



USAID
FROM THE AMERICAN PEOPLE

Supporting Accelerated Investment in Sri Lanka (SAIL) Project

Design Guideline

Minimum Design Requirements for a Tourist Accommodation Facility

Developed for the Investor Relations Unit of
Sri Lanka Tourism development Authority (SLTDA)

January 23, 2021

This publication was produced by International Development Group LLC, for review by the United States Agency for International Development.

Supporting Accelerated Investment in Sri Lanka (SAIL) Project

Design Guideline - Minimum Design Requirements for a Tourist Accommodation Facility

Developed for the Investor Relations Unit of Sri Lanka Tourism development Authority (SLTDA)

Contract Number: AID-OAA-I-12-00042/AID-383-TO-17-00001

January 23, 2021

Submitted by:

International Development Group LLC
1100 North Glebe Road, Suite 950
Arlington, VA 22201
Phone: +1 (571) 336-7980
Fax: +1 (571) 336-7998

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Design Guideline – Minimum Design Requirements for a Tourism Accommodation Facility

Background:

The Design Guideline - Minimum Design Requirements for Tourism Accommodation Facility is a comprehensive guide for designers, builders, and investors of tourism accommodation facilities. The Design Guideline is also a guide to the officials for reviewing architectural designs and ensuring that the proposed design of a tourism facility meets minimum design requirements. The guidelines are intended to cover the minimum design requirements relating to tourist accommodation facilities, to help designers and builders to create facilities which are functional and aesthetically acceptable by tourists, but to also leave space for designers to come up with innovative and creative ideas.

Purpose:

To cater to the needs of designers-investors-builders involved in development and design of tourist accommodation facilities and to address the minimum design standards and norms needs based on the existing regulations (Gazette or Guideline), local building tradition and best international practices.

Rationale:

Before the USAID SAIL project: There is no unified Sri Lankan standard code of practice available to enforce complete spectrum of design, construction, and compliance requirements for building. Designers and builders of tourism accommodation facilities lack standards as reference to pursue with efficient and internationally accepted architectural designs. Also, the process of obtaining a tourist facility construction permit is complex due to the lack of minimum design requirements.

Now with the support of the USAID SAIL project: Investors, designers and builders will have access to the minimum design requirements for tourist accommodation facilities which are also acceptable by the authorities. The Design Guideline will fill the vacuum of appropriate standards to cater to immediate needs. The guideline will help designers and builders to create facilities which are functional and aesthetically acceptable. Additionally, these guidelines will also serve the investors as initial planning tool to define the type, size, and preliminary cost of the tourism project.

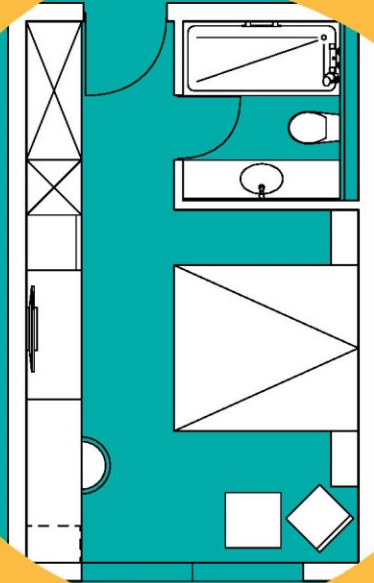


Version 1.0 – Subject to input and comments from stakeholders
Approved: 23 January 2021

DESIGN GUIDELINE TOURIST ACCOMMODATION FACILITIES

SRI LANKA

Hotel 1* - 2*
Minimum requirements
Guestroom = 17m²
Bathroom = 3.7 m²



INVESTOR RELATIONS UNIT



SRI LANKA TOURISM DEVELOPMENT AUTHORITY

TABLE OF CONTENT

1. INTRODUCTION.....	1
1.1 BACKGROUND.....	1
1.2 OBJECTIVES OF THE GUIDELINES.....	2
1.3 HOW TO USE THESE GUIDELINES.....	2
1.3.1 GENERAL OUTLINES.....	2
1.3.2 SUBJECT OUTLINES.....	3
1.3.3 MODELS AND TECHNICAL SUMMARY SHEETS.....	3
1.4 TOURIST ACCOMMODATION FACILITY TERMINOLOGY AND ARCHITECTURAL TERMS.....	4
1.4.1 TOURIST ACCOMMODATION FACILITY TERMS.....	4
1.4.2 ARCHITECTURAL/ENGINEERING TERMS.....	4
1.5 TOURIST CLASSIFICATION SYSTEM IN SRI LANKA.....	5
1.5.1 TOURIST ACCOMMODATION FACILITIES <i>GAZETTED</i> AND GUIDELINES APPROVED BY THE BOARD.....	7
1.5.2 CLASSIFICATION CHARACTERISTICS BASED ON FACILITY REQUIREMENTS.....	7
1.6 DEVELOPMENT CONDITIONS AND SETBACKS.....	9
1.6.1 CCD REGULATIONS.....	9
1.6.2 UDA – GENERAL DEVELOPMENT AND BUILDING REGULATIONS.....	13
1.6.3 UDA – DEVELOPMENT CONDITIONS OF THE CITY OF COLOMBO DEVELOPMENT PLAN.....	24
2. DESIGN CONCEPTS.....	29
2.1 ARCHITECT’S BRIEF.....	29
2.1.1. ORIGIN AND STATUS OF THE BRIEF.....	29
2.2 DESIGN CONCEPT AND INSPIRATION.....	32
2.3 TOURIST ACCOMMODATION FACILITY AREAS.....	35
2.4 THE SITE.....	38
2.5 THE GUESTROOMS.....	40
2.6 THE DINNING ROOM – RESTAURANT AND ITS COMPONENTS.....	50
2.6.1. RESTAURANT.....	52
2.6.2. KITCHEN.....	54
2.6.3. STAFF LOCKERS, BATHROOMS AND CHANGING AREA.....	55
2.7 ENTRANCE, LOBBY OR HALL.....	58
2.8 SERVICES AND ADMINISTRATION.....	59
2.9 EXTERNAL SPACES.....	60
2.10 COST AND BUDGET PARAMETERS.....	60
3 GENERAL PRINCIPLES.....	61
3.1 TECHNICAL NORMS.....	61
3.2 COMFORT PARAMETERS.....	61
3.2.1 CLIMATIC COMFORT (TEMPERATURE).....	61
3.2.2 VISUAL COMFORT.....	64
3.2.3 ACOUSTIC COMFORT.....	66
3.3 SAFETY PARAMETERS (TO BE COMPLETED).....	68
3.3.1. ACCESSIBILITY.....	68
3.3.2. FIRE PROTECTION SYSTEMS AND REGULATION.....	69
4. GREEN BUILDING DESIGN.....	71
4.1 LOCATION ORIENTATION VENTILATION RENEWABLE ENERGY.....	71
4.1.1. LOCATION.....	71
4.1.2. ORIENTATION.....	74
4.1.3. VENTILATION.....	74
4.1.4. RENEWABLE ENERGY.....	75

4.1.5. WATER CONSUMPTION 76

ANNEXES, TABLES AND ILLUSTRATIONS

LIST OF ANNEXES

Annex 1 –Accommodation Schedule Hotel 1-3* – Sample.....	80
Annex 2 –Accommodation Schedule Hotel 4-5* – Sample.....	81
Annex 3 –Accommodation Schedule Boutique Hotel – Sample.....	82
Annex 4 –Accommodation Schedule Boutique Villa – Sample.....	83
Annex 5 –Accommodation Schedule Guest House – Sample.....	84
Annex 6 –Accommodation Schedule Home Stay – Sample.....	85

LIST OF TABLES

Table 1 –Minimum design standards requirements for tourist accommodation facilities set forth in the Gazette regulations and Board-adopted Guidelines Classification.....	8
Table 2 –Access to nonresidential buildings (tourist accommodation facilities).....	13
Table 3 –Specifications as to building lines.....	17
Table 4 –Maximum lot coverage.....	20
Table 5 –Parking space standards.....	22
Table 6 –Width of aisles of parking stalls (one way traffic)	23
Table 7 –Form C1- Specification for Development -The Minimum land extent, width between building Lines, minimum width of private roads and maximum permissible floor area ratios ..	27
Table 8 –Form C2- Specification for Development Building categories, number of floors, minimum site frontage, maximum plot coverage and open spaces around the building	28
Table 9 –Sample of the Space Allocations	31
Table 10 –Hotel area taken by each function.....	32
Table 11 –Gross area per room in various categories of hotel.....	32
Table 12 –Average light reflection factors	64
Table 13 –Comparative lighting value in Lux	65
Table 14 –Rooms	66
Table 15 –Albedo index (the higher the index, the better the material is on reflecting excessive light/heat).....	73
Table 16 –Heat capacity in different materials.....	75

LIST OF ILLUSTRATIONS

Figure 1 – <i>Costal Conservation Zone Map prepared by National Physical Planning Department</i>	10
Figure 2 – <i>Costal Conservation Zone prepared by National Physical Planning Department</i> ...	11
Figure 3 – <i>Flood prone area –Permanent construction shall not be allowed in prohibited zone (annual flood prone area); Limited constructions could be allowed in restricted zone</i>	11
Figure 4 – <i>Costal zone – no permanent constructions are allowed within setback limits set by CCD</i>	12
Figure 5 – <i>Near water bodies (river, stream, lagoon, lake) forest and wildlife reserves</i>	12
Figure 6 – <i>Costal zone sand dune – constructions should be adopted to the natural characteristics and functions of dunes, minimizing rigid structures in front of the dune</i>	12
Figure 7 – <i>No site or lot abutting a street less than 9m in width shall be used for non-residential use or construction of any building for such use expect as provided under regulation 16 (2) (b).</i>	13
Figure 8 – <i>Every such street shall connect on to a public street which is not less than 7m in width or a private street of which the owner of such private street has a right of way which is not less than 7m in width</i>	14
Figure 9 – <i>A street meant to serve one or more lots for construction of any building for non-residential use may be permitted with access less than 9m in width and shall be in conformity with the specification set out in Form “B” of schedule (III).</i>	14
Figure 10 – <i>Every street which is less than 9m in width and exceeds thirty meters in length, shall be provided with a turning circle of not less than 9m in diameter at the dead end</i>	15
Figure 11 – <i>Every lot or site which abuts on to the end of dead – end Street may have a frontage less than the width in Form “C” of Schedule (III), but have a frontage which is not less than 3 meter wide perpendicular to the line of the street.</i>	15
Figure 12 – <i>The maximum height of a building on an existing lot which is 6m or less in width and or as less than 150 m² in extent shall exceed 7.5m or two floors unless the authority directs otherwise.</i>	16
Figure 13 – <i>The maximum height of a building in other case not being a high-rise building shall not exceed 15m or twice the distance the between any story of a building and the further edge of the abutting street; whichever is less</i>	16
Figure 14 – <i>If the lot is situated in a corner, the height of the building shall be regulated by the wider of such streets so far as it abuts or will abut on the narrower street to a depth of 20 m from the wider street.</i>	17
Figure 15 – <i>The building line for every lot on the side abutting the street shall be in conformity with specification and categories set out in Form “D” of schedule (III) and shall be determined according to whether the street onto which it abuts is categorized as a local, secondary or principal street by the authority.</i>	18
Figure 16&17 – <i>In the case of local roads, a lesser width than what is stipulated in Form “D” of schedule (III) may be permitted provided that such a reduced width is in conformity with the development plan approved for the area or the development plan propose the area</i>	18

Figure 18&19 – <i>There shall be in the rear of every building and belonging exclusively to it an open space of not less than 3m extending along the entire width of the building unless the rear of the building abuts on to a public street not less than 7m in width.....</i>	20
Figure 20 – <i>Provided that where the building consists of a ground floor and the first floor only and no further stories are proposed to be added, width of such rear open space may be reduced to 2.25m.....</i>	21
Figure 21 – <i>Parking lot types.....</i>	23
Figure 22 – <i>Parking size: regular and wheelchair</i>	24
Figure 23 – <i>Zoning plan of the City of Colombo</i>	25
Figure 24 – <i>The 6th zones of the city of Colombo where tourist accommodation facilities are allowed</i>	26
Figure 25 – <i>Functional zones in different hotel shapes: a) Block, b) Solitary (central lobby), c) Block with central lobby, d) Star.....</i>	37
Figure 26 – <i>Minimal room height in guestrooms.....</i>	40
Figure 27 – <i>Guestroom inventory</i>	42
Figure 28 – <i>Sample of the guestroom layout based on the minimum requirement set in Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines.....</i>	43
Figure 29 – <i>Sample of the guestroom layout based on the minimum requirement set on - Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines</i>	44
Figure 30 – <i>Sample of the guestroom layout based on the minimum requirement set in Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines</i>	45
Figure 31 – <i>Various samples of guestroom layouts</i>	46
Figure 32 – <i>Various samples of the guestroom layouts.....</i>	47
Figure 33 – <i>Sample of the Guestroom inventory.....</i>	48
Figure 34 – <i>Anthropometric measurements.....</i>	49
Figure 35 – <i>Dimensioning the area for the restaurant based on the furniture dimensions and anthropometrics.....</i>	52
Figure 36 – <i>Square table: square layout local density 1.4m²; Sample layout of organizing restaurant furniture - 1.4m²and 0.9m²/per guest</i>	53
Figure 37 – <i>Square table: diagonal local density 1.2m²..... Error! Bookmark not defined.</i>	
Figure 38 – <i>Circular table: diagonal layout local density 0.82m².....</i>	53
Figure 39 – <i>An example of organization of (a big restaurants’) kitchen</i>	54
Figure 40 – <i>Lockers.....</i>	57
Figure 41 – <i>Showers and bathrooms.....</i>	57
Figure 42 – <i>Thermal comfort: cross ventilation.....</i>	63
Figure 43 – <i>Thermal comfort: Sun protection</i>	64
Figure 44 – <i>Wheelchair dimensions corresponding to adult average.....</i>	69
Figure 45 – <i>The effects of topography on wind and ventilation.....</i>	72
Figure 46 – <i>SuDS – Sustainable Drainage System</i>	77

LIST OF DIAGRAMS

Diagram 1 – <i>Functional zones relationships</i>	35
Diagram 2 – <i>Functional zones of tourist accommodation facility</i>	36
Diagram 3 – <i>Diagram of a typical hotel</i>	38
Diagram 4 – <i>Process of the site analyses</i>	39
Diagram 5 – <i>Functional zones of the Restaurant</i>	51
Diagram 6 – <i>Functional scheme of a small restaurant</i>	51



1. INTRODUCTION

1.1 BACKGROUND

The Sri Lanka Tourism Development Authority (SLTDA), as the government authority tasked with planning, development, regulation, and policy implementation for tourism and related industries, has initiated the formulation of basic guidelines to be used by prospective tourist accommodation facility designers and builders. As the principal facilitator for tourism developments, SLTDA - IRU has come forward to shoulder the responsibility of helping potential investors of tourism accommodation facilities to create sustainable and standardized accommodation facilities for tourists that are environmentally sustainable and locally integrated.

These guidelines have been prepared for Sri Lanka Tourism Development Authority (SLTDA) by Merita Behluli, consultant architect as part of the USAID Project - Supporting Accelerated Investment in Sri Lanka (SAIL) with the assistance of a team of professionals from SLTDA Investor Relation Unit (IRU) and the support of the SAIL management unit, implemented by International Development Group LLC (IDG). The team also worked closely with the other Sri Lanka government institutions and the private sector that provided valuable guidance during the preparation of the document.

The primary purpose of these guidelines is to cater to (i) the needs of designers-investors-builders involved in development of tourist accommodation facilities in Sri Lanka; and (ii) the need to address minimum design requirements based on the existing regulations (*Gazette* or *Guideline*), local building tradition and best international practices.

In the present context, these guidelines will only be a stop-gap measure intended to fill the vacuum of appropriate standards to cater to immediate needs. The guidelines are intended to cover the minimum design requirements relating to tourist accommodation facilities, to help designers and builders to create facilities which are functional and aesthetically acceptable by tourists, but also to leave space for designers to come up with innovative and creative ideas.

Minimum design standards are based on the current regulatory framework, best international practices and local tradition and culture. Combining the best international design standards and the local way of building will make tourist accommodation facilities of the island more attractive, which will contribute to overall tourism growth for the country. “Glocal” (i.e. simultaneously global and local) design lies in the successful integration of contextual understanding and local wisdom with the current trend of global homogeneity in design.

When the tourism industry is seeking for global expansion, it needs to transform tourist accommodation facilities in a way that is both globally appealing and locally accepted. Architecture design is the first step in leading the way towards those aspirations.

1.2 OBJECTIVES OF THE GUIDELINES

This document is intended to serve as a reference for designers of tourist accommodation facilities. It defines and describes the tourist accommodation spaces needed by type, size and specifications according to the existing regulations and best international practices.

The guidelines will facilitate an understanding not only of the physical tourist accommodation spaces required, but also of the factors affecting their design and the quality of the environment to be achieved, within and around the buildings.

The guidelines include development conditions and the room specific data for all types of tourist accommodation facilities, including guest spaces such as ordinary guestroom and dining facilities, support spaces such as service and administrative areas, and external activity spaces such as playgrounds, sport areas, access and parking. It can be used for a number of different purposes and at a number of different levels, including:

- a)** Design of a new tourist accommodation facility
- b)** Design of extensions to an existing tourist accommodation facility
- c)** Rehabilitation of an existing tourist accommodation facility

1.3 HOW TO USE THESE GUIDELINES

1.3.1 GENERAL OUTLINES

Preparation of the standards, specifications, and guidelines included in this document are based upon the following data:

- a)** The existing regulations for tourist accommodation facilities in Sri Lanka¹;
- b)** Sri Lanka Urban Development Authority planning and building regulations (1986)²;
- c)** The City of Colombo Development Plan³;
- d)** Coastal Zone Management Plan;
- e)** The Megapolis – Western Region Master Plan – 2030 Sri Lanka;
- f)** Professional literature related to tourist accommodation facilities standards;
- g)** National Physical Planning Policy – The Plan 2017 – 2050⁴; and
- h)** National Physical Development Plan of Sri Lanka – 2030⁵.

The proposed standards and guidelines of this handbook shall not be considered as mandatory rules but more as recommendations that can be modified due to specific conditions, such as

¹ <https://www.uda.gov.lk/building-regulations.html>

² https://www.uda.gov.lk/attachments/devplan_detailed/for_public_comments/General%20Regulation-%20Report_2018.11.08.pdf

³ <https://www.uda.gov.lk/cms/storage/acts/q31LejWXNw.pdf>

⁴ https://drive.google.com/file/d/1TBgPtGfXOJmTn_vVAmGtJU9AiMckp0/view

⁵ http://www.ccisrilanka.org/wp-content/uploads/2019/02/national_plan_2011-2030.pdf

the site dimensions and topography or the building extension possibilities, and innovative and creative design ideas.

Mandatory norms are only those specified through legislation, duly adopted regulations, or approved by a government body.

Likewise, the sketches and drawings of the proposed typical spaces included in these guidelines are not meant to restrict designers from providing other alternatives and solutions for shapes (dimension and area) and arrangement of the spaces within the same requirements.

1.3.2 SUBJECT OUTLINES

The design guidelines of this document are distributed in two specification categories: (i) general and specific concepts, parameters and norms; and (ii) technical summaries with samples and guidelines for each type of tourist accommodation facility. This distribution allows the reader to collect information at two different levels corresponding to the two chapters of the guidelines:

a) General data and guidelines

- (i) Design concepts; and
- (ii) General principles.

b) Specific development conditions

- (i) Guidelines and samples of site development conditions;
- (ii) Guidelines and samples of internal spaces;
- (iii) Guidelines and samples of external spaces; and
- (iv) Guidelines and samples of guestrooms.

1.3.3 MODELS OF ACCOMMODATION SCHEDULE SHEETS

Each accommodation schedule sheet gives all necessary standards, parameters and elements for internal spaces of each tourist accommodation facility including:

- a)** Dimensions and surface areas corresponding to the accommodation schedules;
- b)** Space and activity requirements; and
- c)** Space requirements and functional scheme.

This document will be periodically updated to reflect new or revised policies and requirements established by SLTDA.

1.4 TOURIST ACCOMMODATION FACILITY TERMINOLOGY AND ARCHITECTURAL TERMS

The vocabulary used by authorities, tourism specialists and technicians of both public and private sectors includes terms that may not be the same for everyone. The present guidelines employ the terminology generally used in current legislation for tourist accommodation facilities.

1.4.1 TOURIST ACCOMMODATION FACILITY TERMS

- a)** Tourist accommodation facility - denotes a system, duly regulated by regulations (Official Gazette) or approved Guidelines, for different types of tourist accommodation categories or grades according to their physical and service characteristics;
- b)** Tourist Hotel - means an establishment or place which provides or holds itself out as providing to tourists for fee or reward sleeping accommodation with or without food and has not less than ten bedrooms;
- c)** Guest House - means an establishment or place which provides or holds itself out as providing to tourists for fee or reward sleeping accommodation with or without food and has not less than five bedrooms;
- d)** Boutique Hotel - is an establishment which contains luxury facilities in a unique and intimate setting and provides a highly personalized service to the guests and has not less than ten bedrooms;
- e)** Boutique Villa –also referred to as a small luxury tourist hotel, is an establishment which contains luxury facilities in a unique and intimate setting and provides a highly personalized service to the guests and has not less than ten bedrooms but not exceeding 50 rooms;
- f)** Home Stay - A home stay is a community based tourism program which is initiated with the objective of distributing the tourism benefit to a fair cross-section of the society by preparing houses/accommodation units carrying various themes, bringing out Sri Lankan authenticity, located in various destinations within Sri Lanka, with suitable quality standards befitting the purpose of accommodating tourists, intending an interaction between the local community with the tourists giving opportunity to the tourist to experience Sri Lankan way of life. Has not less than one bedroom but not exceeding 9 rooms;
- g)** Guestroom – a room in a tourist accommodation facility dedicated for the guests to sleep in;
- h)** Dining room – a room in a tourist accommodation facility where guests have meals;
- i)** Lobby - a room in a tourist accommodation facility used for entry from the outside that usually has corridors and staircases leading off it. A lobby is sometimes referred to as reception area or an entrance hall.

1.4.2 ARCHITECTURAL/ENGINEERING TERMS

- a)** Site (Lot)- the land area upon which the tourist accommodation facility is located;
- b)** Guest area - the physical space in a tourist accommodation facility dedicated to guest activities;
- c)** Administrative area - the physical space in a tourist accommodation facility dedicated to administrative activities;

- d)** Service area - the physical space in a tourist accommodation facility dedicated to support both guest and administrative activities;
- e)** Circulation area - space allocated for horizontal and vertical movement within the building, such as entrance halls, corridors and staircases;
- f)** Climatic comfort - the environmental conditions under which tourist accommodation facility and its occupants can operate at maximum efficiency;
- g)** Acoustic comfort - the acoustic conditions under which tourist accommodation facility and its occupants can operate at maximum efficiency;
- h)** Hygienic environment - the general conditions of hygiene in a tourist accommodation facility that affect the level of comfort and health of the occupants. A hygienic environment depends on the physical condition of the sanitary facilities, water supply, water reserve and wastewater evacuation and treatment system that enable the tourist accommodation facility to operate efficiently and safely;
- i)** Orientation - the direction of a tourist accommodation facility, which is influenced by natural climatic factors such as sun and wind direction.

1.5 TOURIST CLASSIFICATION SYSTEM IN SRI LANKA

Since the Tourism Act, No. 38 of 2005 came into effect in October 2007, the Sri Lanka Tourism Development Authority (SLTDA) has been the government authority tasked with planning, development, regulation, and policy implementation of tourism and related industries. Prior to SLTDA being established in 2007, these functions primarily resided with the organization known as Ceylon Tourist Board / Sri Lanka Tourist Board / Sri Lanka Tourism Board.

Hotel classification was legally formulated in the Tourism Act of 1968. The legal structure that was required to regulate this area was also provided in the 2005 Act, such as appointment of the Hotel Classification Committee.

The Ceylon Tourist Board, SLTDA's predecessor, realized the need to formulate a classification scheme for tourist hotels based on the premise that the international traveler who visits a foreign destination for holiday or any other purpose is expecting acceptable standards in the facilities provided. The Board of Directors felt this was particularly important in the case of countries like Sri Lanka which were considered to be new markets in the travel industry. Hence, it set about to develop internationally accepted quality standards to compete successfully with other destinations.

Originally, the Board of Directors obtained criteria for classification from various foreign sources including the International Union (IU) of Official Travel Organization (IOTO) before establishment of the World Tourist Organization. Sri Lanka was one of the first South Asian countries to formulate criteria for classification of tourist hotels on a star class basis. The original classification scheme was created in the Tourist Hotel Code 1999 (Extraordinary *Gazette* No. 1070 / 10 – Thursday March 1999).

Updating the hotel classification scheme began in 2000 but the redrafting went on for a number of years. It was completed in 2010 but not published in the Official *Gazette* (i.e. adopted) until 2016.

Thus, while the new hotel classification scheme itself has only been used for a few years, the situation and theory giving rise to the current classification scheme is a decade old. The guest house classification scheme has not been updated since 1999. Efforts are underway now to update this system.

In addition to hotels and guesthouses, the classification scheme has expanded to include other types of tourism accommodation facilities, such as boutique hotels, boutique villas, and home stays. These new categories are being regulated through “Guidelines” adopted by the SLTDA Board of Directors.

Currently, SLTDA has a Standards & Quality Assurance Department that oversees classification of tourist accommodation facilities. It is mandatory to register all tourism businesses.⁶ To register a tourist accommodation facility, the classification requirements set forth in either the Gazetted regulations or Board-adopted Guidelines, must be met.

