

SCHOOL

# ARCHITECTURE

成长空间

DESIGN FOR ELEMENTARY AND  
SECONDARY SCHOOLS

世界当代 **中·小·学** 建筑设计

凤凰空间·北京 编



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# PONZANO PRIMARY SCHOOL

## 意大利 庞萨诺小学

**项目设计:** C+S Associati / Carlo Cappai, Maria Alessandra Segantini

**项目地点:** 意大利, 威尼托, 庞萨诺

**项目团队:** F&M Ingegneria spa (结构, 机械电气, 机械, 电器, 测量, 施工监理, 建筑安全), Lorenzo Vittori (可持续性)

**项目面积:** 4 100 m<sup>2</sup>

**项目时间:** 2008 - 2009年

**摄影:** Alessandra Bello, Pietro Savorelli & C+S Associati

**Architects:** C+S Associati / Carlo Cappai, Maria Alessandra Segantini

**Location:** Ponzano Veneto, Italy

**Project Team:** F&M Ingegneria spa (structures, MEP, survey, work supervision, building security), Lorenzo Vittori (sustainability)

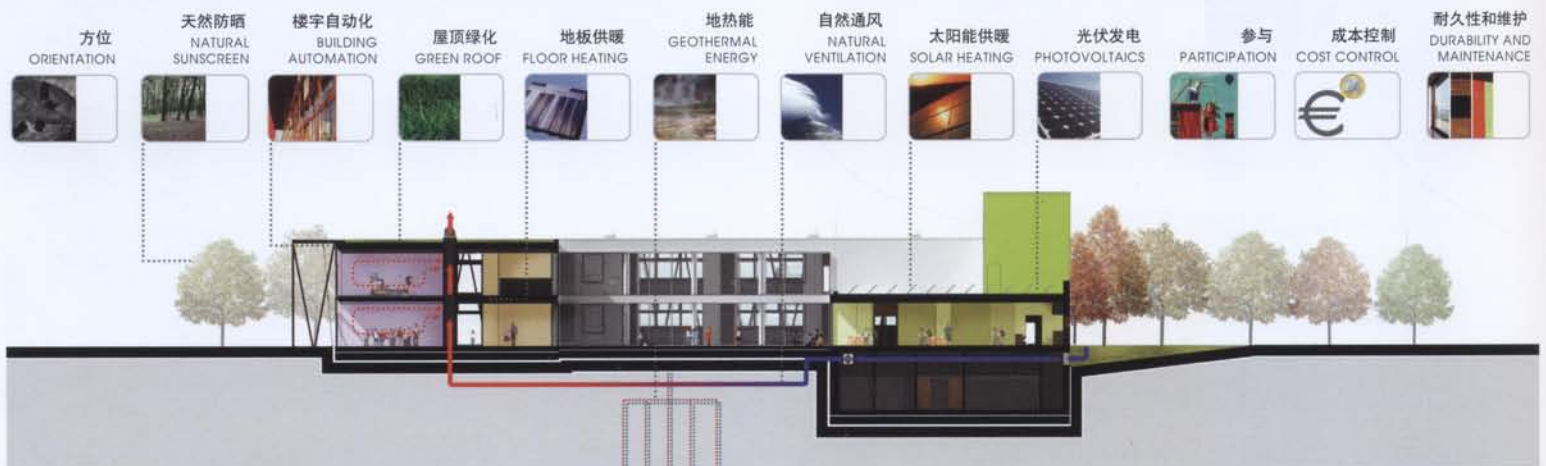
**Project Area:** 4,100 m<sup>2</sup>

**Project Year:** 2008 -2009

**Photographs:** Alessandra Bello, Pietro Savorelli & C+S Associati



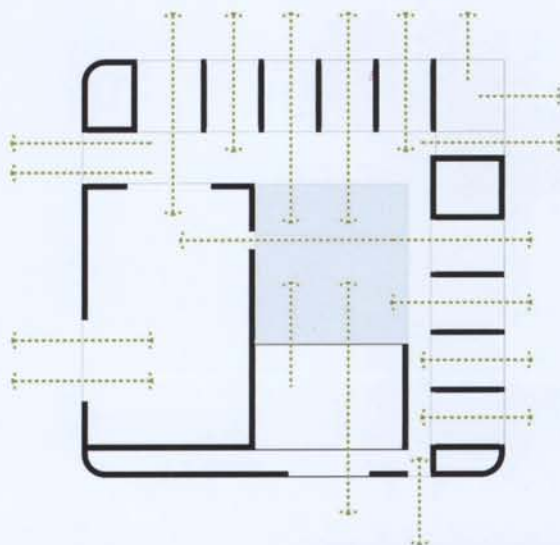
内部轴测投影透视视图 AXONOMETRIC VIEW OF THE INSIDE



