

# The Influence of Islamic Values on The Elements of Islamic Architecture

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## Abstract

In this research paper, two mosques found in the Fatimid era will be analyzed in terms of their design methodology and strategies, as well as their architectural elements and materials. Each element is analyzed with clear images that are provided with explanations about it. The third mosque is a modern mosque which follows some of the characteristics of the two previous mosques and will be analyzed in terms of its architectural techniques and elements along with its architectural drawings as well. Lastly, these three mosques will have a comparative analysis showing the similarities and differences among them in terms of their design and features.

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## تأثير القيم الإسلامية على عناصر العمارة الإسلامية

في هذا البحث العلمي، سيتم تحليل مسجدين تم العثور عليهما في عصر الفاطميين من حيث منهجيتهما واستراتيجيات تصميمهما، بالإضافة إلى العناصر المعمارية والمواد المستخدمة في بنيتهما. وفيه يتم تحليل كل عنصر مع توفير صور واضحة مع شروحات حوله. والمسجد الثالث هو مسجد حديث يتبع بعض خصائص المساجد السابقة، وسيتم تحليله من حيث تقنياته المعمارية وعناصره بالإضافة إلى رسوماته المعمارية. وأخيراً، سيتم إجراء تحليل مقارنة لهذه الثلاثة مساجد يظهر أوجه التشابه في تصميمها وملامحها.

وخلصت هذه الدراسة إلى النتائج التالية:

**أولاً:** اشتراك جميع القباب الثلاثة في الشكل الهندسي الرئيسي البسيط وهو القبة النصف كروية، وجميعها مبنية من مادة واحدة موجودة في كل منطقة سواء الحجر الطبيعي أو الحجر الجيري.

**ثانياً:** تركيز جميع بوابات المدخل الرئيسي على إبراز هذه المنطقة المهمة من خلال تحديد الجدار الرئيسي في الخارج.

**ثالثاً:** تميز جميع المحاريب الثلاثة بامتلاك جدار منحنى بمواد ملونة مختلفة؛ للفت الانتباه إلى هذه المنطقة المهمة الموجودة في كل مسجد، حيث إن جميعها تستخدم نفس المادة الأساسية وهي البلاط الرخامي الذي يعكس الثراء والفخامة.

## **Historical Background for The Fatimid Era**

Ismaili missionaries established themselves throughout the Islamic empire in the ninth century, spreading a revolutionary theology that was opposed to the Sunni order and the Abbasid authority. The Ismaili were able to build a strong foothold in Yemen after several abortive uprisings, and from there they dispatched ambassadors to North Africa, where they were most successful. By 909, they had gained enough power for their imam, who had been hiding, to show himself to be the caliph and take the messianic title of al-Mahdi, an entirely new state and dynasty were inaugurated as a result.

The Fatimid caliphs were only in power for the first fifty years in Sicily and North Africa, where they faced numerous challenges. Sunnis of the Maliki school made up the majority of their students. The Khawrij, or Khrijites, were among the others. The Ismaili ideas of the new rulers didn't sit well with either group, and they put up resolute resistance to them. The Fatimid kings had inherited a battle against the Byzantines in Sicily and Italy from their North African forebears as well as political issues with Amazigh or Berber tribes and nearby Muslim kingdoms.

Notwithstanding these challenges, the Fatimids never lost sight of their ultimate goal, expansion to the east, where the Abbasids' strategic core was located. The conquering of Egypt was the initial stage. Al-Mahd, the first caliph, erected Mahdiyyah (founded 920), on Tunisia's east coast, as his capital. Al-Qaim, al-Mansur, and al-Muizz, his successors, reigned from there. Three unsuccessful expeditions were conducted against Egypt in the years 913–915, 919–921, and 925. The first phase of the push to the east was finally finished in 969. The Fatimids constructed Cairo, which became the capital of their empire, next to Al-Fusa, the former administrative headquarters of Muslim Egypt. In the city's center, a new mosque and seminary were built and named Al-Azhar in honor of Faimah Al Zahra, the dynasty's ancestor.

## **Historical Background for Mosques in the Fatimid Era**

It is challenging to classify Fatimid architecture because it incorporates ornamental aspects. The Fatimids were skilled at taking advantage of people of many racial and religious backgrounds and were unusually tolerant of them. There were some mosques that were

"floating" above stores. The mosque's façade was ornately ornamented and for the first time, it faced the street. The ornamentation was made of wood, plaster, stone, including marble, and featured arabesques of Byzantine and Samaritan origins as well as geometric and floral patterns. In comparison to earlier Islamic styles, the embellishments were more intricate and carefully tailored to structural limitations. The Fatimid caliph's twin roles as head of religion and politics were backed by the imposing architecture and adornment of structures like the Al-Hakim Mosque.

### **Characteristics of Mosques in Fatimid Era**

The mosques were constructed using the hypostyle architectural design. Later columns usually had a base that was mirrored to form a bell-shaped capital. The prayer niche had a more elaborate design, including some domes. The major facades of the Fatimid royal mosques have two different types of Quranic quotations. Quranic passages connected to particular theological doctrines were Ismailis' initial contribution. Popular Quranic passages were included in the second group.

The vast majority of these were represented on prominent façade architectural features in symbolic form. So, on Fatimid buildings, there might have been a connection between a mosque's architectural design and its epigraphic mission. Or, to put it another way, the façade prominently featured ideologically laden Quranic quotes. They originated as early Abbasid minaret designs. Later, minarets took on the recognizable Mabkhara (incense burner) shape.

### **Al Azhar Mosque (970-972)-Cairo, Egypt**

#### **Introduction**

This mosque, with an area of 5,950 m<sup>2</sup>, does not fully predate the current existing construction. Due to many extensions made throughout the years, the structure now occupies an area that is more than double that, measuring 120 m × 130 m.

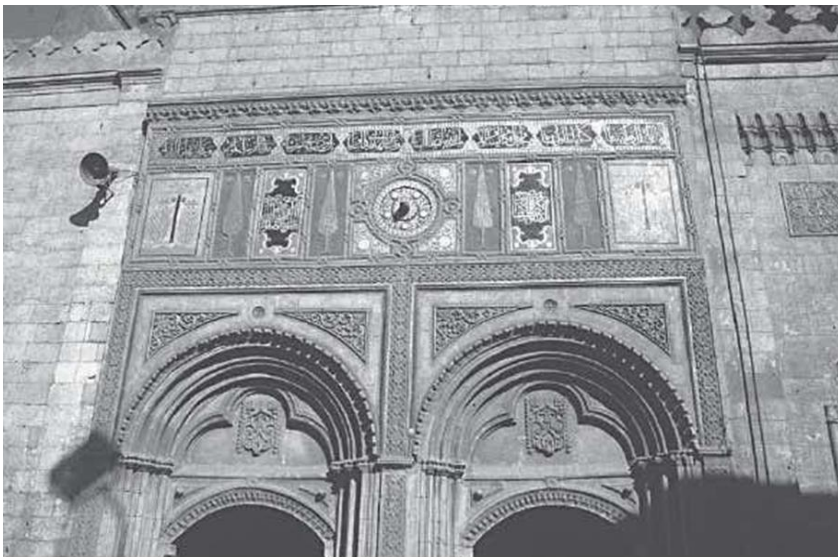
#### **Design Methodology and Strategies**

Mosque's original core has been completely encased by a collection of later ancillary buildings that range from the early fourteenth century to the present. The growth of the mosque may be compared to a spiral; new buildings were added until a full circle was formed around it, these extensions gradually altered the mosque's boundary and occasionally showed disregard for nearby structures. They also changed some of the old mosque walls against which they

were constructed. As a result, just a little section of the Fatimid western façade is still present; It reveals that the mosque was initially constructed of brick and that it has undergone multiple plastering procedures.

