



# **Al Qatif Oasis**

Architectural Design Guidelines



**Application Handbook - Low-rise Buildings** 















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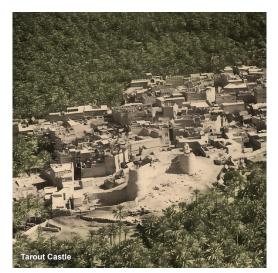
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## **Application Handbook - Low-rise Buildings**

Al Qatif Oasis - Architectural Design Guidelines







## Introduction

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

Al Qatif Oasis represents another area in the Kingdom of Saudi Arabia which has been settled in 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.

The region primarily consists of coastal fishing towns, alongside desert settlements situated in dry wadis or landscape depressions. Additionally, there are denser micro-climate areas linked to date plantation settlements.

Materials used in construction and development are mostly sourced from the neighboring landscape, and do not reveal many influences from surrounding regions or further afield. Lifestyles were mostly focused on basic needs, and construction materials included local 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 minimal ornamentation in the building structure.

Given the frequency of sandstorms and haze, windows and ventilation are small enough 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 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







Example of elevation of a Traditional Low-rise mixed-use building in Al Qatif Oasis

## **II Low-rise Buildings**

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

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

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

#### Low-rise mixed-use buildings

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

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

#### Low-rise apartment buildings

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

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

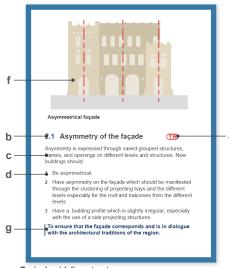
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## III How to use the guidelines

Follow these instructions to create a building that supports the architectural character of Al Qatif Oasis.

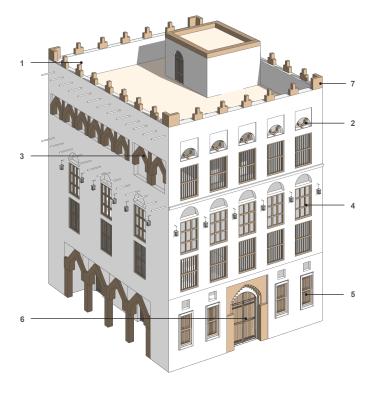
- Consult the regulating plan to determine which architectural style options (Traditional, Transitional, or Contemporary) are permitted at your project location.
- 2 Select from the permitted Architectural styles, and review the list of general guidelines on the style start pages (Pages 5,6 & 7).
- 3 Assess your design according to each of the following guideline categories:
  - Composition: do your building massing and façade design follow compositional principles? (Section 2)
  - Elements: do the individual parts of your building properly interpret the architectural character for your style? (Section 3)
  - Materials and Colors: does your building use acceptable materials and colors in the proportions defined? (Section 4)
  - Patterns: do any elements show inspiration from local craftsmanship and culture? (Section 5)
  - Public Realm: does your building contribute to the quality and character of the street and the neighborhood? (Section 6)
  - Dos and Don'ts: have you avoided common mistakes that lower the quality and character of buildings? (Section 7)
  - Worked examples: these are illustrations showing one possibility of how the guidelines can be applied, provided for inspiration. (Section 8)
- 4 Throughout the document, mandatory guidelines for each character style will marked with the following symbols. Where a guideline is mandatory for all styles, all three symbols will be present:
  - Mandatory for Traditional style
  - Mandatory for Transitional style
  - Mandatory for Contemporary style

- **5** Guidelines are organized according to the following parts:
  - Section heading: identifies the general quideline category
  - b. Header: identifies the guideline topic
  - c. Description: expands upon the topic
  - **d. Instructions:** provides rules and design principles to observe
  - Mandatory symbol: indicates high priority quidelines 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:**

- Flat roofs with high parapets, providing privacy from the public.
- 2 Fenestrations are usually located on the upper floors giving rhythm to the façade.
- 3 Upper-level arcade is styled as cul-de-four arches in frames, supported by short circular column.
- 4 Main large windows are located on the upper-floor, while ground-floor ones are smaller

to maintain privacy.

