



**ASMAZ**

timber structures

# *ASMAZ TIMBER FRAMED STRUCTURES*

*It is the only name in Turkey in terms of all projects,  
architecture, engineering, manufacturing and application for  
Timber Framed Structures*



*The foundation of ASMAZ Ahşap Karkas Yapılar was laid by the valuable founder my father Hüseyin Avni ASMAZ in 1955. We started our business as ASMAZ İnşaat by carrying out hundreds of construction projects. Since the foundation of our company, one of our changeless principles that we have adopted is to offer a luxurious and quality life in high quality and safe buildings.*

*We decided to be a company that specializes in building timber structures in 2008. Our company that we restructured as ASMAZ Ahşap Karkas Yapılar, became one of the most reliable and powerful companies in architecture, engineering, production and implementation of timber framed structure in Turkey. We continue constructions of our projects which are customized according to our customers' special requests and needs in a wide variety of areas such as houses, business centers, shopping centers, public space projects, sports facilities within the country and abroad.*

*ASMAZ Ahşap Karkas Yapılar creates such places aimed at providing breathing, eco-friendly and healthy natural living areas with high quality of life by virtue of the nature of the wood and its carbon retention characteristic. Another outstanding feature of timber structures is to have the most durable construction material against earthquake, fire, climate change, and natural disasters.*

*As ASMAZ Ahşap Karkas Yapılar, we supply certified structural wood materials with engineering specifications from overseas manufacturers which are known as the best in the world to use for our eco-friendly structures with high energy efficiency.*

*We perform works of engineering for all our projects in conformity with European Timber Structures Regulation (ECS- Eurocode 5 Design of Timber Structures). Our production and erection crews consist of experts who are experienced, trained on regular basis and following the innovations in the world. In our production facility located in Yalova, we are offering unlimited design solutions, faultlessly efficient production, and fast and smooth installation process by using latest technologies. We are now closer to our customers and business partners through our office consisting of architecture and marketing departments opened in Istanbul in 2015.*

*One of our most important missions is to raise awareness in timber frame structures of our society and our entrepreneurs. We aim at training younger generations in order to make them specialized in constructing of timber framed structures in collaboration with universities; keeping them informed about the construction industry and what's new and all innovative developments in timber frame structures by participating in various trainings, workshops and conferences. Therefore, we give trainings on timber framed structures several times in a year in architecture and engineering faculties.*

*As ASMAZ Ahşap Karkas, we aspire to create public opinion on the issue as a social responsibility project, to ensure the widespread use of timber frame structures and to contribute to upgrade service quality standards.*

*I wish you happy days in healthy and eco-friendly timber framed structures.*

*Sincerely*

*Mehmet Akif Asmaz  
Chairman of the Board  
ASMAZ Ahşap Karkas Yapılar*

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## ASMAZ TIMBER FRAMED STRUCTURES

ASMAZ Ahşap Karkas Yapılar is one of the leading and the most successful and respected companies in the timber framed structures field of Turkey by designing ecological buildings which are user-friendly and eco-friendly and they reduce energy costs, require minimal maintenance, provide comfort and healthy living conditions and comply with international building codes.

Since 1955, ASMAZ İnşaat company would carry on its activities with its projects, stable structure, and customer-oriented service approach without compromising its quality principles. ASMAZ İnşaat decided to be a company that specializes in building timber structures in 2008. It moved in the direction of corporate restructuring including revision of its investments and aimed at training its team in order to make them specialized in particular timber framed structures by participating in various trainings, workshops and conferences. ASMAZ Ahşap Karkas Yapılar that proceeds on its way with such a

restructuring policy and integrated with the world, following all technological developments and hosting the representations of the largest companies of the world has been operating in the construction industry as a reliable, powerful corporate. Timber Frame Construction System is the world's most advanced, lightweight construction technology that meets the market's needs and people's expectations of life in healthy and durable structures.

Since 2008, ASMAZ Ahşap Karkas Yapılar provides its safe, healthy and comfortable living areas with its registered trademark by producing eco-friendly structures in Yalova factory which are suitable for all weather conditions, energy-efficient as a result of engineering calculations made for its customers in the country and abroad. As Asmaz Ahşap Karkas Yapılar headquarter is in Yalova, now it is closer to its customers and business partners through its office in Istanbul consisting of architecture and marketing departments.

