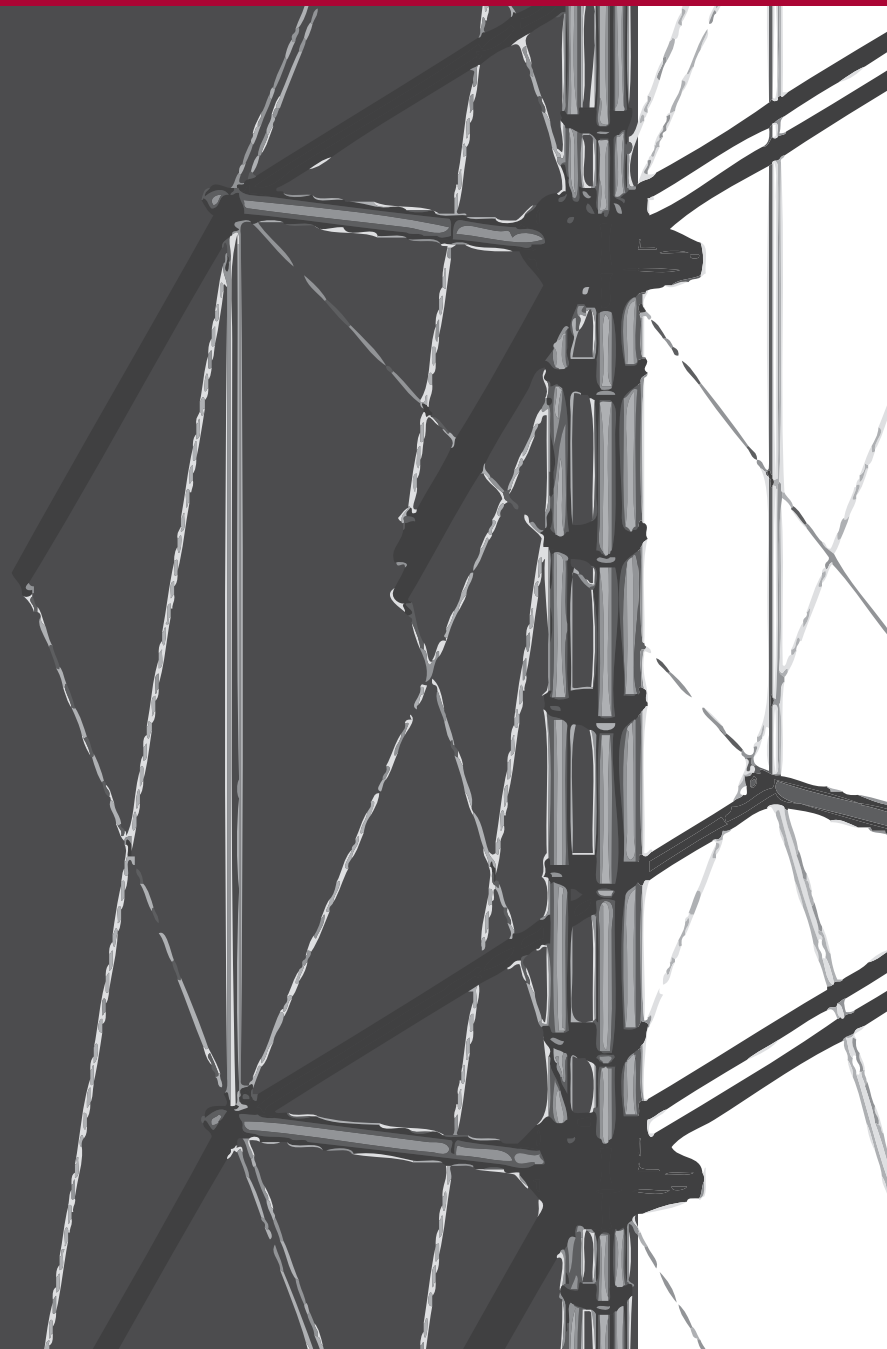




PROTA

“Ever since the establishment of Prota in 1985, the achievement of scientific excellence in engineering practice is our number one goal.”





Design and consultancy servicing in engineering requires investigation, innovation, enrichment of knowledge, and effective, accurate, and economical implementation of scientific principles. It also requires an objective and unsparing attitude complying with the ethical norms of the profession.

Ever since the establishment of Prota in 1985, the achievement of scientific excellence in engineering practice has been our number one goal. The highly inventive solutions that distinguish Prota's services today have their roots in the pursuit for excellence that has become a company principle.

As societies evolve, their needs and demands also evolve. We believe that Prota's mission within this cycle is to foresee future needs and develop effective and reliable solutions in advance. Hence our motto: "Reinforcing the Future".

This mission, of course, entails an innovative outlook at every step of the way. We consider our most valuable resource to be our team. In this respect, our fundamental goal is to train honest, inquisitive, and innovative team members who revere the past, and to advance in our journey within this team spirit.

It is for this reason that Prota employs a management policy that focuses not only on customer satisfaction, but also on the professional development of its personnel within an environment that adopts the "sincere at relations, responsive at work" spirit. Thus, continuous in-house training is an essential feature of the Prota tradition.

As part of our responsibility to the society and the environment, we consider each and every client as a business partner, without compromising either scientific factuality or our impartiality.

We believe that every project in Prota constitutes a case study, wherein recent scientific developments are explored, state-of-the-art technologies are reviewed, and consequentially, alternative solutions are developed so as to satisfy customer demands.

With respect to our mission and vision, we feel fully confident in our team and the projects we have undertaken.

We believe that our twenty-five years of experience grants us with the hope and ability to continue hand-in-hand with our business and solution partners in our journey for "Reinforcing the Future".

