VISION 2**O**30
رؤيـــة 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

العمـــارة السعودية
SAUDI ARCHITECTURE

Al Qatif Oasis

Architectural Design Guidelines

Application Handbook - Residential Villas

وزارة البلديات والإسكان
Ministry of Municipalities and Housing

مركز دعم هيئات التطوير
DEVELOPMENT AUTHORITIES SUPPORT CENTER

برنامج جودة الحيـاة
QUALITY OF LIFE PROGRAM

VERSION 1.0

Al Qatif Architectural Character Area

IRAN

ARABIAN GULF

Qaryat Al Ulya

Al Jubail

Al Qatif

Dammam

Al Khobar

QATAR

Al Hofuf

0m   25km   50km   100km

Contents
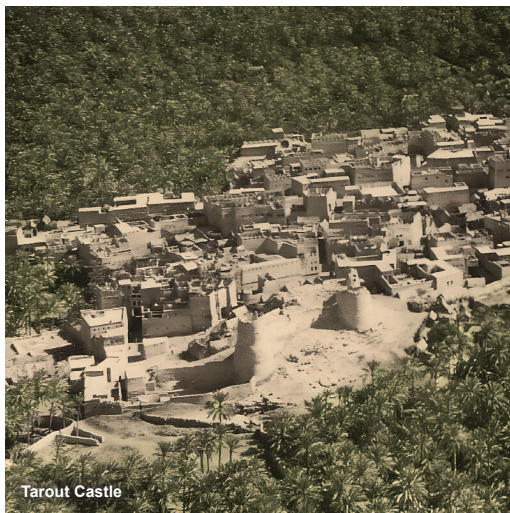
Tarout Castle

Al Qatif Castle

Example of elevation of a Traditional Villa in Al Qatif Oasis

I   Introduction

The purpose of this document is to help designers and builders of villas apply the architectural character of Al Qatif Oasis to their projects.

Al Qatif Oasis represents an area in the Kingdom of Saudi Arabia which has been settled continuously due to the availability of water enabling agricultural production. Located on the Eastern Coast, the region boasts a variety of ecological areas, such as palm tree jungles, offshore coral reefs, sand plains, marshes, and salt flats.

Most settlements in the region are found by the coast composed of fishing towns, in addition to some desert settlements located in dry wadis or landscape depressions, as well as denser microclimate areas which are connected to the date plantation settlements.

Materials used in construction and development are mostly sourced from the neighboring landscape, and do not reveal many influences from surrounding region and continents. Lifestyles were mostly sustenance oriented, and materials include palm, salt rocks, alluvial mud, and hay.

Generally the architectural and design styles of the region are more muted than those found in oases areas, such as Al Ahsa, and include less ornamentation in the building structure.

Given the frequency of sandstorms and haze, windows and ventilation are smaller to preclude the accumulation of dust in the interiors. The climate in the area does not become extreme, however high humidity is extremely common.

This handbook is a supplement to the Al Qatif Oasis 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

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 Al Qatif Oasis

This handbook implements the Al Qatif Oasis 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 Al Qatif Oasis.

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 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.
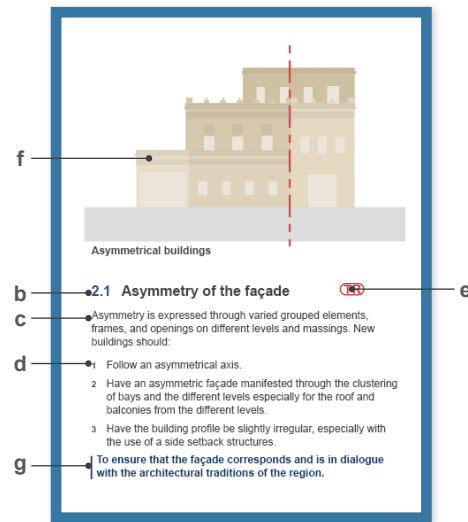
Typical guideline structure.

This general character reference model is from the Al Qatif Oasis Architectural Design Guideline, summarizing the key features of the architectural character.
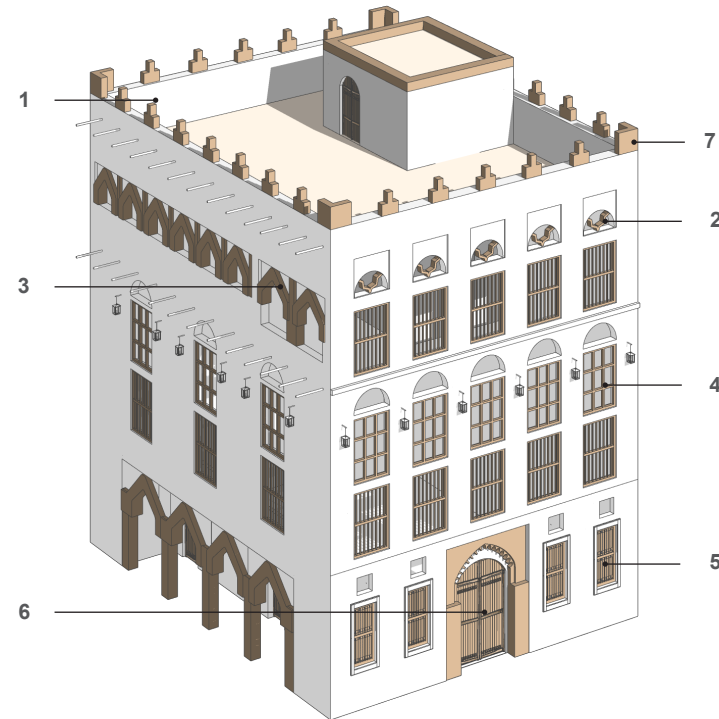

Key features:

1 Flat roofs with slight visibility to the public.

2 Fenestrations: usually located on the upper floors and give rhythm to the façade.

3 Upper-level arcade: Styled cul-de-four arches in frames, supported by short circular columns, promote indoor air circulation.

4 Upper-floor main windows are larger, while ground-level ones are smaller to maintain privacy.

5 Particular style of Al Darisha windows, which have screens that are able to reflect the light indoors at specific angles.

6 Main door features arch, semicircle, or square shaped extension for decoration within elaborate frames, possibly recessed.

7 Crenelations occur at every vertical bay of the building.
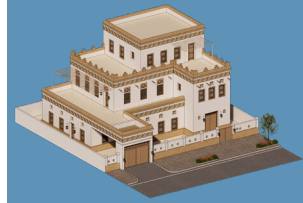
Traditional (TR)
The most conservative and faithful effort at interpreting traditional architectural form.
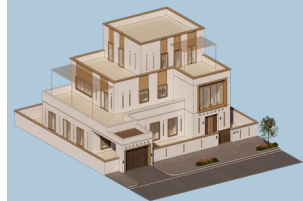START AT PAGE 5
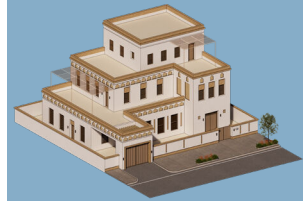
Transitional (TN)
A style suitable to help create gradual transitions between areas of different character style.
START AT PAGE 6

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

To master the traditional architecture of the Al Qatif Oasis region, embrace the concept of asymmetry. Unlike uniform structures, villas here boast an additive grid pattern, highlighting the beauty of asymmetry. Take note of the accessible terraces positioned at different levels within the building—they're key elements. By incorporating these features, you'll create a multidimensional structure that breaks away from conventional square or rectangular designs. When designing, prioritize asymmetrical elements such as staggered balconies and varied roof levels to capture the essence of this unique architectural style.

2.2 Grouping of elements

The vast majority of traditional style villas develop horizontally. To introduce vertical contrast at each level, employ differentiation in wall setback from the perimeter fence across the different sections of the villa, variation in parapet height, or changes in local symmetry across more than one story.

2.3 Entrances and articulation

The base and rest of structure should share the same material. However, the wall-to-ground connection is highlighted by a visible plinth, generally made of a different material such as stone or larger bricks. There should be a large opening for the covered vehicular parking/garage and the main entryway must be clearly distinguished through special framing. The inclusion of a boundary wall around the perimeter is paramount, with gates for the driveway and the main entrance.

2.7 Geometry of components

To achieve a cohesive and visually appealing design, ensure that the organization of facades, openings, and decorations reflects a thoughtful use of various geometric shapes. For doors and windows, consider employing either orthogonal or arch-shaped geometry. Enhance the rear-facing walls by incorporating variations of rectangular fenestrations into the façade. Add aesthetic charm to exterior facades with semi-circular arches.