- **5** Rectangular windows with iron bars and shutters.
- 6 Main door features arch, semicircle, or squareshaped 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 (III)

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

START AT PAGE 6



## Contemporary C

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

START AT PAGE 7

## 1.0 Traditional Style

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

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

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

#### **COMPOSITIONAL RULES**

#### 2.1 Asymmetry of the facade

The architecture should exhibit a diverse multidimensional structure that consists of multiple grouped building masses. This results in an overall asymmetry, highlighted by employing varied fenestration on each segment.

#### 2.2 Grouping of elements

In Al Qatif's architectural style, the grouping of elements plays a significant role. The approach should involve grouping windows, whether rectilinear or arched, on the upper levels to highlight distinctions along the façade. Additionally, niches should be centrally aligned between crenellation pieces to contribute to the overall design.

#### 2.3 Entrances and articulation

Main entrances should ideally feature semi-circular arched doorways, be adorned with patterns, utilize wood as the primary material, and include a heavily decorated central post on the main door for a cohesive and characteristic design.

#### 2.5 Ornamentations

Decorated horizontal banding, mizabs (drainage pipes) on façades, white gypsum on arches, columns, and walls, as well as functional lanterns where needed should be incorporated. Additionally, square fenestration above windows in the lower levels should be adopted for ventilation and lighting purposes.

#### 2.7 Geometry of components

Side façades, openings, and decorations should be organized with a harmonious integration of various geometric shapes. This includes using either orthogonal or arch-shaped geometry for doors and windows, incorporating variations of rectangular fenestrations on the rear-facing walls of the façade, and employing semi-circular arches on exterior facades.

#### 2.8 Facades

Façades should have a fewer proportion of openings compared to the wall. The design should have openings in pairs, puncturing the building with same-size repeated across the façade, and allocating approximately 35% of the façade for openings and fenestrations.

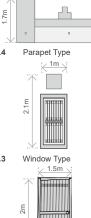


Axonometric view showcasing an example of the application of compositional rules for traditional style low-rise mixed-use buildings.



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

## Key traditional architectural features.



3.2 Door Type

#### 2.9 Roofscape and rooftop elements

Adopt stepping rooftops as they play a role in the asymmetry of the façade. Buildings should incorporate crenelations as an integral part of the roofscape. Specifically, a three-stepped crenelation with appropriate spacing.

#### TRADITIONAL ELEMENTS

#### 3.2 Doorways and entrances

Doors should have a vertical symmetrical composition, frames and screens made of locally sourced wood with elongated rectangular moldings, and paneled shutters. Doors should have intricate frames with arches, semicircle arches, or square-shaped extensions for decoration. Traditional patterns should be used on main entrances.

As for shopfronts, doors do not necessarily have to be arched rather a square shaped extension is also applicable.

#### 3.3 Windows and openings

Windows should have a vertical symmetrical composition. Archshaped windows should be on the front façade, and orthogonal windows on the side façades.

Frames and screens should be of timber material, cusped pointed arches, elongated rectangular moldings, paneled shutters, or iron bars. Punched openings with both arched and flat tops are recommended for integration into solid walls.

#### 3.4 Rooftop elements

Use high parapets for the roofline and multiple roof terraces. Parapets should be screened on upper-level roof terraces for privacy, while occasional punctures should be utilized for airflow. The parapet should feature geometric, evenly spaced stepped elements, with rectangular corner elements. Additionally, arcaded parapets can be used in the top third of buildings with rectilinear or arched recesses.

#### **COLORS. MATERIALS AND PATTERNS**

#### 4.1 Colors

The walls in the building façades should have natural earth colours such as beige, pearl beige, and brown beige and while secondary features should have contrasting colors such as gray, white, redgreen, ochre brown, and mahogany brown. See section 4.0 'Colors and Materials' for more information.

#### 4.2 Materials

The primary wall surface should have a matt-finish off-white plaster, limewash, or similar, to closely resemble the natural and locally sourced material such as clay and stone in terms of their texture, color and appearance

#### 5.0 Patterns

Arabesque patterns should be mainly used for fenestrations and crenelations.

## 1.0 Transitional Style

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

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

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

#### **COMPOSITIONAL RULES**

#### 2.1 Asymmetry of the façade

The asymmetry of the façade applies to the transitional style as it does to the traditional. The building should have multiple grouped building masses, and different grouping of fenestrations on each mass. This asymmetry should be clear.

