2010 On Site Review Report

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by Wael Samhouri

Dowlat II Residential Building

Tehran, Iran

Architect
Arsh Design Studio

Client
Ali Nazemian

Design
2005 - 2006

Completed
2007

Dowlat II Residential Building
Tehran, Iran

I. Introduction

The Dowlat II residential building in Tehran, designed by the Tehran-based Arsh Design Studio, is an elegant, small mid-rise building that comprises four separate apartments. Its most visible and distinctive feature is a wooden grid facade punctuated with a variety of kinetic openings, extending the building's volume beyond its main envelope and, consequently, allowing unpredictable configurations. With this 3D design approach, the building attempts to counter the two-dimensional facade that is typical of mid-rise buildings in the city. The variety and vitality of Dowlat II results from the four different split-level apartments that vary in size and type. The split level design strategy has allowed the architects to cleverly bypass the municipality's building regulations and provide a roof garden for the upper apartment. Furthermore, the building is not only responsive to its users but adds a sense of excitement to the public street-scape it overlooks, and thus it has been voted the most likable facade in the city. Dowlat II is the second of a series of buildings designed along the same philosophy, Dowlat I, and the Khorsand apartment complex.

II. Contextual Information

A. Brief Historical Background

Tehran is situated in the north-central part of Iran, on the slope of the Alborz Mountain. Housing approximately seven million people, or about 18% of the country's population, Tehran is ranked among the 20 most populous metropolitan cities of the world. With over 86.5% of its population residing in urban areas and 13.5% residing in rural areas, the Tehran Province is the most industrialised and urbanized province in Iran.

Although the word 'Tehran' can be found in books dating back to the 10th century, it was but a village of numerous gardens in the distant past**.** The neighbourhood in which the Dowlat II project is built is known to have existed for over 100 years. It is located in one of the oldest districts of Tehran. Originally, this area in the north of Tehran had a series of gardens owned by affluent families. The gardens benefited from a network of traditional aqueducts called *ghanat* which allowed them sufficient water resources. Traditionally, the gardens contained recreational housing for the owners, as well as service corners that housed the permanent staff who took care of the gardens.

Property ownership is still mainly transferred by inheritance, and during the past few decades, in cases where a piece of land is inherited by multiple individuals, a common practice has been the division of the inherited lot to multiple smaller lots. Therefore, after two or three generations, although such divisions have been practiced, there would be a considerable number of very small lots - 100 to 300 square metres - all around the district. Throughout the years, aqueducts have dried out, and the gardens have disappeared. Yet, the area has been transformed into a sort of organic fabric, consisting of small lots and narrow streets. Initially,

the lots were owned by decedents of the staff who used to take care of the gardens but during the last decade, land speculators and little developers have identified the area as a promising zone for investment and as a result, these small lots have been purchased and developed into four and five storey walk-up apartments intended for the middle class market.

B. Local Architectural Character

Here, as everywhere, the prevalent built forms and local architectural character has been determined by the socio-cultural and political history of the place. To start with, during the rule of the Pahlavi dynasty, from 1925 to 1974, the government played an active role in the planning and execution of large scale civil projects and reconstruction plans, all of which were executed with great speed and determined the prevalent style of the period. From 1969 to 1974, under the reign of Mohammad Reza Shah Pahlavi, urban areas grew at unimaginable speed due to substantial oil income, and created the socio-political climate that led Iran to industrialisation.

With the urban growth came the urgency of addressing the question of housing on a national scale. The Iranian government first addressed the goal of large-scale investment in housing in the 1970s, and allocated a sizable budget for the housing sector. The goal was to provide instant housing; consequently, the magic solution was to resort to prefabricated or industrial housing, bypassing the government planning and architectural stages and negotiating directly with the contractor. This type of package led to the building of numerous four-storey walk-up units throughout the country.

In a parallel process, during the late sixties and early seventies, a generation of builders and real estate speculators appeared on the market. Their self-appointed task was to purchase vacant urban lots on which to build small, eight-unit, walk-up apartments, based on prototypical plans without the aid of architects. Since these speculators built up vacant urban land, they played an important part in filling the cavities in the urban fabric. As a result, their impact on the urban environment has been far greater than that of the professional architects. Yet, due to their lack of spatial understanding, attention to quality of design, and taste in the choice of materials, they helped to create one of the world's ugliest cities. Needless to say, the lack of an interested public or private sector robbed Iranian architects of clients, a situation from which the profession is still suffering.

Following the Islamic revolution, something else happened in the late 1980s which changed the landscape of the architectural profession in Iran. The end of the Iran-Iraq war and the death of Imam Khomeini brought the populist phase of the Islamic Republic to an end. Faced with a nearly bankrupt economy and an impoverished population, a major realignment was engineered by Ali Akbar Hashemi-Rafsanjani, who had been elected president in 1989. Labelled ‘the Reconstruction Administration’, Rafsanjani’s government transformed the populist state of the 1980s into a neo-liberal, capitalist state, with Tehran as its experimental laboratory. Mayor Gholam Hossein Karbaschi’s controversial transformation of the city in the 1990s was based on mobilising a speculative and entrepreneurial urban middle class, which had emerged after the war and had accumulated its wealth primarily through speculation in urban real estate and construction. Unable to count on the central government to bail it out, the virtually bankrupt municipality decided that financing for Tehran’s urban renewal should

come from ‘public participation’, a euphemism for a pact between the municipality and the speculative capital floating in the shadow economy. Extracting fees from developers in exchange for zoning exemptions, the municipality collected an estimated $6 billion from 1990 to 1998. Most of the revenue was generated by the ‘sale of density’ or the privatisation of the urban skyline, which favoured developers by allowing them to subdivide plots and build high-rises well above the permitted norm, resulting in a substantial increase in Tehran’s ‘vertical density’.

