



The Aga Khan Award for Architecture

B2 House

Ayvacık, Turkey

Architect:

Han Tümertekin

Istanbul, Turkey

Client:

Selman and Suha Bilal

Istanbul, Turkey

Date of Completion:

2001

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by Sahel al-Hiyari

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I. Introduction

B2 House is a private residential structure located in a mountainous region on the north Aegean coast in the north-west of Turkey. The house is built on the south-eastern tip of a small village called Büykhüsün, located in the vicinity of Ayvacik and Assos, 76 kilometres south of Canakkale. The village consists of a mosque, a school and a small group of stone houses with walled-in gardens and animal sheds, all built down the side of the mountain. Büykhüsün's high altitude offers spectacular views of the unspoiled landscape surrounding the village and the sea, creating an ideal setting for a house intended as a summer retreat. B2 is a pure rectangular mass that combines essential elements of the village house type with certain features of a monument. It is a place where a basic shelter becomes a space for the celebration and contemplation of nature.

II. Contextual Information

A. Historical background

The history of Canakkale and its provinces can be traced back as far as 3000 B.C. Since then the area has been continuously inhabited, leaving traces in the many archaeological sites scattered around the region. Assos, located 5 kilometres to the south Büykhüsün, is an important city, dating back to the seventh century B.C. It was under Lydian rule from the sixth century to the fourth century B.C., when it succumbed to the Macedonians with the conquests of Alexander the Great. It is known that the area was an important centre for learning, and in the fourth century B.C. it was ruled by one of Plato's students, Hermias, who gathered a group of philosophers there which was led for a time by Aristotle, who began work on his *Politics* in Assos. Assos subsequently became part of the kingdom of Pergamon, before falling under the consecutive rule of the Roman, Byzantine and Ottoman empires. In short, this entire region of the Aegean coast, and Assos in particular, are of great historical and archaeological interest. However, little of Büykhüsün's history is known except for the dates carved on some of the houses, which are mainly from the 1940s.

B. Local architectural character

The north Aegean coast is still considered to be relatively 'underdeveloped' in comparison to its southern counterparts or even other coastal areas in Turkey. Fortunately this has left several unspoiled areas that retain the beauty and architectural harmony of the region's past. Nevertheless, the area has fallen prey to crude commercial building practices, industrialization and suburban sprawl. Many commercial and residential settlements have developed at a frantic pace, showing a dubious adherence to regulations, and sometimes lacking the necessary building permits. This widespread phenomenon has degraded the natural environment as well as disturbing the harmony between the traditional architecture and nature.

The vernacular architecture of the region is an interesting mixture of Ottoman influences and a Greek vernacular resulting from the presence of Greek settlers in the area in the period up to World War I. Both influences, however, are similar in their response to climate, available materials and topography, and both reflect similar socio-economic conditions. In secular buildings the differences are mainly formal and in plan both styles share a tendency to centralize and to separate functions onto different floors. The morphology of buildings in the Greek vernacular employs the use of pure forms, while in Turkish *hayat* houses there is a pronounced difference between lower and upper floors, with upper floors projecting beyond the lower floors to provide a larger area. The materials used for construction are stone, wood or a combination of the two, depending on availability. The villages of this region mainly comprise small clusters of buildings that cleverly address climate and topography and reflect their inhabitants' sense of community.

C. *Climatic conditions*

The climate of the north Aegean coast is generally moderate. The following chart shows climatic conditions throughout the year.

Month	Min. temperature	Max. temperature	Rain (days)	Sunshine (hours per day)
January	4°C	10°C	13	3
February	4°C	11°C	11	4
March	5°C	12°C	10	5
April	9°C	18°C	8	7
May	13°C	23°C	6	10
June	15°C	27°C	4	11
July	18°C	30°C	2	12
August	18°C	30°C	2	12
September	15°C	25°C	4	10
October	13°C	20°C	7	7
November	9°C	15°C	10	4
December	4°C	12°C	13	3

D. *Site and surroundings*

Büykhüsün is located on a rocky mountainside and has a southerly orientation, facing the valleys and mountain ranges that slope down to the shores of the Aegean Sea. The village might be described as an embodiment of a tight and homogenous social structure in which communal expression reigns over the individual. Its sense of collective identity is perhaps a result of its small number of inhabitants – around 450 – who work mainly in agriculture and share similar financial conditions.

The village consists of simple rectangular masses tightly and organically grouped around a series of roads and small walled gardens. The road system comprises main roads running parallel to the contour lines and secondary lateral roads connecting the top levels of the

village to its lower edges. There is a great sense of community in this grouping, but the walled gardens also ensure privacy and provide multi-functional outside areas that separate the houses from the public realm of the roads.

Most of the 150 houses in Büykhüsün are two-storey structures, usually entered through the gardens, which are also used for cooking and growing fruit and vegetables. Traditionally bathrooms were also placed in the gardens for hygienic reasons, but in more recent structures they are located within the house. The living spaces, kitchen and bathroom are organized as a row of interconnecting spaces on the ground floor, while the bedrooms occupy the upper floor. The two floors are connected by a wooden stair, usually located within the house, although the stair is sometimes placed externally, adding yet another function to the garden as an intermediate space between the two levels.

The rectangular windows of the houses are placed in the southern façades, so that they face away from the prevailing north-easterly wind, while opening up to views of the sea. The houses are embedded in the slope of the mountainside, with closed north façades that are usually shorter in height than the south façades.

The buildings of Büykhüsün are constructed entirely of the local granite and volcanic stone. The walls are built in the form of interlocking layers of stone held in place by their own weight and by a mixture of soil and fodder, which acts as a bonding agent and as an infill material for gaps in the stone coursing. Older buildings have roofs of flat soil and fodder slabs, supported by wooden beams that rest on the exterior load-bearing stone walls. There are also many houses with pitched tiled roofs; this is said to be a more recent development that reflects the financial growth of some of the village's inhabitants.

B2 House is sited at the lower, south-eastern end of Büykhüsün, outside the boundaries of the village, so it cannot be read as part of the village's fabric. The shape of the site is a triangle, with its apex pointing towards the west. The house can be reached along either of two paths connecting the upper levels of the village to the lower edges. These paths converge into a small dirt road to the west of the site, where the entry to the house is located. The road continues along the southern flank of the site and peters out into the landscape to the east. The site is ideally located for spectacular panoramic views of valleys, mountains and the sea, extending from east to west. Little of the village can be seen from the site, since a high terrace retaining wall located at the northern edge hides the upper parts of the village.

E. Topography

The site of B2 House slopes from both north to south and west to east. The sharpest drop is 7 metres from the north to the south of the site. This difference is resolved by means of terraces, which start with the higher level of the neighbouring lot to the north and end at the level of the dirt road at the southern edge. The drop from west to east is 1.3 metres. The land was not terraced before the house's construction.

III. Programme

A. What conditions gave rise to the formulation of the programme?

The house was created for two brothers, Selman and Suha Bilal, as a place to spend weekends or make short visits, primarily as a retreat from their hectic lifestyles and tight work schedules. They wanted to locate the house on the north Aegean coast in a spot where they could find beauty, tranquillity and seclusion without necessarily travelling long distances from Istanbul, where they reside. Both clients were already working with architect Han Tümertekin on another project, B House, which they had commissioned after seeing one of his interior design projects in Istanbul. They approached the architect with the idea of B2 House and upon his recommendation the site in Büyükhüsün was purchased.

B. Objectives

The objective was to provide an architectural response to the idea of two contemporary urbanites seeking refuge amidst nature in close proximity to a village. The house is conceived as a shelter for two ‘nomads’, as Han Tümertekin describes them, whose relationship to place is transitory, and who seek privacy in the openness of spectacular landscapes. The conceptual premise was to transform this transient rapport with space into a place – or an architecture – that reflects their fluctuation between association and disassociation, presence and absence, public and private.

C. Functional requirements

It was important for the owners to contain the scale of the house in order to maintain construction costs within a certain margin while achieving a simple, practical structure that would not demand much maintenance. The programme is therefore basic: anything outside the realm of necessity was omitted. The functional requirements consisted of the following: a main living space shared by the owners, one shared bathroom, a kitchenette, two separate bedrooms with private bathrooms, and laundry and storage spaces. The requirements also included the provision of outdoor seating areas within a maintenance-free garden. The programme’s adherence to the purely essential is consistent with the manner in which the village houses are conceived. However, the similarity stops there and the house’s appearance sets it apart.

IV. Description

A. Project data

The triangular site measures 400 square metres. The footprint of the house is 60 square metres, with a total area of 120 square metres for both floors.

B. *Evolution of design concepts*

1. *Response to physical constraints*

There were no specific regulations or building codes applicable to the property, but the design had to be approved by the village *muhtar* before its construction. There were no problems obtaining his approval since the village has many second residences owned by people from other cities and, more importantly, the house is fairly small and quite sensitive to the built environment.