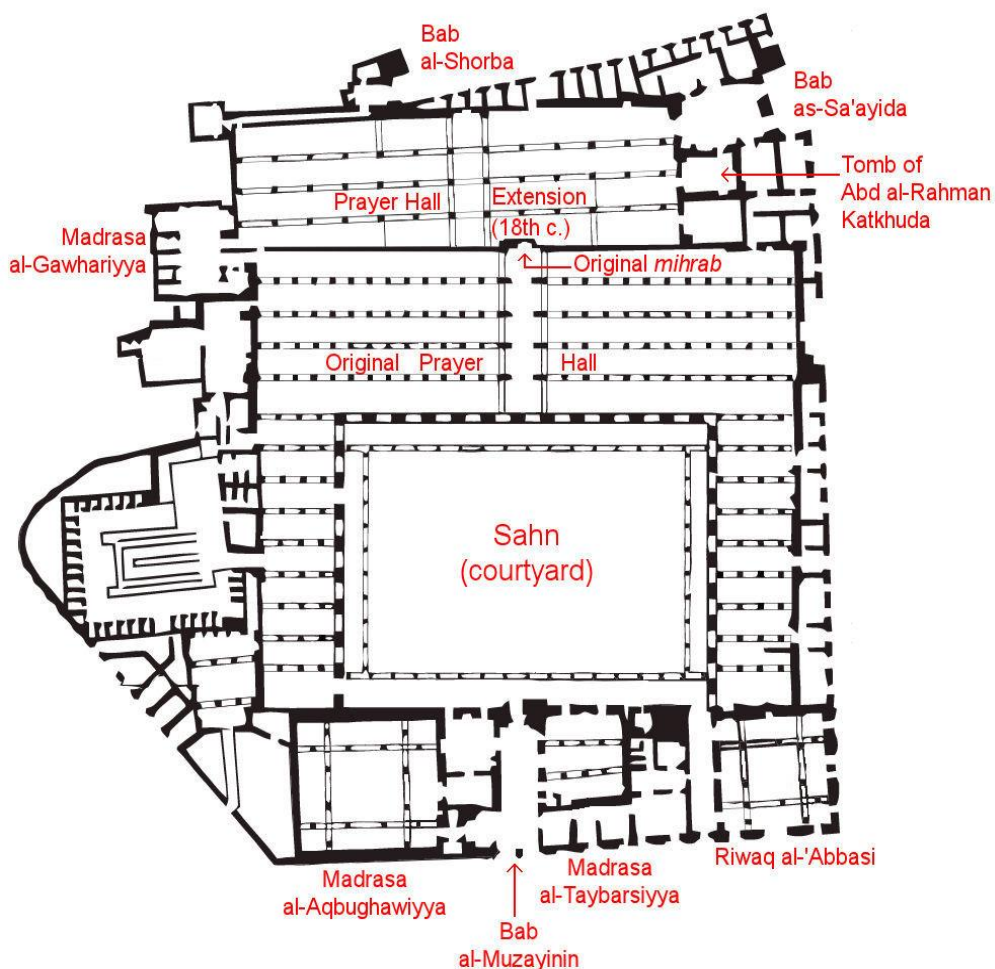


**FIG. 1.2** The minarets of al-Aqbaghawiyya, of Qaytbay, and of Qansuh al-Ghuri.



**FIG. 1.3** Door of Barbers

## Analyzed Architectural Drawings



**FIG. 1.4 General plan for Al-Azhar mosque surrounded by madrasahs**

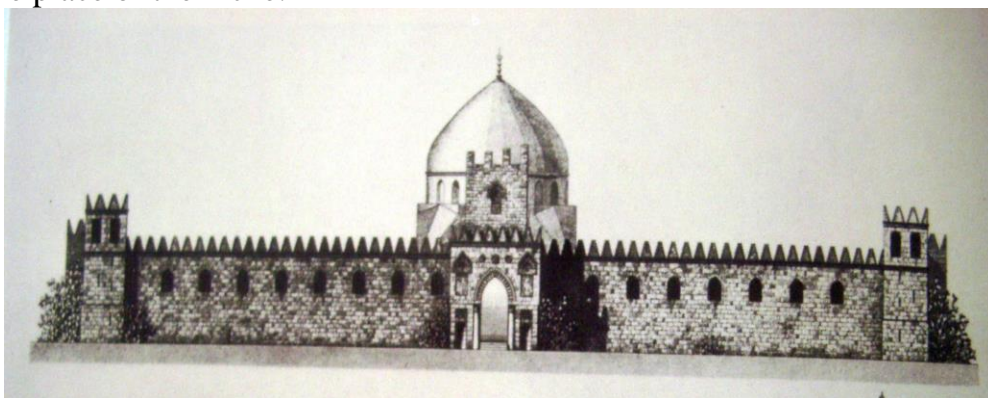
Because Al Azhar Mosque is so unique, it has additional sides and gates within. Al Azhar Mosque really has eight doors, two of which are on the west side (Bab Al Mezainin and Bab Al Abasi). During that time, the Al Azhar Mosque's original design consisted of three porticos. The largest of these porticos was known as "Al Qibla," and there were two more on the other two sides. Al Azhar Mosque's current location is roughly twice as large as the original location where it was first built. To enhance the area's splendor, new porticos,

minarets, schools, and niches have been constructed. As a result, Al Azhar Mosque acts as a sort of museum, showcasing the beauty of Islamic architecture and the profound impact it has had on Egyptian history and culture. See more beautiful structures in Islamic Cairo.

Al Azhar Mosque's architecture and engineering are tied to Cairo's past since the materials used to build it were influenced by many eras in Egyptian history. The mosque has since undergone numerous restorations from various eras. Hence, several Egyptian and non-Egyptian design influences can be seen throughout the entire architectural structure. The domes built during the Ottoman era and the minarets built during the Mamluk era are two examples of how these influences were combined.

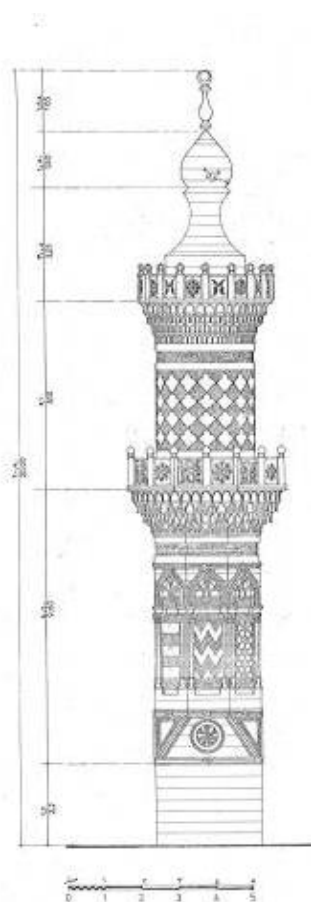
The mosque was designed to resemble a spacious prayer hall with five aisles and expansive grounds, however since that time, Al Azhar Mosque has undergone additional renovations. In addition to the aisles around the courtyard, which had the curved shape with impressive inscriptions on it, a center area was added to the Al Azhar Mosque and was constructed of marble. And under the reign of Al Hafez Le Dein Allah, these curved shapes were created. Moreover, compilations of a few verses from the Holy Quran were inserted during the Fatimid era to give the transepts a spiritual shape.

