DESIGN OPTIMIZATION OF BANK BRANCH INTERIORS: CASE STUDY of IZMIR

By

Ayca ARSLAN

M.Sc. in Interior Architecture

Submitted to the Graduate School of Natural and Applied Sciences
in partial fulfillment of the requirements for the degree of
Master of Science
in Interior Architecture

Yaşar University
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YASAR UNIVERSITY INSTITUTE OF SCIENCE
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A Master's Thesis
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This study, titled “Design Optimization of Bank Branch Interiors: Case Study of Izmir” and presented as a Master Thesis by Ayça ARSLAN, has been evaluated in compliance with the relevant provisions of Y.U. Graduate Education and Training Regulations and Y.U Graduate School of Natural and Applied Sciences Education and Training Direction. The candidate has defended this thesis and the jury members named below have declared by a consensus / majority of votes that the candidate has succeeded, dated……..

Jury Members:		**Signature:**
Head	**: Prof.Dr. Tayfun Taner**	**……...**
***Rapporteur* Member:**	**…….**	**……**
Member	**:…….**	**……**

ÖZET

BANKA ŞUBELERİ İÇ MEKÂN TASARIMLARININ OPTİMİZASYONU: IZMIR ÖRNEĞİ

Ayça Arslan
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Yüksek Lisans Tezi İç Mimarlık Yüksek Lisans Programı
Tez Danışman: Prof. Dr. Tayfun Taner
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Bu tez çalışması, banka şubelerindeki çalışma verimliliğini arttırmaya yönelik, banka şubeleri iç mekân tasarımlarının, mekân organizasyonlarının ve ince yapı bileşenlerinin nasıl olması gerektiğini incelemektedir. Banka şubelerindeki çalışanların iş verimliliğini etkileyen fiziki koşullar; havalandırma sistemleri, mekân organizasyonları, mobilya sistemleri ve bekleme alanları incelenmiştir. Dolaşım, çalışma ve servis alanları, açık ve kapalı ofis bölümleri, bölücü sistemleri şeffaf ve yarı şeffaf olarak incelenmiş, mobilyalar; tekli ve ikili çalışma istasyonları, depolama üniteleri ve gişe bankoları olarak ayrı ayrı araştırılmıştır. İnce yapı bileşenleri; tavanlar, döşemeler ve duvarların tasarımında kullanılan malzemeler ve sistemler araştırılmıştır. Havalandırma sistemleri irdelenmiş, iklimlendirme ve klima sistemlerinin ortamı nasıl olumlu ve olumsuz hale getirdiği ortaya konulmuştur. İç mekânda ki aydınlatma elemanlarının tasarımları irdelenmiş, yapay aydınlatma sistemleri incelenmiştir.

Tezin çalışma yöntemi, İzmir'de bulunan toplam 605 adet banka şubesinden 9 (%1.5) adedinde yapılan anket, rölöve ve yerinde iç mekân bileşenleri ve mobilyaların tespit çalışmasını kapsamaktadır. Anket çalışması, banka iç mekânların da iş verimliliğini arttırmaya yönelik olarak, iç mekân tasarımlarını, mobilya ve mekanik cihazları kapsamaktadır. Çalışma yapılan banka şubeleri karma olup tek bir banka markasına bağlı kalmaksızın farklı bankaların en az birer şubelerinde çalışma yapılmıştır. Böylelikle tezin asıl konusu yani 'banka şubeleri iç mekân tasarımı' daha net bir şekilde ortaya çıkmıştır. Farklı tarzda ki banka şubelerinde yapılan çalışmalar sonucu, nelerin doğru ve optimum olarak, ortak bir dil oluşturarak ortaya çıktığı sponten bir şekilde görülmüştür. Yapılan anket ve rölöve çalışmaları irdelenmiş ve banka şubeleri tasarımına yönelik, iç mekân organizasyonlarına, iç mekân bileşenlerine ve banka mobilyalarına veri olacak öneriler

sunulmuştur. Yine yurtiçi ve yurtdışından güncel banka şube tasarımları incelenmiş, konu araştırması yapılarak veriler toplanmıştır.

Tez çalışması tüm bu konuları kapsayan 6 bölümden oluşmaktadır.

Anahtar Kelimeler: Banka Şubesi İç Mekân Tasarımı, İç Mekân Organizasyonu, Ofis Mobilyaları, Workstation Grupları, İç Mimarlık, Sürdürülebilir ve Esnek Mobilya Tasarımı.

ABSTRACT

DESIGN OPTIMIZATION OF BANK BRANCH INTERIORS: CASE STUDY of IZMIR

ARSLAN, Ayça

M.Sc. in Interior Architecture

Supervisor: Prof. Dr. Tayfun Taner

May 2012, 191 pages

This thesis examines bank branch interior design, space organization and interior components through increasing work efficiency. The physical conditions affecting bank employees' work efficiency, such as air-conditioning, furniture systems, space organization and waiting areas, have been examined. The circulation, work and service areas, open and closed office departments and transparent and non-transparent divider systems between them have been researched. In addition, bank furniture, such as workstations for single and douce units, box-office units and storage systems have all been researched and interior components, such as wall, ceiling and floor coverings and their materials and systems have been examined. Heating and air-conditioning systems have been researched and it has been determined how climate control systems affect interior space positively and negatively. Lighting systems in interior spaces have been researched together with artificial lighting and furniture design.

Basically, the thesis method includes a survey study of existing interior space, furniture and interior component specifications by taking photos and making sketch drawings of the interiors of bank branches located in İzmir. The thesis work has been applied to nine (%1.5) of the existing bank branches in Izmir, which total about six hundred. In addition, the bank branches that have been studied under this thesis subject were chosen from different bank chains to ensure and better determine the basic subject of the thesis, 'interior design of bank branches'. By studying different chains of bank, the optimum conditions for interior design of banks can be determined more clearly. The results of the surveys have been evaluated for bank furniture and interior design, which will be helpful for future branch design. The interior design components, for example space organization, interior dividers, moveable and fixed furniture design, workstation groups, fine structure components, such as wall, floor and ceiling coverings, lighting and ventilation design, doors, showcase and facade designs have

been included under this thesis subject. Examples of bank building designs from abroad and Turkey have been reviewed and literary research has been conducted by looking at optimum space organization of new bank branch design.

This thesis consists of six chapters which include all of these subjects.

Keywords: Interior Design of Bank Branches, Space Organization, Office Furniture, Interior Design, Workstation and Box-office Units, Interior Components, Sustainable and Flexible Furniture Design.

ACKNOWLEDGEMENTS

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Other banks such as Ingbank, Vakıfbank, Halkbank, Finansbank, managers and employees also merit my thanks. Without their support this study could not have been possible.

Declaration of Academic Integrity

I declare and honestly confirm that my study titled “Design Optimization of Bank Branch Interiors: Case Study of Izmir”, and presented as a Master’s Thesis has been written without any assistance inconsistent with scientific ethics and traditions. All sources I have used are listed in the bibliography and I have made references where applicable.

.. / 05 / 2012

Ayça ARSLAN

T.C.
YAŞAR UNIVERSITY

INSTITUTE OF SCIENCES MASTER'S WITH THESIS JURY EXAMINATION REPORT

STUDENT		
Name, Surname	**:**	
Student Number	**:**	
Department	**:**	
Program	**:**	
Thesis Exam Date	**:**	Exam Time :
Thesis Title:		

Having evaluated the answers of the candidate to questions about field of the study and questions from departments representing thesis basis after …… minute thesis defense based on the personnel study of the candidate, the jury decides with

☐ SUCCESSFUL (S) ☐ CONSENSUS
1 ☐ INCOMPLETE (I)
2 ☐ FAILED (F) ☐ MAJORITY OF VOTES

3 ☐ Since the jury couldn't gather, the examination hasn't been done.
4 ☐ The student hasn't participated in the examination.

☐ Successful (S) ☐ Incomplete (I) ☐ Failed (F) **Member :** **Signature :**	☐ Successful (S) ☐ Incomplete (I) ☐ Failed (F) **Member :** **Signature :**	☐ Successful (S) ☐ Incomplete (I) ☐ Failed (F) **Member :** **Signature :**

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INTRODUCTION

1.1 Subject of the Thesis

The subject of this thesis is based on the interior and furniture design of today's banks, i.e., space orgazination and interior components. Interior separation systems such as glass dividers, demountable and movable partition systems and their application details have been examined.

Furniture groups in banks, such as fixed and movable furniture, box-offices, single and douce workstation groups, information desks, queuematic systems, techno advertising systems (lcd, led designs), advertising boards, brochure boxes and their materials were reviewed and their placement in space organization was determined. Also design principles were explored and details were examined.

In addition, furniture design and details of sustainable and flexible interior design were studied. Interior components such as wall, ceiling, floor coverings and material choices were analyzed, also lighting and climate control systems were researched.

Lastly, facade components, bank window boards and design were reviewed. The new technosystems used in banks were researched and internet kiosks, mobile banking systems and their space requirements were explored.

1.2. Aims and Definition of the Problem

The aim of this thesis is firstly to determine todays and the future's bank interior space and furniture design and then to analyze how they should be organized by studying existing bank interior concepts.

Interior space organization of banks, office design, design principles, open-plan or mixed regular bureau types, work and circulation areas, the contents of banks and furniture groups were all studied. The floor coverings used in bank interiors were researched for prestige and hygiene criteria. Interior components such as wall and ceiling coverings chosen, especially for banks, were also studied.

Firstly, bank interior space organization design regarding suitable furniture for specific purposes was analyzed. The study of bank furniture design was separated into two groups; the first group consisting of furniture designed for bank employees in front and back office areas. These were firstly open offices, workstations and box-office groups; then furniture designed

for back offices, such as back office workstations, document cabinet rooms, storage units, photocopy-fax furniture, information and security desks, advertising boards, brochure boxes and separation systems that are used in open offices. The second furniture design group is for clients use only, such as waiting chairs, queuematic systems and bench seats.

For this thesis project, studies have been conducted at nine bank branch interiors and interviews were completed with each of the bank's construction managers about interior design concepts. Their interior design criteria were researched - conceptual design work was analyzed, domestic and overseas examples were researched. Using the same conditions, various design concepts of different bank branches were compared and common bank interior design topics were listed.

Various concept bank designs, interior space organizations, color combinations, furniture design and material choices were analyzed at each bank. Essential furniture modular systems were studied through flexible and sustainable interior bank designs. Air conditioning systems in bank interiors were studied under two topics.

First an air-conditioning system is for the cleaning and circulation of air inside the branch, using fresh air and inlet and outlet culverts inside a suspended ceiling. The second is for climate control, heating and cooling systems such as wall and floor air-conditioning systems.

Lighting systems were researched and analyzed in bank branches. The divider designs, necessary divider details and materials were researched for maximizing the use of daylight inside the bank. Artificial lighting systems were analyzed and classified under three topics; first, for general interior lighting with recessed downlights and fluorescents in a suspended ceiling; secondly, for open office workstation groups with lighting systems usually designed for workstation groups; and thirdly, for box-office desks which are important areas, especially within banks. Therefore lighting systems were specially designed with box-office desks in mind.

Interior divider system details and designs, their material choices and heights of furniture were researched.

1.3 Context of the Thesis

This thesis content is based on firstly interior designs of bank branches with a pre-study of office interior design systems, then research of workstations, box-office desks, and other necessary bank furniture with optimum space requirements.

In the first part of this thesis study; design of office space was examined from past to present. Office design types were investigated. Closed-cell-type offices, open-plan office concepts and the design of mixed regular offices were examined in bank branches, and which places should include which type of design of office in banks is determined.

After space organization research, an analysis of furniture groups specifically for banks was conducted. Office furniture today and current samples were collected and analyzed. Office furniture research was conducted by collecting domestic and overseas furniture examples. Workstations, storage units, work and waiting chairs, conference and meeting tables were analyzed. New system designs for workstation groups, especially wire storage system details, were researched.

Then, the history of banking output from the past and the history of the development of the banks was surveyed. The bank concept was examined, analyzed, and the first bank designs in history examined. Banks spatial organization was researched and data collated.

General interior color combinations and materials used in bank interiors, including furniture, flooring, and wall, ceiling components are compared.

Interior space divider systems and materials were investigated. Glass partitions in office locations and details were analyzed. Mobile divider systems for workstations groups were researched. In other words, these mobile and modular systems are designed with particular workstation units, increasing the possibilities of sustainable interior usage, assuming the main role of the bank interior concepts. Workstations and box-office desks are designed especially in modular systems to ensure a design in various sizes. By adding or decreasing the numbers of these modular systems, bank concepts can be adapted to different places. As a result, modular workstation groups and box-office desks are main the furniture for flexible and sustainable bank interior design.

Air conditioning, climate control and lighting systems were researched in bank branches. Space requirements of bank buildings, work units, however, that the meeting desks were examined and collected for literature review.

Furniture made up the second part of the study and the interior design of a bank, especially box offices and workstation units were studied. The module systems, designed to create sustainable and flexible interiors were examined. In the last section of this thesis work, after bank interior structure, technological designs, internet banking, mobile and on-line data about banking systems were investigated. Self-service banking systems, internet kiosks, digital systems have been added to work as new trends.

1.4 Structure of the Thesis

The structure of this study is based on; space organization and furniture analysis of existing bank branches, in addition to these, surveys have been done on bank managers and employees. A review of published literature on bank designs worldwide has been made and lastly classifications have been made between existing bank branches through optimum required space organization, square meters of space and furniture organization.

There are about 605 bank branches in Izmir. This thesis work examined some % 1,5 (nine bank branches) of this number. Interior space organization was investigated and bank furniture analyzed. Classifications have been made between seven of these branches through optimum space requirements of a bank such as entrance halls, waiting areas, circulation areas, work areas, service areas, and technical areas. Their percentage in the existing total usage area is given in a table. The other two branches examined have been added to this thesis work, however some data was not available due to permission and access problems.

Service areas for bank employees, for example, rest rooms, kitchens, WC's, technical rooms and especially main vault and small rental vault rooms, that are very important in banks, were searched. Interviews based on survey questions were done with bank employees and directors. Then existing interior plan sketches and typical furniture drawings were completed and photos taken for this thesis structure. Queuematic systems, interior components such as wall, floor and ceiling coverings were studied at each bank. Lighting and climate control systems were analyzed.

Under these topics, this thesis work was done at nine different type bank chain branches. Interviews about design strategies were conducted with each bank’s construction director.

2

LITERATURE SURVEY and PREVIOUS RESEARCH

2.1 Structural Properties and Classification of Bureaus

Basically, business organizations from the Middle Ages to today can generally be classified under three basic headings which can be used individually or by company groups.

These types can be summarized as:

-Cell Type (Traditional office planning) Bureau

-Open-Plan Type Bureau

-Free Regular Type Bureau

In addition to these, there exists 'in-between types' such as 'Group Regular Bureau' and 'Mixed Regular Bureau'. (Çete, 2004)

At present, the basic difference between these bureau types is generally determined by the placement of cores such as staircases, elevators and circulation areas in the interior design.

As a consequence, a business company develops its interior concept design and makes spatial organization decisions through the type of bureau that will be used in harmony with the functional features of company.

2.1.1 Cell-type bureau

As pointed out by Çete (2004), cell-typed bureau space is the oldest type of bureau system and its history goes back to the Middle Ages. It is a bureau planning type mostly used before the 1950's. In cell-typed bureau spaces, the depth of space is generally limited to 5.5-6 meters in terms of their adherence to daylight and the development of the bureau is generally to one side. Cell-typed bureau space represents 'rooms' in different sizes. The sizes of the rooms differ in terms of the number of persons occupying it, the work organization and the business hierarchy. It is a suitable bureau for an individual.

In this corridor planned approach, two sides of a main circulation corridor are surrounded by walls. Work rooms are separated from the main circulation corridor by walls. In this type of plan, work areas border the corridor and the façade (Figure 2. 1-2).

Corridors can be arranged in a one sided, two or three sided configuration. The core is generally placed at the two endpoints of a corridor. Cell-typed bureau space is used commonly in many countries, but business organizations and new technological possibilities require research for different space solutions (Çete,2004).

Figure 2. 1. An example for open-plan bureau.*(Çete,2004)*

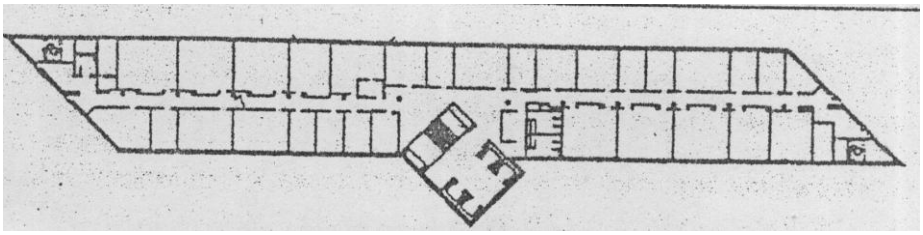
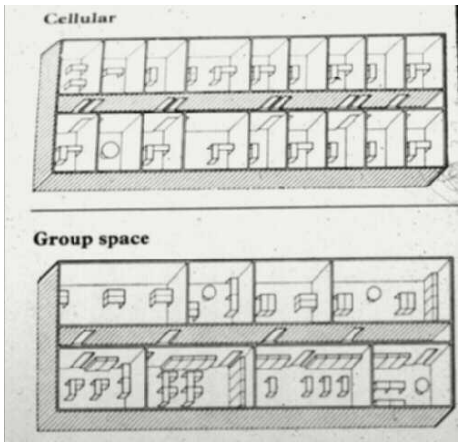


Figure 2. 2 Cellular office and a schematic perspective of group working spaces.
.*(Çete,2004)*



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2.1.2 Open-plan type bureau

As indicated by Çete (2004), with the development of communication devices and their usage, offices changed their interior organization requirements. Offices, in terms of their interior communication needs, began to be planned as open places by using cell walls.

In open-plan bureaus, as understood by its name, there are no existing strong divider systems, such as walls, between people sharing the space. Office furniture, placed by straight-lined geometry, ensures the separation of the space. The gap between workers of this type is completely open or divided with the help of short panels, cabinets and flowers to give a stronger interior space sense (Figure 2. 3.).

An open office is not a system with a lack of walls, but a design type which brings easy communication between employees while on the other hand ensuring privacy. In working in a bureau with either one person or a group, a strong relationship between workers must be ensured. The communication skills and information fluidity becomes stronger and easier between employees and also space must be designed suitably and flexibly for work and must also be changeable via a possibility of different configurations. This can be ensured by

creating different parts for directors and employees by easily movable panels designed in various sizes with various materials. (Çete 2004) (Figure 2. 4).

Figure 2. 3. Open office schematic perspective

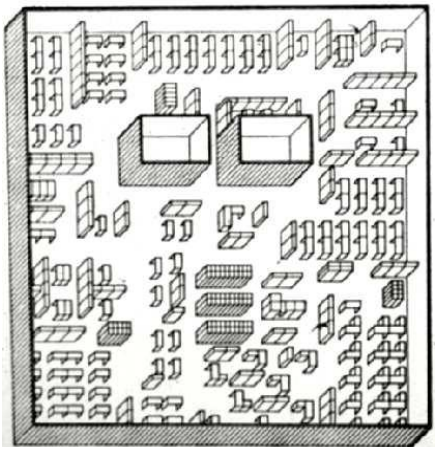


Figure 2. 4. Open office plan example

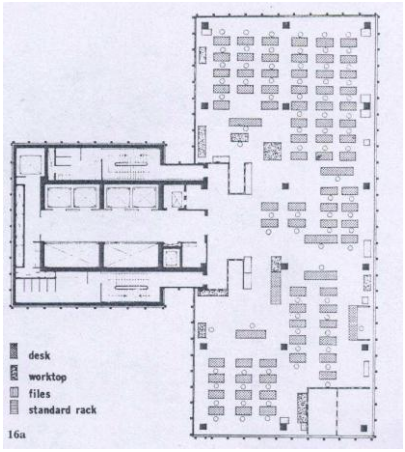
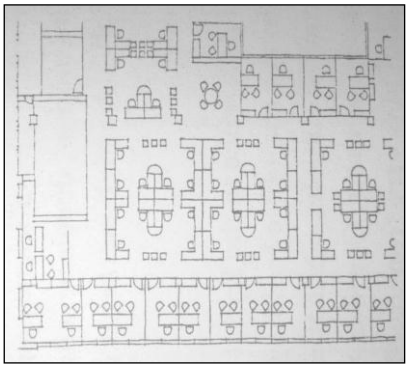


Figure 2. 5. Created separate partitions for managers and chiefs, along with the classic open-plan office floor plan to organize a cross-section of an office work space. (van Meel, 2000) England. *(Çete,2004*)



In addition, an open-office can be designed by placing different types of multiple groups of workstations, storage units, rest areas and occasional seats in geometrical and linear forms with glass dividers, open for conference and meeting rooms. (Figure.2.5).

Through the increasing popularity of open-office systems in working life, divider panel systems for employees' individual areas are developing.

However, for the most suitable environment for group work, divider panels can be used. Burotime's philosophy for a project or the location of the application is in accordance with orders received from customers. The project is completely overseen by Burotime's 100% domestic production and design department which produces the divider panels, uses modular

furniture production technology and is in accordance with the logic of the Parser system using dividers between groups of individuals. Mostly, workstations provide sound and heat insulation using specially designed materials.

Automated button control from the outside of a double glass (divider-dash) controls the blind application of this product group and has a variety of thicknesses - twenty two mm, fifty mm and seventy five mm in three variations(Figure 2.6).

Figure 2.6. (A) An open office design of 'Koleksiyon Company', (B) Divider picture, (C) Open office divider system, a call center example *(Architecture,Design,Space)*

A B C

Figure 2. 7. (A) Philips Turkey Management Office interior plan, (B)Interior Furniture Designs *(Architecture,Design,Space)*

A B

'Improving the quality of life for everyone' in the areas of lighting, health and care products is the Philips Company's motto. WPI, 'Work-place Innovation' (Working in the field of innovation), has been developing globally for a long time, with a strong regard for possible future use of the area. This was first implemented by Philips in Turkey. (Figure.2.7.)

Figure 2. 8. Philips Turkey Management Office Interiors.(Architecture, Design ,Space Journal)

The study area, both inside and outside, uses the WPI concept. The strongest way to provide a communications approach was developed using WPI as an open, cooperative, flexible, mobile, convenient, efficient, productive and creative platform that aimed to increase interaction among employees. (Figure.2. 8)

2.1.3 Free regular type bureau

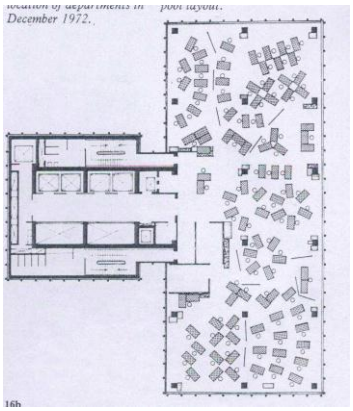
When entering the twenty first century, the cell-typed bureau and the open-plan typed bureau are combined under a third type bureau. This third type of bureau is the 'Free Regular Bureau'. This new type retains the advantages of both cell-typed and open-office typed bureaus. It is a system which the Schnelle Brothers developed in Germany at Quickborn at 1960. The Quickborn team which is a planning, management and business counselling company, brought a new planning mentality which drastically changed traditional bureau organization systems under topics such as bureau interior design, organization, documentary taking surveys and storage systems. (Çete,2004).

As Çete (2004) points out, the ideas that formed the 'free regular type bureau' were developed by architectural design professionals. The ideas which bring a new method to bureau interior design is based on theories of work organizations and known as 'Planning and Organization Sybernelik' in Germany. The Quickborner team works on 'work organization themes' and approaches bureau planning using cybernetics. This term, used by the mathematician Norbert Wiener, is used in the sense of thinking and communication analysis that was developed in parallel to computers.

Figure 2. 9 An example of free regular office floor plan.*(Çete,2004)*

Figure 2.10. Rectangular plan of Bertelmann publishing office, an example of working space organization of Bertelmann's. *(van Meel, 2000)*

A



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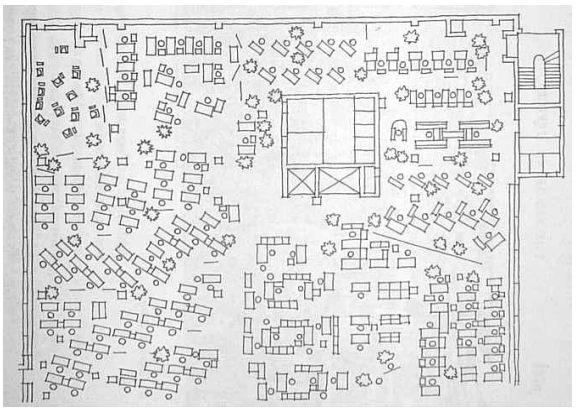


The office floor arranged in Guttersloh for the German Bertelesmann publishing house is the first example of a 'free regular typed bureau'. Bertelsmann publishing house is a rectangular shaped open-office bureau type with two hundred and seventy employees, placed inside a central building with two thousand employees. With wall to wall carpeting and acoustic panels, sound isolation was ensured. This first project, completed quickly by the Quickborner Team, became a fashion for the whole of Europe. (Çete, 2004) (Figure 2.10-11).

Figure 2.11. An interior Picture of Bertelsmann *(van Meel, 2000)*

An open-plan bureau differs from a free regular typed bureau by placing and organizing furniture with straight-lined geometry at regular intervals. (Figure.2.12-13)

Figure 2.12. The same office, (left) open office designed, cell officed for managers and (right) an example of free regular office plan. *(Çete,2004)*

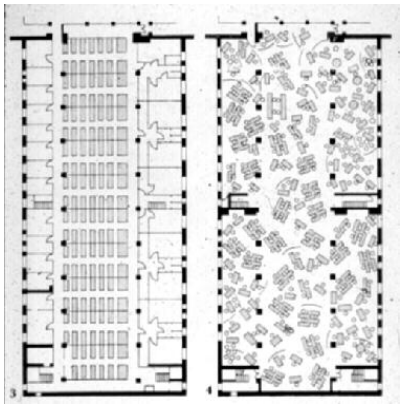
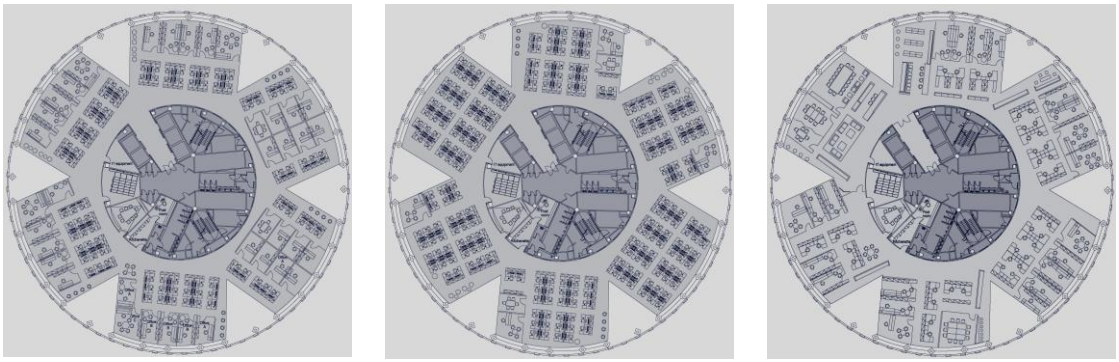


Figure 2.13. Swiss Re Headquarters building, (A) cell designed office, (B) open office design and (C) free regular designed office plans. *(Çete,2004)*

A B C



2.1.4 Group regular type bureau

The Group regular bureau space, although basically the smaller and divided part of the whole bureau, gives a mobility which transfers interior organization to the buildings' exterior form.(Çete, 2004)

Basically, by removing the partition walls of cell typed bureaus and by adding corridors to space, multi-personned cells can be ensured. In this type of bureau, at one level about five to ten employees use at least two to three different areas. The depth of the space is regulated by the daylight source, about twelve-fourteen meters, and a direct passage is needed from the

core to the working space. Because communication between and inside departments is strong and group work is necessary, a medium sized bureau space will be enough for this type.(Çete, 2004)

One of the first examples for group bureau space, completed in 1977, is the administration building of Ova Insurance Company in Manheim.

This building's features can be summarized as follows; formed for a five to ten person capacity, the required space for a one to three person small work group is called 'the basic space' of the whole area. In terms of flexibility and economic circumstances, at least three of these basic spaces must be organized on each floor and each work group must share circulation areas and daylight sources equally.(Çete, 2004) (Figure 2.14).

Figure 2.14. An open office design with regular group (*Architecture,Design,Space Journal*)

2.1.5 Mixed regular type bureau

Basically, as understood from its name, the mixed type bureau is the combination of basic three types.

As Çete (2004) points out, in the project design process if one type is selected as a basic design type, it can be changed to another type depending on the required use or it can be reorganized by adding or removing some cell bureaus. Working space can be a medium or large area. In this type, divider systems are reduced and some groups are arranged in the same space. Individual, closed parts are also required for functional and behavioral reasons. These are arranged in places that open directly onto large working spaces or arranged in different areas linked by corridors. The core is generally arranged as a cell-typed bureau.

2.2 The Space Organization of a Bank Branch

Through the study and analysis done in bank branches and research of interior use and space organization, the basic space requirement for a bank interior is determined. There are spaces which are necessary for bank concepts in order to ensure client communication and bank business and the area is proportional to the total bank area.

These spaces are basically; circulation, work, service and technical areas. The space organization must ensure a good connection between these spaces through space organization diagrams. Circulation areas are also important in order to ensure communication between clients and employees, and between employees themselves. Entrance halls are the first spaces that clients see, and they are also important in decorative rules, to indicate the prestige of the bank, and for functional space to direct clients to a specific department. Therefore an information desk is necessary in the entrance hall of a bank.

Even though every bank has its own design criteria, the spatial organization of a bank is mostly constant. The organization of entrance halls, front offices, back offices, waiting areas and their placement in the interior must be arranged in order to ensure circulation in the bank. For example, a waiting area should be placed in a suitable position so as to reach box-office and front office workstation units easily.

The front office, is always in communication with clients and back office staff, acts as the heart of the bank. The front office furniture is generally designed using the bank's interior design concept. Back offices are placed near the front office for better communication with closed cell walls or non-transparent glass systems to ensure privacy.

These places are the first part of a bank's spatial organization. The second part consists of service and technical areas placed generally at a far point in the bank interior so as not to be seen by clients. These areas can be arranged on basement floors or upper floors of the bank. Service areas consist of a main vault with an ante-room for bank employee's use only, rental vaults for clients use and an archive room, kitchen, WC, restroom and cloakroom, again for bank employee's use only. If service areas are placed on the basement floor there must be a staircase in the back office, to ensure 'main vault and rental vault rooms - back office - front office – client' access and circulation correctly.

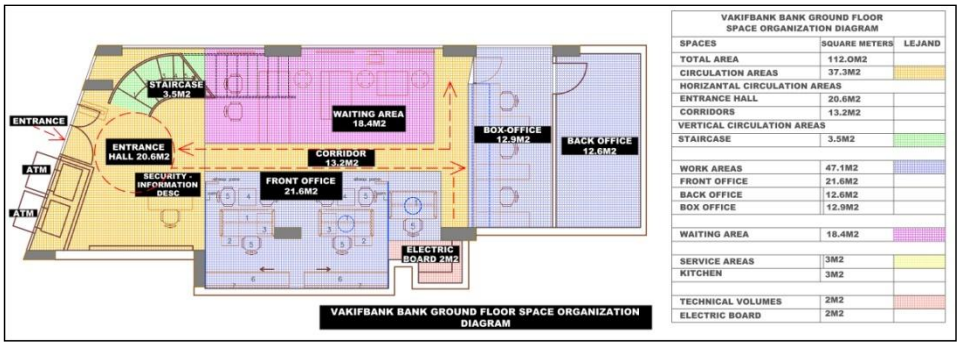
Also technical areas must be placed at a far point in the bank so they cannot be accessed by clients. These spaces ensure banks' technical system requirements such as the climate control

room, UPS room, phone power plant and rooms for electric boards. It is better to place them close to each other, in terms of the use of interior floor, wall and ceiling materials.

In bank space organization, positioning the management department on upper floors is a better solution to ensure prestige. However it differs between every bank's criteria - directors, director's assistant's offices and meeting rooms are generally placed on upper or mezzanine floors. The halls and corridors of these spaces are designed with highly decorative elements and furniture which differ from the banks general concept in color, material and form choices.

Figure 2.15. Banks ground floor space organization examples, (A-B) space designs in a narrow form, (C) space design in more centered square form in which staircase placements are different. *(Arslan A.,2012)*

A



B

C

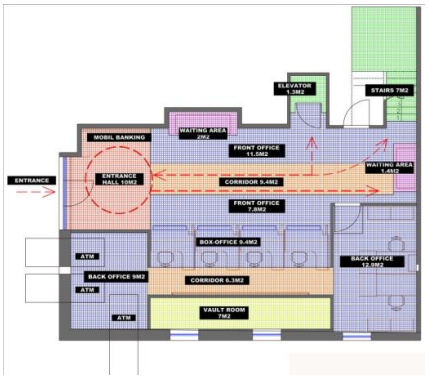
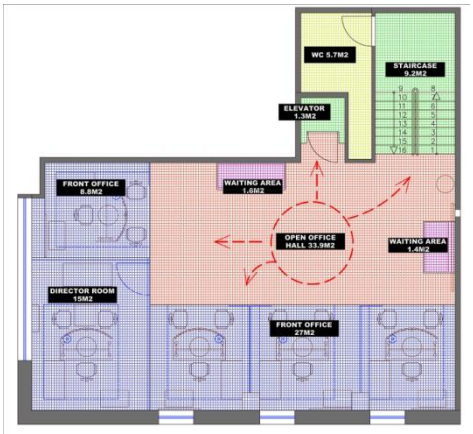


Figure 2.16. Circulation plan of bank at upper floor, with director room, open office and cell type office at back. *(Arslan A.,2012)*

Figure 2.17. Circulation plan of bank at upper floor-2, director room and open office type with glass dividers. *(Arslan A.,2012)*



However, a bank branch's interior design differs through its corporative identity and design concept such as the colors and forms of interior components and furniture. There are constant space requirements and organization which ensure the correct working order of a bank branch. (Figure 2.16-17).These spaces are:

Entrance Halls of Bank

Entrance halls are spaces which are used both by clients and employees and can be designed with a spoiler too. Entrance halls are the first place that a client enters so it must have a first communication capability with a security and information desk, combined together at one desk placed in the entrance, and must ensure client direction in the bank. Also a queuematic system must be placed in the entrance hall where clients can wait in order and do their transactions systematically.

Waiting Areas

Waiting areas are places that are designed only for clients use in banks, in which waiting chairs are placed. Waiting areas are generally placed near or opposite box-office units and workstations where client transactions are done. The square meters of waiting areas varies depending on the banks' overall area.

Work Areas

Work areas of bank branches are divided mainly into two parts, one work space for front office and the other work space for back office. Front office work space is the place where client and employee communicate. The back office is the area only for employees which clients cannot reach or see and is in communication with the front office.

Front offices are places which are designed on open office type principles - there are no existing walls and closed rooms in the space. The area is divided by movable, transparent glass separators and furniture into functional areas and workstations units. Box-offices are placed freely in the interior. The front office consists of box-office units, workstations for individual client transactions and waiting areas in space organization.

The back office is the work space where bank operations are done confidentially which clients cannot access and is in communication with the front office. Because back offices are placed outside the open office borders, the furniture design of back offices is commonly different from front offices. However the back office's workstations, storage units and cabinets are designed more to ensure functional needs; the front office's workstations and storage units indicate the identity of the bank and are designed in both functional and visual concepts and integrated with the concept of the general open-front office.

Common work areas

Common work areas are spaces designed in order to ensure client and employee communication when box-office units and individual workstations are not suitable. These common working areas can also be used by bank employees when they have to work together or as meeting rooms when needed.

Service Areas

Service areas are spaces designed for bank employees use generally and rarely for clients. They are placed in the bank at a far point to the entrance and open office parts which clients cannot access. Service areas are; vault room, small rental vaults, restrooms, kitchen and WC units and cloak rooms for bank employees' use.

Technical Area

Technical areas are places where banks' functional requirements are located, such as climate control equipment and technical rooms for electrical systems, UPS room (uninterruptable power supply), phone power plant, stokehold and generator room.

2.3 Interior Components of Bank Branches

2.3.1 Workstations and storage units

(A) Acoustic panels, work surfaces, rack boxes, wheeled filing and supporting accessories, furnishing, combined with an automated system.

(B) The shape of a shared terminal includes a pivoting side table.

(C) The secretary at his/her workplace, suitable for sharing a printer table.

(D) The automated workstation, as well as furniture, supplies in-built modern office technology, thus becoming an integrated unit...

(E) 'A special automated applications for check processes. Work stations, depending on the office staff, but at the same time expanding office communication as technical equipment.' (Figure 2.18-19) (Çete, 2004)

Figure 2.18. Workstation group example.(*Çete,2004)*

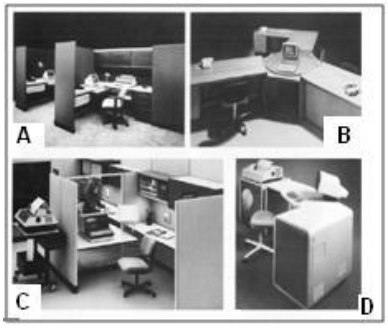


Figure 2.19. Example of workstation group.*(Çete,2004*)

As Çete (2004) points out, bank furniture is equipment that ensures an efficient interface between employees and machines. Typical office furniture includes, work surfaces, chairs, storage units, presentation equipment, divider panels and LCD screens that are necessary to support the employee. Contemporary office furniture is classified into two main groups, traditional and systematic. Generally, traditional furniture is a collection of independent elements such as table, drawers, document cabinet, book shelves and presentation board. System furniture is, on the other hand, an integration of interdependent elements which are work surfaces, filing cabinets, shelves and storage units and presentation features which are designed with panels or support poles. Today's system furniture is developed generally to look traditional or free but also to include systems or units connected to panels.

Figure 2.20. Fluido office table design, Ersa Company. *.(Architecture.Design.Space Journal*

Work configurations must ensure sustainability to respond to special circumstances such as immediate work needs, worker changes, special meetings, privacy needs or when new work groups must be created immediately. (Figure.2.20)

The table, which is the main module of study and the working surface of different forms and dimensions, can simply change the work environment in different ways.

Tables can be grouped in different ways; while allowing easy communication between team members, at the same time allowing individuality. (Figure.2.21-22)

Figure 2.21.Douce workstation group.*(Architecture,Design,Space Journal*)

Figure 2.22. One unit workstation group and cabinet

In this example, a group workstation appears including desk, intermediate separator, caisson, storage units and a large protective mobile separator. Silva, as a new furniture design, brings technology and easy communication with information systems and evokes the offices of the future. The future identifies and widens horizon designs with different extensions. Research within the organization in the field is for general managers, department managers, assistants for individual and multi-purpose use. (Figure.2.23)

Figure 2.23. (A) One unite workstation, (B) Meeting room table.*(Architecture,Design,Space Journal)*

A

B

Silva is an incredibly simple and a very practical product. At the same time, with rational consideration of many functions of detail, the product is specifically designed with contemporary office accessories and different colors of coating to spearhead the creation. Its structure, rather than using high dividing panels between tables, has short and thin panels to enable the sharing of information between employees and allowing a maximum level of communication and teamwork. In this way, it offers a supportive feature for both employees and office layout.(Figure.2.24-25)

Figure 2.24. Workstation group for two persons **Figure 2.25**. Workstation group for four persons

.*(Architecture,Design,Space Journal)*

A

B

Figure.2.26. Manager's office furniture group

In this group, for executive rooms, furniture and color made a contrast. Light cream and dark black colors. Curved metal legs moved to a different color by using a table tray. Storage units create a positive work environment by its orange color.

Figure 2.27. One unit workstation group Inspira model.*(Architecture,Design,Space Journal)*

Cable editing solutions, height adjustable, ergonomic design. (Figure.2.27)

Figure.**2**.**28**.One unit workstation group_Adapta model

Adapta-2 series is an excellent choice that responses to today's comfortable modern, simple expectations in offices. It presents a modern style by its close-box designed metal leg structure and white 'L' type working surface. (Figure.2.28)

Cable Management Solution

Figure 2.29. Cable management solution from Blue Lounge Design Studio, 'Studio Desk'. .*(Architecture,Design,Space Journal)*

Blue Lounge Design Studio, which has won many prizes for space station, cable box and sanctuary, presents the most developed cable management design ‘Studio desk’. A traditional work surface with a very modern design, ‘Studio Desk’ is designed to serve a clear space with a lack of cables for laptop users. A sliding thick surface tray hides a secret mini-storage unit for computer cables.

The timeless design of the desk has dark coffee colored legs and details. A white laminate is used for work surfaces and storage units to ensure resistance. In addition, to protect the work surface, a black leather covering is supplied. The product size is: 47x27.5x29.5cm. (Figure.2.29)

Overseas Workstation Groups

T-Lift Desk is a furniture group designed and developed for offices and has a very complicated and functional also comfortable style, especially highlighted by company;

> ‘Ideal desk for work that alternates between sitting and standing. Reduced form, visually and technically integrated into the T-platform. Keeps the body in motion and thoughts flowing? Perfectly ergonomic desk for great comfort that supports and encourages shifting positions. To be used for desk sharing applications or people who spend most of their time at the computer and frequently need to change body posture spontaneously for health reasons. Also for companies concerned about the well-being of their entire workforce.’ (Figure.2.30-31-32-33)(http://bene.com/office-furniture/tplattform.html?OpenDocument&img)

Figure 2.30. T-lift desk design by side dividers

Figure 2.31. T-lift desk

Figure2.32. T-front office douce workstation group

Figure 2.33. T-front office douce workstation group, an design

The variety of combinations and options are indicative of the system's quality; for example, high quality executive workstations for the front office. Generous workplace layouts, featuring distinctive table shapes and material combinations are characteristic of the T-Front office. Sideboards provide further support to house the information and media technology. (Figure.2.34-35)

Figure 2.34.T-Front office workstation unit with hard disc cabinet

Figure 2.35.T-Front office workstation, side cupboard

T-Front office furniture system ensures modular composition for interiors, as pointed out by the company;

> 'The reduced formality of the table stands in contrast to the natural materials and shapes of the third working level. The modular system of the T-platform creates dynamic workplaces that can be restructured over and over again. A comprehensive cable management system, coupled with a variety of tabletop functions, improves work comfort by means of simple, fast access to power and data networks.' (Figure.2.36-37-38-39) (http://bene.com/office-furniture/t-plattform.html?OpenDocument&img)

Figure 2.36. T-platform working unit

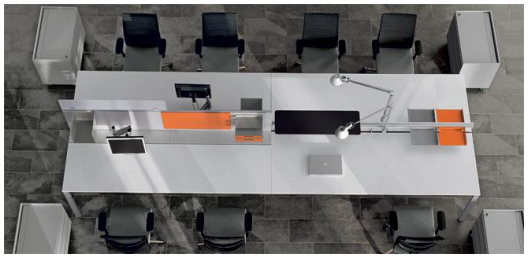
Figure 2.37. T-platform working unit with a different solution

Figure 2.38. T-Workbench workstation group with mixed design concept

Figure 2.39. Workbench workstation group with a regular type design

Figure 2.40. Douce workstation group.