There were two physical constraints, the first being the triangular shape of the site and the second its sloping topography. Both issues were tackled in ways that are typical of local building practices, using a terracing system to resolve the difference of levels and placing the building on one of the site boundaries to maximize the outdoor space. Another determining factor was the necessity to orient the open part of the house towards the view and away from prevailing north-westerly winds.

2. *Response to user requirements; spatial organization*

In response to the slope, the triangular site was separated into two flat plateaus with a difference of 1.3 metres between them. Two sets of stairs connect the two levels at the eastern and western ends of the site, allowing the retaining wall between them to form a long uninterrupted edge. This division of the site creates a long rectangular terrace, on which the house is placed, and a triangular terrace to the back of the house, which is used as a garden. This type of terracing is rooted in local technologies used to deal with level differences. Nonetheless, a radical difference is achieved by the absence of any garden walls or even parapets, which would normally be built to contain outdoor spaces and provide privacy. The idea of a private garden is therefore ameliorated by merging the space into the surrounding landscape in favor of an ambiguous space that, although it follows the building logic of the village, shows a marked individuality.

This wall-free garden has two apparently unrelated effects: its openness to the natural setting renders the notion of what is public or private irrelevant; and it becomes a pedestal on which a pure and idealized mass can be located and used as a house. Tansel Korkmaz, an architectural critic and professor at Yildiz Technical University, describes the project as ‘a small monument placed on a pedestal’. Hence, the sort of privacy this house achieves is not of a strictly domestic nature. Rather, it is comparable to the type of privacy sought in the grounds of temples or monuments.

The two-storey rectangular mass of the house is located at the boundary line of the lower southern terrace, which is almost 2 metres above the ‘public’ dirt-road level. It is pushed to the western edge of the site, providing a larger space at the eastern side of the house where the view of the sea is most dramatic. The house opens to the south and is almost closed to the rest of the site, which cannot be seen from the internal spaces of the house. Consequently, the house reads as a pure rectangular form carved out from the site and claimed by the surrounding landscape.

The connection between the two floors is through a light external stair of wooden planks supported by a steel frame, linking to the northern façade of the building where the entry

points to the various spaces of the house are located. The stair rests on the upper terrace, 3 metres from the house, with a deck that bridges to the main structure, forming a roof for the space below. The idea was to create an outdoor living room below the deck that would also act as an intermediate circulatory hall between indoor and outdoor spaces. The space features a bench facing a long counter and fireplace, designed as part of the northern elevation and forms a semi-external kitchenette. One of the reasons that the stair was placed externally was to make maximum use of the inner spaces of the house and eliminate any element that might distract from their purity. To this end, most of the house's functional spaces – bathrooms, laundry space, storage, kitchenette, and fireplace – are located in a 1.2-metre-deep utility wall in the north façade. This façade acts as a threshold between the various spaces of the house and contains the functions that domestic architecture usually seeks to conceal. The questioning of privacy and domesticity is again evident in this design approach.

The main living room on the ground level and the two bedrooms on the upper level are both defined by more or less the same elements: the concrete utility wall to the north, the walls of the cubic mass to the east and west and the landscape to the south. The two bedrooms are separated by a double-sided closet with sliding doors to the rooms on either side. The spaces can also be connected and used almost as one. Their capacity to fluctuate between being a single shared space and completely isolated private spaces is emphasized by a long connecting balcony on the southern façade.

Upon entering the interior spaces of the house the southern view is the most prominent feature of the space; it appears as if the boundary between indoors and outdoors is erased. However, the transience of this impression is articulated in a system of folding panels that run the entire width and length of the southern façade. The panels are made of stacked reed with aluminium frames and they run between tracks on the floor and ceiling of each storey. The internal spaces can therefore be sealed and entirely isolated from the view. It is only when the panels are closed that the southern edge of the building actually achieves a façade.

The openings into and within the house form a complex sequence of layers. Starting at the back of the house, the first layer is formed by the two entrances to the ground floor, which are aluminium and reed panels opening into the utility wall. The second layer is formed by two MDF doors which provide access to the bathroom and the laundry space within the utility wall. The third layer comprises two frosted glass sliding doors connecting and sealing off the living room from the two semi-external entry points to the main living space which include a bathroom on one side and a laundry room and water-heating unit on the other. The fourth layer is another set of glazed sliding panels located on the southern façade. Finally, the fifth layer is the reed and aluminium folding panels on the south façade. This rhythmic repetition is also extended vertically to the upper bedroom floor, where the various openings allow flexibility in controlling the flow of light and air into the house.

The clients feel that the architect has entirely fulfilled their requirements for the project. The owners' key concern in constructing B2 House was to be close to nature and the house is intended to be used as a space for contemplating the surroundings. When the clients were asked about the absence of a television set or even a fully equipped kitchen they responded that their sole purpose when they are there is to detach themselves from anything that may

distract them from the surroundings: ‘Our kitchen is the small restaurants by the sea,’ they said.

3. *Purely formal aspects*

The rigorous organization of the project is achieved through a tripartite composition consisting of two 1.2-metre-wide concrete structural members that frame a 3.6-metre-wide stone wall. This singular gesture on the building’s eastern and western façades is continued on the roof in a form of “landscaping” that mimics the walls. The result is a continuous uninterrupted surface of concrete that wraps around and defines the mass; when approaching the building from the north, the roof and side walls appear to be one single folded plane. Stones are placed on the roof but are not actually fixed, and are intended to echo the stone walls of the side façades.

The use of man-made structures that act as a frame for a ‘natural’ material is an important recurring theme in the design of the building. It is evident in the way the house frames the landscape, in the house’s syntax – the concrete structure and stone walls – and finally in its detailing – the folding panels of aluminium and reed. Such features form a sequence, advocating the same idea again and again in various forms and with various uses. Although such design choices might be classified as formalistic, they remain secondary and are consistent with the central concept of the work, which is based on the question of defining territory and boundary. In fact, the use of such gestures is restrained. Their rigour and compatibility with the design objectives means that they should not be classified as merely formalist. Neither sheer impulse nor taste formed a foundation for such choices.

A key feature of the project is the use of stone as an infill material for the side walls and the landscaping of the roof. While the stone walls at the sides have no structural role, they refer to the built environment and visually weave the house into the adjacent fabric. The architect interprets the load-bearing stone walls used in the village as part of the natural setting, which has been redeployed in the form of a rich, textured image framed by the architecture. The roof becomes a substitute for the tiled village roofs. Here the architect has reconciled two opposing factors: the communal and the individual. This flux between association and disassociation, collective and individual, public and private, image and structure forms a polarity through which territory in general can be understood, and the concept of territory for this project in particular is defined.

4. *Landscaping*

Large flat pebbles were used as ground cover for the two terraces and were laid randomly to allow the flora of the area to grow within the gaps. Five fruit trees were also planted at picturesque points, without adherence to any geometric pattern. The result is an easily used and maintenance-free space that appears as a quasi-organized version of the surrounding landscape.

C. *Structure, materials, technology*

1. *Structural systems*

The structure of the house is fairly simple and was designed with local technology in mind. The idea was to achieve a rigid monolithic structural box with shear walls that are able to

resist seismic forces, since the area is subject to earthquakes. The structure consists of four reinforced-concrete columns at the corners of the building and a reinforced shear wall on the northern side of the house – the utility wall. This rests on a 30-centimetre raft foundation placed on the bedrock below. The slabs are two-way flat slabs employing no beams for lateral support. However, a single inverted beam connects the two side columns to the south of the structure to increase the rigidity of the building and form a continuous frame on the southern façade.

2. *Materials*

The main materials of the house are concrete and stone, which meet at the side walls in a layered sequence of concrete, stone, concrete. The concrete bears signs of the wooden formwork and the stone is stacked in a highly textured organic manner. It is through these two materials that the architect articulates the image of the project.

The appearance of B2 House is a direct expression of its structure and materials and of its construction process. It is not an extraneous element grafted onto a hidden structure; it is the structure – or rather the architecture – itself. Nothing is concealed. Each material is allowed to express itself clearly. For example, the materials of the side walls of the building form a distinct tripartite composition that extends to the internal spaces of the building, defining and marking the various spaces, reflecting the overall spatial conception. Every component is left bare and unsheathed, so it is impossible to disguise faults – a feature described by the architect as ‘honesty’.

The flooring of the house is the only instance in which one material is used to sheath another. While the ground floor is of terrazzo poured *in situ*, the upper level is finished with wood. These materials relate to the immediate exterior of each level: the terrazzo reflects the pebbled garden transformed into a more refined and polished surface; the wood is an extension of the external stair and wooden deck.

