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5 Star Hotel

Visakhapatnam, Andhra Pradesh, India

Dec, 2025

5 Star Hotel

Visakhapatnam, Andhra Pradesh, India

BACHELOR OF ARCHITECTURE

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DEPARTMENT OF ARCHITECTURE AND PLANNING

MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL

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ARC 511-Thesis Project

Luxury Resort

Visakhapatnam, Andhra Pradesh, India

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DEPARTMENT OF ARCHITECTURE AND PLANNING

MAULANA AZAD NATIONAL INSTITUTE OF TECHNOLOGY, BHOPAL

CANDIDATE DECLARATION

The Thesis Project in the subject ARC 511, entitled **"Luxury Resort, Visakhapatnam, India",** is being submitted in partial fulfillment of the requirement for the award of the degree of Bachelor of Architecture by the undersigned for evaluation.

The matter embodied in this project is a record of my own work. If, in the future, it is found that the above statement is false, then I have no objection to the withdrawal of the Bachelor of Architecture Degree awarded to me by the Institute.

Date: 1st- 2nd Dec, 2025

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RECOMMENDATION

Based on the above declaration of the student, the undersigned recommends that the work submitted by the candidate may be considered for the final end-term examination of the subject ARC-511, Thesis Project.

Date: 1st- 2nd Dec, 2025

Dr. Supriya Vyas
Thesis Guide

CERTIFICATION OF EXAMINATION

The Bachelor of Architecture Thesis Viva-Voce examination of Ms. Shreeya Mudaliar, Scholar No. 211110048, was held from 1/12/2025 to 2/12/25.

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ABSTRACT

This project report presents a comprehensive architectural study and design proposal for a 5-star luxury coastal resort and convention centre in Visakhapatnam, Andhra Pradesh. Situated along the ecologically sensitive and scenically rich coastal belt of Beach Road, the project aims to create an integrated hospitality destination that synthesizes contextual responsiveness, global luxury standards, and sustainable development practices. The study investigates the unique opportunities and constraints of the site—its coastal microclimate, panoramic sea views, topography, and regulatory compliance requirements under CRZ norms—and translates them into a design framework that ensures environmental sensitivity and aesthetic coherence.

The report follows a multi-layered methodology involving detailed site analysis, literature review, examination of Ministry of Tourism guidelines, comparative case studies of leading coastal resorts, and evaluation of operational and security requirements. It examines the spatial organization needs of both front-of-house and back-of-house functions, guest room typologies, F&B facilities, recreational amenities, banqueting areas, and service core. International and national hospitality standards—including ITC Hotel Manuals and Time-Saver Standards—inform the planning of circulation, guest experience, service efficiency, safety, ventilation, acoustics, and sustainability.

The proposed development integrates 210 luxury rooms, multiple dining and leisure facilities, wellness spaces, and extensive landscape design that reinforces the site's natural beauty. The design prioritizes biophilic principles, local craftsmanship, cultural storytelling, and cutting-edge technological interventions to enhance both user comfort and operational efficiency. By aligning environmental stewardship with contemporary luxury hospitality expectations, the project aspires to significantly contribute to Visakhapatnam's tourism growth and set a benchmark for sustainable coastal resort development in India.

ACKNOWLEDGEMENT

As I bring this report to a close, I am filled with immense gratitude for the individuals who have offered their unwavering support, guidance, and encouragement throughout this journey. This work would not have been possible without their contributions.

No words can fully convey my appreciation for each person who has played a role in making this research such a meaningful and memorable experience. However, I must extend my heartfelt thanks to Prof. Vicky Lalramsangi and my thesis guide, **Dr. Supriya Vyas** Their insightful guidance has not only enriched this report but has also shaped my architectural journey in profound ways, broadening my perspectives and deepening my understanding of the field.

Finally, I would like to express my sincere thanks to my family, friends, seniors, juniors, Ph.D. scholars, and faculty members. Their constant support and encouragement were invaluable, turning this journey into a rewarding and fulfilling endeavor. Thank you all.

Date: 1st December, 2025

Place: Bhopal

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List Of Abbreviations

1. **HAI:** Hotels Association of India.
2. **ITC:** Indian Tobacco Company Hotels.
3. **NBC:** National Building Code.
4. **BIS:** Bureau of Indian Standards.
5. **URDPFI:** Urban and Regional Development Plans Formulation and Implementation Guidelines.
6. **ITDC:** Indian Tourism Development Corporation.
7. **MoT:** Ministry of Tourism.
8. **WTTC:** World Travel & Tourism Council.
9. **HVAC:** Heating, Ventilation, and Air Conditioning.
10. **ESD:** Environmentally Sustainable Design.
11. **Scopus:** Elsevier's Abstract and Citation Database.
12. **HITEC:** Hyderabad Information Technology and Engineering Consultancy City.
13. **JHTR:** Journal of Hospitality and Tourism Research.
14. **JAUD:** Journal of Architecture and Urbanism Development.
15. **TQF:** Tourism Quality Framework.
16. **LEED:** Leadership in Energy and Environmental Design.
17. **GDP:** Gross Domestic Product.
18. **SPG:** Spatial Planning Guidelines.
19. **CRZ:** Coastal Regulation Zone.
20. **ITZ:** Impact Transition Zone

Chapter 1
DESIGN BRIEF

1.1 INTRODUCTION

In today's rapidly evolving hospitality industry, **coastal luxury resorts** have emerged as integral destinations offering curated experiences that transcend traditional lodging. These resorts serve as holistic environments where architecture, interior design, and natural settings coalesce to provide comfort, rejuvenation, and a deep sense of place. Within this framework, the architectural design of a **5-star coastal luxury resort in Visakhapatnam (Vizag)** becomes pivotal in crafting spaces that are not only aesthetically compelling but also responsive to the unique demands of their coastal context and the expectations of global travelers.

Unlike conventional hotels, a luxury resort offers a **destination experience**, often nestled within ecologically sensitive or culturally rich environments. Modern resorts provide a range of upscale amenities such as ocean-view villas, wellness retreats, gourmet dining, outdoor recreational areas, and integrated business facilities, while promoting environmental consciousness and regional authenticity. Situated along the scenic Beach Road of Vizag, framed by the Bay of Bengal and lush Eastern Ghats, the project site presents a unique opportunity to design a hospitality experience rooted in nature and culture.

Designing such a resort involves more than fulfilling spatial and functional needs; it requires **an immersive architectural narrative** that fosters tranquility, grandeur, and sustainability. This thesis investigates the spatial planning strategies, material choices, and architectural forms that align with the **coastal microclimate, topography, and CRZ (Coastal Regulation Zone) guidelines**, ensuring regulatory compliance without compromising design excellence. It aims to create a seamless flow between built and natural environments, emphasizing views, ventilation, shading, and landscape integration.

Moreover, the research explores how **technological innovation**, **biophilic design**, and **vernacular architectural references** can shape the resort as a **living ecosystem**, enhancing both environmental performance and guest well-being. The design will also consider **community engagement**, **cultural storytelling**, and **local craftsmanship**, ensuring that the resort contributes positively to the socio-economic fabric of the region.

By combining contextual sensitivity with global luxury standards, the thesis envisions a **5-star coastal luxury resort in Vizag** that redefines sustainable coastal hospitality—creating spaces that are visually iconic, experientially rich, and ecologically grounded.

1.2 AIM

To achieve a fully functional Luxury Resort design that ensures uncompromised aesthetic appeal and seamless integration of high-end services and amenities.

1.3 OBJECTIVES

- To respond sensitively to the immediate coastal and urban context of Visakhapatnam and design accordingly.
- To create a resort that reflects the cultural richness, natural beauty, and relaxed coastal lifestyle of Vizag.
- To maximize the site's scenic views—particularly of the sea and landscape—while strictly adhering to all applicable CRZ norms and development byelaws.
- To propose highly efficient and discreet service networks, aligned with the highest standards of luxury hospitality.
- And finally, to design a world-class Luxury Resort that harmonizes with the site's natural and urban surroundings, while contributing to Vizag's growing potential as a premium tourism destination.

1.4 SITE LOCATION

- **Name of the Project**: Convention centre & 5-star category hotel/resort with other waterfront entertainment facilities
- **Location**: Jalari Peta, Vishakhapatnam, Andhra Pradesh 530017, India**.**
- **Site Coordinates**: 17°722601'N 83°339531'E.

1.5 PROJECT DETAILS

1. **Site Area** = 10.77 Acres (approx.)
2. **Total Built Up Area** = ND
3. **FAR** = 2.5
4. **Building Height** = 60m
5. **Front Setback** = 10m
6. **Rear And Side Setback** = 10m
7. **Ground Coverage** = 30%

1.6 SITE PLAN



Figure 1 SITE

1.7 PROPOSING AGENCY

Name of the Proponent: Visakhapatnam Metropolitan Regional Development Authority (VMRDA), Visakhapatnam.

1.8 SITE LOCATION ON MASTER PLAN

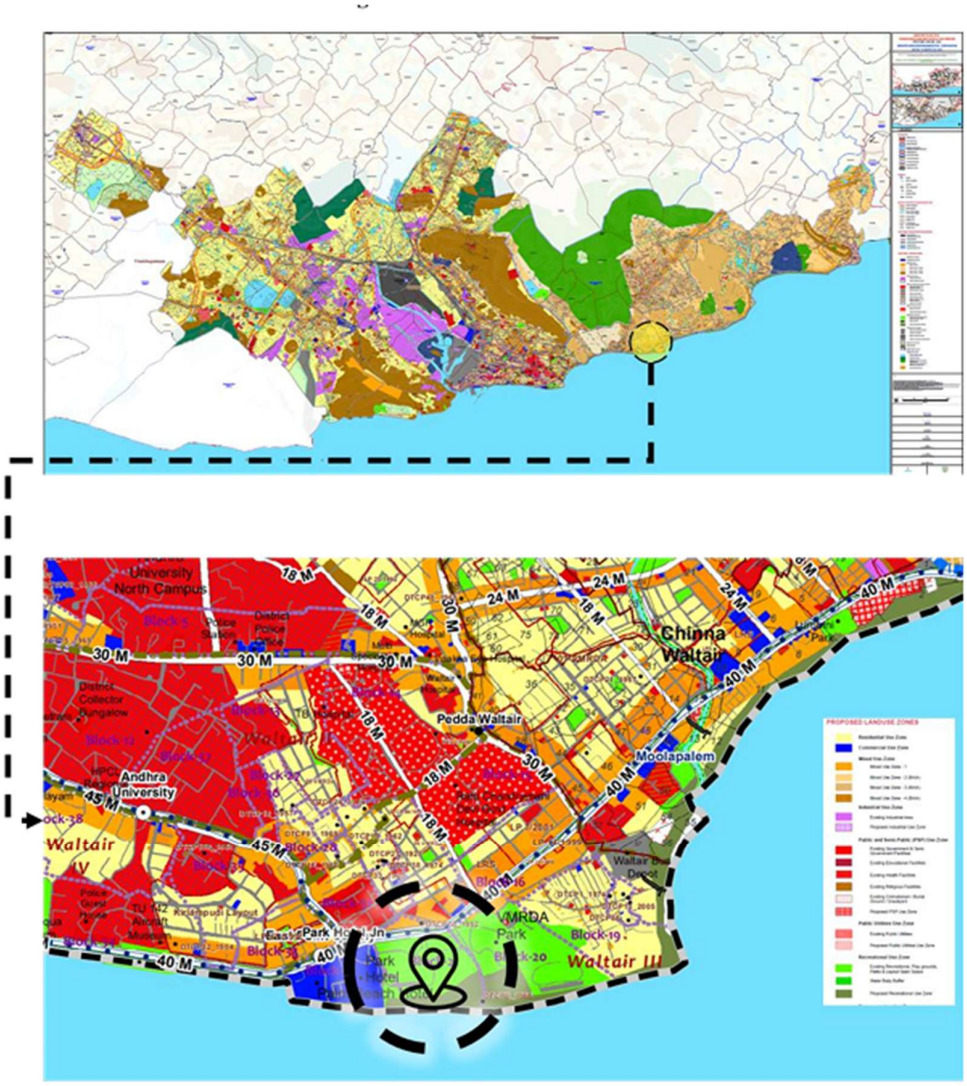


Figure 2 VISAKHAPATNAM DEVELOPMENT PLAN

BROAD SCOPE OF WORK:

The scope of work includes, but is not limited to, methodology

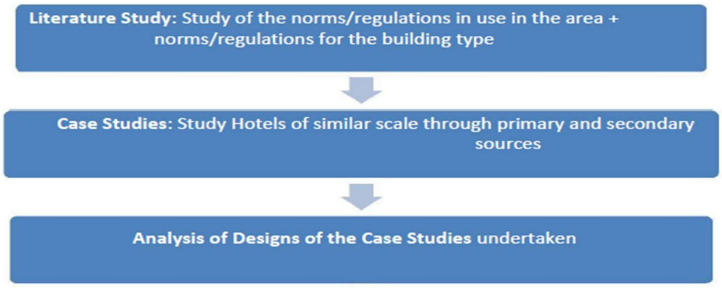


Figure 3Methodology Source: Author

This study adopts an integrated approach combining **site analysis**, **case study evaluations**, and an in-depth **literature review** to understand the architectural and functional requirements for designing a luxury resort in **Vizag**, a coastal city rich in natural and tourism potential.

The methodology involves:

- **Site Analysis**: Assessing the physical, climatic, and environmental attributes of the chosen site in Vizag, including topography, wind and sun orientation, view corridors, and proximity to tourist infrastructure. Coastal regulations and CRZ norms are also studied to ensure environmental compliance.
- **Case Study Comparisons**: Studying comparable luxury resort properties across India and Southeast Asia (e.g., Taj Exotica Andaman, St. Regis Bali, Kaldan Samudhra Mahabalipuram) to analyze spatial layouts, room typologies, amenities, landscape integration, and experiential design elements relevant to coastal resort typology.
- **Literature Review**: Reviewing academic publications, hospitality design journals, and technical manuals to extract key insights on pool design, sustainability strategies, water-energy management, and guest experience optimization in resort environments.
- **Regulatory Review & Expert Input**: Referring to guidelines from IGBC, CRZ, and building codes, along with informal expert consultations with hospitality architects and resort managers to align design recommendations with operational feasibility, luxury expectations, and community engagement.

This methodology enables a context-sensitive and guest-centric design framework tailored to Vizag's unique natural setting, enhancing both **aesthetic appeal and functional performance** of the proposed luxury resort.

Development of the Luxury Resort at Vishakapattnam shall have:

- Rooms
    1. Deluxe rooms= 120nos (approx)
    2. Junior Suites= 10nos (approx)
    3. Villas 30 nos (approx)
    4. Total Rooms = 200 nos
- Lobby
- Food and Beverage Outlets
- Activity Center

- Convention Centre
- Retail
- Swimming Pool
- Saloon and Spa
- Fitness Centre
- Administration
    1. Front Office
    2. Executive Office
    3. IT Office
    4. Sales & Catering Offices
    5. Room Service
    6. Kitchen Service
    7. Receiving/Material Management
    8. Garbage
    9. Main Stores
    10. Personnel/ HR Offices
    11. Laundry
    12. Housekeeping Office and Stores
    13. Repair and Maintenance
    14. Mechanical Areas
    15. Engineering offices

1.8.1 DETAILED LIST OF SPACES:

1.9 DESIGN BRIEF

Site: The size and shape of this site of a 5-star Deluxe Hotel shall be A B C as shown in the plan and demarcated at the site.

Land use: Commercial cum Offices: The type of building permissible in this site shall be used for five star Deluxe hotel with a trade centre purposes in accordance with the RFP issued by TSIIC for such as Room/Suits, Restaurant, Bar, Banquet Hall, Conference Hall, health club, landscape feature like fountains, waterfall and mounds etc. the building shall not be used for any other purpose which is obnoxious in sound, fumes, odour smoke or is Explosive in nature and hazardous/risky to human life.

Division: GF is divided between the hotel and the trade centre. 1st to 4th Floor should be for the Trade Centre, and the Rest for the Luxury Hotel.

Site coverage and F.A.R.: Hyderabad follows an unlimited FSI, where developers can build according to their choice. In India, Hyderabad is the only city with an FSI between 9 and 13, with an average between 6 and 7, while the national average varies between 2 and 2.5

Height: Based on the AAI's NOCAS, the approximate permissible top elevation for the subject site is observed as 649.22m above mean sea level, indicating that the site has a potential for a tower of up to a maximum height of 60 meters. Height (Above Ground Level) = Approximate top elevation– Mean Sea level of the Site 649.22– 589.15, i.e., **60.07m**

No. of Storeys: Not mentioned in the RFP issued by VMRDA

Plinth: 0.4 Metres or 400 mm plinth, as mentioned in the RFP issued by TSIIC

Parking:

S. No	Category of building activity	Parking area to be provided as % to total built up area	
		All Municipal Corporations & UDA areas	All Municipal Municipalities Corporations s/ N. Ps/ G. Ps in UDA area
1	Multiplexes	60	50
2	Shopping malls (above 4000sq.m), information technology enabling services complexes	50	40
3	Boutique Hotels, restaurants, lodges, cinema halls, business buildings, other commercial buildings, Kalyana mandapams, offices, & Highrise buildings/ complexes of non-residential category	30	25
4	Residential apartment complexes, hospitals, institutional buildings, industrial buildings, schools, colleges, other educational buildings & godown & others	20	20

As the said site area falls under VMRDA, which comes under the rest of the municipalities & development authorities as per the Table, a minimum of 30% of the total built-up area (BUA) shall be provided for parking purposes for the proposed facility. Basement.

1) 35 square meters
2) street = 30 square meter
3) open = 25 square meter

Basement: 3 Level Basement as mentioned in the RFP issued by the VMRDA.

Minimum Development Obligations (MDOs)

MDO-1

Within 30 months of the Agreement Date, the Developer needs to achieve the following:

- Complete the construction of the proposed 5-Star Luxury Hotel with a minimum of 180 Keys (including all necessary associated infrastructure sufficient to initiate commercial operations) as per the terms & conditions of the RFP
- The hotel should provide a minimum of 1 Banquet Hall with a minimum of 2500 pax or as per the brand requirement, whichever is higher.

MDO-2

Within 48 months of the Agreement Date, the Developer needs to achieve the following: a. Operationalize the 5-Star Luxury Hotel along with requisite amenities and facilities required by the luxury Brand with at least 5 Star Deluxe Certification from the Ministry of Tourism, Government of India.

1.9.1 LIGHTING

TABLE 1 RECOMMENDED VALUES OF ILLUMINATION

The lighting of some of these locations will be determined primarily by aesthetic considerations and the recommended illumination values as given in IS : 3646 (Part II)-1966* may be taken as a guide only.

SL No.	AREAS	ILLUMINATION, Lux
(1)	(2)	(3)
i)	Entrance halls	150
ii)	Reception and accounts	300
iii)	Dining rooms (tables)	100
iv)	Lounges	150
v)	Bedrooms:	
	a) General	100
	b) Dressing tables, bed heads, etc	200
vi)	Writing rooms (tables)	300
vii)	Corridors	70
viii)	Stairs	100
ix)	Laundries	200
x)	Kitchens	†200
xi)	Goods and passenger lifts	70
xii)	Clockrooms and toilets	†200
xiii)	Dining rooms:	
	a) Tables	100
	b) Cash desks	300
xiv)	Self service-counters	300

*Code of practice for interior illumination: Part II Schedule for values of illumination and glare index.

†Supplementary local lighting should be provided over kitchen equipment and mirrors.

1.9.2 VENTILATION

In case of air-conditioned buildings the minimum standards of mechanical ventilation shall be maintained as given.

TABLE 2 VENTILATION REQUIREMENTS FOR NON-AIRCONDITIONED BUILDINGS

Sl No.	Area	Air Changes per Hour
(1)	(2)	(3)
i)	Living rooms	3
ii)	Dining and lounge	2-3
iii)	Big kitchen	12
iv)	Small kitchen	6
v)	Toilets	6

1.9.3 WATER-SUPPLY

There shall be an adequate supply of safe and potable water. Running water shall be easily accessible to all rooms in which food is prepared or utensils are washed. Requirements for water supply for hotels and restaurants shall be as given.

TABLE 3 WATER SUPPLY REQUIREMENTS FOR HOTELS AND RESTAURANTS

Sl No.	Description	Non-Airconditioned (Litres per Day)	Air Conditioned (Litres per Day)
(1)	(2)	(3)	(4)
i)	Hotels (per bed)	180	275
ii)	Restaurants (per seat)	70	97

Note — In hotels where laundry is provided arrangement for an extra quantity of 120 litres per bed should be made.

Storage of Water-

For the storage of water, proper receptacles made of galvanized iron or other suitable material shall be used. Such receptacles shall he kept covered with tight-fitting lids and shall have screw caps at the bottom for draining out residual water. The receptacles shall be placed on a stand or a platform easily accessible for the purpose of maintenance and cleaning. The receptacles shall be examined and cleaned regularly.

1.9.4 DRAINAGE

Adequate arrangements shall be made for satisfactory drainage of all sewage and wastewater. Harmful wastewater, such as water containing kitchen waste, &all be satisfactorily disposed of. The drainage shall be so designed as to cause no stagnation at the maximum discharge rate for which the different units are designed. The requirements for firments for drainage and sanitation shall conform to the requirements given.

TABLE 4 REQUIREMENTS OF DRAINAGE AND SANITATION FITMENTS IN HOTELS

(*Clause* 14.1.1)

Sl No.	Fitments	For Residential Public and Staff	For Public Rooms		For Non-Residential Staff	
			For Males	For Females	For Males	For Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i)	Water-closets	1 per 8 persons omitting occupants of the room with attached water-closets; minimum of 2 if both sexes are lodged	1 per 100 persons up to 400 persons; and for over 400, add at the rate of 1 per 250 persons or part thereof	2 per 100 persons up to 200 persons; and for over 200, add at the rate of 1 per 100 persons or part thereof	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
ii)	Ablution taps	1 in each water-closet	1 in each water-closet	1 in each water-closet	1 in each water-closet	1 in each water-closet
		1 water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water-closets and urinals				
iii)	Urinals	—	1 per 50 persons or part thereof	—	Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons	—

iv)	Wash basins	1 per 10 persons omitting the wash basins installed in the room suite	1 per water-closet and urinal provided	1 per water-closet provided	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
v)	Baths	1 per 10 persons omitting occupants of the room with bath *en suite*	—	—	—	—
vi)	Slop sinks	1 per 30 bedrooms, minimum 1 per floor	—	—	—	—
vii)	Kitchen sinks and dish washers	← 1 in each kitchen →				

NOTE 1 — Some of the water closets may be of European style if desired.

NOTE 2 — It may be assumed that two-thirds of the number are males and one-third females.

Septic tanks conforming to IS: 2470 (Part I)- 1963* or IS: 2470 (Part II)-l964 shall be provided if required by the authority. The gradient of the drains should be such that no water stagnates anywhere within the premises. Where no sewerage is provided for the final outfall, soak pits or access pools to the satisfaction of the Authority should be provided

1.9.5 KITCHEN

TABLE 5 REQUIREMENTS OF DRAINAGE AND SANITATION FITMENTS IN RESTAURANTS

(*Clause* 14.1.1)

Sl No.	FITMENTS	FOR MALE PUBLIC	FOR FEMALE PUBLIC	FOR MALE STAFF	FOR FEMALE STAFF
(1)	(2)	(3)	(4)	(5)	(6)
i)	Water-closets	1 for 50 seats up to 200 seats; and for over 200 seats, add at the rate of 1 per 100 seats or part thereof	1 for 50 seats up to 200 seats; and for over 200 seats, add at the rate of 1 per 100 seats or part thereof	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
ii)	Ablution taps	1 in each water-closet	1 in each water-closet	1 in each water-closet	1 in each water-closet
		1 water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water-closets and urinals.			
iii)	Urinals	1 per 50 seats	—	Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons	—
iv)	Wash basins	← 1 for every water-closet provided →			
v)	Kitchen sinks and dish washers	← 1 in each kitchen →			
vi)	Slop or service sinks	← 1 in the restaurant →			

NOTE 1 — Some of the water closets may be of European style, if desired.

NOTE 2 — It may be assumed that two-thirds of the number are males and one-third females.

The kitchen shaft be sufficiently spacious and should be of a size in proportion to the average number of diners catered for at one meal. The floor space in the kitchen shall be calculated at the rate of 0.5 me Min per diner. In case of snack bars, soda fountains, etc., the service-cum dispensing area shall be treated as part of the kitchen.

The minimum size of the kitchen should not be less than 10 square meters, and none of the sides should be less than 2.4 meters. Exhaust fans should have provisions for grease filters for collecting grease

1.9.6 STORAGE AND HANDLING EQUIPMENT

All containers and utensils shall be stored at a height of not less than. 430 mm above the floor in a clean, dry place protected from flies, splash, dust, overhead leakage, and other contamination.

STORAGE OF FOOD STUFF

All perishable food shall be stored at the temperatures as given in the following table.

TABLE 6 STORAGE TEMPERATURES FOR FOODSTUFF

Sl No.	Names of Articles	Storage Temperature °C
(1)	(2)	(3)
i)	Meat, meat products, poultry	0·00 to 1·50
ii)	Fresh fish and sea food	−2·00 ,, −0·50
iii)	Dairy products and eggs	0·50 ,, 2·50
iv)	Fresh fruit and vegetables	2·00 ,, 4·50
v)	Ice-creams	−14·50 ,, −12·00

Note 1 — Potatoes need no refrigeration, but should be stored away from light.

Note 2 — Fish and sea foods shall be stored in separate compartments so as not to affect other materials.

1.9.7 ACOUSTICS

Food service establishments (hotels, restaurants, etc.) shall adopt suitable noise control measures to provide adequate sound insulation against various noise sources which would cause disturbance to human comfort and ***efficiency.***

1.9.8 FIRE SAFETY REQUIREMENTS

All buildings, particularly buildings having more than one storey shall be provided with liberally demiglace safe-fire-resistant exists or escapes.

The exits shall be so placed that they are always immediately accessible and each is capable of taking all the persons on that floor as alternative escape routes may be rendered unsuitable and/or unsafe due to fire.

Escape route shall be well-ventilated as persons using the escapes are likely to be overcome by smoke and/or fumes which may enter from floor.

Basements- It is essential that the fire resistance of the basement conforms to the highest order and all columns for separating the upper structure shall have grading not less than the standards laid down for Grade 3.

Chapter 2
LITERATURE SURVEY STUDY

2.1 LITERATURE REVIEW

The word "hotel" originates from the French word "hotel," which means "a French version of a townhouse or any other building seeing frequent visitors," as opposed to a location that provides lodging. Nowadays, the French word "hotel" has the same meaning as the English term "hotel particular," which refers to the former meaning.

2.2 MINISTRY OF TOURISM GUIDELINES (Annexure B):

In order to offer modern standards for the amenities and services offered in hotels, the Ministry of Tourism has developed a voluntary system for classifying hotels that are currently in operation. This system will be applied to the following categories:

2.2.1 **Star Category Hotels**: - 5 Star Deluxe, 5 Star, 4 Star, 3 Star, 2 Star & 1 Star.
2.2.2 **Heritage Category Hotels**: - Heritage Grand, Heritage Classic & Heritage Basic.

FOR APPROVAL-

Application Form should have the following details:

1. Proposed name of the Hotel.
2. Name of the promoters with a note on the business antecedents in not more than 60 words.
3. Complete postal address of the promoter with Telephone, Fax and Email address.
4. Status of the owner/promoter:
   a) If Public/private limited company with copies of Memorandum and Articles of Association.
   b) If Partnership, a copy of Partnership Deed and Certificate of Registration.
   c) If proprietary concern, name and address of proprietor/certificate of Registration.
5. Location of hotel site with postal address.
6. Details of the site.
   a) Area (in sq. meters).
   b) Title – owned / leased with copies of sale / lease deed.
   c) Copy of Land Use Permit to construct Hotel from local authorities.
   d) Distance (in Kms) from
      i. Railway station
      ii. Airport
      iii. Main shopping center.
7. **Details of the project:**
   a) Copy of Feasibility Report.
   b) Star category planned.
   c) Number of rooms (with attached bathrooms) and size for each type of room (in sq.ft.).
   d) Size of bathrooms (in sq.ft.).

e) Details of public areas with size in sq. ft. – Lobby / lounge; restaurants; bar; shopping; banquet/conference halls; business center; health club; swimming pool; parking facilities (no. of vehicles).

f) Facilities for the differently abled guests (room with attached bathroom earmarked for this purpose, designated parking, ramps for free accessibility in public areas and to at least one restaurant, designated toilet (unisex) at the lobby level etc.).

g) Eco-friendly Practices

   i. Sewage Treatment Plant
   ii. Rain water harvesting
   iii. Waste management
   iv. Pollution control method for air, water and light
   v. Introduction of non-CFC equipment for refrigeration and air conditioning.

h) Energy / water conservation (use of CFL lamps, solar energy, water saving devices / taps).

i) Details of Fire Fighting Measures/ Hydrants etc.

j) Date by which project is expected to be completed and become operational.

k) Any other additional facilities.

l) Security related features

m) The architecture of the hotel building in hilly and ecologically fragile areas should incorporate creative architecture keeping in mind sustainability and energy efficiency and as far as possible in conformity with local art and architecture with use of local materials.

2.3 CLASSIFICATION / RECLASSIFICATION OF OPERATIONAL HOTELS:

2.2.3 It should be included in the application if some or all of the rooms will be rented out on a time-share basis. Hotels that plan to rent out all or a portion of their rooms on a time-share basis are not going to be able to get classified under this scheme.

2.2.4 The application fees payable for classification/reclassification are as follows. The Demand Draft may be payable to "Pay & Accounts Officer, Department of Tourism, New Delhi"

Star Category Classification/Reclassification fees in Rs.

5- Star 20,000
5- Star Deluxe 25,000

S. No.	Public Areas	Private Areas (Staff)	Private Areas (Guests)	Semi-Private Areas
1	Lobby and Reception Area	Administrative Offices	Standard Guest Room	Banquet Hall
2	Restaurant and Dining Facilities	Accounting Office	Double Occupancy Guest Room	Formal Dining Hall
3	Retail Outlets and Shops	Technical/Mechanical Rooms	Deluxe Guest Room	Multipurpose Hall
4	Lounge and Bar	Staff Bedrooms	Suite Guest Room	Banquet Area
5	Cloakroom and Storage Area	Laundry and Storage Facilities	Steam Room and Spa Services	
6	Parking Facilities	Kitchen and Food Storage Area	Guest Lounge and Bar	
7	Recreational Outdoor Areas (e.g., Parks)	Lockers and Staff Washrooms	Recreational Facilities (Swimming Pool, Gym)	
8	Banquet Hall	Waste Disposal Area	Guest Reading Room	
9		Control Room		
10		Pantry		

Table 1 Space Classification (Source: Newferts Data).

2.4 Literature Research Papers and Journals:

Table 2 Literature review.

Journal/ Article Title	Authors & Year	Research Focus/Objective	Methodology	Key Findings/ Inferences	Implications/ Learings
Impact of Green Practices on Guest Loyalty in Luxury Hotels	Ali et al., 2021 (Scopus)	To assess how green initiatives influence guest loyalty in 5-star hotels	Survey of 500 guests from luxury hotels	Guests prefer hotels that adopt green practices; green practices improve brand loyalty and eco-conscious bookings.	Hotels should promote green initiatives as a strategic advantage to attract eco-conscious travelers.

Service Quality and Customer Satisfaction in Hospitality	González et al., 2020 (Scopus)	Examining the effect of service quality on guest satisfaction in 5-star hotels	Survey data from 5-star hotel customers	Strong relationship between service quality and guest satisfaction, especially in personalized services.	Training staff and improving personalized services are essential to maintain high levels of guest satisfaction.
Digital Transformation in Luxury Hotels	Chen & Wang, 2020 (Mendeley)	Exploring the role of technology in enhancing guest experience at luxury hotels	Mixed methods: Interviews and guest surveys	Hotels using digital tools (e.g., mobile apps, AI) enhance both operational efficiency and guest satisfaction.	Luxury hotels must invest in technology to stay competitive and meet tech-savvy guests' expectations.
Sustainable Hotel Design and Its Impact on Guests	Hoxha et al., 2022 (Scopus)	Impact of sustainable design on guest perception and satisfaction	Case study of luxury hotels	Sustainable design significantly affects the guests' perception of luxury and comfort.	Incorporating sustainable design elements can be marketed as part of the luxury experience.
Brand Equity in Luxury Hotels	Ranjan & Jain, 2019 (Mendeley)	Understanding how brand equity affects guest retention in 5- star hotels	Interviews with hotel managers and guests	Strong brand equity leads to higher levels of customer retention, particularly for global luxury hotel chains.	Brand consistency and experience play crucial roles in maintaining loyalty in competitive markets.

Checklist of Facilities for Classification/Re-classification of Hotels

CHECKLIST FOR FACILITIES & SERVICES	1*	2*	3*	4*	5*/ 5* D	Yes / No	COMMENTS
General							
Full time operation 7 days a week in season	N	N	N	N	N		
Establishment to have all necessary trading licenses	N	N	N	N	N		Documents as detailed in General Terms and Conditions.
Establishment to have public liability insurance	D	D	D	D	D		
24 hr. lifts for buildings higher than ground plus two floors	N	N	N	N	N		Mandatory for all hotels. Local laws may require a relaxation of this condition. Easy access for the differently abled guests.
Bedrooms, Bathroom, Public areas and kitchen fully serviced daily	N	N	N	N	N		
All floor surfaces clean and in good repair	N	N	N	N	N		Floor may be of any type.
Guest Room							
Minimum 10 lettable rooms, all rooms with outside windows / ventilation.	N	N	N	N	N		
Minimum size of bedroom excluding bathroom in sq. ft	120	120	140	140	200		Single occupancy rooms may be 20 sq ft less. Rooms should not be less than the specified size.
Air-conditioning	25%	25%	50%	100%	100 %		Air-conditioning/ heating depends on climatic conditions & architecture. Room temp. should be between 20 & 28 Degrees C. For 4, 5 and 5 Star Deluxe (the percentage is of the total no. of rooms).
A clean change of bed and bath linen daily & between check– in 's	N	N	N	N	N		Definitely required between each Check – In. On alternate days for 1 & 2 Star hotels.
Suites				N	N		2% of room block with a minimum of 1.
Bathroom							
Number of rooms with attached bathrooms	All	All	All	All	All		It will be mandatory w.e.f. 01.09.2010 for all 1 and 2 Star category hotels to have attached bathrooms. All bathrooms to have sanitary bin with lid.

Table 3 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism)

Crockery & Glassware	N	N	N	N	N		Plastic ware accepted in pool area.
Cutlery to be at least stainless steel	N	N	N	N	N		All categories should use good quality metal cutlery. Aluminum cutlery prohibited.
Bar			N	N	N		
Kitchens							
Refrigerator with deep freeze	N	N	N	N	N		Capacity based on size of F & B service.
Segregated storage of meat , fish and vegetables	N	N	N	N	N		Meat, fish and vegetables in separate freezers.
Colour coded synthetic chopping boards	N	N	N	N	N		Wooden chopping boards prohibited.
Tiled walls non –slip floors	N	N	N	N	N		
Head covering for production staff	N	N	N	N	N		
Daily germicidal cleaning of floors	N	N	N	N	N		
Good quality cooking vessels / utensils	N	N	N	N	N		Use of aluminum vessels prohibited except for bakery.
All food grade equipment containers	N	N	N	N	N		
Ventilation system	N	N	N	N	N		
Garbage to be segregated – wet and dry	N	N	N	N	N		To encourage recycling.
Wet garbage area to be air-conditioned			N	N	N		
Receiving areas and stores to be clean and distinct from garbage area	N	N	N	N	N		
Six monthly medical checks for production staff	N	N	N	N	N		
First – aid training for all kitchen staff	N	N	N	N	N		
Pest control	N	N	N	N	N		
Staff							
Staff uniforms for front of the house	N	N	N	N	N		Uniforms to be clean and in good condition.

Table 4 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism)

Shelves / drawer space	N	N	N	N	N		Necessary for hotels of 1, 2 & 3 Star category to have a wardrobe.
Room and facilities for the differently abled guests							
At least one room for the differently abled guest	N	N	N	N	N		Minimum door width should be one metre to allow wheelchair access with suitable low height furniture, low peep hole, cupboard to have sliding doors with low clothe hangers etc. Room to have audible and visible (blinking light) alarm system. All hotels should be fully compliant by 01.09.2010.
Ramps with anti-slip floors at the entrance. Minimum door width should be one metre to allow wheelchair access.	N	N	N	N	N		To be provided in all public areas. Free accessibility in all public areas and at least one restaurant in 5 Star and 5 Star Deluxe. All hotels should be fully compliant by 01.09.2010.
Bathroom	N	N	N	N	N		Minimum door width should be one metre. Bathroom to be wheelchair accessible with sliding door, suitable fixtures like low wash basin, low height toilet, grab bars etc. No bath tub required. All hotels should be fully compliant by 01.09.2010.
Public restrooms	N	N	N	N	N		Unisex. To be wheelchair accessible with low height urinal (24" maximum) with grab bars. Minimum door width should be one metre. To be introduced by 01.09.2010 in 1, 2 & 3 Star hotels also.
Public Areas							
Lounge or seating area in the lobby	N	N	N	N	N		Doorman on duty. Lobby shall have furniture and fittings which shall include chairs/arm chairs, sofa, tables and fresh floral display.
Reception facility	N	N	N	N	N		Manned minimum 16 hours a day. Call service 24 hrs. Local directions to hotel including city / street maps to be available.
Availability of room, F& B and other tariff	N	N	N	N	N		
Heating and cooling to be provided in public areas				N	N		Temperatures to be between 20-28 degrees Celsius.

Table 5 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism).

							provided on a permanent basis, it will be mandatory for all Star hotels to provide multi-socket adapter plugs on request.
A telephone for incoming & outgoing calls in the room	D	N	N	N	N		4 star and above should have direct dialing and STD / ISD facilities. 1,2 and 3 Star category hotels may go through a telephone exchange.
PC available for guest use with internet access	D	D	N	N	N		This can be a paid service. Upto 3 Star, PC can be in the executive offices, Internet subject to local access being available.
E-mail service	D	D	N	N	N		Subject to local internet access being available.
Fax, photocopy and printing Services.	N	N	N	N	N		
In room Internet / wi-fi connection	D	D	D	N	N		Subject to local internet access being available. Wi-Fi wherever possible.
Business Centre	D	D	D	N	N		This should be a dedicated area. (This provision may be relaxed for resort destinations, tourist and pilgrimage centers).
Swimming Pool	D	D	D	D	N		This can be relaxed for hill destinations. Mandatory to have trained Life Guard, Board containing Do's and Don'ts, No Diving sign, pool depth etc. should be displayed at a strategic location in the pool area. All 4 Star, 5 Star and 5 Star Deluxe hotels shall provide a luminous LED wall clock with numerals of three inches or more on display near their swimming pools
Parking Facilities	D	D	N	N	N		Should be adequate in relation to the number of rooms & banquet / convention hall capacity. Exclusively earmarked accessible parking nearest to the entrance for differently abled guest.
Conference Facilities.	D	D	D	D	N		
ECO FRIENDLY PRACTICES							
Sewage Treatment Plant	N	N	N	N	N		A Sewage Treatment Plant will not be a mandatory condition for hotels which have obtained completion certificate for construction before 01.04.2012.

Table 6 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism).

English speaking front office staff	D	D	N	N	N		This may be relaxed outside the metros / sub-metros for 1 and 2 Star category hotels.
Percentage of Supervisory staff	20%	20%	40%	40%	80%		Hotels of 4 Star category and above should have formally qualified Heads of Departments. The supervisory or the skilled staff may have training or skill certification as follows: Degree / diploma from Central or state IHM's / FCI's or from NCHMCT affiliated IHM's or from other reputed Hospitality schools.
Percentage of Skilled staff	20%	20%	30%	30%	60%		The supervisory or the skilled staff may have training or skill certification as follows: i. Degree / diploma from Central or state IHM's / FCI's or from NCHMCT affiliated IHM's or from other reputed Hospitality schools. ii. Skill training certificate issued under the guidelines and scheme of the Ministry of Tourism.
Staff welfare / facilities							
Staff rest room	D	D	N	N	N		Separate for male and female employees with bunk beds, well lighted and ventilated.
Staff locker room	D	D	N	N	N		
Toilet facilities	N	N	N	N	N		Full length mirror, hand dryer with liquid soap dispenser.
Dining area	D	D	N	N	N		
Guest Services							
Provision of wheelchair for the differently abled guest	N	N	N	N	N		Wheel chair to be available on a complimentary basis in hotels of all categories
Valet (parking) services to be available	D	D	N	N	N		
Dry- cleaning /laundry	D	D	D	D	N		In house for 5 star Deluxe hotels. For 5 Star category and below, maybe outsourced.
Iron and iron board				N	N		Iron and iron board to made available on request in 1 to 4 Star category hotels on complimentary basis. For 5 and 5 Star Deluxe categories, to be available in the room.

Table 7 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism).

