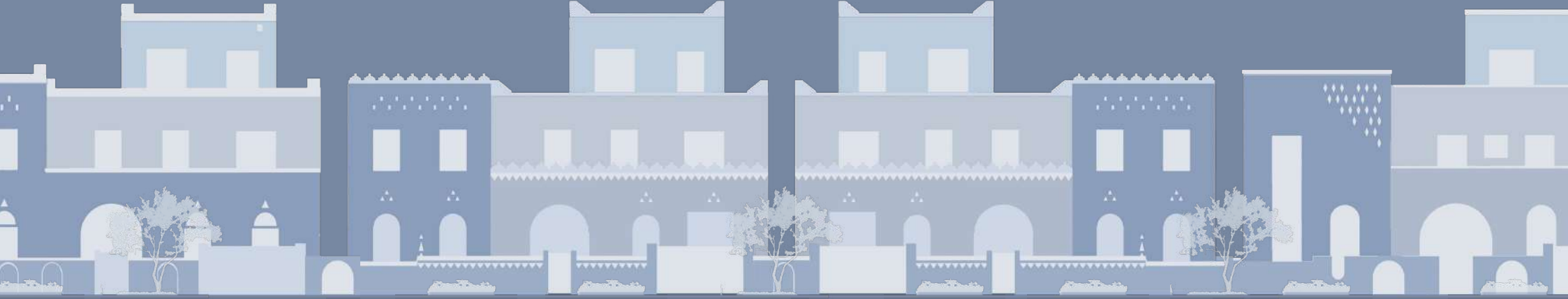


# Eastern Najdi

Architectural Design Guidelines



## Application Handbook - Residential Villas





Eastern Najdi Architectural Character Area



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# Application Handbook - Residential Villa

## Eastern Najdi - Architectural Design Guidelines



Heritage Village in Hafar al Batin



Al Aali Palace (Qaryat al Ulya)

## I Introduction

The purpose of this document is to help designers and builders of residential villas apply the architectural character of Eastern Najdi their projects.

The Eastern Najdi region constitutes the eastern stretch of land between the vast Najdi plateau and the east coast of the Kingdom of Saudi Arabia, which intersects with the northern half of the Eastern Region province. Its location on the plateau alongside the Ad Dahna desert, its richness in wadis, and its water wells – especially in Qaryat Al Ulya – all shaped the region's natural landscape and its built historical trajectory.

Prior to the 20th century, the urban fabric consisted mainly of settlements along pilgrimage routes to Mecca and its proximity to water sources. Existing settlements of the traditional Eastern Najdi are organized around courtyards that historically exist in harmony with the natural landscape. The region's architectural style manifests in minimally-ornamented buildings crowned by double-stepped parapets. This style came as a response to resource limitations imposed by the economic or natural factors of the region.

Settlements are generally designed inwardly with courtyards to modulate the temperature and for ventilation through fenestrations. Local earth was generally used as building material, or mixtures of mud and hay, alongside wood for doors and windows. Qaryat Al Ulya is the main water resource of the region and established the longest-settled areas, which enabled agricultural production, namely wheat.

This handbook is a supplement to the Eastern 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 the character. 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 Villa in Eastern Najdi

## II Residential Villas

Villas form a significant and common aspect of the residential built environment throughout the Kingdom. A housing prototype, they respond strongly to people's experience and character of their homes and place.

Serving residential needs, villas are built across a stylistic scale to better integrate within their neighboring context. Addressing their design is thus necessary to ensure the implementation of architectural design guidelines.

The villa includes three distinctive styles that developed in the twentieth century in the Kingdom, which encapsulate a fluidity from the historic fabric to contemporary development patterns. They are typically composed of large rectangular plots of land enclosed at the perimeter, accessible by car or the main entryway, both placed alongside the same edge. Villas tend to exhibit a horizontal, rectilinear form, where the street facing side is clearly articulated while simultaneously maintaining privacy through the fenced perimeter. Their various stylistic expressions derive from developed differences in the building type.

### Single Family Residential Villas

Designers should apply the architectural character and adapt its compositional principles to the unique challenges of the villa building type. Because architectural character is created at a neighborhood level, designers of villas need to contribute a coherent and attractive streetscape. The treatment of primary facades and boundary walls, and their contributions to the public realm will be crucial. The repetition of identical villas can lead to monotony and anonymity. Though consistency is good, organic variation between neighboring buildings is good for a sense of distinction and ownership. By addressing these primary challenges, single family residential villas will strengthen the architectural character of Eastern Najdi

**This handbook implements the Eastern Najdi Architectural Design Guidelines in residential villas by harmonizing their needs 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 Eastern 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 facade 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)
- **Do's 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. (Sections 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:

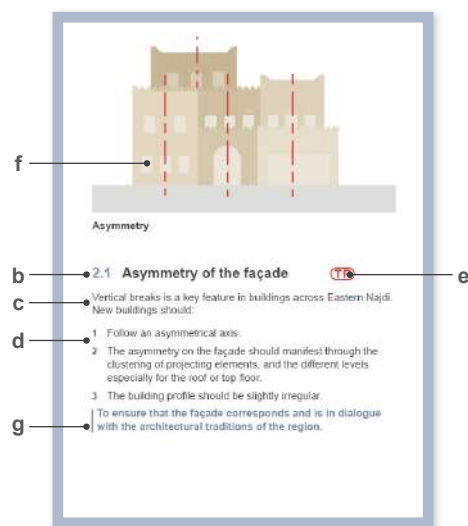
**TR** Mandatory for Traditional style

**TN** Mandatory for Transitional style

**C** Mandatory for Contemporary style

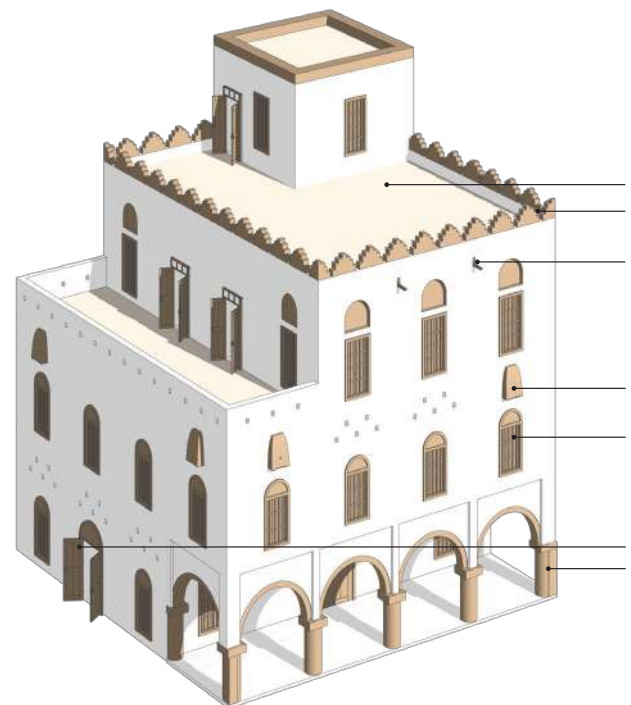
- 5 Guidelines are organized according to the following parts:

- 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 fulfillment



Typical guideline structure.

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



#### Key features:

- 1 Flat occupiable roofs.
- 2 Tall parapets with double or triple stepped crenelations.
- 3 Rainwater drainage through vernacular mizab made of wood.
- 4 A long and thin lookout (turmah) located on the upper floor.
- 5 Windows located on upper levels without ornamentation or frames.
- 6 Doors made of local wood which are frame less and unornamented.
- 7 Arcades and sheltered walkways made of semicircular and flat arches with round or square columns.



#### 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 villas.

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 Residential Villa are shown on this page.

## COMPOSITIONAL RULES

### 2.1 Asymmetry of the façade

When crafting villas in the traditional style, it's crucial to prioritize asymmetry to evoke the desired aesthetic. To achieve this, focus on creating an overall asymmetric composition, particularly evident in the villa's front façade. Ensure that the placement of accessible roofs and balconies varies across different levels of the building. These should be strategically positioned to enhance the villa's dynamic and multidimensional appearance. Additionally, work on groups of elements in bays at specific levels to further accentuate the asymmetrical layout.

