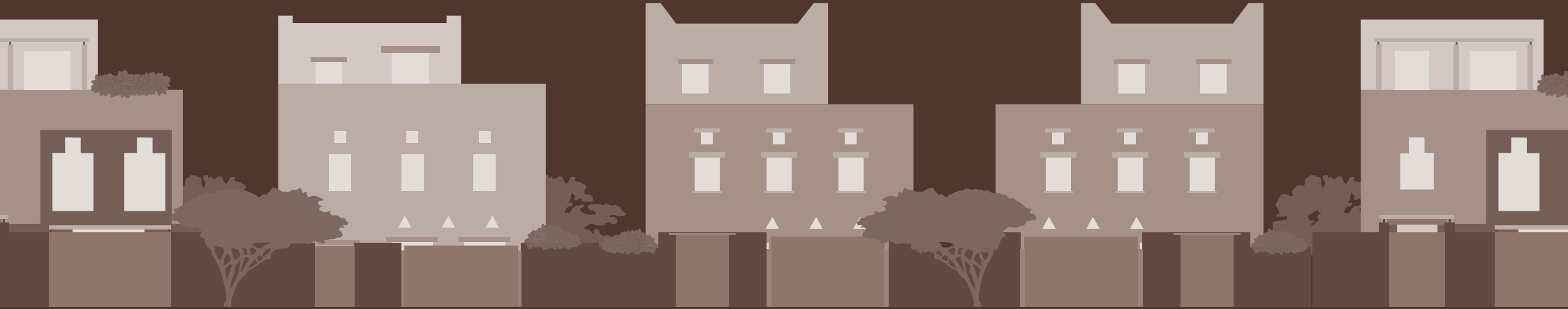


Madinah Rural

Architectural Design Guidelines



Application Handbook - Residential Villas





Madinah Rural Architectural Character Area



Contents

I	Introduction	3
II	Residential villas	3
III	How to use the guidelines	4
1.0	Start Pages.....	5
	Traditional style	5
	Transitional style	6
	Contemporary style	7
2.0	Compositional rules.....	8
3.0	Architectural Elements	10
	Traditional elements	10
	Transitional elements	11
	Contemporary elements	12
4.0	Colors and materials.....	13
5.0	Patterns	14
6.0	Public realm	15
7.0	Dos and don'ts	16
8.0	Examples.....	17
	Traditional small villa worked example	17
	Transitional small villa worked example	18
	Transitional large villa worked example	19
	Contemporary small villa worked example 1	20
	Contemporary small villa worked example 2	21
	Contemporary large villa worked example	22



Application Handbook - Residential Villas

Madinah Rural - Architectural Design Guidelines



I Introduction

The purpose of this document is to help designers and builders of single family residential villas apply the architectural character of Madinah Rural to their projects.

The architecture of Madinah Rural is characterized by agricultural villages and hill-top settlements like Khaybar. Traditional houses are constructed of mud bricks and lava stone, with roofs comprised of palm tree rafters and thatching. Buildings are relatively low, with simple orthogonal forms and small openings. Set near palm oasis, the settlement has a strong connection with the natural landscape.

The urban form is compact and defensive in nature, created by the grouping and connecting of multiple, simpler orthogonal forms into a varied richer whole. This grouped character can strongly inform the design of buildings today. The compact urban form also results in a smaller and more intimate public realm, with networks of narrow shaded paths; this can inform the peripheral exterior spaces of buildings.

This handbook is a supplement to the Madinah Rural Architectural Design Guidelines.

Designers are recommended to read the full version of the Architectural Design Guidelines to gain a comprehensive understanding of all aspects of the character. Please also consult regulating plans that may describe which styles are applicable to your project area.

To access these resources please use the links below.



Link to Full Guidelines



Link to Regulating Plans



Example of elevation of single family villa in Madinah Rural

II Residential villas

Residential villas are a widespread and important building type found across the Kingdom. Their design strongly influences people's experience and the character of a place.

Serving the needs of families residential villas 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: rectangular plots of land accessed by car from a street on one edge, and interfacing with neighboring properties on the other boundaries. Villas generally sit in their development plots with setbacks on all sides as detached units. In denser locations with smaller plots, villas may also be found with zero or minimal setbacks on one or two sides, creating townhouse conditions. The buildings tend to have rectilinear form and a clear orientation to the street, with distinct sides and backs. They are typically surrounded by boundary walls.

These conditions make villas different from the historical building types that are the source of architectural characters. The primary challenge to be addressed by this handbook is the application of the architectural character to these villa conditions.

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 Madinah Rural.

This handbook implements the Madinah Rural Architectural Design Guidelines in residential villas by harmonizing their particular 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 Madinah Rural.

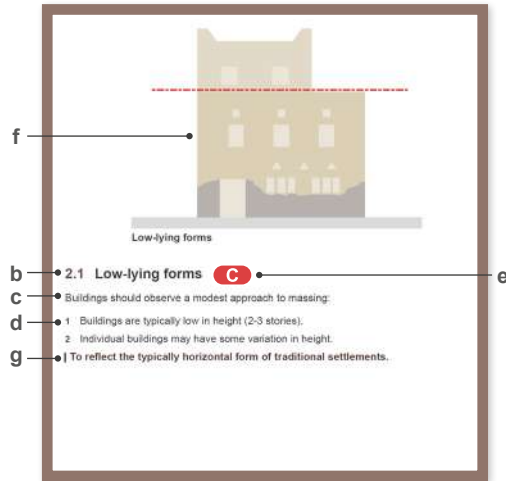
- 1 Consult the regulating plan to determine which architectural style options (Traditional, Transitional, or Contemporary) are permitted at your project location.
- 2 Select from the permitted architectural styles, and review the list of general guidelines on the style start pages (Pages 5, 6 and 7).
- 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)
- **Dos and Don'ts:** have you avoided common mistakes that lower the quality and character of buildings? (Section 7)
- **Worked examples:** these are illustrations showing one possibility of how the guidelines can be applied, provided for inspiration. (Section 8)

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

- TR** Mandatory for Traditional style
- TN** Mandatory for Transitional style
- C** Mandatory for Contemporary style

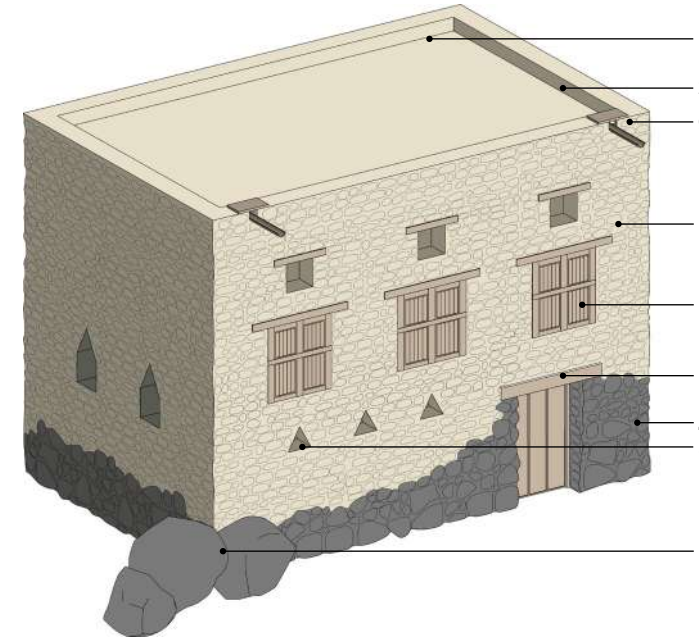
- 5 Guidelines are organized according to the following parts:
 - a. **Section heading:** identifies the general guideline category
 - b. **Header:** identifies the guideline topic
 - c. **Description:** expands upon the topic
 - d. **Instructions:** provides rules and design principles to observe
 -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



- f
- e
- 2.1 Low-lying forms **C**
- Buildings should observe a modest approach to massing:
- 1 Buildings are typically low in height (2-3 stories).
- 2 Individual buildings may have some variation in height.
- To reflect the typically horizontal form of traditional settlements.