The status of registration categories of all tourism services in Sri Lanka is as follows:

- | | |
|--|--|
| a) Hotels - Classified / Unclassified | Gazette (No. 1963/28 of 20 th April 2016) |
| b) Boutique Hotels / Boutique Villas | Guideline approved by the Board |
| c) Guest Houses | Gazette (No. 1096/6 of 06 th September 1999) |
| d) Home Stay Categories | |
| (i) Home stay/Bungalows | Guidelines approved by the Board |
| (ii) Heritage Bungalows | |
| (iii) Rental Apartments | |
| e) Restaurants | Gazette (No. 1096/6 of 06 th September 1999) |
| f) Water Sports Centers | Gazette (No. 1096/6 of 06 th September 1999) |
| g) Travel Agencies | Gazette (No. 79 of 28 th September 1973) |
| h) Ayurvedic Hotels | Gazette (No. 2149/20 of 14 th November 2019) |
| Ayurveda Health Care Centers | Gazette (No. 2149/21 of 14 th November 2019) |
| i) Spa & wellness centers | Guidelines approved by the Board |
| j) Tourist Guide Services | Gazette (No. 2140/17 of 10 th September 2019) |
| National / Chauffer / | |
| Area / Site Guide | |

⁶ Tourism Act, No. 38 of 2005, Sections 48 - 54.

1.5.1 TOURIST ACCOMMODATION FACILITIES GAZETTED AND GUIDELINES APPROVED BY THE BOARD

The Tourism Act requires the standards for tourist accommodation facilities to be issued through an order by SLTDA, published in the Official Gazette and Guidelines approved by the Board. This Guideline takes into consideration only tourist accommodation facilities and no other tourist services either Gazette or Board-adopted Guidelines. Tourist accommodation facilities are classified based on a set of mandatory requirements for each type and star level. Gazette and Board-adopted Guidelines tourist accommodation facilities are:

- a)** Hotels - Gazette (No.1963/28 of 20th April 2016)⁷, and
- b)** Guest Houses - Gazette (No.1096/6 of 6th September 1999)⁸.
- c)** Boutique Hotels - Guidelines approved by the Board⁹
- d)** Boutique Villas - Guidelines approved by the Board¹⁰
- e)** Home Stays - Guidelines approved by the Board¹¹

1.5.2 CLASSIFICATION CHARACTERISTICS BASED ON FACILITY REQUIREMENTS

The guideline presents classification criteria for the areas which have an impact on the overall building design standards, rather than on service-related criteria. The areas of inquiry containing minimum requirements of each classification scheme of tourist accommodation facilities are presented in Table 1. These areas of inquiry vary across categories.

- a)** Location/site coverage ratio
- b)** Building height
- c)** Number of guestrooms
- d)** Guestroom size
- e)** Bathroom size

⁷ http://www.slt-da.lk/sites/default/files/Gazzete_2016_04_20.pdf

⁸ http://www.slt-da.lk/sites/default/files/Gazzete_2016_04_20.pdf

⁹ http://www.slt-da.lk/sites/default/files/Gazzete_2016_04_20.pdf

¹⁰ http://www.slt-da.lk/sites/default/files/Gazzete_2016_04_20.pdf

¹¹ http://www.slt-da.lk/home_stay_project

Table 1–Minimum design standards requirements for tourist accommodation facilities set forth in the Gazette regulations and Board-adopted Guidelines Classification

Area	Hotels	Boutique Hotels	Boutique villas	Guest houses	Home stay
Location ratio	High density area 120 rooms per hectare; medium density area 69 rooms per hectare; low density area 24 rooms per hectare	Spaciousness in the building land ratio	Max 24 room per hectare	The locality and the environment should be suitable for tourist guest houses	Not specified
Building height	Not specified	G+1	G+1 (or higher if elevator is provided)	Not specified	Not specified
Number of Guestrooms	10 (1-2 star) 30 (3-5 star)	10	Min 10 Max 50	Min 5	Min 1 - Max 4 (exceptional Max 9)
Guestroom size (m²)	17 (1-2 star) 22 (3-5 star)	30	30	Single 11.5 Double 13	Single 9.29 Double 11.14
Guestroom size min width (m')	3.0	3.0	3.5	Not specified	Not specified
No of Suites	1 (3 star) 2 (4 star) 3 (5 star)	Not specified	Not specified	Not specified	Not specified
Suite Size (m²)	45 (3 star) 45 (4 star) 65 (5 star)	Not specified	Not specified	Not specified	Not specified
Bathroom size(m²)	3.7	4.5	4.5	3.2	2.78
Bed size W/L (m²)	Single 1.07x2.0 Double 1.83x2.0	Not specified	Not specified	Single 0.94x1.905	Single 0.91x1.92 Double 1.52x1.92

Dining area/ ratio (m²)	Restaurant facility for resident guests shall be available	Dining facilities for residents and their guests must be available	The restaurant must be spacious, luxurious and with an ambiance	Sufficient number of comfortable, clean good quality chairs and tables for guests	Should have a clean, well maintained dining area with good quality comfortable serving and seating arrangement
---	--	--	---	---	--

1.6 DEVELOPMENT CONDITIONS AND SETBACKS

Development conditions and setbacks for the specific areas and locations in Sri Lanka are determined by the government. One of the main goals of the National Physical Planning Policy & The Plan — 2017 – 2050 is development directives that promote the best utility and the efficient use of the available land and infrastructure, and consider the unique landscape of the island. For the purpose of planning and designing a tourist accommodation facility, a number of different planning documents should be consulted.

There are a number of site development conditions and setbacks regulations regulated by various government authorities which are related to the lot and sitting of the buildings. General site and building development conditions for tourism projects in an Urban Development Authority (UDA)-declared “urban development area” are set by UDA regardless of the project’s size. UDA General Regulations may be cited as the urban development authority planning and building regulations 1986¹².

There are other government agencies which have legal or administrative responsibility for the coastal zone and the management of its resources, although primary responsibility for coastal zone management is lodged with the Coast Conservation & Coastal Resource Management Department (CCD or CC&CRMD). Some of the regulations and standards derived from other government agencies related to development conditions and setbacks are presented in this document.

1.6.1 CCD REGULATIONS

Development control over coastal areas is exercised by the Coast Conservation Department (CCD). CCD regulations prohibit construction activity within 300m from the first vegetation line. However, these regulations were not strictly enforced in view of the scarcity of coastal land for development. After the Tsunami disaster, it has been decided to strictly adhere to the coast conservation regulations and other guidelines imposed by the Coast Conservation Act.¹³

¹² UDA General Regulations
https://www.uda.gov.lk/attachments/devplan_detailed/for_public_comments/General%20Regulation-%20Report_2018.11.08.pdf

¹³ Sri Lanka Coastal Zone and Coastal Resource Management Plan – 2018
<http://extwprlegs1.fao.org/docs/pdf/srl183110.pdf>

The Coast Conservation Act defines “coastal zone” thusly (see Figure 1 and 2 for illustrations):

“The Coastal Zone is defined in the Coast Conservation Act as that area lying within a limit of three hundred meters landwards of the mean High Water Line and a limit of two kilometers seaward of the Mean Low Water Line. In the case of rivers, streams, lagoons or any other body of water connected to the sea, either permanently or periodically, the landward boundary extends to a limit of two kilometers, measured perpendicular to the straight base line drawn between the natural entrance points and included waters of such rivers, streams and lagoons or any other body of water so connected to the sea¹⁴”.

A Setback Area is a geographical strip or band within the coastal zone within which certain development activities are prohibited or significantly restricted. The entire set back band is divided into segments viz. the reservation area and the restricted area lying between the Seaward Reference Line and the Landward Reference Line of the particular coastal segment (www.coastal.gov.lk).



Figure 1– Costal Conservation Zone Map prepared by National Physical Planning Department^{15,16}

¹⁴ Pre-and post-tsunami coastal planning and land-use policies and issues in Sri Lanka R.A.D.B. Samaranayake <http://www.fao.org/forestry/13144-0dca7f82cc26e17f422eb31a25361fcf0.pdf>

¹⁵ https://drive.google.com/file/d/1TBgPtGfXOJmTn_vVkAmGtJU9AiMckp0/view

¹⁶ https://drive.google.com/file/d/1TBgPtGfXOJmTn_vVkAmGtJU9AiMckp0/view

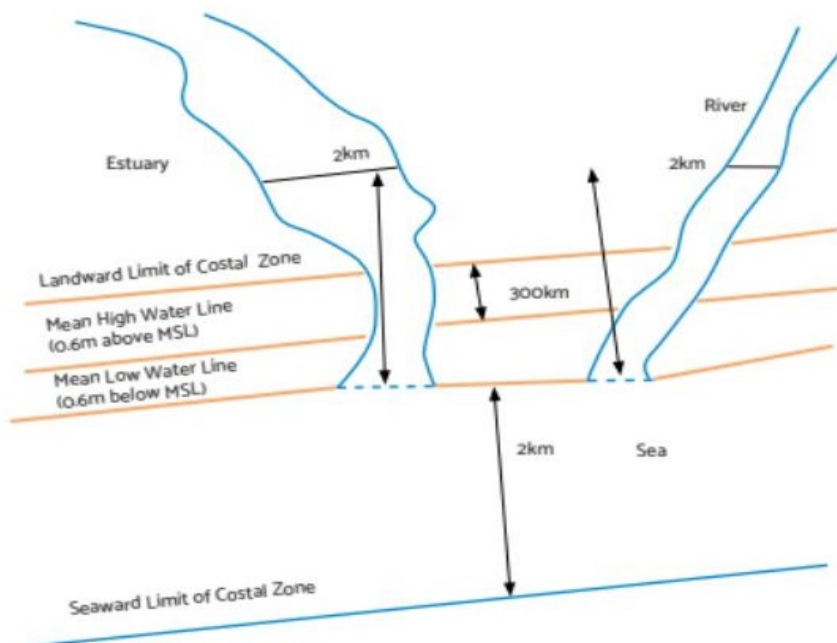


Figure 2–Costal Conservation Zone prepared by National Physical Planning Department

Following the tsunami disaster in December 2004, the landward reference line has been determined as follows:

- a) 100 m landwards from the mean high water line in the following districts – Killinochchi, Puttlam, Gampaha, Colombo, Kalutara, Galle, Matara, Hambantota;
- b) 200 m landwards from the mean high water line in the coastal belt within the Jaffna, Mullaitivu, Trincomalee, Batticaloa and Ampara Districts.

Designers are requested to consult the Coastal Zone Management Plan - CZMP (1997 and 2004) for further details on the coastal segments.

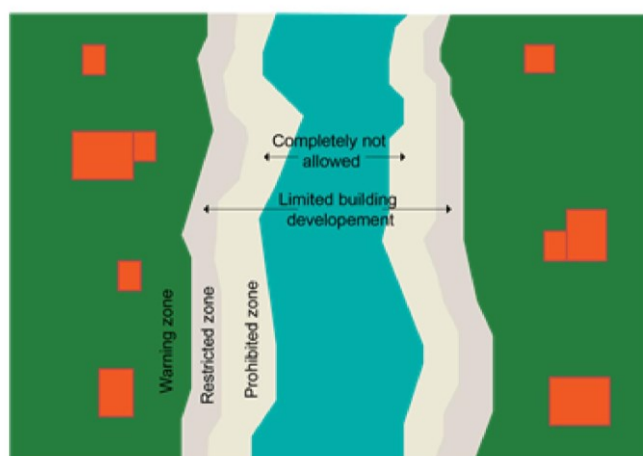


Figure 3–Flood prone area –Permanent construction shall not be allowed in prohibited zone (annual flood prone area); Limited constructions could be allowed in restricted zone

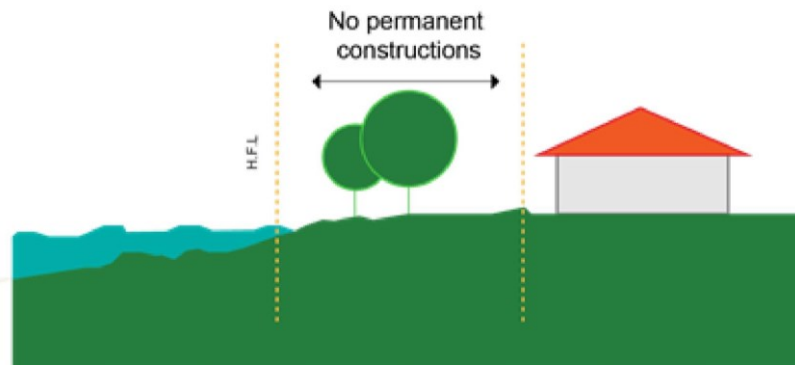


Figure 4–Costal zone – no permanent constructions are allowed within setback limits set by CCD

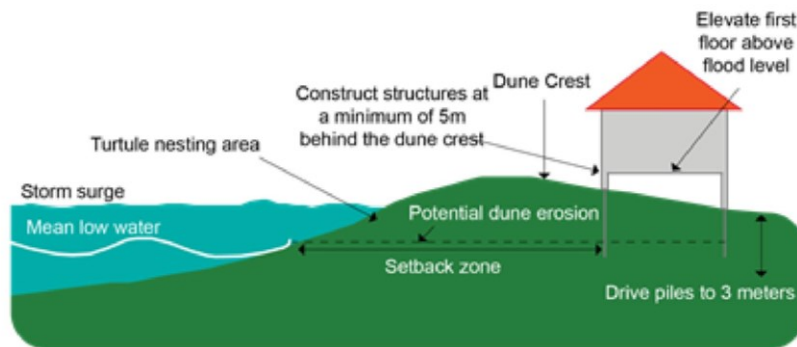


Figure 5–Near water bodies (river, stream, lagoon, lake) forest and wildlife reserves and wetland area. Setback of 10m from High Flood Level (HFL)

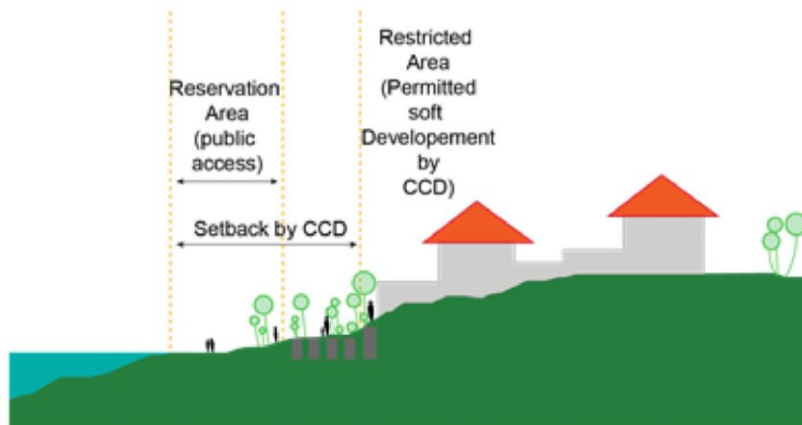


Figure 6–Costal zone sand dune – constructions should be adopted to the natural characteristics and functions of dunes, minimizing rigid structures in front of the dune

Figures 3, 4, 5 and 6 illustrate the proposed adequate setbacks on different locations based on the respective natural characteristics (SLTDA Development Guidelines).

1.6.2 UDA – GENERAL DEVELOPMENT AND BUILDING REGULATIONS

The main site development conditions and building regulations are set by UDA General Site and building development conditions for tourism projects in an Urban Development Authority (UDA)-declared “urban development area”.¹⁷

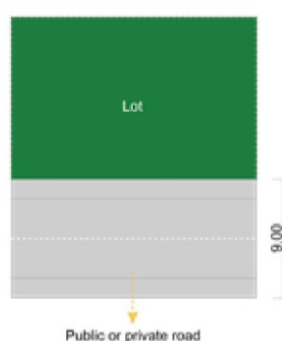
Some of the main UDA regulations and standards related to the site/lot development and building regulations are extracted from UDA General Regulations and presented in this chapter.

1.6.2.1. ACCESS TO THE LOT

Paragraph (2) (a) - Every street meant to serve dwelling units shall be in conformity with the specifications set out in Form “A” of schedule (III) and shall be in conformity with the specification set out in Form “B” of Schedule (III) – Regulation (16) (see Table 2).

Table 2–Access to nonresidential buildings (tourist accommodation facilities)

Maximum Extent of Land served	Maximum FAR on each site	Minimum width of street (meters)	Maximum Length of street (meters)
500m ² Where the street serves more than 1 lot or site but not more than four lots	1.5	6.0	50
2500 m ² Where the street serves only one lot or site	1.5	6.0	150



The minimum width of the access road shall be as approved by the Authority but in no case shall be less than 3.0 meters. However in high terrain area, where no road constructions are permitted due to environmental impacts, foot paths less than 3.0m wide may be considered.

Figure 7–No site or lot abutting a street less than 9m in width shall be used for non-residential use or construction of any building for such use except as provided under regulation 16 (2) (b).

¹⁷ https://www.uda.gov.lk/attachments/devplan_detailed/for_public_comments/General%20Regulation-%20Report_2018.11.08.pdf



Figure 8—Every such street shall connect on to a public street which is not less than 7m in width or a private street of which the owner of such private street has a right of way which is not less than 7m in width



Figure 9—A street meant to serve one or more lots for construction of any building for non-residential use may be permitted with access less than 9m in width and shall be in conformity with the specification set out in Form “B” of schedule (III).

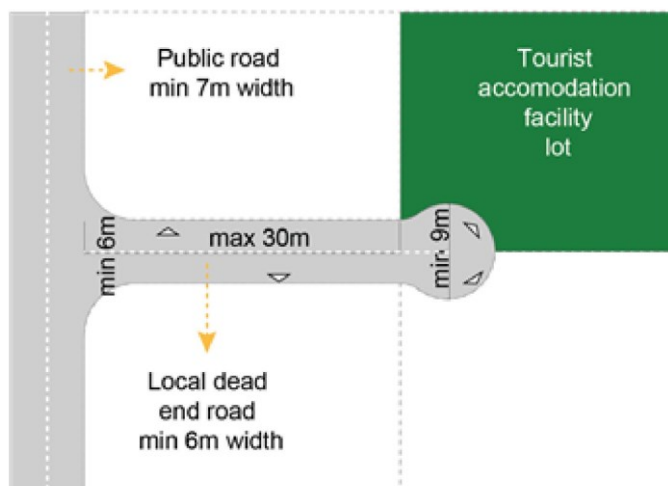


Figure 10—Every street which is less than 9m in width and exceeds thirty meters in length, shall be provided with a turning circle of not less than 9m in diameter at the dead end

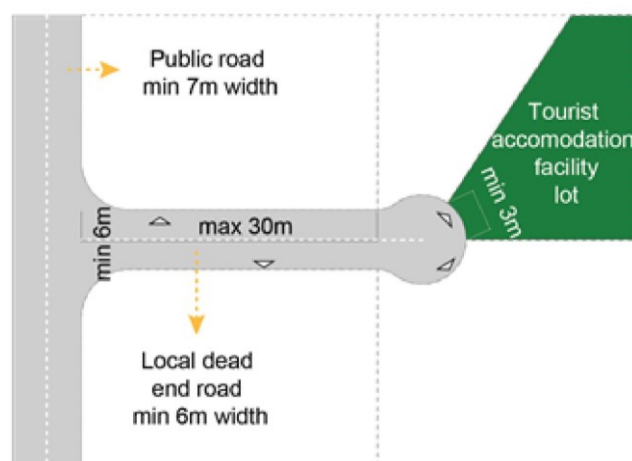


Figure 11—Every lot or site which abuts on to the end of dead – end Street may have a frontage less than the width in Form “C” of Schedule (III), but have a frontage which is not less than 3 meter wide perpendicular to the line of the street.

General regulations also emphasise that the authority may relax requirements of the specified site, extent and width in the case of an existing lot provided that a building satisfying the other regulations can be built on the site.

1.6.2.2. HEIGHT OF THE BUILDING

Paragraph 18. (1) -Building height should consist with sea level. Figures 12, 13 and 14 illustrate regulations related to the allowed height of the building based on respective site and street characteristics.

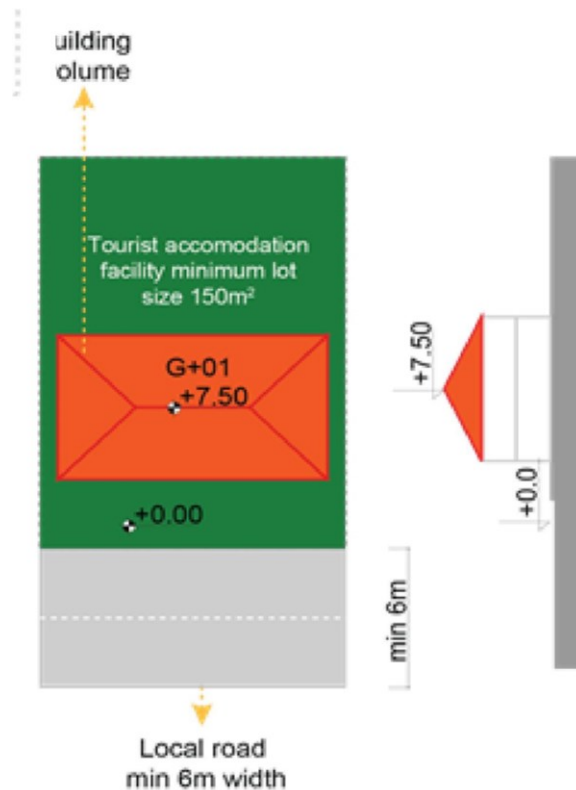


Figure 12–The maximum height of a building in other case not being a high-rise building shall not exceed 15m or twice the distance the between any story of a building and the further edge of the abutting street; whichever is less

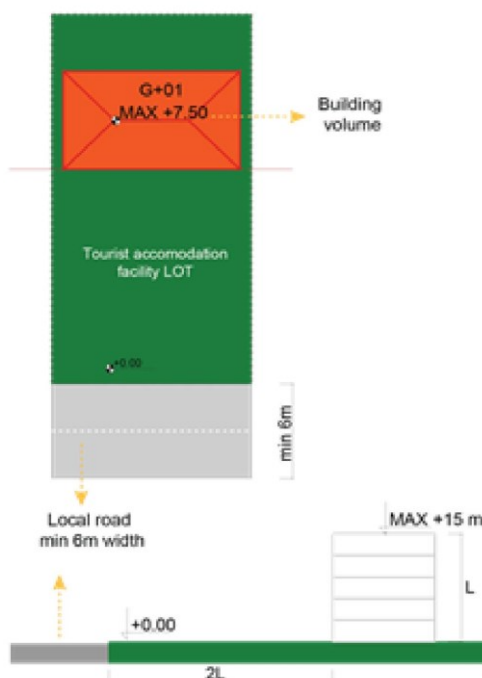


Figure 13–The maximum height of a building on an existing lot which is 6m or less in width and or as less than 150 m² in extent shall exceed 7.5m or two floors unless the authority directs otherwise

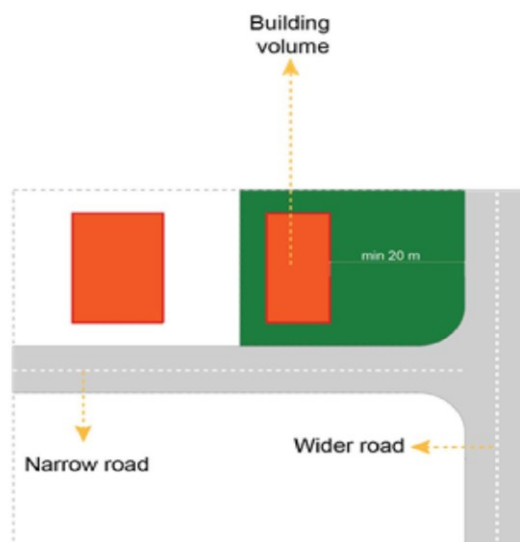


Figure 14—If the lot is situated in a corner, the height of the building shall be regulated by the wider of such streets so far as it abuts or will abut on the narrower street to a depth of 20 m from the wider street.

1.6.2.3. STREET LINES AND BUILDING LINES

Paragraph 19.(1)-The building line for every lot on the side abutting the street shall be in conformity with specification and categories set out in Form "D" of schedule (III) and shall be determine according to whether the street on to which it abuts is categorized as a local, secondary or principal street by the authority.

Schedule (III)-Form "D" – Regulation (19)

Table 3—Specifications as to building lines

Category of public street	Building line from the center of the street or street line if any (meters)
Local	6.0
Secondary	9.0
Principal	15.0

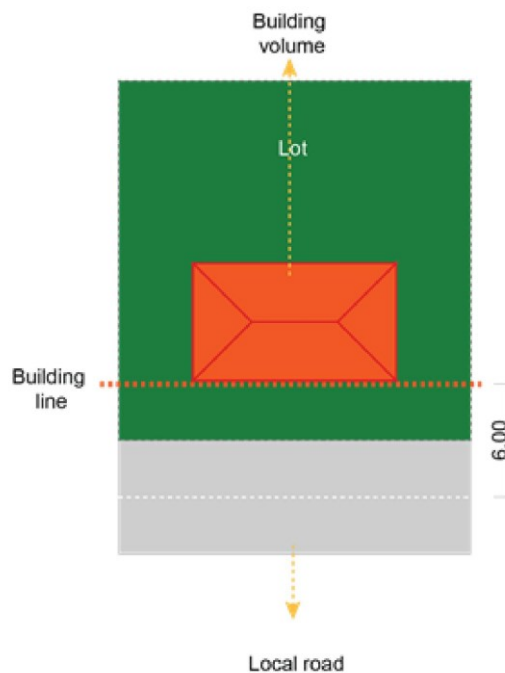


Figure 15–The building line for every lot on the side abutting the street shall be in conformity with specification and categories set out in Form "D" of schedule (III) and shall be determined according to whether the street onto which it abuts is categorized as a local, secondary or principal street by the authority.