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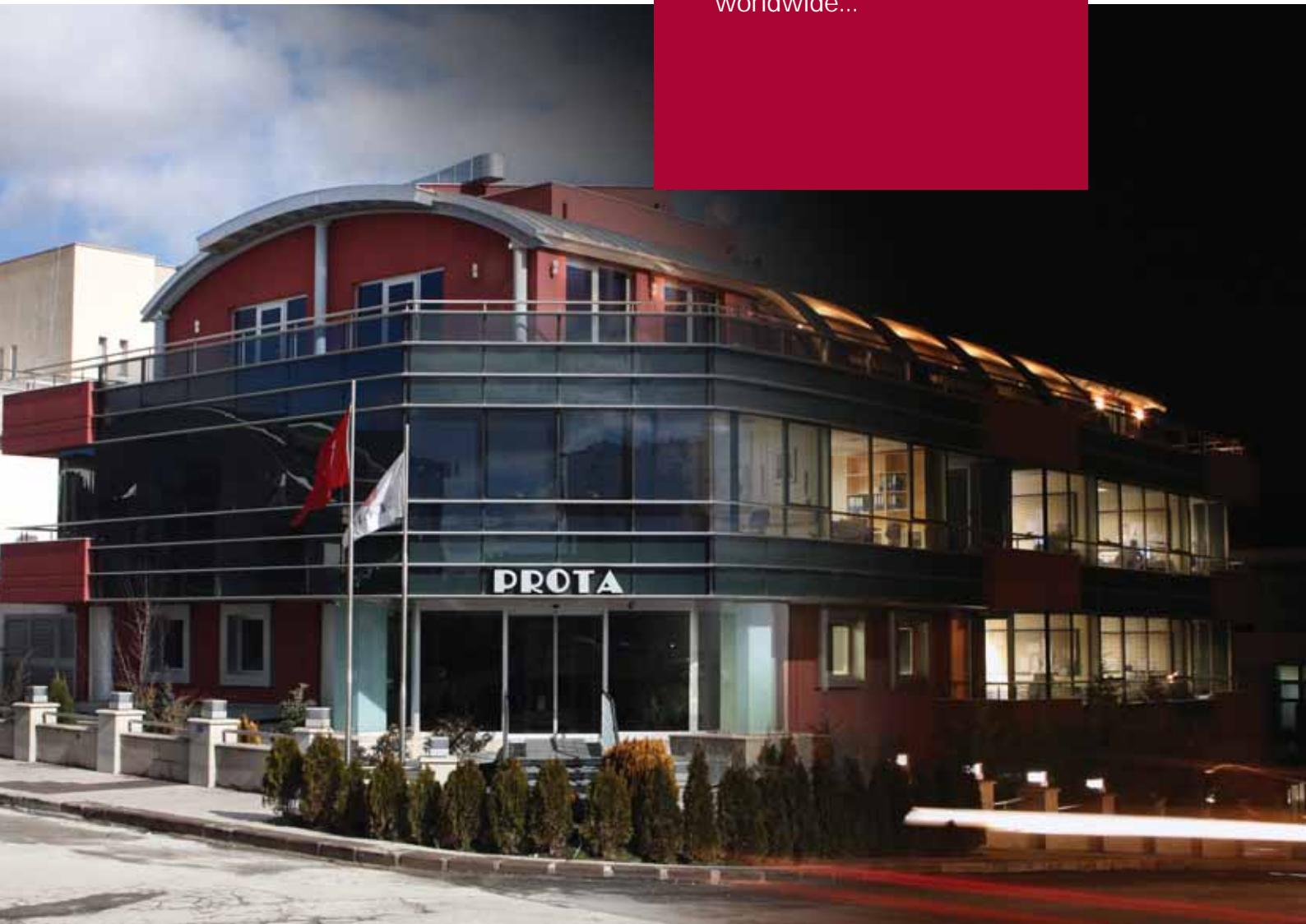
Danyal Kubin

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Jozef Kubin



Ever since its establishment, Prota has implemented thousands of building designs, and provided supervision and consultancy services worldwide...



From 1985 onwards...

Prota was founded in 1985 in Ankara, and in only a few years, it became one of Turkey's leading engineering and consultancy firms with its specialised design approach and innovative performance in a range of disciplines. Prota operates within a strictly technical institutional structure that comprises of engineers, architects, and technicians, as partners.

Prota specialises in architectural and engineering design of high-rise buildings, public buildings, sports complexes, business centres, healthcare and educational facilities, transportation structures, and light and heavy industrial buildings, as well as execution of feasibility studies, infrastructure projects, and urban and regional planning. In addition to its extensive design experience, Prota also provides services in project and construction management, design and construction supervision, systems engineering, and quality control and contract management. Prota has so far undertaken hundreds of projects of various scales in more than 15 countries around the globe.

Within the organization, PROTA employs more than 150 personnel, representing a variety of engineering and architectural disciplines. At Prota, our designers have made it a commitment to focus on the project-specific needs of our clients, and they are

professionally trained to employ the most advanced technologies to develop solutions observing the principles of social responsibility and environmental awareness.

Moreover, Prota is the first consultancy company in Turkey to establish an earthquake engineering department.

Since its establishment in 1985, the Prota Group has continually grown by including within its structure first Prota Computer in 1991, then Promim in 1995, and finally Prota Software in 2002, thus completing its original design chain.

Besides the Headquarters in Ankara and two offices in Istanbul, Prota also has a research and development office in Ankara. The METU Technology Development Centre R & D office is concerned with research studies regarding engineering software development, earthquake engineering, retrofitting techniques, and disaster risk management.

Prota organises periodic in-house and nationwide training programs on topics of relevance that arise during research and development projects; Prota specialists are assigned as trainers in most of these programs. Furthermore, Prota engineers and architects regularly present their work at national and international seminars, conferences, and symposiums.

Prota was certified with the ISO 9001 in 2003 and the ISO 14001 in 2006, and maintains its certification through periodical audits.

Prota is a member of the International Federation of Consulting Engineers (FIDIC), the European Federation of Engineering Consultancy Associations (EFCA), and the Association of Turkish Consulting Engineers and Architects (ATCEA).



Our vision is to fulfil our social responsibility to reinforce the future by drawing from the past.



Our Business Principles

As the pioneer in the Turkish engineering and consultancy sector, Prota has been employing business and management policies and professional values that it has developed along the way. Today, the Prota principles focus not only on customer satisfaction but also on the professional development of its personnel within an environment that adopts the “sincere at relations, responsive at work” spirit.

Using its vision as a springboard, Prota aims to fulfil its social responsibility obligations by maintaining the motto, “Reinforcing the Future”.

Prota’s objectives have been to provide services that are effective in the consultancy sector on both national and international levels, that ensure high level customer satisfaction, and that utilize the latest technologies.

As a FIDIC member, Prota is liable to follow business policies compliant with the FIDIC Code of Ethics.

As Prota, we hereby commit ourselves to:

- Improving our knowledge and skills by following technological and scientific developments,
- Focusing on research, development, and renovation projects,
- Offering reliable and timely services,
- Meeting the latest quality standards in our projects and working units,
- Strictly conforming to in-house training policies at all levels,
- Maintaining a managerial policy that encourages innovation and integrity, and extending team spirit in this direction,
- Ensuring high level customer satisfaction,
- Achieving customer dependency,
- Abiding by national and local environmental policies and current environmental management standards in all of our activities.

Team Spirit



Continuous in-house training is an essential feature of the Prota tradition...