Typical guideline structure.

The illustration below is a general character reference model taken from the Madinah Rural Architectural Character Guideline and is labeled to indicate the summarized key features of the Madinah Rural architecture.



Key features:

- 1 Simple, low-lying building forms with steps in roof profile within building groups.
- 2 Buildings are typically constructed to create an enclosed block with an internal courtyard.
- 3 Stone boulders incorporated at the base of buildings.
- 4 Gray stone lower walls and earth tone upper walls.
- 5 Triangular and triangular-topped vent openings and niches, arranged in rows.
- 6 Simple small windows, typically with four subdivisions and expressed lintels above.
- 7 Informal facades with horizontal character and elements with squarish proportions.
- 8 Timber tone window and door frames and panels.
- 9 Flat parapets with rare use of parapet finials at the corners of upper volumes
- 10 Minimal ornamentation.



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 residential villas.

Traditional style buildings should observe as many architectural character 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 to residential villas are shown on this page.

COMPOSITIONAL RULES

2.1 Low-lying forms

Buildings are typically low in height (2-3 stories). Floors should follow changes in ground level. Parapet heights may be varied.

2.2 Asymmetrical buildings

Buildings and their fenestration arrangements should be asymmetrical and massing comprise of groups of simple forms asymmetricaly arranged. Orthogonal forms may vary in height, window types and, sometimes, minor shifts in color and material.

Strict, large, homogeneous contemporary grids should be avoided.

2.3 Solid facades

Building facades are typically solid walls with simple punched openings that should have 'Opening' proportions of 25% or less of the total front facade area, or 20% or less of the total side facade area. 'Opening' area includes the full extent of all openings, windows and doors.

Side facades should be subordinate to front facades, with predominantly smaller/narrower windows. The ground floor should have a base of stone finish (gray basalt). The base height can be part of the story height or the full story height. The base may step higher at main entrances, or for special emphasis.

2.4 Simple openings

Openings should be simple punched openings that are predominantly rectangular. Some limited use of triangular or rectangular vents and smaller triangular topped rectangular shapes is also encouraged.

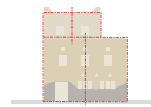
Where used, high level vent openings may relate to windows below or may be in a series with equal spacing between.

2.5 Flat parapets

The parapet line and roof silhouette must be flat and rectangular, and stepped at least once on each facade. The villas should generally have at least one part of their form which is taller, resulting in a stepped form.



2.1 Low-lying forms



2.2 Asymmetrical buildings



2.3 Solid facades



2.4 Simple openings

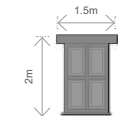


Traditional residential villa axonometric

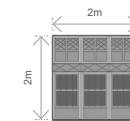


Traditional residential villa front elevation

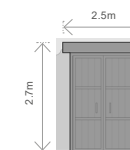
Key Traditional architectural features



3.2 Windows



3.2 Windows



3.1 Entrance door

TRADITIONAL ELEMENTS

3.1 Doors and entrances

Clearly articulate primary entrances, utilizing deep recessing and scaling to give presence. Doors should use traditional materials and craftsmanship.

The design of the boundary walls and entrance in it should be complementary to the villa design.

3.2 Windows and openings

Windows on the main facade should be simple with minimal ornamentation. Windows should be generally be square or rectangular in proportion, sometimes with expressed lintels above and generally be provided with shutters. Some limited use of triangular or rectangular vents and smaller triangular topped rectangular shapes is also encouraged.

Smaller openings, traditionally for ventilation, may be featured above windows.

Use traditional materials and craftsmanship where feasible.

Avoid locating windows directly across from existing windows on neighboring buildings.

3.3 Rooftop elements

The overall roof form should have at least one rooftop element with a step up from the main parapet line.

Roofs on traditional style buildings are normally inaccessible.

Angled parapet finials can be used on corners, particularly on taller forms.

3.4 Other elements

Gates should be folding or hinged and follow traditional timber craftsmanship.

Boundary walls should generally be made of the same material as the base of the building.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The colors used should be consistent with the Madinah Rural architecture. Accent colors should not comprise more than 5% of the facade area.

4.2 Materials

The primary wall surface should be traditionally mixed locally sourced render so the typical coloration is preserved. The render should be continuous above the base to the top of the parapet.

Windows, doors, and shutters should generally be timber following traditional craftsmanship detail.

5.0 Patterns

Create timber screen patterns and door panel patterns based upon existing historical patterns.

1.0 Transitional style

Start here to review the general guidelines of the transitional style residential 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 to residential villas are shown on this page.

COMPOSITIONAL RULES

2.1 Low-lying forms

Buildings are typically low in height (2-3 stories). Floors should follow changes in ground level. Parapet heights may be varied.

2.2 Asymmetrical buildings

Buildings and their fenestration arrangements should be asymmetrical and massing comprise of groups of simple forms asymmetricaly arranged. Orthogonal forms may vary in height, window types and, sometimes, minor shifts in color and material.

Strict, large, homogeneous contemporary grids should be avoided.

2.3 Solid facades

Building facades are typically solid walls with simple punched openings that should have 'Opening' proportions of 30% or less of the total front facade area, or 20% or less of the total side facade area. 'Opening' area includes the full extent of all openings, windows, and doors.

The ground floor should have a base of stone finish (gray basalt, or an equivalent). The base can be from 0.6m to 4m high from grade. The base may step higher at main entrances, or for special conditions or emphasis.

Side facades should be subordinate to front facades, with predominantly smaller/narrower windows.

2.4 Simple openings

Openings should be simple punched openings that are predominantly rectangular. Some limited use of triangular or rectangular vents and smaller triangular topped rectangular shapes is also encouraged.

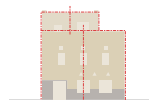
Where used, high level vent openings may relate to windows below or may be in a series with equal spacing between.

2.5 Flat parapets

The parapet line and roof silhouette must be flat and rectangular, and stepped at least once on each facade. The villas should generally have at least one part of their form which is taller, resulting in a stepped form.



