

2013 On Site Review Report

4058.MOR

by Shahira Fahmy

Mohammed VI Football Academy

Salé, Morocco



Architect

Groupe 3 Architectes

Client

Association Académie Mohammed VI de Football

Design

2007 - 2008

Completed

2010

Mohammed VI Football Academy

Salé, Morocco

I. Introduction

Providing intensive football training and a school education to around 50 13–18-year-olds, the Academy is designed to encourage both focus and a sense of community. It is arranged like a traditional *douar* (hamlet), with a central "village square" around which stand five buildings respectively accommodating administrative, sports, teaching, lodging and catering functions. Each has a central landscaped patio for relaxation. The patio walls are each painted a colour that reflects an aspect of Morocco, while the buildings' massive exteriors are sober white. Local ochre earth ties the complex to its environment, and is textured with gravel, river stones, concrete paving and timber decking.

II. Contextual Information

A. Brief historical background

The Mohammed VI Football Academy is a private academy that offers education, schooling and football, initiated and partially financed by personal funding from the King of Morocco in 2006, with the aim to raise the ranking of national football to the top of the Africa charts and compete at international level.

In the past two decades, Morocco's football status has been deteriorating, suffering from low rankings internationally. The milieu is dominated by clubs that have two objectives: gaining more money and more matches, and feeding off both (sponsorships to recruit players from Senegal, Cameroon, the Ivory Coast and their so called training centres, which are merely admission classes/clubs, offering young men very poor training in quality and quantity: 1500 registrations per year, 200 players per pitch, and for 250 EUR (327.710 USD) per year. In addition, the standards of the educators has generally dropped: a lot of the more educated, knowledgeable and experienced trainers have left the country for better opportunities elsewhere, while others accept *baksheesh* (bribes) from parents so that their young ones play more. In such a context nothing is for the good of the young person and only a minimum service is offered. A new model had to be found: a private training centre for Moroccan football.

The Mohammed VI Academy – inaugurated in early 2010 – today, after two and half years, holds a ranking of 10th internationally and 6th at the European level amongst training centres. Mohcine Benyacoub, the client/royal representative, recruited Nasser Larguet, a trainer of 25 years' experience in France. Larguet accepted the offer and moved back to Morocco to manage the Academy. To select the first batch of young trainees, Larguet started off with a rigorous recruiting process, went out to villages, neighbourhoods and the Sahara, organised matches to be played on any ground available – streets, *harah*, *sahar* – and selected from a group of 11–13 years old, with the proviso that he needed a three years' minimum training programme until they reach 18 years old.

Today, he has 81 youths resident at the Academy, 70% of whom come from poor families; here they live, sleep, eat, go to lessons, do football training and have medical care if necessary. For Nasser Larguet this formula offers education, schooling and football training, with future prospects in the social, sports and economic dimensions.

Today, some promising data has already emerged: the first nine graduates (residents) of the Academy are joining national and international clubs – six joined the first division teams of Morocco, the other three joined or are on the verge of joining clubs in France (two to Niort and the third to LOSC). Due to the limited number of trainees that the Academy can take in – a few very lucky ones – Nasser Larguet was keen to overcome this limitation by creating annexe structures outside the Academy with the aim of covering all Morocco. Today he has already established eight annexe structures: Casablanca, Fez, Kenitra, Laayoune, Marrakesh, Agadir, Tangiers and Tétouan. These federal centres are linked to the Academy, comprising tutors and trainers with the main roles of selecting, preparing and training children from 9–12 years old to a pre-Academy level. At the end of this phase a few will be selected by the Academy and others will join other clubs.

On another note, the Academy is a fully private structure (school); it is similar to a club; it embraces championships but without a having a flag team (league); all its players are available for the national team; and the federal centres are non-physical structures.

B. Local architectural character, including prevalent forms and materials

The project is located in Salé, on the right bank of Bouregreg River, opposite the capital Rabat. Salé is one of the oldest cities on the Atlantic coast, Chellah/Sala Colonia founded by the Phoenicians; today it is sadly known for its overcrowded neighbourhoods and extreme poverty, in contrast to the rest of Morocco.