Shop / kiosk	D	D	D	N	N		5 and 5 Star Deluxe category hotels to have one utility and one souvenir shop. 4 Star to have minimum one utility shop.
Money changing facilities	D	D	D	D	D		Money changing facility to be made available.
Bookshop	D	D	D	D	N		
Safety & Security							
Metal detectors (door frame or hand held)			N	N	N		
CCTV at strategic locations	N	N	N	N	N		
X-Ray Machine					N		For 5 Star Deluxe category, it would be 'Necessary' to have an X-Ray Machine at the guest entrance for screening of baggage. Manual checks may be conducted for staff and suppliers at designated entry points.
Under belly scanners to screen vehicles				N	N		
Verification	N	N	N	N	N		All hotels should conduct a verification of their staff and suppliers by the Police / private security agencies.
Staff trained in fire fighting drill	N	N	N	N	N		All hotels to conduct periodic fire drills and maintain 'Manuals' for Disaster Management, First Aid and Fire Safety. Quarterly drill or as per law.
Security arrangements for all hotel entrances	N	N	N	N	N		
Each bedroom door fitted with lock and key, viewport / peephole & internal securing device			N	N	N		A safety chain / wishbone latch is acceptable in place of viewport / peephole.
Smoke detectors	N	N	N	N'	N		These can be battery operated.
Fire and emergency procedure notices displayed in room behind door	N	N	N	N	N		
Fire and emergency alarms should have visual & audible signals	N	N	N	N	N		
First aid kit with over the counter medicines with front desk	N	N	N	N	N		

Table 8 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism).

Rain Water Harvesting	N	N	N	N	N		
Waste management	N	N	N	N	N		
Pollution control methods for air, water and light	N	N	N	N	N		
Introduction of non CFC equipment for refrigeration and air conditioning and other Eco-friendly measures / initiatives.	N	N	N	N	N		

Checklist of Services and Facilities (Annexure III)

D Desirable

N Necessary

There is no relaxation in the 'Necessary' criteria of the Checklist of Services and Facilities (Annexure II), except as specified in the comments column of said checklist.

Note1.

All hotels should clearly indicate on their websites the facilities and amenities provided to guests "free of cost" like complimentary breakfast (indicating broad classification like Indian breakfast, Continental breakfast or American breakfast), iron and iron board facility, shoe cleaning facility, shoe horn and slippers, other "free" facilities like dental kit, shaving kit etc.

If any facility is provided only 'on request' but is included in the room rent, this should be mentioned on the hotel's website under the head **'Facilities and Amenities Provided on complimentary basis'** and also be mentioned to the guest when the hotel staff introduce the room to him / her on arrival. In case the 'complimentary breakfast' is not a buffet, the guest must be shown a list stating in English the name of all complimentary items.

(All hotels shall submit a compliance of Note 1 in the form of a screen shot of their website showing the "Facilities & Amentias provided on complimentary basis")

Note 2.

It will be mandatory for all the hotels classified under all category to display their classification status prominently on their websites under a separate icon on the opening page, which on the click will display the order of classification issued by the Ministry of Tourism, Government of India, and at the reception.

Note 3.

All the hotels shall be required to submit an affidavit with respect to clearances along with their applications for approval of Hotel at the Project Stage and for Classification / Re-classification of Operational Hotels, as given in **Annexure V and VI respectively**.

Note 4:

a. If any hotel is found to obtain classification on a false pretext or on the basis of misrepresentation of facts, or is found to display wrong classification status, or found to promote / market the hotel on the basis of wrongful claims pertaining to hotel classification, then the unit / hotel will stand declassified with immediate effect and it shall be debarred from applying for classification under any category for a minimum period of two years from the date of debarment by the competent authority i.e. the Chairman, HRACC.

b. If a hotel which has applied for classification under any category to the Ministry of Tourism is found to display false classification status, or found promote / market the hotel on the basis of wrongful claims pertaining to hotel classification, then the application for classification of the unit / hotel will stand summarily rejected and it shall be debarred from applying for classification under any category for a minimum period of two years from the date of debarment by the competent authority i.e. the Chairman, HRACC.

c. In case of debarment, a hotel, which is found to otherwise fulfil to the satisfaction of the inspection committee, all criteria pertaining to the classification parameters of the star / heritage category under which it was found to wrongfully promote itself, will have the one-time opportunity for revocation of the debarment by paying a penalty prescribed below. Such observation of the committee, if any, will

Table 9 Checklist of Facilities for Classification/Re-classification of Hotels (Source: Ministry of Tourism).

2.5 EXTERNAL ACCESS OF CONTROL:

2.5.1 Limiting Access Points

There should be no more than two or three access points, and people's entry should be controlled and monitored by CCTV cameras positioned there.

2.5.2 Perimeter Security System

A three-tier security system should be put in place-

a) Cars must halt at the hotel's perimeter, boots must be examined, and mirrors must be placed beneath the car's chassis to detect explosives.
b) Avoid encouraging cars to pull up to the hotel door. It is not appropriate to let cars pull up directly to the entrance. Visitors must disembark and walk up from a distance.
c) All of the hotel's public spaces should have closed-circuit televisions installed, particularly the alighting area and main door, so that guests may be screened as they enter.

2.5.3 Road Barriers

High-end hotels can think about putting up barriers that can halt fast-moving cars, including retractable bollards or hydraulic road barriers. Vehicles can be stopped or slowed down by raising small speed bumps from the ground.

2.5.4 Shrubs and Vines

To lessen their ability to hide criminals or bombs, heavy plants and vines should ideally be maintained away from the hotel building and clipped close to the ground.

2.5.5 Patrolling

Increasing patrols and the number of security guards on duty can effectively discourage criminal activity.

2.6 MATERIAL ACCESS CONTROL:

Guest Baggage Check

a) Baggage should be taken to a drop point, away from the lobby, and passed through baggage scanners, which can detect the shape and density of the objects with a high degree of clarity
b) Handheld bags must be checked at the entry point.

2.7 PEOPLE ACCESS CONTROL:

Walk-In Guests

Hotels should not entertain Walk-in guests (without reference or pre-bookings).

Guest Profiling

Hotels should implement a computer-linked guest profiling system in order to target individuals

whose names are on the Ministry of Home Affairs' Watch List and who have suspect pasts. The details would comprise the guest's full name, birthdate, nationality, sex, passport number, country of issuance, country of residence, visa number, date, and location of issuance.

Employee Verification

Background checks and antecedent verification of staff members and service suppliers are necessary to guarantee internal security. It is best to hire temporary employees from reputable vendors who keep their databases current.

Visitor Management System

A visitor management system is essential. All visitors must be given a 'Visitor Pass'.

INTERNAL ACCESS CONTROL:

a) Within the hotel, there should be restrictions on access to different parts of the hotel.
b) Access of staff to various departments in the hotel can also be regulated through proximity cards with magnetic interlocks.
c) Entrances to areas such as Boiler Rooms, Mal Rooms, Computer Rooms, Switch Boards, and Control Rooms should remain locked when not in use.
d) It is also necessary to establish a procedure for the accountability of their keys.

LIFT USAGE

1. The practice of people entering the lobby and taking the lift to any floor must be stopped.
2. Lifts should be programmed so that Guests staying in hotels can go only to the guest floor they are on by swiping their room card in the lift, and it should only let them get out on the guest floor they are on.

2.8 OTHER SECURITY MEASURES:

Room Key Scanners

Mass spectrometry scanners, developed by the US Department of Energy through Oak Ridge National Laboratories, have the capacity to analyse up to 1000 guest room access cards in an hour. These are capable of detecting explosives down to the billionth of a gram, including TNT and nitroglycerine. Even the slightest hint of an explosive touched by a guest would trigger an instant staff alarm and send information to security services.

Snifex

Snifex is a small handheld device with an aerial. The ariel starts V, pointing to the direction where the explosive is kept from a distance of a few meters.

Trash Management

An explosive device can easily be hidden in the trash. Trash cans need to be managed by trustworthy personnel.

2.9 CRISIS MANAGEMENT PLAN:

a) Hotels must have a plan of action ready in case of an emergency. Staff should be trained by mock drills in evacuations to help people in terror situations.

b) Hotels need to build strong in-house systems to prevent or deal with a crisis; train and motivate staff to respond to an emergency and evacuate guests if there is a shooting or a bomb goes off. There should be a designated nodal executive in charge of the crisis management team.

c) During a crisis, calls start pouring from all over the world for news of the welfare and safety of guests and from the media persons who file reports on TV channels and in newspapers. There should be a nodal point and a designated person for information dissemination and to respond to all enquiries during a crisis.

2.10 ITC HOTEL MANUAL:

PARKING AND APPROACH TO BUILDING:

There must be at least one designated accessible parking space for every 25 parking spaces provided.

a) Location:

- The accessible parking bay should be located closest to the entrance, with an accessible route that is level or gently sloping and at least 1200mm wide, leading to the building entrance.
- The route to the entrance from the parking must not require the user to cross any vehicular monument.
- The parking and the route connecting it to the entrance should preferably be covered.
- In case of underground parking, accessible parking bays should be located closest to the elevator leading to the lobby levels.

b) Parking Space

- Accessible parking bay should be 4800mm wide, out of which at least 1200mm, on both sides, is used as transfer bays. Where there are two accessible parking bays adjoining each other, then the 1200mm transfer bay, on one side, may be shared by the two parking bays in between them.
- Length of the accessible parking bay should preferably be 6000mm, including a 1200mm wide transfer zone at the rear to allow loading of the wheelchair. The

transfer zones, both on the sides and the rear, should have yellow or white cross-hatch road markings.

c) Signage

- There should be the international symbol of accessibility painted on the 2400mm wide area where the car is to be parked. The symbol should be large enough to be easily visible to a person looking for the accessible parking. Recommended size being 1000mm x 1000mm, but not larger than 1500mm x 1500mm. The sign painted on the floor should contrast with the floor color (preferred colors, white and blue)
- There should also be a signboard with the international symbol of accessibility at a height of 1200mm from the floor, right at the end of the parking.
- The Symbol of Access should be displayed at approaches and entrances to car parks, to indicate the provision of an accessible parking lot, for people with disabilities within the vicinity.
- Directional signs should be displayed at points where there is a change of direction to direct people with disabilities to the accessible parking lot.
- Approach to the Building
- The approach to the building entrance should be clearly defined.
- The surfaces should be firm and even, with a finish that is slip-resistant in all weather conditions.
- The width of paths should be appropriate to meet the needs of all users.
- A recommended clear width of 1800mm will allow two wheelchair users to pass each other on the path; however, where obstacles are unavoidable, and a 1800mm width cannot be provided, a clear width of at least 1200mm should be provided throughout the path.
- Any kerbs in the route should have appropriate drop kerbs to allow access to a wheelchair.

MAIN ENTRANCE:

a) Entrance should be easy to locate and adequately signposted
b) Consider installing automatic or semi-automatic doors
c) Avoid thresholds; if unavoidable, they should be no higher than 6mm
d) There should be a landing of at least 1800mm x 1800mm immediately next to the door.

LOBBY, RECEPTION, AND HOUSE PHONES:

a) **Lobby**

- The lobby should be levelled, and split levels should be avoided.

- It should have adequate circulation space for a guest in a wheelchair, parents with a double pram, or a person with heavy luggage.
- Any center piece that may be used in the lobby should be such that it can be easily detected by a person with vision impairments. This can be achieved by making it contrast in color with the flooring and detectable by a white cane, and by having its lower edge less than 300mm above the ground.

b) **Reception**

- Location of the reception should be such that it is easily identifiable from the entrance. The approach to the reception should be obstacle-free.
- The reception should be designed to accommodate both standing and sitting guests. This can be achieved by providing a seated section that is minimally 1500mm wide x 760mm high x 700mm deep with a 750mm high knee recess. The standing section should range from 950mm to 1100mm in height.
- A minimum clear floor area of 1200mm depth and 1800 mm width is required in front of any reception desk or counter (with a provision of 500mm deep knee recess) to enable sufficient maneuvering space for wheelchair users. If there is no knee recess provided, then the minimum maneuvering space required is 1400mm deep and 2200mm wide.

2.11 TIMESAVER STANDARDS (BUILDING TYPES) HOTEL:

- It must be borne in mind that, as far as planned circulation is concerned, there must never be a mingling of the front-of-the-house services with those of the back of the house.
- The two functions must be kept separate and yet so interrelated that both run smoothly and efficiently.
- The physical environment becomes an important part of the guest's creature comforts. These factors include color and decor, lighting, proper air temperature, comfortable furnishings, and, above all, a pleasant and relaxed atmosphere.
- This involves the economics of a new hotel, which will center on the cost of construction and furnishing. These costs represent, together with the cost of the land, the amount of money that is to be invested.
- Hotel planning must ensure smooth, uninterrupted circulation for both guests and service staff. Public and service routes should be clearly segregated yet efficiently connected to maintain guest privacy and operational ease. Proper layout design enhances movement, reduces delays, and contributes to the overall functionality of the space.
- Acoustical comfort is essential to guest satisfaction. Noise control must be achieved through soundproofing, thoughtful placement of noisy equipment, and the use of sound-absorbing materials. Isolating guest rooms from service zones and

entertainment areas ensures a peaceful and relaxing atmosphere, which significantly enhances the overall guest experience.

- The design must allow for future technological integration with minimal disruption. This includes providing modular infrastructure, concealed conduits, and adaptable spatial configurations. With the hospitality industry evolving rapidly, such flexibility ensures the hotel remains modern, efficient, and responsive to new technologies and changing guest expectations over time.
- Sustainability must be embedded in design and operations through energy-efficient systems, water conservation methods, and the use of eco-friendly materials. Features like solar panels, rainwater harvesting, and passive ventilation help reduce environmental impact while appealing to environmentally conscious guests and supporting long-term operational savings.
- Back-of-house areas must be designed for staff comfort, safety, and efficiency. Facilities such as restrooms, locker rooms, dining spaces, and break areas must be well-ventilated and functional. A positive staff environment improves morale and productivity, directly impacting the quality of service and overall guest satisfaction.

2.11.1BACK OF THE HOUSE:

2.11.1.1 Though rarely seen by a guest, the back of the house is the most crucial part of the plan. It must be laid out with two paramount objectives: control and efficiency. Foodstuffs, housekeeping supplies, and a great many other items must be received out of sight of the hotel guests. Such receiving is usually done at a loading dock, which should be covered so that deliveries can be made regardless of the weather.

2.11.1.2 Direction, it is not uncommon for material to be delivered and, within a short time of its having been left on the dock unchecked, for the management to find that this material has disappeared or that some parts of the shipment have gone astray. The second part of the control is to make sure that, once these shipments have arrived, they go directly to their destination without a chance of becoming lost on the way.

2.11.1.3 A good back-of-the-house plan will be worked out in such a way that the flow of supplies is tightly controlled by the security that the architect works into his plan.

2.11.1.4A tight, well-planned back of the house will have circulation patterns that will provide the utmost in control.

2.11.1.5 In the larger hotels, garbage destructors or compressors may be used, in which case tight surveillance is necessary only in the garbage receiving area. Where garbage is shipped out, it is wise to have the garbage rooms so placed (and, incidentally, refrigerated) that the receiving office has this space in full view.

2.11.1.6 A tight control at the point of entry and egress of all employees is highly desirable and can easily be accomplished if it is the same point as that at which food and other hotel supplies are brought in. Once again, the architect's careful planning will make it possible for employees to reach their various dressing and locker areas with a minimum of travel time lost. It must be borne in mind that there is class distinction in hotels and, as an example, that dishwashers and porters are not placed in the same locker rooms as head waiters and reception clerks.

2.11.1.7 Locker rooms should be provided with ample toilet facilities and showers. Once the personnel have changed into their uniforms, the plan of the back of the house will make it possible for the people to get to their work stations with little time lost.

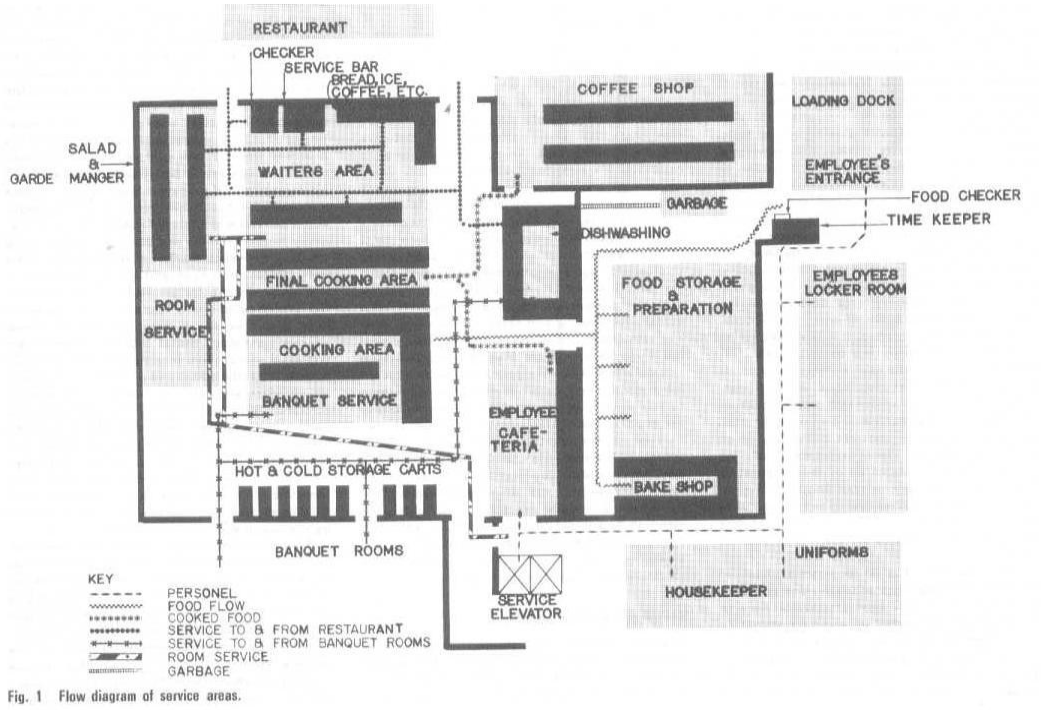


Figure 4 Flow diagram of service areas (Source: ITC Hotel Manual).

Uniform issue is related to the housekeeper, the housekeeper to the laundry room, and the laundry room to the soiled linen room. The soiled linen room connects by vertical linen chute to the service room on every typical floor, and every typical floor is connected by a service elevator that opens to the lower-floor service area convenient to the scrutinizing gaze of the steward and the timekeeper. For convenience, a trash chute, going from every typical floor service area, should be located next to the linen chute.

2.11.2LAUNDRY FACILITIES:

- A laundry is a usual adjunct of most good-sized hotels.
- A hotel laundry that does its own uniforms and flatwork (sheets, pillowcases, linens, etc.) requires a good-sized space for washers, dryers, drum ironers, and various pressing machines suitable for its own type of flatwork, uniforms, and guests' laundry, and men's and women's wearing apparel.
- Larger hotels will maintain their own cleaning department for dry cleaning and pressing of woolens and similar garments. Such a cleaning and valet service is usually a part of or close to the laundry area, and it is definitely under the supervision of the laundry manager.

2.11.3HOUSEKEEPING **DEPARTMENT:**

- The housekeeping department, having several functions, is the province of the chief housekeeper, who will usually have assistant floor housekeepers. Under the housekeeper's strict control and supervision will be all the maids and porters
- The porters will deliver to the service areas on the guest-room floors all linen and soap as well as facial tissue, toilet paper, matches, room service menus, and ashtrays.
- The housekeeper's area is also a storage area, for here are kept all the supplies that become a part of housekeeping.

- It might be useful for the architect to know how many rooms a maid can make up during her daily tour of duty.
- It rarely goes beyond 15. One porter is usually assigned to each maid. In addition to the regular daytime maid, there will be, in most hotels, a night maid who will make up beds for guests ready to go to sleep.

2.11.4 FOOD AND BEVERAGE SERVICES:

- The flow of the raw food from the time it is delivered to the steward until it is finally cooked and ready to be picked up by the waiters or the waitresses.
- After the comestibles have been weighed in, checked, and signed for, they are sent to either dry storage or liquor storage (a room with a big lock on it) or to one of the various cold holding rooms or boxes. Canned food and other bottled or packaged food that does not need refrigeration will be sent to dry-storage rooms. In this storage space will also be kept the various condiments that the chef will need in the preparation of his food. Vegetables will be sent to an area where they will be stored, ready for preparation. A refrigerator box of the proper temperature will be needed, as well as work space, sinks, and cutting boards where vegetables will be prepared for the chefs as needed. A vegetable preparation area is needed.
- Dairy products will go to their own cold-storage boxes. Fish, fowl, and meat will go to a separate area where boxes must be arranged with proper temperatures for their storage.
- Freezer, refrigerator, and cold storage boxes require heavy insulation. Slab sinkage in these areas should be provided for.
- The bakery should be a separate entity, having its own refrigerator boxes as well as all the pertinent equipment that a baker will use in his art---and an art it is, indeed.
- Here again, one should be reminded that the bakery should be close to the actual food service area so that not too many of these goodies find their way into the locker rooms or out of the hotel entirely.

1. KITCHEN

- The food from the prep area is brought to the various points where it is to be used. One of the first areas to which a good part of the prepared food will go is the rough cooking area. Here we find the big soup kettles, the vegetable steamers, the ovens, and the hot tops where most of the bulk foods will be prepared.
- Pot washing area close to the rough or preliminary food cooking area. Rough cooking is usually backed up to the finished cooking area.
- Between the chefs' ovens, broilers, and fryers, which are aligned in a straight line, there will be an aisle for the chefs. On the other side of this aisle will be the serving tables from which the waiters will pick up the finished food. At the bottom of these tables will be a plate. Warmers that the waiter picks up and sets on the table, so the chef can place the order of the specific dish that is required.
- This entire area is for self-service by the waiters, who will pick up the items they need on their way to the guest waiting for the delivery of his food.

2. DINING ROOM-

- The dishwasher is usually placed close to the Dining room area so that the dishes can be disposed of as soon as the waiter or busboy enters the kitchen. The dishwashing area is, of necessity, not only noisy but also a rather untidy operation, SO it must be kept fairly isolated from the actual cooking and serving area.
- Then, before entering the tire. Dining room, Ire will usually go by a checker's desk where he presents a check indicating the items that he is taking out of the kitchen to the diner.

- One other space will usually occur in our ideal kitchen--a service bar with a bartender who will prepare the drinks that the waiter has ordered.
- There will be a chef's office, which is set where the chef can observe all the activities in the kitchen. His office is usually enclosed with glass to give him aural privacy but complete visual control. Here, the chef will prepare and plan menus.
- Room-service area- Here, there must be sufficient space for a fairly large number of room service rolling tables, which are set and ready to carry the dishes that have been ordered by the guest via telephone.
- The room-service area is always close to the tire cooking and garden manager area. The

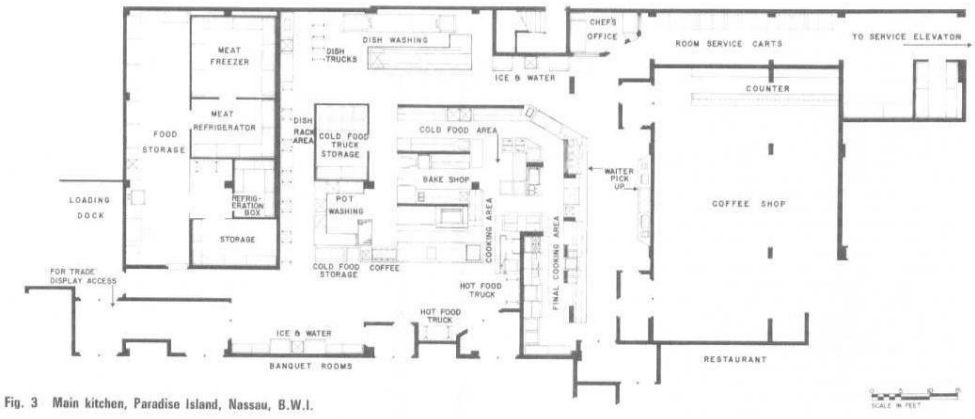


Figure 5 Flow diagram of service areas (Source: ITC Hotel Manual)

room service area should, of necessity, be as close to the service elevators as possible.

3. COOKING AREA

- The cooking area, consisting mainly of griddles, will be manned by short-order chefs who are ready to prepare various hot breakfast dishes, and the garden manager section will be manned by a crew who are experts in the preparation of breakfast menus.

4. BANQUET HALLS

- In the banquet area, there will be mobile cabinets that take trays. These are electrified cabinets arranged to keep dishes either hot or cold. Those banquet cabinets can be stocked before a banquet for certain types of menus.
- A large banquet area in a hotel will require a separate banquet kitchen with its own cooking facilities as well as its own dishwashing area.
- One last observation: it is an excellent idea to have toilets and washrooms for kitchen help, so that they don't need to return to their locker rooms, which may be at some distance. It is always advisable to keep the kitchen help within the kitchen during their stint of duty. Doors to dining rooms, and there may be several dining rooms serviced by the one kitchen, should be strategically placed and baffled so that the diners do not have a view of what goes on in the kitchen, and, what is more important, do not hear what is going on.
- The ideal plan would be to place the coffee shop backed up to the kitchen, so that certain finished dishes and prepared foods can be delivered to the coffee shop work area directly from the main kitchen under complete control, and it passes from prep areas to the kitchen to the coffee shop.
- At the counter, we will usually find a pickup area where the waiters can pick up the food prepared for them without disturbing the diners who are sitting at counters.

- Dirty dishes will be sent back to the dishwashing area through a pass-through, or they will be carried to the dishwashing area in the main kitchen.
- Employees' cafeteria- This space is usually planned to be close to the help's locker rooms and yet contiguous to the main kitchen.
- Beverage service area- This may be a bar room or a cocktail lounge. In any case, there will be a bar with stools (if local codes permit) and an area for cocktail tables and chairs. A cocktail lounge must be serviced just as the kitchen is serviced. To the bar must be brought not only liquor and bottled goods but also the usual crunchies.
- Ideally, the delivery should be made directly to the back bar through pass-throughs from the kitchen, so that we find once again another unit backed up to the ideal kitchen.

5. MECHANICAL SERVICES:

- Another area that should be considered in designing the back-of-the-house spaces will be the boiler or mechanical room. In this area will be found the various pieces of equipment for heating and cooling, as well as all the tanks and pumps to keep all the mechanical systems in operation.
- In this area will also be found all the central switch gear that controls electric current for every purpose in the hotel complex. This domain belongs to the house engineer and, naturally, there should be provision for an engineer's office, with a mechanical repair shop close by.
- These would include a carpentry shop, an upholstery shop, and definitely an area for a locksmith. Somewhere in the area, where they are easily accessible, there will be storage rooms in which a multitude of spare parts are stored to service the hotel. Be occupied by personnel that very often come in contact with the guests, and the strategic location of these back-of-the-house facilities will be controlled entirely by what happens in the front of the house.
- Included in these areas you will find accounting and bookkeeping offices (which back up the front cashiers); reservations offices (which back up to the front registration desk); and offices for management, which will include a reception area, a manager's office, and an assistant manager's office.
- There is also a mail sorting room.

6. FRONT OF THE HOUSE:

- The guest or the paying customer sees only the front of the house, and this must be all that he desires.
- The front of the house comprises every area that the guest will see: lobbies, dining spaces, restrooms, passenger elevators, corridors, hotel rooms, etc. These spaces must be handled and planned with one thought in mind: the convenience and continued approbation of the guests.
- The registration desk and the elevators should be immediately apparent. The registration area consists of a front desk, behind which is a registration clerk, behind whom is the key and mail rack, and behind that the various administration spaces.

7. GUEST REGISTRATION:

- A hotel registration desk must be located so that it is immediately visible as one enters the hotel lobby. The size of the desk will be determined by the size of the hotel.

- 2,000 rooms might have anywhere from four to six registration clerks, while a hotel of 100 to 200 rooms will have one or at the roots of two spaces at which guests may register.
- The simplest arrangement will call for a suitable file containing reservation cards requesting space, so that the clerk can quickly check what room has been reserved for what particular guest.
- Advance registration counter.

8. MAIL AND KEYS:

- There are two other services that the front or registration desk must perform. The first and obvious one is to serve as the place where the room keys are kept.
- If the registration clerk handles the key, then obviously the key rack is directly behind the desk, easily accessible to the registration clerk. If the hotel is large enough to require a separate area and separate personnel for handling keys, this function will usually be alongside the actual registration desk

9. CASHIOR

- The average hotel usually has the cashier's counter located adjacent to the registration desk.
- The larger hotels may place cashiers in the so-called "front desk" area, but somewhat remote from the actual registration desk. There are times in large hotels, especially those catering to conventions, where one convention is checking out while another is checking in. This will cause traffic congestion and some confusion. Such a situation can be avoided by planning the registration and cashier facilities so that lines forming in front of the registration desk do not conflict with lines forming at the cashier's counter.
- Larger hotels will have a complete bookkeeping department. This will require more than just the actual cashiers, who remain at their stations, while the bookkeeping department handles all entries and bookkeeping for the guests. This bookkeeping department should be close to, if not backed up to, the front desk cashiers, so that any questions of charges can be quickly checked and adjusted by the cashier, who will contact the bookkeeping department for clarification or corrections in the guests' bills.
- Therefore, a small closed room is normally provided. The guest enters this room and gives the valuables to the cashier through a pass-through window.
- This pass-through window should have a view of the vault or the safe so that the guest can watch his valuables being deposited properly.
- In large hotels, where there are several restaurants and other facilities that entail cash payment, special arrangements should be made for the handling of this cash, and, in some instances, safety deposit boxes or vaults are provided so that the money can be stored when it is brought to the cashier space at off-hours.

10. ADMINISTRATIVE AREA:

- The administration of a hotel operation depends entirely upon its size.
- A larger, medium-sized hotel will have a manager and an assistant manager, and, as a rule, there will be e reception office where one or two typist receptionists will be acting as a buffer between the public and the manager.

- Aside from the manager and the assistant manager, there may be an office for a food and beverage manager and a banquet manager. A larger hotel, with sizable convention facilities, will also have an office for the convention manager and his assistants.

11. RESTAURANTFACILITIES:

- Under normal situations, there will be a cocktail lounge or beverage bar even in the smallest dining facility. The larger hotel will have a pleasant coffee shop for quick service and for simpler meals, whereas a restaurant, with its appropriate decor for more leisurely dining, will offer a more varied menu with probably a higher cost per meal than in the coffee shop. The cocktail lounge will usually be found close to the dining room so that hotel guests can pause for a cocktail before lunch or dinner, or while waiting, before going to the dining room, to meet friends or other guests. Where convention facilities are offered within a hotel, it is wise to have a bar placed close to the convention facilities.
- Large convention and banquet facilities usually provide a fixed or portable bar arrangement in the pre-assembly or foyer areas to take care of pauses between meetings and seminars and to fill those pauses with a facility that will provide a "pause that refreshes." There is no special requirement for the design of hotel restaurants, bars, cocktail lounges, and coffee shops, which are in any way different from the standard requirements for any such facility.
- Wherever a rooftop restaurant is created, the architect must bear in mind that there will be increased traffic in the elevators taking diners from both inside and outside the hotel to this specialized rooftop facility. And don't forget that, because of public assembly requirements, the stairs must be sized larger. Supper clubs or nightclubs will also be found in the larger hotels with this type of dining and entertainment area, along with orchestra dressing rooms.

12. LOBBIES:

- Every hotel, regardless of its size, must have a public lobby. The size of the lobby is largely determined by the number of guest rooms as well as by the type of hotel that is on the architect's drawing boards.
- Furnishings, color, finishing materials, lighting, and decor must create the proper ambience regardless of whether the hotel is large or small, in a city or a resort, moderately priced or expensive.

13. ELEVATORS:

- Except for one- and two-story motels, every hotel and motel will use elevators to take guests from the point at which they have checked in up to the floor where the guest's room is located. Elevators should be located so that they are immediately visible, either from the entrance of the hotel or from the check-in or registration area. Another consideration in the planning of elevators is that of their location on the guest-room floors. It is advisable to place them centrally so that the distance walked by a guest in any direction is reduced to a minimum.
- The number, size, and speed of the required elevators are best determined by the elevator companies themselves.
- Service elevators are separate and apart.

- Each bank of elevators should be strategically located to best serve the front of the house (guests) or the back of the house.
- The bell captain's station should be located so there is a commanding view of the hotel entrance, the registration desk, the cashier, and the elevators.
- Somewhere in the lobby, there should be a rather large storage space for luggage that may be left by guests after checking out but before departing.

14. GUEST FLOOR CORRIDORS:

- It is wise to remember that no guest-room doors should be placed opposite the elevators. Guests coming or going late at night, coming out or getting into the elevators, may talk loudly or maybe too noisy, in which case they would be disturbing guests whose doors open off this area. The foyer should be further demarked from the guest-room corridor by its decor and lighting.
- One of these appurtenances would be a small bench or some type of seat for guests who may want to wait in the foyer for the elevator or who may be waiting to meet someone else on the floor. It is also a thoughtful gesture to have a full-length mirror in this area; men as well as women guests appreciate the chance to have a look at themselves before descending to the main lobby floor.
- There should obviously be a good-sized ash receiver for cigarettes, cigars, and other trash nuisances that the guest may want to get rid of before getting into the elevator.
- Good practice indicates that a corridor should, if possible, not be over 100 ft in length.
- There is very little choice in the width of a corridor. Normally, 6 ft is considered an adequate width, although some hotels have made do with only 5 ft.
- Another expedient, which may be used either in a narrow corridor (under 6 ft) or a standard-width corridor, would be the device of recessing the bedroom or guest-room doors. Setting doors back from the corridor wall 1 ft or even as much as 2 ft gives an apparent width to the corridor and, what is more important, it gives each room entrance its own sense of privacy and individuality.
- A flush panel door is the least expensive but also the least desirable type of door for a guest room. If only a flush door is used, a strong color might be helpful,
- The lower portion of the wall, therefore, might well be designed as a dado made of bruise- and shock-resistant material or merely marked off with a contrasting color or wall covering.

15. GUESTROOMS:

- The length and width are determined by the amount of furniture that is to go into the room and by the degree of luxury that the hotel operator wishes to achieve. The choice of furniture and layout determines the overall space and comfort of the room for guests.
- The most common room in the hotel field today is the twin-bedded room. Then we have the possibility of a single room, and, lastly, studio rooms or suites. These room types cater to various guest preferences, from solo travelers to those seeking larger, more luxurious accommodations.

- The next consideration is the size of the beds themselves. There are single beds which are 3 ft 6 in. wide, a full-sized bed which is 4 ft 6 in., a queen-sized bed which is 5 ft wide, and a king-sized bed which is 6 ft wide. Presently, all beds are still being made in a 6-ft 6-in. length dimension for comfort.
- If at all possible, there should be a 3-ft aisle, and, if no furniture is placed opposite the bed (a very unlikely arrangement), then the width of the room would be a minimum of 10 ft 6 in. This ensures comfortable movement and space around the bed for guests.
- Where furniture will be placed on the wall opposite the bed, such furniture will most likely consist of a dresser or cupboard with drawers. Such a piece of furniture requires a minimum of 18 in. in width and most likely an optimum width of 24 in. This allows for ample storage space and functional design.
- The most common arrangement found in most hotels consists of two comfortable armchairs with a cocktail table between them. A comfortable chair will require a depth of at least 30 in. and another 30 in. of leg space in front of it, which means that we need at least 5 ft from the wall before we encounter the first piece of furniture, which will probably be a bed. This setup ensures comfort and convenience.
- In talking of lighting, we must bear in mind that we want not only a lamp or a ceiling fixture over the sitting area but also adequate reading lights for the beds. The most often used arrangement is a twin-headed lamp sitting on the night table between the two beds. Proper lighting enhances functionality and atmosphere, providing comfort for various activities.
- Another piece of fixed furniture that is desirable is a luggage stand. This small yet essential item allows guests to conveniently unpack or organize their luggage and helps maintain room cleanliness by preventing bags from resting on furniture or the floor.
- This could be a straight-backed chair or a stool placed in front of the writing-makeup table. This addition provides guests with a functional workspace, allowing them to comfortably engage in activities such as writing, reading, or applying makeup while maintaining a streamlined and practical room design.
- Between a pair of twin beds, the ubiquitous nightstand with its small storage space below is standard. This piece of furniture provides easy access to essentials such as alarm clocks, phones, and personal items, while also contributing to the overall design and convenience of the room.
- SUITES: Another popular arrangement in hotels is that of the so-called "studio room." Dual sleep pieces have been developed, which are comfortable sofas during the day and perfectly comfortable beds at night. This multifunctional design maximizes space while maintaining the comfort of a traditional bed.
- Furnished as a studio room. Thus, the hotel can provide a two-room suite (obviously, connecting doors must be provided between these two accommodations). This layout offers guests flexibility, allowing them to enjoy a larger living space with privacy, ideal for both long-term stays and families.
- Every hotel should have arrangements for suites of a permanent nature as opposed to a combination of a studio room with a typical guest room. Suites will be furnished like fine sitting rooms. They are used not only by the affluent traveller because he can afford it, but also by travellers who do a good deal of entertaining, especially business travellers who entertain clients and customers on their arrival in any given city.

- These suites are also often used by two couples or by a large family, in which case the sitting room of the suite may be used for sleeping at night. In this case, dual sleep pieces will be required, but they will usually be the type that is referred to as a "davenport," or the type of sofa that opens out to become a comfortable double bed (never as comfortable as a true bed). These suites should have a good-sized dining table with enough chairs, provision for an adequate desk (since some business may be carried on in that room), a sufficient number of comfortable lounge chairs, and an accessory table.
- It is a good practice to arrange the sitting room of a suite so that it connects with at least two bedrooms and, if possible, three and sometimes even four bedrooms. This layout accommodates large families or groups, offering both privacy and shared space for socializing or business meetings.
- Suites will usually be found in the corner of a building, which makes it possible for the planner to join up several bedrooms. Corner suites offer enhanced privacy, natural light, and better views, all contributing to a higher-end experience for guests seeking luxury or special accommodations.
- There are times when suites are not used, and the hotel should be able to rent each of the rooms in the suite separately. This flexibility in room rental maximizes hotel occupancy and ensures that the space can serve various purposes depending on guest needs and availability.
- A foyer that connects the bedrooms and the sitting area makes this separate keying of rooms possible. This ensures that each room in the suite can be rented individually, maintaining the functionality of the space while offering guests more choice and privacy during their stay.
- A complete bathroom should be planned for each of the sitting rooms of a suite to make it possible to rent the rooms out singly. Offering separate bathrooms enhances privacy and convenience for guests, making suites more flexible for both short- and long-term stays.
- Since this room will be used for entertaining (either business or private), a bar with a water connection becomes a pleasant adjunct. A well-equipped bar area offers guests added convenience, making it easier to host meetings or entertain guests in a comfortable and inviting space.
- Obviously, these rooms will be situated on the lowest floors so they can be close to the public spaces for the convenience of those who are going to use them for meetings or seminars in connection with a larger convention or meeting taking place in the hotel. This placement ensures accessibility for business-focused guests.

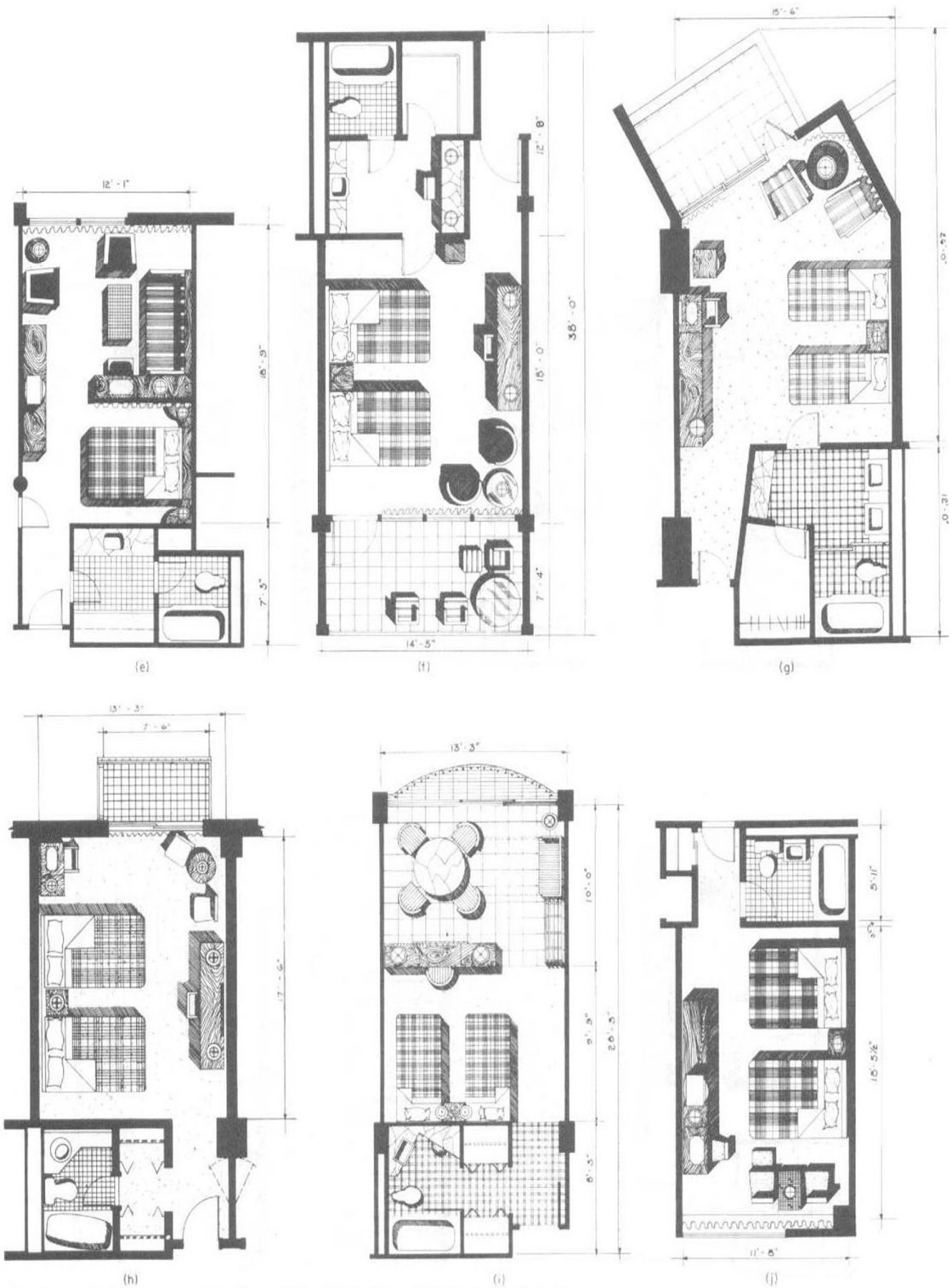


Fig. 5 (cont.) (e) Tampa International Inn, Tampa, Florida. (f) Indies House, Duck Key, Florida. (g) Americana Hotel, Bal Harbour, Florida. (h) Paradise Island Hotel, Paradise Island, Bahamas. (i) Americana of Puerto Rico, typical room layout. (j) Massena Motor Inn, Massena, N.Y.