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## WOOD ENGINEERING

ASMAZ Timber Framed Structure system is an international construction system that its static calculations made in accordance with the special software providing protection against all the possible damaging effects of natural disasters. ASMAZ Ahşap Karkas carries on its works of installation by static calculation in conformity with European Timber Structures Regulation (EC-5 Eurocode 5 Design of Timber Structures) entered into force at the same time in all European economic community countries. All engineering calculations at the company are made by considering all regulations concerning timber structures.



The essential point of engineering calculations is to determine the type of structural timber intended to be used and establish its strength criteria.

All kind of materials from solid wood, laminated wood, wood panels to composite wood must have structural features according to The European Timber Structures Regulation.

ASMAZ Ahşap Karkas Yapılar uses only timber as a structural material for all constructions. Products of connection technology which are the most important factor in the implementation of engineering calculations are also selected from structural materials which have been analysed by engineering calculations.

Asmaz Ahşap Karkas Yapılar works on architectural custom designs, personalized architectural projects and finds solutions based on customers' needs and expectations. After designing architectural projects, static

calculations are made by software systems. The loads generated by natural hazards such as earthquake, winds, rain, snow including dead and live loads are important parameters affecting the engineering calculations. Many factors such as location, climate and seismic data including purpose of use contain the basic information required for engineering calculations in a project preparation.

Having certified structural properties such as nails, screws, bolts etc in terms of use of metal connection technology products is the sine qua non of every production.

ASMAZ Ahşap Karkas Yapılar is the only company which implements worldwide solutions that have applicable engineering calculations in our country in terms of connection technology that constitutes the most important part of the timber frame structure techniques.



## WORKING SYSTEM

Asmaz Ahşap Karkas Yapılar provides unlimited support at every stage of the implementation process in terms of project designing, manufacturing, installation and consultation with its architectural design office which offers creative designs and its manufacturing plant with fast production and specialized technical team.

Asmaz Ahşap Karkas Yapılar works to create projects that will meet the specific requirements of customers.

Asmaz Ahşap Karkas Yapılar produces architectural custom designs, personalized architectural forms and finds solutions based on customers' needs and expectations. After designing architectural projects, static calculations are made by software systems. In order to prepare each manufacturing project; wall panels, floor beams, timber roof trusses and support structures of each project are designed by engineering methods after nature of hazard loads (those generated by natural events such as high winds, earthquake, rain) are properly calculated by engineering analysis for each project. Roof trusses and floor beams are produced with proprietary and certified products by using special galvanized metal connector plates which their engineering calculations have been made.

Construction of structural support system is formed with special mounting accessories at the site of construction after manufacturing wall panels, floor beams and roof trusses in accordance with the project in the factory setting. The supporting structure of a two-story building is completed in 4-6 week quick and trouble-free assembly. After installation of the sheathing wrap of structural system with structural

wood panels from the outer surface and it provides unlimited possibilities to external and internal siding and insulation and trim applications optionally. Timber Framed Structure with structural load-bearing, floor beams, roof trusses thanks to large openings allowing to pass through, is a system preferred in all kinds of industrial and commercial buildings and it provides a seamless connection and unlimited solutions due to compatible with different structural elements.

Timber frame projects are initiated by making a design based on the concept. Even if there is no any architectural project, architectural design team may work with end-users and create personalized designs and projects.

Engineering team makes a static calculation of the related structure and also an engineering design of its structural load-bearing system, after the conclusion of architectural project. After that, production team takes over the project to start production. Timber frame erection crew takes over continuation of the process to complete the project on site after completion of its production.



**Project is delivered at the stage of basic or advanced structure in situ by ASMAZ Ahşap Karkas Yapılar when taken over such a project at the stage of designing. Here are the details of delivery at the stage of basic or advanced structure:**

- Engineering calculations and production projects,
- Production of timber framed structure including structural load-bearing system
- Wall panels, joists, roof trusses,
- Installation of timber frame load-bearing walls
- Wall sheathing with structural wood panels from the outer surface
- Floor beams sheathed with structural wood panels
- Roof sheathed with structural wood panels
- Heat insulation to be applied for walls, floors and roof
- Plasterboard application for inner surface of exterior walls and both surface of interior walls and under floor and roof framing
- Exterior doors, interior doors, windows and joinery applications
- Roof waterproofing application on roof framing
- Roof sheathing
- Exterior sheathing application on exterior waterproofing membrane

**We also provide turn-key services upon receiving a request for special project**

ASMAZ Ahşap Karkas Yapılar offers unlimited design solutions, faultlessly efficient production, and fast and smooth installation process with customer-oriented service approach by using latest technologies in the production facility located in Yalova.