### 2.2 Grouping of elements

In traditional Eastern Najdi style villas, horizontal development prevails, but vertical contrast can be introduced for visual interest. Vary wall setbacks for an interplay between interior and exterior spaces, adjust parapet heights to break horizontal lines, and group openings to highlight distinct zones. Introduce asymmetry across stories to enhance character and functionality, delineating different areas of the structure while enhancing visual appeal.

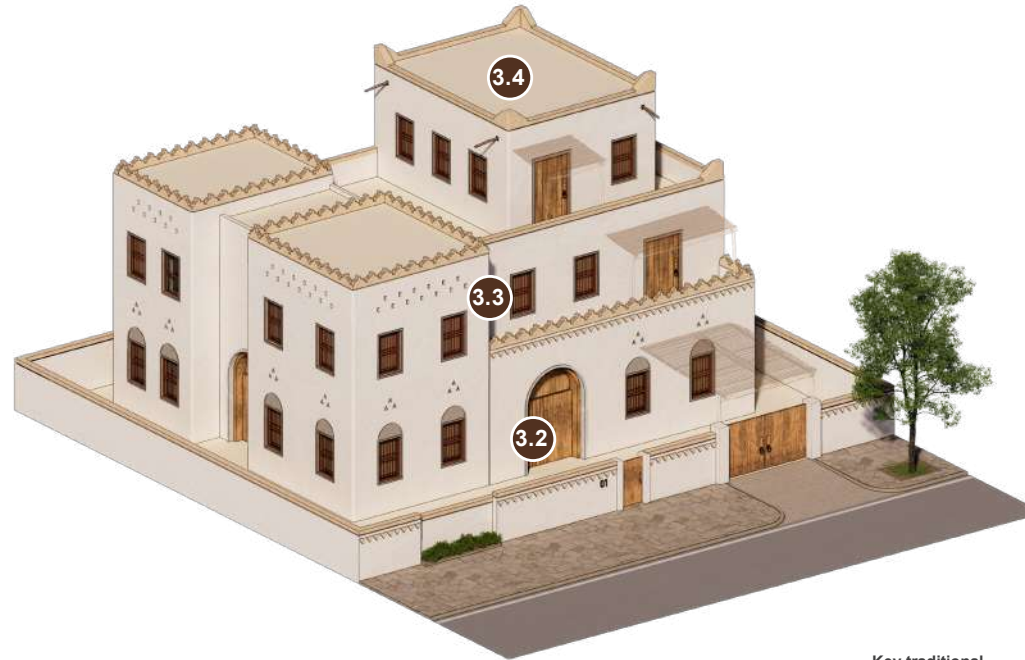
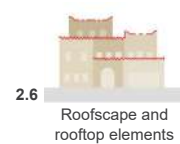
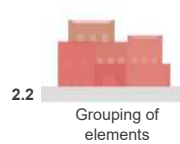
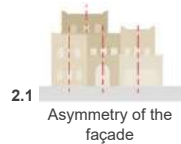
### 2.5 Entrances and articulation

In the villa typology, the initial point of entry comprises the boundary wall, which directly interfaces with the public realm, contributing positively to the aesthetic appeal of the pedestrian environment. The vehicular and main entrance gate should feature decorated shutters or doors, in line with traditional façades, with consideration for a simple traditional ornamentation along the boundary wall.

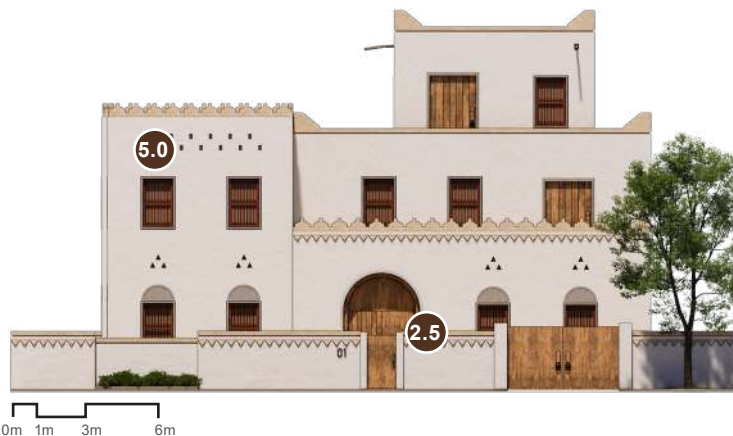
The secondary entry level to the villa is the entrance to the interior. The base and rest of structure should share the same material. The entrance door must be clearly distinguished with either an arched door or a rectangular door behind an arched arcade.

### 2.6 Roofscape and rooftop elements

Each rooftop level should include crenelations at the parapet line. As most rooftop levels are accessible, they may all function like a terrace, and some feature a shaded cover or arcade. The roofline must not be one single straight line across the façade. It must be broken down to create variation in heights across the single façade elevation.

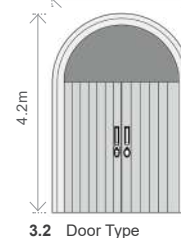
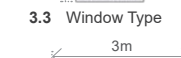
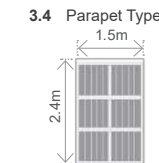
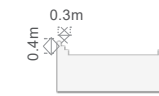


Axonometric view showcasing an example of the application of compositional rules for traditional style residential villa.



Elevation view showcasing an example of the application of compositional rules for traditional style residential villa.

Key traditional architectural features.



## 2.7 Solid Façades

Building façades must have 'opening' proportions of 20-30% of the façade area. The 'opening' area encompasses the full extent of components such as windows, doors, balconies, multiple parapet roofs, lookouts, and so on. Side façades should not overwhelm the front façade, featuring less openings in comparison.

## 2.8 Geometry of components

Traditional Eastern Najdi proportions for openings, windows, doors, should adhere to either square, rectangular or arched geometry. They should be simple and orthogonal. Semicircular arcs and arches can be used to define the base of the building.

## TRADITIONAL ELEMENTS

### 3.2 Doorways and entrances

The main residential entrance should be clearly expressed upon the façade. Use a recessed wooden double door either with an arch or under an arcade for the main entryway. Doorways on other levels are flat, and do not feature an arch.

### 3.3 Windows and openings

Windows are typically uniformly recessed, some with rectangular frames and others with semicircular arched frames, particularly along the façade. The windows themselves are typically of the same size, material, and style, which are aligned with one another. Avoid using long horizontal strip windows and placing windows directly across from existing windows on neighboring buildings.

### 3.4 Rooftop elements

The villa's façade elevation must not form a long unbroken shape. Break frontages at frequent intervals to give the street a human scale and a sense of interest and variety. Apply this across the building façades, especially the main facade by making at least one volume higher than the rest of the façade. Protect residents' privacy and exposure by using higher parapet walls, screens, and by providing overhead shading structures. Most rooftops feature decorated parapets, crenelations, and corner merlons. Additionally, vernacular elements such as mizabs (drainage sprouts) should be incorporated in the traditional style.

## COLORS, MATERIALS AND PATTERNS

### 4.1 Colors

The building façades should comprise natural colors, using predominantly off-white shades and timber. Employ accent colors minimally, in frames of windows, banding, and corner merlons, for example. See section 4.0 'Colors and Materials' for more information.

### 4.2 Materials

The primary wall surface should feature a textured matt-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet. Wood should be used for windows and doors, and stone finish for the colonnades.

### 5.0 Patterns

Incorporate triangular and existing historical patterns in the region. There may also be horizontal bands across the structure, featuring a repetitive pattern.

# 1.0 Transitional Style

Start here to review the general guidelines of the transitional style villas.

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 Residential Villa are shown on this page.

## COMPOSITIONAL RULES

### 2.1 Asymmetry of the façade

It's crucial to prioritize asymmetry when designing transitional Eastern Najdi villas. To achieve this, focus on creating an overall asymmetric composition. Ensure that the placement of accessible roofs and balconies varies across different levels of the building. These should be strategically positioned to enhance the villa's dynamic and multidimensional appearance. Additionally, work on groups of elements in bays at specific levels to further accentuate the asymmetrical layout.

### 2.2 Grouping of elements

Horizontal development is predominant in Eastern Najdi villas. However, to introduce vertical contrast and enhance visual interest, begin by varying the setback of walls from the perimeter fence, creating a dynamic interplay between interior and exterior spaces. Adjusting parapet heights adds further dimension to the façade, drawing the eye upward and breaking the monotony of the horizontal lines. Group sections of openings together along the façade by clustering windows and doors together to form distinct zones, emphasizing the unique characteristics of each section. Also, consider altering the symmetry across multiple stories, introducing asymmetrical elements that contribute to the overall character of the villa.

