



# **Sarawat Mountains**

**Architectural Design Guidelines** 

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# **Application Handbook - Residential Villas**

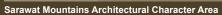














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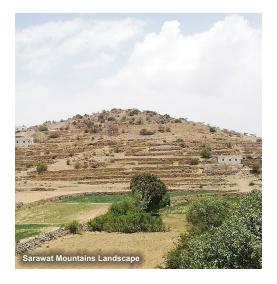
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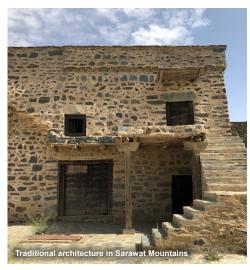


## **Application Handbook - Residential Villas**

Sarawat Mountains - Architectural Design Guidelines







## Introduction

The purpose of this document is to guide designers and builders of single-family residential villa buildings in applying the architectural character of Sarawat Mountains to their projects.

Sarawat Mountains character area is located within the high mountains and highlands of the Sarawat Mountain ranges within the regions of Makkah, Al Baha and Jazan. The architectural character within the Sarawat Mountains in all the three region shares similarities with variations limited to use of local materials.

The Sarawat Mountains are identified as a mix of steep rocky hillsides and dramatic ridge lines, an eastward declining plateau, a westerly escarpment that dramatically drops toward the upper Tuhama foothills, water corridors and the Tuhama coast.

Settlements are influenced by the nature of the site, particularly the topography and typology. Buildings were scattered across the mountains, built on precise grounds for defense and protection against environmental conditions.

Fortress-like buildings are strategically located on

agricultural terraces to protect their associated farms and, defend and give refuge in case of attacks.

Typical features were courtyards and narrow passages between buildings, enabling the unification of various building units and the provision of an open spaces hierarchy.

The dominant vernacular architecture in this region is made of traditional construction materials such as local stones with compact massing and very strong geometries. Other dominant features are the interplay of solid and voids, the use of external circulation elements and the tower typology.

This handbook is a supplement to the Sarawat Mountains 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 Fu



Link to Regulating Plans



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.

Residential Villas

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 a 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 identities. 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 to 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 beneficial for a sense of distinction and ownership. By addressing these primary challenges, single-family residential villas will strengthen the architectural character of Sarawat Mountains.

This handbook implements the Sarawat Mountains Architectural Design Guidelines in residential villas by harmonizing their needs with the requirements of the guidelines.

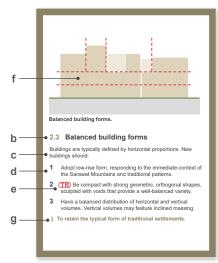
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## III How to Use the Guidelines

Follow these instructions to create a building that supports the architectural character of the Sarawat Mountains.

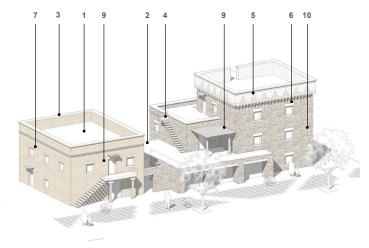
- Consult the regulating plan to determine which architecture style options (Traditional, Transitional, or Contemporary) are permitted at your project location.
- 2 Select from the permitted architecture styles, and review the list of general guidelines on the style start pages (Section 1).
- 3 Assess your design according to each of the 5 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. (Sections 8 - 10)
- 4 Throughout the document, general 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
  - Mandatory for transitional style
  - Mandatory for contemporary style

- **5** Guidelines are organized according to the following parts:
  - a. 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 fulfillment.



Typical guideline structure.

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



Example of vernacular Sarawat Mountains architectural elements, for illustrative purposes only

## **Key features:**

- 1 Compact forms with strong geometric shapes and flat roofs.
- 2 Alteration between mass and void to articulate the facade.
- 3 Massing broken into a balance of vertical volumes and horizontal volumes.
- 4 Facade articulation with external circulation and carved wooden pillars.
- 5 Geometric patterns used in the form of friezes, straps, and stone ornamentation in the form of parapets.
- 6 Low window-to-wall ratio: largely solid areas of wall with small framed windows highlighted with lintels and sills.

- 7 Facades with localized symmetries and alternating volumes bringing asymmetry.
- 8 Shared courtyards within the cluster of buildings as a smaller social space.
- 9 Framed openings and entrances with occasional projected elements for shading.
- 10 General palette of beige, brown and gray with white and complementary landscape colors used for ornamentation.



#### Traditional (TR

The most conservative and faithful effort at interpreting traditional architectural form

START AT PAGE 5



## Transitional

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

START AT PAGE 6



## Contemporary C

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 for single-family residential villas.

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

Note - guideline numbers below correspond to sections 2 through 5 of this Handbook and are not sequential: only the key features relevant to the application of the traditional style single-family residential villa are shown on this page.

#### **COMPOSITIONAL RULES**

#### 2.3 Balanced building forms

Forms should be compact with strong geometric, orthogonal shapes. Building form should include a balanced distribution of horizontal and vertical volumes

Facade should introduce vertical breaks approximately every 5m or less. Facade breaks should be in the form of changes in height and massing.

#### 2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units with varying heights, and change of levels with respect to terrain.

#### 2.5 Solid facades

Buildings should have solid facades with recessed / punched openings. Ground floor facade treatment should provide a solid grounded base, foster a high-quality interface between the building and the street.

Facade design should display a plain, simple and elegant style with the use of hard-wearing and robust materials.

#### 2.6 Simple openings

Generally, openings should consist of small windows of simple geometry. A maximum of 30% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure.

