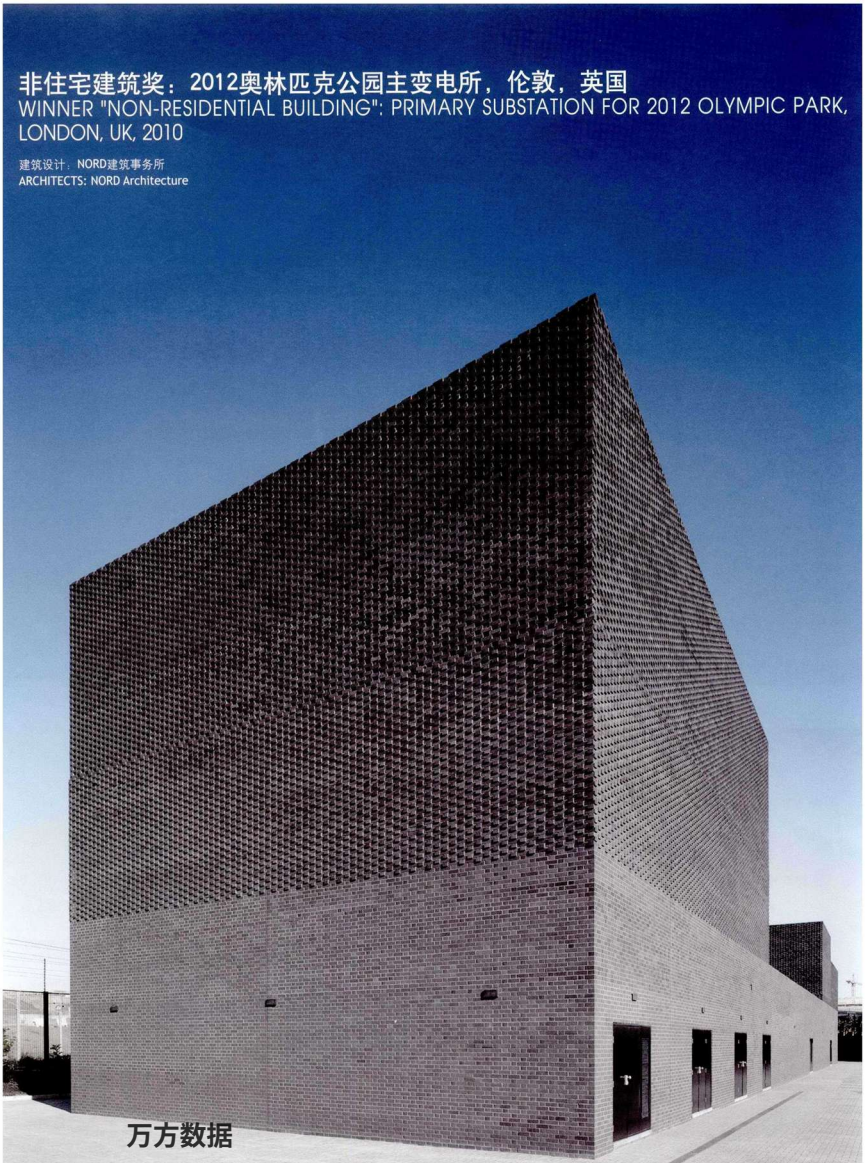
非住宅建筑奖：2012奥林匹克公园主变电所，伦敦，英国
WINNER "NON-RESIDENTIAL BUILDING": PRIMARY SUBSTATION FOR 2012 OLYMPIC PARK, LONDON, UK, 2010

建筑设计：NORD建筑事务所
ARCHITECTS: NORD Architecture



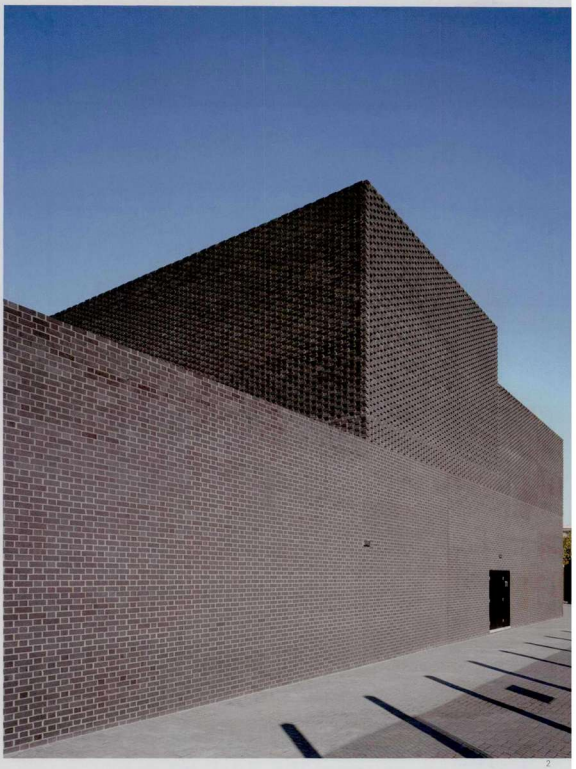
由格拉斯哥的建筑事务所 NORD（研究和设计的北方事务所）设计的变电所，是地处伦敦东端的奥林匹克场地中专业基础设施建筑中的一员。在 2012 年奥林匹克运动会期间，它为各大比赛提供电力保障。之后将作为遗留设施用于新城区的服务。通过重量感和简单的整体感，该建筑物的永久性经由其建筑风格毫不隐晦地表达出来，而这些都使它有意区别于其他运动设施的壮观角色，比如，高技的奥林匹克运动场或者扎哈·哈迪德的曲线形游泳中心。