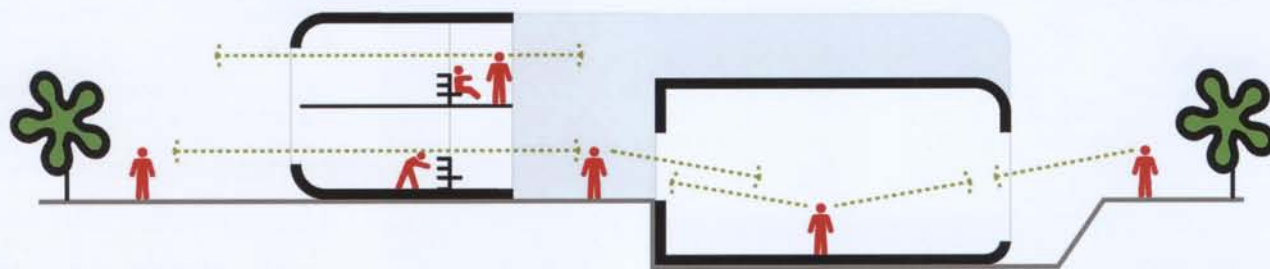
可持续性和节能分析 SUSTAINABLE AND ENERGY SAVING ANALYSIS



学校的模型 MODEL OF THE SCHOOL PROJECT



主要人流量 THE MAIN FLUXES



通视条件图 INTERVISIBILITY SCHEMES



由于城市面积的不断扩张，威尼托区几乎被毁，而庞萨诺小学则是城中一个小小的凝聚点。建筑的一部分（体育馆）在放学后对公众开放。这样，这所学校成为了庞萨诺社区居民的一个聚集点。

在该项目中，集体空间是一个极其重要的元素。在规划理念上，所有的空间均围绕一个中央广场而设立。这使人不禁回想起过去是学术中心的修道院。从分区上看，所有的空间都朝向彼此，在通透炫彩的墙壁上互相衬照。尽管它们保留着教室的特征，在130 cm以下并不透明，上方的玻璃却能使孩子们互相交流自己的作品。这种错综复杂的设计使人想起威尼托模式的工业区，在那里人们热衷于互相学习，交流经验。

学校成为了一座社会性建筑，一个促进多民族文化交流 and 比较的场所。它成为了一个起点，格林森特将其称之为“翻译”。蕴涵特定意义的不同语言在这里融合，共同勾画了记忆的画面和时代的印记。

在这个项目中，建筑师通过威尼托区红色的“barchessas”（紧邻由Campo Baeza设计的庞萨诺幼儿园，被解读为一种当代别墅）唤起人们的记忆。而与建筑的当代性相关联的是贝纳通工厂和他们的设计文化以及风靡全球的色彩民主哲学。

从这层意义上说，这所学校则成为了梦或孩子们口中的故事背景。故事的主人公是孩子们和他们的老师，以及学校周围的社区。在设计阶段，建筑师甚至还编撰了一本带有插图的故事书来给孩子们解释这个项目。

庞萨诺小学是为375名6至10岁的孩子设计建造的，拥有15个教室和专门用于艺术、音乐、计算机、语言和科学的教室，以及体育馆、餐厅和图书馆。

教室是孩子们待得时间最长得地方，要尽可能保证良好的朝向，因此，教室都面向东南或西南。

学校的设计遵循可持续性和节能原则，由于良好的方位、厚实的绝缘材料、屋顶的绿化和精巧的技术（地热、光伏板、自然通风的烟囱和楼与自动化系统），学校每年能耗仅为 $3.6 \text{ kW} / \text{m}^3$ 。包括家具在内建造成本为 $960 \text{ 欧元} / \text{m}^2$ ，符合意大利法律所规定的A+级标准。

