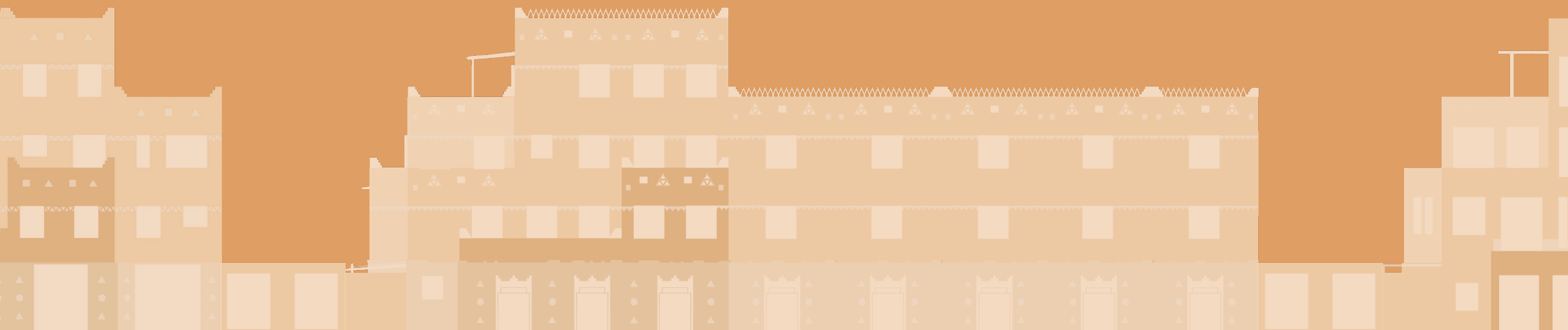


# Northern Najdi

## Architectural Design Guidelines



## Application Handbook - Low-rise Buildings





Northern Najdi Architectural Character Area



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# Application Handbook - Low-rise Buildings

## Northern Najdi - Architectural Design Guidelines



Marid castle



Sakaka castle

## I Introduction

The purpose of this document is to help designers and builders of low-rise mixed-use buildings apply the architectural character of Northern Najdi to their projects.

Northern Najdi envelops parts of the provinces of Tabuk, Al Jouf, Hail, and the Northern Borders of the Kingdom of Saudi Arabia. Its location on the Najdi plateau and the An Nafud Desert renders the natural landscape a red-brick hue. The region's desert areas, oases and grassy areas, as well as its water wells and aquifers have all shaped its natural landscape and built environments. Before the 20th century, the urban fabric consisted mainly of settlements along pilgrimage routes to Mecca and proximity to water sources. Many settlements were enclosed by walls and designed with Masjids placed in the center, with dwellings and other buildings surrounding.

The traditional Northern Najdi architectural style is reflected in austere aesthetics, raw geometries and symmetrical shapes on buildings crowned by stepped parapets. This style came as a historical

response to resource limitations imposed by the economic and natural factors of the region. It is also an extremely arid and semi-arid region with little rainfall.

Much of the existing architecture of the region is conceived as closed with few openings, which is largely due to the climatic conditions of the region. In regions which are more mountainous, such as Tabuk, stone is used as a building and stacking material.

This handbook is a supplement to the Northern Najdi Architectural Design Guidelines. Designers are recommended to read the full version of the Architectural Design Guidelines to gain a comprehensive understanding of all aspects of local architecture. Please also consult regulating plans that may describe which styles are applicable to your project area. To access these resources please use the links below



Link to Full Guidelines



Link to Regulating Plans



Example of elevation of a Traditional Low-rise mixed-use building in Northern Najdi

## II Low-rise Buildings

Low-rise buildings form a large proportion of the built environment across the Kingdom, and strongly influence people's experience and the character of a place.

Ranging from 1-4 stories, typically in a linear arrangement along roads and accommodating a mix of uses, low-rise buildings are a common building type found everywhere. Addressing their design is an important part of the implementation of the architectural design guidelines.

This building type emerges predominantly from contemporary development patterns: larger rectangular plots of land typically accessed by car from a street on one edge, and interfacing with adjacent properties on the other boundaries. These buildings tend to exhibit a horizontal, rectilinear form and a clear orientation to the street, with distinct sides and backs. This makes their form inherently different from the historical building types that are the source of architectural characters, and is a primary challenge for the application of the architectural character to low-rise buildings, to be addressed by this handbook.

### Low-rise mixed-use buildings

Low-rise mixed-use buildings are usually subdivided into multiple units that often create a diversity to the facade, particularly where the ground floor use is commercial or retail.

The establishment of a consistent character for the whole building is another important objective of this handbook. This extends to the neighborhood: the consistent character of the streetscape, and the support of the public realm in conjunction with other low-rise buildings is a high priority.

### Low-rise apartment buildings

Where low-rise buildings are primarily comprised of apartments, the relationship between public and private spaces become paramount. In addition to the low-rise building application guidelines, please also observe the guidelines focused on apartment buildings, in Appendix A.

**This handbook will implement the Northern Najdi Architectural Design Guidelines in low-rise building types by harmonizing the needs described above with the requirements of the guidelines.**

## III How to use the guidelines

Follow these instructions to create a building that supports the architectural character of Northern Najdi.

- 1 Consult the regulating plan to determine which architectural style options (Traditional, Transitional, or Contemporary) are permitted at your project location.
- 2 Select from the permitted Architectural styles, and review the list of general guidelines on the style start pages (Pages 5,6 & 7).
- 3 Assess your design according to each of the following guideline categories:

- **Composition:** do your building massing and façade design follow compositional principles? (Section 2)
- **Elements:** do the individual parts of your building properly interpret the architectural character for your style? (Section 3)
- **Materials and Colors:** does your building use acceptable materials and colors in the proportions defined? (Section 4)
- **Patterns:** do any elements show inspiration from local craftsmanship and culture? (Section 5)
- **Public Realm:** does your building contribute to the quality and character of the street and the neighborhood? (Section 6)
- **Dos and Don'ts:** have you avoided common mistakes that lower the quality and character of buildings? (Section 7)
- **Worked examples:** these are illustrations showing one possibility of how the guidelines can be applied, provided for inspiration. (Section 8)

- 4 Throughout the document, **mandatory guidelines** for each character style will be marked with the following symbols. Where a guideline is mandatory for all styles, all three symbols will be present:

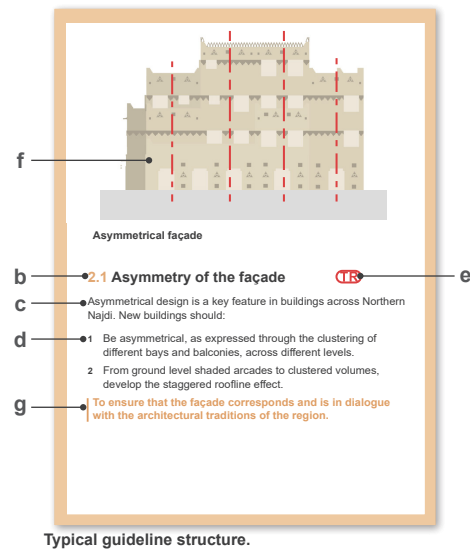
**TR** Mandatory for Traditional style

**TN** Mandatory for Transitional style

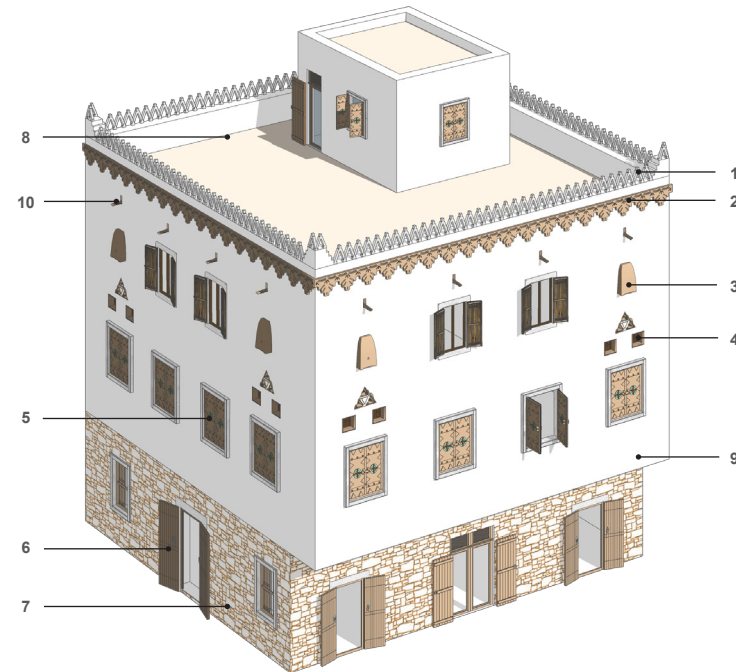
**C** Mandatory for Contemporary style

- 5 Guidelines are organized according to the following parts:

- a. Section heading:** identifies the general guideline category
- b. Header:** identifies the guideline topic
- c. Description:** expands upon the topic
- d. Instructions:** provides rules and design principles to observe
- e. Mandatory symbol:** indicates high priority guidelines that must be complied with
- f. Illustration:** non-regulatory diagrams that help visually explain guidelines
- g. Rationale:** objective of the guideline, to allow for alternative approaches to fulfilment

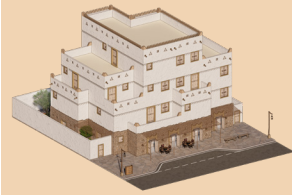


This general character reference model is from the Northern Najdi Architectural Design Guideline, summarizing the key features of the architectural character.