Figure 6 Area Specifications (Source: ITC Hotel Manual)

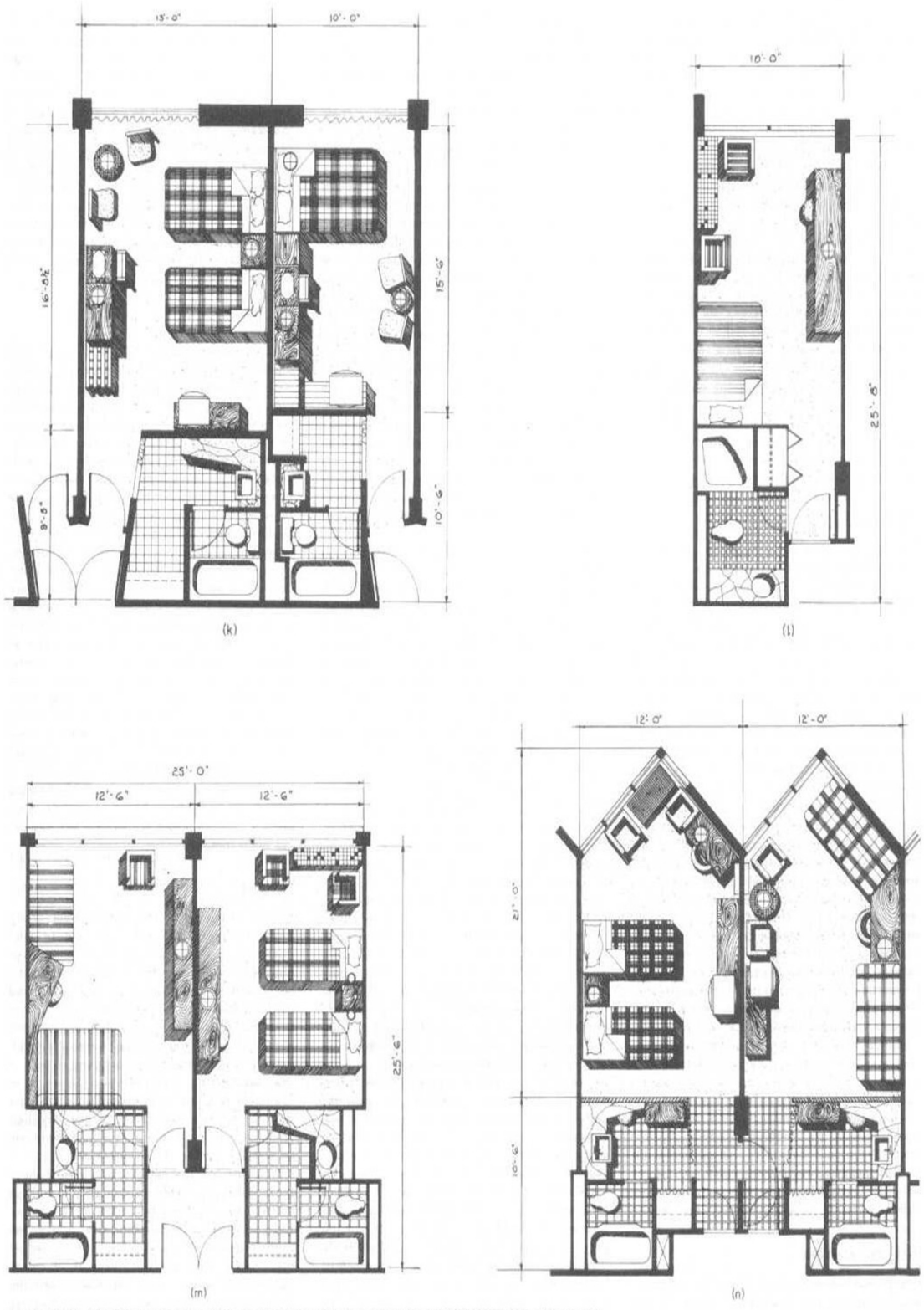


Fig. 5 (cont.) (k) Chicopee Motor Inn, Chicopee, Massachusetts. (l) and (m) Thomas Circle Motor Hotel, Washington, D.C. (n) Riverview Motor Hotel, New York.

Figure 7 Area Specifications (Source: ITC Hotel Manual)

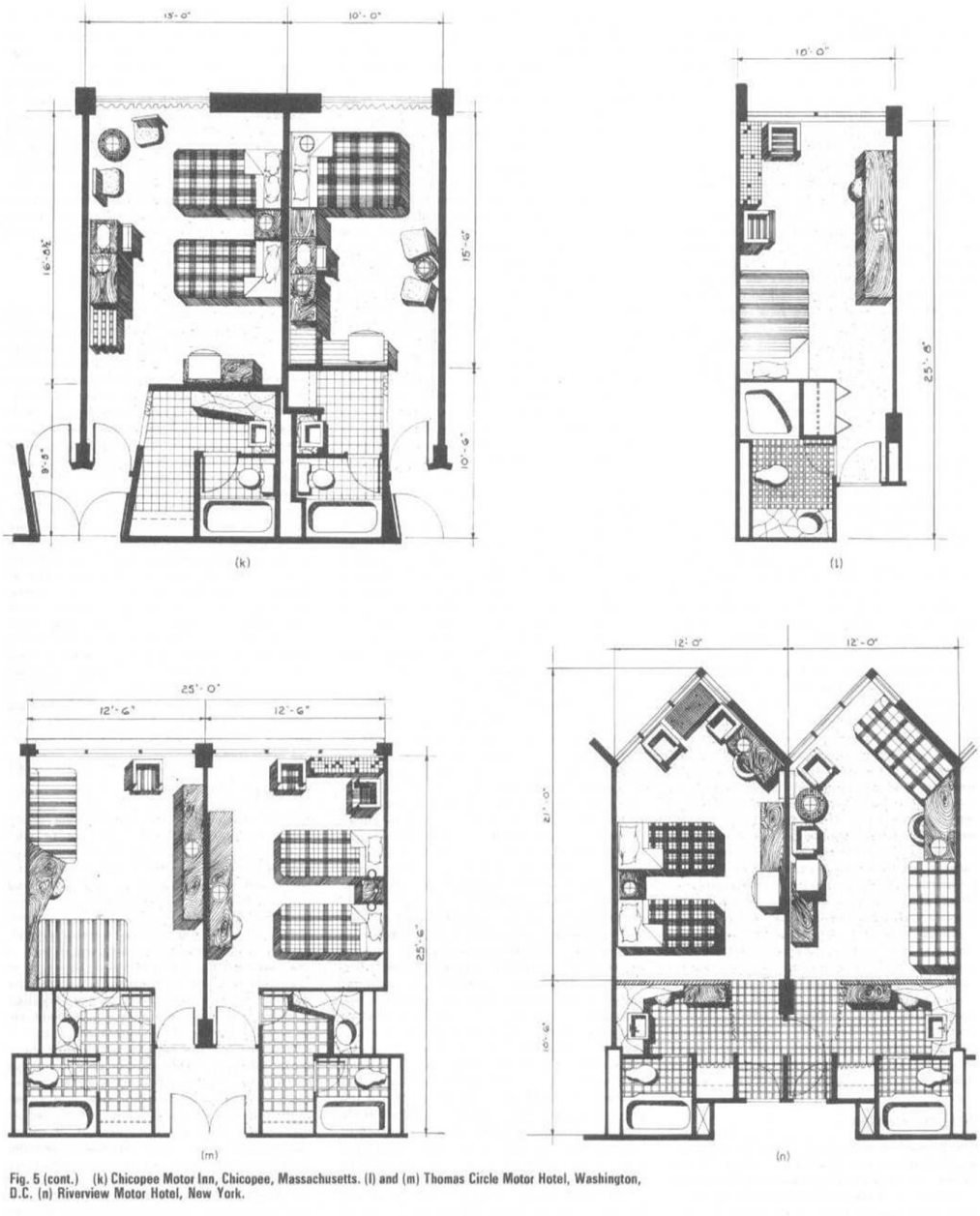


Fig. 5 (cont.) (k) Chicopee Motor Inn, Chicopee, Massachusetts. (l) and (m) Thomas Circle Motor Hotel, Washington, D.C. (n) Riverview Motor Hotel, New York.

Figure 8 Area Specifications (Source: ITC Hotel Manual)

16. GUEST BATHROOMS:

- The minimum bathroom will have a combination tub-shower, a lavatory, and a water closet.
- An innovation devised by the writer's firm was the introduction of two lavatories in the bathroom facilities. These two lavatories may be right in the bathroom itself, they may be pulled out into a dressing area, or one lavatory may be placed in the bathroom and another outside the bathroom.

- Bidet is being introduced. Obviously, this additional feature is found only in the most luxurious hotels.
- A wall-hung unit makes cleaning of hotel bathrooms easier for the maid, but again, its economics will determine whether this fairly expensive type of installation is warranted. The tub in a guest room is normally a 5-foot tub.
- The normal shower head becomes standard in all hotels, although there is a growing tendency to use the so-called "telephone shower head."
- The normal wall shower head, and by using two movable showerhead supports, one at the normal hand level and one at the higher level where a fixed shower head normally would occur, the guest has the option of allowing the hand-type shower head to remain in a standard position or to remove it and use it as he pleases.
- It is preferable to have a ledge on which toiletries may be placed, where they are conveniently reached, and where, obviously, they will not be left when the guest checks out.
- If a ledge is used, the toilet tissue holder can be placed within the recess of the ledge, as can be the tumbler holders and the toothbrush holders. Obviously, an electrical convenience outlet must be placed in this area for electric shavers, electric toothbrushes, and other electrical gadgets that today's traveler takes with him. A slot receptacle for used razor blades should not be forgotten. Towel bars must be strategically placed so that the guest can reach for a towel regardless of whether he is stepping out of the tub or whether he is washing or shaving et the lavatory.
- Another nicety which might be provided is some form of clothesline. With today's wash-and-wear apparel, many guests, especially women, like to do their washing at night and hang their garments in the bathroom.
- Several hotels are installing a wall-hung mirror, which is an enlarging mirror on one side and a normal mirror on the other, a very nice touch for both men and women guests.

17. GUEST CLOSETS:

- The size of a closet will be determined by the type of hotel.
- Having the open hanging arrangements obviates this possibility. The longer the guest-room stay that is anticipated, the larger the closet.

- It should be possible to store the luggage out of sight in the closet without diminishing the available hanging space, the shoe-rack space, or shelf space for hats and other apparel and paraphernalia. Whether the closet is a flat reach-in type or a walk-in type, the door should be such that, when the closet is opened, there are no hidden recesses where clothing may be forgotten because it cannot be readily seen by the departing guest.
- A good closet will have a hang rod with sufficient space to comfortably hold men's and women's clothes, a shelf for packages, hats, etc., and a shoe ledge or rack for placing shoes.

18. GUEST FLOOR SERVICESPACES:

- Every guest room floor will have a service area.
- Primarily, it is a place where linen is stored and where the maids' carts are kept. We must bear in mind that each maid will handle anywhere from 12 to 15 rooms and that each maid will need a cart. The number of rooms on the floor will, therefore, determine the number of maids and, in turn, the number of carts.
- A closed storage area should be provided for the storage of linens. In addition to the maids', porters', and linen supplies, sufficient space should be left for the storage of room service carts.
- They may have to remain on the floor for some time waiting for the service elevator or elevators. Obviously, the service elevators will open out to this service area, so that all this activity takes place out of the sight and hearing of the hotel guests.

19. BANQUETING FACILITIES:

- Larger hotels will have a more diversified arrangement for meetings, luncheons, dinners, and banquets. The largest hotels are usually designed with a full banqueting and convention facility.
- The normal meeting room requirements are rather simple. The rooms will vary in size to accommodate anywhere from 10 to as many as 100 people. In most instances, wherever it is feasible, the meeting rooms will be arranged in a straight line, so that the walls separating one room from the other can be made movable.
- Thus, if two meeting rooms, which normally might seat 25 people, are thrown open to one, we would have a meeting room to take 50 people; and if another wall is opened, we would be able to seat 75 people, and so on.
- In larger rooms, which normally qualify for conventions or large banquets, it is also possible to subdivide the space by the use of movable walls to create smaller rooms when a large room is not required. A large space, which might seat 1,000 people when all folding walls have been moved back, can be cut up into anywhere from four to six spaces, allowing for meeting rooms that can accommodate 150 to 250 people.
- Of course, in the really large convention halls, it will not be unusual to seat 3,000 or more people in one large convention banquet hall. Realizing that food must be brought to all these rooms, their juxtaposition to serving kitchens is highly important in arranging the plan.
- For the most part, food should be brought directly from the banquet kitchens to the banquet spaces. In subdividing these spaces, the subdivision must be so planned that each

space is contiguous to the kitchen and has its own doors to enable waiters to come and go between the banquet spaces and the banquet kitchen.

- Sound isolation is of the greatest importance, and this applies not only to the decibel rating of the panels themselves but also to the arrangement of the joints between the sections or panels of the movable wall.
- In fairly large meeting, banquet, and convention facilities, space must be provided which is normally called "preconvention assembly space.'
- Since most of the people who are standing are those who will eventually be seated, the proportions of the preconvention foyer space will be determined by the number of people who will eventually be seated. As a rule of thumb, a person standing in fairly close quarters will take up approximately 5 sq ft. A person seated at a table will take up anywhere from 10 to 15 sq ft. A person seated for a seminar or a meeting will require 8 or 9 sq ft. It thus becomes apparent that the ideal preconvention, pre-banquet, or assembly space should be at least one-third of the area of the actual dining and meeting spaces.
- Thus, becomes apparent that the ideal preconvention, pre-banquet, or assembly space should be at least one-third of the area of the actual dining and meeting spaces.

2.12 TIME SAVER STANDARDS (BUILDING TYPES)-RESTAURANTS:

1. SPACE REQUIREMENTS

- Adequacy of space will influence building and operating costs and efficiency. When space is too small, labor time and effort are likely to increase, and the volume and quality of output decrease. When it is too large, building and maintenance costs are high.
- Calculate area requirements in terms of: (1) volume and type of service, (2) amount and size of equipment to be used, (3) number of workers required, (4) space for needed supplies, and (5) suitable traffic area. The dining area location and space allowance.

2. DINING ROOMS:

- Space for dining areas is usually based on the number of square feet per person seated times. Space requirements:
- The patron's size and the type and quality of service should be considered.
- A banquet seating allowance might be as little as 10 sq. ft. per seat, and that for a deluxe restaurant as much as 20 sq. ft.

Type of Operation	Square Feet per Seat
Commercial Cafeteria	16-18 sq. ft.
College and Industrial Cafeteria	12-15 sq. ft.
School Cafeteria (Lunchroom)	9-12 sq. ft.
College Residence (Table Service)	12-15 sq. ft.
Counter Service	18-20 sq. ft.
Hotel, Club, or Restaurant (Table Service)	15-18 sq. ft.
Table Service (Minimum Eating)	11-14 sq. ft.
Banquet (Minimum)	10-11 sq. ft.

Table 10 Area Specifications (Source: Time Saver)

- Table 1: square feet per seat used for various types of food operations
- All of the areas in a dining room used for purposes other than seating are a part of the square footage allowed for seating.

- Service stations may be estimated in the proportion of one small one for every 20 seats or a large central one for every 50 to 60 places. The advisability of having a central serving station will be influenced by the distance of the dining area from the serving area.
- Small substations for silver, dishes, napery, beverages, ice, butter, and condiments may measure 20 to 24 in. square and 36 to 38 in. high. The size of central stations varies from that of a small enclosed room to that of a screened section measuring approximately 8 to 10 ft long by 27 to 30 in. wide by 6 to 7 ft. high. Table size will influence patron comfort and efficient utilization of spaces. Smell tables, such as 24 or 30in. Squares are economical for seating but are uncomfortable for large people.
- The width of booths, including seats and tables, is commonly 5 ft. A lunch counter will have a minimum width of 16 in. and a maximum width of 24 to 30 in. The linear feet are calculated on the basis of 20 to 24 in. per seat. The maximum area best served by one waitress is generally 16 U-shaped counters make maximum use of space and reduce travel. Space in depth of 8'/r to 11 ft will be required for every linear foot of counter. This will provide 3 to 4 ft of public aisle, 2 ft for aisle space for employees. A width of 41 ft is desirable where employees must pass.
- A minimum passage area is 18 in. between chairs and, including chair area, tables should be spaced 4 to 5 ft apart. Aisles on which bus carts or other mobile equipment are to be moved should be sized according to the width of such equipment.
- Diagonal arrangement of square tables utilizes space better than the square arrangement and yields a more trouble-free traffic lane.

Number of Persons Allowance:

- The number of persons to be seated at one time is the second point of information needed for the calculation of the dining room size. The total number of seats required at one time, multiplied by the space required for each seat, will give the total number of square feet needed in the dining area.
- The number of times a seat is occupied during a given period is commonly referred to as "turnover."
- The turnover per hour, times the number of seats available, gives the total number of patrons who can be served in an hour. If peak loads, or the number to be served at one time, are known, the number of seats required can be estimated.
- The table sizes used in the dining room will affect occupancy. It is often desirable to provide for groups varying from two to eight, with a predominance in most dining rooms of those for two people.
- Chairs with a "tablet arm" that will fold at the right have been used for fast turnover in crowded areas.
- One cafeteria line can serve four to eight patrons per minute, depending on (1) the speed of the servers, (2) the elaborateness of food selection, (3) the convenience of the layout, and (4) the type of patrons.
- Banquet seating requires planning because maximum seating potential means maximum profits. Folding tables 30 in. wide are popular. These are obtained in varying lengths, but 72 and 96 in. are commonly used. The spacing for the legs should be such as to allow for comfortable seating when the tables are joined end to end, and place settings are laid on 24-inch centers.

4. Production areas:

- A frequently used rule for allotting a space for the kitchen is that it should be one-third to one-half the area of the dining room.
- An analysis of specific needs is required. Many factors influence space

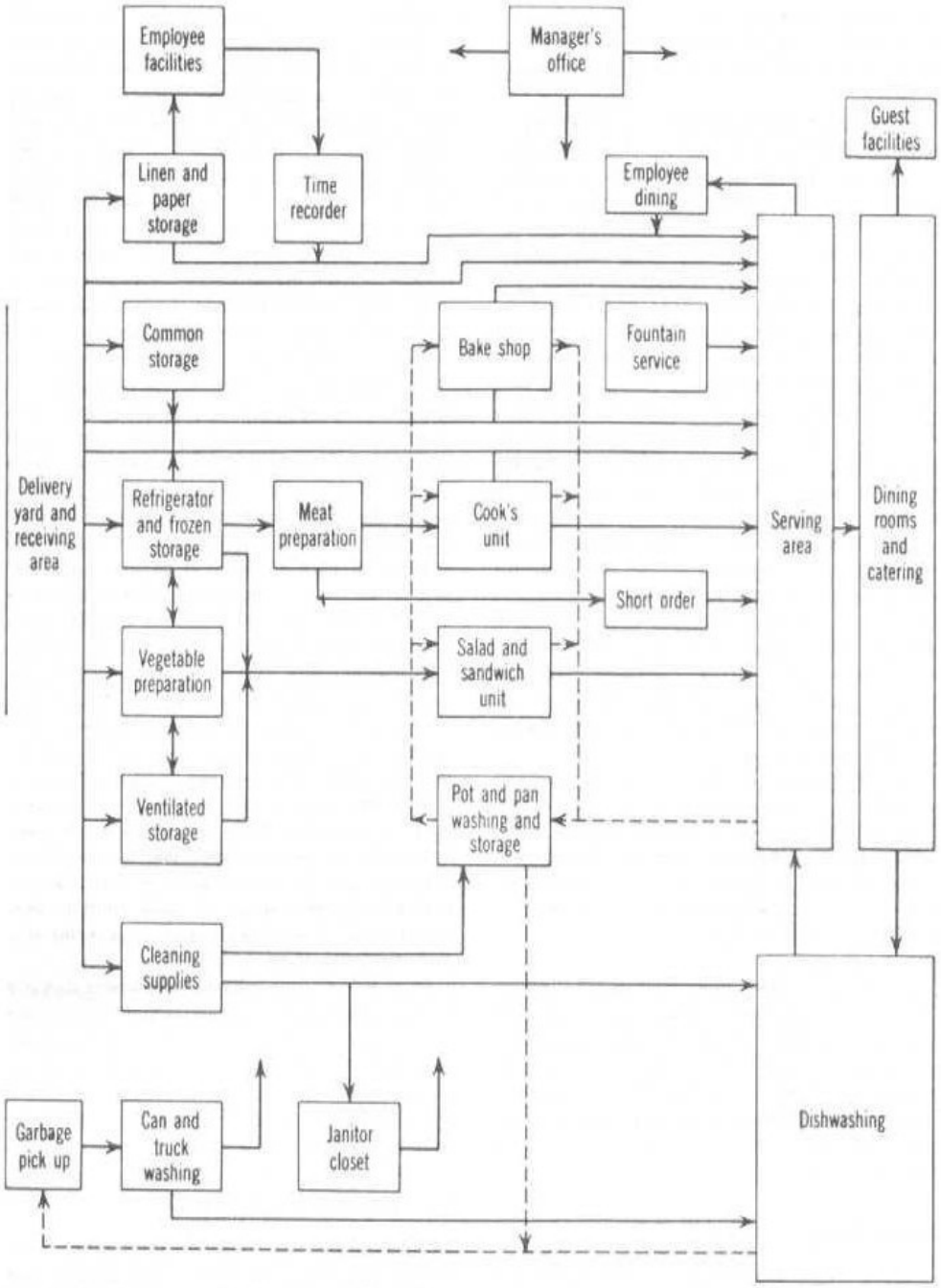


Fig. 1 Flow diagram showing functional relationships.

requirements, such as:

Type of preparation and service.

1. Amount of the total production done in the unit.
2. Volume in terms of the number of meals served.

3. Variety of foods offered in the menu.
4. Elaborateness of preparation and service.
5. Amount of individual service given, as in a hospital inpatient service.
6. Seating and service plan, whether on one floor or many.

TABLE 2 Variation in Space Needs in Relation to Numbers Served

Meal load	Square feet per meal	Variation in square feet
100–200	5.00	500–1,000
200–400	4.00	800–1,600
400–800	3.50	1,400–2,800
800–1,300	3.00	2,400–3,900
1,300–2,000	2.50	3,250–5,000
2,000–3,000	2.00	4,000–6,000
3,000–5,000	1.85	5,500–9,250

Figure 9 Area Specifications (Source: Time Savers Standards)

- The equipment provided will affect the space needs. Garbage and refuse, for example, may require a sizable area for storage awaiting pickup. Disposal units for food garbage, an incinerator for burnable refuse, and a crusher for tin cans will greatly reduce the amount to be held. The frequency of garbage collection will minimize the space needs.
- The shape of the kitchen, location of ventilation and elevator shafts, support columns, and partitions should be considered in relation to an efficient layout for work. The location of entrances and exits for a good flow of traffic, window placement, suitable space, and relationship of sections need consideration. Eliminate partitions whenever possible; this will reduce space needs and also permit easier supervision of production areas.
- The square footage given is to be multiplied by the maximum number of meals estimated per hour of service.
- The width of the table may be 24 to 30 in. unless dishes or food containers are to rest at the back of the table. Tables 36 in. wide are preferable when the back of the area is used for such storage. Where two workers work opposite each other, a table 42in. Wide may be used. A work area of 4 to 6 in feet will be within convenient reach of the average person. Tables 8 to 10 ft. long are used if two people are working side by side. A height of 34 in., commonly used as a working height, can be evaluated in terms of specific work done and equipment used.
- The minimum width for a lane between equipment where one person works alone is 36 and 42 in., where more than one is employed, and where workers must pass each other in the progress of work. Where mobile equipment is used, 48 to 54 in. are recommended. At least 60 in. is needed for main traffic lanes where workers regularly pass each other with mobile equipment.
- Work centers at right angles to traffic lanes are efficient.
- A satisfactory layout may claim less than 30 percent of total space for equipment while work areas, traffic lanes, and space around equipment are provided for easy operation.

TABLE 3 Square Feet of Kitchen Space per Meal for Food Facilities of Different Type and Size

Type of facility	Estimated maximum meals per hour				
	200 or less	200-400	400-800	800-1,300	1,300-7,500
Cafeterias	7.5-5.0	5.0-4.0	4.0-3.5	3.5-3.0	3.0-1.6
Hospitals	18.0-4.5	12.0-4.5	11.0-4.5	10.0-4.0	8.0-4.0
Hotels	18.0-4.0	7.5-3.0	6.0-3.0	4.0-3.0	4.0-3.0
Lunch counters	7.5-2.0	2.0-1.5			
Railroad dining car	1.6				
Restaurants (service)	7.0-4.0	5.0-3.6	5.0-3.6	5.0-3.0	5.0-3.0
School lunchrooms	4.0-3.3	3.3-2.2	3.0-2.0	2.5-1.6	2.0-1.6

Figure 10 Area Specifications (Source: Time Savers Standards)

- In cafeterias, the counter length should be regulated by the variety and volume.
- An estimate that may be used for allotting width is 14 ft. This allows for 4 ft as patron lane space,1ft treyelide,2ft counter width, 4'/r ft for workers, and 2'/r ft for back bar.
- Some commercial cafeteria counters may be 70 to 80 ft long, but counters over 50 ft long are frequently considered inefficient. Twenty feet is usually thought of as a minimum, but under special conditions and where a limited menu is served,6 to 8 feet may be sufficient.
- Some planners use, as a rough guide, one counter or line for every 250 to 300 patrons served, but arrival rate, speed of service, and turnover are more reliable factors to consider in establishing the number of lines required.

1. **Receiving and storage areas:**
   - Although the average operation may find a dock 8 ft deep and 12 ft long sufficient for receiving items, this would not be sufficient for a large one. The space requirement in square feet for food storage for 30 days has been calculated by some as approximately one-half the total served, or, if 1,000 are served, 500 sq ft may be used as a tentative figure for total food storage needs.

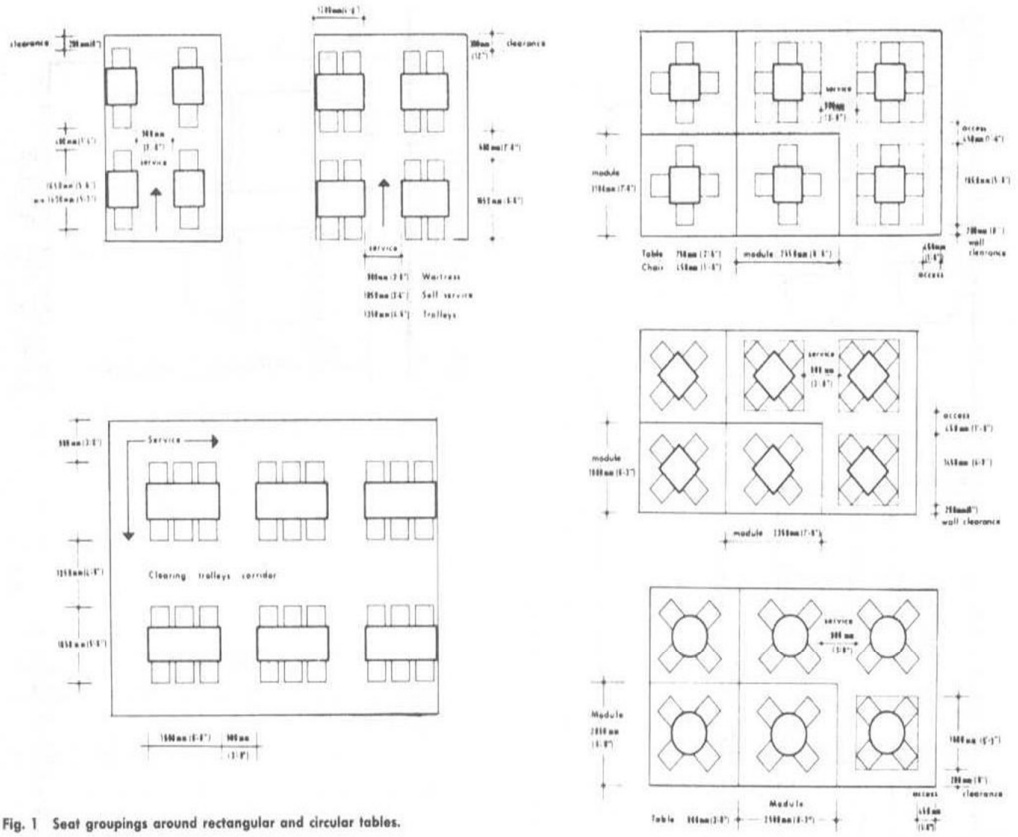


Fig. 1 Seat groupings around rectangular and circular tables.

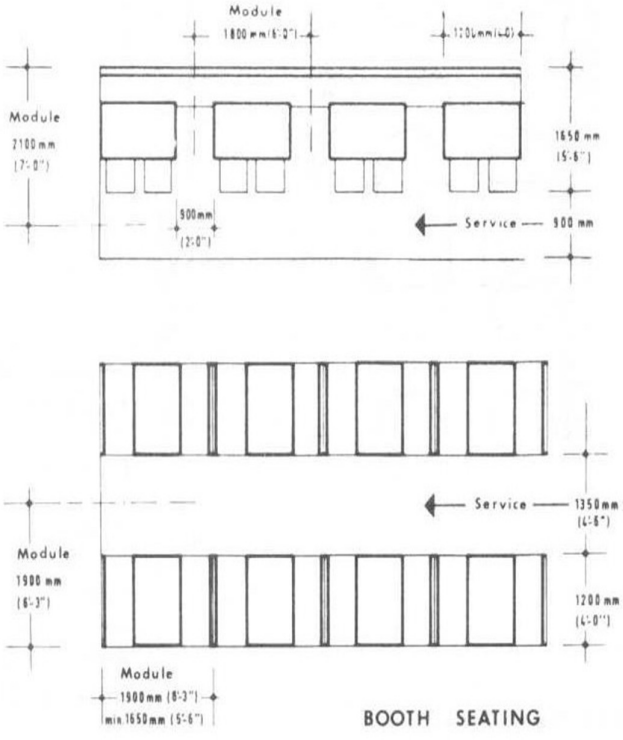
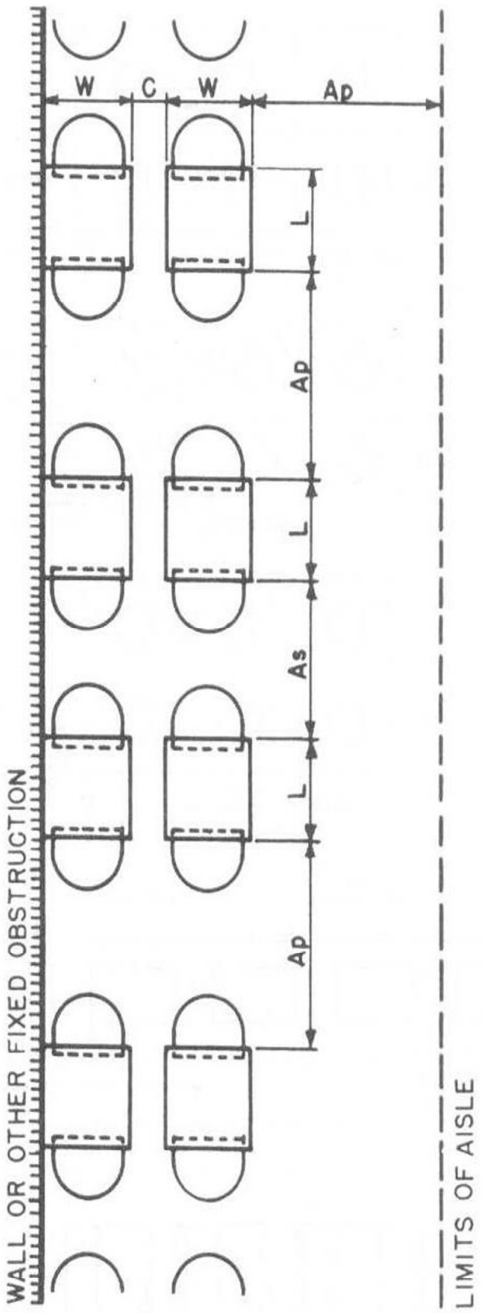
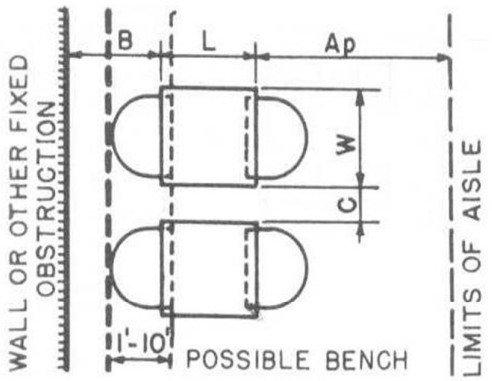


Fig. 2 Banquette seating arrangements and limiting dimensions including space for access and service.

Fred Lawson, *Restaurant Planning and Design*, The Architectural Press, Ltd., London, 1973.

Figure 11 Area Specifications (Source: Time Savers Standards)





		Abs. Min.	Des. Min.	Comfort-able
Ap	Public circ'n	3–0 to 4–6	3–6 to 5–0	3–9 to 5–0
As	Service aisle	3–6 to 4–6	4–0 to 5–0	4–0 to 5–6
B	To wall	1–8 to 2–0	2–0 to 2–6	2–0 to 3–0
C	Between units	0 to 8	6 to 1–0	1–0
	Length	1–8 to 2–0	2–3 to 2–4	2–4 to 2–6
	Width	1–8 to 2–0	2–2 to 2–3	2–4 to 2–6

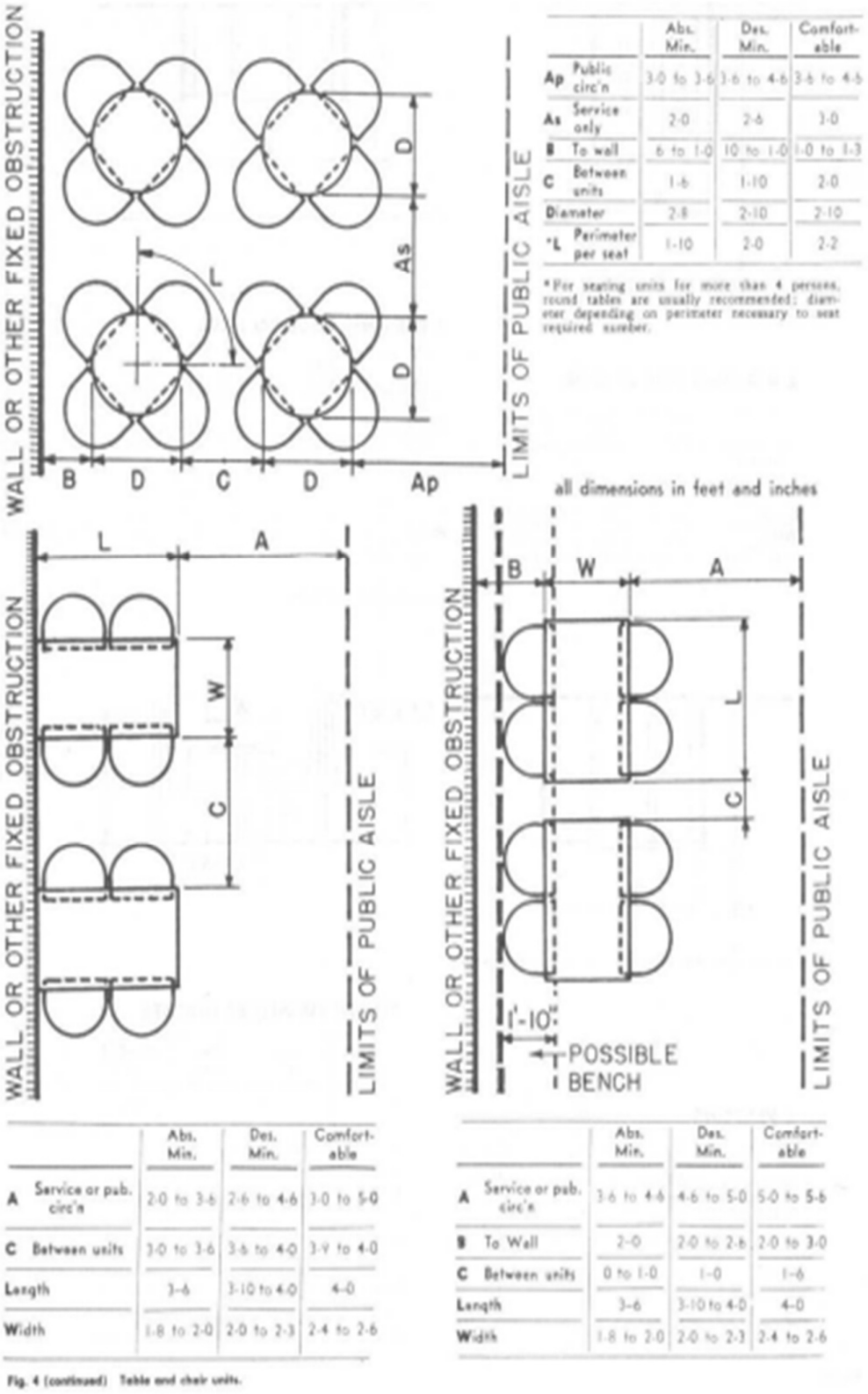
all dimensions in feet and inches

		Abs. Min.	Des. Min.	Comfort-able
Ap	Public circ'n	*1–10 to 4–6	2–3 to 5–0	3–0 to 5–0
As	Service aisle	3–0 to 3–6	3–6 to 4–0	3–9 to 4–0
C	Between units	0 to 3	4 to 6	6
	Length	1–8 to 2–0	2–3 to 2–4	2–4 to 2–6
	Width	1–8 to 2–0	2–2 to 2–3	2–4 to 2–6

*Lower range only if chairs, etc., do not project into aisle

Fig. 4 Table and chair units.

Figure 12 Area Specifications (Source: Time Savers Standards



		Abs. Min.	Des. Min.	Comfortable
Ap	Public circ'n	3-0 to 3-6	3-6 to 4-6	3-6 to 4-6
As	Service only	2-0	2-6	3-0
B	To wall	6 to 1-0	10 to 1-0	1-0 to 1-3
C	Between units	1-6	1-10	2-0
Diameter		2-8	2-10	2-10
*L	Perimeter per seat	1-10	2-0	2-2

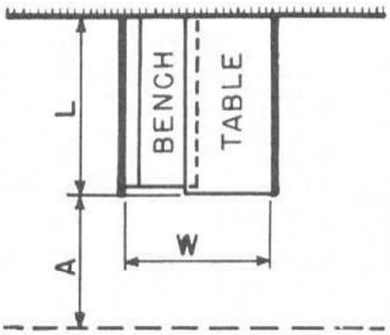
*For seating units for more than 4 persons, round tables are usually recommended; diameter depending on perimeter necessary to seat required number.