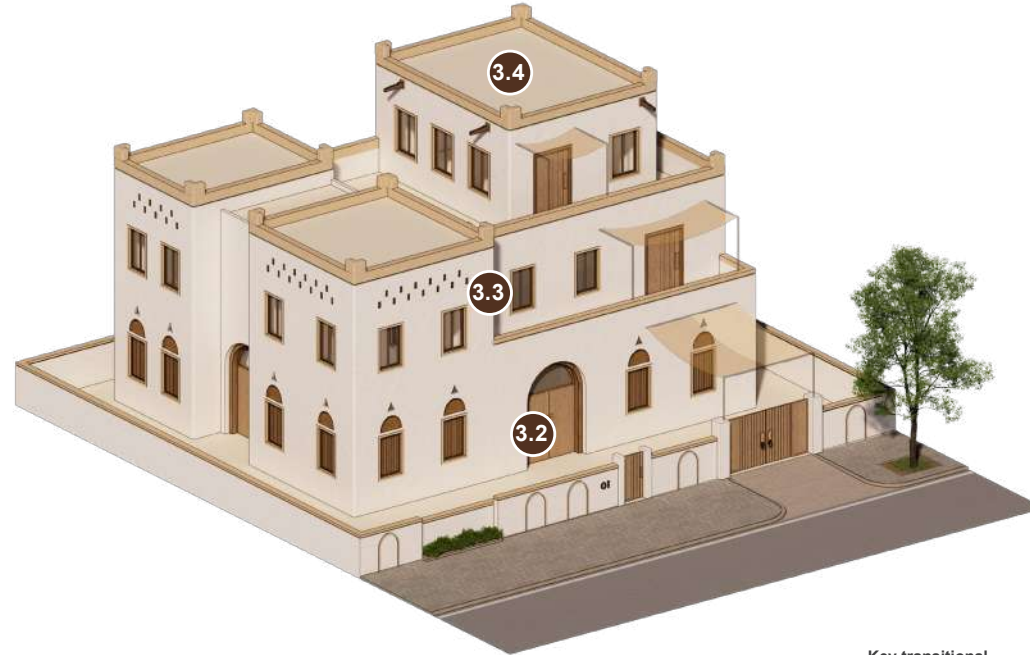
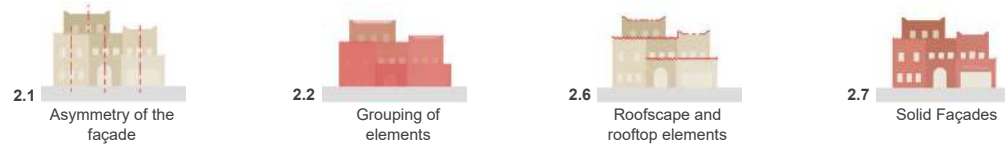
### 2.5 Entrances and articulation

In the villa typology, the initial point of entry comprises the boundary wall, which directly interfaces with the public realm, contributing positively to the aesthetic appeal of the pedestrian environment. The vehicular and main entrance gate should feature simple shutters or doors, in line with transitional façades, with consideration for simplified ornamentation along the boundary wall.

The secondary entry level to the villa is the entrance to the interior. The base and rest of structure should share the same material. The entrance door must be clearly distinguished with either an arched door or a rectangular door behind an arched arcade.

### 2.6 Roofscape and rooftop elements

The parapet line and roof silhouette must be flat and rectangular. The rooftop level may function like a terrace and must not be one single straight line across the façade. It must be broken down to create variation in heights across the single façade elevation.



Axonometric view showcasing an example of the application of compositional rules for transitional style residential villa.

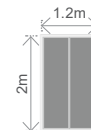


Elevation view showcasing an example of the application of compositional rules for transitional style residential villa.

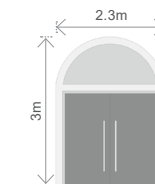
Key transitional architectural features.



3.4 Parapet Type



3.3 Window Type



3.2 Door Type

### 2.7 Solid Façades

Building façades must have 'opening' proportions of 30-45% of the façade area. Side façades should not overwhelm the front façade, featuring less openings in comparison. There should be greater use of glass for windows to increase openness. Much of the framing can be articulated through semicircular arches above openings.

### 2.8 Geometry of components

Arrange windows, balconies, doorways, bays, and staircases to create local symmetries, which correspond to interior architecture use and program. Avoid an angular grid pattern, suited to the contemporary architecture. Blend elements more seamlessly. For example, windows and doors still feature the traditional style, and yet are more in line with rest of structure, less recessed.

## TRANSITIONAL ELEMENTS

### 3.2 Doorways and entrances

Placed under arched frame, the main residential entrance should be clearly expressed upon the façade. Doorways on other levels (such as for balconies or on the rooftop) are also typically recessed.

### 3.3 Windows and openings

In the transitional style, windows feature wider openings and are typically not shuttered. This design allows for a greater amount of light to enter. Like the traditional they are found on all levels and are mostly rectangular, with some being arched. On the base level, there can be semi-circular design elements above the openings.

### 3.4 Rooftop elements

The villa's façade elevation must not form a long unbroken shape. Break frontages at frequent intervals to give the street a human scale and a sense of interest and variety. Apply this across the building façades, especially the main façade by making at least one volume higher than the rest of the façade. Protect residents' privacy and exposure by using higher parapet walls, screens, and by providing overhead shading structures. The corners feature square and angular definition. Include horizontal banding with geometric decoration.

## COLORS, MATERIALS AND PATTERNS

### 4.1 Colors

The building façades should comprise natural colors, using predominantly off-white shades and timber finish. Employ accent colors minimally, in frames of windows, and corner merlons, for example. See section 4.0 'Colors and Materials' for more information.

### 4.2 Materials

The primary wall surface should feature a textured matt-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet. Glass and metal frames that resemble wood could be applied for windows and entrances

### 5.0 Patterns

The building typically features minimal patterning, featuring repetitive patterns.

# 1.0 Contemporary Style

Start here to review the general guidelines of the contemporary style villas.

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 Residential Villa are shown on this page.

## COMPOSITIONAL RULES

### 2.1 Asymmetry of the façade

Contemporary style villas blend and build on the asymmetry of traditional and transitional styles. Create balconies on different sides of the building and vary setback distances from the perimeter of the villa. Ensure that the placement of accessible roofs and balconies varies across different levels of the building and work on groups of elements in bays at specific levels to further accentuate the asymmetrical layout.

### 2.2 Grouping of elements

Although less overtly horizontal in expansion, introduce greater vertical contrast at each level through differentiation in wall setback from the perimeter fence, variation in parapet height, or changes in local symmetry across more than one story. Group sections of openings together along the façade by clustering windows and doors together to form distinct zones and consider altering the symmetry across multiple stories, introducing asymmetrical elements that contribute to the overall vertical sense of the villa.

### 2.5 Entrances and articulation

In the villa typology, the initial point of entry comprises the boundary wall, which directly interfaces with the public realm, contributing positively to the aesthetic appeal of the pedestrian environment. The vehicular and main entrance gate should feature simple shutters or doors, in line with contemporary façades, with consideration for contemporary simple ornamentation along the boundary wall.