The materials used in the project are generally raw yet refined; the refinement emerges with their layout and relationship in a scheme of calculated rusticity that is at the same time in no way nostalgic.

3. *Construction technology*

One of the architect’s main concerns was to provide a design that could easily be implemented by local builders. For this reason, innovative building technology was suppressed so as to keep the project close to local construction practices. The composition of the house reflects this concern, attempting to bypass any problems in execution and supervision by dividing construction tasks according to their difficulty. For example, work that required heavy supervision, such as building the concrete structure, was separated from work that required less, such as the stone work, and this division is expressed in the design of the building. The architect devised a framework that the local builders could implement without much interference, minimizing the number of site visits and ensuring a high quality of execution.

4. Building services and site utilities

Running water and electricity are commonly available in Büyükhüsün. Sewage, on the other hand, is treated separately by each house by means of septic tank. An electric heater located in the laundry space supplies B2 House with an adequate amount of hot water. Electrical wiring and sockets are placed in two trenches covered with a metal grille located at the junctions between the two side walls and the floor. The aim was not only to avoid attaching sockets to the side walls, but also to provide a space for the addition of a heating system if needed. Since the house is unexpectedly being used in the winter, a slender heating device will be placed in the trenches to provide sufficient heating for the cold months. Similar trenches are located at ground level along the side walls on the exterior of the building, where they function as rainwater drainage channels.

The house also has an underground water tank at the western side of the building. This provides a back-up supply when water is not pumped from the village, although this does not happen often.

D. Origin of technology, materials, labour force, professionals

1. Technology and materials

The house was mainly built with local technology and materials. Only the glazing system of the southern façade and sliding doors was brought from Istanbul and installed by the manufacturer.

2. Labour force

The project's construction team consisted of three master builders and two workers led by chief builder Enver Akan, all of whom were local. The main contractor/coordinator of the project was Ziya Ildiz from Ayvacik who is currently working with the architect on another project in the area.

3. Professionals

Architect Han Tümertekin and his team designed the project from their Istanbul-based office. Tümertekin has executed projects in Turkey, the Netherlands and Japan. Gülsun Parlär was the structural engineer for the project; she is also based in Istanbul.

V. Construction Schedule and Costs

A. History of project

Design was commenced in March 1999 and completed in October 1999. The project's construction period lasted for eighteen months, starting in November 1999 and finishing in April 2001. The house was executed as designed, without any significant changes.

B. Total costs and main sources of financing

The land was purchased for the sum of USD 10,000. In addition, a budget of USD 90,000 was designated for the project. The initial budget was exceeded by USD 50,000, costing a total of

USD 140,000. The owners, Selman and Suha Bilal, privately funded the project and, when asked about the increase, stated that the final outcome is worth much more than their investment.

C. Comparative costs

New houses in the area cost around the same amount.

D. Qualitative analysis of costs

The cost of construction was an average of USD 700 per square metre.

E. Maintenance costs

The design approach to the house combined with the simple requirements of the clients has generated a good example of low-maintenance architecture. Stone and concrete are left to express their true nature without any treatment, which has greatly cut down maintenance costs. The issue of repainting surfaces does not really apply to the project. Other treated surfaces such as the wooden floors, MDF surfaces and reed panels may require upkeep, but wood and MDF are generally durable materials that require infrequent repair and the amount of maintenance required will depend on how heavily the house is used. Reed, however, is subject to damage and will require annual replacement, costing USD 200 per year – a relatively low amount for changing the entire panelling system of the house. Possibly the highest maintenance cost will be incurred by any repairs to the glazing system, owing to the lack of specialized technicians in Büyükhüsün. As for energy and water consumption, it is clear that the house performs well, since there are few electrical appliances and the garden hardly needs any work or watering.

VI. Technical Assessment

A. Functional assessment

If the main premise of building this house was to immerse its users in nature, then their relationship with nature must be active and reciprocal and should not be based solely on the detached process of simply gazing at the landscape. In these terms, the house is very successful in its functionality.

Domestic architecture generally seeks to fulfil certain functional norms in order to be usable, comfortable and practical. Such norms have been the object of a critical scrutiny in the design of B2 House, and certain functional relationships that are normally taken for granted have been subject to an alternative understanding. A clear example is the manner in which nature or open space is used as a key ingredient in the composition, being integrated with typical domestic features. To inhabit the building it is essential to use exterior spaces, as with the exterior stair that is the sole link between the two levels of the building. One is forced to exit the building in order to enter the upper level – an arrangement that might normally be considered impractical but that is actually suitable for both the type of users and for the

general use of the house. Another example is the location of the utility spaces in the semi-enclosed vestibules by the entrance so that they serve both external and internal areas, at the same time emphasizing the importance of the outdoor spaces as integral parts of the house. These utility spaces are sheltered and separated from external spaces by only a reed-panelled door.

This fascination with what lies beyond the demarcated territory of the house plays a functional role in the project, and expresses an alternative view of how territory is commonly understood within the private dwelling. The transitory relationship of the 'nomads' with place is translated into a permanent architectural condition that is also subject to transitory use.

B. Climatic performance

The house performs well climatically between April and November. However, during the colder months, from December to March, its external circulation, large glazed surfaces and lack of adequate heating could cause some discomfort, especially on the upper floor, which does not have a fireplace. But although the house was designed to be used mainly in summer, the architect foresaw the need for heating and designed a space so that it could be added at a later stage, and it is this that will allow heating to be installed in the building imminently.

Many might regard moving from one floor to another through an external space as an ordeal, particularly during rainstorms or low temperatures, but the users of the house do not seem to mind being exposed to the natural elements.

The house is oriented in the same direction as the buildings of Büyükhüsün, facing to the south, and this reduces exposure to the prevailing north-westerly winds. The southern glazed façade admits ample light and breezes into the house, while the reed panelling functions as an easily controlled shading and wind-cooling mechanism during the summer. The cross-ventilation between the southern and northern façades has been carefully designed and can be easily controlled by the layering effect of the glazed and reed panels. Utility spaces on the ground level are ventilated through the reed panels of the two ground floor entrances, while the upper-floor bathrooms are ventilated through two horizontal windows on the north façade.

In short, the house functions well for most of the year, although the lack of a sufficient heating system and the external circulation might be inconvenient during the winter.

C. Choice of materials, level of technology

In its materials the house attempts to bridge the architectural gap between itself and the village through the visual continuity of textures, colours and scale. The result is an ambivalent relationship between house and village, a flux between association and disassociation, the house's clear autonomy being counteracted by its attempt to establish a dialogue with its built surroundings. Hence, the use of materials is part of a larger strategy of negating the definition of a fixed territory, be it spatial, cultural or visual.

The house's technology combines local building practices with mass-produced, commonly used elements – glazing, MDF, and so on. Both are utilized with a modernist sensibility without necessarily resorting to high-technology solutions.

1. *Ageing and maintenance*

The house has two main problems: the first is the water impermeability of the walls; and the second – perhaps more easily resolved – is the strength of the wooden planks used for the flooring of the deck. These two points do not necessarily compromise the general strength of the project but they are issues that need to be addressed and contained.

All the stone work is built with open joints, with no outer mortar filling the thin gaps between the stones, so it is likely that water and humidity can travel through the gaps and across the cement mortar into the interior. This is most likely to occur if rainwater carried by a strong wind hits the walls horizontally. Water has managed to seep through on the upper side of the western wall at the seam between the stone and the concrete where the drainpipes are located on the exterior. The seepage may be due to the open joints between the stone, a leak in the connection between the stone and concrete columns, or the drainpipes.

On the deck adjacent to the stair, the thin section of the wooden members does not provide the necessary stability for a load-bearing surface. The wooden members actually bend when someone stands on them and this could become hazardous as the wood becomes brittle with time. A solution to this problem would be to replace the existing wooden planks with ones that are thicker in section and can support more weight.

In general, the house is expected to age very well; its resilient materials will gain more appeal with time while resisting erosion and decay.

2. *Design features*

With a reduced architectural language employing rudimentary forms, remarkable spatial conditions are achieved in B2 House. The architect has managed to draw uncommon energies from common forms by virtue of siting, organization and thematic consistency. The context of the project becomes a vague point of reference, subject to editing and reduction. The tectonic articulation of the project is hard-edged and at times brutal; the manner in which the building meets the plateau has a cut-and-paste effect that is evident in the articulation of the façades as well. This tendency is also reflected in the proportional relationship of various elements: of the mass to the base, the concrete to the stone, the stair deck to the mass, and so on. Ultimately, the architect's attention was geared towards redefining the spatial norms of domesticity and the composition is subservient to this goal.

VII. Users

A. *User profile*

The house is owned and used by two well-educated, well-travelled and cosmopolitan brothers, Suha and Selman Bilal, who are co-owners of a major garment-manufacturing

company that caters for the Turkish and international markets. They both belong to the upper income bracket.

