


# An Evaluation Of The Key Characteristics Of A Townhouse: Studying The Structures And Benefits To Occupants In South-South Nigeria

**Ogundele Joseph OLUROTIMI**

Department of Architectural Technology
Federal Polytechnic
Bida, Niger State

ABSTRACT

*This study sought to evaluate the key characteristics of a townhouse, examining its structure and benefits to occupants in South-South Nigeria. In carrying out this study, a descriptive survey research design was adopted. The study was conducted in South-South Nigeria. The target population comprised all Architects and Civil Engineers in South-South Nigeria. A stratified sampling technique was employed to select 30 Architects and 30 Civil Engineers from each of the three selected states, namely Akwa Ibom State, Rivers State, and Cross River State. This resulted in a total sample size of 180 respondents. The instrument used for data collection was a structured questionnaire entitled "Townhouse Characteristics, Structures and Benefits Questionnaire "(TCSBQ). The instrument was subjected to face and content validation by other one expert each in Architecture and Civil Engineering to ensure its accuracy, appropriateness, relevance, and completeness for the study. The reliability coefficient obtained was 0.84, indicating that the instrument had a high level of reliability and was suitable for the study. The data generated for the study were analysed using appropriate statistical techniques, particularly descriptive statistics, to answer the research questions. The results of the findings revealed that "shared walls" (23.89%) constituted the highest percentage necessitating the choice of townhouses, while "limited side windows" (16.67%) recorded the lowest percentage. Regarding the types of townhouses mostly available in South-South Nigeria, "conventional townhouses" recorded the highest percentage (22.22%), while "courtyard townhouses" recorded the lowest (11.11%). Furthermore, the findings showed that "efficient use of space" (25.00%) was the most commonly identified benefit of townhouses, whereas "access to neighbourhood facilities" (15.56%) recorded the lowest percentage. The study concluded that well-designed, safe, and climate-responsive townhouses can improve housing quality, occupants' comfort, and the overall standard of living in South-South Nigeria. One of the recommendations made was that building professionals, developers and relevant government agencies should ensure that townhouse construction in South-South Nigeria complies with approved building regulations and structural engineering standards.*

**Keywords:** Townhouse, structural characteristics, housing design, occupants' benefits

## INTRODUCTION

Housing is one of the fundamental needs of human existence, because it offers protection, privacy, shelter, and a comfortable living space for families. Townhomes have emerged as a significant housing alternative in modern residential construction because they mix the seclusion of individual living units with the

economical use of land. Generally speaking, a townhome is a multi-story residential building with its own entrance and interior living areas that is connected to nearby buildings by shared walls. Functional room configurations, sufficient ventilation, natural lighting, safe access, appropriate building materials, and efficient drainage systems are some of its key features. The City of Toronto (2018) emphasizes that a well-designed townhome should support open space, pedestrian safety, natural ventilation, privacy, access to sunshine, and neighborhood harmony. When assessing townhomes' quality, usability, and appropriateness for residential usage, these features are crucial.

Examining townhome buildings and their advantages to tenants is especially pertinent in South-South Nigeria, where urbanization and population expansion impact housing demand. The varied urban and environmental characteristics of states like Akwa Ibom, Rivers, Bayelsa, Delta, Edo, and Cross River have an impact on housing choices, building materials, and home design.

Effective land use, more privacy, greater living space organization, security, and chances for family time are all advantages of townhomes for its residents. When properly planned and built, its multi-story layout may offer more space without requiring a lot of land, and shared walls can lessen exposure to the elements. However, these advantages are contingent upon structural soundness, efficient upkeep, cost-effectiveness, sufficient ventilation, and adherence to building codes. Akinola, Ibem, Opoko and Akinola (2026) highlighted that the features of housing units, services offered, location, management, and the surrounding socioeconomic environment all have an impact on the quality of housing in Nigeria.

Against this background, this study evaluates the key characteristics of townhouses in South-South Nigeria, with particular attention to their structural components, design features, functional suitability and benefits to occupants. It also considers the challenges associated with townhouse development and the need for safe, affordable, climate-responsive and sustainable residential designs that improve occupants' comfort and overall quality of life.