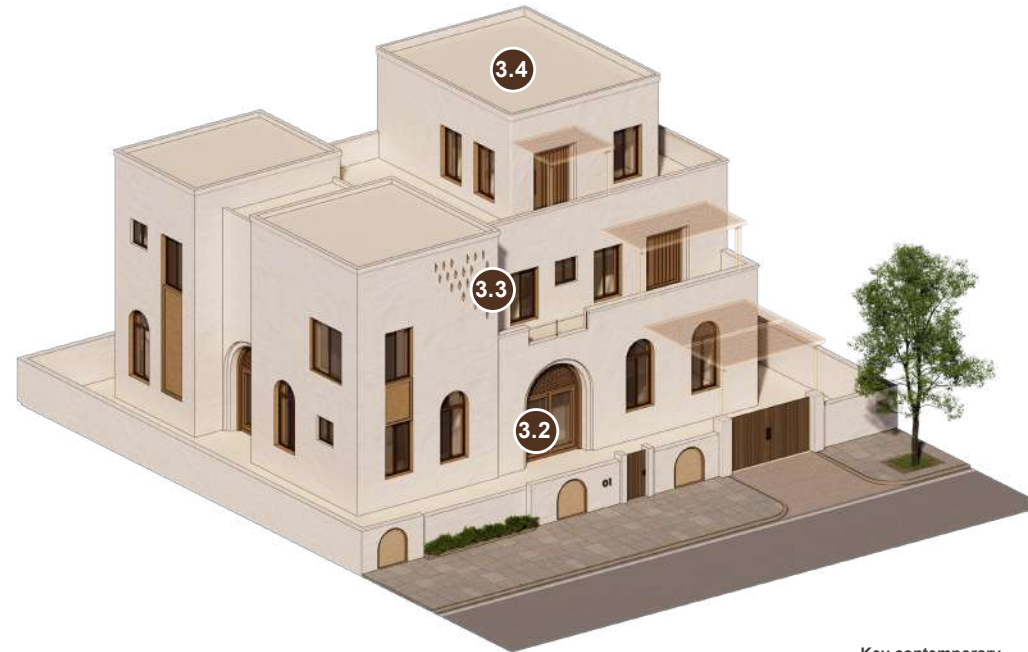
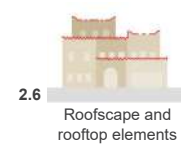
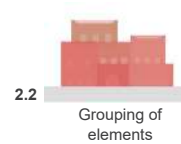
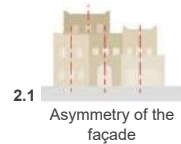
The secondary entry level to the villa is the entrance to the interior. The base and rest of structure should share the same material. The entrance door must be clearly distinguished with either an arched door or a rectangular door behind an arched arcade.

### 2.6 Roofscape and rooftop elements

The parapet line and roof silhouette must be flat and rectangular. Any accessible roof terrace should have a shaded section. The roofline must not be one single straight line across the façade. It must be broken down to create variation in heights across the single façade elevation.

### 2.7 Solid Façades

The contemporary style is characterized by more open and wider frames of upto 50% of the entire structure. Windows and portals should be set within semi-circular arched frames, of various lengthier sizes. Use glass for windows to increase the sense of openness.



Axonometric view showcasing an example of the application of compositional rules for contemporary style residential villa.

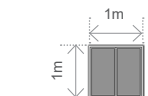


Elevation view showcasing an example of the application of compositional rules for contemporary style residential villa.

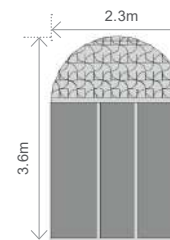
Key contemporary architectural features.



3.4 Parapet Type



3.3 Window Type



3.2 Door Type

## 2.8 Geometry of components

Proportions for openings, windows, doors, should adhere to either square, rectangular or arched geometry. They should be simple and orthogonal. Semicircular arcs and arches can be used to define the base of the building.

## CONTEMPORARY ELEMENTS

### 3.2 Doorways and entrances

Placed under a wide, arched, recessed frame, part of which features glass, is the main residential entrance. It should be clearly differentiated upon the façade. Doorways on other levels (such as for balconies or on the rooftop) are also typically recessed, made of glass, with wider openings.

### 3.3 Windows and openings

Windows on the main façade must have at least 3 levels of hierarchy in size and proportion. They are rectangular as well as arched windows and openings, including doorways, with timber framing, or a suitable alternative. Windows feature wider openings, and are typically not shuttered. This design allows for a greater amount of light to enter. Avoid using long horizontal strip windows, and placing windows directly across from existing windows on neighboring buildings.

### 3.4 Rooftop elements

The contemporary style villa does not use large parapets or crenellations. Instead, flat, minimal roofscapes are preferred. At each level where an accessible roof is provided, protect residents' privacy and outdoor exposure with higher parapet walls, as well as the provision of a shade covering.

## COLORS, MATERIALS AND PATTERNS

### 4.1 Colors

The building façades should comprise natural colors, using predominantly off-white shades and timber finish. Employ accent colors minimally, in frames of windows, for example. See section 4.0 'Colors and Materials' for more information.

### 4.2 Materials

As with traditional and transitional styles, the base and structure should be of the same material. Modern materials that resemble wood could be used for windows and doors with an accent for the semicircular window arches. The primary wall surface should feature a textured matt-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet.

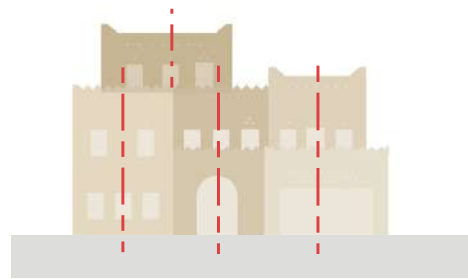
### 5.0 Patterns

Inspired by existing historical patterns, develop a minimal fractal and scalar geometric design. This is best applied in corners along the façade.

## 2.0 Compositional rules

The following guidelines provide compositional rules for building design with the Eastern Najdi architectural character, specially adapted for villa 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.



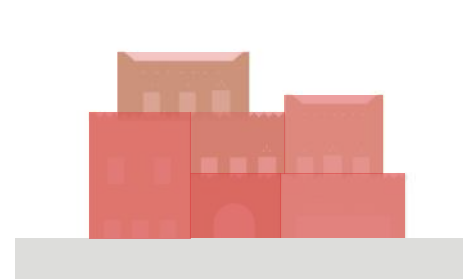
Asymmetry

### 2.1 Asymmetry of the façade

The asymmetrical grouping of forms and breaks in building massing is a fundamental part of the Eastern Najdi architecture. New buildings should:

- 1 Follow an asymmetrical axis.
- 2 The asymmetry on the façade should manifest through the clustering of projecting elements, and the different levels especially for the roof or top floor.
- 3 The building profile should be slightly irregular.

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



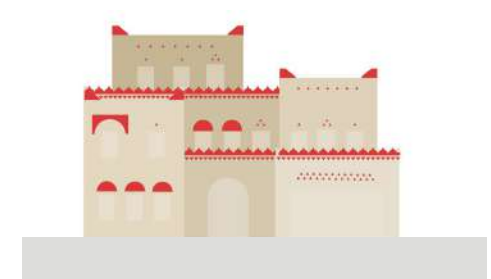
Grouping of elements

### 2.2 Grouping of elements

Villas are typically defined by horizontal expansion, newer styles more vertical in their appearance. New buildings should:

- 1 Adopt broad proportions, highlighted by bay organization and setbacks, particularly at the upper levels and the main entrance.
- 2 Embrace strong alignment of frontages, openings, windows and motifs to create coherent building lines and streets.

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



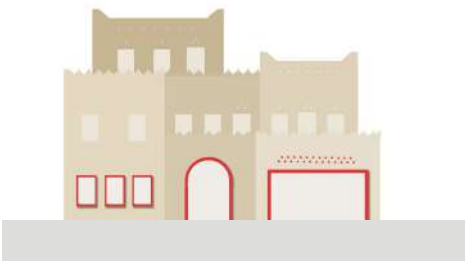
Ornamentations, fenestrations and crenelations

### 2.4 Ornamentation

As new buildings are on average of a larger scale to traditional form, avoid distorting the original architecture, as this could undermine the quality. New buildings thus should:

- 1 Include different sets of ornamentation across the different structures of the building as well as the different levels.
- 2 Focus ornamentation carefully above openings and windows, and in banding by the roof level.
- 3 Arches should be configured in groups, mainly on the ground level.
- 4 **TR** Turmahs and mizabs (rainwater overflow) should play important roles in the composition of the façade.

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



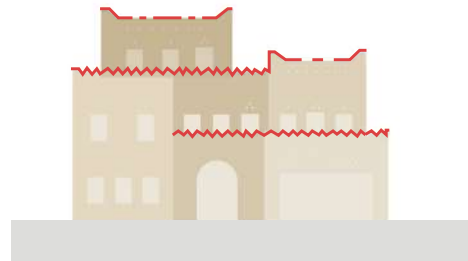
Base detail

### 2.5 Entrances and articulation

A key compositional characteristic of Eastern Najdi architecture is the entrances and ground level. New buildings should:

- 1 Make use of the same material for the base and remaining structure.
- 2 Emphasize framing of the entrance and vehicular parking/garage gate.
- 3 Include a boundary wall around the perimeter, with gates for the driveway and the main entryway.
- 4 **TR** The entrance door should be clearly distinguished, featuring either an arched design or a rectangular door positioned behind an arched arcade.