Loggias may be incorporated in frontages. Abutting balconies should be avoided.

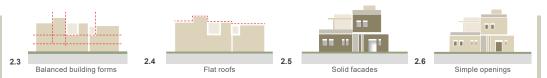
#### 2.7 Asymmetrical frontages

Frontages should generally be asymmetrical in massing and articulation. Occasional use of localized symmetries should be encouraged in the placement, size, rhythm and patterns of openings to establish an informal rhythm across the facades.

#### 2.8 Special features

External circulation with projecting staircases, a distinct feature of the area, should be encouraged, particularly for inner courtyards. The use of columns articulated using traditional patterns should be encouraged to support projecting elements and shading structures.

Top part of the vertical volumes should be highlighted with the use of traditional patterns, facade features, materials or articulation.





Axonometric view showcasing an example of the application of compositional rules for traditional style building

3.4 × X Parapet Type A

2.6 Window Type A

Window Type A

3.2 × X Parapet Type A

Window Type A

Door Type A

#### TRADITIONAL ELEMENTS

#### 3.1 General details and considerations

Facades should be clearly articulated with external circulation in the form of staircases, supported by columns. Vertical volumes should be highlighted with articulated parapets using traditional patterns.

Perimeter wall and fence should have low to medium levels of transparency. Main entrance within the perimeter wall should be highlighted.

#### 3.2 Doors and entrances

Generally, doors and entrances should have simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3.

Doors and entrances should be highlighted with projecting timber heads and sills and should include carved decorations.

#### 3.3 Windows and openings

Generally, openings should consist of small windows of simple geometries with width-to-height proportions of 1:1.5 - 1:2.

Windows and openings should be articulated using changes in materiality and / or color and should be highlighted with either stone or timber heads and sills, or their equivalent.

#### 3.4 Roofscape

The roofscape should feature flat roofs with simple articulated parapets.

Articulations should include parapets with pointed corners and / or friezes, often painted white. Articulated parapets with patterns derived from traditional band of alternating masonry stone and white stone decorations (mainly triangular patterns) should be preferred for vertical volumes.

Parapets should have small openings enabling access from outdoor staircases.

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

#### 4.1 Colors

Key traditional

architectural features

The general palette should be beige, brown, and white.

90% of the building's color palette should be composed of primary colors and 10% should be composed of accent colors.

At least 70% to 80% of the facade should be composed of one consistent primary color.

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures.

#### 4.2 Materials

Generally, subject to availability, the use of locally available traditional materials, or equivalent should be encouraged. 70% to 80% of the facade should be composed of one consistent material.

Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures.

Stone, or other material that closely resemble the local stone in terms of the texture, color, and appearance, should be used as a primary material on the facade.

#### 5.0 Patterns

Typical colors and patterns should be used for decoration and highlights and should be no more than 10% of the facade area. Patterns should replicate traditional art patterns.

1.0

## 1.0 Transitional Style

Start here to review the general guidelines of the transitional style for single-family 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 single-family residential villa are shown on this page.

#### COMPOSITIONAL RULES

#### 2.3 Balanced building forms

Forms should be compact with strong geometric, orthogonal shapes with voids that provide a well-balanced variety. Building form should include a balanced distribution of horizontal and vertical volumes.

Facade should introduce vertical breaks approximately every 7m or less. Facade breaks should be around a minimum of 1.5m in depth and 3m in width for at least 70% of the facade vertically.

#### 2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units with varying heights, and change of levels with respect to terrain.

#### 2.5 Solid facades

Buildings should have solid facades with recessed openings. Ground floor facade treatment should provide a solid grounded base, foster a high-quality interface between the building and the street. Facade design should display a plain, simple and elegant style with the use of hard-wearing and robust materials.

#### 2.6 Simple openings

Generally, openings should consist of small windows of simple geometry. A maximum of 40% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure.

Loggias may be incorporated in frontages. Abutting balconies should be avoided.

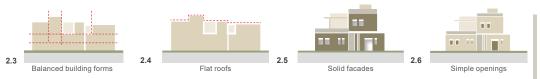
#### 2.7 Asymmetrical frontages

Frontages should generally be asymmetrical in massing and articulation. Occasional use of localized symmetries should be encouraged in the placement, size, rhythm and patterns of openings to establish an informal rhythm across the facades.

#### 2.8 Special features

External circulation with projecting staircases, a distinct feature of the area, should be encouraged, particularly for inner courtyards and may be highlighted with a different color. The use of columns articulated using interpretations of traditional decorative motifs, should be encouraged to support projecting elements and shading structures.

Top part of the vertical volumes should be highlighted with the use of interpretations of traditional patterns, facade features, materials or articulation





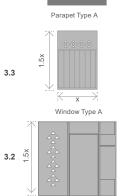
Axonometric view showcasing an example of the application of compositional rules for transitional style building



Elevation view showcasing an example of the application of compositional rules for transitional style building

Key transitional architectural features

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Door Type A

#### TRANSITIONAL ELEMENTS

#### 3.1 General details and considerations

Perimeter wall and fence on the main frontage should have medium to high levels of transparency to provide a permeable connection to the public domain and add to the overall quality of the public realm. Side / back boundary wall may have low, medium or high levels of transparency.

#### 3.2 Doors and entrances

Generally, doors and entrances should consist of simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3.

Doors and entrances should be highlighted and should include projecting timber heads and sills.

#### 3.3 Windows and openings

Generally, openings should consist of medium sized windows of simple geometries with width-to-height proportions of 1:1.5 - 1:3.