By 1999 the laissez-faire high-rise era had run into difficulty following Karbaschi’s trial and imprisonment on corruption charges. To calm the outcry caused by the unregulated real estate boom of the 1990s, the municipality shifted its emphasis to vending permits for smaller, four-to-six-storey buildings. The current strategy has ‘democratised’ speculation**:** in lieu of a few anonymous and politically well-connected speculators, now any urban property owner can build a lucrative, multi-story apartment building. Most of the time, these projects are merely motivated by financial incentives. People with money, whose professions have nothing to do with building or architecture, come to an architect’s offices - if they even consider such an option - with only one, non-negotiable demand: maximize the inhabitable surface area while minimizing the cost per square footage.

With this mentality, architects do not have much room to manoeuvre in the volumetric composition or the planning layout of the project. When the goal is to maximize the sellable square footage, the only thing left to actually design is basically the main facade of the building, with the maximum depth of 20 to 40cms. One can say that the generation of young, post-revolution architects like the architects of the Dowlat II project in Iran have ended up being what they call ‘facade architects’, committing themselves to the task of creating a two-dimensional composition layout albeit on the scale of a four to five storey building. So, for every project the concern becomes how to design this envelope, or facade, or for that matter interface, all in order for the project to stand out from its immediate context.

I was informed that because of these market-oriented investments, once the spatial organisation of structural columns is set, based on the parking requirements to provide as many parking units as possible, the facade of the building follows, on which opacity is reserved for areas that coincide with the structural elements, and transparency or semi-transparency for what is left, in order to solve the aesthetic problem of the sort of graphical composition of two-dimensional zones of opacity and transparency.

The most common material used for the facade is stone plate cladding the exterior walls with masonry techniques. In low budget projects, the investors choose to limit their expenses on the facade by merely covering the masonry walls with a coating of cement and a waterproof colour finishing.

C. Climatic Conditions

Climate in Tehran is affected by three factors: the Alborz Mountains, the western humid currents, and the latitude. The Alborz Mountains contribute to the moderate weather that characterises Tehran. In northern Tehran, the weather is moderate and mountainous, and in

plains it is semi-arid. A major part of precipitation takes place in winter. The average annual rainfall stands at 200 millimetres.

The cold season usually begins in December, but earlier in the mountainous regions. The cold season lasts three or four months. In mid-March, the weather grows warm. In late April, the weather begins to grow warm at a faster pace, so that in mid-May, it becomes rather hot.

D. Immediate Surroundings of the Site

The project is surrounded by two similar residential buildings on its right and left (east and west), a narrow street from the northern side and back-to-back gardens on the rear side (south). The two immediately neighbouring buildings, and indeed the rest of the street, comprise typical Tehran mid-rise residential buildings, built out of concrete. The surrounding buildings can be seen as representative of a common mediocre type that corresponds to what the architects derisively call ‘under-designed buildings’.

E. Topography of the Site

Although the surrounding area slopes from the north to the south, as does Tehran as a whole, the Dowlat II building plot is all flat.

III. Programme

A. History of the Inception of the Project

The architects of the Dowlat II project complained bitterly to me that young architects have next to no chances of getting large scale architectural commissions in Iran, such as monumental public projects. Furthermore, small residential projects are seldom really designed, due to their small scale and the specificities of the market as elaborated above. Having just started their architecture office, the architects of Dowlat II needed to find a target market for their services and were obliged to establish a substitute market strategy, which they call a ‘survival kit’. This is one of their major contributions.

With this in mind, they started their practice as four young designers (partners), with two options, either to kid themselves with unreal expectations that one day some big investor - private or governmental - would knock on the door with a huge proposal for a monumental building or to wake up from this somewhat naïve dream and face reality: that as a new business with no prospective clients they would have to discover their own market for their work.

They embarked on a mission to promote architectural design as a set of strategies that would not serve to merely increase the overall financial burden of the projects, but would also result in economically recognized added value. They identified a great potential market in the profit-oriented, privately sponsored residential projects that make up the major area of building in the city of Tehran.

Taking into account the fact that during the next decade or two a great number of city lots (70% of which are small lots) would need to be developed, and that investors would be hesitant to go to professional architects for their design due to the small scale of the project, the four partners tried to propose a set of strategies that would secure their position as consultants in such a market-oriented economy. In this way, they felt they would be able to enter a realm of the building market that is full of potential, and that their work would have an invaluable cultural impact, with design being considered a generator of added value to a building rather than a costly liability.