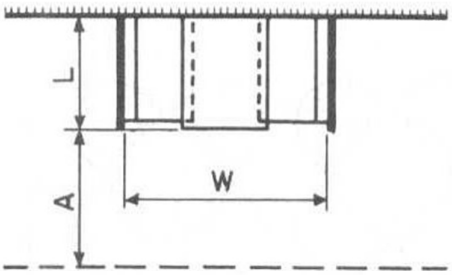
		Abs. Min.	Des. Min.	Comfortable
A	Service or pub. circ'n	2-0 to 3-6	2-6 to 4-6	3-0 to 5-0
C	Between units	3-0 to 3-6	3-6 to 4-0	3-9 to 4-0
Length		3-6	3-10 to 4-0	4-0
Width		1-8 to 2-0	2-0 to 2-3	2-4 to 2-6

		Abs. Min.	Des. Min.	Comfortable
A	Service or pub. circ'n	3-6 to 4-6	4-6 to 5-0	5-0 to 5-6
B	To Wall	2-0	2-0 to 2-6	2-0 to 3-0
C	Between units	0 to 1-0	1-0	1-6
Length		3-6	3-10 to 4-0	4-0
Width		1-8 to 2-0	2-0 to 2-3	2-4 to 2-6

Fig. 4 (continued) Table and chair units.

Figure 13 Area Specifications (Source: Time Savers Standards)





2 PERSONS SIDE BY SIDE

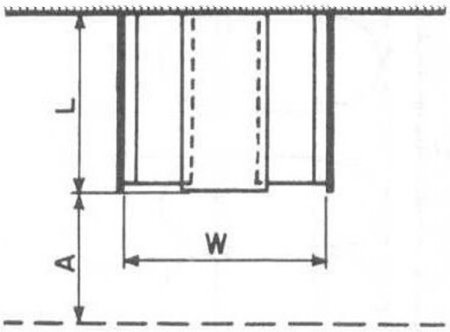
	Abs. Min.	Des. Min.	Comfortable
A Service and pub. circ'n	2–6	3–0	3–6
Length	3–6	3–9	4–0
Width	3–0	3–3	3–6

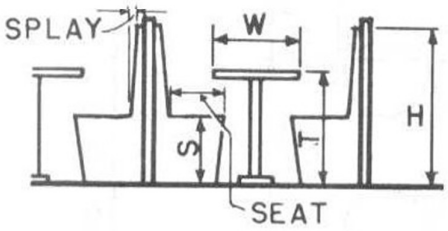
Note: This type not ordinarily recommended.

2 PERSONS FACE TO FACE

	Abs. Min.	Des. Min.	Comfortable
A Service and pub. circ'n	2–6 to 3–0	3–0 to 4–0	3–6 to 5–0
Length	2–0	2–2 to 2–6	2–6
Width	4–10 to 5–6	5–2 to 5–6	5–8 to 5–10

dimensions in feet and inches





4 PERSONS

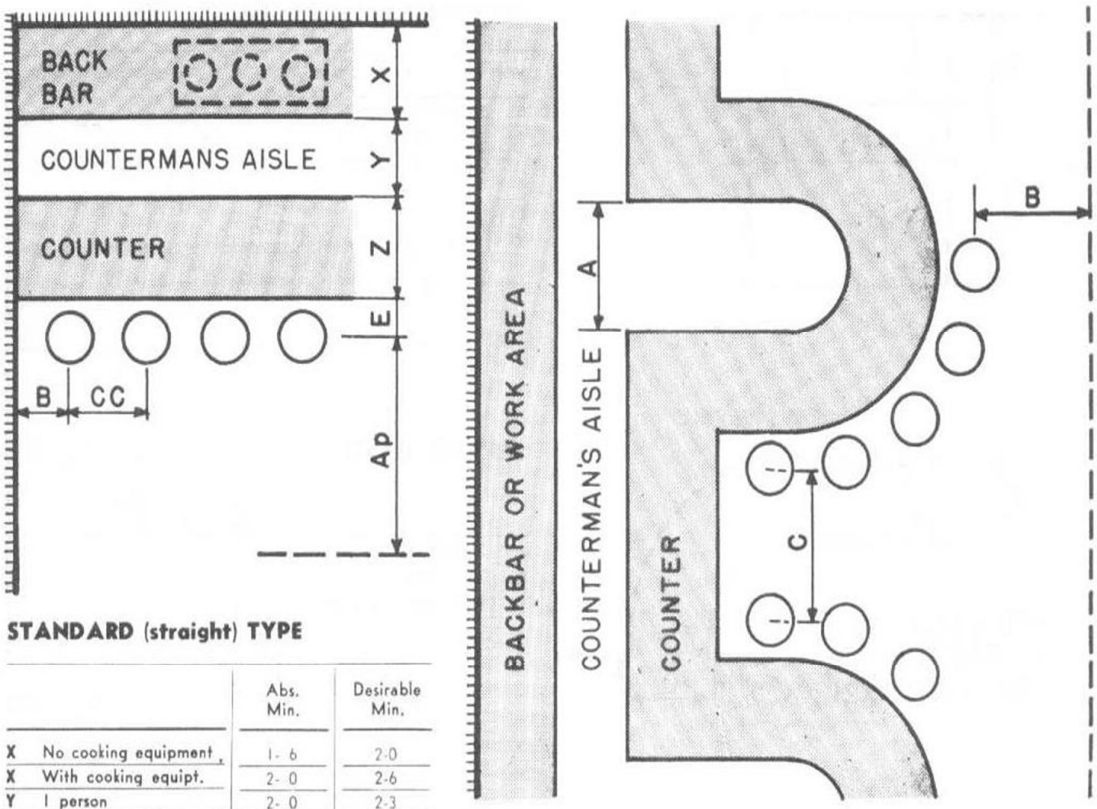
	Abs. Min.	Des. Min.	Comfortable
A Service and pub. circ'n	2–6 to 3–0	3–0 to 4–0	3–6 to 5–0
Length	3–6	3–9 to 4–0	4–0 to 4–2
Width	4–10 to 5–6	5–2 to 5–6	5–8 to 5–10

BOOTH FURNITURE HEIGHTS

	Abs. Min.	Des. Min.	Comfortable
H	3–0 to 3–6	3–6	4–0
S	1–5 to 1–6	1–5 to 1–6	1–6
T	2–5	2–5 to 2–6	2–6
W	1–8 to 2–0	2–0 to 2–2	2–4 to 2–6
Seat	1–4 to 1–5	1–5 to 1–6	1–6 to 1–8
Splay	0 to 0–3	0–2 to 0–3	0–3½ to 0–4

Fig. 5 Booths.

Figure 14 Area Specifications (Source: Time Savers Standards)



STANDARD (straight) TYPE

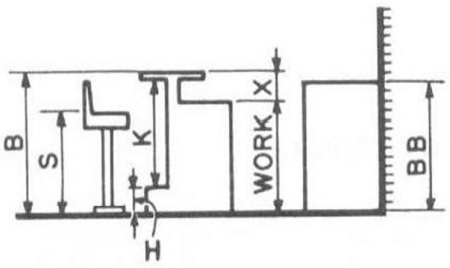
		Abs. Min.	Desirable Min.
X	No cooking equipment	1- 6	2-0
X	With cooking equipt.	2- 0	2-6
Y	1 person	2- 0	2-3
Y	2 or more persons	2- 6	2-9
Z		1-10	2-0
E		9	1-2
Ap		3- 6	4-6
B		1- 0	1-2
CC		1-10	2-0

Variations in Shape

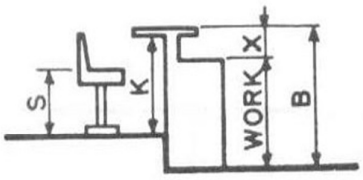
	Usual Minimum
A	2-6 to 3-6
B	2-6 to 4-6
C	2-9 to 5-6

dimensions in feet and inches

HEIGHTS



LEVEL FLOOR



DROPPED FLOOR

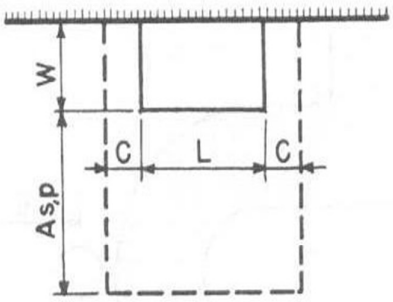
	Range of Dimensions		Range of Dimensions
B	2-6 to 3- 6	X	1-2 to 1- 3
BB	3-0 to 3- 6	Work	2-4 to 2- 7
H	7 to 10	S	1-6 to 2- 6
K	2-4 to 2- 8		

	Range of Dimensions
B	3-0 to 3- 6
K	2-4 to 2-10
S	1-6 to 2- 1
X	1-2 to 1- 3
Work	2-4 to 2- 8

Fig. 6 Food bars.

Figure 15 Area Specifications (Source: Time Savers Standards)

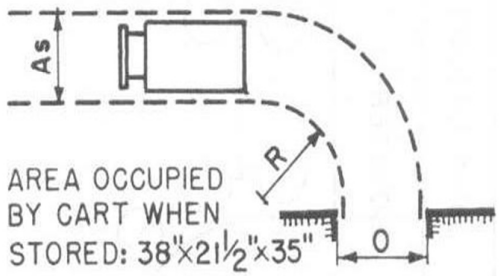
Serving Units



SERVING TABLE (& sideboard)

		Abs. Min.	Des. Min.	Comfort-able
As	Service only	2-6	3-0	3-6
Ap	Public circ'n	2-0	2-6	3-0
C	Clearance to adjacent units	2-0	2-3	2-6
Length / Width	30" x 20" x 42" is average.			

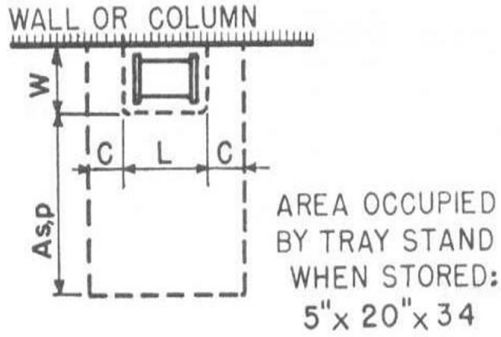
Display tables (hors d'oeuvres, etc.) usually 5' 0" x 2' 0"; (wines), 3' 0" round



SERVING CART

		Abs. Min.	Des. Min.
As	Service only	2-0	2-6
R	Turn radius	3-0	3-6
O	Door, opening width	2-0	2-6

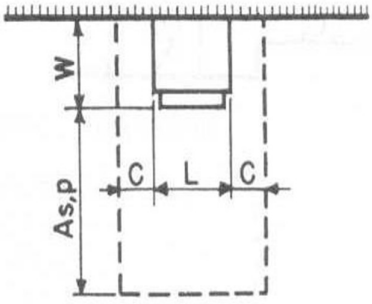
Approx. area when stored: 38" x 21½" x 35"



TRAY STAND

		Abs. Min.	Des. Min.	Comfort-able
As	Service only	2-6	3-0	3-6
Ap	Public circ'n	2-0	2-6	3-0
C	Clearance to adjacent units	2-0	2-3	2-6
Length (tray) / Width (tray)	Depends on type of restaurant.			

Approx. area of stand, stored: 5" x 20" x 34"

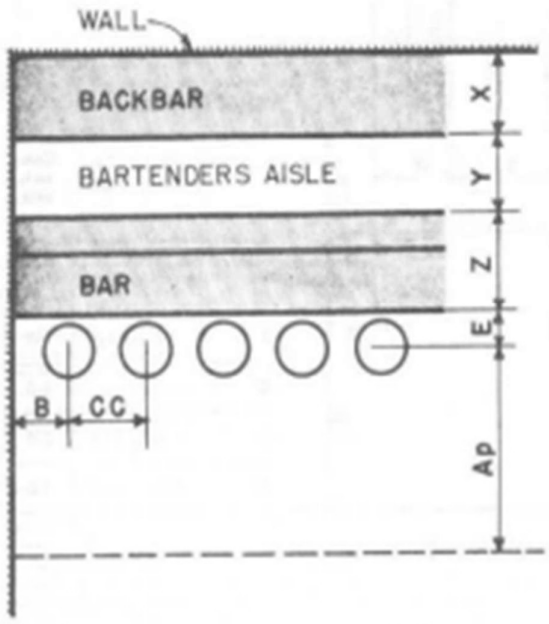


WATER COOLER

		Abs. Min.	Des. Min.	Comfort-able
As	Service only	2-6	3-0	3-6
Ap	Public circ'n	2-0	2-6	3-0
C	Clearance to adjacent units	Can arrange on top or front		
Length / Width	Depends on capacity and if glass storage included.			

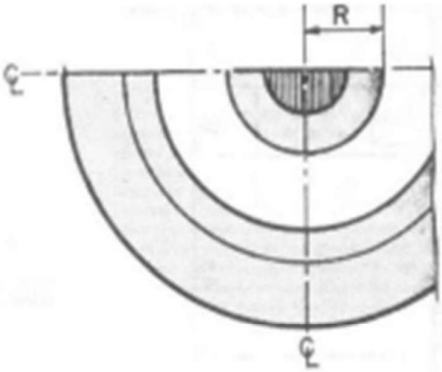
Fig. 7 Serving units.

Figure 16 Area Specifications (Source: Time Savers Standards)



STRAIGHT TYPE—with or without stools

		Abs. Min.	Des. Min.	Comfortable
Ap	Public aisle	3-6 to 4-6	4-0 to 5-0	4-6 to 6-0
B	Stool to wall	1-0 to 1-6	1-2 to 1-6	1-4 to 1-6
CC	Stool, cent. to cent.	1-9 to 2-0	2-0	2-2 to 2-6
E	Stool to bar	9 to 1-0	1-0	1-1 to 1-2
X	Back bar	1-6 to 1-8	1-8 to 2-0	2-0 to 2-3
Y	Bartender's aisle	2-0 to 2-2	2-6	3-0
Z	Bar	2-3 to 2-6	2-5 to 2-6	2-8 to 2-9

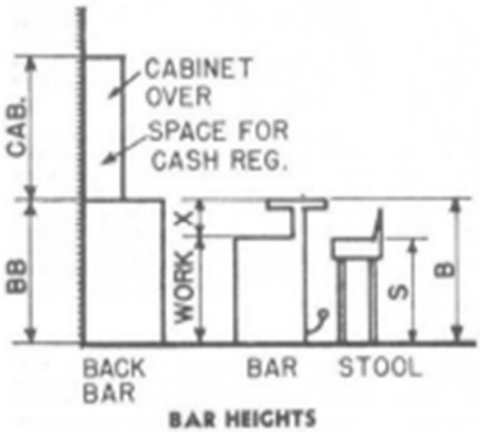


CURVED TYPES: Radius R should be at least 2 ft.; other dimensions as for straight types.

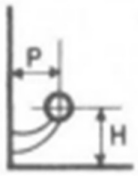
Bar length: Allow from 1 ft. 6 in. to 1 ft. 10 in. per person for standup bars; 2 ft. for each stool.

Bar depth: No increase in depth is needed for more than 1 bartender, as each man should be provided with his own "set-up" space in the work counter and back-bar.

Service bars: These are usually from 6 to 8 ft. long for 1-man service; from 10 to 12 ft. long if 2 bartenders are needed for peak service periods. No footrail, counter overhang, or stools are required. Location is often adjacent to kitchen and concealed from patrons; however, advertising values sometimes cause it to be set in public view. In the latter case, a rope rail or similar device, to discourage patrons from standing at the bar, is often advisable.



BAR HEIGHTS



RAIL OR STEP

P = 7 to 10
H = 7 to 10

dimensions in feet and inches

	Usual Min.	Usual Max.
B	3-6	3-9
BB	3-6	3-9
Cab	3-0 to 3-10	5-0 to 5-7
S	2-4 to 2-6	2-7
Work	2-4	2-6
X	1-0 to 1-2	1-2 to 1-3

Fig. 8 Liquor bars.

Figure 17 Area Specifications (Source: Time Savers Standards)

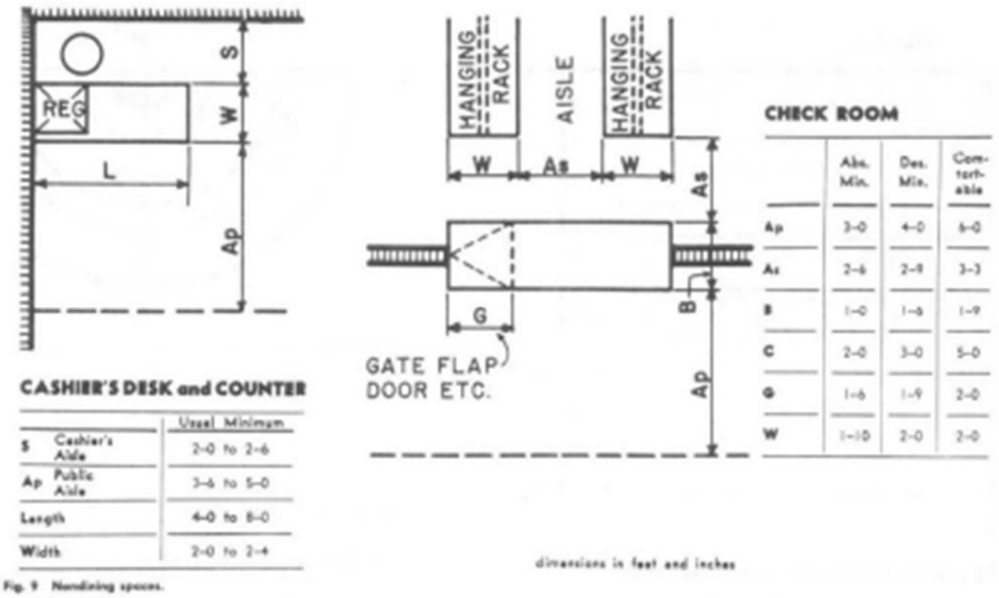


Fig. 9 Nonsitting spaces.

Figure 18 Area Specifications (Source: Time Savers Standards)

5. Refrigerated and low-temperature storage:

- Allocation in preliminary planning may be as follows: 20 to 35 percent for meat (portion-ready meats require '/ to '/, less space than carcass or wholesale cuts); 30 to 35 percent for fruits and vegetables; 20 to 25 percent for dairy products, including those in serving areas; 10 to 25 percent for frozen foods; and 5 to 10 percent for carry- over foods, salads, sandwich material, and bakery products. A requirement of 15 to 20 cu ft of refrigeration per 100 complete meals has also been used by some planners.
- Approximately 0.25 to 0.50 cu ft of refrigerated walk-in space was provided per meal served, and frozen walk-in space.
- A walk-in becomes feasible for an operation serving 300 to 400 meals per day, and refrigerated pass-throughs can be added when serving from 400 to 500 meals per day
- Aisles of 30 in. are usually too narrow; 42 in. are desirable. If mobile equipment is moved in and out, aisles may have to be wider. Walk-ins that are 8 to 9 ft wide and about 10 ft long are the minimum size. This allows for two storage are as 30 in wide with a 3 to 4 ft aisle.
- Doors should be a minimum of 42 in. wide to admit large crates and containers or be sized to suit mobile equipment.

6. Sanitation areas:

- Dishwashing areas: The dimensions may be only 30 to 36 in. for a single tank machine, 60 to 72 in. for sinks, or 7 to over 30 ft. for a conveyor-type machine.
- Pot and pan section: When allowing space for the pot and pan section, 40 sq. ft. is generally regarded as a minimum for the smallest unit. The free work aisle between the sinks and other equipment should be 4 ft wide. The space allowance above the minimum will vary widely depending upon the type of equipment used and the volume of pots and

pans handled.

7. Employee facilities:

- Facilities for employees may include lockers and a lounge area, toilets, showers, time-recording equipment, hand basins near work areas, and dining rooms. An employee entrance should be so located that the employees may go directly to the dressing rooms without passing through the dining room or production area.
- Locker and lounge area: Whether individual lockers or a common cupboard, sufficient space should be allowed for personal clothing to hang without crowding or wrinkling.
- The depth from front to back should be a minimum of 20in.
- The suitable size for an employee lounge depends largely on the scheduling of workers and the policies of individual establishments.
- A cotor day bed, 36in. By 6ft, should be provided in the women's room.
- Toilets and showers: They should be separated from food areas by a hallway or double entrance. Supply one wash bowl for every 8 to 10 workers, one toilet stool for every 12 to 15 women, and one urinal and one toilet stool for every 15 men. Toilet compartments measure approximately 3 by 41/, to 5 ft.
- Time recording management: Provide space for a recorder near and within view of the office. Wall-hung card racks of sufficient capacity are recommended for the number of workers, both full and part-time, who are likely to be employed during an accounting period. Estimated space for a clock recorder is approximately 18in.wideby12y.in.deepand18in.high, and a rack of 50 cards approximately 1 1/2 by 2 1/2 by 34 ½ in.

8. Guest facilities:

- The size of the area should be based on probable need for waiting, type of service, and number of persons likely to congregate at one time. If there is a lounge or hallway adjacent to the dining room, this may provide some waiting space.

9. Cashier:

- Preferred location for the cashier's desk or counter is on the right-hand side of the door when leaving, to avoid cross-traffic and resulting congestion.

10. Coat-checking:

- Use of coat trees in dining areas is considered "necessary but never desirable. These occupy approximately 20 by 20 in., are 72 in. high, and can accommodate 8 garments

2.13 TIME SAVER STANDARDS (BUILDING TYPES)-KITCHENS:

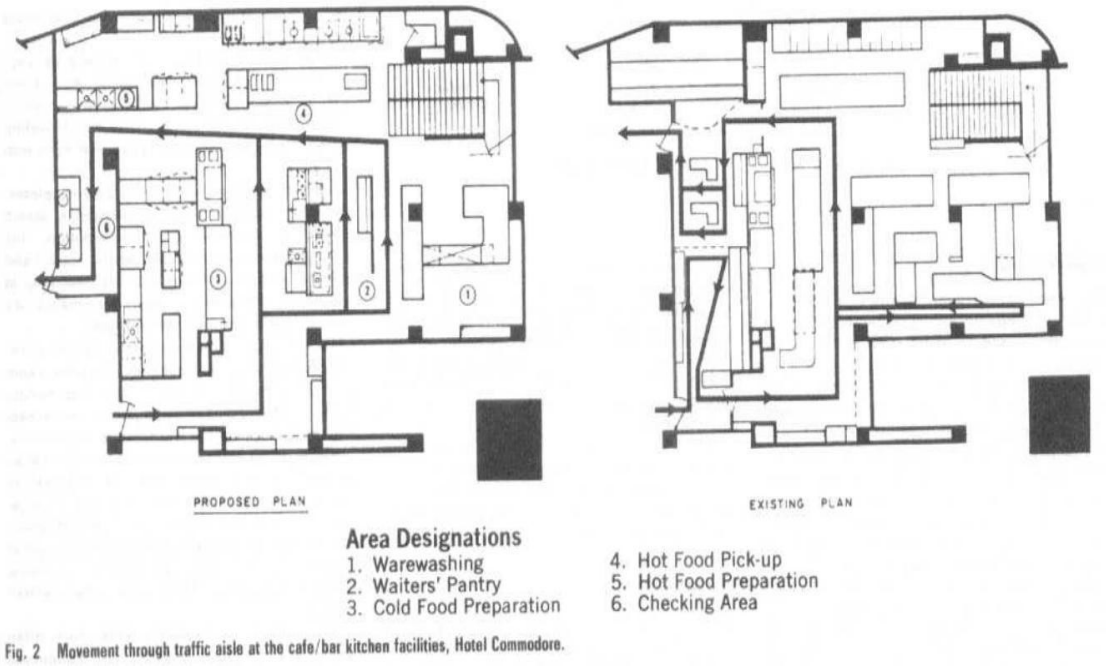


Fig. 2 Movement through traffic aisle at the cafe/bar kitchen facilities, Hotel Commodore.

Figure 19 Area Specifications (Source: Time Savers Standards)

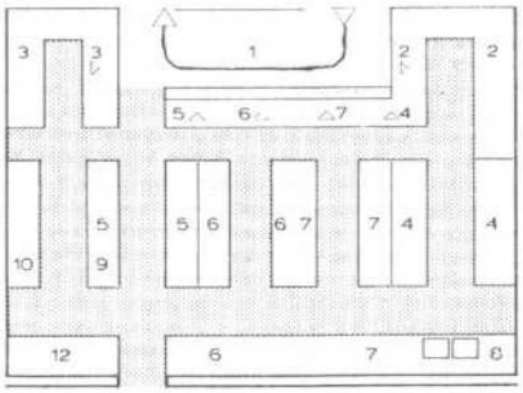


Fig. 1 Hotel or restaurant kitchen or French restaurant of high standard. Capacity for main meals: Hotel—100–200 persons / menu, 100 persons / à la carte. Restaurant—200–300 persons / mealtime from 11:30 to 1:30. Waiters' passageway: tangential. Kitchen: Linear arrangement with large installations in the rear. See Legend for explanation of numbers.

Figure 20 Area Specifications (Source: Time Savers Standards)

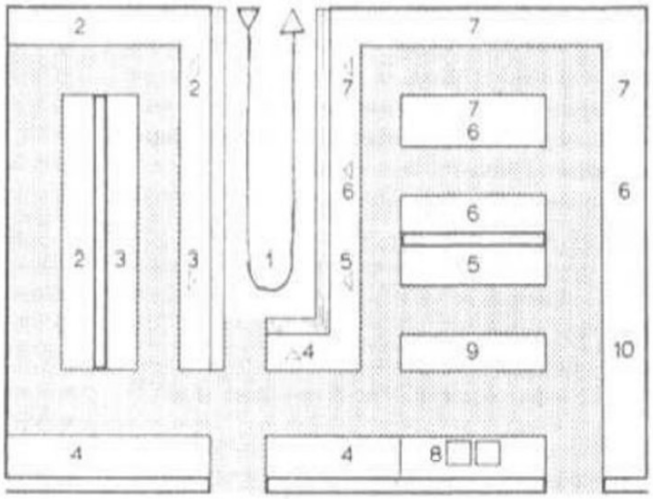


Fig. 2 Hotel or restaurant kitchen. Capacity: With this layout, a 200-seat restaurant will be able to handle three full sittings. This layout can also take care of a hotel with 100 guests and can also accommodate a restaurant open to the general public, an outdoor restaurant, and a private dining area for parties and conferences (altogether, 400 guests). Waiters' passageway: in the center. Kitchen: Linear arrangement with large installations in the rear. See Legend for explanation of numbers.

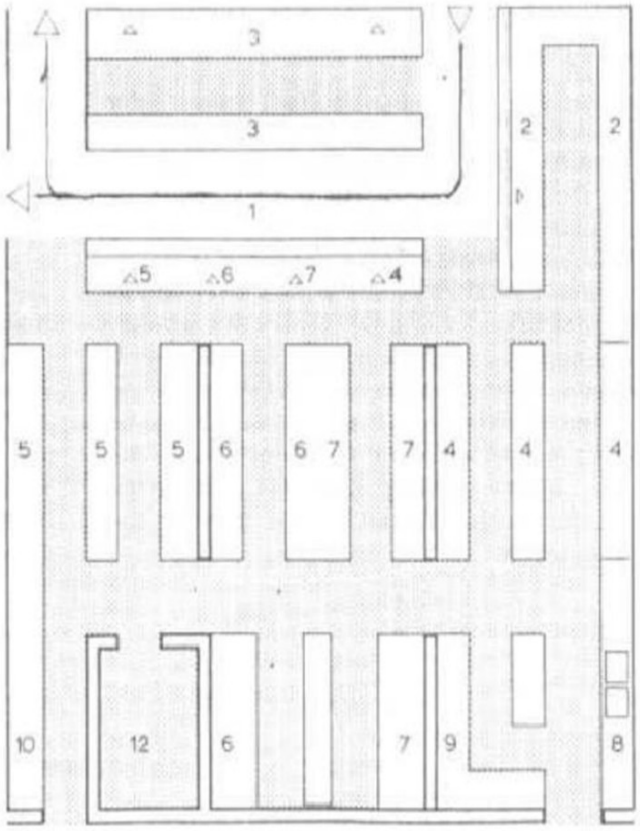


Fig. 3 Large restaurant kitchen for restaurants with many private party and conference facilities or with commissary and catering capacity for other businesses. Suitable also for large hotel with large restaurant for the general public. Capacity: 800–1,000 persons (e.g., 200 seats and fourfold reoccupancy). Waiters' passageway: tangential, with food buffet situated in front. The waiter has access to beverages and other items from the waiters' passageway in the kitchen and from the dining room side as well. The buffet looks over the dining rooms. Kitchen: Linear arrangement with fitted berths for large apparatus. See Legend for explanation of numbers.

Figure 21 Area Specifications (Source: Time Savers Standards)

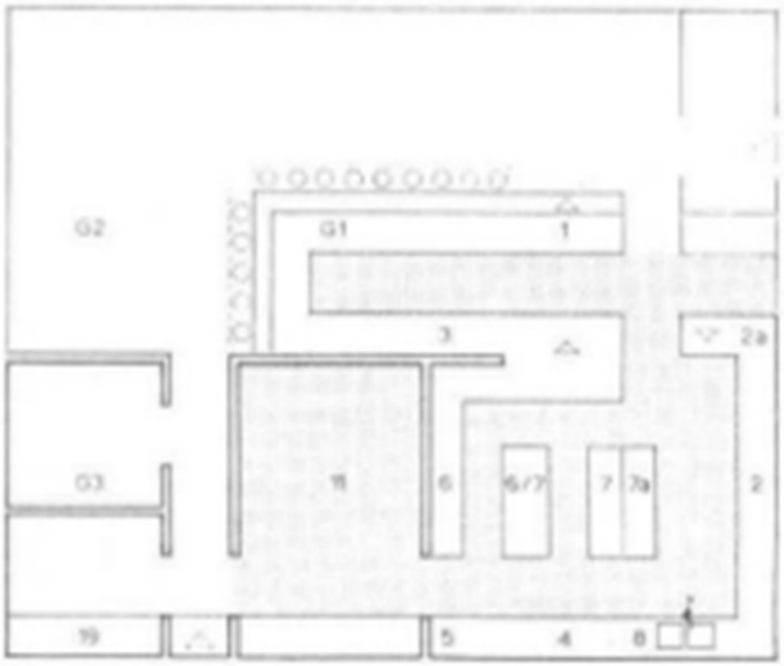


Fig. 7 Snack bar (Pub, tavern, bistro, café, or restaurant). Capacity: 55–60 seats (five- or six-fold reoccupancy over lunchtime, twofold in the evening; at other times, a well-run café, cake, and snack business). The kitchen deals primarily with ready-to-serve articles. In a city business with daily delivery, the storage space does not have to be especially large.

Legend:

1. Meal and beverage serving counter
2. Dishwasher
2a. Dish return
3. Beverage buffet with mixer, toaster, ice-cream container, etc.
4. Oven and small pastry station
5. Garde-manger
6. Saucier / rôtisseur
6/7. Range
7. Entremétier
7a. Cooking vat and high-performance steam cooker
6/7b. Warming cupboard and warm serving counter with warming lamps
8. Pot and pan washing
11. Storage, empty goods, office; instead of cold storage rooms—cold storage and freezer cupboards
19. Employees' toilets
G1. Bar counter—also for meals
G2. Dining room with table seating
G3. Guests' toilets / make-up room / telephone booths

Figure 22 Area Specifications (Source: Time Savers Standards)

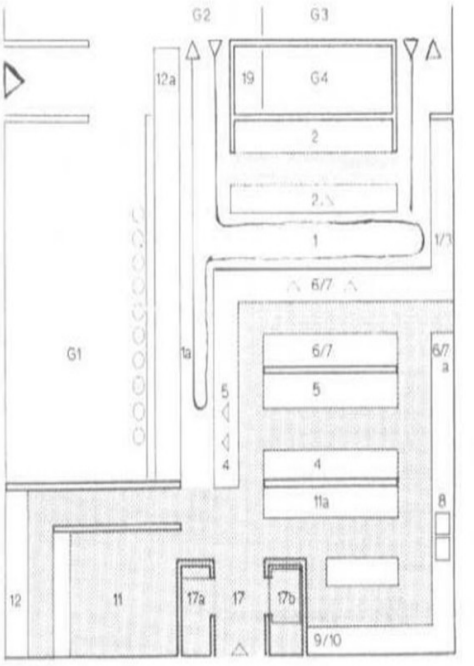


Fig. 10 Restaurant for travelers (Highway restaurant, or café-restaurant at a busy intersection in the city). Capacity:

- Snack—45–50 seats (200 persons every hour)
- Restaurant—80 seats—(two- or threefold reoccupancy during meals; at other times, coffee, ice cream, pastry, and sandwich service)
- Grill—40 seats (one- or twofold reoccupancy, high standard service) Kitchen: Linear-wall arrangement, approximately equal balance between freshly prepared meals and ready-to-serve meals. Storage, empty goods, and personnel cloakrooms in the cellar.

Legend:

1. Waiters' passageway
1a. Service corridor for snacks, and cold meal and pastry-serving counter for restaurant
1/3. Waiters—Beverage self-service
2. Dishwasher
4. Pastry
5. Cold kitchen
6/7. Warm kitchen (roast, grill, fry), bain-marie in the serving counter
6/7a. Cooking and frying apparatus (2 vats, 1 pan)
8. Pot and pan washing
9/10. Meat and vegetable preparation
11. Storage for the day
11a. Cupboard group, cooled and not cooled
12. Kiosk facing the street
12a. Cigarette machine
17. Goods delivery
17a. Office
17b. Elevator to cellar
19. Employee toilets
G1. Snack area with about 40 seats and seats at the bar
G2. Restaurant
G3. Grill restaurant, possibly with small bar for espresso coffee, aperitifs, whisky, and other spirits
G4. Guests' toilets

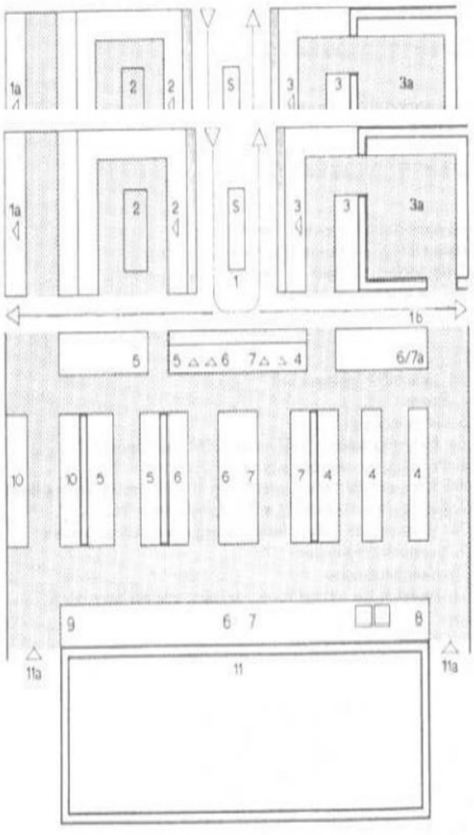


Fig. 11 Large hotel-restaurant kitchen also for large restaurants with some auxiliary rooms and with outside deliveries or production for other organizations (variant of Figs. 3 and 6). Capacity: 800–1000 persons. Waiters' passageway: in the center, with a special serving link to the garden (or, for instance, to a bowling alley) and directly connecting to the auxiliary rooms. Kitchen: Linear arrangement with rear side of large apparatus.

Legend:

1. Waiters' passageway
1a. Meal and beverage serving to garden
1b. Access to auxiliary rooms
2. Dishwashing area
3. Beverage serving area
3a. Beverage cold storage (day cellar)
4. Pastry
5. Cold kitchen
6. Warm kitchen—saucier / rôtisseur area
7. Warm kitchen—entremétier area
8. Pot and pan washing
9. Vegetable preparation
10. Meat preparation
11. Cold storage and storage rooms
11a. Accesses to delivery, empty goods room, and intermediary storage, office, personnel cloakrooms and toilets
S Service accessories (cash register)

Figure 23 Area Specifications (Source: Time Savers Standards)

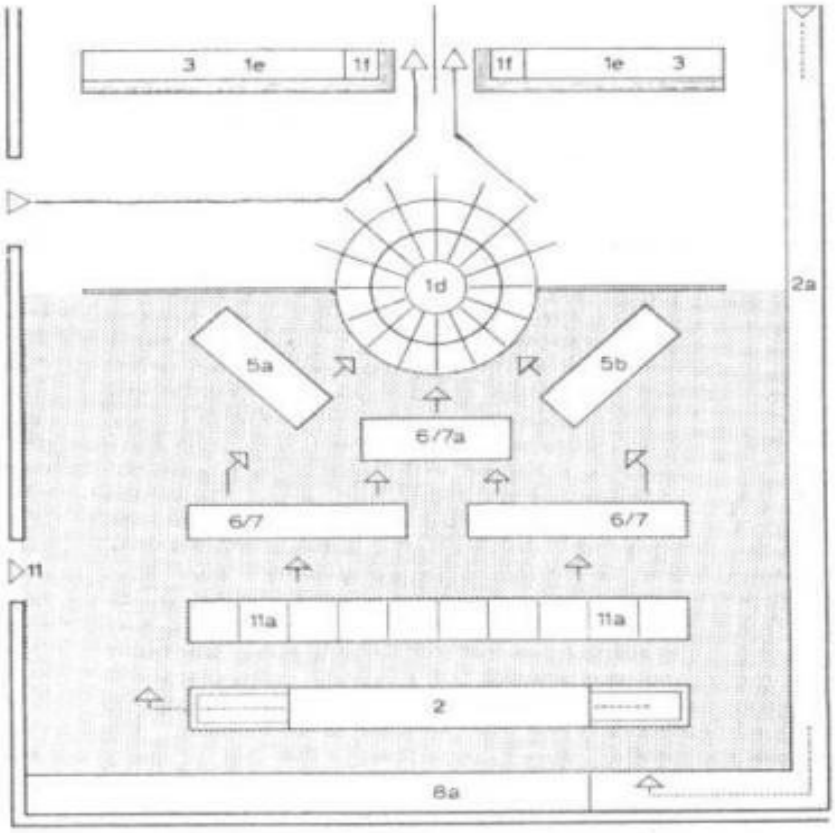


Fig. 15 Student dining hall or cafeteria with self-service carrousel. Capacity: after the initial phase, 1,400 persons per hour. Seating: at least 400 seats. Meal delivery from a central kitchen—deep-freeze, boil-in-the-bag (Nacka), and Régéthermic system.

Legend:

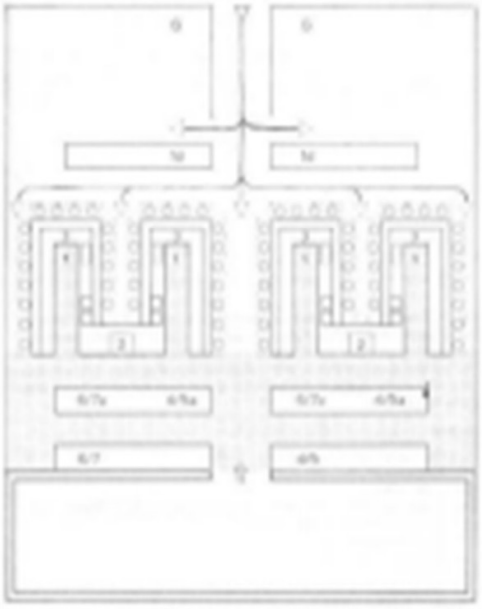
17. Linear-arrangement kitchen with automats. For large output, there are appropriate appliances for steaming and baking.
18. Linear-arrangement kitchen with transport-equipment system. In the foreground: dish washing; soup, vegetable, and entrée vats; stove for general purposes and dietary foods; sauces and meats.
19. Three-tier carrousel (Maison Tricault, Paris) of 2-meter diameter, with a tray slide.
1d. Self-service three-tiered carrousel
Below: 2 cold dishes, various salads, desserts (partly on ice)
Center: warm meals, 3 warm dishes, 2 grilled or fried dishes (with warming lamps above)
Above: sandwiches, pastry, etc.
1e. Salad dressings, condiments, extra cutlery, etc.
1f. Cash register
2. Dishwaster (stacking area, 3 tanks, drying zone)
2a. Soiled-dish conveyor belt
3. Beverage self-service area
5a. Portioning table for cold dishes and salads
5b. Portioning table for desserts, sandwiches, etc.
6/7. Warming and defrosting appliances
6/7a. Portioning table for warm meats
8a. Trolley storage
11. Meal delivery from the central kitchen, access to the supply and auxiliary rooms
11a. Storage cupboards for cold goods and other goods delivered from the central kitchen

Figure 24 Area Specifications (Source: Time Savers Standards)



Legend:
1d. Self-service buffet with grill and fry unit
1e. Salad dressings, spices, cutlery reserves
1f. Cashier
3. Dishwasher
3a. Dish return
3/4. Sandwich unit, cakes, ice cream, coffee, beverages; service available at an outdoor café
5a. Cold preparation table
6/7. Defrosting, warming-up apparatus front, serviceable on two sides (convection ovens, heating appliances for the Nocke system or Regatherm ovens)
11. Cold storage and storage (varies in size according to system of servicing and rhythm of delivery)
11a. Refrigerator front, serviceable on two sides
11b. Delivery, empty goods, intermediary storage, personnel cloakroom
13. Kiosk—sales on the inside and to customers on the street
E1. Entrance from street
E2. Entrance from building (department store, office building, etc.)

Fig. 8 Self-service restaurant suitable for department stores or office buildings. Kitchen: no independent production; outside delivery and preparation via deep-freeze, boiling-in-the-bag (Nocke), or Regatherm methods.