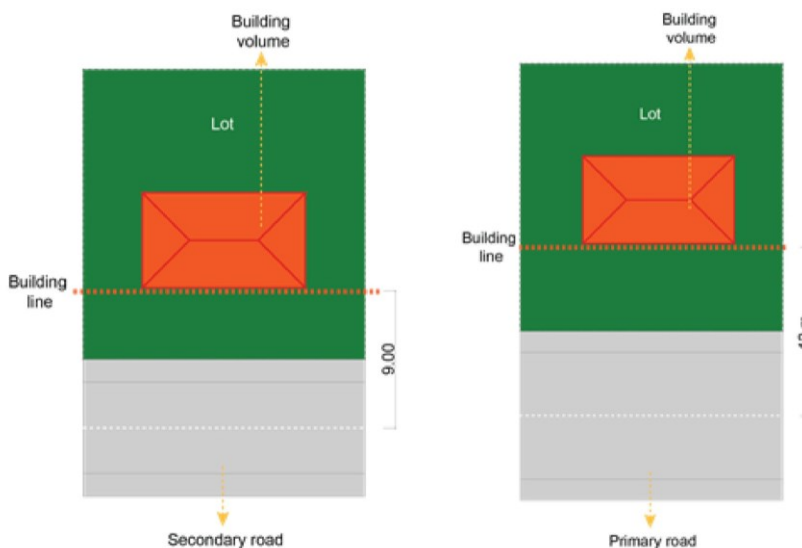
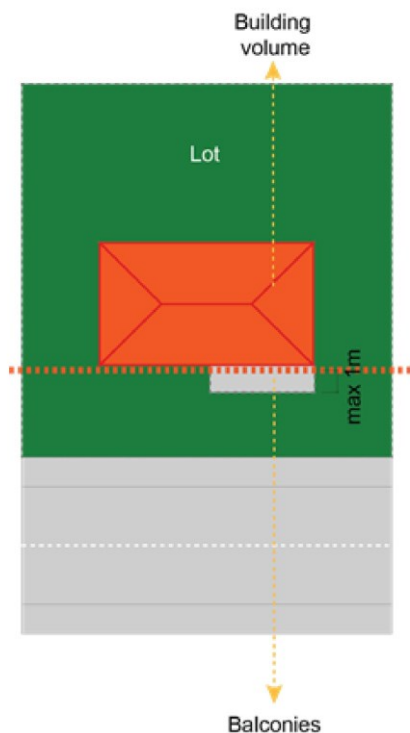


Figure 16&17–In the case of local roads, a lesser width than what is stipulated in Form "D" of schedule (III) may be permitted provided that such a reduced width is in conformity with the development plan approved for the area or the development plan propose the area



Any building line approved or sanction by the local authority shall not be varied without the prior approval of the authority.

Figure 18—No building shall extend beyond the building line provided that balconies, sunshades or eaves, not exceeding 1 meter in width may be permitted between the building line and a fence or boundary wall not exceeding 2 meters in height may be permitted on the building line.

1.6.2.4. OPEN SPACES AROUND BUILDINGS

Paragraph 25.(1) - The maximum plot coverage permissible on any site for any of the purposes specified in Form “E” of schedule (III) shall be as in conformity with the requirements specified therein.

Schedule (III)-Form “E” – Regulation (25)

Table 4–Maximum lot coverage

Character of the building 1	Maximum lot coverage 2	Minimum open space at the ground level 3
Dwelling units, Hotels, Hostels, Guest Houses and Public Assembly Building	66 ½	3
Offices, Shops, Other Commercial and Industrial Buildings	80	20

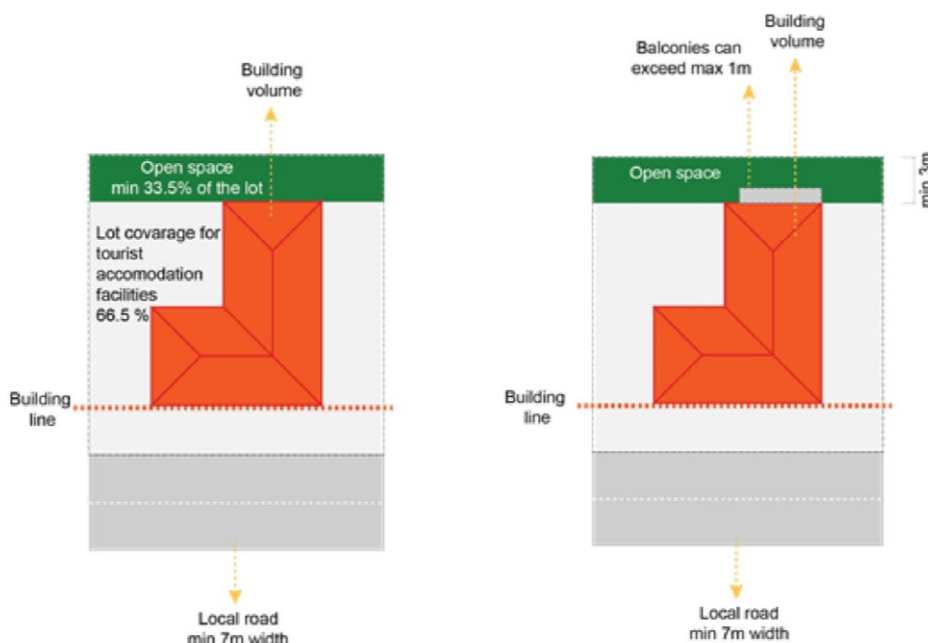
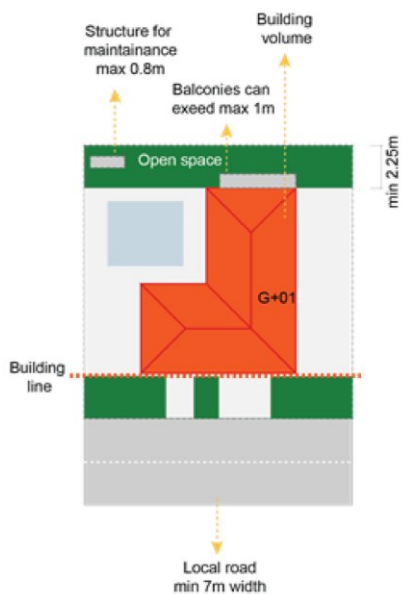


Figure 19&20 – There shall be in the rear of every building and belonging exclusively to it an open space of not less than 3m extending along the entire width of the building unless the rear of the building abuts on to a public street not less than 7m in width



In sites of irregular shapes where it's impracticable to provide an open space to the entire width of the building in the rear, the Authority may direct that the open space in the rear shall be left as it deems appropriate having regards to the circumstances of the case.

Figure 21 – Provided that where the building consists of a ground floor and the first floor only and no further stories are proposed to be added, width of such rear open space may be reduced to 2.25m

1.6.2.5. PARKING AND TRAFFIC CONTROL

Paragraph 31 (1) - A minimum number of parking spaces within the site at the standard specified in schedule (II) to these regulations.¹⁸

Schedule (II) - Regulation (31)

Table 5–Parking space standards

Usage	Types of Vehicle			
	Standard Minimum parking space			
	Car	Motor bike/ Bicycle	Two axel commercial	
Bus			Lorry	
Commercial				
(ii) City hotel	1 per 300m ²		2 bus bays	1 lorry bay close to service area
(iii) Star Class Hotel	1 for 5 rooms & 1 for 2 suites		2 bus bays	2 lorry bay close to service area
a. Banquet Hall	1 for 5 seats			
b. Conference Hall	1 for 5 seats			
c. Staff Quarters				
i. Executive staff	1 for 2 rooms			
ii. Other staff		1 for 4 bed		
(iv) Guest houses & Lodges	1 for 5 rooms			
(v) Restaurants	1 for 10 seats	1 for 5 seats		
(vi) Banquet halls	1 for 10 seats			

The dimensions of car parking stalls (Schedule III) shall be:

- (i) Minimum stall width- 2.4 meters Regulation (31)
- (ii) Minimum stall length- 4.8 meters
- (iii) Minimum stall length for parallel parking - 5.4 meters

The minimum width of aisles shall conform to the requirements specified in Form “F”.¹⁹

¹⁸ UDA General regulation, Schedule II, pg. 34
https://www.uda.gov.lk/attachments/devplan_detailed/for_public_comments/General%20Regulation-%20Report_2018.11.08.pdf

¹⁹ UDA, “General regulation”, Schedule III , pg. 37

Schedule (III)- Form “F” – Regulation (31)

Table 6–Width of aisles of parking stalls (one way traffic)

Parking Angle 1	Bays on one Side (m) 2	Bays on two Side (m) 2	Two Way Traffic (m) 4
Parallel	3.6	3.6	6
30°	3.6	4.2	6.3
45°	4.2	4.8	6.3
60°	4.8	4.8	6.6
90°	6.0	6.3	7.3

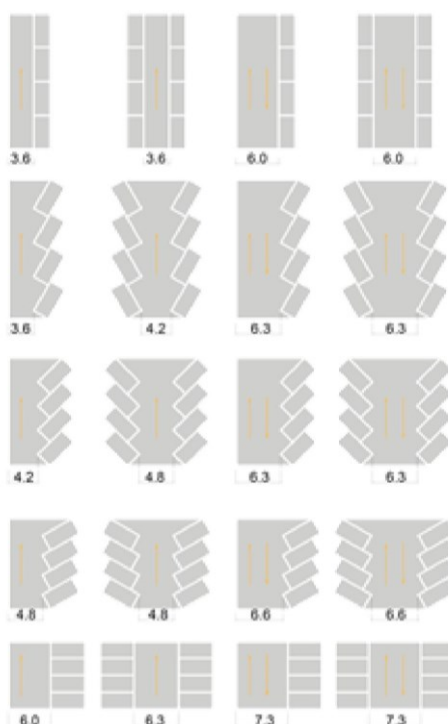


Figure 22–Parking lot types

Parking spaces are places that are usually paved with concrete or asphalt, but other materials can also be used. Parking spaces are usually painted with bright yellow color in order to create the sense of space and order. Buffers and barriers are used to separate spaces and pedestrian lines to improve safety for drivers and pedestrians.

Parking lot can be of many types:

- a) Open air
- b) Half closed
- c) Underground

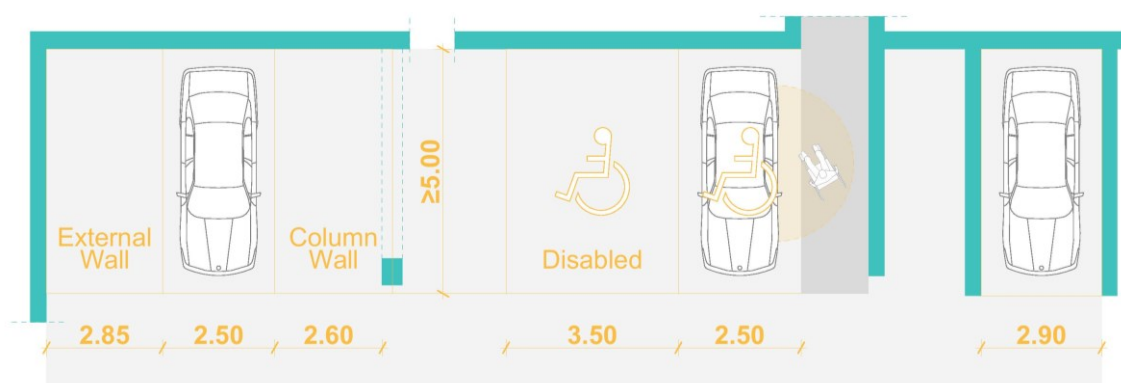


Figure 23–Parking size: regular and wheelchair²⁰

1.6.3 UDA – DEVELOPMENT CONDITIONS OF THE CITY OF COLOMBO DEVELOPMENT PLAN

If the site is within the area of City of Colombo, the land use zoning is as follows:

- a) Special Primary Residential Zone
- b) Primary Residential Zone
- c) Special Mixed Residential Zone
- d) Sea Front Zone
- e) Mixed Development Zone
- f) Port Related Activity Zone
- g) Commercial Zone
- h) Concentrated Development Zone
- i) Public Open Spaces

The permissible uses for each zone are defined in the City of Colombo Development Plan, while tourist accommodation facilities are permitted uses only in the following zones:

- a) Special Primary Residential Zone
- b) Sea Front Zone
- c) Mixed Development Zone
- d) Port Related Activity Zone
- e) Commercial Zone
- f) Concentrated Development Zone

²⁰ Ernest and Peter Neufert, “Neufert, Architects’ Data”, Fourth Edition, pg.391

Zoning Plan – 2020 (Map)

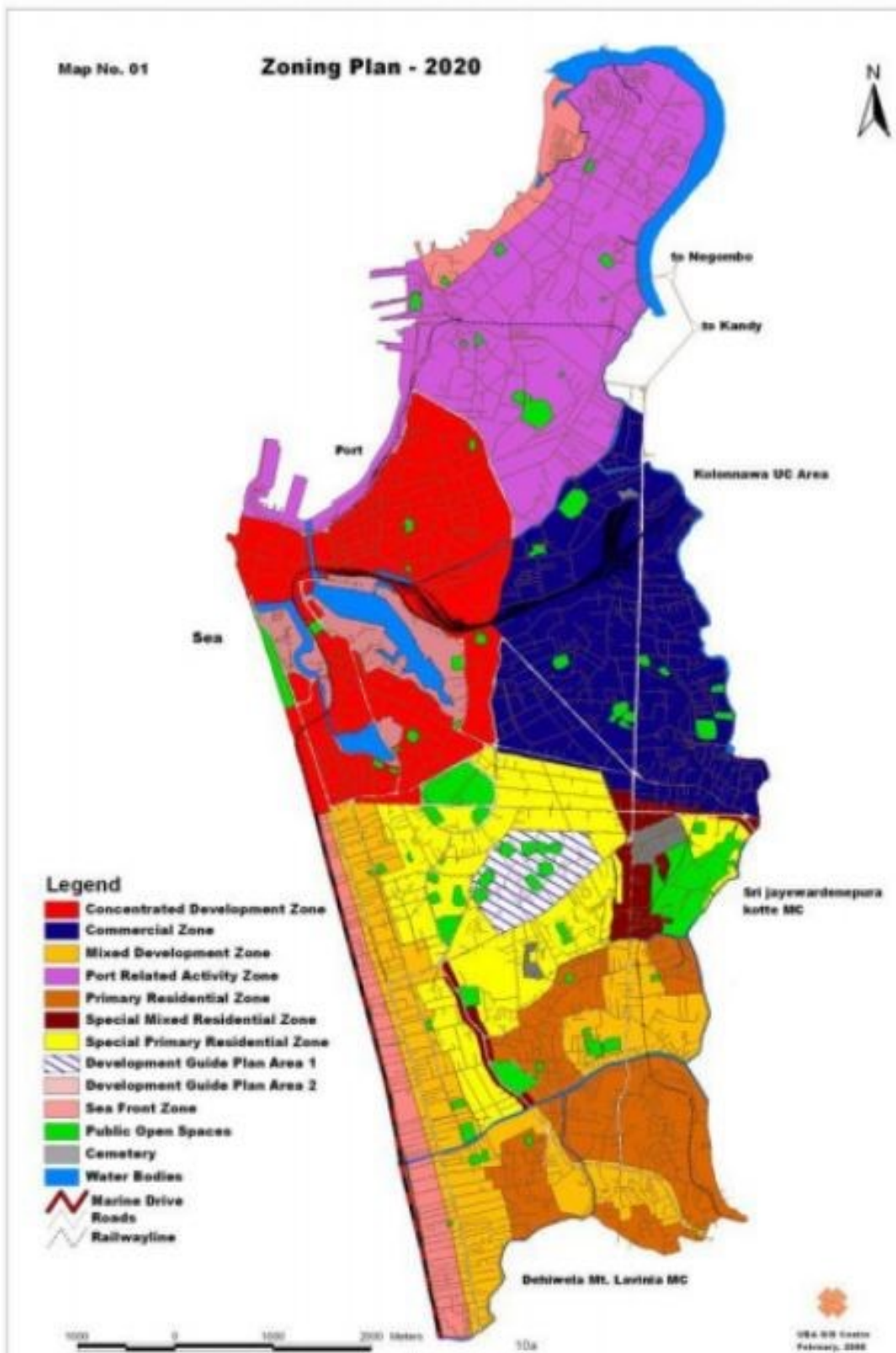


Figure 24–Zoning plan of the City of Colombo

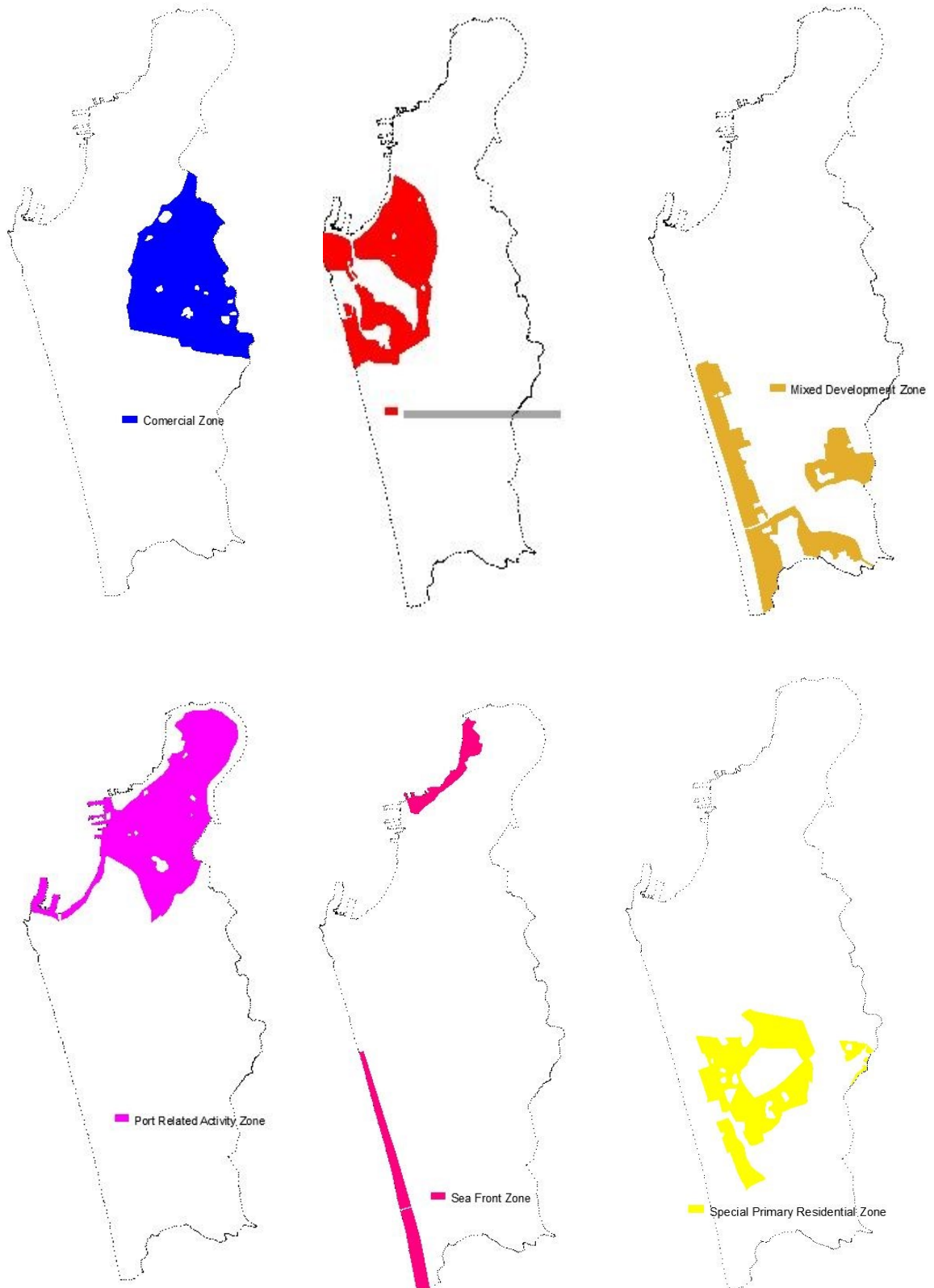


Figure 25–The 6th zones of the city of Colombo where tourist accommodation facilities are allowed

Development criteria differ in each zone. For example, if the site is in the Special Primary Residential Zone, a tourist accommodation facility cannot have more than 10 guestrooms within a site extent exceeding 1000 m².

The development conditions for the minimum land extent, width between building lines, minimum width of private roads and maximum permissible floor area ratios are given in Form C1 (Table 7). Building categories, number of floors, minimum site frontage, maximum plot coverage and open spaces around the building are given in Form C2 (Table 8). Parking requirements, standards for minimum parking space are presented in the Table 5 since they are same with the UDA General requirements

Table 7–Form C1- Specification for Development -The Minimum land extent, width between building Lines, minimum width of private roads and maximum permissible floor area ratios ²¹

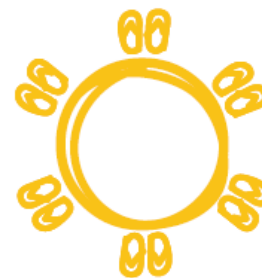
Row No	Minimum Land Extend (m ²)	Minimum width between building lines of a public Street/Road (meters)	Minimum width of private Street/Read (meter)	Maximum permissible FAR
1	150 less than 250	-	3	1:1.5
2	150 less than 250	-	4.5	1:1.75
3	150 less than 250	-	6	1:2.0
4	150 less than 250	-	9	1:2.5
5	150 less than 250	12.2	12.2	1:13.0
6	250 less than 250	12.2	6	1:3.5
7	400 less than 500	12.2	9	1:4.5
8	500 less than 700	12.2	9	1:5.0
9	500 less than 700	15.0	12.2	1:5.5
10	700 less than 900	15.0	12.2	1:6.0
11	900 less than 1000	15.0	12.2	1:7.0
12	900 less than 1000	22	12.2	1:7.5
13	1000 less than 1500	22	12.2	1:8.0
14	1500 less than 2000	22	12.2	1:9.0
15	2000 less than 2500	24	12.2	1:9.5
16	2000 less than 2500	24	12.2	1:10.0
17	2500 less than 3000	24	12.2	1:12.0
18	3000 and above	24	12.2	Unlimited

²¹ Form C1 -City of Colombo Development Plan -pg 36
<https://www.uda.gov.lk/cms/storage/acts/q31LejWXNw.pdf>

Table 8–Form C2- Specification for Development Building categories, number of floors, minimum site frontage, maximum plot coverage and open spaces around the building²²

Building Category	Maximum number of floors including ground floor (GF)	Min. site frontage (m)	Max. Plot Coverage (%)	Open Space around the Building				
				Min. Rear Space (m)	Minimum one side space (m)	Both sides space (m)		
						Each Side	or	One Side
Low Rise	GF	6.0	65.0	2.3	-			
	2	6.0	65.0	2.3	-			
	3	6.0	65.0	3.0	-			
	4	6.0	65.0	3.0	-			
Intermediate Rise	5	8.0	65.0	4.0	3.0 GF only			
	6	10.0	65.0	4.0	3.0 GF only			
	7	14.0	65.0	4.0	3.0			
	8	16.0	65.0	4.0	3.0			
Middle Rise	9	22.0	65.0	4.0	3.0			
	10	26.0	65.0	4.0	-	3.0	or	4.0
	11	30.0	65.0	4.0	-	3.0	or	4.0
	12	30.0	65.0	4.0	-	3.0	or	4.0
High Rise	13	35.0	50.0	4.0	-	4.0	or	4.0
	14	35.0	50.0	4.0	-	4.0	or	4.0
	15-20	40.0	50.0	4.0	-	6.0	or	4.0
	21 & above	40.0	50.0	4.0	-	6.0	or	4.0

²² Form C1 -City of Colombo Development Plan , pg. 36
<https://www.uda.gov.lk/cms/storage/acts/q31LejWXNw.pdf>



2. DESIGN CONCEPTS

2.1 ARCHITECT'S BRIEF

The architectural design brief or “Program” includes an accommodation schedule and surface areas and defines the activities that will be conducted within a tourist accommodation facility, allocating the required space, and establishing relationships between the spaces. This is one of the first steps in the development process. In addition to detailing the activities, space allocations, and relationships within the building, a successful program helps to establish the way the building or buildings are situated on a site, site organization, and functionality of the spaces in the building, architectural concept, design inspirations and connections to the country’s cultural heritage and to the external world. In almost all cases, the activities are the starting point. Once the activities are defined, functional relationships among them should be established. Early in the programming process, the schematic diagrams presenting functional zones to convey both activities and relationships help to provide an overview of the overall concept.

Programming is the process of defining the activities that will be conducted within a tourist accommodation facility, allocating the requisite space, and establishing relationships between the spaces.

2.1.1. ORIGIN AND STATUS OF THE BRIEF

The Brief constitutes the starting point of the work of the Design Team. Its preparation should be based on the following information:

- a) a description of a typical day in the life of the tourist accommodation facility and how it will change with the transformation agenda;
- b) the organizational structure of the tourist accommodation facility, including management, service support and so on;
- c) activities to be accommodated within the tourist accommodation facility;
- d) the frequency of the different activities – the usage levels of the different types of accommodation; and
- e) required adjacencies between different activities, departments etc.

All of this information is useful to the designers of the tourist accommodation facility and therefore is included in the detailed brief as background information.

Once these issues have been established, the next stage of writing the brief is to produce a detailed accommodation schedule (spreadsheet listing all the spaces required).

a) Accommodation schedule – space allocation

The accommodation schedule will list exactly the number of guestrooms required and their minimum sizes, as well as the anticipated tourist accommodation guest capacity given in terms of total number of guests using public areas, and areas dedicated to administration and services. The schedule will add up to an overall target area for the building to ensure that all facility requirements are included.

Table 9: presents sample of detailed space allocations for two hotel categories and the range of facilities based on The Architects Handbook - RIBA.

Excel-based accommodation schedules for each type of tourist accommodation facility are attached as annexes to this Guideline. Designers and investors can use these tools to automatically calculate the required minimum surface areas in a tourist accommodation facility by functional areas depending on whether it is a 1-5 star hotel, guesthouse, boutique hotel, boutique villa or home stay. Minimum Space requirements are based on the existing SLTDA and UDA regulations, while for the missing regulations the best international practices standards are used.

Further detailed information about the furniture and inventory of the guestroom is listed in what is usually called a room data sheet.