To sum up, and responding to the four major concerns of the investors, the architects proposed the following strategies:

1. Building the maximum allowed envelope into a sellable, habitable space.
2. Providing variations that allow the building to stand out as a unique piece of architecture in its urban context.
3. Making sure the adopted design strategies, in their spatial composition, have proposed construction techniques and technologies, and the choice of materials does not compromise the financial feasibility of the investment as a whole. This means that although the proposed design strategies will result in added value, adopting them does not necessarily mean added costs and expenses in return.
4. Manipulating city bylaws and municipal regulations for design in order to create a unique project, in line with the clients' orders.

The first step was to identify a neighbourhood where a small lot could be pinpointed and proposed as the possible site for a low budget investment. This is due to the fact that the cost of acquiring land is a major portion of the overall investment for housing in the city of Tehran. Identifying such a site, our architects managed to persuade family members to invest for the initial financing. In their proposal to investors they also suggested that the office would be involved in financing 10% of the project by accepting shares in the investment in return for consultancy and contractor fees. They also proposed to match the initial fund with a construction loan from one of the governmental banks by making the construction loan applications and getting the approvals.

B. General Program Objectives

The program objectives were closely intertwined with those of the shareholders, albeit with the architects' input. The first investor (Mr. Nezamian, 60% share) requested to have units exactly equivalent to his capital. None of the investors were interested in sharing a unit as a shared investment. They all wanted to have just their own unit. Mr. Nezamian asked specifically for a three bedroom unit with a master bedroom that had a higher level of privacy from the other two. He also was keen to have the view of Alborz Mountain Chain from the bedrooms (which he got). Aside from the three bedroom unit, he wanted to have another unit, one for himself and one as an investment, as long as his share corresponded to exactly 60% of the whole investment.

The second investor (Mr. Eslami, 30% share) was merely interested in investing and owning a typical floor plan unit.

The third investor was the architects' studio (Arsh studio, 10% share); they needed a small unit in the complex, which corresponded to their small share in the overall project.

C. Functional Requirements

The functional requirements have been generally explained above, but it is worth noting, that in addition to the above, the architects needed to apply for a building permit for four units. One of the most important zoning bylaws of the city of Tehran is that each apartment unit needs to have at least one parking unit, with the exception of one small unit for which the municipality would exact penalty fees. Due to the small size of the lot and its limited width, providing three parking units was the most difficult requirement.

IV. Description

A. Building Data

Floors:	4 floors (based on zoning bylaw)
Massing:	60% of the site plus 2m (base on zoning bylaw)
	102m²
Volumetry:	no cantilever accepted in a 6m alley
Number of units:	4 units
Gross area:	535m²
Units' area:	335m²
- Unit 1 (first floor)	81m²
- Unit 2 (second floor)	84m²
- Unit 3 (third floor)	46m²
- Unit 4 (fourth and third floor)	124m²

B. Evolution of Design Concept

The design concept, according to the architects' statements and my discussion with them can be categorised as follows:

Micro-Section Strategies

Since investors occasionally constrain the designers by asking them to incorporate the maximum allowed buildable/sellable area in their design proposals, what becomes the prominent site for design practices is the main facade of the building. This had a major influence on the main concept of Dowlat II.

The architects spoke of the nature of the design process, that in their conventional training they learnt to usually start from the ground floor or underground floors, while trying to fit in as many parking units as possible (due to Tehran's bylaws stating that each residential unit has to have at least one parking area). In market oriented investments, they explained that the goal of the investor is to provide as many parking units as possible, which allows him to divide the total sellable area into more units. Such a strategy results in smaller units which are sold at a

higher rate and as a result, the profit return of the project is faster, as opposed to the case of larger units.

The architects explained that once the parking units are provided and based on that, the spatial organisation of structural columns is set, the facade of the building follows as a 'common-sensual aftermath by allocating opacity to those areas of the facade that coincide with the spatial zones of structural elements, and transparency or semi-transparency to what is left.' At the end, within the constraints of the structural frame adopted or imposed, the task of the designer is limited to solving an aesthetic (or cosmetic) problem in terms of what they call graphical composition.

The first proposed strategy by the architects in light of the above was to try to violate such a precept about designing building facades. Therefore, they treated the facade as a 'micro-section' that needed to be architecturally developed. They were very much against being considered 'Facade Graphic Designers'. When conceptualising the facade as a micro-section, they started the process of design from what they called 'wall-section' - a point of view perpendicular to the conventional frontal view. Their main statement 'envisioning the facade as a micro-section, as opposed to a two-dimensional canvas', opened up a multiplicity of potentials as listed below:

The Facade as an Activated or Animated Surface

"Due to the morphology of the city of Tehran, most of the time, it is the main facade of the building that is the major manifestation of the project. This main facade is also framed between the adjacent buildings. As our first strategy in thinking of facades as micro-sections need to be designed, we conceptualise such facades as animated or actuated. This means that the facade is conceptualised as a whole consisting of kinetic elements capable of adapting a multiplicity of states once the inhabitants start to interact with them. In this project, it is the openings that their different configurations based on inhabitants' preference that can transform the facade from one state to the other. Thus, our first proposed design strategy regarding the main façade of the building is using the envelope of a building as a medium for activation of the space through animating the micro-section of architecture.