Al Azhar Mosque features a number of gates, but the major one used today is Bab Al Mizainin, which leads to a white marble courtyard with the mosque's enormous main prayer room in front of it. A marble structure with gilded lettering on its sides recently took the place of the niche.



**FIG. 1.5 External elevation of the northern facade**

The main facade is defined with a huge stone dome and an arched portal from bricks. At the two ends, two towers constructed from stone were not only to define the entry but were also used for ventilation purposes through the two openings in each tower. Several arched openings were placed on a higher eye level for privacy and to provide more focus and less noise for the prayers. The rest of the main facade material is dolomitic limestone and lime mortar which are known for their heaviness and strength. In some instances, the wind has an impact on grand structures, and the direct effect is connected to the air flow by the increase of powerful forces acting upon the structure's surface.



**FIG. 1.6 Minaret of Qaytbay detail drawing**

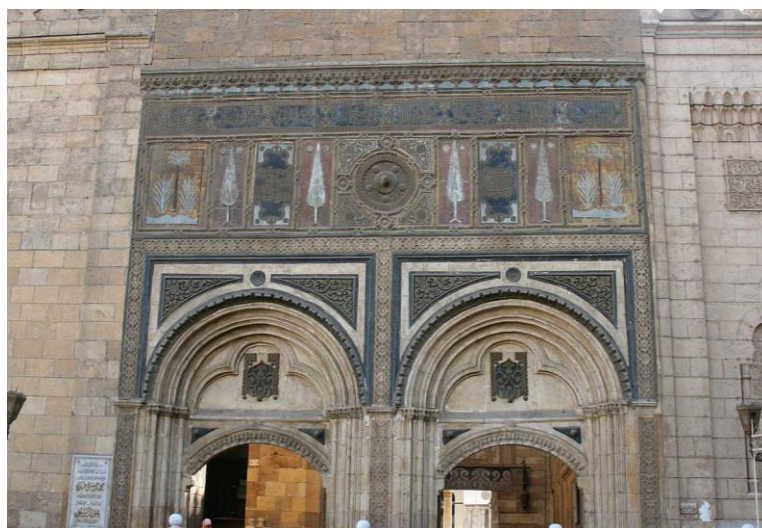


Three balconies on the Qaytbay minaret are supported by muqarnas. The tower is thought to have been erected where a brick minaret from the Fatimid dynasty that had itself been rebuilt numerous times had previously stood. The Qadi Alqudat was run by Sad AlDinal Adhrai while Sultan Baibars was in power. In its stead, the minaret of Qaytbay was constructed as part of the renovation of the mosque's entryway.

entire work of art. The madrasa Thibrisi in the old Mosque of al-Azhar houses this minaret, which Mamluk Sultan Qaitbay had built. The outside is entirely covered in bas-relief designs on the walls, half-columns, and three concentric terraces, whose parapets are even exquisitely ornamented with fretwork. Al-Azhar Mosque is a masterpiece.

### **Exterior Architectural Elements and Materials**

#### ***The Main Gate***



**FIG. 1.7 The Door of Barbers**

This one is considered to be the main entrance (Gate of the Barbers). These two gates have layered arches on a stone entrance with two arches. Panels with classic Islamic architectural designs of flowers and plants are also present. This entrance gate was really built in the middle of the eighteenth century. Yet, the commitment to building magnificent constructions demonstrates the mosque's

continued importance in Islam and the influence it gained when it was first built in the tenth century.

### The Courtyard



**FIG. 1.8 The courtyard (Sahn)**

The rectangular, marble courtyard can be entered through the Bab al-Muzayinin gate. The primary entrance to the prayer hall is located in the southeast of the courtyard's three arcades. Two of the minarets may clearly be seen from this angle. The balconies are embellished with muqarnas, a typical feature of Islamic architecture. It is thought that there existed a minaret from the Fatimid dynasty that needed to be restored before this building.

## The Arcades



**FIG. 1.9 The Arches**

These arches in the arcades can be seen in this picture. It is only possible to find them in Fatimid architecture. This unusual design contributes to the building's status as a significant representation.

## The Arcades Decorations



**FIG. 1.10 The stucco decorations found in courtyard arcades**

Stucco inscriptions adorn the arcades that enclose the courtyard. Mosaics are absent from Al-Azhar, which also has few other embellishments. One distinctive feature of the mosque is that all embellishments are constructed of stucco. In contrast to the rival Abbasid and Byzantine empires, the Fatimid empire stood out with this unusual adornment.

### **The Minaret of Qaybay**

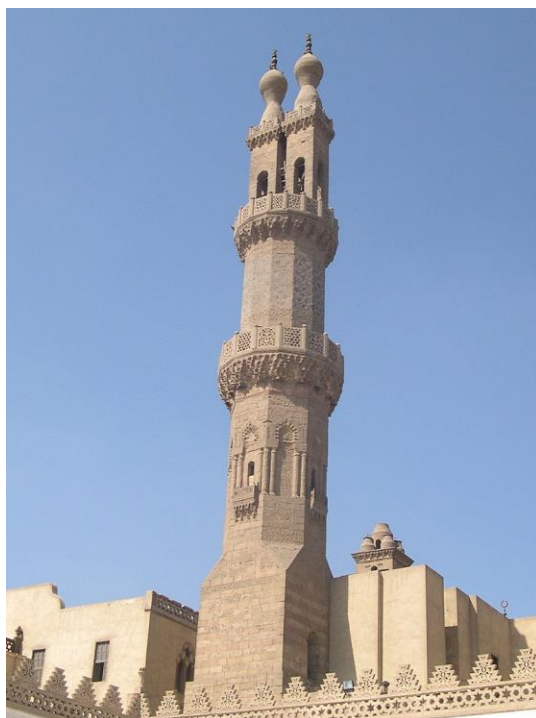


**FIG. 1.11 Qaybay Minaret**

This minaret is decorated by Muqarnas, supporting three balconies. Upcoming part is located above this one and is plaited and separated from the first by a balcony. This shaft and the last cylindrical shaft, which is adorned with four arches, are separated by a second balcony. The third balcony, which is topped by the minaret's finial, is located above this. The tower is thought to have been erected

where a brick minaret from the Fatimid dynasty had previously stood and had undergone numerous reconstructions. According to historical reports, the Fatimid minaret required many reconstruction attempts due to structural flaws.

### **The Minaret of al-Ghuri**



**FIG. 1.12 The minaret of AlGhuri**

The first shaft is octagonal and rests on a square base. Four of its eight sides feature elaborate keel arches that are divided from one another by two columns. Blue faience is used to embellish A finial is perched on two identical onion-shaped bulbs on top of each of these two shafts, with a balcony separating it from the shafts.



## The Barsbay Dome



**FIG. 1.13 The Barsbay Dome found in the courtyard**

This dome is known to be one of the most unique parts in this mosque. It is decorated with some geometrical motifs where below are some Quranic verses. The dome, then surrounded by several arched openings, was used for ventilation.

## Interior Architectural Elements and Materials

### The Prayer Hall



**FIG. 1.14 The prayer hall**

This praying hall is supported by wooden beams and marble columns. The interior arcades take the shape of a semi circular arch, in which it is decorated with floral ornaments on both sides. The ceiling of the prayer hall is supported by wooden panels and also helpful in terms of improving and controlling the noise and acoustics.

