



Formation of entrance doors in traditional wooden buildings in the city center of Tekirdağ

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Abstract

The fundamental building material of traditional Tekirdag houses is wood. Although the exact building dates are not documented, the remaining wooden carcass structures are mostly from the 19th and 20th centuries. Today, wooden houses are most intensely located in the city center, Pestemalci Street, Iskele Street, Mayadağlı Street, Cehennemdere Street, Sogukkuyu Street, Tintinpinar Street, and its surroundings. In the countryside, it is concentrated in Gazikoy, Guzelkoy, and Ucmakdere. The entrance doors of houses located in the center are retracted by a niche and decorated with varying motifs. The main doors and room doors are simpler in the countryside. The most modified or missing building components are doors in these buildings, which are worn out for different purposes and their number is diminishing day by day. The purpose of this research is to contribute to the inventory studies of wooden structures and building elements that we lose day by day. For this purpose, wooden doors in Tekirdag civil architecture examples were examined in terms of material, design, and construction. Wooden doors belonging to 33 buildings, that are each registered, chosen from central district where wooden structures are clustered, were examined, their building surveys were taken and detailed drawings were rendered.

1. Introduction

According to the data published by the Tekirdağ Department of Zoning and Urbanization in 2019, there are 1053 cultural properties in Tekirdağ today. The most important of these properties are located in Tekirdağ city center and Şarköy district (Gaziköy, Güzeldere, Uçmakdere villages) [1]. In this cultural inventory, examples of civil architecture hold a significant place. According to the statistics of the General Directorate of Cultural Heritage and Museums at the end of 2021, there are 524 examples of civil architecture that need to be preserved within the borders of Tekirdağ [2].

The examples of civil architecture that have survived to the present day and are located in the city center of Tekirdağ that were the subject of the research are generally dated to the end of the 19th century and the beginning of the 20th century. Even though the number of these buildings is decreasing day by day, especially on Peştemalci Road, Iskele Road, Mayadağlı Road, Cehennemdere Road, Soğukkuyu Road, and Tintinpinar Road, they are still dense enough to form a street texture. Some of these buildings, registered as the second group of immovable cultural properties, continue to be used in their original form. Abandoned buildings have been largely destroyed. Several of the abandoned buildings were expropriated, restored, and assigned public functions. However, most of them were destroyed or demolished. The opening components of buildings, entrance doors, are easily deformed, particularly in abandoned buildings, and the traces of traditional architecture is gradually obliterated.

Entrance doors, which complement the facade composition of the building, are one of the most important elements that reflect the identity of the building. The position, dimensions, material, shape, and style of the door on the facade directly affect the building. The dimensions, the materials used, the colors, the decorations, and the

purpose of the construction have many meanings concerning the construction techniques and the lifestyle of the time [3]. For this reason, documentation of the original doors is extremely important for restoration and conservation studies.

Many studies have been conducted to investigate and document the door form and construction techniques in traditional architecture. These studies have discussed local door types, construction techniques, the relationship between the facade and the door, ornamentation and decoration, door knockers, and lock systems [4-14].

In this study, the entrance doors of the registered buildings in the city center of Tekirdağ, which have not been restored, were discussed. Entrance doors, which occupy a very important place in the street silhouette, facade design, and residential culture, were evaluated in terms of material, shape, and construction.

2. General characteristics of Tekirdag houses

High Council first declared Tekirdağ Municipal Protected Area for Real Estate Antiquities and Monuments with the decision of 11.06.1976 and 9158. After the proclamation of the protected urban area, the decision of the Ministry of Culture, the General Directorate of Antiquities and Museums, and the High Council for Real Estate, Antiquities and Monuments dated 10.04.1981 and numbered 12746 established the protection plan and submitted it to the Ministry of Housing for approval by precisely including it in the land use plan. During this period, the number of buildings recognized as historical monuments in the city center was 365. In 1987, this number decreased to 260. With the 1991 decision of the Edirne Regional Committee for the Preservation of Cultural and Natural Heritage, numbered 881, the previously established boundaries of the urban conservation area were updated, as shown in Figure 1 [15]. Most of the registered buildings in this area are examples of civil architecture. The places where wooden houses are mainly found today are Çiftlikönü Road, Pestemalci Road, Barbaros Road, İskele Road, Cennetdere Road, Mayadagli Road, Sogukkuyu Road, Tintin Pınar Road, and their surroundings.