Starting from limited surfaces of frontal facades of the residential buildings that we were designing we started to think of the whole city and its civic facades as a medium full of potentials for animation and activation of publicly shared spaces of the city; what if all the civic facades where built out of neutral, repeatable, expandable and adaptable modules that could be controlled by the occupants of the built environments? What if the variations were based on how these repeatable modules were interacted?"

Thus, the main facade's micro section is designed as a two-tier component. The interior tier seals the inhabitable spaces from environmental factors, whereas the exterior tier is conceptualised as a re-configurable multi-part object.

The exterior tier consists of a wooden grid with various openings. Opening and closing the configurable parts results in a multiplicity of compositions, whereas openings extend the volume of the building beyond the maximum building envelope allowed by zoning bylaws.

Here, the facade acquires a temporary volumetric characteristic and for obtaining such volume the designer is not compromising the square footage of ‘sellable’ or ‘inhabitable’ areas.

The Innovative Construction Techniques Combined with Choice of Cheap Materials

As a main part that contributed to the evolution of the design concept, the architects were committed to the goal of maintaining the construction costs at a minimum while creating added value through design using conventional and non-expensive materials. For example, in the case of the facade, the wooden grid is made out of the cheapest wood available in Iranian market which is that of *Narrad* Wood. This is a material that is conventionally used for supporting frames on which the construction workers stand while working on the facade. It has to be noted that wooden facades were almost non-existent in Tehran at the time that this project was built. So they decided to experiment with this material as an exterior surface material. Later on, they decided that being exhibitionist or merely different in their choice of materials was not sufficient to achieve what they conceptualised as ‘added spatial value through design’. So, they tried to extend this manoeuvre area beyond the main facade of the building.

Back Facade (south)

As mentioned before, due to the specific urban morphology of this area of Tehran, on the one hand, and the zoning bylaws on the other, the four to five storey typology buildings have only two facades. Depending on the orientation and position of the lot relative to the street, either the northern or southern facade is the main manifestation/ representation of the building. The other facade, facing the back yard, is left ‘under-designed’ most of the time, since the investors do not think that spending money on it has any importance to its value. In such a building market, the Dowlat II architects proposed a design strategy where the back facade was also subject for investment. Although the choice of materials was still within the cheapest possible pallet to keep the construction costs to minimum, through sensitive design this facade retains is distinctive elegance after more than two years. In two of the three cases presented in this report, the material used for the finishing of the back facade was painted cement, the cheapest possible material. Yet, the choice of bright green colours on the one hand and variation in window types and sizes on the other has resulted in an interesting composition for a back facade, quite out of the ordinary in Tehran.

Macro-Section Strategies

Since investors demand that the designers incorporate maximum allowed sellable/inhabitable space in design proposals, so they can widen their profit margin, the designer does not have a *carte blanche* for volumetric compositions. This generally results in facades with no depth, albeit highly ornamented ones. Also, building the maximum allowed sellable/inhabitable space means that the designer is not free to incorporate sectional variations such as double-height interior spaces or interior voids. As a result, in most cases, if one looks at the section of a prototypical four to five storey building in Tehran, one will see that the somewhat dull section consists of multiple slabs with the same floor to floor height. Under such circumstances, the architects proposed a design strategy where sectional variations are introduced to the design proposal where these variations would not only result in waste of

‘sellable space’, but also introduce spatial occasions whereas new inhabitable/ sellable spaces are created in between sectional breaks.

In some cases, these in-between spaces are not sellable *per se* but are considered as added value for the units, causing an increase in the price per square footage of the sellable parts. In other cases, the in-between spaces are in fact sellable. All these sectional variations in the present design are incorporated in a way that the maximum allowed envelope is still constructed. The macro-section strategies can be categorised as follows:

- Building the maximum allowed envelope
- Designing for left over spaces to convert them to added value for sellable spaces
- Proposing ‘sectional variations’ that result in novel volumetric compositions on the one hand, and the creation of extra usable/ inhabitable surface area within the constraints of municipal zoning regulations, on the other.

As an example, in the Dowlat II project, a new ‘twist’ is introduced to the conventional multistab section where the difference in levels allows for an access to the roof for the upper unit. Here, the roof, which is conventionally a left over shared space, is subjected to a series of design strategies to be converted to a privately used roof garden. (This is a design strategy of which Dowlat II project is only an example). Although the roof garden is not legally accepted as extra sellable footage, the unit that has exclusive access to the roof garden benefits from an added value that impacts the price per square footage of its ‘sellable’ areas. The in-between spaces that are created due to sectional configuration are all conceptualised as useable spaces.

Also, sectional variations allowed the architects to provide multiple unit types within the same apartment building with varying square footage. This is not that conventional in prototypical floor plans in Tehran.

Sectional configuration further allows for the creation of a variety of spatial qualities while building to the maximum allowed by zoning bylaws. Here, the proposed sectional disposition provides access of the upper unit to a private roof garden. Also, variations in macro-section allow for variations in unit types as shown in the unit distribution diagram.

C. Structure, Materials, Technology

Structural System

The building has a steel structure framework which was built in the workshop and later assembled on the site mainly by welding. (One of the challenges in structural design was the fact that the architects wanted to remove one column in the ground floor to provide one more parking, resulting in one more unit.)