### *The Column's Capitals*

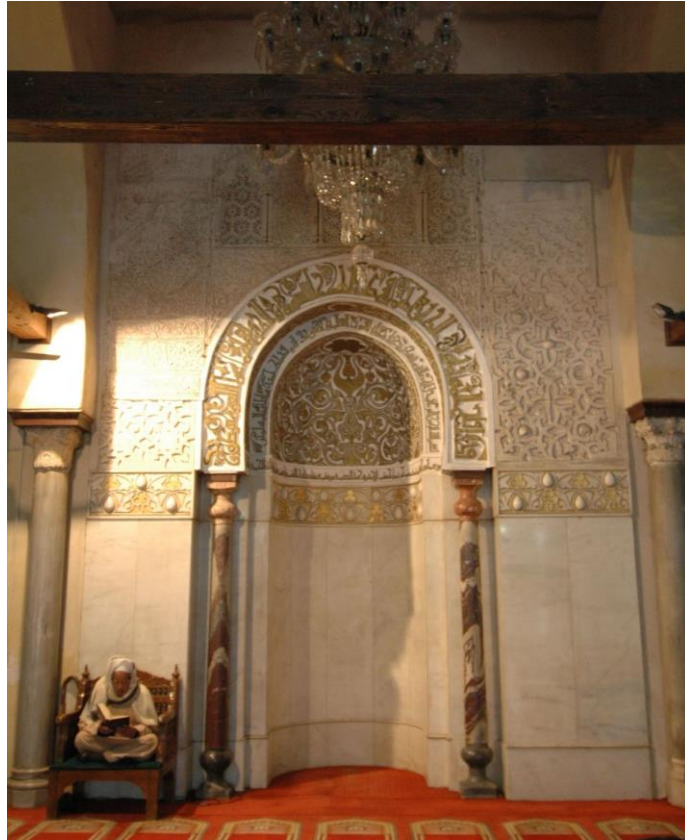


**FIG. 1.15 The column's capitals in the prayer hall**

The Column's Capitals are mostly inspired from the Greek composite capitals, but more in Islamic way. They are heavily decorated with floral ornamentations. Those capitals were

constructed from carved white marble which gives this valuable and rich appearance.

### *The Mihrab*



**FIG. 1.16 The Mihrab**

This important element found in the mosque contains marble columns on either side of a semi-dome. The semi-dome has elaborate stucco patterns that are thought to be original. Two entire sets of Qur'anic inscriptions.



## The Dome's Interior



**FIG. 1.17 The dome found over The Madrasa al-Aqbughawiyya in AlAzhar mosque**

This area is covered by a dome and a minaret. The dome is surrounded by arched windows that provide natural light. Under these windows, it is decorated with colorful muqarnas.

### **Al Hakim Mosque (996-1013)-Cairo, Egypt**

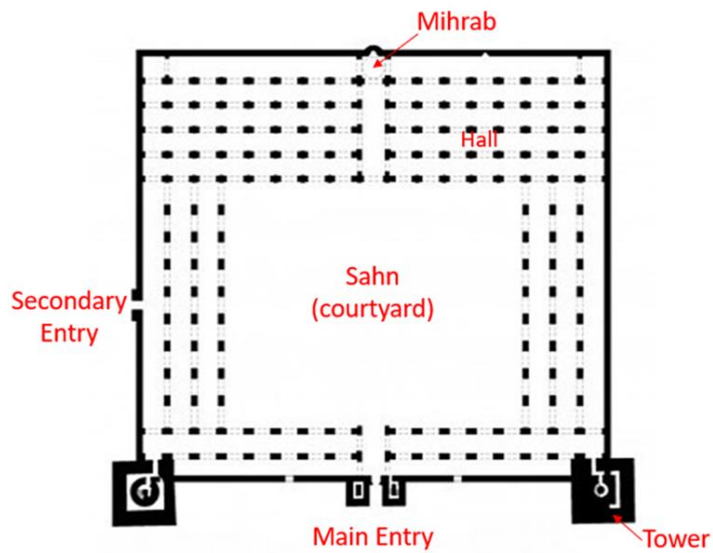
#### **Introduction**

Al-Hakim Mosque's Fatimid architectural contribution dates from about 990 and 1012. It imitated both the latter's spatial arrangement and the former's architectural forms and methods.



**FIG. 2.1 A** The prayer hall in AlHakim mosque

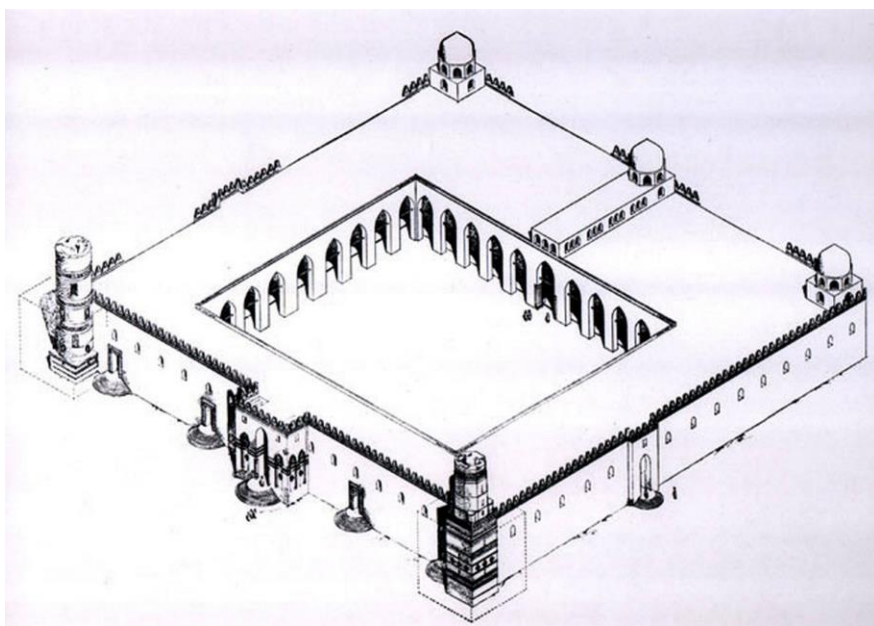
### Analyzed Architectural Drawings



**FIG. 2.2** The main floor plan of AlHakim mosque

The floor plan shows a simple rectangular layout for the mosque. The main entry is highlighted by two large towers to draw attention to this zone. In the middle, a square courtyard surrounded by arcades. The mihrab then found in the deepest part and marked with a dome.

The section drawing taken from the middle shows the design of the dome above the mihrab surrounded by several arched windows. The roof of the mihrab is marked by making it higher than the other roofs. The columns show a simple design for the capitals which are considered to be more romanesque capitals. The aisles are defined with simple pointed arches.



**FIG. 2.3 Isometric view of AlHakim Mosque**

The main entry gate is projected to highlight and clarify this zone for prayers. Two huge towers constructed from stones are located in the two corners to highlight the main facade. In the middle of this mosque, Except for the northwestern side, which is only two Riwaqs broad, this design element was initially used in Egypt's Ibn Tulun Mosque and afterwards reused at Al-Azhar. There are three domes located in one facade where the middle one is located above the mihrab with a raised roof.