**Statement of the Problem**

The increasing demand for residential accommodation in urban areas has made the provision of suitable, affordable, and functional housing a major concern in Nigeria. In South-South Nigeria, population growth, urbanisation, rising land costs, and the need for efficient land utilisation have continued to influence residential housing choices. Consequently, different forms of residential buildings have emerged to accommodate the housing needs and preferences of individuals and families. One of such residential building types is the townhouse, which offers an alternative to conventional detached and semi-detached residential buildings. Despite the potential of townhouses to provide efficient land utilisation, shared facilities, security, privacy, and convenient residential accommodation, there appears to be limited understanding of the specific characteristics that influence their choice among residents in South-South Nigeria.

The decision to choose a townhouse may be influenced by factors such as architectural design, building layout, and number of floors, availability of parking spaces, accessibility, privacy, and the general functionality of the building. However, the extent to which these characteristics determine the preference for townhouses in the region remains unclear. The problem, therefore, is the inadequate understanding of the key characteristics that necessitate the choice of townhouses, the types of townhouses predominantly available, and the benefits associated with townhouse developments in South-South Nigeria. Addressing these issues is necessary to provide useful information for architects, civil

engineers, property developers, investors, and prospective occupants in making informed decisions regarding townhouse design, development, and selection. It is against this background that this study seeks to investigate the characteristics of townhouses, their structural forms, and the benefits to occupants in South-South Nigeria.

**Research Objectives**

1. To find out the key characteristics of townhouses that necessitate the choice of townhouses in South-South Nigeria.
2. To determine the types of townhouses that are mostly available in South-South Nigeria.
3. To examine the benefits mostly identified with townhouses in South-South Nigeria.

**Research Questions**

1. What are the key characteristics of townhouses that necessitate the choice of townhouses in South-South Nigeria?
2. What types of townhouses are mostly available in South-South Nigeria?
3. What are the benefits mostly identified with townhouses in South-South Nigeria?

**CONCEPTUAL FRAMEWORK**

**Concept of Townhouse**

A townhome is a multi-story residential building with a private entrance and at least one wall shared with a neighboring home. A townhome operates as a stand-alone unit within a row of comparable homes, in contrast to apartments, which are stacked units within a shared building. Townhomes typically have a height of two to four stories and are built with a small footprint to maximize site utilization in urban or suburban settings. Townhomes are a popular housing option in densely crowded areas where space is both expensive and scarce, according to Plan7Architect (2026). Because of shared walls and generally community-managed outdoor areas, they offer the experience of a single-family home, often with cheaper upkeep responsibilities and prices. In order to improve visual appeal, new developments may add a variety of façades to townhomes, which are typically placed in rows and occasionally have identical architectural styles.



**Fig. 1: A picture of a Townhouse**

As demonstrated by Confident Group (2026), a townhome is a kind of multi-story dwelling that shares one or both side walls with neighboring homes. It typically opens to the street with its own private entrance. Usually consisting of two to four levels, each town home is a stand-alone property with a distinct layout and character. The term "townhouse" suggests a combination of private and communal life. Townhomes are often constructed in a row, as contrast to apartments, which are piled one over the other. The architectural styles of the houses in a row could be comparable. Modern ones, however, have a variety of facades to enhance their esthetic appeal. This type of dwelling provides a compromise between an apartment and a villa. Compared to a villa or standalone home, you can enjoy the comfort,

privacy, and space of an apartment at a cheaper cost and with less maintenance.

Additionally, BH Management Services (2024), explains that a townhome is a kind of residential structure that is usually tall and narrow and shares one or more walls with nearby houses. These homes are built to make the most of available space and are frequently found in urban or suburban locations. They typically have several floors, with bedrooms on the upper floors and living spaces on the main floor. Although any city residence might technically be referred to as a townhome, the term is typically used to describe a type of multi-story house that shares one or two walls with other houses. Each includes a modest front lawn and backyard, as well as its own door. Townhomes, as their name implies, have tall, narrow shapes and are intended for high-density urban settings.