### Key features:

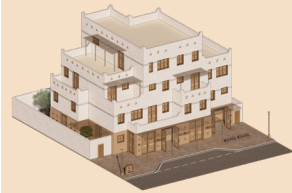
- |  |  |
|--|--|
| 1 Crenelated parapets across the roofline.                                     | 6 Double wooden doors.                               |
| 2 Triangular banding at the top of the structure at the roof level.            | 7 Stone stacking used for the base and ground level. |
| 3 Security lookout feature (turmah: a lookout feature).                        | 8 Flat roof with a pop-up room.                      |
| 4 Double square openings above windows which are to the corner of the façades. | 9 Main façade wall made from plaster or gypsum       |
| 5 Orthogonal windows for the upper level with wooden shutters.                 | 10 Rainwater drainage spouts (mizab).                |



### Traditional **TR**

The most conservative and faithful effort at interpreting traditional architectural form.

START AT PAGE 5



### Transitional **TN**

A style suitable to help create gradual transitions between areas of different character style.

START AT PAGE 6



### Contemporary **C**

This style keeps the essence of the architectural character that makes it distinct from contemporary architecture of other places.

START AT PAGE 7



## 1.0 Traditional Style

Start here to review the general guidelines of the traditional style low-rise buildings.

Traditional style buildings should observe as many architectural design guidelines as strictly and as faithfully as possible. The traditional style is suitable for projects near heritage assets and parts of town closer to historic cores.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential: only the key features relevant to the application of the Traditional style low-rise buildings are shown on this page.

### COMPOSITIONAL RULES

#### 2.1 Asymmetry of the façade

Modify the typically repetitive bay structure of low-rise buildings into an asymmetrical façade. This can be done through asymmetric location of main entrances, window groupings and taller building elements.

#### 2.2 Grouping of elements

Northern Najdi has a strong vertical and square expression. Sections are grouped together, with setbacks developing balconies and accessible rooftops, gradually increasing in height towards the highest rooftop point. The building expresses the variation in height and upon the façade across multiple levels with elements consistently grouped together. These include: fenestrations, parapet and corner merlons, for example.

#### 2.3 Solid façades

Building façades should have opening proportions of 10-20%. This would include the frames, shutters, storefronts and arcades as well as any other compositional elements which provide entry into the structure. This should be concentrated on the main façade, with less openings on the sides and back of the building.

#### 2.5 Geometry of components

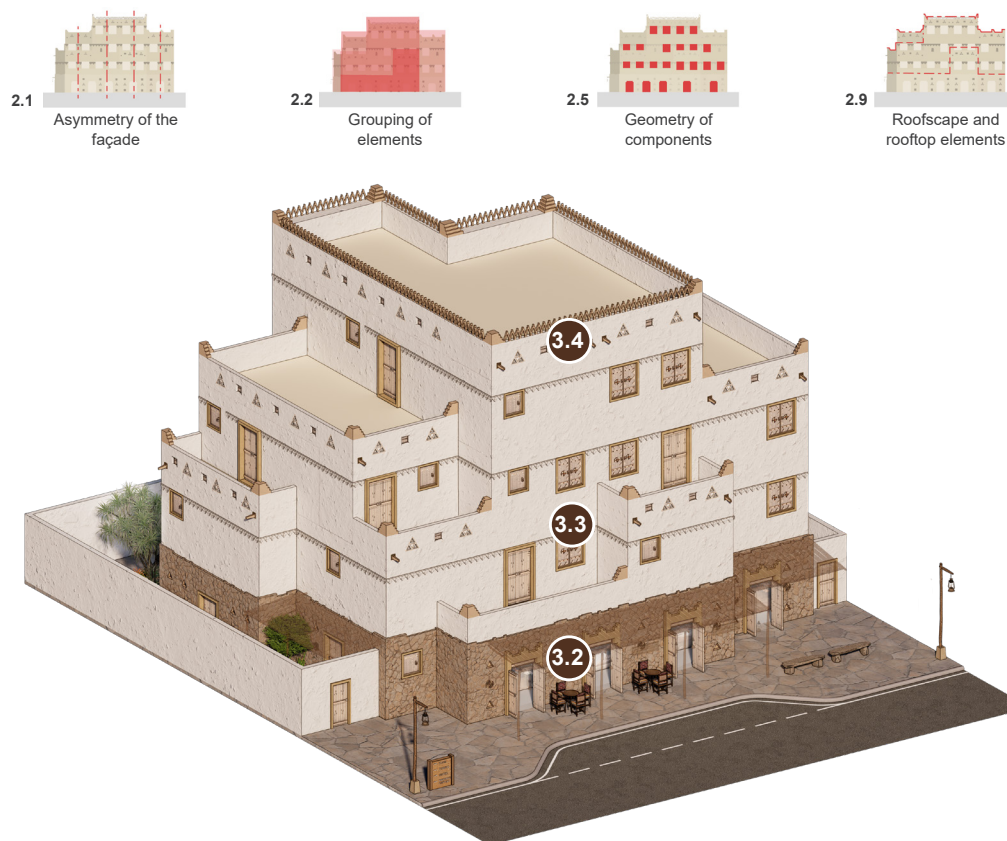
Traditional Northern Najdi proportions for openings, windows, doors, should adhere to square/rectangular geometry. Traditional passages and styles for openings and doors within the interior sometimes are shorter and smaller than is typical today.

#### 2.8 Wall to ground relationship

For the traditional style, exposed stacked rock from the surrounding environment with gypsum or other natural adhesive should be used for the base. Generally, it does not have a flat or flush quality with the existing shape of the rock giving a textual and dimensional base surface.

#### 2.9 Rooftscape and rooftop elements

The parapet line and roof silhouette should be flat and rectangular. Develop the sections organization as a stepped roofscape. The roof should feature crenelations and merlons at each corner that are slightly stepped.



Axonometric view showcasing an example of the application of compositional rules for traditional style low-rise mixed-use buildings.



Elevation view showcasing an example of the application of compositional rules for traditional style low-rise mixed-use buildings.

### TRADITIONAL ELEMENTS

#### 3.2 Doorways and entrances

For mixed-use developments, instead of a main residential door, there are should be a series of similar entrances along the main façade. Use wooden double doors in the traditional, ornamental style, placed under a timber awning.

#### 3.3 Windows and openings

Rectilinear, orthogonal windows on the main façade should have at least 3 levels of hierarchy, with square openings also used across the entire building. Use slimmer windows for side walls.

#### 3.4 Rooftop elements

Rooftops should have stepped merlons at corners. Where accessible terraces are provided, use high parapet walls and crenelations.

Projecting elements such as mizab (drainage spouts) are placed on the roof.

### COLORS, MATERIALS AND PATTERNS

#### 4.1 Colors

The building façades should be of natural colors of the materials used such as earth, stone, and mud. Accent colors should not comprise more than 20-30% of the façade area. See section 4.0 'Colors and Materials' for more information.

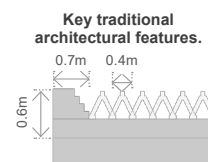
#### 4.2 Materials

Local organic rock or its equivalent should be used for base finishes. The primary wall surface should be textured, similar to gypsum and clay-mud finish that is typical of the region. Select from a natural range, some of which are specified above in colors.

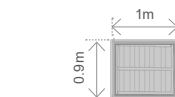
Windows, doors, and shutters should be a timber finish.

#### 5.0 Patterns

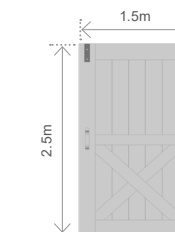
Create timber screens, door and wall patterns inspired by existing historical patterns.



3.4 Parapet Type



3.3 Window Type



3.2 Door Type

## 1.0 Transitional Style

Start here to review the general guidelines of the transitional style low-rise buildings.

Transitional style buildings help integrate traditional architecture with the larger urban context and steer design towards new interpretations of traditional form.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential: only the key features relevant to the application of the Transitional style low-rise buildings are shown on this page.

### COMPOSITIONAL RULES

#### 2.1 Asymmetry of the façade

Develop asymmetry with setbacks and balconies, blended into the structure. Cluster different openings together.

#### 2.2 Grouping of elements

Building on the horizontal expansion of the traditional style, vertical breaks should be less emphasized.

Different sections should be grouped together, stepping toward the top in a more seamless manner. For example, the band of fenestrations and motifs are delicate. Generally, the corners are more angular, the overall structure more square and less materials are used to differentiate the different levels of the building.

#### 2.3 Solid façades

Building façades should have opening proportions of 30% glass doors are used in the structure to increase transparency and openness. Designed frames and recessed entries are not relied on to articulate their position on the façade, and the aluminum frame of the window is used instead. The side and back of the building would have less opening proportions.