Legend:
1. Service passage for U-shaped or finger-shaped counter
1d. Automats for self-service
2. Connection of two fingers with dishwasher having two covers serviceable on both sides; adjoining are two sinks each
3. Coffee machine, refrigerators, soup pot storage
4/5. Salad and ice cream preparation
4/5a. Cold counter—salad, ice cream, dessert
6/7. Frying pan, soup cooker, and other cooking equipment
6/7a. Warm counter—bain-marie, fryer, grill plates
11. Basement, cold storage, and freezer space, staples room (deliveries, empty goods room, office, personnel cloakrooms and washrooms not included)
G Guest rooms with standing room and seats (automat service with disposable dishes)

Fig. 9 Restaurant with finger-shaped bar and automats for quick lunch service in restaurants for passersby, cafeterias, department stores, highway restaurants. Capacity: 300 persons per hour. Kitchen: preparation of precooked meals, salads, and ice cream.

Figure 25 Area Specifications (Source: Time Savers Standards)

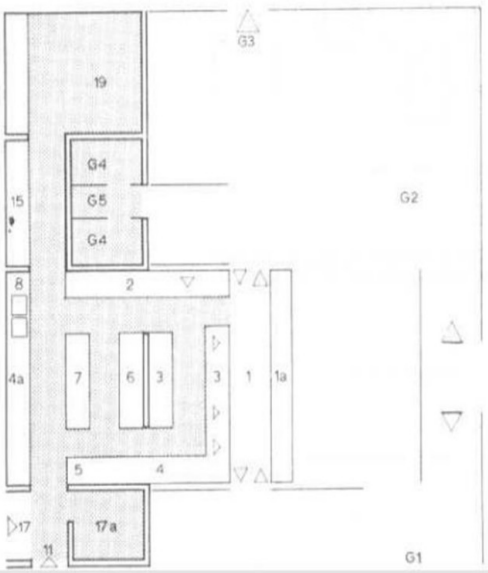


Fig. 12 Café-restaurant with tearoom, or a city restaurant in a busy district.

- Café: alcohol-free beverages, except for bottled beer; pastry and small meals—cold and warm
- Tearoom: alcohol-free beverages, pastry, sandwiches. Capacity: About 150 seats (continuous service from early morning to midnight or later). Kitchen: extensive use of precooked meals; little storage.

Legend:

1. Waiters' passageway
1a. Serving stations and cash register
2. Dishwasher
3. Beverage buffet with mixer, toaster, ice cream container, etc.
4. Pastry
4a. Pastry oven
5. Sandwich unit
6. Defrosting and heating equipment, soup vats
7. Oven, grill, frying apparatus
8. Pot and pan washing
11. Day stores, empty goods (staple goods in cellar)
15. Linen storage
17. Delivery
17a. Office
19. Employees' washrooms, cloakroom for waiters (cloakroom and washrooms for kitchen employees in cellar)
G1. Tearoom
G2. Café-restaurant
G3. Terrace or garden
G4. Washrooms
G5. Telephone booths

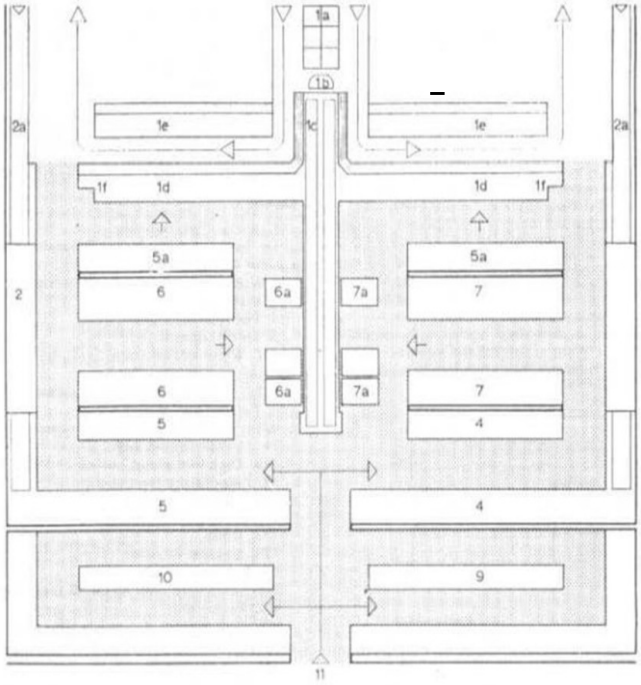


Fig. 13 Student dining hall or cafeteria with two-sided self-service buffet and conveyor belt. Capacity: 12 persons per minute × 2 = 24 persons. Without cash payment: hourly capacity, 1,400 persons. With cash circulation: hourly capacity, 1,100 persons. Seating: at least 340 seats. Kitchen: fully equipped linear arrangement, planned for automatic equipment.

Legend:

1a. Platter and cutlery trolley
1b. Distribution help, regulation of conveyor-belt speed, dietary food storage
1c. Conveyor belt for standard menu
1d. Self-service buffet—Menu:

1 soup of the day	various salads
1 stew	various desserts
1 standard menu	dairy products
1 dietary food	5 cold beverages (beer, wine, carbonated beverages, juice)
2 cold meals	

1e. Salad dressings, condiments, cutlery
1f. Cash register
2. Dishwasher
2a. Soiled-dish conveyor belt
4. Pastry
5. Garde-manger
5a. Portioning table for cold meals, salads, and desserts
6. Roast kitchen, possibly with roasting automats
6a. Warm-storage trolleys—portioning of meat, sauces, dietary food
7. Cooking kitchen, possibly with automatic steam cookers
7a. Warm-storage trolleys for portioning of vegetables, entrées
9. Vegetable preparation
10. Meat preparation
11. Access to the storage rooms, delivery, and auxiliary rooms

Figure 26 Area Specifications (Source: Time Savers Standards)

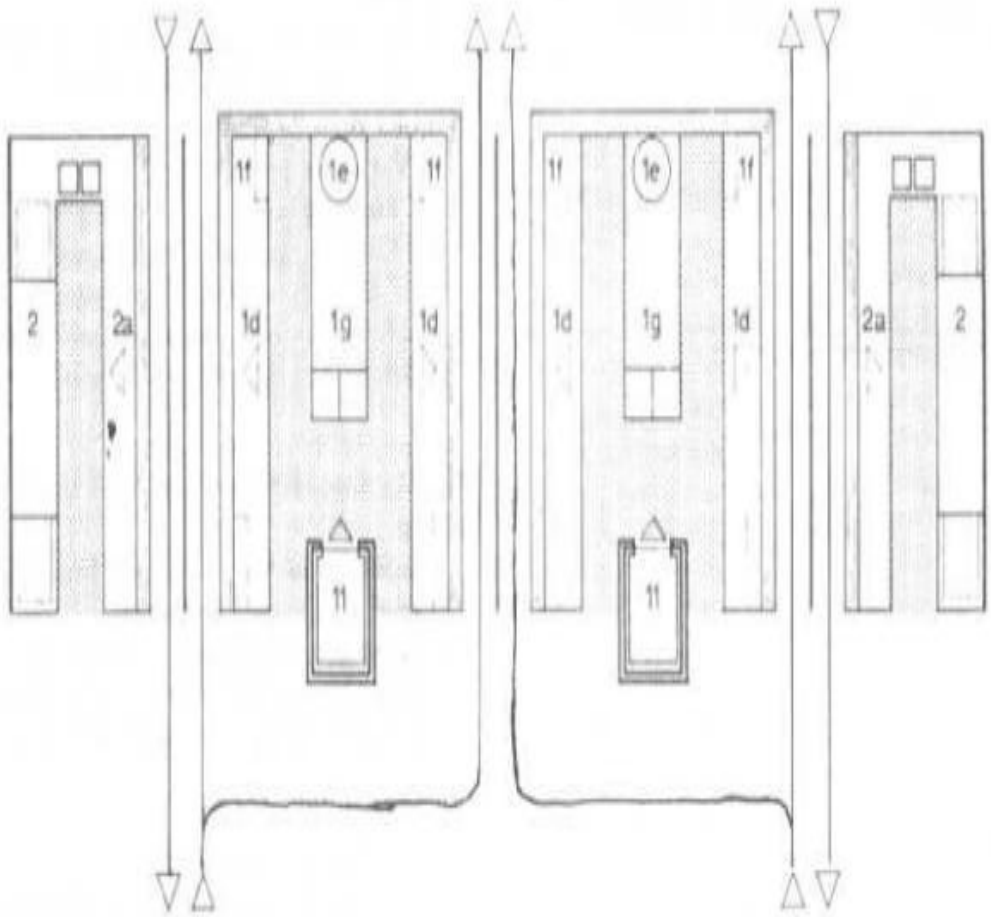


Fig. 14 Student dining hall or cafeteria with four self-service buffets. Capacity: at least 1,500 persons per hour. Seating: at least 400 seats. Kitchen: outside delivery of meals with standard or conveyor-type elevator.

Legend:

1d. Self-service buffet—menu as in Fig. 13
1e. Circular device for salad dressings, condiments, extra cutlery, etc.
1f. Cash register
1g. Preparation table with trolley stand
2. Dishwasher
2a. Soiled-dish return
11. Standard or conveyor-type elevator connection to meal-preparation kitchen

Figure 27 Area Specifications (Source: Time Savers Standards)

2.14 TIME SAVER STANDARDS (INTERIOR DESIGN):

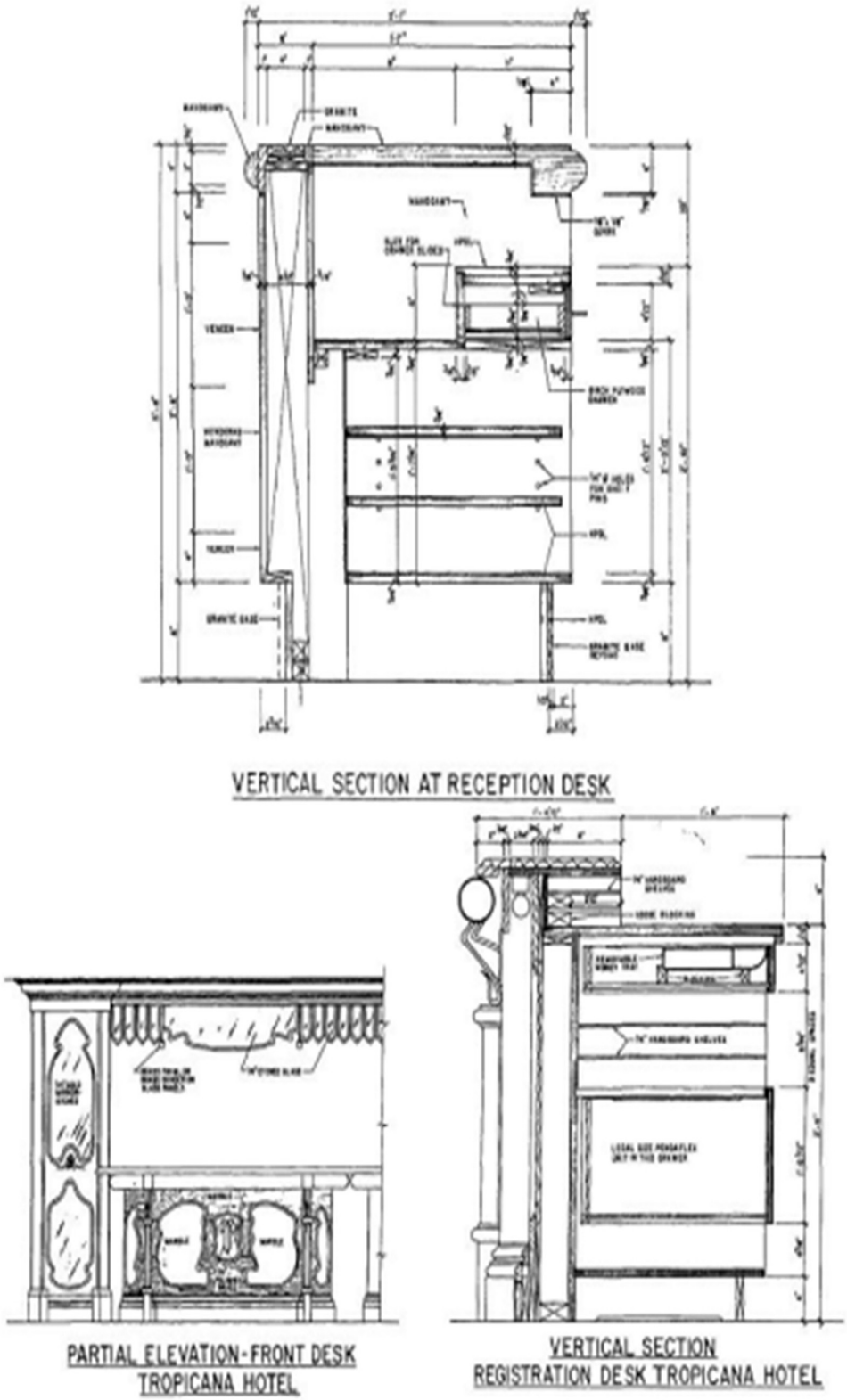


Figure 28Area Specifications (Source: Time Savers Standards)

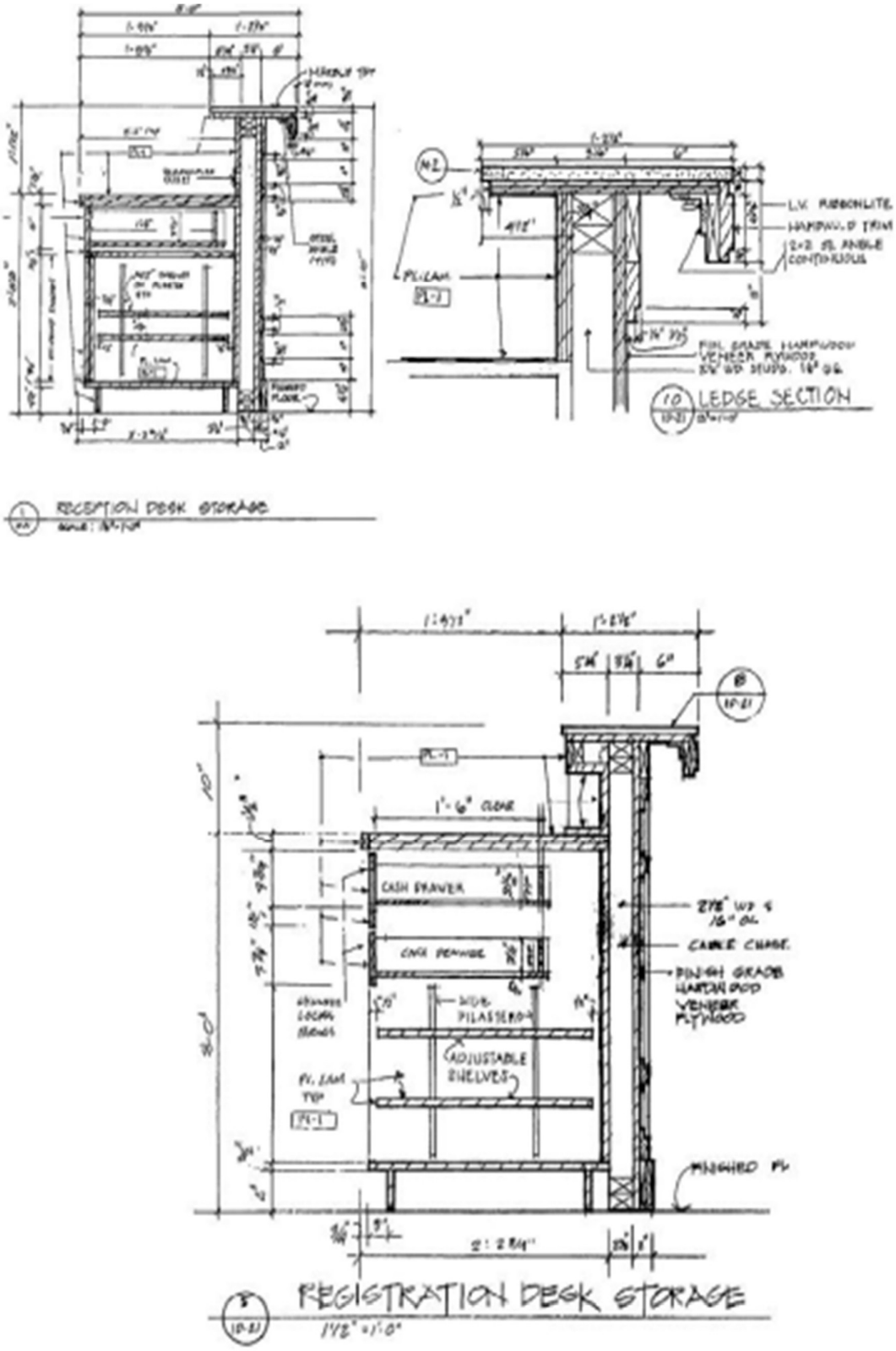


Figure 29 Area Specifications (Source: Time Savers Standards)

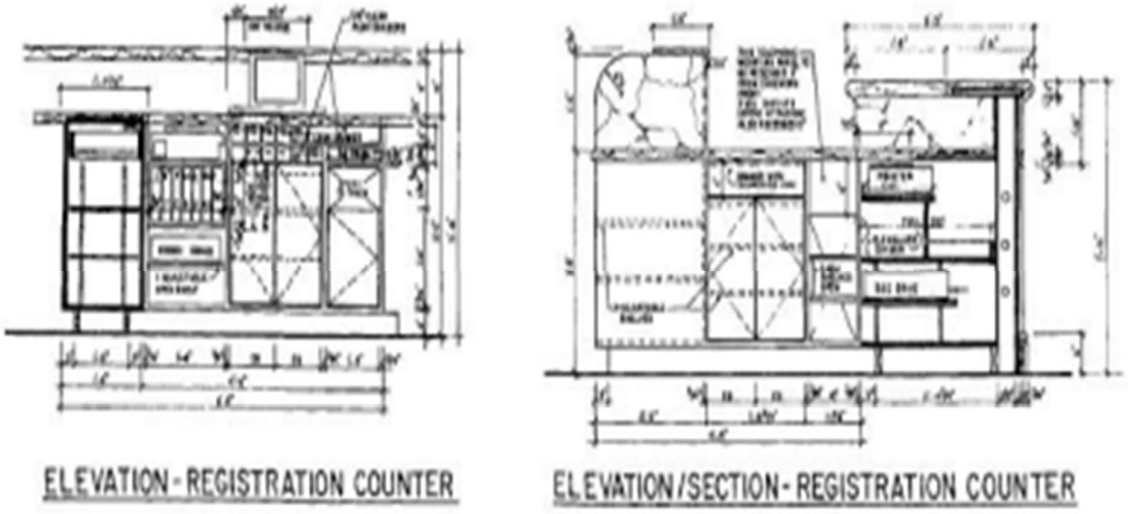


Figure 30 Area Specifications (Source: Time Savers Standards)

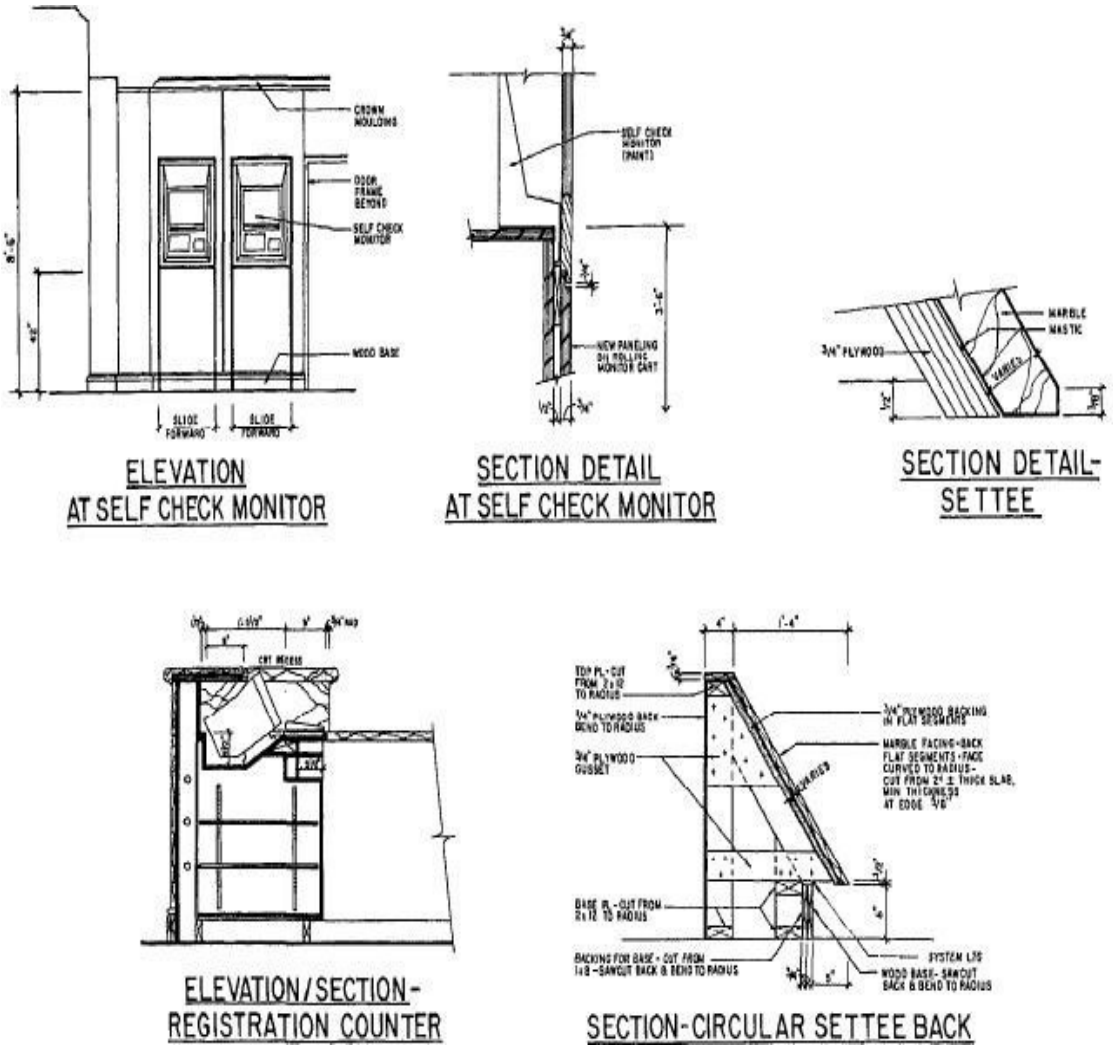


Figure 31 Area Specifications (Source: Time Savers Standards)

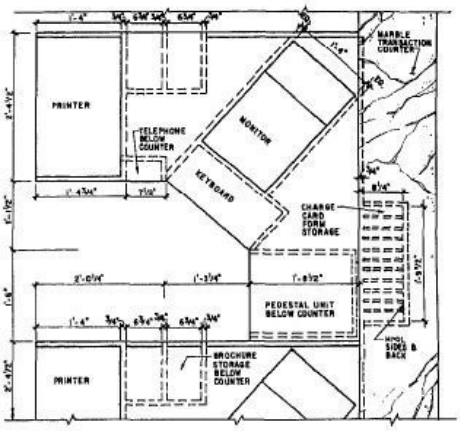
3. Elevators servicing the hotel guest rooms should be readily visible from the front desk. This is not always feasible in extremely large hotels.

4. The front desk should be designed in such a way as to take into consideration the various users it will accommodate. Special attention should be given to the fact that hotel guests may be physically challenged or chairbound. The overall height, writing surfaces, and overhangs should be designed to accommodate a hotel guest seated in a wheelchair.

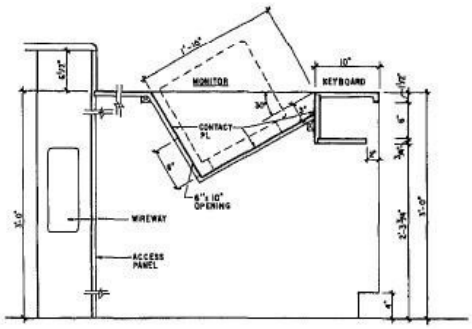
5. The basic front desk design should avoid, wherever possible, visual obstructions that block sightlines or create blind spots. Accordingly, columns and high walls should be avoided.

6. Equipment and custom elements that are typically incorporated within the front desk include computer monitors/CRTs with keyboards and printer, room racks, reservation racks, information racks, room status displays, mail drawers, key drawers, alpha guest listings, message-waiting display, credit card imprinters, fax and telex, guest/employee paging system, automatic wake-up system, electric receptacles, cable chases, alarm systems, and file and cash drawers.

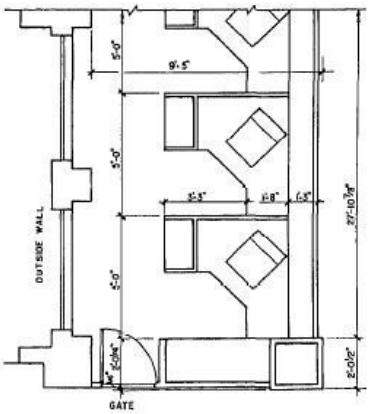
Figure 32 Area Specifications (Source: Time Savers Standards



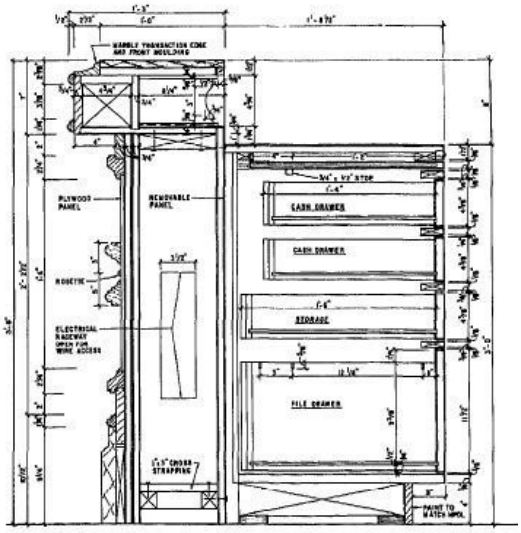
ENLARGED PARTIAL PLAN
REGISTRATION COUNTER
GRAND FLORIDIAN HOTEL



SECTION AT REGISTRATION DESK
GRAND FLORIDIAN HOTEL

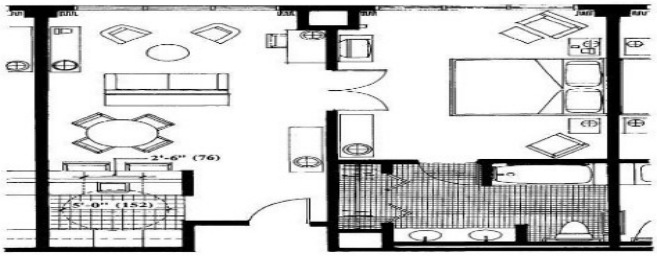


PARTIAL PLAN
REGISTRATION COUNTER
GRAND FLORIDIAN HOTEL



SECTION AT COUNTER
GRAND FLORIDIAN HOTEL

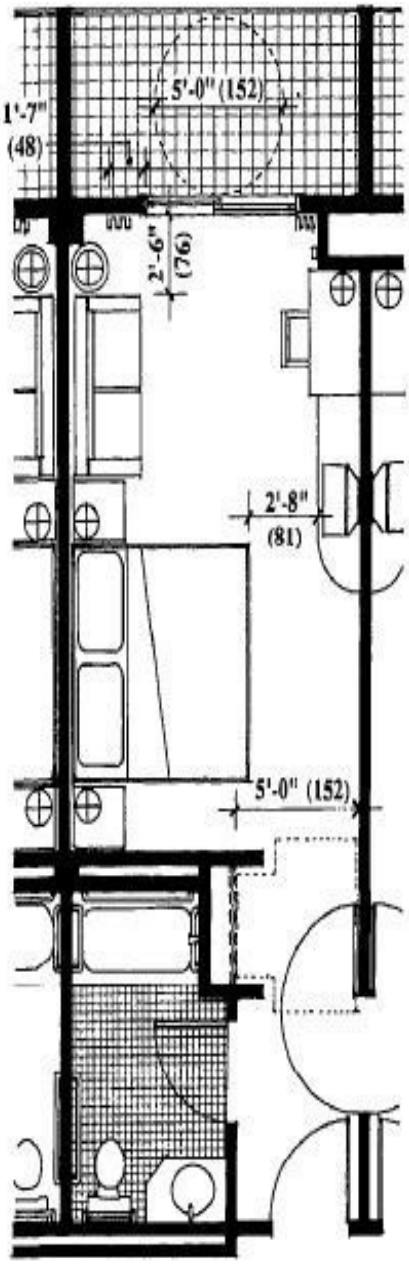
Figure 33 Area Specifications (Source: Time Savers Standards)



Suite with 14' Bay-spacing

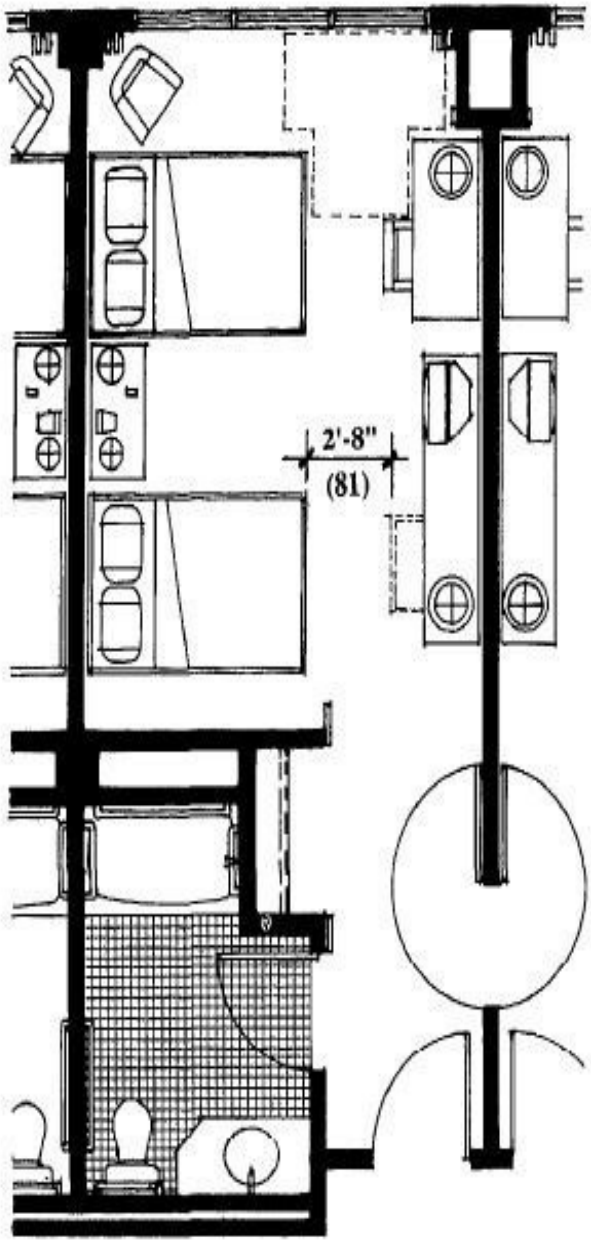
Fig. 8 Accessible suites should meet the same requirements for accessible guestrooms and guest baths. Because suites are usually more generous in terms of space, providing accessibility is less difficult. If a small kitchenette is included, a kneespace 2'-9" high should be provided below the sink. A countertop height of 2'-10" (2" lower than standard) is suitable for both ambulatory guests and guests in wheelchairs. A pull-out lapboard at a height of 2'-6" provides a workspace for guests in wheelchairs. The kitchenette should include a 5'-0" turning space.

Figure 35 Area Specifications (Source: Time Savers Standards)



12' Bay-spacing

Fig. 6 This alternative 12'0" bay-spacing design requires the dresser to be offset from the foot of the bed. The bathroom wall is stepped back to provide clearances for the bathroom door and connecting door. The heating/cooling unit projects into the room to allow access to the thermostat. If balconies are provided, a minimum depth of 5'0" is recommended to allow guests with wheelchairs to turn around.



13' Bay-spacing

Fig. 7 A 13'0" bay-spacing provides room for wheelchair clearances, including a turning space in front of the closet and at the foot of the beds, an access aisle between the beds, a T-turnaround at the window aisle for access to temperature controls and blinds and drapes, door clearances, and a bathroom that meets ANSI standards.

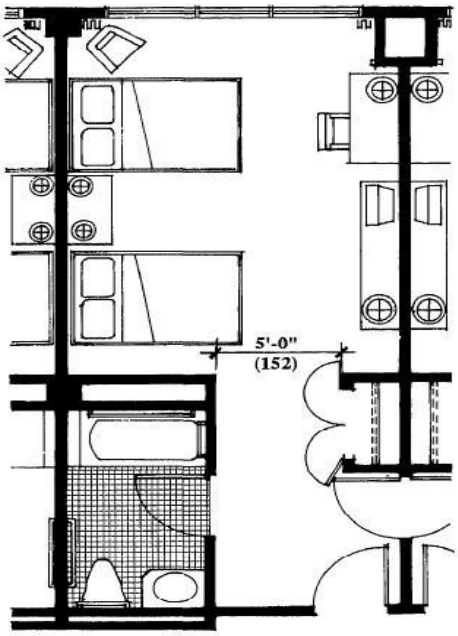


Fig. 5 Bay-spacings of *(a)* 14′, *(b)* 15′, and *(c)* 16′ can easily accommodate guests with restricted mobility.

Figure 36 Area Specifications (Source: Time Savers Standards)

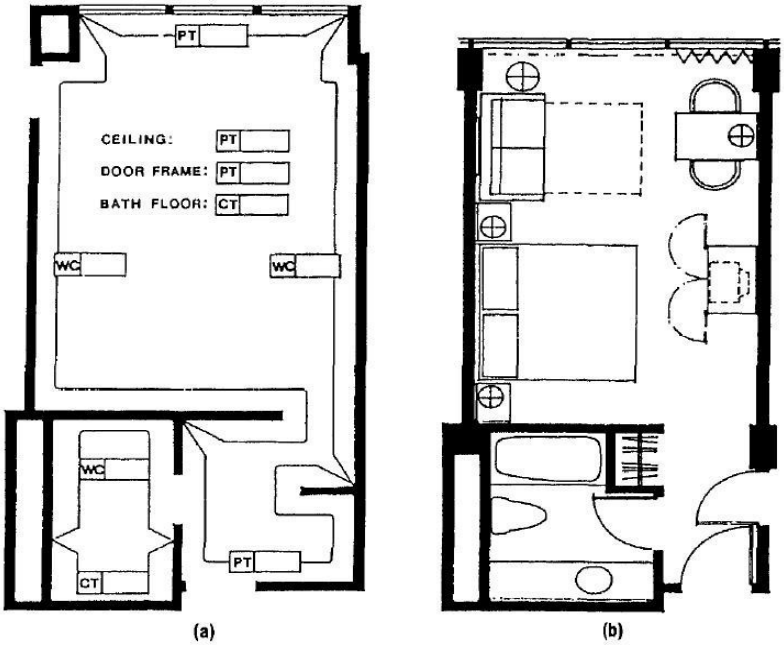


Figure 37 Area Specifications (Source: Time Savers Standards)

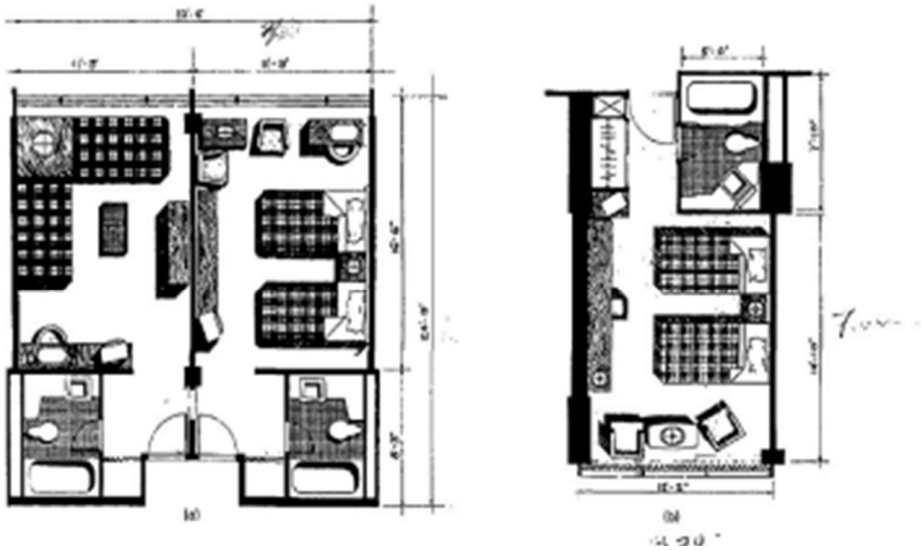


Figure 38 Area Specifications (Source: Time Savers Standards)

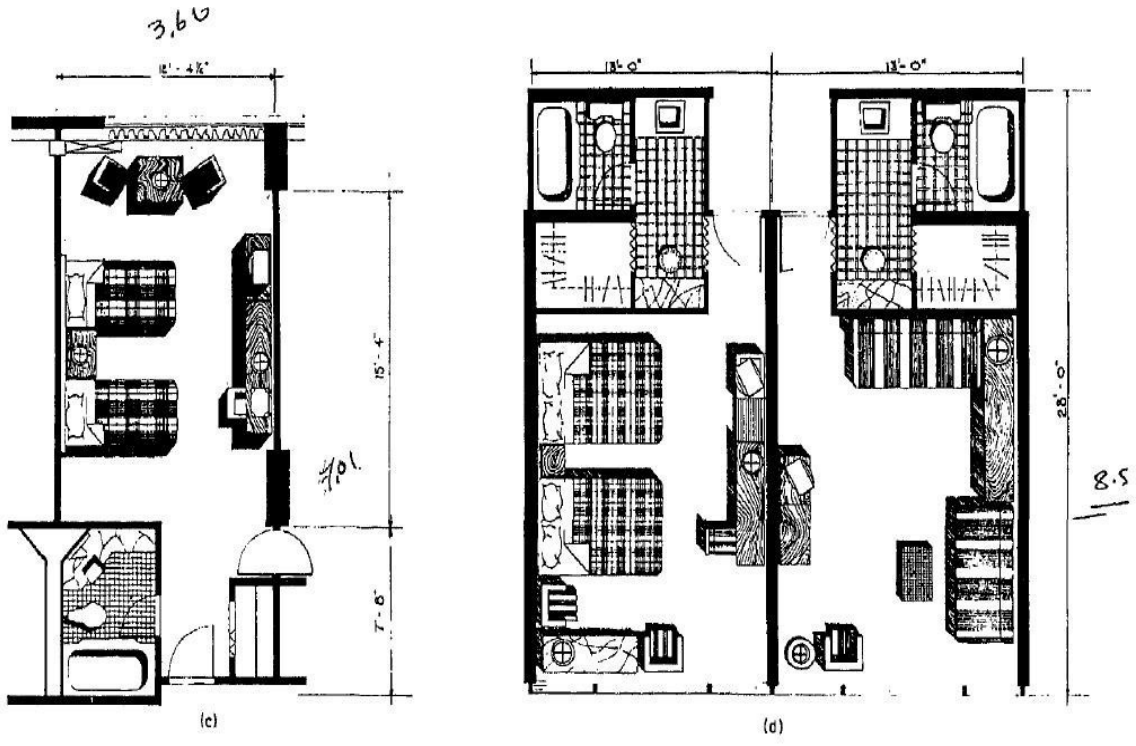
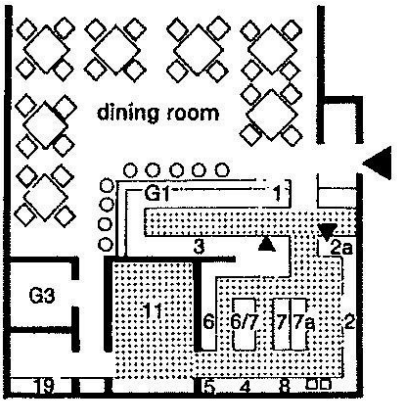


Fig. 1 *(a)* Uris Brothers Hotel, New York. *(b)* Americana Hotel, New York, typical tower room. *(c)* Loews N.Y. Motel, typical room. *(d)* Causeway Inn, Tampa, Florida.

Figure 39 Area Specifications (Source: Time Savers Standards)

Snack Bar

- Corner pub, cafe, restaurant: capacity 55-60 seats (2-4 place turnover at lunch time, 2 in evenings). Between lunch and evening meals: serving coffee, cakes, and snacks. Kitchen: supplied predominantly with pre-prepared items. The storeroom need not be particularly large if deliveries are daily.