Materials

All the materials, with the exception of the wooden louvers, are local (masonry). The walls are of clay bricks and grout, covered by plaster. The south facade and floors are made of concrete. Inside the units, floors are covered by a laminate flooring system.

Construction Technology

Local technology (masonry) - the north facade is different, as explained below under 'Choice of material, level of technology'.

Building Services, Site Utilities

Water, electricity, swage system and natural gas are from the local network. A four-person elevator is provided.

D. Origins of Technology, Materials, Labour Force, Professionals

Technology:	Local
Materials:	Local
Semi-skilled:	Local labour
Professionals:	All local, subcontracted technical support offices.
Architects:	Arsh Design Studio (Ali Reza Sherafati; Rambod Eilkhani; Panta Eslami; Nashid Nabian)
Structural Engineer:	Mr. Abdolhosein Jelveh
Mechanical Engineer:	Mr. Ali Ghanizadeh

V. Construction Schedule and Costs

Commission:	December 2005
Design:	December 2005-April 2006
Construction:	April 2006-September 2007
Occupancy:	Since November 2007

Construction:	$600 per square metre total
Units cost:	$780 per square metre
Others:	$300 per square metre

A. History of Project Design and Implementation

Negotiating with investor:	Dec. 2006
Choosing the lot by architect:	Jan. 2007
Design and permission:	Jan. to Apr. 2007
Demolition and excavating:	Apr. to Jul. 2007
Steel structure:	Jul. to Oct. 2007
Walls, mechanical and electrical:	Oct. 2007 to May. 2008
Finishing:	May 2008 to Aug.2008
Occupancy:	Oct. 2008

B. Total Costs and Main Sources of Financing

Total cost: approximately USD 600,000 (All shareholders put their money in cash based on their shares which along with 10% bank financing completed the financing of the project.)

C. Comparative Costs

Average cost in neighbourhood: USD 550 per square metre.

D. Qualitative Analysis of Costs

Construction:	USD 600 per square metre total
Units cost:	USD 780 per square metre
Others:	USD 300 per square metre

E. Maintenance costs

USD 100 - 120 monthly

VI. Technical Assessment

A. Functional Assessment

The functional distribution of the apartments responds to the users' spatial requirements. Both the open plan and split unit configuration adopted add a distinctively modern feeling to the apartments, especially in the living-dining-kitchen integrated area. The distribution of bedrooms is quite familiar to the local taste and use, except for the split level apartments, where privacy is heightened.

The flexible configuration of the plans was directly proven by one of the tenants who transformed his apartment into an office.

The common areas (garage, entrance, stairs, garden and foyers) function well and provide a common area for neighbourly interaction. Also worth mentioning is the way the stairway has been placed in the middle of the building, giving room for more light to the rooms distributed at the front and back of the building.

B. Climatic Performance

With the stairway well placed at the core of the building, all spaces can have natural light including kitchens. All bedrooms also use the south light. In moderate seasons (spring and fall) all can have natural ventilation too.

C. Environmental Response

Not applicable, as the surrounding environment is urban. Still, the ground public garden and the roof private garden attract native flora and fauna of the kind that is found in Tehran.

E. Choice of Material, Level of Technology

Using local material and technology was a priority for the architects. The wooden louver was made of the cheapest wood used on construction sites, often as scaffolding to support structures and usually disposed of after construction. The one floor-high panels were constructed off site and installed separately on the facade with the aid of unskilled labour who were also engaged to paint them after installation. Conventionally, the facades are made of stone with masonry detail, which is a more expensive treatment needing more skilled labour and one that is very time consuming. In the case of this building strategy, the facade ended up in being very cheap, and was quickly installed in two weeks, as opposed to two to three months in the case of stone facades.

F. Response to, and Planning for, Emergency Situations

I was assured by the structural engineer and other building system personnel that I met that the project meets all the requirements of the national building codes, especially earthquake codes.

G. Aging and Maintenance Problems

No maintenance or aging problems were pointed out by the users and owners that I met.

H. Durability and Long-time Viability of the Project

It was hard to find information about this point, but judging from the way in which the building has been executed, the fine detailing and finishing, all the indications suggest that the project is durable in the long run.

I. Ease and Appropriateness of Furnishings; Interior Design and Furnishing

I found all the tenants in compliance with the modern, open-plan configuration of Dowlat II in terms of their minimalist, semi-modern furniture. All except for the apartment on the top floor, where I found that the owner had brought his old furniture along with him, but did not seem bothered about the layout. On the contrary, he had managed to personalise the space according to his taste and needs. However, it has to be pointed out that the generous built-in-furniture works very well indeed, and leaves little need for the clients to add extra storage space.

VII. Users

According to floor occupancy:

	owner	User	Type of use	No. of occupants
1st floor 81 sq	Mr. Nezamian	Mr. Nezamian	Residential	4(temporary)
2nd floor 84 sq	Mr. Eslami	Mr. Eslami	Office	6
3rd floor 46	Arsh studio	Rented out to a single tenant	Residential	1
4th floor plan	Mr. Nezamian	Rented out to a family	Residential	5

A. Description of those who use or Benefit from the Project

Average middle class individuals invested in this project. Some of them live there and some rent out their apartments. The tenants are also middle class and value the design of the building and find it functional; they also appreciate the reasonable rent, the result of the low cost of implementation of the project.