#### 2.5 Geometry of components

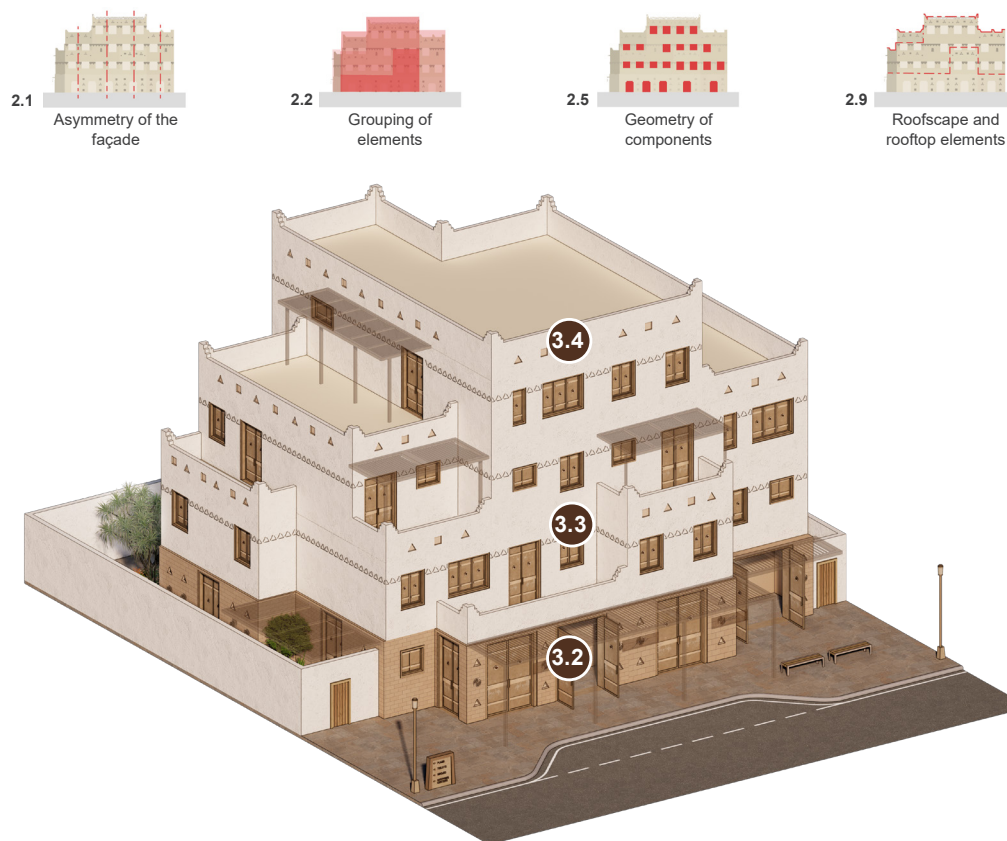
Windows, doors should be in the same style as the traditional, only slightly recessed. Generally, they are square or rectangular. Small and abstracted square and triangular fenestrations on the different volumes of the building.

#### 2.8 Wall to ground relationship

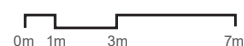
The storefront openings should wrap around the breadth of the base. Use a more durable flattened material for the base, such as modern brick or stone, which gives a flush finish to the building line or slightly projecting from the remainder of the structure. Like the traditional style, the base should feature a different material from the remaining structure.

#### 2.9 Roofscape and rooftop elements

Create a stepping effect only towards the top of the structure, developing articulation to the side façade.

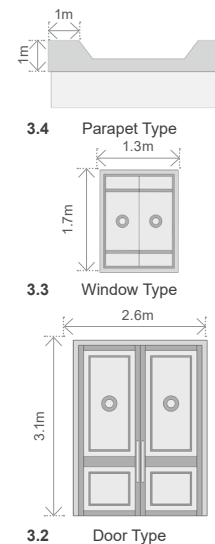


Axonometric view showcasing an example of the application of compositional rules for transitional style low-rise mixed-use buildings.



Elevation view showcasing an example of the application of compositional rules for transitional style low-rise mixed-use buildings.

Key transitional architectural features.



### TRANSITIONAL ELEMENTS

#### 3.2 Doorways and entrances

For mixed-use developments, there should be a series of similar entrances along the main façade. The main door should be slightly wider than the rest. Use glass doors, with framing, and place entrances under timber awning.

Main residential entrances should be more prominent, with framing also placed under timber awning.

#### 3.3 Windows and openings

Generally, use a combination of larger, rectangular windows across the main façade. They should be typically slimmer and less large on the side façades. Windows on the base floor should be square. All windows are made of glass, with no shutters, with wider openings.

#### 3.4 Rooftop elements

For the transitional style, use a more angular and square outlook for the roofscape. Employ merlons at corners, with simpler details. At the rooftop level there should be geometric fenestrations, adopting the traditional triangle fenestration of the Najdi region.

### COLORS, MATERIALS AND PATTERNS

#### 4.1 Colors

The building façades should mimic and build on the natural colors of the materials used in the region such as earth, stone, and mud.

Employ darker accent colors for the base, merlons, and framing. They should not comprise more than 20-30% of the façade area. See section 4.0 'Colors and Materials' for more information.

#### 4.2 Materials

The primary wall surface should have a flat matt-finish with a clear material differentiation for the base, that is similar to stone.

Incorporate the use of glass windows and aluminum frames (in brown) as part of entrances and windows.

#### 5.0 Patterns

Extract and refine historic patterns and use them across door and window openings, and wall surfaces.



## 1.0 Contemporary Style

Start here to review the general guidelines of the contemporary style low-rise buildings.

Buildings of this style should aim to retain the essence of the architectural character by skillful and knowledgeable interpretation of traditional forms into contemporary expression.

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential: only the key features relevant to the application of the Contemporary style low-rise buildings are shown on this page.

### COMPOSITIONAL RULES

#### 2.1 Asymmetry of the façade

The contemporary style should build on traditional asymmetry. Develop a gradually stepping design from each section to the top roof. The irregular profile should also be developed through setbacks in the façade.

#### 2.2 Grouping of elements

For the contemporary, many of the previous compositional rules apply. Elements such as openings should be generally larger, yet ensure to retain their upright, rectilinear form. They are also accented by a deeper frame color.

#### 2.3 Solid Façades

Generally, in the contemporary style there are minimal to nonexistent frames. Use clear, more angular and linear styles, and openings should be recessed. Rather than using aluminum frames around windows and doors as in the transitional, incorporate more simple framing. Openings should comprise nearly 50% of entire structure.

#### 2.5 Geometry of components

Various sizes for rectangular openings should feature in the design. Generally, the geometries are more angular, wider and more square.

#### 2.8 Wall to ground relationship

The ground floor should use modern materials which ensure its differentiation from the remaining structure, incorporating shaded arcades and fractal screens as well as glass entryways.

#### 2.9 Roofscape and rooftop elements

Stepping should be articulated at the top of the structure. Balconies add to this effect, as well as the main entrance and side walls of the building. The design should still pay homage to the traditional style but embrace contemporary materials and design principles. There should be few parapets, if any, and no banding or crenellations.

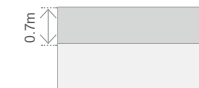


Axonometric view showcasing an example of the application of compositional rules for contemporary style low-rise mixed-use buildings.

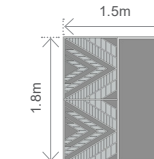


Elevation view showcasing an example of the application of compositional rules for contemporary style low-rise mixed-use buildings.

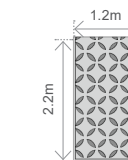
Key contemporary architectural features.



3.4 Parapet Type



3.3 Window Type



3.2 Door Type

### CONTEMPORARY ELEMENTS

#### 3.2 Doorways and entrances

Entrances should be more discreet and can be tucked within a shaded arcade which has playful concealing screen elements.

Include various doors on the base, which mark the entrance differently to the storefront entrances. Use glass doors, with framing, and place entrances under timber awning.

#### 3.3 Windows and openings

Windows on the main façade and across the structure should comprise different styles and sizes. Generally, they are larger and made of glass. All windows and openings should be slightly recessed.

Include thin, slim rectangular windows on the sides of the building.

#### 3.4 Rooftop elements

Generally, the rooftop has no elements and the parapet is flush with the building line.

### COLORS, MATERIALS AND PATTERNS

#### 4.1 Colors

Use paints and colors which are very similar and in line with the regional palette and natural materials. Consider using accent colors, darker beige for example, of no more than 10-20% as part of the screen and signage. See section 4.0 'Colors and Materials' for more information.

#### 4.2 Materials

As with traditional and transitional styles, the base should be made of a different material. It should approximate the traditional style. The base material should closely resemble the local rock in terms of texture, color, and appearance. It should be different to the rest of the structure which should be textured, similar to gypsum and clay-mud finish that is typical of the region.

More extensive glazing than on transitional style buildings are permissible.

#### 5.0 Patterns

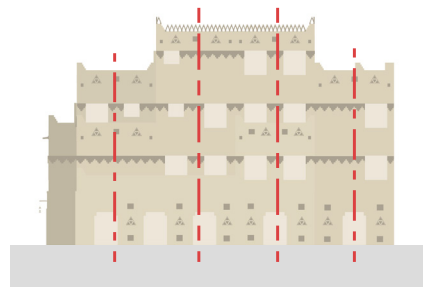
Extrapolate patterns from existing traditional styles to create new patterns.

Wall surfaces and window screens provide good opportunities to apply these new patterns. They are also used on the ground level as a screen.

## 2.0 Compositional rules

The following guidelines provide compositional rules for building design with the Northern Najdi architectural character, specially adapted for low-rise building types.

The rules apply generally to all three styles (traditional, transitional, and contemporary), with mandatory requirements for specific styles identified by the relevant symbol.