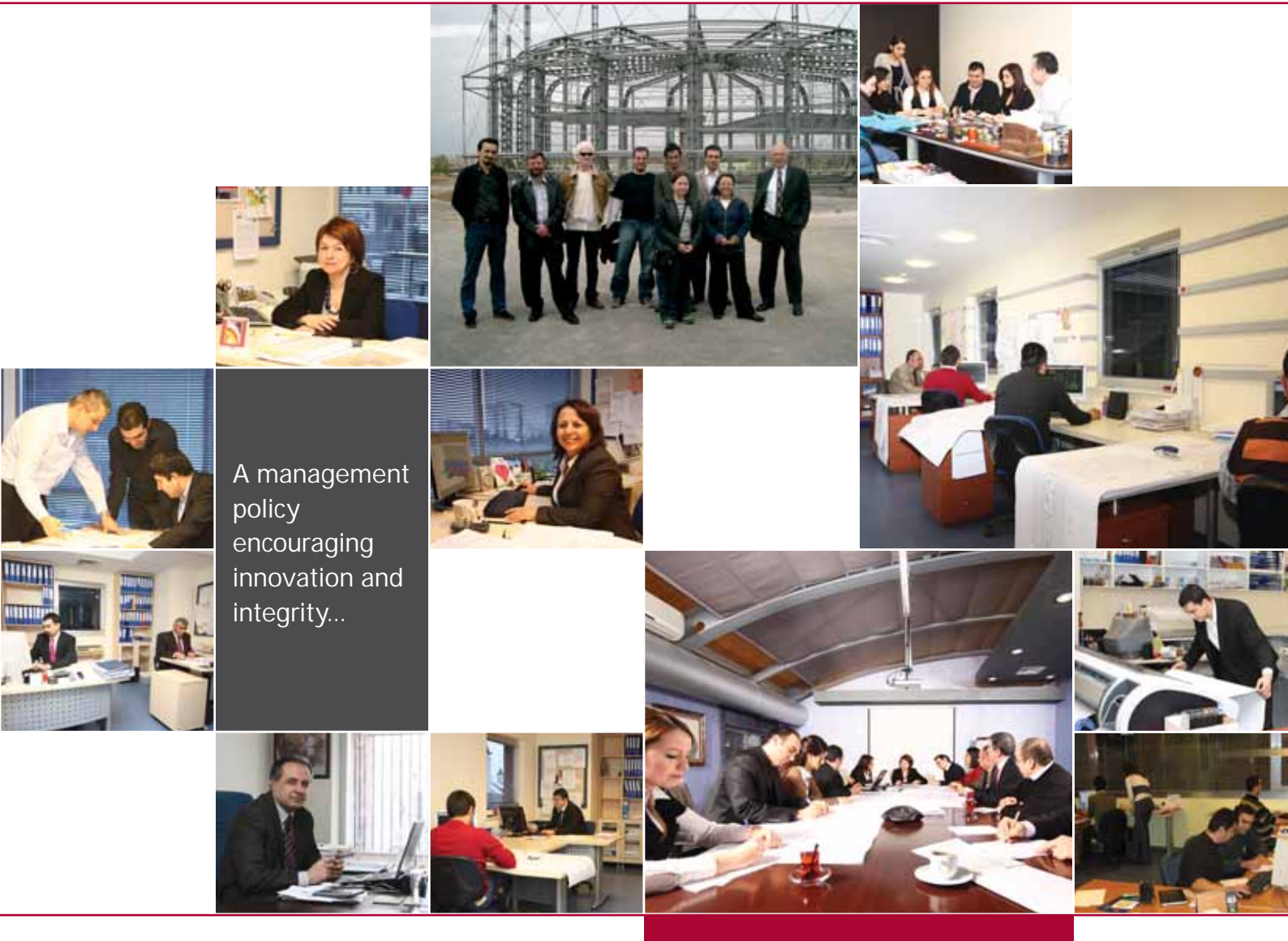


...compliant to national and local environmental policies and current environmental management standards in all of our activities...



Our structural system solutions include prefabricated concrete, reinforced concrete, masonry, steel, cabled suspended structures, composite, and pre-stressed and post-tensioned reinforced concrete systems and so on...

Prota Engineers and Architects have so far undertaken more than 21 million m2 in more than 15 countries around the globe.



Prota's success lies in its interdisciplinary nature that combines architecture, civil, structural, electrical, mechanical engineering and landscaping design within its body which allows offering holistic solutions to the customers.



Prota Services

PROTA Engineering has proven experience in providing professional, multi-disciplinary services for construction, maintenance and research and development projects. These projects have included (i) Structures: light and heavy industrial buildings, high-rise buildings, warehouses, underground and earth-retaining structures, tanks, seismic assessment and retrofit works, (ii) Infrastructure: transportation systems including above & underground rail and road structures, site development and (iii) Planning: urban and regional plans and assessment management plans.

We offer professional services for all phases of a project:

Design Phase:

- Architectural Design
- Engineering Design (all disciplines)
- Condition Assessment
- Damage Assessment
- Land Surveying
- Development of Techniques and Methodology
- Urban and Regional Planning
- Geological/Geotechnical Investigation and Design
- Feasibility Studies
- Preparation of Tender Documents and Specifications

Procurement Phase:

- Eligibility Surveys and Investigation Studies
- Tendering Support and Technical Assistance
- Bid Evaluation and Contract Negotiations Support

Construction Phase:

- Project and Construction Management
- Construction Supervision and Technical Assistance
- Commissioning Assistance
- Operation Consultancy
- Acceptance of Works

Building Design



... business and shopping centres, residential buildings, housing complexes and satellite cities, office buildings, educational buildings, healthcare facilities, transportation structures and stations, tourism facilities, industrial buildings, public buildings and more...

Since its foundation, Prota has been specializing in building design, and has undertaken thousands of structural designs and provided supervision and consultancy in a number of countries. Among these projects are business centres, shopping malls, residential buildings, housing complexes and satellite cities, office buildings, educational buildings, healthcare facilities, transportation structures and stations, industrial buildings, public buildings, sports fields and centres, recreation and social structures, and underground and above-ground parking facilities.

Prota's success lies in its inter-disciplinary nature that combines architecture, civil, structural, electrical, mechanical engineering and landscaping design within its body which allows offering holistic solutions to the customers. Besides engineering and architectural services, Prota also provides initial and complementary services during the design stage, such as feasibility studies, cost and quantity estimations, and technical specifications preparations, and inspection and quality control services.

Prota design solutions aims to provide the most cost-effective answers by employing a wide range of structural system solutions. These include prefabricated concrete, reinforced concrete, masonry, steel, cabled suspended structures, composite, and pre-stressed and post-tensioned reinforced concrete systems.

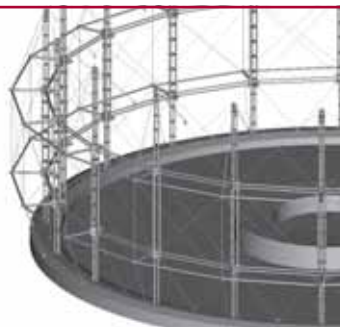
Prota engineers, who keep abreast of the literature and latest developments in their

fields, and are well equipped to propose innovative system models in order to produce solutions that are economical and aesthetically pleasing.

Prota uses Turkish, US, and EN codes, as well as the local codes of other countries.

In addition to building design services, Prota attaches importance to research and development, and has been developing new techniques and methods in its field of activities at the METU Technology Development Centre R & D office.

Prota takes an active part in the adaptation of Turkish standards and codes to EU norms, in particular regarding to building design and construction materials and methods.



