# IN GREEN! PUBLIC ARCHITECTURE

Architectures with Energy Saving, Low Carbon,
Environmental Materials, Technology and Reuse Ideas

绿色建筑・公共



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### Ponzano Primary School

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 gymnasium, a canteen and a library. In this project memory is represented by a remind to cultivation, the red coloured 'barchessas' of the Veneto Region. The contemporary is linked to the Benetton factories (which are in the plot nearby) and their culture of good design and philosophy of colour spreading all over the world. In this sense, the school design becomes a series of dream (of a fairytail would the children say) where the main characters are the children together with their teachers and the community around the school.

The design of the elevation is offered by a thin filigree. It sews together the roof and the ground and transforms the elevation in a deeper threshold designed by the shadows of the red bend pillars on the wood and glass wall inside the arcade where all the classrooms are open towards. The arcade is also the screen against the sun together with a system of rolling curtains (mounted on a metallic structure) which automatically unroll under the control of the BMS system. Another design topic is that of intervisibility. The architects are convinced that children can learn very well also copying one from the other (this is the reason why also the classrooms' walls are glazed and can easily become windows exposing the children's works. Due to his huge volume, the gymnasium has been set in the ground.

Ponzano小学专为6~10岁年龄段儿童而设计,可容纳375人。它拥有15间教室以及用于艺术、音乐、电脑、语言教学和自然科学的专用教室,另有一间健身房、一个餐厅和一个图书馆。这项建筑犹如威尼托区红色的"谷仓",给人留下勤奋育人的深刻印象。小区附近的贝纳通工厂以优秀的设计文化和色彩理念而享誉全球,更为学校带来现代化气息。在此意义上,学校的设计有如一连串梦想(或是儿童口中的童话),故事中的主人公就是孩子们和老师以及学校周围的社区。

学校的外立面呈丝网状。它像针线一样将屋顶和地面缝合起来,其红色折线形支柱在门廊的木料与玻璃上投下光影,使立面更有深度感,所有的教室均面向此门廊。该门廊亦作为遮阳的屏障,它带有卷帘系统(安装于金属结构上),会在楼宇管理系统的控制下自动展开。另一项设计主题是通视性。建筑师们认为儿童可通过互相模仿来学习,因此教室采用了玻璃墙,以便于展示孩子们的作品。由于建筑体积庞大,体育馆被设置于地下。

#### Name of Project / 项目名称:

Ponzano Primary School

#### Location / 地点:

Ponzano Veneto, Italy

#### Area / 占地面积:

4,102 m2

#### Completion Date / 竣工时间:

2009

#### Architecture / 建筑设计:

C+S Associati: Carlo Cappai, Maria Alessandra Segantini

#### Landscape / 景观设计:

C+S Associati

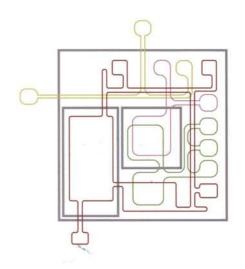
#### Photography / 摄影:

Alessandra Bello,

Pietro Savorelli

#### Client / 客户:

Comune di Ponzano Veneto, Ponzano Patrimonio e Servizi

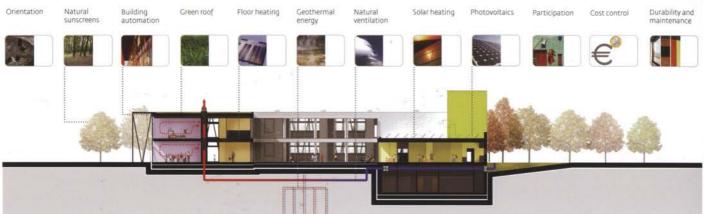


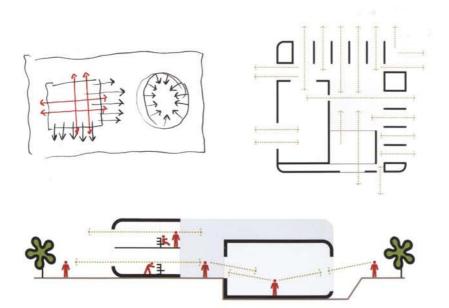








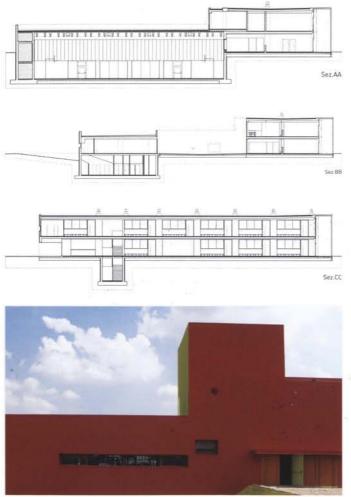


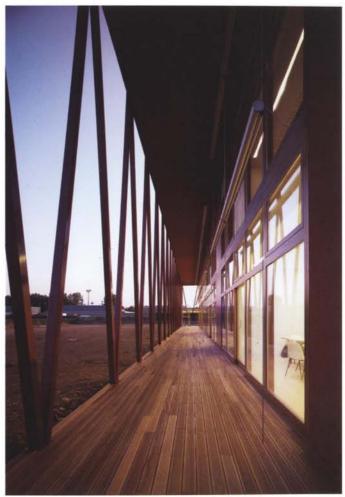


The classrooms where the children spend most of their time face south-east and south-west so as to improve their daylight exposure. Thanks to a judicious orientation, a thick insulation, a green roof and sophisticated technologies (geothermal heating, photovoltaic panels, natural ventilation chimneys, BMS: building automation system) the school consumes only 3.6 kWh/mc/year, reaching the Italian Class A+ efficiency rating with a building cost of only 960 euro/m² including furniture: a proof that the very strong economic and functional requirements of an educational building are compatible with energetic efficiency and high quality interior spaces.

供孩子主要活动的教室朝向东南和西南方向,这样可以为室内增加日照。由于有明智的定位、较厚的保温层、绿色屋顶和复杂的技术(地热采暖、光伏板、自然通风烟囱、BMS,即楼宇自动化系统),使学校平均年耗电量仅为每平方米3.6度,已达到意大利法定的A+级标准。建设成本包括家具在内,每平方米为960欧元,这证明一项对经济与功能有强烈需求的教育设施同样可以达到高效的能源利用和拥有高品质的室内空间。



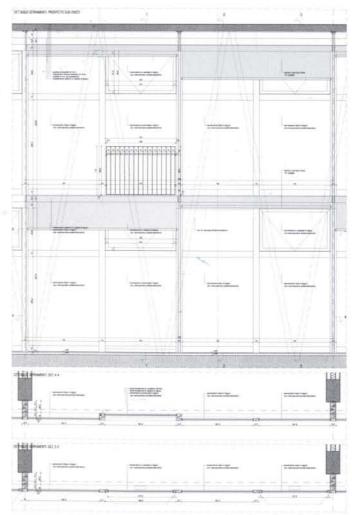






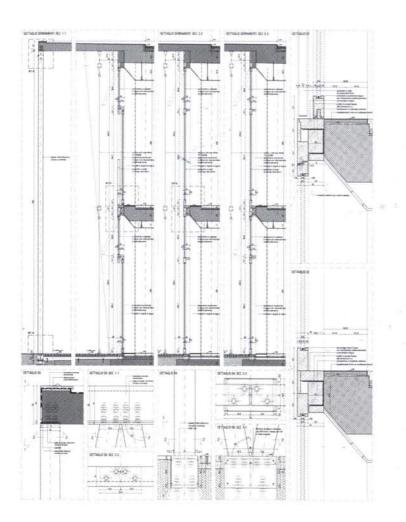






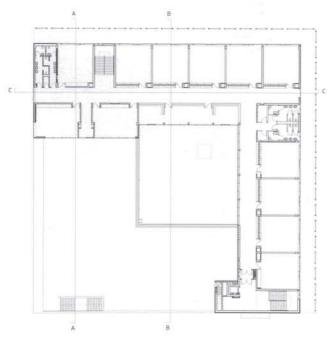


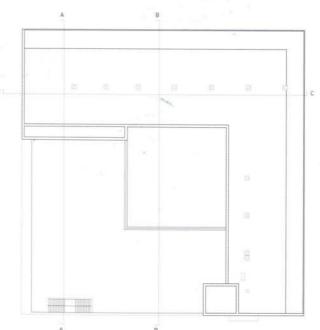








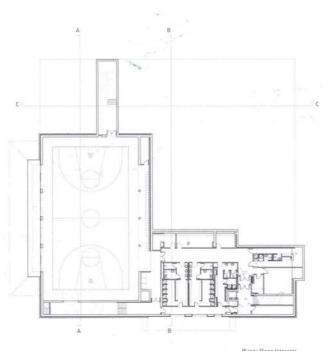


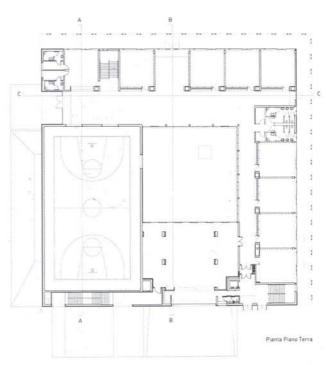


Pianta Piano Primo

Pianta Copertura







#### BDP

Add: 16 Brewhouse Yard, London EC1V 4LJ, UK Tel: +44 [0]20 7812 8000; Email: enquiries@bdp.com Web: www.bdp.com

BDP is the largest interdisciplinary practice of architects, designers, engineers and urbanists in Europe.