#### 2.2 Grouping of elements

Arranging elements for the transitional style requires grouping windows, be they rectilinear or arched, on the upper levels to emphasize diversity. Nevertheless, niches become more prominent, particularly on the side façade. The positioning of these elements should be correlated with the doors below, as the parapet crenelations should be abstracted into flat rooflines in this style.

#### 2.3 Entrances and articulation

The base detail typical of the traditional style is not used here. The base has the same material as the walls above and is demarcated with a slight horizontal indentation.

#### 2.5 Ornamentations

For the transitional style, horizontal banding takes on a slight indentation on the façade and windows should have simpler timber frames instead of gypsum. However, functional lanterns where needed should still be incorporated. Additionally, square fenestration above windows in the lower levels should be adopted for ventilation and lighting purposes and side arched fenestrations should be added for the top floors.

#### 2.7 Geometry of components

The windows and doors should manifest a unique style, determined by their respective levels and structures, aiming for increased uniformity in proportions. Their frames should adopt a more subdued appearance, devoid of any projecting elements, rather recesses are encouraged. The materials of both the façade and windows should serve as the primary aesthetic elements.

#### 2.8 Façades

Façades should have almost the same proportion of openings compared to the wall. The design should be placing openings in groups instead of pairs, puncturing the building with same-sized openings repeated across the façade, and allocating approximately 45% of the facade for openings and fenestrations.







articulation





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

Key transitional



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



3.4 Parapet Type



3.3 Window Type



Door Type

#### 2.9 Roofscape and rooftop elements

Stepping rooftops should be taken into account in the transitional style since building masses differ more in height. Crenelations should be abstracted into single stepped crenelations or no crenelations at all

#### TRANSITIONAL ELEMENTS

#### 3.2 Doorways and entrances

Different to the traditional settings for doors and entrances, the transitional style should adopt a smaller variety of arches. Like the traditional style, doors should have a vertical symmetrical composition, frames and screens made of locally sourced wood with elongated rectangular moldings, and paneled shutters.

#### 3.3 Windows and openings

Employ a template for the windows to distinguish each section of the building. Choose a small set of window styles and maintain consistency, aligning them with one another. Pay attention to design distinctions between windows in various sections and those for the entrance area's façade. Create discreet openings with squares and semicircular arch niches above each row of windows.

#### 3.4 Rooftop elements

Front façades must have one rooftop element with a step up from main parapet line.

In transitional styles, the parapets should feature angular, square definitions for the corners. Rather than decorated parapets, a horizontally thin indentation encircles the rooftops.

#### **COLORS, MATERIALS AND PATTERNS**

#### 4.1 Colors

The building façades should mimic and build on the natural colours of the materials used in the region such as pearl white and light beige. See section 4.0 'Colors and Materials' for more information.

#### 4.2 Materials

The primary wall surface should have a flat matt-finish with a clear material diffrentiation for the openings, doors, windows, and the columns, mainly wood or equivalent. Incorporate the use of glass windows.

#### 5.0 Patterns

Arabesque ornamentation is to be used on the main door. It should be an abstracted version of local patterns.

## 1.0 Contemporary Style

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

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

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

#### **COMPOSITIONAL RULES**

#### 2.1 Asymmetry of the facade

In the contemporary style, asymmetry is achieved by incorporating various architectural elements such as side balconies, setback structures, and projecting window frames. These components create a tiered and lined effect across different levels of the building.

#### 2.2 Grouping of elements

Grouping elements for the contemporary style requires differentiating window types between the ground floor and the upper levels. Arched openings should be more prominent on the ground floor, main and side façade. As in the transitional style, the positioning of these elements should be correlated with the doors helow

#### 2.3 Entrances and articulation

The ground floor and structure should have the same material. The base should also features large floor to ceiling windows for the side structures echoing the entrance.

#### 2.5 Ornamentations

For the contemporary style, abstracted ornamented fenestrations should be adopted. The abstracted ornaments should be derived from regional patterns.

#### 2.7 Geometry of components

For the contemporary style, projecting frames should be used. Arches on the ground floor should adopt an abstracted style of traditional arches, particularly a segmental arch top with inclined orthogonal sides. As for the upper floors, orthogonal windows should have projecting frames instead of over panels like the one utilized in the transitional style.