Table 9–Sample of the Space Allocations ²³

typical provisions	500 room city-center hotel ★★★★		200 room suburban hotel ★★★	
	m ²	%	m ²	%
guest rooms and suites	32.0		25.0	
circulation, services, etc.	12.0		7.5	
total residential areas	<u>44.0</u>	71.00%	<u>32.5</u>	72.20%
lobby with lounge areas	1.0		1.0	
shops	<u>0.2</u>	1.90%	<u>0.1</u>	2.40%
coffee shop	0.8		0.8	
main restaurant	0.7			
specialty restaurant	0.4		0.7	
lounges, bars	1.1		0.8	
circulation, clocks, etc.	<u>0.6</u>	5.80%	<u>0.6</u>	6.70%
pre-function area, foyer	0.5			
ballroom/banquet hall	1.5			
conference/ function rooms*	<u>1.9</u>	6.30%	<u>1.3</u>	2.90%
leisure pool areas*	0.6			
club facilities/fitness room*	<u>0.6</u>	1.90%	<u>0.4</u>	0.90%
front office, administration*	<u>1.6</u>	2.60%	<u>1.4</u>	3.10%
main and satellite kitchens	1.1		0.8	
stores, circulation, etc.*	0.5		0.2	
receiving/ garbage areas*	0.3		0.3	
general stores*	0.4		0.4	
housekeeping, laundry*	1.2		1.4	
engineer, stores, equipment*	1.8		1.3	
employee, stores, personal*	0.2		0.1	
changing, lockers, canteen*	<u>1.0</u>	10.50%	<u>0.8</u>	11.80%
total built area	<u>62.0</u>	100%	<u>45.0</u>	100%
<i>*gross areas, including circulating and ancillary areas</i>				

²³ The Architects Handbook edited by Quentin Pickard RIBA

Table 10–Hotel area taken by each function²⁴

No.	Area	Percentage
1	guest rooms, bathrooms, corridors, room service	50-60%
2	public area, lobby, reception, etc.	4-7%
3	catering	4-8%
4	events, ballroom, seminar rooms	4-12%
5	wellness/ fitness area	5-10%
6	other areas, cosmetics, hairdresser	1-2%
7	management, administration	1-2%
8	service area, kitchen, staff rooms, stores	9-14%
9	building services	5-10%

Table 11–Gross area per room in various categories of hotel²⁵

	Hotel type	m ² /room
1	luxury	90-110
2	first class	60-70
3	comfort	50-60
4	standard (holiday hotel, motel)	40-60
5	tourist (low budget)	15-20

2.2 DESIGN CONCEPT AND INSPIRATION

Good hotel planning and design achieves a balance between functional layout and aesthetics, meeting the needs of the guests, the staff, and the owner. In general, tourist accommodation facilities have public areas that are heavily design oriented, with the functional aspects carefully integrated to enhance, yet not dominate, the space.

Minimum design standards should be based on the best international practices and local tradition and culture. By combining best international design standards and the local way of building will create tourist accommodation facilities that are uniquely Sri Lankan while meeting the expectations of an international market. “Glocal” design lies in successful integration of contextual understanding and local wisdom with the current trend of global homogeneity in design.

Design should embrace the local flavor and character of its respective market. Innovation and contemporary ideas in harmony with the nature and local architectural values would ensure the unique design globally appealing and regionally accepted.

Architectural design of the tourist accommodation facility should ensure that building is incorporated in the surroundings and is not visually violent towards the surrounding and its guests. Good design is a dialog between protecting and taking advantage of the unique characteristics of the country and the site, which together build the memory and experience. Sri

²⁴ Ernest and Peter Neufert, “Neufert, Architects’ Data” Fourth edition, pg. 171

²⁵ Ernest and Peter Neufert, “Neufert, Architects’ Data” Fourth edition, pg. 171

Lanka with its bright colors and beautiful and dramatic nature is very inspirational and that should be reflected in the design, too.

The design should provide tourist facilities that inspire, are sustainable, are safe, efficient, and cost effective, and that maintain their utility and charm through time. Therefore, the investor should request from their architect to have a consistent approach to design and to treat the project as a unique problem requiring a unique solution.

The design simultaneously should meet the demand for efficient use of resources and the need for affordable solutions with an innovative and creative design response.

Architectural quality should, therefore, not only contribute to the functionality of the facility, but also to its integration within the community and to its building as a symbol by:

- a)** Installing in guests a sense of good architecture through the harmony and proportions of built spaces, open spaces, facades;
- b)** Creating a pleasant environment in the facilities and helping users to appreciate it through the use of materials, colours and plants, the quality of waiting and circulation areas, etc.;
- c)** Allowing an easy identification of different spaces by grouping them according to their activities and by providing easy links between buildings and spaces;
- d)** Integrating cultural values so as to build the community's sense of appropriation and pride in its tourist accommodation facility;
- e)** Respecting cultural heritage values of the country and the site area.

The internal spaces should:

- a)** Provide an interior environment that is visually comfortable and stimulating;
- b)** Provide ample natural light and incorporate colours that stimulate or soothe, depending on the space function;
- c)** Ensure good insolation, daylight throughout guestrooms and all public areas;
- d)** Ensure good ventilation;

A contextual approach of the conceptual design will look at the context of the site and surroundings, the historical features of the area and the people that will use the facility.

Conceptual design starts with a detailed survey of the site. The architect will then develop conceptual drawings which will present the concept of the building. Conceptual design should provide information related to:

- (i) Adaptability to the site characteristics and morphology, how the building is “sitting” in the landscape;
- (ii) Functionality of the facilities and relationships between different functions. Tourist accommodation facility design should ensure that the building can be used effectively above anything else;
- (iii) Context of the site and surroundings, the cultural and historical features of the area;

- (iv) Proportion, scale and form by using formal language of architecture. This does not mean that design is classical in its style. It may be that the formal rules of proportions, scale, the golden section and so on are translated into a contemporary building;
- (v) Use of specific materials to create the desired appearance / effect. Selection of the materials based on the site context and if possible manufactured locally; and
- (vi) All other preliminary proposals regarding structure, lighting, circulation, services etc.

Other consultants and engineers as part of the conceptual design team will work on and develop proposals for the different aspects of the building such as:

- (i) Energy efficiency measures;
- (ii) Solid Waste Management;
- (iii) Wastewater Management;
- (iv) Water Harvesting;
- (v) Electricity Usage;
- (vi) Water Usage; and
- (vii) All other requirements set in the Common Application Form.

Moreover, the architect should assure the Investor that the conceptual design presents relationships between functional, technical, formal and aesthetic concepts. When the design has a story behind and reflects the atmosphere of the surrounding, it is in harmony with nature and at the same time meet tourist expectations then it is obvious that good and sustainable design is reached.

2.3 TOURIST ACCOMMODATION FACILITY AREAS

Four major types of areas are involved in the tourist accommodation facility: guestrooms, public areas, administration areas, and service areas. Samples of the functional relationships of these areas are presented in Diagram 1, 2 and 3.

Functional zones in different building shapes (such as: a) Block, b) Solitary (central lobby), c) Block with central lobby, d) Star are presented in Figure 25.

Functional relationships

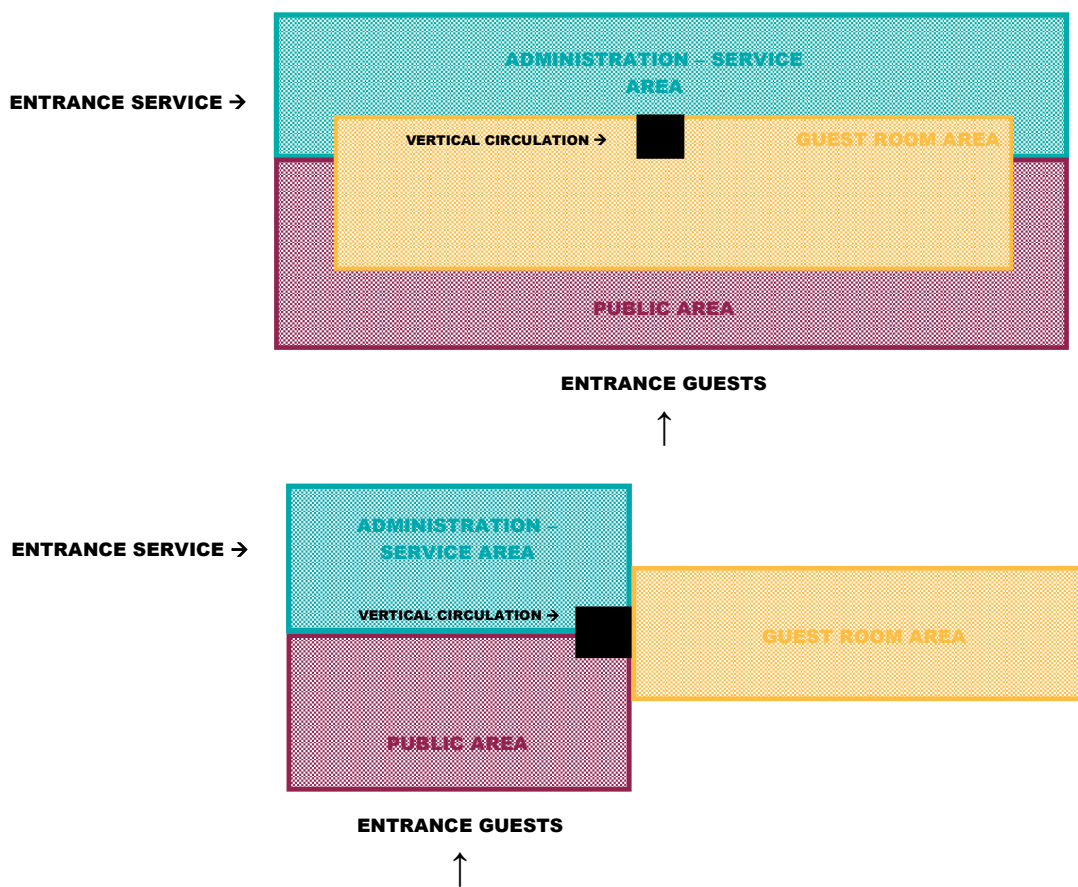


Diagram 1–Functional zones relationships²⁶

²⁶ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.143

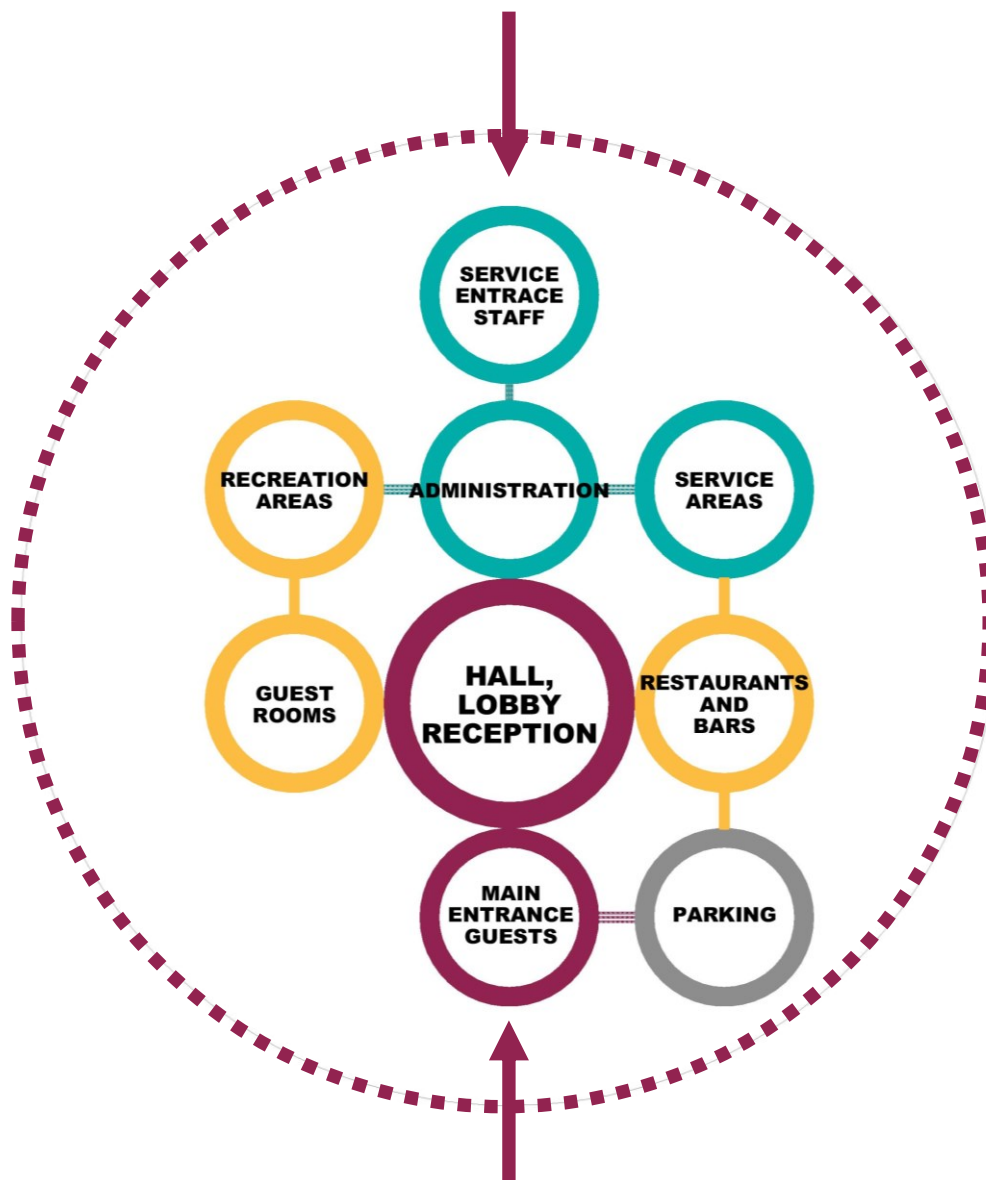


Diagram 2–Functional zones of tourist accommodation facility

“It took me a long time to understand the relationship between ideas and between objective facts. But after I clearly understood this relationship, I didn't fool around with other wild ideas. That is one of the main reasons why I just make my scheme as simple as possible.”

Ludwig Mies van der Rohe

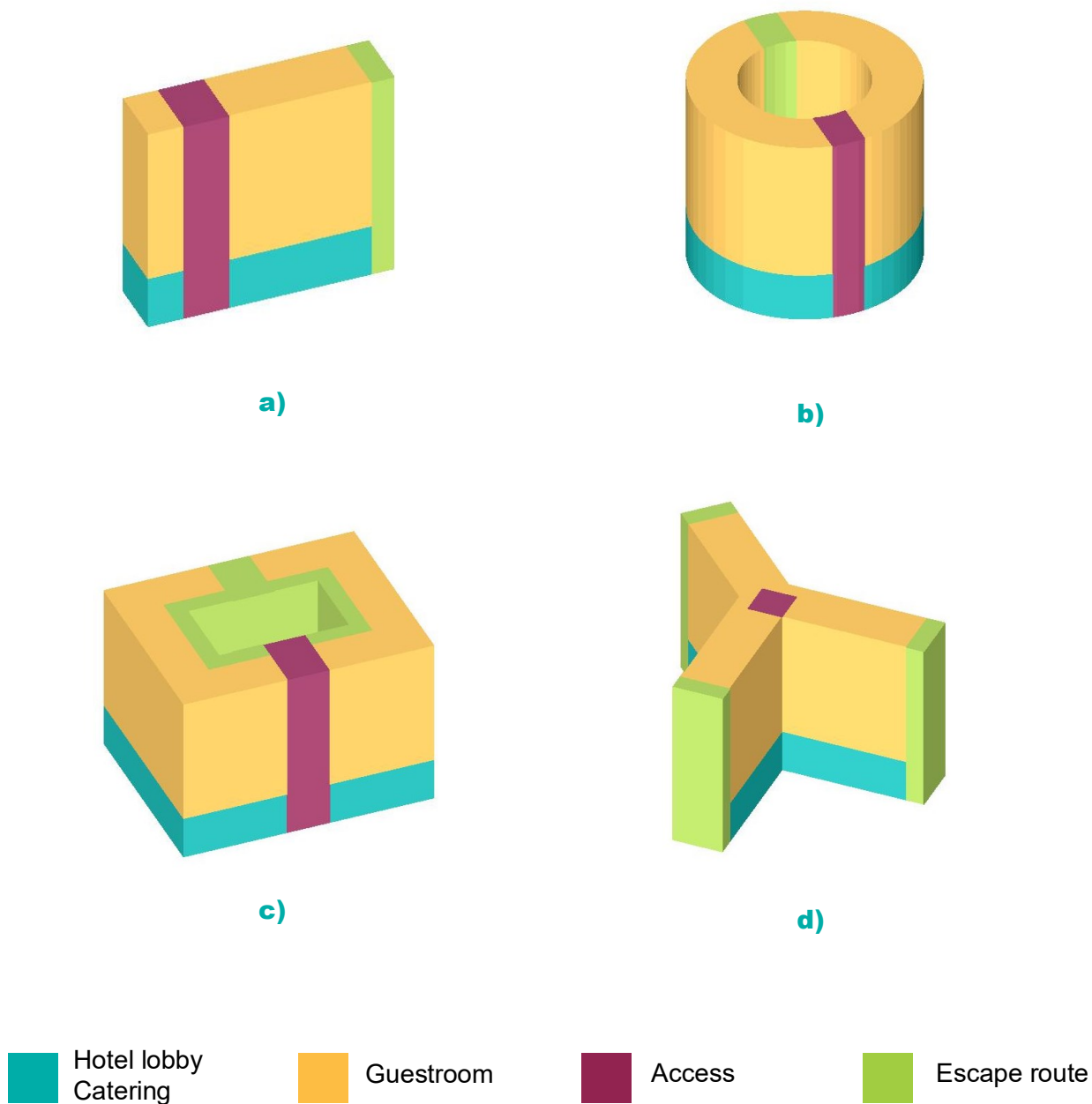


Figure 26–Functional zones in different hotel shapes: a) Block, b) Solitary (central lobby), c) Block with central lobby, d) Star²⁷

²⁷ Ernest and Peter Neufert, “Neufert, Architects’ Data” , Fourth Edition, pg.175

It is important that relationships between areas be well planned and provides separation between guest and service areas. At the same time, the spaces must allow efficient service without distraction.

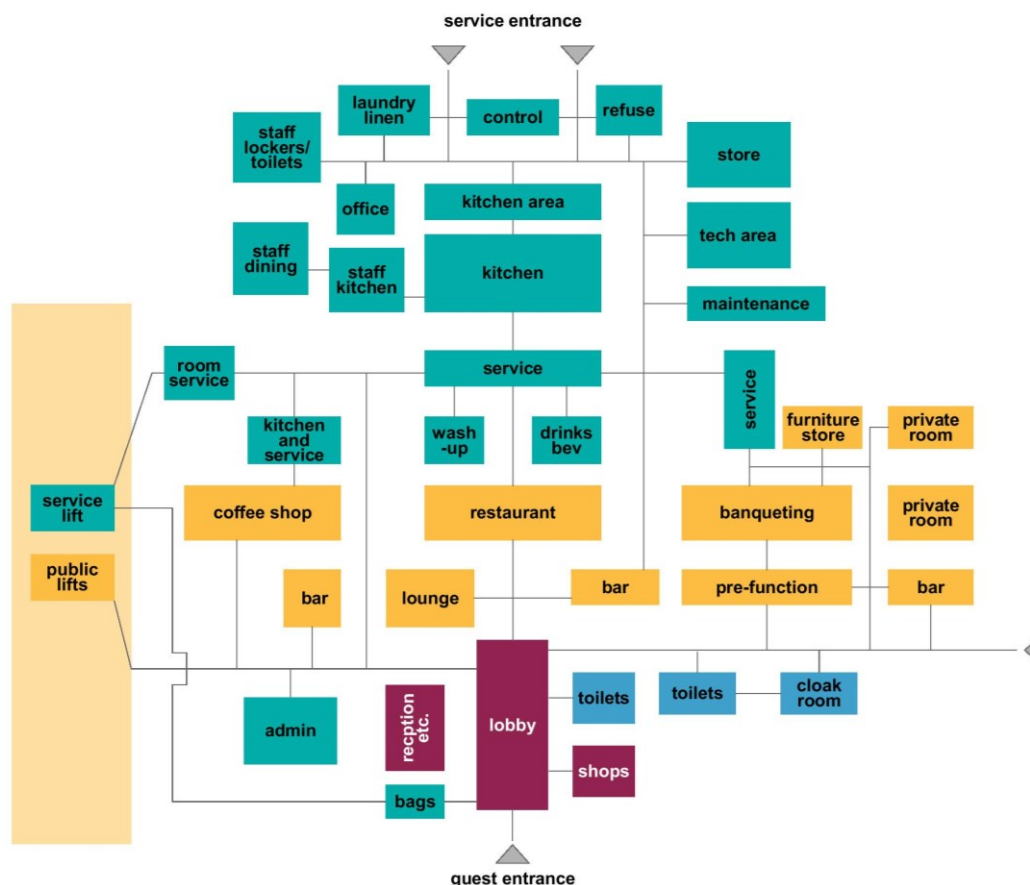


Diagram 3—Diagram of a typical hotel²⁸

2.4 THE SITE

Site selection demands the highest level of scrutiny. Carefully review the challenges, asking yourself questions like: Are there any obstacles to acquiring the land? Are there potential zoning issues or prohibitive architectural review standards? Is the site appropriate for a tourist accommodation facility based on the General Management Plan? Is the site close to basic utilities, and can infrastructure enhancements to streets and utilities be conducted with ease? Is the site near cultural heritage sites or buildings? Will the planned project cause environmental or social impacts in the area?

²⁸ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.143

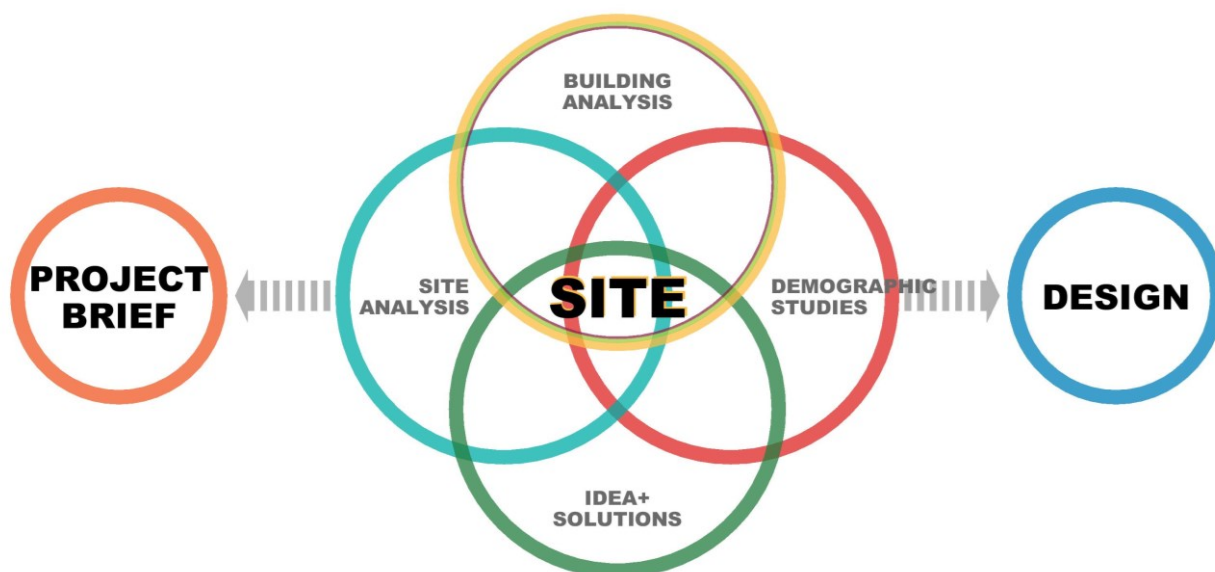


Diagram 4–Process of the site analyses

Every site has its limits for development. Therefore, a detailed site analyses should be undertaken. Sustainable use of land, water and other resources should be based on the National Physical Planning Policy & The Plan — 2017-2050²⁹.

Development conditions, design standards, and planning and building regulations approved under any relevant central or local institutions should be followed. If the site is in an Urban Development Authority (UDA) declared area³⁰, all requirements set in section 8F of UDA Law should be met³¹. If the site belongs to the area where development conditions or design standards are not legally regulated than best international practices should be considered.

The primary requirement in planning is to ensure that the proposed tourist accommodation facility development is in an area demarcated for tourist accommodation facility land use.

If the site belongs to the area where development conditions are set, (example: City of Colombo Development Plan³², Form C1 and C2 (Table 7 and 8)), the development conditions set for that particular site should be considered. Nevertheless, development conditions regulated by SLTDA regulations, Official *Gazette* or approved Guidelines, for different types of tourist accommodation are mandatory (Table 2. extracted from classification characteristics based on the facility requirements of tourist accommodation facilities set forth in the *Gazette* regulations and Board-adopted Guidelines).

²⁹ https://drive.google.com/file/d/1TBgPtGfIXOJmTn_vVkAmGtJU9AiMckp0/view

³⁰ https://www.uda.gov.lk/attachments/regulations/declare_Area_SL_2016.jpg

³¹ <https://www.uda.gov.lk/mega-developments.html>

³² [City of Colombo Development Plan \(Compiled Edition \) \[PDF - 3 MB\]](#)

Development conditions to be considered:

- a) Set back
- b) Building line
- c) Street line
- d) Floor Area Ratio (FAR)
- e) Minimum width between building lines of a public street/road (m)
- f) Minimum width of private street/road (m)
- g) Maximum number of floors including ground floor
- h) Minimum site frontage (m)
- i) Maximum Plot Coverage (%)
- j) Open space around the building
- k) Any other mandatory development condition set the governmental agencies (local and central level institutions)

$$\text{Floor Area Ratio (FAR)} = \frac{\text{Total Building Area}}{\text{Land Area}}$$

2.5 THE GUESTROOM

Guestrooms are the most important spaces of tourist accommodation facilities. They are considered the heart of the building and the conditions and comfort of the guestroom is the main indicator of a good design.

The layout and interior of the guestroom based on the minimum requirement set in Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines are presented in Figures 27, 28, 29 and 30. Samples of the various guestroom layouts are presented in Figure 31. A detailed list of guestroom inventory and items are presented in Figure 26 and 32.