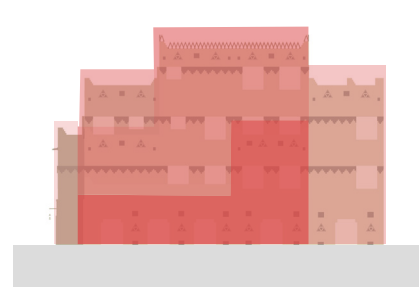
Asymmetrical façade

### 2.1 Asymmetry of the façade

Asymmetrical design is a key feature in buildings across Northern Najdi. New buildings should:

- 1 Be asymmetrical, as expressed through the clustering of different bays and balconies, across different levels.
- 2 From ground level shaded arcades to clustered volumes, develop the staggered roofline effect.

**To ensure that the façade corresponds and is in dialogue with the architectural traditions of the region.**



Grouping of elements

### 2.2 Grouping of elements

Buildings in Northern Najdi are typically defined by horizontal expansion with newer styles having a more vertical appearance. New buildings should:

- 1 Group vertical sections together that share height to develop the vertical plane, while maintaining horizontal expansion.
- 2 Minimize projections in favour of recessions and setbacks, developing terraces. This is to maintain the building lines.

**To reflect the typical form of vernacular buildings.**



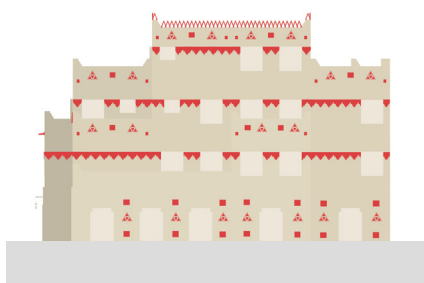
Solid façades

### 2.3 Solid Facades

Per traditional architecture, facades feature less openings. New buildings should:

- 1 Incorporate rectangular and square openings.
- 2 Articulate the main entrance through decorative motifs.
- 3 Employ accent colors to frame and articulate openings.

**To soften the presence of solid walls and accentuate awareness of surrounding environment.**



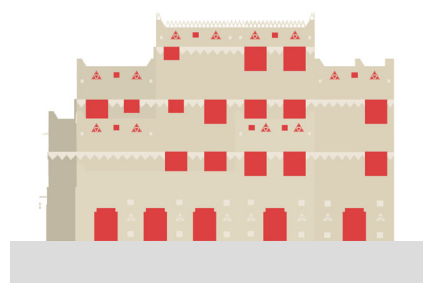
Ornamentations, fenestrations and crenelations

### 2.4 Ornamentation

New buildings are of a larger scale to traditional form. In Northern Najdi architecture, there is distinctive ornamentation across the structure. New buildings should:

- 1 **TR** Façade ornamentation should include triangular bands.
- 2 Triangular fenestrations can be placed above the windows.
- 3 Emphasize ornamentation around the base, framing the entrance.

**To ensure that the ornamentations reflect the style of the Northern Najdi architecture and distinguish it from other Najdi regions.**



Orthogonal geometry of elements

### 2.5 Geometry of components

The overall alignment and placement of elements such as doors and windows are key to expressing the design. New buildings should:

- 1 Have orthogonal windows and doors which are not articulated through ornamented or recessed frames.
- 2 Usually have few circular and triangular fenestrations above windows.
- 3 Windows should be located relative to interior room layouts rather than a rationalized external façade composition.

**To embrace the distinctive lines angles and overall composition inherent to the region's traditional architecture.**



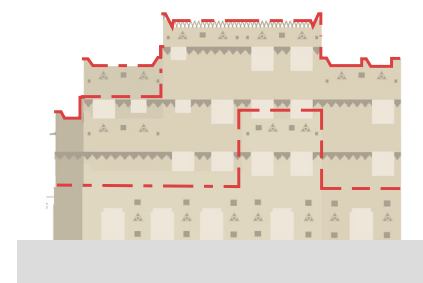
Base detail

### 2.8 Wall to ground relationship

Traditional Northern Najdi architecture is unique for using and making visible the multiple materials which create the structure. New buildings should:

- 1 Use the local stacked rock technique for the base of the building on the main ground level to create the look of a strong contrast between the smooth upper levels.
- 2 **TR** **TN** Feature framed openings for doors, as well as local motifs.

**To maintain a connection with the landscape and typical vernacular materials.**



Stepping, rectilinear roofscape

### 2.9 Roofscape and rooftop elements

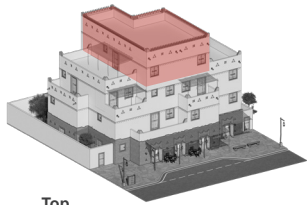
Roof and parapets form a joint component in Northern Najdi. The design of new buildings should:

- 1 Roofs should be predominantly flat.
- 2 Provide projecting bays, enclosed by tall parapets which are flush with the building line.
- 3 **TR** Incorporate corner and stepped merlon.

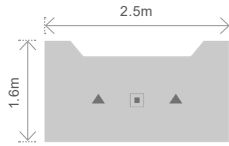
**To retain a consistent and traditional roofscape.**

### 3.0 Traditional Elements

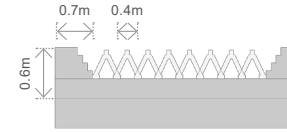
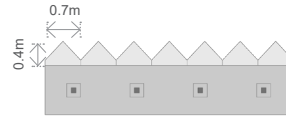
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



Top



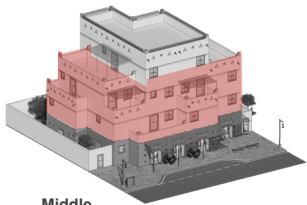
Parapets with crenelations



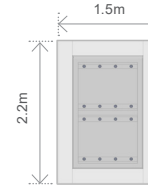
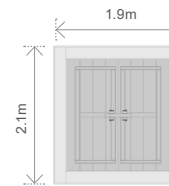
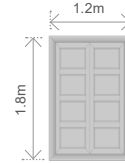
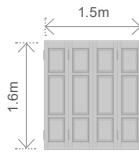
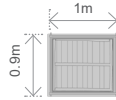
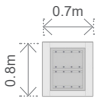
#### 3.4 Rooftop elements

- 1 Be completely flat.
- 2 Should demonstrate a stepping roofscape towards the crown of the building.
- 3 Rooftops consist of triangular crenelation bands and parapets with special merlons at corners.

To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area



Middle

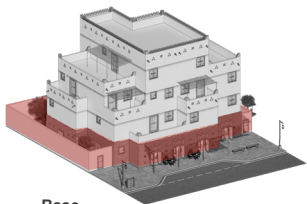


Windows

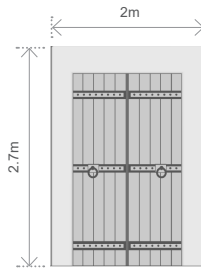
#### 3.3 Windows and openings

- 1 Provide rectangular and small-sized squarish windows.
- 2 Windows may vary slightly in size but remain largely the same across levels. There are more windows on upper levels.
- 3 Windows should be generally made of wood and framed with paint or recessed into the building's walls.
- 4 Fenestrations should be placed above windows.

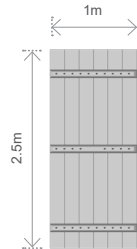
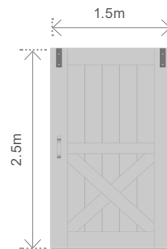
To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area



Base



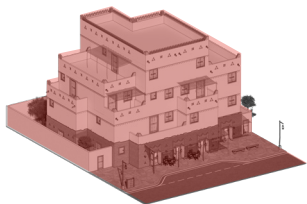
Entrance doors



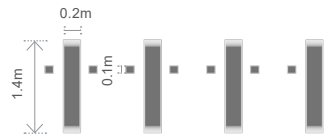
#### 3.2 Doorways and entrances

- 1 Doors into the structure are generally recessed and small.
- 2 Frame the entrance on the façade, and include some ornamentation on the door.
- 3 Consider the articulation of entrances and openings using an arched entrance and by clearly marking as part of the street frontage.
- 4 There should be several entrances along the main façade, set beneath a timber awning.

To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to local character



Other elements



Ornamentations / Fenestrations

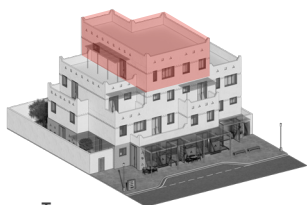
#### 3.5 Other elements

- 1 Triangular fenestrations or openings and stepped banding, marking each level of the building are important elements of the traditional style.
- 2 Some of these openings and banding can also feature arabesques and other geometric shapes.
- 3 Include openings such as lookouts or turnahs.
- 4 Projecting elements such as lanterns are also found on the ground level.
- 5 Boundary walls, their gates and portals should be designed to complement the building design.