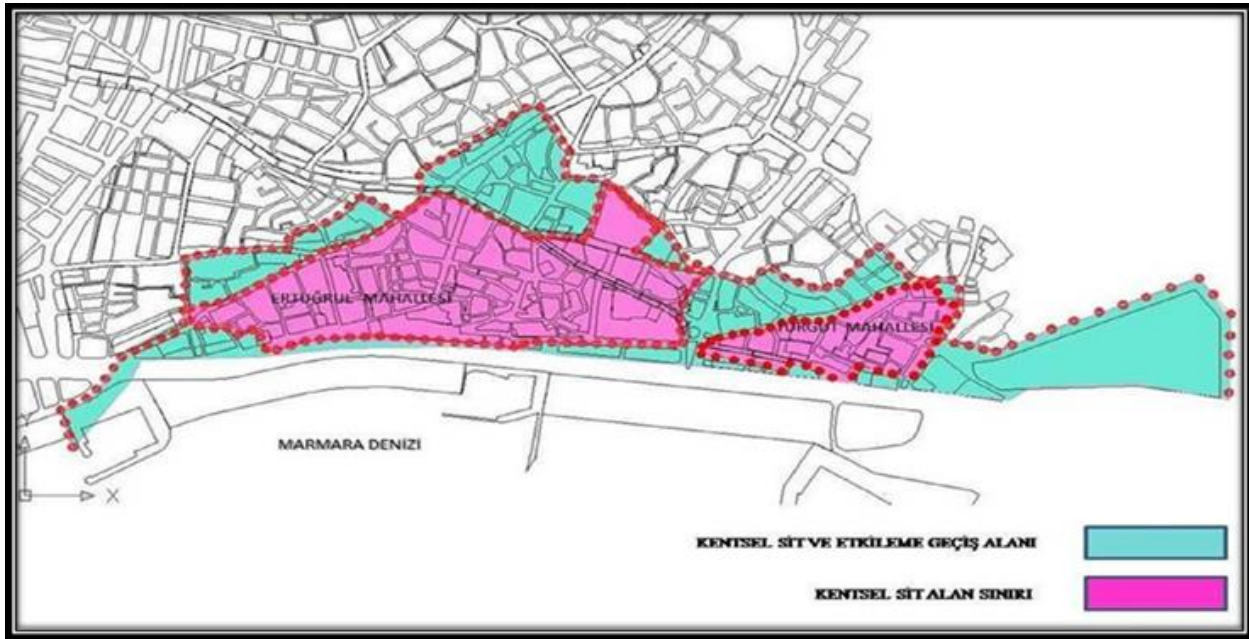


Figure 1. Tekirdağ Province Urban Site and Urban Site Impact Transition Area Border [15]

The houses of Tekirdağ carry the influences of Ottoman Turkish culture and Western Thrace culture due to the region's geographical location. The basic building material of houses is wood. Wood frame houses are usually 2 or 3 stories high. The use of lofts is also widespread. Turkish-style tiles are used for the lofts. The wooden facades are painted opaque in some buildings and plain in others.

The layouts of the traditional houses in Tekirdağ were designed according to the architectural features of the time, the size, shape, and location of the land on which they were built. It can be seen that the size of the house depends on the size, status, ethnic characteristics, and economic status of the family. By increasing the number of floors of the houses on the smaller plots where the houses are built, areas of use have been created to meet the needs. Most of the residential houses in Tekirdag have a basement. Above the first floor, there are two, three and four floors. The use of mezzanines is also common in two-story houses. The projections on the facades of the wooden houses are construction elements that increase the utilization of space [16].

The relationship between sofa and room, which is one of the characteristic features of the Turkish house, is also found in Tekirdağ houses. The rooms that are around a sofa have many windows. Wooden decorations were placed on the four sides of the windows or only on the lower edge. Iron grilles were used on the first- and second-floor windows [17]. In most houses, the front door is recessed with the entrance niche. The doors are usually

double-leaf and made of wood. While the exterior doors are decorated with various motifs, the interior doors are plain.

Traditional furnishings such as cedar, stove, and cupboard occupy an important place in the rooms. The wooden ceilings are usually plain. In the buildings of wealthy families, there is also a main room. The main rooms' ceiling panels and other furnishings were made in a more ornamental style.

