入由3个层次构成的照明设施。其中拓彩岩透光板这种新型材料在创造精致纹理时起到了关键作用。发光砖和青砖按照传统的砌筑方式有序地铺砌,形成大小和密度各不相同的方形发光区。4个立面构成了统一又简单的连续表皮。

发光的建筑表皮由相互叠合的方 形发光图案组成,这些发光图案大小 各异、密度不同,并与方形的门窗框 相交叠。由于 LED 砖与其他青砖的形状大小一样,所以它们可以一起构成不同肌理的方形发光区域。方形也是建筑中门窗的形状,它在表皮中成为了一种基本元素。为了突出这种表皮覆盖的效果并生成不同亮度的肌理,在大的发光区域内还隐藏着一些小尺度、高密度、亮度特别高的发光区。

This page: Night view of the west elevation. Illuminated bricks surround the openings and shine at night. Opposite, above: View of the entrance and openings made of stainless steel plates to reflect the illuminated bricks. Opposite, below: Close-up view of illuminated bricks and window frame.

入口和橱窗突出于外墙,以满足功能和审美的需要。入口由不锈钢板构成,同样的材料也应用于独特的凸窗外壁,窗户内壁则覆盖了铜板。不锈钢反射邻近的发光砖产生炫丽的幻影,亮铜色则为建筑增添了迷人的温暖感和繁华感。

本页:西侧立面的夜景。发光砖围绕着入口在夜晚闪耀。对页,上:不锈钢板做成的入口和开口可以反射出发光砖的光亮。对页,下:发光砖和窗框的近景。

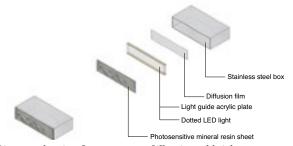
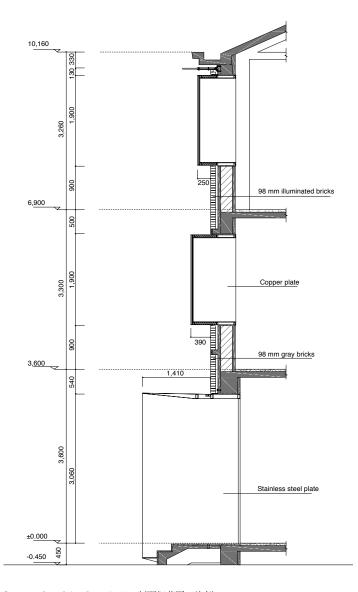


Diagram showing five segments of illuminated bricks 发光砖 5 个组成部分的图示



Section detail (scale: 1/80) \angle 剖面细节图(比例: 1/80)

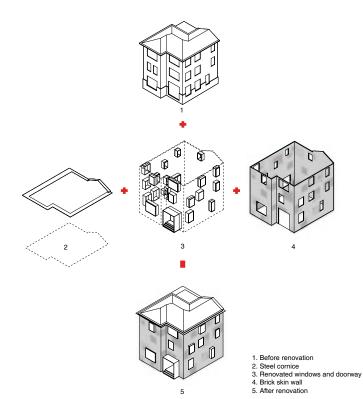


Diagram of facade renovation / 立面翻新示意图





Credits and Data

Project title: Facade Renovation for Building 8, Hengshanfang

Client: Shanghai Hengfu Properties, Co, Ltd.

Program: Commercial

Location: Xuhui District, Shanghai, China

Design: 2012 Completion: 2014 Status: Completed

Architects: Atelier Archmixing

Design Team: Zhuang Shen, Wang Kan, Yang Yunqiao, Xie Wenjing (Intern) Illuminated brick manufacturer: Gainker (China) Building Technology Company Structural mechanical and electrical engineer: Shanghai Sanyi Architectural

Design company, Shanghai Yuangou Design and Consultant Company

Main contractor: Shanghai Xufang Construction Industry Company

Total floor area: 230 m²