2.8 Façades

Building façades must have 'opening' proportions of 20-35% and side façade openings should be limited to 20% of the total front façade area. The 'opening' area encompasses the full extent of components such as windows, doors, balconies, shutters, lookouts, and all compositional elements which provide entry into the villa.
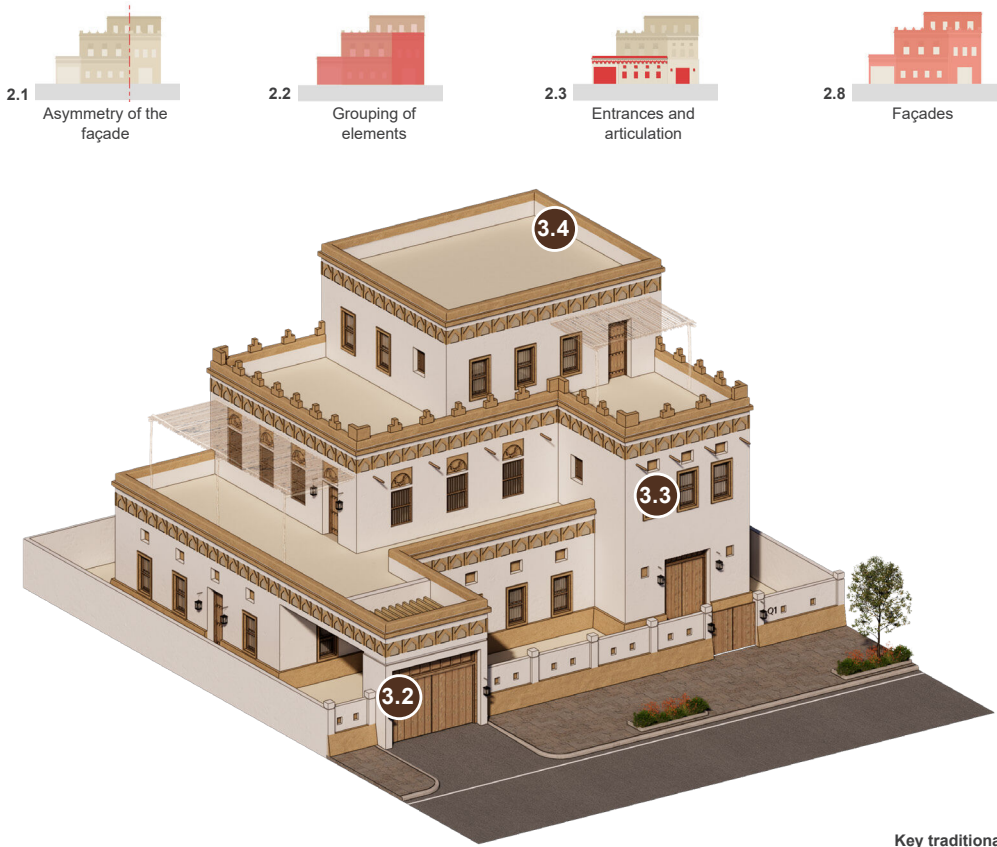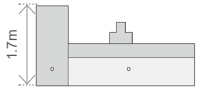

2.1 Asymmetry of the façade

2.2 Grouping of elements

2.3 Entrances and articulation
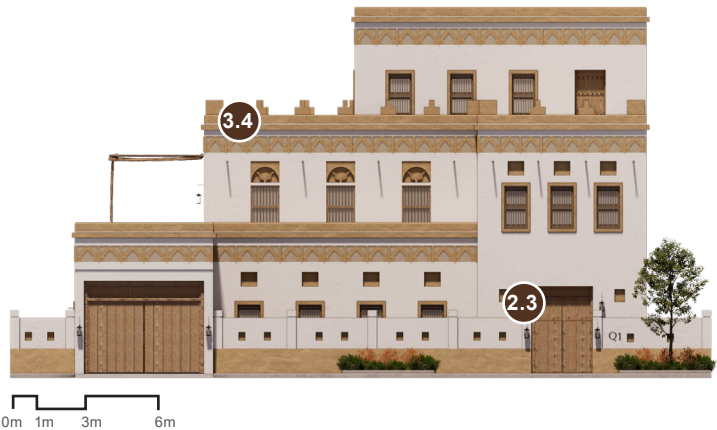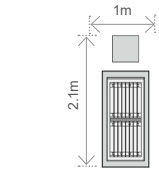
2.8 Façades

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

Key traditional architectural features.

3.4 Parapet Type

3.3 Window Type

3.2 Door Type

0m 1m 3m 6m

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

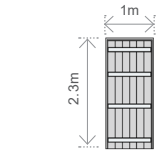Side façades should not overwhelm the front façade, featuring less openings in comparison.

2.9 Roofscape and rooftop elements

The parapet line and roof silhouette must be flat and rectangular, and at the top level use crenelations. Rooftops should be accessible and function as terraces, and some feature a shaded cover or arcade. The rooftop should be broken down to create variable heights across the facade.

TRADITIONAL ELEMENTS

3.2 Doorways and entrances

The main residential entrance should be clearly expressed upon the façade, slightly set back from the fenced boundary wall but extruded from the main villa volume. Use timber panels for the main entryway. Doorways on other levels should be slightly recessed.

3.3 Windows and openings

Windows should typically be rectangular, made of wood, and may feature a semicircular decorative element. The windows themselves are typically either square or rectangular, with timber shutters. Avoid using long horizontal strip windows and placing windows directly across from existing windows on neighboring buildings.

3.4 Rooftop elements

The villa's facade must be broken up to respect traditional architecture rhythms and avoid long unbroken shapes. Break frontages at intervals for a human scale and visual interest, especially on the main facade with one volume higher or a parapet extension. Ensure privacy with higher parapet walls, screens, shading structures, and mizabs along the facade. Incorporate traditional patterns and stepped crenellations on the parapet.

3.5 Other elements

Boundary walls of the fence should be made from the same material as the villa. However, the wall-to-ground connection is highlighted by a visible plinth, generally made of a different material such as stone or larger bricks. Consider as well incorporating geometric elements and bands along the boundary and various levels of the villa.

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, comprising no more than 10-20% of the façade area. See section 4.0 'Colors and Materials' for more information.

4.2 Materials

The primary wall surface should feature a matte-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet. Wood, or other materials that resemble it in color, appearance, and texture, should be used for windows and doors.

5.0 Patterns

Incorporate patterns for timber screens from historic designs existing 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

When designing villas in the transitional style, it's essential to create asymmetry to achieve a balanced yet dynamic aesthetic. To accomplish this, incorporate slight setbacks on various sides of the villa. These setbacks add visual interest and depth to the facade while breaking away from the symmetrical layout. Additionally, consider integrating accessible roof terraces into the design, ensuring they seamlessly blend into the overall structure. These roof spaces not only enhance the architectural appeal but also provide functional areas for relaxation or entertainment.

2.2 Grouping of elements

To offset the horizontal expansion carried from the traditional style, vertical breaks should be included through less exaggerated differentiation in wall setback from the perimeter fence, variation in parapet height, or changes in local symmetry across more than one story. Corners, parapets, and banding contribute to the angular nature and verticality of the villa.
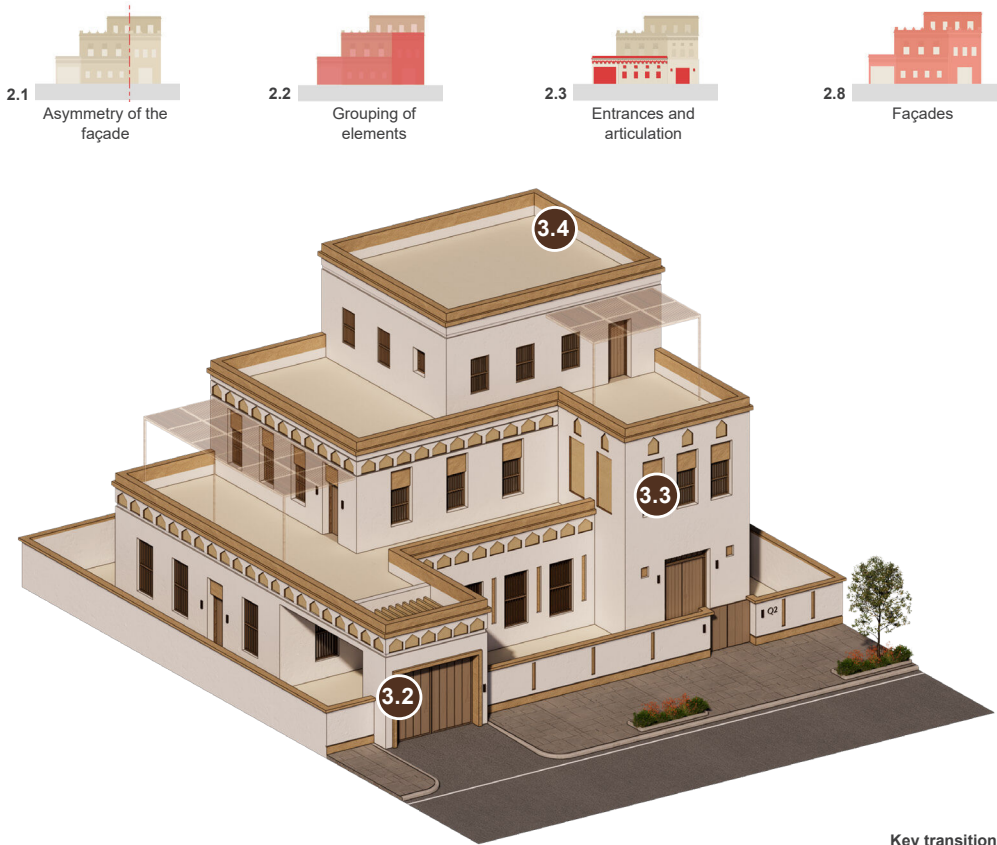
2.3 Entrances and articulation