3. Material and Method

The building survey belonging to the entrance doors of 33 registered examples of civil architecture in the city center of Tekirdağ was studied. The studied buildings are located in Yavuz District, Ertuğrul District, Çiftlikönü District, Ortacami District, and Zafer District, which belong to the central districts of the city. Buildings in the study area whose restoration had already been completed or whose original doors had been replaced were excluded from the study. The material of the study is entrance doors of registered buildings that have retained their original value. The research data were obtained by examining the positions and constructions of these doors on the facade, measuring and drawing their current condition, making the restitution drawings of the damaged doors, and documenting them with photographs.

The size table used by Yılmaz and Satici in their study of the wooden entrance doors of Kuzguncuk houses was revised and used to record the door dimensions [6].

4. Results

4.1. Doors based on their position on the facade

Tekirdağ traditional houses can be divided into houses with entrance niches, houses with direct entrances, houses with additional stairs to the facade, and houses with entrances from the garden, depending on the position of the door on the facade [1]. The doors are usually recessed with an entrance niche for buildings in the city center. While entrance niches visually give aesthetic character to buildings, they also serve as the primary element protecting wooden doors from external influences. Most buildings with entrance niches reach the landing by 7-8 steps [18]. In this type of entrance niche, iron railings are used in front of the landing (Figure 2a). In some buildings, the entrance niche projects are directed toward the door (Figure 2d). In this type of building, the number of steps is smaller, and the width of the entrance niche equals the width of the door. The entrance door is at the first-floor wall level in residential buildings with a direct entrance. In such entrances, the height of the door is usually reached by a single step made of stone or marble (Figure 2c). If there are no exits on the upper floors of the doors with direct entrances, a fringe is placed on the door to protect the entrance from external influences (Figure 2b).

In most buildings, a separate door on the first floor leads to service areas such as a basement and is solved in a simpler style. These doors are located at the front or side of the house. However, unlike the main entrance doors, they are single-leaf and smaller [19].

4.2. Doors based on the leaf structure and typology

The entrance doors of Tekirdağ houses are designed according to the location and status of the building. The entrance doors of large houses, such as the mansion, are also quite large and ornate. On the other hand, it is observed that modest houses have simpler doors [20].

The main entrance doors of all buildings except house number 8 on Tintinpinar Road and house number 23 on Eski Bedesten Street have two leaves. The left leaf is fixed and can be opened when needed. The right leaf, which opens inward, forms the entrance to the room. On both leaves, there are iron or brass door handles and rings with which to knock on the door. In the two single-leaf examples, the door configuration resembles the side doors that lead to service areas in other apartment buildings. In plated doors, the panels are decorated with geometric shapes. The most common geometric shapes are rhombus, rectangles, squares, and circles as seen in the Figure 3.

All the structures studied are massive framed doors. The door leaves are usually formed by joining solid panels with solid frames with hinge inserts. In some examples, glass is used in the upper part of the door leaf instead of a panel. In these examples, the glass is symmetrically placed on both door leaves. Elegant grilles often complement glazed door leaves as seen in the Figure 3d. In some doors, slats are placed between the solid frames, lined up with a valley beam system.

The use of skylights is fairly common. Skylights are rectangular in some examples and oval in others. Most skylights are made of lattice or iron bars. Glass is used in the door leaves, as in the examples of Number. 1 Peştemalci Street and Number. 26 Rakoczi Street in some entrance doors. The glazed parts of the leaves are finished with elegant grilles, similar to the skylights. In addition to the skylight, some buildings have symmetrically arranged windows to the right and left of the door.

In some examples, the entrance doors are painted with opaque colors. The entire door is painted the same or two colors to emphasize the patterns on the ornate doors. Some doors are used in their natural color.



(a)



(b)



(c)



(d)

Figure 2. (a) Example of the door with spiral staircase and entrance niche, Mayadağlı Road No. 29, (b) Example of the door with direct entrance, Eski Bedesten Street No. 23, (c) Example of the door with direct entrance, Karlık Road plot No. 16 (d) Example of the door with entrance niche and straight staircase, Eski Bedesten Street No:14

The entrance doors examined in the research were classified as simple doors, ornamented doors without glass, ornamented doors with glass and doors with skylights. Simple door typology is shown in Figure 4. Single-leaf door examples are in this door typology. Glassless ornamented door typology and glass decorated door typology are shown in Figure 5 and Figure 6. Doors with skylight which is the most common door type are shown in Figure 7. The examples in the typology tables were obtained by measuring the doors and drawing their current condition, and making the restitution drawings of the damaged doors.