Windows and openings should be articulated using changes in materiality and / or color and should be highlighted with either stone or timber heads and sills, or their equivalent.

#### 3.4 Roofscape

The roofscape should feature flat roofs with simple articulated parapets. Generally, parapets should be simple and integrated within the overall design of the facade.

Articulations may include parapets with pointed corners and / or friezes, often painted white. Articulated parapets may feature patterns (mainly triangular shaped) derived from traditional band of alternating masonry and white stone decorations, or their equivalent.

Parapets should have small openings enabling access from outdoor staircases

#### COLORS. MATERIALS AND PATTERNS

#### 4.1 Colors

The general palette should be beige, brown, and white.

80% of the building's color palette should be composed of primary colors and 20% should be composed of accent colors. At least 60% to 70% of the facade should be composed of one consistent primary color

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures and / or facade elements.

#### 4.2 Materials

Between 60% to 70% of the facade should be composed of one consistent material

Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures.

At least 20% of the facade should use stone, or other material that closely resemble the local stone in terms of the texture, color, and appearance, either to highlight the base, or on the main frontage, or as an accent feature on doors and entrances.

#### 5.0 Patterns

Typical colors and patterns should be used for decoration and highlights. Patterns should be no less than 10% and no more than 15% of the facade area. Transitional buildings should utilize interpretations of traditional art patterns.

## 1.0 Contemporary Style

Start here to review the general guidelines of the contemporary style for single-family 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 single-family residential villa are shown on this page.

#### **COMPOSITIONAL RULES**

#### 2.3 Balanced building forms

Forms should be compact with strong geometric, orthogonal shapes with voids that provide a well-balanced variety. Building form should include a balanced distribution of horizontal and vertical volumes.

Facade should introduce vertical breaks approximately every 10m or less. Facade breaks should be around a minimum of 1.5m in depth and 3m in width for at least 70% of the facade vertically.

#### 2.4 Flat roofs

Building massing should be designed to have flat roofs. Varied roofline may be created with stepped conjoined units with varying heights, and change of levels with respect to terrain.

#### 2.5 Solid facades

Buildings should have solid facades with recessed openings. Ground floor facade treatment should provide a solid grounded base, foster a high-quality interface between the building and the street. Facade design should display a plain, simple and elegant style with the use of hard-wearing and robust materials.

#### 2.6 Simple openings

Generally, openings should consist of small windows of simple geometry. A maximum of 50% of the facade's surfaces should be openings. This ratio should respond to the needs of the accommodation and consider solar and wind exposure.

Loggias may be incorporated in frontages. Abutting balconies should be avoided.

#### 2.7 Asymmetrical frontages

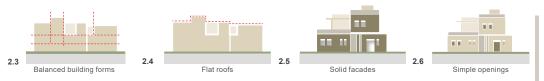
Frontages should generally be asymmetrical in massing and articulation. Occasional use of localized symmetries should be encouraged in the placement, size, rhythm and patterns of openings to establish an informal rhythm across the facades.

#### 2.8 Special features

External circulation with projecting / visible staircases may be featured.

Columns may be used to support projecting elements and shading structures. They should be articulated using simple geometries and may include abstract interpretations of traditional decorative motifs.

Top part of the vertical volumes should be distinct with the use of interpretations of traditional patterns, facade features, materials or articulation.





Axonometric view showcasing an example of the application of compositional rules for contemporary style building

contemporary style building

3.4

Parapet Type A

Window Type A

3.2

Elevation view showcasing an example of the application of compositional rules for

#### **CONTEMPORARY ELEMENTS**

#### 3.1 General details and considerations

Perimeter wall and fence on the main frontage should have medium to high levels of transparency to provide a permeable connection to the public domain and add to the overall quality of the public realm. Side / back boundary wall may have low, medium or high levels of transparency.

Facades articulated with interpretation of external circulation in the form of staircases, should be encouraged and highlighted with a different color.

#### 3.2 Doors and entrances

Generally, doors and entrances should have simple orthogonal geometries with width-to-height proportions of 1:2 - 1:3. Doors and entrances should be highlighted and may include projecting heads and sills.

#### 3.3 Windows and openings

Generally, openings should consist of medium sized windows of simple geometries with width-to-height proportions of 1:1.5 - 1:3.

Openings may include floor to ceiling windows. Large windows (1:3) and double height windows should feature elements to divide the height to avoid disproportionate scaling. Windows and openings should be articulated. Articulation may include changes in materiality and / or color, and highlighted heads and sills.

#### 3.4 Roofscape

The roofscape should feature flat roofs with simple articulated parapets. Generally, parapets should be simple and integrated within the overall design of the facade.

Articulated parapets should display abstract interpretations of vernacular elements. Parapets may have small openings enabling access from outdoor staircases.

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

#### 4.1 Colors

Key contemporary

architectural features

Door Type A

The general palette should be beige, brown, and white.

70% of the building's color palette should be composed of primary colors and 30% should be composed of accent colors. Between 50% to 60% of the facade should be composed of one consistent primary

Accent colors should be reserved for highlighting key elements, such as entries, openings, shutters and shading structures and / or facade elements

#### 4.2 Materials

Between 50% to 60% of the facade should be composed of one consistent material.

Wood, or its equivalent, should be used for elements in openings such as window frames, shutters and shading structures. Stone, or other material that closely resemble the local stone in terms of the texture, color, and appearance, may be used to highlight the facade.