Figure 2.41. Multiply-workstation group



Workbench is furniture developed for a variety of flexible work options and described by the company as;

It is a flexible office furniture for IT integration which fostering interaction and communication and easily adaptable to today's office requirements. Multifunctional unit for different office zones and applications such as team work or project-focused work; for desk sharing or classic workstations or as a touch-down in office space. Power and network cabling are stored in a generous cable tray in the table center; sliding table top or cable flap for comfortable access. Extra elements of the third working level: rails, organizer units, screens, plug box, filing trays and shelves, flatscreen, swivel support, tasklight adapters etc. (Figure.2.40-41

Individual desks come in different sizes, modular composition allows reversible configurations. (Figure.2.42) (http://bene.com/office-furniture/t-plattform.html?OpenDocument&img)

Figure 2.42. Multiple workstation furniture, (A) two sided design, (B) one sided design, (C) two sided multiple solution

A B C

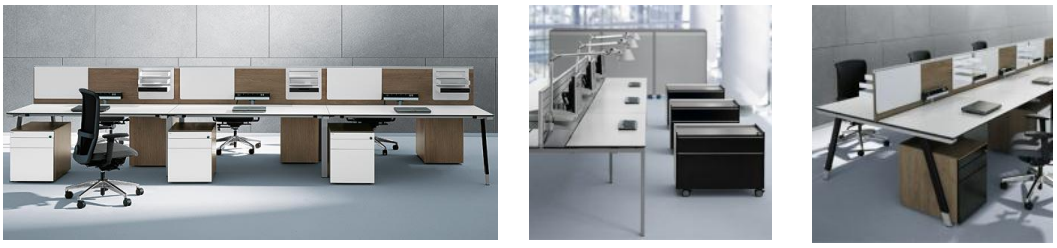


Figure 2.43. Workstation unit, (A) screen elevator system, (B) hard disk cabinet, (C) whole design

A B C

2.3.2 Work chairs, waiting area chairs and coaches

Figure 2.44. Herman Miller's 'embody chair' design.*(Architecture,Design,Space Journal)*

Herman Miller adds an ergonomic touch to office chairs that are a nightmare for employees who work seated. Herman Miller, who sees design as an important solution for people, has a new design chair ‘Embody’ which was created with this design approach.

As highlighted by Herman Miller;

> ‘If a design goes beyond minimizing the negative effects of sitting?’ If we design a chair that takes your life through a positive way? ‘Embody’ was created by reflecting of this ideas to design.’

‘Embody’ brings three solutions by work done with experts. Ooffice worker health must be positive and therapeutic, back and seating dynamics and surface pressure must ensure comfort and vitality and must provide positive health benefits. Work seats, no matter how the person's backbone curve is, must ensure a natural postural balance. Through these parameters, technologically the chair is created by joining lots of units together. (Figure.2.44)

Figure 2.45. File Plus model, future’s design chairs by Burosit Company

Figure 2.46. Waiting chairs. *.(Architecture,Design,Space Journal)*

Fileplus series is recommended to users who have waist, spine and neck pains. Fileplus is a good design in its mechanical solution in keeping with the ergonomics discipline. Fileplus ensures ergonomics’ criteria and also present an aesthetic style to offices (Figure.2.45.).

Burosit Dream series is designed for waiting and conference rooms with its elegant lines and a multi-use field, as well as being very strong and has passed many tests required by European standards (Figure 2.46).

Figure.2.47.Collective serial waiting chairs. .*(Architecture,Design,Space Journal)*

Dream has a mechanism which helps to save space by using mobile, stackable chairs**.** This mobility is popular with employees. Burosit offer mobile wheeled chairs as an optional extra. Dream is a tailored series with its anatomical and ergonomic structure and has been used for a long time. With the help of castor-wheels, a maximum fifteen chairs with tables can be replaced in the office space. (Figure.2.47)

2.4 Local Bank Branches Research and Investigation of Samples

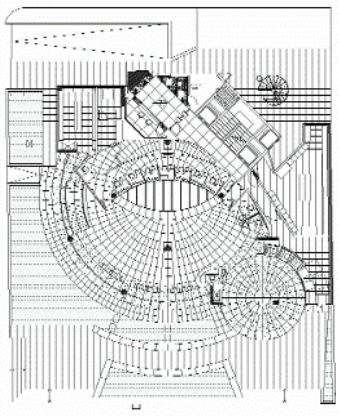
Garanti Bank branch is an exceptional style with its minimalist design work. The branch brings a new approach to bank branch design by its details and material choices.

Space Organization

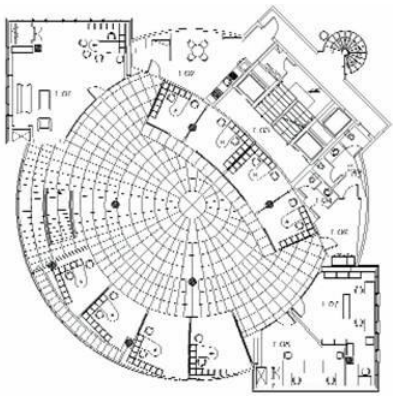
The branch is located on the ground and first floor of a multi-storey building; on the upper floors are the bank's administration and management offices. The branch's concept design was developed from the buildings existing form. The building project concept, formed with a circlular geometry of six thousand square meters, consists of three basement floors, a ground floor and five upper floors and indicates enlightenment and openness. At the ground floor level of the branch, an ATM hall, client hall, box-offices, rental vaults and an archive room are located. On the first floor there is the manager's office, client portfolios, operation units, kitchen and WC. (Figure.2.48)

Figure 2.48. Garanti Bank, Istanbul Suadiye branch, (A) Ground floor plan, (B) First floor plan

A



B



Design Concept

While designing the branch, the center point of building was an arbiter. Materials and structural components applied in decoration were chosen through this concept. Spaces spread from the center using partition walls. These spaces were specially adapted as part of the whole function of the scheme. (Figure.2.49)

Figure 2.49. (A) Bank's box-office picture, (B) box-office's artificial lighting.

A

B

A client ATM hall, created in the branch's entrance on the ground floor, forms a circular shape. Internet banking partitions and ATMs are placed again in this circular area. There is a glass divider wall system that separates the bank interior and the ATM hall, in order to be closed after working hours. This translucent wall system opens and adds the ATM hall into bank interior at working hours.

Figure 2.50. Bank's general interior, (A) divider systems, (B) waiting chairs

A

B

In the client hall, marble and granite floor coverings were used. The floor was designed from the center point in a circular shaped plan. Floor materials were cut using special computer aided machines. Box-offices were designed in a circular shape too. In front of the box-office, a glass floor covering was designed together with furniture. Because of the strong visual effect of the columns in the interior of the branch, they were covered with glass material to reduce this effect.(Figure.2.50)

In the design of the staircase, which connects the ground and first floor, an enlightened and simple effect is dominant. The stairs were designed using glass. The back wall of the staircase was covered in stone to create a visual effect in the interior. (http://ozkankac.wordpress.com/2009/07/21/garanti-bank-suadiye-branch)

On the box-office back wall, LCD screens were placed to ensure advertisements of the bank for waiting clients. LED systems were used for interior lighting. Artificial night lighting system of the interior resembles an aquarium (Figure 2.51.)

Figure 2.51. Bank's artificial lighting effect.

Is Bank Branch

In this branch, the general entrance and ground floors are designed as open office concepts, consisting of box-offices, client hall, waiting area, workstation groups, customer representative and director's rooms throughout the area. All functions can be found on the ground floor.

If a branch is on one level, the information desk, waiting area and box-office units are placed near to the entrance and the director's room and customer representatives placed at back. Service units for employees, for instance the kitchen, restroom, WC and vault rooms are placed far from the entrance and in a private area, not accessible by clients.

Figure 2.52. (A)Bank's box-office unit, (B) workstation units, (C) bank's general interior

A

B

C

.

Self Service Bank Concepts of Isbank

Figure 2.53. (A). Isbank'new concept interior, (B) internet kiosks, mobile banking

This example is given for futuristic and digital bank concepts for the future indicated at first chapter of thesis. (Figure.2.53)

As indicated by company;

'Reaching millions of customers by more than 1000 branches in Turkey, bank surprised by its "self-service banking" concept. Today's young, quick, "online" service is now closer to its customers by this internet based mobile banking designs.'(http://www.i-amistanbul.com.tr/our-clients/turkiye-is-bankasi)

2.5 Investigation and Examination of Sample Overseas Current Bank Branches

Citibank's Interior Design

Figure 2.54. Citibank's interior concept

Citibank's general interior and visual concept, both interior and exterior, can be described as modernist, especially in the use of the spatial organization of interiors and furniture design. With colorful designs and the way of using color in the design as a whole for the interior, exterior, furniture and facades. In addition, as highlighted by Pentagram Architects group;

A visual language and colors and materials palette were developed to represent the new brand. The shade of blue that defined Citicorp's visual identity was incorporated from the outset in the form of a blue brand wall, an arresting expression of the brand that is now a key feature of Citibank branches worldwide. (Figure.2.54) .The distinguishing elements of Citibank branch interiors include the blue brand wall, located at back wall of box-office unit, and open consultancy desks with lifestyle banners and translucent privacy screens. A secondary color palette was also developed to be used for accent colors in customer waiting areas. Citibank interiors have two division, Citibank "Blue" environments and the more luxurious "affluent customer" environments for CitiGold. Part of the all-encompassing design program for Citibank included the brand identity and interiors for both the blue environments and those for CitiGold. (Figure.2.55) (http://pentagramarchitects.com/case-studies/citibank-1.php)

Figure 2.55. (A)Second color palette for customer waiting areas, (B) bank's blue brand wall.

In addition the general concept approach was described as;

'While ensuring that the CitiGold "affluent customer" environments are consistent with the brand's core values, the palette employed clearly distinguishes the division as exclusive and alludes to notions of contemporary luxury. The colors are understated with clean, elegant lines, warm wood paneling, and frosted glass partitioning and generous furnishings throughout. Flat–screen TV's give customers the opportunity to relax and private on–line banking terminals are available for their convenience. Backlit floating walls of a warm toned wood are positioned in front of cream colored walls that provide the spaces with a sense of detail and luxury. The counters and tables are rounded for a softer feel that suggests friendliness and accessibility.'(http://pentagramarchitects.com/case-studies/citibank-1.php) (Figure.2.56)

Figure 2.56. (A) Bank's façade from street, (B) bank's façade inside of a shopping mall (http://pentagramarchitects.com)

A

B

A Bank Design in Kentucky

A new bank branch was developed with a new corporate image for the small town of Louisville, Kentucky, involving all color, materials and finished elements within the interior design.

Winner of the 2009 Daltile Best Floor/Wall Tile Installation Competition. Published in the May 2010 Edition of “Interior Design” Magazine. (Figure.2.57-58)

Figure 2.57. (A) Bank’s waiting hall, (B) bank’s circulation corridor in interior.*(Interior Design Magazine)*

Figure 2.58. Bank’s meeting room design.

3

THE HISTORY OF BANKS

3.1 Description of Concept of a Bank

In this chapter the description and concept of a bank is demonstrated using basic guidelines. Firstly, if we consider the meaning of ‘a bank’ - A bank is a place or foundation which gives and takes money with interest, makes foreign exchange transactions and gives credit and discount. The word ‘bank’ comes to Turkish from Italian the word ‘banca’ which also indicates ‘money exchange office or place’. In fact, banks are companies which make transactions in the economy and store valuable goods in their vaults.

In fact banks are businesses that make monetary and commercial decisions related to credit transactions. Commonly, a universal bank ensures credit to individuals and organizations such as deposit accounts, insurance, capital other transactions related to money - this is the mission of a bank. As an example, also highlighted by Yetiz (2009), there is a credit institution in Germany which ensures the bank’s business, such as capital and liquidity needs, accepting deposits, collecting funds, transfers credits and a kind of financial placement that aims at profit maximization.

In other words banks are establishments that are founded on capital, organized on set objectives and which ensure income by collaborating with other services. In short, we can say that banks are companies that provide money and credit for the economy.

Banks are establishments that trade credit through a policy of trust and they always have economic services which have money, ready to borrow when needed, or seek money and credits from nations. In order to ensure this borrowed money or credit, a trust policy is needed between both borrowers and lenders. After the development of credible services of banks, some people do not use a credit facility but deposit their money in banks. Banks have also started to borrow money from borrowers. In order to realize this system, banks have all the necessary technical equipment to secure the loans.

Through economic principles, banks can be grouped under the following headings:

-Banks serve to collect large funds by collecting small borrowable funds. By this, they ensure they meet governments’ and individuals’ credit needs.

-Banks help individuals and companies find credit and borrow and money, follow the same course of monetary and credit needs of each economic unit, thus increasing the fluidity of the currency market.

-Banks help individuals save money that they won't use for a while. Those who claim interest have a better opportunity to measure the money collected in the form of deposits to provide the most efficient use of their money.

-Through the varying conditions of economics and technology, banks are always in a hurry and continuously change. Because of this, banking is always open to technical and economic developments.

3.1.1 Description of Bank Buildings

Basically, bank buildings can be classified as office and management places which also include the needs of other bank areas in their spatial organization.

In other words, bank buildings are like office buildings that include work areas as offices for bank services generally, but distinguish itself with very important features through their functional composition. This difference comes from the money, bonds, and other valuable commodities such as jewelry or precious items that must be stored in places that are designed within the location. And for a bank to function, it is not possible to ensure this in an office building without a vault facility. As a result, different orders, programs and space organization is required for bank buildings.

Consequently, there are basic features that distinguish bank buildings from office buildings. For example, required spaces must be organized in the interior for depositors' money to be kept safe. So the spatial organization of a bank building must ensure this service but also have office areas. In addition, when we consider the placement of bank buildings in city planning, they are commonly in the center or commercial and business locations of a city. Bank buildings can be divided basically into two: - central bank headquarters and branches of banks. The central bank design requires a much more complex program with a bigger area and is like an independent office building. On the other hand, bank branches take a role in the organization with a much smaller space requirement. So bank branches ensure the function with usually a smaller office space with specific areas is taken up by service departments. In conclusion, bank buildings and branches have common features in that they are always in contact with people and businessmen on a day to day basis.

3.1.2 Functions of Banks

Banks are establishments that have some basic functions to serve the public, individually or company based. These functions can be summarized as firstly to ensure capital, money, credit and any related financial intermediaries that exist in the process. Also to maximize public benefits, the control is regulated under special state laws. The most important benefits of banks are to ensure national income by collected funds through interest. These functions are performed in the presence of a free primary system. Commonly, the main goal of banks is to make maximum profits for their business entities.

As Yetiz (2009) points out, banks are institutions based on trust, do not recognize each other and cannot rely on anyone, but everyone recognizes the bank and the bank also recognizes everyone. In this way, many people who know each other through the bank may enter into business relationships with confidence.

- Lending
- Service Delivery
- Non-monetary Transactions (All Payment Transactions)
- Economic Functions
- Investment Operations (Securities)
- The promotion of the Monetary Policy Transmission (Interest)

3.2 Space Requirements of Bank Buildings

In bank buildings, space organization design is essential in order to use the space in optimum criteria. Beacause bank buildings differ from office buildings with busy client communication with employees and special service facilities to ensure security, such as vault rooms, their space orgnization and space requirements must ensure this communication and integration in the interior.

Basically, bank branch space organization consists of;

* Circulation Areas
  *Horizontal Circulation Areas (Entrance Halls, Waiting Halls, Corridors)
  *Vertical Circulation Areas (Cores - staircases and elevators)
* Work Areas
  (Front office, Box-office, Back Office, Director’s Room, Meeting Room)

* Service Areas

(Main Vault Room, Rental Vaults Room, Archive Room, Kitchen, Cloakroom, Restroom)

* Technical Areas

(Main System Room, Electric Room, Climate control, Equipment Room, UPS Room, Phone Plant Room)

As Deilmann points out, basically these spaces are necessary to create the interior structure of a bank building. In addition, some other individual features are required for bank building design; the physical features of a building, an environmental approach, dimension related, and interior space design. Also structural characteristics are important such as social and psychological features with economic traits. (Deilmann and Yetiz, 2009)

3.2.1 Circulation Areas

Circulation areas are efficient places of bank buildings in terms of ensuring space organization circulation. Circulation areas are spaces that ensure horizantal and vertical circulation in a bank building including all existing floors. They are divided into two, one horizontal circulation area and the other vertical.

3.2.1.1 Horizontal Circulation Areas

Horizontal circulation areas of the bank buildings are corridors and hallways and also include vertical circulation areas too, like cores.

a) Entrance Halls

A bank's entrance hall takes an important role in a design concept as it is the first area that clients see. Except for their functional mission to allow ingress and egress, entrance halls, especially in bank buildings, have a secondary important mission too which is the representative role of bank. Because of having to give this prestige effect, their decoration plays an important role too, and generally bank buildings' entrance halls are designed with highly decorative elements. In addition, at bank buildings entrances a spoiler is designed as a pre-entrance to bank, which also ensures blocking cold air circulation from the interior. Entrance halls' dimensions can vary according to the general square meters of the bank and can also be arranged through the placement of security and information desk. Also a queuematic machine must be placed next to the information desk which ensures client direction in the bank.

For floor materials, generally abrasion resistant, attractive colored and patterned models must be chosen firstly to give a good visual effect and secondly because of busy usage by clients in working hours. As an example; colored marble and natural stone coverings are used in entrance halls to give a strong visual effect and to indicate prestige. Also this strong visual effect continues with wall coverings using marble and attractive stone material especially in entrance halls and commonly used areas.

In addition, ceilings are also important in bank decoration in order to be in harmony with the general interior concept and are designed as decorative components of halls with artificial lighting and covering materials.

As a result of being a commercial building open to the public or companies, bank buildings entrance doors are generally desinged with metal framed glass materials. This transparency also ensures the interior/exterior fluidity which indicates the commercial advertising of bank building from the interior.

On the other hand bank buildings must ensure security in order to protect their functions, so glazed doors have to be used for security outside working hours so that, for example, metal grilles, blinds and similar forms of cover to mask the ways of the linear equation. These fence or grille-like elements, during working hours, are hidden by slots in the wall or ceiling coverings. To raise or lower the bars, hand pressure or an electric motor can be used.

Entrance halls at the same time are designed to allow access. Appropriate and proportionate to the size, the orientation of people to their destinations correctly and relaxed and a comfortable open planned space for people waiting in the hall must be provided. Also, high standard types of material must be used in this magnificent and eye-catching space as indicated below. (Figure 3.1).

As it can be seen from the example above, in history famous architects used to design their buildings in order to use natural resources such as daylight as much as possible. In this bank building design of Otto Wagner’s, the entrance and information hall of the bank were covered by a transparent, glass and steel roof in order to let daylight into the interior as much as possible.

The core of the building, raised and approached through a broad staircased atrium, is the central banking hall: a dramatic bright, white space, glazed both above with a pergola-shaped iron and glass ceiling, and below with a glass-brick floor.

Figure 3.1. Main hall, The Austrian Post Office Savings Bank, Vienna, Otto Wagner, 1906.

The simplicity and scale of this five hundred fifty square-meter hall was part of Wagner's innovation, going against the competition rules to combine the checking and savings businesses in one banking hall. As art historian Peter Haiko describes it;

'The three-naved, basilical system of this space – a high central nave is accompanied by lower side-naves – this system is in itself a characteristic of church-building in historical architecture... as a modern aesthetic architect, Wagner tries to give his creation a rational base, in order to establish artistic form as the inevitable result of functional form. With the quotation from church architecture, he raises money trading from its profane level. He perfects money dealing with a quotation from a machine room – similarly inherent in the spatial solution – in the same way that labour is taylorised in the machine room.'

b) The Waiting Hall

Bank buildings, transaction halls, or commonly named as waiting halls, have an important role by their functional and representative roles in the interior. Firstly, functionally; waiting areas in the space organization of banks must be positioned correctly with a close relationship with front office and box-office units to increase clients and employees communication. The required dimensions of the waiting areas depend on the total square meters of the bank and furnished by waiting chairs and tripods. Secondly, waiting areas are also important areas that indicate the bank's prestige and concept, so for their design generally high standard furniture and materials are used. (Figure.3.2.)

Figure.3.2.Waiting area of Garanti Bank,İstanbul.

c) Corridors

Corridors are the most important areas in the banks that ensure horizantal circulation. Corridors also ensure vertical circulation of all the interior by including elevators and stairs as a core of the floor of the bank. While designing corridors, the number of persons using them every day and spaces (rooms) that open onto the corridors must be considered. As indicated by Yetiz (2009) for one door, an open corridor width must be about ninety-hundred cm., if two doors are next to each other, the width must be about 130-140cm. and if two opposite doors opens onto the corridor, the width must be min. hundred and sixty cm. (Figure 3. 3.).

Figure 3.3. Corridors and Hall, Bank in Praque.

3.2.1.2 Vertical circulation areas

Vertical circulation areas of the bank buildings are staircases and elevators.

a) Staircases

In bank building and branch staircase design, the placement of staircases in the spatial organization is important to ensure easy circulation. The required dimensions must be a minimum width of hundred twenty cm. for at least two or three people using the stairs at the same time.

The materials of staircases are also important. They must indicate the prestige and concept of the bank using stair materials and bannisters. The bannisters are generally designed using metal and glass materials as a modernist approach and for stair materials, high resistant, non-slip and decorative stone is used in harmony with the general concept of the bank.

In addition, generally staircases are placed next to entrance halls to ensure easy access between floors and can use natural daylight, but some are placed in cores in the center of buildings. In this second type an artificial lighting system must be designed for the staircase.

b) Elevators

> 'The cabin with machine which takes 'people or loads' horizantally or between oblique rails is called an elevator.'(Yetiz, 2009)

Figure.3.4.Elevator hall of the Austrian Post Office Savings Bank, Vienna, Otto Wagner,1906.

Elevators are the most important elements that ensure vertical circulation. With the help of elevators, tall buildings can be designed. And the most important points while designing

elevators in banks are determined by how many floors exist in the bank and how many persons will it hold. By calculating these, an efficient elevator can be designed. By calculating the number of floors in the bank, the square meters of each floor, the placement of elevators in the interior can be determined and this affects the type of elevator, its capacity for passengers and the number of elevators required(Figure 3.4).

3.2.2 Work Areas

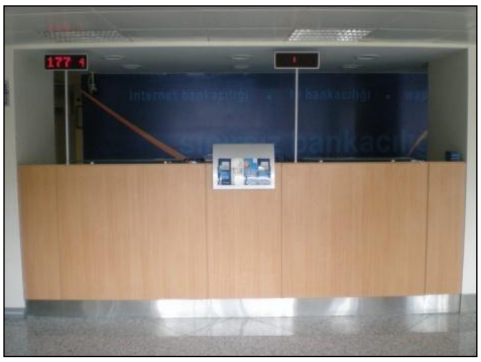
a) Box-Offices

Box-offices are units used by employees of the bank and ensure direct communication with clients. In order to ensure this, a transaction hall is required in front of the box-office units. In the halls of a bank, the bank officials allocate customers a sequence number. A box-office member of staff then offers bank services including current accounts, bonds and foreign ex-change.

As highlighted by Yetiz (2009), employees are in a required number of locations, depending on the various service arrangements. Client contact is made by related services, with the bank official in the relevant box-office. Close to the client point of contact are more senior officials for referral or conference as necessary. Behind this group are yet another set of senior officers. The most senior official is at the back, safe in a secure area. (Figure 3.5).

Figure.3.5.(A) Yapıkredi bank, box-office unit. (B) Halkbank box-ofice unit.

A B



In addition, the related to the number of staff behind the box-offices and the depth of the room will affect the design of bank halls. In this regard, the regulation of bank projects, sizing and design of halls for bank transactions, a certain number of staff is necessary. The

information desk is placed before the box office, opposite the entrance to meet the needs of the approaching client. The dimensions of the desk are vital, not too big and not too small.

Back box-office workstation units must be designed differently to front office units. The box-office workstation units must be designed in order to cater for equipment necessary for the box-office function such as a money-counting machine, fax-photocopy machine or other banking service equipment.

In addition, box-office desk units must be designed at least hundred and ten cm. from the floor for standing clients and workstations units at the back must be a height of seventy five cm.Behind the box-office desk, the floor can be designed fifteen cm. higher than the general interior to ensure better communication between clients and employees. A shelf at eighty cm. for bags in front of the desk is necessary for a standing clients.

In conclusion, a box-office unit must be placed between two walls which employees can reach from the back office or through a door next to desk not accessible by clients.

c) Front and Back Offices

In Bank buildings, front offices are the work spaces in which client and employee communication is done. And the back office is the area only for employees which clients cannot access or see and are in communication only with the front office.

Front offices are places designed on open office type principles, with no existing walls or closed rooms. The space is divided by movable, transparent glass partitions and furniture for functional areas and workstations units and box-offices are placed freely in the interior. The front office consists of box-office units, workstations for individual client operations and waiting areas.

The back office is the work area where bank operations are carried out confidentially, which clients cannot access and is in communication with the front office. Because back offices are placed outside the open office borders, the furniture design of back offices is commonly different from front offices. However a back office’s workstations, storage units and cabinets are designed more to ensure functional needs; a front office’s workstations and storage units indicate the identity of bank and are designed with both functional and visual concepts and are integrated within the general concept of an open-front office.

c) Director's and meeting rooms

In bank buildings, manager's offices are important areas in terms of their representative and management role and also as a work office. Because managers are usually in contact with clients, their rooms must be placed with care and linked to the entrance and operation halls.

In addition, it is better to design a bank's director rooms with glass dividers for better communication within the bank and regarding the decoration, extra chairs must be arranged for client's interviews.

Basically, the dimensions of a manager's room is generally designed to be bigger than a one person office to act both as a working place for the manager, but also a meeting place for clients – therefore a meeting table must be positioned there. On other occasions, another meeting room can be arranged in the bank. (Figure 3. 5).

Figure.3.6.Director room example

Figure 3.7., Meeting room example.*(Architecture,Design,Space Journal*

With the principal rooms of this kind, as well as meeting rooms and the director's room, both are linked to the outside. Meeting rooms sizes, if necessary, and materials are more prestigious than the business offices and doorways and the construction of the walls are important elements as is a separate audio system and special details should be made accordingly (Yetiz,2009).(Figure.3.6-7)

These meeting rooms are generally placed near manager's rooms and are linked to both manager's room and the interior. Their dimensions vary through necessity and the materials used in construction are more expensive than other office rooms. Other construction materials for doors and walls are important in terms of sound insulation and special details are applied to meeting rooms.

3.2.3.Service Areas

a) Bank Vault Rooms

As Yetiz (2009) points out, the function of bank vault rooms are; to protect and keep all valuable documents, money and gold very safely. Vault rooms work in two ways. One is designed to protect and secure the bank's own documents, and the second is to secure and protect clients' valuable documents, money, gold. etc. Clients' vault rooms are known as small rental vaults. While rental vault rooms are open to clients, the main vault, the bank's vault can be accessed only by bank employees. Admittance to rental vault rooms by clients is generally onerseen by box-office staff. To ensure security more easily, bank vaults are generally on basement floors. Designing bank vaults on basement floors also has a static design, interior space organization and administration advantages. Bank vault rooms are usually connected to the box-office so the space organization must ensure this. For both of the vault rooms there is firstly a pre-vault service in terms of ensuring security and to block unauthorised entry. Vault rooms consist of a pre-entrance room and a main vault room. The pre-entrance room is for bank employees to open the main vault and then access the client's vault by using different keys, one held by the bank, the other held by the client.by employee and client together at the same time.

Basically, to ensure security, vault rooms are designed with concrete walls with a thickness of approximately 30cm and their ceilings must be the same thickness of concrete. It is also necessary to protect documents and other valuables during a fire. The measurements of vault rooms vary through the bank sizes and the requirements of the vault. Generally around the vault rooms a corridor circle must be designed to ensure a void. Vault rooms need their control circle corridor around them. By putting mirrors at the corners of corridors, it ensures a viewing circle around the vault room. Also the same concept for the ceiling must be ensured by designing a void between the vault ceiling and the main floor. Also vault rooms doors must be designed with steel or metal materials for security. The valve can be about 30cm. thick and the key of the vault must be unique. For security, except for the steel door, a secondary steel cage door system must be designed in the interior of the vault. The steel doors must be taken into consideration while construction and application in terms of its weight so that it will be very heavy.

In closed-box styles of vault rooms, a ventilation system must be considered. Mechanical ventilation systems are required. Also in terms of security problems, mechanical channels must be designed with special details to prevent someone entering the vault. In vault rooms, again in terms of security, special details are required for electrical equipment such as

fire alarms, concealed cameras and digital video systems that are required near the vault rooms.

b) Archives and storages

As Yetiz (2009) points out, bank buildings must have archive and storage rooms for service and also general archive rooms. These functions are generally placed on basement or upper floors of banks which are needed to service documents. They are generally designed in order to ensure security, not as much as a vault, but enough to ensure security because of the valuable papers and documents stored in them. If there is not enough natural ventilation, an artificial vent system must be installed.

c) Areas of social need

Areas of social need are places for bank employees and placed at a far point in the interior through space organization criteria, not accessible by clients. Commonly these areas are, kitchen, WC, rest rooms and cloakrooms for employees. These areas are needed for to ensure the increasing work efficiency of the bank employees. The square meterage of these areas vary according to the overall bank square meterage.

3.2.4.Technical Areas

Technical areas are places where banks functional requirements are placed, such as climate control equipment, and include technical rooms for electrical systems and a UPS room (uninterruptable power supply), phone power plant, stokehold and generator room.

In addition the placement of technical areas in space organization is generally on basement or upper floors of the bank at a far point from general interior not to accessible by clients.

Ventilation and Lighting Systems

The number of people working in hallways or in the processing rooms or in the halls of front office where are a lot more employees, necessary attention must be paid to the ventilation. Accordingly, there are two natural ventilation methods for the treatment halls. Although natural ventilation through windows can be available at planning and preparation stages, through the vents in the window, despite being generally sufficient for small areas, it is not enough to service large areas, such as hallways. It also gives rise to a number of

drawbacks. The exercise by a majority of the bank transaction mechanical layouts ventilated hall ways. Ventilation installation, depending on natural, fresh air introduced by metal air channels, as well as heated air, must also be cool during the summer months. Summer air humidity is controlled, a specific humidity of the winter air, and a mixture utilized (air conditioning system).

The preparation of bank projects, with the largest bank feature buildings, lighting and ventilation in the subject, pre-term studies of architecture and civil engineering work occupy an important place. Concealing the air ducts, or a set of beams and other structural elements must be from within, as well as suspended ceilings for a number of reasons. In every case architectural studies, civil engineering work and other engineering work make it necessary to work together. (Yetiz, 2009)

4

CASE STUDIES: THE APPLICATIONS OF INTERIOR DESIGNS

This chapter consists of bank branches that have been studied under this thesis subject, indicating and demostrating their interior components as a whole.

This idea is organized around basic topics such as, furniture, materials for separate walls, floor, ceiling and interior partition systems, glass partitioning, artificial lighting systems, ventilation and air condition systems in banks.

In addition, for each bank, furniture analysis measurements have been conducted via forms, material choices and dimensions of each unit. Furniture use has been separated under headings to indicate their functional features to show their placement in the space organization;

-Information/Security desks and Queuematic machines

-Box-Office units

-Workstation groups for front offices

-Workstation groups for back offices

-Documentary cabinets

-Waiting area components (seating)

-Meeting room furniture

-Director’s room furniture

-Archive room cabinet systems

The common features of interior materials have been listed through studies at existing bank branches under this criteria. The necessary furniture and material choices to reduce noise in public spaces, artificial lighting systems and their design inside the building affect the furniture, ventilation and air-conditioning systems designed for a busy space in working hours have been classified.

To sum up, these studies have been done according to each bank's specific requirements and an interior analysis has been done. To balance this thesis, an ordered and planned study has been conducted on each bank branch alike;

-Photos from 4 sides of each level of banks

-Taking dimensions of existing floors/areas of banks

-Researching current furniture groups by taking dimensions

-A material analysis on the interiors of each bank. For example, wall, floor and ceiling products.

-Artificial lighting analysis

-Air-conditioning system analysis

4.1 Textile Bank (Izmir Pasaport Branch)

This chapter describes the Textile Bank Izmir Pasaport Branch's general properties beginning with its location in the city to its interior design concept, furniture, interior components, artificial lighting, ventilation systems and advertising design.

4.1.1 General information about the location of the Bank and Bank employees

Textile Bank Pasaport branch in Izmir is located on the main street. It dominates the adjacent region and the branch has two facades, one front and one back with a long, narrow, rectangular working place. The main entrances are designed with glass panels as the only facades of the bank to ensure increasing daylight usage in the interior, an open-plan type in a bank branch.

The employees are the branch manager, assistant manager, individual marketing officer, director, operations director, official box office expert, specialists in current accounts, booking clerks, security, box office clerks, the director of the portfolio section and the secretarial staff.

Figure 4.1. Textile Bank pasaport branch google earth photo

The total number of bank employees is eighteen, half male, half female and all the staff have graduated from university. In terms of surveys, after individual information, they were asked about individual work preferences - tables, chairs, computers, faxes, phones. Also, they were asked about the comfort of their work place and their suggestions and criticisms have been taken into consideration regarding interior space, furniture and lighting.

4.1.2 Overall interior design

The bank branch has two floors and an entrance floor designed for box-office processes.

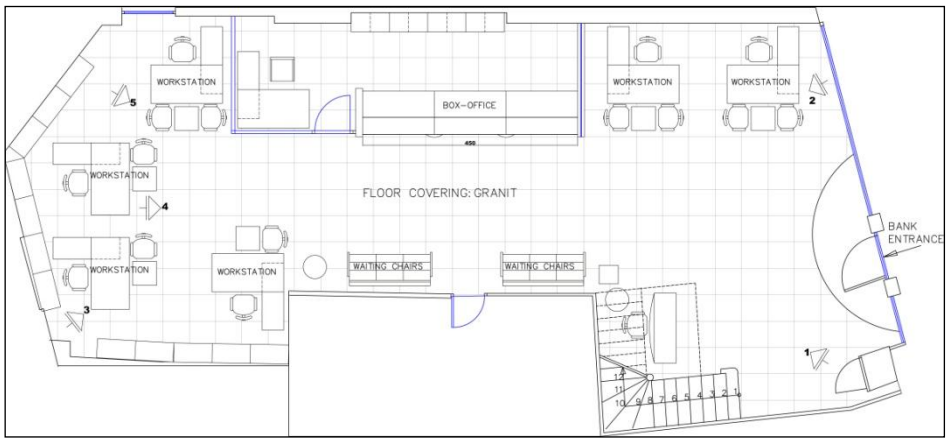
The ground floor is arranged as an open office and is four hundred and twenty square meters. Just to the left of the entrance door is a curved staircase, the security and information desk are placed to the right. The waiting area and chairs are opposite the box-office units

To the right of the box-office are two workstation units for individual transactions and to the left there is a back office with a glass partition. The back office can receive daylight through the glass dividers.

At the end of the area, there is an open office for four workstation groups, tall cabinets and fax-photocopy furniture for document storage. With the help of an open office design, the back office gets day light from the entrance.

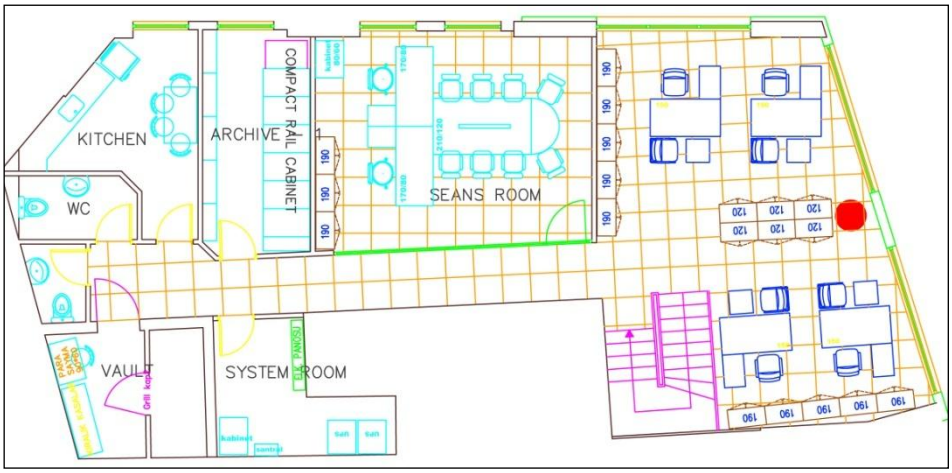
The box-office and waiting area were designed to be in the center of the area, thus making transactions easier. (Figure 4.2)

Figure 4.2. Textile bank ground floor plan



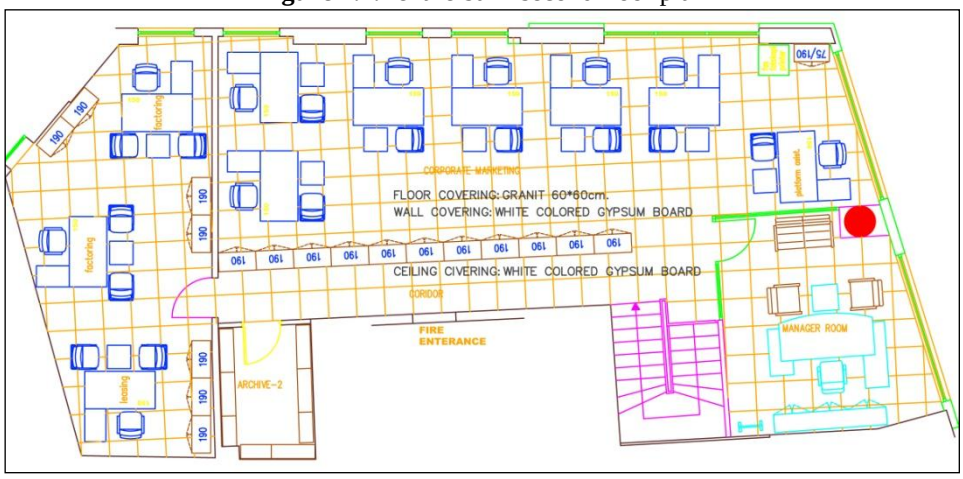
The curved staircase was positioned correctly in the interior space, just opposite the entrance, so clients can reach the upper floor, bypassing the box-office corridor.

Figure 4.3. Textile bank first floor plan



On the upper floors, the front areas are occupied by the director and the director's assitant rooms with glass and aluminium dividers. The other space was designed in an open office system. Using glass partitions, daylight reaches all offices. In an open office there is one unit and douce unit workstation groups for bank clients. In terms of form, the bank's workstation units are placed in one linear line with no corridor (Figure.4.3)

Figure 4.4. Textile bank second floor plan



At the back of the open office there are technical, electrical and archive rooms with gypsum walls. There is also a small kitchen and wc for bank employees.

The open office in the middle of the floor can also get daylight and also there is an artificial lighting system in the ceiling via recessed lighting. (Figure.4.4)

4.1.3 General evaluation of furniture in banks

This section illustrates existing bank furniture using photos and drawings of workstations, box-offices, work chairs, waiting chairs, dividers and storage systems.

4.1.3.1 Workstation groups

Figure 4. 5. (A) Bank's box-office picture, (B) Workstation of a bank

A

B

The workstation units are one unit type. Each workstation group consists of table, side cupboard, chair, two client chairs and one tripod.(Figure.4.5-6)

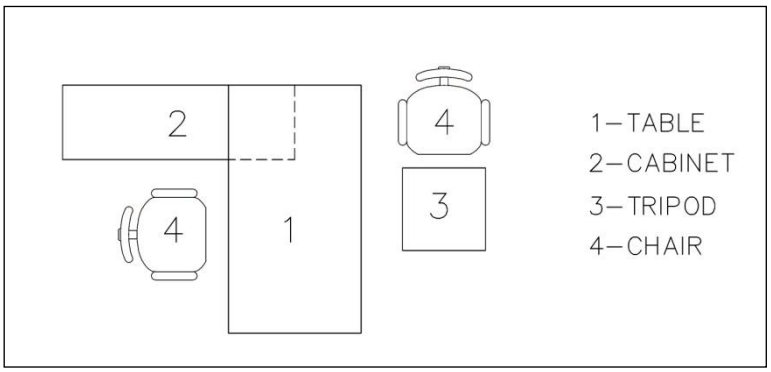
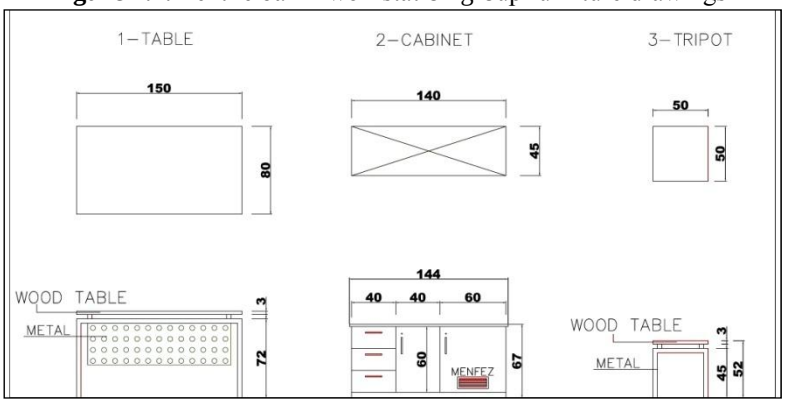


Figure 4.6. Textile bank ‘workstation group’

Workstations are generally 150x80cm and 75 cm in height. The table consists of four metal structural legs and a wooden tray on a structural base. The tray is designed in light beige colored mdf material (three cm). The metal legs are four cm. There is a protective metal panel in front of the table at a height of 40cm. The side cupboard was designed in the same material and color as the table tray. The side cupboard is 140x60cm and seventy cm high. It has three parts, two parts for shelves for documents and the larger area for keeping papers secure. (Figure 4.7)

Figure 4.7. Textile bank ‘workstation group furniture drawings’



Employee chairs are designed using ergonomic criteria together with textile material. Clients chairs have to have a comfortable design and the same color and material as staff chairs.