The minimum height of guest room areas:

- a) For living rooms and bedrooms not less than 2.80m;
- b) For bathrooms, lavatories, water-closets, porches, balconies, terraces and garages not less than 2.20m.³³

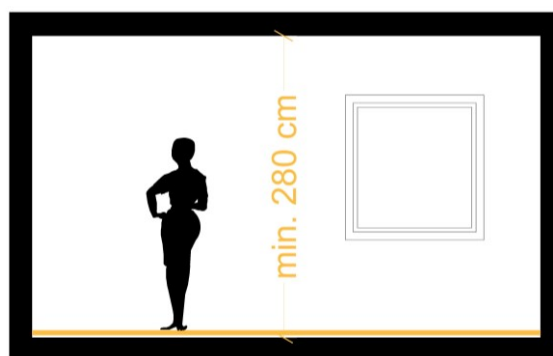


Figure 27–Minimal room height in guestrooms

³³ City of Colombo Development Plan 2008 (Amended),pg.41 and 50 (1).

1. Guestroom items

The following items suitable for a tourist accommodation facility could be foreseen:

- a) Arm chairs with a coffee table
- b) Dressing table with mirror and stool/chair
- c) Writing table with chair
- d) Television
- e) Wardrobe or wall cupboard with adequate racks and hangers
- f) Well stocked mini bar³⁴

2. Every guestroom shall have following electrical lighting

- a) General room illumination controlled by a master switch located close to the entrance door.
- b) All lighting shall have the facility of being controlled from the bedside in addition to the individual controls.
- c) Adjustable lamps of good quality and sufficient illumination for reading in the arm chair and in bed.
- d) On the face lighting over mirrors
- e) Door activated lighting for the wardrobes.³⁵

Guestroom lighting levels recommended to be maintained are as follows. Bed room general lighting 75 Lux. Reading (Bedside and arm chair) 300 Lux. On the face lighting at the mirrors 300 Lux.³⁶

³⁴ THE TOURISM ACT, No. 38 2005, pg. 11A.

³⁵ THE TOURISM ACT, No. 38 2005, pg. 11A.

³⁶ THE TOURISM ACT, No. 38 2005, pg. 11A and 12A.

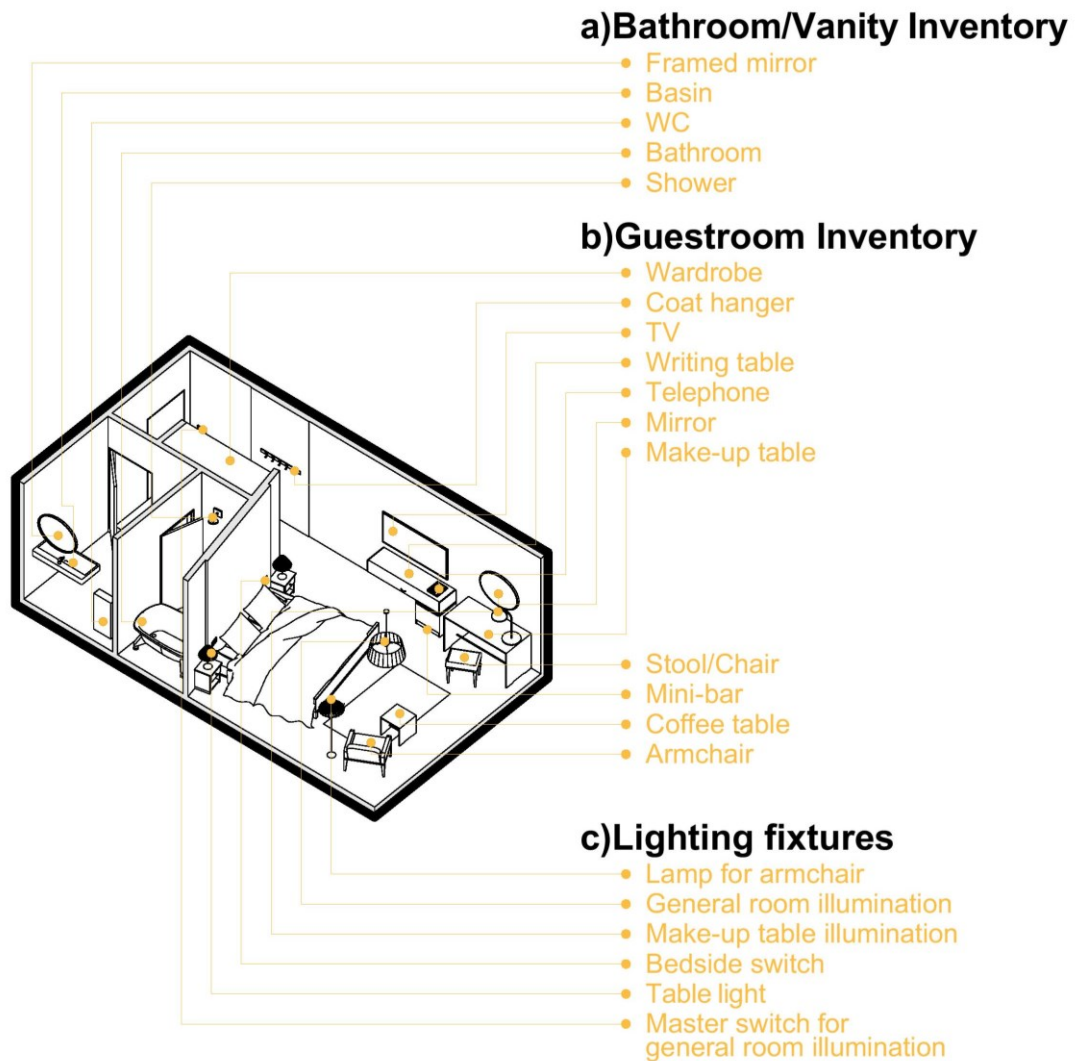


Figure 28–Guestroom inventory



Figure 29–Sample of the guestroom layout based on the minimum requirement set in Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines.



Figure 30–Sample of the guestroom layout based on the minimum requirement set on - Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines



Figure 31–Sample of the guestroom layout based on the minimum requirement set in Gazette (No.1963/28 of 20th April 2016) and Board Approved Guidelines



Figure 32–Various samples of guestroom layouts

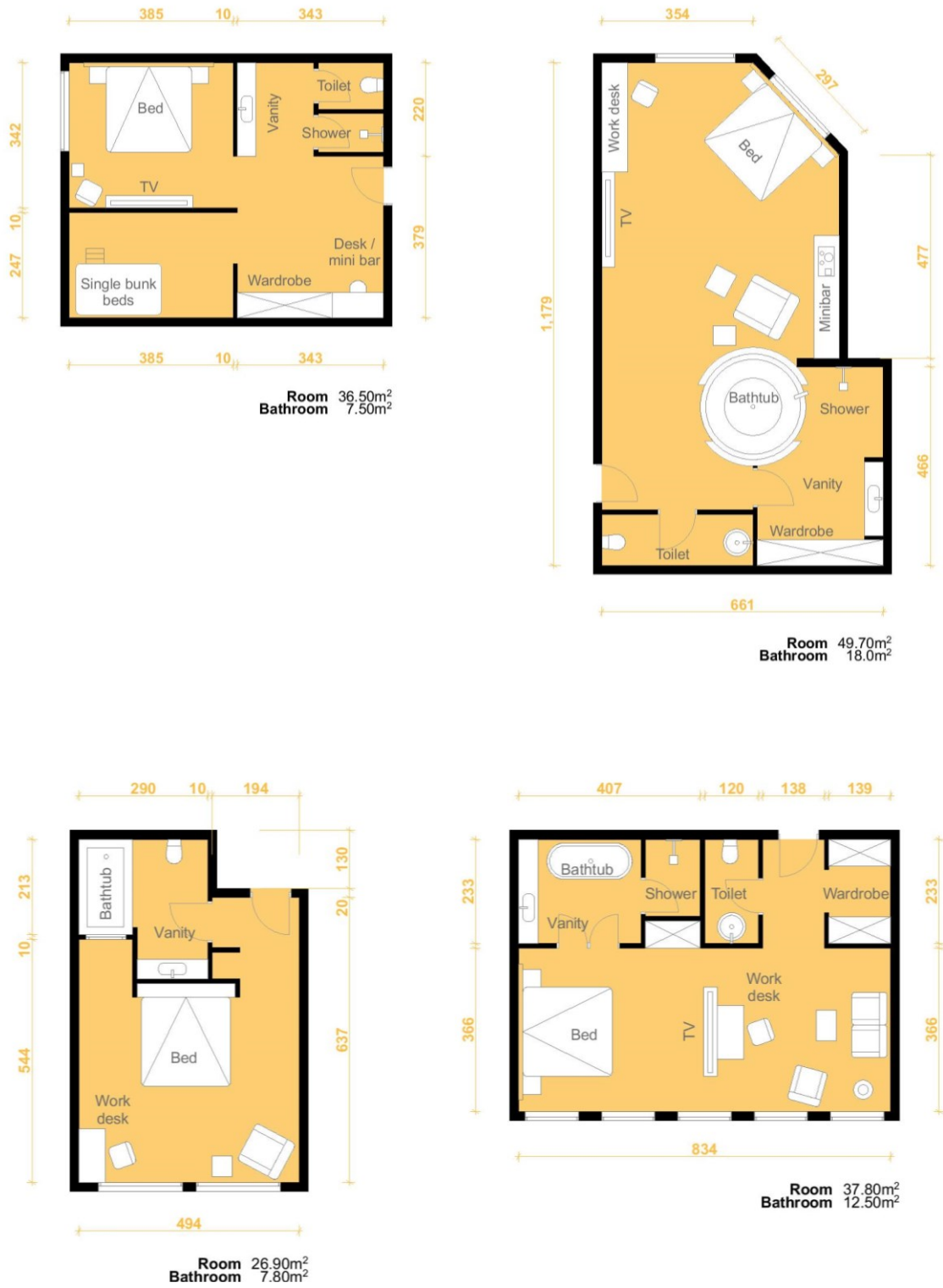


Figure 33–Various samples of the guestroom layouts

2.5.1. ANTHROPOMETRIC FURNITURE

When designing interior spaces, the architect and the designer should be very careful to make the spaces and furniture humane. Designing based on human proportions is known as anthropometric design.

Well-designed furniture not only serves to sit or lay on, but also serves as a place where the body finds full rest and is fully comfortable. Furniture that is not designed anthropometrically can provoke a general feeling of discomfort and, in some cases, injuries.

Tourist accommodation facilities are spaces where people go on vacation, to rest and to enjoy. Therefore, anthropometric considerations must be a key feature in the design.

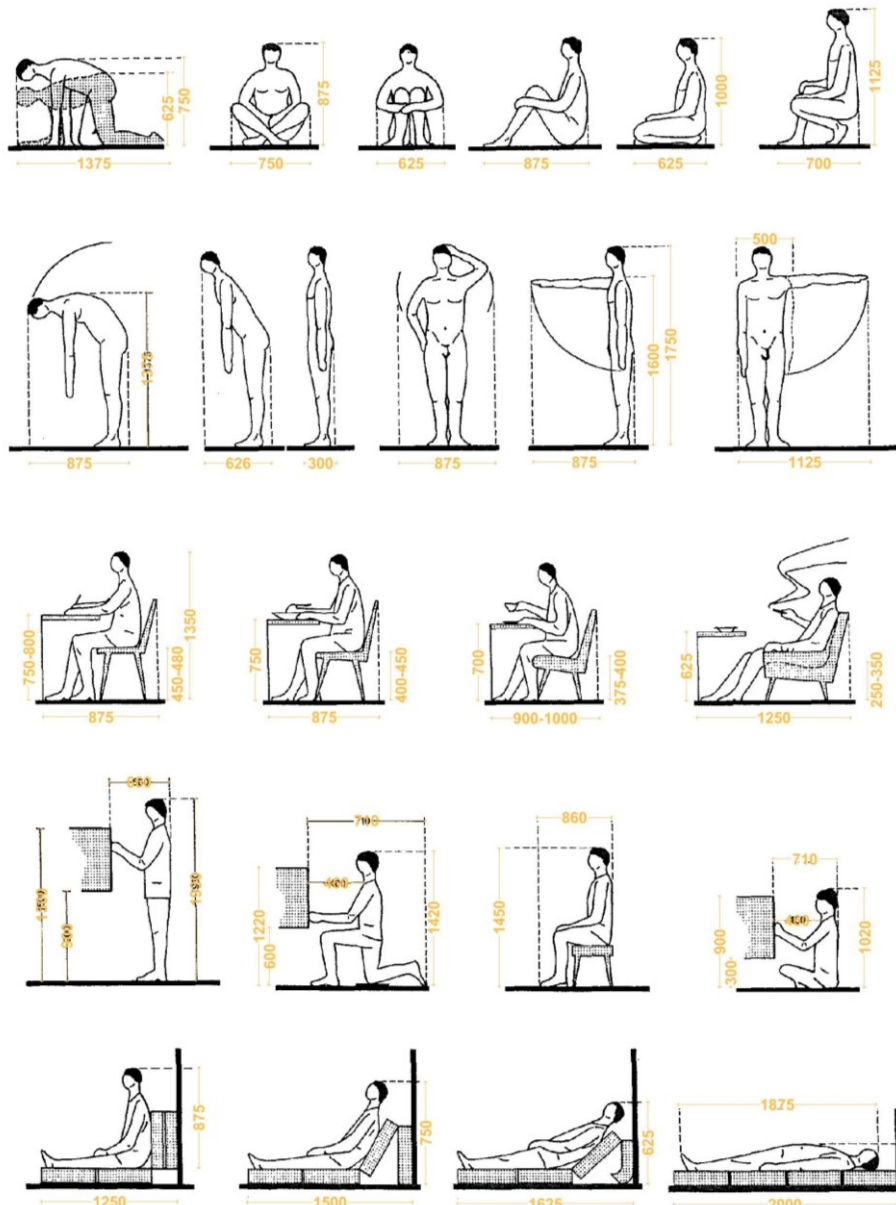


Figure 35–Anthropometric measurements³⁷

³⁷ Ernest and Peter Neufert, “Neufert, Architects’ Data”, Fourth Edition, pg.26

2.6 THE DINING ROOM – RESTAURANT AND ITS COMPONENTS

The dining room of the tourist accommodation facility it is a very complex space of the facility. The dining area includes number of components and layers that help it function as a whole. These components are:

- a) The main restaurant
- b) The bar
- c) Kitchen
- d) Storage room
- e) Cellars
- f) Changing rooms and lockers for kitchen staff
- g) Showers
- h) Bathrooms
- i) Other...

When designing a tourist accommodation facility dining area, a certain balance should be established between quality of function and cost efficiency. This balance may be obtained by various means such as:

- (i) Rational dimensioning of spaces;
- (ii) Adapted circulation areas - circulation spaces should not exceed 25% of the useful built area;
- (iii) Optimal number of spaces - the number of spaces is primarily determined by the rate of occupancy. The minimum standard for restaurant area is 1.5m² per guest/seat;
- (iv) Maximum versatility - spaces must be designed with a maximum versatility, enabling them to adapt to several changes, when this is compatible with their functional requirements;
- (v) Grouping of spaces - spaces should be grouped in blocks according to function and interrelation.

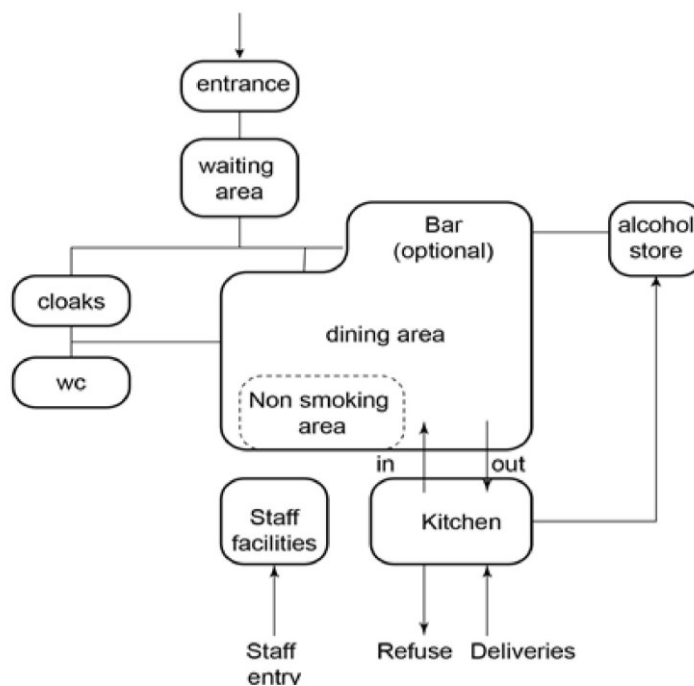


Diagram 5–Functional zones of the Restaurant

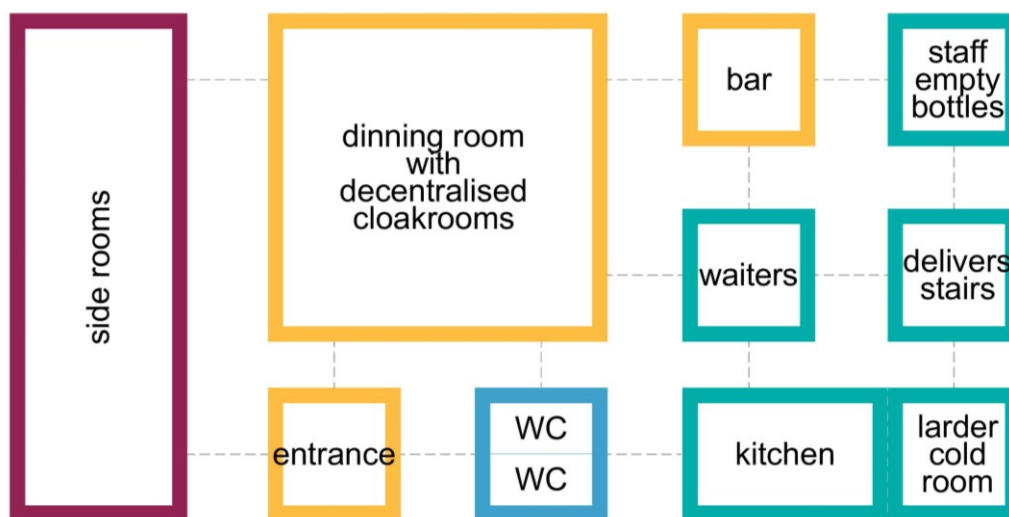


Diagram 6–Functional scheme of a small restaurant³⁸

³⁸ Ernest and Peter Neufert, "Neufert, Architects' Data", Fourth Edition, pg.171

2.6.1. RESTAURANT

The restaurant, together with the lobby and guestrooms, is one of the most representative areas of the hotel. Taking this into account, the restaurant should be well furnished with comfortable and functional furniture that has a superior quality and is in good condition. Walls, floors ceiling, doors, windows, woodwork, and fittings of the restaurants should be safe and very well maintained. The theme of the restaurant should complement that of the hotel. Also, in the restaurant the floor area should be of a very high standard, maintained and in good condition.³⁹

There are several components that should be taken into mind when dimensioning a tourist accommodation facility' restaurant. Such components are listed below:

a) The ceiling height

The ceilings height varies based on the size of the restaurant area:

- (i) ~50m² = 2.50m'
- (ii) >50m² = 2.75m'
- (iii) >100m²= ~3.00m'
- (iv) Above galleries ~ 2.50m' ⁴⁰

b) Area of the restaurant

The size of the restaurant is dimensioned based on the capacity of the hotel, but its area is shaped by the human proportions, i.e. anthropometric proportions.

Below are visualized the anthropometric and furniture (standard) requirements for restaurants:

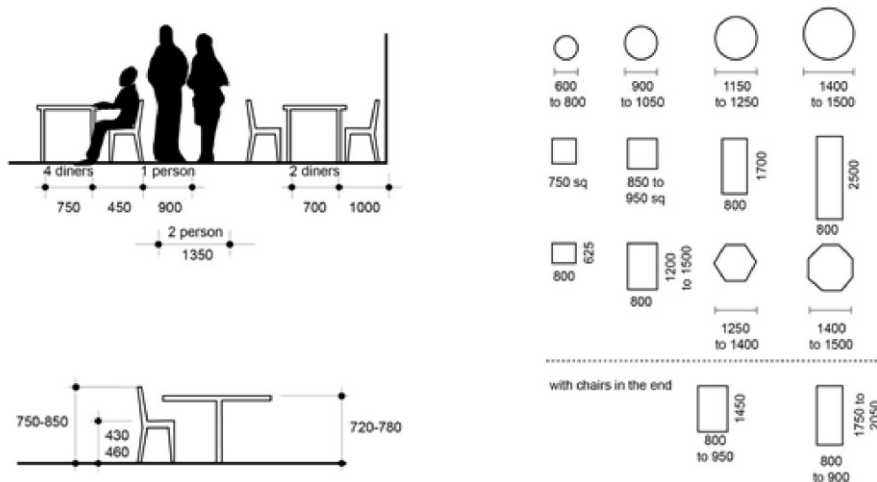


Figure 36–Dimensioning the area for the restaurant based on the furniture dimensions and anthropometrics

³⁹ Gazette, “THE TOURISM ACT”, No. 38 2005, pg.31A

⁴⁰ Ernest and Peter Neufert, “Neufert, Architects’ Data”, Fourth Edition, pg.175

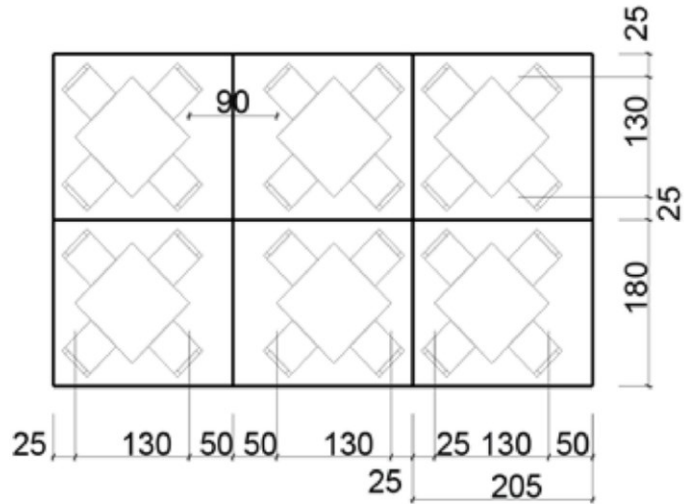


Figure 37–Sample layout of organizing restaurant furniture - 1.4m² and 0.9m²/per guest Circular table: diagonal layout local density 0.82m²

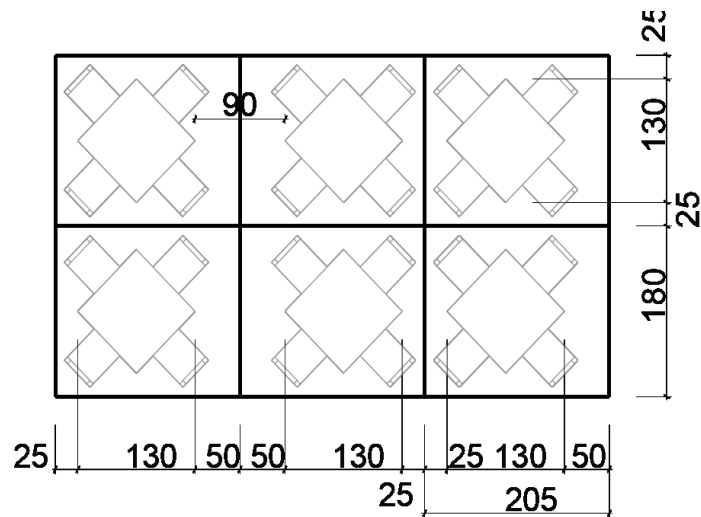


Figure 39–Square table: diagonal local density 1.2m²

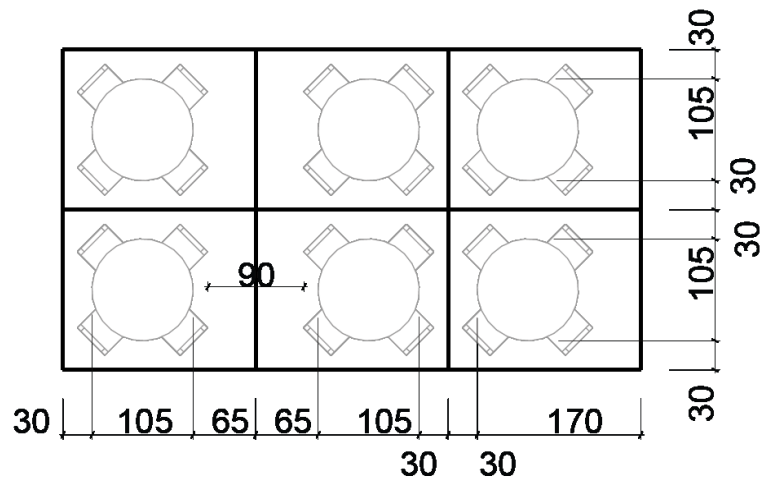


Figure 38–Round table, round layout local density 1.411

2.6.2. KITCHEN

The main kitchen/satellite kitchens should be strategically located in close proximity to the food outlets.⁴¹

In the kitchen there are several processes that take place that need to be addressed carefully and translated into clean functional lines. Some of these processes include:

- a) Preparation
- b) Cooking
- c) Baking
- d) Storage room (no frost)
- e) Storage room (frost)
- f) Dish washing
- g) Pot washing
- h) Chef's office

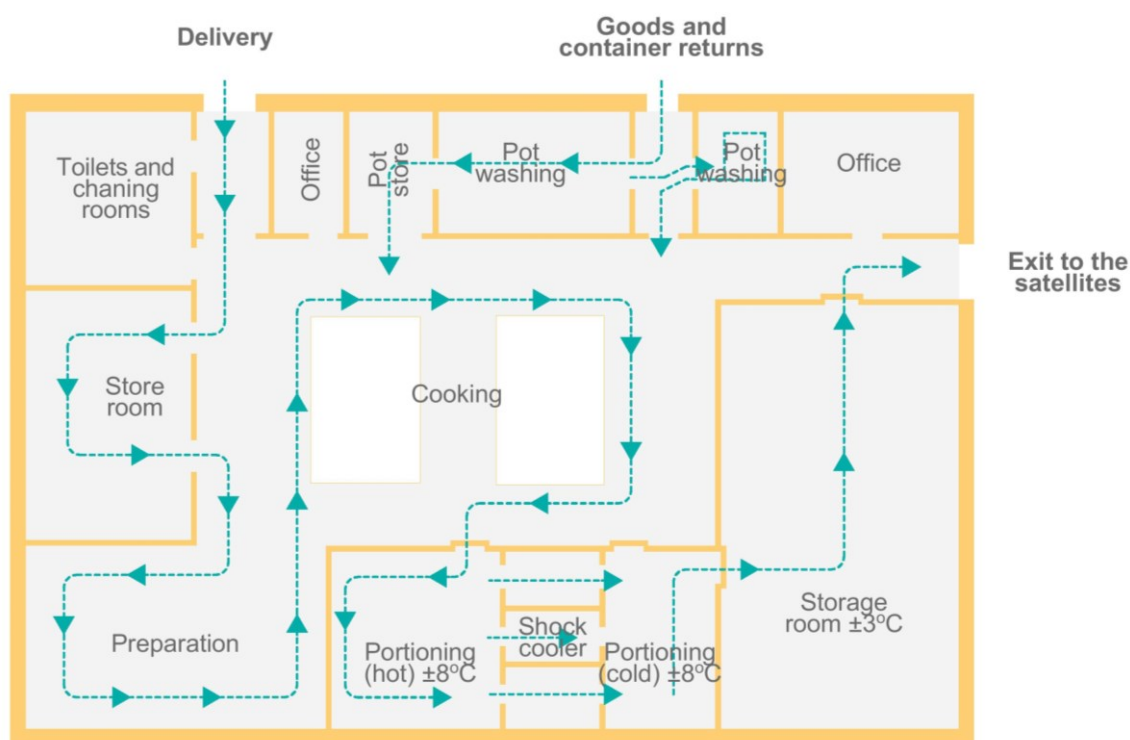


Figure 40—An example of organization of (a big restaurants') kitchen

⁴¹ Gazzete_2016

When designing a kitchen, there are several volumes that need to be dimensioned according to the capacity. These volumes/areas are:

a) Kitchen area height

The height of rooms (kitchen) in a place of public resort shall be not less than 3.0m.⁴²

b) Kitchen area

The size of the kitchen is based on how the tourist accommodation facilities classified. In stard hotels, the kitchen area must be equal to the number of seats in the restaurant multiplied by 1.2m². In guest houses, boutique hotels, and boutique villas, the kitchen area is equal to the number of seats in the restaurant multiplied by 1.0m². In home stays, it is the number of seats in the restaurant multiplied by 0.7m².

c) Lighting in kitchen area

Lighting shall be of adequate luminance. Lamps shall be provided with shatter proof and easily cleanable diffusers.⁴³ Kitchen areas should have both natural and artificial lighting.