Figure 3. (a) Example of the plain door with a panel, Muratlı Road number: 27, (b) Example of the plain door with a slat, Peştemalci Road number. 109 (c) Example of an ornate door with a skylight, Tintinpinar Road Number: 7, (d) Example of an ornate leaf door, Rakoczi Road No: 26, (e) Example of an ornate door with different decorations in different colors, Muratlı Road Number: 12, (f) Example of an ornate door with a skylight, Muratlı Road Number: 22

4.3. Doors based on the construction techniques and dimensions

All the doors used in the traditional houses of Tekirdağ are made of wood. Oakwood, pinewood, and firwood are the most commonly used wooden materials. The solid frame technique made the entrance doors of all the buildings studied in the research. Door leaves are generally made by combining vertical frames or panels to form a frame. These frames are usually straight; in some examples, they are mitred. In plated doors, the panels are decorated with geometric shapes. The most common geometric shapes are rhombus, rectangles, squares, and circles. The shapes gain depth due to the joints on the edges of the panels. Relief decorations in the form of plants were encountered in fewer examples.

The width of double-wing doors is minimum 112 and maximum 190 cm. The minimum door height is 200 cm and the maximum door height is 315 cm. In the six examples studied, the leaf widths are different. The dimensions of the doors studied are given in Table 1.