The project is in close proximity to Sala Al Jadida and on the peripheries of Salé. The site is dominated by open spaces and agricultural land with scattered, mainly residential buildings. The use of a local stone – *pierre de Salé* – is prevalent in the traditional typologies.

C. Climatic conditions

Salé has a Mediterranean climate: warm to hot, dry summers and mild to cool, wet winters. Summer months last from June to September and winter from December to March. Salé had heavy rains during the 2012–13 winter.

D. Immediate surroundings of the site, including architectural character, access, landscaping, etc.

The Mohammed VI Football Academy project is located on the plateau of Salé, near Sala Al Jadida. The site is an agricultural plateau and it is surrounded by a few industrial facilities, farmland, occasional residential *douars* (hamlets) and, most notably, the new Technopolis Park covering 107 hectares, a new technology, business, industrial and training park. More precisely:

- to the north-east, beyond the bypass, is the new city of Sala Al Jadida;
- to the south, the periphery of the plateau borders the valley of Bouregreg;

- to the east, the Moulay Abdellah dam, a tap water reservoir for the neighbourhood;
- to the north, Technopolis.

E. Topography of the project site

The project is situated in a trough on a roughly flat site, which neighbours ground that becomes a marshy landscape (daya) during the winter.

The nature of the soil is mainly clay and marl, which has posed concerns since the opening and operation of the project regarding the preparation of land and method of construction used.

III. Programme

A. History of the inception of the project

In 2006 a royal decree was issued to raise Morocco's football ranking. Royal representative Mohcine Benyacoub assigned Nasser Larguet as director of the project, and he took part in the process from early on, from the phase of selecting the site, to articulating the programme and all the way through the design process and final execution on site.

In 2007 two sites were proposed for the project: one was in the forest and the other was where the project is located today. The first raised concerns of accessibility, topography and preservation of trees, while the later reflected quite the opposite and was finally selected.

Once a decision was made, the design process started immediately, with a young architecture firm assigned the job.

The initial brief was for a one-building typology that would house schooling, lodging, catering, sports activities and so on, following the model of European football academies.

However, the architects took a completely different view: a concept of a traditional *douar* (hamlet) organisation, with a central "village square" around which stand five buildings reflecting the different functions: accommodation, administration, sports activities, schooling/teaching, lodging and catering functions, allowing for these specific experiences to take place individually while providing for a flow of communication through the central square.

Their idea was approved and the construction process started. In March 2010 the official inauguration of the Academy took place with the attendance of His Majesty King Mohammed VI and the sponsoring and financing partners of the project: to name a few, BMCE Bank, Maroc Telecom and Wafa Insurance among others.

B. How were the architects and specialists chosen?

The architect, the project manager and the engineers were chosen directly by the client, and the contractors were selected via an open tender procedure.

C. General programme objectivities

Designed with the vision of the best international training centres in Europe, the Academy is willing to offer an educational and sports infrastructure that intends to provide its residents with a "sport study" type of curriculum. Recruited according to their potential technical skills and physical potential, young people will benefit from an intensive sports training programme and personalised schooling path, both taking place at the Academy.

Subjected to a very demanding daily-life discipline, the players of the Academy are surrounded by qualified educators who demonstrate and provide, in addition to their technical expertise, the values of work, exemplary role models and excellence, offering for young people a perspective of a better education and a future even beyond sports.

Beyond this stated objective, however, the aim of the project – as specified to the architects following the initial kick-off meeting – was to solve the following issues:

- how to design a functional and efficient tool that can compete with the training centres of the best European clubs by adapting it at the same time to the cultural and social specifics of the population concerned?
- how to create an environment that enables these activities to happen in rich, diverse and formative daily life was at the core of this project initiative;
- how to welcome these young people in a new yet familiar place?
- how to organise areas for community life and a rich, diverse and formative daily life?
- how to create the conditions for future use?

As for the architects, they said: "We were very lucky as the end user himself joined us very early in our research and brainstorming; he was the future director of the site who was recruited well in advance so as to participate in the project as it evolved and oversee its development."