2.6.3. STAFF LOCKERS, BATHROOMS AND CHANGING AREA

One of the important components that supports the well-functioning of a tourist accommodation facilities the staff area. Several functional areas should be considered, calculated and dimensioned:

- a)** Accommodation, if provided on-site
- b)** Dining area
- c)** Lockers
- d)** Bathrooms/ washrooms and showers
- e)** Lighting

RIBA recommends calculating the number of staff based on the number of rooms and type of facility⁴⁴. Fractions should be rounded to the next whole number:

- luxury: 1.5 staff per room;
- high-grade: 0.8-1.0 staff per room;
- mid-grade: 0.5-0.6 staff per room;
- low budget: 0.2-0.3 staff per room.

According to STLTDA regulations, the minimum standards for staff areas are:

⁴² City of Colombo Development Plan 2008 (Amended). Pg.41, 50 (1)

⁴³ Gazzete_201

⁴⁴ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.151

a) Accommodation

Where staff accommodation is provided, the building shall be well ventilated and has maximum possible natural lighting. The floor shall be made of impervious materials to facilitate cleaning. The floor area provided per person shall be not less than 5m². Comfortable beds with suitable mattresses shall be provided. The walls should be smooth and treated with a finish conducive for cleaning.

b) Dining area

- (i) Dining kitchen: If there is a dining area where staff meals are provided and prepared separately, an adequately equipped and clean staff kitchen should be available. Running hot and cold water with mixing facilities shall be available for washing of kitchen utensils. The staff kitchen shall be free of insects and rodents.
- (ii) Dining area/food: Where staff meals are provided, staff dining room should be well ventilated. The floor should be made of impervious material. Walls should be covered up to 150cm with impervious material to facilitate cleaning. The dining area should be such that a minimum of 1.5m² is available per person. The total number of seats should be adequate to serve 30% of the total staff in one sitting. The table should be covered with impervious material conducive for easy cleaning. There must be at least two sinks with running hot and cold water with mixing facilities for washing of cutlery, crockery and glassware. Adequate number of hand washing stations with soap and hand drying facilities should be available.

c) Lockers

- (i) Residential staff locker space should 0.3m³/per person. The height of the locker shall be not less than 90 cm, and the depth not less than 45 cm. The lockers should be well ventilated.
- (ii) Non-residential staff locker space should 0.3m³/per person. The height of the locker shall be not less than 90 cm, and the depth not less than 45cm.

d) Washrooms/ bathrooms and showers

For every 50 staff, there must be a toilet, washbasin and shower for each gender.

e) Lighting

Where staff accommodation is provided, the building should be well ventilated and have maximum possible natural lighting.

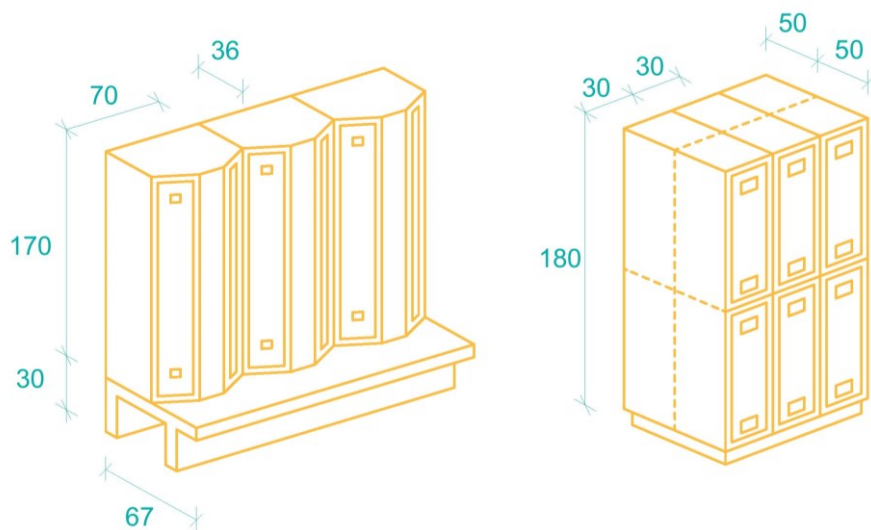


Figure 41–Lockers⁴⁵

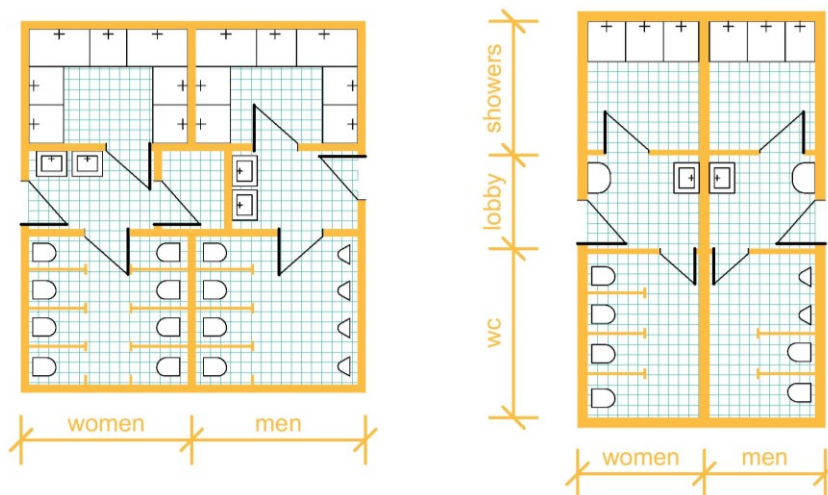


Figure 42–Showers and bathrooms⁴⁶

⁴⁵Ernest and Peter Neufert, "Neufert, Architects' Data", Fourth Edition, pg.272

⁴⁶Ernest and Peter Neufert, "Neufert, Architects' Data", Fourth Edition, pg.367

2.7 ENTRANCE, LOBBY OR HALL

The entrance, hall and lobby welcomes visitors and sets the first impression. It is also where almost all functional lines meet and interact with each other. So giving this area careful thought is well warranted.

The main components of this area are:

- a) Entrance
- b) Lobby
- c) Reception/ front desk

a) Entrance

The approach, entrance, vicinity and the environment shall be fit for a tourist accommodation facility.⁴⁷

b) Lobby

The lobby / lounge should portray the image and the ambience in relation to the location and the environment of the hotel. The lobby should be well appointed and air-conditioned, well ventilated with adequate seating facilities commensurate with the size of the hotel. The furniture, surfaces and decorations of this area should be of a high quality. The seating of the lobby should be designed in a way that is functional, comfortable, and safe.⁴⁸

The lobby area is the circulation area where people gather, wait, register, settle account and get information services. According to RIBA, based on the type of the hotel the lobby area can be dimensioned by these parameters:

- (i) high-grade city hotel: approximately 1.0m² per room
- (ii) budget designs: approximately 0.3m² per room or less

Since the lobby area is the place where people wait and get information, the lobby furniture/elements include:

- (i) a front desk
- (ii) lounge – waiting area
- (iii) cloakrooms
- (iv) facilities for luggage handling and
- (v) other, based on the specific design

While this might be the minimal requirements for the lobby area, in larger hotels add:

- (i) arcade shops
- (ii) concierge
- (iii) currency exchange
- (iv) bell-captain
- (v) group registration and

⁴⁷ Gazette, "THE TOURISM ACT", No. 38 2005, pg. 9A

⁴⁸ Gazette, "THE TOURISM ACT", No. 38 2005, pg. 10A

- (vi) other services⁴⁹

c) Reception/ front desk

The reception/ front desk area consists of workstations where visitors go to check in/out, get information and solve other issues. Usually the front desk is set back at least 1.2m from circulation routes and is supported by a front office – while space behind the desk should be around 1.2-1.5m. For example, a workstation of about 1.5-1.8m' contains:

- (i) reception
- (ii) cashier
- (iii) information (concierge) sections
- (iv) telephone switchboard
- (v) alarm indicator panels, and
- (vii) other, based on the specific design

The desk length is calculated by the size of the hotel:

- (i) 50 rooms: 3m
- (ii) 100/150 rooms: 4.5m
- (iii) 200/250 rooms: 7.5m
- (iv) 300/400 rooms: 10.5m⁵⁰

2.8 SERVICES AND ADMINISTRATION

The administration area is the area where the managerial staff and other logistics should be placed. As with other areas, the administration area varies in size based on the size and room capacity of the tourist accommodation facility.

The administration areas include:

- (i) the front office(located adjacent to the reception desk)
- (ii) executive
- (iii) accounting
- (iv) sales
- (v) catering offices
- (vi) personnel and
- (vii) engineer's offices.

The amount of space needed for administration services is calculated by the type of hotel and number of rooms:

- (i) high-grade: 1.6 m²/room
- (ii) mid-grade: 1.2 m²/room
- (iii) budget: 0.4 m²/room⁵¹

⁴⁹ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.148

⁵⁰ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.148

⁵¹ RIBA, Edited by Quentin Pickard, "The Architects' Handbook", pg.148

2.9 EXTERNAL SPACES

External spaces are divided in three categories:

- a) Spaces allocated to recreation areas and sport areas;
- b) Circulation areas including those for vehicles (roads and parking) and for pedestrians (sidewalks and paths);
- c) Green areas with plantings (trees, shrubs, bushes and lawns).

The minimum requirement of land area for each type of tourist accommodation facility is calculated by adding the necessary requested external spaces to the built area of each building. This area depends on the tourist accommodation facility capacity, the number of floors, and the estimated proportion of land attributed to landscaping and circulations.

2.10 COST AND BUDGET PARAMETERS

The materials and building techniques should ensure architectural quality while at the same time meeting budgetary requirements. The designer should therefore choose materials and techniques that establish the best possible relationship between quality, durability and cost.

To reduce the total cost of owning a building while ensuring its quality, it is necessary to balance the initial design and construction costs with the running costs such as lighting, heating, cooling, repairing and otherwise operating and maintaining the facility. This balance can be reached through:

- a) Use of local resources (materials and labor) and consideration of the recyclability of materials within the threshold of quality;
- b) Ease and simplicity of design and construction;
- c) Durability with respect to the effects of climate and intensive use by guests;
- d) Selection of building elements on the basis of life-cycle cost analysis (compare the lifespan of projects and systems with the expected lifespan of the facility);
- e) Specified materials and products that are easy to maintain;
- f) Commissioning of the facility to ensure that it operates in a manner consistent with design intent;
- g) Use energy simulation and analysis tools to optimize energy performance (integrate day lighting systems, high-performance HVAC, energy-efficient building shell, and high-performance electric lighting); and
- h) Anticipate and prepare an easy and efficient maintenance schedule with adapted materials and using locally available accessories and spare parts.



3 GENERAL PRINCIPLES

3.1 TECHNICAL NORMS

Technical norms for construction, building techniques and materials are not yet established in Sri Lanka and professionals in the construction sector are relying on foreign norms, mostly from **TO BE IDENTIFIED**.....;

3.2 COMFORT PARAMETERS

There are three main sources of physical discomfort that the body can experience: temperature, light and sound. An amount of any of these outside an acceptable range will cause discomfort. It is the object of the facilities design to so arrange a building's environment that potential discomfort is reduced to an acceptable level. This is an inexact science since much response to discomfort is subjective and varies between individuals. However, studies have shown broad agreement on what are considered as suitable levels for each of the sources.

3.2.1 CLIMATIC COMFORT (TEMPERATURE)

a) Definitions and terminology

Thermal comfort is usually attributed to two main parameters: (i) the thermal comfort feeling due to the balance between accumulated and lost calories in the body; and (ii) the control of the climatic conditions including sun position and radiation, temperature, humidity and winds.

Designers of tourist accommodation facilities need to take into account the climatic conditions of the area where the construction is envisaged. The present guidelines give general statements about climatic conditions in Sri Lanka, but additional and more detailed data shall be collected for precise conditions in the concerned area, such as: (i) average monthly temperatures with minima and maxima; (ii) local hygrometry; and (iii) prevailing winds for each climatic season and frequency of strong winds and storms.

b) Sri Lanka Climatic Conditions

Due to the location of Sri Lanka within the tropics between 5° 55' to 9° 51' North latitude and between 79° 42' to 81° 53' East longitude, the climate of the island is characterized as tropical. The central part of the southern half of the island is mountainous with heights more than 2.5 km. The core regions of the central highlands contain many complex topographical features such as ridges, peaks, plateaus, basins, valleys and escarpments. The remainder of the island is practically flat except for several small hills that rise abruptly in the lowlands. These topographical features strongly affect the spatial patterns of winds, seasonal rainfall, temperature, relative humidity and other climatic elements, particularly during the monsoon season.

The climate of Sri Lanka is dominated by the above mentioned topographical features of the country and the Southwest and Northeast monsoons' regional scale wind regimes. The climate experienced during a 12 months period in Sri Lanka can be characterized into 4 climate seasons as follows.⁵²

- (i) First inter-monsoon season (March-April);
- (ii) Monsoon season (May-September)
- (iii) Second inter-monsoon season (October-November)
- (iv) Northeast monsoon season (December-February)

Temperatures differ slightly depending on the seasonal movement of the sun, with some modified influence caused by rainfall. The mean annual temperature varies from 27°C in the coastal lowlands to 16°C at NuwaraEliya, in the central highlands (1900m above mean sea level). This relatively unique feature manifesting as sunny beaches to rain forests inland is a tourist attraction.

c) Improving climatic comfort

To improve the thermal comfort of tourist accommodation facilities, possible climate control measures are classified in two categories:

- (i) **Natural** or passive measures including building orientation, position and dimensions of the openings, quality of materials, thermal insulation, plantings next to the buildings.
- (ii) **Artificial** or active measures including mechanical or electrical means such as ventilation or air conditioning and heating.

In order to control the climate effects on the tourist accommodation facilities spaces, simple measures should be taken by designers at the beginning of the design process. These are concerning:

- (i) **Orientation** of buildings: orientation of guest areas towards South and North is recommended, as such orientation provides a protection against direct sun rays. This preferential orientation can deviate by approximately minus or plus 30° (because of site requirements or because of the orientation of the prevailing winds);
- (ii) **Placement** of buildings: the distance between buildings from façade to façade shall be proportional to the height of the buildings to allow fresh air and natural light in the lowest levels;
- (iii) **Shape and design** of buildings, as for example, the possibility of transverse air flow for the renewal of fresh air with natural cross ventilation during the hot season;
- (iv) **Landscaping**: vegetation can play an essential role in creating a microclimate, whenever needed. Planting trees contributes effectively in creating protection from dust, winds and sunlight. In addition, the planting

⁵² Department of Meteorology Sri Lanka -
http://www.meteo.gov.lk/index.php?option=com_content&view=article&id=94&Itemid=310&lang=en&lang=en

- lawn shrubs and bushes allows protection against sunlight reverberation and reflected glare from the ground;
- (v) **Appropriate building elements:** this includes the appropriate roof drainage and site drainage around the buildings, shading with adjustable shutters on windows, sun breakers, sun screening, overhangs and/or galleries that can bring additional protection against sunlight, especially when the building orientation is unfavourable.
 - (vi) **Adequate building materials,** including façade materials with possible reflection of the sunlight, insulation materials to increase the wall and roof thermal inertia.

Cross-ventilation will be a natural comfort factor for the hottest part of the year (see Figure 42) In any case, a building group with rooms with the option of openings both sides are not economical, although this is the optimum recommendation. Tourist accommodation facilities, like any building mass, will have a pressure gradient over it in any wind condition and direction, so that air will flow through the building from positive pressure to negative, to the extent that internal divisions and spaces permit. This is how the overnight potential cooling benefit will be assisted by exterior high-level window opening lights and the interior.

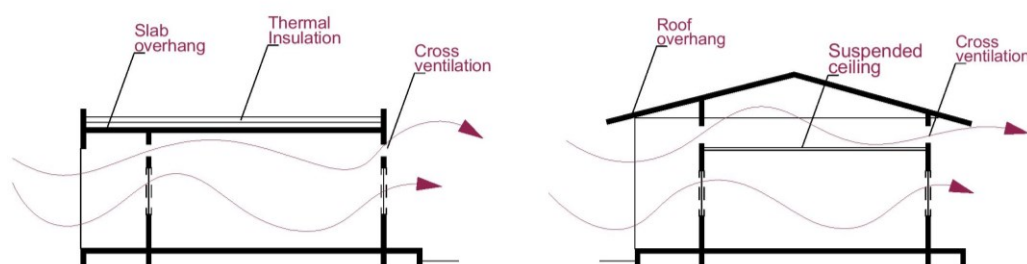


Figure 43–Thermal comfort: cross ventilation

- (i) **Sun Screening:** effective sun screening devices can be designed to operate in any orientation, since the angle of the sun is entirely predictable. However, owing to seasonal change in elevation, round the year full exclusion would require movable elements in a screen. In practice, screening is usually a compromise, although if the optimum orientation has been designed in, then screening will be effective. Assuming a South orientation, a window will be screened by an external horizontal shelf at the level of the top of the window, with a projection depending on the duration of the year that it is desired to exclude the sun from penetrating the room or from striking the glass. It is essential to stop the sun from striking the glass as the heat is very effectively transferred inward and the glass itself is heated, thus accentuating the effect. It must be noted that the use of double glazing is ineffective in stopping sun penetration; it is only effective at preventing heat loss outwards.

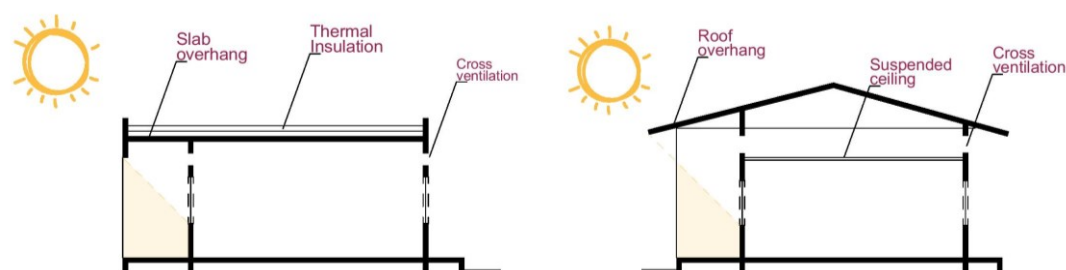


Figure 44–Thermal comfort: Sun protection

3.2.2 VISUAL COMFORT

a) Definitions and terminology

The need for high standards and well designed lighting in tourist accommodation facilities is based on: (i) **natural lighting** resulting from direct sunlight or indirect light reflected from the ground and other external or internal surfaces (see table 6 and 7 below); (ii) **artificial light** from electricity sources (lamps, fluorescent tubes); (iii) **brightness** or intensity of light whether from natural or artificial source or from an opaque surface or object; and (iv) **contrast** that applies equally to differences in brightness or colour.

Table 12 – Average light reflection factors

Materials	%
Plaster	85
White paper	84
White painting	75
Cement	55
Freestone	50
Natural timber (light colour)	33
Red brick	20

b) Findings from previous studies

Excessive glare from sunlight can cause acute discomfort. The amount of daylight normally falling on an un-shaded guestroom will be well over 1000 lux and a comfortable level should be 300 to 400 Lux (see table 6 below). Internal window blinds may be the only means of reducing glare on a very bright sunlit day and it will be appropriate for the designer to make provision for the necessary track.

Table 13–Comparative lighting value in Lux

Location	Lighting (lux)
Outside, full sunny weather at noon	80,000 to 100,000
Inside, next to a window with clear skies :	
- 0,50 m from window	2,000 to 4,000
- 1,50 m from window	700 to 900

c) Recommended measures

Designers must take appropriate measures to ensure lighting and visual comfort, which is essential for both guests and staff. These are:

(i) Natural lighting:

- limit the use of expensive artificial lighting. The building plan and room layouts should maximize the use of natural light while minimizing the potential glare that could occur during certain periods of the day;
- a good level of lighting is important in circulation areas to minimize the risk of accidents;
- the distance between opposite facades should allow sufficient penetration of light into the facilities. The same distance recommendations apply for climatic comfort;
- the number, dimension, placement and arrangements of windows must comply with the required quantity of light (and air flow). Bearing in mind the importance of natural lighting, it is recommended that the minimum surface of windows in guestroom spaces to be not less than 15% of the floor area;
- the depth of rooms may affect the natural lighting for spaces on the opposite side of the windows. It is therefore recommended to avoid room depth exceeding 7.50m;
- when using overhangs, struts and/or bars to protect windows, their effect on natural light should be carefully studied;
- planting trees and bushes can limit the intensity of light, depending on their size, shape, type of foliage and distance from the buildings.

(ii) Artificial lighting:

- some tourist accommodation activities demand adequate artificial lighting, especially at the end of the day or on cloudy days.
- the type of lighting equipment to be installed depends on the intensity of light required and the type of related activity. However, fluorescent tubes, when compared to incandescent lamps, have the advantage of low surface brightness, high efficiency, low heat production and good light distribution;
- there are no precise standards in Sri Lanka for the amount of light required in tourist accommodation facilities, but it is recommended to use the following average general standards presented in table 8;
- the building design and the type of lighting equipment must address accessibility for easy maintenance, especially in high ceiling areas.

Table 14 –Rooms

Rooms	General (lux)
Guestrooms	300 to 500
Offices, administration	400 to 600
Corridors and stairs	200
Lobbies	250
Restaurants	350
Kitchen	530
Lounge (adjustable)	55-350
Public Restrooms	215-430
Meeting Rooms / Boardroom	530
Health Clubs & Fitness Rooms	430
Stores, archives	200

3.2.3 ACOUSTIC COMFORT

a) Definitions and terminology

Before recommending measures to improve the acoustic comfort in tourist accommodation facilities, terms and notions related to acoustics should be defined:

- (i) **Sound** is a pressure wave in an elastic medium. If not restricted, it spreads from the source in all directions and diminishes in intensity as the square of the distance from source. It moves at about 0.344 m/second in the air and with a faster speed in denser media such as wood, steel, concrete.
- (ii) **Transmission** of sound through a medium depends upon its density and homogeneity. In homogeneous medium such as steel, the sound is transmitted with a greater efficiency than in a non-homogeneous medium such as a brick wall;
- (iii) Sound **intensity** is the rate at which the energy of sound is transmitted. This intensity is measured in decibels (dB);
- (iv) Sound **frequency** is measuring the number of pressure waves per second produced by the sound. The average human ear responds to frequencies 16 to 16,000 waves per second;
- (v) **Absorption** represents the proportion of sound that stays in materials and never comes out. The more porous materials, the higher is the absorption and structural surfaces. People or furniture are actually absorbing part of the sounds.

b) Findings from previous studies

Acoustic discomfort may come from outside or inside sources. The acoustic environment in tourist accommodation facilities can be noisy, especially when groups of guests are arriving or leaving. When the guests are in the guestroom, a controlled level of sound is needed for the privacy of the guests. There are three sources of unwanted noise that need to be controlled:

- (i) From guestrooms;
- (ii) From noise sources within the tourist accommodation facilities, lobby, lounge, restaurants, corridors, mechanical systems, as well as from inside and outside sport and recreation areas, playgrounds and other sources of noise outside the building;
- (iii) From other sources off the wider site/location.

c) Recommended measures

In order to provide a good environment, the following considerations must be taken into account in the design of the tourist accommodation facility:

- (i) **Location:** exterior noise can be controlled by locating tourist accommodation facility as far away as possible from noisy boundaries, by orientating guestrooms away from noise sources, by increasing landscaping elements to limit the penetration of exterior noise (markets, highways, stations).
- (ii) **Location of buildings** with reference to interior and exterior sources of noise.
- (iii) **Soundproofing:** measures should be taken to provide sufficient soundproofing between spaces (guestrooms, corridors, offices, etc.) to prevent disturbances caused by external or internal noises. A solid material such as a block wall between a predictable noise source and neighbouring room will give a decibel reduction of a good order; and
- (iv) **Materials and techniques** should be adapted to control noise between spaces and inside spaces: the use of absorbent materials on ceiling, the construction of double external walls separated with a void filled with insulating materials (polystyrene), thick partitions and walls between guestrooms, floor finishes materials helping to decrease impact noises, stuffing of joints around pipes and air ducts etc.