#### 5.0 Patterns

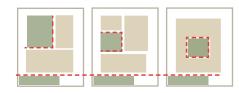
Typical colors and patterns should be used for decoration and highlights. Patterns should be no less than 10% and no more than 20% of the facade area. Contemporary buildings should utilize abstractions of traditional art patterns.

1.0

## 2.0 Compositional Rules

The following guidelines provide compositional rules for building design with the Sarawat Mountains architectural character, specially adapted for single-family residential villa types.

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

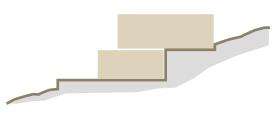


Spatially enclosed spaces and open space hierarchy

#### 2.1 Townscape groupings

Layout of Sarawat Mountains' residential buildings respects the natural terrain and is organized with hierarchy of open spaces. New buildings should:

- 1 Exhibit layout with spatially enclosed outdoor spaces, courtyards, patios providing climatic comfort while allowing privacy to the inhabitants.
- 2 Feature planting strip along the front setback should mitigate continuous treatment with neighboring plot and ensure continuous landscaped street frontage.
- 3 Minimize grading and alterations of natural land form. Terracing shall be used to adapt to sloping sites.
- To provide privacy and climate comfort.

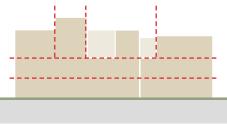


Built form respecting the natural terrain

#### 2.2 Relationship to landscape

- 1 Prioritize the conservation and enhancement of environmental and cultural resources on site.
- 2 Respect the natural terrain and avoid flattening of slopes
- 3 Use of terraces to mitigate slopes.
- 4 Provide usable open space within the plot oriented toward the public frontage.

To respect and respond to the natural landscape context, climate and environment.

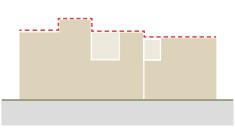


Balanced buildings forms

#### 2.3 Balanced building forms

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

- 1 Adopt low-rise form, responding to the immediate context of the Sarawat Mountains and traditional patterns.
- 2 TR Be compact with strong geometric, orthogonal shapes, sculpted with voids that provide a well-balanced variety.
- 3 Have a balanced distribution of horizontal and vertical volumes. Vertical volumes may feature inclined massing.
- | To reflect the typical form of vernacular buildings.



Stepping, rectilinear roofscape

#### 2.4 Flat roofs

Sarawat Mountains vernacular buildings feature flat roofs with minimum articulation. The design of new buildings should:

- 1 Feature flat roofs
- 2 Create varied roofline with stepped conjoined units with varying heights, and change of levels with respect to terrain.
- 3 Always screen MEP equipment, utilities, delivery, refuse containers, and other types of utilities by parapets or by locating them underground / internalized.
- 4 Feature a distinct top part for the vertical volumes.
- To retain a consistent and traditional roofscape with tower elements as highlights.



Solid facades

#### 2.5 Solid facades

Facades are generally plain and simple with minimum articulation. New buildings should:

- 1 Have solid facades with recessed / punched openings. Generally, facades should express external solid walls that are grounded to the street level.
- 2 Have a maximum share of 30% to 50% of the overall facade surface.
- 3 Have hard-wearing and robust facade materials.
- 4 Have facade design integral to all public sides (i.e. with the same level of design quality and a consistent treatment).

To express the grounded, solid architectural character of the vernacular buildings in the mountains.

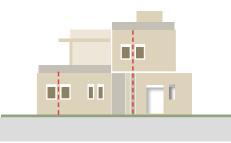


Openings with simple geometries

#### 2.6 Simple openings

Buildings are typically defined by simple articulations of fenestrations and openings. New buildings should:

- 1 TR Provide small sized window openings with simple geometries and relatively balanced proportions.
- 2 Provide occasional colonnades and recesses for pedestrian micro-climate comfort.
- 3 Include loggias instead of balconies to activate the facade.
- 4 Avoid large or unusual opening features. Large features should only be used to demarcate unique conditions, like special uses and landmark buildings.
- | To observe the aesthetic character and simplicity of the mountains.



Occasional local symmetries with asymmetrical massing

#### 2.7 Asymmetrical frontages

Facades follow the internal organization and function of the building, rather than external appearance. New buildings should:

- 1 Generally have frontages asymmetrical in massing and articulation.
- 2 Have occasional localized symmetry in the placement, size, rhythm and patterns of the openings
- 3 Have facades articulated by horizontal and vertical break, finishes and material banding, bringing variation.
- 4 Avoid large-scale symmetry. This should be reserved for only the most important of civic and religious buildings.
- | To observe simple asymmetry defining the traditional architecture.



Projecting elements

#### 2.8 Special features

Carved wooden columns, opening shutters, articulated parapets for towers, and external staircases are key feature of Sarawat Mountains. New buildings should:

- 1 (TR) Encourage display of distinct local architecture features like provision / interpretation of external circulation with projecting staircases.
- 2 TR Encourage the use of columns articulated using traditional patterns to support projecting elements and shading structures.
- 3 Have distinct vertical volumes tops by use of traditional patterns, facade features, materials or articulation.

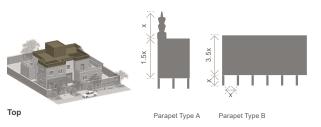
To highlight the local architecture of the Sarawat Mountains while creating attractive and detailed facades.