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



Stepping, rectilinear roofscape

### 2.6 Roofscape and rooftop elements

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

- 1 Be flat and broken down to create variation in heights across the single façade elevation.
- 2 **TR** Have triangular stepped parapets for the balcony on the upper level and merlons at corners for the roof.

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



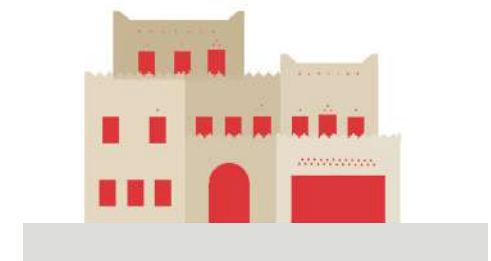
Solid façades

### 2.7 Solid Façades

Eastern Najdi has some framing of the façade and openings. New buildings should:

- 1 Frame the different openings with arches and emphasize the doorway, through articulation of the main entrance.
- 2 Incorporate subtle square openings.
- 3 Incorporate repetitive rectangular and arched openings.

**To design the openings of façades building upon the region's traditional architecture.**



Components of Geometry

### 2.8 Geometry of components

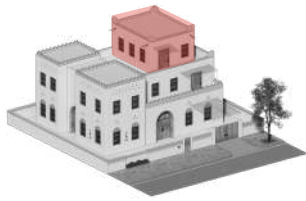
The overall alignment and placement of elements such as doors and windows are key to expressing the design. New buildings should:

- 1 Ensure the geometry of doors and windows is orthogonal and framed by semicircular arches.
- 2 Add square and triangular fenestrations at the different levels.

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

### 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

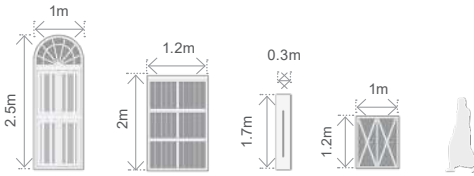
### 3.4 Rooftop elements

- 1 Be completely flat.
- 2 Parapets of double-stepped crenelations with a triangular band across the roofline or flat parapets with corner crenelations.
- 3 Rainwater drainage sprouts of the vernacular mizab below the parapet and made of wood.

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



Middle

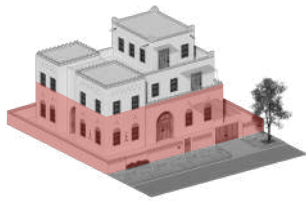


Windows

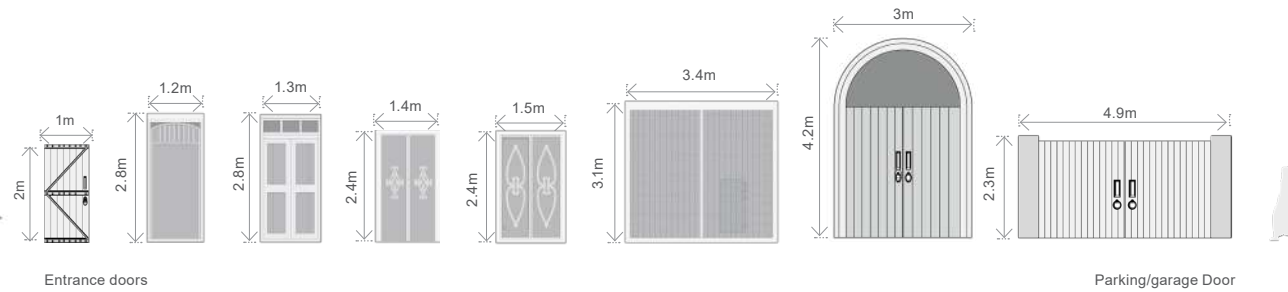
### 3.3 Windows and openings

- 1 Windows are rectangular or squares.
- 2 Can be topped by semicircular arches for upper levels.
- 3 Openings of the same style are generally aligned with each other.
- 4 Square openings are usually above windows.
- 5 Windows should be generally made of and framed with wood.

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



Base



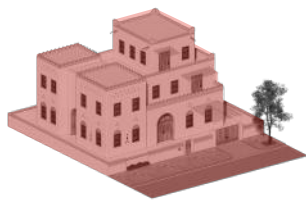
Entrance doors

Parking/garage Door

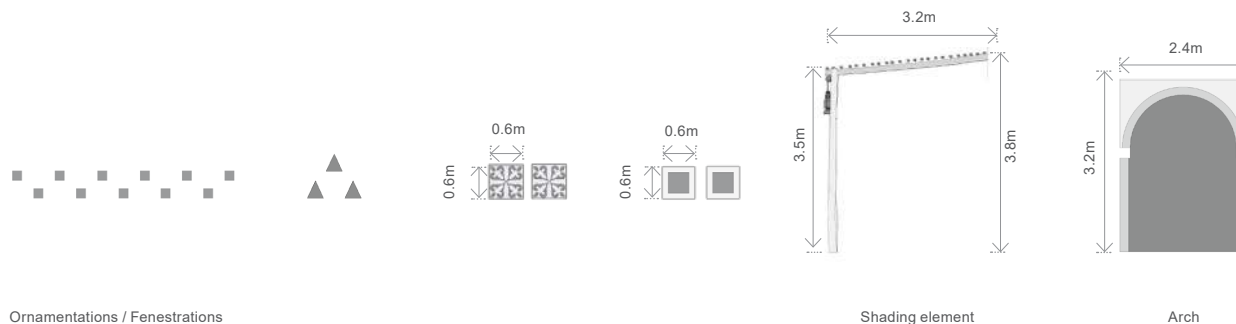
### 3.2 Doorways and entrances

- 1 Clearly define primary entrances as part of a well-ordered street frontage.
- 2 Doors are framed and usually recessed.
- 3 Generally made of local wood and show minimal ornamentation.
- 4 Entrances can have a semicircular arch above or be flat and set as part of an arched frame of an arcade.

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



Other elements



Ornamentations / Fenestrations

Shading element

Arch

### 3.5 Other elements

- 1 Use repeated and alternated triangular or square fenestrations.
- 2 Include shading elements in terraces.
- 3 Boundary walls, their gates and portals should be designed to complement the villa design.

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

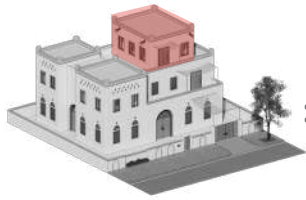
### 3.0 Transitional Elements

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.

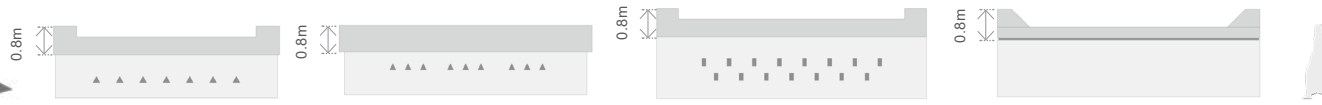
#### 3.4 Rooftop elements

- 1 Be completely flat.
- 2 Maintain a smoother plane with grouped structures combining to form a staggered roofscape.
- 3 Incorporate a crenelation on the corners with minimal steps.

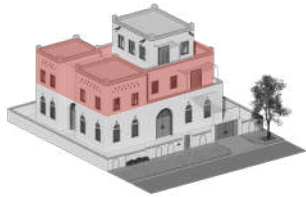
To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.