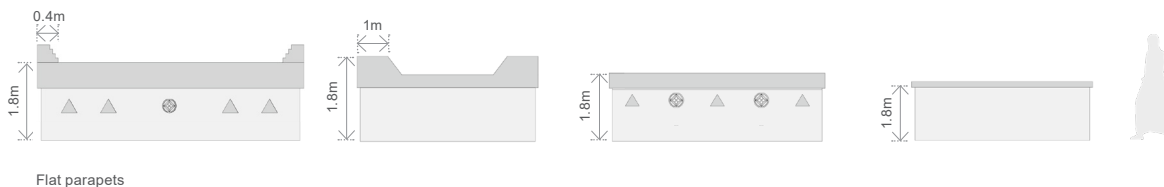
To embed other elements which are frequently part of the overall composition of buildings

## 3.0 Transitional Elements

The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



Top

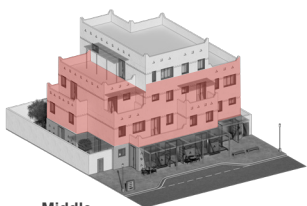


Flat parapets

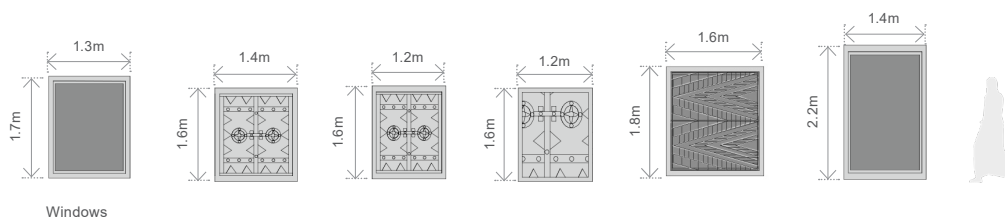
### 3.4 Rooftop elements

- 1 Be completely flat.
- 2 Roof parapets should be smooth textured with rounded corners.
- 3 Parapets should be more angular, less stepped and not crenelated.

To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.



Middle

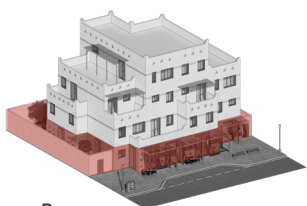


Windows

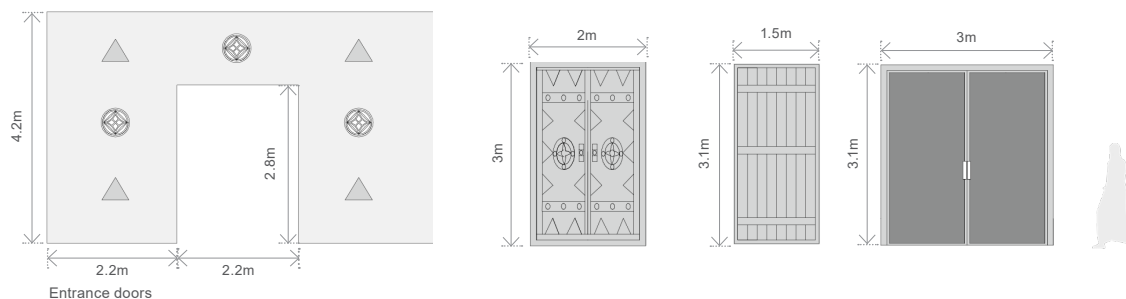
### 3.3 Windows and openings

- 1 Provide vertical windows which are square or rectangular.
- 2 Incorporate simple, geometric patterns such as triangles above the windows or openings.
- 3 Use glass for windows, encouraging more transparency and light into the structure.
- 4 Window frames and shutters should be crafted from wood or a material that closely mimics its texture and color.

To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area.



Base

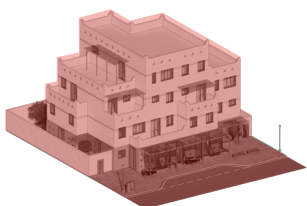


Entrance doors

### 3.2 Doorways and entrances

- 1 Define primary entrances as part of a well-ordered street frontage.
- 2 Doors should be central and part of the main façade and building line.
- 3 Consider entrance framing, by adding elements such as shaded verandas and wall motifs.
- 4 Consider the articulation of entrances and openings by using more glass to encourage more light into the building. Consider wood or equivalent for the other features.

To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to local character.



Other elements



Ornamentations / Fenestrations

### 3.5 Other elements

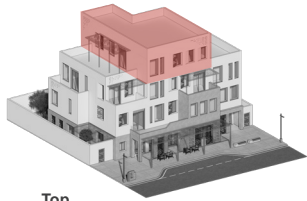
- 1 Buildings can incorporate more balconies and bays, and have projecting elements for rainwater drainage as well as geometric motifs on the façade.
- 2 Include motifs of lookouts as decorative elements for the structure.
- 3 Boundary walls, their gates and portals should be designed to complement the building design.

To embed other elements which are frequently part of the overall composition of buildings

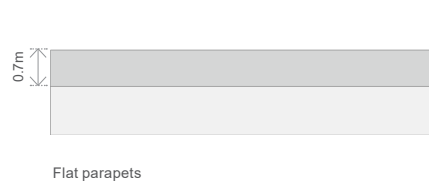


## 3.0 Contemporary Elements

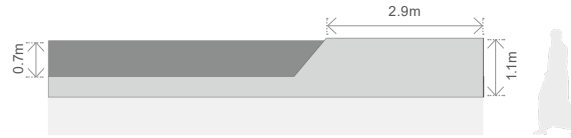
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



Top



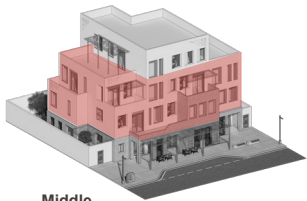
Flat parapets



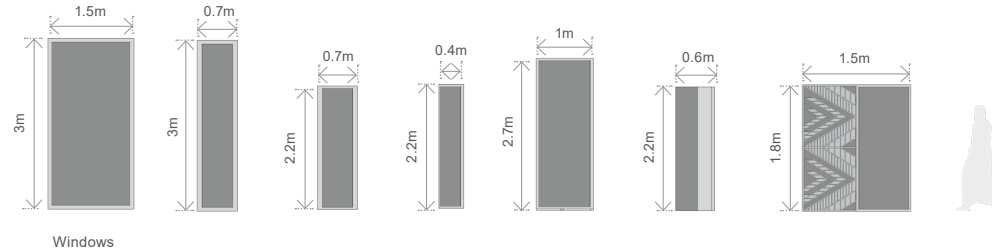
### 3.4 Rooftop elements

- 1 Have a more angular and linear finishing.
- 2 Should feature flat parapets which are be flush with the primary building line.

To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.



Middle

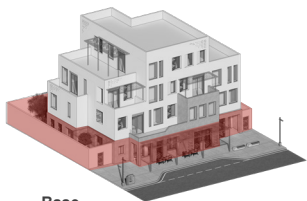


Windows

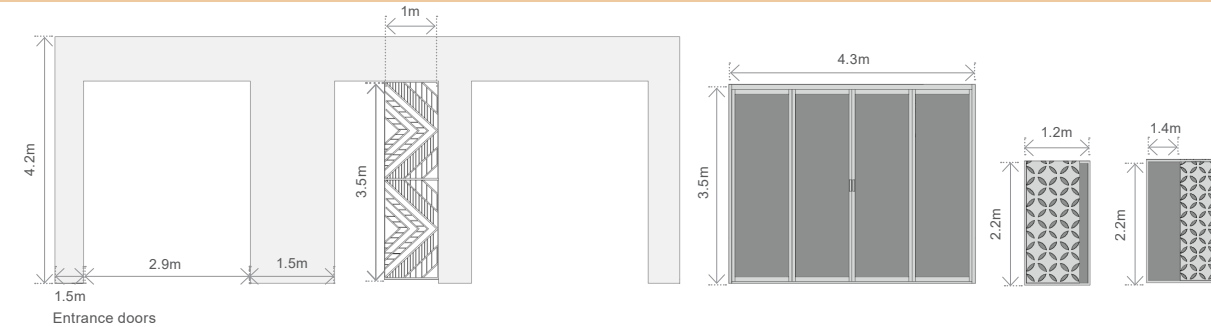
### 3.3 Windows and openings

- 1 Use large rectangular and square windows.
- 2 Incorporate them on many levels, ensure their length may be from floor to ceiling.
- 3 Use glass for the windows and angular frames around these openings.
- 4 Do not include lookouts and instead emphasize windows.
- 5 Window frames and shutters could be made of metal or another modern material, styled to reflect traditional features in a contemporary manner.

To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area.



Base

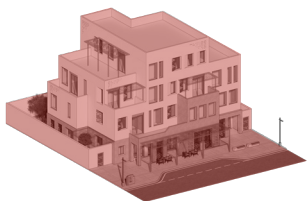


Entrance doors

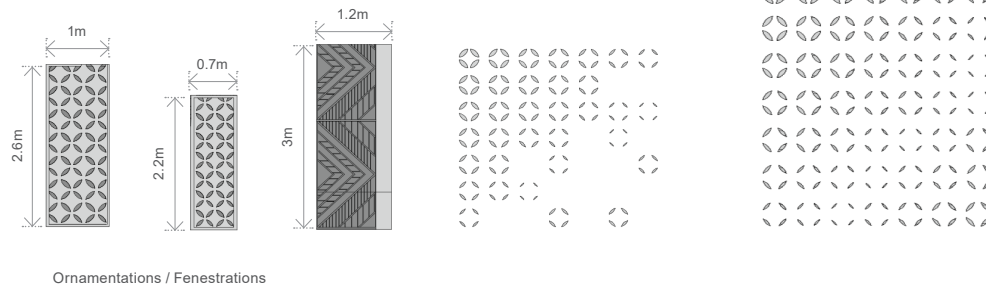
### 3.2 Doorways and entrances

- 1 Clearly define primary entrances as the street frontage experience.
- 2 Arcades can also be used to indicate entry in the building and should align with the façade.
- 3 Use wide double doors made of metal or another modern material and incorporate glass for interior/exterior visibility.
- 4 Integrate a sense of openness for the main entrance to be part of the overall street frontage.

To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to local character.