A tripod is 50x50cm and fifty two cm high and has been designed using the same materials and concept as a workstation table with four metal carcass legs and a light color mdf tray.

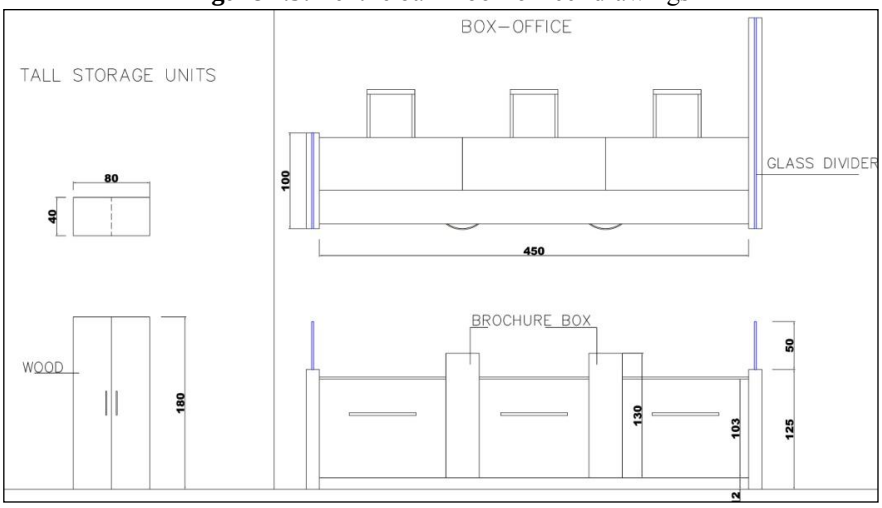
4.1.3.2 Box-office desk

Figure 4.8. Textile bank 'box-office' Picture

The Textile Bank box-office had been designed with three modules. Each module is a hundred and fifty cm.width forty cm depth - the total box-office is four hundred and fifty cm. at a height of hundred and twenty five cm. It's height is found to be too high in terms of ergonomic criteria. It is designed in a light coloured wooden material and there are brochure boxes between the modules designed in chrome material. (Figure.4.8-9)

Using attractive colors in box-office design is useful in terms of positive space design. Attractive colors make banks busy and intense vision lighter. Orange colors in the basements of a box-office is favorable. At the sides of the box-office there is a glass divider at fifty cm height, designed for sound inslation. The glass divider is designed the same as for glass offices with sandblasted bands to ensure privacy.

Figure 4.9. Textile bank 'box-office' drawings



4.1.3.3 Work chairs, waiting area chairs and general bench seats

Figure 4.10. Textile bank waiting area and chairs**.**

Waiting chairs have been positioned correctly in the interior design. They are placed just opposite the box-office. Clients can see the queuematic units above the box-office easily.

In terms of conceptual design, waiting chairs have the same design concept as workstation group chairs. They have been designed in the same material, textile material and chrome structure and are in the same color, dark blue. There are three unit waiting chairs, and each group has a three person capacity for a total of nine persons. (Figure.4.10)

4.1.3.4 Interior Dividers

Just next to the box-office unit, there is a translucent glass designed back-office. The divider system is composed of aluminium and glass materials which in some parts have been sandblasted to ensure privacy inside the room. The glass was chosen especially not to block daylight to back offices and workstations.

Figure 4.11. Textile bank Glass separators**.**

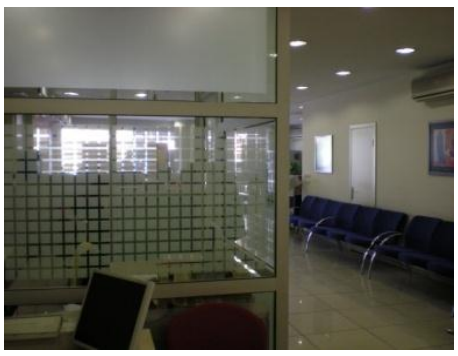


Figure 4.12. Textile bank Glass room.

An aluminium divider system is positive in terms of its modern and translucent effect in the interior. It also is in harmony with the polished granite materials of the bank (Figure. 4.11-12.)

4.1.3.5 Storage systems

The branch's storage units are designed as tall wall cabinets and side cabinets for workstation groups. Tall wall cabinets are 80-40cm at a height of a hundred and eighty cm in the same material as workstation groups and the wood coating has been designed in the same color, both with a pop-up lid and a handle inside with shelf systems. On the ground floor there are a total of eighteen units, but the survey shows that this number in insufficient.

4.1.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials.

4.1.4.1 Floor material

On the branch floor, sixty by sixty cm. beige granite tiles were used in the general interior. In terms of hygiene and sound inslation, granite is better than carpet and wood. Polished granite is also more effective and gives prestige to bank buildings especially on ground floors. In terms of size, granite tiles of sixty by sixty cm. give a more spacious effect to the area. Also the general color concept of the branch is light coffee colors, so beige polished granite completes the concept of color.

4.1.4.2 Ceiling material

The branch is designed with flat plaster board ceiling painted white completing the light-colored concept of bank (Figure 4.13).

Figure 4.13. Textile bank ceiling lighting system

In this example, the ceiling is also designed to ensure the artificial lighting of the interior. Circular recessed downlights were placed inside the ceiling in a linear geometry.

4.1.4.3 Wall materials

The bank's wall is cream colored plaster compatible with the color of paint used. Tall cupboards are coordinated within the concept.

4.1.5 Ventilation systems

For ventilation, there is an air-conditioning system. Interior ventilation is provided by air-conditioning systems in the ceiling and wall mounted units, however there are not enough.

4.1.6 Interior lighting sytems

The bank's lighting system consists of circular recessed downlights arranged linearly.

4.2 Ing Bank (Izmir Pasaport Branch)

This chapter describes Ing Bank Izmir Pasaport Branch's general properties beginning with it's location in the city to it's interior design concept, furniture designs, interior components, artificial lightings, ventilation systems and advertising designs.

4.2.1 General information about the location of the bank and bank employees

Ing Bank Pasaport branch is on the main street. In terms of adjacent areas, the branch has two facades, front and back only. The branch has a narrow, long, rectangular working space. The entrance to the branch is via the main street facade. (Figure.4.14)

Figure 4.14. Ing bank Pasaport branch Google Earth photo

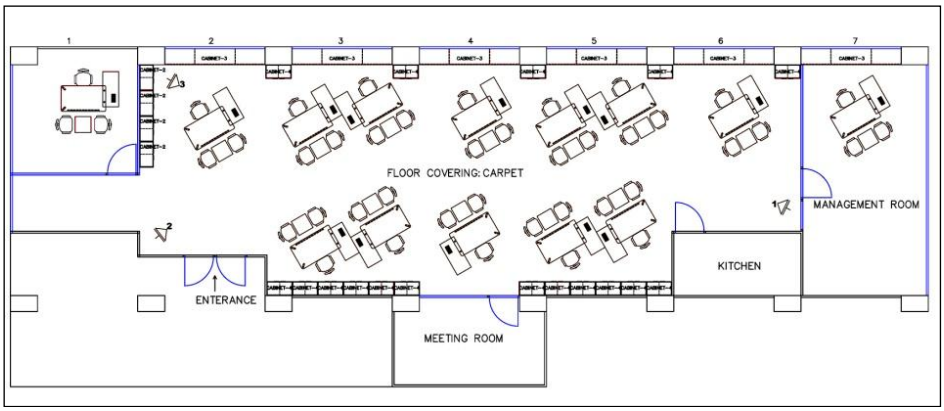
The employees are the directors, corporate banking director, external operations, corporate marketing executive, and customer service representatives, assistants, marketing manager and marketing executive .The branch has ten employees, all of them university graduates.

4.2.2 Regarding the bank's overall interior design

The office floor of Ing Bank is on the fifth floor. The floor has been designed as an open office. There is a manager's office on the front facade. The office is designed in glass so it receives daylight.

In terms of rectangular form, daylight can be taken from the front, back and side facades. There is a hall in front of the elevators and a staircase and glass doors open from the office to the hall. The space is two hundred and eighteen square meters in total.(Figure.4.15)

Figure 4.15. Ing Bank office floor plan



4.2.3 General evaluation of furniture in banks

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems.

4.2.3.1 Workstation groups

Figure 4.16. Ing Bank workstation type drawing

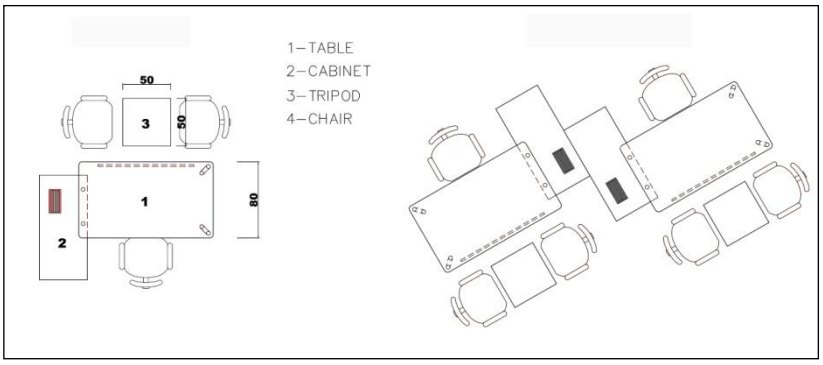
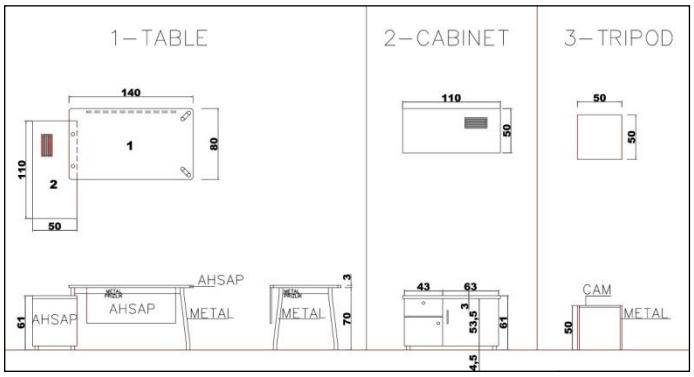


Figure.4.17. WorkStation Furnitures

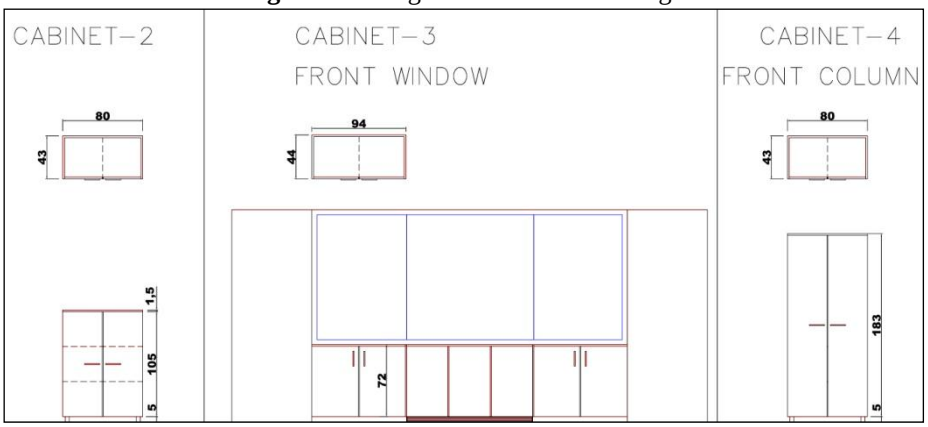


Workstation units are designed with metal legs seventy cm height and light colored mdf tray three cm high on structural legs. The total height of the table is seventy three cm and 140x80cm in size.

The side cabinet, 110x50cm, is designed in light colored mdf material and sixty one cm high. It has two cabinets, one for shelves for documents and one for a hard disc. There is a concealed cable system on the trays. (Figure.4.16-17)

4.2.3.2 Storage sytems

Figure 4.18. Ing Bank cabinets drawings



Storage systems of the bank were designed in three types. Firstly, in front of the windows at the same height as the parapets (seventy two cm), light colored mdf cabinets were designed, 40x80x72cm (depth, width, height). The second type is for in front of glass offices. Taller than the first type, it is 40x80x112cm (depth, width, height). And the third type is for in front of gypsum walls. This is the tallest type, 40x80x180cm (depth, width, height), and were designed as tall document cabinets in light colored wood using the same concept as the general furniture design of bank. (Figure.4.18)

In terms of analysis of space, storage units were noticeable as being inadequate for documents and archives.

4.2.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials.

4.2.4.1 Floor coverings

The bank's office floor was designed in terms of an open-plan office system. Except for one manager's and one assitant's office, the whole area is full of one unit and douce unit workstation groups. The offices were designed in glass so all open offices receive daylight.

The entrance part of floor, elevator hall was covered in granite. Hardwearing, thin carpet was used for open office floors. (Figure.4.19)

Figure 4.19. Ing bank open office floor covering

4.2.4.2 Ceiling coverings

The bank's ceiling are painted gypsum board. The suspended ceiling is at a height of two hundred ten cm. Gypsum board is a good choice for ceilings in terms of an artificial lighting system for open offices.

4.2.4.3 Wall coverings

The bank's wall materials use the same concept - gypsum board and light colored, white paint. The light color of walls makes the interior area more spacious and wider.

4.2.5 Ventilation systems

Open facades and windows for natural ventilation is one system that has been used in the bank. Another ventilation system is ensured by outlet and inlet vents placed in the suspended ceiling. By this ceiling ventilation system, fresh air circulation is ensured. The third ventilation system is wall and floor mounted air-conditioners and a climate control system ensures hot air in summer and cold in winter.

4.2.6 Interior lighting sytems

For the bank's interior lighting system, three types have been used. The first is ensured by glass facades, using daylight in the open office. The second is an artificial lighting system placed in the suspended ceilings. Downlights are placed linearly and frequently in the ceiling. The third system is the artificial lighting designed for workstation groups.

4.3 Tekfen-Euro Bank (Izmir Pasaport Branch)

This chapter illustrates Tekfen Euro Bank Izmir Pasaport Branch's general properties beginning with it's location in the city to its interior design concept, furniture design, interior components, artificial lighting, ventilation systems and advertising design.

4.3.1 General information about the location of the bank and bank employees

Tekfen Euro Bank Pasaport branch is on the main street and very close to Cumhuriyet Square. The branch has two facades, front and side. The bank's position is positive for receiving daylight. The employees are branch manager, assistant portfolio manager and other sections, such as marketing director. On the mezzanine floor there are 6 employees, all of them university graduates, one of them female, the others male. (Figure.4.20)

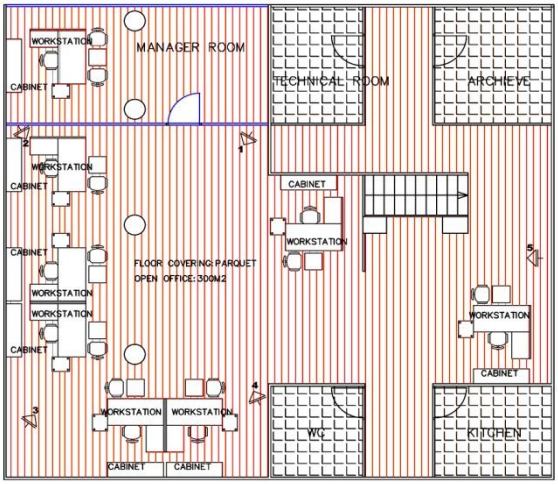
Figure 4.20. Tekfen-Euro Bank Google Earth photo

4.3.2 About the bank's overall interior design

Tekfen Euro Bank Pasaport branch has one ground floor and a mezzanine. The total space of the upper floor is two hundred and twenty square meters.

On the ground floor, the information desk and security are just near the entrance, with the box-office, waiting hall and staircase behind. Box-office business is done on the ground floor. Brochure boxes are next to the information desk. This floor is well designed in terms of space organization.

Figure 4.21. Tekfen-Euro bank first floor plan



On the mezzanine floor; there is one glass enclosed director's office, an open office and a technical room. For staff use only there is a kitchen and WC units. The director's room is designed in glass so as to not block daylight and also for better communication between employees. The director's office also overlooks the ground floor and above the parapet are non-openable glass windows. This is a negative design approach for ventilation and communication. Openable windows would be a better solution for the director's office. (Figure.4.21)

On the ground floor, just next to entrance door there is an information and security desk. Ground floor material is granite for busy use. On the mezzanine floor, as an open office space, the floor is laminated wood. The staircase is a set of straight, single line stairs placed in front of the box-office. It would be better to place the staircase near the entrance door in terms of not taking up space in busy areas.

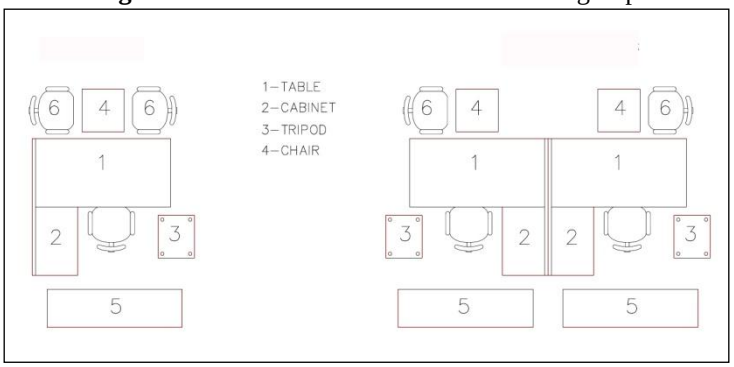
4.3.3. General evaluation of furniture in banks

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems.

4.3.3.1 Workstation groups

The workstation groups on the mezzanine floor were designed in terms of a sustainable module concept as one and douce units. Both one unit and douce units are being used in the interior organization. A workstation group consists of main table, side table, back cabinet, one short cabinet, a tripod, one worker's chair and two client chairs. (Figure.4.22)

Figure 4.22. Tekfen-Euro bank Workstation group

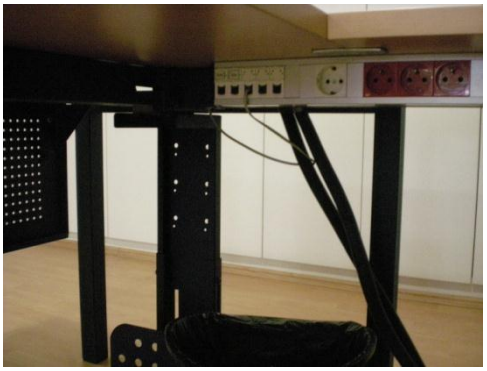


The main table is designed at 160-80cm and the side table is 80-50cm in size. The structure of the table consists of four metal legs and a metal carcass to join them. On the structural system a light colored wooden tray is placed at a height of three cm.

The linear metal structure is designed to carry a tray and also to conceal electric sockets. In this way all cables are hidden. For computer hard discs, a metal structure positioned under the side table. At the front of table, a metal frame is positioned to hide the back of table at a height of 40cm. (Figure.4.23-24)

Figure 4.23. Tekfen Euro bank Izmir branch workstation picture

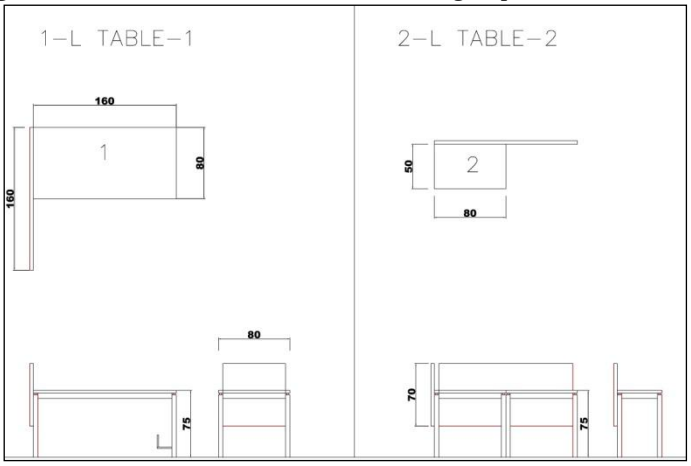
Figure 4.24. Tekfen Euro bank Izmir branch concealed cable system under the table tray



Another unit of a workstation group has a back cabinet designed in the same materials as the table tray. It is 160x45cm at a height of seventy-five cm. It has two black glass covers work with sliding doors. The short cabinet is designed at 43-59cm. sizes and fifty cm. height. The short cabinet is made of same material as the tray and has three shelves.

A one unit workstation group consists of these units. And a douce workstation group has an extra divider system between tables made of black wood at a height of 30cm. (Figure.4.25)

Figure 4.25. Tekfen-Euro Bank workstation group furniture drawings



4.3.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials,

4.3.4.1 Floor materials

At Tekfen Euro Bank, the floor materials are two types. The first type is used on the ground floor utilizing sixty by sixty cm. beige granite tiles. This is necessary at ground floor in terms of busy use and hygiene.

The second type is used on the mezzanine floor. Wooden laminate has been used in the open office and director's room. This is negative in terms of sound insulation but, on other hand, it has positive features with a warm effect.

The staircase had been designed using hardwearing granite. Also service units for staff like the kitchen and WC use the same material

4.3.4.2 Ceiling coverings

The ceiling covering is gypsum board painted white. Artificial lighting and a mechanical system have been placed in the suspended ceiling.

4.3.4.3 Wall coverings

The wall covering is designed using gypsum board again painted in terms of the general interior concept.

4.3.5 Ventilation systems

The bank's ventilation system has been designed in two types. The first is designed in suspended ceiling with inlet and outlet vents for circulation of fresh air.

The second type is climate control system, and there are small wall-mounted air-conditioning units as well as larger floor mounted models.

4.3.6 Interior lighting sytems

The bank's interior lighting system firstly ensures natural lighting by using daylight from two facades and secondly by an artificial lighting system in the suspended ceiling and another system designed within workstation groups.

4.4 Halk Bank (Izmir Bornova Branch)

This chapter indicates Halk Bank Izmir Bornova Branch's general properties beginning with it's location in the city to it's interior design concept, furniture designs, interior components, artificial lightings, ventilation systems and advertising designs.

4.4.1 General information about the location of the bank and bank employees

Figure 4.26 Halk Bank Izmir Bornova branch Google earth photo

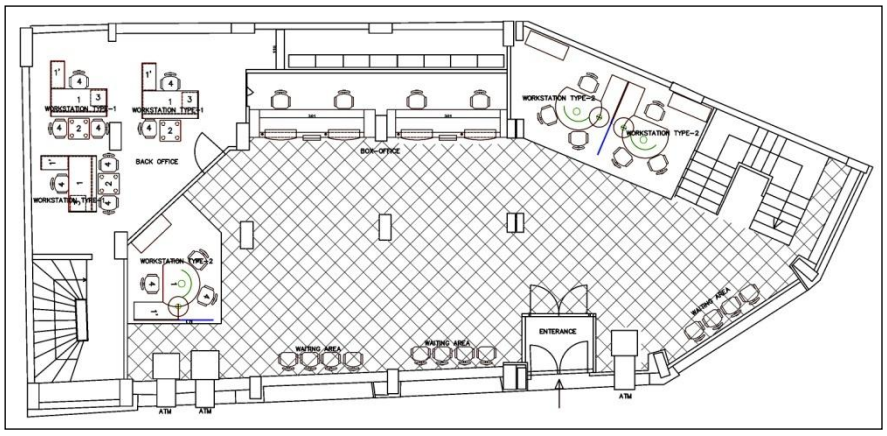
Halk Bank, Izmir Bornova branch is in the central district of Bornova, close to the street and on the ground and first floor of an existing building (Figure 4.26).

Halk Bank Izmir Bornova branch consists of three levels; basement, ground, and first floors. The ground floor consists of an entrance area, three workstation groups for individual operations, box-office unit, waiting hall and back office. The first floor consists of director's office, assistants' rooms, meeting room and private clients operations area. The basement floor consists of a vault and, for staff use only, a kitchen, WC and rest room.

Halk Bank Izmir Bornova branch's general interior organization is; at ground floor there is a pre-entrance from street and just next to door there is an information and security desk. At both sides of the entrance there are waiting areas, to the right for four persons and to the left for eight persons, in total an area for twelve persons. On the right facade there is a staircase leading to the first floor. The total ground floor space is two hundred and six square meters.

Just opposite the entrance hall is a box-office and workstation units are placed both sides of the box-office module. Sothe ground floor space organization is designed as an entrance axle, opposite the entrance, a box-office unit and back office area, and to the right of the axle is an information desk, staircase and two workstation units (for individual operations), to the left is one workstation group. On the back wall of thebox-office is an advertising board. And behind the box-office is a back-office with a staircase connecting to the basement floor. (Figure 4.2)

Figure 4.27. Halk Bank Izmir Bornova branch ground floor plan



4.4.3 General evaluation of furniture in banks

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems

4.4.3.1 Workstation groups

Halk Bank workstation group design consists of two groups. The first group workstations are designed for back-offices and the second group is designed for general interior for both employees and clients use. The first group workstation consists of an L table, tripod, caisson and chairs. The table is made of natural colored wood material at a height of seventy-five cm. In the side table there is structure system for a hard disc. (Figure 4.28).

Figure 4.28. Halk Bank Izmir Bornova branch first group Workstation unit

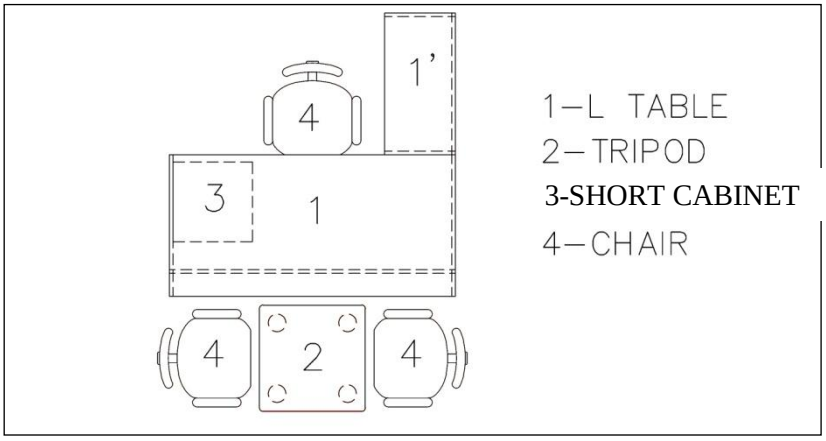
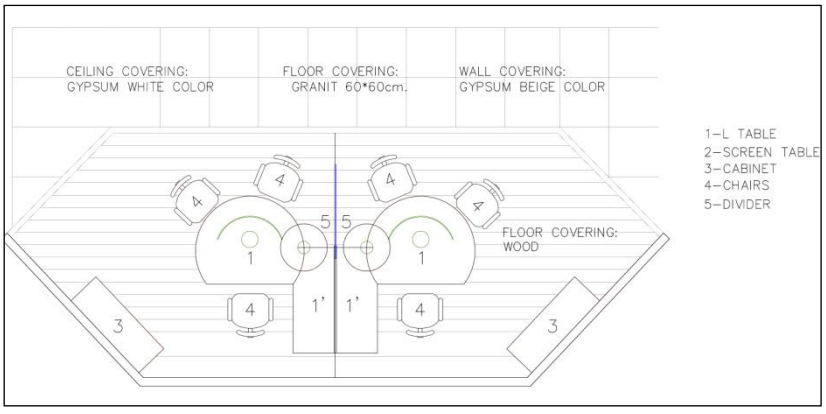


Figure 4.29. Halk Bank Izmir Bornova branch second group Workstation unite, douce workstation units.



The second group workstation consists of; a round table, a small round table for a screen, back cabinet, chairs and a divider system. The round table tray is made of light colored wooden material at a of height three cm and a circular metal structure is designed to carry the tray.

On the tray, a ten cm screen tray is placed with round plexi material. The back cabinet is designed as 120x42cm at a height of a hundred and eighteen cm, of which five cm is chrome for the protective basement. The cabinet is made of the same material as the table tray, and consists of three parts; the medium part is made of soft glass cover, other two parts of wooden material. (Figure 4.29).

The divider, protector and sound insulation system of the workstations are designed with stage between plexi glass and wooden separators. The plexi glass separator is at a height of a hundred and thirty five cm and the wood seperator next to it is a hundred and twenty cm. A wooden platform is designed for workstation floor covering (Figure 4.30-31).

Figure 4.30. Halk Bank Izmir Bornova branch second group Workstation unit furniture drawings.

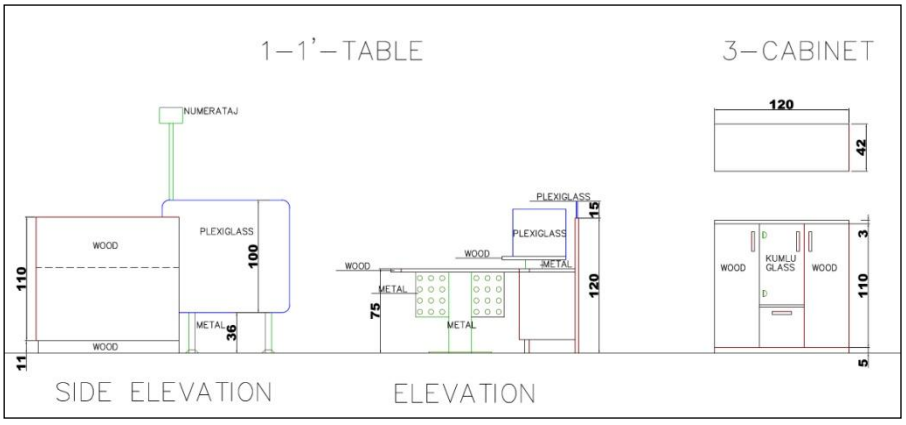


Figure 4.31. Halk Bank Izmir Bornova branch Workstation group

4.4.3.2 Box-office desk

Halk Bank's box-office unit is designed between coloums in two parts. Each part consists of two modules and suspended ceilings above them for queuematic and lighting systems. Each box-office module is 150-15cm in size at a height of a hundred and twenty-five cm. The height of the suspended ceiling is two hundred cm. The total length of the box-office is six hundred cm (four modules).

Each module consists of; at the front, a fifteen cm high aluminium basement for protection and a hundred and ten cm high wooden desk, total hundred and twenty-five cm. Glass trays are designed on the desk, 90-24cm in size with metal structures three cm high

Between the two modules are chrome brochure boxes, 50-15cm in size, designed with plexi glass shelves at a height of thirty cm. Each box-office module has chrome tube reaching to the suspended ceiling to carry the queuematic display.

On the back wall of the box-office modules is advertising design for the bank. The general ceiling covering of the interior concept is a metal suspended ceiling, but in the box-office units, a secondary gypsum board suspended ceiling is arranged to complete the box-office design. (Figure.4.32)

Figure 4.32. Halk Bank Izmir Bornova branch box-office unit

4.4.3.3 Working chairs, waiting area chairs and general coaches

Halk Bank's waiting area and chairs are separated into two areas. To the right and left a total of twelve waiting chairs are placed (Figure 4.33)

Figure 4.33. Halk Bank Izmir Bornova branch waiting area and chairs

Except waiting chairs, each work-station group has two client chairs.

On the ground floor, there are three workstation units and six client chairs.

4.4.3.4 Interior dividers

Halk Bank's interior design is arranged as an open office concept. The back office, which is placed behind the box-office, is separated from the open office by a glass and aluminium divider system. To ensure the privacy of the back office, sandblasted bands were used on the glass divider. (Figure.4.34)

Figure 4.34. Halk Bank Izmir Bornova branch glass divider sytem

4.4.3.5 Storage Sytems

Halk Bank's storage units consist of two groups. The first group is for workstation groups and the second for tall document cabinets in the back office.

Figure 4.35. Halk Bank Izmir Bornova branch storage units

The first group storage units are; 120x42 cm, a hundred and eighteen cm high. The cabinet consists of three parts, the right and left parts are designed with high wooden doors, with a shelf system inside. The central part is designed with sandblasted glass door.

The workstation group's second cabinet is a side cupboard. It is 120x50cm, seventy five cm high with twelve cm metal legs. It's also designed for a hard disc and open shelf systems in same material as the table.

The second group storage units are back office high document cabinets. They are 87x28 cm, with a seven cm. basement, hundred and ninetyseven cm cabinet totalling two hundred and seven cm in height. All storage units are designed with locks.

4.4.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials.

4.4.4.1 Floor materials

Halk Bank's floor materials consists of two groups. The first group is wooden used for workstation groups and in the back office.

The second group is gray granite used in the general interior space. Also both staircases are granite (Figure 4.36).

4.4.4.2 Ceiling materials

Bank's general ceiling covering is designed as sixty by sixty cm. metal suspended ceiling. Only on box-office, white painted gypsum board is used (Figure 4.37).

4.4.4.3 Wall materials

The structural columns and walls are painted with light beige paint close to the interior concept. The back wall of the box-office is made of gypsum board with advertising board. The back office's interior wall is made of aluminium and glass material.

Figure 4.36. Halk Bank Izmir Bornova branch floor material

Figure 4.37. Halk Bank Izmir Bornova branch ceiling material

4.4.6 Interior lighting sytems

The ventilation system of the bank is provided by in-vents and out-vents for fresh air in the metal suspended ceiling. For climate control, high floor air-conditioning units are placed inside the bank. The Halk Bank interior lighting system consists of three groups.

The first group is a natural day light system that reaches the interior from the facades of the bank. The second group is designed for the general interior inside the metal suspended ceiling by lighting armatures in ceiling. The third group is designed for box-offices by a secondary, suspended gypsum board ceiling and receseed downlights.

4.5 Yapı Kredi Bank (Izmir Mavisehir Branch)

This chapter indicates Yapı Kredi Izmir Mavişehir Egepark Shopping Center Branch's general properties beginning with it's location in the city to it's interior design concept, furniture designs, interior components, artificial lightings, ventilation systems and advertising designs.

4.5.1 General information about the location of the bank and bank employees

Yapı Kredi Izmir Mavisehir branch is in Ege Park shopping center on the ground floor. The Bank has one facade receiving daylight and is a hundred twelve square meters, one level branch. It's designed as an open office concept. (Figure.4.38)

Figure 4.38. Yapı Kredi Bank Izmir Mavisehir branch Google Earth photo

The total employees at the branch number eight persons, with security. The branch manager, retail banking, individual banking portfolio, deputy director and operations director are current tasks of bank employees. %90 of the employees graduated from university.

4.5.2 About the bank's overall interior design

Yapı Kredi Mavisehir branch is a one level bank and hundred twelve square meters. Except for the director's and assistants offices, the bank interior is designed as an open office system. The offices are made of aluminium and glass dividers so as not to block daylight from the interior.

In the entrance, on left there is an information desk, ATM, Tele-Web and on the right there are the waiting area, box-office and two workstation groups. (Figure.4.39)

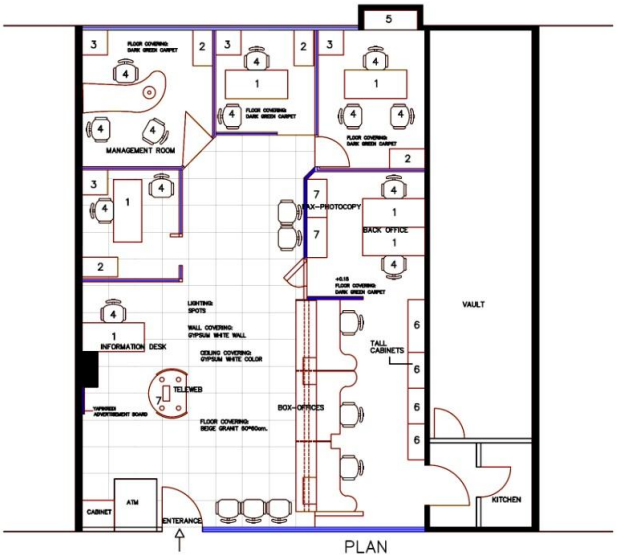
Figure 4.39 Yapı Kredi Izmir branch interior picture

Opposite the entrance hall are the director's and assistant's offices and one workstation group. Behind the box-office there is the vault and service units for staff use.

The bank's general concept is a light colored design for floor, ceiling and wall material. Also, the storage systems were designed with a light colored wooden material. The furniture designs, especially for the box-office, dark green marbles were used as a contrast to the general interior and to give a strong visual effect of the bank.

The general form of the bank is a linear concept plan. But some furniture, such as the workstation unit in the director's office and box-office back modules, is designed with curvilinear shapes to give a friendly and warm effect. In fact, this make the interior design of the bank more functional and warm (Figure 4.40).

Figure 4.40. Yapı Kredi Bank Izmir branch floor plan

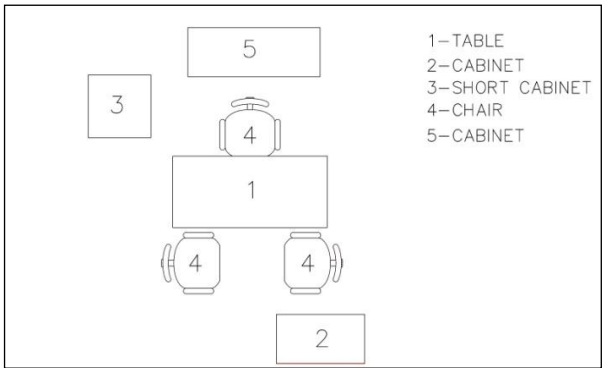


4.5.3 General evaluation of furniture in banks

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems

4.5.3.1 Workstation groups

Figure 4.41. Yapı Kredi Bank Workstation unit



A workstation group consists of; table, cabinet, short cabinet, high cabinet behind the table and chairs. The table is wooden, 140x65cm, at a height of seventy-eight cm. The structural system is made of four wooden legs and a carcass. The cabinet is 80x44cm, with a seven cm. basement, a total height of eighty-nine cm. The short side cupboard is fifty-six by fifty-six cm. with a height of fifty-seven cm. It is made of gray-blue colored wood, with shelves and a hard disc part. Behind the table is a high document cabinet, 120x45cm, two hundred and ten cm high, made of the same wooden material as the table placed. (Figure 4.41).

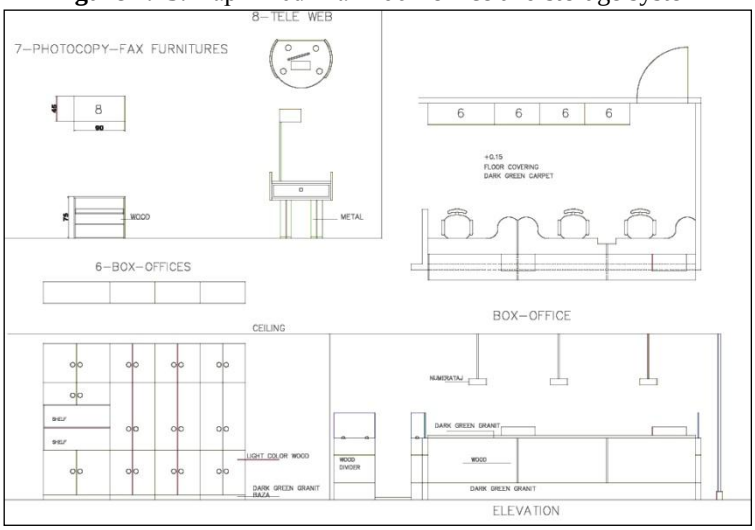
4.5.3.2 Box-office desk

Figure 4.42. Yapı Kredi Bank box-office unit

The box-office consists of three modules. It is designed with a thirty cm.high dark green marble basement, natural wood body and and a five cm high dark marble tray. It's total height is a hundred and fifteen cm. The desk's dark green marble tray is 160x46cm for each module, the total size of the box-office is 480x46cm. There are tall document cabinets in the back office area. Workstation groups in the back office were designed with wooden material the same as the box-office paravane.

Behind the box-office, the floor platform is fifteen cm. higher than the general interior and is covered with light green carpet. Three box-office workstations, two workstation units, photocopy and fax furniture are positioned in the back office. A wooden paravane system is designed to separate the back office from the interior at a height of a hundred and ten cm with a forty-fivecm glass divider. There is a wooden door placed on the paravane for entrance to the back office for employees only (Figure 4.42-43).

Figure 4.43. Yapı Kredi Bank box-office and storage system



4.5.3.3 Working chairs, waiting area chairs and general coaches

In front of the box-office is a waiting area for three persons and just next to the entrance another area for three persons, making a total waiting area for six persons. The waiting chairs are made of a light green colour textile material.

4.5.3.4 Interior dividers

Figure 4.44. Yapı Kredi Bank glass divider system

Yapı Kredi Izmir Mavisehir branch is designed as an open office concept. The director's and assistants' offices which are on the front façade are designed with a glass and aluminium divider system so as not to block daylight from the interior. (Figure 4.44).

4.5.3.5 Storage sytems

High document storage units are placed backing the box-office wall. Tall cabinets, designed with white colored wooden materials, they are 358x38cm, with a nine cm. basement at a total height of two hundred and eighty cm. They are made of four modules (Figure 4.45).

Figure 4.45. Yapı Kredi Bank high documentry cabinets

4.5.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials.

4.5.4.1 Floor materials

Yapı Kredi Bank Izmir branch's uses two floor materials in two areas. The first is used in the open office area and general interior - sixty by sixty cm.beige granite floor tiles. The second is used behind the box-office, in the back office, director's office, assitant's office and inside workstation groups, this being a light colored green, hygiene protective carpet (Figure 4.46).

4.5.4.2 Ceiling materials

The branch's ceiling is made of white painted gypsum board consistent with the general interior design concept. (Figure 4.47).

Figure 4.46. Yapı Kredi bank floor material

Figure 4.47. Yapı Kredi bank ceiling picture

4.5.4.3 Wall coverings

The walls of the branch are covered by white gypsum boards. In the open office, only the director's and assitant's offices are made of glass and aluminium dividers.