The base and the rest of structure should be made of the same material. There should be an opening for the covered vehicular parking/garage (an extension of the first accessible terrace) and the main entryway clearly distinguished. The inclusion of a boundary wall around the perimeter is paramount, with framed gates for the driveway and the main entryway.

2.7 Geometry of components

For the transitional style, 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. For doors and windows, employ orthogonal geometries. Enhance the rear-facing walls by incorporating variations of rectangular fenestrations into the façade.

2.8 Façades

Building façades must have 'opening' proportions of 30-45% or less of the total façade area. Side façades should not overwhelm the front façade, featuring less openings in comparison.


2.1 Asymmetry of the façade
2.2 Grouping of elements
2.3 Entrances and articulation
2.8 Façades

3.4
3.3
3.2

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

3.4
2.3
Q2

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

0m 1m 3m 6m
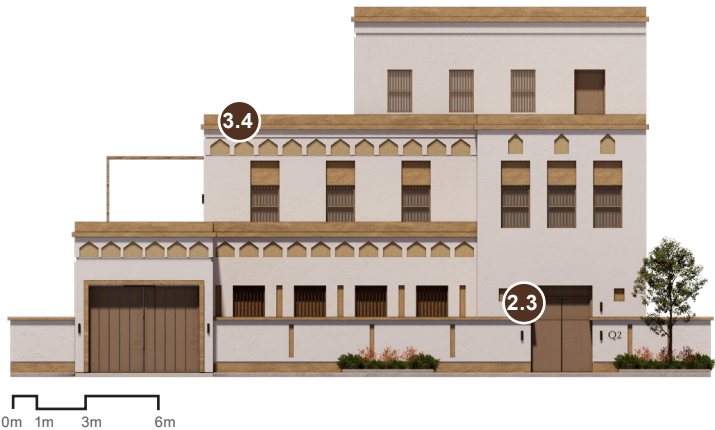
Key transitional architectural features.
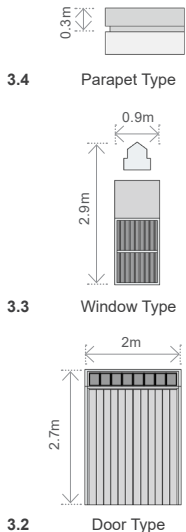
0.3m
3.4 Parapet Type

0.9m
2.9m
3.3 Window Type

2m
2.7m
3.2 Door Type

2.9 Roofscape and rooftop elements

All façades should generally have an asymmetric composition. The parapet line and roof silhouette must be flat and rectangular. The roof should be broken down to create variable heights across the facade.

TRANSITIONAL ELEMENTS

3.2 Doorways and entrances

The double door main residential entrance should be clearly expressed upon the façade, through surrounding wall recess, and also articulated the gate of the fenced boundary. Doorways on other levels (such as for balconies or on the rooftop) are typically only slightly recessed, and made of wood or equivalent materials.

3.3 Windows and openings

Windows on the main façade must have at least 3 levels of hierarchy in size and proportions. In the transitional style, windows should be a mixture of slimmer rectangles, larger rectangles, squares and arched openings. They may feature longer openings, a design which 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 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. Incorporate uniform distanced recesses along the parapet.

3.5 Other elements

Boundary walls along the perimeter should be made from the same material as the villa. The vehicular and main entrance gate should be of timber panels, or another equivalent material, in a simple pattern and finish compatible with transitional façades. Consider incorporating geometric decorations along the façade, above and in between windows and other openings.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The building façades should comprise natural colors, deriving from the natural contextual environment, predominantly off-white shades and timber. Employ accent colors minimally. See section 4.0 'Colors and Materials' for more information.

4.2 Materials

The primary wall surface should feature a matt-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet. Windows, doors, and shutters should use a dark timber or an equivalent material finish.

5.0 Patterns

Design patterned timber (or equivalent) screens, door panels, and wall treatments inspired by existing historical 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 skilful 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, through the asymmetrical rooftop, and the structural setback from the perimeter. Asymmetry is also demonstrated on the façade through across various accessible roof terraces, for example.

2.2 Grouping of elements

Although less overtly horizontal in expansion, introduce greater verticality 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 storey. Balconies and roofs with transparent glass railings, and longer vertical windows extend the vertical sense of the villa.

2.3 Entrances and articulation

The base and rest of structure should share the same material. Clearly distinguish the opening for the covered vehicular parking/garage and the main entryway, on the main façade and the boundary. The inclusion of a boundary wall around the perimeter is paramount, with gates for the driveway and the main entryway. It may be decorated with a series of linear elements.

2.7 Geometry of components

For the contemporary style, arrange windows, balconies, doorways, bays, and staircases to create local symmetries, which correspond to interior architecture use and program. Ensure that the organization of side facades, openings, and decorations reflects a thoughtful use of various geometric shapes. For doors and windows, consider employing either orthogonal or arch-shaped geometry. Enhance the rear-facing walls by incorporating variations of rectangular fenestrations into the façade.

2.8 Façades

In the contemporary style, windows and protruding elements are mostly from glass, thus increasing openness to 50% of the entire facade. Other openings, such as balconies, are recessed within a structure of the villa, with a slightly protruding frame. Walls are flat, corners more angular, a general linear style across the villa. Side façades should not overwhelm the front façade, featuring less openings in comparison.


2.1 Asymmetry of the façade

2.2 Grouping of elements

2.3 Entrances and articulation

2.8 Façades

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.

0m 1m 3m 6m
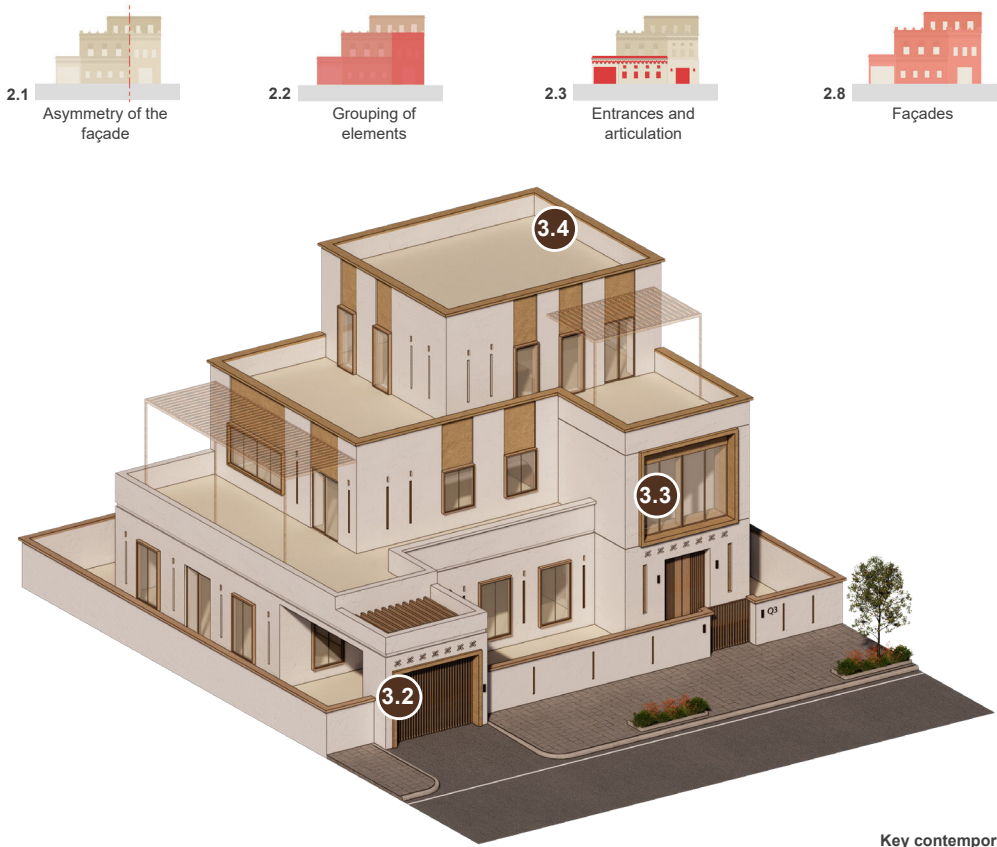
Key contemporary architectural features.