同时，这座建筑强烈地表达着英国工业建筑的传统。在它著名的前辈中有用砖的权威，比如，伦敦河岸和巴特西发电站。不过，NORD 的建筑师也参考了下里亚谷地周围环境中那些无名的砖建筑，包括工厂和仓库等，它们以英国花园模式从被污染的工业棕地变身为奥林匹克公园。最后，这里将成为当地的一个休闲区，不仅为居民提供更好的公共交通，自行车路与步行网络，还将为本地的动植物提供新的栖息之所。

形式上，该变电所表现为一座抽象的雕塑：一个实体的，棱角分明的体量，伫立在奥林匹克场地的西北部。最引人注目的是它那由墨黑色砖砌成的外壳，是对点燃工业革命的燃料的回忆？或许是吧，但无论如何，我们都应该对它以特别粗野的黑砖来完成窗和转角以有别于前辈的方式致敬。

变压器、开关柜的冷却装置以及一个控制室都被安置在这个 80m 长的建筑中。由外观之，最初呈现的是一个所有表皮封闭的景象，事实上，这是一个由优秀工艺才能完成的多样化外壳，或为承重结构，或为维护结构，又或为可渗透的格子。在变压器放置的位置上，荷载就地转移到混凝土基础，砖仅提供一个饰面而已。不过，在基座区的大部分位置，立面都具有承载的功能。在塔楼区，由于只是隐藏位于后部的冷却设备，所以砖采用了带孔洞的连接方式。这种立面纹理上的间隔变化使得建筑越接近顶部看上去越轻盈；特别引人入胜的是，白天看上去实心的塔楼外壳，在开放式工作的夜晚却变成了精致的灯笼。从功能的观点来看，洞口是用于自然通风和技术室照明的。在这座单一用途的建筑中，实用主义和诗意实现了一种微妙的平衡。

最后同样重要的是，变电所还满足了总体规划的生态要求。屋顶覆盖着由碎砖和砾石所形成的薄层，并随即被当地自发生长的野生植物所占据。如果鸟类也开始在这些砖上筑巢，那又将是求之不得的。□（李菁 译）



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1 这座长80m的砖建筑使人联想到英国工业建筑的传统，位于奥林匹克园区的西北部/The 80m long brick building, which was realised in the tradition of British industrial architecture, rises on the north–western boundary of the Olympic Park

2 外景/Exterior view

（1, 2 摄影/Photo：Andrew Lee）

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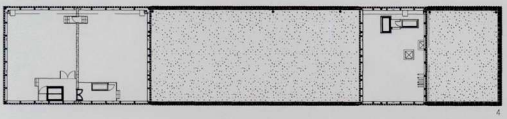

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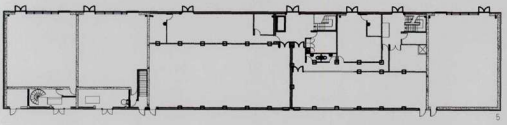

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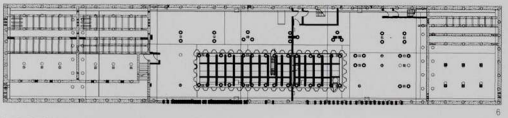

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3 屋顶平面/Roof level plan
4 顶层平面/Upper level plan
5 首层平面/Ground level plan
6 地下层平面/Basement level plan
7 外景/Exterior view (摄影/Photo: Andrew Lee)

The substation by Glasgow-based architectural practice NORD (Northern Office for Research and Design) belongs to a family of technical infrastructure buildings at the Olympic site in London's East End. During the 2012 Olympics, it provides electricity needed for the Games, and afterwards in legacy for the new urban district. Its permanence is unambiguously expressed by the architecture of the building, by its heaviness and monolithic simplicity, which deliberately distinguishes itself from the spectacular play of shapes characterising the sports facilities, for example the notched crown of the high-tech Olympic Stadium or Zaha Hadid's curvy swimming centre.

Simultaneously, the building makes strong reference to the tradition of British industrial architecture. Among its famous predecessors are the brick cathedrals such as the Bankside and Battersea Power Stations in London. However, the architects from NORD also found references in the immediate surroundings, in the anonymous brick architecture of factories and warehouses in the Lower Lea Valley, which mutated from a contaminated industrial brownfield site into an Olympic Park, following the model of English gardens. Eventually, a local recreation area will be built here, which will provide the residents not only with a better connection to public transport and a network of cycle paths and footpaths, but will also offer new habitats for the native flora and fauna.