4.5.5 Ventilation systems

The ventilation system is provided by a split air-conditioning unit near the entrance.

4.5.6 Interior Lighting Sytems

The branch's interior lighting system is ensured by daylight from one facade and an artificial lighting system in the suspended ceiling. Square downlighters were used linearly in the suspended ceiling.

4.6 Finans Bank (Izmir Karsıyaka Branch)

This chapter indicates Finans Bank Izmir Karşıyaka Branch's its interior design concept, furniture design, interior components, artificial lighting and ventilation systems.

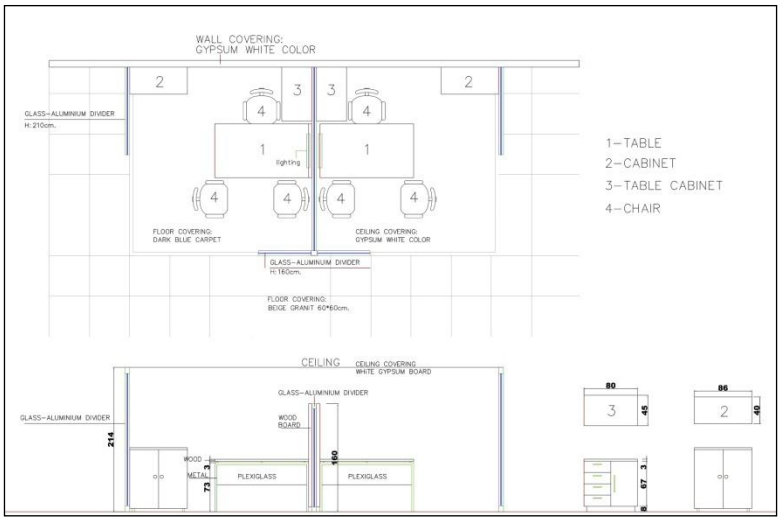
4.6.3 General evaluation of furniture in banks

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems.

4.6.3.1 Workstation groups

Finans Bank workstation groups are designed as one and douce unites. A workstation group consists of a table, side cupboard, back table cabinet, employee chair and two client chairs. There is ‘T’ formed glass aluminium and wooden divider between the douce workstations. The table is designed at 145x80cm at a height of seventy three cm.

Figure 4.48. Finans Bank Izmir branch Workstation type drawings



The structure of table consists of four metal legs, a carcass and wooden tray three cm. high. In front of the table, a plexiglass protection board is designed thirty cm high. The table side cupboard is 80x45cm, with an eight cm. wood basement, sixty seven cm carcass and a three cm light colored tray, a total height of seventy eight cm. It is designed with two parts, one for a hard disc and one for a shelf system.(Figure 4.48).

The back table cabinet for documents is designed from the same material as the table, stands on four metal legs at five cm in height, a total of ninety five cm in height. The glass divider system that completes workstation unit is a hundred and sixty cm high made of glass. In the middle of glass there is light colored wooden paravane designed for privacy and a lighting system. (Figure.4.49)

Figure 4.49. Finans Bank Izmir branch one workstation unit

Figure 4.50. Finans Bank Izmir branch douce workstation units

4.6.3.4 Interior dividers

In the bank's interior, two groups of glass divider systems are used. The first group is designed for the director's office. A glass and aluminium divider system has sandblasted glass bands to ensure privacy.(Figure.4.50-51)

Figure 4.51. Finans Bank Izmir branch general interior

Second group glass divider is designed between douce workstation groups to ensure separation and privacy.

4.6.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials,

4.6.4.1 Floor materials

The bank's floor material consists of two groups. The first group is for general interior use with 60x60cm beige granite tiles. The second group is for back office and directors' offices with a dark blue colored hygeine protective carpet.

4.6.4.2 Ceiling materials

At the branch, a white painted gypsum board suspended ceiling is installed at a height of two hundred and fifteen cm.

4.6.4.3 Wall materials

For wall materials, a white painted gypsum board wall system is used in concordance with the general bank light white colored design concept. For directors' offices, there is a glass and aluminium divider system.

4.6.5 Ventilation systems

The ventilation system of bank is provided by tall air-conditioning units placed on the floor.

4.6.6 Interior lighting sytems

The general lighting system at branch is provided firstly by daylight from one façade and secondly by an artificial lighting system. Downlights are used linearly in the suspended ceiling.

4.7 Isbank (Izmir General Manager's Office)

Notes of the interview with the General Director of İsbank Izmir Real Estate and Construction Department by Director Assistant Bilge Basaran. General Isbank Bank Branch Design Concept is as above:

Design Concept:

Isbank's general branch concept is based on sustainable interior design, flexibility and functionality. To ensure flexibility and sustainability, furniture is designed in modular systems. All workstation groups, box-office units, work units, storage systems are designed by modules so they can be altered by adding or decreasing the area square meters.

Workstation Units:

In terms of number of employees, workstation units can be designed as douce, quad or sestet groups, like a lego system, and the number of workstations can be increased. This main theme of design concept ensures different interior area designs, changing existing branch areas and brings flexibility and facility to interior spatial organization.

Interior Organizations:

General entrance and ground floors are designed as open office concepts consisting of box-offices, client hall, waiting area, workstation groups, consumer representatives and directors' offices depending on the number of square meters. All functions can be carried out at ground floor level. If the branch is one level, the information desk, waiting hall and box-office units are placed near the entrance and director's office, customer representatives placed at the back. Service units for employees such as kitchen, restroom, WC and vault rooms are placed far from the entrance so as not to be accessed by clients.

If the branch's ground floor is a small area and a multi-level branch, on the ground floor, firstly the information desk, box-office, back office and waiting area (small or medium) must be placed. On the upper floors are directors' offices, workstation groups for individual operations, meeting rooms.

On the basement floor, service areas, (kitchen, WC, restroom, technical rooms) and vault room are placed far away from the entrance hall in terms of the privacy concept. Also a mezzanine floor can be designed for directors' rooms with workstation groups for individual operations depending on the plan of bank.

However, Isbank's bank branch concepts are based on a corporate and unique system but some special branch designs have been completed. These special branches are designed to serve mostly individual client operations. But generally, every city of Turkey, from Izmir to Ankara, one, unique, corporate concept design has been applied and everybody recognizes the general concept of Isbank. In the interior area design of branches, an infrastructure system takes over priority. All electric, internet, computer cables are placed in channels under the floors and at other necessary points, outputs are given to workstation units and box-offices and in this manner visible cables are not seen and a clear area created.

Ventilation Systems:

At necessary points, over workstations, general crowded areas such as waiting areas and above box-office units, out-vent and in-vent systems are placed to ensure fresh air. Ventilation and artificial lighting systems are placed in metal suspended ceiling linearly. Lighting armatures are 4-18cm and fluorescents are placed in metal suspended ceiling above each workstation table. Ventilation culverts are positioned at constant gaps in the metal ceiling and on culvert covers a vinyl layer is placed to ensure acoustic design which reduces noise pollution. In ceilings especially, a metal suspended system is chosen to enable easy access in case a technical problem arises.

Floor Materials:

Floor materials are generally glazed porcelain tiles, gray colored and with joint filler. İn intensive, busy areas and halls glazed porcelain tiles are used. At less busy areas, for employees' areas, very thin carpet such as PVC is used to ensure hygiene.

Wall Materials:

For wall materials, gypsum board and breathing plastic paintings are used. The general concept color is ivory crème. Isbank's general branch concept design is to ensure sustainability and flexibility. Gypsum board walls are easily placed and changed in line with the concept. For interior dividers, glass is also used to increase daylight reaching the offices. Especially in offices, glass is used with jalousi systems to ensure privacy and security. The important point for choosing materials is flexibility. The system must be modular and must ensure variation. The needs of sustainable design, flexibility and functionality are the basic points.

Bank Furniture:

Workstation groups are designed in modular systems. By adding modules, one or more working group can be made. Workstation modules are also used as box-office working modules. Thus, box-office sizes can be increased and decreased by modules through interior spatial arrangement. Tables are made of laminate trays and carrier steel structure. Cabinets are made of laminate material and metal structural carriers at a height of wall basements. For basements, glass dividers metal basements and glazed porcelain tiled floors, the same material is used as the basements. Wall furniture is designed at the same height as the basement to ensure design unity. For work chairs, resistant textiles and ergonomic chairs are chosen.

Tables at workstation groups are seventy-five cm in height. Cabinets are designed at a height of a hundred and thirty-five cm with three shelf systems for documents and classification. Isbank's box-offices are two types. The first type is designed as necessary gap for client communication and second type is a cashier's office designed with a glass divider in front of it. (Figure.4.52-53)

Figure 4.52. Isbank's workstation group

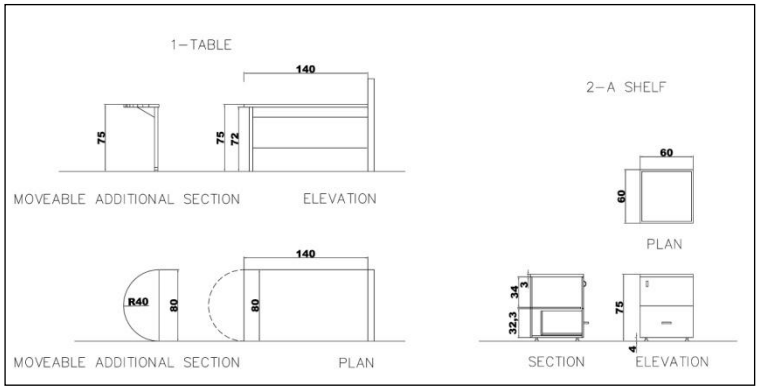
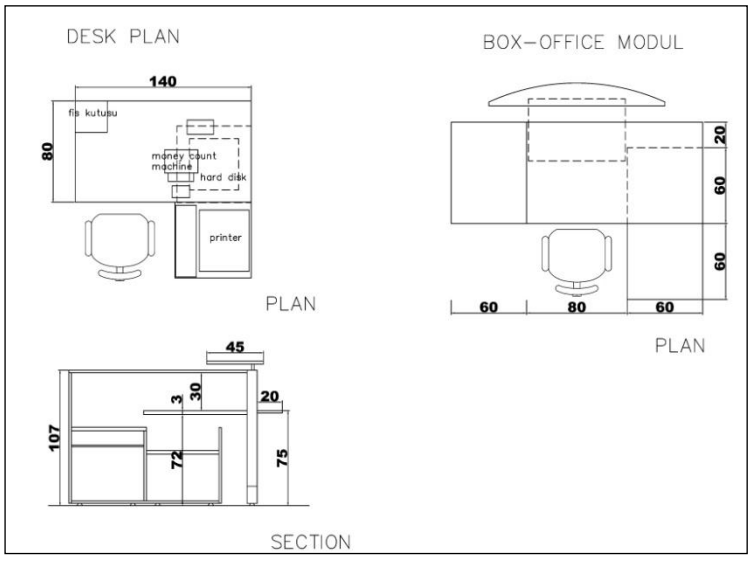


Figure 4. 53. Isbank's other furniture



Façade Design

Isbank's general facade design concept is corporate and the same at all branches. Small or big, the same corporate concept is applied. Facade glass is laminate and resistant to avoid

robberies. And the stone material is same color and pattern everywhere. The bank's advertising name is placed on aluminium board.

At Isbank branches, visual effect and advertising is important and it indicates a digital design must be used. So in client halls, niches are designed with gypsum boards for LCD screens and plasma for digital advertising systems and internet banking.

4.8 Vakıf Bank (Izmir Karsıyaka Girne Street Branch)

This chapter indicates Vakıf Bank Izmir Karşıyaka Branch's general properties beginning with its location in the city to its interior design concept, furniture design, interior components, artificial lighting, ventilation systems and advertising design.

4.8.1 General information about the location of the bank and bank employees

Figure 4.54. Vakıf Bank Izmir branch Google earth Picture

Vakıf Bank Izmir Karsıyaka branch is on the main Girne Street. The branch has two facades. It consists of two levels, ground and first floor and two hundred and fifty square meters in total. (Figure.4.54)

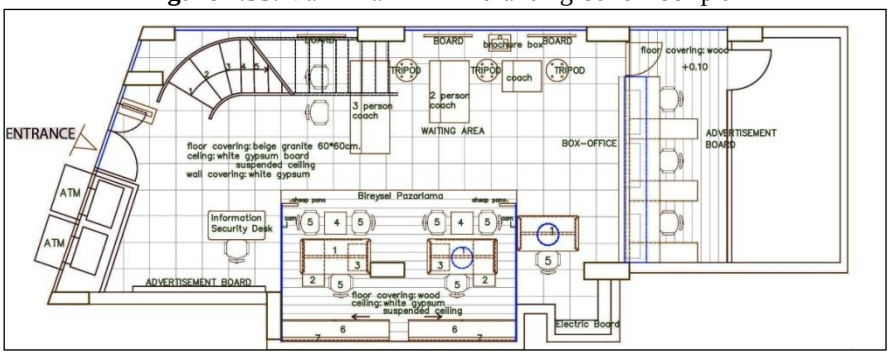
4.8.2 About the bank's overall interior design

On the ground floor of the bank there are two workstations for individual business, a box-office, a waiting area and an information-security desk just next to entrance hall. There is a spiral staircase to the left of the entrance hall. The staircase is placed correctly in the interior organization, especially for a bank design as itis very close to the entrance hall, so clients can access the upper level easily. The general interior of the bank is designed as an open office concept.

The box-office is formed by three modules, opposite the hall. It is placed very correctly, and clients can access and see the queuematic system easily. The back wall of the box-office is designed as advertising board for the bank. The back office is behind the box-office and can not be accessed except by employees, so the necessary privacy has been applied correctly here. The vault and document cabinets and necessary bank documents are also placed in the back office area. In front of the box-office are two workstation units for individual banking operations.

The waiting area is a medium-sized hall in front of the box-office, with a capacity for eight persons. It is placed on a pivotal area in theinterior so clients can reach all areas. There are two ATM machines at the sides of the entrance and there are advertising boards and brochure boxes in front of them. As a general concept, the ground floor's commonly used colours are white, yellow and black. The general spatial organization of the ground floor is right for a bank branch using this concept (Figure 4.55).

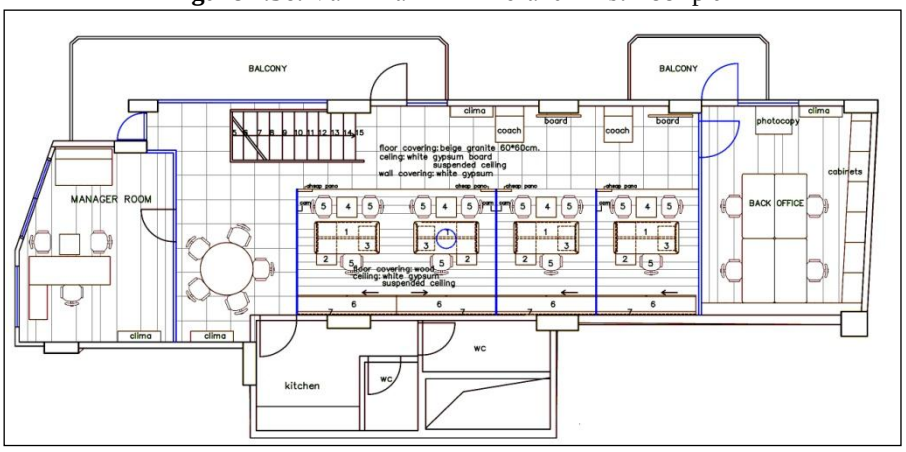
Figure 4.55. Vakıf Bank Izmir branch ground floor plan



The first floor of the bank is designed as an open office concept, the same as the ground floor. To ensure open an office concept, a glass divider room system was used in the necessary places. After reaching the first floor by a curved staircase, four units of workstation groups meet clients for portfolio business. On the front façade, there is a director's office and on the other side is the director's assitant's office. Both were designed using glass and aluminium dividers so as to not block daylight from the interior. (Figure.4.56)

Tall document cabinets, fax and photocopy machine furniture are placed in the director's assitant's office. There is a kitchen and service room for staff use only on this floor, placed behind the workstation groups wall for privacy.

Figure 4.56. Vakıf Bank Izmir branch first floor plan



4.8.3 General evaluation of furniture in bank

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems.

4.8.3.1 Workstation groups

Figure 4.57. Vakıf Bank Izmir branch workstation group-one unit

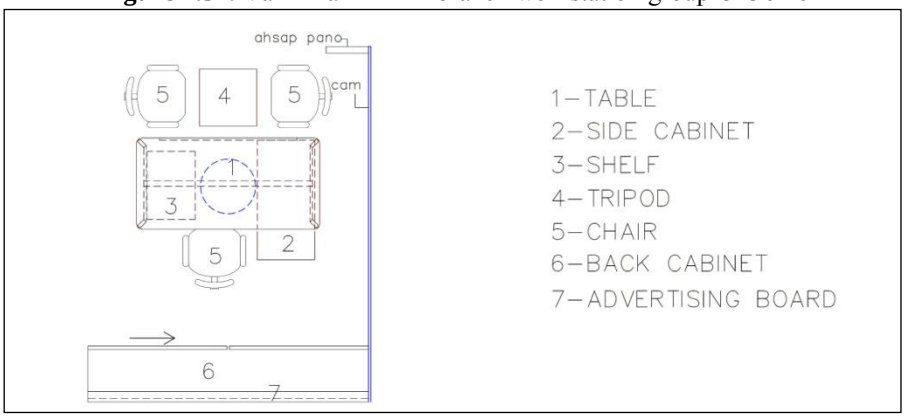


Figure 4.58. Vakıf Bank Izmir branch douce workstation unit

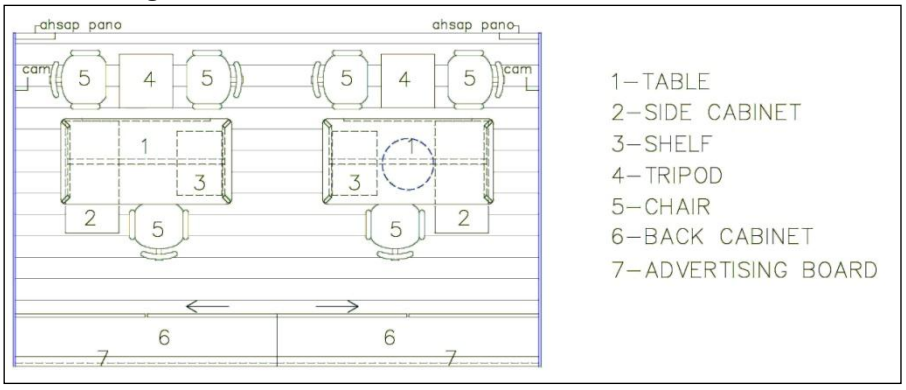
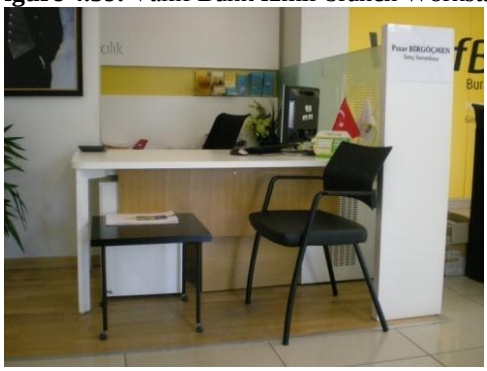


Figure 4.59. Vakıf Bank Izmir branch Workstation unit



Vakıf Bank's workstation modules are designed as one and douce units.

A workstation group consists of a table, side cupboard, under table movable caisson, one client and one worker chair, a movable tripod and behind, a 65cm wide cabinet and a wooden advertising board with brochure boxes two hundred and thirty cm wide. (Figure.4.57-59)

Material choices are generally black, white and yellow wood. The workstation groups are completed with a suspended ceiling for artificial recessed downlights and one large suspended lighting unit. The workstation borders are ensured with patterned glass dividers a hundred and thirty-six cm in height and forty cm wide, and a part description board made of white wood. The table tray is circlular sided, 160x80cm, three cm high of white colored wooden. The carrier system is white steel legs with an upper frame seventy two cm high, a total height of seventy five cm. The side cupboard is 105x50cm, made of wood in two parts. The first is for a shelf system and the second is for the computer hard disc. It is made of the same material as the table and is sixty four cm high.

The movable caisson is designed for use under the table for documents. Behind the table is a wall-mounted advertising board and a short cabinet of wood with the concept colors of the bank. The advertising board is two hundred thirty four cm wide and ten cm in depth and attached to the wall. A Cabinet is attached to this wooden board. It is thirty seven cm in depth and sixty five cm in height with a sliding door system. On the advertising board are brochure box and digital queuematic niches. The board is illuminated with lights from the suspended ceiling .

One of the other pieces of furniture of workstation groups is the tripod which is designed to be mobile for flexibility. It is made of four chrome legs and a black tray, fifty cm high. Considering the workstation unit as a whole, wood, chrome and metal materials and white, black, yellow colors are used dominantly in the design. (Figure 4.58).

4.8.3.2 Box-office desk

The box-office area is placed opposite the waiting area which clients can access easily. The back of the box-office back is on a raised floor at ten cm and the floor is wooden. The box-office has a ten cm basement and is a total of a hundred and ten cm in height made of black wood. The top of the box-office unit is designed with dark green marble with metal legs. The box-office consists of three modules, totalling a hundred and fourty cm in width.

Behind the box-office there are two workstation groups. Each group consists of the same concept, table, sideboard and chairs. Above the box-office is a suspended ceiling for the queuematic and lighting system, designed with metal material thirty cm from the main ceiling.

4.8.3.3 Working chairs, waiting area chairs and general coaches

The branch's waiting chairs are placed back to the staircase and in front of the box-office. Black leather seats are designed for one, two or three persons, a total of eight persons. Except for the waiting area, seats are placed at individual operations workstation groups, each with two client chairs. On the first floor, two waiting seats are placed in front of workstation groups.

4.8.3.4 Interior dividers

Figure 4.60. Vakıf Bank Izmir branch glass dividers

The bank's interior dividers consist of two groups. The first group is designed for workstation units with glass dividers a hundred and fourty cm in height to create borders.

The second group is designed for rooms on the first floor so as not to block daylight to the interior. The room divider system consists of a black aluminium structure and glass. Sandblasted glass ensures privacy inside. These glass dividers are two hundred and thirty cm in height. (Figure.4.60)

4.8.3.5 Storage systems

The storage systems consist of two parts. The first group is workstation group cabi-nets. The advertising board is two hundred and thirty four cm wide and ten cm in depth attached to wall. The cabinet is attached to the wooden board and is thirty seven cm in depth and sixty five cm in height a sliding door system. The cabinets are work together with wall board.

Figure 4.61. Vakıf Bank Izmir branch workstation cabinet's sliding door system

Figure 4.62. Vakıf Bank Izmir branch workstation unit, side cupboard for a hard disc

The second group of storage systems is for the director's assitant's room designed as tall document cabinets in white wood. There are a total of six units, each one 75x50cm and two hundred and thirty cm in height with two covers and a shelf systems. There are also fax and photocopy machines in the room (Figure 4.61-62).

4.8.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials.

4.8.4.1 Floor materials

The bank's floor materials consist of two groups. The first group is for the general interior, waiting area, entrance hall and are designed for hygiene, using sixty by sixty cm. beige colored granite tiles. The second group is light colored wood for the director's and assistant's offices and also for workstations. The staircase is also made of gray colored granite. (Figure.4.63-64)

Figure 4.63. Vakıf Bank Izmir branch curved staircase

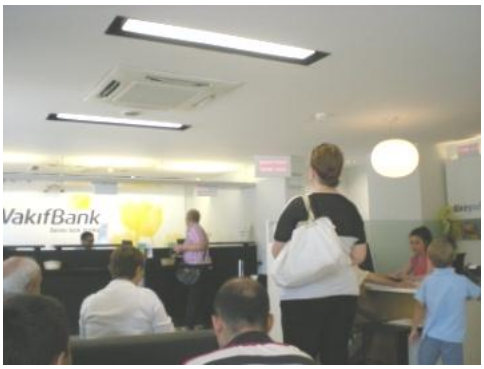
Figure 4.64. Vakıf Bank Izmir branch workstations floor coverings

4.8.4.2 Ceiling coverings

The ceiling is two hundred and thirty cm high and made of white gypsum board. It is designed at one elevation height linearly throughout the interior. The main ceiling of the branch consists of recessed fluorescents and downlights, supended lighting and ventilation systems. Over the box-office is a secondary ceiling, thirty cm lower than the main ceiling, and is designed in 420-50cm. sizes with metal hangers to cater for both the lighting and the queuematic system. (Figure.4.65)

Figure 4.65. (A) Bank's ceiling system on box-office, (B) interior ceiling system

A



B

4.8.4.3 Wall materials

The bank's wall materials are made of white colored gypsum board in the bank's light colored concept. Yellow and white colored wooden advertising boards are mounted on the walls and in the general interior, white, black and yellow colores are used.

4.8.5 Ventilation systems

Figure 4.66. Vakıf Bank Izmir branch ceiling ventilation system

On the ground floor, the ventilation system is provided by an in-vent and out-vent mechanical system for fresh air. And for climate control, there are floor and wall mounted air-conditioning units. (Figure.4.66)

4.8.6 Interior lighting systems

Vakıf Bank's artificial lighting system consists of two groups.

Figure 4.67. Vakıf Bank Izmir branch interior artificial lighting system

The first group is Vakıf Bank's general lighting system which is designed with rectangular lighting armatures giving white light inside the white gypsum ceiling. The second group lighting system is designed for workstation units, circular lighting elements suspended from the ceiling over each table. And for the box-office lighting system, a secondary metal suspended ceiling has recessed downlights. (Figure.4.67)

4.9 Akbank (Izmir Karsıyaka Bazaar Branch)

This chapter indicates Akbank Bank Izmir Karşıyaka Branch's general properties beginning with it's location in the city to its interior design concept, furniture design, interior components, artificial lighting, ventilation systems and advertising design.

4.9.1 General information about the location of the bank and bank employees

Figure 4.68. Akbank Izmir branch google earth Picture

Akbank Izmir Karsıyaka branch is in the main shopping street in Karsıyaka in a corner building. It is an old building with masonary walls about fifty cm thick. The bank has a front facade with large glass windows, and on the side facade, small windows due to the masonry construction. Three one hundred cm sized windowsare on the side façade. So the front façade provides most of the daylight for the interior. At higher levels of the front facade, large glass windows are placed on a parapet system. Akbank Izmir Karsıyaka bazaar street branch is a five level branch with ground floor and a total of five hundred and thirteen square meters (Figure 4.68).

4.9.2 About the bank's overall interior design

Akbank Karsıyaka bazaar street branch consists of four levels and a ground floor, totalling five levels. The ground floor is ninety seven square meters and other each of four levels is a hundred and four square meters. The entrance is from directly from the main street . The ground floor consists of three ATMs at the back office, internet banking and an information/security desk just next to entrance and a four module box-office. The back office consists of two old concept workstation groups, a waiting area placed in front of the box-office, elevator, technical room and staircase. The back office is a closed room, designed with gypsum board walls for privacy and connects to the back of the box-office. The back wall of the box-office units are designed to advertise Akbank with colored boards. The back office floor and behind the box-office is fifteen cm higher than the general interior to ensure easier

banking operations behind the box-office. In the back office, there are tall metal documentary cabinets and fax-photocopy furniture. (Figure.4.69)

Figure 4.69. Akbank Izmir branch ground floor picture

The first floor consists of two new design concept workstations and a three module box-office, a back office behind the box-office, a waiting area and seating. The waiting area bench seat is a metal structure design, one for three persons and one for two persons compatible with new concept. On the back wall of the box-office is an advertising board for Akbank, the same as the ground floor. The back office consists of two workstation groups, tall document cabinets, fax-photocopy machines and a vault. Just opposite the staricase is a brochure box, made of plexi glass material and an illuminated advertising board. (Figure.4.70-A)

On the second floor there are four new design workstation units, a glass director's office, waiting chairs, an advertising board and brochure boxes. The director's office is also used for meetings. (Figure.4.70-B). On the third floor there are three new design concept workstations, a technical room and a rest room for employees. The technical room is about three meters long and an advertising board for Akbank is placed on the wall. There are also three electric cabinets. (Figure.4.71-72)

Figure 4.70. (A) Akbank Izmir branch first floor picture, (B) branch second floor picture

A

B

Figure 4.71. Akbank Izmir branch third floor

On the fourth floor there is a kitchen (for staff use), archive room, mechanical rooms and elevator hall. The archive room lets in daylight from two facades. In the archive room there are two rail systems metal cabinets. Next to the archive room there are electric cabinets. Between each floor there are four WC's (Figure.4.73)

Figure 4.72. (A) Bank's electric cabinets open, (B) electric cabinets closed form

A B

Figure 4.73. Akbank Izmir branch archieve room and cabinets

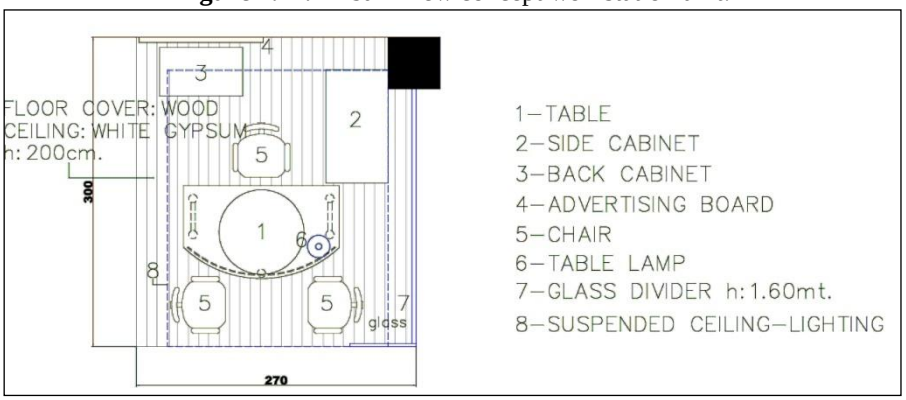
4.9.3 General evaluation of furniture in the bank

This section illustrates existing bank furniture by photos and drawings of workstations, box-offices, work chairs, waiting chairs, divider and storage systems.

4.9.3.1 Workstation groups

The new concept design of Akbank's workstation group consists of; table, side cup-board, back of table cupboard, one staff chair, two client chairs, tripod, glass separation at a height of a hundred and sixty cm. The suspended ceiling is designed for lighting and queuematic systems and there is also table lighting. The size and borders of a complete workstation unit is 3x2,7 meters. (Figure.4.74)

Figure 4.74. Akbank new concept workstation unit.



The table of the workstation group is designed with five metal structural legs, an mdf tray and metal front panel. The tray is designed in white mdf and natural circlular wood pattern. It is 150x60cm and makes a thirty cm. arc to the front. Under the tray there is a metal carcass with five metal legs. The total height of the table is seventy five cm. and there is concealed socket under the tray between structural legs. There is table lamp to one side of the computer. (Figure.4.75-76)

Figure 4.75. (A) Akbank one unit workstation group, (B) detail from workstation unit

A

B

The side cabinet is 110x60cm at a height of sixty cm. It consists of two parts, one for document shelves, the other part for a hard disc. It is made of natural wood and white mdf is used for sides. Back of table cupboard is designed with at a height two hundred and five cm. advertising board. The board is 120x5cm and in front of it is a cabinet 80x47 cm and eighty seven cm in height. The cabinet is made of natural wood with shelves for documents. The glass separation system is designed for workstations borders. With a five cm. aluminium barrier the total height of the separator is a hundred and sixty cm. In front of the separator there is white board for episode and employees identity. (Figure.4.77)

Figure 4.76. Akbank workstation structural and socket, harddisc hiding system

Figure 4.77. Akbank douce unites Workstation group.

Over the workstation group is a suspended ceiling for lighting and ventilation systems of the unit. The height of ceiling is two meters and there is also a queuematic system. Workstation groups' floors are made of wood.

4.9.3.2 Box-office desk

Akbank's box-offices are on the ground floor and first floors.

The box-office on the ground floor is 156x40cm consisting of four modules. The upper tray of modules is at a height of a hundred and sixteen cm, and made of chrome material. In front of the box-office, there is glass bag apparatus with sizes 156x40 cm at a height of ninethy five cm.and made of wooden material with chrome bands at sides. (Figure.4.78)

On left of every module, at a height of a hundred and thirty six cm and 35x6.5cm, there are plexi brochure boxes with chrome structures. Under each module, aluminium basements six cm in height are designed for protection. The back-office area of the box-office is fifteen cm higher than the general interior to ensure easy client communication (Figure. 4.79).

Back office workstations are designed in wood, the table at a height of seventy five cm with a computer screen. In front of the table, at a height of eight cm, there is a pencil drawer. The side cupboard is also designed in the same material as the table, 140x45cm, seventhy five cm in height. It has shelves for a computer hard disc and document storage. The box-office module design is completed with a suspended ceiling for artificial lighting and the queuematic system. On the back wall of the box-office is an advertising board for Akbank. The box-office on the first floor is designed using same concept, with three modules (Figure 4.80)

Figure 4.78. Akbank Izmir branch box-office elevation drawings

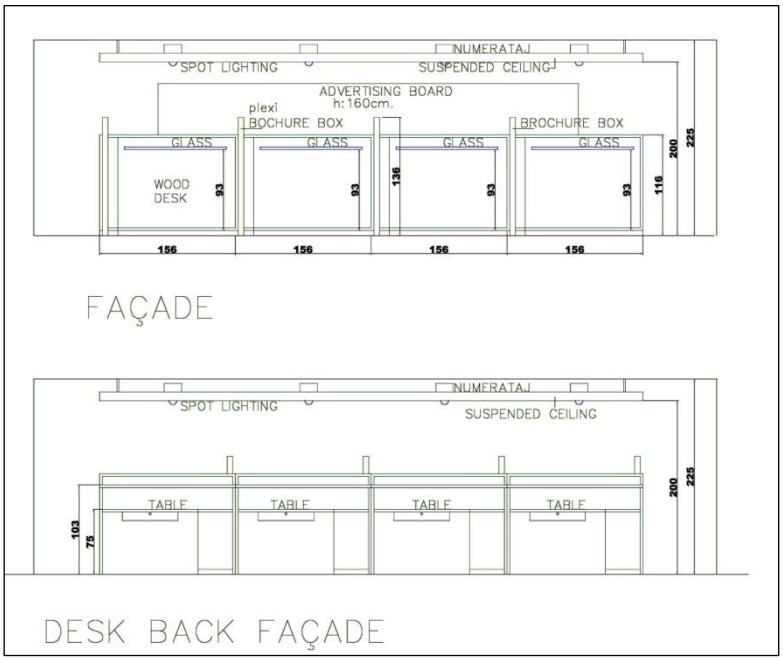
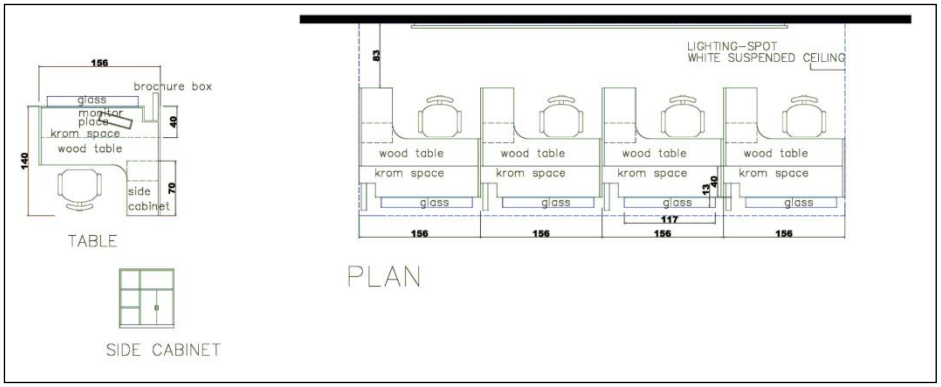


Figure 4.79. Akbank Izmir branch box-office

Figure 4.80. Akbank Izmir branch box-office plan drawings



4.9.3.3 Work chairs, waiting area chairs and general coaches

Waiting chairs are designed for three persons (190-65cm. sizes) and for two persons (140-65cm.sizes) in a thin metal material. And they are placed on each floor.

At the branch, the waiting chairs capacity (excluding workstation groups) is for fifteen persons. All workstation groups have two client chairs. In the director's office there are two single single seats and one double for client use.(Figure.4.81)

Figure 4.81. Akbank Izmir branch director's office

4.9.3.4 Interior dividers

Akbank's glass divider system consists of two parts. The first part is designed for workstation units, for protection and sound insulation, 1.6 meters high. The second group glass divider system is designed for the director's office at a height of 2,3 meters (Figure 4.82).

4.9.3.5 Storage systems

Akbank's storage systems consist of two groups. The first group is designed inside and within workstation units, side and back cabinets. The second group storage units are for documents in the archive room. These are high, metal made with rail systems. There are twelve storage groups like this on two rail systems, 100x60cm at a heightof two meters. They are designed with six group metal shelves each for documents.

4.9.4 Evaluation of interior fine structural components

This section illustrates the bank's interior components such as wall, ceiling and floor materials,

4.9.4.1 Floor coverings

Akbank's floor materials consist of four groups. The first group is for general interior, waiting areas and circulation areas, 30x54cm black-grey colored granite tiles. The second group is designed for workstation groups and is a The twooden material. Third group is for the staircase which is granite. And the fourth group is for back office floors which use a light, hygiene protective carpet. The archive room, on the fourth floor, has 30x30cm light beige granite tiles (Figure 4.83)

Figure 4.82. Akbank Izmir branch glass divider system

Figure 4.83. Akbank Izmir branch floor coverings

4.9.4.2 Ceiling materials

The suspended ceiling are gypsum board painted white. It is at a height of two hundred and twenty five cm and holds the artificial lighting and ventilation systems.

4.9.4.3 Wall materials

The wall material is made of gypsum boards painted white.

4.9.5 Ventilation systems

Akbank Izmir branch's ventilation system consists of three parts. The first is in the suspended ceiling with an in-vent and out-vent mechanism to provide fresh air. The second group is floor mounted tall climte control systems and the third is wall split air-conditioning units for heating and cooling.

4.9.6 Interior lighting sytems

The bank's artificial lighting system is designed with recessed lighting in asuspended ceiling. Also every workstation group has its own artificial lighting via a suspended ceiling light and a table lamp.(Figure.4.84)

Figure 4.84. Akbank Izmir branch table lighting

(All pictures and figures in this chapter have been taken and drawn by Ayça Arslan)

5

OPTIMIZATION OF BANK BRANCHES

5.1.Description of Optimization in Design

Optimization

Uffle Leintz had described optimization in his paper named ‘Integrated design with Form and Topology Optimizing’ as; from the simplified world of ideal geometric proportions CAD systems begin to integrate potentials to let construction develop over a time span, the same way as nature has evolved oprimal design. Designers can reach “the best possible” solution evaluated according to design criteria and demands in the same way as naturally selection leads to ‘the best possible’ construction. (Leintz,1999)

Form and topology optimization

According to Uffle Lentz; there are two methods for optimization. Form optimization always lead to a solution with the same topology as the conceptual basic design. Topology optimization has only been developed in the last decade. The topology of a construction is understood as the superior concept, the configuration and the relationship between sub components in a construction. It is possible to combine the methods to obtain an optimal topology and an ideal geometry. Mathematical programming methods based on iterative use of FEM calculations made the Form Optimizing break through. Supplied with design sensitivity analysis and optimization. With these methods it is possible to achieve a process where the “best possible” solution is constantly approached.

This rational process of construction requires that all the demands of the problem can be expressed as criteria functions, to be evaluated according to the design of the construction. These criteria functions can be weight, stiffness, strength, stability, life span etc. The next step is to introduce design variables, describing the design in areas where the designer wants to have the freedom to make changes. These variables can represent shape, thickness, material parameters.

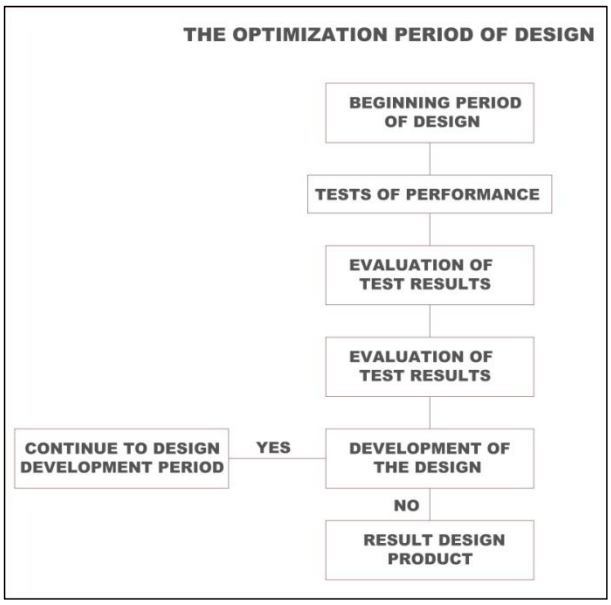
An optimizing routine calculates a new design slightly better than the previous. Step by step the construction process will lead to the optimal solution. The natural evolution is compressed from millions of years to hours.

At the same time, as highlighted by Tarım (2006), ‘optimization’ as a word means to reach the best by increasing and decreasing. Also, optimization concludes two types of design process which are; functional design and optimal design. In particular, functional design can be described as a design process that answers all necessary design headings that are determined at the beginning and which are open to development during the design process. In a design process, optimization is always in connection with criteria like economy, resistant,

dimensions of form, weight and performance. The products chosen and the structural prototype are very efficient on production cost and performance. So it will not be possible to reach the best results at the end without an optimum structural prototype of model. As a result, if at the first phase of the design process optimum topologies will not be made, this will effect production cost and performance in a negative way.

In fact, as Tarım (2006) mentioned, the design process period is an important period that determines production costs for all life of the product.

Figure.5.1.The optimization period of design



However this table demostrates the optimization period for more an industrial design, it is generally adapted to interior space design at next phase of the thesis.