B. *User response*

The owners are extremely fond of the house and its location. They consider it to be comfortable, practical and aesthetically pleasing, although, owing to their work commitments, they are able to use the house only once or twice a month. They feel that the effect of the house is conducive to the well-being of its users: 'Even if we spend one day in the house it is sufficient to feel totally rejuvenated,' they say.

During the initial design stages the clients were concerned that the aesthetic of the house would probably be 'too strong for the villagers', but upon its completion they were relieved to find that the house was accepted and admired by the local community. This does not mean that the locals do not still regard it as an oddity and an object of curiosity; many ask permission to see 'the Japanese house'.

B2 House is a well-known project in Turkey. It has been featured in both national and international publications and has been recognized by the architectural milieu as an important project. The professional community is generally agreed on its conceptual strength and refined sensibility, but it has been criticized by some for being too costly and by others for being inclined towards formalism, though the majority regard it as a project of great value and interest.

VIII. Project Personnel

In addition to architect Han Tümertekin, the design team included project architect Eylem Erding, and assistant architects Hakan Semgin, Hayriye Sözeh and Ahmet Öhder.

Structural engineering: Gülsün Parlar

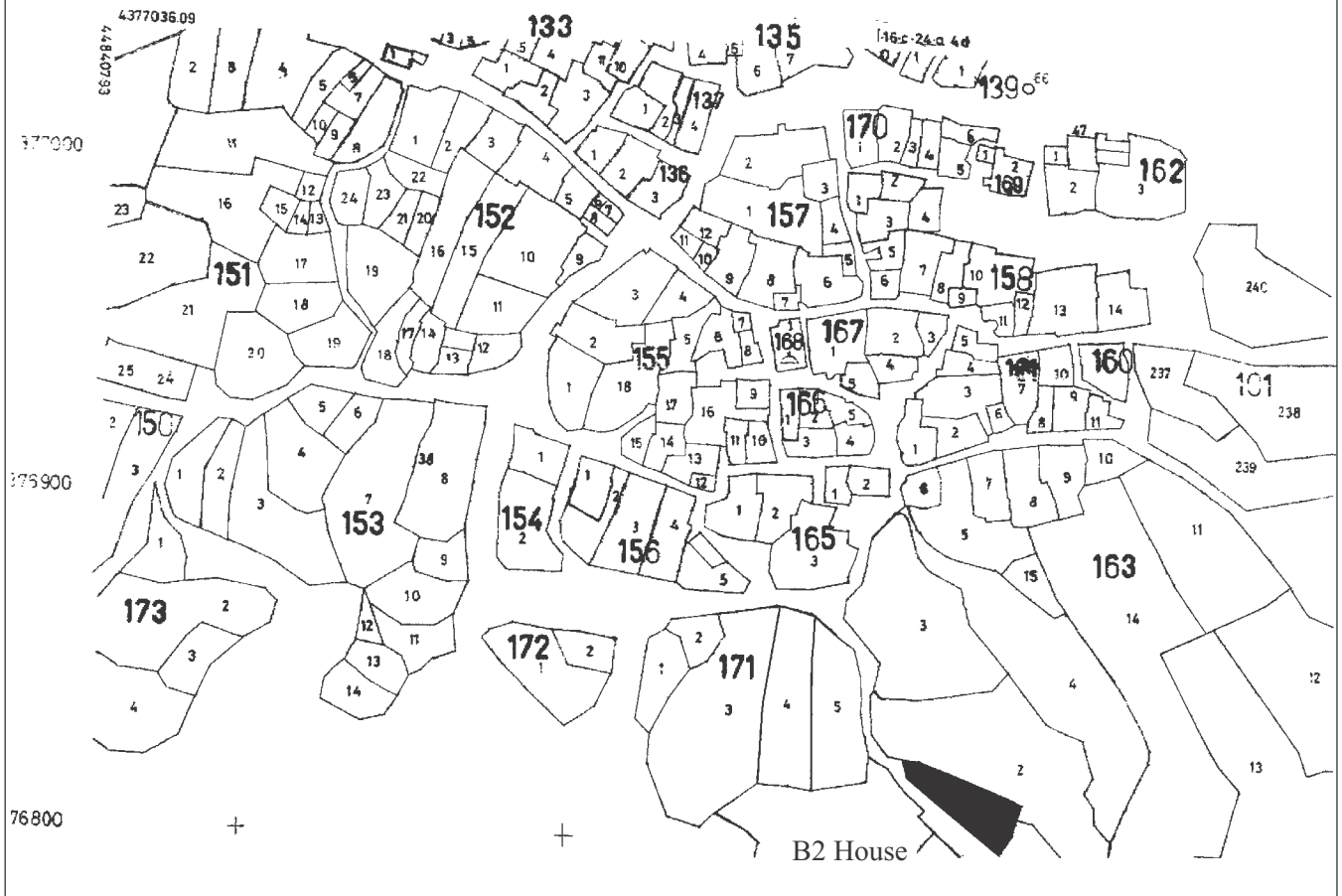
Contractor: Ziya Ildiz

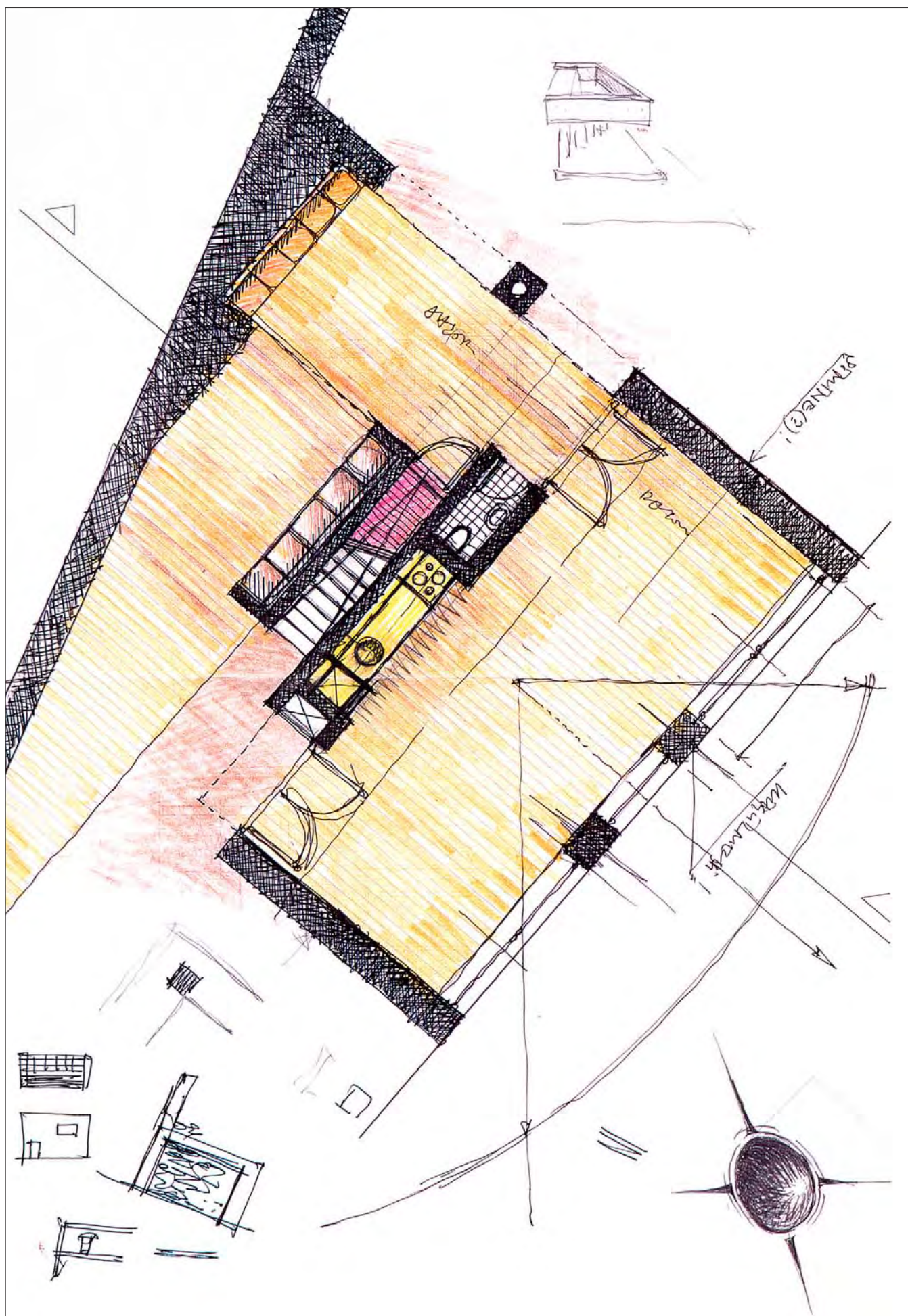
Master builder: Enver Akan

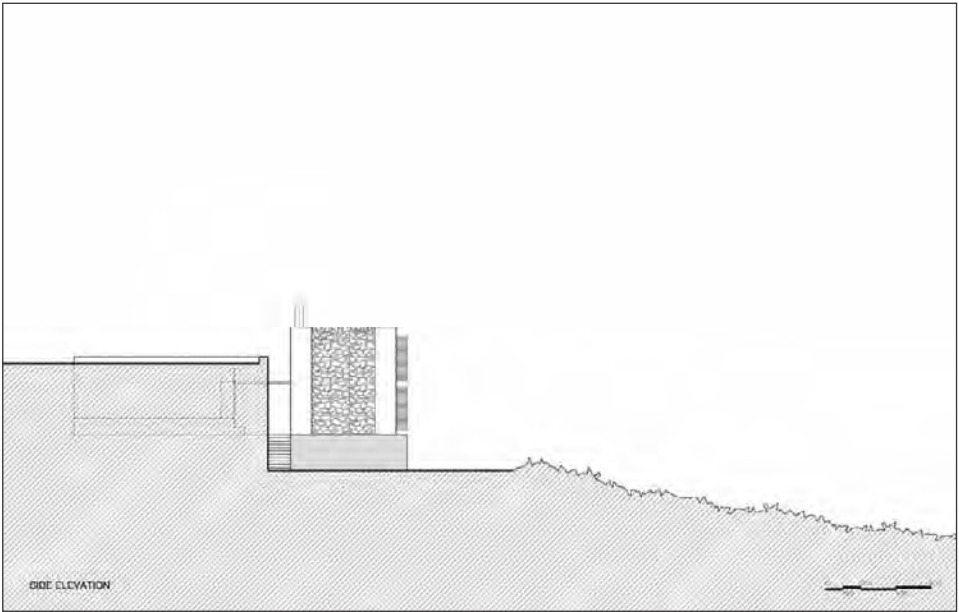
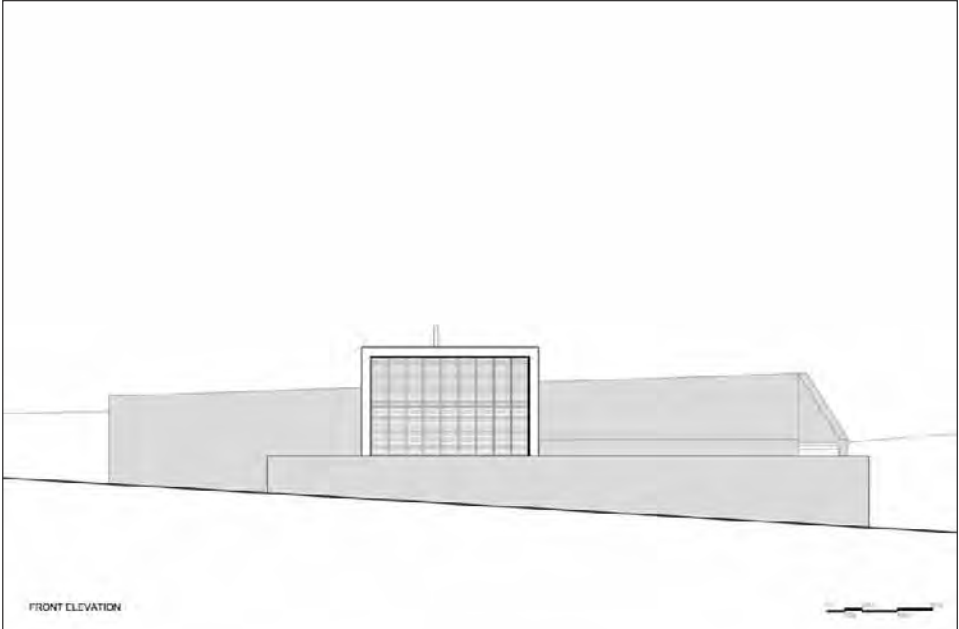
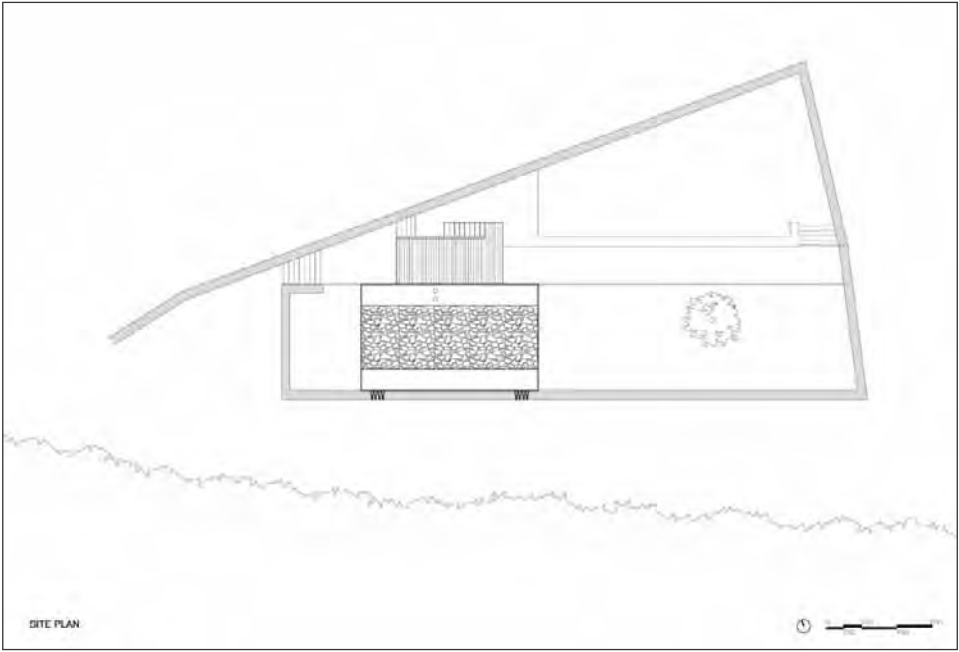
Sahel Al-Hiyari

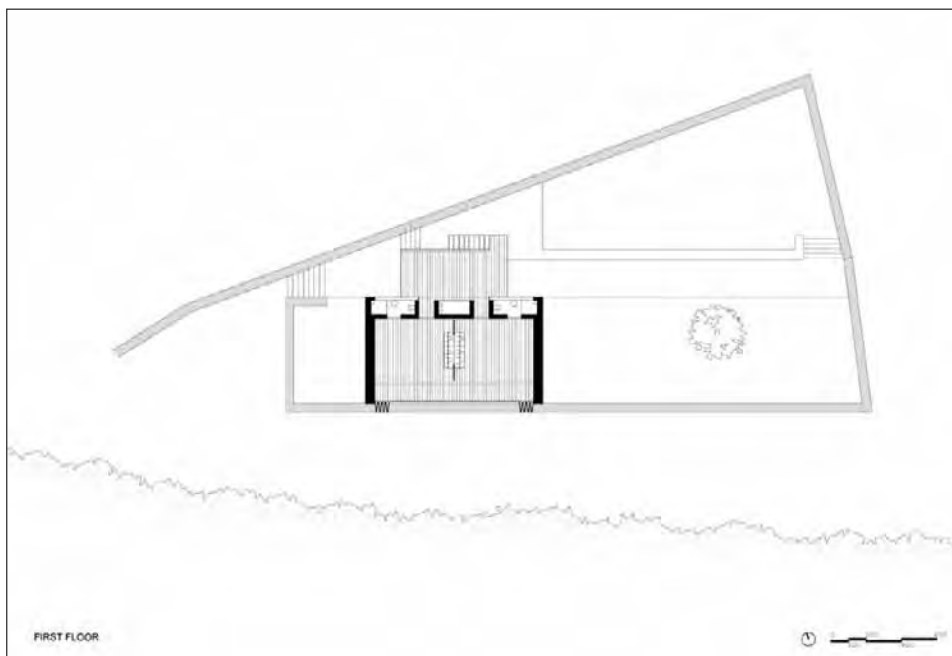
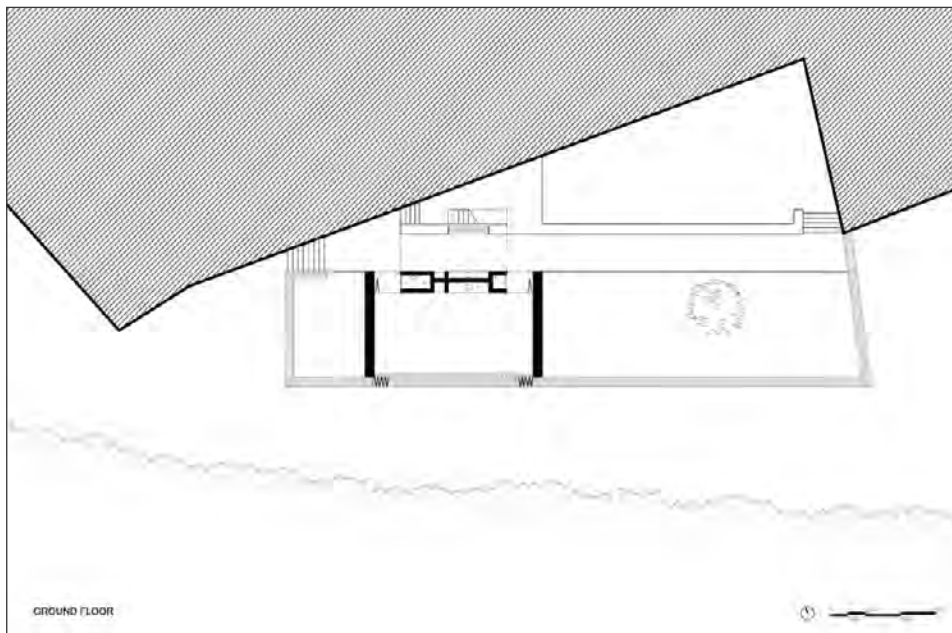
May 2004