3.4 Parapet Type
0.9m

3.3 Window Type
1.8m / 2.3m

3.2 Door Type
2m / 2.8m
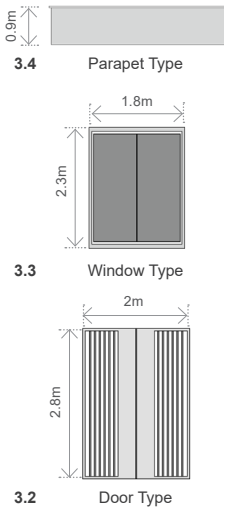
2.9 Roofscape and rooftop elements

All façades should generally have an asymmetric composition. The parapet line and roof silhouette must be flat and rectangular. The roof may also be accessible, with a shaded section. It should be broken down to create variable heights across the facade.

CONTEMPORARY ELEMENTS

3.2 Doorways and entrances

The main residential entrance should be clearly differentiated upon the façade and on the gate of the fenced boundary. Doorways on other levels (such as for balconies or on the rooftop) are also typically slightly recessed, framed with timber, or other equivalent modern materials, with wider openings.

3.3 Windows and openings

Windows on the main façade must have at least 3 levels of hierarchy in size and proportions. They feature wider openings, and typically protrude from a timber frame, or another equivalent modern material. 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 should not use large parapets or crenelations. Instead, flat, roofscapes with minimum variation in rooflines are preferred. Where an accessible roof terrace is provided, protect residents' privacy and outdoor exposure with the provision of a shade covering and transparent railings in certain sections.

3.5 Other elements

Boundary walls of the fence should be made from the same material as the villa. The vehicular and main entrance gate should be in a pattern and finish compatible with contemporary façades. Consider incorporating linear motifs along the boundary wall and at various levels of the villa.

COLORS, MATERIALS AND PATTERNS

4.2 Colors

The building façades should comprise natural colors, in line with the regional palette, using predominantly off-white shades and timber. Employ accent colors minimally. See section 4.0 'Colors and Materials' for more information.

4.1 Materials

The base and structure should be of the same material. The primary wall surface should feature a matt-finish with off-white plaster, limewash or similar. This must be continuous from above the base to the top of the parapet. Glass could be used in higher proportion for windows and openings.

5.0 Patterns

Inspired by existing historical patterns, develop a minimal geometric design. This is best applied in banding along the façades of the villa.

2.0 Compositional rules

The following guidelines provide compositional rules for building design with the Al Qatif Oasis 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.
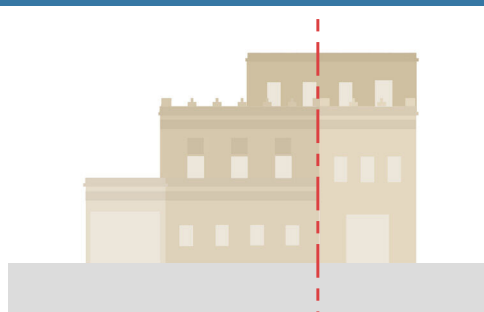

Asymmetrical buildings

2.1 Asymmetry of the façade

Asymmetry is expressed through varied grouped elements, frames, and openings on different levels and massings. New buildings should:

1   Follow an asymmetrical axis.
2   Have an asymmetric façade manifested through the clustering of bays and the different levels especially for the roof and balconies from the different levels.
3   Have the building profile be slightly irregular, especially with the use of a side setback structures.

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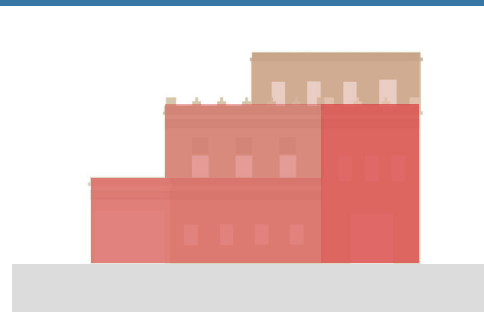
Grouping of elements

2.2 Grouping of elements

Buildings are typically defined by vertical proportions. New buildings should:

1   Have windows grouped on the upper levels and on different building masses. If niches are present they should be aligned with the crenelations or centered with the building entrances.
2   Embrace strong alignment of frontages, opening, windows arches, and columns to create coherent building lines.

| To reflect the typical form of vernacular buildings.
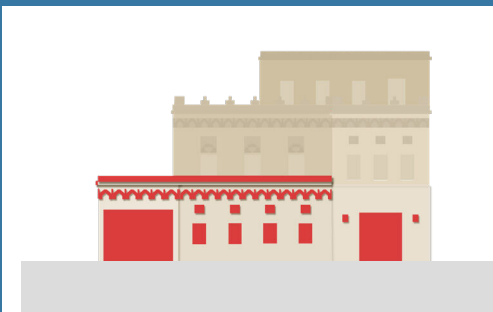
Base detail

2.3 Entrances and articulation

Wall finishes demonstrate a close relationship with the ground. 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.
3   Include a boundary wall around the perimeter, with gates for the driveway and the main entryway.
4   (TR) Highlight the wall-to-ground connection by a visible plinth, generally made of a different material such as stone or larger bricks.

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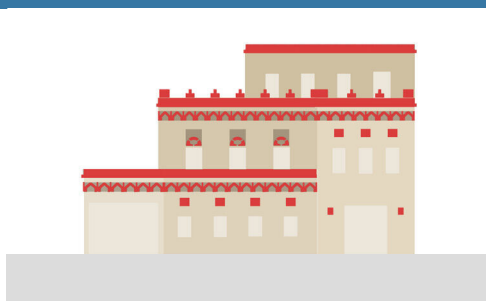

Ornamentations, fenestrations and crenelations

2.5 Ornamentations

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   Be composed of several smaller structures, decorated at each level with banding or fenestrations or geometric elements.
2   (TR) Embed ornamentation within parapets, horizontal banding, arches, doors and recessed elements.
3   Have façades generally show singular ornamentation at every level, used repetitively.

| To ensure that the ornamentation reflects the style of the Al Qatif Oasis architecture and distinguish it from other regions.
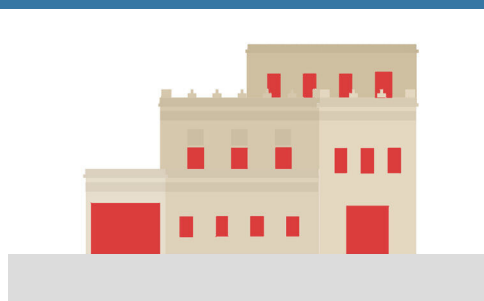

Geometry of components

2.7 Geometry of components

The legible organization of openings is a dominant feature which characterizes different geometries. New buildings should:

1   Keep the alignment of doors and windows orthogonal.
2   Arrange various geometries based on the grouping of openings. Traditional styles should include a variety of opening geometries and arch types, while transitional styles should feature fewer, and contemporary styles should be restricted to two: one geometry for doors and one for windows.

| To embrace the properties and relations of the lines, angles and surfaces distinctive to the region.
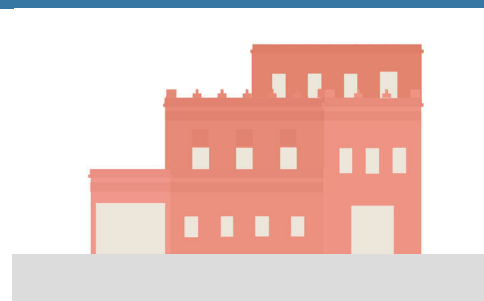
Solid Façades