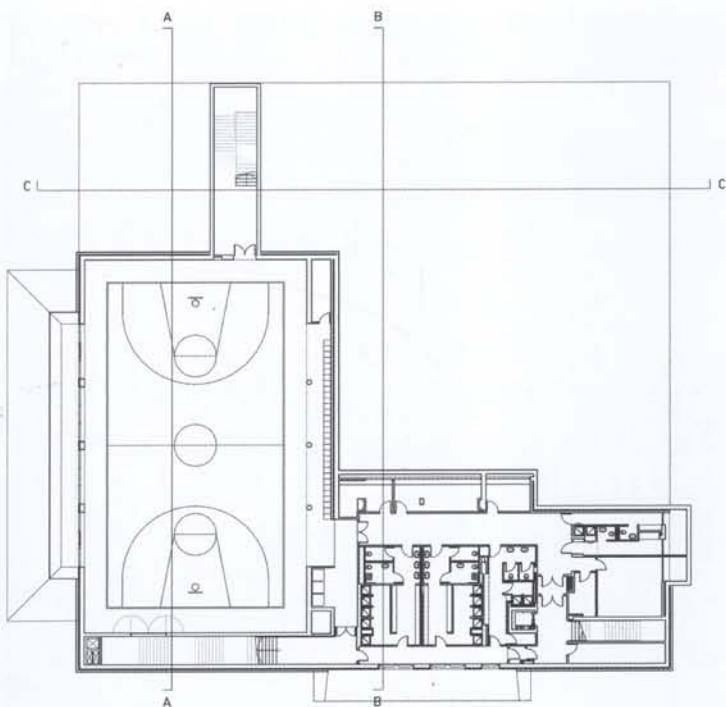
从能源社会性、成本控制方面讲，小学是一座可持续性建筑。

能源：庞萨诺小学每年能耗仅为 $3.6 \text{ kW} / \text{m}^3$ 。

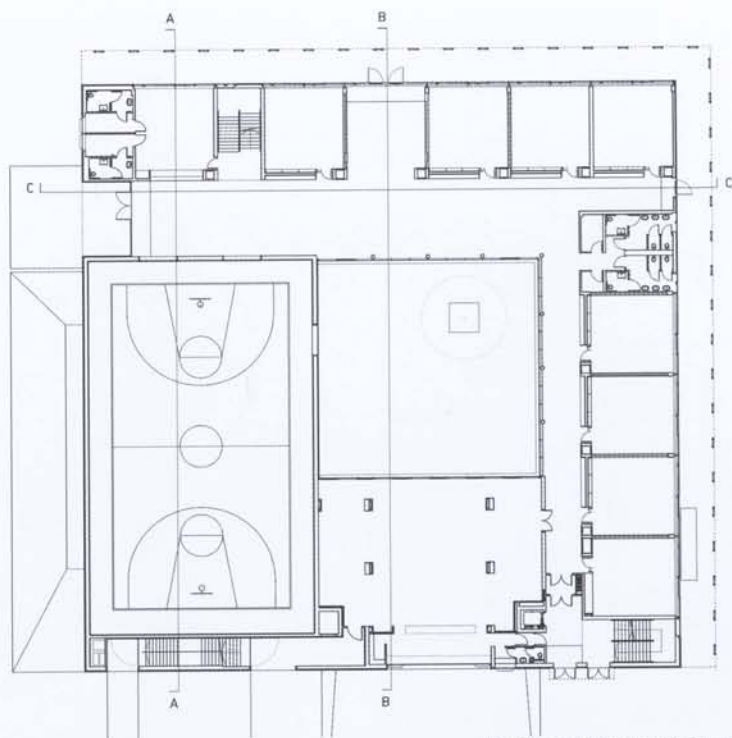
社会性：孩子们和老师们参与了设计过程。

成本控制：包括家具在内建造成本为 $960 \text{ 欧元} / \text{m}^2$ 。





地下层平面图 UNDERGROUND FLOOR PLAN



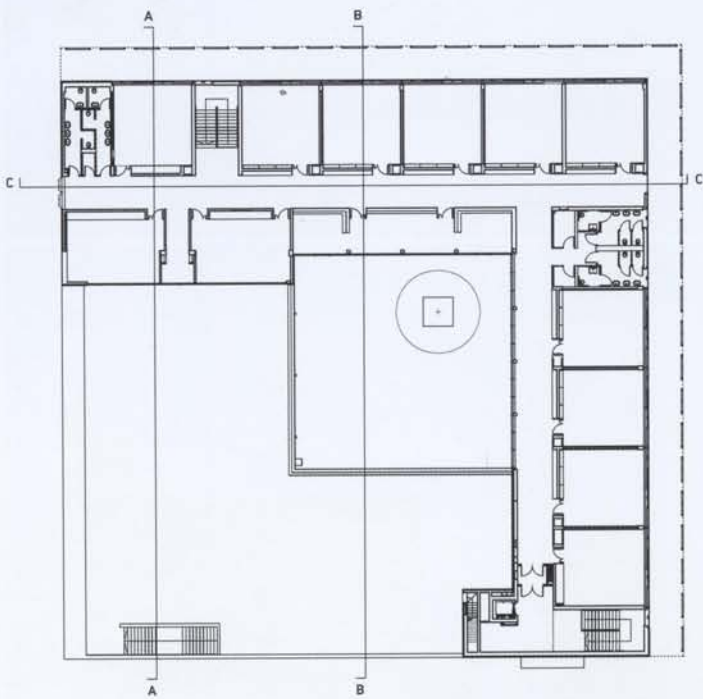
一层平面图 FIRST FLOOR PLAN



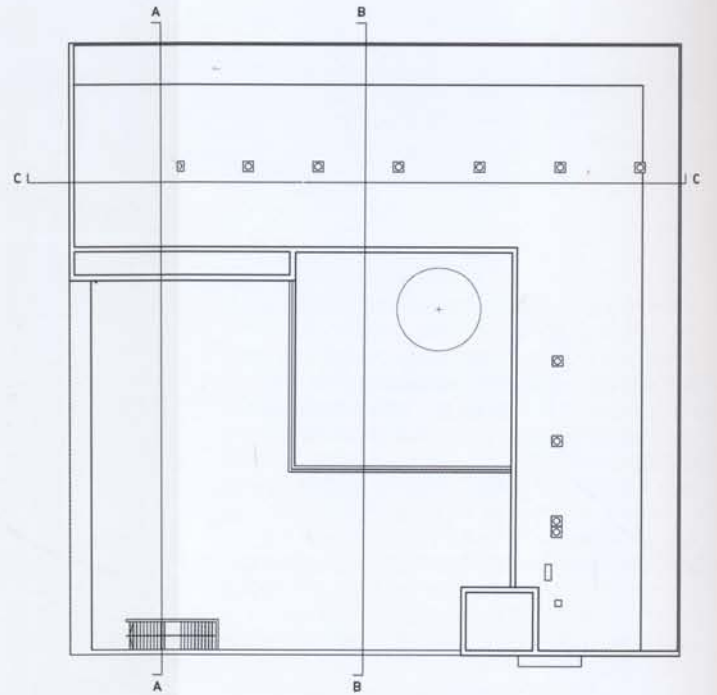
Inside the sprawl city which destroyed the Veneto Region, Ponzano Primary School is a small clot: part of the building (the gym space) is in fact accessible by everybody after the school time. In this sense the school becomes a meeting place for the people of Ponzano community.

Collective spaces are very important in this school project both in the plan concept (all spaces are gathered around a central square, memory of monastic cloisters, which, in the past were the places of knowledge conservation) and in the section concept, as all spaces face each other (though maintaining their specificity like the classrooms which are opaque until cm 130 and above a glass lets children show their work to everybody) reflecting on transparent and colored walls. This complexity reminds the Veneto model of industrial districts where people are incited to learn from each others exchanging experiences.





二层平面图 SECOND FLOOR PLAN



屋顶平面图 ROOF FLOOR PLAN





The school becomes a "society building", a space of possible multiethnic exchange and comparison. It becomes a threshold, like it is "translation" in Glissant's words, a place were to keep together different languages in their specific meanings, were to keep together a landscape of memory and a landscape of contemporary.