- 1 MEGA Belaya Dacha Shopping Mall - Moscow/Russian Federation
- 2 TED College Education Campus - Ankara
- 3 TNA Parliamentarians Office Complex - Ankara
- 4 METU Technology Museum-Ankara
- 5 Haydarpaşa Siyami Ersek Training and Research Hospital-Istanbul
- 6 MEGA Shopping Mall - Ufa/Russian Federation
- 7 OZ Shopping Mall-Saratov/Russian Federation
- 8 "Emekli Sandığı 75. Yıl" Rehabilitation Centre-Ankara
- 9 Cer Atelier Fine Arts Museum-Ankara
- 10 Gençlerbirliği Training and Sports Facilities-Ankara
- 11 METU College Conference Centre and Atelier Building-Ankara
- 12 KYUM Shopping Mall-Perm/Russian Federation
- CSO Concert Hall and Workshop Building-Ankara
- TRT Radio and Television Studios-Izmir
- TRT Television Studios-Erzurum
- TRT Television Studios-Tepebaşı/Istanbul
- Tax Offices in Bursa, Balıkesir, Mersin, Kayseri, and Bolu
- Begendik Department Stores in Mersin, Kayseri
- Social Security Institution Head Office-Ankara
- Foreign Ministry Auxiliary Building-Moscow/Russian Federation
- MEGA Shopping Mall-St. Petersburg/Russian Federation
- Shopping Centres -Baku/Azerbaijan
- KİPA Shopping Mall-Konya
- Green Plaza-Perm/Russian Federation
- Regions Shopping Mall-St. Petersburg/Russian Federation
- Koluman Mercedes Benz Maintenance and Service Centres in Ankara,Tarsus, and İstanbul
- Prison Buildings in Denizli and Diyarbakır

High-Rise Buildings

The field that Prota is most experienced in is perhaps high rise building design. With its accomplished team of engineers and the broad range of engineering software, either developed by Prota researchers and/or those found in its comprehensive library, Prota has implemented a great number of high rise building designs worldwide.

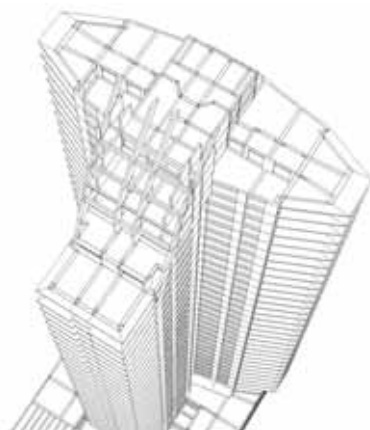
Prota's services regarding high rise buildings have mostly focused on structural engineering and system selection consultancy. For almost all the projects designed and managed, feasibility studies, cost and quantity estimations, technical specifications, and procurement consultancy services are provided by Prota. In some cases, Prota provides construction quality management and supervision services during construction of the designed facilities.

Prota engineers keep abreast of the literature and latest developments in their fields, and are thus able to propose innovative system models in order to produce solutions that are economical and aesthetically pleasing. Prota has established its expertise by using "Top-down methodology", in which steel and cast-in-place piles are used as columns and the structure is constructed from top to bottom, in cases where the buildings are located in dense settlement areas and on relatively poor soil conditions. The method has proven to be a cost effective way to achieve safety for the neighbouring buildings during construction.

Prota's expertise in earthquake engineering certainly contributes to produce structurally safe and high quality designs. During the analysis of high-rise buildings, more economical and realistic designs can be obtained by utilizing time and frequency domain linear and non-linear analysis methods that take into account the effects of secondary modes of vibration.

Prota uses Turkish, US, and EN codes, as well as the local codes of other countries. Prota takes an active role in the adaptation of Turkish standards and codes to EU norms, particularly in the fields of building design and construction materials and methods.

In addition to building design services, Prota prioritises research and development, and has been developing new techniques and methods in its field of activities at the METU Technology Development Centre R & D office.



- 1 Eston Business Towers – Istanbul
- 2 Portakal Çiçeği Residential Tower 1st part – Ankara
- 3 Glotur Residential and Commercial Buildings – Almaty /Kazakhstan
- 4 Revenue Office Building – Mersin
- 5 Park Gorkogo Complex – Kiev/Ukraine
- 6 Portakal Çiçeği Tower – Ankara
- 7 Balem Commercial Centre – Bursa
- 8 Leninsky Prospekt 131-135 – Moscow/Russian Federation
- 9 Yugo Zapadny Residential Complex – Moscow/Russian Federation
- Belyaeva Residential Complex – Moscow/Russian Federation
- Gubkina Residential Complex – Moscow/Russian Federation



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...Reinforced concrete, steel, composite and pre and post tensioned R/C systems...

Industrial Structures



....a systematic design approach
integrating theoretical and practical
engineering knowledge within the
process...

Industrial structures may appear to be buildings simple to analyse; however, the truth is they are not. The client demands that the system followed in the design of the industrial facility be efficient enough to match the production procedure. This, as a matter of fact, makes the industrial facility designs more complicated.

With regard to industrial buildings, Prota adopts a systematic approach that integrates theoretical and practical engineering knowledge, and employs a method that analyses different types of structural systems together with its essential subsystems. The central procedure we employ in the design of industrial facilities is to develop simple, integrated solutions that perceive the complex factors which influence structure stability, security, and serviceability.

Prota Engineering has been following this approach to design dozens of industrial facilities in a wide range of business sectors in the last 25 years. The facilities that we have designed and engineered include cement factories, gypsum and drywall production facilities, mining and crushing/sieving plants, steel profile factories, heavy and light concrete prefabricated production facilities, electrical element factories, juice and concentrated juice factories, power plants, cold stores and meat processing units, packaging facilities, combined cycle natural gas plants and coal plants, flour and pasta factories, transformer and energy structures, and large warehouses.

Besides implementing the process design, Prota also carries out the architectural, structural, mechanical and electrical, infrastructural, and landscaping designs of a facility. In addition to architectural and engineering services, consultancy services for system-mechanics-equipment selection are also undertaken by Prota.

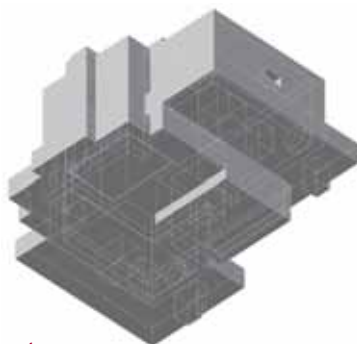
For almost all the projects designed and managed, feasibility studies, cost and quantity estimations, technical specifications, and procurement consultancy services are provided by Prota. In some cases, Prota provides construction quality management and supervision services during construction of the designed facilities.

In order to provide the most cost-effective architectural solutions that achieve the highest process efficiency, Prota employs many of the structural system solutions available for industrial structures. Prefabricated concrete, reinforced concrete, steel, cabled suspended structures, composite, pre-stressed, and post-tensioned reinforced concrete systems are some examples of such structural systems.

Prota engineers keep abreast of the literature and latest developments in their fields, and are thus able to propose innovative system models in order to produce solutions that are economical and aesthetically pleasing.