2.1 Low-lying forms



2.2 Asymmetrical buildings



2.3 Solid facades



2.4 Simple openings

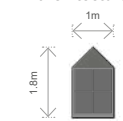


Transitional residential villa axonometric

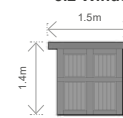


Transitional residential villa front elevation

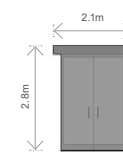
Key Transitional architectural features



3.2 Windows



3.2 Windows



3.1 Entrance door

TRANSITIONAL ELEMENTS

3.1 Doors and entrances

Clearly articulate primary entrances. Door framing and recessing can add depth and create a sense of entry.

The design of the boundary walls and entrance in it should be complementary to the villa design.

3.2 Windows and openings

Windows on the main facade should be simple with minimal ornamentation. Windows should be relatively square or rectangular in proportion with expressed lintels above. Provide suitable shutters with glazed windows set behind. Smaller openings, traditionally for ventilation, can also be used and are a feature of Madinah Rural.

Avoid locating windows directly across from existing windows on neighboring buildings.

3.3 Rooftop elements

The overall roof form should have at least one rooftop element with a step up from the main parapet line.

Where accessible roof space is provided, protect the privacy of inhabitants with high parapet walls that are extended as part of the facade. This also helps to mitigate overlooking of neighbors and between different residential dwellings.

3.4 Other elements

Gates should be folding or hinged and be inspired by traditional timber craftsmanship.

Boundary walls should generally be made of the same material as the base of the building.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The colors used should be consistent with the Madinah Rural architecture. For appropriate colors refer to Section 4 of this handbook. Accent colors should not comprise more than 10% of the facade area.

4.2 Materials

The primary wall surface should be render. More contemporary materials can also be utilized. The render should be continuous above the base to the top of the parapet.

Windows, doors, and shutters should generally be timber and be inspired by traditional detail.

5.0 Patterns

Where used, patterns should be inspired by existing historical patterns.

1.0 Contemporary style

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

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

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

COMPOSITIONAL RULES

2.1 Low-lying forms

Buildings are typically low in height (2-3 stories). Floors should follow changes in ground level. Parapet heights may be subdivided and have variation in height.

2.2 Asymmetrical buildings

Buildings and their fenestration arrangements should be asymmetrical and massing comprise of groups of simple forms asymmetricaly arranged. Orthogonal forms may vary in height, window types and, sometimes, minor shifts in color and material.

Strict, large, homogeneous contemporary grids should be avoided.

2.3 Solid facades

Building facades are typically solid walls with simple punched openings that should have 'Opening' proportions of 35% or less of the total front facade area, or 20% or less of the total side facade area. 'Opening' area includes the full extent of all openings, windows, and doors.

Side facades should be subordinate to front facades, with predominantly smaller/narrower windows and no shop fronts.

The ground floor should have a base of stone finish (gray basalt or an equivalent). The base can be from 0.6m to 4m high from grade. The base may step higher at main entrances, or for special emphasis.

The base material can be stone cladding of a more engineered appearance than the transitional or traditional style.

2.4 Simple openings

Openings should be simple punched openings that are predominantly rectangular or, for smaller windows, triangular-topped above rectangular form.

Windows may have localized symmetry within single compact orthogonal forms.

2.5 Flat parapets

The parapet line and roof silhouette must be flat and rectangular, and stepped at least once on each facade. The villas should generally have at least one part of their form which is taller, resulting in a stepped form.



2.1 Low-lying forms



2.2 Asymmetrical buildings



2.3 Solid facades



2.4 Simple openings

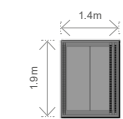


Contemporary residential villa axonometric

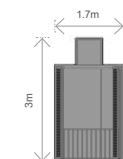


Contemporary residential villa front elevation

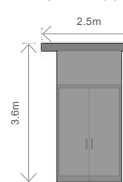
Key Contemporary architectural features



3.2 Windows



3.2 Windows



3.1 Entrance door

CONTEMPORARY ELEMENTS

3.1 Doors and entrances

Clearly articulate primary entrances. Door framing and recessing can add depth and create a sense of entry.

The design of the boundary walls and entrance in it should be complementary to the villa design.

3.2 Windows and openings

Windows on the main facade should be simple with minimal ornamentation. Windows should be relatively square or rectangular in proportion. In some cases window openings can be combined with over panel openings (see example). Provide suitable shutters / shading to windows, as appropriate.

Avoid locating windows directly across from existing windows on neighboring buildings.

3.3 Rooftop elements

The overall roof form should have at least one rooftop element with a step up from the main parapet line.

Where accessible roof space is provided, protect the privacy of inhabitants with high parapet walls that are extended as part of the facade. This also helps to mitigate overlooking of neighbors and between different residential dwellings.

Further privacy and shading can be provided by pergola structures of a simple form and structure using wood or metal and with appropriate shading fabrics.

3.4 Other elements

Gates should generally be folding, hinged or sliding. Their detail can be based on an interpretation and abstraction of local craftsmanship.

Boundary walls should be made of the same material as the base of the building.

COLORS, MATERIALS AND PATTERNS

4.1 Colors

The colors used should be consistent with the Madinah Rural architecture. Accent colors should not comprise more than 15% of the facade area.

4.2 Materials

Contemporary materials inspired by the vernacular architectural language of the region should be utilized.

The primary wall surface should be smooth render or similar and be continuous above the base to the top of the parapet. However more contemporary materials can also be utilized.

Window, doors, shutters and gates may be timber or metal, or a combination of both.

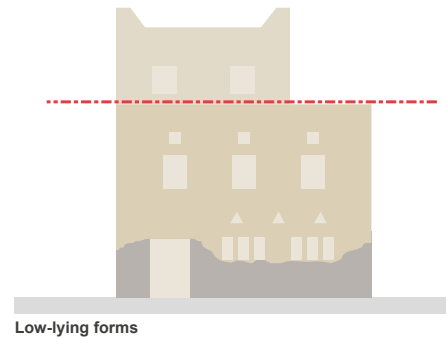
5.0 Patterns

If used, patterns should be abstracted from existing historical patterns.

2.0 Compositional rules

The following guidelines provide compositional rules for building design with the Madinah Rural architectural character, specially adapted for the Residential Villa building type.

The rules apply generally to all three styles (Traditional, Transitional, and Contemporary), with mandatory requirements for specific styles identified by the relevant symbol.



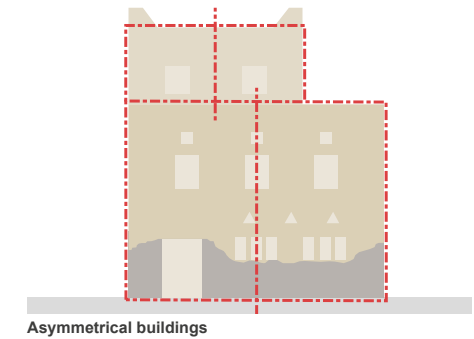
Low-lying forms

2.1 Low-lying forms

Buildings should observe a modest approach to massing:

- 1 Buildings are typically low in height (2-3 stories).
- 2 Individual buildings may have some variation in height.

| To reflect the typically horizontal form of traditional settlements.