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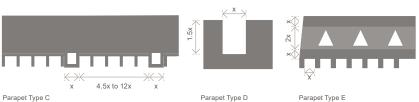
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## **Traditional Elements**



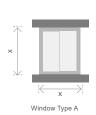
The elements illustrated are examples and should not limit other possible design solutions that follow guideline principles and historic precedents. Element measurements are illustrative and provided to indicate general proportions only

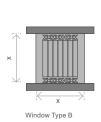


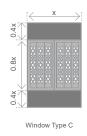
#### 3.4 Roofscape

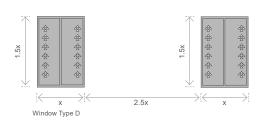
- 1 Roof should be completely flat and may be accessible through external circulation.
- 2 Parapets should be articulated with pointed corners or a frieze, often painted white. Parapets should be highlighted with traditional
- 3 Vertical volumes feature articulated parapets with band of alternating masonry and white stone (or their equivalent) or corner element.
- 4 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

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









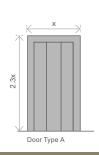
#### 3.3 Windows and openings

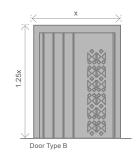
- 1 Generally, openings should have simple geometries. Opening surrounds may be recessed or projected from the main facade.
- 2 Openings may be enriched with articulated window shutters with local carving patterns.
- 3 Windows and openings should be articulated either in change in materiality and / or color and should be highlighted either with stone or timber heads and sills, or their equivalent.
- 4 Opening should follow locally symmetrical alignments.
- 5 Informal groupings; alignments related to interior room layouts rather than external facade composition.

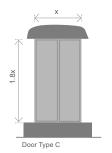
To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area.

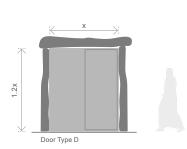


Base









#### 3.2 Doors and entrances

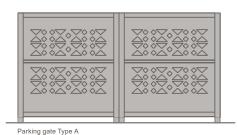
- 1 Doors and entrances should be highlighted with projecting timber heads and sills.
- 2 Main door shutters and entrance should be highlighted using patterns and colors from the traditional carving patterns.
- 3 Articulated columns may be used to highlight main entrances, surround courtyards and support shading structures.
- 4 Canopies and awnings may be included to highlight entrances and provide shade.

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



Other elements







Perimeter wall Type A

### 3.1 General details and considerations

- 1 Materials should match the local character, reference local heritage and be consistent in nature.
- 2 Local art and patterns should be integrated in design composition, mainly for opening shutters, columns, and parapets, generally up to 10% of total facade surface.
- 3 Perimeter walls and fences, gates and portals should be designed to complement the overall villa design.
- 4 Perimeter wall and fence on the main frontage should have low to medium levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.
- To embed other elements which are frequently part of the plot.

## 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





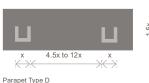
Parapet Type A



Parapet Type B



Parapet Type C





Parapet Type E



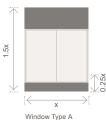
Parapet Type F

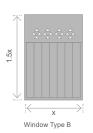
#### 3.4 Roofscape

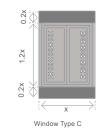
- 1 Roof should be completely flat and may be accessible through external circulation. Parapets should maintain a distinct rectilinear form, with groups combining to form a staggered roofscape.
- 2 Parapets should be horizontal, typically low in height, and materially continuous with the wall below.
- 3 Vertical volumes feature articulated parapets with band of alternating masonry and white stone (or their equivalent) or corner element.
- 4 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

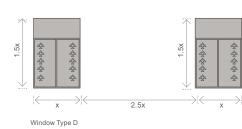
To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.









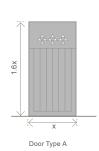


#### 3.3 Windows and openings

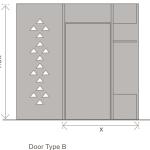
- 1 Generally, openings should have simple geometries. Opening surrounds may be recessed or projected from the main facade.
- 2 Openings may be enriched with articulated window shutters with local carving patterns.
- 3 Windows and openings should be articulated in change in materiality and / or color and highlighted either with stone or timber heads and sills, or their equivalent,
- 4 Opening should follow locally symmetrical alignments.

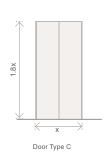
To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area.

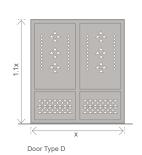












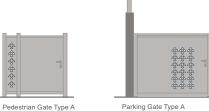
#### 3.2 Doors and entrances

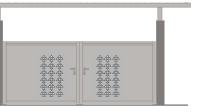
- 1 Doors and entrances should be highlighted and should include projecting timber heads and sills.
- 2 Entrances may feature highlighted entrances with articulated door shutters interpreting carving patterns and colors used in local art.
- 3 Columns, colonnades should be encouraged for active frontages and around courtyards.
- 4 Canopies and awnings may be included to highlight entrances and

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



Other elements







Perimeter Wall Type A

#### 3.1 General details and considerations

- 1 Local art and patterns should be integrated in design composition. mainly for opening shutters, columns, and parapets, generally between 10% to 15% of total facade surface.
- 2 Perimeter walls and fences, gates and portals should be designed to complement the overall villa design.
- 3 Perimeter wall and fence on the main frontage could have medium to high levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.
- To embed other elements which are frequently part of the plot.

## 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.



Parapet Type A



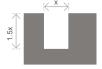
Parapet Type B



Parapet Type C



Parapet Type D



Parapet Type E



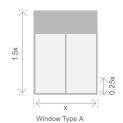
Parapet Type F

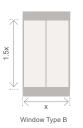
#### 3.4 Roofscape

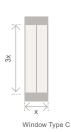
- 1 Roof should be completely flat and may be accessible through external circulation. Parapets should maintain a distinct rectilinear form, with groups combining to form a staggered roofscape.
- 2 Parapets should display abstract interpretations of vernacular
- 3 Vertical volumes may feature articulated top element / parapets using local patterns and variation in materials.
- 4 Rooftop elements should be screened and set back from the parapet / building facade. Utilities on the roof should be minimized to allow for other uses. Exceptions may be allowed where the parapet is higher and can conceal 'rooftop elements' from view.

