Dal segno alla costruzione La genesi dell'opera architettonica



SELECTED PROJECTS



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The first phase of the project was completed in 2007 with the inauguration of a central bridge spanning the railway line and the Autostrada, flanked by twin bridges that cross over roundabouts and access roads serving the Autostrada as well as the highway toll station. The new train station "Stazione Mediopadana" for the TAV (Treno Alta Velocità) highspeed railway line between Milan and Bologna is currently under construction and is expected to be in operation in 2013.











The layout of the Olympic Sports Complex was inspired by Greece's classical tradition of stoa-like entrance plazas and agoras, while the long span steel arches of the new stadium and velodrome roofs convey the city's desire to present the 2004 games as a modern event. The tubular steel structures of the Olympic Stadium roof span 304 meters and weigh 15,000 tons each and cover a surface area of 25,000 square meters. To accommodate the tight construction schedule the roof structures were constructed adjacent to the existing stadium and hydraulically pushed into place along rails. The choice of landscaping, colors and materials, including ceramic tile, echo traditional Mediterranean design, and add to the symbolic encounter between architecture, engineering and sports.











The new bridge is a landmark structure connecting the richly landscaped residential community of Sunnyside on the north side of the river with the modern urban downtown community of Eau Claire, located on the south side of the river. The 126-meter long (413 feet), 8-meter wide (26 feet) with a total height at 5.85 meters (19 feet) bridge structure is embedded as a sculptural, yet mathematically-derived element into a naturally landscaped surrounding and its sculptural appearance generates a striking contrast with the surrounding landscape.









Calatrava adopted the strategy of giving a volumetric treatment to the roof and walls — physical limits of the landscape outside and the winery within — so that continuity between the two spaces is achieved through the "static movement" of the enclosures. Two 196-meter-long concrete, load-bearing walls, placed 26 meters apart, trace a sinusoidal shape in both plan and elevation. The roof, composed of a series of laminated wooden beams, supported on the staggered sinusoidal cornice of the lateral walls, is treated as a continuation of the facades. The result is a ruled surface wave, which combines concave and convex surfaces as it evolves along the longitudinal axis.







The Liège-Guillemins TGV Railway Station celebrates movement, openness and transparency. The station creates a sense of place reminiscent of Victorian-era stations and symbolizes the city's renewal. Built above five active rail platforms and nine tracks, the 35-meter-high, 160-meter-long vaulted station is a major hub for high-speed trains that provides a scenic alternative for leisure travelers, enhances the efficiency of business travelers and, most importantly, shortens the travel time between England, France, Germany and the Benelux considerably.







The dramatic form of the 5,600 square meter railway station resembles a bird at the point of flight and is envisioned as a symbolic gateway to the region of Lyon. The 1,300-ton roof of the main hall measures 120×100 meters, with a maximum height of 40 meters and span of 53 meters. The hall accommodates ticket offices, retail shops, restaurant facilities and access via elevated galleria to and from the airport.







Turning Torso is a mixed-use residential tower in Malmö's Western Harbor that serves as a symbol of the revitalization of an important urban area from a decaying industrial zone into a thriving seaside neighborhood. Based on the Turning Torso sculpture executed years prior, the building is composed of nine cube units with triangular tips. Each unit houses five floors, serving as a 'sub-building'. At a height of 190 meters, Turning Torso is the tallest residential building in Sweden and the second tallest residential building in Europe.



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Seeking inspiration from nature, the moveable wing-like sun screen atop the Milwaukee Art Museum's reception hall landmarks the addition as one of his most remarkable urban interventions in the United States in a generation. The 115-ton steel brise soleil consists of two equal wing elements formed by 36 fins whose lengths range between 8 and 32 meters. The vaulted, steel and glass structure has become the signature element of the Quadracci Pavilion and a symbol of the city.







The form of the building may be summed up, according to Santiago Calatrava, by the image of a bird released from a child's hands. His first major design decision for the WTC Transportation Hub was to conceive the building at street level as a freestanding structure. It is situated within a landscaped Wedge of Light plaza that has been conceived through the recreation of Fulton and Dey Streets, west of Church Street. The building is angled to sit along the southern edge of the Wedge of Light described in Daniel Libeskind's master plan for the site. Among its principal benefits, this treatment of the site opens a quieter space—a kind of pause—amid the dense buildings that are planned for Ground Zero and creates a link in a procession of green spaces, which will extend down Park Row from City Hall Park to the churchyard of St. Paul's, then through the WTC Transportation Hub plaza to the garden of the Memorial.









As only the fourth bridge to be built over the Canal Grande since the 16th century, the 80 meter spanning Quarto Ponte bridge is a landmark within the unique urban fabric of Venice. The steel arch structure varies in width along its 101 meter overall length from 5.39m at either foot to 9.38 meters at the mid-point and rises from a height of 3.2 meters at the spring point to 9.28 meters at midspan. The bridge provides commuters, visitors and residents with a panoramic view of the city as well as a renewed appreciation for both the history and future of Venice.







The ethereal structure of Zurich University's new Law Library seemingly floats over the intimate and serene entry courtyard of the existing historic structure. Capped by a glass dome and operable solar shade, the sky-lit atrium maximizes daylight in the winter and minimizes excessive heat gain in the summer. The Law Library is a respectful and sensitive intervention within a historic context that creates a beautiful, functioning space for students and faculty.