#### 2.8 Facades

Façades should have a bigger proportion of openings compared to the wall. Unlike transitional and traditional styles, openings should be approximately 60% of the façade. The residential entrance is also setback under an arched shaded walkway with the main doors setback under a balcony on the main floor.



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



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

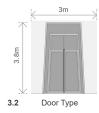
Key contemporary architectural features.



3.4 Parapet Type



3.3 Window Type



#### 2.9 Roofscape and rooftop elements

Stepping rooftops should be taken into account since variation in building masses are more prominent for this style. Additionally, there should be no crenelations at all, rather a slightly projecting horizontal band at the top of the parapet with the same material as the facade.

#### CONTEMPORARY ELEMENTS

#### 3.2 Doorways and entrances

Entrance doors to the upper floors are discreetly placed within a shaded walkway, framed by contemporary arches that complement the glass openings of the side structures. In the commercial space, priority should be given to storefront doors and gates, spanning the entire width and actively engaging with the public.

#### 3.3 Windows and openings

Ensure all windows and openings feature frames projecting outward from the façade, significantly wider than those in previous styles and spanning the height of their respective levels. Use variations in widths and proportions based on interior zoning.

#### 3.4 Rooftop elements

Generally, the rooftop has a slightly projecting roofline indenting the structure. No decorations or corner merlons are used on parapets.

#### **COLORS, MATERIALS AND PATTERNS**

#### 4.1 Colors

Use paints and colors which are very similar and in line with the regional palette and natural materials. Consider using accent colors to create façade contrast as part of the definitions for the arches, banding of the balconies, and signage. See section 4.0 'Colors and Materials' for more information

#### 4.2 Materials

Similar to the transitional style, the base and structure should be of the same material. Incorporate the use of wood or equivalent and glass windows. However, a distinct material should be used for defining frames and columns, one that aligns closely with traditional elements.

#### 5.0 Patterns

Contemporary styles should abstract from existing traditional patterns to create a fractal and scalar design applied consistently across the façade as decorative and aesthetic elements.

## 2.0 Compositional rules

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

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



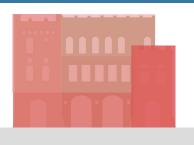
Asymmetrical façade

#### 2.1 Asymmetry of the façade

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

- Have an overall asymmetrical massing.
- 2 Incorporate asymmetry into the façade by clustering projecting bays, emphasizing differentiation among levels, particularly for the roof and balconies.
- 3 Have a building profile which is slightly irregular with the use of a side projecting structures.

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



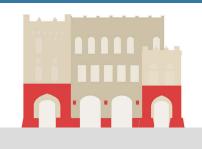
Grouping of elements

#### 2.2 Grouping of elements

Grouping sections of openings together to obtain variation in the facade. 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 Frontages, openings, windows arches, and columns should be properly aligned 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 Have clear and prominent entrances, defined through traditional or contemporary arches. They should be ornamented if they adopt a traditional or transitional style and have protruding frames if they adopt a contemporary glazed style.
- 2 Entrances can adopt a different base material in the case of the traditional style, otherwise, the surrounding material of the entrance and façade material should be the same.

To maintain a distinction between main entrances and other building openings.



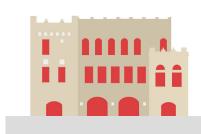
Ornamentations, fenestrations and crenelations

#### 2.5 Ornamentations

Distinctive to the region is the use of diverse ornamentation styles for fenestrations and crenelations. New buildings should:

- 1 Embed ornamentation within the parapets, horizontal banding, arches, doors and recessed elements. In the case of a contemporary approach, ornamentation should be limited to abstracted patters for fenestrations.
- 2 Unified ornamentation should be used for different groupings of openings, specifically for traditional styles. Adopt niches for

To ensure that the ornamentations reflect the style of the Al Qatif Oasis architecture and distinguish it from other regions.



Orthogonal geometry of elements

#### 2.7 Geometry of components

The legible organisation of windows is a dominant feature which characterises different geometries. New buildings should:

- 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 between the grouping and the geometry distinctive to the region.