B. Response to Project by Client, Users, Community

It won the 'Grand *Memar* Prize' (2nd place) 2008 and 'Facade Design by Natural Material' 2010. Both awards are granted based on peer-review and evaluation of a jury consisting of top-level professionals and academics in Iran.

The project has been awarded the first prize as 'Best Façade Selected by Denizens' in the annual competition held by the City of Tehran, in which the city residents document the projects and nominate them for the award.

Although I found most people reluctant to speak to me about the project, two of the neighbours, who spoke English, an elderly woman and a young teenager, spoke very highly of the building. The teenager expressed his admiration of the 'cool modern image of the building in the neighbourhood' while the old lady expressed her happiness with the neat back garden that she can see from her bedroom window. Later, when visiting the sister project Dowlat I across the street, another teenager walking with his mother, spoke with humour of the wooden louvers 'teasing' the neighbours because they only revealed shadows of people moving behind them!

VII. Persons Involved

Architects:	Arsh Design Studio (Ali Reza Sherafati; Rambod Eilkhani; Panta Eslami; Nashid Nabian)
Structural Engineer:	Mr. Abdolhosein Jelveh
Mechanical Engineer:	Mr. Ali Ghanizadeh

IX. Bibliography

The project was featured in Memar 58, an Iranian bimonthly magazine concerned with architecture and urban design. December-January 2009-2010.

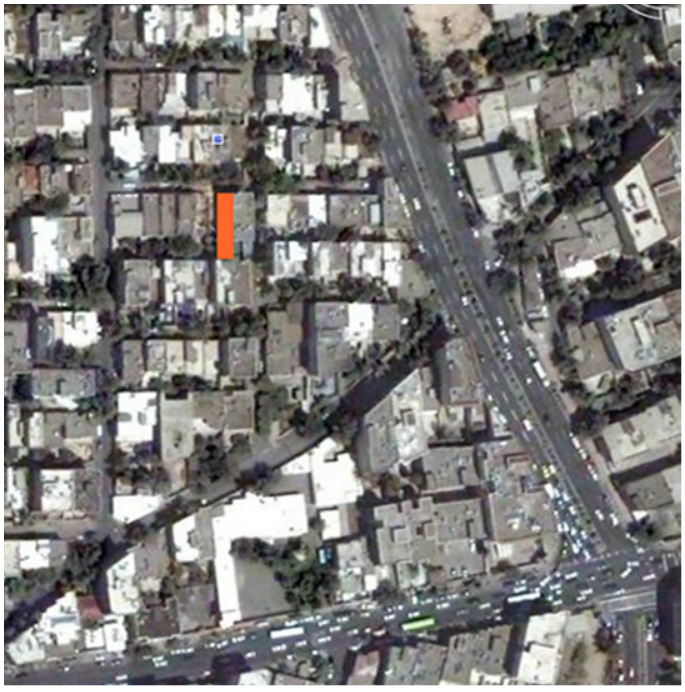
Memar 52, an Iranian bimonthly magazine concerned with architecture and urban design. December-January 2008-2009.

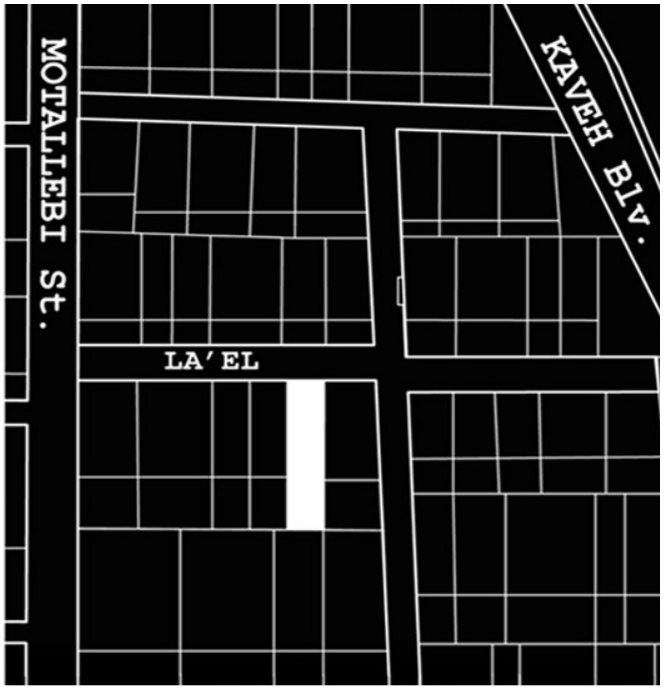
Exhibition catalogue and exhibition held at the French embassy in Tehran under the title of '8 Outstanding Projects Implemented since 2005', introduced by Sara Borzoui at a reunion of Iranian Architects on 17 February 2010.

Amir Bani Masoud, Iranian Contemporary Architecture, Honar-E-Memmari, publications, Tehran, 2009 (in Persian).