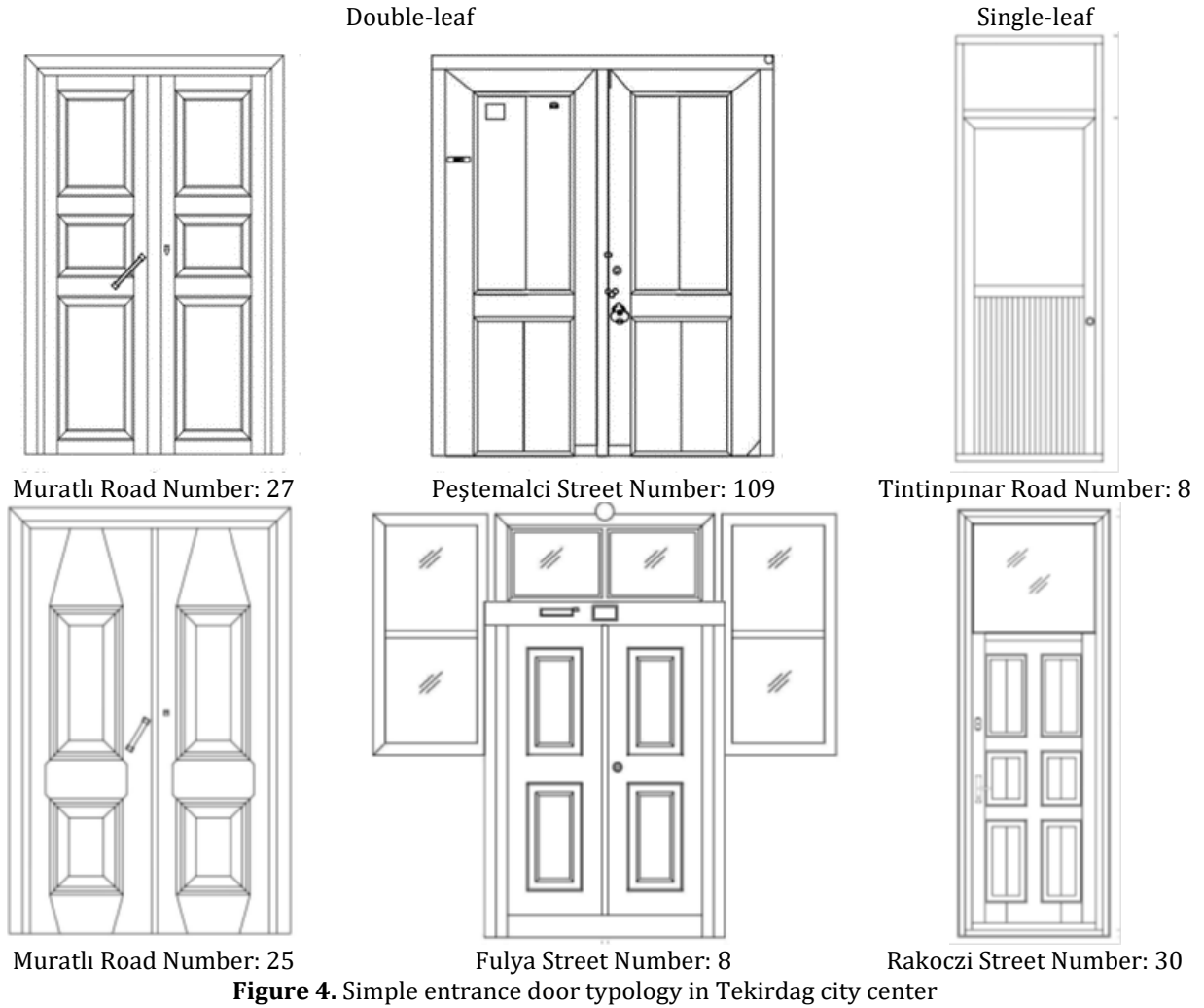


Figure 4. Simple entrance door typology in Tekirdag city center

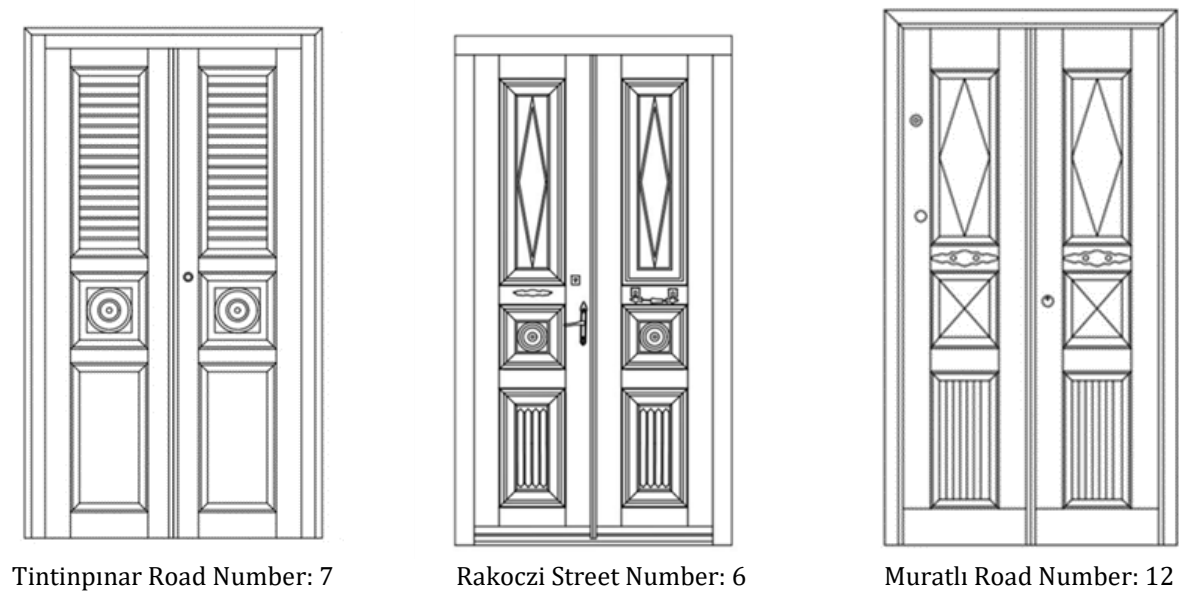
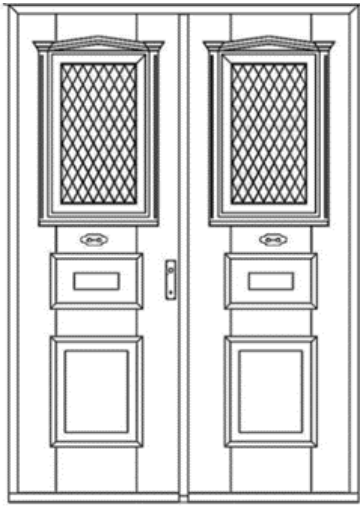
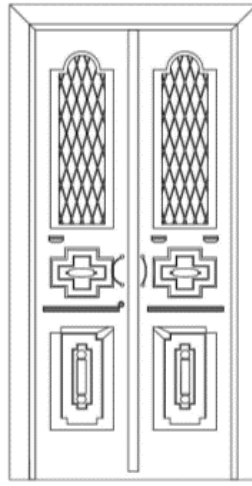