## Exterior Architectural Elements and Materials

### The *Main Gate*



**FIG. 2.4 The projected portal with ornamental motifs and kufic inscriptions**

The main structure of this entry. Is stone. It is marked by a recessed arched opening, with two arched decorative elements. At the top are some quranic verses made on carved wood.



## The Minarets



**FIG. 2.5 One of the two minarets found in the two corners of main facade**

This is considered to be a very unique minaret. It has an octagonal shaft where it's decorated with three rows of muqarnas. It has several decorated openings which are mostly used for ventilation purposes.

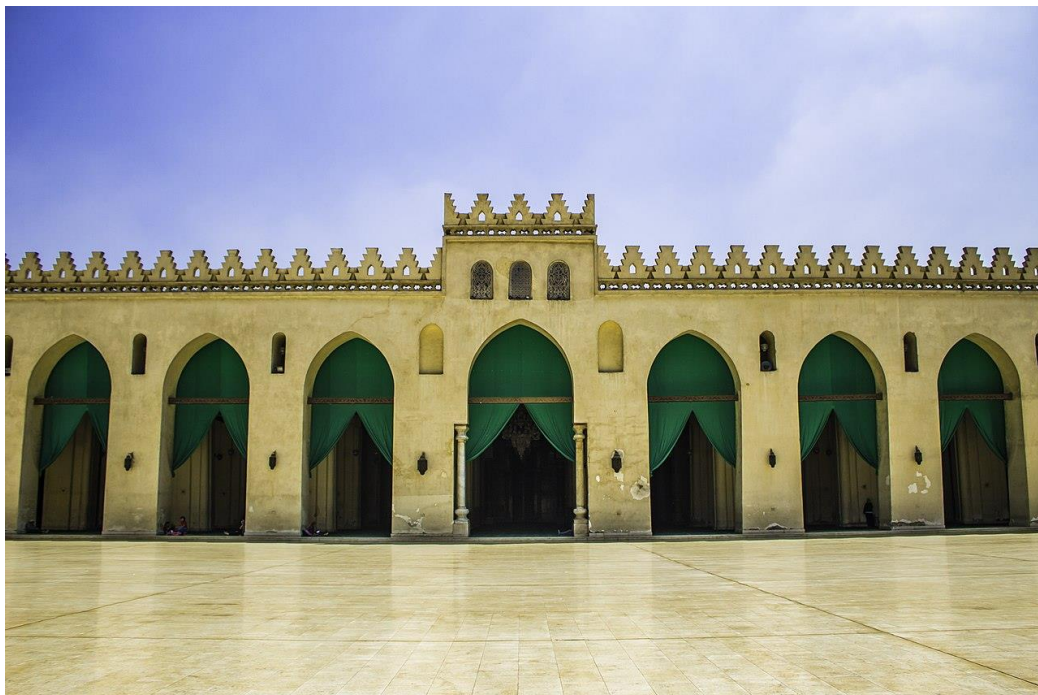
## The Mihrab's Dome



**FIG. 2.6 The Mihrab's Dome**

This dome has a pointed top. It is constructed from local lime stone found in that area. It has a square base which is then octagonal in shape. Several openings surround this dome. The openings are decorated with carved wood for daylight and ventilation.

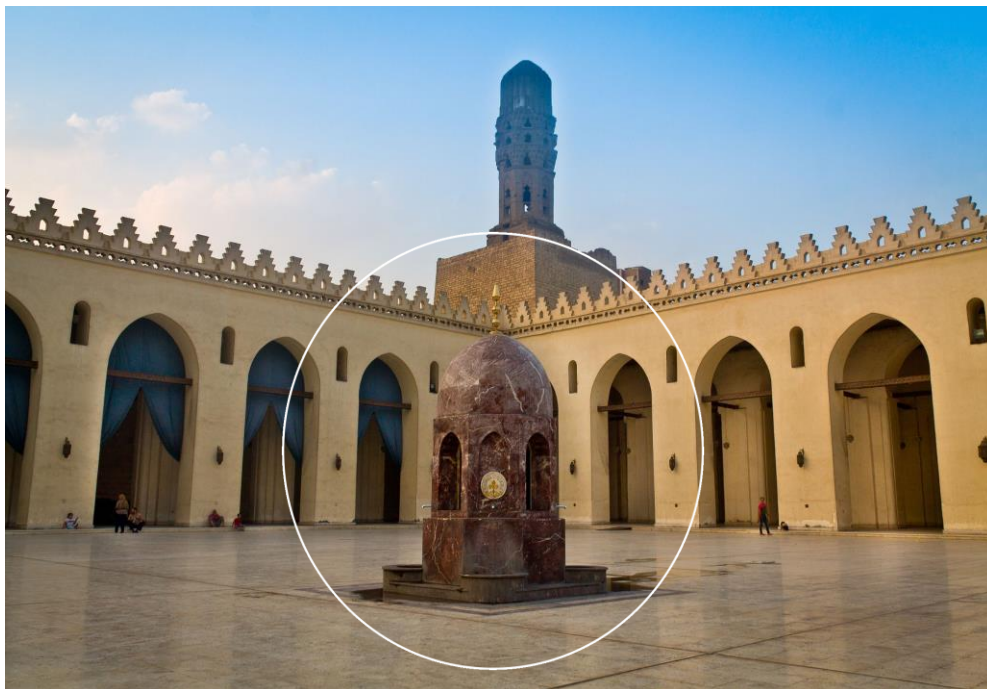
## *The Courtyard*



**FIG. 2.7 Looking southeast from the mosque's courtyard toward the prayer hall's central aisle.**

The mosque's rectangular design features a central courtyard that is encircled by arcades (Riwaqs) on all four sides. Other arcades that run along to the walls of the courtyard are located behind these ones, dividing them into aisles. The courtyard's northwest side (the entrance side) has a space that is two aisles deep; its southwest and northeast sides have spaces that are three aisles deep; and its southeast side has a space that is five aisles deep, housing the main prayer hall. This design resembles that of the Al-Azhar Mosque and the earlier Ibn Tulun Mosque.

## *The Ablution Area*



**FIG. 2.8** The ablution dome found in the middle of the courtyard

This dome is located in the middle of the mosque's courtyard and constructed from stone then covered with unique red marble. The sculpture is surrounded by water tabs for prayers. Also, This dome is surrounded by projected arches from the same material. The flooring under it is highlighted with red marble to emphasize this area.



## *Interior Architectural Elements and Materials*

### *The Oldest Mihrab*



**FIG. 2.9** The older Mihrab in AlHakim mosque

This mihrab is considered to be the oldest mihrab in AlHakim mosque. It is built from cement to the wall with colored design using a technique called Ablaq. The mihrab is projected inside and marked by double hemi domes. On the upper side, a couple of Quranic verses are written using Kufic inscriptions.

### *The Oldest Mihrab*



**FIG. 2.10** A clear image of the carved cement tablet found next to the older Mihrab

## The Latest Mihrab



**FIG. 2.10** The latest mihrab of AlHakim mosque

This mihrab is more ornamented and rich compared to the older one. It is constructed from white marble and decorated with goldish floral ornaments. Also, several Quranic verses are written using Kufic inscriptions. The design of this mihrab reflects the symmetry and order in terms of its arrangements and decorations. The mihrab is supported by two marble columns that take the design of Romanesque capitals. Double hemi domes are marked this mihrab.