In this project memory is represented by a remind to cultivation, the red colored "barchessas" of the Veneto Region (near to the Campo Baeza Ponzano Children which is read as a kind of Contemporary Villa). The contemporary is linked to Benetton Factorles and their culture of good design and philosophy spreading color democracy all over the world.

In this sense the school architecture becomes the scenography of a dream (of a story would the children say) where the main characters are the children together with their teachers and the community around the school. During the design phase the architects wrote and illustrated a story to explain the project to the children.

Ponzano primary school is designed for 375 children aged from 6 to 10. It has 15 classrooms and special classrooms for art, music, computer, language and science, a gym space, a canteen and a library.

On south-east and south-west elevation the classrooms face as they need to be as well-oriented as possible: in fact they are the spaces where children spend as much time as possible.

Sustainable and energy saving principles guided the design. Thanking to well-orientation, thick insulation, green roof and sophisticated technologies (geothermy, photovoltaic panels, natural ventilation chimneys, building automation system) the school consumes only 3.6 kwh/mc/year, corresponding to Class A+ of Italian law with a building cost of 960 Euros/ square meter including furniture. Ponzano primary school is a sustainable building in energetic, social and cost control meaning.

- Energy: Ponzano primary school consumes only 3.6 kwh/mc/year.

- Society: the design phase was partecipated with children and teachers.

- Cost control: The cost of the building including furniture is 960 euros/square meter.