**Key Characteristics of Townhouse**

A townhouse is a type of residential building designed as an individual dwelling unit that shares one or more walls with neighboring units. Townhouses are commonly constructed in rows or clusters and may have two or more floors, depending on the design, location, and purpose of the development. They combine features of individual houses and high-density residential buildings by providing private living spaces while making efficient use of available land.

- **Shared Walls**:

Sharing one or both side walls with nearby residential units is one of a townhouse's main features. A townhouse is typically joined to other homes in a row, rather than standing freely on all sides like a detached house. This configuration makes it possible for multiple residences to inhabit a small plot of land. According to Friedman (2018), attachment between housing units is an important element of townhouse design and helps define this housing type.

- **Multi-Storey Structure**:

To provide enough living space without requiring a big ground-floor footprint, townhouses are typically planned with two or more levels. While bedrooms, bathrooms, and private family areas may be located on the higher levels, the ground floor may include the living room, kitchen, dining area, and guest amenities. However, the actual configuration is determined by the inhabitants' requirements and the design. Hamaoka et al. (2023) examined townhouse buildings with three to five storeys in their study of traditional and modern architectural characteristics in Bhaktapur, Nepal.

- **Efficient Use of Land**:

Townhouses are ideal for places where land is expensive or scarce, because multiple residential units may be built on a relatively small site. More homes can be accommodated without dispersing buildings over wide areas thanks to their vertical architecture and linked layout. Because of this feature, townhouses are helpful in urban and suburban housing developments where there is a need for more housing due to population expansion. Compact footprints, vertical development, and attached units are characteristics that distinguish this type of dwelling, according to the architectural principles covered in Town and Terraced Dwelling.

- **Individual Living Units**:

Despite having walls in common with nearby homes, townhouses are often built as independent residences. Every home can have its living areas, bedrooms, bathrooms, kitchen, and entrance. With this setup, residents of a connected residential development can continue to lead independent domestic lives. Friedman (2018) explains that townhouse design can accommodate different household requirements while retaining the essential characteristics of the housing type.

- **Limited Side Windows**:

Because townhouses share walls with adjoining buildings, windows are generally concentrated on the front and rear façades rather than on the attached sides. This can limit the amount of natural light and ventilation entering rooms located in the middle of the building. Architects may address this limitation through larger front and rear windows, internal courtyards, skylights, or carefully positioned openings. Hamaoka, et al., (2023) identify window arrangements and façade openings as

important features for examining townhouse architectural types.

**Structure of Townhouse**

A townhouse is a type of residential structure that is intended to be a single housing unit connected to one or more adjacent units in a block or row. While sharing side walls with other homes, each unit typically spans from the ground floor to the roof and has its own door. Townhomes typically have two to four stories, although local planning laws and design specifications determine their height and layout.

The major structural components of a townhouse include the following:

- **Foundation:**

The building's weight is securely transferred to the ground via the foundation. Soil conditions, the weight of the building, and the findings of relevant site studies all influence its design.

- **Walls and partitions:**

While interior partitions separate the structure into rooms, external walls shield residents from the elements. Shared walls must meet all applicable structural and fire safety regulations and serve as a barrier between adjacent units.

- **Floors and staircase:**

Furniture, people, and other loads are supported by floor slabs or floor framework. Staircases should allow people to travel between floors safely and link different levels.

- **Roof structure:**

The building is shielded from sunshine, rain, and other external factors by the roof's supporting components and covering materials. Rainwater is diverted from the building by gutters and drainage systems.

- **Doors, windows and ventilation:**

Windows offer vistas, natural light, and ventilation, while doors allow access to specific areas and exits. Comfort, privacy, and energy efficiency should be supported by their placement. Friedman (2018) explains that townhouse façades and interior layouts have evolved to respond to changing housing needs and architectural preferences.

- **Building services and safety systems:**

Important elements of building a townhouse include electrical, water, plumbing, drainage, sanitation, and fire safety systems. The Federal Housing Authority (n.d.) identifies structural, mechanical and electrical drawings as essential aspects of building design and approval in Nigeria.