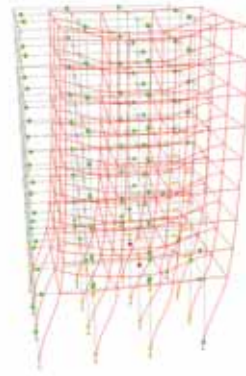
Seismic structural performance assessment of industrial buildings is among Prota's fields of expertise.

Prota uses Turkish, US, and EN codes, as well as the local codes of other countries.



- 1 Rehau PVC Plant - Russian Federation
- 2 Nuh Cement Industry Combined Cycle Natural Gas Plant - Izmit/Turkey
- 3 Limkon Concentrated Juice Plant - Adana/Turkey
- 4 Knauf Gypsum, Gypsum Board and Construction Chemicals Plant - Izmit/Turkey
- 5 Eti Aluminium Seydişehir Lignite Coal Combined Cycle Plant / Turkey
- 6 Iston Prefabricated Concrete Structure Elements Plant - Istanbul/Turkey
- 7 Knauf Gypsum and Gypsum Board Plant - Ankara/Turkey
- Madinsan Plaster Mine Plant - Ankara /Turkey
- Uno Floor&Floory Made Plant - Bergen Op Zoom/ Netherlands
- Prefi Prefabricated Manufacturing Plant - Ankara/Turkey
- Baku-Ceyhan Oil Pipeline Station Buildings -Turkey
-

Earthquake Engineering



The geological, geomorphologic, and climatic disposition of Turkey renders it vulnerable to natural disasters.

As engineers, our responsibility to the community is not only to perform designs for earthquake resistant structures but also to develop guiding methods for earthquake risk mitigation and disaster management, generate earthquake specific planning approaches, and assist in the development of relevant standards and codes nation-wide.

As the first engineering company in Turkey to focus on earthquake engineering, Prota has made it a specific field of expertise. It specializes in the retrofit design of buildings and large structures, seismic capacity assessment of structures, repair and strengthening of damaged buildings, and software development for structural finite element analysis, design, and detailing.

Prota has been involved in several projects funded by the World Bank, European Investment Bank, European Commission, and EuropAid, as well as in seismic risk mitigation projects funded by some Turkish ministries including Ministry of Public Works and Settlement, Ministry of Education, Ministry of Culture, Ministry of Health, Ministry of Defence, and Ministry of Interior.

Prota has performed post-earthquake field inspections, damage assessments and retrofit designs, and numerous renovation projects following the 1992 Erzincan, 1995 Dinar, 1998 Adana/Ceyhan, 1999 Marmara, 2002 Sultandağı, and the 2003 Bingöl earthquakes.

Prota has so far completed earthquake risk mitigation projects situated on a total of about seventeen (17.0) million square metres of floor space.

Prota has been directly involved in the formation of the Draft Turkish Code for “Buildings to be constructed under Disaster Zones” as well. Besides the cooperative research ventures with academic institutions such as Gazi University, Istanbul Technical University, Yıldız Technical University, and Middle East Technical University, Prota has also participated in numerous training sessions regarding earthquake engineering regulations and practices. In addition to its expertise in seismic design/review works, Prota conducts and sponsors substantial numbers of feasibility and research studies, develops methodologies, standards, techniques, and specifications, and provides contract management and retrofitting construction supervision services in this field of expertise.

Prota engineers have participated as panellist and speakers in national and international conferences, panels, and symposiums for civil engineering and earthquake engineering. Members of our (senior) staff have recently presented papers in the World and European Conferences on Earthquake Engineering, such as the 2002 ECEE and the 2004 WCEE, the 14th World Conference on Earthquake Engineering, and the 2009 Earthquake and Tsunami WCCE-ECCE-TCCE Joint Conference on Civil Engineering Disaster Mitigation Activities Implementing Millennium Development Goals.

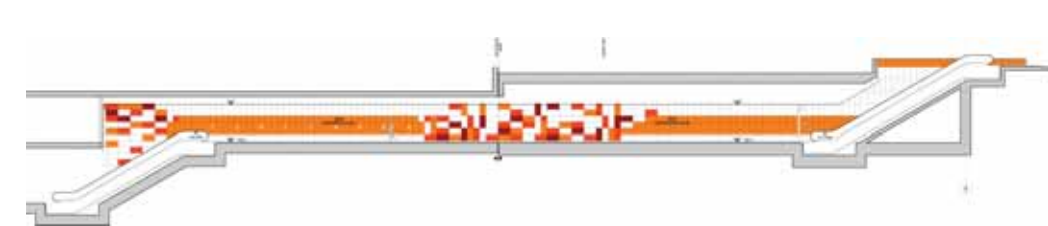
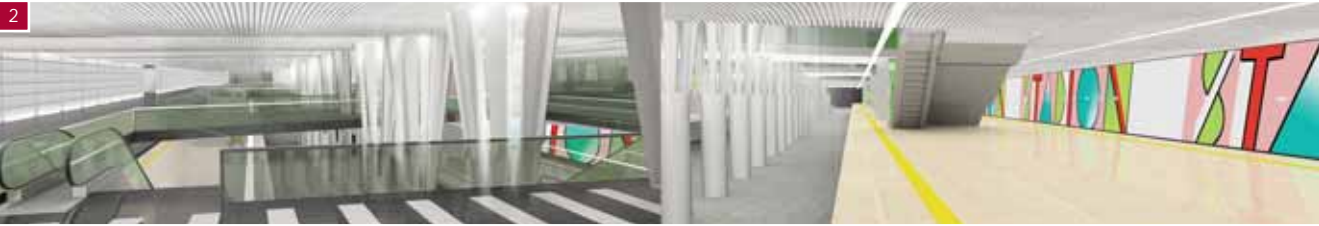
- Following the 1992 earthquake, seismic evaluation and retrofitting of the 3rd army headquarter buildings in Erzinçan
- Following the 1995 earthquake, seismic evaluation and retrofitting of the residential buildings in Afyon
- Following the 1998 earthquake, seismic evaluation and retrofitting of the residential buildings in Adana
- Following the 1998 earthquake, seismic evaluation and retrofitting of the residential buildings in Adana
- Following the 1998 earthquake, seismic evaluation and retrofitting construction of the buildings in Adana
- Following the 1999 Marmara earthquake, retrofitting of TUPRAS Petroleum Refinery Buildings in Kocaeli
- Following the 1999 Marmara earthquake, retrofitting of the Post Office buildings
- Following the 1999 Marmara earthquake, retrofitting of Turkish Electricity Authority buildings
- Retrofitting designs for Historical Çelik Palas Hotel buildings in Bursa, İzmir, and Hilton Hotel in Istanbul
- Retrofitting designs for the Koleksiyon furniture factory buildings in Tekirdag
- Seismic evaluation and retrofitting of the Bastas Cement and Klinker Silos in Ankara
- Seismic evaluation and retrofitting of the Kurtalan Cement Factory in Siirt
- Seismic vulnerability analyses and retrofitting design of the branch offices for Türkiye İş Bankası
- Retrofitting design of headquarter and branch office buildings of Turkish Tele-Communication Authority in Istanbul
- Seismic performance assessment and retrofitting design for the Tüpraş Petroleum Refinery chimneys and buildings in Kırıkkale
- Seismic performance assessment and retrofitting design for the Tüpraş Petroleum Refinery Hydro Cracking and Process Facilities in Kırıkkale