D. Functional requirements

The project consists of five main blocks or activities and a sixth building:

- administrative block: a reception hall and information, a conference room (100 seats) and administrative offices;
- sports block: a gym, 4 changing rooms and lockers, a health centre with physiotherapy and spa bath therapy;
- educational block: 10 classrooms for 10 students, one language classroom, one computer classroom and administration:
- lodging block: 30 double bedrooms, 4 individual rooms, 2 dormitories for 8 people, a foyer and a playroom;

- catering block: dining room for 100 covers, an equipped kitchen and a cafeteria;
- mosque: prayer room and ablutions.

IV. Description

A. Building data

The Mohammed VI Football Academy project was sited on a 25-hectare plot. Nearly half of the land is dedicated to the training centre – the Academy – and the rest is shared between a football club/school open to children from Rabat-Salé while the remainder is set aside as reserve:

•	total site area	2,500,000 m ²
•	ground-floor plan	$6,000 \text{ m}^2$
•	total combined floor area	9,000 m ² (including basement, ground floor and
		upper floor)

Areas of the terrain:

•	global terrain	22.5 ha
•	terrain of the Mohammed VI Football Academy	11.7 ha (117,000 m ²)
•	terrain of the football school 6-12 years old	$3.5 \text{ ha} \ (35,000 \text{ m}^2)$
•	landbank (land reserve)	$7.2 \text{ ha} \ (72,000 \text{ m}^2)$

Built up areas:

•	prayer room	108 m ²
•	educational pole	726 m²
•	sports pole	1,686 m ²
•	lodging pole	2,120 m ²
•	catering pole	1,030 m ²
•	administrative pole	753 m²
•	total	6,423 m ²

B. Evolution of design concepts

1. Response to physical constraints

The site is buffered from the nearby surroundings, along the north-western perimeter, with a cluster of relatively old eucalyptus trees that act as a filter between the outside world and the heart of the project. The architects, along with the landscape designer, preserved these trees and planted new ones in between, designating the area as a transitional space and gateway into the project.

The climate was addressed in the physical configuration of the building layout: interior spaces/courtyards, facade openings, increasing the ventilation and the natural light in the main spaces.

The site, as mentioned in other sections of the report, is a trough of a roughly flat site, a point of depression, which becomes very marsh-like (*daya*) during the winter, with unsuitable soil properties (clay/argil and marl) that today are posing concerns for the structural system and the buildings' settlement.

After the appearance of many cracks on the facades of the five buildings, Nasser Larguet with the architects called the project managers and structural engineers to conduct an investigation of the situation. Once they started, they had to evacuate a partial section of the lodging block in order to reinforce it securely and safely; now they are in the process of treating the problem case by case. An overall understanding has not yet been developed. Generally, their first assessments show that the cracks are in the masonry work and not in the structure of the buildings. This is due to a badly conducted preliminary analysis of soil properties. Moreover, the existing method of the structural systems is not reacting favourably to soil expansion properties.

In contrast, the landscape design and implementation has followed a proper preparation of the land, removing the layer of clay soil and replacing it with a mix of sand and gravel; in addition, special drainage and irrigation systems were specified for the football pitches and the landscapes areas.

2. Response to user requirements, spatial organisation

The project draws on the rural connotations of the agricultural bed on which it is located.

In the context of the open landscape/fields, it looks like a *douar* (hamlet) among others, introverted and minimally penetrated.

Its relation to the outside world is filtered through an existing array of eucalyptus trees along the north-western fringe of the site; once this filter is passed, the "village" is revealed, leading to the heart of the project.

The project consists of five buildings organised around a central square:

- the administrative block;
- the sports block;
- the educational block;
- the lodging block;
- the catering block.

Each of these blocks is organised around a patio that enables the residents to pull out temporarily from the life of the village and to "live in" a place with a more specific nature, whose relation to use is more intimate, more domestic and less institutional. The developing of the inner gardens designed by Mounia Bennani, along with the creation of chromatic moods for the hearts of the buildings, which contrast strongly with the plainness of the white volumes perceived on the exteriors, is a call for each to adhere to its own identity and confirm its use.

These chromatic tendencies, diffused with natural light, are barely glimpsed from the exterior, yet immediately arouse curiosity.

3. Purely formal aspects

According to the architects, their vision is about a whole fragmented into parts. The whole is the *douar* (hamlet-village) typology with a central heart, while the parts are the building units inspired by traditional home typologies.