**Types of Townhouse**

As builders, we are aware that there is no one-size-fits-all approach to home design! Although it may be simple to distinguish between a single-family home and a mid-rise condo, townhomes come in a variety of sizes and designs. Activa (2026), we construct a variety of townhomes (or villages) in our communities to meet the region's density restrictions as well as our homeowners' budgetary and square footage needs! They can differ greatly in terms of size, style, and design, and it's frequently difficult to distinguish between them just by looking at their names.

- **Conventional Townhouse:**

Individual living units are grouped side by side in a row in this conventional type of townhouse. Typically, each unit has two to four stories, a front and back area, and a separate entrance. End apartments only share a wall on one side, whereas adjacent units share side walls. This layout makes effective use of the land while offering separate living areas.

- **Stacked Townhouse:**

One residence is placed over another in a stacked townhouse, which is made up of residential units organized both vertically and horizontally. Separate entrances to each apartment may be reachable from a common outside landing or walkway. According to the City of Toronto (2018), stacked townhouses commonly have three to four storeys and are suitable for developments where efficient land use is required.

- **Back-to-Back Townhouse:**

Dwelling units that share rear and side walls with nearby units make up this type. Because the back walls are shared, it typically lacks a private backyard, in contrast to traditional townhomes. Usually, each home has a separate entrance that faces a common outside access area, sidewalk, or roadway. With this configuration, more dwelling units may be built on a less amount of land.

- **Stacked and Back-to-Back Townhouse:**

The qualities of back-to-back and stacked townhouses are combined in this design. Units share side and back walls with nearby homes and are placed vertically. Entrances are usually provided from shared outdoor landings on one or more sides of the building. This type increases residential density and makes effective use of available urban land (City of Toronto, 2018).

- **Low-Rise Hybrid Townhouse:**

Townhouse-style ground-floor apartments and upper-level residences accessible via a common entry, internal hallways, or staircases are combined in a low-rise hybrid structure. Upper-level tenants share communal circulation areas, whereas ground-floor inhabitants often have direct doors from the exterior. This structure blends certain aspects of apartment buildings with the seclusion of townhome living (City of Toronto, 2018).

- **Courtyard Townhouse:**

Townhouses with courtyards are grouped around a common open area or interior courtyard. The courtyard offers natural sunlight, ventilation, social contact, and recreational options. While some end units face the public street, the apartments may face inward toward the courtyard. New Westminster City (2016) identifies courtyard development as a design option for townhouse projects on deep sites.

**Benefits of Townhouse**

A townhouse is a residential building that is usually attached to neighboring housing units and may consist of two or more floors. It provides occupants with individual living spaces while making efficient use of available land. Townhouses can offer several benefits, including efficient space utilization, residential independence, convenience, and access to neighborhood facilities.

- **Efficient Use of Space**:

One major benefit of townhouses is their efficient use of available land and interior space. Since townhouse units are often attached to one another and built vertically, occupants can enjoy several rooms without requiring a large plot of land. This arrangement is particularly beneficial in urban areas where land is expensive or limited. Efficient space planning can provide room for bedrooms, living areas, kitchens, and bathrooms while reducing unnecessary space wastage.

- **Greater Residential Independence**:

Townhouses generally provide occupants with individual entrances and private domestic facilities. This enables households to organize their daily activities independently without relying on shared kitchens, bathrooms, or living rooms. Such independence is beneficial to families and individuals who value control over their home environment. Ilesanmi (2011), in a study of public housing in Lagos, identified autonomy as one of the important psychosocial benefits people derive from their homes. Although the study did not focus specifically on townhouses, its findings help explain the value of independent residential spaces.

- **Potential for Greater Privacy**:

Townhouses can provide privacy by separating each household's living spaces from those of neighboring occupants. Individual entrances, private bedrooms, and carefully positioned windows can reduce unnecessary interference from others. However, because townhouse units share walls, sound insulation and window placement are important for maintaining privacy. Amao and Ilesanmi (2022) examined residents' perceptions of privacy in public housing estates in Ibadan and highlighted the importance of privacy in residential environments. Their findings support the need to consider privacy when designing and evaluating housing for occupants.