Asymmetrical buildings

2.2 Asymmetrical buildings

The buildings of Madinah Rural are created by groupings of basic orthogonal forms joined or together.

- 1 Smaller orthogonal forms may have different heights to create variations in the overall building.
- 2 In plan, Orthogonal forms should align along the primary frontage.
- 3 Doorways should be typically set to one side of the building.

| To create the assemblage of simple forms found in Madinah Rural.



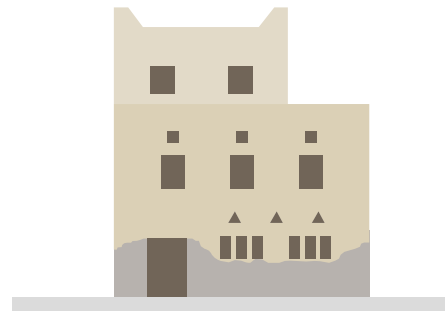
Solid facades

2.3 Solid facades

Buildings of the Madinah Rural Architectural Character have a rustic sturdiness and solidity:

- 1 A building's elevation should have a low proportion of windows relative to the overall area of the wall.
- 2 The solid nature of the external walls should be expressed. Openings within them should be small and express the lintel above them.
- 3 The walls at the base of the building should be composed of a material that expresses a heavier quality.
- 4 **TR** The bases of buildings were traditionally a gray stone (basalt). Designs should interpret and reflect this local tradition.

| To express the solidity and weight of traditional buildings.



Simple openings

2.4 Simple openings

Openings should be simple and modest in size:

- 1 Windows should have relatively square proportions, with expressed lintels above.
- 2 Windows and doorways should have minimal ornamentation.
- 3 Panels and frames should, generally, be constructed from timber with a natural tone.
- 4 The primary entrance should be set back within a recess, and set to one side of the building in order to create an asymmetrical facade.

| To evoke the simple character of vernacular facades in Madinah Rural.



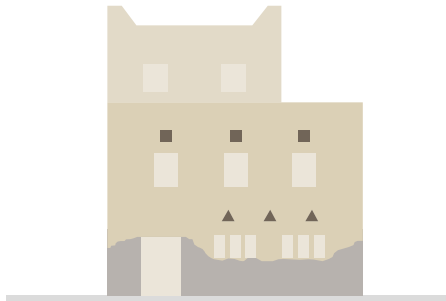
Flat parapets

2.5 Flat parapets

Parapets should observe the following:

- 1 Roofs are generally unoccupied so parapets are typically low.
- 2 Parapet finials may be used on the corners, generally applied to taller elements.
- 3 Parapet finials may be simplified and abstracted on transitional and contemporary styles.

| To reflect the rural condition of flat and stepped conjoined rooflines.



Ventilation openings

2.6 Ventilation openings

Ventilation openings are a distinguishing feature of Madinah Rural.

- 1 Ventilation openings should be arranged in rows.
- 2 Ventilation opening shapes may vary between groups (but be similar within group).
- 3 Appropriate styles include triangular-topped vent openings and niches, as well as square openings with expressed lintels.
- 4 Centre the ventilation openings above windows.
- 5 Ground floors may have high-level vents without need for windows below.

| To utilize a key feature of rural architecture.



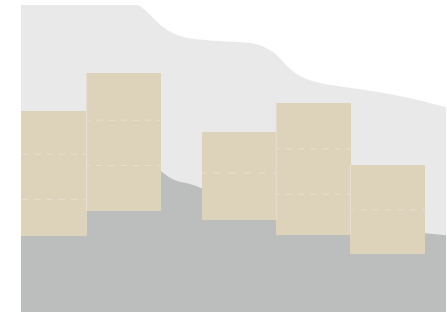
Continuous streetwalls

2.7 Continuous streetwalls

The overall streetscape created by neighboring buildings is important for the establishment of architectural character

- 1 Individual buildings should share a family resemblance when seen next to their neighbors. However, neighboring buildings should have a pleasing variety of height, architectural elements and roofscapes.
- 2 In plan, primary building facades should generally align.
- 3 Neighboring boundary walls should align or transition in an attractive way.

| To ensure that individual buildings work as a group to establish the architectural character and create a more attractive streetscape.



Responding to landscape

2.8 Responding to landscape

Buildings in Madinah Rural should respond to the topography and natural qualities of the landscape:

- 1 General asymmetry and stepped volumes across building groups is preferred
- 2 Buildings should reflect the surrounding topography and respond to natural variations in the existing ground levels.
- 3 Design should be sensitive to solar orientation, hydrology, wind and the physical characteristics of the soil.

| To respond to the natural environment and landscape context.

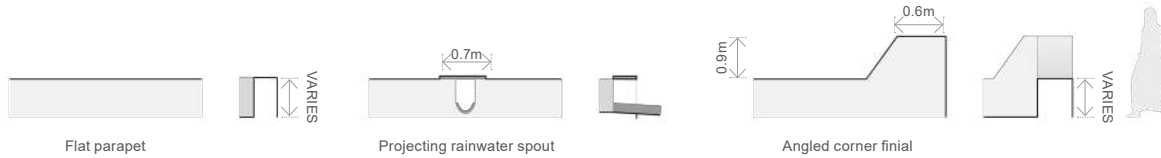
intentionally blank

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.



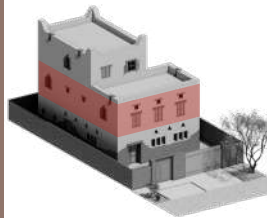
Top



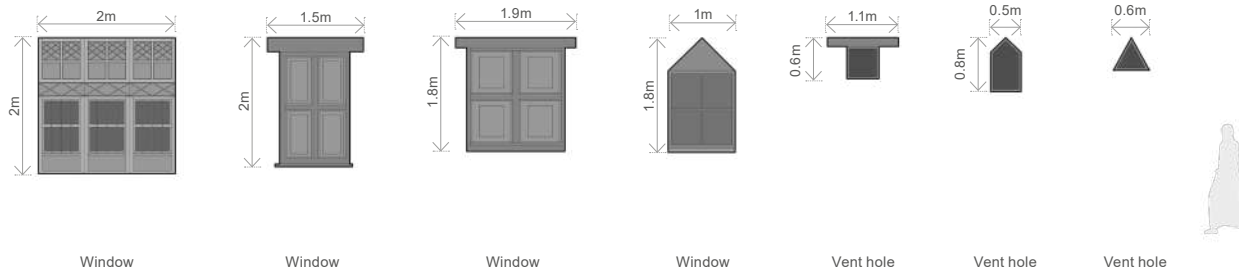
3.3 Rooftop elements

- 1 Use of flat parapets predominantly.
- 2 Use stepped or staggered building volumes with a rectilinear geometries to make varied low-lying roofscapes.
- 3 Typically, no rooftop activation.
- 4 Sometimes use stepped /angled parapet finials on the corners. This would generally apply to taller elements each building.

To express the organic form and character of the traditional townscape character in Madinah Rural.