## SOLUTION PARTNERS

ASMAZ Ahşap Karkas Yapılar has ongoing collaboration and solution partnership agreements with industry leading corporations. These agreements include project design and engineering, as well as authorized representation and after-sale service warranty agreements of EN certified structural wood products.

### BAMBUDECK

ASMAZ Ahşap Karkas Yapılar started to use bamboo, which has become the most popular product in the world for decking and siding in recent years. Representative brand name is Bambudeck. Bambudeck has high density, flexible bending strength and the architectural surroundings, which are the force of tension; high-tech, environment-friendly, called vegetable steel new decking and siding product.



### MOSSER

Since 2012, ASMAZ Ahşap Karkas Yapılar has also been the Turkish representative of Mosser Company from Austria, one of Europe's high-tech certified structural laminated wood producers.



### SIENNA PASIFIC WINDOWS / HURD WINDOWS AND DOORS

In 2009, ASMAZ Ahşap Karkas Yapılar has been the Turkish representative of Hurd Windows and Doors which is one of the most prominent wooden window frame manufacturers in the United States and as a representative it continues providing sales and after-sales services for Hurd Windows and Doors products in Turkey.



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# *Our Projects*

# Historic Building

Üsküdar / İstanbul

It's located in Sultantepe neighbourhood on the back of Üsküdar Paşalimanı, where has a wide view from Marmara Sea to Bosphorus Bridge. Restoration of the second degree historical building called as Fehmi Pasha's mansion was completed by ASMAZ Ahşap Karkas Yapılar. 2.5 storey pavilion which is eye-catching with its vaccine colour and panels of siding to be used as a house, is located in the Bosphorus, İstanbul as one of the unique historical buildings.



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# Historic Building Sarı Konak Hotel

Amasya



*The Yellow Mansion Hotel (Sarı Konak) is a historic building of the first degree remained from Ottoman period and is one of the largest mansions in Amasya on Yesilirmak River, located at the south end of the Seljuk Kunch Bridge.*

*The Yellow Mansion Hotel showcases the most defining characteristics of Ottoman style of traditional wooden architecture in Amasya with its 1000m<sup>2</sup> usable space on two floors and the interior courtyard facing the river and contributes greatly to local tourism.*