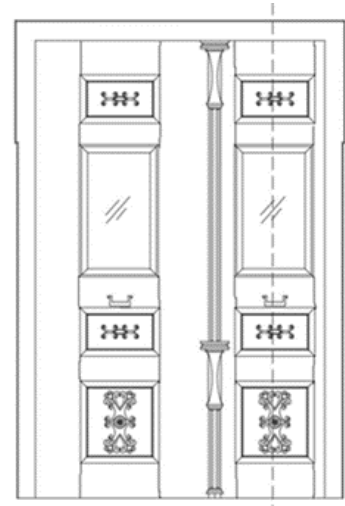
Figure 5. Glassless ornamented entrance door (double-leaf) typology in Tekirdag city center



Rakoczi Street Number: 1/1

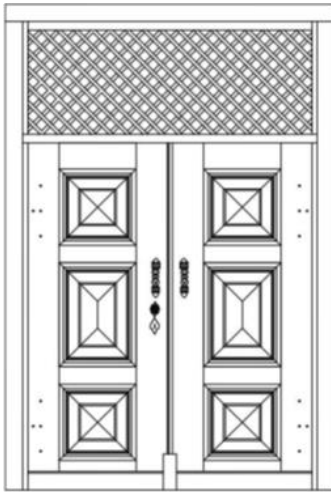


Rakoczi Street Number: 26

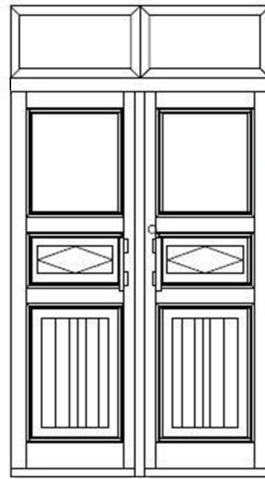


Rakoczi Street Number: 7

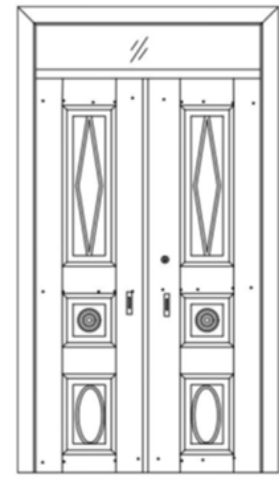
Figure 6. Glass decorated entrance door (doble leaf) typology in Tekirdag city center



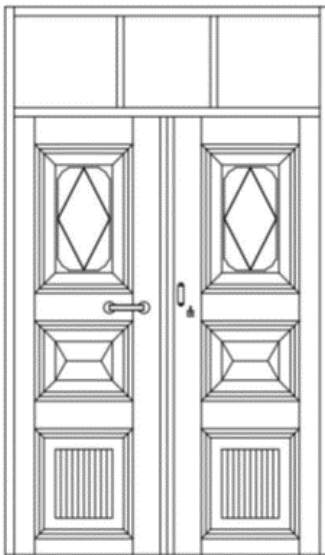
Rakoczi Street Number: 34



Kahvecioğlu Street Number: 10



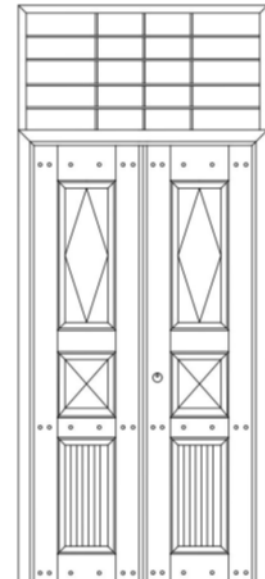
Gemiciler Street Number: 26



Muratlı Road Number: 22



Eski Bedesten Street Number: 47



Muratlı Road Number: 79

Figure 7. The entrance door (double leaf) typology with skylight in Tekirdag city center