3.3 SAFETY PARAMETERS

3.3.1. ACCESSIBILITY

Tourist accommodation facilities must comply with the regulations stipulated in "Protection of the Rights of Persons with disabilities" Act (gazette notification no. 1, 467/15 of 17th October 2006).

In order to provide persons using mobility devices such as wheelchairs, crutches and walkers and for the persons moving with the assistance of another person with easy access to any tourist accommodation facility, or place where common services are available, the following part of the buildings shall be designed in accordance with the design requirements specified in Disabled Persons (Accessibility) Regulations:

- (i) **Parking areas;**
Parking area shall have designated parking spaces for disabled drivers and guests and such spaces shall be located as close as possible to the main entrances and exits of tourist accommodation facility. Out of 25 parking places one should be designated for disabled drivers. Parking areas should have enough clear space around them so that disabled persons can get into and out of a car
- (ii) **Pathways and corridors**
Pathways and corridors shall be wide enough for wheel chair users. The corridors should provide the circulation routes that allow easy movement and provide a sense of direction. Minimum 90cm clear width for single wheelchair and minimum 150cm width of corridors with wheelchair turning spaces of 180cm x 180cm at regular intervals.
- (iii) **Ramps**
Entrances and exits to be accessible by ramp; Ramps should ideally not be steeper than 1:15; Ramps should at least be 150cm wide, and have landings every 5 metres run and at the top and bottom of the ramp; Steps should always accompany a ramp and vice-versa.
- (iv) **Lifts and elevators ;**
The elevator should have a minimum internal space of 140cm x 140cm and the door should provide a clear opening width of 90cm.
- (v) **Doorways and entrances**
Doorways shall be wide enough for wheelchair users (90cm. Minimum); Space to manoeuvre shall be provided in front of doors, including sufficient;
- (vi) **Toilets**
At least one accessible toilet in the common restroom area. Toilet areas shall have enough floor space for wheelchair users to enter and exit. Internal dimensions of the toilet cubical shall be not less than 150cmX200cm.
The en-suite bathroom should have minimal internal dimensions of 2700mm x 2500mm.
The toilet door should either be an outward opening door or a sliding type
- (vii) **Guestrooms.**

Minimum of 01 guestroom with adequate facilities, preferably on the ground floor, shall be available for differently abled guests

At least one guestroom in every 25 guestrooms or part thereof shall be accessible and usable;

The dimensions of the differently abled persons in wheelchairs have to be considered by designers for the sizing of the tourist accommodation facility spaces and circulations. The wheelchairs have different dimensions, following the age of the guests and the type of item. However, the following dimensions, corresponding to adult average dimensions shall be considered (see Figure 43):

- (i) The chair width is generally between 600 and 700 mm
- (ii) The length is between 1000 and 1250 mm
- (iii) The external radius is between 1300 and 1500 mm

The reaching space of disabled in wheelchairs is defined as:

- (i) Between 230 and 300 mm over the floor level;
- (ii) Between 1100 and 1300 in height;
- (iii) Between 300 and 400 mm from the lateral sides of the chair;

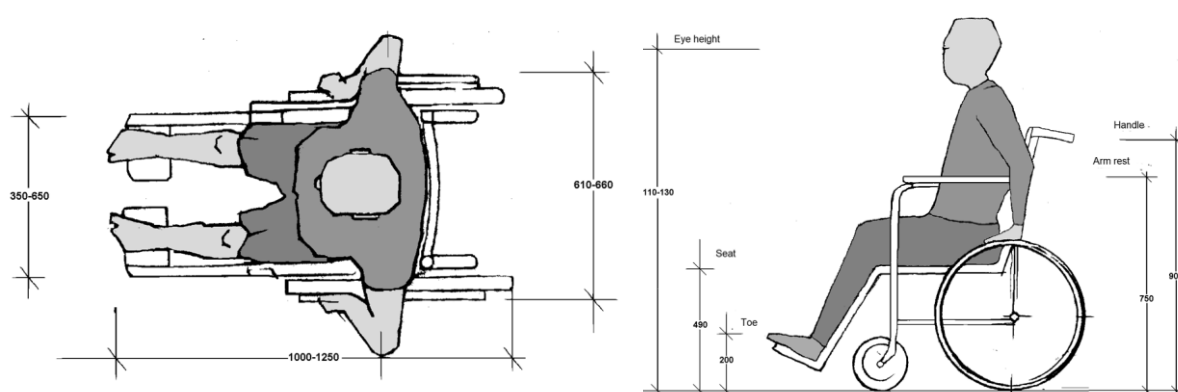


Figure 45–Wheelchair dimensions corresponding to adult average

3.3.2. FIRE PROTECTION SYSTEMS AND REGULATION

As a rule, emergency stairs must be sited at or near the ends of each corridor. Lengths of corridors are limited by travel distances to protected fire escape stairs as specified in local codes. For corridors with sprinkler systems and fire exits at opposite ends allowing two directions of escape, maximum distances usually range from 30 to 60m (with smoke doors at 30m). Dead-end corridors with one exit are limited to 7.6m and travel distances within suites of rooms to 9m.

Minimum fire resistance periods for separation of exits such as staircases are normally: 1 hour for buildings up to three stores, 2 hours for four stores or more. Combustible material and surface flame ratings of linings in exit routes are controlled.

Large tourist accommodation facilities use automatic sprinkler systems, fire mode ventilation switching with alarm, lift and smoke door activation. Fire alarm, indication panel and hydrant

systems must be installed, together with portable and CO² extinguishers (for electrical equipment), in specific areas as required.



4. GREEN BUILDING DESIGN

Green building design is no longer an option, it has become an absolute necessity. Green building design not only minimizes the impact on the environment, but also is practical, efficient, and cost-effective.

When it comes to designing a building with green principles in mind, certain concepts play a key role in the energy consumption outcome: location, landscaping, orientation, ventilation, environmentally-friendly products, water conservation, waste water management, renewable energy and using recyclable materials.

Designers should aim to implement appropriate sustainable design strategies and principles including:

- a) Climate responsive strategies relevant to Sri Lanka and site microclimate;
- b) Building energy efficiency by prioritizing long life, passive design strategies;
- c) Sustainable building architecture features such as high performance building envelope, solar shading devices, and day lighting and view optimization;
- d) Water efficiency through the use of water conservation fixtures and grey water systems;
- e) Storm water strategies for design elements and water closet supply;
- f) Building materials with low embodied energy, reclaimed and/or recycled material that are sourced locally and contain low VOCs;
- g) Waste management strategies for waste, recyclables and organics;
- h) High efficiency HVAC, LED lighting and electrical systems and daylight controls;
- i) Intelligent Building Automation Systems.

4.1 LOCATION/ ORIENTATION/ VENTILATION /RENEWABLE ENERGY

4.1.1. LOCATION

Location means the site of the building, and has a continuous impact throughout its life. For example, a location which is airy, with a natural insulation, or with a geomorphology that creates barriers against heavy winds has qualities that remain and “passively” contribute to the building. Such qualities, when taken in consideration during the early stages of design, lower the carbon imprint together with the needs and the demands that a building has.⁵³

⁵³ Building and Planning Authority; *Building, planning and massing*, pg.24, www.bca.gov.sg

There are many components that should be kept in mind when choosing a building site, such as:

a) Morphological characteristics such as:

- (i) Topography – building at the top of the hill creates sometimes excessive insulation, in the other hand building at its foot generates constant shade. A building surrounded by large masses of land has a good ventilation and is protected by wind. It is important to locate the building in that way that suits its needs for optimal shade, insulation and ventilation.

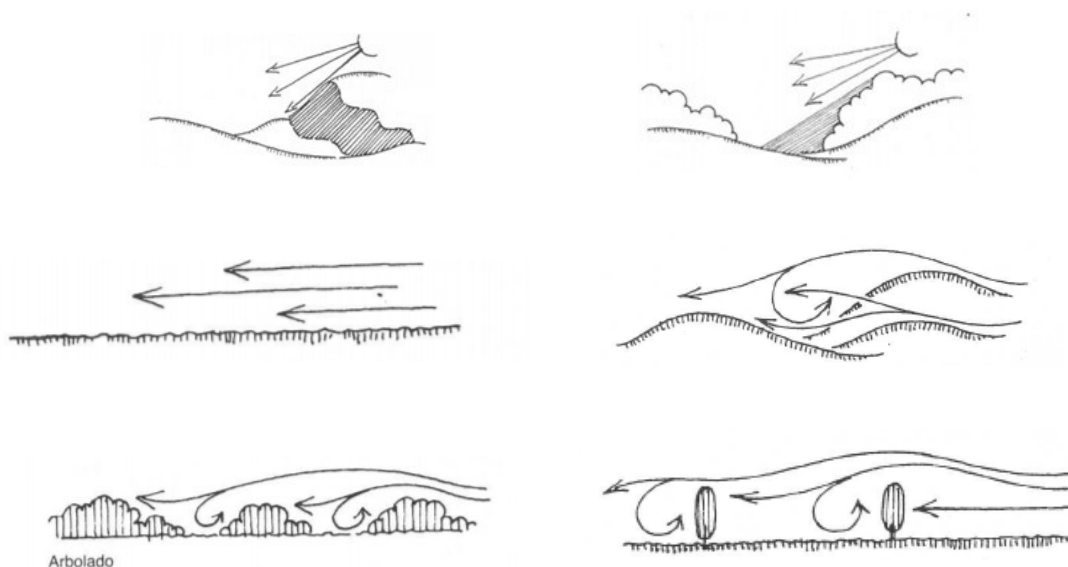


Figure 46–The effects of topography on wind and ventilation

- (ii) Geology –choosing a site that is not prone to landslide or to erosion by performing many examinations beforehand
- (iii) Biodiversity –It is important for the building not to degrade the ecosystem. Designing a building to have minimal impact in that specific ecosystem, by:
- Not releasing water / sewer that is biohazardous
 - Not damaging the flora and fauna
 - Not creating noise pollution
 - Not creating air pollution
 - Having a lower carbon imprint by reducing energy loss and consumption with many methods such as passive heating/cooling (geothermal heating/cooling systems), application of cool roofs, solar panels and photovoltaic panels

b) The building as a part of urban area

A building that is located in an urban area is more likely to be impacted by the heat island effect. This is because materials that are generally used to build and finish city surfaces are very dense, thus absorbing and keeping the heat in. In order to cut the energy costs (such as for cooling), materials with lighter colors are very recommended (known as albedo materials).

54

The solution to this is minimization and better mitigation of these surfaces e.g. use of materials that have generally lighter colors (higher albedo surfaces) such as white brick, red brick and green grass rather than fresh asphalt and black brick that absorb the heat instead of reflecting it.^{55,56} Green roofs, a solution that not only lowers the temperature, captures rainwater by creating new water resources and raises the air quality. They can also serve as quality space for a restaurant, cafe bar or terrace.

When it comes to choosing a location between urban area or suburban/rural area, the very location of a building is more likely to adjust the massing. In suburban/rural areas, buildings tend to be built horizontally or outward, while in urban areas they tend to go upward or vertically. Tall buildings require elevators and water pumps. On the other hand, buildings that are flat need fewer or no elevators, and sometimes do not need water pumps.

Table 15 –Albedo index (the higher the index, the better the material is on reflecting excessive light/heat)

Substance	Typical albedo
Conifer Forest (summer)	0.06-0.15
Deciduous Trees	0.15-0.18
Fresh Asphalt	0.04
Black Brick	0.08
Worn Asphalt	0.12
Bare soil	0.17
Green grass	0.25
Red brick	0.36
Desert sand	0.4
Ocean ice	0.5-0.7
New concrete	0.55
White brick	0.72
Fresh snow	0.80-0.90

⁵⁴ Environmental Protection Agency (EPA); *Reduce Urban heat island effect*, www.epa.gov

⁵⁵ North Carolina Climate Office; *Albedo* <https://climate.ncsu.edu/> and A. SYNNEFA, A. DANDOU, M. SANTAMOURIS, AND M. TOMBROU; *On the Use of Cool Materials as a Heat Island Mitigation Strategy*

⁵⁶ HOOD College; *SURFACE LESSON 2: ALBEDO & LAND COVER TEMP LAB*, <https://www.hood.edu/>

4.1.2. ORIENTATION

Orientation is entwined especially with the sun position and horizons. Since sun offers us light and heat, directing the longest facade towards it is key to harnessing its light and heat. In hot climates, sunlight serves to reduce the dependency of light bodies as much as possible, but sun also releases infrared light which heats surfaces and spaces. In order to avoid such thing in hot climates, different types of shading are proposed from trees to typical shades. Another way is glass film, which is used to filter the light that gets inside the rooms.

Here are some examples of orientation for different rooms:

Sleep, living and resting areas – are recommended to be oriented to the south, southeast or southwest for better sun heat and ventilation. In this group: guest rooms, terrace, restaurants and swimming pool.

Working areas and storerooms – are recommended to be oriented to the north, because the light oscillations are lower, more shade, sun angle is lower generating spaces that are darker and cooler. In this groups: kitchen, storage areas, cellars, wine cellars and fitness rooms.

There are exemptions to these general rules. For example, in coastal cities which have larger hours of sunlight and sun heat per year, northwest or northeast orientations are preferred for living areas or even sleeping areas to lower the energy consumption and raise the quality of that space.⁵⁷

4.1.3. VENTILATION

a) Passive housing

Passive housing is a system that absorb and transport energy, by natural processes. There are three type of passive housing:

- (i) direct gain (when a surface is heated directly by sunlight)
- (ii) indirect gain (when sunlight hits an alternate surface, the heat is transferred to this material and then this material heats the surroundings)
- (iii) isolated gain (such as heat storage tanks)

Steps toward a passive housing building:

- (i) Orientation: optimal sunlight
- (ii) Shape: longer façade on the east-west axis absorbs more daylight
- (iii) Tracking north: keeping a shorter façade on north if cold breeze is not beneficial
- (iv) Tracking functions: location of highly used rooms towards orientation that have more sun such as south, southeast and southwest
- (v) Tracking south: placing large windows on south, southeast and southwest in order to gain more light and heat if heat is beneficial
- (vi) Entrance and openings: placing entrances that do not open in the wind direction

⁵⁷ <https://www.metabuild.io/what-do-building-massing-and-orientation-have-to-do-with-sustainability/>

- (vii) Materials: with higher energy absorption that reduce the temperature oscillations in indoor spaces
- (viii) Solar windows
- (ix) Lanterns or skylights
- (x) Proper shading

Table 16 –Heat capacity in different materials

Substance	Specific Heat (Btu/lb - °F)	Density (lbs/cu ft)	Heat Capacity (Btu/cu ft°F)
Water	1.00	62	62.4
Wood, oak	0.57	47	26.8
Expanded polyurethane	0.38	1.5	0.57
Wool, fabric	0.32	6.9	2.20
Air	0.24	0.075	0.018
Brick	0.20	123	25
Concrete	0.156	144	22
Steel	0.12	489	59

4.1.4. RENEWABLE ENERGY

Renewable energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished. Advocating for renewables, or using them in tourist accommodation facilities, can accelerate the transition toward a clean energy future.

Good practices include:

- a) Solar panels
- b) Photovoltaic panels
- c) Geothermal heating and cooling
- d) Local windmills
- e) Local hydrolytic generators
- f) Energy from biomass and waste recycling



SOLAR
Energy



GEOHERMAL
Energy



WIND
Energy



HYDROLITIC
Energy



**BIOMASS &
WASTE TO**
Energy

Other than finding resources of renewable energy, saving energy is one of the best practices for green buildings. Practices of energy saving solutions are:

- a) Mechanical and natural (well-engineered) ventilation
- b) Good user interfaces for room control (humidity, temperature)
- c) Adjustable light sources (dim switch)
- d) >2% available daylight factor, 0.4 uniformity
- e) Overheating –25-28°C, maximum 1% of occupied hours⁵⁸

*These practices aim to attain:

- a) 75% reduction of operational energy demand and carbon by at least 75% before offsite renewables offsetting by 2030
- b) 50-70% reduction of embodied carbon by 50-70% before offsite renewables offsetting
- c) the net zero carbon emission by 2050 for new buildings

4.1.5. WATER CONSUMPTION

Water recycling is very important the more time passes. It is estimated that the top 17 countries with the largest populations in the world are experiencing water stress. Most of this is due to bad practices in water consumption and recycling.⁵⁹ In order to lower the occurrence of water stress phenomenon, change must start in every single building, with the aim of reducing potable water use per person by 40% (or <75l/p/day) by 2030.⁶⁰

These good practices include:

- a) Good piping system
- b) No water leakage/ Leak detection systems
- c) Low-flow fittings and appliances
- d) Waterless appliances
- e) Treatment of rainwater and grey water
- f) On-site black water treatment (optional)
- g) Sustainable Urban Drainage (SuDS)

⁵⁸ <https://www.architecture.com/-/media/GatherContent/Test-resources-page/Additional-Documents/RIBASustainableOutcomesGuide2019pdf.pdf>

⁵⁹ <https://www.wri.org/blog/2019/08/17-countries-home-one-quarter-world-population-face-extremely-high-water-stress>

⁶⁰ <https://www.architecture.com/-/media/GatherContent/Test-resources-page/Additional-Documents/RIBASustainableOutcomesGuide2019pdf.pdf>

Overall benefits of Green Buildings are lower energy consumption and lower carbon imprint



Figure 47–SuDS – Sustainable Drainage System

ANNEX 1–Accommodation Schedule Hotel 1-3* - Sample

ANNEX 2–Accommodation Schedule Hotel 4-5* - Sample

ANNEX 3–Accommodation Schedule Boutique Hotel - Sample

ANNEX 4–Accommodation Schedule Boutique Villa - Sample

ANNEX 5–Accommodation Schedule Guest House - Sample

ANNEX 6–Accommodation Schedule Home Stay - Sample

Notes:

- (1) - No. of staff per room based on RIBA, Employees per room: luxury 1.5; high-grade 0.8-1.0; mid-grade 0.5-0.6; budget, 0.2-0.3. The number of staff calculated should be a whole number
- (2) - Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
- (3) - 0.8-1.2 seat/room; 1.8-2.0 seat/room. When the restaurant is under 100 m² the formula can lead to false results. Dimension of the restaurant should be done from concrete furniture layout plans. (See the Guideline)
- (4) - Ernest and Peter Neufert, "*Neufert, Architects' Data*", fourth edition, pg.359
- (5) - For smaller tourist accommodation facilities fitness areas are calculated for 50% of guest number
For bigger tourist accommodation facilities fitness areas are calculated not more than 20% of guest number

Annex 1–Accommodation Schedule Hotel 1-3* - Sample

ACCOMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Hotel 1-2*						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	9	0	1	5	20	10
Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	10.00	0.00	Based on Space Allocations table (1.00m ² per guestroom)
1.2	Shops	0	0.10	0.00	0.00	Based on Space Allocations table (0.10m ² per guestroom)
TOTAL			10.00	11.50	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	8.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	20.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	0.80	8.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	5.00	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	15.00	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	19.00	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			15.75	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			90.75	104.36	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	20.70	0.00	0.00	Based on Gazette No.1963/28 (17m ² room area + 3.7m ² bathroom)
3.2	Double room	9	20.70	186.30	0.00	Based on Gazette No.1963/28 (17m ² room area + 3.7m ² bathroom)
3.3	Suite	0	0.00	0.00	0.00	Gazette No.1963/28
3.4	Room for differently abled guests	1	20.70	20.70	0.00	
3.5	Circulation area			47.61	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			254.61	292.80	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
4 Recreation areas						
4.1	Leisure pool area*	0.00	0.60	0.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	0.00	4.50	0.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ^{(4) (5)}
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			0.00	0.00	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.40	7.00	0.00	Based Space Allocations table (1.40m ² per guestroom) (*Communication is already calculated)
5.2	Staff accommodation	1	5.00	25	0.00	Based on Gazette No.1963/28 (not less than 5.00m ² per staff)
5.3	Staff dining area	1	1.50	2.25	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less than 1.5m ² per person
5.4	Staff lockers	1	1.00	5.00	0.00	Based on Gazette No.1963/28.
5.5	Other areas	0	1.00	0.00	0.00	
TOTAL			39.25	45.14	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	0.80	8.00	0.00	Based Space Allocations table (0.80m ² per guestroom)
6.2	Stores, circulation*	1	0.20	2.00	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	3.00	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	4.00	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.40	14.00	0.00	Based Space Allocations table (1.40m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.30	13.00	0.00	Based Space Allocations table (1.30m ² per guestroom)
6.7	Employee/control/personnel*	1	0.10	1.00	0.00	Based Space Allocations table (0.10m ² per guestroom)
6.8	First aid	1	0.00	0.00	0.00	
6.9	Other areas	1	0.00	0.00	0.00	
TOTAL			45.00	51.75	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	
GRAND TOTAL						
TOTAL AREA (m²)			439.61	505.55	Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design	

Annex 2–Accommodation Schedule Hotel 4-5* - Sample

ACCOMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Hotel 3-4-5*						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	24	5	1	15	60	30

Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	30.00	0.00	Based on Space Allocations table (1.00m ² per guestroom)
1.2	Shops	1	0.20	6.00	0.00	Based on Space Allocations table (0.20m ² per guestroom)
TOTAL			36.00	41.40		
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	24.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	60.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	1.10	33.00	0.00	Based on Space Allocations table (1.10m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	15.00	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	45.00	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	57.00	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			49.14	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			283.14	325.61		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	25.70	0.00	0.00	Based on Gazette No.1963/28 (22m ² room area+3.7m ² bathroom)
3.2	Double room	24	25.70	616.80	0.00	Based on Gazette No.1963/28 (22m ² room area+3.7m ² bathroom)
3.3	Suite	5	48.70	243.50	0.00	Gazette No.1963/28. Hotels with 3-4* suite has an area of 45m ² while in hotels with 5* suite area is 65m ²
3.4	Room for differently abled guests	1	25.70	25.70	0.00	
3.5	Circulation area			203.78	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			1,089.78	1,253.25		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
4 Recreation areas						
4.1	Leisure pool area*	1.00	0.60	18.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	1.00	4.50	135.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ^{(4) (5)}
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			153.00	175.95		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.60	24.00	0.00	Based Space Allocations table (1.60m ² of guestroom) *Communication is already calculated
5.2	Staff accommodation	1	5.00	75	0.00	Based on Gazette No.1963/28 (not less than 5.00m ²)
5.3	Staff dining area	1	1.50	6.75	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less than 1.5m ² per person
5.4	Staff lockers	1	1.00	15.00	0.00	Based on Gazette No.1963/28.
5.5	Other areas	0	0.00	0.00	0.00	
TOTAL			120.75	138.86		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	1.10	33.00	0.00	Based Space Allocations table (1.10m ² per guestroom)
6.2	Stores, circulation*	1	0.50	15.00	0.00	Based Space Allocations table (0.50m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	9.00	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	12.00	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.20	36.00	0.00	Based Space Allocations table (1.20m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.80	54.00	0.00	Based Space Allocations table (1.80m ² per guestroom)
6.7	Employee/control/personnel*	1	0.20	6.00	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.8	First aid	1	35.00	35.00	0.00	Based on
6.9	Other areas	1	0.00	0.00	0.00	
TOTAL			165.00	189.75		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
GRAND TOTAL						
TOTAL AREA (m²)			1,847.67	2,124.82		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design

Annex 3–Accommodation Schedule Boutique Hotel – Sample

ACCOMMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Boutique Hotel						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	9	0	1	5	20	10
Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	10.00	0.00	Based on Space Allocations table (1.00m ² per guestroom)
1.2	Shops	1	0.20	2.00	0.00	Based on Space Allocations table (0.20m ² per guestroom)
TOTAL			12.00	13.80		
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	8.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	20.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	1.10	11.00	0.00	Based on Space Allocations table (1.10m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	5.00	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	15.00	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	19.00	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			16.38	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			94.38	108.54		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	34.50	0.00	0.00	Based on SLTDA Guidelines
3.2	Double room	9	34.50	310.50	0.00	Based on SLTDA Guidelines (30m ² room area + 4.5m ² bathroom)
3.3	Suite	0	69.50	0.00	0.00	Suite size is based on Gazette No.1963/28, while bathroom size is based SLTDA Guidelines
3.4	Room for differently abled guests	1	34.50	34.50	0.00	
3.5	Circulation area			79.35	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			424.35	488.00		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design
4 Recreation areas						
4.1	Leisure pool area*	1.00	3.50	35.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	1.00	4.50	45.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ⁽⁴⁾⁽⁵⁾
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			80.00	92.00		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.60	8.00	0.00	Based Space Allocations table (1.60m ² of guestroom) *Communication is already calculated
5.2	Staff accommodation	1	5.00	25	0.00	Based on Gazette No.1963/28 (not less then 5.00m ²)
5.3	Staff dining area	1	1.50	2.25	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less then 1.5m ² per person
5.4	Staff lockers	1	1.00	5.00	0.00	Based on Gazette No.1963/28.
5.5	Other areas	0	0.00	0.00	0.00	
TOTAL			40.25	46.29		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	1.10	11.00	0.00	Based Space Allocations table (1.10m ² per guestroom)
6.2	Stores, circulation*	1	0.50	5.00	0.00	Based Space Allocations table (0.50m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	3.00	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	4.00	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.20	12.00	0.00	Based Space Allocations table (1.20m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.80	18.00	0.00	Based Space Allocations table (1.80m ² per guestroom)
6.7	Employee/control/personnel*	1	0.20	2.00	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.8	First aid	1	0.00	0.00	0.00	
6.9	Other areas	1	0.00	0.00	0.00	
TOTAL			55.00	63.25		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design
GRAND TOTAL						
TOTAL AREA (m²)			705.98	811.88		Gross floor area is calculated 15% more then net floor area. Mid-range may vary based on the design