Installation



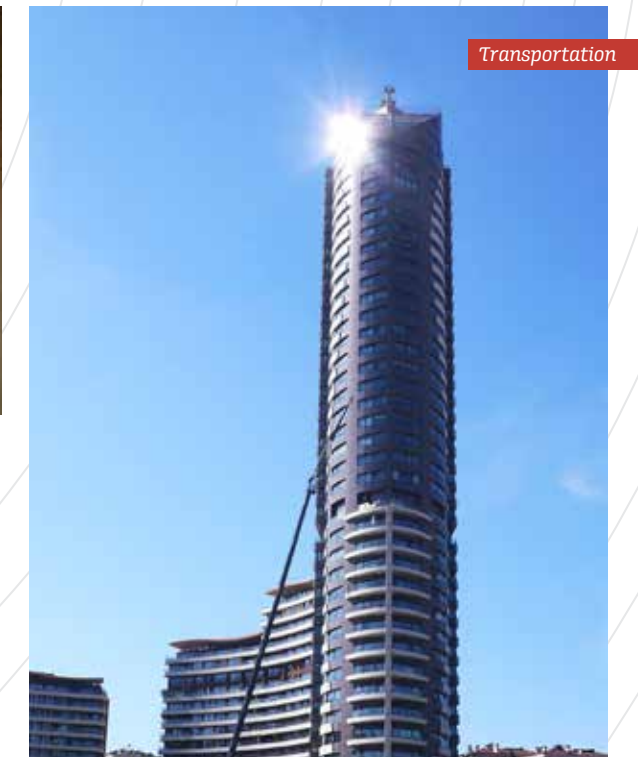
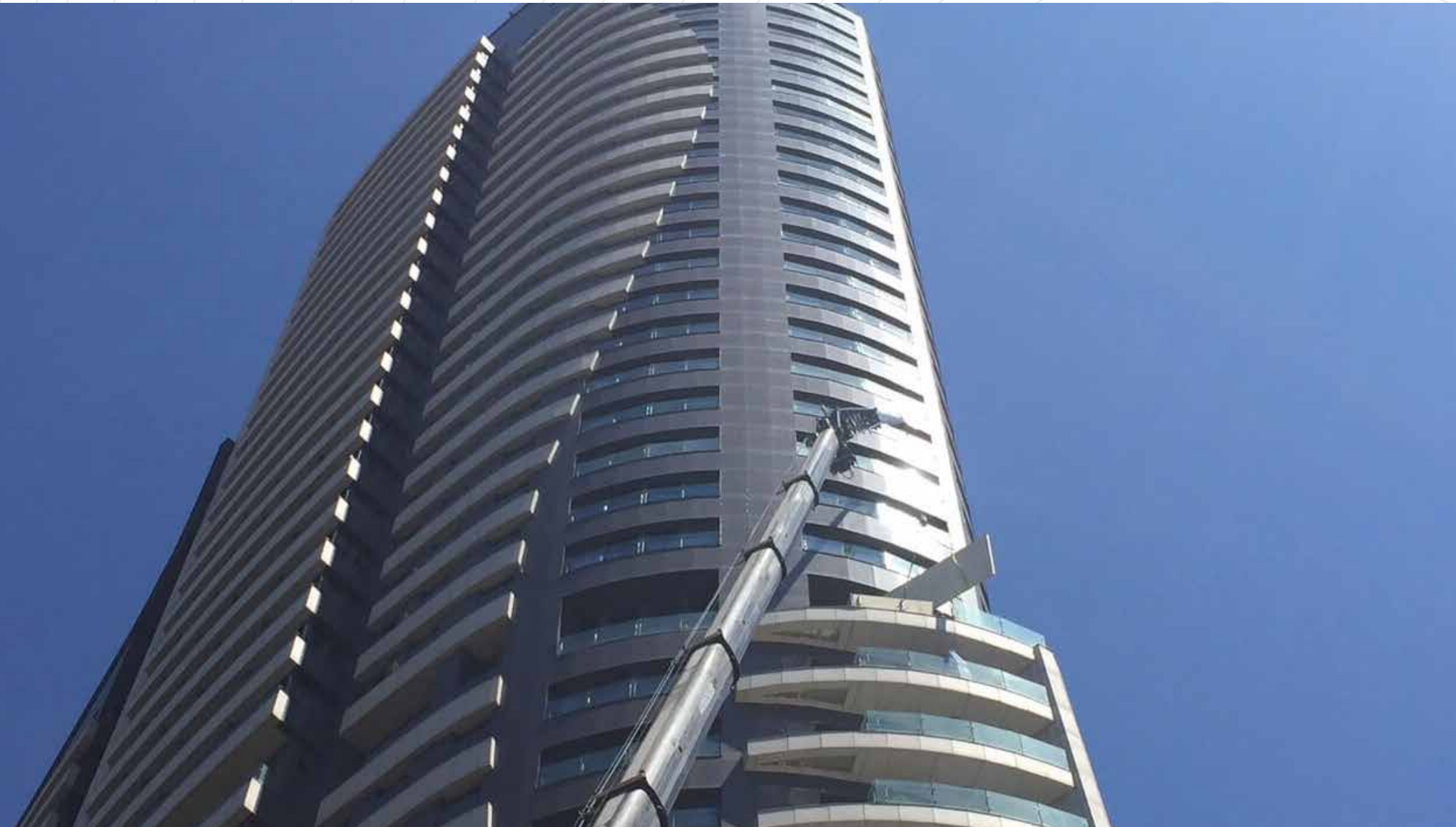
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# Akasya Koru Tower

Acibadem / İstanbul



Four timber-framed duplex apartments were built on the 15th floor of Koru Tower located at Akasya Park in Acibadem, Istanbul. Construction of these very special boutique apartments has been completed in such a short period of 6 weeks without interfering daily activities at Koru Tower in Akasya Park that is one of Istanbul's most popular shopping / living complexes.