Façades

#### 2.8 Façades

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



Stepping, rectilinear roofscape

#### 2.9 Roofscape and rooftop elements

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

- 1 Be flat, especially on the top level.
- 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.

## 3.4 Rooftop elements

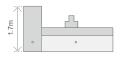
- 4 Roof scape should be flat.
- 5 Parapets should have stepped crenelations, corner merlons, and rectangular niches with small openings for public viewing.
- 6 The roof should be flush with the primary building line and integrated into the building's façade.

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











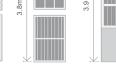


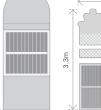


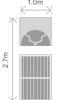
Parapets with crenelations

















#### 3.3 Windows and openings

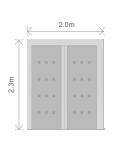
- 1 Provide rectilinear vertical windows.
- 2 Do not incorporate motifs or ornamentation, but some semicircular arches or semicircular niche over panels.
- 3 Should be made of wood with crossed bars and generally slim and small to protect from the sand.
- 4 Recessed frames should be used around the windows.

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



1.5m





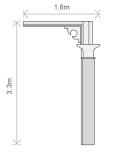
#### 3.2 Doorways and entrances

- 1 Doors should be framed and recessed to add depth and a sense of entry.
- 2 Incorporate semicircular or pointed arch tops with little to no ornamentation above.
- 3 Use wood for the door and local materials where possible.

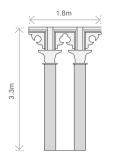
To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to local character rooftop elements.







Columns



#### 3.5 Other elements

- Buildings should have an overall smooth contrasting look for a muted finish.
- 2 Provide different ornamentations based on the vegetal inspired motifs and patterns of the region.
- 3 Crenelations, exposed columns and vertical piers should act as separators of the building's façade.
- 4 Arcades are typically included in larger sized buildings, on the second story supported by slim circular columns with capitals shaped according to vegetal motifs.
- 5 Boundary walls, their gates and portals should be designed to complement the building design.

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

Other elements

Base

Ornamentations / Fenestrations

## 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.



- 1 Roof scape should be flat.
- 2 Include multiple roof levels extending from each level
- 3 Should feature flat parapets and single stepped corners or merlons.
- 4 Horizontal banding should be done through the 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.

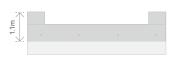
2 Use wood or an equilvalent material for shutters and frames to

semicircular niche over panels for the upper floors. 4 Square windows can be lined-up with vertical niches to create a

3 Emphasize rectangular shapes for windows and incorporate glass as well as semicircular arches above the ground floor windows or

5 Incorporate subtle square fenestrations above windows as openings. To respond to climate considerations and provide an aesthetic











Parapets with crenelations



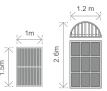














Windows

3.2 Doorways and entrances

treatment which is distinct to the local area.

3.3 Windows and openings 1 Provide slim vertical windows.

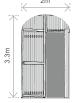
articulate the window area.

dynamic façade.

- 1 Define doors as part of the street frontage and be flush with the main building line and façade.
- 2 Incorporate no or modest ornamentation around the door except semicircular arches above or square over panels for the entrance.
- 3 Use wooden doors and no frames, ornamentation could be done to the timber panels of the door only. Consider the use of glass to let natural light enter the building.

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













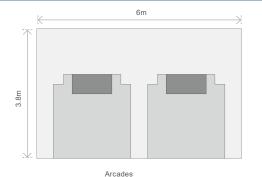
Base

Middle

Entrance doors







#### Other elements Ornamentations / Fenestrations

## 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
- 4 Boundary walls, their gates and portals should be designed to complement the building design

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

## 3.0 Contemporary Elements

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

#### 3.4 Rooftop elements

1 Should feature flat parapets which are flush with the primary building line as well as angular corners.

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

3 Consider including shaded verandas with contemporary arches.

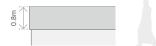
4 Include wide and upward openings to further accentuate projecting 5 Window frames and shutters could be made of metal or another modern material, styled to reflect traditional features in a

To respond to climate considerations and provide an aesthetic

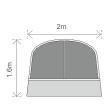


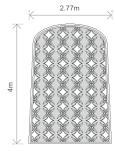


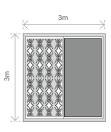


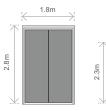














Rectangular windows



Middle

Top

Arched windows

Parapets

## 3.2 Doorways and entrances

contemporary manner.

