

PROGETTI E CONCORSI

The first housing units are being occupied in the residential district

Hadid's "spaceships" in the Citylife area of Milan

A fleet of spaceships is standing out in the new Milan district Citylife, with seven residential buildings designed by Zaha Hadid. With their smooth and polished surfaces, different heights and extreme technological solutions, they are one of the great stakes of Milan's redevelopment projects under way. The first apartment occupiers are completing notarial deed paperwork and moving in; by the end of the year, the whole residential complex will be ready as designed by Anglo-Iraqi architect Zaha Hadid, with façades built by Permasteelisa. Nearly thirty-seven months were necessary to supply reinforced concrete structures with the elegant wood and aluminium panelling. This hard, craftsman like work on the building site is the rival attraction to the previous standardized activity of building apartments with strict irremissible "Class A" constructive characteristics, with an interior hiding radiant panels for cooling and heating systems in the false ceiling, using ground water. So, while gardeners are completing bits and pieces of work in the inner yard, the first features standing out of these new designer housing units are the halls of each building oozed with technology, something halfway between a luxury cruise ship with its wooden details and a spaceship with polished metal parts, i.e. aluminium. The seven buildings thus develop similarly by preserving their global consistency, while stressing at the same time the idea of movement in the whole project, with housing units not perfectly aligned, from the first building having 5 floors, up to the tallest one reaching 14 floors, searching for repetitiveness without being tiresome.

The logistics and engineering challenge

A tailor-made suit for Hadid's houses

2.5 million pieces of aluminium were fitted by Permasteelisa in Milan's residential complex. 70% of the housing units have been completed, the first apartments were occupied in September

If it had to be stretched on a surface, this tailor-made suit would extend for 30,000 square metres to which an additional 12,000 should be added for the parapets. The residential complex of Citylife designed by Zaha Hadid with façades supplied by Permasteelisa is a logistics and engineering challenge for a building site where precise onsite work was absolutely necessary to assemble and check 2.5 million pieces fitted on a kind of huge open-air workshop in the sky of Milan. Arriving at a building site and panelling a built structure just like Permasteelisa is completing, is nothing extraordinary, but dealing with such a huge residential complex is definitely less frequent. What is more, with 2.5 million pieces to be fitted like in an enormous Meccano game, the bulk of the work had to be carried out in the Citylife building area itself. Each one of the aluminium pieces has its own code assuring precise assembly, but further complications may come from the fact that 60% of the pieces are unique, whereas only 40% are repetitive. This is the scenario in which the technical staff had to work for more than three years within Hadid's residential complex. «The job was very demanding on this building site – as commented by Davide Mangini, Permasteelisa's project manager – you have to work simultaneously on 7 buildings, setting priorities on the basis of the progress of sales. In such condition, the most difficult aspect was logistics, with 130 workers on site, plus supervisors and 2 equipment warehouses. Paradoxically speaking, a tower has a more easily foreseeable organization. We have now completed nearly 70% of the buildings and, after 35 months of work, the first apartments were occupied in September ». As far as construction details are concerned, façades have got three "skins", with the innermost layer being a straight and curved grid of aluminium extruded sections. Then there is a structure of integrated aluminium bands and, finally, the outer layer is a mat-finish ventilated panelling of painted aluminium and wood. The bearing structure, instead, is a skeleton of hot-galvanized steel connected to the concrete floor by means of a system of slots and small blocks. The cedar wood slat lining is pre-assembled and mechanically anchored to the main frame. The assembly of the parapets is extra work partially carried out on site.

«There was the problem of non-conforming pieces – continued project manager Davide Mangini – with errors of geometry, there weren't so many of them, about 2%, but they required a sort of emergency intervention team on site to fix them. These pieces often resemble the bodywork of a car, so we've got 5 panel beaters always available for additional touch ». So there is aluminium on one side, but wood on the other to give warmth to the façades. Canadian cedar wood was chosen for that because this wood is ideal for external use and it fades naturally with time; other types of wood would have required frequent treatment, whereas here natural wash (rain) is enough for several years. «The idea was that the housing units should give a sense of homogeneity – said architect Maurizio Meossi from Zaha Hadid's office – but it also had to highlight differences and evoke a sense of movement with gradual elevation from a 5-storey building to a 14-storey one by avoiding repetitiveness while also maintaining consistency. This characteristic finds expression in the façades looking inward, where wood is predominant and evokes the warmth of a home. In the end parameterization could be applied to approximately 60% of the buildings, unfortunately we did not reach 100%». To complete the whole project, the first portion of a public park is being created in the area between Hadid's residential complex and Libeskind 's neighbouring one, to be ready by December 2013. If we widen our glance to consider the whole Citylife project, we will be able to see that the Isozaki Tower has reached and exceeded in height the 20th floor, out of 50 floors in total scheduled by 2015. As for the Hadid Tower, excavation work for the foundations is under way (building to be delivered in 2016) whereas the final project for the Libeskind Tower is being completed (to be delivered in

2017). As far as the other residential units are concerned, housing units designed by Daniel Libeskind are being completed in via Senofonte and Spinola, therefore the first months of 2014 will see further 230 notarial deeds completed.

CREDITS

Building surface: 38,000 sqm GFA

Client: CityLife Spa

Main Contractor: Tre torri contractor/City Contractor

Beginning of the project: 2004 (bid for tenders)

Beginning of work: July 2009

End of work: December 2013

Architects: Zaha Hadid and Patrik Schumacher (Project manager Gianluca Racana.

Project architect: Maurizio Meossi)

Structural project: Msc Associati, Milan (Danilo Campagna)

Systems: Hilson Moran Italia

Architectural envelopes: Permasteelisa

Interiors lobbies: Bazea

Marble floors: Bosisio

Wooden floors: Antonini Legnani

Gardens: Peverelli

THE ARCHITECT'S OFFICE

Zaha Hadid Architects is based in London. The Citylife project has been supervised by an Italian team in Milan.

The project by Zaha Hadid Architects for Citylife residences has been entirely supervised by an Italian team: project manager Gianluca Racana from Hadid's office and project architect Maurizio Meossi, who has been directing the artistic supervision on the building site since its start, together with a team of five architects. «Daily monitoring of building activities is, indeed, a fundamental task to assure the qualitative result of the work – say the designers – also through constant dialogue among several actors in the building process ». Citylife is Hadid's second built project in Italy after the Maxxi art gallery in Rome, next on the list is the Maritime Terminal in Salerno. The Afragola high-speed train station remains a distant dream.