- Seismic evaluation of 477 residential buildings in Düzce
- Seismic evaluation, performance analysis, retrofitting design for the Oyak-Renault Car Factory in Bursa
- Seismic evaluation, performance analysis, retrofitting design for the 34 school buildings in 5 different cities for Ministry of National Education
- Seismic evaluation, performance analysis, retrofitting design for SSK Sopalı Hospital in Kocaeli
- Prime Ministry Project Implementation Unit, Consultancy Services for the Feasibility Studies for Retrofitting of the Selected Residential Buildings in Bakırköy/Istanbul
- Seismic evaluation, performance analysis, retrofitting project for 28 Ziraat Bank branch office buildings
- Ministry of National Education, Seismic evaluation, performance analysis, retrofitting design for 760 school buildings at 275 campus in the earthquake prone regions of Turkey
- Istanbul Project Coordination Unit, Consultancy Services for Retrofit Designs of Public Buildings in Istanbul (CB1.3D and CB1.3F)



Transportation Engineering



.....holistic solutions in trackway design, metro and transportation structures' architecture, telecommunication systems, and geotechnical, traction power, electrical and mechanical designs...

Prota has enriched its worldwide building design capacity by meeting with success in the analyses of transportation structures. Among these structures that Prota has worked on so far, both nationally and internationally, are bus terminals, metro and rail systems, underground and above ground stations, airport terminals, car parks, improved facilities for passengers and, many others.

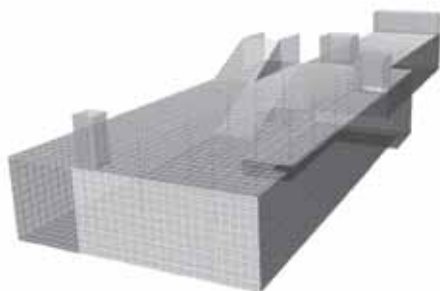
Being restructured to offer holistic solutions to its clients in transportation sector, Prota has now reached a high level design capacity that focusing on basic disciplines of transportation engineering: Trackway design, transportation structures' architecture, telecommunication system design, traction power engineering, geotechnical, electromechanics, electrical and mechanical engineering.

Owing to its incessant research and development activities, Prota have undersigned innovative geotechnical solutions for underground transportation structures. Prota engineers, who keep abreast of the literature and latest developments in their fields, and are well equipped to propose innovative system models in order to produce solutions that are economical and aesthetically pleasing.

Prota, in this context, offers a wide range of design services in transportation sector: alignment surveying, profile planning, curb and speed limit calculations, drainage

system design, displacement design, railway superstructure design, switch system design, access roads for tunnels, underground and above ground station architecture, structural, electrical, electro-mechanical, and mechanical engineering for metro structures, retaining wall and bracing designs, geotechnical monitoring/design, diaphragm wall, hydraulic design, fire protection - fire fighting system designs, fire simulation analysis, environmental control systems, acoustics and emergency ventilation system designs, low voltage, lighting and telecommunication system designs, energy supply and traction force designs, catenary system designs.

Besides the above design services in the field, Prota provides a comprehensive consulting services in construction planning, developing method statements, design quality checking, peer reviews, seismic assessment, retrofitting design, and construction supervision of transportation structures



- 1 2 Warsaw Underground Line II- Poland
- 3 Technical Facilities of International Sabiha Gökçen Airport- Istanbul
- 4 Intercity Bus Terminal- İzmir
- 5 Kadıköy-Kartal Metro Construction Bracing Works, Istanbul
- 6 22,5 km, 16 Metro Station Design between Kadıköy and Kartal, Istanbul
- 7 Marmaray Commuter Rail System Upgrade Final Design-Istanbul
- 8 Kadıköy-Kartal Yenisahra Station Model
- Aksaray Intercity Bus Terminal
- Adnan Menderes Airport Domestic Terminal-İzmir
- Atatürk Street Railway Junction Overpass-Tarsus/ Mersin
- Taksim and Şişli Metro Stations, Istanbul
- Gebze - Halkalı Commuter Rail Upgrading: Civil Structural Systems Design and Consultancy Services, Istanbul

Historical Structures



Home to countless civilizations for centuries, Anatolia has presented us a substantial basis to strengthen our historical field of expertise. For many years Prota has been one of the prominent engineering firms consulted by the Ministry of Culture regarding survey, restitution, restoration, and rehabilitation of historical buildings.

With its broad range of experience and knowledge in rehabilitation and strengthening of historical structures, Prota not only provides design services but also constitutes a "source of reference" for those who are interested in the field. Prota owes the privilege of resolving issues of importance regarding historical structures to its incessant research and development activities.

Prota engineers and architects have attended numerous symposiums and conferences and presented papers regarding conservation, certification, and seismic rehabilitation of historical assets. In addition to research studies conducted in collaboration with universities on methodology development for assessment and certification of historical assets, Prota has developed various three dimensional structural analysis methods to strengthen these assets as earthquake resistant.

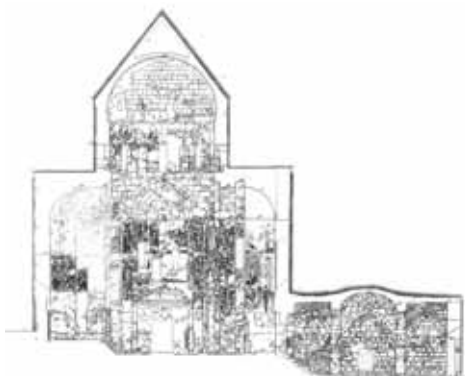
The historical assets Prota has worked on so far belong to a wide range of historical periods: Hellenistic, Roman, Ottoman, and Republican periods are all represented.

Within this context, structural analyses and seismic rehabilitation designs of many historical assets constructed by masonry, stone wall bearing, timber, cast iron, and adobe systems

have been carried out. Among the historical and cultural assets that Prota has worked on so far are stadiums, theatre buildings, hammams, caravanserais, castles, mosques, mausoleums, churches, ateliers, city entrance structures.

Prota has undertaken many earthquake performance assessment projects concerning historical structures. One particular example is the unique approach developed, as a first in the industry, for the Istanbul Fatih District Historical Building Stock; the comparison with the sophisticated analyses has verified the reliability of the simplified procedures developed by Prota in collaboration with METU and ITU academicians for the assessment of these more than two-hundred buildings. The procedure should be construed as first tier analyses method for a rapid survey of historic buildings. Its accuracy is similar to that of methods developed for buildings. In many cases the estimates for the gross shear stresses in the walls agreed well with the average stresses in those walls derived from the next tier of analyses. The exception to this was for re-entrant corners and walls with irregular plan views. In many mosques the minarets are likely to be destroyed. The study is presented at prominent conferences at the national and international level.