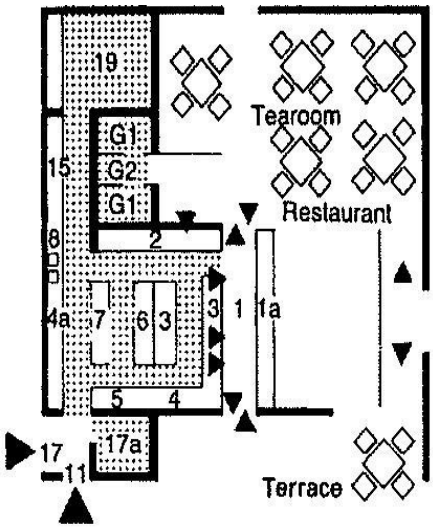
1 Snack bar

1	meals and drinks servery
2	dishwasher
2a	crockery returns
3	drinks bar with mixer, toaster, food containers etc.
4	oven for small pastry items
5	food storage
6	rotisserie
6/7	cooker rings
7a	water boiler and steam machine
8	pot and pan washer
11	stores/office; catering size refrigerators and freezers instead of cold store
19	staff toilets
G1	bar counter
G3	customer toilets

Figure 40 Area Specifications (Source: Time Savers Standards)

Cafe-restaurant:

- With a tea room. Urban business in a heavy traffic location.



2 Café-restaurant

1	waiters' walkway
1a	service counter and cash tills
2	dishwasher
3	drinks bar with mixer, toaster, ice cream freezer etc.
4	pastry preparation
4a	pastry oven
5	sandwich preparation
6	reheating equipment (e.g. soup)
7	cooker rings
8	pot and pan washer
11	empties
15	linen store
17	deliveries and (a) store
19	staff toilets and cloakroom
G1	toilets
G2	telephone cubicle

Figure 41 Area Specifications (Source: Time Savers Standards)

Cafe:

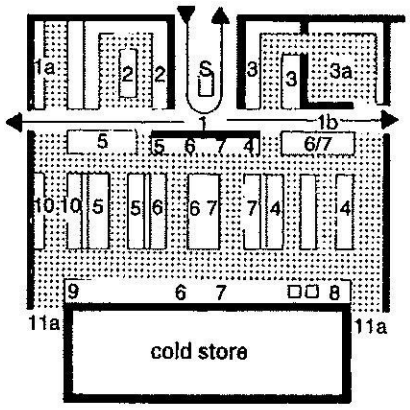
- Alcohol-free drinks, except bottled premium beer, liqueurs, etc., patisserie and light food- cold and hot.

Tearoom:

- Alcohol-free drinks, patisserie, sandwiches. Capacity approx.150 seats, continuous operation 6.30-24.00. Kitchen: predominantly pre-prepared items, little storage.

Large hotel restaurant kitchen:

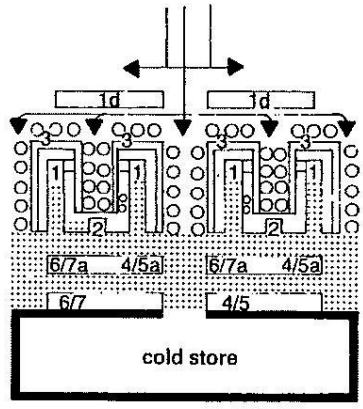
- Also, for large catering establishments with side rooms, external deliveries, or production for outside companies. Capacity 800-1000 people. Waiters' walkway: in the center, with special service in the garden, or also a bowling alley, and direct access to the side rooms. Kitchen: cell system fronted by the backs of the large appliances.



1 waiters' walkway
1a garden service counter
2 dish-washing area
3 drinks counter
3a drinks cellar
4 pastry counter
5 cold dishes
6 hot dishes and sauces
6/7 table with hot store
8 pot and pan washer
9 vegetable preparation
10 meat preparation
11a deliveries, and access to stores, offices, staff cloakrooms and toilets
S service accessories and tills

3 Large hotel restaurant kitchen

Figure 42 Area Specifications (Source: Time Savers Standards)



1 serving aisles in U-shaped counters
1d vending machines
2 link between two counters with covered dishwashers, operated from both sides, each with two rinsing basins
4/5 cold meal preparation
4/5a cold servery (salads, ices, desserts)
6/7 griddle, soup heater, water boiler etc.
6/7a hot servery (bain-marie, hotplates)

4 Restaurant with buffet and vending machines

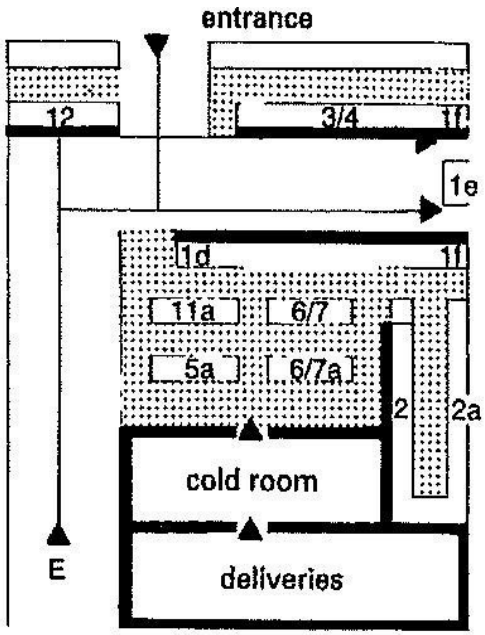
Figure 43 Area Specifications (Source: Time Savers Standards)

Restaurant with buffet and vending machines:

- For fast midday meals in canteens, department stores, and motorway services. Capacity 500 people/h. Kitchen: only warming of preprepared foodstuffs.

Self-service restaurant:

- Suitable for department stores or attached to offices. Kitchen: no in-house production. Outside delivery and preparation using a deep frozen process.
- Ideal for department stores, malls, or office complexes, these outlets offer quick dining options without disrupting the building's primary function, catering to busy professionals and casual shoppers.
- Food is prepared off-site and delivered frozen, reducing on-site kitchen needs while ensuring consistency, hygiene, and faster service through simple reheating methods.
- Requires only basic equipment and minimal staff, making operations cost-effective, space-efficient, and ideal for high-traffic areas or compact layouts.
- Design focuses on display, customer seating, and smooth workflow, with minimal back-end space for storage and reheating, ensuring fast turnaround.
- Tailored for time-sensitive customers, this model is easily replicable, supporting franchise expansion and uniform service quality across multiple locations.



1d self-service buffet with grill and chip fryer
1e sauces, condiments, cutlery
1f cash till
2 dishwasher
2a crockery returns
3/4 food and drinks servery (service to street possible)
5a cold meal preparation table
6/7 heating units, used from both sides
6/7a hot meal preparation table
11a refrigerators, used from both sides
12 sales kiosk (serving inside and to street)
E entrance

5 Self-service restaurant

Figure 44 Area Specifications (Source: Time Savers Standards)

Function and organization of the restaurant kitchen:

- The capacity of the kitchen is primarily dependent on the number of customer seats, customer expectations (type, extent, and quality of the meals offered), the proportion of products freshly prepared from raw (in contrast to ready-prepared food), and the rate of customer turnover all day or at meal times (consumer frequency).
- In fast food restaurants, the rule of thumb for seat changes is about1-3times per hour, in conventional restaurants about 2. In specialty and evening-based restaurants, the guests stay on average for for1.3-2 hours.

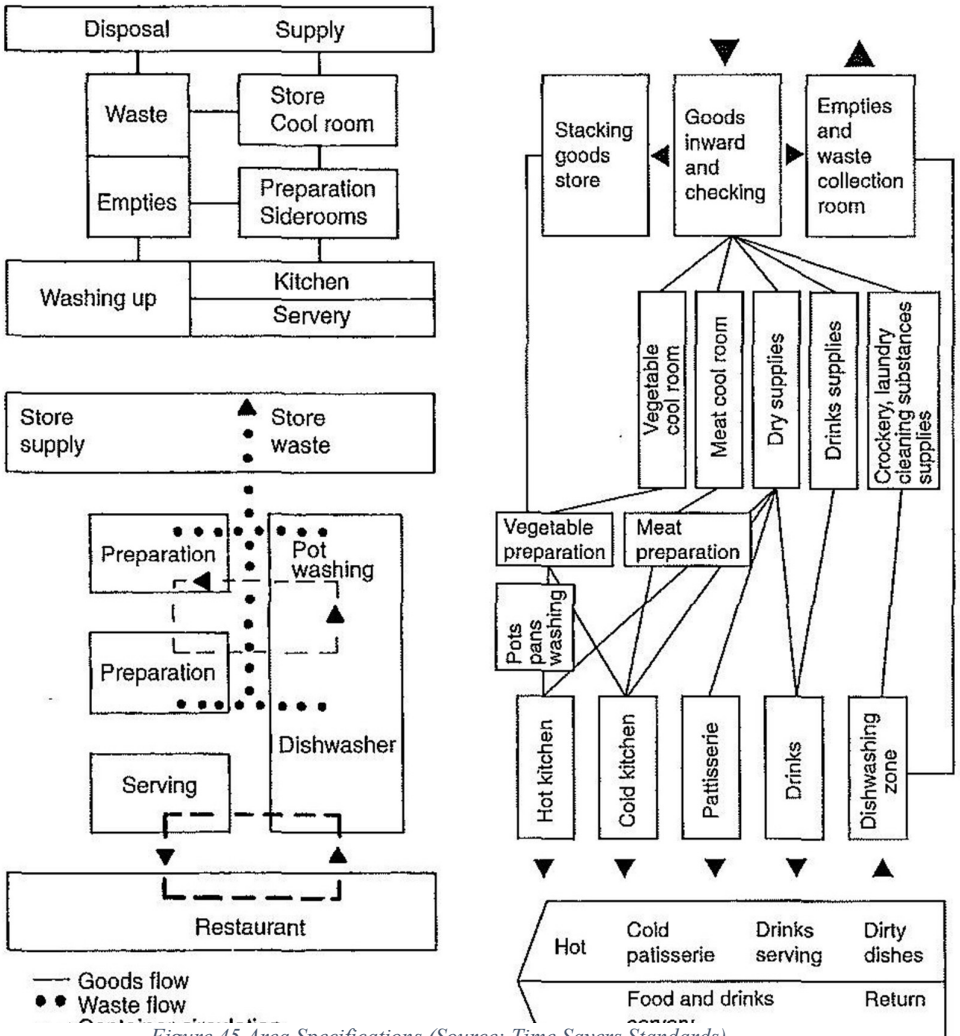


Figure 45 Area Specifications (Source: Time Savers Standards)

1 Restaurant kitchen: functions 2 Restaurant kitchen: organisation

Figure 46 Area Specifications (Source: Time Savers Standards)

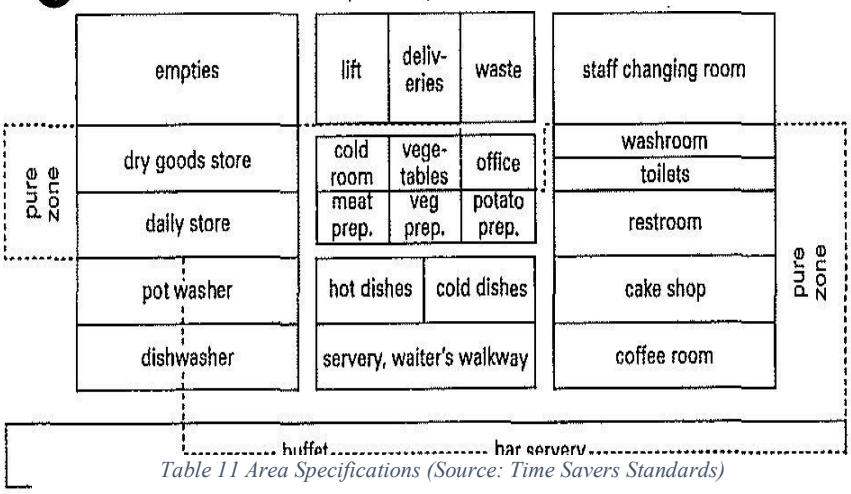
Percentage of total kitchen space requirement-

- Differentiated according to small, medium, and large kitchens, floor area values for individual functions are based on.
- Aisle widths in storage, preparation, and production areas differ according to whether they are purely traffic routes or also overlap the service area. Working aisle widths should be 0.90-1.20 m, side traffic routes with (temporary) overlapping use 1.50-1.80 m, and main traffic routes (transport and two-way through traffic) 2.10-3.30 m wide. For kitchen areas in small to medium restaurants, aisle widths of 1.00-1.50 m should be sufficient.
- Bistros, snack bars, small cafes, or specialty restaurants with 40-60 seats are classified as small operations. Small to medium units (70-100 places) require, on the other hand, carefully zoned and fully equipped kitchen facilities. Large businesses (service areas, fast food restaurants, large hotel kitchens) achieve considerably higher place numbers, often with an integrated eating bar or self-service areas.

Area	Proportion (%)
goods delivery including inspection and waste storage	10
storage in freezer, cold and dry rooms	20
daily store	
vegetable and salad preparation area	2
cold dishes, desserts	8
patisseries/cakes	8
meat preparation	2
cooking area	8
washing area	10
traffic area	17
staff rooms and office	15
Total	100

Table 11 Area Specifications (Source: Time Savers Standards)

4 Basis for dimensions and space requirements



5 Kitchen areas: classification and relationships of functional areas in clean and unclean zones (if earth-covered vegetables are prepared, this must take place in a separate part of the unclean area!)

Functions are shown below:

5-Stars (Luxury): as before, but single room 18m², double room 26m2, (minimum size, see above), 2% of the hotel rooms as suites (at least two), each with an armchair/sofa per bed, additional washbasin in double rooms and suites, additional colour television in suites, reception lobby.

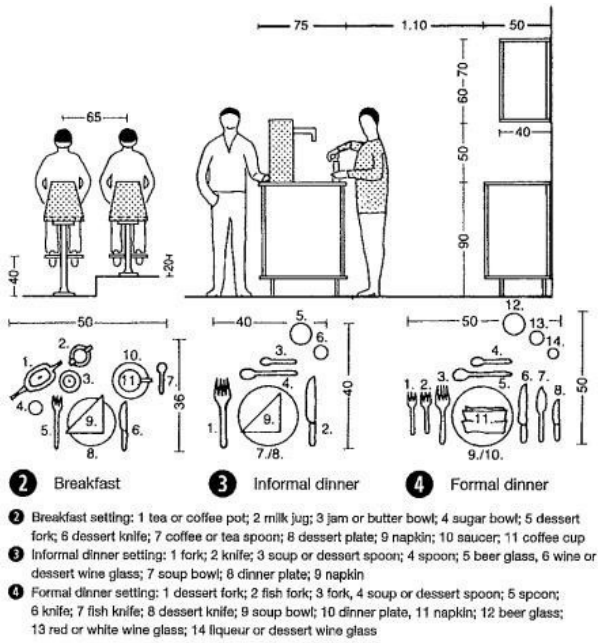
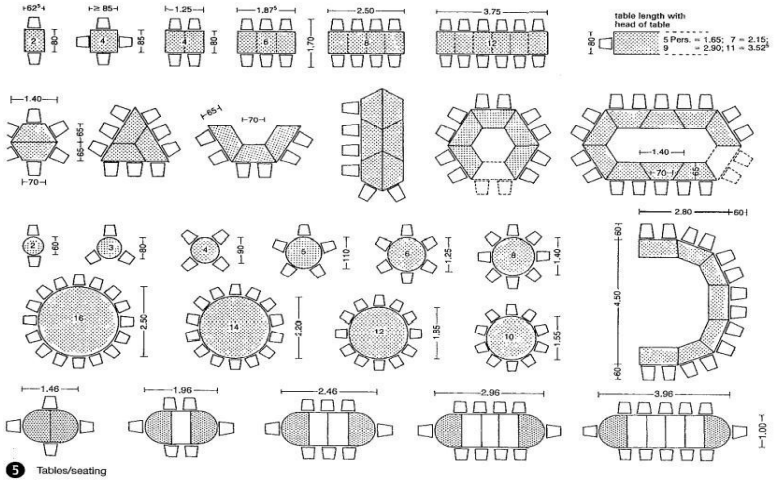


Figure 47 Fig-54: Area Specifications (Source: Time Savers Standards)

To be able to eat in comfort, one person requires a table area around 60 cm wide and 30-40 cm deep. This provides sufficient distance between adjacent diners. Although an additional 20 cm space in the centre for dishes and large bowls is sometimes desirable, an overall width of 80-85 cm is suitable for a dining table. If the food is served on plates, then 70 cm is sufficient, and for fast food, 60 cm table depth.



The distance between the table and wall is greater than or equal to 75 cm because the chair alone requires a space of 50 cm. If the space between the table and wall is also used for access, the distance should be greater than 100cm. Round tables need a little more space, a difference of up to 50cm.

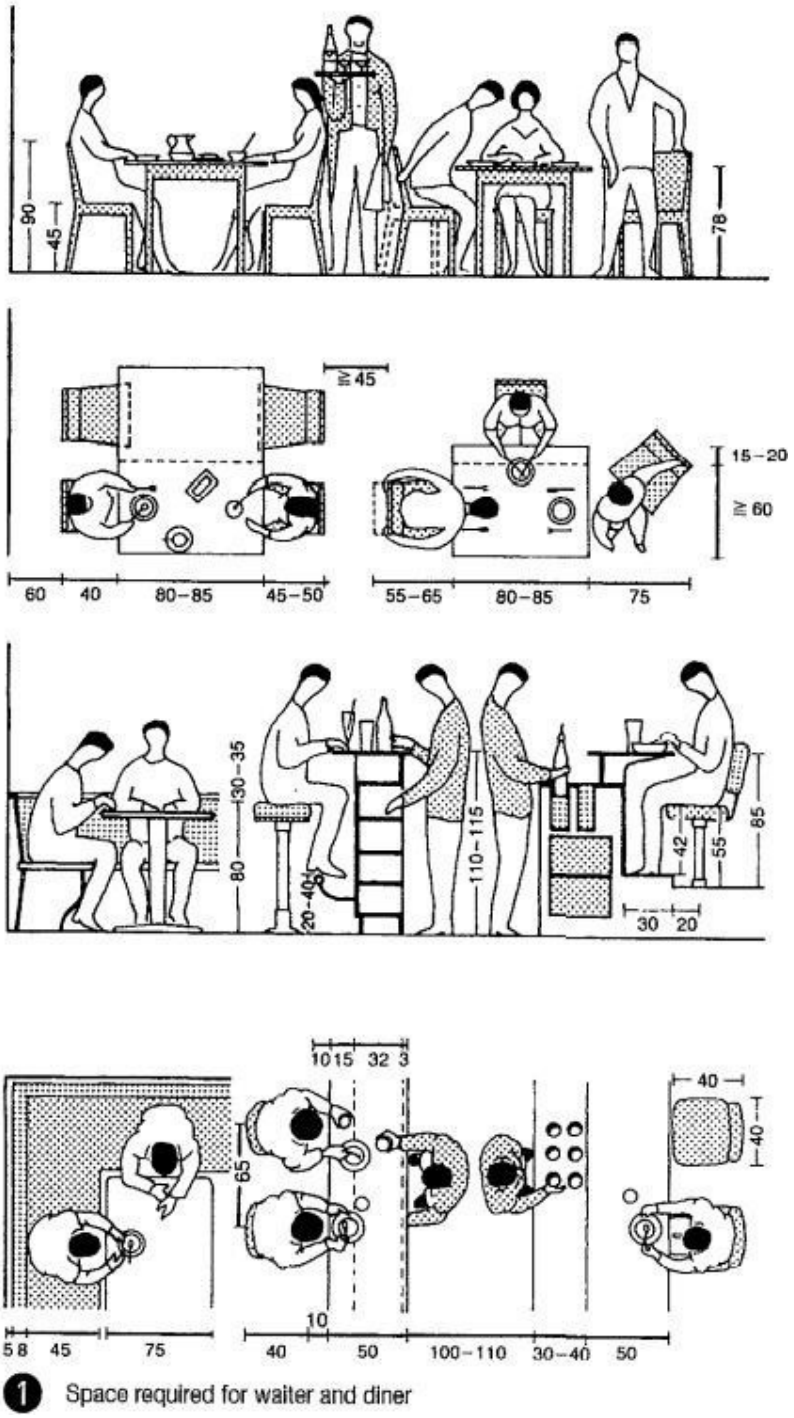
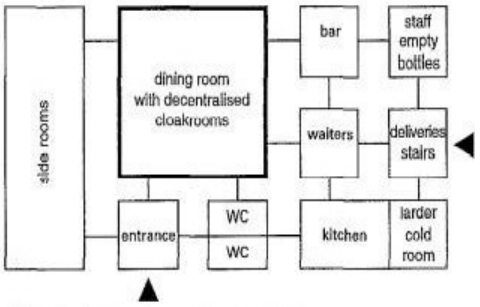


Figure 48 Area Specifications (Source: Time Savers Standards)

Larger dining rooms should be split into zones. Kitchen, side rooms, toilets, and sanitary installations should be grouped around the dining room, also in the basement.

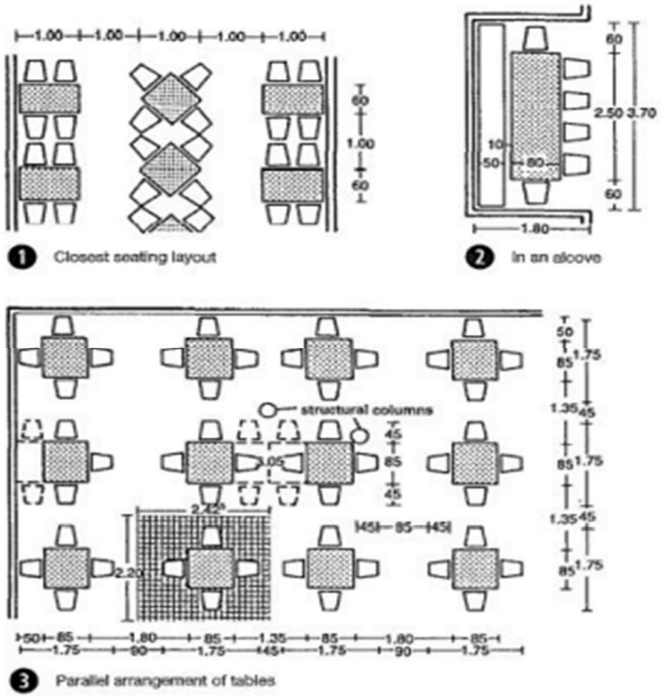


8 Functional scheme of a small restaurant

Type	Seat occupancy per meal	Kitchen floor area (m^2/cover)	Dining room floor area (m^2/seat)
exclusive restaurant	1	0.7	1.8–2.0
restaurant with rapid turnover, e.g. department store	2.5	0.5–0.6	1.4–1.6
standard restaurant	1.5	0.4–0.5	1.6–1.8
inn, guest house	1	0.3–0.4	1.6–1.8
for storerooms, personnel rooms etc., add approx. 80%			
cover = seat × seat turnover.			

11 Space requirements

Columns in a dining room are best located in the centre of a group of tables or at the corners of the tables. The ceiling heights of dining areas with a floor area less than or equal to 50m2=2.50m, > 50 m2 = 2.75 m, and >100m2 greater than or equal to 3.00 m; above or below galleries greater than or equal to 2.50 m.



1 Closest seating layout

2 In an alcove

3 Parallel arrangement of tables

Figure 49: Area Specifications (Source: Time Savers Standards)

Emergency exits are 1.0 m wide per 150 people using them. Minimum clear width of

aisles in restaurants0.80 m, doors: 0.90 m.

Toilets in public houses, bars or restaurants: Stairs to toilets, wash, staff and storage rooms, usable width less than or equal to 1.1 0 m. Clear walkthrough height is less than or equal to 2.10 m measured vertically. The window area is less than or equal to 1/10 of the floor area of a restaurant.

Floor area of dining room	Usable walking width
≤100 m²	≥1.10 m
≤250 m²	≥1.30 m
≤500 m²	≥1.65 m
≤1000 m²	≥1.80 m
>1000 m²	≥2.10 m

9 Usable width of stairs

Figure 50 Area Specifications (Source: Time Savers Standards)

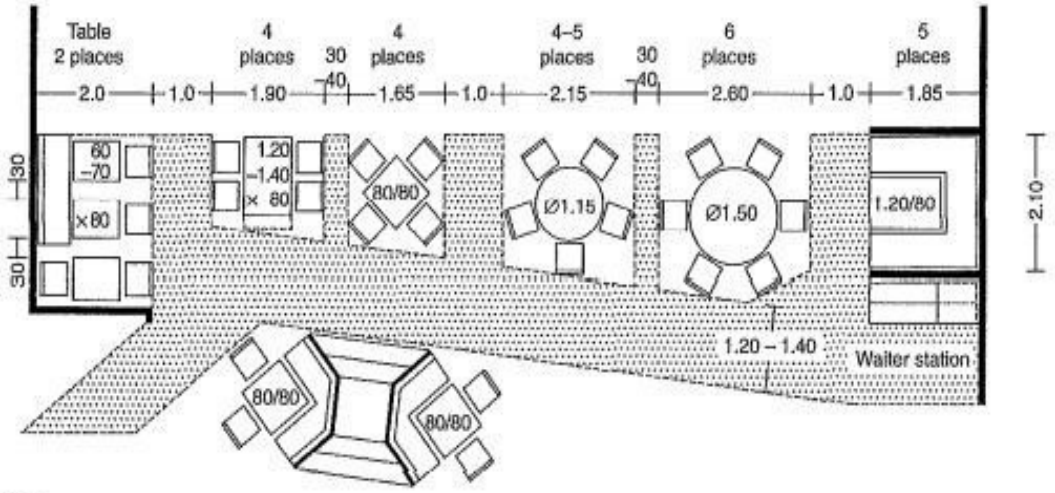
Furnishing (tables)	No. places	Waiter (m²/place)	Self-service (m²/place)
square	4	1.25	1.25
rectangular	4	1.10	1.25
rectangular	6	1.00	1.05
rectangular	8	1.10	1.10

12 Total space required for dining room: 1.4–1.6 m²/place

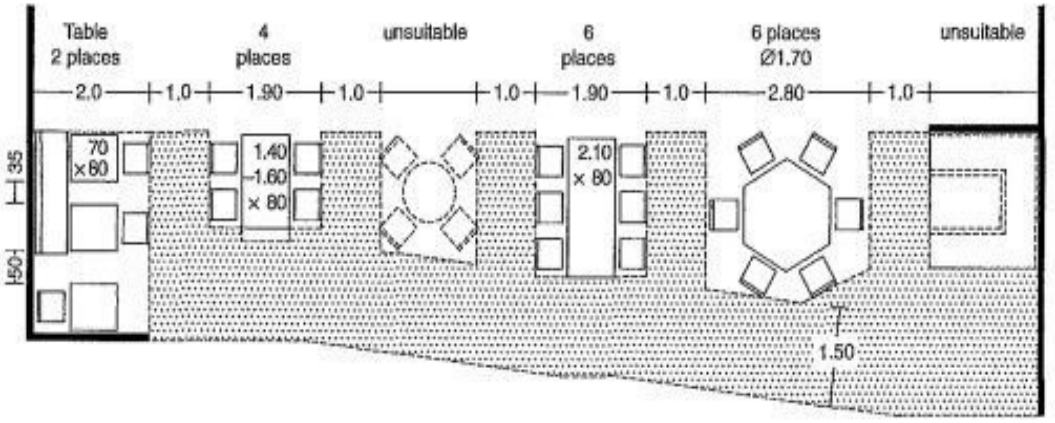
main aisles	min. 2.00 m wide
intermediate aisles	min. 0.90 m wide
side aisles	min. 1.20 m wide

13 Aisle widths

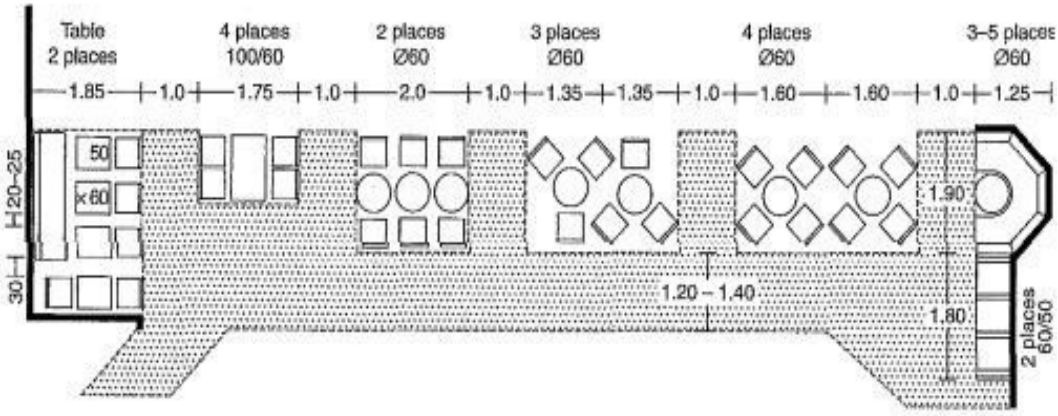
Figure 51 Area Specifications (Source: Time Savers Standards)



1 Table sizes in a restaurant: with predominantly plate service the table depth can be reduced to 70 cm



2 In a self-service restaurant



3 Bistro–café–bar

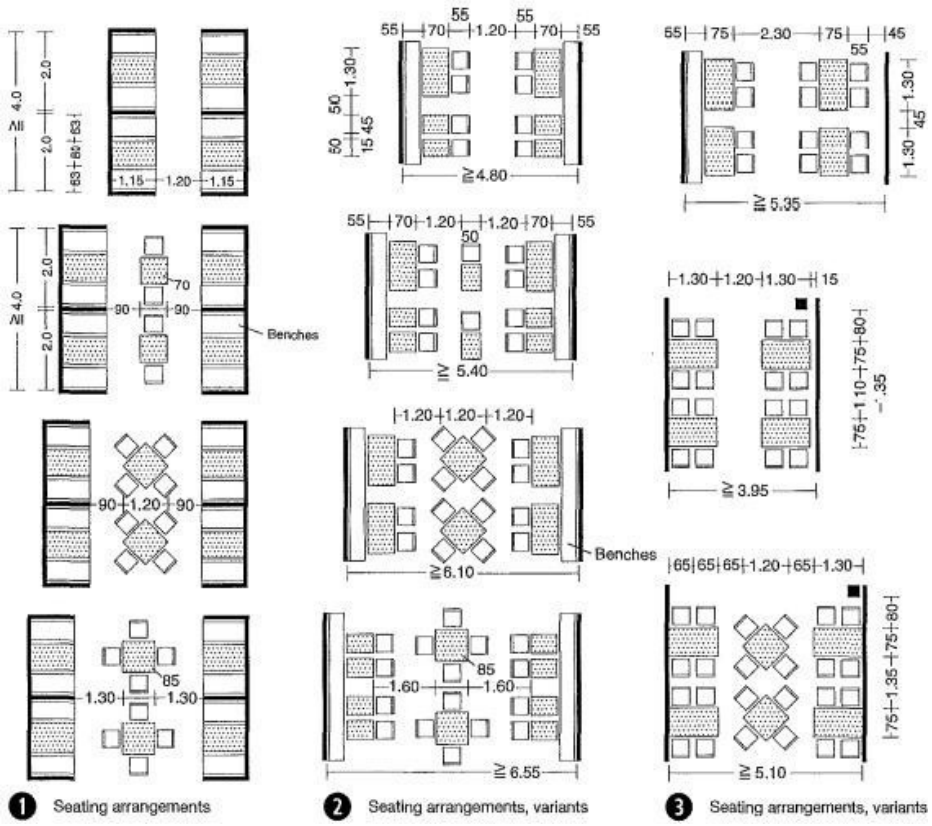


Figure 53 Area Specifications (Source: Time Savers Standards)

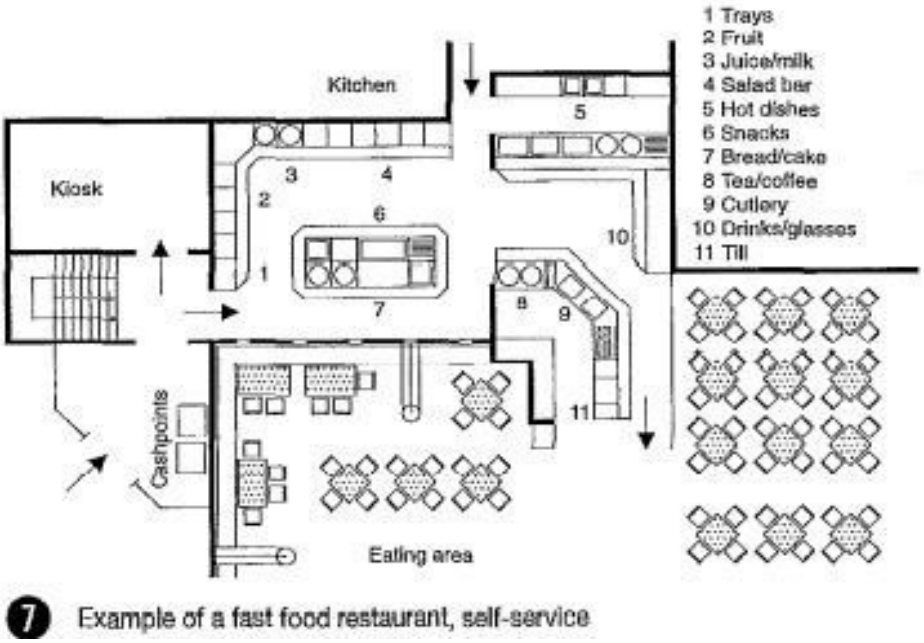


Figure 52 Area Specifications (Source: Time Savers Standards)

2.15 URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION AND IMPLEMENTATION GUIDELINES (URDPFI), (Annexure C):

1. MEANS OF ACCESS

For plot development of uses other than residential, the following minimum width corresponding to the length of the means of access shall be followed:

Sr. No.	Width of Means of Access (m)	Length of Means of Access (m)	Other Controls
1.	12.0	200	➢ The width of the means of access shall not be less than the internal access ways in layouts and subdivision.
2.	15.0	400	
3.	18.0	600	
4.	24.0	above 600	

Source: NBC, 2005.

Figure 54 Area Statement (Source: URDPFI GUIDELINES)

For high-rise buildings and buildings other than residential, the following additional provisions shall be ensured:

I. The width of the abutting main street shall not be less than 12 m, and one end of this street shall join another street not less than 12 m in width.

II. The approach to the building and open spaces on all sides up to 6 m width, and the layout shall be done in consultation with the Chief Fire Officer of the city.

III. The main entrance to the plot shall be a minimum of 6 m wide to allow easy access to a fire engine.

2. PARKING

2	Commercial Centres		
	Convenience Shopping Centre/Local Shopping Centre / Local Level Commercial areas	2 ECS / 100 sqm of floor area	--
	Service Market	2 ECS / 100 sqm of floor area	--
	Community Centre / Non- hierarchical Commercial Centre	3 ECS / 100 sqm of floor area	--
	District Centre/ Sub-Central Business District/Sub-City Level Commercial areas	3 ECS / 100 sqm of floor area	--
	Commercial Plot: Retail & Commerce Metropolitan City Centre	3 ECS / 100 sqm of floor area	--
	Hotel	3 ECS / 100 sqm of floor area	For Population between 2- 10 lakh – 1 car parking space for every 4 guest room. For Population between 10-50 lakh – 1 car parking space for every 3 guest room. For Population more than 50 lakh – 1 car parking space for t room[143].

Figure 55 Area Statement (Source: URDPFI GUIDELINES)

3. MINIMUM SETBACKS

- Setbacks based on Plot Sizes
- The following table may be referred to for deciding the minimum setbacks for different-sized plots in various use zones. The size of plots should be decided after taking into account the provisions of the National Housing Policy and the Urban Land (Ceiling and Regulation) Act. The setbacks, if necessary, may be changed depending upon the local situations and specified in the Development Plans and Building byelaws.

Sr. No.	Plot Size (in sqm)	Front (m)	Rear (m)		Side (m)	Side (m)
			Plains	Hill Towns	Plains	Hill Towns
1.	Upto 60	0	0	2	0	1.5
2.	Above 60 and upto 150	3	0	2	0	1.5
3.	Above 150 & upto 300	3	3	3	0	1.5
4.	Above 300 & upto 500	3	3	3	3	3
5.	Above 500 & upto 1000	6	3	3	3	3
6.	Above 1000 & upto 2000	9	3	3	3	3
7.	Above 2000 & upto 4000	9	6	6	6	6
8.	Above 4000 & upto 10000	9	6	6	6	6
9.	Above 10000	15	9	9	9	9

Source: UDPFI Guidelines 1996.

Table 12 Area Statement (Source: URDPFI GUIDELINES)

4. SETBACKS WITH RESPECT TO ABUTTING ROAD WIDTH

A. Front Setback

Sr. No.	Front Setback (m)	Width of street fronting the plot (m)	Remarks
1.	1.5	Upto 7.5	For buildings upto a maximum height of 7 m
2.	3.0	7.5 to 18	
3.	4.5	18 to 30	
4.	6.0	Above 30	

***Note**: For streets less than 7.5 m in width, the distance of the building (building line) shall be at least 5m from the centre line of the street.*

Table 13 Area Statement (Source: URDPFI GUIDELINES)

B. Rear and Side setback for building heights above 10m

Sr. No.	Height of Buildings (m)	Side and rear setbacks (m)	Other Controls
1.	10	3	➢ For buildings above 24 m in height, the minimum front setback shall be 6 m. ➢ Where rooms do not derive light and ventilation from the exterior open space, the width of such space shall be reduced by 1 m subject to a minimum of 3 m and maximum of 8m. ➢ Alternative setbacks for tower like structures ○ Upto height of 24 m with one setback: Minimum 6m ○ Between 24 m and 37.5 m with one setback: Minimum 9 m ○ Above 37.5 m with two setbacks: Minimum 12 m
2.	15	5	
3.	18	6	
4.	21	7	
5.	24	8	
6.	27	9	
7.	30	10	
8.	35	11	
9.	40	12	
10.	45	13	
11.	50	14	
12.	55 and above	16	

Table 14 Area Statement (Source: URDPFI GUIDELINES)

The open areas provided in the buildings can be used for the following permissible activities:

- Garden, rockery, water well and well structures, plant nursery, water pool, swimming pool (if uncovered), platform around a tree, landscaping, tank, fountain, bench, *chabutra* with open to pandunen closed on sides by walls, and the like.
- Drainage culvert, conduit, catch pit, gully pit, chamber, gutter, and the like.
- Compound wall, gate, un-storied porch and portico, canopy, slide, swing, uncovered staircase, ramps are covered by *chajja* and the like.
- Watchmen's booth, suction tank and pump-house, garbage shaft, sanitary block, parking lockup garages, electric cabin or substations, and such other utility structures meant for the services of the building under consideration ratio.

5. GROUND COVERAGE & FAR WATER SUPPLY:

Sr. No.	Hierarchy of Commercial Centre	Maximum Ground Coverage (%)		Maximum FAR		Maximum Height (m)		Other Controls
		Plains	Hills	Plains	Hills	Plains	Hills	
1.	Cluster Centre Convenience Shopping	40	40	60	60	15	6	
2.	Neighbourhood Centre	30	35	100	100	15	9	
3.	Community Centre	25	30	100	100	26	15	
4.	District Centre	25	25	125	125	37	15	Some of the buildings in Plains could be permitted upto 50 m height with the approval of the Government for achieving an urban form.
5.	Sub city centre	--	--	--	--	--	--	Controls to be as per requirement
6.	City Centre	25 (MPD, pg 59)	--	150 (MPD, pg 59)	--	--	--	Other controls to be as per requirement
7.	Hotel	40 (MPD, pg 59)	--	225	--	--	--	Other controls to be as per requirement
8.	Service Apartment	30	--	150	--	--	--	Other controls to be as per requirement
9.	Any other commercial centre	25%	--	100	--	--	--	Other controls to be as per requirement

Source: UDPFI Guidelines 1996, MPD.

Table 15 Area Statement (Source: URDPFI GUIDELINES)

6. WATER-SUPPLY

The CPHEEO Manual recommends fire-fighting water demand as a function of population,

i.e., water demand for fire-fighting purposes = 100√P, where P stands for forecasted population, may be adopted for communities larger than 50,000. It is desirable that one-third of the fire-fighting requirements from part of the service storage. The balance requirement may be distributed in several static tanks at strategic points. These static tanks may be filled from nearby ponds, streams, or canals by water tankers wherever feasible. The pressure required for firefighting would have to be boosted by fire engines.

S. No.	Institutions	Litres per head per day
1	Hospital (including laundry) a. no of beds exceeding 100 b. no. of beds not exceeding 100	a. 450 (per bed) b. 340 (per bed)
2	Hotels	180 (per bed)
3	Hostels	135
4	Nurses homes and medical quarters	135
5	Boarding schools/colleges	135
6	Restaurants	70 (per seat)
7	Airport and seaports	70
8	Junction stations and intermediate station where mail or express stoppage (both railway and bus stations) is provided	70
9	Terminal stations	45
10	Intermediate stations (excluding mail and express stops)	45 (could be reduced to 25 where bathing facilities are not provided)
11	Day Schools/colleges	45
12	Offices	45
13	Factories	45(could be reduced to 30 where no bathing rooms are required to be provided)
14	Cinema, concert halls and theatres	15

Source: CPHEEO Manual, 1999.