Formally, the substation presents itself as an abstract sculpture: a solid, angular volume on the north-western boundary of the Olympic site. The eye-catcher is the envelope from coal-black brick. A remembrance of the fuel that fired the industrial revolution? Maybe, but in any case a reverence to the cleared away predecessor with window cases and corners constructed from particularly robust black brick.

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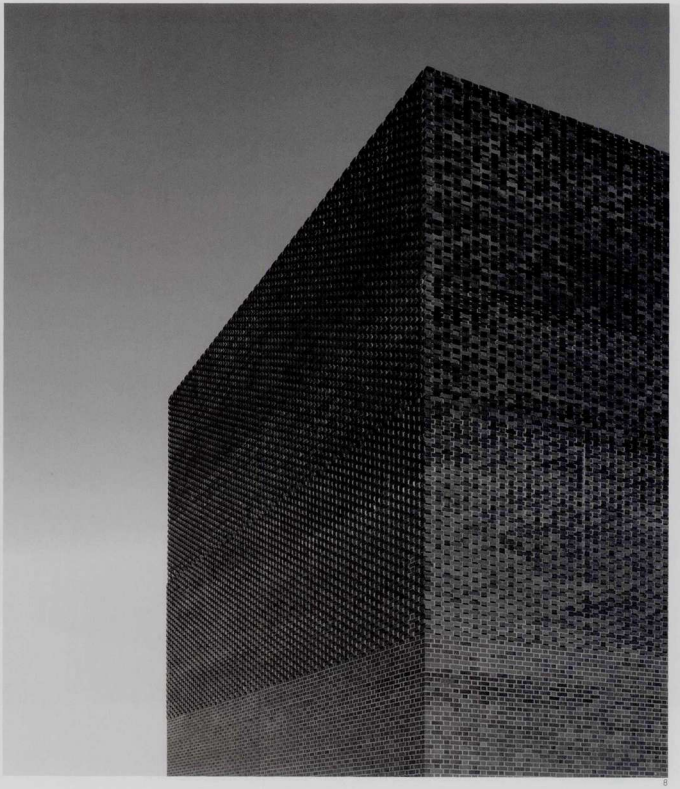

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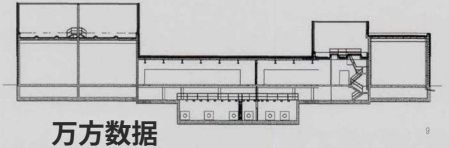

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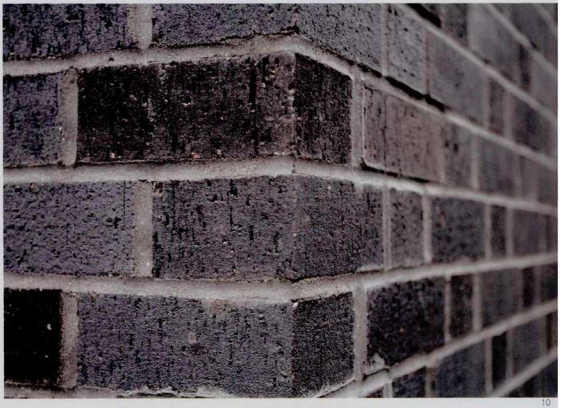
Transformers, switchgear cooling units and a control room are accommodated inside the 80 m long building. What initially appears as a closed all-over skin when viewed from the outside is in actual fact a differentiated surface of excellent workmanship, sometimes load-bearing structure, sometimes cladding and then again permeable latticework. Where the transformers are positioned in load-transferring in-situ concrete foundations, the brick only provides a facing. In large parts of the socle zone, however, the facade has a load-bearing function. In the area of the towers, which conceal the cooling units located behind, the brickwork bond is perforated. This alternation in the facade texture makes the building lighter towards the top; this is especially intriguing at night when the open-work and during the day seemingly solid envelope of the tower is transformed into a filigree lantern. From a functional point of view, the openings are used for natural ventilation and lighting of the technical rooms. Pragmatism and poetry enter into a subtle relationship in this single-purpose building.

Last but not least, the electrical substation also fulfils the ecological specifications of the master plan. The roof is covered with a thin layer from crushed brick and gravel, which was immediately colonised by spontaneous vegetation of local wild plants. And if birds start to nest in the brickwork, this is quite the intention, too. □ (Amber Sayah, Published in Brick'12 by Callwey)

设计团队 /Design Team: NORD 建筑事务所,阿伦·珀特;安德鲁斯联盟（结构设计）/NORD Architecture: Alan Pert; Andrews Associates (Structure Designer)
建造目的 /Building's Purpose: 2012 奥林匹克公园变电所 /Substation for 2012 Olympic Park
使用面积 /Useable Floor Area: 1 810m²
业主 /Client: 英国电网 /UK Power Networks
用砖类型 /Brick Type: 饰面砖 /Facing brick



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8 立面细部/Details on the facade（摄影/Photo：Andrew Lee）
9 剖面/Section
10 细部/Detail
11 外景/Exterior view
（10、11 摄影/Photo：ZONE Media GmbH）