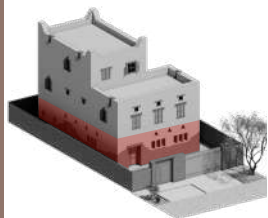
Middle



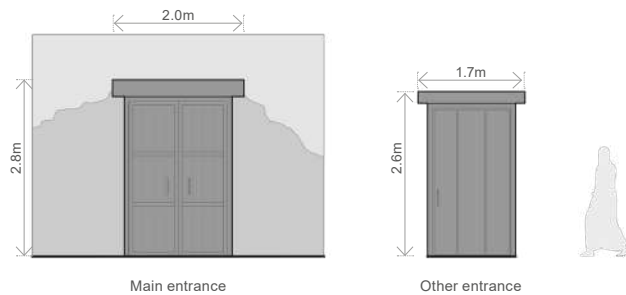
3.2 Windows and openings

- 1 Windows should, generally, be simple and rectangular in shape.
- 2 Occasionally triangular topped openings can be used as special elements.
- 3 Small openings, predominantly for ventilation purposes, are sometimes used traditionally. They are located centrally above windows. These are often rectangular and sometimes triangular in form.
- 4 Simple, openable, rustic shutters should, generally, be incorporated on windows.

To respond to climatic and environmental factors and to create facades which are recognizably of the local area.



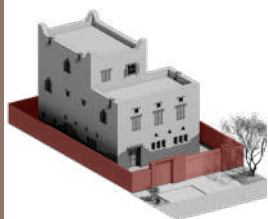
Base



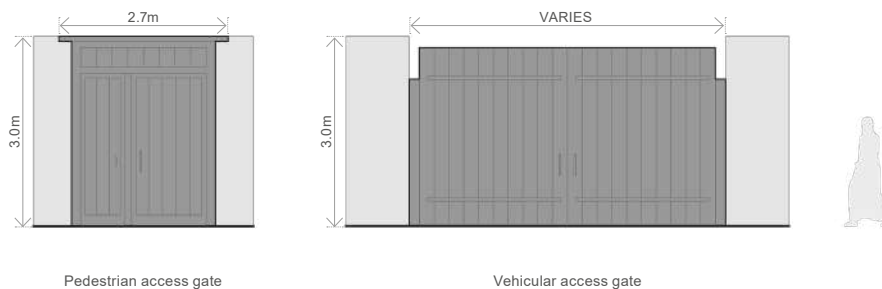
3.1 Doors and entrances

- 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 Typically doors and entrances should have relatively simple and plain detail.
- 3 Consider the articulation of entrances and openings using wood and stone, using local materials where possible.
- 4 Generally be asymmetrically arranged on the building.

To create legible entrances which are carefully integrated within the base of the building, responding to the area's character.



Other elements



3.4 Other elements

In addition to the elements above, buildings often incorporate other elements (for example gates and stone plinths).

Boundary walls to villas should utilize materials consistent with the villa, and be from the local material palette. Gates, portals and openings in the boundary walls should also be complementary to the villa's detail.

To consider other elements which are frequently part of the overall composition of buildings as part of the family of elements.

3.0 Transitional elements

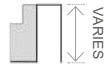
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



Top



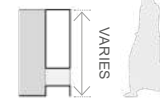
Square corner finial



Flat parapet



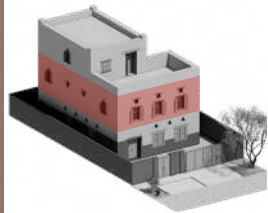
Parapet with opening



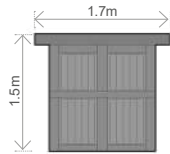
3.3 Rooftop elements

- 1 Use of flat parapets predominantly.
- 2 Use stepped or staggered building volumes with a rectilinear geometries to make varied low-lying roofscapes.
- 3 Some rooftop activation protected by higher parapets and shading.
- 4 Very limited use of smaller simple rectangular parapet finials on the corners. This would generally apply to taller elements.

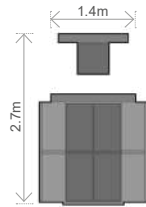
To express the organic form and character of the traditional townscape character in Madinah Rural.



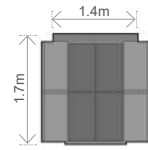
Middle



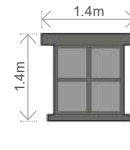
Window



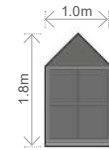
Window with vent



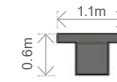
Window



Window



Window

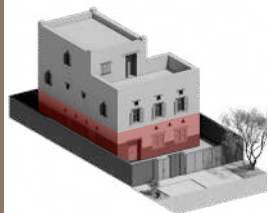


Vent hole

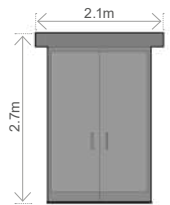
3.2 Windows and openings

- 1 Windows should generally be simple and rectangular in shape.
- 2 Occasionally triangular topped openings can be used as special elements.
- 3 Small openings, predominantly for ventilation purposes, are sometimes used traditionally. They are located centrally above windows. These are often rectangular and sometimes triangular in form.
- 4 Simple, openable, rustic shutters are generally incorporated on windows.

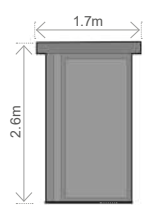
To respond to climatic and environmental factors and to create facades which are recognizably of the local area.



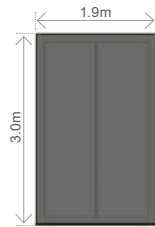
Base



Main entrance



Other entrance



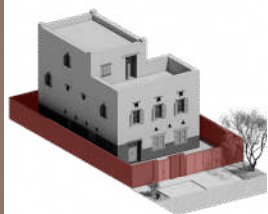
Terrace door



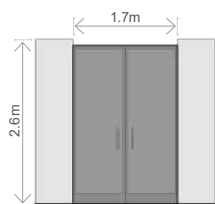
3.1 Doors and entrances

- 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 Typically doors and entrances have relatively simple and plain detailing.
- 3 Consider the articulation of entrances and openings using wood and stone, using local materials where possible.
- 4 Generally be arranged asymmetrically on the building.

To create legible entrances which are carefully integrated within the base of the building, responding to the area's character.



Other elements



Pedestrian access gate



Vehicular access gate



3.4 Other elements

In addition to the elements above, buildings often incorporate other elements (for example gates, stone plinths etc).

Boundary walls to villas should utilize materials consistent with the villa, and be from the local material palette. Gates, portals and openings in the boundary walls should also be complementary to the villa's detail.

To consider other elements which are frequently part of the overall composition of buildings as part of the family of elements.

3.0 Contemporary elements

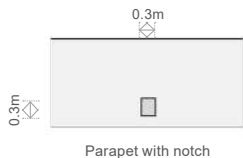
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only.