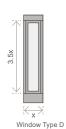
To create functional roof spaces and roofscapes which embrace the typical characteristics of the local area.









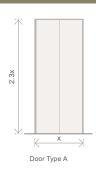


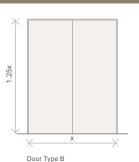
#### 3.3 Windows and openings

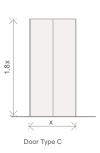
- 1 Generally, openings should consist of simple geometry. Opening surrounds may be recessed or projected from the main facade.
- 2 Openings may be enriched with window shutters interpreting the local carving patterns.
- 3 Opening should follow locally symmetrical alignments.
- 4 Generally windows should have proportions of 1:1.5 1:3. Informal groupings; alignments related to interior room layouts rather than external facade composition.

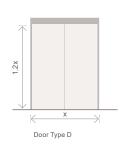
To respond to climate considerations and provide an aesthetic treatment which is distinct to the local area.









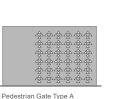


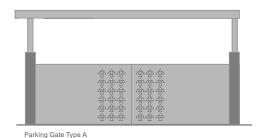
#### 3.2 Doors and entrances

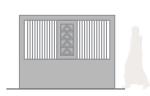
- 1 Primary entrances should be clearly defined as part of a wellordered street frontage.
- 2 Entrances may feature highlighted entrances with articulated door shutters interpreting carving patterns and colors used in local art.
- 3 Columns, colonnades should be encouraged for active frontages
- 4 Canopies and awnings may be included to highlight entrances and

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









Perimeter Wall Type A

### 3.1 General details and considerations

- 1 Local art and patterns should be integrated in design composition, mainly for opening shutters, columns, and parapets, generally between 10% to 20% of total facade surface.
- 2 Perimeter walls and fences, gates and portals should be designed to complement the overall villa design.
- 3 Perimeter wall and fence on the main frontage could have medium to high levels of transparency. Side / back boundary wall may have low, medium or high levels of transparency.
- To embed other elements which are frequently part of the plot.

## 4.0 Colors and Materials

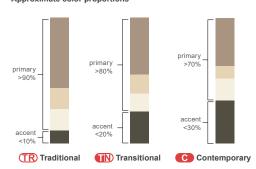
#### 4.1 Colors

The color palette of the Sarawat Mountains is closely linked to traditional building materials such as local stone, wood and white stone highlights. The surrounding landscape is also an important influence, particularly the shadows and ridges that play with the depth in tones of the Sarawat Mountains.

- 1 TR The walls should have a beige / brown color similar to the local stones, off white colors derived from the plastered walls and white color for highlighted elements similar to the white stone used in traditional architecture.
- 2 Generally, use natural colors and finishes for the main body of the building with occasional use of brighter colors for accents on specific elements.
- 3 A maximum percentage of accent color, measured as a percentage of the total facade area, is allowed for each style:
- (TR) <10%
- (1N) <20%
- · C <30%
- 4 Avoid using brightly colored, mirror-like reflective glass for windows that does 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/





Local stone





cladding











Stone patterns



Marble



Quartz









Terrazzo



Concrete







Mud bricks



bricks

Compressed



timber

Polished



Wood finish Stainless powder coating steel

Wood window shutters



Wood panels

Aluminum

#### 4.2 Materials

This palette summarizes the prevalent materials found in the architecture of the Sarawat Mountains.

- 1 (TR) The six large images reflect materials used in traditional architecture; new traditional style buildings should employ these materials as faithfully as possible. At least 80% of the facade should be composed of one consistent material.
- 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.
- 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

3 When designers can't utilize original materials, they might

4 Local and sustainable sourced materials should be 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.

To respond to the landscape and architectural character.

## 5.0 Patterns

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

#### 5.1 Patterns

New buildings should:

- Create patterns through the use of local materials and craftsmanship.
- 2 Where multiple decorative patterns are applied across a single facade, these should be complementary.
- TR Focus the use of surface patterns to doors, window screens and shutter doors.
- TR Refer directly to historic precedents and be limited to geometric patterns. Decorative patterns should not exceed 10% of the total facade area.
- TN The transitional use of patterns should be inspired from historic precedents while preserving the balance, rhythm and movement of traditional patterns. Decorative patterns should be between 10% to 15% of the total facade area.
- C The contemporary use of patterns should interpret and abstract from historic precedents while maintaining a degree of balance. Decorative patterns should be between 10% to 20% of the total facade area.
- 3 The 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)
- 4 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.

To encourage contextually sensitive contemporary design.









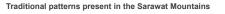
Patterns

















V1.0

## 6.0 Public Realm

This section focuses on the contributions of single-family residential villas 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

- Select robust materials for longevity, easy cleaning, repair, and sourcing.
- 2 Materials should provide varying textures within a simple color palette to compliment the area's architectural character.

The materials palette has been designed to be simple and sensitive to the existing character area.





#### 6.2 Vehicular access

- 1 Sidewalk must be accessible from the entrance without projecting stairs or ramps into the public space
- 2 Safe interaction between pedestrian and vehicular areas including legibility and clear zoning of paving materials.