Optimization (reaching the best) methods:

As identified by Tarım (2006), in architectural and industrial products design, there are some existing works on design optimization. Especially, shape optimization and structural optimization methods are used very extensively. In fact, structural optimization methods are developed through to arrive ideal design targets. Despite this, shape optimization differs from structural optimization; shape optimization helps the designer with construction design just at the beginning period of design. With the help of this method, the designer can create the best building design that he will use at forward phases of design from the beginning design period. In other words, the designer creates the first sketch of a design at optimum circumtances. At forward works on design and shape optimizations will be through the optimum building design created at the beginning. Otherwise a shape optimization application will be achieved on a non-optimum structure. Conventionally, we see lots of optimization work that is shape optimization of non-optimum building model. The results of these works are not respectful

and successful. As a result, on design for effective optimization studies, optimum building design approaches must be used.

In addition, as identified by Tarım (2006), in architectural designs, topolocigal optimization is the last phase necessary for, after digital design period to get the final design, through basic criterias like costs, esthetics, stability, acoustic value and lightings, to become 'the best'.

5.2.Space Organization and Required Space Percentages Diagrams of Bank Branches That Have Been Studied

In this chapter you will find the classification of bank branches that have been studied under this thesis subject. The banks have been classified through their spatial organization, required square meter area and percentages. Firstly, spatial organization diagrams have been made to indicate how circulation in the bank branch must be. Then the connections of each space have been showed with simple type drawings with banks' own plan diagrams that have been studied.

In addition to plan diagrams, furniture diagrams have been made which is the second part of the thesis study. Furniture diagrams are shown with in each space such as front office, back office, entrance hall, waiting area, and director's offices and meeting rooms. Equally, which furniture must be chosen for these spaces?

Basically, spatial organization diagrams have been made for each of 7 bank branches that have been studied and spatial connections have been shown with each interior plan.

As a result, this study ensured to create a common and typical plan scheme for a bank branch interior organization and how the areas must be placed from the entrance to the back respectively. At the same time this study includes required square meters of spaces at each bank differently in basic headings as below:

-Work Areas

-Circulation Areas

-Waiting Halls

-Service Areas

-Technical Rooms

Conventionally, required square meters for each of these places have been showed by diagrams for each bank. And as a result, the optimum space requirements have been calculated. This study has been made respectively on Textile Bank, Tekfen-Euro Bank, Ing Bank, Yapı Kredi Bank, Halk Bank, Vakıf Bank and Akbank through their dimensioned plan schemes. And lastly, the common spatial organization and space percentages tables have been made to classify them which include all of the banks spatial requirements and percentages in the general interior.

In addition to these space organization and square meter diagrams, a color usage table has been made which indicates each bank's brand palette known from exterior advertising to interior concepts. Simultaneously, level numbers of each bank that have been studied, have been showed with another table, which indicates how many levels a bank branch should have.

5.2.1. Textile Bank branch

With respect to studies that have been made in the branch's interior, such as plan and existing furniture drawings, the spatial organization diagram of the branch is like above for each floor.

On the ground floor, as seen from the diagram, spatial organization begins with an entrance hall which clients encounter first, with an information/security desk and queuematic machine placed in order to ensure client direction within the interior. Respectively, the entrance hall is connected to the corridor hall which ensures front office, box-office with back office connection and waiting areas circulation. The ground floor is busiest level of a bank which communicates with clients. (Figure.5.2)

Figure.5.2.Textile Bank ground floor space organization diagram

When one enters a first floor by a staircase placed opposite an entrance, spatial organization begins wtih an open office divided by workstation units and cabinets (furniture),

and connects to a corridor hall which ensures meeting room, service areas and technical volumes access. To the right, there are service areas such as archive room, kitchen, WC units and vault room with a pre-entrance room and rental vaults area with a closed-box design as cell typed. And on the left, technical areas are placed such as the system room, UPS, phone power plant and electric boards. (Figure.5.3)

In addition when we investigate first floor, which is a hundred and forty square meters, it is a mixed type office floor by its integration of open office area and cell plan type together.

Figure.5. 3. Textile Bank first floor space organization diagram

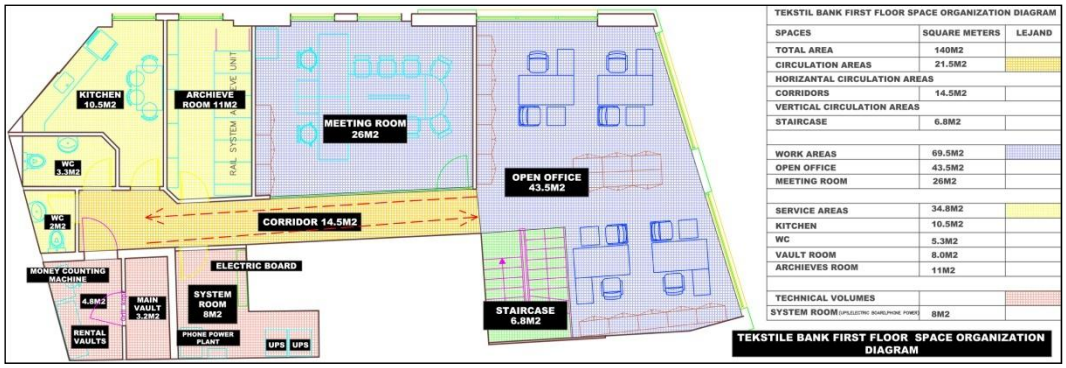
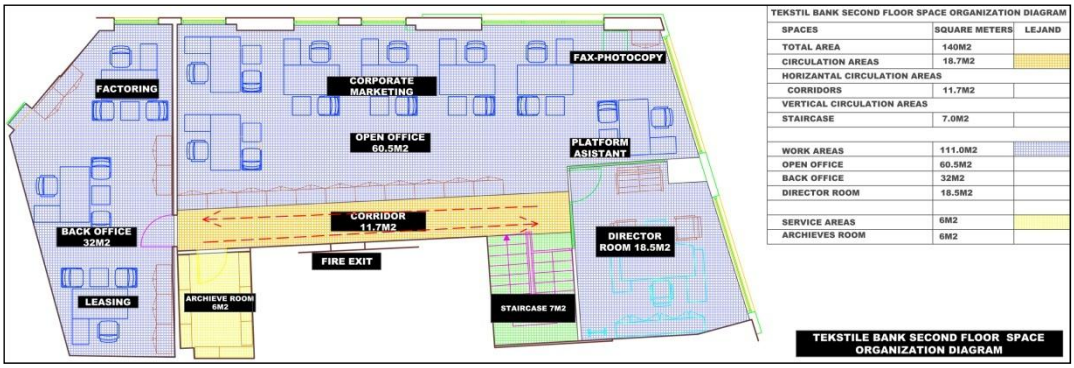


Figure.5.4. Textile Bank second floor space organization diagram

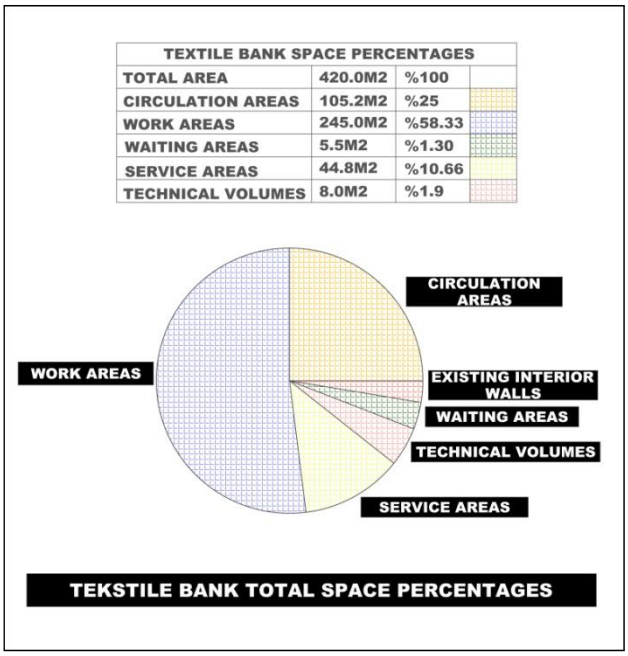


And equally, when one enters the second floor, a corridor meets you in order to ensure circulation to the director’s office, open office area, archive room and back office area at the back. The open office is formed by furniture placement in hard geometrical forms such as workstations and document cabinets without any closed walls. The director’s office on the front facade, is designed with transparent material, glass, to ensure daylight reaches the interior and to increase communication. The second floor is also a mixed type office floor

with its open office and back office area like a closed-box with a hundred and fourty square meters in total. (Figure.5.4)

As a result, through the space percentages diagram below, work areas take up a huge area of bank at %58.33. Then circulation areas follow with 25%, service areas 10.66%, technical volumes 1. 9% and waiting areas with 1.3 %. (Figure.5.5)

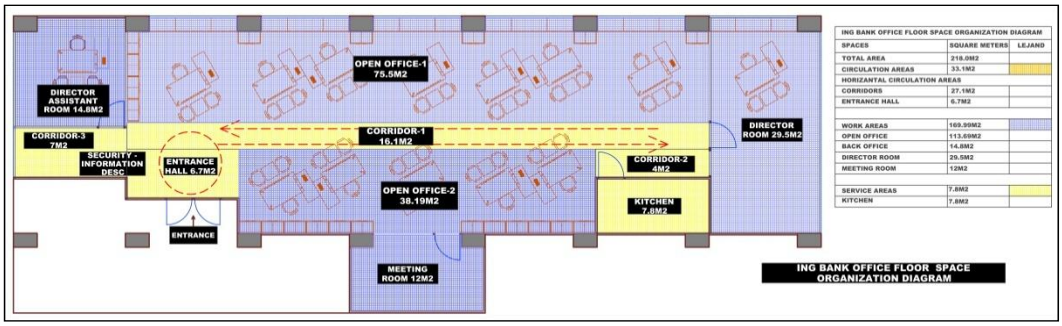
Figure.5 .5. Textile Bank space percentages diagram



5.2.2.Ing Bank branch

The Ing Bank office floor study has been made through space requirements, existing square meters, spatial organization and furniture placement.

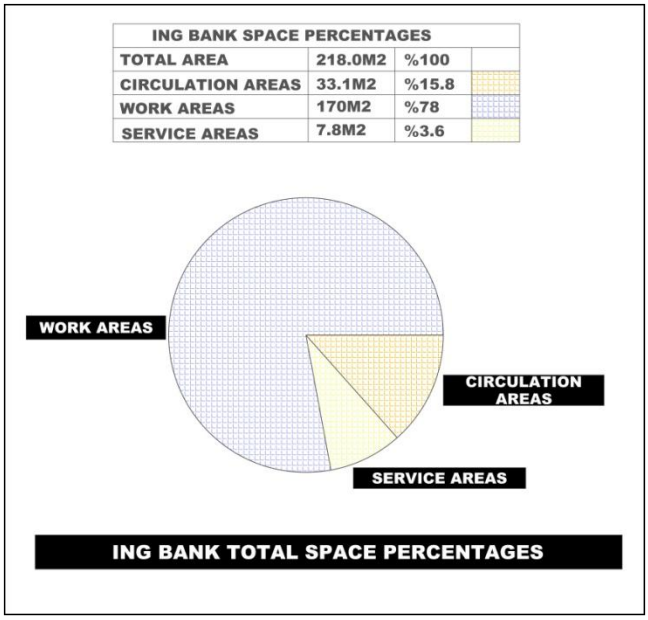
Figure.5.6.Ing Bank office floor space organization diagram



On the office floor, one enters the entrance hall by a long, narrow corridor in the middle of the open office which ensures open office, meeting room, director room connection respectively. (Figure.5.6)

As a result, when we analyze space requirements, work areas took the biggest part in space organization by 78% than circulation areas by 15.8% and lastly service areas by 3.6% of total space. (Figure.5.7)

Figure.5.7. Ing Bank space percentages diagram

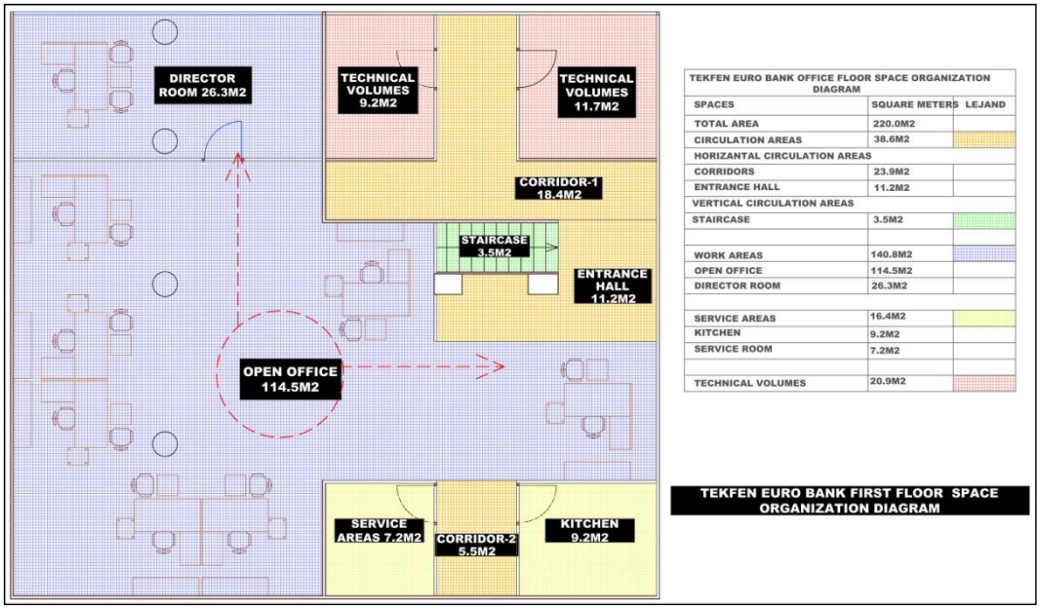


5.2.3.Tekfen Euro Bank branch

Tekfen-Euro Bank's space organization has been done for the first floor. Basically, by a staircase one can reach the first floor first entrance hall and respectively the open office and director's office at the front.

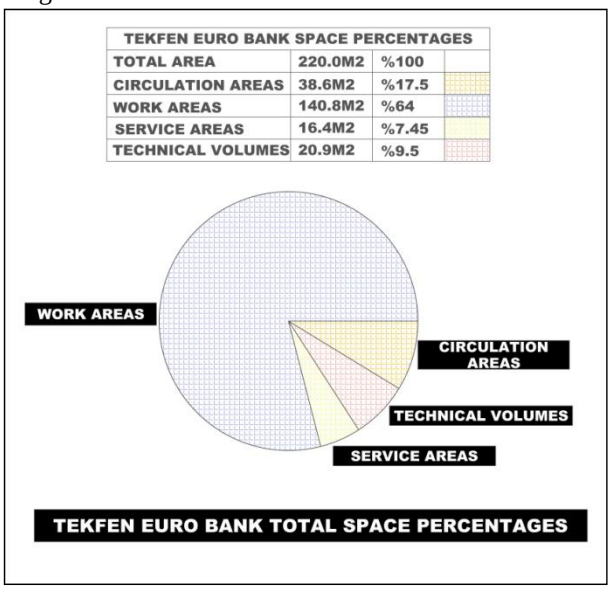
With respect to space analysis, Tekfen Euro Bank's first floor is organizaed as an open office type and divided by furniture groups as workstation units. The closed spaces are service and technical areas of the branch. Service areas are placed on the left axis of the entrance area and technical areas on the right. (Figure.5.8)

Figure.5. 8. Tekfen-Euro Bank space organization diagram



As a result, space requirements of the branch, which is two hundred and twenty square meters, are determined through existing space diagrams. The biggest part of space organization is taken by work areas as open office and director room placement by 77.2% and then circulation areas by 17.5%, technical volumes by 9.5 % and lastly service areas by 7.45% in the total space of the bank branch's first floor. (Figure.5.9)

Figure.5. 9.Tekfen-Euro Bank space percentages diagram

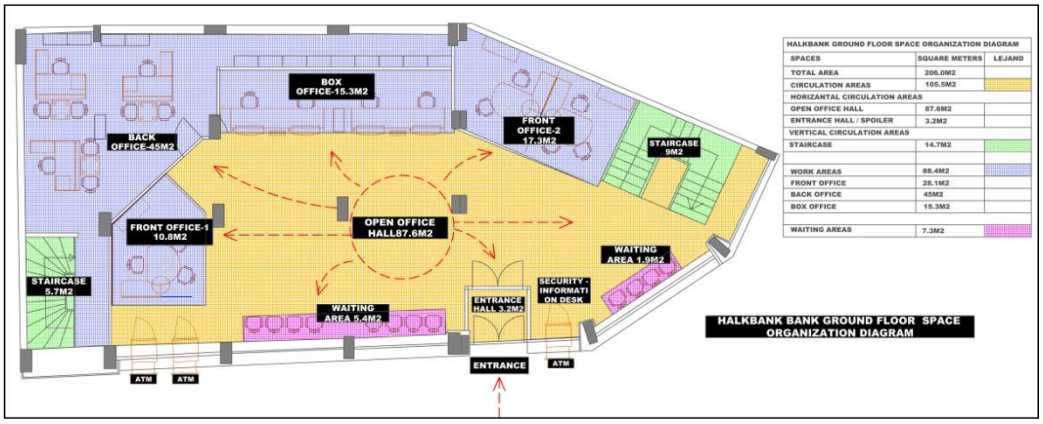


5.2.4.Halk Bank branch

Halk Bank branch, which is two hundred and six square meters at ground floor level, has been studied under this thesis through spatial organization and required space areas.

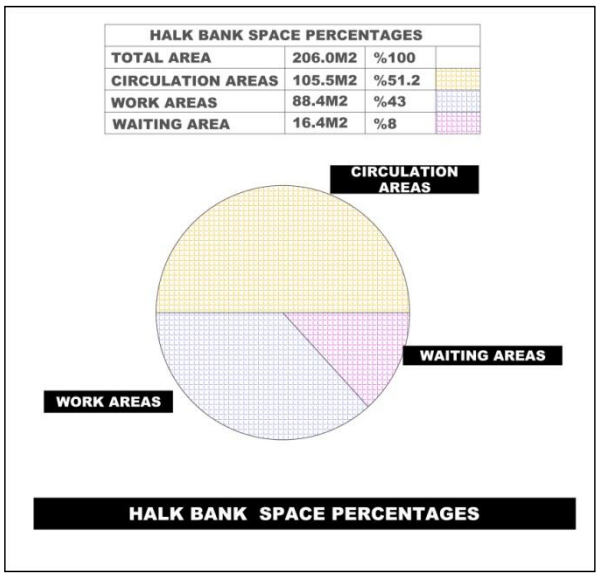
More specifically, the space analysis work on the plan determined the space requirements and their dispersions in interior. Respectively, the entrance hall with a spoiler greets one, then the information desk in the entrance hall, and one is directed into the bank. At the centre is the circulation area of open office type branch which provides box-office, front office, back office, waiting area and staircase circulation. The back office also has a connection with the box-office in the spatial organization.-(Figure.5.10)

Figure.5.10. Halk Bank space organization ground floor diagram



Accordingly, through a space requirements diagram, respectively circulation areas with entrance hall and staircase take the biggest area with 51.2% compared to work areas which consist of front office, back office, box-office 43% and lastly waiting areas placed both sides of entrance hall in the spatial organization with 8% .(Figure.5.11)

Figure.5.11. Halk Bank space percentages diagram



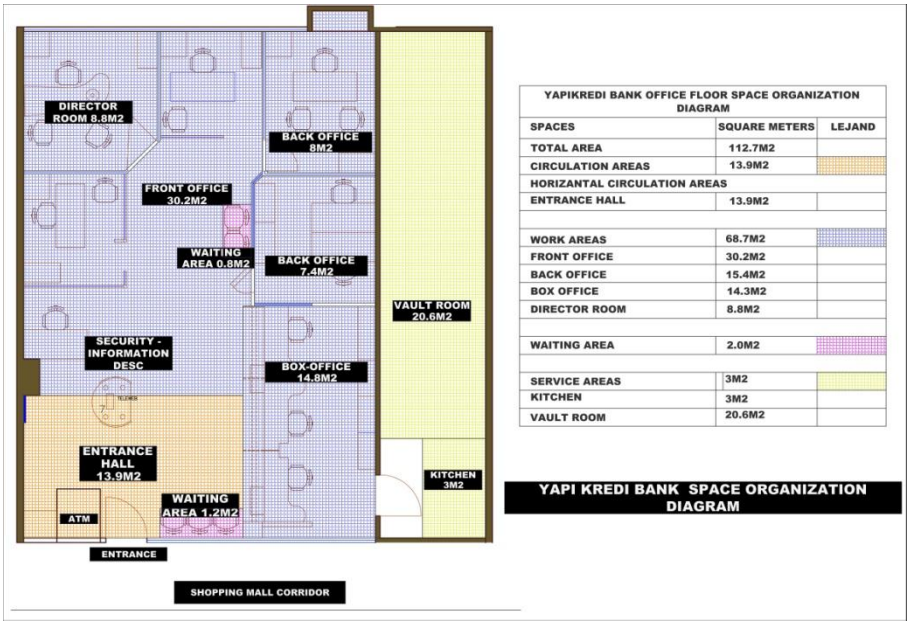
5.2.5.Yapı Kredi Bank branch

According to theplan scheme studies and analysis, Yapı Kredi Bank branch, which is a hundred and twelve square meters, a spatial organization diagram have been made as above. (Figue.5.12)

As the bank branch is in a shopping mall, there is no existing spoiler the entrance. Respectively the plan scheme develops as entrance hall, waiting area, open office area with a circulation area which ensures front office, box-office, back office and director's office connection as seen in the diagram. Box office includes back office area with two workstation units and in connection with closed type service areas such as the vault room and kitchen.

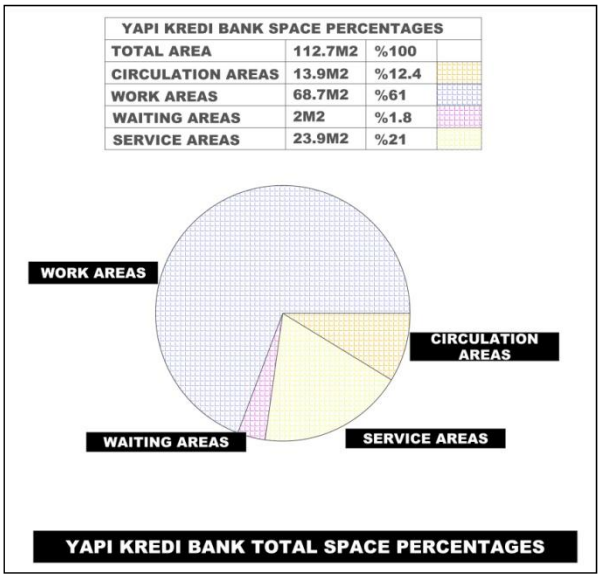
Basically, the branch's organization is based on an open office type with glass dividers for the director's office and back office. The back area of the box-office is arranged as a cell-type office with closed walls for service areas. It can be also designed with glass in order to use jalousie systems or sandblasted glass bands for privacy.

Figure.5.12. Yapı Kredi space organization diagram



As a consequence, through the existing space analysis and research, a space percentages diagram has been made that demonstrates the space requirements. Respectively, work areas which are front office, back office, box-office took the biggest area in space dispersion with 61% of total space , then service areas 21%, circulation areas with entrance hall 12.4% and lastly waiting areas take the smallest area in space dispersion 2%. (Figure.5.13)

Figure.5.13. YapıKredi Bank space percentages diagram

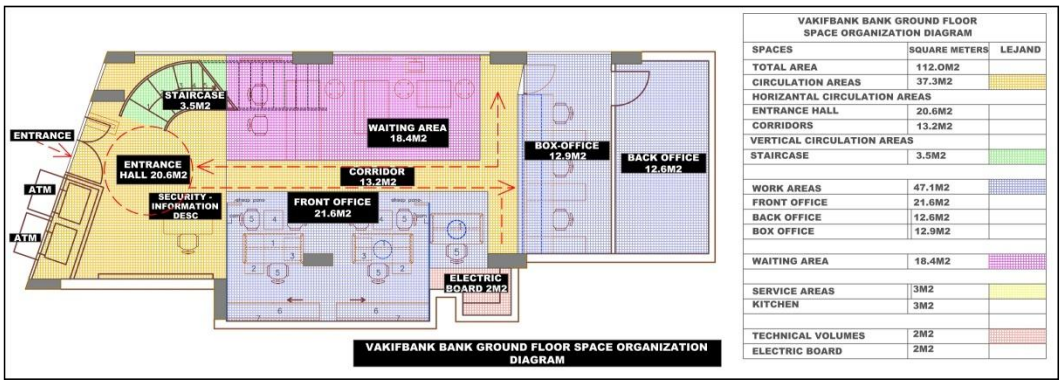


5.2.6.Vakıf Bank branch

According to space analysis and plan studies of Vakıf Bank, space organization diagrams and required space percentages schemas have been made through existing space dimensions.

In particular, the space analysis has been done separately at ground and first floor levels of Vakıf Bank branch, an area of two hundred and fifty square meters. Firstly, on the ground floor space organization, theentrance hall with information desk ensures client direction in the bank. By a narrow corridor placement in the centre, respectively front office, waiting area, box-office and back office circulation is ensured. Back office is connected to box-office which can not be accessed by clients.(Figure.5.14)

Figure.5.14.Vakıf Bank space organization diagram of ground floor



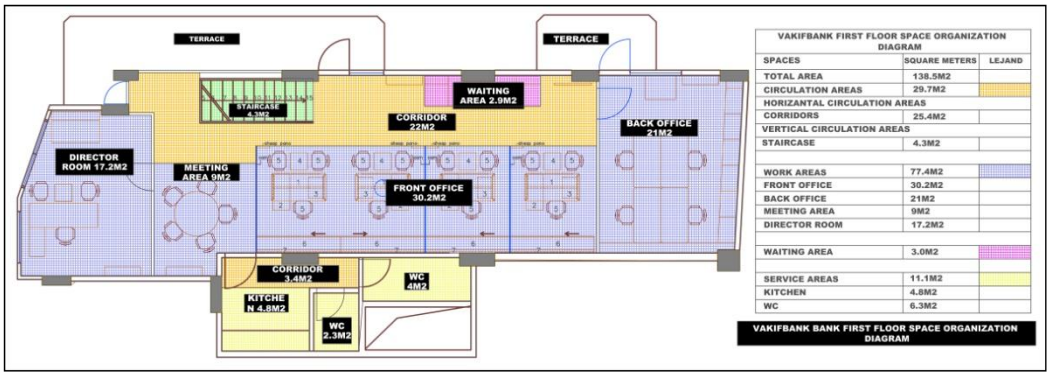
VAKIFBANK BANK GROUND FLOOR SPACE ORGANIZATION DIAGRAM		
SPACES	SQUARE METERS	LEJAND
TOTAL AREA	112.0M2	
CIRCULATION AREAS	37.3M2	
HORIZANTAL CIRCULATION AREAS		
ENTRANCE HALL	20.6M2	
CORRIDORS	13.2M2	
VERTICAL CIRCULATION AREAS		
STAIRCASE	3.5M2	
WORK AREAS	47.1M2	
FRONT OFFICE	21.6M2	
BACK OFFICE	12.6M2	
BOX OFFICE	12.9M2	
WAITING AREA	18.4M2	
SERVICE AREAS	3M2	
KITCHEN	3M2	
TECHNICAL VOLUMES	2M2	
ELECTRIC BOARD	2M2	

Simultaneously, with the staircase next to the entrance hall, first floor connection is available for both bank employees and clients. When one enters the first floor, a waiting area and corridor meets you to ensure circulation with the front office, with four workstation units, director’s office on the front facade, and back officeareas on the rear facade. There is a also an open meeting table placed next to the front office.

Basically, the general interior of branch is designed with an open office type for work areas and cell type offices with closed walls for service areas and technical areas.(Figure.5.15)

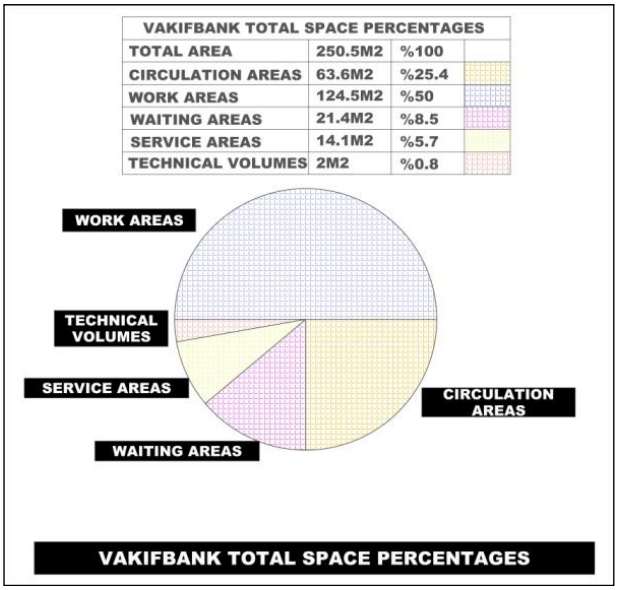
In addition, the director’s office and back office on the first floor is also designed with glass divider systems in terms of increasing daylight in the interior and creating better communication.

Figure.5.15. Vakıf Bank space organization diagram of first floor



As a consequence, the total space percentages indicate the basic space dispersions as follows: work areas form the biggest area in the space organization scheme with 50%, then comes circulation areas 25.4%, waiting areas 8.5%, service areas 5.7% and lastly technical areas with 0.8 % of total space. Also the bank uses another building very closeby to the main bank building for technical areas. (Figure.5.16)

Figure.5.16.Vakıf Bank total space percentages diagram

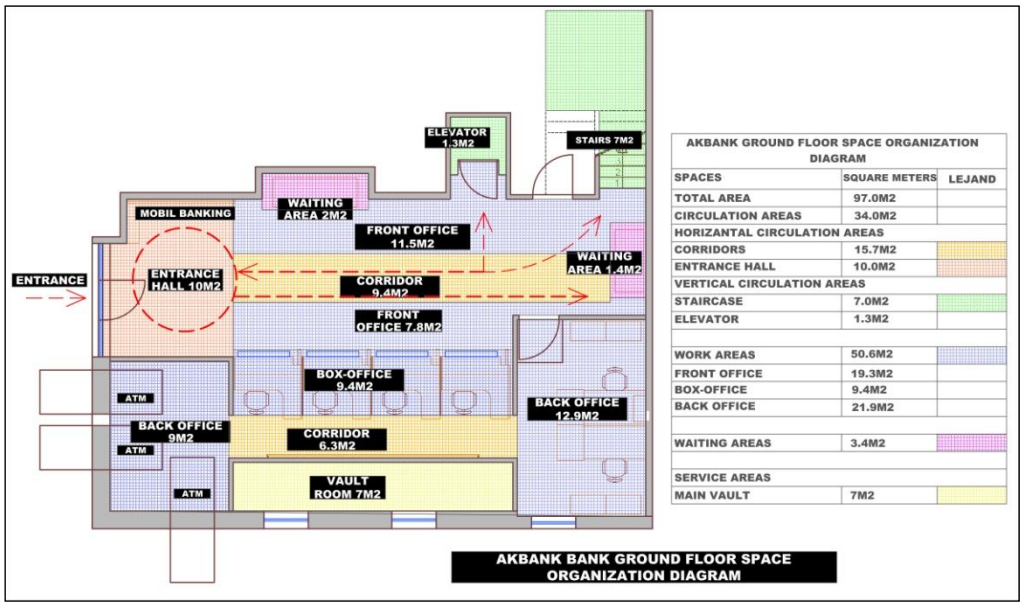


5.2.7.Akbank branch

Regarding studies that have been made in the Akbank interior, plan schemes and space organization diagrams have been created. Space diagrams have been made for each level of the branch, which has four upper levels and a ground level, as a five level branch with a total of five hundred and thirteen square meters.

Basically, at ground floor level, which is ninety seven square meters, space dispersion is made between circulation, work and waiting areas. When one enters the branch, an entrance hall with information/security desk meets you, consists of mobile banking, and by a narrow corridor ensures box-office, back office, waiting area, and circulation areas such as elevator and staircase access. The back office, which is a cell type office with closed walls, is connected to the box-office by another back corridor. (Figure.5.17)

Figure.5.17. Akbank space organization diagram of ground floor



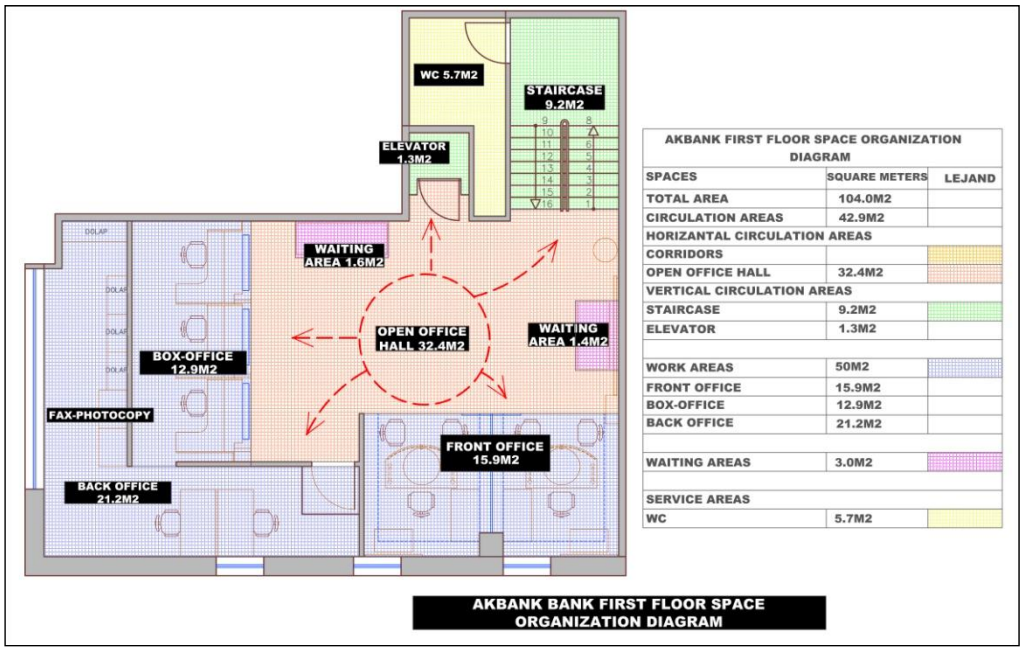
AKBANK GROUND FLOOR SPACE ORGANIZATION DIAGRAM		
SPACES	SQUARE METERS	LEJAND
TOTAL AREA	97.0M2	
CIRCULATION AREAS	34.0M2	
HORIZANTAL CIRCULATION AREAS		
CORRIDORS	15.7M2	
ENTRANCE HALL	10.0M2	
VERTICAL CIRCULATION AREAS		
STAIRCASE	7.0M2	
ELEVATOR	1.3M2	
WORK AREAS	50.6M2	
FRONT OFFICE	19.3M2	
BOX-OFFICE	9.4M2	
BACK OFFICE	21.9M2	
WAITING AREAS	3.4M2	
SERVICE AREAS		
MAIN VAULT	7M2	

On the first floor of the branch, which is a hundred and four square meters as seen on space diagram, an open office consists of front office with two workstations, and box-office and waiting areas are placed at the centre of the plan. And behind the box-office, back office connection is designed with a corridor. The first floor plan is a mixed type office with its open office and cell type office designs. (Figure 5.18)

In addition, with the help of the high leveled design of the bank, service areas are seperated at central parts of the staircase at each level.

For the second floor of the bank,a space organization diagram has been made through existing plan schemes. Second floor space organization consists of work areas and waiting areas. Work areas consist of front offices and director's office. For front offices, four workstation groups have been placed and the director's office is designed with glass dividers in order to ensure open office type and increase communication with the interior. (Figure.5.19)

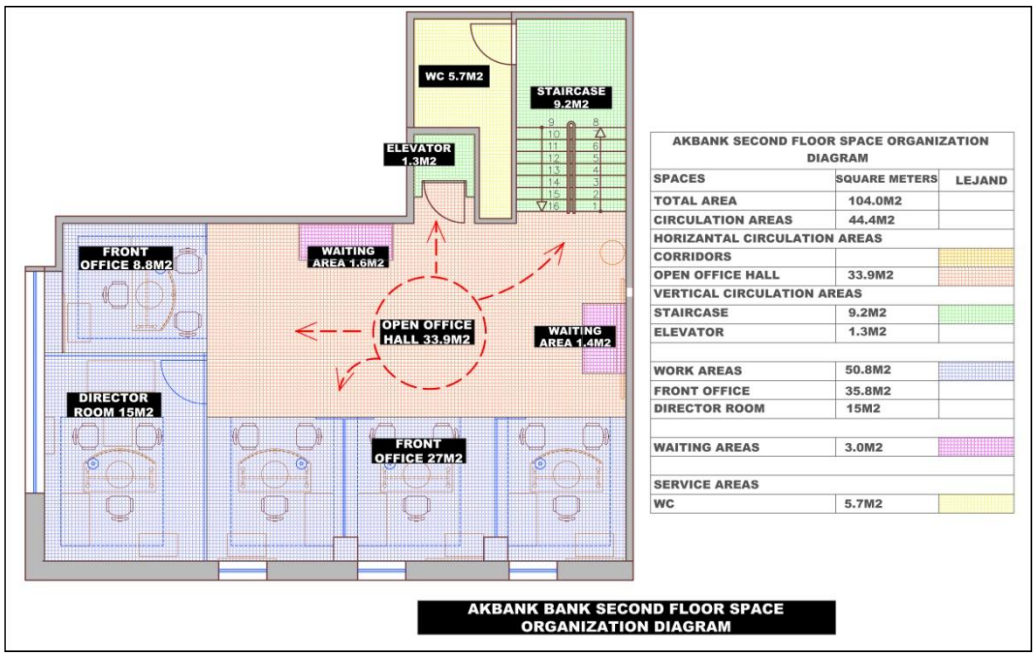
Figure.5.18. Akbank space organization diagram of first floor



In addition, vertical circulation components like stairs and elevator open directly to office.