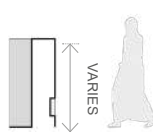
Top



Flat roof parapet



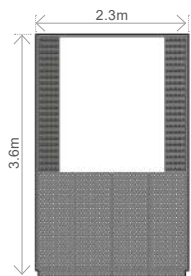
Parapet with notch



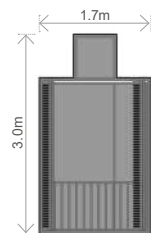
VARIES



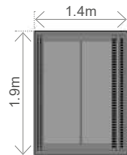
Middle



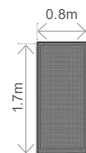
Balcony window



Window with composite vent over



Window



Screened window



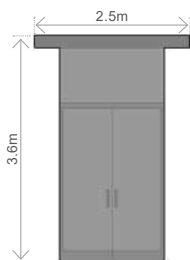
Window



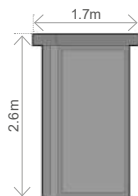
Window



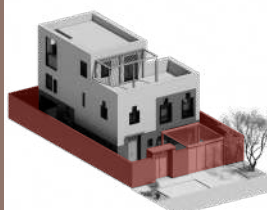
Base



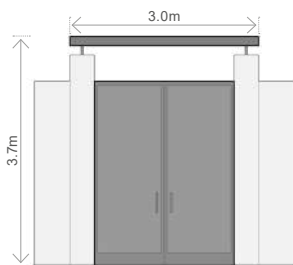
Main door



Door



Other elements



Pedestrian access gate



Vehicular access gate



3.3 Rooftop elements

- 1 Use of flat parapets predominantly.
- 2 Use stepped or staggered building volumes with a rectilinear geometries to make varied low-lying roofscapes.
- 3 Some rooftop activation protected by higher parapets and shading.
- 4 Very limited use of smaller simple rectangular parapet finials on the corners. This would generally apply to taller elements.

To express the organic form and character of the traditional townscape character in Madinah Rural.

3.2 Windows and openings

- 1 Windows should generally be simple and rectangular in shape.
- 2 Occasionally triangular topped openings can be used as special elements.
- 3 Limited use of rectilinear openings which combine an upper level rectangular vent placed centrally over its associated window.
- 4 Simple, openable, shutters are generally incorporated on windows. These may be of more contemporary material and appearance; for example laser cut metal sheet with color finish.

To respond to climatic and environmental factors and to create facades which are recognizably of the local area.

3.1 Doors 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 Typically doors and entrances have relatively simple plain detail.
- 3 Consider the articulation of entrances and openings using framing and materials that are from the Madinah Rural palette.
- 4 Entrances should generally be asymmetrically placed.

To create legible entrances which are carefully integrated within the base of the building, responding to the area's character.

3.4 Other elements

In addition to the elements above, buildings often incorporate other elements (for example gates and stone plinths).

Boundary walls to villas should utilize materials consistent with the villa, and be from the local material palette. Gates, portals and openings in the boundary walls should also be complementary to the villa's detail.

To consider other elements which are frequently part of the overall composition of buildings as part of the family of elements.

4.0 Colors and materials

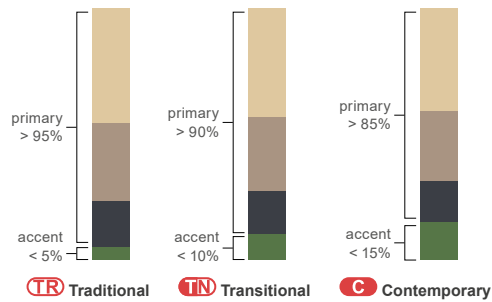
4.1 Colors

The color palette of Madinah Rural is closely linked to traditional building materials such as stone, wood and off-white render. The surrounding landscape and geology is also an important influence.

- TR** The base should have a darker band of color, or of similar in town to basalt lava stone, changing to rendered light off-white walls above the ground level.
- Generally use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.
- A maximum percentage of accent color, measured as an approximate percentage of the total facade area, is allowed for each style:
 - TR** < 5%
 - TN** < 10%
 - C** < 15%
- The use of reflective glass of bright colors in windows should be avoided as it may contrast the local architectural 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/

	RAL 1015
	RAL 1024
	RAL 3012
	RAL 1014
	RAL 1002
	RAL 8003
	RAL 1011
	RAL 6021
	RAL 6011
	RAL 6010
	RAL 6015
	RAL 5015
	RAL 5007
	RAL 7031
	RAL 7001
	RAL 9006
	RAL 5004
	RAL 7024

primary colors

accents colors



Lava stone



Stone cladding



Re-constituted stone blocks



Re-constituted stone cladding



Mud Brick



Render smooth finish



Colored render rough cast finish



Lime render finish



Stained timber



Painted timber



Painted timber



Metal panels (can be coated)



Timber panels

4.2 Materials

This palette summarizes the prevalent materials found in the architecture of Madinah Rural

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

- Precious or no-longer available materials may entail the need for substitutions. The smaller images reflect a range of feasible substitutions for the primary images above them, acceptable for use in transitional or contemporary buildings.
- Local and sustainable sourced materials are preferred.

- 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.

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

To enhance architectural character through the support of local craftsmanship.

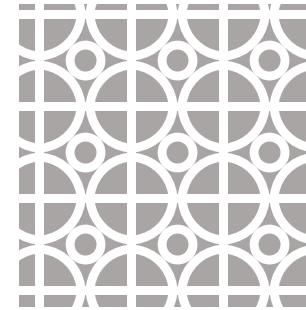
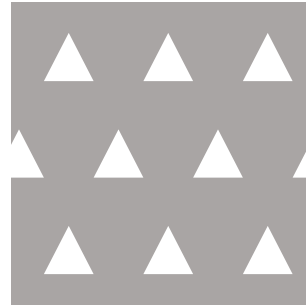
To create buildings with tactile and visual richness.

5.0 Patterns

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

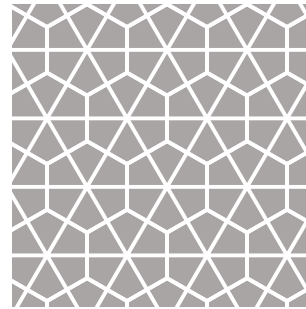
New buildings should:

- 1 Create patterns through the use of local materials and craftsmanship.
- 2 Where multiple decorative patterns are applied across a single facade, 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 **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:



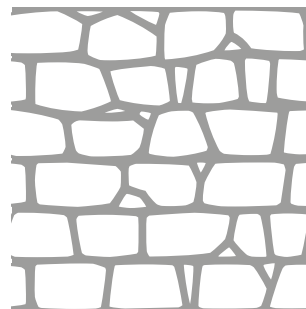
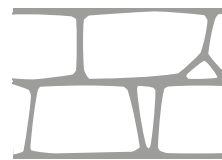
- Color (hue, tonality, tint)
- Shape (figure, outline, 2-D geometry)
- Form (volume, 3-D geometry)
- Texture (physical surface quality)
- Line (verticals, horizontals, diagonals, zigzags, curves, dashes, etc.)
- Value (lightness to darkness)

- 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.