3.3 Windows and openings 1 Provide vertical and orthogonal windows. 2 Use projecting window frames.

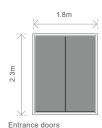
which are abstracted from traditional ones.

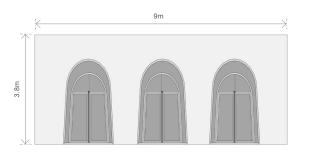
treatment which is distinct to the local area.

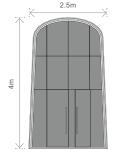
- 1 Clearly define primary entrances as part of the street
- 2 Use projecting frames, recesses or arcades to mark door entrance
- 3 Use contemporary arches around the doors to create a sense of
- 4 Use glass and metal or another modern material, for the doors with a floor to ceiling height.

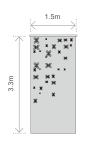
To create suitable thresholds within the base which is part of a well-ordered, coherent street scene and responds to local character Rooftop elements.

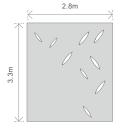
# Base

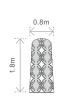


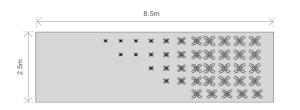












#### 3.5 Other elements

- 1 Consider other alternatives for traditional lanterns
- 2 For contemporary arches use a segmental arch with inclined sides
- 3 For contemporary ornamentations, abstract traditional patterns into simpler geometric shapes.
- 4 Boundary walls, their gates and portals should be designed to complement the building design

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

Other elements

Ornamentations / Fenestrations

## 4.0 Colors and Materials

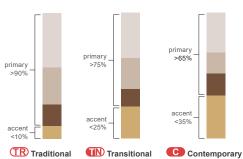
#### 4.1 Colors

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.

- 1 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.
- 2 Use accent colors to provide contrast to the façade using the smaller swatches on the right.
- 3 A maximum percentage of accent color, measured as a percentage of the total façade area, is allowed for each style:
- (1N) <25% • C <35%
- 4 For windows' glass, avoid using mirror-like reflective glass with bright colors that do not harmonize with the local environment and character.

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

#### Approximate color proportions

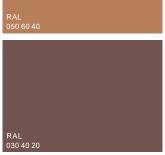


#### **RAL Color codes**

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









primary colors



050 40 30

8016



Adobe walls









Mud brick fenestrations

Terracotta blocks



Mud brick Metal fenestrations fenestrations









Wooden and Wooden door Fiberglass with glass door panels wood finish





Plaster niche





Mud finish









Concrete block

Cut stone

#### 4.2 Material

Concrete niche Adobe niche

Adobe niche

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

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

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

4 Local and sustainably sourced materials are preferred.

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

To enhance architectural character through the support of local craftsmanship.

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

## 5.0 Patterns

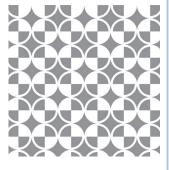
This section provides advice on the interpretation and use of traditional patterns in new projects.

New buildings should:

- 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.

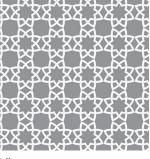












Patterns















## 6.0 Public realm

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

The guidelines apply both to 'semipublic' 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.

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

To enhance aesthetics, and environmental sustainability in urban landscapes.





#### 6.2 Shading

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

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

To create a pleasant outdoor ambiance for public areas.





#### 6.3 Parking

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

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

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

Shade trees









Palm 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

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

| To create a distinct and active sense of place.

## 7.0 Dos and don'ts

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

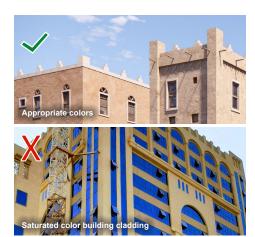
|To avoid common design mistakes.