Other elements



Ornamentations / Fenestrations

### 3.5 Other elements





- 1 Contemporary building motifs should experiment with traditional design.
- 2 Consider inclusion of screens for windows and openings which allow privacy as well as transparency.
- 3 Boundary walls, their gates and portals should be designed to complement the building design.

To embed other elements which are frequently part of the overall composition of buildings

4.0 Colors and Materials

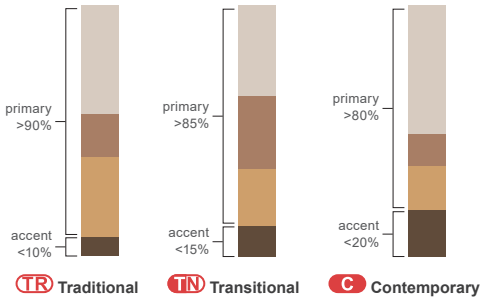
4.1 Colors

The color palette of Northern Najdi is closely linked to traditional building materials such as stone, wood and off-white render. The surrounding landscape is also an important influence, particularly the colors of sandstone structures.

- 1  The base should have darker stone,changing to rendered light off-white walls above the ground level.
- 2 Generally use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.
- 3 A maximum percentage of accent color, measured as a percentage of the total façade area, is allowed for each style:
  -  <10%
  -  <15%
  -  <20%
- 4 For windows' glass, avoid using mirror-like reflective glass with bright colors that do not harmonize with the local environment and character


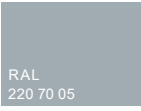

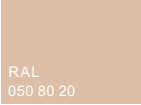

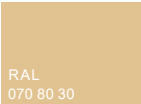

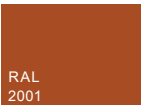
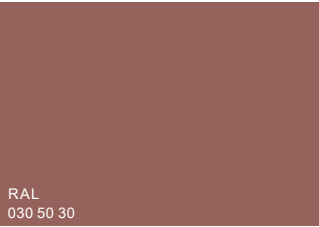
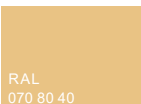

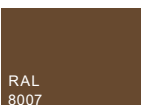
To create a townscape in harmony with the surrounding landscape and architectural character.












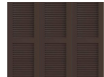






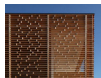




Approximate color proportions



RAL Color codes


RAL codes are part of a universal color-matching system used to provide consistency in architectural finishes. It is recommended that teams verify colors with a physical fan deck. For more information visit [www.ral-farben.de/en/](http://www.ral-farben.de/en/)

 RAL 060 80 10	 RAL 220 70 05
 RAL 060 70 20	 RAL 050 80 20
 RAL 060 70 40	 RAL 070 80 30
 RAL 2000	 RAL 2001
 RAL 030 50 30	 RAL 070 80 40
 RAL 050 40 20	 RAL 8007
primary colors	accents colors

 Stone wall	 Mud wall	 Metal shutter
 Cut stone cladding	 Natural cut stone cladding	 Textured stone cladding
 Adobe wall	 Mud finish	 Plaster finish
 Metal shutters	 Aluminum shutters	 PVC shutters
 Ornamented wooden door	 Wooden panels	 Natural stone flooring
 Ornamented metal door	 Wooden and glass door	 Ornamented wooden door
 Wood Fenestrations	 Wood finish powder coating	 Cut stone flooring
 Stone in landscape	 Textured stone flooring	

4.2 Material

This palette summarizes the prevalent materials found in the architecture of Northern Najdi.

- 1  The six large images reflect materials used in traditional architecture; new traditional style buildings should employ these materials as faithfully as possible.
- 2 Precious or no-longer available materials may entail the need for substitutions. The smaller images reflect a range of feasible substitutions for the primary images above them, acceptable for use in transitional or contemporary styles, and in a more cautious manner in traditional style.
- 3 When designers can't utilize original materials, they might utilize materials that closely resemble the original materials present in the area while taking into account material quality in terms of sustainability and durability aspects as much as

possible. Poor interpretations or applications of the materials should be avoided.

- 4 Local and sustainably sourced materials are preferred.

To create buildings in harmony with the surrounding landscape and architectural character.

To enhance architectural character through the support of local craftsmanship.

To create buildings with tactile and visual richness landscape and architectural character.



## 5.0 Patterns

This section provides advice on the interpretation and use of traditional patterns in new projects.

New buildings should:

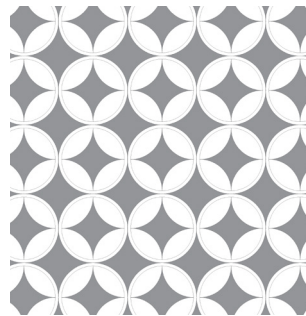
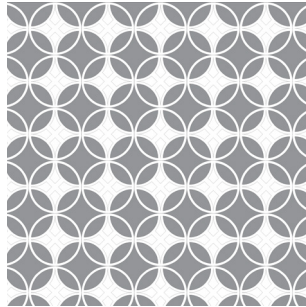
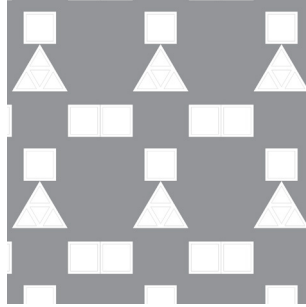
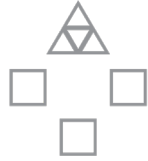
- 1 Create patterns through the use of local materials and craftsmanship.
- 2 Where multiple decorative patterns are applied across a single façade, these should be consistent.
- 3 **TR** Focus the use of surface patterns to doors, window screens and shutter doors.
- 4 **TR** Refer directly to historic precedents and be limited to geometric and floral patterns.
- 5 **TNC** The contemporary use of patterns should involve interpretation and abstraction: a selective emphasis of characteristics to create meaning and beauty in its new context. Designers can selectively use formal characteristics such as:

- Color (hue, tonality, tint)
- Shape (figure, outline, 2-D geometry)
- Form (volume, 3-D geometry)
- Texture (physical surface quality)
- Line (verticals, horizontals, diagonals, zigzags, curves, dashes, etc.)
- Value (lightness to darkness)

- 6 Patterns can be further transformed in the way they relate to one another. Designers can play with compositional rules such as:

- Balance (equality or harmony of parts)
- Contrast (difference of parts)
- Emphasis (strengthening of parts)
- Movement (change, directionality)
- Pattern (repetition, symmetry)
- Rhythm (even and uneven spacing)
- Unity/variety (degrees of variation)

To express the spirit and essence of the original architecture in new yet familiar ways.



Patterns



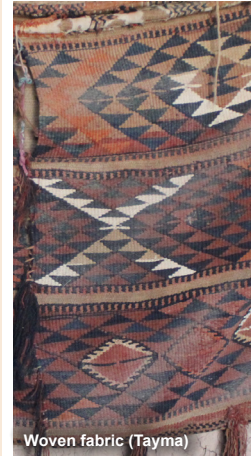
Wall openings (Tayma)



Door detail (Tayma)



Wall openings (Tayma)



Woven fabric (Tayma)



Punched wall pattern (Tayma)



Woven fabric (Tayma)



Woven carpet (Tayma)



Window shutter detail (Tayma)



Interior details (Tayma)



## 6.0 Public realm

This section focuses on the contributions of low-rise buildings to the surrounding streetscape and public spaces, creating strong character and high quality spaces.

The guidelines apply both to 'semi-public' spaces (public space built by private owners) and 'semi-private' spaces (private space that is generally accessible to the public).

Note: The application of these guidelines should be tailored to the specific project type, scale, and needs. It's essential to ensure that any modifications or additions to publicly-owned spaces are thoroughly coordinated and approved by relevant authorities.

**To enhance the character and quality of publicly used spaces in between buildings.**



### 6.1 Paving Materials

Paving guides users through both built and natural areas.

- 1 Select robust materials for longevity, easy maintenance, and repair.
- 2 Use contextual materials that complement surrounding.

**To enhance aesthetics, and environmental sustainability in urban landscapes.**



### 6.2 Shading

Shading structures are a critical component of modulating the public's interaction with the outdoors.

- 1 Integrate light shading structures as distinctive features that reflect the architectural style or theme, ensuring they harmonize with other facade elements for a cohesive overall design aesthetic.

**To create a pleasant outdoor ambiance for public areas.**

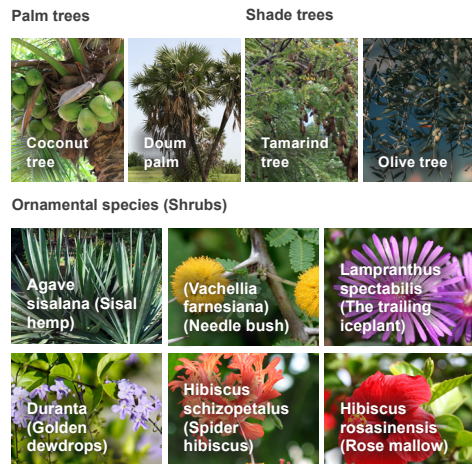


### 6.3 Parking

Parking is a key component in the overall approach to the public realm and for user decision making.

- 1 Parking spaces should not obstruct the use of built areas.
- 2 Unregulated parking in urban areas disrupts visual appeal and public access.

**To ensure that parking does not create an obstruction to the development and ensures good flow.**



### 6.4 Planting

Planting should complement and work with existing ecosystems and contribute to a sustainable built habitat.