## *The Minbar*



**FIG. 2.11 The Minbar AlHakim mosque**

This minbar is found next to the latest mihrab. It is constructed from cherry wood and carved with different Islamic and geometrical decorations.

### *The Dome's Interior*



**FIG. 2.12 The dome's interior found above the new mihrab**

This view is found above the latest mihrab in alHakim mosque. It is supported by an octagonal base which has four sides with windows that allow natural light inside the mosque, where the other four sides are vaulted with pendant lights on each one. More closer to the dome, there are also eight windows placed on each side of the octagonal form. In the middle of the dome is a circular geometric art with different colors. The lower part of the dome which is the Sqaurch base is surrounded by Arabic inscriptions using Kufic writings.

## *The Prayer Hall*



**FIG. 2.13 The Prayer hall**

This structure supported by wooden panels and also helpful in terms of improving and controlling the noise and acoustics. Wooden beams are also used for more support to the structure. Most of the interior walls are made from white marble where all the flooring is covered with praying carpets.

## *Basuna Mosque (2019)-Basunah, Egypt*

### *Introduction*

The mosque's role as the "House of God" is the central idea. a tangible location, a House for the One who transcends time and space, and whose only creatures are His own. Since He alone is incomprehensible and all-knowing, He encompasses all human perception rather than being able to be seen by any human being. He alone is all-hearing and all-seeing, and there is nothing like Him. This design aims to explore how the relationship between the created and the Creator, who is both physical and metaphysical, is expressed architecturally. God's house contains His will, which is revealed in His written word.



**FIG. 3.1 A view for the Basuna mosque**



### *Connection With Context(Location)*

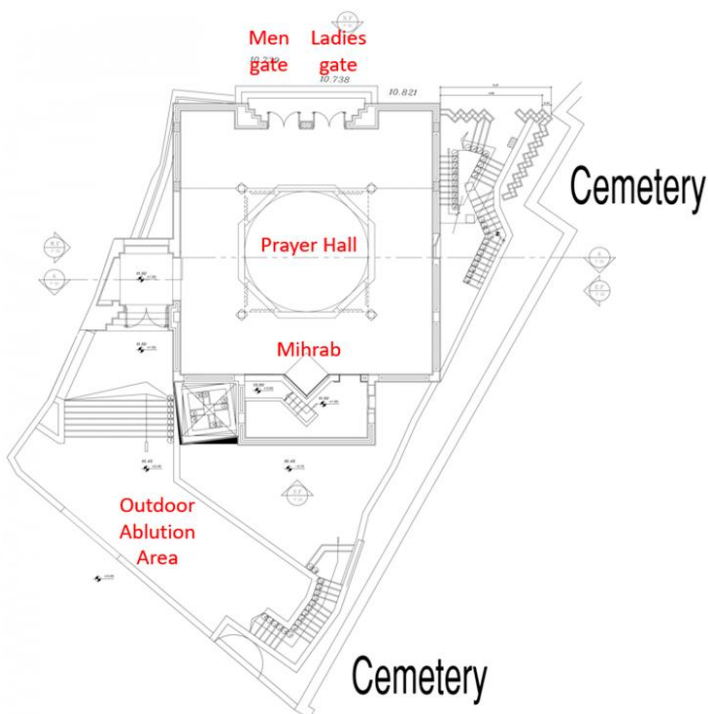


**FIG. 3.2 An image showing the layout of the mosque within its context**

This mosque used these materials in its facades like the local limestone which shows a clear connection between the building and the site.

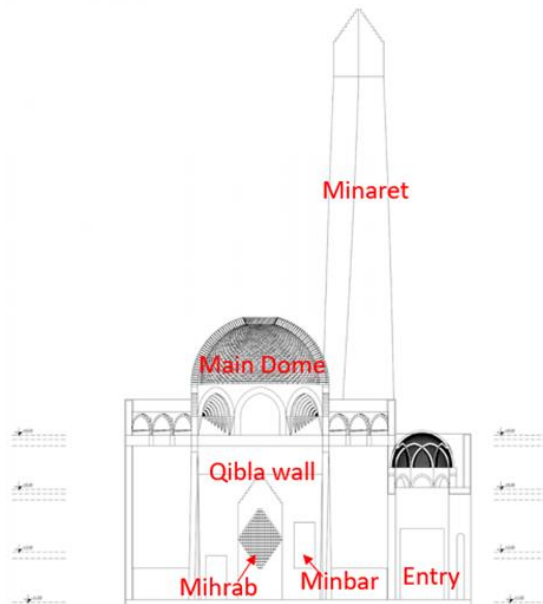


## Architectural Drawings



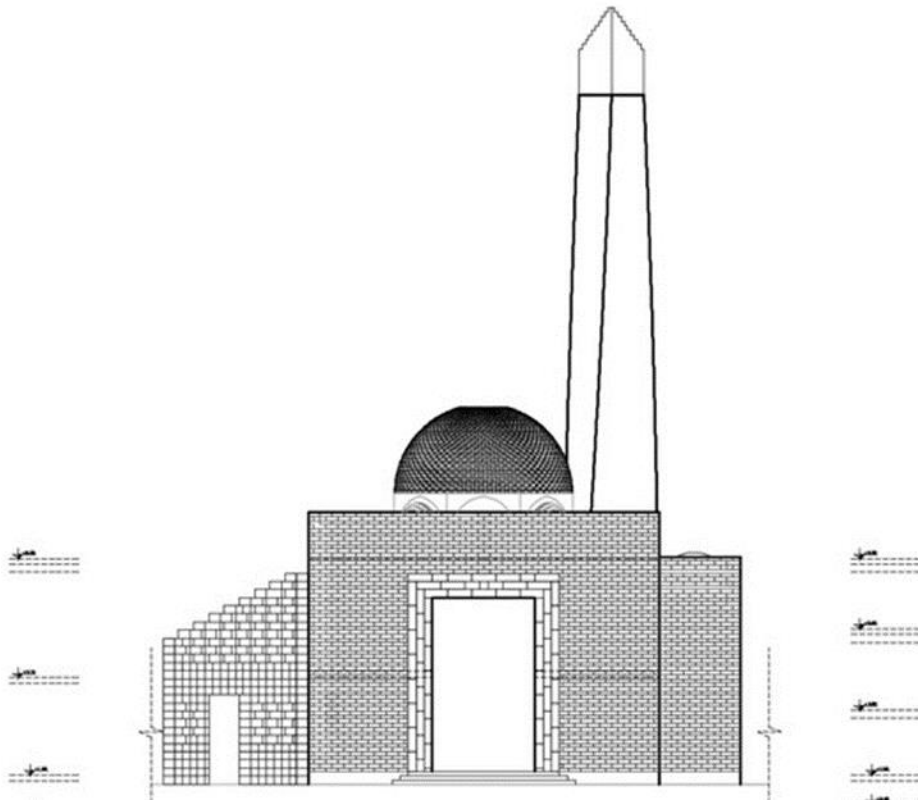
**FIG. 3.3 Basuna mosque Floor Plan layout**

The main floor plan shows that the mosque has a simple rectangular layout. A small outdoor area is mainly used for circulation and ablutions. This mosque has two gates which separate the two genders. In the middle is the main prayer hall with the dome above it and supported by four columns. The qibla wall has a cubic mihrab which also includes the minbar next to it.