2.8 Façades

The Al Qatif Oasis has distinct framing of the façade and openings. New buildings should:

1   Frame the different openings with arches or protruding frames and emphasize the entryway with a large door.
2   Provide horizontal articulation for the main entrance and vertical ones for the side structures.
3   Have a clear openings percentage, 35% for traditional styles, 45% for transitional styles and 60% for contemporary styles.

| To design the openings of façades building upon the region's traditional architecture.
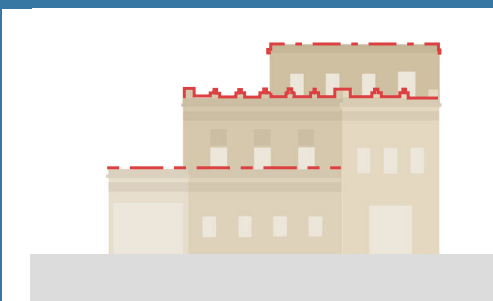
Stepping, rectilinear roofscape
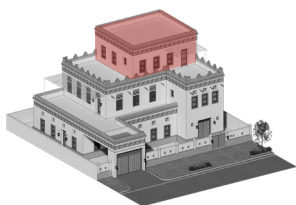
2.9 Roofscape and rooftop elements

Roof and parapets form a distinctive component in Al Qatif Oasis. The design of new buildings should:

1   Incorporate flat roofs.
2   (TR) Crenelation should be a part of the roofscape.
3   High parapets should be used for privacy with openings to facilitate airflow.

| To retain a consistent and traditional roofscape.
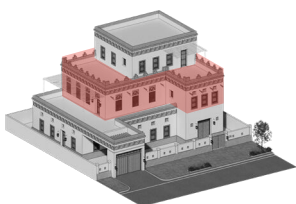
3.0 Traditional Elements

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.
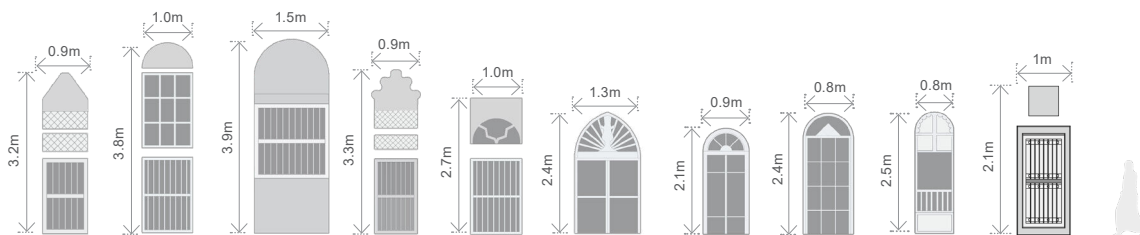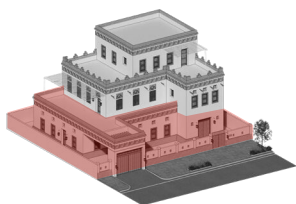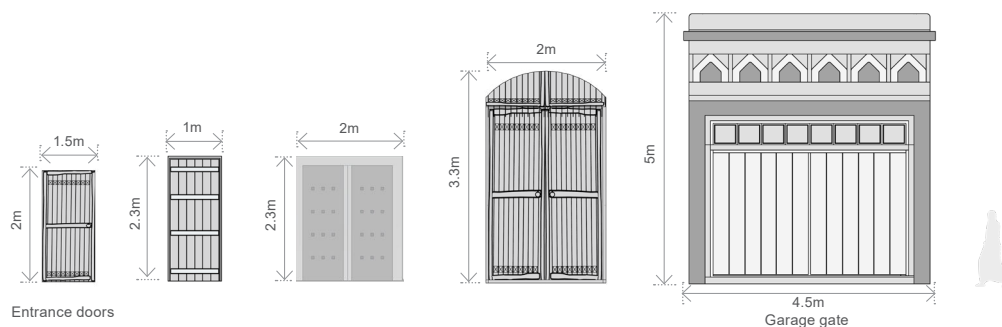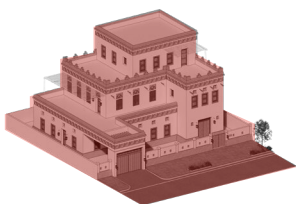
Top
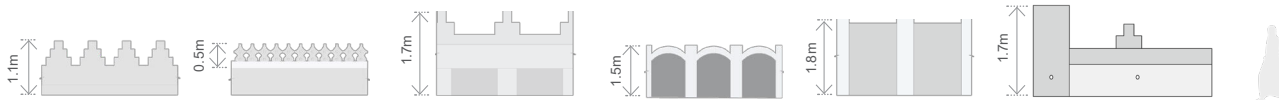
Parapets with crenelations

Middle

Windows

Base

Entrance doors

Garage gate
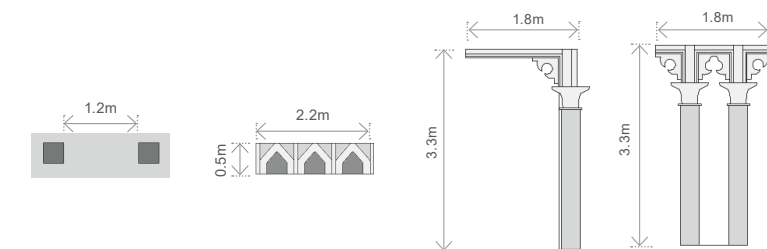
Other elements

Ornamentations / Fenestrations

Columns

3.4 Rooftop elements

1 Roof scape should be flat.

2 Parapets are elaborate with stepped crenelations, corner merlons, and rectangular niches with small openings for public viewing.

3 The roof is flush with the primary building line.

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

3.3 Windows and openings

1 Provide rectilinear vertical windows.

2 Use wood or an equivalent material for shutters and frames to articulate the window area.

3 Usually do not incorporate motifs or ornamentation, but some semicircular arches.

4 Square openings do feature on lower levels.

5 Recessed frames are used around the windows.

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

3.2 Doorways and entrances

1 Clearly define primary entrances as part of a well-ordered street frontage. Door framing and recessing can add depth and create a sense of entry.

2 Use wood for the door and local materials where possible.

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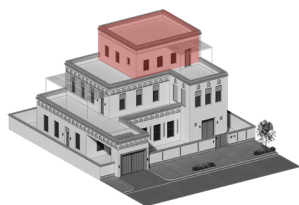
3.5 Other elements

1 Provide different ornamentations based on the vegetal inspired motifs and patterns of the region.

2 Crenelations, exposed columns and vertical piers should act as separators of the building's façade.

3 Arcades are typically included in larger sized buildings, on the second story supported by slim circular columns with capitals shaped according to vegetal motifs.

4 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.
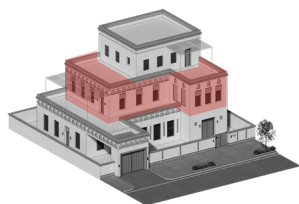
3.0 Transitional Elements

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.
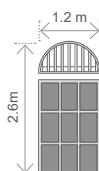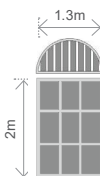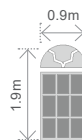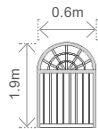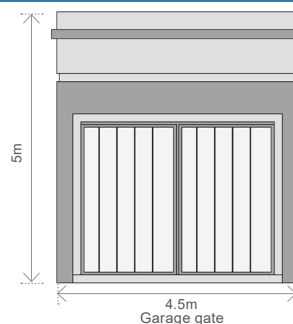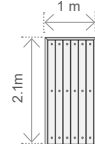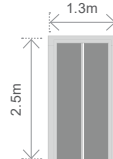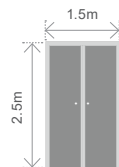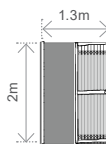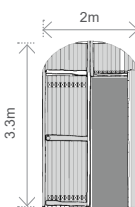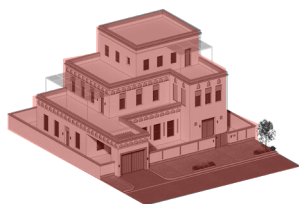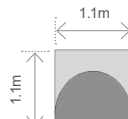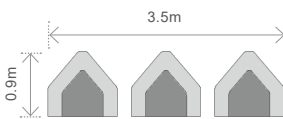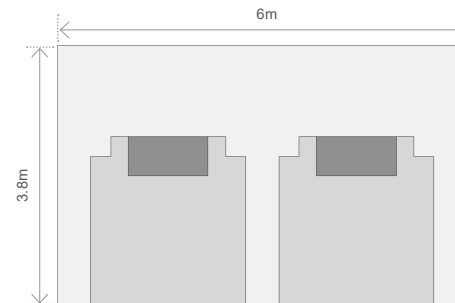
3.4 Rooftop elements

1. Be completely flat, with multiple and gradual roofscapes extending from each level.
2. Maintain a distinct rectilinear and angular corners.
3. Should feature flat parapets and single stepped corners or merlons.
4. Banding and marking of the roof with rafters or slight recessing and framing of the structure with muted arches.