These buildings are each differentiated by their functional roles. These functional identities are the main players in determining the relations between the building and the outside surroundings: open/closed, interior/exterior, white/colour, work/rest, introverted gardens/vast open landscape.

The exterior presents a composition of white, plain and massive surfaces, carefully pierced to respect light, thermal flows, wind and views. The massive white walls are interlaced with a local stone, pierre de Salé, an ochre earth tan that ensures the continuity of the buildings and ties them more to their environment. The material and colour of the stone organise the relation between the exterior and interior of the buildings, penetrating more profoundly in some, and tying a whole chromatic palette together: the grey gravel, concrete floors, white colour of the volumes and the greens of the landscape.

In contrast, on the inside each building has a patio, a central landscape for relaxation. The patio walls are each painted in a dominant colour that reflects an aspect of Morocco: the blues of the ocean or of Chefchaouen alleys; the ochre of the south; the greens of fertile plains.

4. Landscaping

The landscape design by Mounia Bennani is organised around four main families, with the objective of cost reduction:

- the peripheral areas are less or not managed, including the eucalyptus stands;
- the football grounds, where the investment and money are concentrated, due to their technical requirements and infrastructure (irrigation and drainage systems);
- the peripheries of buildings and borders are dominated by ground-cover plants that are very resistant to the climatic conditions, need minimal water and are very low maintenance. With their density and homogeneous characteristics, they accentuate the contrast with the white building volumes;
- the thematic gardens at the heart of the buildings, with their careful details and selections, follow a palette of atmospheres: a tropical garden, an Andalusian garden, a dry garden and so forth.

C. Structure, materials, technology

1. Structural systems

The orthogonal plan allows an even distribution of column grids, adopted all around the buildings, enhancing the flexibility of the spaces, encouraging manageable foundation loads and allowing the use of simple pad foundations with a few strip foundations. A column and beam system with some areas of flat slabs, the foundation depth is approximately 80 to 120 centimetres. The footings of each building are separate from the others.

The structural system is at present under investigation and study to review its stability and security in relation to the soil properties.

2. Materials

Structural members, and materials

As mentioned above.

Infill materials

Not relevant.

Rendering and finishes

A soft and balanced material and colour palette:

- white plaster walls;
- colour plaster walls in the interior: blues, greens and ochre/terracotta mix;
- local stone cladding pierre de Salé in ochre earth colour;
- darker palette for the floor coverings: greyish in colour;
- paved concrete for walkways, a grey stone for defining edges and curbs, gravel around the buildings and in the main square, and light grey pebbles for the main entrance;
- timber decking in the main entrance pathway.

3. Construction technology

Local skills and methods were used throughout. The innovation lies in the detailing and quality of the final construction, rather than relying on importing unusual trend-setting modern systems and materials.

4. Building services, site utilities

The architects allocated all services to an entity of its own, a one-floor building adjacent to the educational pole, buffered with an array of trees.

This separate enclosure allowed the electric-powered chillers and heating plant to be located in a single position. The plant rooms are thus isolated, clean and easily maintained without affecting the operations of the Academy.

D. Origin of

Technology

Mentioned above.

Materials

All materials used throughout the project are local, except for the timber-decking pathway in the entrance.

Labour force

Local labour forces were used throughout.

Professionals

Client: Association Mohammed VI de Football (Mohcine Benyacoub)

User: Académie Mohammed VI de Football (Nasser Larguet)

Project manager: Compagnie Générale Immobilière

(CGI – a subsidiary of CDG Développement)

Architect: Groupe3Architectes (Omar Tijani and Skander Amine)

Landscaper: MB Paysage (Mounia Bennani)

Engineers: NOVEC (a subsidiary of CDG Développement)

V. Construction Schedule and Costs

A. History of project design and implementation

• preliminary design: June 2007

provisional design: December 2007
contract signature: January 2008
final design: March 2008
tender documents: June 2008

• supervision of the work: July 2008–June 2010

inauguration: March 2010operation: September 2010

B. Total costs and main sources of financing

Initial budget:

buildings + covered field: 47,000,000 MAD (5,512,865 USD) landscape + fields: 63,000,000 MAD (7,389,585 USD) total: 110,000,000 MAD (12,908,830 USD)

Final costs:

buildings + covered field: 56,000,000 MAD (6,568,520 USD) landscape + fields: 74,000,000 MAD (8,679,830 USD) total: 130,000,000 MAD (15,248,350 USD) Iinitial funding was provided by His Majesty King Mohammed VI, and then other multinational companies and banks in Morocco followed to sponsor the project, including BMCE Bank, Maroc Telecom and Wafa Insurance among others.