- **Cost-Effective Land Use**:

Townhouses can make residential development more economical by accommodating several households on a single development site. Shared walls may reduce the quantity of external wall materials required per dwelling, while multi-story construction can increase usable floor area without requiring a larger plot. These features may help developers provide more housing within limited urban land. Nevertheless, the final purchase price or rent depends on location, construction quality, facilities, and other market conditions;

townhouses are not automatically cheaper than other housing types.

- **Access to Neighborhood Facilities**:

Townhouse developments may be located near roads, shops, schools, healthcare centers, workplaces, and recreational facilities. Access to these services can make daily activities easier and reduce the time occupants spend travelling to meet essential needs. The benefit depends on the location and planning of the development rather than on the townhouse structure alone.

## METHODOLOGY

In carrying out this study, a descriptive survey research design was adopted. The study was conducted in South-South Nigeria. The target population comprised all Architects and Civil Engineers in South-South Nigeria. A stratified sampling technique was employed to select 30 Architects and 30 Civil Engineers from each of the three selected states, namely Akwa Ibom State, Rivers State, and Cross River State. This resulted in a total sample size of 180 respondents. The instrument used for data collection was a structured questionnaire entitled *"Townhouse Characteristics, Structures and Benefits Questionnaire* "(TCSBQ). The instrument was subjected to face and content validation by other one expert each in Architecture and Civil Engineering to ensure its accuracy, appropriateness, relevance, and completeness for the study. The reliability coefficient obtained was 0.84, indicating that the instrument had a high level of reliability and was suitable for the study. The data generated for the study were analysed using appropriate statistical techniques, particularly descriptive statistics, to answer the research questions.

## RESULTS AND DISCUSSIONS

**Research Question 1:**

The research question sought to find out the key characteristics of townhouse that necessitate the choice of townhouse in South-South Nigeria. To answer the research question, percentage analysis was performed on the data (see Table 1).

**Table 1:**
**Percentage analysis of the key characteristics of townhouse that necessitate the choice of townhouse in South-South Nigeria**

| Key characteristics of townhouse that necessitate the choice of townhouse in South-South Nigeria | Frequency | % |
|---|---|---|
| Shared Walls | 43 | 23.89** |
| Multi-Storey Structure | 39 | 21.67 |
| Efficient Use of Land | 35 | 19.44 |
| Individual Living Units | 33 | 18.33 |
| Limited Side Windows | 30 | 16.67* |
| **TOTAL** | **180** | **100** |

****The highest percentage frequency**
***The least percentage frequency**
**SOURCE: Field survey**

The table 1 presents the Percentage analysis of the key characteristics of townhouse that necessitate the choice of townhouse in South-South Nigeria. From the result of the data analysis, it was observed that the highest percentage (23.89%) was recorded for "Shared Walls " while the least percentage (16.67%) was recorded against "Limited Side Windows". The findings is in support with Friedman (2018), who explained that attachment between housing units is an important element of townhouse design and helps define this housing type A townhouse is typically joined to other homes in a row, rather than standing freely on all sides like a detached house. This configuration makes it

possible for multiple residences to inhabit a small plot of land. Similarly, Hamaoka et al. (2023) examined townhouse buildings with three to five-storey in their study of traditional and modern architectural characteristics in Bhaktapur, Nepal. While bedrooms, bathrooms, and private family areas may be located on the higher levels, the ground floor may include the living room, kitchen, dining area, and guest amenities. However, the actual configuration is determined by the inhabitants' requirements and the design.

**Research Question 2:**

The research question sought to determine the types of townhouses that mostly available in South-South Nigeria. To answer the research question, percentage analysis was performed on the data (see Table 2).