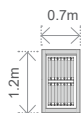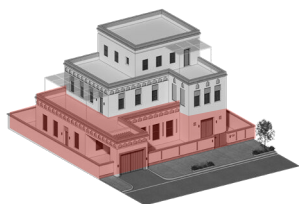**To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.**

Top

Parapets with crenelations

3.3 Windows and openings

1. Provide slim vertical windows.
2. Use wood or an equivalent material for shutters and frames to articulate the window area.
3. Emphasize rectangular shapes for windows and incorporate glass as well as semicircular arches above the ground floor.
4. Square windows can line vertical niches to create a rhythm in the façade.
5. Incorporate subtle square openings above windows as openings.

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

Middle

Windows

3.2 Doorways and entrances

1. Define doors as part of the street frontage and have it flush with the main building line and façade.
2. Incorporate no or modest ornamentation for the door, with semicircular arches above or angular square for the entrance.
3. Use double doors made of wood or an equivalent material with no frames.

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

Base

Entrance doors

Garage gate

3.5 Other elements

1. Provide different ornamentations abstracted from the vegetal inspired motifs and patterns of traditional designs.
2. Hanging lanterns could be integrated on the ground floor.
3. Horizontal elements like façade indentation should be used to differentiate levels.
4. 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.

Other elements

Ornamentations / Fenestrations

Arcades

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

0.9m

Parapets with crenelations

1.5m

Middle

1.4m
2.3m

1.3m
3.7m

3m
3m

1.8m
2.8m

1.8m
2.3m

4.2m
3.7m

Windows

Base

1.8m
2.3m

2m
2.8m

4.5m
5m

Entrance doors

Garage gate

Other elements

1.5m
3.3m

2.8m
3.3m

0.8m
1.8m
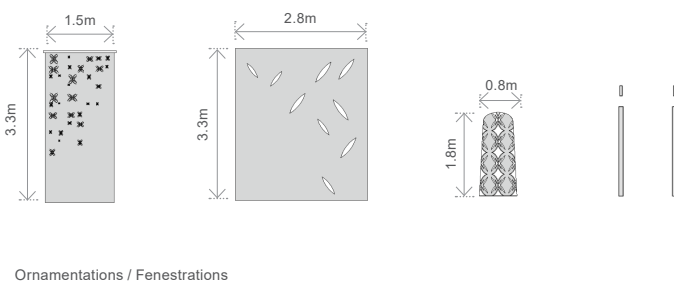
Ornamentations / Fenestrations

3.4 Rooftop elements

1. Be completely flat and extend out as multiple roofs or balconies.
2. Parapets should be flat, angular and minimal, with a very slight differentiation and accentuation from the remaining structure.

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

3.3 Windows and openings

1. Provide vertical and rectangular windows.
2. Interpret the size and scale of the window frames.
3. Consider including shaded verandas which experiment with arches that are common to the area.
4. Include wide and upward openings to further accentuate projecting features.
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.

3.2 Doorways and entrances

1. Clearly define primary entrances as part of the street frontage.
2. Consider the inclusion of framing, recessing and shaded verandas or arcades to mark door entrance and portals.
3. Experiment with the semicircular rounded arch around the doors to create a sense of entry.
4. Use glass for the doors.

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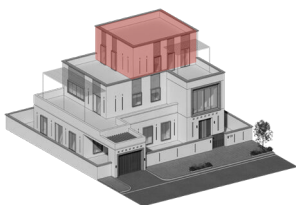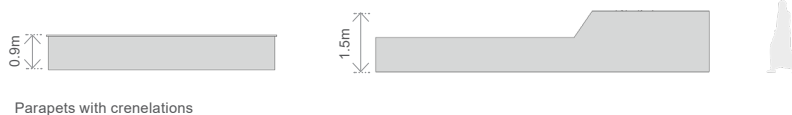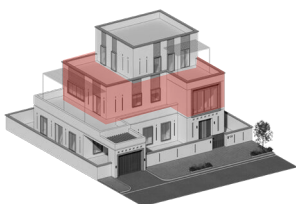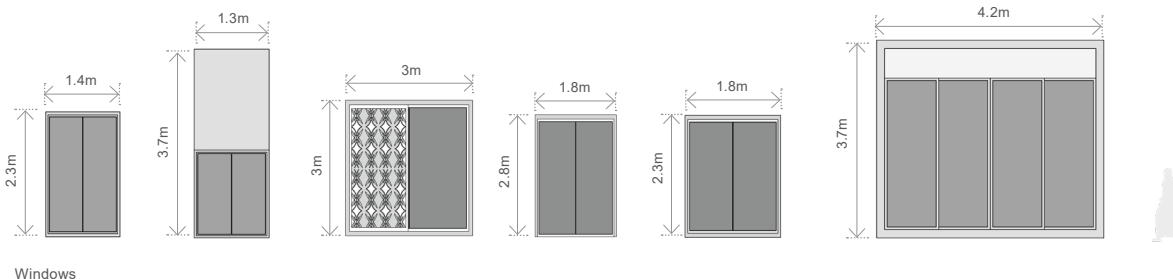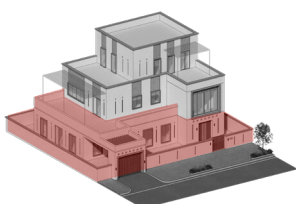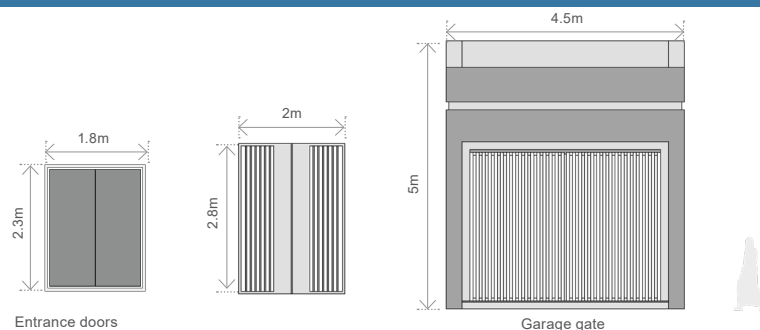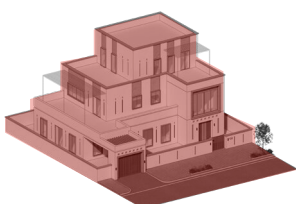
3.5 Other elements

1. Consider other alternatives for traditional lanterns
2. For contemporary arches use a segmental arch with inclined sides for the base.
3. For contemporary ornamentations, abstract traditional patterns into simpler geometric shapes.
4. 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

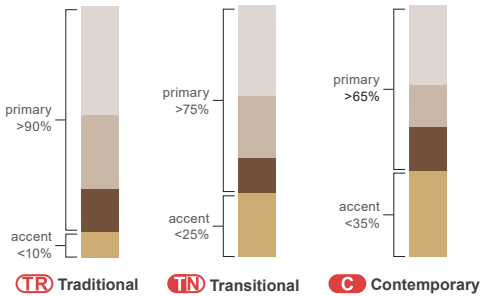The color palette of Al Qatif Oasis is closely linked to traditional building materials which have a chromatic color quality, such as pebble gray, ochre brown, and pearl beige. The surrounding landscape is also an important influence, particularly the sandy colors of nearby coast.

5 (TR) The stone base is a different color from the rest of the building and is usually chromatic between beige, pearl beige, and brown beige. They are the larger swatches to the right.