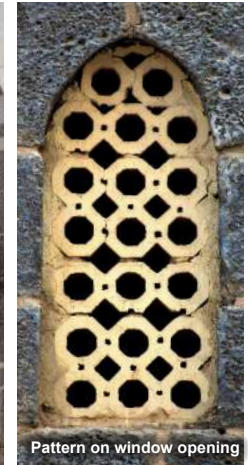
Abstracted patterns



Stone patterns



Pattern on face of door



Pattern on window opening



Repeated pattern on window openings



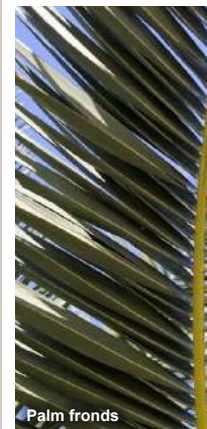
Repeated openings



Repeated pattern on face of balcony



Openings



Palm fronds



Palm trunk



Bamboo



Boulders



Stacked layers

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 need. Ensure that any modifications or additions to the public-owned spaces are co-ordinated and approved by relevant authorities.

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



6.1 Paving materials

- 1 Co-ordinate finish levels of pedestrian pathways and vehicular surfaces for smooth and visually co-ordinated transitions with neighboring buildings.
- 2 Use materials that are complementary to the Madinah Rural architectural material palette (Section 4.2)

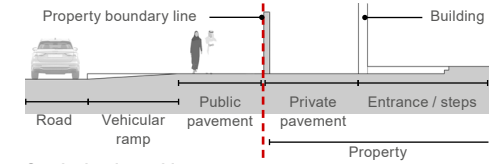


Ornamental species



6.2 Planting

- 1 Prioritize the use of native species suited for the local climate and minimize the need for artificial irrigation.
- 2 Use planting to enhance privacy for ground level windows of residential occupancies.
- 3 Integrate and co-ordinate landscape and architectural design to better root the building in its surroundings.

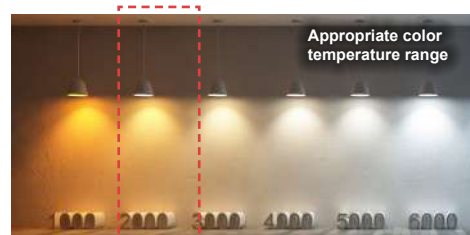


On-plot level transition



6.3 Public realm interface

- 1 Boundary walls and their portals should be architecturally integrated with the building design.
- 2 Co-ordinate the design of new boundary treatments with neighboring boundary treatments to create elegant transitions.
- 3 Steps and ramps should not protrude into the public realm. Transitions should be located within property lines.



6.4 Lighting

- 1 Architectural lighting should target color temperatures in the 2200K-2700K range for comfort and good color rendering.
- 2 Light bulbs should be shielded from direct view of pedestrians and drivers to avoid nuisance glare.
- 3 Light bulbs should be shielded from shining directly into the night sky to minimize light pollution.



6.5 Signage

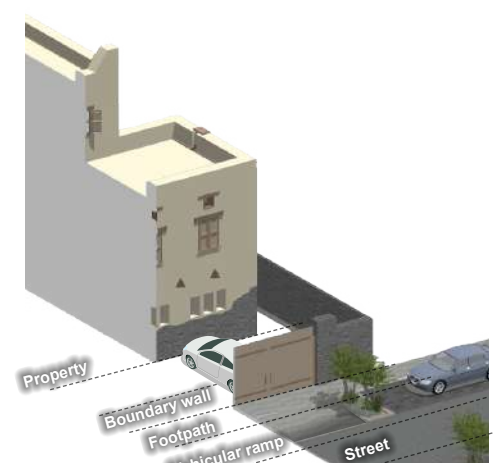
- 1 Residential signage should be integrated with the building design, with a preference for solid lettering.
- 2 Avoid the use of back-lit perspex-box surface mounted signage, and excessively large numbers on the facade.



6.6 Parking

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

- 1 The design of parking bays should be integrated with the landscape design, with co-ordinated surface materials.
- 2 Intersperse parking spots with planting and seating areas.
- 3 Sufficient clearance for pedestrian movement should be provided between parking bays and buildings.



6.7 Vehicular access

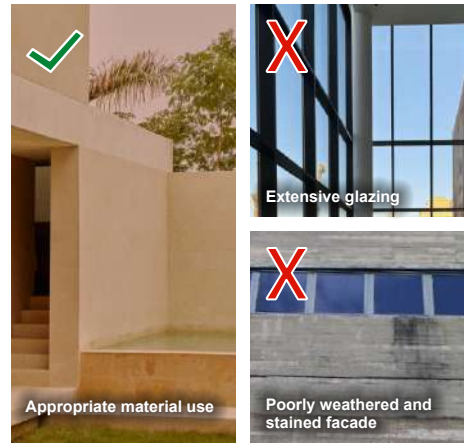
- 1 Vehicular ramps should not protrude into public roadways or footpath zones.
- 2 Integrate vehicular gates with the architectural design of the buildings.

7.0 Dos and don'ts

This section focuses on basic design moves to improve architectural quality and character.

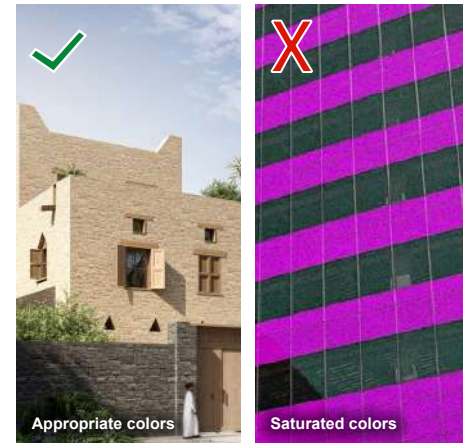
They identify common mistakes that cause visual pollution and hostile environments so that designers can eliminate or minimize them.

To raise the overall quality and character of buildings by avoiding common design mistakes.



7.1 Inappropriate materials

- 1 Do not use large expanses of glass that increase cooling demand. Use building materials appropriate for the climate.
- 2 Do not use large expanses of mirrored glazing that can be a source of nuisance glare to pedestrians and drivers.
- 3 Do not use large expanses of materials that weather poorly or require high maintenance.
- 4 Do use locally sourced materials where possible.



7.2 Inappropriate colors

- 1 Do not use large expanses of artificial, highly-saturated colors on buildings as they detract from the natural landscape and create a visually loud urban environment.
- 2 Refer to section 4.0 Colors and materials for guidance.
- 3 Do use colors compatible with the Madinah Rural Palette.



7.3 Screens and security

- 1 Do not use razor or barbed wires for typical buildings; utilize deterrents that are inconspicuous or visually appealing.
- 2 Do integrate screens and security features through intelligent layout and design.



7.4 Superficial elements

- 1 Where historical motifs are used, the function and scale of the original elements should be respected. Avoid superficial application or the undisciplined resizing of features.
- 2 Avoid the use of non-functional elements such as fake mullions.
- 3 Reflect and interpret traditional elements sensitively. Have a selective emphasis of characteristics to create meaning and beauty in its new context.



7.5 Exposed service elements

- Ordinary building service elements such as watertanks, air conditioning units and satellite dishes create visual pollution and undermine the character of a building.
- 1 Service elements should be screened and located in places not visible to the public.
 - 2 Avoid surface mounting associated conduits, ducts, pipes and wiring. Integrate their location within the facade design.