**Table 2:**
**Percentage analysis of the types of townhouses that are mostly available in South-South Nigeria**

| Types of townhouses that mostly available in South-South Nigeria. | Frequency | % |
|---|---|---|
| Conventional Townhouse | 40 | 22.22** |
| Stacked Townhouse | 36 | 20.00 |
| Back-to-Back Townhouse | 32 | 17.78 |
| Stacked and Back-to-Back Townhouse | 28 | 15.56 |
| Low-Rise Hybrid Townhouse | 24 | 13.33 |
| Courtyard Townhouse | 20 | 11.11* |
| **TOTAL** | **180** | **100** |

****The highest percentage frequency**
***The least percentage frequency**
**SOURCE: Field survey**

The table 2 presents the percentage analysis of the types of townhouses that are mostly available in South-South Nigeria. From the result of the data analysis, it was observed that the highest percentage (22.22%) was recorded for "Conventional Townhouse", while the least percentage (11.11%) was recorded against "Courtyard Townhouse". The findings align City of Toronto (2018), who stated that stacked townhouses commonly have three to four storeys and are suitable for developments where efficient land use is required. One residence is placed over another in a stacked townhouse, which is made up of residential units organized both vertically and horizontally. Separate entrances to each apartment may be reachable from a common outside landing or walkway.

**Research Question 3:**

The research question sought to examine the benefits mostly identified with townhouse in South-South Nigeria. To answer the research question, percentage analysis was performed on the data (see Table 3).

**Table3:**
**Percentage Analysis of the Most Commonly Identified Benefits of Townhouses in South-South Nigeria.**

| The benefits mostly identified with townhouse in South-South Nigeria | Frequency | % |
|---|---|---|

| | | | |
|---|---|---|---|
| Efficient Use of Space | 45 | | 25.00** |
| Greater Residential Independence | 41 | | 22.78 |
| Potential for Greater Privacy | | 36 | 20.00 |
| Cost-Effective Land Use | 30 | | 16.67 |
| Access to Neighborhood Facilities | 28 | | 15.56* |
| **TOTAL** | **180** | **100** | |

****The highest percentage frequency**
***The least percentage frequency**
**SOURCE: Field survey**

The table 3 presents the Percentage Analysis of the Most Commonly Identified Benefits of Townhouses in South-South Nigeria. From the result of the data analysis, it was observed that the highest percentage (25.00%) was recorded for "efficient use of space", while the least percentage (15.56%) was recorded for "access to neighborhood facilities" The findings align with Ilesanmi (2011), who explained that in a study of public housing in Lagos, identified autonomy as one of the important psychosocial benefits people derive from their homes. Although the study did not focus specifically on townhouses, its findings help explain the value of independent residential spaces Townhouses generally provide occupants with individual entrances and private domestic facilities. This enables households to organize their daily activities independently without relying on shared kitchens, bathrooms, or living rooms. In agreement with the findings of the study Amao and Ilesanmi (2022), mentioned that Townhouses can provide privacy by separating each household's living spaces from those of neighboring occupants. Individual entrances, private bedrooms, and carefully positioned windows can reduce unnecessary interference from others. However, because townhouse units share walls, sound insulation and window placement are important for maintaining privacy. examined residents' perceptions of privacy in public housing estates in Ibadan and highlighted the importance of privacy in residential environments. Their findings support the need to consider privacy when designing and evaluating housing for occupants.

## Conclusion

In conclusion, Townhouses are a significant choice for residential housing as they mix practical living areas, privacy, comfort, and effective land use. Foundations, shared walls, floors, stairwells, roofs, ventilation systems, and building services are some of its essential features that help make buildings safe, long-lasting, and generally suitable for residents. Appropriate townhome design in South-South Nigeria should take into account the climate, rainfall patterns, tenant demands, and affordability of the area.. Although townhouses offer benefits such as improved space management, security and convenient family living, these advantages depend on proper construction, effective maintenance and compliance with building regulations. Therefore, the development of well-designed, affordable and climate-responsive townhouses should be encouraged to improve housing quality, occupants' comfort and the standard of living across South-South Nigeria.

## Recommendations

1. Building professionals, developers and relevant government agencies should ensure that townhouse construction in South-South Nigeria complies with approved building regulations and structural engineering standards.
2. Architects and developers should incorporate appropriate ventilation, natural lighting, roof designs, shading and efficient drainage systems into townhouse construction.

3. Government authorities and private developers should promote the construction of affordable townhouses with well-organised bedrooms, kitchens, bathrooms and living spaces.
4. Townhouse owners and occupants should carry out regular inspections and maintenance of roofs, walls, plumbing, electrical installations and drainage systems.

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