6 Generally use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.

7 A maximum percentage of accent color, measured as a percentage of the total façade area, is allowed for each style:

- (TR) <10%
- (TN) <25%
- (C) <35%

8 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

primary >90%   primary >75%   primary >65%
accent <10%   accent <25%   accent <35%

(TR) **Traditional**   (TN) **Transitional**   (C) **Contemporary**

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/

primary colors

RAL 075 80 10

RAL 060 70 10

RAL 1035

RAL 050 60 40

RAL 030 40 20

RAL 8007

accents colors

RAL 060 80 05

RAL 8004

RAL 060 50 50

RAL 060 70 30

RAL 070 80 30

RAL 7013

RAL 7006

RAL 8016

RAL 050 50 20

RAL 050 40 30

RAL 7033

RAL 050 70 20

Adobe walls

Mud brick fenestrations

Wooden door

Smooth colored plaster | Concrete finish | Adobe

Terracotta blocks | Mud brick fenestrations | Metal fenestrations

Wooden and glass door | Wooden door panels | Fiberglass with wood finish

Adobe niche

Textured mud

Stone flooring

Concrete niche | Adobe niche | Plaster niche

Mud finish | Gypsum finish | Concrete

Cut stone flooring | Concrete block flooring | Cut stone flooring

4.2 Material

This palette summarizes the prevalent materials found in the architecture of Al Qatif Oasis.

1 (TR) 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 (TN) (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)
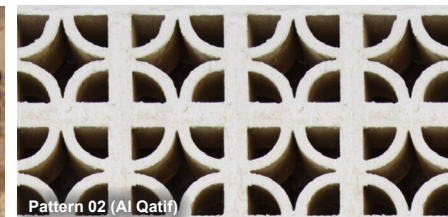- Unity/variety (degrees of variation)

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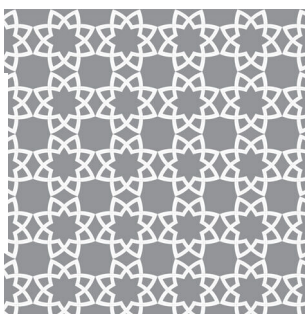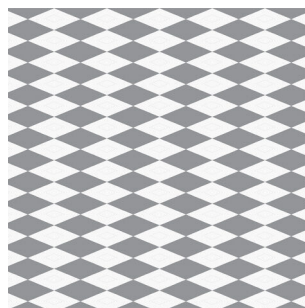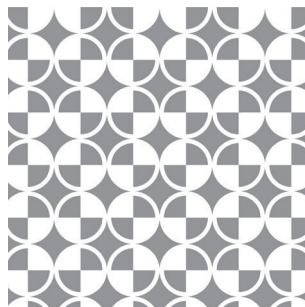
Patterns

Pattern 01 (Al Qatif)

Pattern 02 (Al Qatif)

Pattern 03 (Al Qatif)

Pattern 04 (Al Qatif)

Pattern 05 (Al Qatif)

Pattern 06 (Al Qatif)

Pattern 07 (Al Qatif)

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.

Flag stone: Flooring

Compact sand:

Basalt paving

Dry stone: Flooring

Basalt

Gravel:

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.

Undesirable shading

Shading design complies with the contextual character

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.
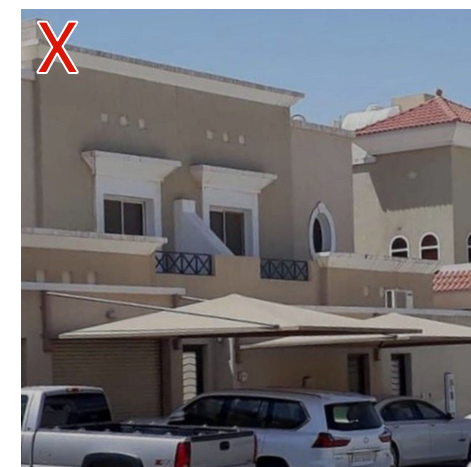
6.3 Parking

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

Azadirachta indica (Neem tree)

Albizia lebbeck (Siris)

Shade trees

Acacia ampliceps (Salt Wattle)

Phoenix dactylifera (Date palm)

Ornamental species

Plumeria obtusa (Plumeria)

Gazania rigens (Daisy)

Myrtus communis (Myrtle)

Vitex agnus castus (Chasteberry)

Atriplex semibaccata (Saltbush)

Dodonaea

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.

Villa signage

Undesirable villa signage
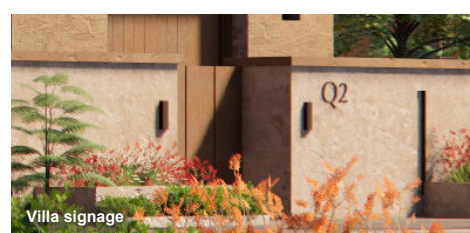
## 6.5 Signage

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.

Ceiling light

Wall hanging light

Free standing light

Undesirable lighting approach
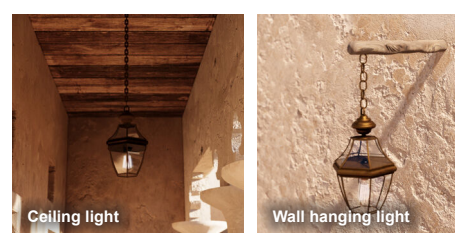
6.6 Lighting

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.

Planter

Bollards

Bins

Neglected side

Protruding steps

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 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.

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.

Surface mounted pipes and exposed rooftop plant

Exposed rooftop plant

Surface mounted conduits and pipes

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 style

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.

1 Vehicular gate entrance, made of timber, or equivalent and placed under a decorated rectangular arch.

2 Intricately detailed windows with traditional motifs.
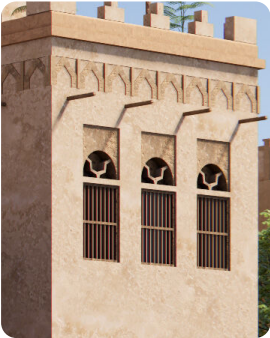
3 Accessible rooftop terraces include a large shaded area, with parapets adorned with horizontal ornamental bands.

4 Traditional rooftop parapet include cornices and horizontal decorative bands.

8.0 Traditional villa example

In Al Qatif Oasis, traditional architecture prominently reflects the region's historical roots. Key design elements include solid façades, timber vehicular gates, intricate detailing, and shaded rooftop areas.

The buildings are intentionally placed off-center along an asymmetrical axis, ensuring spatial balance and architectural harmony. The varied villa massing integrates habitable rooftop terraces, each equipped with shading devides and a high parapet for privacy and safety. The parapets feature cornices and horizontal banding with an arched embossed design.

Windows are carefully aligned, and each feature serves a distinct purpose within the overall design. These window openings are orthogonal, with semicircular arches integrated on their tops based on the interior function of the rooms. These elements not only enhance the villa's aesthetic but also aim to harmonize it with the surrounding environment.

The boundary walls are not only functional but are also decorated with fenestrations and motifs that mirror the region's traditional style, reinforcing a strong sense of cultural preservation.

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

8.0 Transitional villa example 1

In this transitional villa example, the design incorporates elements that bridge traditional and contemporary styles. The building's openings and frames are more angular and simplified compared to traditional motifs. Key features include flat parapets, streamlined horizontal bands separating different levels, and uninterrupted façades, representing a clear departure from heavily ornamented traditional designs.

The parapet embraces a simplified, flush design, accentuating horizontality with a façade-wide indentation and arched niches toward the top.

The overall grouping of elements persists, but each undergoes abstraction. Different window types are used across the façade, dictated by the interior layout. Rectangular over-panels are designed as niches positioned above the windows.

Unlike traditional boundary walls that feature

intricate detailing, the transitional design uses simpler, flatter elements. For example, a slim rectangular opening replaces more ornate architectural flourishes, aligning with the building's main window shapes for a cohesive look.

While traditional patterns and styles are still present, they are updated with a more modern, subdued color palette.

1 Vehicular gateway is less ornamented, slightly recessed under a rectangular arch made of timber, or other materials that resemble it.
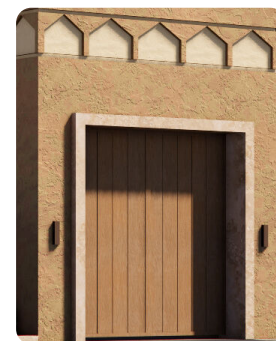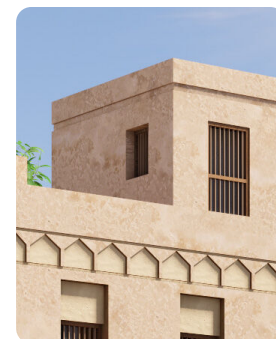

2 Windows feature decorative motifs above openings, and metal bars.
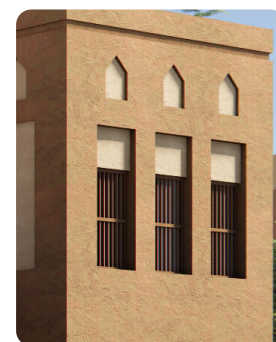
3 Shaded rooftop terraces with flat parapets incorporate a simplified motif.