Ayvacık village









The plan of the house is a rectangular form carved out from the property within the surrounding landscape.



B-2 is a private house for two brothers, located in the mountainous region of the north Aegean coast.





The rectangular form is most defined when the panels of the front, south façade are closed.



The house is open to the south but almost closed to the rest of the property.

The two-storey house is located at the boundary of the lower southern plateau, which is almost 2 meters above lower, 'public' dirt road.



Reed shades are held in folding panels on the south façade.





From the interior, the southern view of the mountains is the most prominent component of the space.

The lower level of the house comprises one main living space shared by the two brothers; a kitchenette and a fire place are also located in the space.





A double-sided closet and two sliding doors separate the two bedrooms on the upper floor; the spaces can be also be nearly fully connected as one single area.

The upper bedrooms can also be configured as completely isolated private spaces.





Connection between the upper and lower floors is through a light external steel framing structure with wooden planks, located at the northern façade of the building where entries to the various spaces are located.



The northern façade is a 1.2-meter deep utility wall that contains most of the utilities (i.e. bathrooms, laundry space, storage, kitchenette, fireplace).



The Aga Khan Award for Architecture

ARCHITECT'S RECORD
 2004 AWARD CYCLE
I. IDENTIFICATION

Project Title B.2 HOUSE
 Street Address BÜYÜKHÜSUN VILLAGE . AYVACIK
 City CANAKKALE Country TURKEY

II. PERSONS RESPONSIBLE**A. Architect/Planner**

Name HAN TÜMERTEKİN
 Mailing Address GINARLI GEŞME SOK. GÜNLÜK ÇIKMAZI N°1 80820 KURU GEŞME
 City İSTANBUL Postal Code 80820
 Country TURKEY Telephone +90 212 3582760
 Facsimile +90 212 3582762 E-mail mimarlar@mimarlar.com
 Principal Designer _____

B. Client

Name SELMAN BİLAL
 Mailing Address TEŞVİKİYE BOSTAN SOK. N°6 NİŞANTAŞI
 City İSTANBUL Postal Code 80220
 Country TURKEY Telephone +90 212 3273133
 Facsimile +90 212 2613204 E-mail main@bilsar.com

C. Project Affiliates/Consultants

Please list those involved in the project and indicate their roles and areas of responsibility (e.g. engineers, contractors, economists, master craftsmen, other architects, clients, etc.). Please cite addresses and telephone numbers separately.

Name	Role
EYLEM ERDİNG	ARCHITECT IN DESIGN TEAM
HAYRİYE SÖZEN	ARCHITECT IN DESIGN TEAM
AHMET ÖNDER	ARCHITECT IN DESIGN TEAM
HAKAN ŞENGÜN	ARCHITECT IN DESIGN TEAM
GÜLSÜN PARLAR parlar@parlar.com	STRUCTURAL ENGINEER
ZİYA İLBİZ	SITE COORDINATOR

III. TIMETABLE

(please specify year and month)

A. Commission 1999

B. Design Commencement 1999 (MARCH) Completion 1999 (OCTOBER)

C. Construction Commencement 1999 (NOVEMBER) Completion 2001 (APRIL)

D. Occupancy JUNE 2001

Remarks _____

IV. AREAS AND SURFACES

(please indicate in square metres)

A. Total Site Area 400 m²

B. Ground Floor Area 60 m²

C. Total Combined Floor Area 120 m²
(including basement(s), ground floor(s) and all upper floors)

Remarks _____

V. ECONOMICS

(please specify the amounts in local currency and provide the equivalent in US dollars. Specify the date and the rate of exchange in US dollars at the time.)

	Amount in Local Currency	Amount in US dollars	Exchange Rate	Date
A. Total Initial Budget	_____	_____	_____	_____
B. Cost of Land	_____	<u>10.000 -</u>	_____	_____
C. Analysis of Actual Costs				
1. Infrastructure	_____	<u>30.000 -</u>	_____	_____
2. Labour	_____	<u>30.000 -</u>	_____	_____
3. Materials	_____	<u>30.000 -</u>	_____	_____
4. Landscaping	_____	<u>20.000 -</u>	_____	_____
5. Professional Fees	_____	<u>30.000 -</u>	_____	_____
6. Other	_____	<u>—</u>	_____	_____
D. Total Actual Costs (without land)	_____	<u>140.000 -</u>	_____	_____
E. Actual Cost (per sq. meter)	_____	<u>700 -</u>	_____	_____

Remarks _____

VI. PROJECT DESCRIPTION

USER - A CONTEMPORARY "NOMAD", CHANGING PLACES FREQUENTLY AND STAYING AT PLACES RARELY...
 CRITERIA - SHORT TERMLY USED, MAINTENANCE-FREE, MAXIMUMLY USED HOUSE WHICH IS LOCALLY MADE BUT NON LOCALLY LIVED IN...
 PLACE - AN AEGIAN VILLAGE

VII. MATERIALS, STRUCTURE, AND CONSTRUCTION

MAIN STRUCTURAL MATERIAL IS CONCRETE. THE BEST CONSTRUCTIVE WALLS ARE HAND CRAFTED STONE. THE BALCONY AT THE UPPER EXTERNAL HOUSE IS A STEEL CONSTRUCTION WITH WOODEN FLOOR FINISHING EXTENDING TOWARDS THE INTERNAL HOUSE. THE GROUND FLOOR IS TERRAZZO INSIDE AND NATURAL STONE OUTSIDE. WINDOW FRAMINGS AND SHUTTERS ARE LESS MAINTENANCE REQUIRED ALUMINIUM FRAMES. ALUMINIUM SHUTTERS ARE FILLED WITH HAND CRAFTED REED, CREATING BETTER CLIMATIC CONDITIONS FOR THE INTERNAL HOUSE.

VIII. PROJECT SIGNIFICANCE AND IMPACT

THE SIGNIFICANCE OF THE B2 HOUSE IS TO FRAME A VOID FOR A CONTEMPORARY "NOMAD". A NOMAD, WHO DENSELY USES THE CONTEMPORARY INFORMATION TECHNOLOGIES AND THUS CAN ACT INDEPENDENTLY FROM "PLACE", EVEN IN THE HOUSE ITSELF - BETWEEN FLOORS AND FLOORS - IN THIS CASE HOW COMPULSORY WOULD IT BE FOR A NOMAD'S HOUSE TO BELONG ITS VERY PLACE IN THE NEIGHBORHOOD OF A HILLSIDE VILLAGE, AN OLIVE GROOVE AND THE SEA...

TO WHAT EXTENT A CITIZEN TURN OUT TO BE A VILLAGER BY "STAYING" THERE AND "STARING" OUT FROM A DISTANCE THROUGH A DETERMINED FRAME...

HOW WOULD A PRISM CREATE ITS OWN SPACE AND LANDSCAPE...

THE LIMITS OF THE SITE DETERMINE THE LIMITS OF THE HOUSE, VIA INTERNAL HOUSE, EXTERNAL HOUSE, WALLS AND LEVELS...