BDP works closely with users, clients and the community to create special places for living, working, shopping, culture and learning across Europe, Africa, Asia and Australia.

Founded in 1961, BDP now employ more than 1000 architects, designers, engineers, urbanists, sustainability experts, lighting designers and acoustics specialists in studios across the UK, Ireland, Netherlands, UAE, India and China.

BDP has a leading track record in all major sectors including health, education, workplace, retail, urbanism, heritage, housing, transport and leisure. BDP combines expertise across disciplines, locations, sectors and all major building types to deliver a truly integrated way of working – resulting in high quality, effective and inspiring built spaces...

#### **Belzberg Architects**

Add: 1507 20th St., Suite C, Santa Monica, CA 90404, USA Tel: (310) 453-9611; Fax: (310) 453-9166 Web: www.belzbergarchitects.com

Beyond providing exceptional architectural design, there is an inherent understanding that clients entrust their architect to act on their behalf as well as in their best interest, and Belzberg Architects carries out this ideology by integrating the client within the design process to produce an end result which is always more than what is expected. Having not only developed highly individualized designs but realizing said designs through unique and exemplary methods of professional practice is the group ethos. Each project at Belzberg Architects describes their latitudinous way of thinking, which coupled with an intensive look at the contemporary culture of learning and experiencing, defines their approach to the design of large-scale and complex environments. Simply put, they carry out an ideology of integration. Architecture is done at both the local and global scales and the ability to narrate with effectiveness the movement and use of a space brings the individual in and the architecture out.

#### BIG

Add: Norrebrogade 66d, 2nd floor, 2200 Copenhagen N, Denmark Tel: +45 7221 7227; Fax: +45 3512 7227 Web: www.big.dk

BIG is a Copenhagen-based group of architects, designers and thinkers operating within the fields of architecture, urbanism, research and development. BIG has created a reputation for completing buildings that are as programmatically and technically innovative as they are cost and resource conscious. In the architectural production they demonstrate a high sensitivity to the particular demands of site context and programme.

As designers of the built environment, the group test the effects of scale and the balance of programmatic mixtures on the social, economical and ecological outcome of a given site. Like a form of programmatic alchemy they create architecture by mixing conventional ingredients such as living, leisure, recreation, working, parking and shopping to realize imaginative and responsible solutions. Their philosophy recognizes the added value to be brought to each building site and the recipe of programmatic alchemy allows for the development of constructible

#### Bohlin Cywinski Jackson

Add: Wilkes-Barre, Pittsburgh, Philadelphia, Seattle, San Francisco, USA web: www.bcj.com Bohlin Cywinski Jackson, founded in 1965, has offices in Wilkes-Barre, Pittsburgh, Philadelphia, Seattle and San Francisco. The firm's work is known for exceptional design, for its commitment to the particularity of place and user, and for an extraordinary aesthetic based on a quiet rigor which is both intellectual and intuitive.

The firm's work ranges greatly in scale and circumstance. Its architecture is alive to the subtleties of place — man-made or natural, to the varied natures of people, to the sensibilities of individuals, to the character of institutions, and to the rich possibilities of materials and the means of construction.

Bohlin Cywinski Jackson has received more than 460 regional, national and international awards for design. In 1994, the practice received the Architecture Firm Award from the American Institute of Architects. The firm's work is published regularly in professional journals worldwide.

#### C+S Associati

Add: Piazza San Leonardo, 15, 31100 – Treviso – Italy Tel: +39.0422.591796, Fax: +39.0422.591796 Email: press@cipiuesse.it www.cipiuesse.it

Carlo Cappai and Maria Alessandra Segantini founded their architecture office C+S ASSOCIATI in Treviso, Italy, in 1994. They have been visiting professor in architectural design in several universities and they won many international awards. Their work is published in the most important architectural reviews such as: 2G (E), Abitare (I), AD (GB), Area (I), A+U (JA), Architectural Review (GB), AW (DE), Bauwelt (DE), Casabella (I), D'Architettura (I), Detail (DE), Domus (I), L'Architecture d'Aujord'hui (F), Loggia (ES), Spazio e Società (I) and The Phaidon Atlas of 21st Century World Architecture (UK). Their work was exibited in Venice (8th and 12th Biennale of Architecture and 50th Art Biennale), Milan, Paris, London, Essen, Vienna, Piran, Muenchen.