Primary routes allow for full vehicular access, while Barahas / Sahas have restricted access, and Zuqaqs have no access.



#### 6.3 Parking

For parking area within the private property ownership:

- 1 Legible, universally accessible, and safe link between parking and destinations should be planned.
- 2 Planting should respond to shading and screening where
- 3 The design of parking bays should be integrated with the landscape design, with coordinated surface materials.

### Trees











6.4 Planting











#### 6.5 Signage

- 1 Signage must be well-integrated and coordinated within the overall architectural composition (form, proportion, scale, color, material, surface, size of sign and lettering).
- 2 Signage should always be placed on the main frontage, near the main entrance.
- 3 Signage should be easily legible from the street, and unobstructed



#### 6.6 Lighting

- 1 Architectural lighting should target color temperatures in the 2200K-2700K range for comfort and good color rendering.
- 2 Utilize lighting temperature to differentiate routes and define in between characters.
- 3 Utilize modern lighting that is low energy, low heat, and dust
- 4 Lighting design should be consistent and comply with the general theme and character of the area.







#### 6.7 Street furniture

- 1 Carefully selected to provide continuity, coordination and
- Consider consistency of design (furniture family).
- 3 Be integrated into the public realm, flexible and movable where required.
- 4 Be easily maintained and repaired with easily available / replaceable components.

























1 Planting should be limited to xeriscape solutions within urban

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



#### 7.1 Inappropriate materials

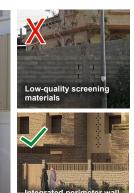
- 1 Use durable and quality materials that give the building authenticity, texture and mass while adhering to recommended material palette.
- 2 Do not use building materials alien to the tradition such as metal cladding and high reflectivity and colored glass.
- 3 Do not use low-quality building materials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



#### 7.2 Non-contextual colors

- Do not use non-contextual bright and artificial colors that detract from the natural landscape and local architecture of the Sarawat Mountains
- 2 Have limited colors to generate a harmonious appearance of the building.
- 3 Use a spectrum of earth tone colors adhering to the recommended color palette that perfectly harmonize with each other.





#### 7.3 Screens and closures

- 1 Have all exterior walls and perimeter walls designed to be fully integrated with the overall architectural composition.
- 2 Do not use substandard / low-quality materials such as exposed precast concrete, plastic or metal sheets.
- 3 Do not use exterior surface-mounted rolling shutters.
- 4 Do not have bulky and unarticulated fences





### 7.4 Superficial traditional elements

- 1 Do not use neo-traditional elements that don't reflect the genuine local architecture such as non-contextual architectural shapes, elements and styles, mere replicas with wrong proportions and decorations.
- 2 Reflect and interpret traditional elements sensitively. Have a selective emphasis of characteristics to create meaning and beauty in its new context.



#### 7.5 Projecting and shading elements

- Avoid having buildings generally lacking shading and projecting elements.
- 2 Avoid shading elements that are not integral to the building and public realm.
- 3 Incorporate light shading structures used as characterdefining features to reflect the architectural style or theme consistent with other facade elements. Have shading elements such as screens and awnings be of solid but light (perforated) appearance.





#### 7.6 Exposed service elements

- 1 Avoid uncoordinated and exposed conduits, machinery, ducts, water tanks, pipes, wires, satellite dishes and other utilities.
- 2 All site building services, utilities and mechanical equipment visible from the main road should be hidden / screened from view with the help of landscaping / enclosures.
- 3 Any rooftop equipment should be setback from the edge of the building and properly screened behind the parapet or enclosure.



### 7.7 Topography

- 1 Respect the natural terrain, flattening of slopes should be
- 2 General slopes should be stabilized with rip-rap or terracing
- 3 Generally, large retaining walls should be avoided or treated in an appropriate way that does not cause a visual pollution.

V1.0



Parapets highlighted with decorative friezes featuring traditional patterns



Window openings highlighted with stone sills and heads



3 Special elements such external staircases



4 Perimeter wall complementing the overall building design in terms of material, color and use of patterns



## 8.0 Traditional Small Residential Villa Worked Example

The massing and design of elements adopt traditional forms and patterns, traditional architectural elements and decorations, and traditional materials and colors in a sensible way.

Building massing features thick stone walls, simple orthogonal openings, carved wooden columns, projecting staircases and articulated parapets.

The building displays a plain, simple form with solid facades and recessed / punched openings. Windows are framed by stone sills and heads (or

their equivalent), and timber shutters decorated with traditional carvings.

Roof parapets are highlighted with decorative friezes featuring triangular patterns with alternating white and local stones (or their equivalent).

Shading structures are supported with carved wooden columns with broad heads and decorated with traditional patterns, and rooftops are accessed through external projecting staircases, both of which are distinct features of the Sarawat Mountains.

Stone (or its equivalent) is used as the primary material and patterns are used to highlight door, windows and shutters.

Perimeter walls and gates are integral to the overall design of the building and are articulated using traditional patterns and landscape.

Parking structure is integral to the perimeter wall design.

40



Parapet highlighted with decorative friezes featuring traditional patterns



2 Window openings highlighted with stone sills and heads



3 Special elements such as external staircases



4 Articulated perimeter wall and gates



## Traditional Large Residential Villa Worked Example

The massing and design of elements adopt traditional forms and patterns, traditional architectural elements and decorations, and traditional materials and colors in a sensible way.

Building massing features thick stonewalls, simple orthogonal punched openings, use of carved wooden columns, projecting staircases and articulated parapets. Roof parapets articulations are in the form of crenelations, simple parapets, and triangular pattern using alternation of white stone and local stone, or their equivalent.