Table 16 Area Statement (Source: URDPFI GUIDELINES)

7. FIRE FIGHTING:

The CPHEEO Manual recommends fire-fighting water demand as a function of population, ie, water demand for fire-fighting purposes = 100√P, where P stands for forecasted population, may be adopted for communities larger than 50,000. It is desirable that one-third of the fire-fighting requirements from part of the service storage. The balance requirement may be

Distributed in several static tanks at strategic points. These static tanks may be filled from nearby ponds, streams, or canals by water tankers wherever feasible. The pressure required for firefighting would have to be boosted by fire engines.

8. SOLID WASTE MANAGEMENT:

Municipal Solid Waste (MSW) is the trash or garbage that is discarded day to day in a human settlement. According to MSW Rules 2000, MSW includes commercial and residential wastes generated in a municipal or notified area in either solid or semisolid form, excluding industrial hazardous wastes but including treated bio-medical wastes. Waste generation encompasses activities in which materials are identified as no longer being of value (being in the present form) and are 95itherr thrown away or gathered together for disposal. The following table indicates the waste generation per capita per day for estimation and forecast of waste generation for the future, for planning purposes:

S.No.	Land use type	Estimated waste generation
1	Residential refuse	0.3 to 0.6 kg/cap/day
2	Commercial refuse	0.1 to 0.2 kg/cap/day
3	Street sweepings	0.05 to 0.2 kg/cap/day
4	Institutional refuse	0.05 to 0.2 kg/cap/day

Source: Manual on Solid Waste Management, CPHEEO – 2000

Table 17 Area Statement (Source: URDPFI GUIDELINES)

2.16 INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS:

I. BUILDING

In addition to the recommendations in the code, the building in which the food service establishment is located shall also conform to the local building byelaws in force. The building should be of a permanent nature and maintained in a proper state of repair and cleanliness.

II. FLOORS

The floors of all rooms in which food or drink is stored, prepared, or served, and of all washing places shall be of such construction as to be impervious, easily cleansed, smooth, and in good repair. All floors shall be kept clean and free from litter. Dustless method of floor Cleaning shall be used; all except emergency floor cleaning shall be done during the period when the least amount of food and drink is exposed.

III. WALLS

The walls shall have a smooth, non-absorbent surface, free from cracks and crevices, to facilitate their efficient cleaning.

The walls of all rooms in which food or drink is prepared, or utensils are washed, shall have a smooth washable surface up to a minimum height of 2-O m from the floor.

IV. CEILING

Ceilings must be clean, leak-proof, smooth, and non-absorbent, with no cracks or crevices, ensuring ease of cleaning and resistance to moisture, grease, and mold. Light-colored finishes are preferred to enhance lighting and visibility.

Suspended ceilings should allow easy access for maintenance of services like ducts and lighting. All joints must be sealed to prevent dust and pest entry, and surfaces should withstand regular cleaning and sanitizing.

V. DOOR AND WINDOWS

In the absence of air-conditioning, all openings to the outer air, including doors, windows, sky skylights, shall be effectively screened with tight-fitting screens free from holes with a wire gauge conforming to IS: 1568-

1960*. The doors, when not in use, shall be kept in the closed position. Self-closing screened doors to the outer air shall open outwards. Other methods approved by the authority shall be employed to ensure the absence of flies

VI. LIGHTING

TABLE 1 RECOMMENDED VALUES OF ILLUMINATION

The lighting of some of these locations will be determined primarily by aesthetic considerations and the recommended illumination values as given in IS : 3646 (Part II)-1966* may be taken as a guide only.

Sl No.	Areas	Illumination, Lux
(1)	(2)	(3)
i)	Entrance halls	150
ii)	Reception and accounts	300
iii)	Dining rooms (tables)	100
iv)	Lounges	150
v)	Bedrooms:	
	a) General	100
	b) Dressing tables, bed heads, etc	200
vi)	Writing rooms (tables)	300
vii)	Corridors	70
viii)	Stairs	100
ix)	Laundries	200
x)	Kitchens	†200
xi)	Goods and passenger lifts	70
xii)	Clockrooms and toilets	†200
xiii)	Dining rooms:	
	a) Tables	100
	b) Cash desks	300

Table 19 Area Statement (Source: INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS)

†Supplementary local lighting should be provided over kitchen equipment and mirrors.

VII. VENTILATION

In case of air-conditioned buildings, the minimum standards of mechanical ventilation shall be maintained as given.

TABLE 2 VENTILATION REQUIREMENTS FOR NON-AIRCONDITIONED BUILDINGS

Sl No.	Area	Air Changes per Hour
(1)	(2)	(3)
i)	Living rooms	3
ii)	Dining and lounge	2-3
iii)	Big kitchen	12
iv)	Small kitchen	6
v)	Toilets	6

Table 20 Area Statement (Source: INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS)

VIII. WATER SUPPLY

There shall be an adequate supply of safe and potable water. Running water shall be easily accessible to all rooms in which food is prepared or utensils are washed. Requirements for water supply for hotels and restaurants shall be as given.

TABLE 3 WATER SUPPLY REQUIREMENTS FOR HOTELS AND RESTAURANTS

Sl No.	Description	Non-Airconditioned (Litres per Day)	Air Conditioned (Litres per Day)
(1)	(2)	(3)	(4)
i)	Hotels (per bed)	180	275
ii)	Restaurants (per seat)	70	97

Note — In hotels where laundry is provided arrangement for an extra quantity of 120 litres per bed should be made.

Table 21 Area Statement (Source: INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS)

Storage of Water:

For the storage of water, proper receptacles made of galvanized iron or other suitable material shall be used. Such receptacles shall he kept covered with tight-fitting lids and shall have screw caps at the bottom for draining out residual water. The receptacles shall be placed on a stand or a platform easily accessible for the purpose of maintenance and cleaning. The receptacles shall be examined and cleaned regularly.

IX. DRAINAGE:

Adequate arrangements shall be made for satisfactory drainage of all sewage and wastewater. Harmful wastewater, such as water containing kitchen waste, &all be satisfactorily disposed of. The drainage shall be so designed as to cause no stagnation at the maximum discharge rate for which the different units are designed. The requirements

for fitments for drainage and sanitation shall conform to the requirements given.

Septic tanks conforming to IS: 2470 (Part I)- 1963* or IS: 2470 (Part II)-l964 shall be provided if required by the authority. The gradient of the drains should be such that no

TABLE 4 REQUIREMENTS OF DRAINAGE AND SANITATION FITMENTS IN HOTELS

(*Clause* 14.1.1)

Sl No.	Fitments	For Residential Public and Staff	For Public Rooms		For Non-Residential Staff	
			For Males	For Females	For Males	For Females
(1)	(2)	(3)	(4)	(5)	(6)	(7)
i)	Water-closets	1 per 8 persons omitting occupants of the room with attached water-closets; minimum of 2 if both sexes are lodged	1 per 100 persons up to 400 persons; and for over 400, add at the rate of 1 per 250 persons or part thereof	2 per 100 persons up to 200 persons; and for over 200, add at the rate of 1 per 100 persons or part thereof	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
ii)	Ablution taps	1 in each water-closet	1 in each water-closet	1 in each water-closet	1 in each water-closet	1 in each water-closet
		1 water tap with draining arrangements shall be provided for every 50 persons or part thereof in the vicinity of water-closets and urinals				
iii)	Urinals	—	1 per 50 persons or part thereof	—	Nil up to 6 persons 1 for 7-20 persons 2 for 21-45 persons 3 for 46-70 persons 4 for 71-100 persons	—
iv)	Wash basins	1 per 10 persons omitting the wash basins installed in the room suite	1 per water-closet and urinal provided	1 per water-closet provided	1 for 1-15 persons 2 for 16-35 persons 3 for 36-65 persons 4 for 66-100 persons	1 for 1-12 persons 2 for 13-25 persons 3 for 26-40 persons 4 for 41-57 persons 5 for 58-77 persons 6 for 78-100 persons
v)	Baths	1 per 10 persons omitting occupants of the room with bath *en suite*	—	—	—	—
vi)	Slop sinks	1 per 30 bedrooms, minimum 1 per floor	—	—	—	—
vii)	Kitchen sinks and dish washers	← 1 in each kitchen →				

NOTE 1 — Some of the water closets may be of European style if desired.

NOTE 2 — It may be assumed that two-thirds of the number are males and one-third females.

Table 22 Area Statement (Source: INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS)

water stagnates anywhere within the premises. Where no sewerage is provided for the final outfall, soak pits or access pools to the satisfaction of the Authority should be provided.

X. KITCHEN

The kitchen shall be sufficiently spacious and should be of a size in proportion to the average number of diners catered for at one meal. The floor space in the kitchen shall be calculated at the rate of 0.5 me Min per diner. In case of snack bars, soda fountains, etc, the service-cum dispensing area shall be treated as part of the kitchen.

The minimum size of the kitchen should not be less than 10 square meters, and none of the sides should be less than 2.4 meters. Exhaust fans should have provisions for grease filters for collecting grease.

XI. STORAGE AND HANDLING EQUIPMENT (Annexure D):

All containers and utensils shall be stored at a height of not less than. 430 mm above the floor in a clean, dry place protected from flies, splash, dust, overhead leakage, and other contamination.

STORAGE OF FOOD STUFF

All perishable food shall be stored at the temperatures as given below:

TABLE 6 STORAGE TEMPERATURES FOR FOODSTUFF

Sl No.	Names of Articles	Storage Temperature °C
(1)	(2)	(3)
i)	Meat, meat products, poultry	0·00 to 1·50
ii)	Fresh fish and sea food	−2·00 ,, −0·50
iii)	Dairy products and eggs	0·50 ,, 2·50
iv)	Fresh fruit and vegetables	2·00 ,, 4·50
v)	Ice-creams	−14·50 ,, −12·00

Note 1 — Potatoes need no refrigeration, but should be stored away from light.

Note 2 — Fish and sea foods shall be stored in separate compartments so as not to affect other materials.

Table 23 Area Statement (Source: INDIAN STANDARD CODE FOR HOTELS AND RESTAURANTS)

XII. ACOUSTICS

Food service establishments (hotels, restaurants, etc) shall adopt suitable noise control measures to provide adequate sound insulation against various noise sources that would cause disturbance to human comfort and efficiency.

XIII. FIRE SAFETY REQUIREMENTS

All buildings and particularly buildings having more than one storey shall be provided with liberally demiglace safe-fire-resistant exits or escapes.

The exits shall be so placed that they are always immediately accessible and each is capable of taking all the persons on that floor, as alternative escape routes may be rendered unsuitable and/or unsafe due to fire.

The escape route shall be well-ventilated, as persons using the escape are likely to be overcome by smoke and/or fumes which may enter from the floor.

Basements- It is essential that the fire resistance of the basement conforms to the highest order, and all columns for separating the upper structure shall have grading not less than the standards laid down for Grade 3.

2.17 Room Typology in Luxury Resorts

2.17.1 Introduction

Room typology in luxury resorts is more than a matter of size and price—it is a reflection of architectural intent, market segmentation, operational strategy, and guest experience design. As the hospitality industry becomes more experience-driven, room typologies are evolving to provide personalization, flexibility, and value differentiation.

According to *Ching (2014)* and *Allen & Iano (2017)*, spatial hierarchies in building design serve to define user priorities and expectations. In resorts, this is especially true where room typologies establish a guest's lifestyle, privacy, and level of exclusivity.

2.17.2 Typological Hierarchy and Guest Segmentation

Luxury resorts generally follow a hierarchical room typology system that starts with standard or deluxe rooms and progresses to junior suites, full suites, and exclusive villas. Each level is designed to cater to a specific guest profile:

- **Standard/Deluxe Rooms** (30–45 m²): Designed for short-stay guests, solo travellers, or couples. Includes basic luxury amenities such as AC, minibar, Wi-Fi, and a TV.
- **Premium/Luxury Rooms** (45–60 m²): Often Sea/lake facing, these rooms include extended amenities like balconies, mood lighting, and premium toiletries. Targeted at mid-range leisure travellers.
- **Suites** (70–100 m²): Include dedicated living spaces, large bathrooms, walk-in wardrobes, and entertainment setups. These appeal to long-stay guests or small families.
- **Villas** (100–200+ m²): Offer complete seclusion, private pools, garden patios, and butler services. Designed for high-net-worth individuals, wedding guests, or honeymooners.

(*Luxury Design Quarterly*, 2022) notes that this spatial layering is crucial in revenue optimization, as it allows resorts to target different price bands while using modular design and services.

2.17.3 Amenities and Spatial Experience

The evolution of room typologies has also been linked to the inclusion of tailored amenities. A study by *Resort Architecture Today (2021)* found that the perceived value of a room is increasingly linked to non-structural elements like view orientation, personalized interiors, wellness features (jacuzzis, yoga decks), and digital enhancements (smart lighting, app-controlled services).

Higher typologies tend to offer:

- Larger bathrooms with bathtubs and dual vanities.
- Lounge or work zones to accommodate business-leisure travelers.
- Interconnected rooms for families.
- Outdoor decks and private plunge pools in villas.

Room orientation is also crucial—*Stachura (2020)* suggests that lake, forest, or ocean-facing rooms consistently generate 15–30% higher average daily rates (ADR) than inward-facing counterparts.

2.17.4 Emerging Trends

Recent years have seen notable shifts in how room typologies are designed and marketed:

- **Personalization & Theming**: Brands like Taj and Six Senses offer regionally inspired suites that reflect local culture, art, or landscape in their décor and layout.
- **Hybrid Functionality**: Rooms increasingly accommodate remote working needs post-pandemic—ergonomic desks, soundproofing, and tech integrations are standard in premium rooms.
- **Sustainable Typologies**: Eco-resorts now offer “earth villas” or “jungle pods” made from sustainable materials, blending minimalism with comfort.
- **Family & Wellness Clusters**: Some properties group typologies like villas with

interconnecting rooms, spa suites, or meditation zones to cater to niche groups.

2.17.5 Conclusion

Room typology in luxury resorts is not static; it evolves with changing guest expectations, technological advancement, and contextual design. A well-defined typological hierarchy improves guest satisfaction, supports brand positioning, and optimizes both CapEx and OpEx. For a resort in coastal or heritage-rich locations like **Vizag**, the typology must balance visual access to the site's natural beauty with personalized spatial experiences tailored to a diverse clientele.

Chapter 3
SITE INVENTORY

3.1 CONNECTIVITY TO VISHAKHAPATNAM

3.1.1 INTRODUCTION

- **City Area**: Approximately **682 km²** under the Greater Visakhapatnam Municipal Corporation (GVMC).
- **Population:** Estimated **2.45 million** (2024) with the metro region over **60 lakh** (6 million) when including Greater Visakhapatnam Metropolitan Region Development Authority (VMRDA) jurisdictions.
- **Regional Status**: Vizag is a rapidly expanding coastal city with growing IT, naval, industrial, and tourism infrastructure.
- Closest Metro Station (Planned): Metro corridor underway; Phase-1 includes stations like Kommadi, Maddilapalem, Chinavalteru (RK Beach). Approx. 20–30 min surface transit to central zones.
- **Railway Station:** Visakhapatnam Junction (~11 km / 20-30 min from airport) serving A1-category traffic, with suburban hubs like Simhachalam and Gopalapatnam.
- **Airport:** Visakhapatnam International Airport (VTZ), about 9–11 km (~20–25 min drive) from the city center. New Bhogapuram (Alluri Sitarama Raju) Airport is under construction, ~44 km out.

- **Contour, Terrain, and orientation:**

The site contour for the luxury resort in Vizag ranges from **18 m to 22 m** above sea level, indicating a gentle coastal slope of approximately **4 meters** across the site. This natural gradient is ideal for **tiered resort planning**, allowing for **stepped landscape features**, unobstructed sea views, and **gravity-assisted drainage** without major earthwork interventions.

The terrain consists primarily of **coastal alluvial soil** mixed with patches of **laterite and sandy loam**, offering moderate permeability and requiring **soil stabilization** measures in structural foundations. Given Vizag's **humid tropical climate** with strong sea breezes and seasonal rainfall, the terrain also supports lush coastal vegetation, enhancing the site's ecological value.

The **optimal site orientation** would be **east to southeast**, maximizing **morning sunlight**, enhancing natural lighting in public areas, and aligning guest rooms or villas to face the **Bay of Bengal**. This orientation not only enhances **visual and experiential quality** but also leverages prevailing sea breezes for **natural ventilation**, thereby improving **thermal comfort** and reducing HVAC energy loads. Such a passive design approach aligns with **sustainable resort development principles** in coastal zones.

3.1.2 ROADWAYS

Visakhapatnam is a key coastal city with growing infrastructure and is well-connected through several National Highways (NH) and state roads, making the VMRDA Park area easily accessible for tourism and resort development:

- NH 16 *(Part of Golden Quadrilateral)*: One of India's busiest highways, it passes through Vizag and connects Kolkata to Chennai, ensuring excellent access from major eastern cities. It runs parallel to the coast, just a few kilometers inland from the resort zone.
- NH 516: A key spur road from NH 16, this connects central Vizag areas—including Beach Road and VMRDA Park—to the larger highway network. Ideal for tourist traffic and resort access.
- Proposed Coastal Highway Corridor: Under the Bharatmala Project, a new coastal highway is being planned to further strengthen connectivity along Andhra Pradesh's coast, which will benefit long-term accessibility to resorts in this area.
- Beach Road (Ramakrishna Beach – Bheemili Stretch): A scenic coastal boulevard that directly serves VMRDA Park and the surrounding hospitality zone. It's frequently used by both locals and tourists for recreational and resort access.
- State Highways & Local Roads: Well-developed arterial and sub-arterial roads connect the resort location to Vizag city center (~6–8 km), Railway Station (~9–11 km), and Airport (~11 km).

3.1.3 Regional Road Transport:

The APSRTC bus network connects Vizag to major cities across Andhra Pradesh like Vijayawada, Tirupati, Rajahmundry, and Kakinada, as well as interstate destinations in Telangana, Odisha, and Chhattisgarh, including Hyderabad, Bhubaneswar, and Raipur.

Key terminals such as the RTC Complex (~7 km) and Maddilapalem Depot (~5 km) are within easy reach of VMRDA Park. Premium private operators also provide luxury coach services to Chennai, Kolkata, and Bengaluru.

This ensures convenient regional access for both domestic tourists and long-distance travelers visiting the resort.

3.1.4 RAILWAYS

- **Visakhapatnam Junction (VSKP)** is the city's main railway station, classified as an **A1-category station** under the East Coast Railway zone, located about **9–11 km** from VMRDA Park.
- Other nearby stations include **Duvvada**, **Simhachalam**, and **Marripalem Halt**, serving regional and suburban traffic.
- Vizag has **direct rail connectivity** to all major Indian cities, including **Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad**, and **Bhubaneswar**.

- **Suburban and MEMU services** operate frequently within the Visakhapatnam metropolitan region, offering additional convenience for local travel and resort staff commuting.



Figure 56 HYDERABAD RAILWAY MAP

3.1.5 AIRWAYS

- **Visakhapatnam International Airport (VTZ)** is located in **Gollapalli**, about **11 km** from VMRDA Park, offering **convenient access** to the resort via Beach Road or NH 16.
- The airport is well-connected to major domestic hubs like **Delhi, Mumbai, Bengaluru, Chennai**, and **Hyderabad**.
- It also operates **international flights** to **Dubai**, **Singapore**, and **Kuala Lumpur**, with seasonal or chartered flights to other Southeast Asian and Gulf destinations.
- VTZ serves as a growing regional hub for carriers like **IndiGo**, **Air India**, and **SpiceJet**, with future expansion planned through the **Bhogapuram International Airport**, ~44 km away.

3.2 PROXIMITY



3.2.1 SAFETY AND STRUCTURES ON SITE

The surroundings of the site are safe & sound.

There are no on-site structures on site other than fencing. The site is covered with wild vegetation. The site has garbage dumped in some of its areas

3.3 CLIMATE ANALYSIS

3.3.1 CLIMATE OF VISAKHAPATNAM

Visakhapatnam (Vizag) has a **tropical wet-and-dry climate** with high humidity due to its coastal location along the Bay of Bengal. Average temperatures range from **24°C in winter to 34°C in summer**, with peak summer temperatures often touching 38–40°C. The **southwest monsoon (June–September)** brings heavy rainfall, averaging around **950–1,200 mm annually**. Winters (December–February) are mild and pleasant, while summers are hot and humid. The city experiences **moderate to high relative humidity (60–85%) year-round**. Being on the cyclone-prone east coast, Vizag occasionally faces **severe cyclonic storms** during pre- and post-monsoon seasons, influencing design and planning.

3.3.2 SOLAR RADIATION AND SKY DOME

It annually receives 1,825 kWh/m²/year of solar radiation, which creates a great scope for solar panels.

3.3.3 CLIMATE RESPONSIVE DESIGN CONSIDERATIONS

- **Window overhangs** (designed for this latitude) or **operable sunshades** (awnings that extend in summer) **can reduce or eliminate air conditioning.**

- **Minimize or eliminate west-facing glazing** to reduce summer and fall afternoon heat gain.
- On hot days, **ceiling fans or indoor air motion** can make it **seem cooler by 5 degrees F (2.8 °C)** or more, thus less air conditioning is needed.
- In this climate, air conditioning will always be needed, but can be greatly reduced if building design minimizes overheating and uses the **radiant cooling** method.
- Good **natural ventilation** can reduce or eliminate air conditioning in warm weather, if windows are well shaded and oriented to prevailing breezes.
- Climate-responsive buildings in hot, windy, dry climates used enclosed, **well-shaded courtyards**, with a **small fountain** to provide wind-protected microclimates.
- Use **light colored building** materials and cool roofs (with high emissivity) to minimize conducted heat gain. **Flat roofs work well in hot, dry climates (especially if light colored).**
- A **radiant barrier** (shiny foil) will help reduce radiated heat gain through the roof in hot climates
- Use **plant materials** (bushes, trees, ivy-covered walls) especially on the west to minimize heat gain (if summer rains support native plant growth).
- **Long, narrow building floorplan** can help maximize cross ventilation in temperate and hot, humid climates.
- **Orient most of the glass to the north, shaded by vertical fins**, in very hot climates, because there are essentially no passive solar needs.

3.4 NEIGHBOURHOOD CONTEXT

3.4.1 SHADOW PATTERN OF NEARBY BUILDINGS

Height of notable buildings

Orientation of buildings

1. The Park Hotel, Visakhapatnam

- **Height**: ~22–25 m
  (≈ 6–7 floors)
- **Orientation:**
  - Longer façade faces EAST toward the sea
  - Secondary façade faces North–South along Beach Road
- **Notes:** All sea-facing rooms oriented toward *east for sunrise views*.

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2. Novotel Visakhapatnam Varun Beach

(about 350 m from VMRDA Park)

- **Height:** ~30–35 m
  (≈ 8–9 floors)
- **Orientation:**
  - Primary façade faces East (Beach)
  - Building massing is slightly angled NE–SW to maximize ocean frontage
- **Notes:** Curved elevation facing the bay.

3. Hotel Welcome ITC (The Welcomhotel Devee Grand Bay)

- **Height**: ~28–30 m
  (≈ 7–8 floors)
- **Orientation:**
  - Faces SE/E—angled slightly to capture ocean view
- Notes: Located immediately north of VMRDA Park.

4. The Gateway Hotel (Taj) – Beach Road

- **Height:** ~20–22 m
  (≈ 5–6 floors)
- **Orientation:**
  - Sea-facing orientation East
  - Slight angle toward NE to increase window frontage
- **Notes**: Terrace and pool face the ocean.

5. VMRDA Kursura Submarine Museum

- **Height:** ~10–11 m (submarine conning tower height)
- **Orientation:**
  - Submarine axis runs North–South
- **Notes:** Positioned on beach sand platform.

6. TU-142 Aircraft Museum

- **Height:** ~12–14 m (tail height)
- **Orientation:**
  - Aircraft parked facing North-East
- **Notes:** Wingspan placed parallel to beach curve.

7. VMRDA Children's Arena

- **Height:** ~12–15 m (auditorium hall)
- **Orientation:**
    - Main entrance faces West
    - Rear side opens toward East (toward park + beach)

8. Sea Pearl Hotel

- **Height:** ~20–23 m (≈ 5–6 floors)
- **Orientation:**
    - Faces East
    - Slight rotation N–S along Beach Road

9. Palm Beach Hotel & Resort

- **Height:** ~15–20 m
- **Orientation:**
    - Faces East toward the ocean
    - Older block aligned NS, newer blocks slightly angled NE

3.4.2SURFACES, MATERIALS & URBAN DESIGN ELEMENTS

Surface & Materials

- **Exteriors:** Glass facades, metal cladding, stone, concrete, and green walls.
- **Interiors:** Marble, tiles, vinyl flooring, drywall, acoustic panels, modular furniture, and glass partitions.
- **Sustainability:** Solar panels, recycled materials, and eco-friendly paints.
- **Roads:** Asphalt, Concrete
- **Pathways:** Interlocking Blocks, Cobble Stones, Concrete

Water Bodies near Site

Urban Design Elements

- **Parks and Green Spaces: Pocket parks, landscaped gardens, and green belts promoting relaxation and ecological balance.**
- **Pathways and Connectivity**
- **Pedestrian Walkways: Paved, shaded, and accessible for all users.**
- **Cycle Tracks: Dedicated lanes encouraging sustainable commuting.**
- **Skywalks and Foot Over Bridges (FOBs): Seamless connectivity across major roads.**
- **Streetscape Design: Street Trees and Planters, Wayfinding Signage, Public Art Installations**
- **Transport and Mobility: Bus Stops and Shelters, Metro Connectivity, EV Charging Stations**
- **Smart Urban Features: Wi-Fi Zones, Smart Poles, Interactive Kiosks**

3.5 TOPOGRAPHY

Topography of Visakhapatnam

Visakhapatnam (Vizag), located on the eastern coast of India in Andhra Pradesh, has a **unique and complex topography** created by the interaction of the Eastern Ghats and the Bay of Bengal. Its physical setting is one of the most diverse among Indian coastal cities.

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1. Coastal Plains

• Low-lying coastal plains run parallel to the Bay of Bengal.
• Elevation generally ranges **0–15 metres above mean sea level**.
• Consists of sandy beaches, dune structures, and flat buildable land.
• Areas include: Ramakrishna Beach, Rushikonda, Sagarnagar, and the port region.
• Susceptible to storm surges and cyclonic effects, but stable for construction with proper CRZ compliance.

2. Eastern Ghats Hill Ranges

Visakhapatnam is unique because **hills enter the city**, forming natural divisions.

• Hills belong to the **Eastern Ghats mountain system**.
• Heights range from **150 to 600 metres**.
• Major hill ranges include:

- Kailasagiri Hill
- Yarada Hill
- Simhachalam Hill
- Dolphin's Nose (358 m)
- Kambalakonda Reserve hills

These hills form ridges, rocky spurs, and steep slopes, influencing wind, drainage, and vistas.

3. Valleys and Basins

Between the hills lie narrow, elongated valleys that shape natural drainage networks.

• Provide **air flow corridors and green belts**.
• Low-lying basins often become urban catchments.
• Key valleys:

- Madhurawada Valley
- Simhachalam–NAD valley system
- Bheemili–Madhurawada rolling plains

Many residential colonies are developed along these valleys due to the gentle slopes.

4. Rolling Undulating Terrain

Most of northern Visakhapatnam (Madhurawada, Bheemili, Chinna Waltair) features **gentle to moderate undulating terrain**.

• Slopes range from **3% to 15%**.
• This makes it highly suitable for **institutional campuses, resorts, and gated communities**.
• Provides natural drainage and good view corridors of hills and sea.

5. Water Bodies & Natural Drainage

• Several seasonal streams (geddas) originate from the hills and drain into the sea.
• Key lakes/water bodies:

- **Meghadri Lake**
- **Mudasarlova Reservoir**

- **Gambhiram Gedda**
- **Tenneti Park coastal drainage basin**

These form important eco-hydrological systems requiring protection.

6. Soil Profile

The topography affects soil distribution:

• Coastal belt → **sandy soils**
• Mid-city plains → **red loamy soils**
• Hill slopes → **rocky laterite and khondalite formations**
• Valleys → **alluvial fertile soils**

This is important for construction, vegetation selection, and foundation design.

7. Seismic & Stability Considerations

Visakhapatnam lies in **Seismic Zone II** (low to moderate risk).
Hill slopes require:

• Retaining structures
• Controlled excavation
• Slope stability analysis (especially along NH-16 and hill-base constructions)

8. Topographic Significance for Planning

Visakhapatnam's topography influences:

• **Urban zoning**
• **CRZ restrictions** along the coast
• **View-based architecture** (sea-view & hill-view properties)
• **Drainage planning** to avoid flooding in valley areas
• **Preferred resort and hospitality locations** (Rushikonda–Bheemili stretch)

3.1Flora of Visakhapatnam

The flora of Visakhapatnam reflects the city's unique ecological setting, where the **Eastern Ghats meet the Bay of Bengal**, creating a rich mosaic of coastal, tropical, and hill-forest vegetation. The hilly regions—especially the **Kambalakonda Wildlife Sanctuary, Simhachalam Hills, Kailasagiri slopes, and Dolphin's Nose**—are dominated by **dry evergreen forests** and **tropical moist deciduous species** such as Shorea, Terminalia, Albizia, and Cassia. Indigenous trees like **Neem, Banyan, Peepal, Indian Laburnum (Amaltas), Flame of the Forest**, and **Tamarind** are common across the uplands and urban green pockets. The coastal belt supports **salt-tolerant and wind-resistant species**, including **Casuarina, Palmyra, Coconut, Pandanus (screw pine)**, and dune-stabilizing grasses. In low-lying valleys and reservoir zones such as

Mudasarlova and Meghadri, the flora transitions into **riparian vegetation** featuring reeds, water-tolerant shrubs, and bamboo groves. This diversity of plant life not only enhances scenic beauty but also acts as a vital ecological buffer—stabilising slopes, supporting wildlife habitats, and moderating microclimate through natural green corridors.

Shorea species **Terminalia species** **Albizia species** **Cassia species** **Neem**



Banyan **Peepal** **Flame of the Forest** **Tamarind** **Madagascar Almond**



Summary

Visakhapatnam's topography is defined by the dramatic meeting of **sea, hills, and valleys**, making it:

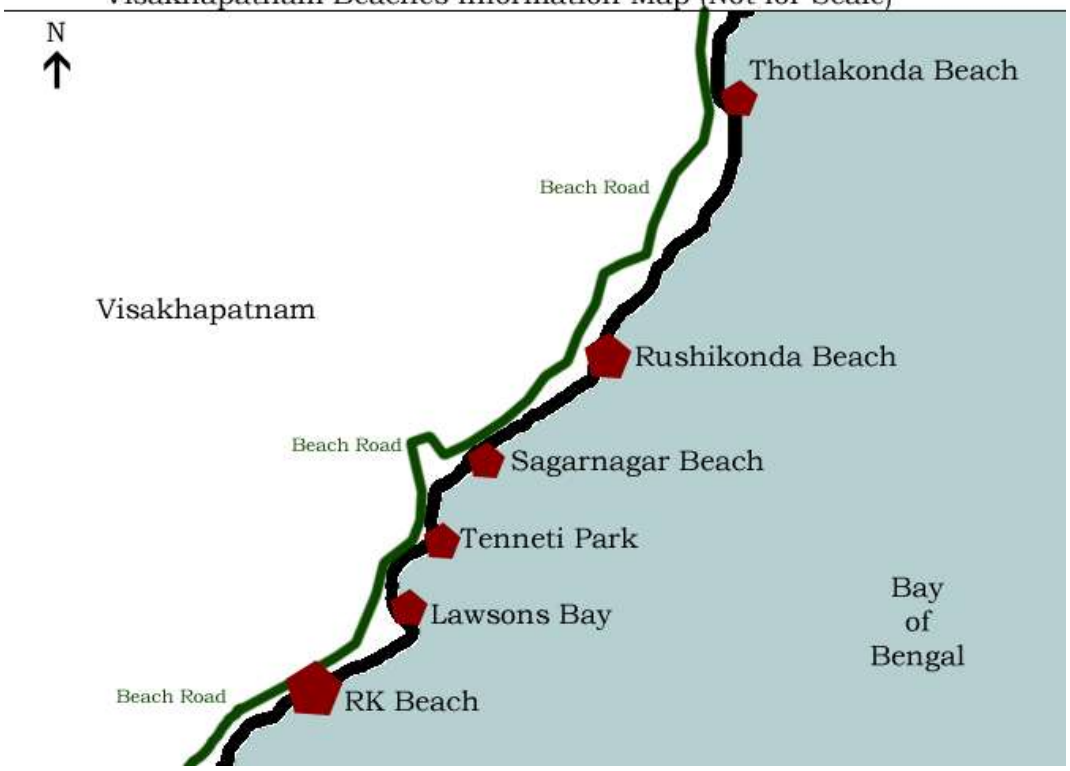
✓ Scenic for tourism
✓ Climatically moderated by hills and sea breeze
✓ Complex for drainage and infrastructure
✓ High-value for view-based developments like resorts

THE Park Visakhapatnam

4.2•Hotel



Visakhapatnam Beaches Information Map (Not for Scale)





4

- A 5-star luxury hotel right on Beach Road.
- Good for stays if you want beachfront convenience and are near VMRDA Park.

Tenneti Park









4

- A coastal urban-park along Beach Road, overlooked by hills and sea — good for an easy walk or relaxation by the sea.
- Good as a quick outing if you're near the beach-road belt.

Rajiv Smruthi Bhavan (Cultural Centre)


40
RAJIV SMRUTHI BHAVAN



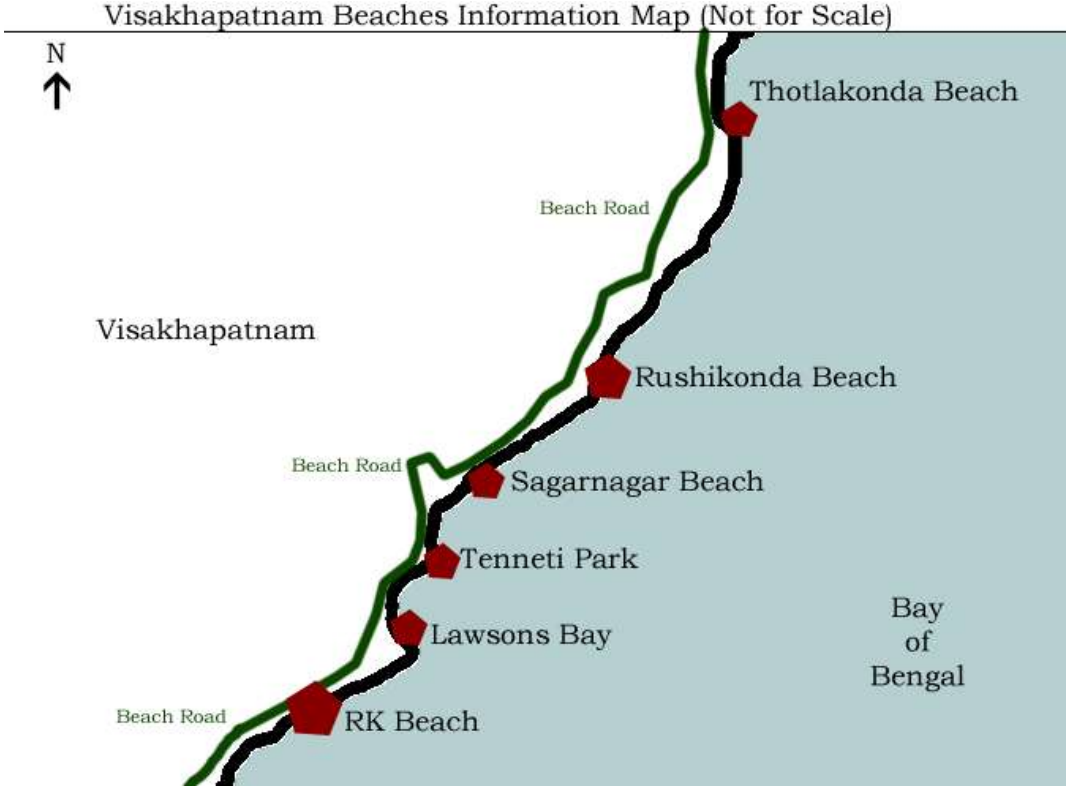
4

- A cultural / memorial centre on Beach Road, not far from the park — good for light sightseeing or cultural visits.

Ramakrishna Beach (RK Beach)



Visakhapatnam Beaches Information Map (Not for Scale)



4

- A popular beach on the same coastal stretch — easy to combine with a park-visit or hotel stay.
- Good for early morning/evening walks, sea breeze, or casual beach-front time.

Kailasagiri (Hill-top / Sea-view Park)







4

- Slightly uphill but still within easy reach — offers great panoramic views of the sea and city.
- Nice spot for sunsets, photographs, and a change from the flat beach/park zone.

Soil type and vegetation

3.2UTILITIES & INFRASTRUCTURE

Utilities and Infrastructure of Visakhapatnam

Visakhapatnam, one of the largest and most economically vibrant cities in Andhra Pradesh, has a strong and expanding urban infrastructure network. Its utilities—electricity, water, sanitation, transport, waste management, and communication systems—are governed primarily by GVMC (Greater Visakhapatnam Municipal Corporation), VMRDA, APEPDCL, and various state-level agencies. Below is a detailed overview.

1. Electricity Supply

Governing Agency:

APEPDCL – Andhra Pradesh Eastern Power Distribution Company Limited

Key Features:

- Citywide supply is stable, with high reliability due to integration with the Visakhapatnam Thermal Power Station (VTPS), Simhadri Super Thermal Power Plant (NTPC), and regional renewable sources.
- Power transmission infrastructure includes:
    - 33/11 kV substations across zones
    - Underground cabling in select coastal + commercial zones
    - Smart meters in pilot areas
- Industrial nodes such as AutoNagar, Pharma City, and SEZs receive dedicated high-load lines.

Coverage:

- Nearly 100% electrification for urban households.
- Frequent maintenance and overhead line strengthening in cyclone-prone coastal corridors.

2. Water Supply

Authority:

GVMC Water Supply & Public Health Department

Primary Water Sources:

- Mudasarlova Reservoir
- Meghadrigedda Reservoir
- Gambhiram Gedda
- Gosthani River (Thatipudi & Raiwada reservoirs)
- Borewells + supplemental groundwater extraction
- Seasonal water pumped from Yeleru canal

Distribution:

- Treated at major water treatment plants before supply.
- Pipelines distributed via zonal reservoirs and overhead tanks.
- Many layout zones use continuous 24×7 water-supply systems, others follow scheduled timings.

Coverage & Quality:

- Adequate for urban population, with expansion ongoing.

- Water quality monitored through chlorination units and periodic testing.

3. Sewerage & Drainage

Sewerage System:

- Centralized network managed by GVMC.
- Recently built STPs (Sewage Treatment Plants) in:
  - Appughar
  - Kapuluppada
  - Narava
- STPs treat wastewater before disposal or reuse (irrigation/industrial).

Stormwater Drainage:

- Network of open and closed drains along all major roads.
- Vulnerable basins (Madhurawada, Seethammadhara, Gajuwaka) use reinforced concrete drains + culverts.
- Hill-valley terrain requires catch drains to prevent runoff flooding.

4. Solid Waste Management

System Managed By:

GVMC + private waste-handling contractors

Key Features:

- Door-to-door waste collection widely implemented.
- Segregation into wet/dry/biomedical increasingly enforced.
- Waste sent to Kapuluppada Integrated Solid Waste Management Facility.
- Beach clean-up, tourist-zone waste bins, and mechanised sweeping along Beach Road.

5. Transportation Infrastructure

Road Network:

- NH-16 passes through Vizag (six-lane corridor).
- Beach Road (Dr NTR Beach Road) is the main coastal arterial.
- Internal mobility supported through:

- RTC bus network
- Auto-rickshaws
- Shared mobility (e-bikes/cabs)

Railways:

- Visakhapatnam Junction (VSKP) is a major railway division hub.
- Waltair division handles large passenger + freight capacity.

Air Transport:

- Visakhapatnam International Airport (operated by Indian Navy–Civil enclave) with:
  - Domestic + limited international flights
  - Cargo terminals
  - Expansion plans in the upcoming Bhogapuram Greenfield Airport (under construction).

Port Infrastructure:

- Visakhapatnam Port (one of India's largest cargo ports)
- Gangavaram Port (deepwater facility)

6. Communication & Digital Infrastructure

- 4G coverage citywide; expanding 5G networks.
- Fiber-optic backbone by BSNL + private ISPs (Airtel, Jio, ACT).
- Public Wi-Fi in select tourism + government zones.
- Smart-city initiatives:
  - CCTV surveillance network
  - Smart poles
  - Integrated command center (ICCC)

7. Public Amenities & Services

Healthcare Network:

- KGH (King George Hospital) – major government hospital
- Andhra Medical College
- Multiple private hospitals: Apollo, CARE, Medicover, SevenHills

Education Infrastructure:

- Andhra University (AU)
- GITAM University
- IIM Vizag
- Schools + technical colleges throughout the city

8. Urban Planning & Development Infrastructure

- Overseen by VMRDA for metro region planning.
- Development includes:
    - Beachfront beautification
    - Park revitalization (Tenneti Park, Kailasagiri, City Central Park)
    - Hill protection measures
    - Slum redevelopment and housing schemes
- CRZ (Coastal Regulation Zone) guidelines monitored for coastal construction.