Third floor space organization consists of work areas and technical areas. The work area, which is a front office with three workstation groups, ensures client communication in an open office type design. And the technical room and rest room are designed with cell type closed walls, and as a result it is a mixed type office floor. (Figure.5.20)

Figure.5.19. Akbank space organization diagram of second floor

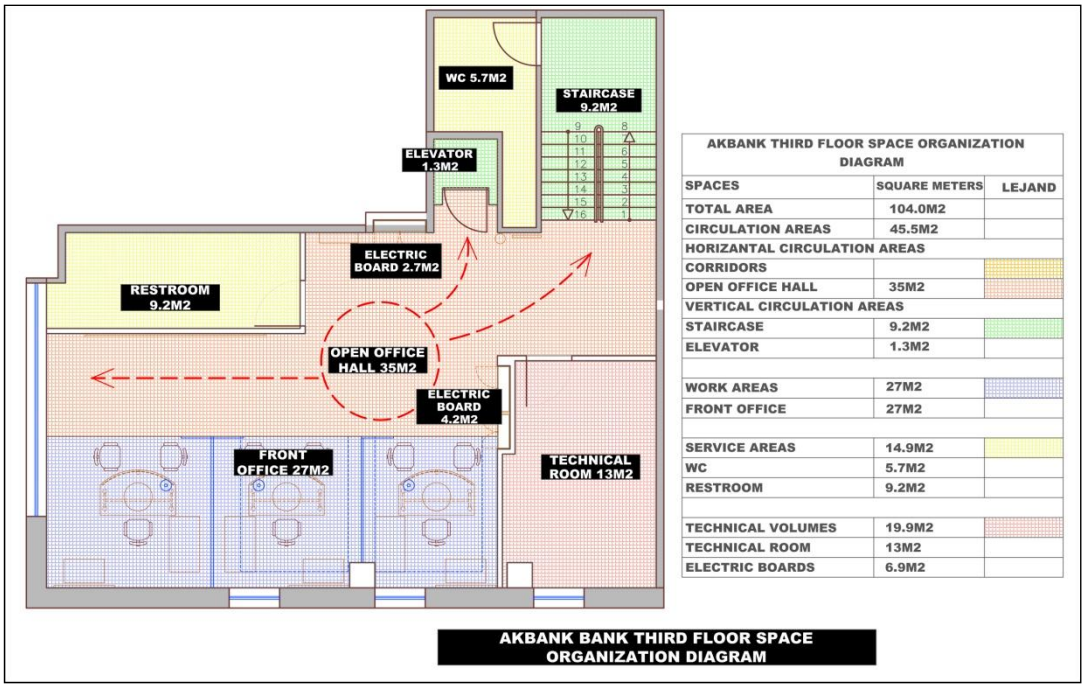


AKBANK SECOND FLOOR SPACE ORGANIZATION DIAGRAM		
SPACES	SQUARE METERS	LEJAND
TOTAL AREA	104.0M2	
CIRCULATION AREAS	44.4M2	
HORIZANTAL CIRCULATION AREAS		
CORRIDORS		
OPEN OFFICE HALL	33.9M2	
VERTICAL CIRCULATION AREAS		
STAIRCASE	9.2M2	
ELEVATOR	1.3M2	
WORK AREAS	50.8M2	
FRONT OFFICE	35.8M2	
DIRECTOR ROOM	15M2	
WAITING AREAS	3.0M2	
SERVICE AREAS		
WC	5.7M2	

And lastly, the fourth floor is designed for service areas and technical areas in the general space organization scheme of bank. This last upper floor is used only for technical and service requirements. Technical areas, such as mechanical rooms both for the bank's climate control system and elevator and electric cabinets, are placed on this floor. Equally, service areas like the kitchen and archive room are also placed on the fourth floor, which is far away from the bank's busy areas where clients' transactions are made and can not be accessed by clients. (Figure.5.21)

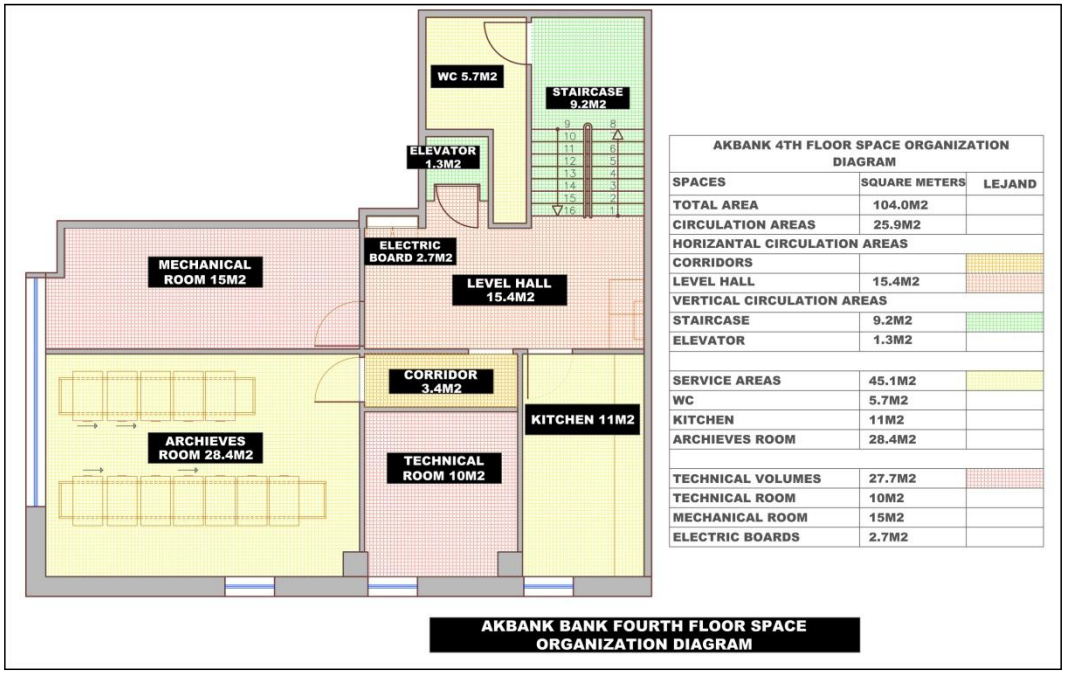
As a consequence, a total space requirements diagram of the bank has been made which demostrates the basic space requirements. Accordingly to the space percentages diagram, circulation areas take the biggest part at total space of bank with 37.6% and then work areas with 34.8% of the total space and service areas 14%, technical areas 9.3 % and lastly waiting areas take the smallest part in the space organization with 1.9% of the total. (Figure.5.22)

Figure.5.20. Akbank space organization diagram of third floor



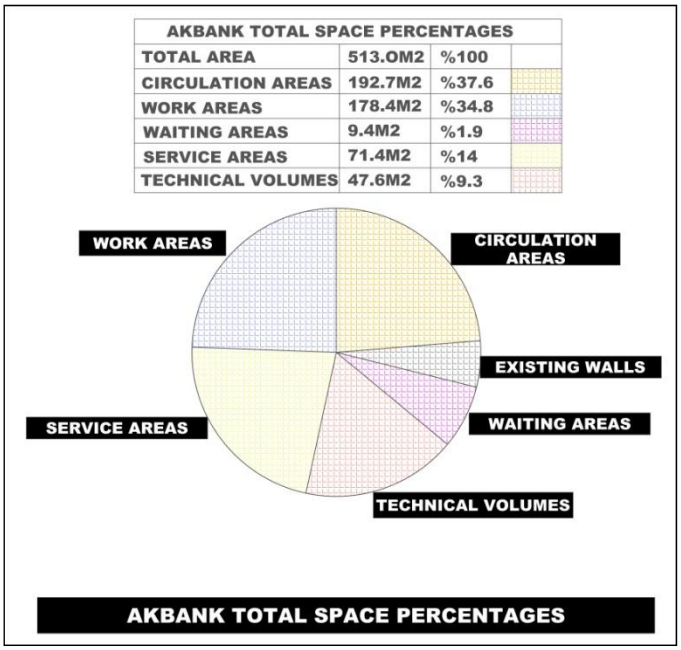
AKBANK THIRD FLOOR SPACE ORGANIZATION DIAGRAM		
SPACES	SQUARE METERS	LEJAND
TOTAL AREA	104.0M2	
CIRCULATION AREAS	45.5M2	
HORIZANTAL CIRCULATION AREAS		
CORRIDORS		
OPEN OFFICE HALL	35M2	
VERTICAL CIRCULATION AREAS		
STAIRCASE	9.2M2	
ELEVATOR	1.3M2	
WORK AREAS	27M2	
FRONT OFFICE	27M2	
SERVICE AREAS	14.9M2	
WC	5.7M2	
RESTROOM	9.2M2	
TECHNICAL VOLUMES	19.9M2	
TECHNICAL ROOM	13M2	
ELECTRIC BOARDS	6.9M2	

Figure.5.21. Akbank space organization diagram of fourth floor



AKBANK 4TH FLOOR SPACE ORGANIZATION DIAGRAM		
SPACES	SQUARE METERS	LEJAND
TOTAL AREA	104.0M2	
CIRCULATION AREAS	25.9M2	
HORIZANTAL CIRCULATION AREAS		
CORRIDORS		
LEVEL HALL	15.4M2	
VERTICAL CIRCULATION AREAS		
STAIRCASE	9.2M2	
ELEVATOR	1.3M2	
SERVICE AREAS	45.1M2	
WC	5.7M2	
KITCHEN	11M2	
ARCHIEVES ROOM	28.4M2	
TECHNICAL VOLUMES	27.7M2	
TECHNICAL ROOM	10M2	
MECHANICAL ROOM	15M2	
ELECTRIC BOARDS	2.7M2	

Figure.5.22. Akbank total space pecentages diagram



5.3.Classification of All Banks Through Optimum Space Requirements

As a consequence, data from all of these bank branches that have been studied under this thesis subject has been collated on common space requirements and a square meters table, and the percentages of spaces such as work areas, circulation areas, waiting areas, service areas and technical areas, and the space requirements of each have been indicated in the total space of each bank branch.

Classification table of bank branches space square meters

Figure.5.23. Classification table of bank branches space square meters

	CLASSIFICATION OF BANKS INTERIORS THROUGH SPACE SQUARE METERS					
	TOTAL AREA	CIRCULATION AREAS	WORK AREAS	SERVICE AREAS	TECHNICAL VOLUMES	WAITING AREAS
TEXTILE BANK SPACE PERCENTAGES	420.0M2	105.2M2	245.0M2	44.8M2	8.0M2	5.5M2
ING BANK SPACE PERCENTAGES	218.0M2	33.1M2	170M2	7.8M2	-	-
TEKFEN EURO BANK SPACE PERCENTAGES	220.0M2	38.6M2	140.8M2	16.4M2	20.9M2	-
YAPI KREDI BANK SPACE PERCENTAGES	112.7M2	13.9M2	68.7M2	3M2	20.6M2	2M2
HALK BANK SPACE PERCENTAGES	206.0M2	105.5M2	88.4M2	-	-	16.4M2
VAKIFBANK SPACE PERCENTAGES	250.5M2	63.6M2	124.5M2	14.1M2	2M2	21.4M2
AKBANK SPACE PERCENTAGES	513.0M2	192.7M2	178.4M2	71.4M2	47.6M2	9.4M2

Classification table of bank branches space percentages

Figure.5.24.Classification of bank branches space percentages

	CLASSIFICATION OF BANKS INTERIORS THROUGH SPACE PERCENTAGES					
	TOTAL AREA	CIRCULATION AREAS	WORK AREAS	SERVICE AREAS	TECHNICAL VOLUMES	WAITING AREAS
TEXTILE BANK SPACE PERCENTAGES	420.0M2	%25	%58.33	%10.66	%1.9	%1.30
ING BANK SPACE PERCENTAGES	218.0M2	%15.8	%78	%3.6	-	-
TEKFEN EURO BANK SPACE PERCENTAGES	220.0M2	%17.5	%64	%7.45	%9.5	-
YAPI KREDI BANK SPACE PERCENTAGES	112.7M2	%12.4	%61	%2.7	%18.3	%1.8
HALK BANK SPACE PERCENTAGES	206.0M2	%51.2	%43	-	-	%8
VAKIFBANK SPACE PERCENTAGES	250.5M2	%25.4	%50	%5.7	%0.8	%8.5
AKBANK SPACE PERCENTAGES	513.0M2	%37.6	%34.8	%14	%9.3	%1.9

According to these tables, its demostrated that how space dispersions must be done in general interior. Respectively from big to small space requirements, the space order must be; work areas, circulation areas, service areas, technical volumes and waiting areas in optimum design principles.

Simultaneously, as seen from the table, work areas which consist of front office, box-office, back office, director's offices and meeting rooms, take up the biggest area in space organization with 52.4%. Then circulation areas, which are horizontally such as corridors and entrance halls and vertically such as cores (stairs and elevators), take the second biggest area (28.5%) in the space organization of a bank, as can be seen in the tables.

Classification table of all bank branches through optimum space requirements

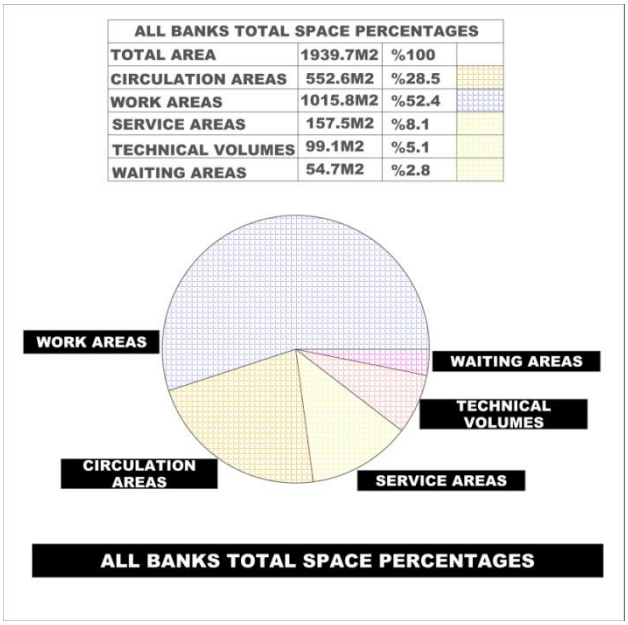
Figure.5.25. Classification of all bank branches through optimum space requirements

	CLASSIFICATION OF ALL BANKS INTERIORS THROUGH OPTIMUM SPACE REQUIREMENTS					
	TOTAL AREA	CIRCULATION AREAS	WORK AREAS	SERVICE AREAS	TECHNICAL VOLUMES	WAITING AREAS
ALL BANKS SPACE SQUARE METERS	1939.7M2	552.6M2	1015.8M2	157.5M2	99.1M2	54.7M2
ALL BANKS SPACE PERCENTAGES	%100	%28.5	%52.4	%8.1	%5.1	%2.8

In addition to work and circulation areas, service areas take the third area in space organization which are the main vault room, rental vaults room with a pre-entrance room, archive rooms, kitchen, WC and cloakrooms 8.1%. Then, respectively, technical areas comes next which consist of system room, UPS room, phone power plant, climate control room, electric room and video cameras, security room with 5.1%. And lastly, waiting areas take the smallest part of space organization 2.8% in general space percentages. (Figure.5.25-26)

Classification table of all bank branches through optimum space percentages

Figure.5.26. Classification of all bank branches total square meters through optimum space percentages



5.4.Classification of All Bank Branches Through Color Palettes and Level Numbers

Despite space organization and percentages diagrams of all banks, also a color study has been made for each bank and collected under one general ‘Color Palette’ table.

As lastly, the level classification of banks has been achieved by indicating each bank’s level in a table.

Figure.5.27.Color palettes of bank branches own concept

COLOR PALETTES OF BANKS	
BRANDS	MAIN COLORS
TEXTILE BANK COLORS	
ING BANK COLORS	
TEKFEN EURO BANK COLORS	
YAPI KREDI BANK COLORS	
HALK BANK COLORS	
VAKIFBANK COLORS	
AKBANK COLORS	

Figure.5.28. Level classification of bank branches

LEVEL CLASSIFICATION OF BANKS	
BRANDS	LEVEL NUMBER
TEXTILE BANK	3
ING BANK SPACE	1
TEKFEN EURO BANK	2
YAPI KREDI BANK	1
HALK BANK	3
VAKIFBANK	2
AKBANK	5

6
CONCLUSIONS

6.1.Recommendations for Bank Interior Designs and Furniture

Space Organization of a Bank:

Studies in bank branches undertaken were: a poll, survey, detection of the existing interior space with furniture and components. The results of the research on the design of bank branches determined how a bank branch should be organized.

Bank branch interiors are spaces that are designed in open and mixed type bureau systems as space organizations. They include both office type requirements for front office areas where an open office type is needed, and for the contribution of back office areas, service and technical areas closed, cell rooms are needed. Therefore as a total design of a bank interior, a 'mixed type office' design is required.

First, a bank branch in terms of spatial organization and the interior settlements. If we consider a basement, ground floor and mezzanine (1st floor) for at least three layers as functions of spatial organization must be, these layers should be as follows;

On the ground floor, a spoiler can be placed at the entrance but if the bank is in a shopping mall, the spoiler section cannot be designed. An entrance hall with security, an information desk and queuematic machine must be placed to ensure client direction. Front office box-office units and at least two workstation units for individual client transactions must be arranged on the ground floor, and a waiting area for clients must be included.

Behind front office and box-office units, a back office for bank employees' use only must be arranged. Back office is positioned in order not to be accessed by clients and must be in communication with the front office. In the back office, workstation units, storage units, document cabinets, fax-photocopy machines are located. A staircase is placed in back office areas to access the vault room and rental vaults in the basement.

In addition, internet banking, tele-web, and mobile banking systems are also placed at ground floor near to the entrance hall.

On the basement floor, which is reached by staircase placed at a far point from the interior space so clients can not access it, is mostly placed in a back office area for staff use only. The main vault room, small rental vaults, technical rooms, archive rooms, service rooms for staff use such as the kitchen, WC, cloakroom and restroom can be placed on this floor.

If the bank branch doesn't have a basement floor, these places must be arranged on upper floors of the bank or in rear parts of the interior in tems of privacy and not accessed by clients. These concepts must be designed as mixed-use offices and open office areas should be near the entrance hall that can be reached easily.

On the first floor, there should be offices for directors and assistants and also a meeting room. The first floor can be arranged as a mixed used office type and an open office area can be designed with workstation groups for banking operations. Depending on the square meters of the branch, a secondary box-office can be placed on the first floor. With a box-office area there, a back-office in communication with the box-office and a waiting area for clients must be designed at the same time.

A bank interior organization should be like this.

Interior Components of a Bank

This part includes bank branches interior components as; floor, ceiling and wall materials and their properties.

Floor Materials:

The interior components such as wall, floor and ceiling materials vary according to the bank's own design concepts, but even so there are some specific criteria that are unchangeable.

A bank's ground and first floor levels which are used by clients frequently such as the entrance hall, waiting area and box-office hall must be designed with resistant materials for frequent usage and hygeine resistant materials – granite, for example .

For workstation unit boundaries, a different type of material must be chosen, to make a difference such as hygienic, hard-wearing, resistant, thick carpet or wood, parquet coverings.

The back of the box-office area must often be a fifteen cm raised floor from the general interior to facilitate communication between employee and client. The height of the box-office desk must be one hundred and ten cm or could be one hundred and twenty five cm if a high leveled design is used to provide standing transactions. And a different material from the general interior – for instance, thick carpet or wood material such as parquet - can be chosen for behind the box-office.

If branch is a multi-storey building, a staircase must be designed for common usage with resistant materials like granite or marble, the same as the entrance hall. Of course, all of these materials, colors, patterns and whole designs vary though the general concept of bank.

Wall Materials:

Basically, wall coverings of a bank can be arranged in three parts;

The first group is for the bank's external facade, structural walls and coverings. Here the inside walls are covered with materials that complement the general interior concept of the bank. Mostly exterior walls are constructed of large panes of glass and aluminium materials and solid surfaces designated for advertising boards.

The second group is internal walls, For mixed-use office designs, mostly glass walled rooms are used to allow daylight into interior spaces. Directors' offices, director's asistant and meeting rooms are designed with glass and aluminium materials. And to ensure privacy in these rooms, jalousie systems or sandblasted bands must be chosen.

The third group is other internal group. For cell office designs are mostly made with gypsum board or concrete material. These are areas such as technical rooms, archive rooms, back offices of box-office units, vault rooms and service rooms for staff use only - restrooms, kitchen, WC, for example.

Also for the back walls of box-office units, side walls of entrance halls must be designed by gypsum board walls in terms of placing advertisement boards, mobile and internet banking units. And for the back of workstation groups, gypsum walls can be a good solution for placing cabinets, qyueumatic systems and advertising, information boards for workstation groups.

Ceiling Materials:

In bank branches, ceilings can be designed with gypsum or metal boards as a suspended ceiling. The important point is to design the suspended ceiling with the necessary height for including ventilation and lighting systems. For both gypsum and metal suspended ceilings, we must consider access points to the interior. When we consider acoustic design and noise control design in the interior, thick pvc bants can be used at the access panels.

Mostly in new concept designs of banks, a secondary lower suspended ceiling is designed for artificial lighting and a digital queuing system for box-office and workstation units. They are generally designed together as a whole unit. The materials and colors of ceiling can vary through general interior concept design.

Furniture of Bank Branches:

The furniture groups designed in bank interiors are respectively like this; information-security desk just opposite the entrance; box-office unit; workstation groups both for open office and the back of the box-office. Also director's office furniture, meeting room furniture, waiting area seats, storage units, document cabinets, photocopy-fax furniture, advertising boards, brochure boxes and niches or furniture designed for internet and mobil banking devices.

The information-security desk must be placed just opposite the entrance in terms of orientation. The desk should be a height of hundred-ten cm. and a working table with a seat behind it.

Meeting Rooms:

Designing meeting rooms from totally glass materials can be a better solution in order to increase communication inside the open office. But a jalousie system or sandblasted bands must be designed in the glass divider to ensure privacy when needed. Also glass dividers in directors' offices and director's assistants offices can be designed using the same concept of jalousie or opaque glass for privacy. In meeting rooms, for floor coverings a different material from the general interior can be chosen such as wooden or very thick carpet materials. In meeting rooms, one or two unit document cabinets must be placed and also a projection system from the suspended ceiling must be designed for presentations. All furniture inside the bank must be designed with a harmony through materials, colors and styles consistent with the general concept of the bank interior.

Workstation Units:

One workstation unit must consists of at least one working table, a side cabinet, short cabinet (a mobile design is better), a place in the cabinet for a computer hard disc, a document cabinet behind the table, a working chair, one or two client seats, and a tripod in front of the table. A secondary suspended ceiling about thirty cm. lower than the main ceiling for artificial lighting and a digital sequence number box is needed. A table lamp can be also placed on the

table. Also cables for internet, phone and computer devices must be concealed in the table to avoid cable vision pollution. For douce workstation groups - in addition to these elements, a divider system must be designed between workstation units. These divider, separator systems can be made of glass, wood or metal materials in a harmony with the general concept. Workstation groups must be designed as one, douce and multiple units and added to large area interior organization to ensure sustainability in the interior.

Box-Offices Units:

Box-office desk units must be designed at least 110cm in height for a standing client to conduct business and workstations units in back offices must be at a height of 75cm. The floor behind the box-office can be designed fifteen cm. higher than the general interior to ensure better communication between clients and employees. A shelf at a height of 80cm for bags in front of the desk is necessary for standing clients.

The box-office unit must be placed between two walls which employees can reach from the back office or with a door next to the desk not accessible by clients. Box-office units and workstation groups must be designed under these specifications with a harmony between colors, materials, shapes and forms through the general concept of the bank interior. For box-office desk designs, generally chrome, wood and glass materials are used.

Waiting Areas:

Waiting areas must be placed opposite or near box-office units and designed together with box-office units in the interior organization to ensure clients see the sequence number boxes easily. The umbers of waiting seats vary through the capacity and square meters of the bank. Except for box-office units, for individual business and also waiting areas, seats must be considered and positioned.

Ventilation and Climate Control Systems:

Ventilation and climate control systems are important problems for bank interiors which can be very intensive in daytime. Ventilation of fresh air inside the bank can be solved by in-let and out-let systems from the interior of the ceiling by frequently placed culverts. And a climate control system for hot and cold air can be solved by air-conditioning units inside the ceiling and walls. In addition, air-conditioning units can be placed on the floor where necessary.

Artificial Lighting and Daylight Usage:

The lighting system is another critical system inside the bank to be solved. Daylight usage must be increased in the interior by designing general interiors as open office or mixed-used office types and using transparent dividers as much as possible.

For artificial lighting design, recessed lighting can be used in an interior suspended ceiling system at necessary points. And secondary suspended ceilings designed at a lower height than the general ceiling can be designed specifically for workstation and box-office units.

The digital sequence number system (queuematic) is a priority subject that must be designed in banks in terms of directing clients correctly and making operations easy without causing disorder in the interior.

Just opposite the entrance, a queuematic must be placed near the information desk to ensure clients know where to go directly for pre-operations in the bank interior.

Under these design topics, interior organizations of bank spaces, furniture designs, interior component designs and chosings can be made correctly. For different banks and different concepts these criterias must be applied.

Futuristic New Concept Banking Systems:

Apart from these topics, there are new banking concepts that associate with futuristic concepts like internet banking and self-service banking systems. These concepts are designed in conjunction with modern technology. In these concepts, there are corners consisting of internet, phone and computers to assist clients making their transactions on-line from computer kiosks. These concepts are frequently smaller designs than general bank branches.

6.2. Type plans for interior of bank branch designs and furniture diagrams

In the last phase of this thesis study, the type plans for space organization of a bank branch and funiture diagrams for interiors have been made to demostrate the research and studies that have been done in existing bank branches with literary reviews.

Furniture Organization Diagrams of Bank Branches

Figure.6.1.TYPE-1 FOR FURNITURE ORGANIZATION

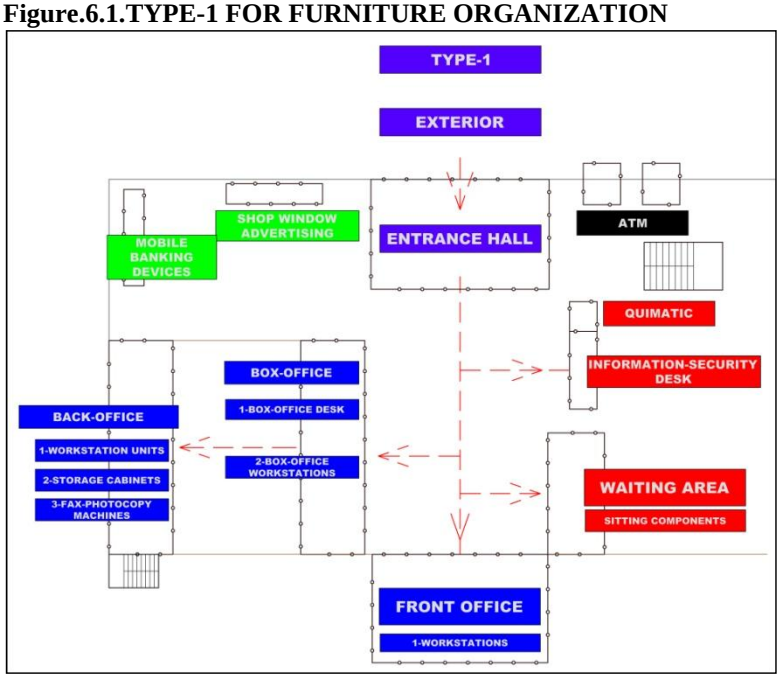


Figure.6.2.TYPE-2 FOR FURNITURE ORGANIZATION

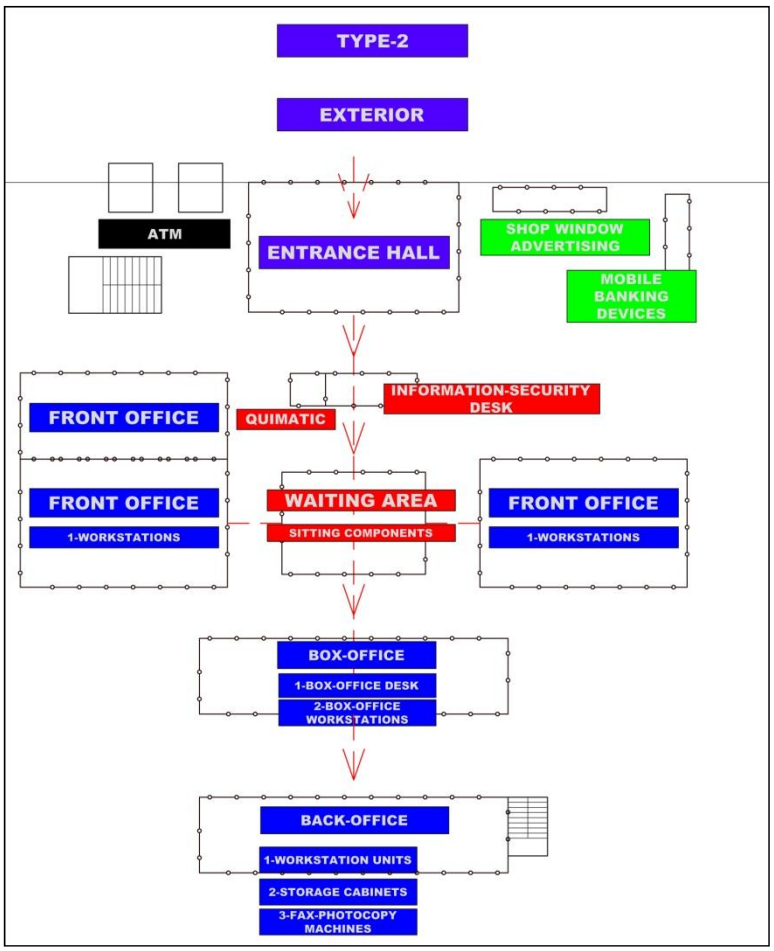
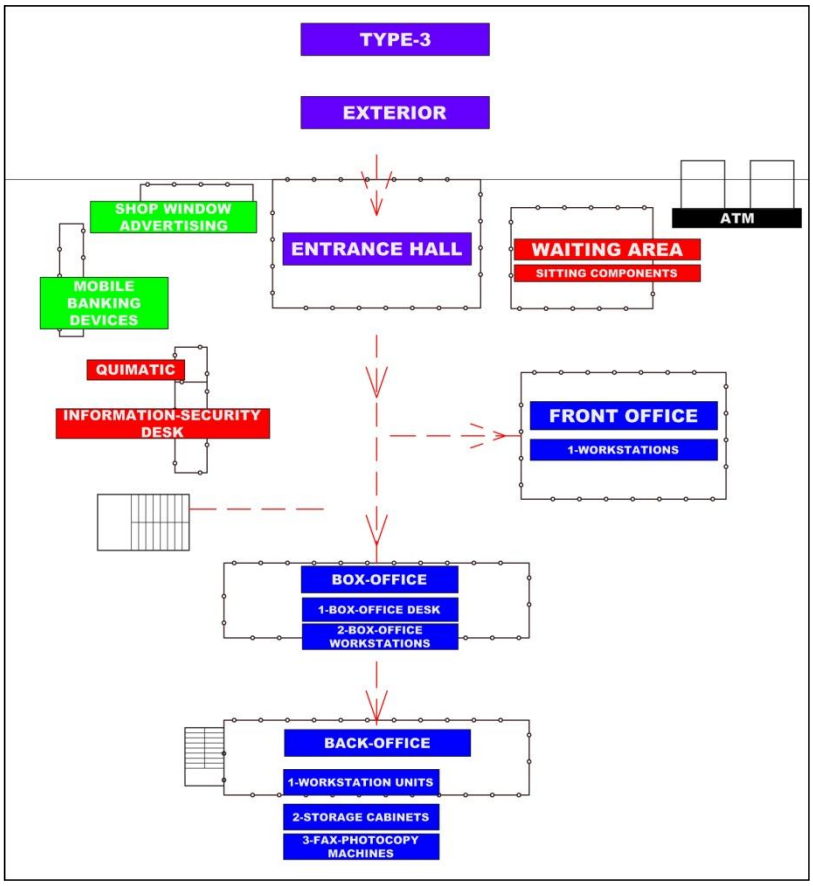


Figure.6.3.TYPE-3 FOR FURNITURE ORGANIZATION



Possible Space Organization Diagrams of Bank Branches

Figure.6.4.Plan types for bank space organization, ground and first floor schemes

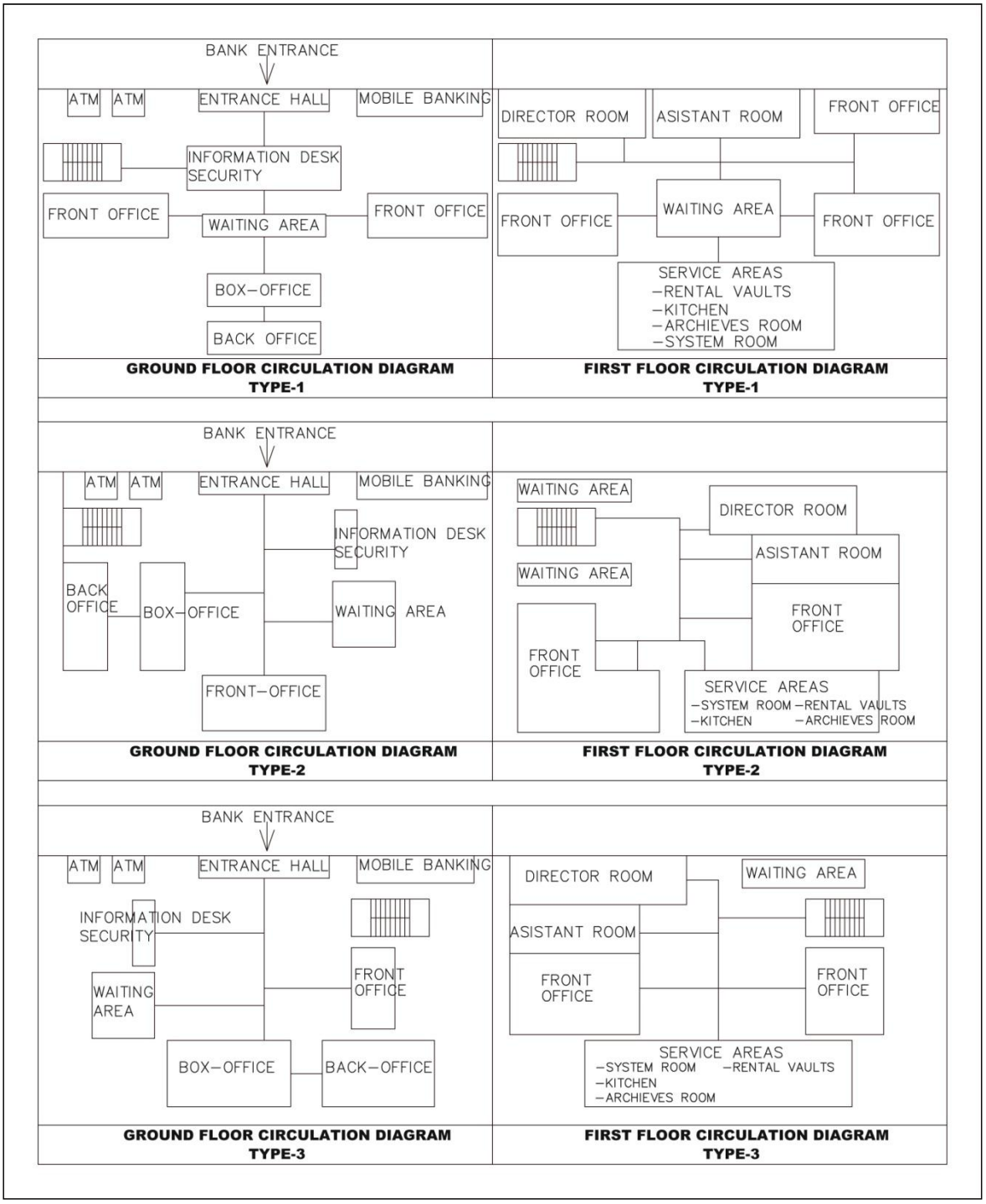
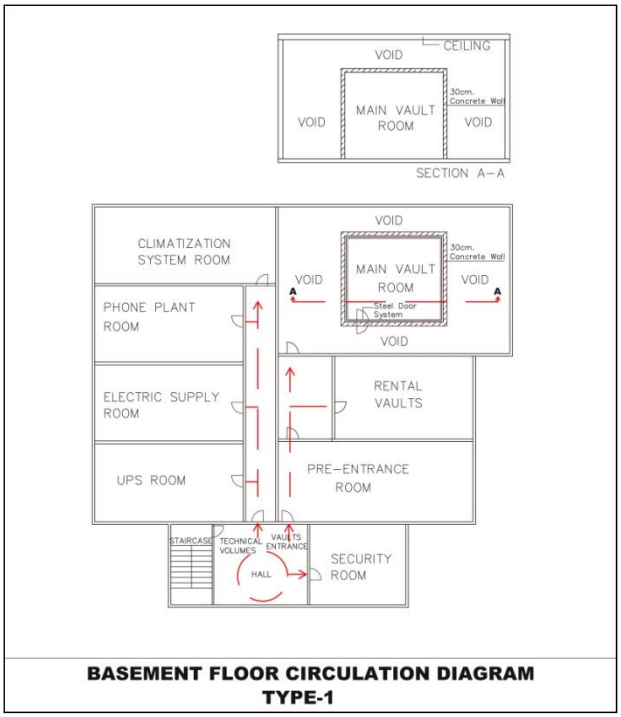


Figure.6.5. Plan type for a basement floor of a bank branch



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APPENDICES

App.1-Plans of Bank Branches Studied

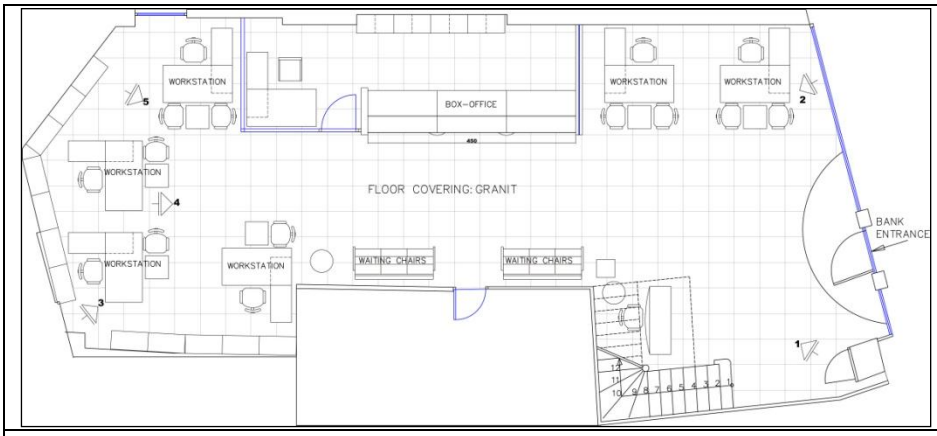
App.2-Furniture of Bank Branches

App.3-Photos of Interiors and Furniture

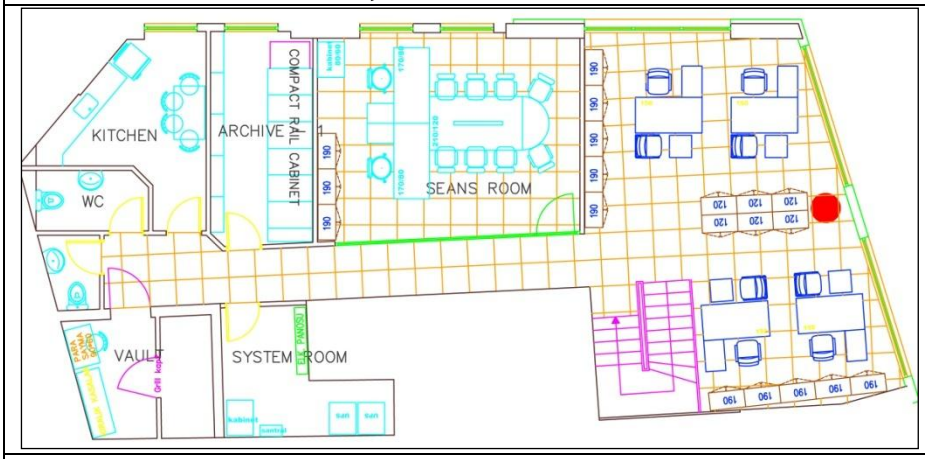
App.4-Questionnaire

Appendix 1- Plans of Bank Branches

(1) TEXTILE BANK (Pasaport Branch), İzmir



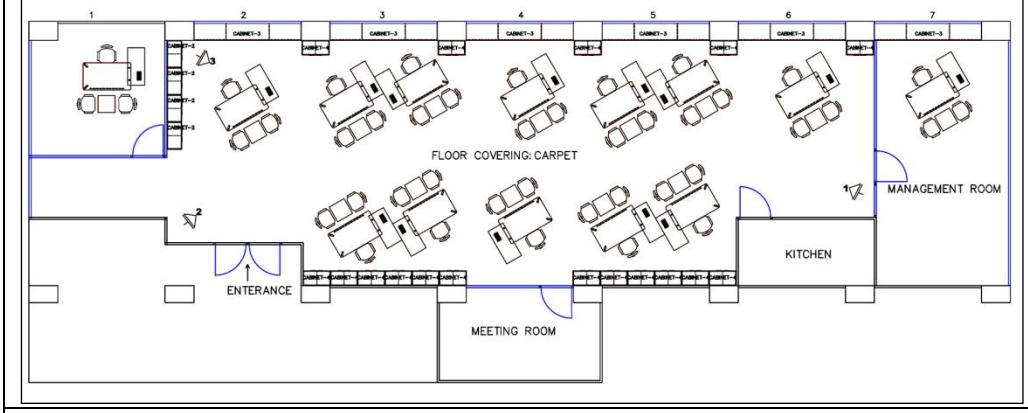
Textile Bank, Ground Floor Plan



Textile Bank, First Floor Plan

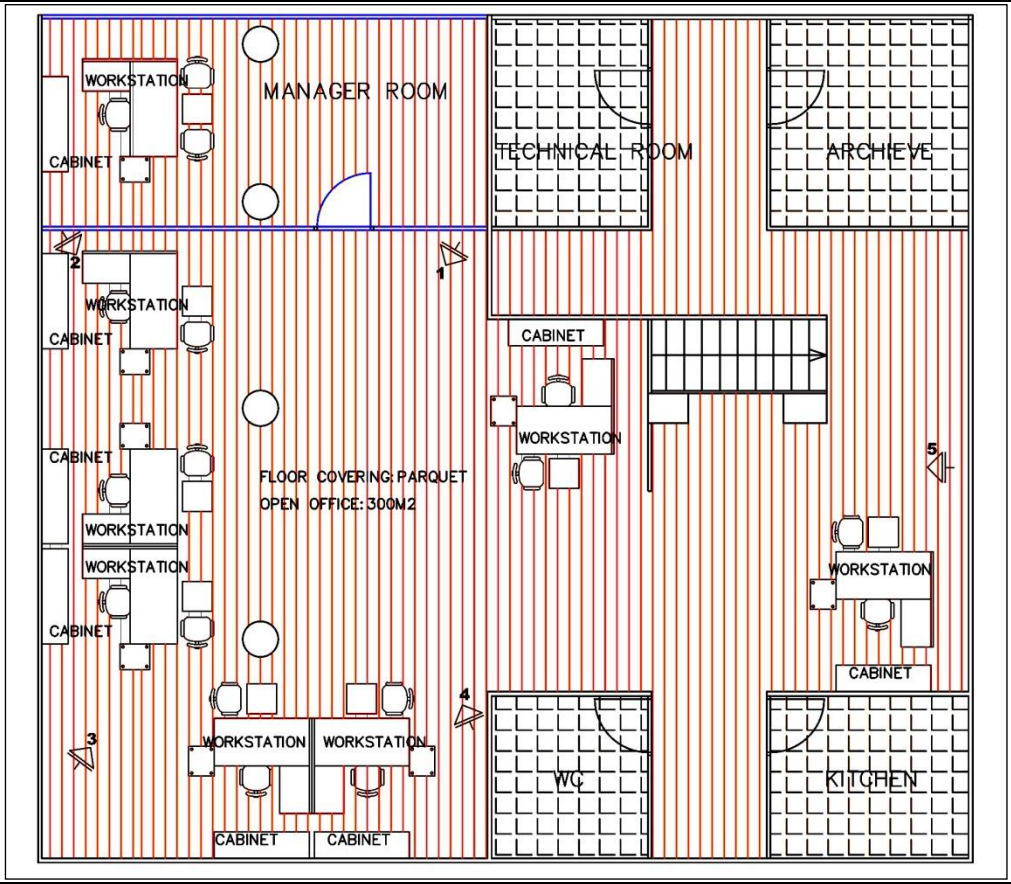
Textile Bank Second Floor Plan

(2) ING BANK PLAN (Pasaport Branch), Izmir.



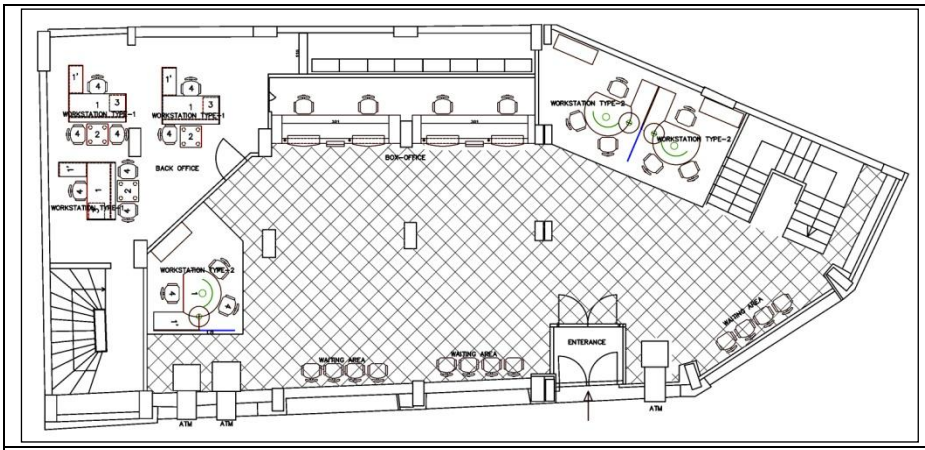
Ing Bank Branch Office Floor

(3) TEKFEN-EURO BANK PLAN (Pasaport Branch), İzmir.