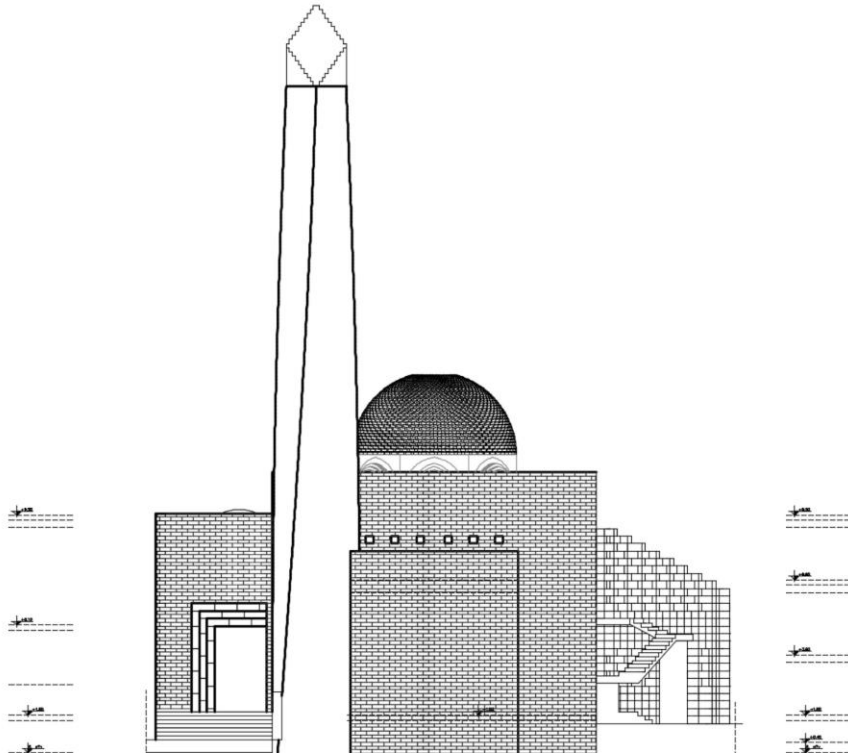
**FIG. 3.4 A section drawing shows the prayer hall and the mihrab**

This section shows the relationship and connection between different architectural elements. The mihrab is in the middle where the minbar is placed next to it with a small opening in the qibla wall. The prayer hall is marked with a huge dome that is supported with four columns. Next to the dome, a simple and modern minaret with a unique top that takes the shape of a pyramid but more in an abstract way.



**FIG. 3.5 Northern Elevation**

This drawing shows the northern facade with the tiles of limestone used on the exterior walls. The main entry gate in the middle is surrounded by three different projected levels to emphasize this area.



**FIG. 3.6 Southern Elevation**

This drawing shows the southern facade which is more of the back side of the mosque. There is a secondary entrance which is surrounded by three different projected levels to emphasize this area. Several small openings are found in this area where they are used for controlling the winds.

## *Facades and Entrances*



**FIG. 3.7 Northern entrance, in addition to Ladies entrance**

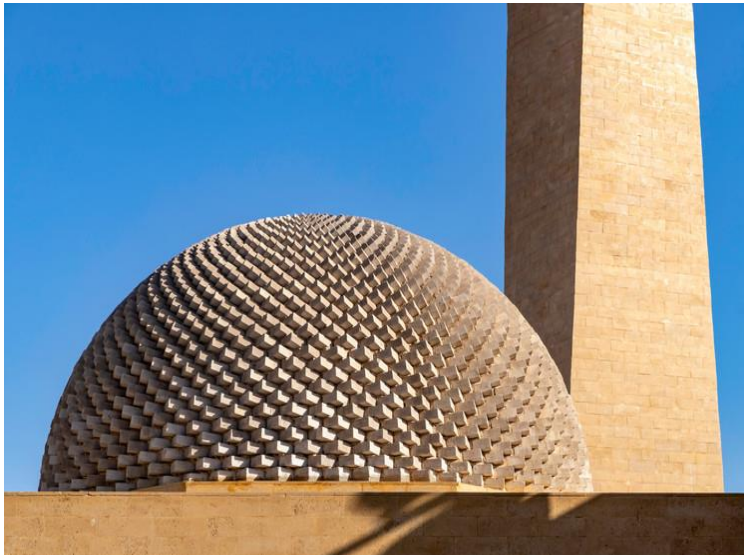
This is the main entrance where it includes both men and women gates. The main door is constructed from solid wood with floral motifs. The Kufic calligraphy is used in the middle as a focal point with a goldish tone. This area is projected many times with different heights to draw attention to this zone. The main facade's structure is the limestone found and made in this small village.



**FIG. 3.8 South Eastern facade with the cemetery on the East**

This facade shows the back side of the mosque where it has several openings for ventilation. The main structural material here is also the local limestone. There is a cemetery area located on the east side of the Basuna mosque.

*Exterior Architectural Techniques and Elements*  
*The Main Dome*



**FIG. 3.9 A view of the central dome**

This dome is made up from many limestone blocks placed in a way to form a round domed shape. The base that these blocks lay on is more octagonal in shape. These blocks which are placed above the main praying hall are designed with few openings to allow access to daylight and some ventilation.

## The Minaret

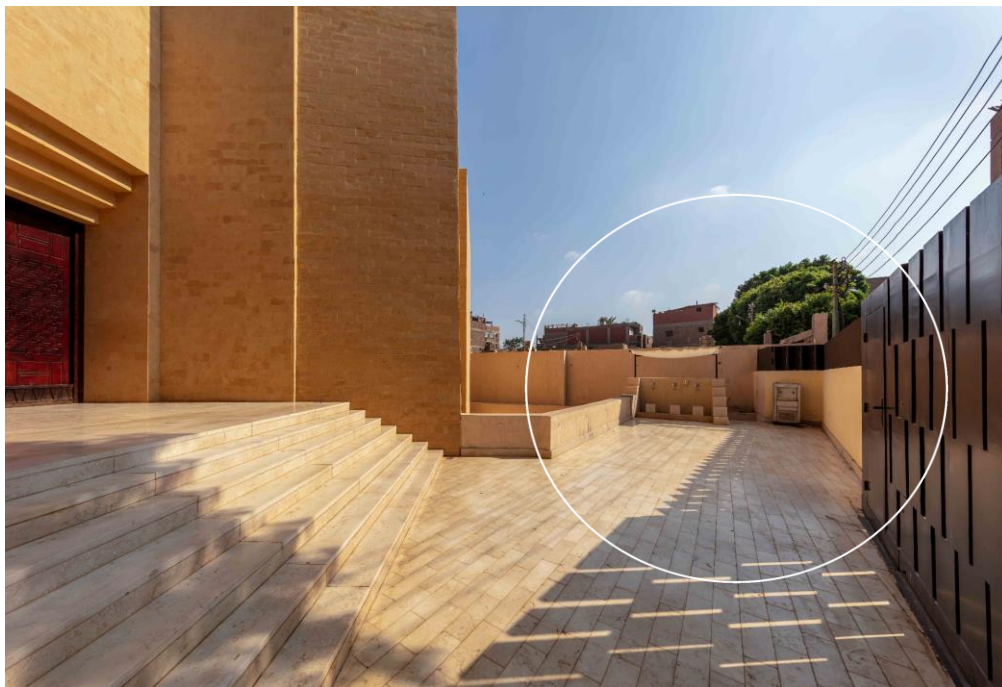


**FIG. 3.10** The structure of the minaret in Basuna mosque

This minaret is constructed from the same facade main material which is the local lime stone. It is a very simple minaret that takes the shape of a square with a little unique twist.