- 1 Rely less on importing plant species and source drought and saline tolerant species.

**To ensure that plants do not disturb existing wildlife and natural environment.**

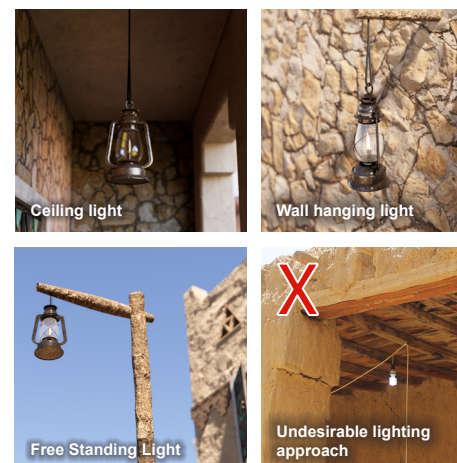


### 6.5 Signage

Signage guides users and aids navigation in public areas.

- 1 Signage should integrate seamlessly with the architecture, ensuring clarity and harmony in form, scale, color, and size.
- 2 Minimize signage conflicts with residences and tree canopies by facing roads and using subdued illumination.

**To effectively orient the public in navigating built areas.**



### 6.6 Lighting

Lighting is crucial for nighttime activity and overall design.

- 1 Consistent lighting enhances urban and architectural appeal.
- 2 Architectural lighting should target color temperatures in the 2200K-2700K range for comfort and good color rendering.

**To create a harmonious and pleasurable perception of public areas.**



### 6.7 Public realm interface

The shared spaces and walkways of public areas should be used effectively.

- 1 Ensure that mixed-use development and activations of frontages are created throughout public areas.
- 2 Avoid protruding ramps or steps into public property.

**To create a distinct and active sense of place.**



## 7.0 Dos and don'ts

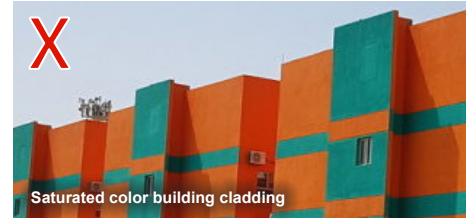
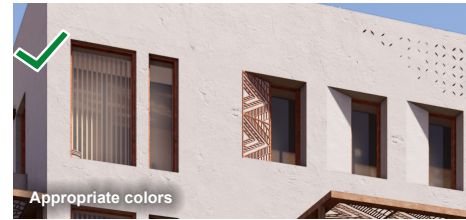
This section focuses on easy wins for the improvement of architectural quality and character. Drawing upon best design practice, these guidelines help avoid common mistakes create visual pollution and hostile environments.

**| To avoid common design mistakes.**



### 7.1 Inappropriate materials

- 1 Use durable and quality materials that give the building authenticity, texture and mass while adhering to recommended material palette.
- 2 Do not use building materials alien to the tradition such as metal cladding and high reflectivity and colored glass.
- 3 Do not use low-quality building materials that appear fake or poorly imitate the original materials.



### 7.2 Saturated colors

- 1 Do not use non-contextual bright and artificial colors that detract from the natural landscape and local architecture.
- 2 Colors should be consistent and integrate well with the built landscape and landscape at large.



### 7.3 Screens and closures

- 1 Integrate the design of security features with the architecture.
- 2 Do not extend walls with unfinished corrugated metals and other raw sheet materials.
- 3 Do not use razor or barbed wires for typical buildings; utilize deterrents that are inconspicuous or visually appealing.



### 7.4 Superficial traditional elements

- 1 Integrating traditional elements on existing or new structures should be done in a conscious manner adhering to original precepts through which such motifs and elements were used.
- 2 Careless copies of historical motifs, lackluster incorporation of local symbols, poor consideration of proportions, massing, volume, and other instrumentalization of traditional motifs should be avoided.



### 7.5 Exposed roller shutters

- 1 Exposed roller shutters create noise and visual pollution if not properly concealed.
- 2 Shutters should always be integrated in the façade and properly mounted.
- 3 Use high-quality mechanized shutters. Shutters should also reflect the color scheme of the construction, design and overall region.



### 7.6 Exposed building services

- 1 Infrastructural elements such as communication towers, air-conditioning units, satellite dishes, water tanks and ducts, wires, pipes, among other should be discreetly embedded in the design and not exposed or be seen by the public.



### 7.7 Inconsistent or imported architectural style

- 1 The adoption of building materials, style, and standards which do not comply with local architecture style and character should be avoided.
- 2 Styles should embrace the cultural context and use materials that work with the local context.
- 3 Avoid applying foreign imported architectural elements.





## 8.0 Traditional mixed-use worked example

Traditional architecture in Northern Najdi is characterized by an emphasis on asymmetry, engaging both interior and exterior spaces. Eaves and multiple balcony projections create a multidimensional structure, deviating from strict square or rectangular forms. Vertical breaks introduce setbacks and balconies, promoting a gradual, sloping effect across different levels. The architecture rejects strict angular grids, ensuring human-scale proportions for openings,

windows, doors, and balconies. The base of the structure is defined by its rock base. These are incorporated for the building's openings on the ground level.

Traditional elements include wooden double doors and square recessed openings. Natural earthy colors dominate, with accent colors comprising a limited percentage. Timber screen patterns and door panels draw inspiration from historical motifs.

The shopfronts and base of the building includes an external shading structure as additional framing for the ground level entrances.

1 High parapets and traditional triangular motifs.



2 Square windows have wooden ornamented shutters with a white surrounding band.



3 Stacked rock and gypsum create a textured and dimensional base.



4 External shading protrude from the façade, supported by thin, undecorated columns.







Worked examples demonstrate one possible application to the guidelines and are for illustration only.

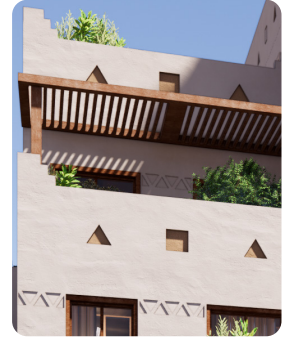
## 8.0 Transitional mixed-use worked example

In the transitional architectural style of Northern Najdi, asymmetry is subtly incorporated, employing slight setbacks and volumetric plays. Unlike the traditional style, vertical breaks are less emphasized, blending balconies more seamlessly and creating a more square and collected appearance. The corners exhibit angularity, contributing to an overall square structure.

The base is made from a different material. It has a more flattened finish than the exposed rock technique of the traditional. This base provides to mark the function of entrances and shopfront arcade. It is complemented by a shading structure with minimal fenestrations.

The façade has larger openings and simple rectangular frames surrounding them. Several balconies and bays project from the different levels.

1 Shading structures are integrated into the building, with tall parapets for privacy.



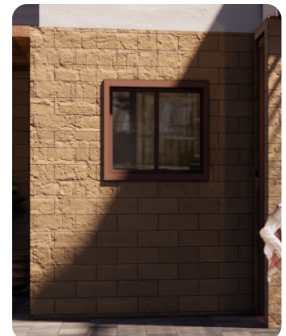
2 Glass storefronts with ornamental recessed geometrical motifs.



3 External shading structures attached to the building create shaded promenades or porches.



4 Stone-finish base for exterior walls, with wood used for the windows.







Worked examples demonstrate one possible application to the guidelines and are for illustration only.

## 8.0 Contemporary mixed-use worked example

In the contemporary architectural style of Northern Najdi, traditional asymmetry is subtly expressed in different façade elements. Verticality becomes paramount, emphasizing a robust square structure with slight setbacks at the higher levels.

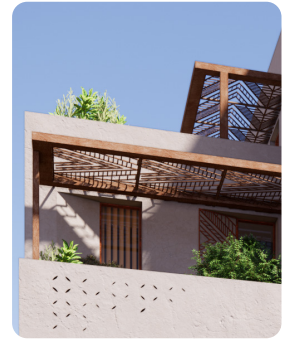
Balconies and storefronts seamlessly integrate into this vertical and square design. Structures for shading are external to the building and attached to it on the ground floor to create a shaded street level,

as well as to add privacy to the floors above.

The different material for the base is reinterpreted with new modern materials.

The façade has many wider and greater openings, with glass as a secondary material layer of the building.

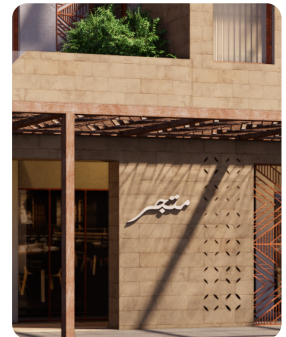
1 Roofscape articulates stepping at the top of the structure.



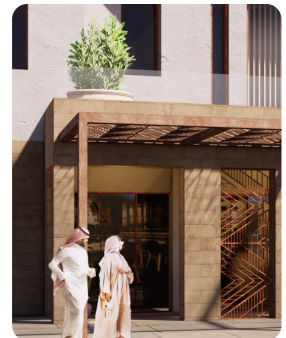
2 Windows exhibit rectilinear proportions.



3 Shaded arcades with contemporary patterns, custom metal shading panels, and appropriate storefront signage.



4 Wide storefront openings located along shaded corridors.





# A.0 Appendix: Low-rise apartment buildings

This appendix focuses on design issues important to low rise apartment buildings, for example, the relationship between public and private spaces, access to individual units, ground floor facade design, the provision of outdoor amenity, and the design of boundary treatments and rooftops.