Table 1. The dimensions of the entrance doors studied in the research

Structure location	Door space (cm) width/height	Door leaf (width/height)		Skylight Width/height
		Left (cm)	Right(cm)	
Muratlı Road Number: 12	128/234	56/226	56/226	None
Muratlı Road Number: 22	142/239	67/191	67/191	134/48
Muratlı Road Number: 23	136/281	57/213	57/213	114/68
Muratlı Road Number: 25	146/221	65/210	59/210	None
Muratlı Road Number: 27	152/221	65/210	65/210	None
Muratlı Road Number: 79	128/298	56/226	56/226	112/64
Tintinpinar Road Number:7	130/314	58/224	54/224	112/90
Tintinpinar Road Number: 8	80/230	72/186	-	72/44
Rakoczi Street Number: 1/1	190/280	90/270	90/270	Could not be measured
Rakoczi Street Number: 6	145/270	62,5/260	62,5/260	None
Rakoczi Street Number: 7	156/235	86/235	57/235	None
Rakoczi Street Number: 26	125/240	52,5/230	52,5/230	Could not be measured
Rakoczi Street Number:34	160/235	70/226	70/226	Could not be measured
Eski Bedesten Str. Number: 15	160/315	70/305	70/305	None
Eski Bedesten Str. Number: 17	160/315	70/305	70/305	None
Eski Bedesten Str. Number: 23	77/204	77/197	-	Could not be measured
Eski Bedesten Str. Number: 47	164/308	67/225	73/225	140/75
Peştemalci Road Number: 109	152/176	70/170	70/170	None
Kahvecioğlu Street Number: 10	140/253	67,5/203	67,5/203	135/44
Kahvecioğlu Street Number: 22	130/210	55/200	55/200	None
Sefa Street Number: 18	140/312	66/243	66/243	132/69
Hikmet Çevik Street Number: 7	140/305	63/210	63/210	126/95
Fulya Street Number: 8	160/280	72,5/190	72,5/190	145/60
Gemiciler Street Number: 26	150/280	65/225	65/225	130/35
Hacı İlbey Street Number: 12	140/220	52,5/202	52,5/202	Could not be measured
Namık Kemal Road Number: 27	170/229	70/229	70/229	Could not be measured
Mayadağlı Road Number: 29	113/271	56,5/213	56,5/213	113/57
Hacı Veli Street Number: 2	140/244	60/234	60/234	Could not be measured
Saadet Street Number: 7	147/271	68/266	68/266	136/55
Vakıf Avlu Street Number: 35	112/205	51/200	51/200	None
Karlık Road Number: 3	160/267	70/190	70/190	140/57
Çiftlikönü Road Number: 14	120/200	55/200	55/200	110/55
Ortacami Street Number: 3	140/220	65/210	65/210	None

5. Conclusion

In the traditional houses of Tekirdag, doors are one of the most important elements that describe the character of the building and lifestyle. Depending on the location and status of the building, the shape of the doors also changes. In this regard, the doors play an important role in creating the initial idea of the building.

In all high-ranking buildings, the doors are drawn in with the entrance niche. The door leaves are larger and have more ornaments. The skylight and windows on both sides of the door were often used. In these buildings, the entrance and the front door are the central points on the facade of the building. In smaller and more modest buildings, the door decorations were simplified. Some of these buildings do not have an entrance niche. The example of a single-leaf main entrance door, found in only two buildings, also has a direct entrance. The skylight was also often used in modest buildings.

All the structures studied are massive framed doors. The door leaves are usually formed by joining solid panels with solid frames with hinge inserts. In some examples, glass is used in the upper part of the door leaf instead of a panel. In these examples, the glass is symmetrically placed on both door leaves. Elegant grilles often complement glazed door leaves. In some doors, slats are placed between the solid frames, lined up with a valley beam system. This type of construction is usually preferred for plain doors.

In plated doors, the panels are decorated with geometric shapes. The most common geometric shapes are rhombus, rectangles, squares, and circles. The shapes gain depth due to the joints on the edges of the panels. Relief decorations in the form of plants were encountered in fewer examples.

In double-leaf doors, the entrance to the building is provided with the right leaf, which opens inward. Leaf widths are the same in most examples. In the six examples studied, the leaf widths are different. In two examples, the right door is wider, and the left leaf is wider in four.

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Conflicts of interest

The authors declare no conflicts of interest.

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