Wael Samhouri
April 2010


Tehran

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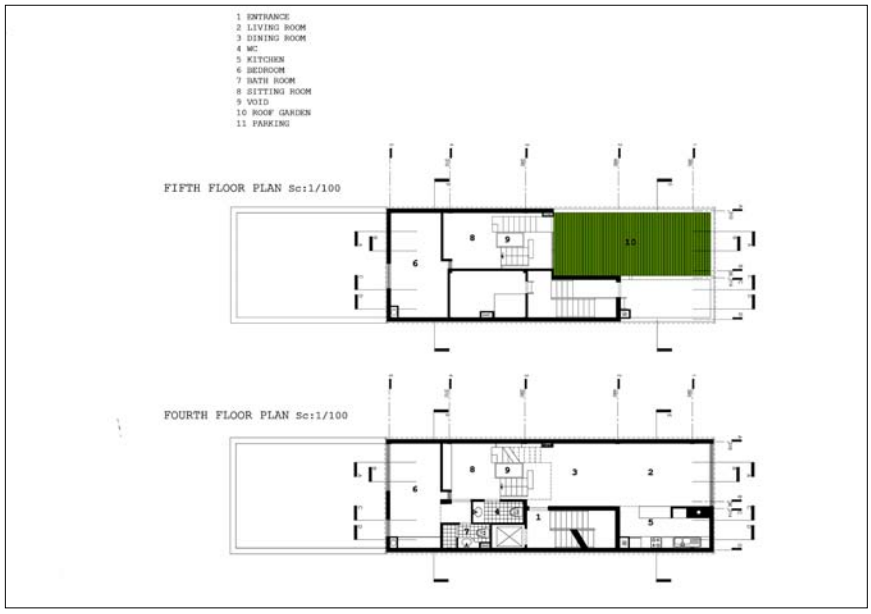
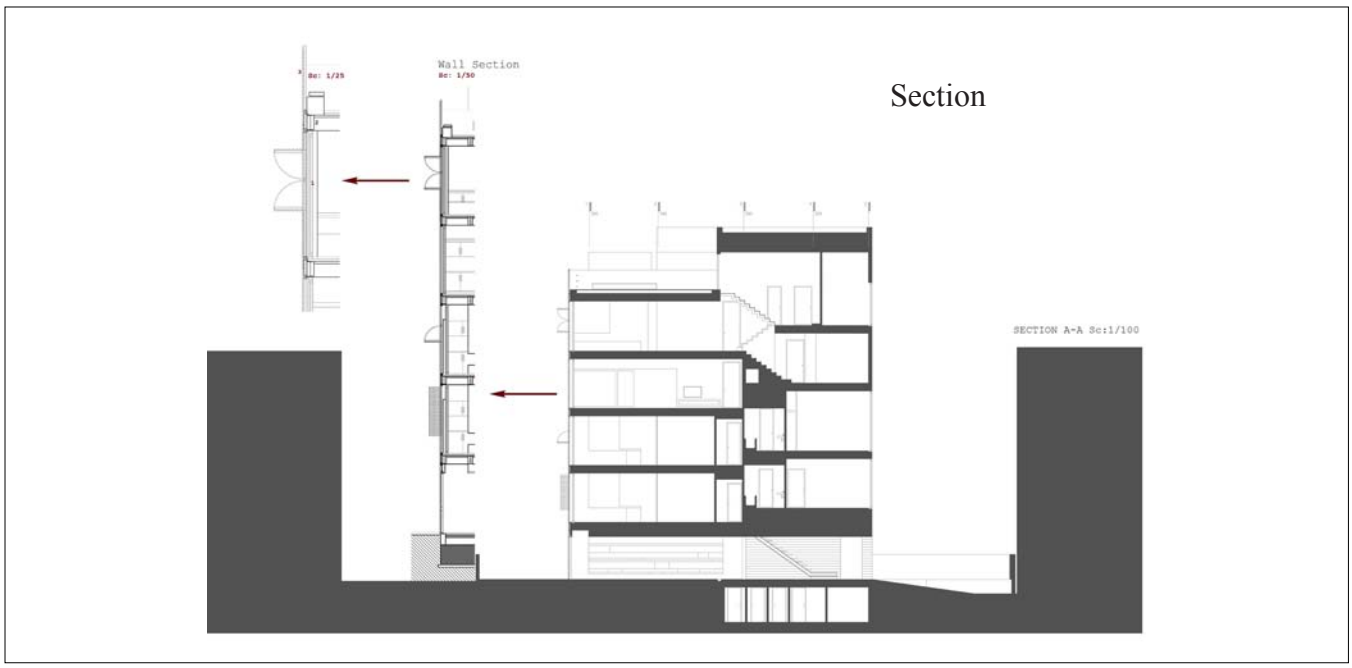
First, second and third floors.