Apartment building design should follow the guidelines for traditional, transitional and contemporary style in the rest of this handbook, but also observe the guidance notes in this appendix.

## Solid Façades

Inspired by Northern Najdi style, openings are kept at a minimum with wider openings on upper levels. It emphasizes asymmetry with shutters and textured materials. Ground floor vicinity balance privacy and public access, with small openings to ensure privacy.

## Entrances and articulation

The main entrance boasts large double doors, blending seamlessly with the building's visual base. Secondary and service entrances follow the base's rhythm, ensuring a blended appearance.

## Roofscape and rooftop elements

In Northern Najdi architecture, the roofscape with its parapets is distinctive. New buildings should include crenelations, extracted from historic Northern Najdi designs. Larger buildings may feature multiple levels of rooftop areas. Privacy provisions for terraces should incorporate shading structures, preventing direct visibility from the street.

## Secondary frontage

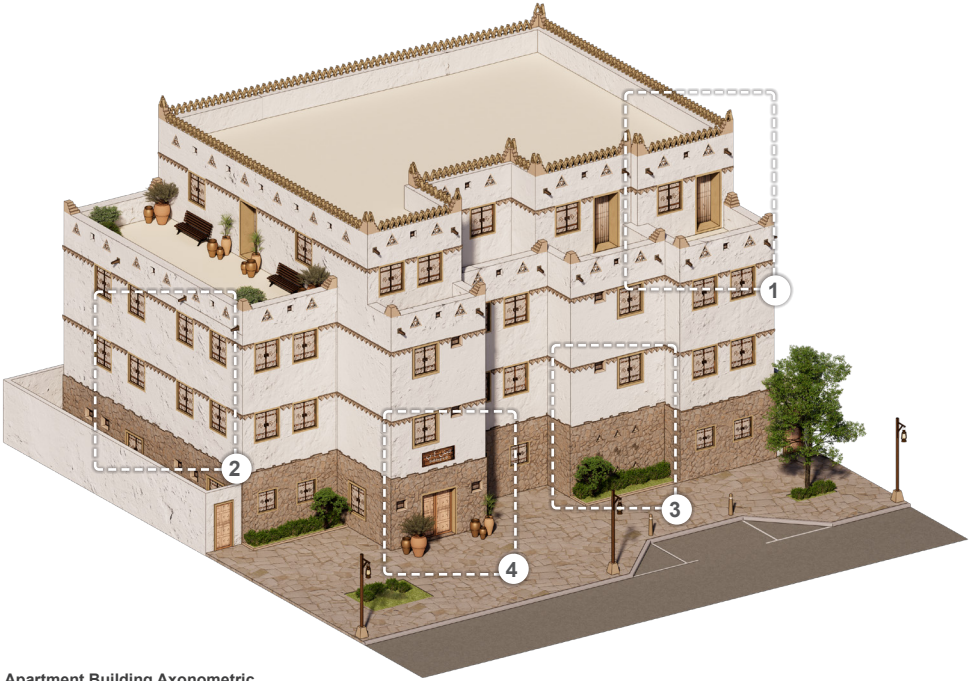
Residents' privacy is a top priority across all façades, preventing visual access to private spaces through shuttered side windows and restrained ornamentation in Northern Najdi geometric motifs. Low-rise buildings enhanced security on ground floors via wooden shutters for front facing windows.

## Doorways and entrances

Door alignment follows interior room layout rather than external façade composition, reflecting street planning and distinguishing private from communal spaces. Doors feature geometric patterns, local wood, and stone lintels or other materials that resemble stone or wood, with ornamental plaster frames and generous proportions. Access to buildings is directly from the street, adhering to interpretive guidelines rather than strict duplications.

## Privacy

Ground floor windows on street frontage should maintain privacy and security for residents. This may be achieved by using smaller windows, elevated windows, adjustable attractive security screens, and by setting back from the boundary with planted buffer zones and landscaping details.

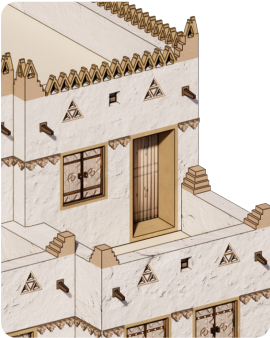


Apartment Building Axonometric



Apartment Building Front Elevation

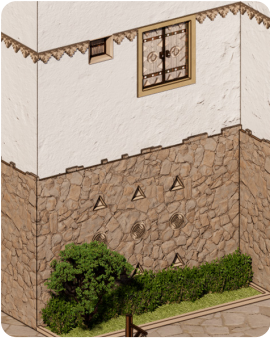
- 1 Roof terraces have triangular crenelations.



- 2 Maintain privacy between neighbors on side façades.



- 3 Maintain privacy and security at ground level.



- 4 Emphasize primary shared entrances.







Worked examples demonstrate one possible application to the guidelines and are for illustration only.

## A.0 Traditional apartment worked example

Traditional architecture comprises the use of square openings, grouped on the façade to reflect the interior zoning. These openings are generally shuttered as traditional design has few openings and mostly reserved for the upper floors. The base has small square and triangular fenestrations for aesthetic purpose. The base is made from stacked rock and is a different material to the main structure.

Building volumes and massing is asymmetrical.

Geometric ornamentation on windows, crenelations, and stiped triangles on mud is used to promote the traditional architecture and to introduce aesthetic variety on the façade. These openings should also be carefully placed so they introduce ventilation and light into the building.

The worked example uses building materials that evoke the same traditional style for the walls, windows and frames. Colors are smoothly contrasted in the design enhancing variety and allowing the ornamentation to pop out on windows.

1 Ornaments placed on the parapet.



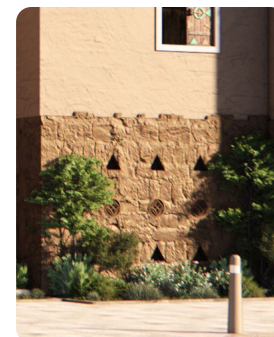
2 Shaded and framed entrance.



3 Staggered roofscape with crenelated parapets.



4 Stone base material.







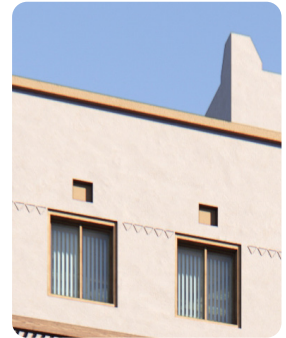
## A.0 Transitional apartment worked example

In the transitional style, evolution from the traditional is made through the abstraction of architectural elements. It adopts all the same grouping, geometry and material through a flatter and cleaner finishing. This style uses the same character and style of the traditional yet brings more transparency through wider openings on the façade.

Main differences between the traditional and transitional is through wider openings for windows and door occupying more space on the façade. Additionally, the engravings, ornamentations are muted from the traditional with only their silhouette used in the structure and for windows. Except on the ground floor, window shutters and planting are used to maintain privacy.

Fenestrations are more minimal and only one to two styles are used to indicate different massing and volumes of the structure. Additionally, the parapets use a cubic and geometric indentation.

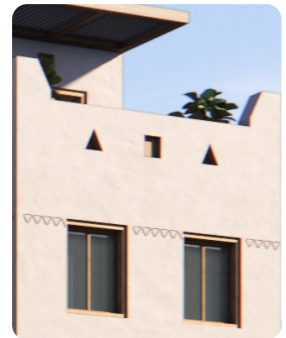
1 Flat parapet with occasional stepped/pointed corners.



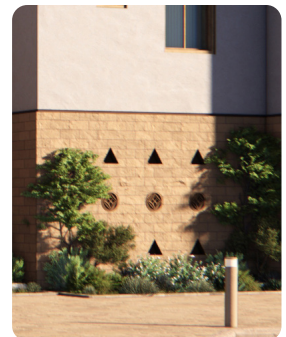
2 Well-marked and wide building entrance.



3 Triangular banding on balconies and roofs.



4 Abstracted motifs used for the base instead of openings.







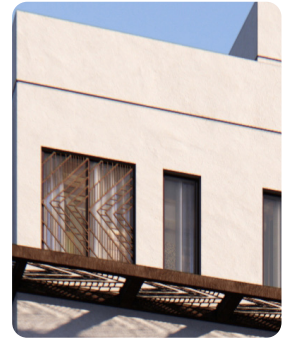
## A.0 Contemporary apartment worked example

The essence of the architectural character is preserved through innovative use of materials, addressing the rhythm of the façade, and using larger openings for habitable spaces. Generally, the building has a more defined and square look with flat undecorated parapets and roofscapes.

The volume and massing is retained in this style but blended more seamlessly with little breaks in the façade walls. The opening proportions for the main entrance and windows on upper levels are much wider and take up more space on the façade. The material difference for base is retained.

Ornamentations inspired by the traditional styles are only used as shading structural elements or as details on the ground floor.

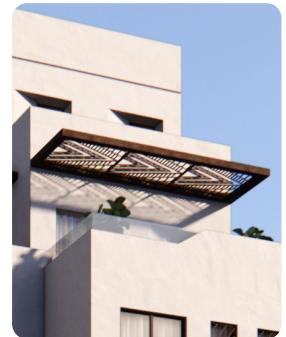
1 Contemporary rectangular windows with ornamented shading structures.



2 Wide and shaded entrance.



3 Blended and staggered roofscape with an undecorated parapet.



4 Base material different to the rest of structure with fractal fenestrations.