MATERIALS DO NOT REQUIRE MAINTENANCE, ARE PREFERRED DUE TO INFREQUENT RUNNING OF THE HOUSE... "SUPPLYING" THE ESSENTIAL CONSTITUTIONAL ELEMENTS LOCALLY, FROM THE VILLAGE AND "BRINGING" WITHIN THE ARTICLES, THINGS FROM THE CITY IS THE MAIN OBJECTIVE OF THE BUILDING PROCESS. FAR DISTANCE

COMMUNICATION REQUIRES AN EASILY TRANSFERRED INFORMATION WHICH CAN ALSO BE EASILY UNDERSTOOD AND PRODUCED BY LOCAL CRAFTSMEN. THE IDEA OF DETERMINING THE "FRAME" IS CARRIED OUT THROUGH THE DESIGN STAGE IN ALL SCALES.

THROUGHOUT THIS CRITERIA THE MATERIALS ARE USED IN THEIR NATURAL STATES AND THE CONTOURS ARE FRAMED BY MORE REFINED MATERIALS AND USED AS COUPLES.

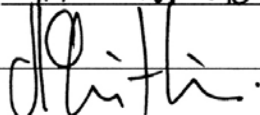
STONE WITH EXPOSED CONCRETE, WOOD WITH STEEL, REED WITH ALUMINIUM...

HOUSE "FINISHES" WITHOUT COVERINGS AND RATHER FINISHES ITSELF WITHOUT "FINISHINGS" AND PUTS ITSELF OUT AS A LOCALLY MADE BUT NOT NATIVE TO THE PLACE.

Please note: The submission of this Record is a prerequisite to candidacy for the Award. All information contained in and submitted with the Record will be kept strictly confidential until announcement of the Award is made. Subsequently, such material may be made available by the Aga Khan Award for Architecture and you hereby grant the Aga Khan Award for Architecture a non-exclusive licence for the duration of the legal term of copyright (and all rights in the nature of copyright) in the Material submitted to reproduce the Material or licence the reproduction of the same throughout the world.

Name (please print) HAN TÖMERTERKİN

Signature



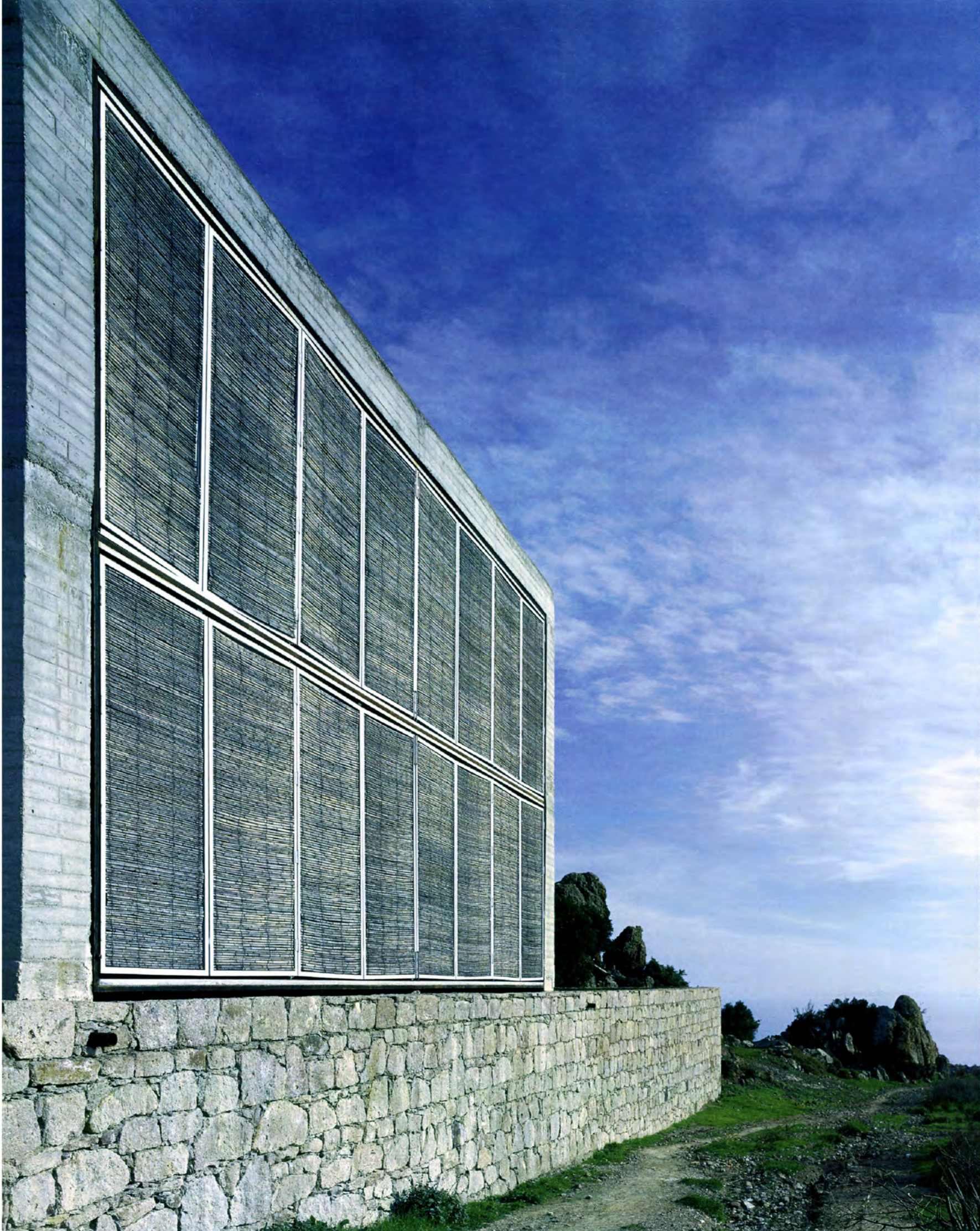
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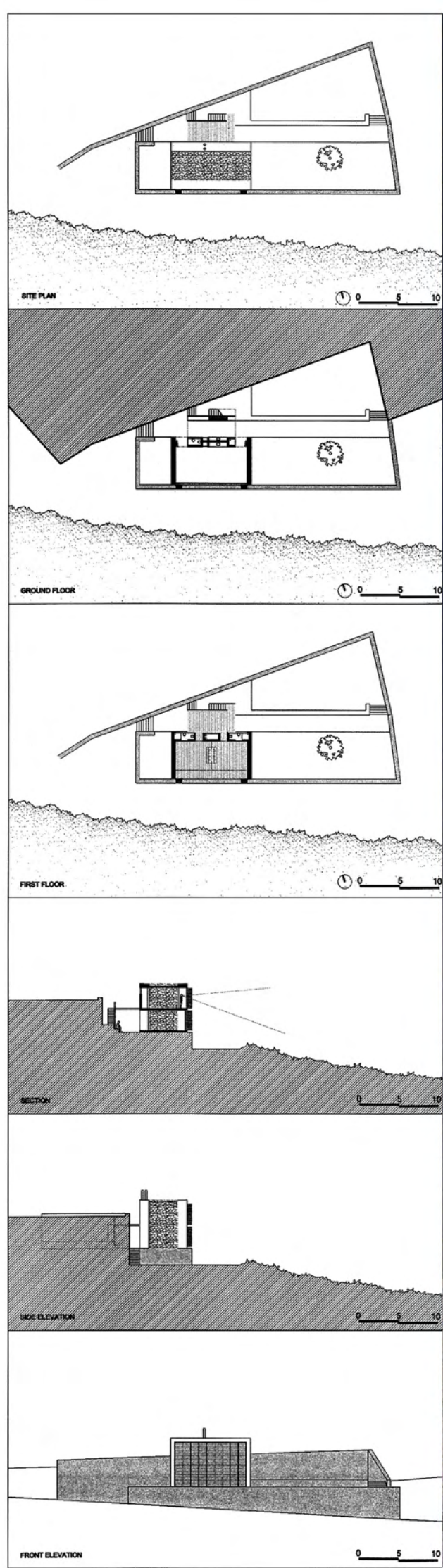
B2 House

Buyukhusun Village, Ayvacik
Canakkale, Turkey

Architects	Han Tümertekin Istanbul, Turkey
Clients	Bilal Selman Istanbul, Turkey
Commission	1999
Design	1999 - 1999
Construction	1999 - 2001
Occupancy	2001
Site	400 m2
Ground floor	60 m2
Total Floor	120 m2
Costs	
- Land	10'000 USD
- Global	140'000 USD
	USD = US Dollar