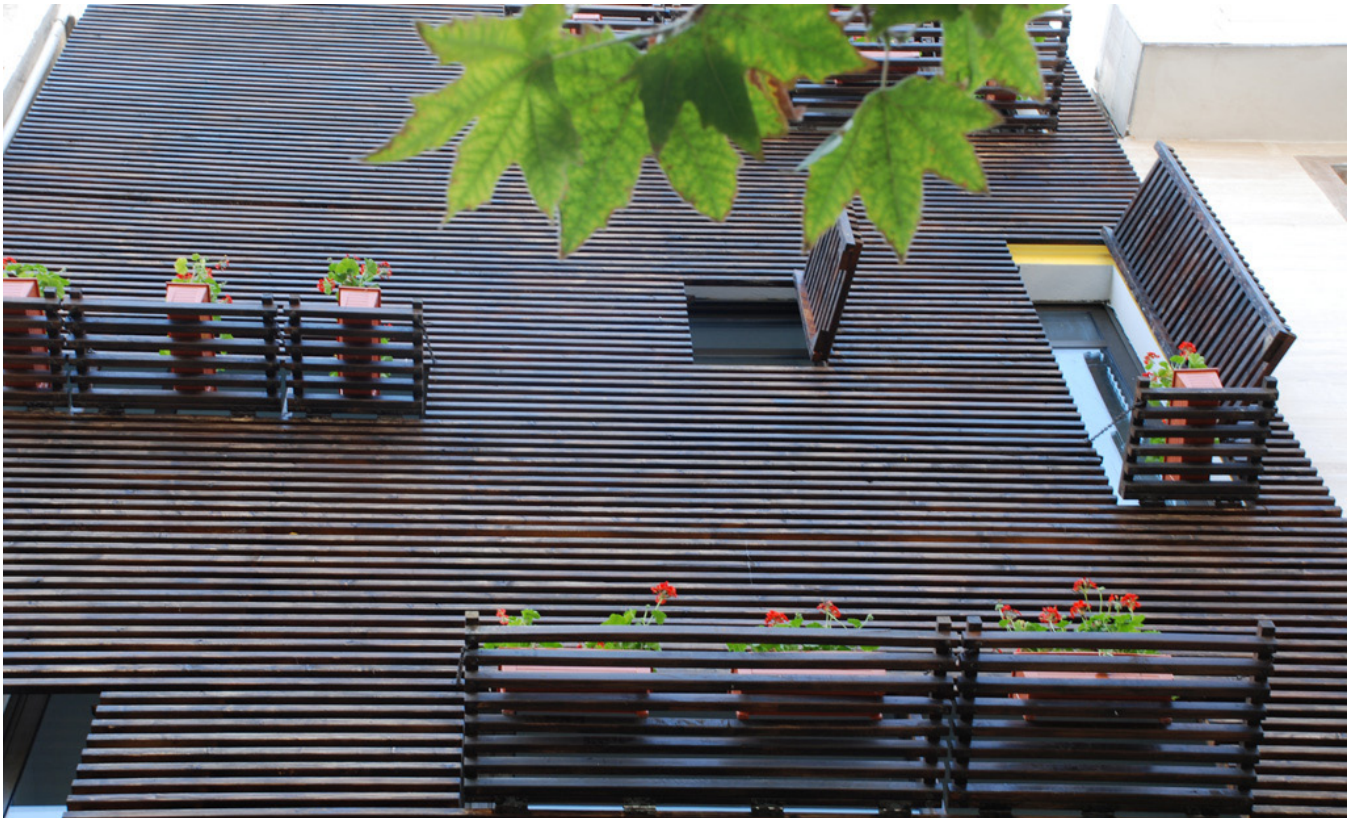
Fourth and fifth floors.



Section

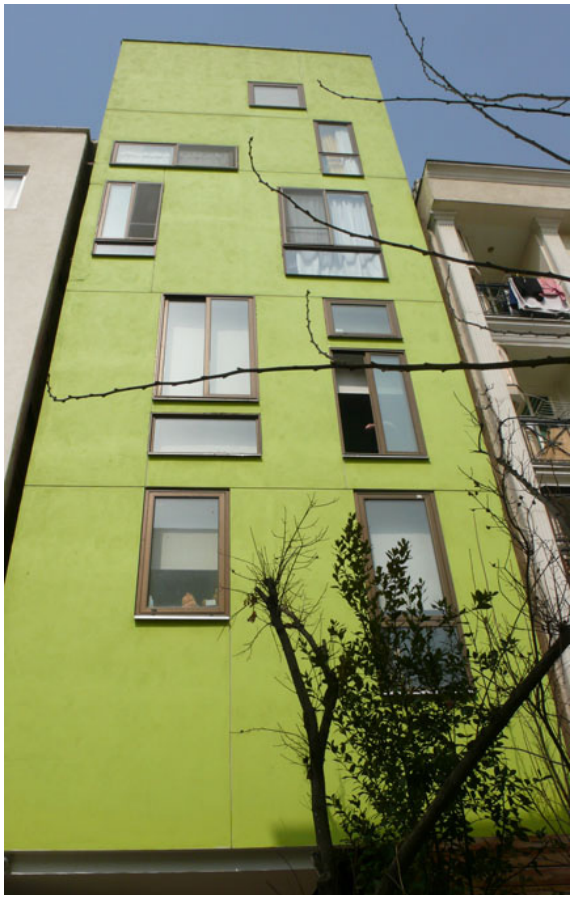
View from the street.

Entrance of the building.



View of the façade, with the panels opened.

Detail of a panel with greens.



Rear façade .

Details of the rear façade.

Courtyard and wooden deck.

Detail of the wooden deck and stairs.

Kitchen of the appartment on the first floor.

Living room.

View from the master bderoom on the back courtyard.

Child’s bedroom.

View of the terrace on the fifth floor from the roof.

Detail of the wooden deck and stones on the terrace.