# Historic Building Kalkavan Mansion

Yeniköy / İstanbul



Installation



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*Kalkavan Mansion that is one of Turkey's iconic historical mansions located in Yeniköy is under restoration. Kalkavan Mansion was built in 1850s with French architecture style by Sultan Abdülaziz and Stephan Damaryan who was well-known that time and had worked in printing industry for the 2nd Sultan Abdülhamit. Restitution and restoration projects for -3.5 storey including its basement of Kalkavan Mansion are carried out by Emrah Çelenk Mimarlık and also the mansion's architectural works undertaken by Kırmızıtoprak Mimarlık.*

# Project of Haliç Terrace

Şişhane / İstanbul



*It is an open public space arranged as an urban square designed by Şanal Mimarlık at Beyoğlu Pera/Galata/Şişhane/Tunnel crossing located. The terrace that facing at the beauty of Haliç is providing one of the important contribution of İstanbul's urban design with the curved wooden walkways and children's playing area applications.*

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Prototype



Installation

# Historic Building Köseleciler Mansion

Anadolu Hisarı / İstanbul



Reconstruction of the mansion which was registered as a second degree historical monument that located next to İstanbul Anatolian Fortress Pier, was made with the wooden framework technique as a turn-key project. After the reconstruction, this stunning structure became one of the most important mansions in İstanbul that regained its original appearance.

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# Historic Building Mansion

Çengelköy / İstanbul



*A second degree historic building which its owner was known as stories and novels writer Kemalettin Tuğcu, was rebuilt according to the approval for its original position by the Memorial Board. This building located in Çengelköy with the Bosphorus view, is used as a house now.*



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Installation

# Wooden Dome

Türkmenistan



The structure having 12 m diameter is located on the terrace of Russia Federation Embassy -13storey building in the capital city Ashgabat. Without using a metal connection technology product, it was built with wooden dowels and interlocking system by forming radius timber truss. The dome that was the highest building of Ashgabat stands out with its location, architecture and construction technique.

# Historic Building Süreyya Paşa Mansion

Yeniköy / İstanbul



*A second degree historic building which is known as Süreyya Pasha, was rebuilt with the technique of timber framed structure. It is one of the most important mansions with a Bosphorus view in İstanbul.*

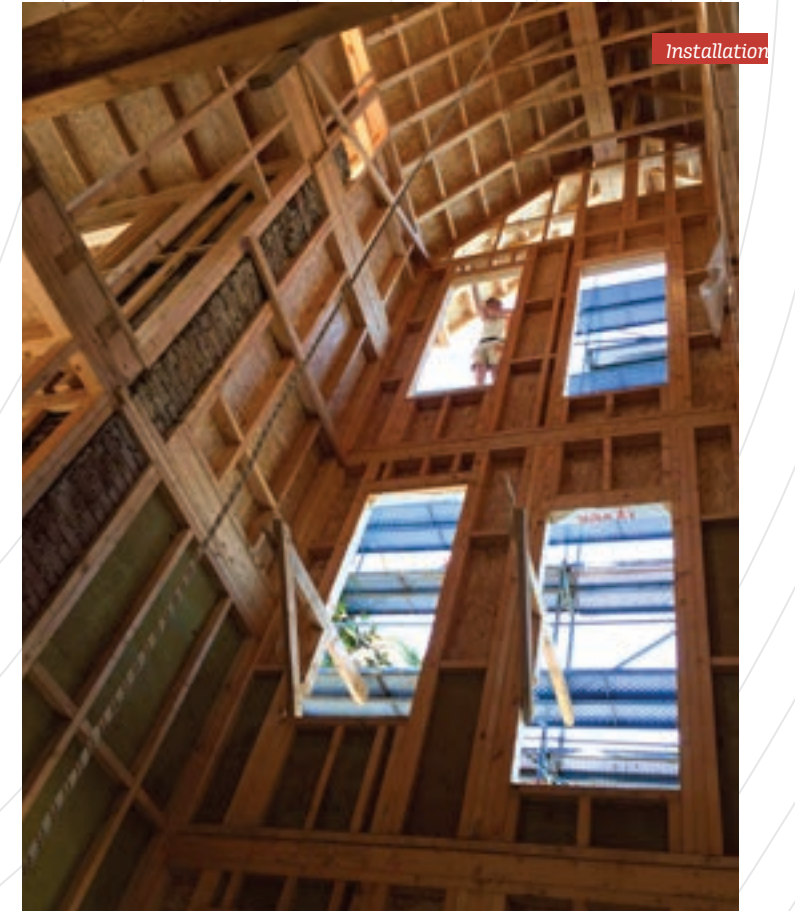


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# Historic Building Cavit Paşa Mansion