Annex 4–Accommodation Schedule Boutique Villa – Sample

ACCOMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Boutique Villa						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	9	0	1	5	20	10

Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	10.00	0.00	Based on Space Allocations table (1.00m ² per guestroom)
1.2	Shops	1	0.20	2.00	0.00	Based on Space Allocations table (0.20m ² per guestroom)
TOTAL			12.00	13.80		
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	8.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	20.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	1.10	11.00	0.00	Based on Space Allocations table (1.10m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	5.00	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	15.00	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	19.00	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			16.38	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			94.38	108.54		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	34.50	0.00	0.00	Based on SLTDA Guidelines
3.2	Double room	9	34.50	310.50	0.00	Based on SLTDA Guidelines (30m ² room area+4.5m ² bathroom)
3.3	Suite	0	69.50	0.00	0.00	Suite size is based on Gazette No.1963/28, while bathroom size is based SLTDA Guidelines
3.4	Room for differently abled guests	1	34.50	34.50	0.00	
3.5	Circulation area			79.35	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			424.35	488.00		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
4 Recreation areas						
4.1	Leisure pool area*	1.00	0.60	6.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	1.00	0.60	6.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ⁽⁴⁾⁽⁵⁾
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			12.00	21.60		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.60	8.00	0.00	Based Space Allocations table (1.60m ² of guestroom) *Communication is already calculated
5.2	Staff accommodation	1	5.00	25	0.00	Based on Gazette No.1963/28 (not less than 5.00m ²)
5.3	Staff dining area	1	1.50	2.25	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less than 1.5m ² per person
5.4	Staff lockers	1	1.00	5.00	0.00	Based on Gazette No.1963/28.
5.5	Other areas	0	0.00	0.00	0.00	
TOTAL			40.25	46.29		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	1.10	11.00	0.00	Based Space Allocations table (1.10m ² per guestroom)
6.2	Stores, circulation*	1	0.50	5.00	0.00	Based Space Allocations table (0.50m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	3.00	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	4.00	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.20	12.00	0.00	Based Space Allocations table (1.20m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.80	18.00	0.00	Based Space Allocations table (1.80m ² per guestroom)
6.7	Employee/control/personnel*	1	0.20	2.00	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.8	First aid	1	0.00	0.00	0.00	
6.9	Other areas	1	0.00	0.00	0.00	
TOTAL			55.00	63.25		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
GRAND TOTAL						
TOTAL AREA (m²)			637.98	741.48		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design

Annex 5 – Accommodation Schedule Guest House – Sample

ACCOMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Guest House						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	4	0	1	3	10	5
Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	5.00	0.00	Based on Space Allocations table (1.0 m ² per guestroom)
1.2	Shops	0	0.10	0.00	0.00	Based on Space Allocations table (0.2 m ² per guestroom)
TOTAL			5.00	5.00	5.75	
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	4.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	10.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	0.80	4.00	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	2.50	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	7.50	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	9.50	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			7.88	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			45.38	52.18		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	14.75	0.00	0.00	Based on Gazette, No. 1096/6 (11.5m ² room area +3.25m ² bathroom)
3.2	Double room	4	16.25	65.00	0.00	Based on Gazette, No. 1096/6 (13m ² room area +3.25m ² bathroom)
3.3	Suite	0	0.00	0.00	0.00	Gazette, No. 1096/6
3.4	Room for differently abled guests	1	16.25	16.25	0.00	
3.5	Circulation area			18.69	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			99.94	114.93		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
4 Recreation areas						
4.1	Leisure pool area*	0.00	0.60	0.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	0.00	0.40	0.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ^{(4) (5)}
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			0.00	0.00		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.40	4.20	0.00	Based Space Allocations table (1.40m ² per guestroom) (*Communication is already calculated)
5.2	Staff accommodation	1	5.00	15	0.00	Based on Gazette No.1963/28 (not less than 5.00m ²)
5.3	Staff dining area	1	1.50	1.35	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less than 1.5m ² per person
5.4	Staff lockers	1	1.00	3.00	0.00	Based on Gazette No.1963/28.
5.5	Other areas	0	1.00	0.00	0.00	
TOTAL			23.55	27.08		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	0.80	4.00	0.00	Based Space Allocations table (0.80m ² per guestroom)
6.2	Stores, circulation*	1	0.20	1.00	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	1.50	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	2.00	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.40	7.00	0.00	Based Space Allocations table (1.40m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.30	6.50	0.00	Based Space Allocations table (1.30m ² per guestroom)
6.7	Employee/control/personnel*	1	0.10	0.50	0.00	Based Space Allocations table (0.10m ² per guestroom)
6.8	First aid	1	0.00	0.00	0.00	
6.9	Other areas	1	0.00	#REF!	0.00	
TOTAL			22.50	25.88		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
GRAND TOTAL						
TOTAL AREA (m²)			196.36	225.82		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design

Annex 6 – Accommodation Schedule Home Stay – Sample

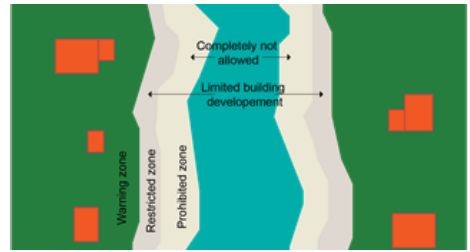
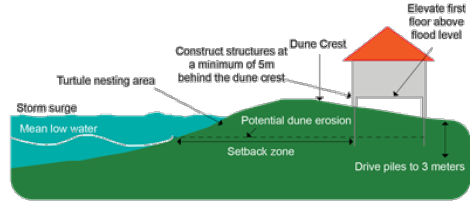
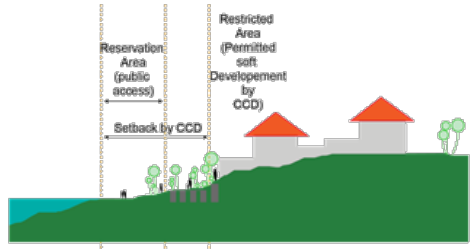
ACCOMODATION SCHEDULE AND SURFACE AREAS						
Type of the tourist Accommodation Facility: Sample - Home stay						
Single room	Double room	Suite	Room for differently abled guests	Staff ⁽¹⁾	Guests	Guest Rooms
0	3	0	1	2	8	4
Ref.	Functional areas	Quantity	Net area		Gross area ⁽²⁾	Comments
			m ²	Total		
A. Guest Areas						
1 Entrance/Lobby/Area/Hall						
1.1	Reception, lobby and lounge area	1	1.00	4.00	0.00	Based on Space Allocations table (1.00m ² per guestroom)
1.2	Shops	0	0.10	0.00	0.00	Based on Space Allocations table (0.20m ² per guestroom)
TOTAL			4.00	4.60		
2 Restaurants and Bars						
2.1	Coffee shop	1	0.80	3.20	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.2	Main restaurant	1	2.00	8.00	0.00	Based on Space Allocations table, For higher number of guests, 1.5m ² /cover could be used ⁽³⁾
2.3	Lounges, bars	1	0.80	3.20	0.00	Based on Space Allocations table (0.80m ² per guestroom)
2.4	Pre-function area, foyer	1	0.50	2.00	0.00	Based on Space Allocations table (0.50m ² per guestroom)
2.5	Ballroom/banquet hall	1	1.50	6.00	0.00	Based on Space Allocations table (1.50m ² per guestroom)
2.6	Conference/function rooms*	1	1.90	7.60	0.00	Based on Space Allocations table (1.90m ² per guestroom)
2.7	Circulation ⁽⁷⁾			6.30	0.00	Based on Space Allocations table Circulation area calculated with 21% of the total residential areas. Mid-range may vary by ±3%
2.8	Other areas			0.00	0.00	
TOTAL			36.30	41.75		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
3 Residential areas/Guestrooms and Suites						
3.1	Single room	0	11.78	0.00	0.00	Based on STDLA Guidelines (9m ² room area+2.78m ² bathroom)
3.2	Double room	3	13.78	41.34	0.00	Based on STDLA Guidelines (11m ² room area+2.78m ² bathroom)
3.3	Suite	0	0.00	0.00	0.00	SLTDA Guidelines
3.4	Room for differently abled guests	1	13.78	13.78	0.00	
3.5	Circulation area			12.68	0.00	Based on Space Allocations table Circulation area calculated with 23% of the total residential areas. Mid-range may vary by ±3%
3.6	Other areas			0.00	0.00	
TOTAL			67.80	77.97		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
4 Recreation areas						
4.1	Leisure pool area*	0.00	0.60	0.00	0.00	Based on Space Allocations table (0.60m ² per guestroom)
4.2	Club facilities/fitness room*	0.00	0.40	0.00	0.00	Based on Space Allocations table (4.5m ² per guest, 50% of total guests) ^{(4) (5)}
4.3	Other areas	0.00	0.00	0.00	0.00	
4.4	...	0.00	0.00	0.00	0.00	
TOTAL			0.00	0.00		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
B. STAFF AND COMMON SERVICES						
5 Administration						
5.1	Front office, administration*	1	1.40	2.80	0.00	Based Space Allocations table (1.40m ² per guestroom) *Communication is already calculated
5.2	Staff accommodation	1	5.00	10	0.00	Based on Gazette No.1963/28 (not less than 5.00m ²)
5.3	Staff dining area	1	1.50	0.90	0.00	Based on Gazette No.1963/28. Dining area 30% of staff, not less than 1.5m ² per person
5.4	Staff lockers	1	1.00	2.00	0.00	Based on Gazette No.1963/28
5.5	Other areas	0	1.00	0.00	0.00	
TOTAL			15.70	18.06		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
6 COMMON SERVICES						
6.1	Main and satellite kitchen	1	0.80	3.20	0.00	Based Space Allocations table (0.80m ² per guestroom)
6.2	Stores, circulation*	1	0.20	0.80	0.00	Based Space Allocations table (0.20m ² per guestroom)
6.3	Receiving/garbage areas*	1	0.30	1.20	0.00	Based Space Allocations table (0.30m ² per guestroom)
6.4	General stores*	1	0.40	1.60	0.00	Based Space Allocations table (0.40m ² per guestroom)
6.5	Housekeeping, laundry	1	1.40	5.60	0.00	Based Space Allocations table (1.40m ² per guestroom)
6.6	Engineer, stores, equipment*	1	1.30	5.20	0.00	Based Space Allocations table (1.30m ² per guestroom)
6.7	Employee/control/personnel*	1	0.10	0.40	0.00	Based Space Allocations table (0.10m ² per guestroom)
6.8	First aid	1	0.00	0.00	0.00	
6.9	Other areas	1	0.00	0.00	0.00	
TOTAL			18.00	20.70		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design
GRAND TOTAL						
TOTAL AREA (m²)			141.80	163.07		Gross floor area is calculated 15% more than net floor area. Mid-range may vary based on the design

The Site

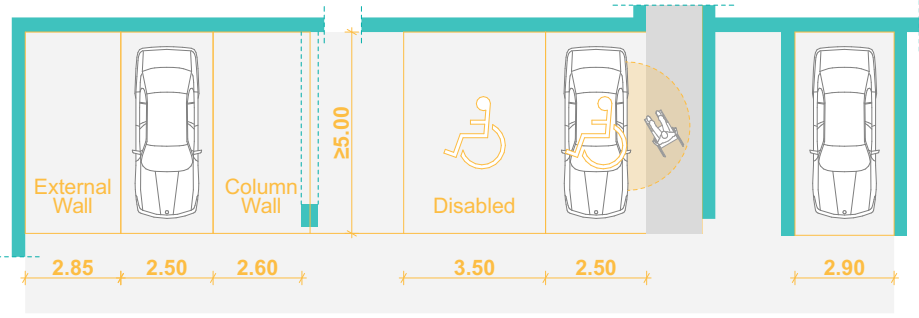
- Port related activity zone
- Special primary residential zone
- Sea front zone
- Special primary residential zone
- Concentrated development zone
- Commercial zone



The 6th zones of the city of Colombo where tourist accommodation facilities are allowed



UDA Regulation - Site analyses and minimum requirements



Different parking spaces and their minimum requirements

parking place/per guestroom

STAR CLASS HOTELS

1/5
1/2 (suites)

GUEST HOUSE & LODGES

1/5

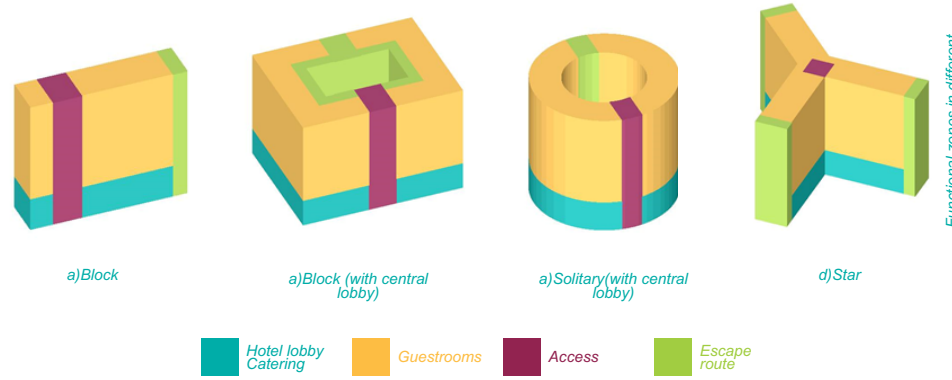
DIFFERENTLY ABLED PARKING SPACES

1/25

Functional zones



Functional zones of tourist accommodation facility



Functional zones in different hotel shapes

ACCOMMODATION SCHEDULE AND

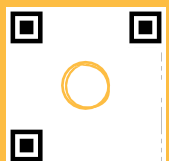
Type of the tourist Accommodation

Single room	Double room	Suite	Room for differently abled guests
0	9	0	1

Ref.	Functional areas	Quantity	Net area		Gross area
			m ²	Total	
A. Guest Areas					
1 Entrance/Lobby/Area/Hall					
1.1	Reception, lobby and lounge area	1	1.00	10.00	0
1.2	Shops	0	0.10	0.00	
TOTAL			10.00		

2 Restaurants and Bars					
2.1	Coffee shop	1	0.80	8.00	
	Main restaurant	1	2.00	20.00	
	Lounges, bars	1	0.80	8.00	
	Function area, foyer	1	0.50	5.00	
	Banquet hall	1			
	Meeting rooms*	1			

Scan the QR code to download the full DESIGN GUIDELINE FOR TOURIST ACCOMMODATION FACILITIES



The Sri Lanka Tourism Development Authority (SLTDA) with the support from USAID Project - Supporting Accelerated Investment in Sri Lanka (SAIL), has developed the "DESIGN GUIDELINES FOR TOURIST ACCOMMODATION FACILITIES"

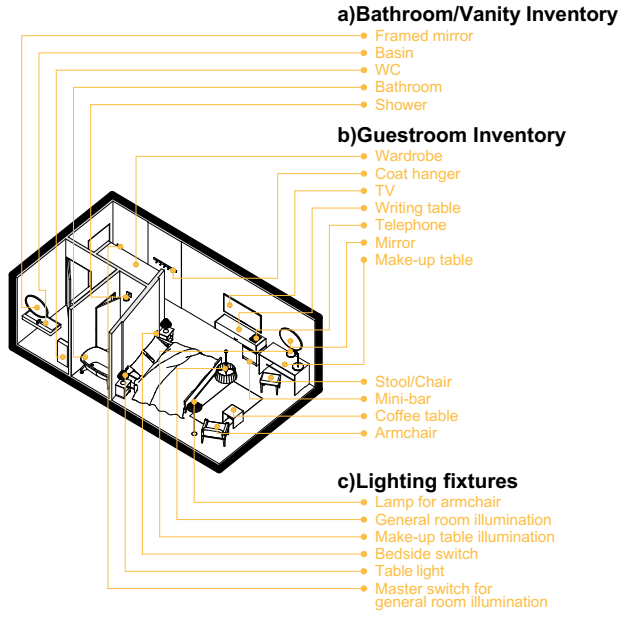


SLTDA-IRU has come forward to shoulder the responsibility of helping potential investors of tourism accommodation facilities to create sustainable and standardized accommodation facilities for tourists that are environmentally sustainable and locally integrated.

Design Guidelines define and describe the minimum standards for tourist accommodation facilities according to the classification, size and specifications in line with the standards and requirements set by SLTDA, Urban Development Authority (UDA) and best international practice.

Design Guidelines are intended to cover the minimum design requirements relating to tourist accommodation facilities, to help designers and builders to create facilities which are functional and aesthetically acceptable by tourists, but also to leave space for designers to come up with innovative and creative ideas.

Guestroom



Inventory: a) Bathroom/Vanity Inventory; b) Guestroom Inventory; c) Lighting fixtures

HOTEL 1-5★

Guestroom:
 Size: min. 17m² (1-2★)
 min. 22m² (3-5★)
 Suite: min. 45m² (1-4★)
 min. 65m² (5★)
 Height: min. 2.8m
 Width: min. 3.0m

Bathroom:
 Size: min. 3.7m²

GUEST HOUSE

Guestroom:
 Size: min. 11.5m² (single)
 min. 13m² (double)
 Height: min. 2.8m
 Width: min. 3.0m

Bathroom:
 Size: min. 3.25m²

BOUQUETTE HOTEL

Guestroom:
 Size: min. 30m²
 Suite: <65m²
 Height: min. 2.8m
 Width: min. 3.0m

Bathroom:
 Size: min. 4.5m²

BOUQUETTE VILLA

Guestroom:
 Size: min. 30m²
 Suite: 65m²<
 Height: min. 2.8m
 Width: min. 3.0m

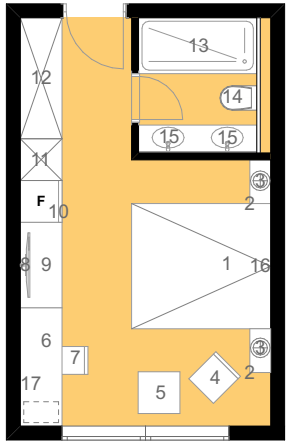
Bathroom:
 Size: min. 4.5m²

HOME STAY

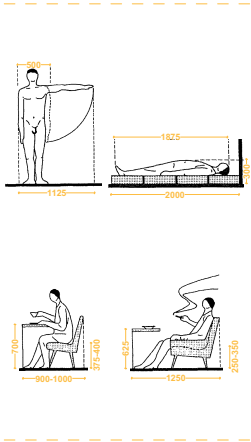
Guestroom:
 Size: min. 9m² (single)
 min. 11m² (double)
 Height: min. 2.8m
 Width: min. 3.0m

Bathroom:
 Size: min. 2.78m²

Minimum requirements for different tourist accommodation facility

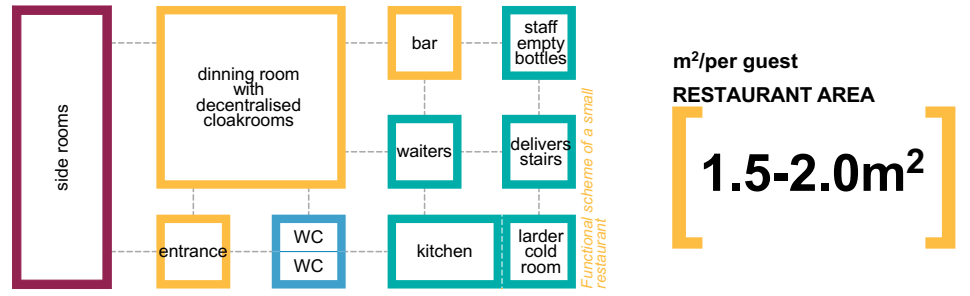


- 1 Head Board with Bed
- 2 Night Stand
- 3 Table Lamp
- 4 Lounge Chair
- 5 Table
- 6 Desk
- 7 Desk Chair
- 8 TV
- 9 TV chest
- 10 Mini-Bar
- 11 Luggage Rack
- 12 Wardrobe
- 13 Shower
- 14 WC
- 15 Basin
- 16 Framed Mirror
- 17 Artwork



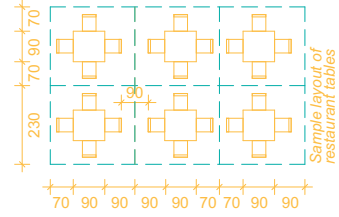
Design Guidelines define and describe tourist accommodation facilities minimum standards and norms, include development conditions and the room specific data for all types of tourist accommodation facilities, including guest spaces such as ordinary guestroom and dining facilities, support spaces such as service and administrative areas, and external activity spaces such as playgrounds, sport areas, access and parking.

Restaurant



Restaurant ceiling height:

- ~50m² = 2.50m'
- >50m² = 2.75m'
- >100m² = ~3.00m'
- Above galleries ~ 2.50m'



Design Guidelines are to be used for different purposes, including: designing of new tourist accommodation facilities, designing of additional areas for existing facilities, evaluating and improving existing tourist accommodation spaces.

Kitchen

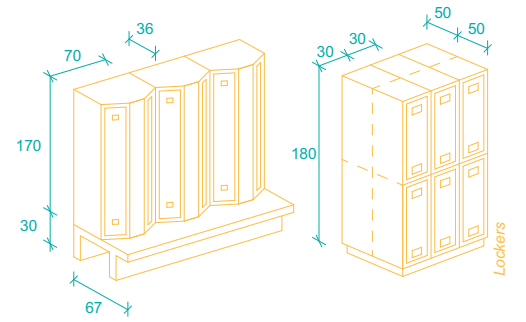
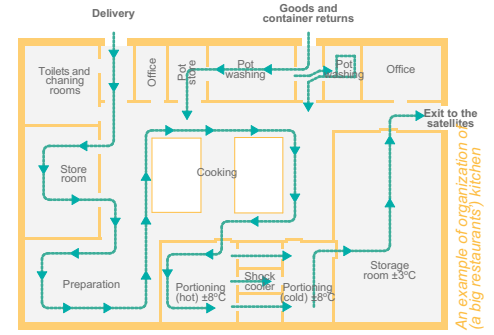
KITCHEN AREA

0.5 of a restaurant

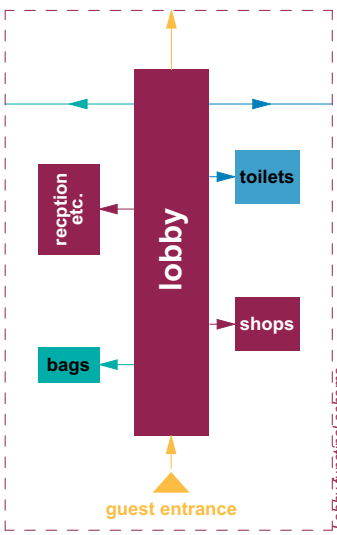
KITCHEN HEIGHT

3.0m'

- Kitchen area components
- Storage room
 - Cellars
 - Changing rooms and lockers for kitchen staff
 - Showers
 - Bathrooms
 - Other



Lobby



m²/per guestroom

HOTEL 1-5★

0.5m² (1-2★)
1.0m² (3-4-5★)

GUEST HOUSE

0.5m²

BOUQUETTE VILLA

1.0m²

BOUQUETTE HOTEL

1.0m²

Reception desk length:

- 50 guestrooms: 3m'
- 100/150 guestrooms: 4.5m'
- 200/250 guestrooms: 7.5m'
- 300/400 guestrooms: 10.5m'

Design Guidelines are to be applied by professionals dealing with designing and construction of tourist accommodation facilities, including: professional design companies, consulting companies, architects, engineers, as well as other professionals in the field of design and construction.

Administration & Staff

m²/per guestroom

HOTEL 1-5★

1.2m² (1-2★)
1.6m² (3-5★)

GUEST HOUSE

1.2m²

HOME STAY

0.4m²

BOUQUETTE VILLA

1.6m²

BOUQUETTE HOTEL

1.6m²

The administration includes:

- 1 the front office
- 2 executive
- 3 accounting
- 4 sales
- 5 catering offices
- 6 personnel and
- 7 engineer's offices

m²/per staff

STAFF ACCOMODATION

5m²

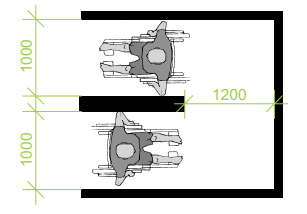
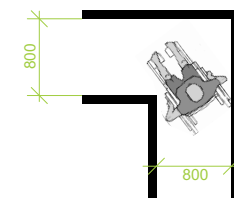
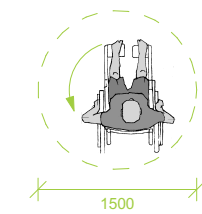
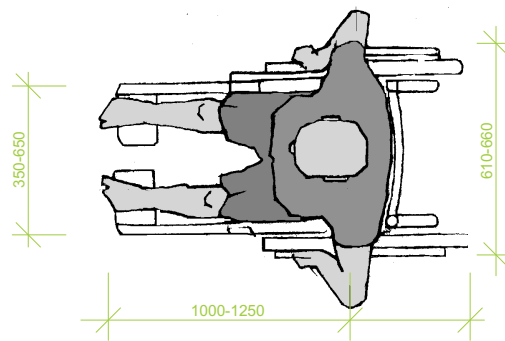
STAFF DINING (30% of staff)

1.5m²

CHANGING AREAS

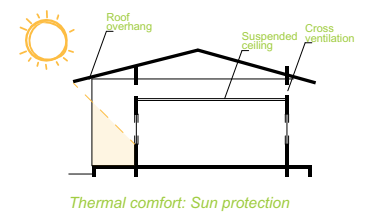
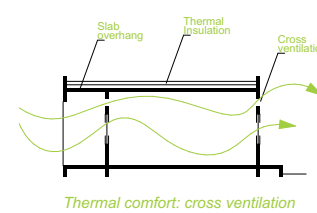
0.13m³ (non-residential)
0.3m³ (residential)

Accessibility Comfort parameters, Green and Sustainable standards



Design standards for differently abled persons in wheelchairs have to be considered by designers for the sizing of the tourist accommodation facility spaces and circulations

Adequately ventilated areas of tourist accommodation facilities should be ensured by the designers. Fresh, clean air should be drawn from a source outside the facility and be circulated through the facility.



Renewable/Sustainable sources of energy