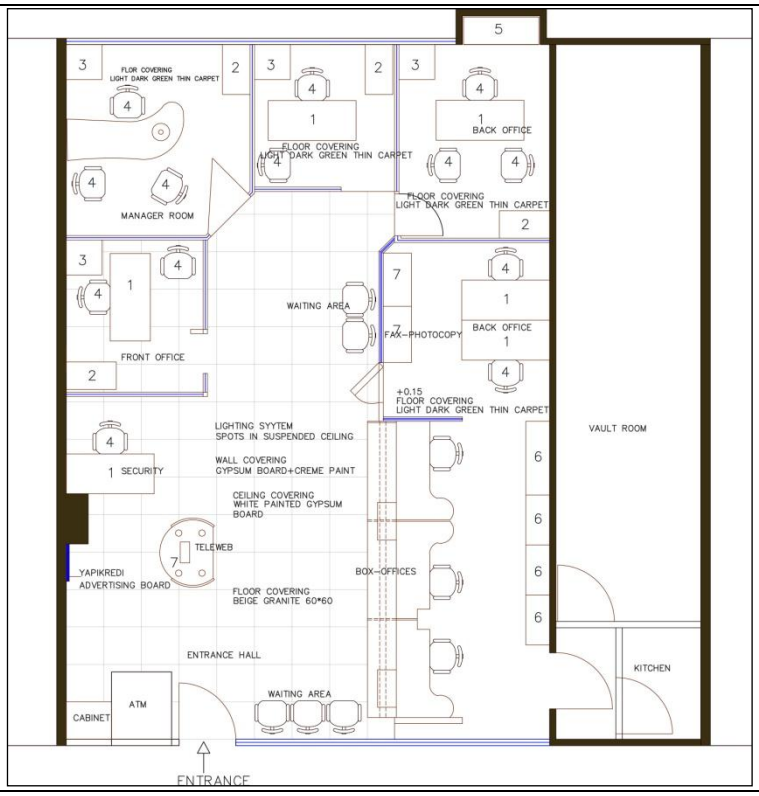
Tekfen Euro Bank First Floor Plan

(4) HALK BANK PLAN (Bornova Branch), İzmir.



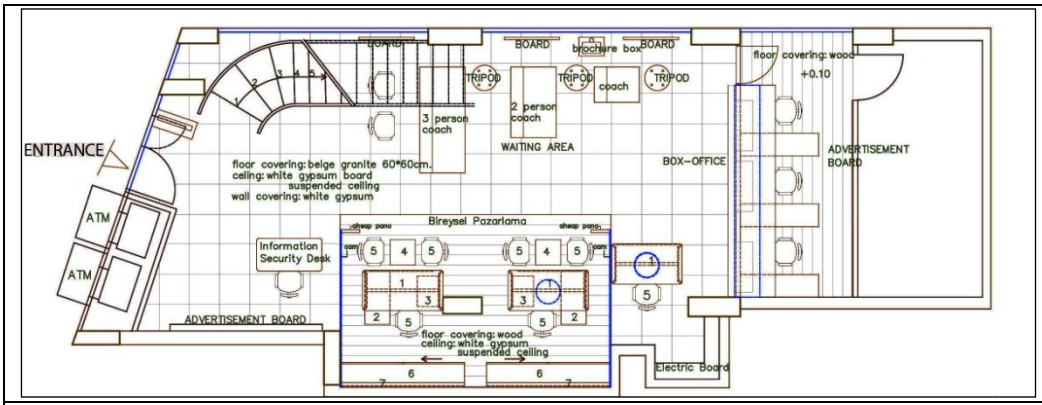
Halk Bank Ground Floor Plan

(5) YAPI KREDI BANK PLAN (Mavisehir Ege Park Branch), İzmir.

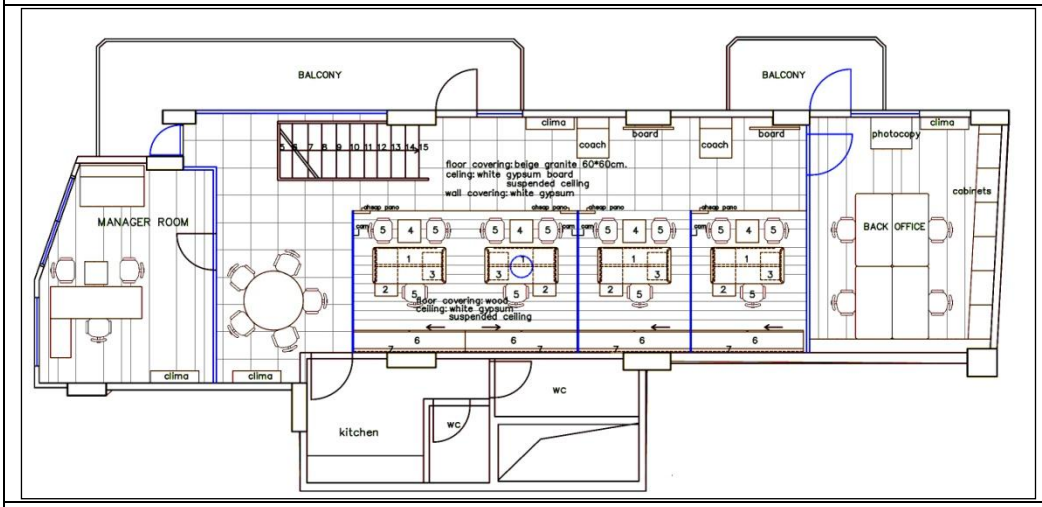


Yapı Kredi Bank Floor Plan

(6) VAKIF BANK FLOOR PLANS (Karsıyaka Girne Street Branch), İzmir.

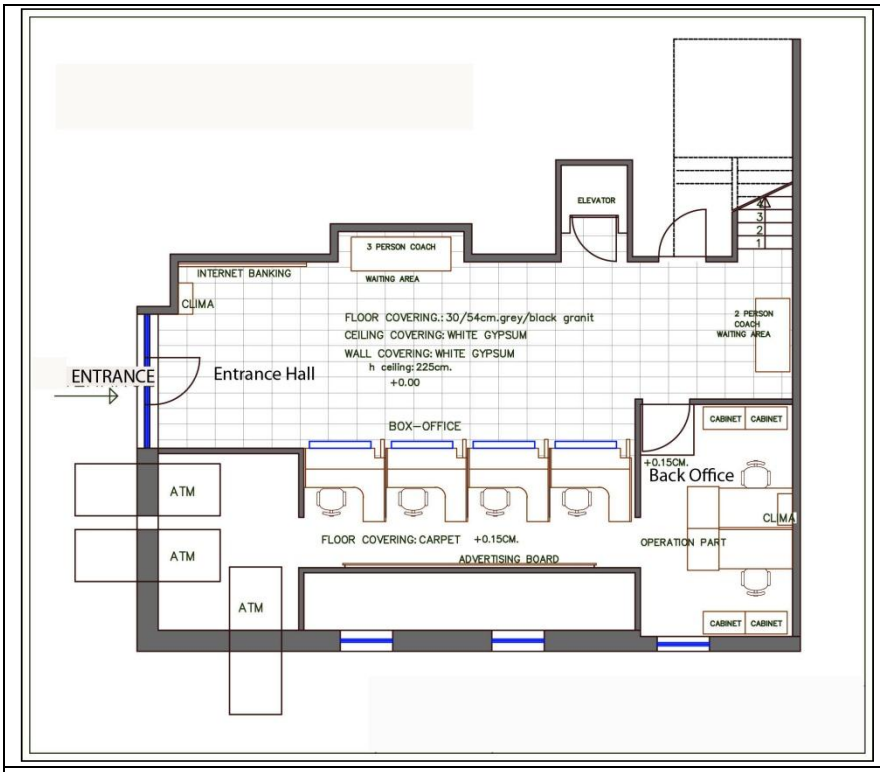


VakıfBank Ground Floor Plan

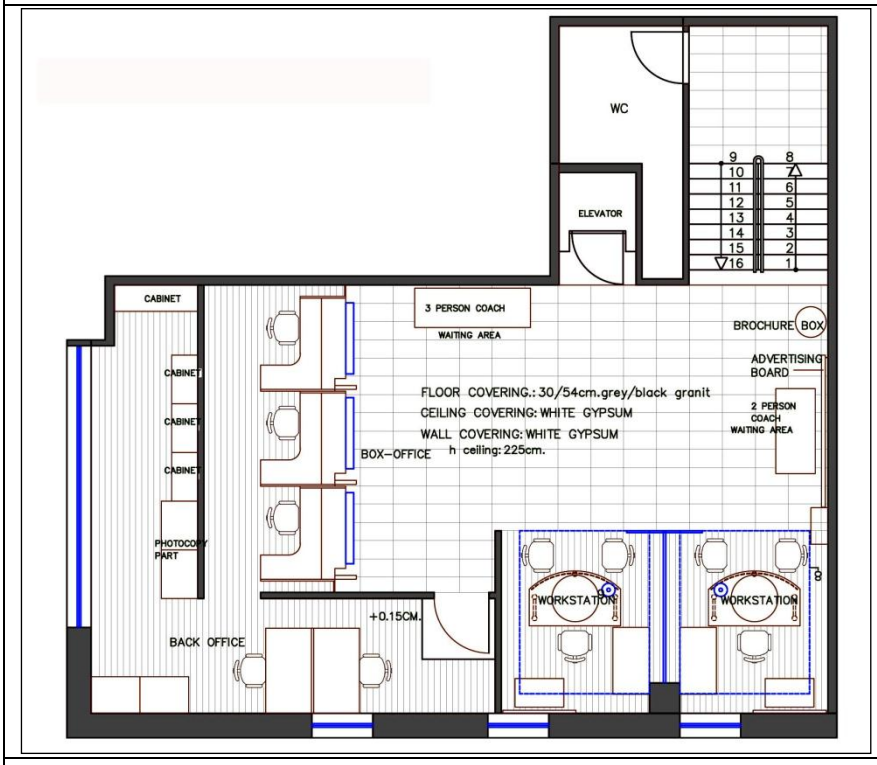


VakıfBank First Floor Plan

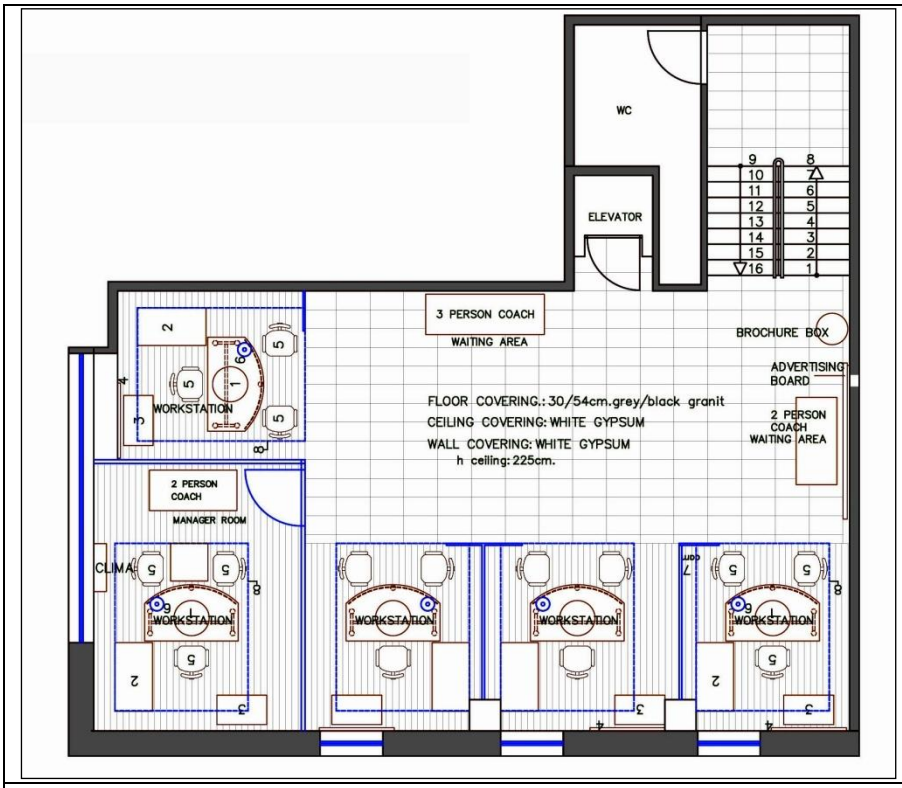
(7) AKBANK FLOOR PLANS (Karsıyaka Bazaar Branch), İzmir.



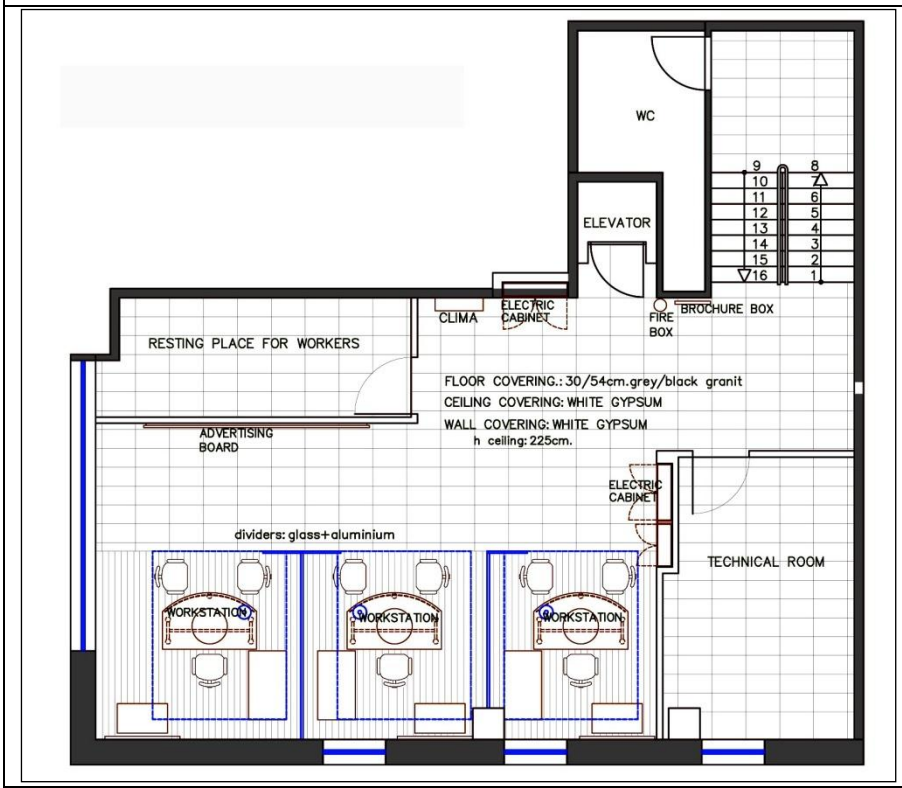
AkBank Gound Floor Plan



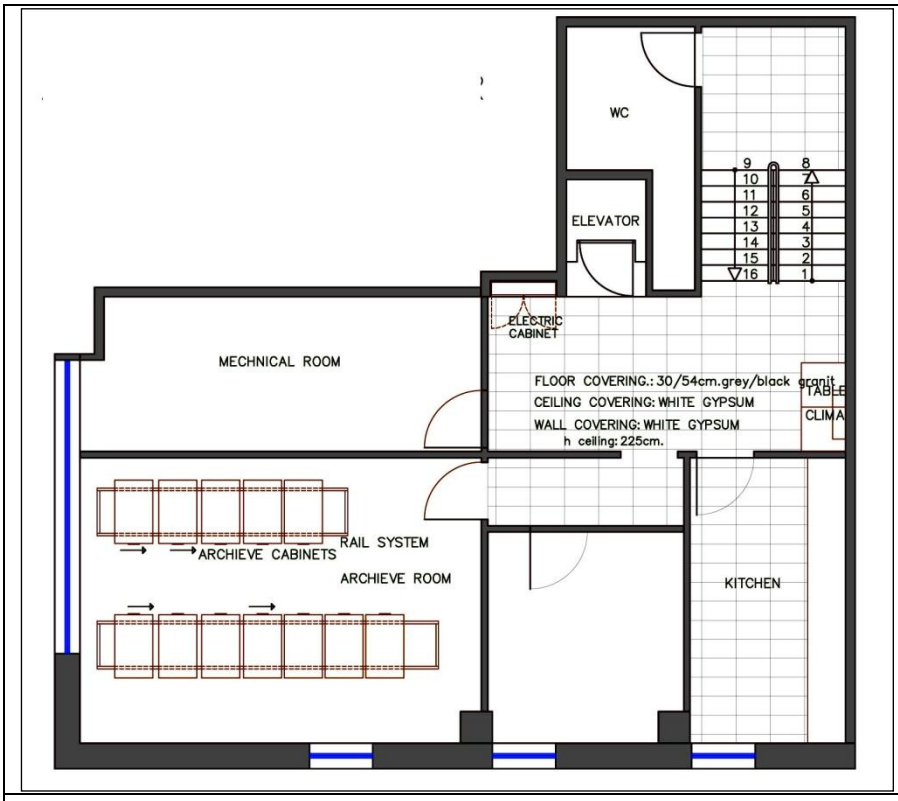
AkBank First Floor Plan



AkBank Second Floor Plan



AkBank Third Floor Plan

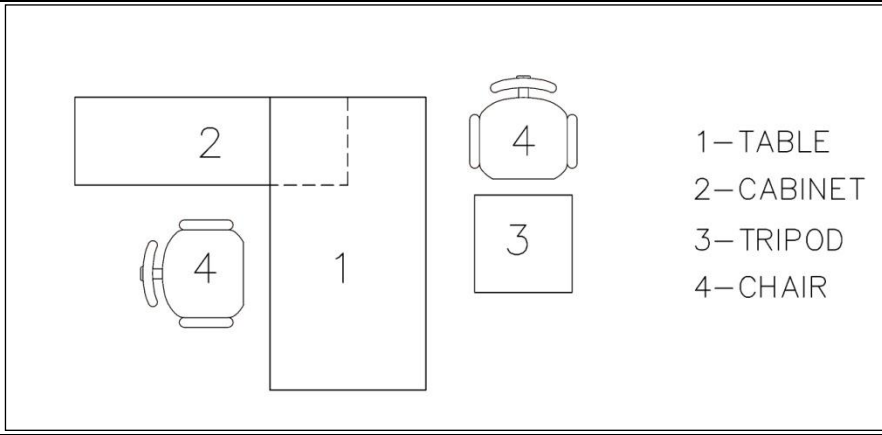


AkBank Fourth Floor Plan

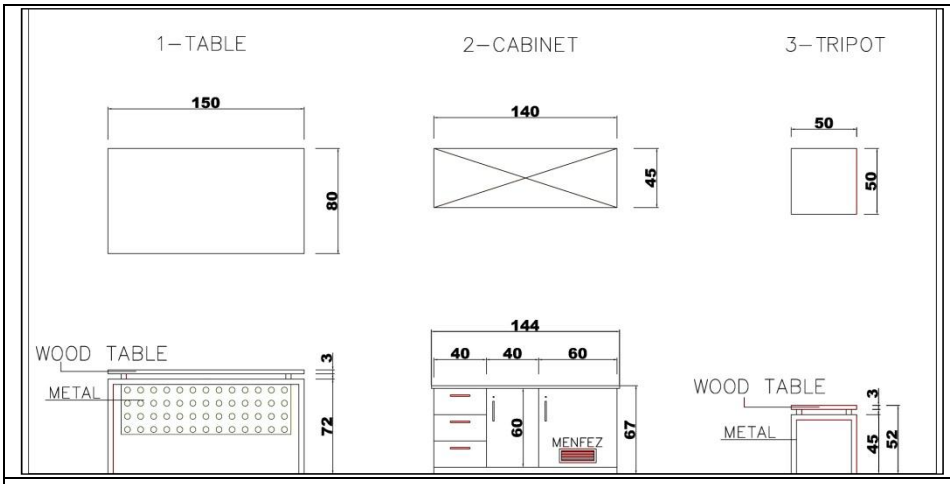
Appendix 2

Bank Branches Furniture

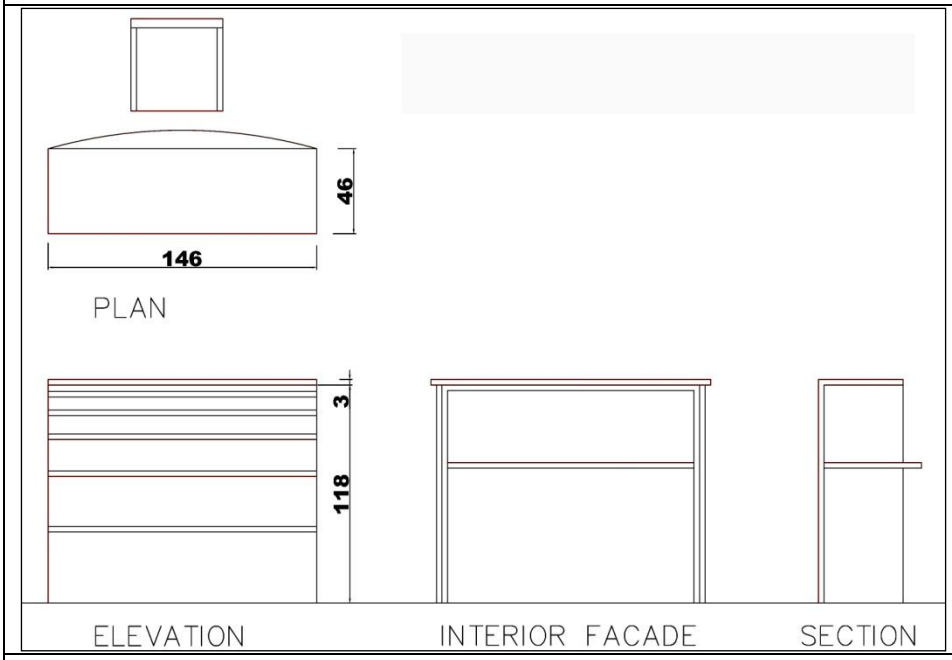
(1) TEXTILE BANK FURNITURE



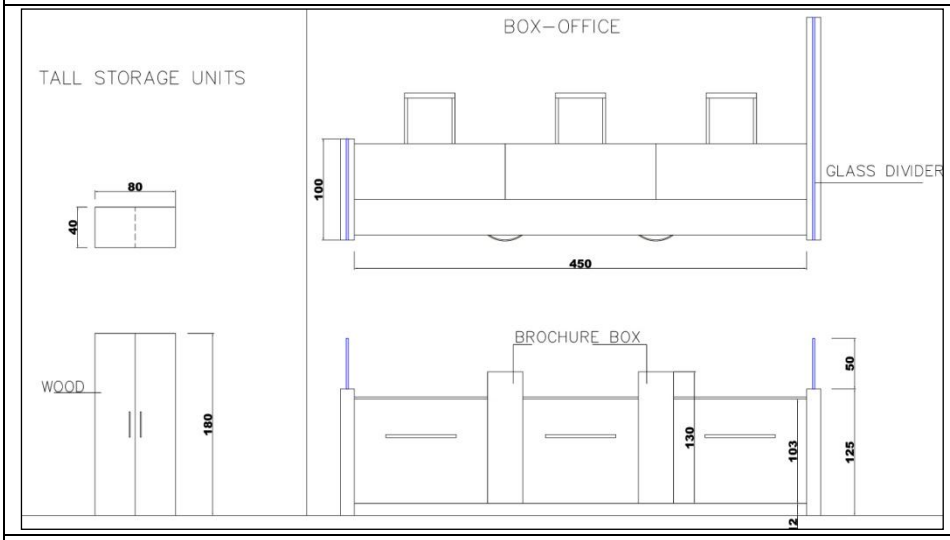
Textile Bank WorkStation Group



WorkStation Furniture

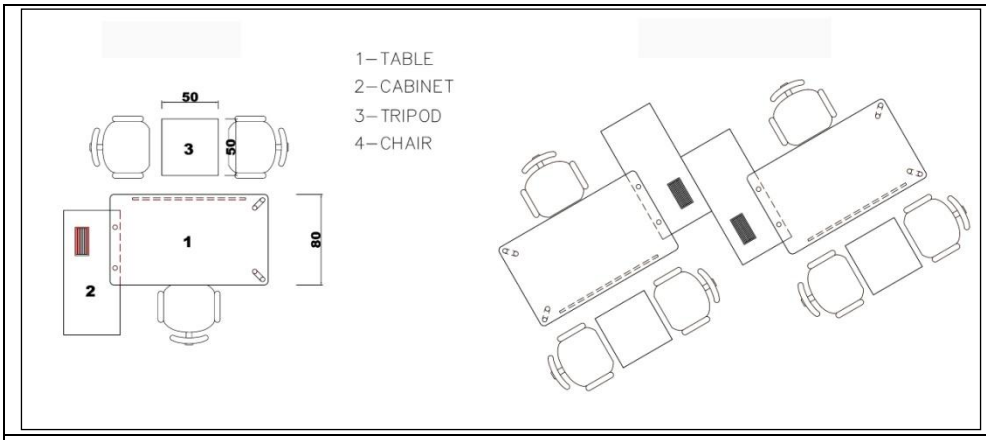


Information Desk

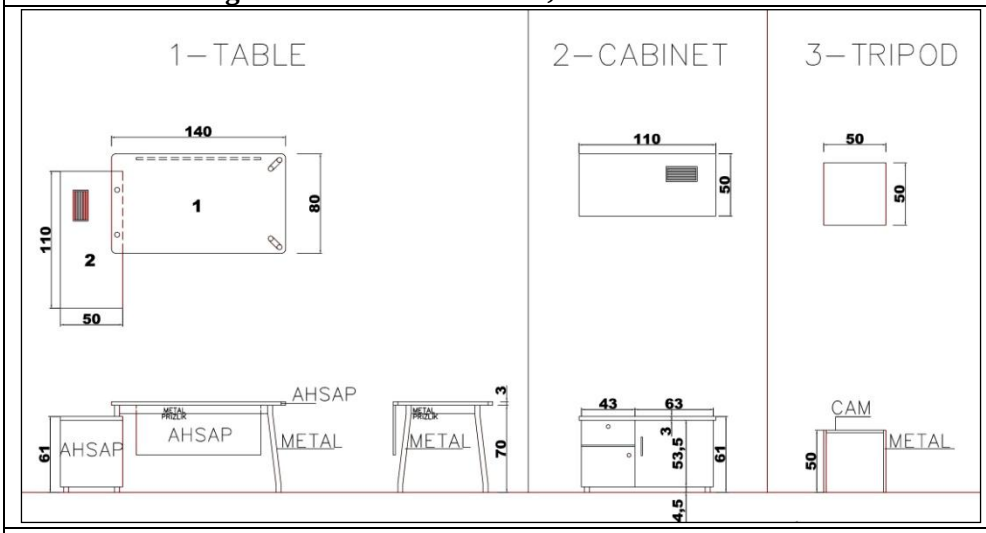


Other Furniture - Box-Office and Tall Cabinets

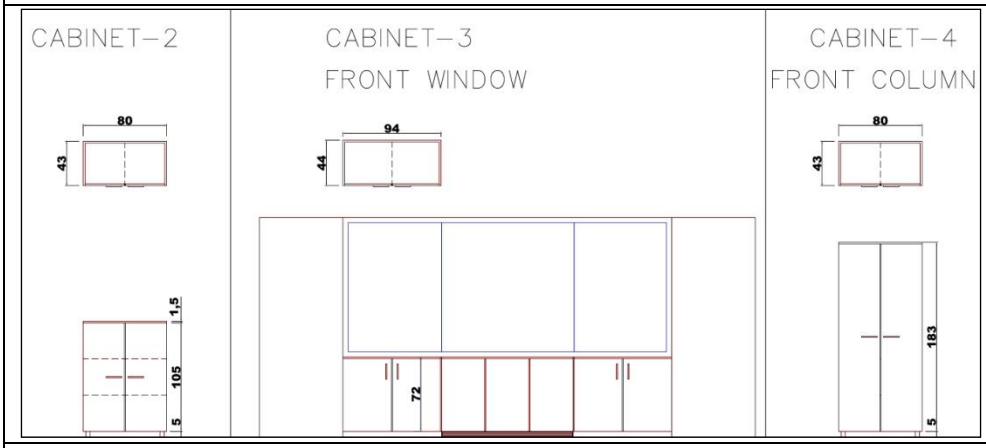
(2) ING BANK FURNITURE



Ing Bank WorkStation Unit, For One and Douce

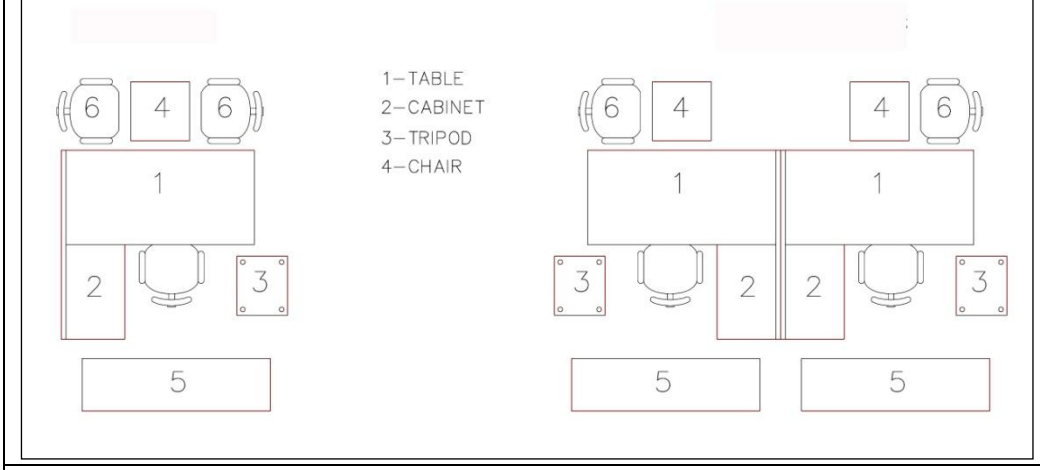


WorkStation Furniture

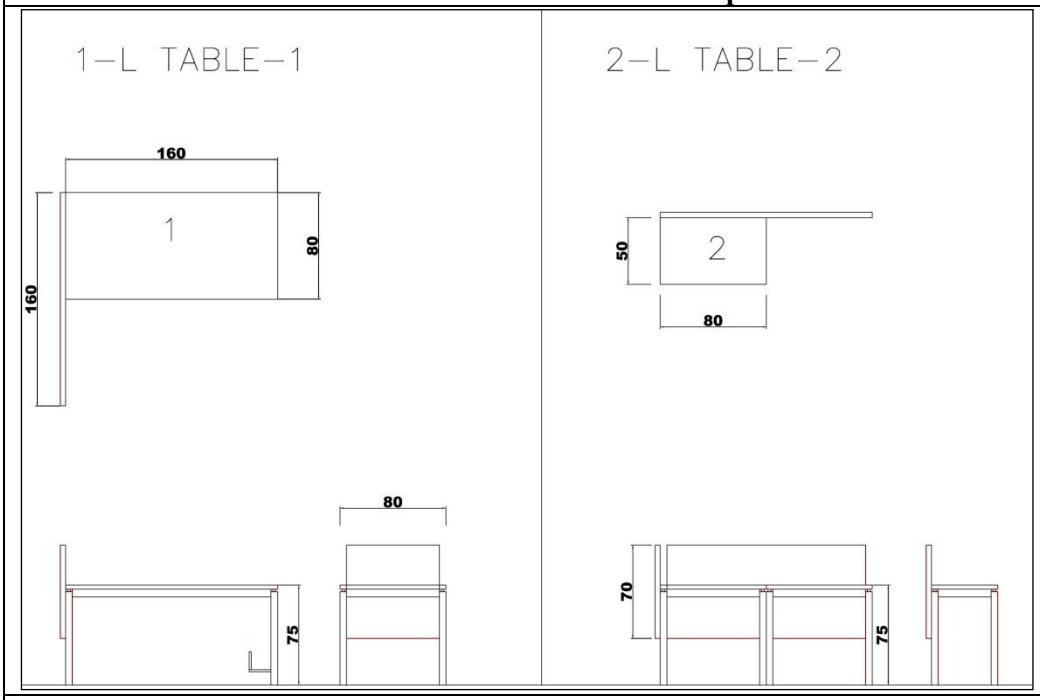


Other Furniture

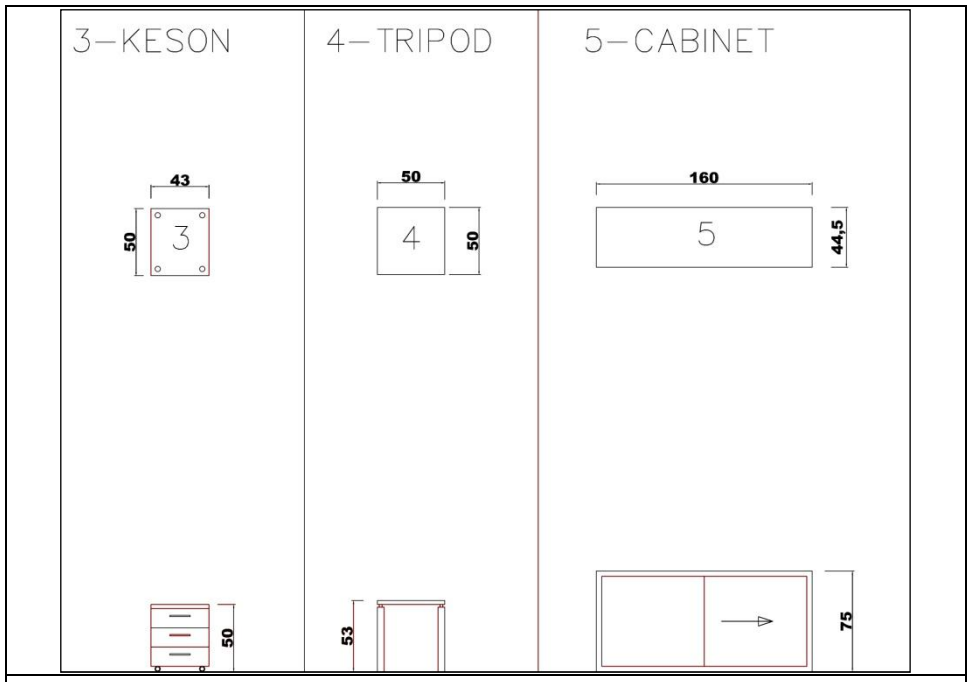
(3) TEKFEN EURO BANK FURNITURE



Tekfen Bank WorkStation Group

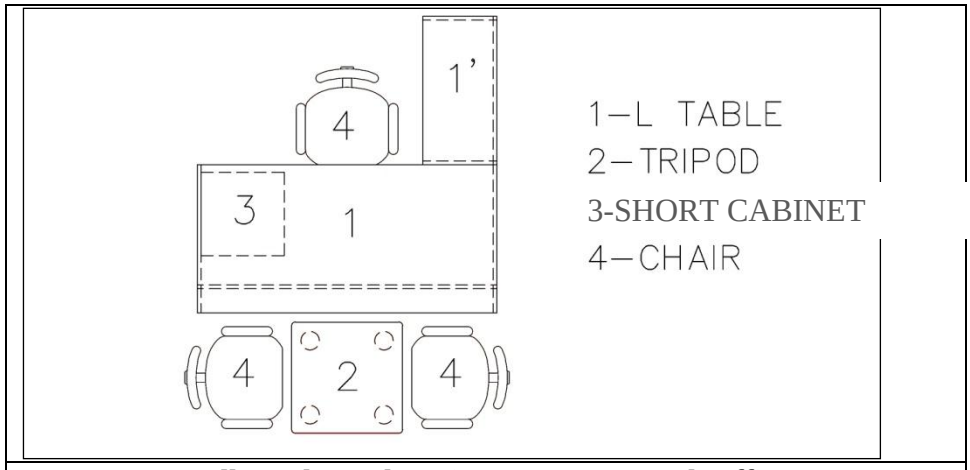


WorkStation Furniture

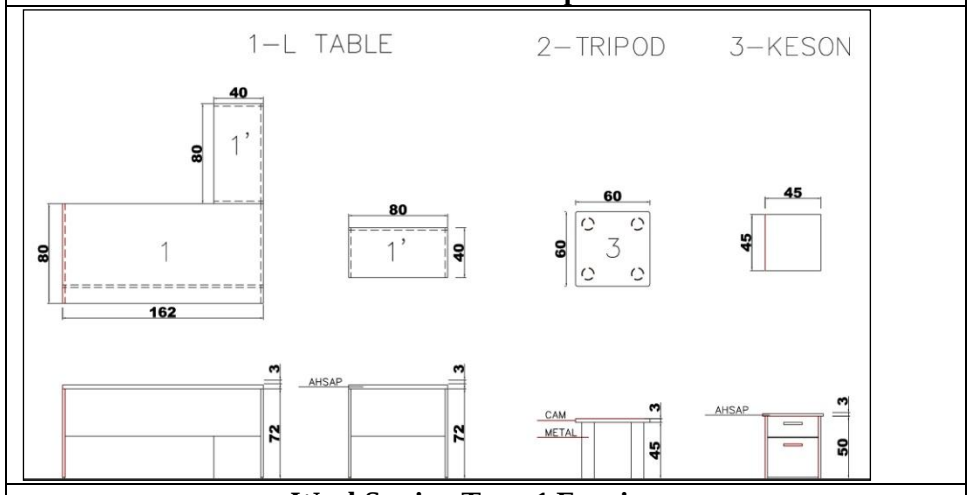


Tekfen Euro Bank Other Furniture

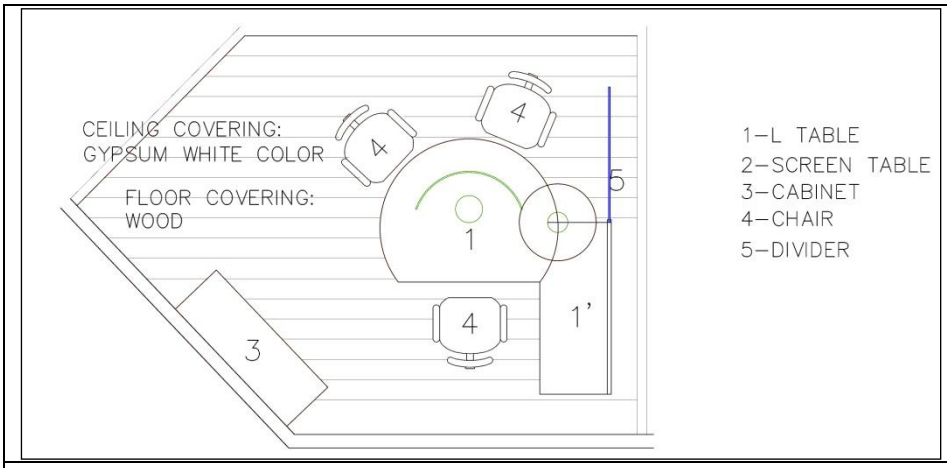
(4) HALK BANK FURNITURE



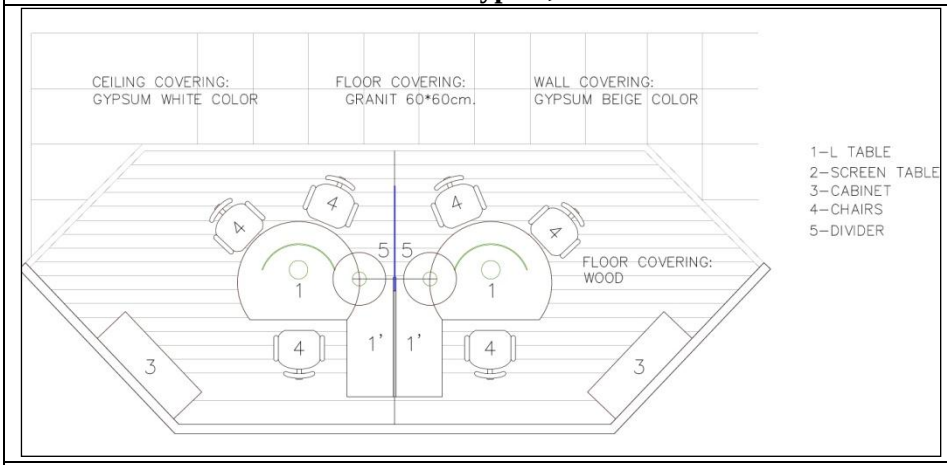
Halk Bank WorkStation Group For Back Office