- 1 Restoration, strengthening and detailing project of Theatre-Perge/Antalya.
- 2 Structural strengthening design project for Yivli Minaret Mosque-Antalya
- 3 Strengthening and restoration of Hellenistic Towers-Perge/Antalya
- 4 Strengthening and restoration project of Myra Antique Theatre-Kale/Antalya
- 5 Seismic assessment and performance analysis for historical buildings in Fatih District-Istanbul
- 6 Restoration, strengthening and detailing project of Stadium-Perge/Antalya
- 7 Structural strengthening project of Magnesia Roman Wall-Aydin
- 8 Strengthening and restoration of Sofular Quarter-Tarsus/Mersin
- 9 Structural strengthening project of Cotton Gin Plant-Tarsus/Mersin



- Strengthening project of Roman Path-Side/Antalya
- Strengthening project of Port Bath-Side/Antalya
- Strengthening Project of Big Roman Bath-Side/Antalya
- Girls Vocational High School Restoration-Çorum
- Strengthening project of Uşakizade Cultural Center-Izmir
- Restoration/Strengthening Project of Harbiye Military Museum-Istanbul
- Strengthening project of Cer Ateliers/Modern Arts Museum-Ankara



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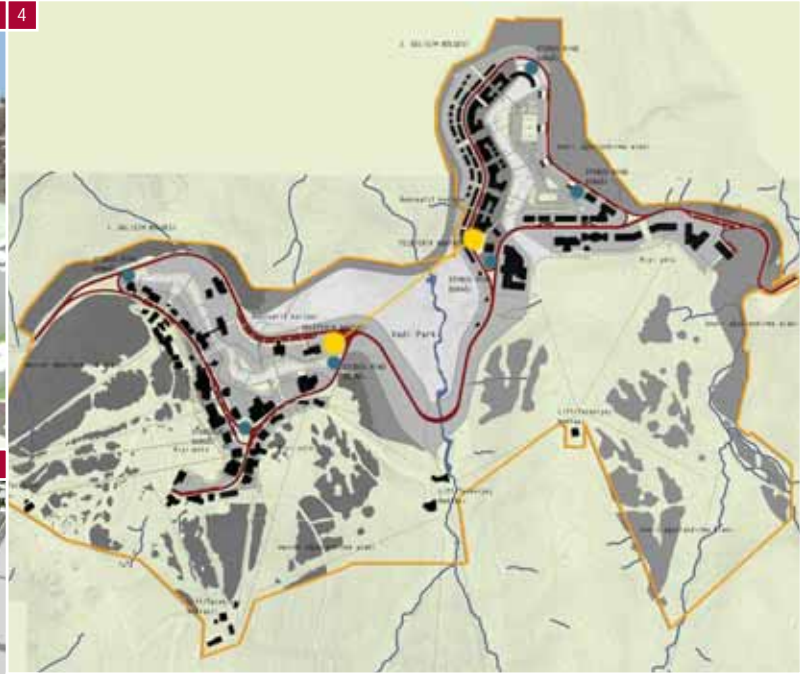
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Planning



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... urban planning, building code enforcement, urban design projects...

Alongside research and development studies on structural design and earthquake engineering, Prota also offers planning services, such as urban and rural planning, hazard risk mitigation, and urban regeneration, and undertakes urban design works either as part of research and development studies or for urban code development in the country.

Regarding urban planning services, Prota is proud to conduct studies which produce feasible solutions to Turkey's planning issues, based on comprehensive analyses and evaluations and taking into account latest international methods and approaches.

Urban design studies include planning, architecture, and a range of engineering disciplines. Prota, in this sense, adopts an approach which takes into account the urban effect, and contributes to various urban design projects, either directly or indirectly.

Following the 1999 Marmara Earthquake, Prota has conducted a number of research and development projects funded by the World Bank, such as "Integration of Earth Science Data to Spatial Planning", "Development of Planning and Urban Design Standards in Disaster Risk Areas", "Building Code Enforcement Analysis", in collaboration with a team of experts, academicians, and

Promim Landscaping,
Urban Design and
Computer Services Ltd.
was founded in 1995.



The founder, urban planner Can Kubin, MPI is now the Managing Director of the company. Ever since its foundation, Promim has successfully completed hundreds of landscaping designs, urban designs, and renewal and urban regeneration projects in various cities. Moreover, Promim designers have been awarded a number of prizes in national and international competitions.

public authorities belonging to architecture, planning, and engineering disciplines.

Within the scope of such projects, action plans and guiding manuals have been prepared for the use of local and central public institutions, and proposal drafts have been suggested for the development of new legislations.

- Design and Urban Planning Project of Porsuk Stream, Sıcaksular and old Couch Station Region - Eskişehir
- Küçükçekmece City Center-Istanbul
- Başakşehir City Center-Istanbul
- Uludağ National Park, 1st and 2nd developing zones - Bursa
- Capital Organised Industry Social Equipment Area-Ankara
- Mudanya Shore Line and Urban Design Project-Bursa
- Development of Planning and Urban Design Standards in Disaster Risk Areas, World Bank
- Urban Planning Project for Ihlara Valley's -Aksaray
- Urban Planning Project for Temelli Yeni Hisar - Ankara
- Urban Design Project for Lara City Park-Antalya
- Urban Design Project for Bahçeşehir T2 Commercial and Residential Center-Istanbul
- Urban Design Project for Nilufer Creek-Bursa
- Urban Design Project for İzmir Street-Ankara
- METU Campus Project- Güzelyurt/Turkish Republic of Northern Cyprus
- Urban Planning Project for Çayyolu Domicile Area-Ankara
- Landscaping Project for Cumhuriyet Square-Mersin
- Urban Renewal Planning Project of Sinan Pasha and Fatih quarter-Adana
- Planning studies of St Petersburg Forum Master-Russian Federation
- Landscaping Project of Çamlık National Park-Yozgat

Project & Construction Management



...experienced work groups in
the fields of architecture, civil,
environmental, mechanical,
electrical, and process engineering

...

Prota has so far provided design services for thousands of structures nationally and internationally, and has offered construction and technical supervision services to many of these structures.

Prota considers supervision services as a high level project management endeavour, and thus provides total engineering and consultancy services that belong to a job-specific-model framework which brings together the requisites of a professional project management approach and the customer's specific needs.

The independent consultancy services provided by Prota are project planning, cost and time control, quality assurance, quality control, contract management, and specific technical expertise in architectural, civil, structural, electrical, and mechanical engineering.

Prota considers every client whom it performs project and construction management as a partner, and therefore greatly values communication and information exchange with its clients. Prota's primary goal here is to protect the rights and interests of its clients, and to provide outcomes that will satisfy their expectations with regards to time, quality, and money. In this sense, Prota does not only offer guidance but also suggests a variety of alternatives and possible added values to its customers.