#### 7.1 Inappropriate materials

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



#### 7.2 Saturated colors

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





#### 7.3 Screens and closures

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





#### 7.4 Superficial traditional elements

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



#### 7.5 Exposed roller shutters

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







#### 7.6 Exposed building services

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





## 7.7 Inconsistent or imported architectural style

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



 Stepped parapet with spaced crenelations and seamless water drains.



2 Double vertical timber windows with semicircular over-panel fenestrations.



3 Parapet crenelations, screens, window openings, and niches harmoniously aligned.



4 Timber doors with segmental arched tops with proper signage.



## 8.0 Traditional mixed-use worked example

In Al Qatif's traditional style, architectural elements like bands, ornamentation, and window alignment distinguish various levels and functions, serving both aesthetic and functional purposes. The deliberate façade opacity fosters harmony with the local environment, integrating the building into Al Qatif's architectural fabric. This exemplifies a commitment to preserving the region's heritage, fostering continuity and community belonging.

The asymmetry of the façade is evident in the distinct building masses, creating an animated skyline with varied roof levels and traditional parapets. Windows are grouped into sections, each featuring different geometries, yet maintaining alignment. These window openings are orthogonal, with semicircular arches integrated on their tops based on the interior function of the rooms.

The shopfront entrances stand out with a traditional aesthetic, notably the main entrance that slightly protrudes forward and adopts a pointed arch. All entrances are recessed within the wall thickness and constructed with local timber.

The public space surrounding the building comes to life through lanterns on the ground floor, inviting entrances to the shopfronts, and the presence of surrounding greenery and benches.



 Flattened parapet with horizontal banding.



2 Double vertical timber windows with semicircular over-panel niches.



3 Grouped windows run with timber shutters and rectangular niche over panels.



4 Non-ornamented timber doors with segmental arched tops with proper signage.



## 8.0 Transitional mixed-use worked example

Inspired by the traditional style, this scenario simplifies the design with flat parapets and singular band lines for façade continuity. The transitional style seamlessly integrates traditional elements into a contemporary context, with clean silhouettes and distinctive window frames. Ground-level shop fronts balance tradition and modernity through vertical shutters and materials compatible with traditional aesthetics.

In this style, the overall grouping of elements persists, but each undergoes abstraction. Different window types are used across the façade, dictated by the interior layout. Over panels, whether semicircular or rectangular, open or as niches, are featured above the windows.

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

For color, a mint green is chosen for windows and doors, echoing a vibrant yet smooth contrast to the overall façade.



1 Roof terrace and parapet with ends that project slightly beyond the main structure.



2 Modern window characterized by sleek lines and large sizes with screens for privacy.



3 Vertical windows with protruding frames mainly utilized on side façades.



4 Ground floor entrances feature arcades.



## 8.0 Contemporary mixed-use worked example

This scenario expands traditional elements into a contemporary design, featuring abstracted motifs like flat parapets and innovative window designs. A distinctive recessed terrace adds playful yet respectful volumetry. Contemporary shop fronts blend modern design with traditional sensibilities for a visually appealing commercial space.

Asymmetry, a characteristic of Al Qatif buildings, is translated into its contemporary style. However, the contemporary approach involves an abstracted design for the grouping and geometry of windows to achieve a higher opening percentage compared to traditional and transitional styles.

In terms of ornamentation, this style predominantly features protruding frames and abstracted patterns for fenestrations, both in darker colors than the rest of the façade.

This highlights contrast in the façade to animate its frontage.

Parapets in this contemporary style slightly protrude from the building, embracing horizontal design elements and aligning with traditional characteristics.



# A.0 Appendix: Low-rise apartment buildings

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

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

#### **Entrances and articulation**

Entrances in the region's traditional style exhibit distinct features. The main entrance should be prominent through wooden double doors and recessed frames. Secondary entrances feature inset single wooden doors, adding individuality while maintaining architectural cohesion.

#### **Façades**

The façade acts as a link between the building, neighboring residences, and the street, defining public and private areas. Ground floor apartment amenities strike a balance between privacy and community, using semicircular arches, textured walls, and timber screens for a visually appealing and culturally grounded design.

#### Roofscape and rooftop elements

The roofscape, with its crenelations, is a defining feature of Al Qatif. Crenelations should be integrated into the roofscape, adopting a three-stepped design with spacing. Privacy on rooftop terraces is ensured through timber screens, providing shade and visual separation. Recessed designs maintain privacy by preventing direct visibility from the street, creating a tranquil environment for residents.