Bağdat Caddesi / İstanbul



The last one of the 52 historic mansion located on Baghdad Street, Cavit Pasha Mansion restoration project began. The mansion is historic building of the first degree located next to historic fountain Çatalçeşme between Suadiye and Bostancı and was built in the late 18th century and the early 19th century and draws attention with its steep roof, inspired by the Swiss Chalet.

Cavit Pasha Mansion which its project investment is made by Berkolan Gayrimenkul Yatırım, is one of the symbols of Bagdat Street.

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# Stone House Roof Structure

Şarköy



*It's built as a vineyard in Şarköy region famous for its vineyards, between Hoşköy and Mürefte with a view of Marmara island. The house was built with natural stones and it has a castle form with roof trusses using structural laminated wooden forms. The warm roof that covering the lounge where a fireplace is positioned with 360 degrees, is one of the most beautiful examples of stone and wood architecture combination.*



Survey



Installation



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# Historic Building Mansion

Reşitpaşa / İstanbul



The building which was collapsed as a result of a fire in 1980's, was registered as a second degree historic building with the approval of The Council of Monuments. It was rebuilt with the wooden framework technique and now it is used for the commercial purpose.



Installation



Installation



# Timber Framed Roof Structure

*Durusu Park / İstanbul*



Installation



Installation



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*It is a roof structure application for the reinforced concrete building located on a hill that dominates Terkoz Lake at Durusu Park. This roof structure with its steep roof form that was built by using structural laminated timber roof trusses, has got a gothic cathedral shape; it is an example with its steep roof form which has not been built in Turkey before.*

# Çanakkale Seramik Headquarters

Levent / İstanbul



Two different structures which were planned as a winter garden for showroom and a café and projected by Erginoğlu and Çalışlar Architecture, were built by using structural laminated wooden joists in the garden of Çanakkale Seramik Headquarters in Levent/Istanbul. It is a modern project created a cosy venue reflecting the warmth of wood and glass is enhanced in combination with the use of wooden.



# Mansion

Emirgan / İstanbul



*Whole exterior curtain walls of this reinforced concrete structure in the most beautiful location of Emirgan, was made by using iroko thermowood process. It was a turn-key project and structural laminated wood materials were used as architectural elements of exterior walls of the building.*

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# Sas Otomotiv Ford Otosan

Gölcük / İzmit



*It is the project of a single storey office located in Gölcük Ford Otosan's Supplier Park, SAS Otomotive Production plant. Timber framed structure was built as fire-resistant building in accordance with the related regulation on an area consisting of 250 square meters.*



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# Roof Truss

## Port Alaçatı / İzmir

The roof structure of a fish restaurant in Port Alaçatı was designed in the local architecture style. Colored wood materials in white were used for the purpose of creating a bright ambience.



# Kalkan Chalet

## Chalet / Antalya

The chalet with 1 and -2/storey was built in on the plateau of Toros Mountain in Sarbelen village Kalkan, Antalya. The structure was made of cedar wood in the local architecture style by using timber frame structure technique by a veteran architect living in England.



# Winter Garden

## Houses of Toskana Valley / İstanbul

It was a winter garden application with the characteristics which were harmonised with the existing building architecture for the project of Toskana Valley in Büyükçekmece, İstanbul. Turn-key type project was completed in such a short period of one week.



# Pergolata

## Houses of Toskana Valley / İstanbul

Pergola was formed with structural laminated timber joists compatible with outdoor use and the existing house architecture for the project of Toskana Valley located in Büyükçekmece, İstanbul. It is a model project that can be used for a period of 12 months through its retractable pergola awning transforming the house into a relaxing haven.



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Brands which we represent



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