## The Ablution Area



**FIG. 3.11** The ablution area found in the main gate outdoor area

This area is also constructed from the local limestone and placed on the side of the main gate.

## Interior Architectural Techniques and Elements

### *The Prayer Hall*



**FIG. 3.12 The prayer hall in Basuna mosque**

The main prayer hall is a simple rectangular one that is found in many mosques. In the middle is the qibla wall with the mihrab and the minbar on its right side. The four columns are used to support the roof structure. The wall here is made from modern gypsum board to reduce the noise coming from the outside as it's considered a noise area. The walls are then treated by limestone supports to unify the design of this mosque and match it with the exterior facade.

## The Mihrab and Minbar



**FIG. 3.13** The mihrab and minbar in Basuna mosque

The mihrab here is made from black marble to highlight this area in the qibla wall. Next to it is the minbar as a small opening where the Imam can use it to tell the speech. In the middle of the mihrab, ninety nine cubes placed in the shape of a bigger cube made from wood veneers representing the ninety nine names of Allah. These cubes also worked as a decorative lighting in the night time.



**FIG. 3.14** a view of the mihrab with the decorative cubes lighted  
*The Domes's Interior*



**FIG. 3.15** An interior view of the central dome

The ceiling shows the main dome in the center with a squarish base and layering design surrounding it on the four sides. Then four stone columns support this structure. The roof here is a waffle type which has openings to the sky that works as wind catchers, also helpful in controlling the sound.

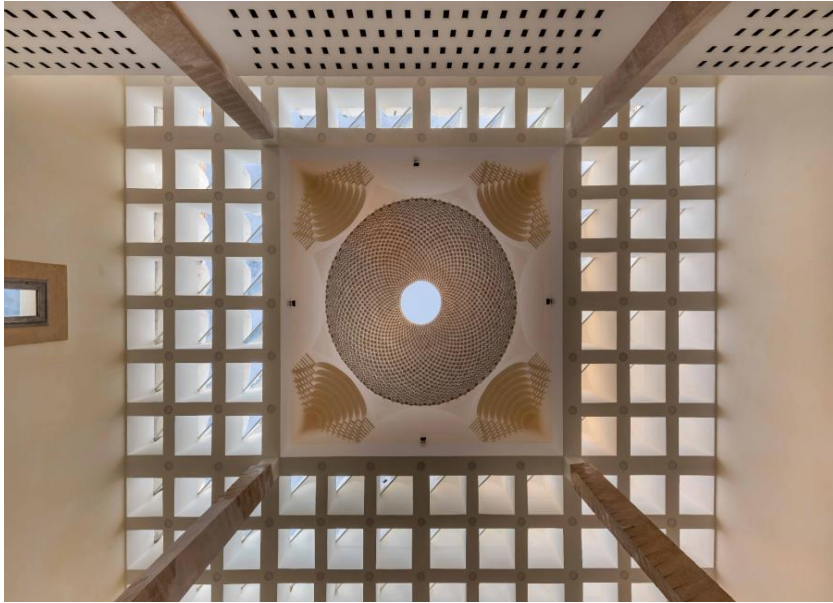
### **Environmental and climatic treatments**



**FIG. 3.16 An exterior facade showing the single window**

This image shows that a single window is used on one facade to help minimize the heat and noise coming from the busy street.



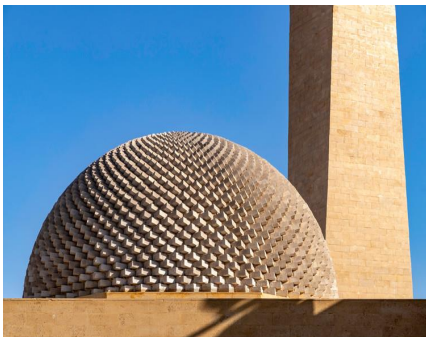


**FIG. 3.17 An interior view of the central dome**

The structure of the roof that mostly is waffle roof, provides the enough amount of daylight needed throughout the day. Also, the central dome takes a significant role in providing focused light and ventilation.

## Architectural Elements Comparison

### The Domes



**FIG.4.1 The dome of Basuna Mosque FIG 4.2 Dome of Hakim mosque FIG4.3 Dome of Azhar Mosque**

All the three domes share the simple geometrical main shape which is a hemispherical dome. They all constructed from one material found in each region whether natural stone or limestone. All of them are located above the mihrab and the qibla wall to highlight this important place found in each mosque. In contrast, the carvings and decorations found in each are differ from dome to dome. The dome of Al Hakim mosque satisfied only with the carvings found in each arched opening. The Basuna dome makes the spherical arrangement of the limestone blocks to be the main design as well as its unique decorative element. In Al Azhar dome, it is really showing a big difference in terms of decorations as it has rich Islamic carvings on the dome, where the Kufic inscriptions are found around it. Moreover, both Al Hakim and Al Azhar domes have small openings in their dome's base, while in Basuna it is satisfied with the several openings found in the mosque's roof for daylight and ventilation.

### The Main Entrances



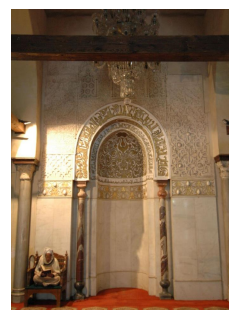
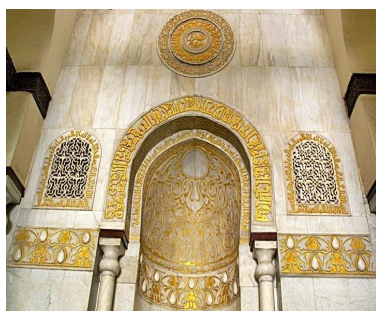
**FIG.4.4 The gate of Basuna** **FIG 4.5 The gate of Al Hakim**  
**FIG4.6 The gate of Al Azhar**

All the three gates focus on highlighting this important zone by projecting the main wall outside.

The door itself is heavily decorated and carved with different Islamic and floral ornaments. Both Al Hakim and Al Azhar gates used Arches to mark the entry, while in Basuna they depend only on the rectangular shape with different heights. In addition, all of them share the same facade material which is natural stone that is also considered to be sustainable as it is found locally and in each region.

In Basuna and Al Azhar mosques, both provide two entrances located next to each other to separate the two genders entry zone, but in Al Hakim mosque, it only provides one huge entrance. All the three entrances use the Quranic verses on the upper side of each entrance as a decorative element.

### The Mihrab



**FIG.4.7 The mihrab of Basuna    FIG 4.8 The mihrab of Al Hakim**  
**FIG4.9 The mihrab of Al Azhar**

The three mihrabs are all marked by a niche or a curved wall with different color material to draw attention to this important area found in each mosque. All of them are using the same main material, which is marble tiles that reflect the richness and luxury. The three mihrabs all used a design element above the mihrab in the center, for example in Al Hakim mosque, it is used as a circular decoration with some qur'anic verses. In Al Azhar mosque, it is used as an arch shape and filled with floral carvings. In Basuna mosque, it depends on using six square openings as decorations as well as for lighting and ventilation. Both Al Hakim and Al Azhar mihrabs are supported by Romanesque columns which are inspired by Greek architecture. Both Al Azhar and Basuna apply a light fixture in the middle of the mihrab, Al Azhar uses a chandelier, while Basuna's mihrab uses the ninety nine cubes as a light element and a focal point.

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