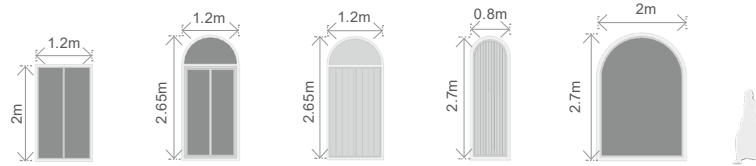
Top



Parapets with fenestrations



Middle

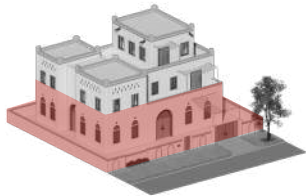


Windows

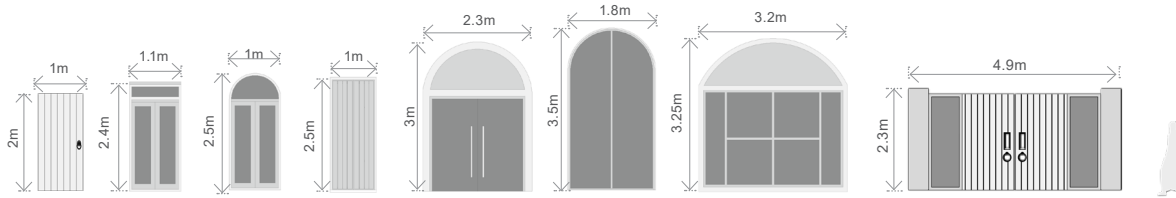
#### 3.3 Windows and openings

- 1 Provide rectangular vertical windows.
- 2 Incorporate openings with frames wider than traditional styles.
- 3 Include upward openings and semicircular arches with articulated framing.
- 4 Windows should be crafted from glass and 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



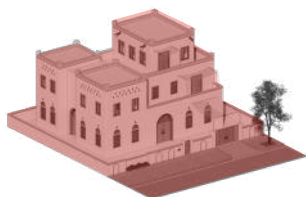
Entrance doors

Parking/garage Door

#### 3.2 Doorways and entrances

- 1 Clearly define primary entrances.
- 2 Can include recessing and create a modest sense of entry.
- 3 Incorporate semicircular arches above double doors and consider including wood, or its equivalents, or glass doors for sense of openness.

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



Other elements



Ornamentations / Fenestrations

Shading element

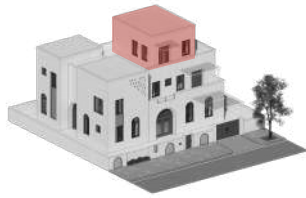
#### 3.5 Other elements

- 1 Triangular and squarish motifs and openings placed above the windows, with minimal patterns on window louvres.
- 2 Include shading elements in terraces
- 3 Boundary walls, their gates and portals should be designed to complement the villa design.

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

### 3.0 Contemporary Elements

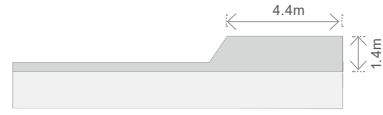
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



Top



Parapets with notches



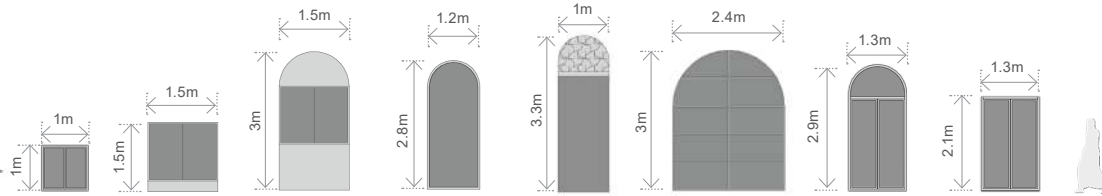
### 3.4 Rooftop elements

- 1 Be completely flat.
- 2 Develop a rectilinear form, with groups combining to form a less staggered roofscape.
- 3 Consider using glass and encourage more views between the public and the roofscape.

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



Middle

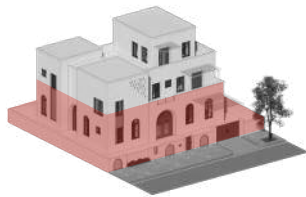


Windows

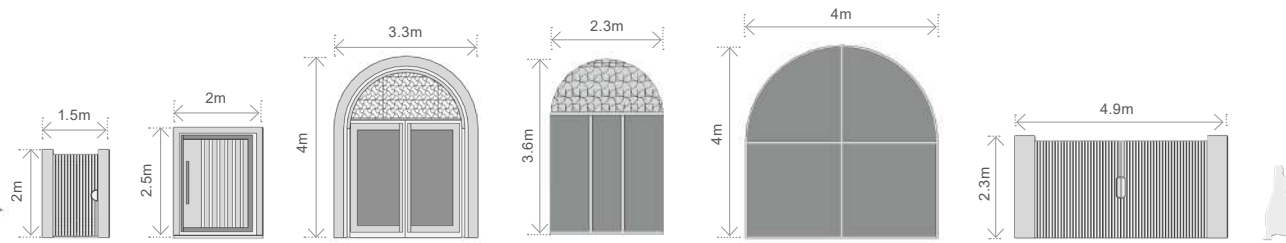
### 3.3 Windows and openings

- 1 Develop interpretations of the arched windows to increase daylight and views to the interior.
- 2 Consider modular screens and glass windows which are clearly framed.
- 3 Emphasize window openings rather than lookouts or square openings above windows.
- 4 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



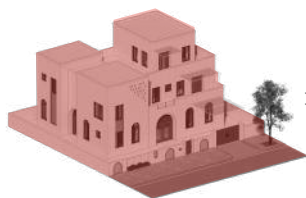
Entrance doors

Parking/garage Door

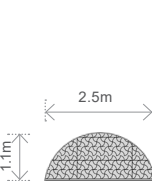
### 3.2 Doorways and entrances

- 1 Clearly define primary entrances.
- 2 The door should be flush with the main building line.
- 3 Consider a shaded timber finish awning to articulate the main entrance.

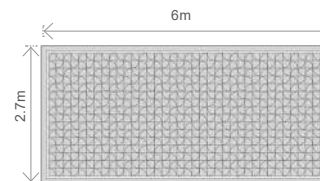
To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to the local character.



Other elements



Ornamentations / Fenestrations



Shading element (top view)

### 3.5 Other elements

- 1 Develop complex re-envisioning of existing semicircular arches for ornaments.
- 2 Appropriate existing vernacular ornamentation into scalar or diffuse design motifs for building decoration.
- 3 Boundary walls, their gates and portals should be designed to complement the villa design.

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

# 4.0 Colors and Materials

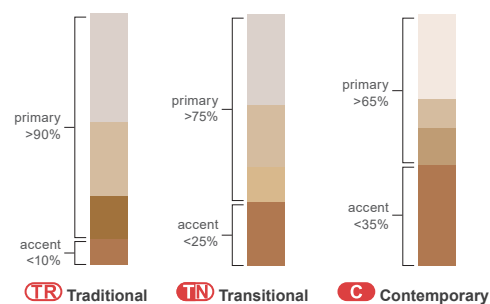
## 4.1 Colors

The color palette of Eastern Najdi is closely linked to traditional building materials such as stone and brown mud. The surrounding landscape is also an important influence, particularly light pink and earthy yellow colors.

- TR** The base should have the same color changing to rendered light off-white walls above the ground level.
- Generally use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.
- A maximum percentage of accent color, measured as a percentage of the total façade area, is allowed for each style:
  - TR** <10%
  - TN** <20%
  - C** <30%
- 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/)

primary colors

accents colors



Textured plaster wall



Textured plaster wall    Concrete finish    Smooth plaster wall



Mud wall



Concrete    Plaster    Sandstone cladding



Wooden door



Wooden door    Glass with aluminum frames    Fiberglass with wood finish



Textured brick



Sand block    Terracotta Blocks    Mud



Sandstone wall



Sandstone finish    Rammed earth wall    Concrete finish



Natural stone flooring



Cut stone and pebble flooring    Cut stone flooring    Concrete block flooring

## 4.2 Material

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

- TR** The six large images reflect materials used in traditional architecture; new traditional style buildings should employ these materials as faithfully as possible.
- 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.
- 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.