C. Comparative costs

Not relevant.

D. Qualitative analysis of costs

- 6,000 MAD/m² (701.7/m² USD) for buildings only.
- the average cost for similar constructions in Morocco is between 4,500 and 8,000 MAD/m² (between 526.3 and 936.6 USD/m²).

E. Maintenance costs

Cost per year: 850,125 MAD (107,000 USD).

F. Ongoing costs and "life performance" of the building

Cost per year: 440,000 MAD (55,000 USD).

VI. Technical Assessment

A. Functional assessment

The Academy is extremely clean and tidy, and in conversation with the employees, residents and maintenance staff, it became very apparent that they are extremely pleased and happy to be working in such a wonderful environment and "prefer to stay there rather than go home", according to a few of the residents who also stay over the weekends – due to their long journey back home; they all much enjoy their time at the Academy.

The arrangement of the buildings around the central square is easy to understand and encourages both communication between the users and a clear sense of community. The self-similarity of the exterior of the buildings blurs the hierarchy between administration staff, trainers, maintenance staff, residents and educators. This becomes clear during the lunch break when all the personnel gather in a very light and spacious restaurant. The visibility from the administration mezzanine at both ends of the building is very successful: one overlooks the entrance path and foyer, and the other towards the football grounds.

B. Climatic performance

Natural light is a fundamental element in this project, creating, together with the colours and the planting, the quality and identity of each space. The majority of light comes through the internal

patios, but it is also captured by the rooftop skylights and the glazed facades, feeding natural light into the dining hall, classrooms, changing rooms and administration.

The increased height of the building and internal courtyards definitely maximises daylight, reducing energy use and thermal performance as well as encouraging natural ventilation. In addition, the installation of solar panels on two of the major flat roofs of the project ensures the production of sanitary hot water, in a context where residents and the sports activities in general require much of it.

C. Response to treatment of water and rainfall

The user has explained that the consumption of gas has been increasing recently, with the evolution of domestic needs and the spa-bath therapy basin, which is reflected in the rapid multiplication of the filling of propane tanks.

An increase of 39% of consumption of propane in two years equals an increase in the price of fuel of KG of 21.3% in the same period.

The initial budget of 120,000 MAD (14,118.88 USD) is not sufficient as per previous calculations and experience. This year, the client estimates an increase to approximately 186,000 MAD (21,900.28 USD). This is due to the obsolete condition of the infrastructure implemented, which is decreasing the efficiency of the production of heated water (with an estimated renovation cost of 118,000 MAD / 21,130.51 USD). Another option is to install heating pumps.

Regarding water consumption in winter – November to April – it is 100% for domestic use; in summer – May to October – consumption is three times more with a third going to domestic use and two thirds for irrigation purposes.

The sources of water are tap water, two water drilling rigs up to (75 m) and two wells (20 m). By the end of May, the wells are dry; by the end of July, the water drilling rigs are dry; tap water is used until October. In short, there is a lack of water.

As per water collection, there is a concealed discharge channel system all around the project and the football grounds' drainage system functions very well, although the major drawback, according to the user, is that these systems are not fully connected or integrated, which results in a huge loss of water.

The user/operator is considering the potential for recycling the water and integrating the system together in the future.

The patios, or "open" gardens, are also well treated, with controlled drainage systems that collect and direct the rainwater without flooding the gardens.

D. Environmental response

The project interior and exterior planting and landscape respond to the constraints of the site (zone of floods, soil properties of clay and marl with an impermeable nature, wind and so on) and to the functions of the different spaces. The objective is to achieve low management and low cost, yet to be integrated into the existing environment.

The landscape designer has managed to create a balance between developing an overall scheme of the site territory while paying attention to the intimate small interior gardens.