#### Secondary frontage

Privacy is key for all façades, preventing visual access to private areas. Side windows feature semicircular arches and geometric patterns for seclusion without sacrificing aesthetics, harmonizing with neighboring structures. Ground floor street-facing windows are smaller for resident comfort. Enhanced security and privacy for these windows include wooden shutters, semicircular arches, and recessed frames.

#### Windows and openings

Al Qatif's traditional architecture reflects the regional vernacular style, adapting to climate while showcasing craftsmanship, notably in doors and frames. Guidelines include vertical symmetrical composition, arch-shaped front windows, orthogonal side windows, timber frames with cusped pointed arches, elongated rectangular moldings, paneled shutters, iron bars, and punched openings in solid walls.

#### **Privacy**

Ground floor windows should prioritize privacy and security. Consider smaller windows, elevated windows, security screens, and setback with landscaping.





**Apartment Building Front Elevation** 

1 Enhance usefulness of roof terraces with flat roofs and high parapets.



2 Fewer openings on the side façades to maintain privacy between neighbors.



3 Use less openings on the ground floor to maintain privacy and visibility to the interior.



4 Emphasize primary shared entrances with a welcoming canopy and an arched door.





Semicircular openings with geometric ornamentation recessed in a rectangular niche above windows.



2 Arched decorated entrance doorways with clear signage.



3 Traditional arched columns on the first floor, indicating the interior includes a public zone.



4 Accessible stepped roofscape, with crenelated parapet.



## A.0 Traditional apartment worked example

In Al Qatif Oasis, traditional architecture comprises the use of semicircular or segmental arches and orthogonal openings, grouped on the façade to reflect the interior zoning.

The building adopts an asymmetric composition for its massing, yet maintains precise opening alignment across all façades. Traditional elements, including over panels above windows like rectangular niches, semicircular openings,

or a combination of both, may feature geometric ornamentation. The varied building massing integrates habitable roofs in the traditional example, each equipped with a high and crenelated parapet for privacy and safety.

Despite this building not having shops, a sign is positioned above the main door, indicating its name. The design incorporates smoothly contrasting colors to enhance variety, allowing openings to stand out.

Additionally, ornamented columns are used to animate the main façade.





I Glazed windows featuring semicircular over-panel niches without geometric ornamentation.



2 Arched, slightly decorated entrance doorways with clear signage sit within smaller recesses than traditional ones.



3 First floor arcade is a orthogonal design derived from the traditional one.



4 Stepped accessible roof devoid of crenelation with an indented horizontal band.



## A.0 Transitional apartment worked example

In the transitional style, evolution from the traditional is made evident through the preservation rather than abstraction of architectural elements. This style uses the same character and style of the traditional through semicircular and orthogonal openings, grouped on the façade to reflect the interior zoning.

The main differences between the traditional and transitional is through the use of less openings for window over panels and rather more semicircular

niches with no ornamentation. Windows feature more glazing than the traditional style.

For the banding in this building, a horizontal indentation is used along the flat parapet in addition to a cul-de-four arcaded niche band. Square fenestrations are used above windows.

Finally, the entrance is still to be made prominent in comparison with the rest of the façade, however, it is less recessed than the traditional style.



1 Sleek contemporary rectangular windows with projecting frames.



2 Arched entrance door with a protruding frame and projecting entrance mass.



3 Contemporary windows for the ground floor, maintaining privacy through under panels.



4 Simple flat parapet with projecting horizontal band and screes for light and ventilation.



## A.0 Contemporary apartment worked example

In the contemporary style of Al Qatif Oasis, the essence of the architectural character is preserved through skillful reinterpretation and utilization of traditional forms. Contemporaneity is expressed through innovative use of materials, addressing the rhythm of the façade, and using large openings that span from the floor to the ceiling.

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.

Windows in this style feature an orthogonal opening. All openings alike integrate a projecting frame for an animated façade since ornamentation usage is limited in the contemporary style. With the exception of some recesses windows depending on the interior

zoning.

The contemporary style integrates contrasting façade colors through the frames themselves and since the openings are abundant, the contrast is abundant and sleek.