- 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:

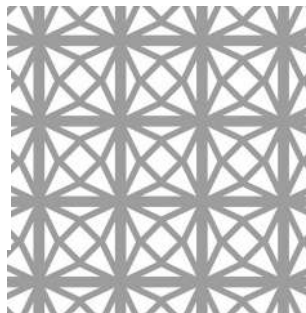
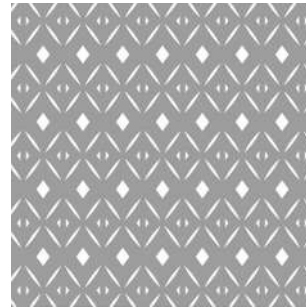
- 1 Create patterns through the use of local materials and craftsmanship.
- 2 Where multiple decorative patterns are applied across a single façade, these should be consistent.
- 3 **TR** Focus the use of surface patterns to doors, window screens and shutter doors.
- 4 **TR** refer directly to historic precedents and be limited to geometric and floral patterns.
- 5 **TIN C** 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)

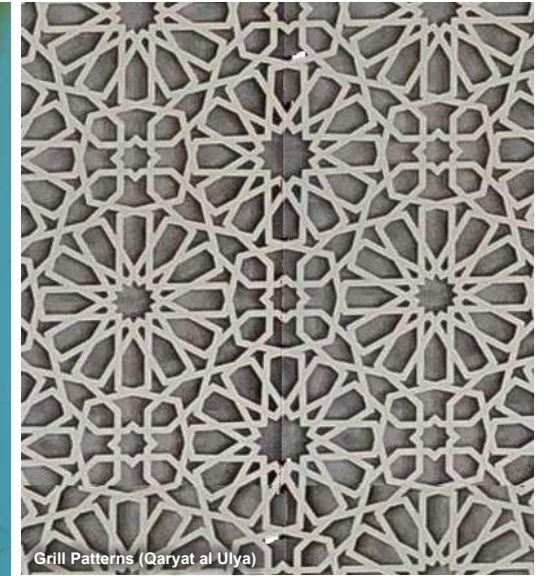
To express the spirit and essence of the original architecture in new yet familiar ways



Patterns



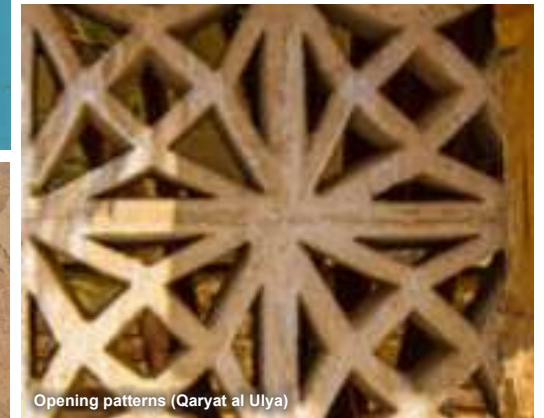
Metal door (Hafar Al Batin)



Grill Patterns (Qaryat al Ulya)



Parapet patterns



Opening patterns (Qaryat al Ulya)



Parapet patterns



Najdi traditional rug (Qaryat al Ulya)



Parapet patterns (Qaryat al Ulya)



Parapet patterns (Qaryat al Ulya)

## 6.0 Public realm

This section focuses on the contributions of residential villas 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

If the parking area is within the private property ownership, consider the following:

- 1 Parking spaces should not obstruct the use of built areas.
- 2 Unregulated use of public space disturbs the visual appeal of the built area and affects public access.

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

#### Palm trees Shade trees



#### Ornamental species



### 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.**

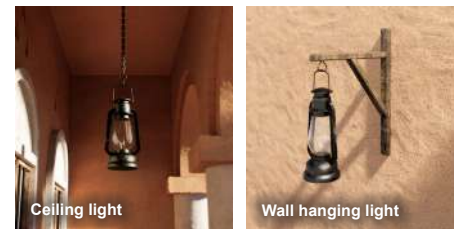


### 6.5 Signage

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.**

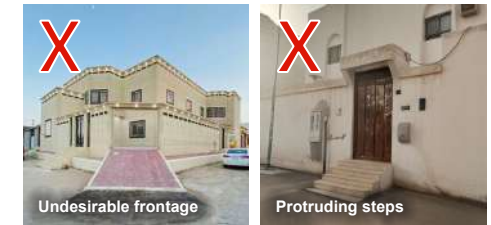
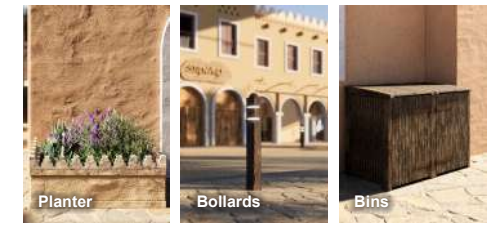


### 6.6 Lighting

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 Boundary walls and their portals should be architecturally integrated with the building design.
- 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 which create visual pollution and hostile environments.

**| To avoid common design mistakes.**



Appropriate materials



Inappropriate materials

### 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.



Appropriate colors



Saturated color building cladding

### 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.



Low quality screening materials



Low quality screening materials

### 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.



Correct use of traditional elements



Poor application of traditional elements

### 7.4 Superficial traditional elements

- 1 When integrating traditional elements on existing or new structures, it 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.



Exterior surface-mounted rolling shutter

### 7.5 Exposed roller shutters

- 1 Exposed roller shutters create noise and visual pollution if not properly concealed.
- 2 It is recommended that shutters are always integrated in the façade and properly mounted.
- 3 The use of high-quality mechanized shutters to ensure durability is advised. Shutters should also reflect the color scheme of the construction, design and overall region.



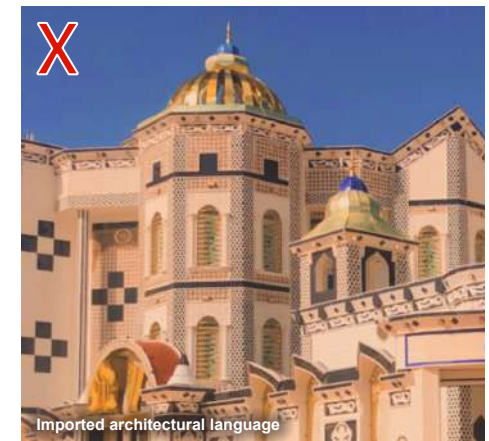
Exposed air conditioning units



Exposed air conditioning units

### 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.



Imported architectural language

### 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.



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

## 8.0 Traditional villa example

This structure reflects Eastern Najdi traditional architecture, showcasing asymmetry as a key feature. Its distinctive roof has stepped crenelations and semicircular openings, creating a multidimensional effect that adds visual depth.

The boundary wall complements the main structure with similar banding and triangular fenestrations, enhancing architectural harmony.

The windows on the main façade are uniform in size and style, featuring square recessed openings with timber coverings. They sometimes feature as rectangles with semicircular recesses above. The parapets have mizabs (drainage spouts) and simple alternate fenestration patterns.

This design not only honors Eastern Najdi's heritage but also emphasizes the importance of continuity and community cohesion, ensuring the region's cultural legacy is preserved.

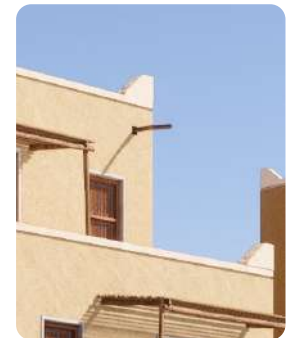
1 Stepped parapets create a multidimensional composition.



2 Windows on the main façade are consistently sized and styled, with square recessed openings and timber coverings.



3 The topmost rooftop exhibits mizabs (drainage spouts).



4 Greenery along the perimeter boundary wall includes a context-appropriate mixture of floral vegetation.





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

## 8.0 Transitional villa example 1

The transitional villa design builds on traditional architectural features while introducing modern aesthetics. This is seen in the more angular designs of semi-arched openings and frames, moving away from classical forms.

The parapets are flatter, providing a sleek silhouette while maintaining continuity in the façades.

Traditional motifs are refreshed with a restrained interpretation of regional patterns and ornamentation. Windows are wider, longer, and more open, framed in white paint. Both windows and doors have angular frames and semicircular arches with minimal ornamentation. The slightly lowered boundary wall allows for a strong presence, enhanced by wider windows and doors that create visual balance.

Instead of traditional multi-stepped corner merlons, the design uses square elements to define the corners, creating uniformity across the rooflines. This consistency reinforces the contemporary aesthetic of the villa.