The conservation of the existing vegetation, as per the eucalyptus trees on the north-western side, was one aim that was reinforced with new planting. Following the same approach, native shrubs that exist all around the site and are characteristic of the Rabat-Salé region were also enhanced and planted by Mounia Bennani, the landscape designer. For example, there are hedges of "brise-vent de filao" (*Casuarina equisetifolia*) along the football grounds from the east; hedges of "Gsseb" (*Arundo donax*) in the north; and hedges of *Myoporum laetum* in the west and south. These plants are extremely resistant to a lack of water and flooding.

E. Choice of materials, level of technology

The majority of these issues have been discussed in other sections.

F. Response to, and planning for, emergence situations

In order to optimise the evacuation of water (floods) outside the site, a proposal was made early on for an exposed drainage system that directed all surplus water towards the lowest point, which is along the eucalyptus tree buffer. Unfortunately, these drainage routes were not fully executed, which leaves the site today with a few accumulations of water here and there, especially after the heavy rains of the recent winter season.

As Rabat and Salé are in an earthquake zone, the structural engineers took into account measures to protect the buildings against earthquakes. On the contrary, they obviously did not take such precautions regarding the reaction of the buildings with the soil; today they are in the process of studying the situation once more in order to find remedies to resulting problems.

The Socotec Group provided assessment of conformity to Moroccan fire regulations.

G. Ageing and maintenance problems

Cracks in the masonry are being treated with silicon injections. According to preliminary studies, these cracks are located in the masonry work and do not affect the structure of the building.

H. Design features

The majority of these issues have been discussed in other sections. It is clear that the Academy functions in a very efficient and pleasant manner. Regarding the coordination of spaces, pedestrians and vehicles, this has been approached by the designers in a "holistic" and "integrated" fashion. Testament to this is the general tidiness of the Academy. Externally the proportions of the buildings and their relationship to the site and open fields, such as the football grounds, mosque, service building and so on, have also been carefully studied, detailed and constructed.

I. Impact of the project on the site

The site is connected to a major route through a tertiary side road and service road on the site.

J. Durability and long-time viability of the project

Studies are under way to find a solution to the lack of water; one of the proposed solutions is to make the water drilling deeper, up to about 100 metres approximately, at a cost of 220,000 MAD / 25,847.10 USD (mortgaged over 13 months).

The users are also considering recycling the grey water (45 m³ of water/day consumed by students), treated and recycled for irrigation purposes; these proposals are today under study and analysis.

K. Interior design and furnishing

The furnishings are simple, minimal, with bright colours and the majority were prescribed or designed by the architects G3A (Groupe3Architectes).

VII. Users

A. Description of those who use or benefit from the project

The majority of these issues have been discussed in other sections. The users are: the administrative staff, the educators, the teachers and the residents.

Today there are 81 residents, from 13–18 years old; 70% come from poor to low-income families.

As Nasser Larguet said, a lot of effort and work focuses on the socio-cultural levels in order to educate the young men and help them integrate well into society.

B. Response to project by clients, users, community, etc.

1. What do architectural professionals and the cultural "intelligentsia" think about the project?

Regarding the architecture, it has been appreciated and published within the Moroccan and football press.

2. What is the popular reaction to the project?

The project has received its share of criticism and arouses jealousy in the football environment in regard to the source of its financing, which was in large part from the king's personal funds. Other clubs are frustrated: from their point of view, to emulate such a structure seems naturally utopian. They have accused the Academy with all sorts' of claims, one of which is that the Academy steals players from other clubs.

As for the young trainees, it is "the" place to be, where their hopes can materialise. Families, parents and kids dream of being part of the Academy.

The formula of taking care of their young ones from a medical, sports, educational and financial standpoint is a great privilege that many families seek.

3. What do neighbours and those in the immediate vicinity think about the project?

The project is relatively new. Both what it stands for and what it offers is still in the introductory phase.

VIII. Persons Involved

A. Identification of project personnel

There was a good team spirit among the people involved on the project. The collaboration and cooperation between the users and the architects lay behind its success.