4 At the rooftop level, the parapets are flat, with simplified banding.

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

8.0 Transitional villa example 2

The architectural design of this villa uses a variety of openings and building volumes, resulting in a multi-layered and stepped roof structure. These design elements create a seamless connection between traditional Al Qatif architectural principles and modern design. The overall structure is asymmetrical, with carefully grouped windows that provide optimal light and scenic outdoor views.

The windows consist of three main shapes:

semicircular arches, vertical openings, and rectangular forms, each designed for specific indoor functions. Windows feature more glazing than the traditional style. The walls are decorated with geometric wall niches, which are arched, squared or rectangular inspired by traditional Al Qatif motifs, adding cultural depth to the villa's design.

To ensure visual consistency, the villa predominantly uses one primary material for both the parapets and

wall niches, promoting a unified appearance. The selective use of timber or equivalent materials for gates, shading systems, and certain windows adds contrast and warmth, enhancing the villa's overall aesthetic.
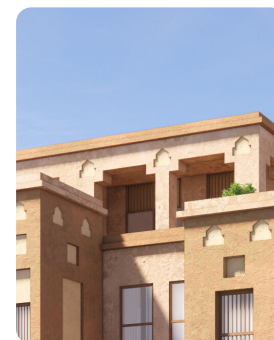
1 Vehicular gateway is less ornamented, under a rectangular arch with pointed arch recesses in a lighter finish.
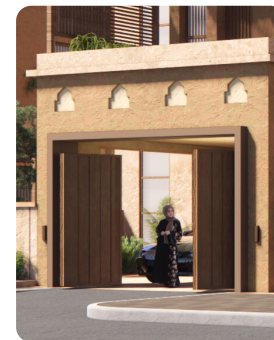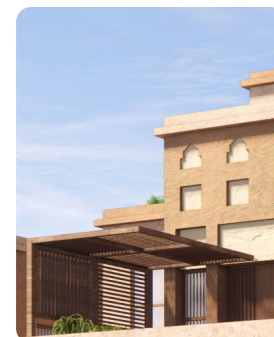

2 Windows are vertically proportioned, slightly recessed into the wall with an orthogonal niche over panel.
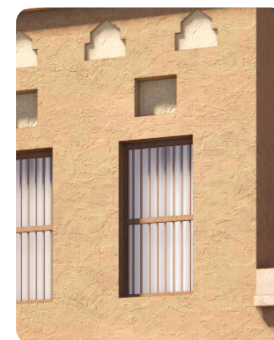
3 Balcony is set back into the structure and the arcade, with traditional pointed niche motifs.

4 Flat parapets that incorporate simplified motifs and a timber finish shading structure of lined panels shades the rooftop terrace.

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

1. A reinterpretation of traditional elements, with sleeker timber or equivalent material finish doors and entrances and rectangular arched cover for the vehicular entrance.

2. Modern opening design characterized by sleek lines and glazed surfaces

3. Rooftop terrace includes a shaded timber finish section, with openings framed in timber and glass.

4. Flat and minimal parapets, with a very slight differentiation and accentuation from the remaining structure.

8.0 Contemporary villa example 1

This design approach combines traditional architectural principles with simplified elements to create a more modern style.

A key innovation in this design is the terrace that extends over the enclosed vehicular parking/garage, utilizing previously unused space to increase the building's functionality.

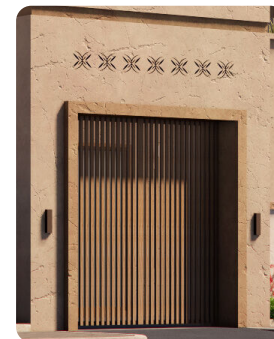The parapet features a streamlined, flush design that emphasizes horizontal lines, with an indented band running across the top of the façade. In some areas, embossed surfaces extend from above the window niches, adding subtle detail and continuity to the parapet design.

Windows and openings are strategically sized and placed on each level to optimize natural light and ventilation. In contrast to traditional styles that focus on ornate detailing, this design prioritizes clea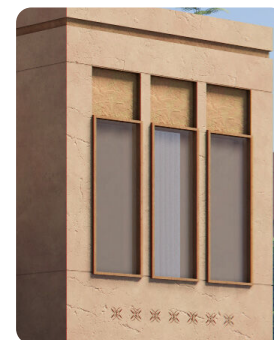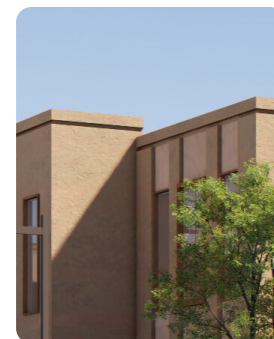n lines and angular orthogonal forms, occasionally incorporating simplified floral motifs for subtle decoration. All openings alike integrate a projecting frame for an animated façade since ornamentation usage is limited.

The villa walls are adorned with slim rectangular recesses, while the gate, crafted from wood or a similar material, incorporates thin vertical details to maintain visual consistency.

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

1 Vehicular gate with the same material as the building with a horizontal lined dent, and a lined timber or equivalent material finish door.
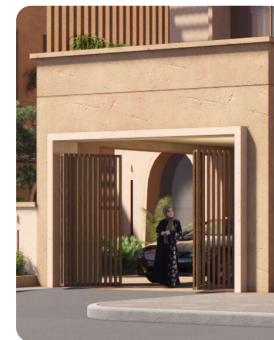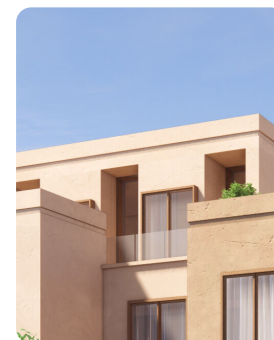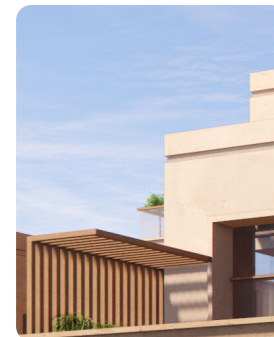

2 Windows are vertically proportioned, with slightly protruding frame.

3 Balcony space is minimized, while large openings are deeply recessed within the structure.

4 Stepped roofscape with flat and minimal parapets flush with the building profile.

8.0 Contemporary villa example 2

In this contemporary villa design, adaptable features are integrated to improve both functionality and appearance. The asymmetry of the façade is used here to create dynamic building masses, some projecting forward and some recessed. In the case of the entrance, it is made prominent through a slight forward projection.

The design balances tradition with modern innovation by preserving the region's characteristic stepped roofline, enhanced with timber shading systems and greenery. These natural elements not only provide shade but also help the villa blend with its surrounding landscape.

The building's streamlined profile is updated with unique protrusions in the window designs, adding a modern touch. The contrast between the window frames and the earthy tones of the building materials creates a visually striking effect.

The boundary walls feature a straightforward design with uniformly striped recesses running along the surface. Practical features, such as clearly visible building signage and numbering, are also incorporated, improving navigation for residents and pedestrians and contributing to the villa's overall functionality within its urban setting.

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

8.0 Contemporary villa example 3

In this contemporary villa, a cohesive design is achieved through the integration of multiple rooftop terraces, a unified window system, and the extensive use of locally sourced materials.

The design emphasizes natural light, with windows spanning several floors to create a bright and open interior. Some windows are fitted with timber screens for light control, while others feature interior curtains, allowing for adjustable lighting based on residents' needs. The window system draws from traditional vertical window proportions, contributing to a consistent and unified appearance.

While the window style remains uniform, variations in size reflect the different interior spaces, effectively communicating the villa's functional layout through its external façade. The villa's horizontal lines are emphasized by clean, recessed and embossed bands along the exterior, enhancing its visual coherence and linking the design to local architectural traditions.

The use of timber or an equivalent material for doors and screens introduces warmth and texture, grounding the villa in its cultural setting while enhancing its aesthetic appeal.

1 Vehicular garage entrance, crafted from timber or equivalent finish material in a minimal linear style, is connected to a canopy made of the same material as the building.

2 Long vertical windows used to increase interior daylight and outdoor views.

3 Shading structure made of timber, or other materials that resemble it, is provided to shade the rooftop terrace. bands.

4 Flat, angular and minimal parapets, with a very slight differentiation and accentuation from the remaining structure.