1 Roofscape adopts a stepping effect towards the top, and angular cornices.



2 Windows are wider, longer, and more open with white painted frames.

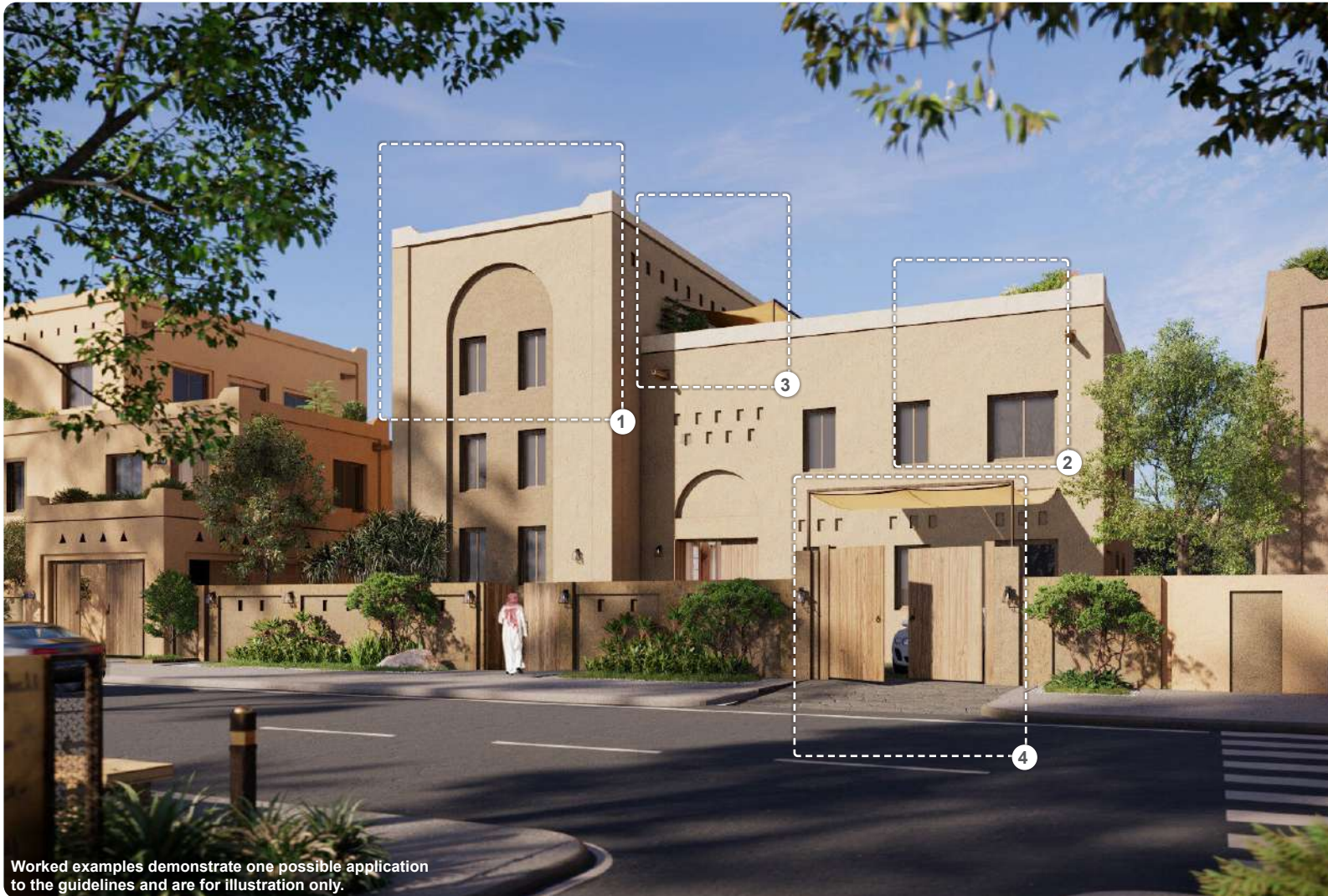


3 Balconies shaded with traditional inspired fabric structures.



4 Greenery along the perimeter boundary wall includes a contextually appropriate mixture of floral vegetation.





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

## 8.0 Transitional villa example 2

The villa is designed in a transitional style inspired by traditional Eastern Najdi architecture.

Asymmetry is achieved with a stepped roof, while symmetry is reflected in the arrangement of openings across different building elements. Shading structures, such as the garage roof and rooftop canopy, connect various parts of the building, marking a shift from traditional design.

The façade features local earth tones with slight contrasts, and the parapet includes traditional corner crenelations. Decorative elements include a recessed semicircular arch that highlights the vertical mass and rectangular niches beneath the parapet that emphasize horizontality and enhance ground floor openings.

The building's frontage is inviting, with greenery and a spacious sidewalk along the boundary wall, which is made from materials that match the villa, creating a cohesive appearance.

1 Simple parapet with corner crenelations made of a lighter material.



2 Windows are grouped into vertical and square windows with a simple frame and slight recess.



3 Habitable and fabric shaded roof terrace.



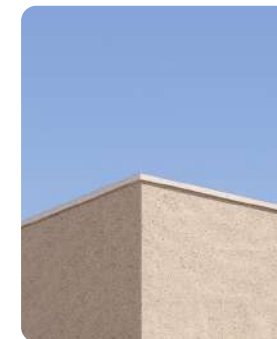
4 Villa's garage entrance, crafted from local timber, or a suitable alternative material, includes a fabric canopy spanning from the boundary wall to the building.





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

1 Simple linear parapet in a lighter material.



2 Windows embody contemporary aesthetics, being thin, elongated, promoting openness.



3 The top of the facade, with a shaded rooftop features simplified abstracted ornamentation expressed through a slight recess through a slight recess.



4 Villa's garage entrance is made of local timber, or equivalent material, including a canopy that spans from the boundary wall to the building.



## 8.0 Contemporary villa example 1

Contemporary architecture in Eastern Najdi blends traditional elements with modern design principles. This is evident in the asymmetrical structures, where traditional motifs are reinterpreted alongside contemporary forms.

The architectural landscape features playful asymmetry, particularly in the arrangement of balconies and frontages.

Key architectural features include the region's iconic semicircular arches, reimagined for modern use. These arches adorn the main door and elongated windows, creating inviting openings and adding visual accents to the boundary wall. The top of the façade features a shaded rooftop with simplified, abstract ornamentation expressed through a

subtle recess. The windows reflect a contemporary aesthetic with their thin, elongated design, enhancing a sense of openness.

This approach honors the architectural history of Eastern Najdi while embracing contemporary aesthetics.



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## 8.0 Contemporary villa example 2

This villa design advances the transitional style by unifying specific elements. A recessed arch serves as a decorative feature throughout, drawing from Eastern Najdi tradition. The windows are slightly more recessed than in the transitional style and include minimal timber screens for shading.

The roofscape steps inward to create a habitable roof, shaded by a geometric timber structure, which also covers the car parking area and connects the boundary wall to the building.

Contrast on the façade is achieved with timber finishes for entrances, openings, and shading structures. Recesses in the building allow for the

integration of darker colors, enhancing contrast. Traditional patterns in the façade ornamentation animate the building frontage, providing a visually appealing, traditional-inspired aesthetic.

1 Geometric ornamentation abstracted from traditional patterns animates sections of the façade, close to the parapet.



2 Windows feature vertical proportions sitting within a semicircular arch.



3 Habitable rooftop with a timber-finish shading structure.



4 Villa's main entrance door, like the garage door, is crafted from local timber, or equivalent.





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

### 8.0 Contemporary villa example 3

This contemporary villa design features innovative building massing and cohesive connections between elements. The garage is integrated into the overall massing, with its roof converted into a habitable space. The roofscape includes inward-stepping areas, creating dynamic multi-level surfaces, all shaded with materials that match the façade.

The same shading material extends to the garage and main gates, promoting design unity. The front door incorporates this pattern within its arch and is set in a prominent recess for visual impact. The ground floor features semicircular glass arches, a distinctive element of Eastern Najdi architecture.

A dynamic arrangement of windows serves to define the building's various interior spaces, rather than just functioning as openings. Ornamentations inspired by the traditional styles are only used minimally as a design element.

1 Geometric ornamentation abstracted from traditional patterns animates sections of the façade, close to the parapet.



2 Balconies are shaded with a perforated element featuring abstracted patterns.



3 Habitable and shaded roof terrace with simple parapet.



4 Villa's garage entrance structurally connected to the building massing.