7.6 Perimeter walls and extensions

Perimeter walls are an important part of each villa plot and should be considered as part of the overall design.

- 1 Do not extend walls with corrugated metals and other inappropriate materials.
- 2 Perimeter walls should be architecturally integrated with the design of the buildings.
- 3 Provide a consistent treatment or smooth transition between adjacent plots to create a harmonious streetscape.



7.7 Rolling shutters

The appearance of the primary frontage is important and should be carefully designed.

- 1 Exterior surface-mounted and unhooused rolling shutters should not be used on residential facades.
- 2 Side-rolling, swinging or folding gates are preferred for vehicular entrances.



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

8.0 Traditional small villa worked example

The traditional worked example features a very strong application of the guidelines to the small villa building type.

Traditional buildings are characterized by strong articulation of the base. The ground floor level uses a base dark gray lava stone, transitioning into mudbrick or plastered finish at the levels above the base.

The massing is simple and has a set back upper level volume giving a simple stepped over all form.

Facades are informal with a horizontal character. Simple windows, horizontally arranged, are used, following the traditional element types and usually shuttered. Distinctive triangular shaped vents and window heads add extra detail.

Short, flat parapets with stepping between adjacent buildings in conjoined groups, and angled finials on the corners of the tallest parapets.

Front boundary walls are treated as part of the overall design. The materials used for boundary walls are consistent with the villa. Pedestrian and vehicular gates are of timber construction, detailed in a simple way, inspired by traditional craftsmanship.

1 Detail of the upper roof parapet with angled finials.



2 Simple timber frame and timber shuttered windows with high level vent.



3 Simple triangular openings and vents.



4 Stone boundary wall with timber gates.





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

8.0 Transitional small villa worked example

The transitional model maintains a strong relationship to the traditional style while using simplified and less crafted details.

Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

Stone cladding is used at the base of the building. The upper parts are finished in a simple textured render of color that respects the materials and color palette of Madinah Rural.

There is a set back upper floor with terrace giving a simple stepped form to the building. Facade elements are simplified whilst retaining the proportions and materiality of the traditional.

Roof parapets remain flat and continuous with more orthogonal square finials in the corners.

Front boundary walls are integrated with the villa's design. The materials used for boundary walls are consistent with the villa. Pedestrian and vehicular gates are of simple timber construction, inspired by local craftsmanship.

1 Flat parapet with small square finials.



2 Timber framed shuttered windows and high level vents.



3 Small, triangular topped, shuttered window.



4 Boundary wall with timber gates.





8.0 Transitional large villa worked example

The transitional large villa model has a strong relationship to the traditional style while using simplified and less crafted details.

Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements. The building materials respect the Madinah Rural materials and color palette: main finishes used on walls are stone and colored render.

The large villa volume is articulated by using simple stepped massing. Generally, rectangular window openings are used with timber windows set behind shutters which are set flush with the walls. In some cases, small high-level openings are included. An upper-level terrace is incorporated behind openings in walls and provided with a pergola overhead, providing shade.

Roof parapets remain flat and continuous. Some higher-level parapets have simplified orthogonal square finials in the corners.

Front boundary walls are integrated with the villa's design. The main doors and vehicular gates are of simple timber construction, inspired by local craftsmanship.

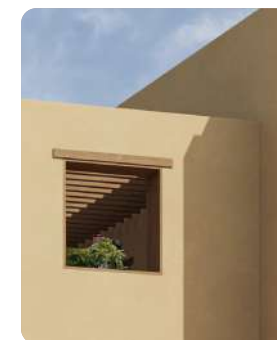
1 Flat parapet with small square finials.



2 Timber framed shuttered windows and high level vents.



3 Terrace with pergola.



4 Simple entrance integrated in boundary wall.





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

8.0 Contemporary small villa worked example 1

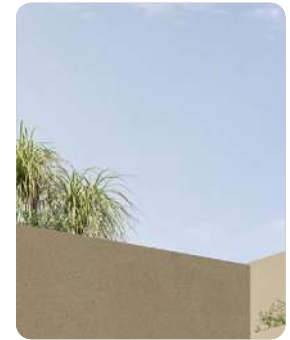
The contemporary model seeks to reflect changes in construction, availability of skills and materials. The design also incorporates adaptation to respond to modern ways of living and working. The use of elements and patterns abstracted from those of Traditional buildings in Madinah Rural helps to create this family resemblance.

The building form is simple with a stepped massing towards the back. An upper-level terrace is provided with a lightweight shading structure which is simple in form.

Plain rectangular window openings with shutters are used. Some openings include high level vents above integrated in a smaller, upper, opening extension. The shutters are perforated with an abstracted, locally inspired pattern.

Front boundary walls are treated as part of the overall design. The materials used for boundary walls are consistent with the villa. Pedestrian and vehicular gates are designed to be consistent with the villas detailing.

1 Simple flat parapets with no ornamentation.



2 Deeply recessed windows frames with shutters outside.



3 Terrace behind tall parapet with shading structure above.



4 Entrance Gates integrated in stone clad boundary wall.





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



1 Flat parapets to terrace with timber shading structure.



2 Large deep recessed windows with shutters.



3 Recessed balcony.



4 Entrance Gates integrated in stone clad boundary wall.

8.0 Contemporary small villa worked example 2

The contemporary model seeks to reflect changes in construction, availability of skills and materials. The design also incorporates adaptation to respond to modern ways of living and working.

The overall building form follows the compositional rules described in this document and retains a strong family resemblance to the transitional and traditional buildings. The use

of simplified or abstracted elements and patterns of Traditional buildings helps to create this family resemblance. The design follows the materials and color palette of Madinah Rural.

Plain rectangular window openings are used and are provided with shutters which are perforated with an abstracted pattern inspired by local patterns.

An inset balcony at first floor and terrace at second floor are simply detailed, inspired by local use of wood and plastered walls with simple modern metal railings. Parapets are simple.

Front boundary walls are treated as part of the overall design using materials of the Madinah Rural palette. Pedestrian and vehicular gates are designed to be consistent with the villas detailing.



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

8.0 Contemporary large villa worked example

The large contemporary villa model draws inspiration from the local Madinah Rural color and materials palette and uses a simple stepped massing which is a regional trait. This aims to create a visual family resemblance to the regional architecture.

The overall building form follows the compositional rules described in this document; it is a low-lying, asymmetrical form.

Terraces are incorporated with screen walls that are inspired by the traditional materials palette and with perforated pattern motif that's abstracted from local patterns.

Rectangular window openings with deep reveals, are used following typical proportions. Roof parapets remain flat and continuous without the use of finials.

The main villa entrance is treated as integral with the front boundary wall which folds in and is part of the overall design. The vehicular gates are designed to be consistent with the villas detailing.

1 Simple flat parapets with no ornamentation.



2 Deeply recessed windows with minimal frame detail to express elementary opening.



3 Screened wall for modulated interior daylight.



4 Main villa entrance door integrated in the stone clad boundary wall.