The project management and supervision teams of Prota comprise of experts from different fields: architects, civil, environmental, mechanical, and electrical, and process engineers, and planning experts.

Our consulting services include pre-bidding services like the preparation of tender documents and technical specifications, bidding services like the evaluation of tender proposals, and post-bidding services like contract management, construction supervision, and quality management and finally lead to either commissioning or final acceptance.

Prota is a member of the International Federation of Consulting Engineers (FIDIC), the European Federation of Engineering Consultancy Associations (EFCA), and the Association of Turkish Consulting Engineers and Architects (ATCEA). Prota is liable to follow the FIDIC contracts and provisions, and national and international construction standards and codes in its management and supervision activities

During project management and supervision, Prota pays special heed to production of sustainable solutions, environmental protection principles, human rights and workers' rights, and counter corruption.

- 1 Koluman-Mercedes Benz Maintenance Service - Ankara
- 2 Koluman-Mercedes Benz Maintenance Service - Tarsus/Mersin
- 3 Dormitories of Hacettepe University - Ankara
- 4 Limkon Concentrated Juice Plant - Adana
- 5 7 Sabiha Gökçen International Airport construction supervision services - Istanbul
- 6 Knauf Gypsum Board and Structure Chemicals Plant - Köseköy/Izmit
- Madinsan Gypsum Plant - Bala/Ankara
- MAN Truck and Bus Factory Extension Project - Akyurt/Ankara
- Urban Development Project for Eskişehir Municipality- Project Management Services
- Ministry of National Education, Construction Supervision of Educational Facilities in 34 cities in Turkey
- Ministry of National Education, Construction Supervision Services for Retrofitting of 53 school buildings in 7 cities in Turkey
- İstanbul Project Coordination Unit- Construction Supervision Services for Retrofit Constructions of Selected Public Buildings in İstanbul

Research and Development Studies



Prota's business principles are built on the notion of promoting innovation. Therefore, Prota considers each project as a case study in research and development.

Prota has conducted a number of research and development projects funded by the World Bank, such as "Integration of Earth Science Data to Spatial Planning", "Development of Planning and Urban Design Standards in Disaster Risk Areas", "Building Code Enforcement Analysis", in collaboration with a teams of experts, academicians, and public authorities belonging to architecture, planning, and engineering disciplines.

In that sense, Prota has been developing new techniques, methods and software in its field of activities at the METU Technology Development Centre R & D office.

In addition to the research projects in planning issues, extensive feasibility and research studies, development of methodologies, standards, techniques in disaster risk mitigation field have been conducted and implemented: Feasibility Studies for Retrofitting of 369 Residential Buildings in Istanbul, Social and Economical Impact Assessment for Retrofitting of Residential Buildings, Development of Rapid Assessment Method and Forms for Earthquake Prone Buildings and Pilot Study, Urban Renewal Planning and Preparation of Local Action Program and Initiatives on the Historical Building Stock at Istanbul Fatih District for Guiding Reconstruction, Rehabilitation and Strengthening as Part of Enhancing Earthquake Safety Plan, and Risk Assessment Method Development, Structural Analyses for Timber and Masonry Buildings located on the Marmaray Commuter Rail System Route.

- MEER - Feasibility Studies including Social and Economical Impact Assessment for Retrofitting of 369 Residential Buildings in Istanbul
- Development of Rapid Assessment Method and Forms for Earthquake Prone Buildings and Pilot Study
- LESSLOSS - Risk Mitigation for Earthquake and Landslide, Cluster on Urban Areas
- MEER - Building Code Enforcement Analysis
- MEER - Integration of Earth Science Data to Spatial Planning
- MEER - Development of Planning and Urban Design Standards in Disaster Risk Areas
- ISMEP - Development of Training Materials and Program for the Buildings to be Constructed in Disaster Zones
- MARMARAY - Risk Assessment Method Development, Structural Analyses for Timber and Masonry Buildings located on the Marmaray Commuter Rail System Route
- Structural Design Verification for Sabiha Gokcen Airport Terminal and Carpark Buildings
- Urban Renewal Planning and Preparation of Local Action Program and Initiatives on the Historical Building Stock at Istanbul Fatih District

Software Development

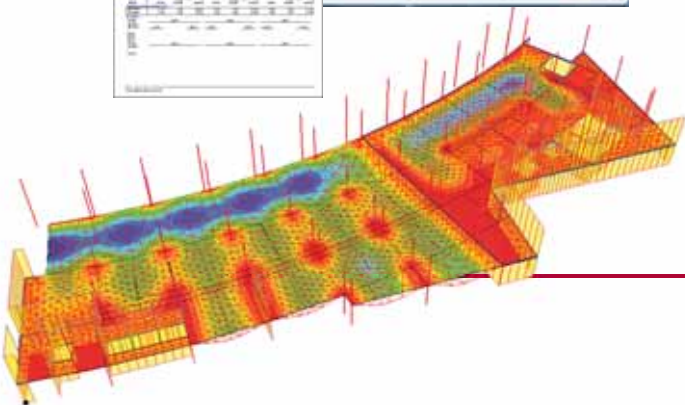
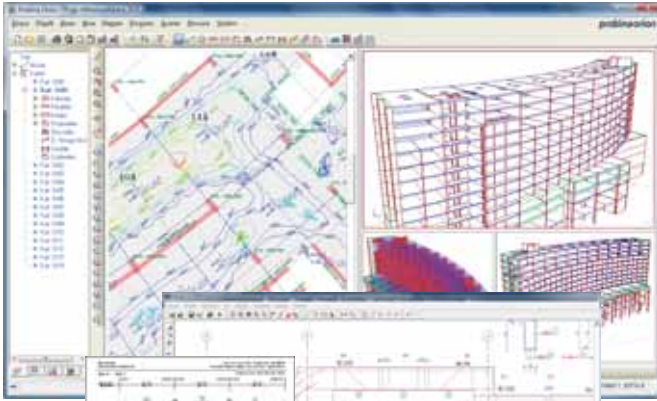
Becoming a proficient engineering practitioner entails full comprehension of structural behaviour, the capability to develop new methodologies, and problem solving knowledge and experience. Prota undertakes various research studies almost every year, shares the findings of these studies with its colleagues in national and international conferences.

As performed many firsts so far, the methods that Prota developed within the scope of civil engineering projects have been considered as reference guidelines by our national and international colleagues working toward the same purpose.

Prota provides an extensive automation and technological contributions in structural design capacity by its in-house software development unit: Probina, an integrated solution for dedicated analysis, design and drafting for reinforced concrete building structures.

Today, Probina Orion is used by more than 3000 civil engineering firms worldwide. The software developed by Prota's experienced software engineers provides a unique central 3D modelling environment from which automatic analysis, design and drafting is derived for the engineer as well as project specific structural analysis program updates on demand by our engineers to enrich our internal engineering and design capacity.

Model: Hilton Otel, Liverpool, İngiltere, Halcrow Yolles



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PROTA Computer Inc.

PROTA Software IT Engineering Ltd

PROMİM Landscape Planning
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