#### **Calder Flower Architects**

Add: Level 2 140 Myrtle Street, Chippendale NSW 2008 Australia Tel: +61 2 9698 9822; Fax: +61 2 9698 5937 Web: www.calderflower.com.au

Calder Flower Architects is a Sydney-based practice with thirty years experience in a range of community architecture including houses, multi-residential and aged-care developments. The practice is expert and active at all levels of the design delivery process from interrogation of the brief to construction administration. CFA is committed to promoting environmentally responsible and environmentally responsive design. The practice uses a variety of media to conceive, develop and test design work including sophisticated 3D computer modelling and gaming technologies. As well as a consistent inventory of current building projects, regular participation in theoretical design competitions allows the practice to continually test and develop new ideas.

#### **Christina Zerva Architects**

Add: 383 N. Glebe Rd, Arlington, VA 22203, USA Tel: +1 202 355 5229 Web: www.christinazerva.com

Christina Zerva Architects, founded in 1991, is a worldwide practice, working globally with project offices in Washington DC, Larissa and Belgrade. Christina Zerva leads the office with partners Paola Nena Nastasia Sakic and Milan Li. The practice works internationally on residential, cultural and commercial projects. With each project they explore new ways to ensure that the best results are achieved through integration of concept and context with the programmatic and functional essence of a building. Through the continuity of the design process and extensive research involved in the analysis of site, program, social context, emerging construction and contemporary technologies, the approach and methodology introduce new perspectives and new dynamics, reinvigorating both landscape and cityscape.

They provide full architecture, master planning, project management, interior design, product and furniture design services for both the private and public sectors. They use materials and sense of order that constitute the discipline and practice of modern architecture. The practice has initiated systematic research into a responsible approach on systems that reduce energy consumption and regulate harmful emissions. Their architecture seeks to reduce waste of energy, water and materials. By taking advantage of a system of holistic design using technologies, methods and products that not only protect your health and the world around you, but actually enhance the spiritual, emotional, and mental quality of your daily experience.

#### Coates Design, Inc.

Add: PO Box 11654 Bainbridge Island, WA, USA Tel: 206 780 0876 Web: http://www.coatesdesign.com

Coates Design, Inc. is gaining a sterling reputation for offering innovative architectural and sustainable design services for a wide range of projects. Coates pride themselves on consistently exceeding their client's goals, on both large and small construction projects. Their highly creative, qualified team members, with backgrounds in design, construction and the fine arts, transform complex design challenges into elegant solutions.

Award-winning Architect, Matthew Coates, AIA, is recognized by the U.S. Green Building Council (USGBC) as a LEED accredited professional. Let Coates Design, Inc. create sustainable and environmentally sensitive solutions for your specific design or building needs.

#### **Dattner Architects**

Add: 1385 Broadway, 15th Floor, New York, NY 10018, USA Email: Info@dattner.com Web: www.dattner.com

Dattner Architects is a New York City firm founded in 1964. The firm's work includes master planning and buildings for educational and cultural institutions, public agencies, not-for-profit groups and corporate clients, historic preservation/adaptive reuse, sustainable architecture, interior design, and spans from small scale interiors to large urban planning projects.

With each project, regardless of size or type, they aim to realize their clients' highest aspirations while respecting shared social responsibility and building within available resources. Since its inception, the firm has been characterized by the continuing involvement of the firm principals, from the beginning of the project through post-occupancy services.

#### David Hertz Studio EA

Add: 1920 Olympic Blvd Santa Monica, CA 90404, USA Tel 310.829.9932; Fax 310.829.5641 Web: http://www.studioea.com

The work of David Hertz Architects Inc, Studio of Environmental Architecture focuses on the design and construction of environmentally responsible residential and commercial buildings, and engages in multiple facets of design, including product design, furniture design, public sculpture, environmental consulting, as well as the research and development of resource efficient ecologic building products.

In 1983, Hertz founded Syndesis Inc, and invented the material manufacturing process of Syndecrete®, the innovative pre-cast lightweight concrete surfacing material. Hertz sold the technology in 2006. Evolving from a generalist nature of practice to a more specified studio has allowed for a comprehensive understanding of creative problem solving and the opportunity to view design challenges from multiple perspectives simultaneously.

S.E.A. has been located in Santa Monica for over the last 20 years, It is a small practice dedicated to design and green building, and employs about 10 people.