Building facades have a horizontal form with balance of vertical volumes. Facades have localized symmetries. Window openings follow internal room functions, not necessarily aligned with lower and upper floors. Windows have highlighted sill, lintel and timber shutters with traditional carvings.

Materials used for buildings feature stone, or its equivalent, as a primary material. Patterns from traditional architecture are used to highlight elements like doors, window and shutters.

Wooden columns with broad heads and carved with traditional geometric patterns are used to support shading structures. External projecting staircases are used to access rooftops. Both of these elements are distinct feature of the Sarawat Mountains.

Perimeter walls and gates are integral to the overall design of the building and are articulated using traditional patterns and landscape. Parking structure is integral to the perimeter wall design.





1 Articulated parapet



2 Window openings highlighted by sills and lintels



3 Special elements such as external staircases



8.0 Transitional Small Residential Villa Worked Example

The transitional model is a progression of the traditional form, which allows simplified and less 'crafted' detail. Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

The building displays a simple, plain and solid form, characterized by thick stone walls punctuated by orthogonal openings.

Recessed windows, aligned across floors, are framed by sills and lintels and adorned with timber

shutters featuring interpretations of traditional motifs.

Roof parapets are simple and highlighted by white stone or similar material for parapet coping.

Integrated external staircases serve as prominent features, offering access to rooftops and showcasing distinct features of the Sarawat Mountains.

Stone, or equivalent material, and plaster are predominantly used, complemented with patterns used to highlight doors and windows.

Perimeter walls and gates are integrated into the overall design and achieve a balance between privacy and openness. Interpretations of traditional patterns further enhance their aesthetic.

The parking structure is seamlessly integrated into the perimeter wall design, creating a cohesive whole.

4 Perimeter wall complementing the overall building design in terms of material, color and use of patterns



V1.0



Simple parapets featuring indentations



2 Recessed windows with highlighted lintels



3 Special elements such as projecting staircases



4 Articulated perimeter wall and gates



## Transitional Large Residential Villa Worked Example

The transitional model is a progression of the traditional form, which allows simplified and less 'crafted' detail. Many of the traditional features remain present, but some variations signal an evolution and reinvention of specific elements.

Building massing features thick walls, simple orthogonal recessed openings, use of patterns to articulate facade, external staircases and articulated parapets. Roof parapets feature interpretations of simple traditional parapets using white color / stone or its equivalent for parapet coping.

Building facades have a balance of horizontal and vertical volumes. Facades have localized symmetries. Window openings are recessed and aligned with lower and upper floors. Windows have highlighted lintels, overhead panels and timber shutters with interpretations of traditional geometric patterns.

Materials used for buildings are stone, or its equivalent, and plaster as finish material. Patterns interpreted from traditional architecture articulate external walls.

External staircase integrated within the overall design of the facade is used as a highlight element to access rooftops, showcasing distinct feature of the Sarawat Mountains.

Perimeter walls and gates are integral to the overall design of the building, display balance of privacy and transparency and are articulated with traditional patterns. Parking structure is integral to the building and perimeter wall design.





 Simple parapet featuring indentations



2 Recessed windows highlighted with lintels and slightly recessed overhead panels



3 Special elements such as projecting staircases



4 Perimeter walls and gates complementing the overall building design in terms of materials, colors and patterns



## 8.0 Contemporary Small Residential Villa Worked Example

The form and style of contemporary buildings should distill the essential qualities and values of vernacular architecture in a new contemporary expression and address the needs of contemporary living, reflect the changes in construction and availability of skills and materials, yet respect and celebrate the local natural character and traditions.

The massing features thick stonewalls, simple orthogonal recessed openings, external staircases and articulated parapets.

Building facades have localized symmetries with recessed window openings, generally aligned with lower and upper floors. Windows are highlighted with projecting lintels and slightly recessed overhead panels. Roof parapets are simple, in continuation with the external walls features indentations as highlights.

External staircases integrated within the overall design of the facade are used as a highlight element to access rooftops, showcasing distinct features of the Sarawat Mountains

The primary materials used for buildings are earth tone colors with stone finish, or equivalent. Traditional motifs are reinterpreted and abstracted to emphasize elements such as doors and window shutters, and exterior wall treatments.

Perimeter walls and entrance gates complement the overall building design in terms of materials, colors and patterns. Garage is incorporated within the overall building massing.

V1.0



1 Simple parapets



Windows with projecting and highlighted lintels



3 Special elements such as projecting staircases



4 Patterns abstracted from traditional architecture



## 8.0 Contemporary Large Residential Villa Worked Example

The form and style of contemporary buildings should distill the essential qualities and values of vernacular architecture in a new contemporary expression and address the needs of contemporary living, reflect the changes in construction and availability of skills and materials, yet respect and celebrate the local natural character and traditions

Building massing features thick walls, simple orthogonal recessed openings, external staircases and articulated parapets.

Roof parapets are simple, in continuation with the external walls. Building facades have a balance of horizontal and vertical volumes with localized symmetries. Window openings are recessed and generally aligned with lower and upper floors. Windows have highlighted projecting lintels and timber shutters.

Materials used for buildings are earth tone colors with stone finish, or its equivalent, used to highlight elements. Patterns abstracted from traditional

architecture are used to highlight elements like door and window shutters and to articulate external walls.

External staircase integrated within the overall design of the facade is used as a highlight element and to access rooftops.

Perimeter walls and entrance gates feature wood, stone, or their equivalent, and plaster as finish materials and articulated using patterns abstracted from traditional art. Garage is incorporated within the overall building massing.