Client: Association Mohammed VI de Football (Mohcine Benyacoub)

User: Académie Mohammed VI de Football (Nasser Larguet)

Project manager: Compagnie Générale Immobilière

(CGI – a subsidiary of CDG Développement)

Architect: Groupe3Architectes (Omar Tijani and Skander Amine)

Landscaper: MB Paysage (Mounia Bennani)

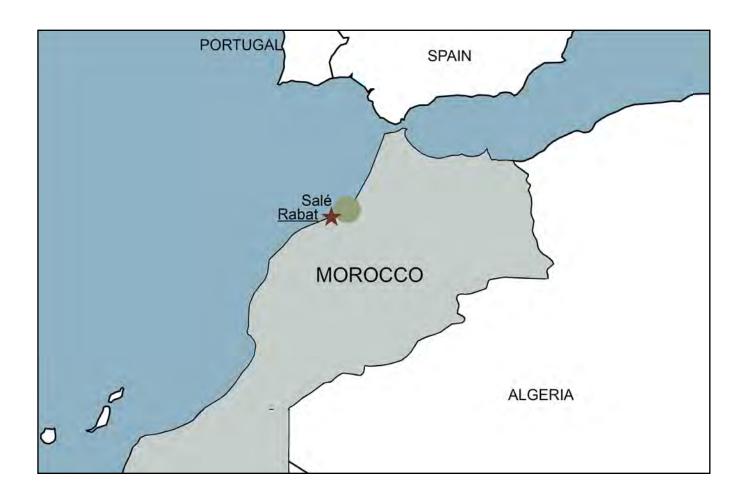
Ingeniers: NOVEC (a subsidiary of CDG Développement)

IX. Bibliography

List of Publications

"Reportage au sein de l'Académie Mohammed VI", Vestiaires, premier magazine consacré aux éducateurs de football, no. 44, November 2012.

Shahira Fahmy April 2013



Masterplan





The Academy consists of 5 differents buildings organised around a central square, reproducing the "douar" hamlet village typology with a central heart.

The administration block. Each building is differentiated by its functional role.





The student residential building entrance on the central square. The arrangements of the buildings around "la place carrée", is easy to understand, and encourages communications and a clear sense of community.



The path below the sportive block links the football grounds and the central square. The local stone "pierre de Salé" is interlaced with the massive white walls of the building..



Interior view of the Administration building. The majority of the light comes through the internal patios of each building, but it is also captured by the roof top skylights and the glazed facades, feeding natural light to the hall of the rooms.

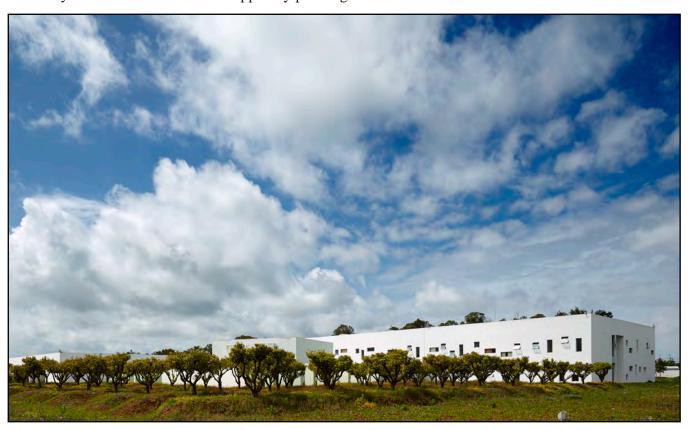
Patio of the education building. Each building has a patio, a central landscape for relaxation. Each patio has a different color that reflects an aspect of Morocco: blues of the ocean, ochre of the South, greens of fertile plains.





Students benefits of an intensive training sportive programme, but also a personalized schooling path which takes place inside the Academy.

The landscape around the building is made of land covering vegatation, which are resistant to climate conditions, with a minimal need of water and maintenance. The existing eucalyptus grove around the Academy was conserved and developed by planting new trees.





Rear view of the student residential building, in front of the mosque.

Room with windows opening on the central ble patio of the Sport building.





The increased height of the building and internal courtyards maximizes daylight, reducing energy use and thermal performance as well as encouraging natural ventilation, here in the refectory.

The covered football playground.