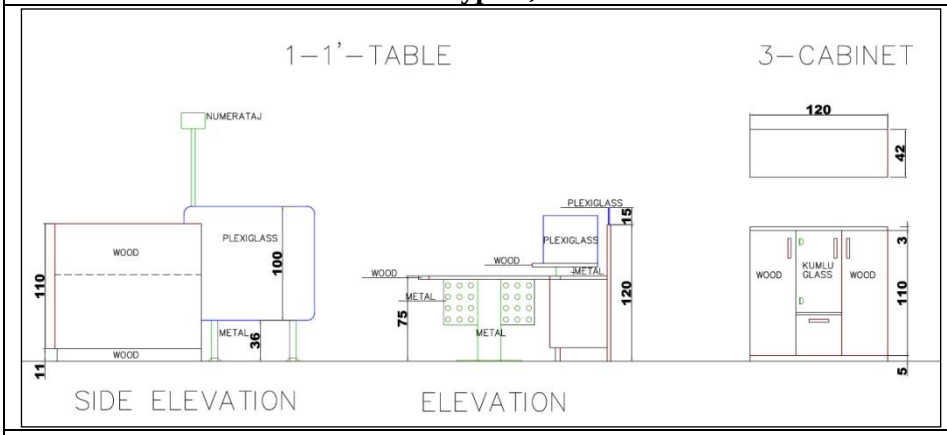
WorkStation Type-1 Furniture



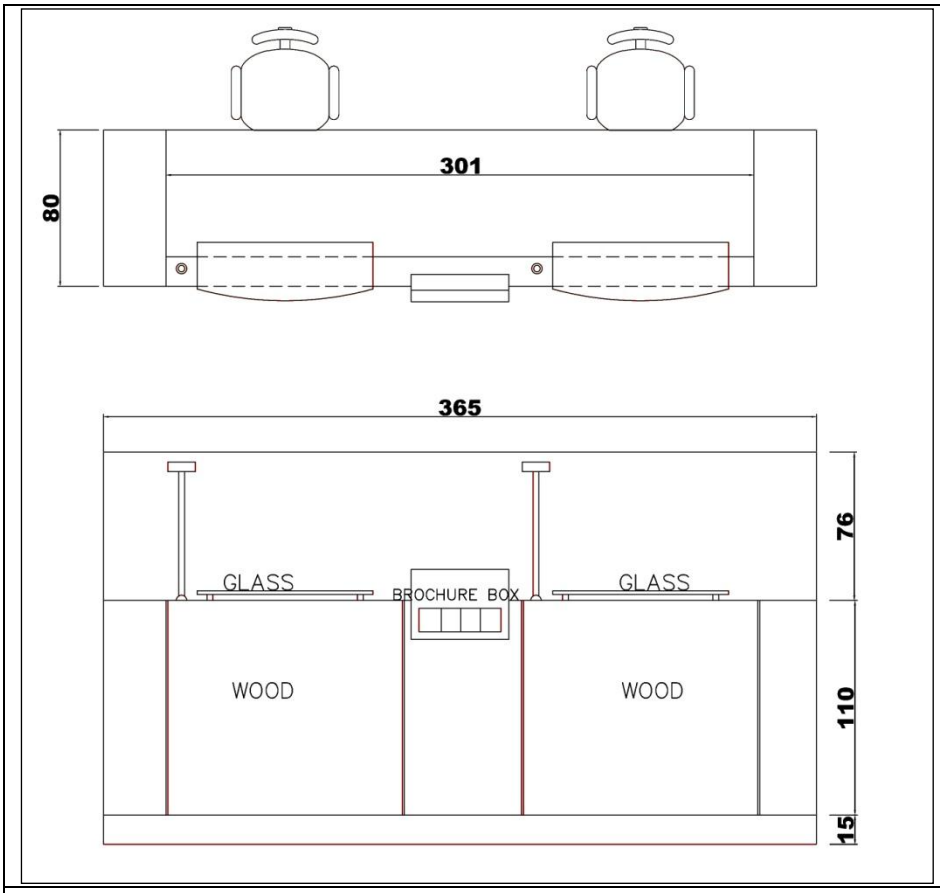
WorkStation Type-2, One Unit



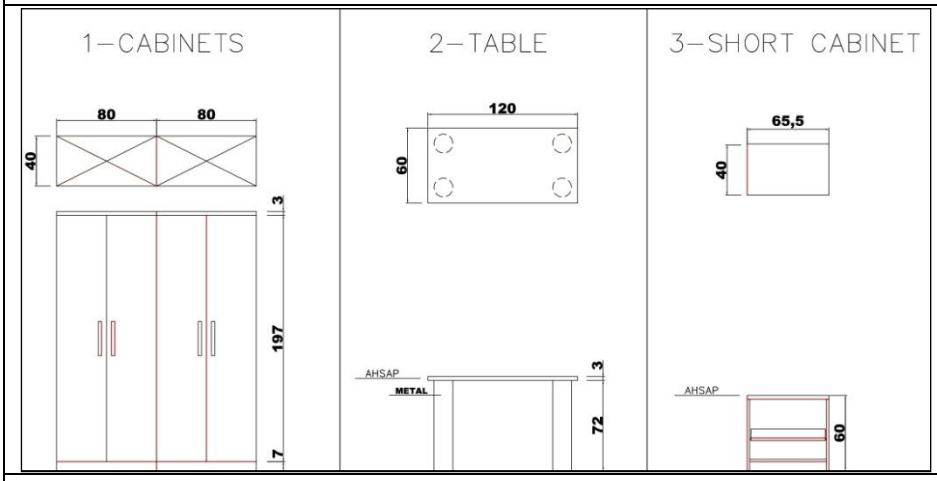
WorkStation Type-2, Douce Units



WorkStation Type-2 Furniture

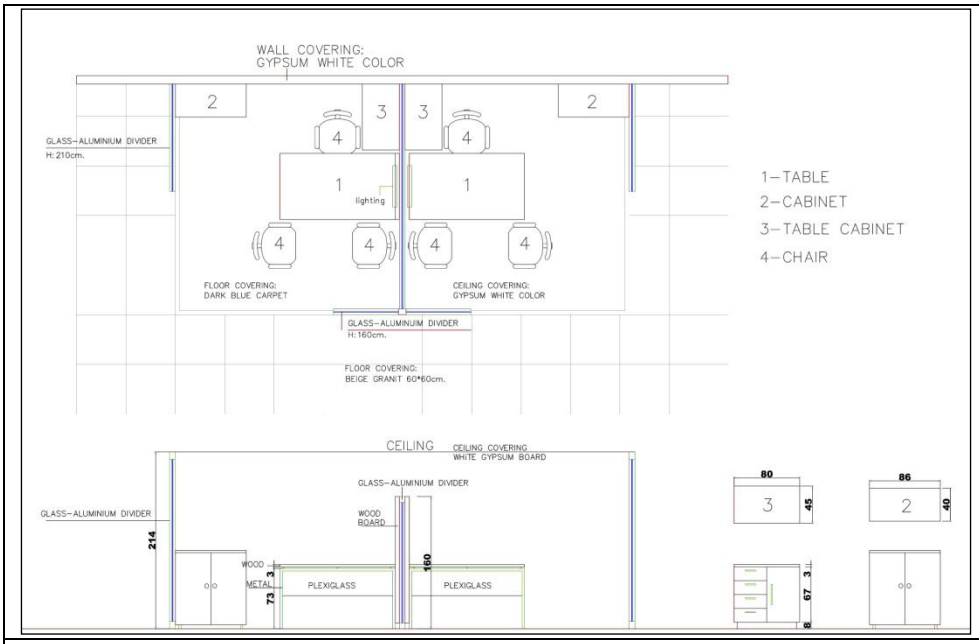


Box-Office Unit



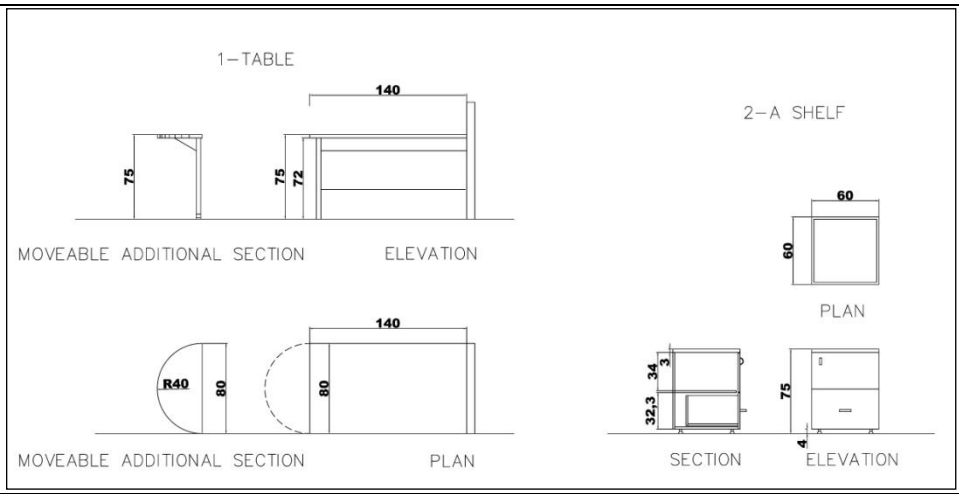
Other Furniture

(5) FINANSBANK FURNITURE

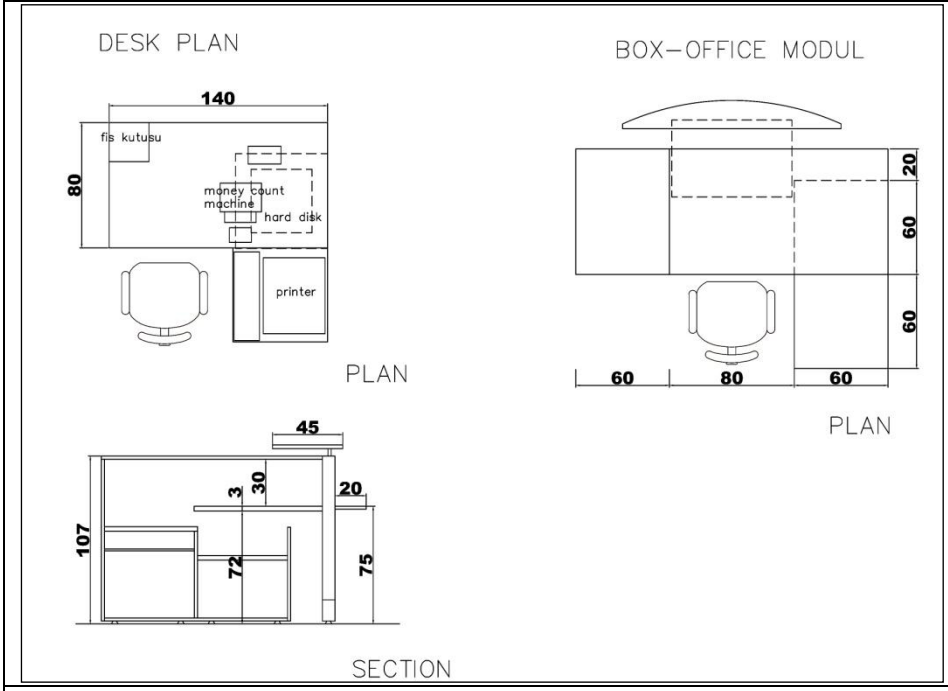


FinansBank WorkStation Group, For Douce Units

(6) ISBANK FURNITURE

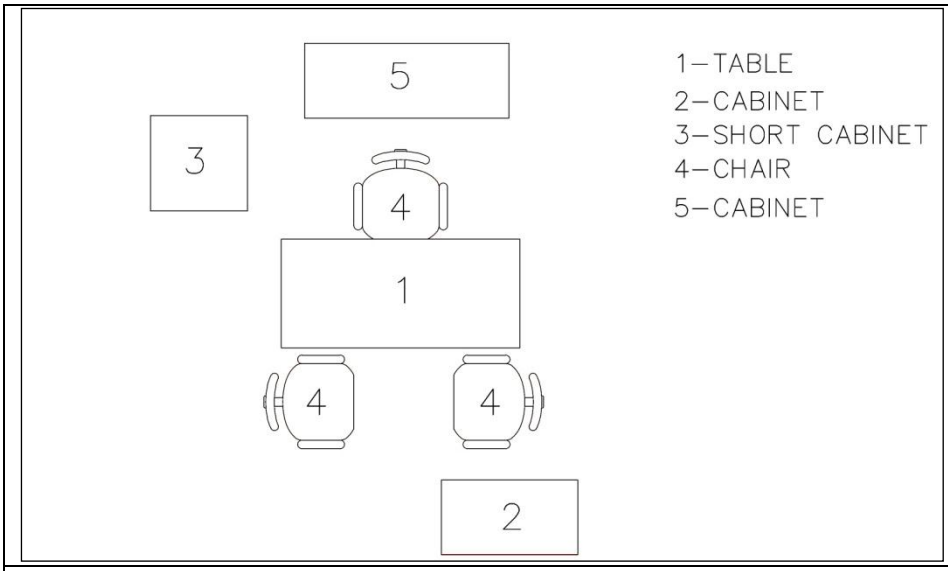


IsBank WorkStation Group

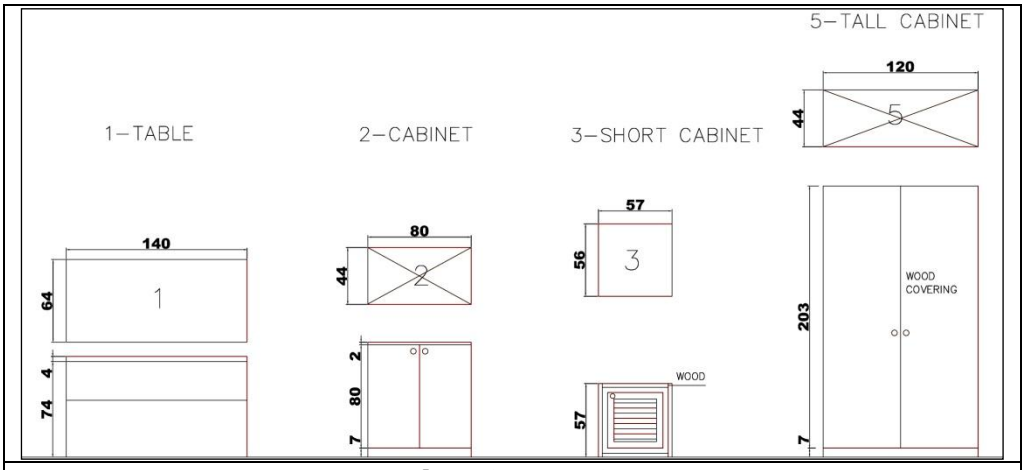


IsBank Other Furniture

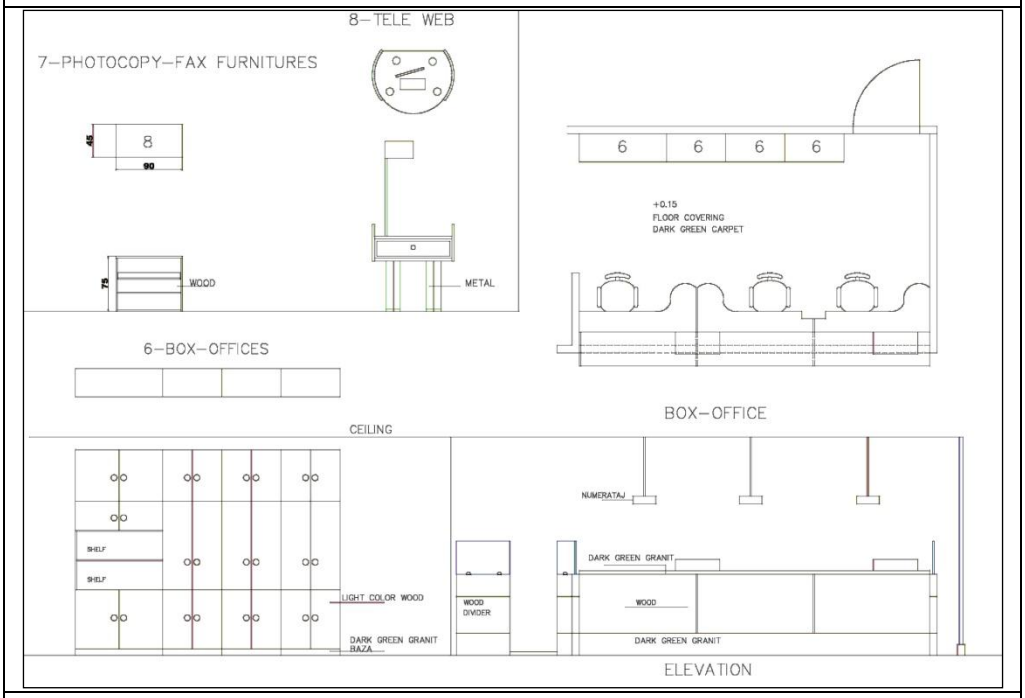
(7) YAPI KREDI BANK FURNITURE



YapıKredi WorkStation Group

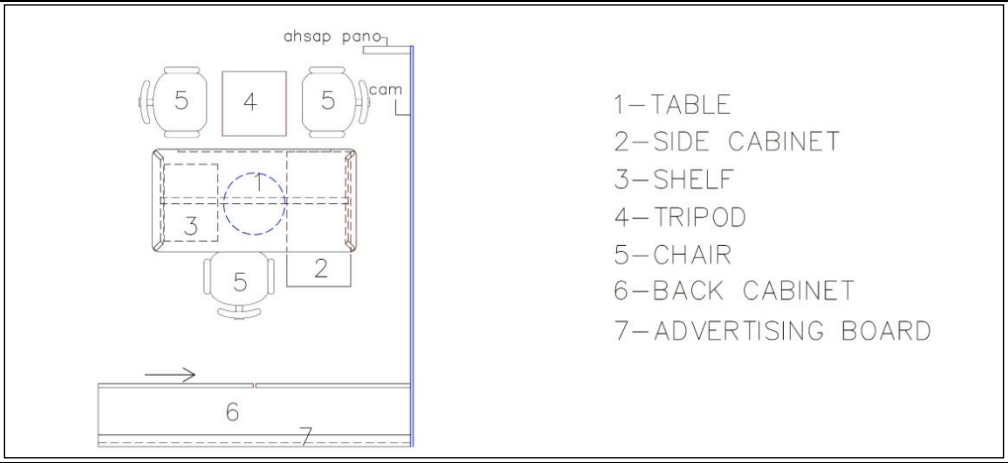


WorkStation Furniture

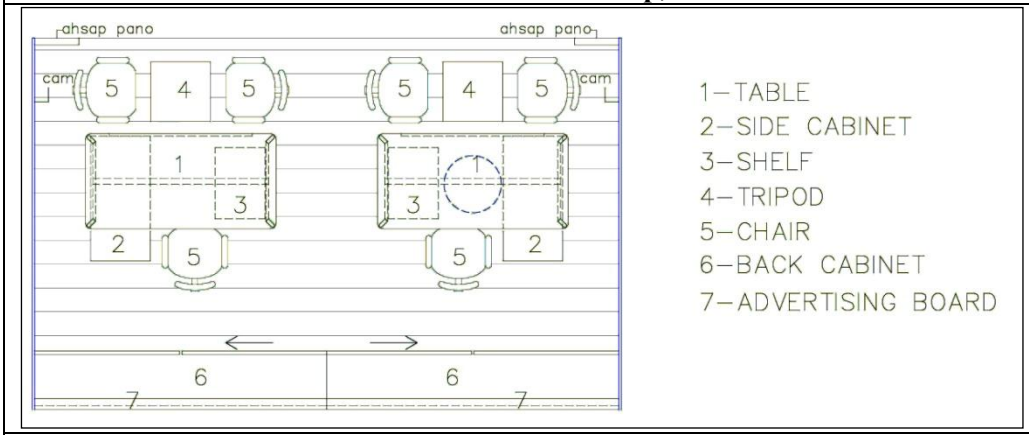


Box-Office, Tall Document Cabinets, Tele-Web

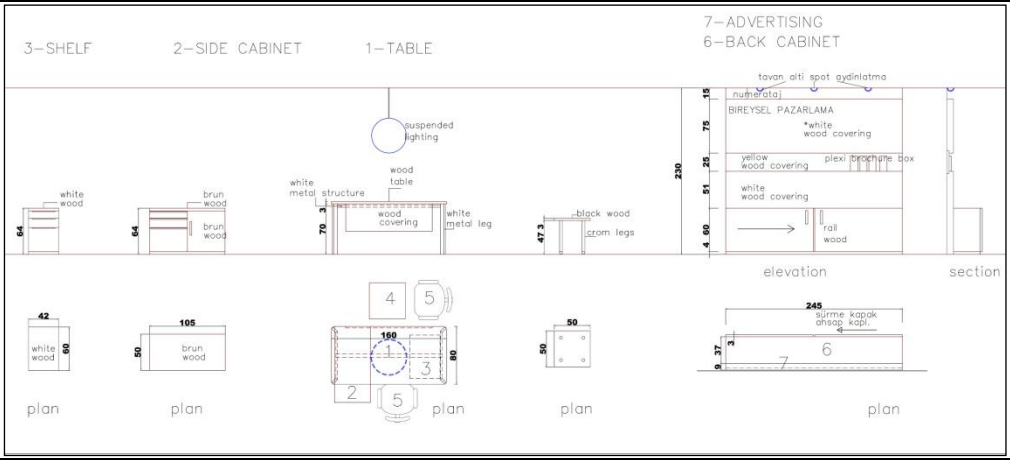
(8) VAKIFBANK FURNITURE



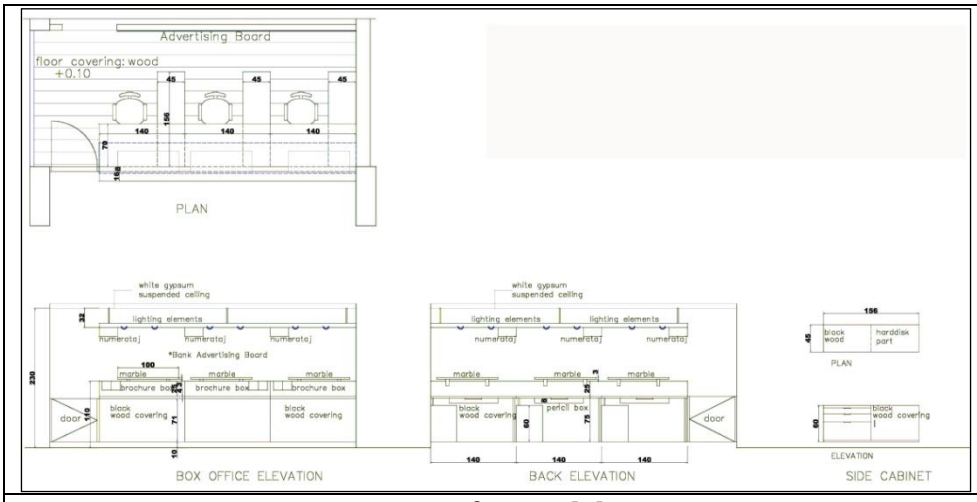
VakıfBank WorkStation Group,One Unit



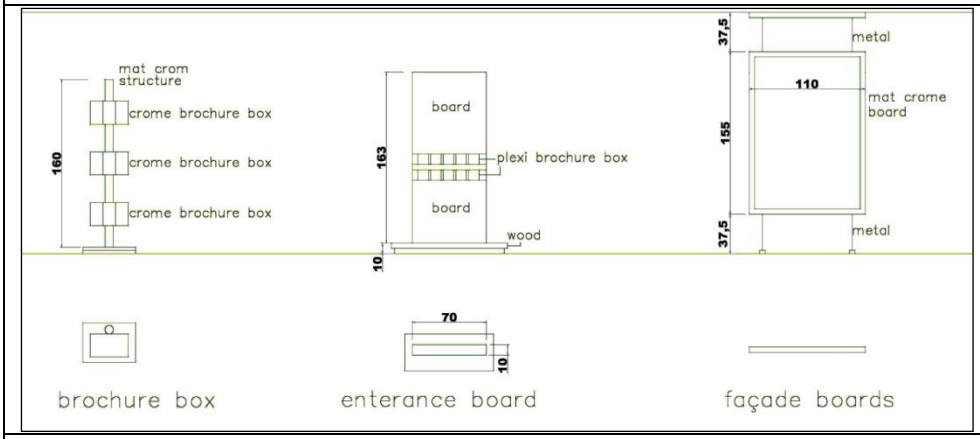
WorkStation Group, Douce Units



WorkStation Furniture

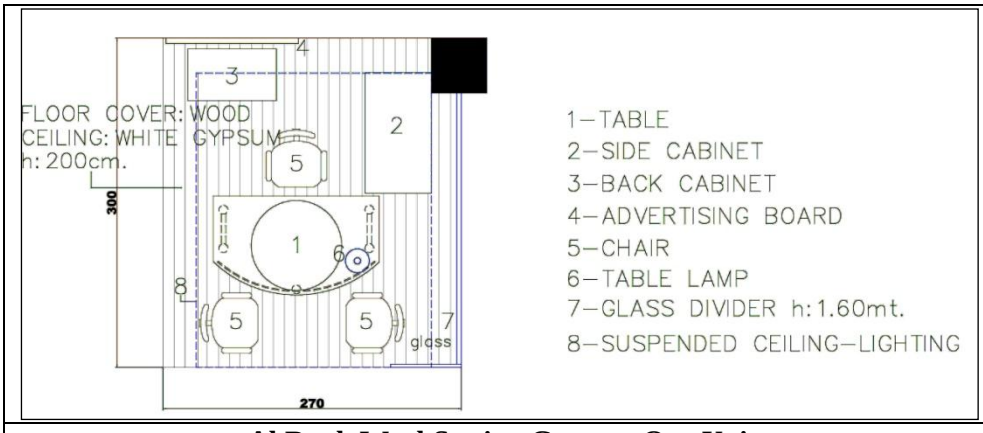


Box-Ofice Module

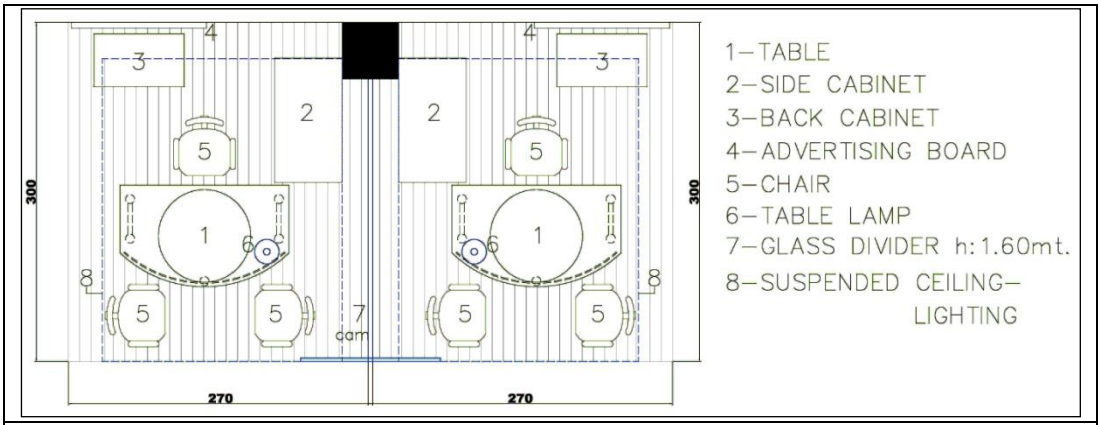


Advertisiment Equipment

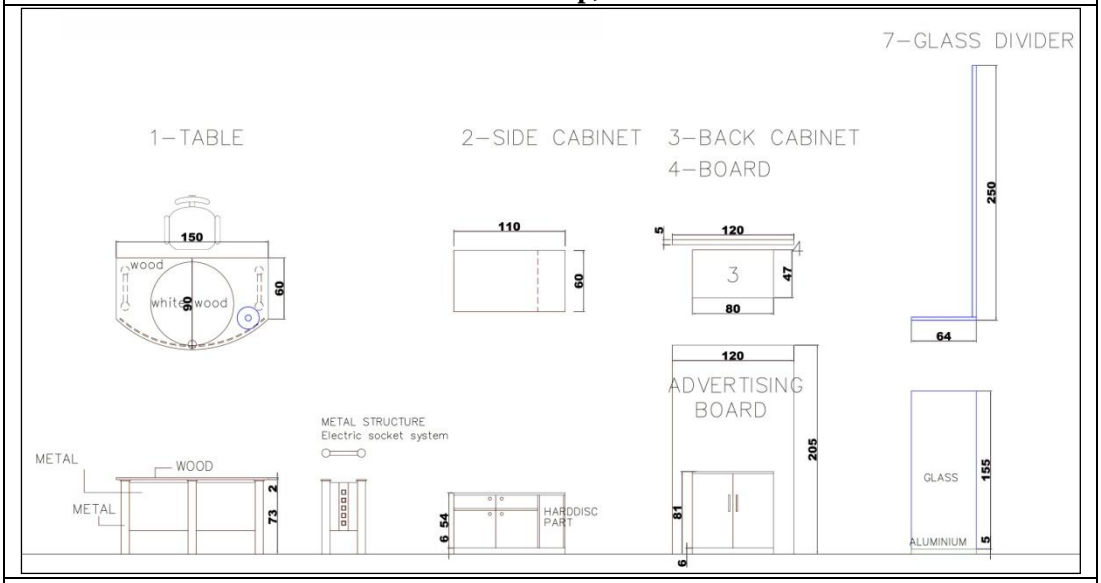
(9) AKBANK FURNITURES



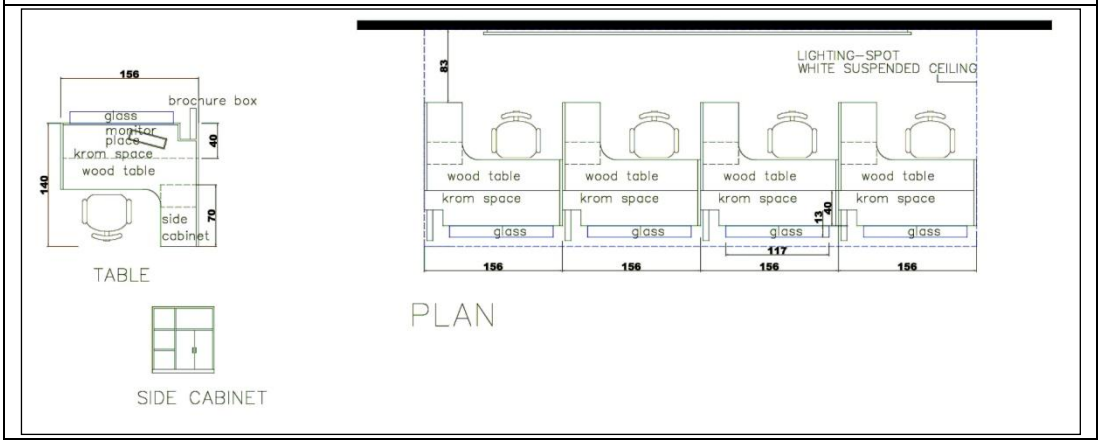
AkBank WorkStation Group , One Unit



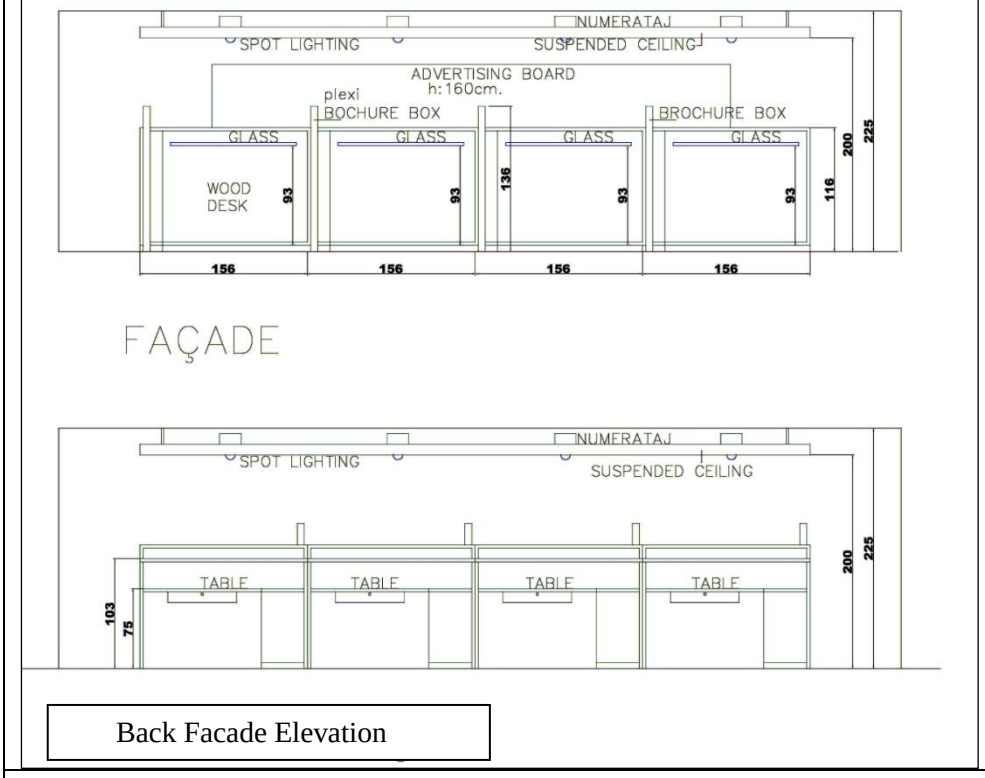
WorkStation Group, Douce Units



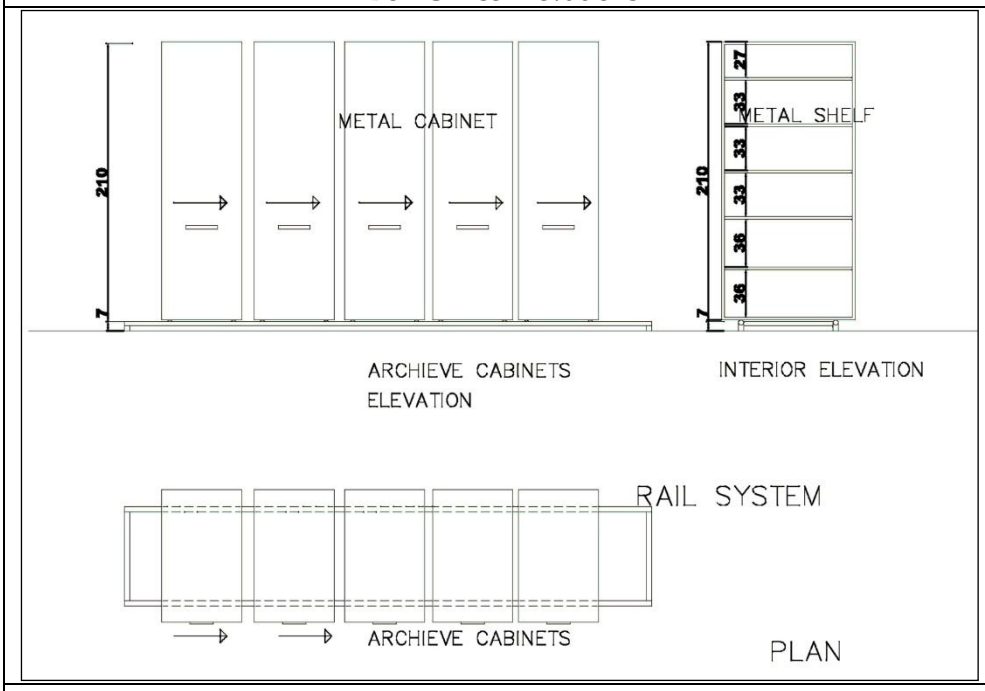
WorkStation Furniture



Box-Office Unit



Box-Office Elevations



Archive Cabinets

Appendix 3 Photos of Interiors and Furniture

(1)TEXTILE BANK INTERIOR PHOTOS

A B C

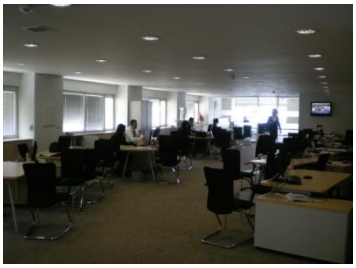
Banks interior photos, (a)entrance hall, (b)waiting area, (c) information desk

A B C

(a)Box-office unit, (b)general interior, (c)glass divider

(2) ING BANK INTERIOR PHOTOS

A B C


D E

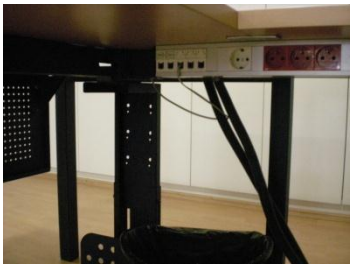

Ing Bank's Interior photos, (a-d) general interior, (b)open-office, (c)workstation group detail, (e) workstation group

(3) TEKFEN-EURO BANK INTERIOR PHOTOS

A B C



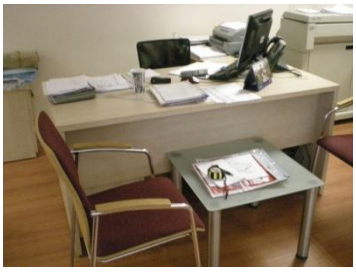
D E F


Tekfen Euro Bank Interior photos, (a-b) general interior, (c-d)workstation one unit, (e)electric sockets under table, (f) douce workstation group

(4) HALK BANK INTERIOR PHOTOS

A



B

C

D

E

F

G

H

I

HalkBank's Interior photos, (a) workstation type-1, (b-c) workstation type-2, (d) workstation plexiglass divider system, (e) waiting chairs, (f) box-office unit, (g-h)cabinets, (ı) back-office glass divider

(5) YAPI KREDI BANK INTERIOR PHOTOS

A

B

C

D

E

G

Yapı Kredi Bank Interior photos, (a) workstation group, (b) box-office, (c) glass divider system, (d-e) general interior and floor materials, (g) air-conditioning system

(6) VAKIF BANK INTERIOR PHOTOS

A

B

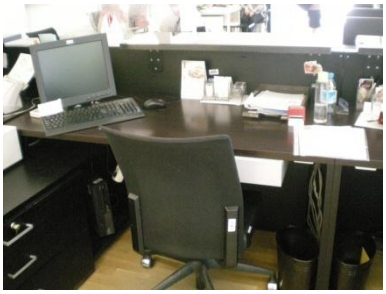
C

D

E

F

G



H

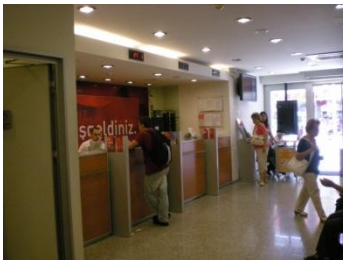
I

VakıfBank Interior Photos, (a-b) workstation unit, (c) back cabinet, (d)box-office, (e)artificial lighting,(f)shopwindow brochure boxes (g) back of box-office desk, (h) ventilation system, (ı) stairs

(7) AKBANK INTERIOR PHOTOS

A

B



C

D

E

F

G

H

I

J

K

L

AkBank’s Interior Photos, (a) entrance, (b)box-office, (c)douce workstation, (d-e-ı)one unit workstation group, (j) concealed cable system, (k) director’s office (ı) stairs, (j) advertising board, (k) electric cabinets, (l) archive room

Appendix 4 Ouestionnaire

Questionnaire:

Bank Branch Designs – Business Efficiency Survey:

Part.1. Individual Questions

1. Survey Respondent's Name and Surname
2. Bank Branch's Name
3. Gender: Male:… Female:…
4. Age:…
5. Mission at Bank:..
6. Working duration 0-1 year
   1-5 year
   5-10 year
   10+ year
7. Education University degree:..
   Master degree:…
   Doctor's degree:…

Part.2. Working and Interior Space Questions

2.1. Office Working Order

A. Individual Offices
B. Collective Working Place
C. Mixed Working Place

2.2. What are the percentages?

2.3. How many square meters is your working space?

2.4. What are your working spaces -Color
-Wall covering
-Floor Covering
-Lighting system

2.5. How many people are working in this space?

Part.3.What are your individual resources?

-Workstation
-Computer
- Internet
-Phone

Part.4. Your criticism about the interior space

Part.5. Your proposals about the interior space

(Survey study could be achieved at only four of the bank branches under this thesis study component due to permission problems.)

Survey Data and Results of Analysis

(1). Textile Bank Survey Datas and Results

Data

1. Lines of business disruption and the theme of multi storey criticized in terms of management makes it more difficult
2. Personnel lack ergonomic chairs
3. In terms of spatial organization, individual marketing positioning before box-office units

4. The staff desks near the entrance, negative in winter because of cold air.
5. There aren't separations units between portfolio tables.
6. Poor ventilation
7. Poor cabinets and shelves.
8. Box-office criticized in terms of not being glass, too high and close inside.

Results
1. To increase interior communication, a branch can be one almost two storeys.
2. Good ventilation solution is necessary.
3. In terms of a client's privacy, separation between portfolio tables is a must.
4. In terms of interior conceptual design, more attractive, hot and positive colors can be used.
5. Sufficient number of cabinets and shelves must be addressed.
6. There must an emergency exit door on the ground floor.
7. The box-office must be at an ergonomic height in terms of not to prevent vision and glass material.

(2). Ing Bank Survey Datas and Results

Data
1. Open office environment is found positive, in terms of visualization and better communication.
2. Meeting room is criticized as too small for functions and not enough light in it.
3. The very nearest placement of workstation units is found negative.

Results
1. Larger places for workstation units in again open office system.
2. More cabinets and cupboards are needed.

(3). Tekfen-Euro Bank Survey Datas and Results

Data
1. Because of bad sound insulation in glass offices and general interiors due to reverberation.
2. Lack of clients privacy in terms of no jalousie system glass offices.
3. Lack of open window for fresh air.
4. Accommodation, due to the laminate floor, makes a lot of noise.
5. Space is an extremely large, empty lot, had to remain idle space.
6. The opportunity to use day light is very little.
7. Because of laminate floor covering, there is lot of noise.
8. There is a problem with interior ventilation.

Results
1. Glass separators are a must for client's privacy and sound insulation.
2. In terms of sound insulation, carpet floor covering can be used instead of laminate.
3. Interior space planning for empty area.
4. Movable air-conditioning systems for ventilation problems.

(4). YapıKredi Bank Survey Datas and Results

Data
1. Interior space of branch is not enough and small.
2. Lack of ventilation.

3. There isn’t a kitchen for staff.
4. In terms of very small interior space, client privacy cannot be achieved and there is a bad sound insulation.
5. In terms of ground floor and lighting is the same color, yellow, interior space is pale.
6. In terms of old interior concept, there is a pressed interior planning.
7. There are not enough square meters for a bank branch.
8. There aren’t enough cabinets and shelves for documents.
9. General interior concept is pale and light dark.
10. Working areas are small and lack fresh air.
11. More attractive interior components, floor and wall coverings.

Results

1. New interior concept, furniture’s and positive colors is necessary.
2. More spacious and bright working space is a must.
3. New concept workstations are necessary.
4. Good ventilation and lighting system.
5. More comfortable interior space organizations are necessary.
6. A kitchen and WC in branch is necessary for staff.

Personal Resume

Architect Ayça Arslan

PERSONAL INFORMATION

BIRTH PLACE & DATE: BALIKESİR 17/05/1977
INTERESTS: ARCHITECTURE, INTERIOR DESING, MUSIC, TRAVELLING, CINEMA, THEATRE

EDUCATION & TRAINING

2010-…. YAŞAR UNIVERSITY MASTER in INTERIOR ARCHITECTURE
1996-2004 MIMARSINAN FINE ARTS UNIVERSITY ARCHITECTURAL FACULTY, ARCHITECTURAL DEPARTMENT
1988 - 1995 BALIKESIR SIRRI YIRCALI HIGH COLLAGE
1983 - 1987 BALIKESIR ALTI EYLUL ELEMENTARY SCHOOL

COURSES TAKEN:

- TOEFL COURSE, RUSSIAN LANGUAGE, FRENCH LANGUAGE, GERMAN LANGUAGE, 3D-MAX & ANIMATION , PHOTOSHOP, SKETCH-UP, AUTO-CAD

COMPUTER SKILLS:

-AUTOCAD 2010(welldone), 3D-MAX 2011(welldone), PHOTOSHOP, SKETCH-UP (welldone), OFFICE PROGRAMMES

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