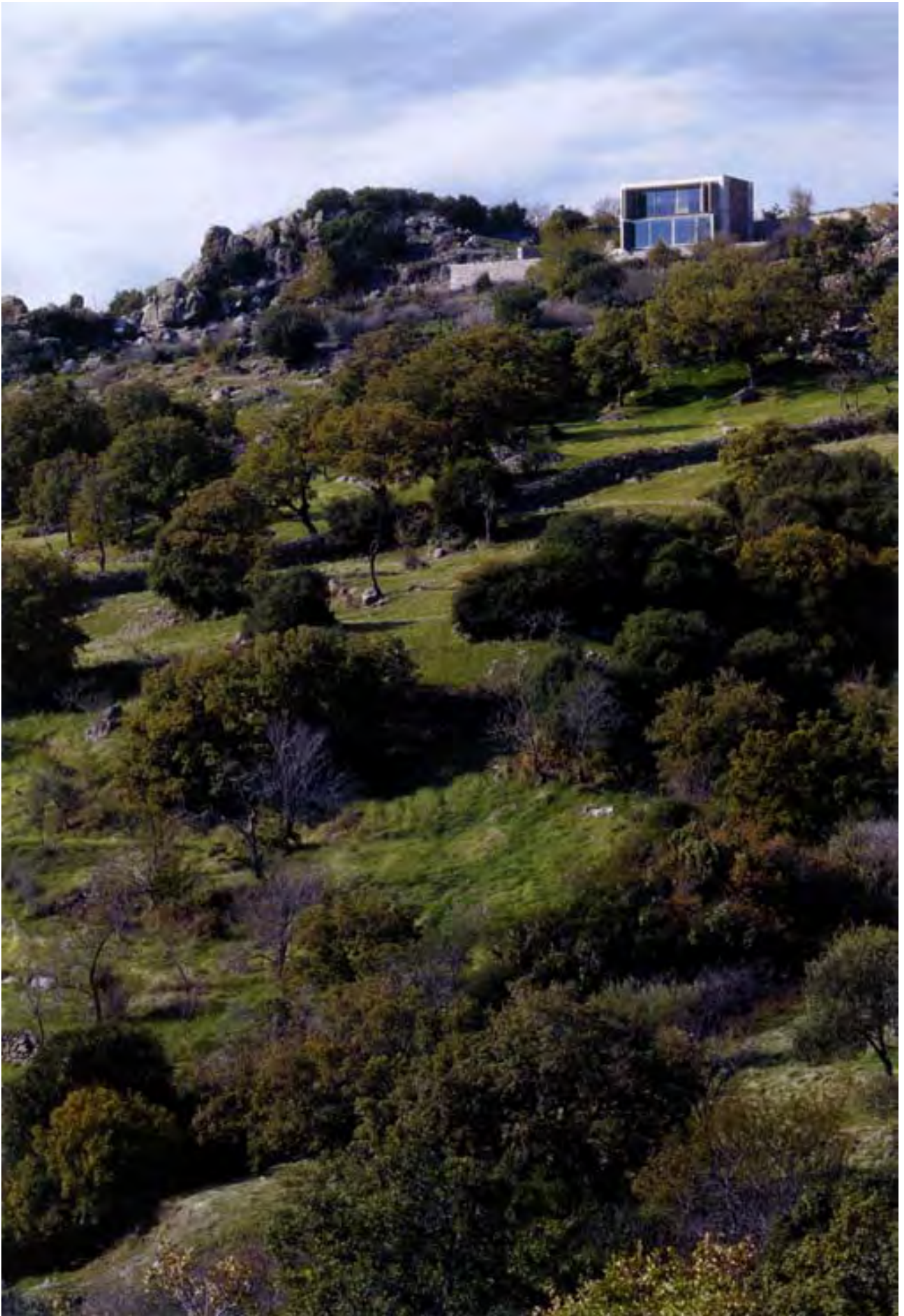
Programme A two-storey house made of concrete and handcrafted stone. The balcony on the upper level is a steel construction with wooden floor finishing that extends towards the house. Aluminium frames and shutters are used for the windows; the latter are filled with handcrafted reed, helping the interior of the structure remain cool. The house requires little maintenance and is ideally suited for a person with a 'nomadic' lifestyle, seeking temporary accommodation.







B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



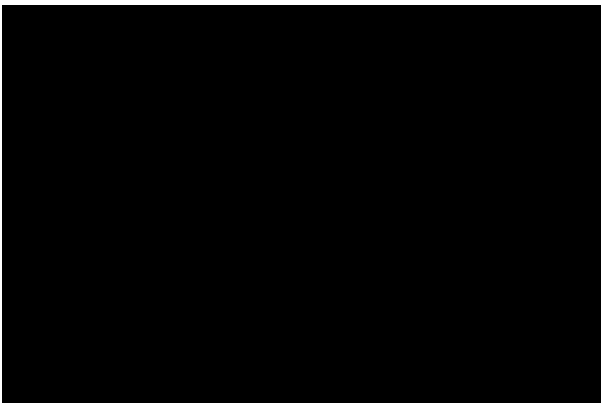
B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey



B2 House , Canakkale, Turkey

B2 House
Canakkale, Turkey



Acc No: S221519
VM Title: General view, context
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221520
VM Title: General view
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221521
VM Title: Front view
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221522
VM Title: Front view
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221523
VM Title: Front facade closed
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221524
VM Title: Front facade open
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
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VM Link: P002763 B2 House

B2 House
Canakkale, Turkey



Acc No: S221525
VM Title: Side view
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221526
VM Title: Side view
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
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Acc No: S221527
VM Title: Front & side facades
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
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VM Link: P002763 B2 House



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Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
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CD/Location: - / AK
VM Link: P002763 B2 House



Acc No: S221529
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Photographer: Cemal Emden
Copyright: Y
Technical Infos:
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VM Link: P002763 B2 House



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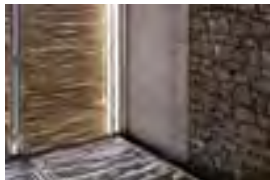
B2 House
Canakkale, Turkey



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Date: 01.03.2003
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Copyright: Y
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VM Link: P002763 B2 House



Acc No: S221532
VM Title: Wall, detail
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
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Acc No: S221533
VM Title: Wall, window, detail
Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
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Date: 01.03.2003
Photographer: Cemal Emden
Copyright: Y
Technical Infos:
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Acc No: S221536
VM Title: Presentation panel 2
Date:
Photographer:
Copyright: Y
Technical Infos:
Notes:
CD/Location: - / AK
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B2 House
Canakkale, Turkey

List of Visual Materials

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13	R012609				12.03.2003	Cemal Emden	A4	Y
14	R012610				12.03.2003	Cemal Emden	A4	Y
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26	R013130				12.03.2003	Cemal Emden	A4	Y
27	S221519			General view, context	01.03.2003	Cemal Emden	24x36	Y
28	S221520			General view	01.03.2003	Cemal Emden	24x36	Y
29	S221521			Front view	01.03.2003	Cemal Emden	24x36	Y
30	S221522			Front view	01.03.2003	Cemal Emden	24x36	Y
31	S221523			Front facade closed	01.03.2003	Cemal Emden	24x36	Y
32	S221524			Front facade open	01.03.2003	Cemal Emden	24x36	Y
33	S221525			Side view	01.03.2003	Cemal Emden	24x36	Y
34	S221526			Side view	01.03.2003	Cemal Emden	24x36	Y
35	S221527			Front _side facades	01.03.2003	Cemal Emden	24x36	Y
36	S221528			Front facade	01.03.2003	Cemal Emden	24x36	Y
37	S221529			Back facade	01.03.2003	Cemal Emden	24x36	Y
38	S221530			Interior, ground floor	01.03.2003	Cemal Emden	24x36	Y
39	S221531			Interior, ground floor	01.03.2003	Cemal Emden	24x36	Y
40	S221532			Wall, detail	01.03.2003	Cemal Emden	24x36	Y
41	S221533			Wall, window, detail	01.03.2003	Cemal Emden	24x36	Y
42	S221534			First floor balcony	01.03.2003	Cemal Emden	24x36	Y
43	S221535			Presentation panel 1			Digital	Y
44	S221536			Presentation panel 2			Digital	Y
45	S221537			First floor plan			Digital	Y
46	S221538			Front elevation			Digital	Y
47	S223754			Ground floor			Digital	Y
48	S223755			Section			Digital	Y
49	S223756			Side elevation			Digital	Y
50	S223757			Site plan			Digital	Y

MATERIALS IDENTIFICATION FORM

Provide a full list of all material being submitted

No.	Description	Remarks
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1	GENERAL VIEW - 1	
2	GENERAL VIEW - 2	
3	GENERAL FRONT-VIEW - 1	
4	GENERAL FRONT VIEW - 2	
5	FRONT FACADE CLOSED	
6	FRONT FACADE OPEN	
7	GENERAL SIDE VIEW - 1	
8	GENERAL SIDE VIEW - 2	
9	FRONT - SIDE FACADE	
10	FRONT FACADE - INTERIOR	
11	BACK FACADE	
12	GROUND FLOOR INTERIOR - 1	
13	GROUND FLOOR INTERIOR - 2	
14	DETAIL - 1	
15	DETAIL - 2	
16	FIRST FLOOR BALCONY	
17		
18		