3.3SENSORY

Views from the site

Figure 57 VIEWS FROM SITE

Noise, Odour and Pollution

No foul odour around the site. Noise & Dust clouds are caused due to the ongoing construction around the site.

Chapter 4
CASE STUDIES AND DESK APPRAISAL

4.1 CASE STUDY: RADISSON BLU RESORT, VISAKHAPATNAM

4.1.1 INTRODUCTION

Radisson Blu Resort, Visakhapatnam, is a serene blend of coastal elegance and contemporary luxury. Perched along the pristine shoreline of the Bay of Bengal and just a short drive from the city center and airport, the resort stands as a tranquil escape woven into the cultural fabric of Andhra Pradesh. This iconic seaside destination reflects the soul of Visakhapatnam—its maritime heritage, natural beauty, and dynamic modern spirit.

The resort's architecture draws inspiration from the coastal vernacular and native materials, paying homage to the tribal art of Araku, the vibrant Kalamkari textiles of Machilipatnam, the intricate Etikoppaka lacquerware, and the rhythmic waves of the Eastern Ghats that frame the landscape. Interiors celebrate refined coastal aesthetics with modern finishes, local motifs, and expansive sea views.

A gateway to the city's coastal charm, Radisson Blu Resort opens its doors with 104 well-appointed rooms and suites, world-class dining experiences, rejuvenating wellness at the spa, state-of-the-art fitness and recreation, and elegant event venues, including lush lawns and sea-facing banquet spaces, making it an ideal destination for both leisure and celebration.

Details:

PROJECT	**Radisson Blu Resort, Visakhapatnam**
LOCATION	Visakhapatnam
CLIMATE	Humid Subtropical
TOPOGRAPHY	Coastal Plains
ARCHITECT	UpalGhosh Associates
COMPLITION YEAR	Late 2020
NO. OF ROOMS	112
SITE AREA	12 ACRE
FAR	ND

4.1.2 Location

Radisson Blu Resort, Visakhapatnam, is nestled along the scenic coastal stretch of Visakhapatnam, offering panoramic views of the **Bay of Bengal** and the lush Eastern Ghats. Located at **Rushikonda Beach Road**, the resort enjoys proximity to some of the city's most iconic natural and cultural attractions.

It is close to **Rushikonda Beach**, **Kailasagiri Hill Park**, **INS Kursura Submarine Museum**, **Tenneti Park**, **Yarada Beach**, and the **Borra Caves** of Araku Valley—making it an ideal base for leisure travelers and nature lovers. The resort is about **25 minutes from Visakhapatnam**

International Airport and lies along the Vizag–Bheemili beach corridor, known for its serene coastal drives and eco-sensitive development.

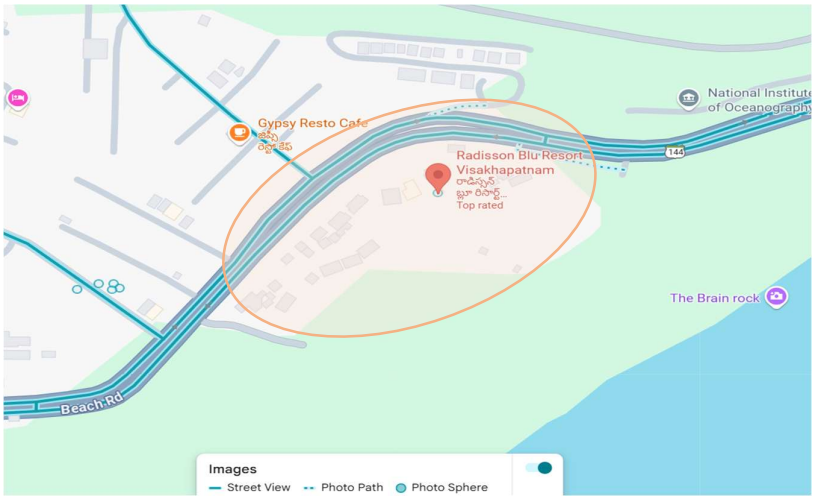


Figure 58 Location of Radisson Blu Resort, Vishakapatnam.

4.1.3 Site Boundary



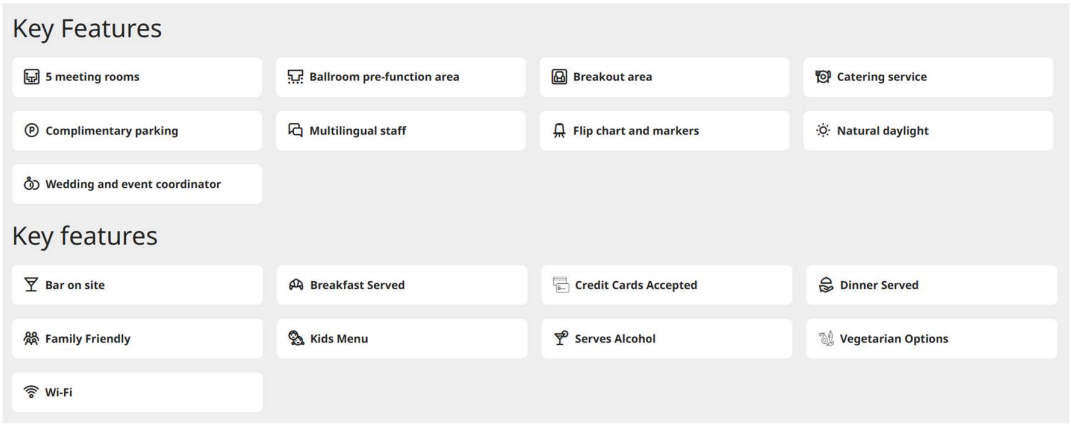
4.1.4 Site Characteristics

- The site is located on a **sloping terrain** overlooking the Bay of Bengal, with a **linear coastal frontage** that provides uninterrupted sea views from most guest areas.

- The **site shape is elongated** with a gentle natural slope from the rear (entry) toward the front (sea), which has been used advantageously in spatial zoning.
- The **front edge** of the site opens directly to the sea, and is designed with **tiered lawns, stepped terraces, and a large infinity pool deck**, creating a strong indoor-outdoor connection.
- The **main resort blocks** are positioned along this central axis, offering maximum sea-facing rooms, while **detached villas and banquet lawns** are aligned on either side for privacy and landscape continuity.
- The **back part** of the site, closer to the entrance and main road, houses **service zones**, staff entries, parking, and MEP infrastructure, separated from guest areas for functional efficiency
- The **building form follows the terrain**, with staggered levels and stepped massing that respect the slope and ensure natural ventilation and views.
- **Circulation** within the site is carefully designed with **segregated guest and service routes**, ensuring smooth vehicular flow, uninterrupted pedestrian paths, and **zero conflict zones** near drop-offs, banquet entries, and recreation areas.

4.1.5 Facilities

These are the following facilities and amenities that **Radisson Blu Resort, Visakhapatnam** offers to its guests.



4.1.6 Access Road

- A **24 m wide arterial road**, known as the **Beach Road (Rushikonda–Bheemili stretch)**, connects the Radisson Blu Resort to key areas of Visakhapatnam city, including the airport, Kailasagiri, and central business districts.
- A **secondary internal access road** of approximately **9–12 m width** runs along the **rear (west) side** of the site, facilitating **service entry, staff circulation, and utility movement**.
- The **main entrance driveway** is gently sloped and leads directly from the arterial road to the **porte cochère**, offering a clear and elegant arrival experience.
- Dedicated drop-offs are planned for **banquet functions, villas, and spa areas**, ensuring smooth internal circulation and minimal interference with the main guest lobby flow.

4.1.7 Area statement

Zone / Component	Sub-Function / Space	Approx. Area (sqm)	Notes

1. Arrival / Entrance Zone	Grand Porte Cochère, Entry Plaza, Waiting Lounge	300	Double-height canopy with water features
	Main Lobby + Reception + Lounge	400	Sea-facing with an art installation
	Concierge + Travel Desk	50	
	Luggage Room / Storage	50	
2. Guest Rooms & Suites	104 Rooms Total (Standard + Premium + Suites)	7000	Avg. 50–70 sqm per room, includes balconies
	Deluxe Room (60 units x 55 sqm)	3300	
	Premium Sea View (30 units x 60 sqm)	1800	
	Executive Suites (10 x 80 sqm)	800	
	Presidential Suite (1 x 120 sqm)	120	
	Room Corridors, Service Shafts	980	
3. Food & Beverage	All-Day Dining Restaurant	400	Indoor + Outdoor seating
	Fine Dining Specialty Restaurant	300	Sea-facing, theme-based
	Bar / Lounge	250	
	Poolside Bar / Grill	150	Deck seating
	Banquet Kitchen + Main Kitchen	500	Incl. Cold storage, prep, and dishwashing
	Staff Dining & Pantry	150	
4. Banquets & Events	Main Ballroom (Divisible)	600	Capacity ~500 pax
	Pre-function Area	200	
	Business Centre + Meeting Rooms (3 Nos)	200	Varying sizes
5. Recreational Facilities	Infinity Swimming Pool + Deck	500	With a children's pool
	Spa & Wellness Centre	400	4–6 treatment rooms, steam, sauna
	Salon	100	
	Gym / Fitness Centre	200	
6. Back-of-House (BOH)	Laundry (Incl. Linen Room)	250	With access to the service core
	Staff Changing Rooms + Lockers	150	Separate Male/Female
	Housekeeping Stores	100	Per floor basis
	Engineering / MEP Room	200	HVAC, Fire, Electrical
	STP / WTP Room	300	Outdoor/underground zone
	Garbage Segregation & Service Yard	150	Near back access

7. Circulation / Core	Vertical Cores (Lifts, Stairs, Shafts)	400	2–3 guest lifts, 1–2 service lifts
	Corridors + Lift Lobbies	800	Across 3–4 levels
8. Outdoor Areas / Landscape	Lawns, Pathways, Amphitheatre, Garden Courts	2000	Wedding lawns, events
	Parking Area	1000	Surface + limited basement
	Driveways / Drop-off Zones	700	Paver-block finish, shaded

4.1.8 Floor Layouts

4.1.8.1 Basement Level (Single Basement):

- The resort has a **single-level basement**, primarily serving **back-of-house operations**, **engineering services**, and **staff support functions**.
- The basement is **strategically positioned towards the rear (west)** of the site to avoid obstruction of ocean views and to separate guest and service circulation.

4.1.8.2 Ground Floor Plan: Radisson Blu Resort, Visakhapatnam

- The **main entrance lobby** of the resort offers a **grand sea-facing view** with a **double-height volume**, extensively detailed with **natural stone cladding, textured plaster finishes, and custom coastal art installations**.
- The lobby area integrates **lounge seating**, a **concierge desk**, and **direct access** to the **sea-view infinity deck**, creating a seamless indoor-outdoor resort experience.
- **Cove lighting** in the false ceiling, integrated with natural daylight, enhances the spatial elegance during both day and night.

Dedicated Banquet & Event Wing:

- The resort features a **separate entry** for banquet guests, with a **vehicular drop-off zone** and direct access from the parking.
- Banquet space consists of:
    - **Main Ballroom**: Can be split into 3 function halls with **automated partition panels**
    - **Pre-function Area**: Spacious, well-lit corridor with access to washrooms and F&B counters; acts as **sound and visual buffer**
    - **Outdoor Banquet Lawn**: Sea-facing, suitable for weddings and large-scale events
- Individual banquet halls are named around **local coastal or cultural themes**, often used in wedding packages and formal events.

Service & Utilities (Ground-Level Access Points):

- **A 33 kV electrical line** for the transformer is routed underground from the service yard.

- **2 Diesel Generators (DG)** of **similar capacity (approx. 1000–1250 kVA)** are located in a **dedicated soundproof room** near the BOH area.
    - DG enclosures use **multi-layer insulation (glass wool/fibre)** to reduce operational noise from **95 dB to ~65 dB**, and <45 dB at guest-accessible floors.
- **HVAC AHU rooms**, **electrical panel rooms**, and **fire control panels** are also placed on this level near service circulation zones.

Additional Ground Floor Functions:

- **All-day Dining Restaurant** with indoor and outdoor seating, sea-facing
- **Specialty Restaurant** located adjacent to the lobby with private dining niches
- **Bar Lounge** with terrace seating on an elevated platform
- **Access to Infinity Pool Deck** from both dining and spa areas
- **Jiva-style Spa**, **salon**, and **gymnasium** located on the quiet side of ground level for maximum privacy and relaxation

WTP Process: Raw Water ⟹ Sand Filter, ⟹ Activated Carbon ⟹ Hyper Filtration, Domestic Water Tank ⟹ Ro Filter

4.1.8.3 First Floor Plan: Radisson Blu Resort, Visakhapatnam

- The first floor layout is strategically designed to overlook the double-height lobby, creating a strong spatial connection between entry-level hospitality spaces and the upper guest-accessible functions.
- A balcony edge or internal gallery offers visual access to the sea-facing lounge below, enhancing the feeling of openness and vertical luxury.

Banquet & Event Spaces (Upper-Level)

- The banquet wing continues to the first floor, with meeting rooms, conference halls, and boardrooms, designed for both corporate events and social functions.
- The main banquet hall is divisible into three modular segments with automated acoustic partitions for flexible use.
- The pre-function area on this floor connects seamlessly to the halls and includes access to:
- Banquet guest washrooms
- Service pantry
- AV control rooms

Banquet Names & Capacities (Indicative)

- Samudra Hall *(Large Ballroom)* – sea-inspired, capacity ~300–350 pax
- Aranya & Vihar Rooms *(Small function rooms)* – themed around coastal greenery and tranquility
- Pre-function corridor includes display zones, soft seating, and ambient lighting design.

Service & Utility Infrastructures

- Electrical services and HVAC units extend to this level through vertical shafts from the basement.
- DG backup (2 DGs of approx. 1000–1250 kVA) powers all major zones, including conference areas and lifts, with a response time of 6–8 seconds.
- Sound insulation treatment of the DG and HVAC shafts includes glass fibre lining, keeping noise levels below:
- 65 dB in technical floors
- <45 dB in guest floor corridors and public zones

Other First Floor Features

- Select guest rooms and premium sea-view suites begin from this level and are arranged along corridors offering:
- Sea-facing verandahs
- Internal garden court views
- Private balconies in select units
- Connectivity to Spa and Fitness Wing via a semi-open corridor bridge
- Staff movement and banquet service entry are kept fully segregated via back corridors and service elevators

4.1.8.4 Second & Third Floors

- Primarily **Guest Room Levels**
- Houses the majority of:
    - **Deluxe Rooms** (city-facing or sea views)
    - **Premium Rooms** (full sea-facing with balconies)
- Guest movement is smooth via **2–3 guest lifts** and **service staircases**

4.1.8.5 Terrace & Villa Zones (Lower Sloping Front)

- Some **independent luxury cottages or villas** are placed along the **lower tier facing the sea**
- These may include:
    - **Sea View Suites**
    - **Garden Villas**
    - **Private Deck Rooms**

These blocks are **stepped in levels**, creating a cascading view pattern

4.2 SAI PRIYA VISAKHAPATNAM

4.2.1 INTRODUCTION

Sai Priya Beach Resort, Visakhapatnam, is a serene beachfront property that blends simplicity, regional architecture, and tropical aesthetics. Located right on **Rushikonda Beach**, the resort is

among the earliest private coastal properties developed in the region. With lush lawns, traditional coastal cottages, and banquet-ready facilities, Sai Priya offers a cozy and affordable hospitality experience with direct access to the **Bay of Bengal**.

The resort architecture is inspired by traditional South Indian coastal vernacular, featuring sloped tiled roofs, wide verandahs, natural stone paths, and open green courtyards. Interiors are kept minimal, with focus on natural ventilation and outdoor-indoor spatial continuity. It is a popular destination for family vacations, destination weddings, and small business retreats.

Although more modest than 5-star resorts, Sai Priya's charm lies in its **lush landscaping**, **sea-facing lawns**, **private beach access**, and its reputation as one of the first coastal resorts in Visakhapatnam.

Details:

PROJECT	**SAI PRIYA BEACH RESORT, VISAKHAPATNAM**
LOCATION	**VISAKHAPATNAM**
CLIMATE	Humid Subtropical
TOPOGRAPHY	Coastal Plains
ARCHITECT	Not publicly disclosed (Privately developed resort)
COMPLITION YEAR	Circa 2000s
NO. OF ROOMS	50
SITE AREA	Approx. **3–4 acres**
FAR	ND

4.2.2 LOCATION

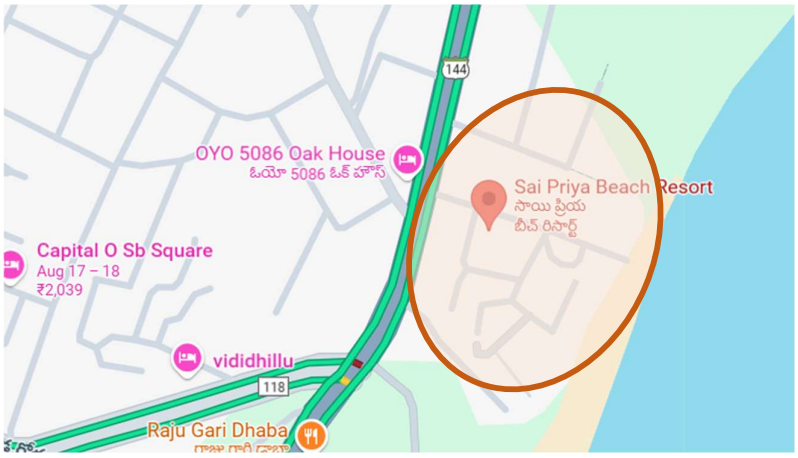
Sai Priya Beach Resort is located along the **Rushikonda–Bheemili Beach Road**, approximately:

- 18 km from **Visakhapatnam Railway Station**
- 24 km from **Visakhapatnam International Airport**
- Adjacent to **Rushikonda Beach** and near **Gitam University**

The resort lies on the eastern coast of Andhra Pradesh and is part of the city's scenic coastal development corridor. Nearby tourist attractions include:

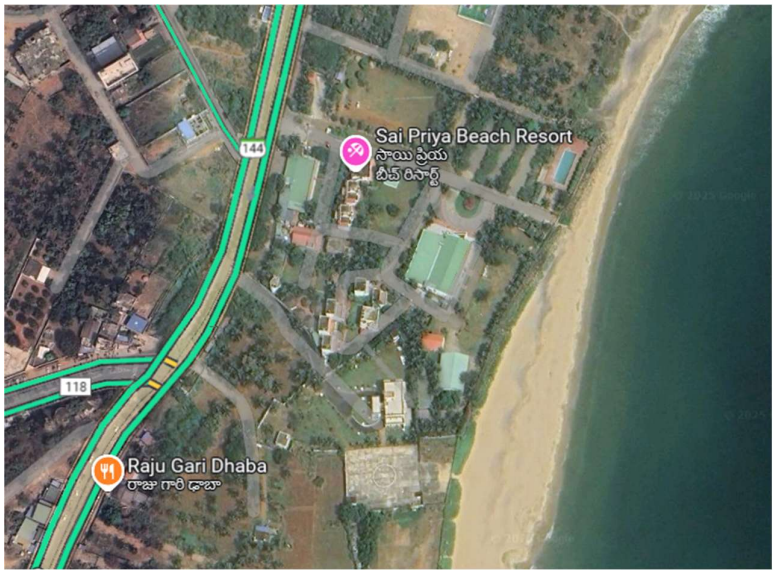
- Rushikonda Beach (walking distance)
- Kailasagiri Hilltop Park (~6 km)
- INS Kursura Submarine Museum (~10 km)
- Tenneti Park
- Bheemili Beach and Araku Valley (further up the road)

Its prominent beachfront location, proximity to city attractions, and tranquil setting make it ideal for budget leisure travelers, weddings, and local events.



4.2.3 SITE BOUNDARY

- The site is **rectangular with a slightly tapering beachfront edge**
- It abuts **Rushikonda Beach Road** on the western side (main access)
- The eastern boundary opens directly to the **Bay of Bengal**
- Northern and southern edges are flanked by other private beach plots and vegetation belts



4.2.4 FACILITIES

- ~40–50 rooms (mix of standard, deluxe, and beachfront cottages)
- Banquet lawn with sea view (500–600 pax capacity)
- Open-air multi-cuisine restaurant
- Swimming pool with deck
- Garden seating and hammocks
- Private beach access
- Event lawns for weddings and corporate retreats
- Indoor game zone, children's play area

- Conference room (small-scale)
- Basic spa/massage services
- Ample surface parking

Zone / Component	Sub-Function / Space	Approx. Area (sqm)	Notes
1. Arrival / Entrance Zone	Main Entrance + Lobby	150	Single-height arrival, resort-style
	Reception + Waiting Lounge	80	Compact, tropical-themed
2. Guest Rooms & Suites	~44 Rooms Total (Deluxe & Premium)	1,800	Average ~35–45 sqm per unit, private terrace
	Deluxe Rooms (~25)	1,000	Garden or beach-facing variants
	Premium Rooms (~19)	760	Better views, slightly larger
3. Food & Beverage	On-site Restaurant (multi-cuisine)	200	Indoor + outdoor beachside seating
	Bar / Café / Outdoor Dining	100	Next to the pool and banquet areas
4. Banquets & Events	Banquet Hall & Conference Hall	500	Large hall with seating for ~200–300 guests
	Pre-function / Lawn area	300	Garden lawns facing the beach
5. Recreation & Wellness	Swimming Pool + Sliding Pool	250	Poolside deck
	Children's Play Area / Outdoor Games	150	Family zone near pool
6. Back-of-House (BOH)	Laundry, Utility & Service Rooms	200	Includes staff storage and support zones
	Servants' Quarters / Staff Amenities	100	Staff welfare zone
7. Vertical Circulation & Core	Corridors + Service Passageways	250	Connecting wings and rooms
8. Parking & Access	Surface Parking & Driveway	400	Capacity ~40–50 cars
9. Outdoor & Landscaping	Landscaped Gardens, Beach Access, Pathways	600	Beachfront green zone, beachfront terraces

4.2.5 Site Layout Overview

- The resort follows a **horizontal spread** with **clustered single-story blocks** organized along **a central spine** from the entrance (west) to the beachfront (east).

- The built form is **low-rise** with no vertical stacking (no basement or upper guest floors).
- The spatial planning emphasizes **garden-to-beach connectivity**, creating a strong **indoor–outdoor relationship**.

4.2.5.1 Entrance & Reception Zone (Front West Side)

- **Vehicular drop-off** leads to an **open-air reception pavilion** designed with sloped Mangalore tile roofing and traditional columns.
- Adjacent to the reception is a **lobby lounge area** with basic seating, waiting, and a travel desk.
- **Administrative office**, security booth, and luggage store are tucked behind the reception.
- Guests are escorted via **walkways** to individual rooms or cottages.

4.2.5.2 Guest Room Clusters (Central Zone)

- The rooms are distributed in **low-rise, twin-sharing or quad-sharing cottages**, spread across landscaped paths.
- Each cluster consists of:
    - **Standard Rooms** (single room with attached bath)
    - **Deluxe Rooms** (larger carpet area + seating + balcony)
    - **Beachfront Cottages** (with direct view and private deck)
- Room units are **detached or semi-detached**, aligned to face either the **sea, garden, or pool**.
- Interiors are simple and functional: tiled floors, wooden furniture, attached bathrooms, and basic sea-view balconies (for select rooms).

4.2.5.3 Dining & F&B Zone

- The resort has a **centralized open-air restaurant**, covered by a tiled pavilion roof.
- **All-day dining area** is directly connected to:
    - **Live kitchen counter**
    - **Buffet counter**
    - **Outdoor seating near lawns and beachfront**
- Special **private dining setups** are arranged on the lawns during weddings and events.

4.2.5.4 Recreational Zone

- A medium-sized **swimming pool** with a paved deck is located just behind the dining zone.
- Adjacent facilities include:
    - Kids' play area
    - Indoor game room with TT and board games
    - Hammock gardens
    - Spa room (basic massage/treatment)

4.2.5.5 Banquet & Events Lawn (Beachfront Edge)

- Large **lawn of approx. 1200–1500 sqm** is directly aligned with the sea.
- Used for:
    - Destination weddings (seating ~500 pax)
    - Corporate functions
    - Musical or cultural events
- A **temporary mandapam structure** is often erected during events.
- Connected back-of-house service corridor for:
    - **Food & beverage catering**
    - **Audio-visual setup**
    - **Portable washrooms or banquet service units**

4.2.5.6 Service & Utility Areas

- **Service access road** along the western edge of the property connects to:
    - Staff quarters (compact units behind reception)
    - Laundry & linen storage (adjacent to kitchen)
    - Garbage disposal zone (gated at rear corner)
    - Electrical panel room & borewell
- **Water Supply**:
    - Overhead tank for domestic water
    - Septic tank-based sewage system
- No basement or mechanical services room—everything is at-grade or outdoor units

4.2.5.7 Circulation & Landscaping

- **Walkways** are paved and shaded with pergolas or tree canopies
- Lighting is solar-powered in garden zones
- Each zone (reception, room, dining, event) is connected by clear wayfinding
- **Wheelchair-accessible paths** are provided throughout the resort.

4.3 NOVOTEL VISAKHAPATNAM VARUN BEACH

4.3.1 INTRODUCTION

Novotel Visakhapatnam Varun Beach blends modern hospitality with coastal charm, located right along the scenic **Ramakrishna Beach Road** in Visakhapatnam. Overlooking the **Bay of Bengal** and adjacent to cultural landmarks like the **INS Kursura Submarine Museum**, it offers a premium stay experience for both leisure and business travelers.

Its architecture is contemporary, integrated with local artistry and views of the sea from nearly every corner. Built as part of a **mixed-use development** with an INOX multiplex and shopping

complex, the hotel offers **225 well-appointed rooms**, multiple fine dining outlets, expansive banqueting facilities, a rooftop terrace, spa, and recreation zones—making it a complete coastal hospitality hub.

Details:

PROJECT	**NOVOTEL VISAKHAPATNAM VARUN BEACH**
LOCATION	**VISAKHAPATNAM**
CLIMATE	Humid Subtropical
TOPOGRAPHY	Coastal Plains
ARCHITECT	Not publicly disclosed (Developed by Accor Hotels Group)
COMPLITION YEAR	Circa 2011
NO. OF ROOMS	225
SITE AREA	Part of a larger integrated commercial parcel
FAR	ND

4.3.2 Location

Novotel Visakhapatnam is positioned on the bustling **Ramakrishna Beach Road**, directly facing the Bay of Bengal. The location ensures excellent visibility and walkability to major tourist attractions like:

- **INS Kursura Submarine Museum**
- **Kailasagiri Hill**
- **Tenneti Park**
- **RK Beach**
- **VUDA Park**

It is ~**30 minutes from Visakhapatnam International Airport**, and is part of the city's urban coastal development corridor.



4.3.3 Site Boundary

The site is part of a **commercially integrated coastal parcel**—shared with a multiplex, shopping mall, and event spaces. It enjoys uninterrupted views toward the east (seaside), with service entries and vehicular access from the western side.



4.3.4 Site Characteristics

- Positioned on **flat coastal terrain** directly abutting the main beach road.
- The **site opens toward the sea** on the eastern front, with the **main hotel block centrally aligned** to this axis.
- **Room wings branch outward** in a cross or linear configuration, maximizing sea views.
- The rear side contains the **INOX multiplex, service roads, and basement access**.
- Guest and service circulation is well separated, with **3 basement levels**, **service cores**, and **BMS-regulated systems**.

4.3.5 Facilities

- 225 Guest Rooms (including Suites and Kitchenette Rooms)
- 5 Dining Outlets
- Executive & Club Lounges
- Infinity Pool + Children's Pool
- Spa, Sauna, Steam Room
- Fitness Center with Bay View
- Rooftop Restaurant & Jogging Track
- Banquet and Conference Halls (7 Venues, 56,000+ sq ft)
- Gaming, Library, Play Areas
- INOX Multiplex (adjacent)
- Mall Retail Integration

- EV Charging, Airport Shuttle, BMS, Fire Safety Infrastructure

Services in the hotel and nearby

On site :

- Swimming pool
- Restaurant
- Fitness center
- Air conditioning
- Bar
- Room service
- Car park
- Wheelchair accessible
- Wi-Fi
- Breakfast
- Meeting rooms

In hotel

Hotel informations

- ✓ 225 rooms
- ✓ One room for people with reduced mobility
- ✓ 14 connecting rooms
- ✓ 6 floors

Reduced mobility Facilities

Wi-Fi

- ✓ WiFi in the communal areas
  Additional charge
- ✓ WiFi at the hotel
- ✓ High Speed internet
  Additional charge

Desk equipment available

- ✓ Shoe shine machine

Porter

- ✓ Porter

Languages spoken at the hotel

- ✓ English

Laundry / Valet Services

- ✓ Dry cleaning / Ironing

Air conditioning

Check In & Check-out facilities

- ✓ Express check-out

Currency exchange

- ✓ Currency exchange

Hotel access

Accessibility

Wheelchair accessible hotel

Sports and leisure

Golf

✓ Nearby

Family

Babysitting on request

✓ Babysitting on request

Well-being

Infinity Pool

✓ Covered

✓ On site

In Balance by Novotel

✓ On site

✓ Jacuzzi/Whirlpool bath

Catering

4 Restaurants

One Bar

Room service

✓ Cold snacks

✓ Hot meals

Breakfast

✓ Breakfast à la carte

Business

7 Meeting rooms

Business Center

✓ Business center is wheelchair accessible

✓ Self service business center

✓ Business center with support staff

4.3.6 Access Road

- Connected by a 24 m wide Ramakrishna Beach Road
- Located in a high-visibility urban beachfront corridor
- Entry and drop-off zones are at-grade with covered access
- Back entry for services and parking via controlled access roads
- Guest vehicle circulation isolated from service logistics through dedicated basements

4.3.7 Area Distribution

Zone / Component	Space	Approx. Area (sqm)	Notes

Arrival Zone	Entry + Lobby + Lounge	700	Sea-facing triple-height
Guest Rooms	Deluxe + Premium + Suites	9,000+	Includes balconies
Dining	5 Restaurants & Bar Lounges	1,300	Includes rooftop lounge
Banquets	V-Convention + 6 other venues	5,200+	1,700 pax main hall
Recreation	Pools, Spa, Gym, Salon	1,200	Sea-view deck
Services	STP, WTP, DG, Laundry, BOH	2,000+	Includes HVAC, RO plant
Parking	3-Level Basement	~8,000	Capacity for ~300 vehicles

4.3.8 Area Statement

Zone / Component	Sub-Function / Space	Approx. Area (sqm)	Notes
1. Arrival / Entrance Zone	Porte Cochère + Entry Plaza	300	Double-height, beachfront entry
	Main Lobby + Lounge + Reception	500	Includes a guest lounge, concierge, and waiting
	Lobby Café (Sugarr)	100	
2. Guest Rooms & Suites	225 Total Rooms (incl. suites & kitchenette)	11,000	Avg. ~45–60 sqm per room incl. balconies
	Deluxe Rooms (approx. 150)	7,000	City-facing + partial sea view
	Premium Sea View Rooms (~40)	2,000	Full frontal view
	Executive Suites (9)	600	Lounge + bath + bedroom
	Presidential Suite (1)	120	Top floor, 1,000+ sqft
	Room Corridors, Vertical Shafts	1,280	Across 3–4 floors
3. F&B Outlets	The Square (All-day dining)	450	Buffet + indoor-outdoor seating
	Zaffran (Indian Fine Dining)	300	Semi-private dining
	Red Bowl (Pan-Asian)	250	
	Harbour Vue (Bar Lounge)	200	Rooftop/terrace access
	Sugarr Café (Lobby)	Included in Lobby	
	Kitchens (Main, Banquet, Prep)	800	Incl. Cold storage, dishwashing, and F&B staff
	Staff Dining / Pantry	150	

4. Banquets & Events	V-Convention Center (1, 2, 3)	1,050	11,200 sq ft, divisible, column-free
	Pre-function Area	420	Spacious, sea-facing
	Summit / Pearl / Coral / Eureka / Avenue Halls	1,100	6 venues, breakout sizes
	Outdoor Banquet Lawns / Deck	1,200	Wedding lawns, ocean-facing
5. Recreation & Wellness	Infinity Pool + Deck	400	With a children's pool
	Calm Spa & Salon	300	Vinotherapy, Thai massage, bridal lounge
	Gym / Fitness Centre	200	Sea-facing, fully equipped
	Sauna + Steam Room + Hot Tub	120	Located near the Spa zone
6. Back-of-House (BOH)	Laundry & Linen Room	300	Basement level
	Staff Changing Rooms + Lockers	200	Male/Female segregation
	Engineering Workshop + Maintenance	200	Tools, inventory
	STP / WTP + Pump Room	400	2KL RO Plant (Sand → Carbon → Tetra filter)
	DG Rooms + Panels (2 DGs ~1000 kVA)	250	Glass-fibre insulation, soundproofed
	Garbage Yard / Segregation Area	100	Basement 2
7. Vertical Circulation & Core	Passenger Elevators (3–4), Service Lifts (2)	300	Connected to the back corridors
	Corridors + Lift Lobbies	1,100	Across guest room floors
8. Parking	3 Basement Levels (approx. 300 cars)	8,000	Includes circulation & service corridors
9. Outdoor & Miscellaneous	Terrace Bar + Jogging Track	400	Sky deck lounge + running path
	Landscape, Planters, Amphitheatre	1,200	Eastern Bay side

4.3.9 Floor Plans

4.3.9.1 Basement Levels (B1, B2, B3)

Primary Functions:

- **Parking**, **Service Utilities**, **MEP infrastructure**, and **Staff Movement**

Basement B3:

- Houses **WTP**, **fire pumps**, and **raw/domestic/fire water tanks**
- Large **pump rooms** serve central water circulation
- Dedicated **fire safety tanks**, monitored by BMS

Basement B2:

- Major **MEP operations zone**
    - **STP**, **ETP**, and **RO Plant** (2KL capacity)
    - **Boiler room**, **DG rooms** (2×1000–1250 kVA)
    - **Electrical transformer yard**, **battery backup room**
- **Laundry and linen store**
- **Engineering & Maintenance room**, garbage segregation
- **Staff lockers** and changing rooms
- Access to **service lift cores** and shafts

Basement B1:

- Primarily **vehicular parking**
    - ~100+ cars per level across B1–B3
    - **Staff and guest segregated access**
- **Service corridors** connect all MEP spaces
- **Ramps** and **ventilation shafts** integrated

4.2.9.2 Ground Floor Plan

Function: Arrival, Public Zones, Dining, Banquets, Recreation Core

Zones:

- **Triple-height sea-facing entrance lobby** with lounge seating, concierge, check-in
- **Lobby Café** (Sugarr), gift shop, waiting lounge
- **All-day dining restaurant** (The Square), indoor & outdoor sea-facing seating
- **Fine dining restaurants** (Zaffran, Red Bowl) with theme-based interiors
- **Bar Lounge – Harbour Vue** with access to terrace
- **Infinity Pool Deck** with kids' section, connected to lounge and spa
- **Calm Spa & Salon**, steam room, hot tub zone
- **Gymnasium** with sea view, connected to spa zone
- **Banquet Reception Zone**
    - Separate entry for V-Convention guests
    - Vehicular drop-off zone

- Access to pre-function area

Service Access:

- **Utility shaft lobby**
- **DG panel**, **transformers**, **fire control room** behind public access
- **BMS control room** monitors all building automation

4.2.9.3 First Floor Plan

Function: Banquets, Executive Lounges, Premium Rooms

Zones:

- **Banquet Level Expansion:**
  - **V-Convention Centre 1, 2, 3** (column-free, divisible)
  - ~11,200 sq ft with AV controls, F&B counters, utility access
  - **Pre-function corridor** (~4,500 sq ft) with ambient lighting, soft seating
- **Breakout Venues:**
  - **Summit** (Boardroom, 50 pax)
  - **Pearl** & **Nautica** (120 pax)
  - **Avenue** (~470 pax)
  - **Coral** (3 rooms), **Eureka** (Executive)
- **AV Control Room**, **Server Rooms**, **Service Pantry**
- **Banquet Washrooms** + Green Room zone
- **Premium Rooms** begin from this level:
  - Sea-facing verandahs
  - Internal garden views
  - Private balconies

4.2.9.4 Second Floor Plan

Function: Guest Accommodation

- Houses the bulk of **Deluxe Rooms** (city- or sea-facing)
- **Corridors** planned along linear wings
- **Housekeeping closets**, **service shafts** at junctions
- **Two guest lifts**, **one service lift** connected to each core
- Balconies in ~70% of rooms
- **Fire exits** integrated at both ends

4.2.9.5 Third Floor Plan

Function: Guest Accommodation – Premium Tier

- Mostly **Premium Sea View Rooms**
- Direct frontal view of the **Bay of Bengal**
- **Glazed balconies**, full-height sliding windows
- Carpeted corridors, curated lighting
- Rooms include: minibar, work desk, executive desk, smart TV, and walk-in shower

4.2.9.6 Terrace & Roof Level

Function: Exclusive recreation, VIP zone, utilities

- **Presidential Suite** (~1,035 sq ft) with:
  - Private lounge
  - Butler pantry
  - Large balcony/terrace
  - Bay view from the living, bath, and bedroom
- **Rooftop jogging track**
- **Harbour Vue bar extension** (evening lounge with pergolas)
- **Solar panels**, **AC condenser units**, **vent shafts**
- Emergency fire exit staircases

4.3.9.2 Vertical Circulation Overview:

- **3 Passenger Elevators** (guest core)
- **2 Service Lifts**
- **4 Fire escape staircases** at the far ends and 2 in the middle
- Utility/service shafts run vertically through all floors

4.4 CASE STUDY: TAJ HOTEL, BHOPAL

4.4.1 INTRODUCTION

The Taj Lakefront, Bhopal, epitomises true luxury. Overlooking the upper lake and just 25 minutes from the international airport, this iconic landmark symbolises the soul of Bhopal and its vision for tomorrow. The magnificent structure by the lakefront redefines fine living with its modern interiors, ornate and luxurious finishes. The design is intuitive to the region and inspired by the bell metal craft of Tikamgarh, the lakes and Zari work ofBhopal, the paisley prints of Bagh, the Durries of Sironj, and the Terracotta art of the state's tribal areas.

Ready to be the new landmark of the city, it opens its doors to the world with 152 guest rooms, multi-cuisine and award-winning restaurants, recreation facilities, Jiva spa, modern meeting spaces, well-equipped conference rooms, and the city's largest banqueting facilities.



Details:

PROJECT	**TAJ LAKEFRONT**
LOCATION	BHOPAL
CLIMATE	Humid Subtropical
TOPOGRAPHY	Plain land
ARCHITECT	JOI DESIGN
COMPLITION YEAR	2021
NO. OF ROOMS	152
SITE AREA	4.77 ACRE
FAR	2

4.4.2 LOCATION

It is close to the Van Vihar National Park, Sanchi Stupa, National Museum of Mankind, Taj-ul-Masajid, and many such wonders of the city. Located near Bhadbhada Road Chauraha, Link Rd Number 3, Bhopal, Madhya Pradesh, overlooking the upper lake.



4.4.3 SITE BOUNDARY

Site Boundary
Circulation within the Site

4.4.4 Site Characteristics:

- The site has a kind of trapezium shape with having curved edge in front.
- As we look into the site planning of Taj, the front part is designed with a pleasing landscapethrough which guests can connect with its lush greenery.
- The back part of the site is used for the services.
- The building shape is evolved by the curved front edge of the site.
- Circulation of the site is designed in that way so that no congestion will occur.

4.4.5 FACILITIES

These are the following facilities and amenities that Hotel Taj provides to their guests.

Outdoors
- ✓ Outdoor furniture
- ✓ Sun terrace
- ✓ Terrace
- ✓ Garden

Activities
- ✓ Evening entertainment
- ✓ Games room

Food & Drink
- ✓ Bar
- ✓ Restaurant

Internet

WiFi is available in all areas and is free of charge.

Parking

Free private parking is possible on site (reservation is not needed).
- ✓ Electric vehicle charging station

Reception services
- ✓ Invoice provided
- ✓ Concierge service
- ✓ Currency exchange
- ✓ Express check-in/check-out
- ✓ 24-hour front desk

Cleaning services
- ✓ Daily housekeeping
- ✓ Trouser press Additional charge
- ✓ Ironing service Additional charge
- ✓ Dry cleaning Additional charge
- ✓ Laundry Additional charge

Business facilities
- ✓ Business centre
- ✓ Meeting/banquet facilities

Safety & security
- ✓ Fire extinguishers
- ✓ CCTV outside property
- ✓ CCTV in common areas
- ✓ Smoke alarms
- ✓ Security alarm
- ✓ Key card access
- ✓ 24-hour security

General
- ✓ Air conditioning
- ✓ Lift
- ✓ Family rooms
- ✓ Non-smoking rooms
- ✓ Room service

Outdoor swimming pool

Free! All pools are free of charge
- ✓ Open all year
- ✓ Opening times
- ✓ All ages welcome
- ✓ Pool/beach towels
- ✓ Pool bar
- ✓ Infinity pool
- ✓ Pool is on rooftop

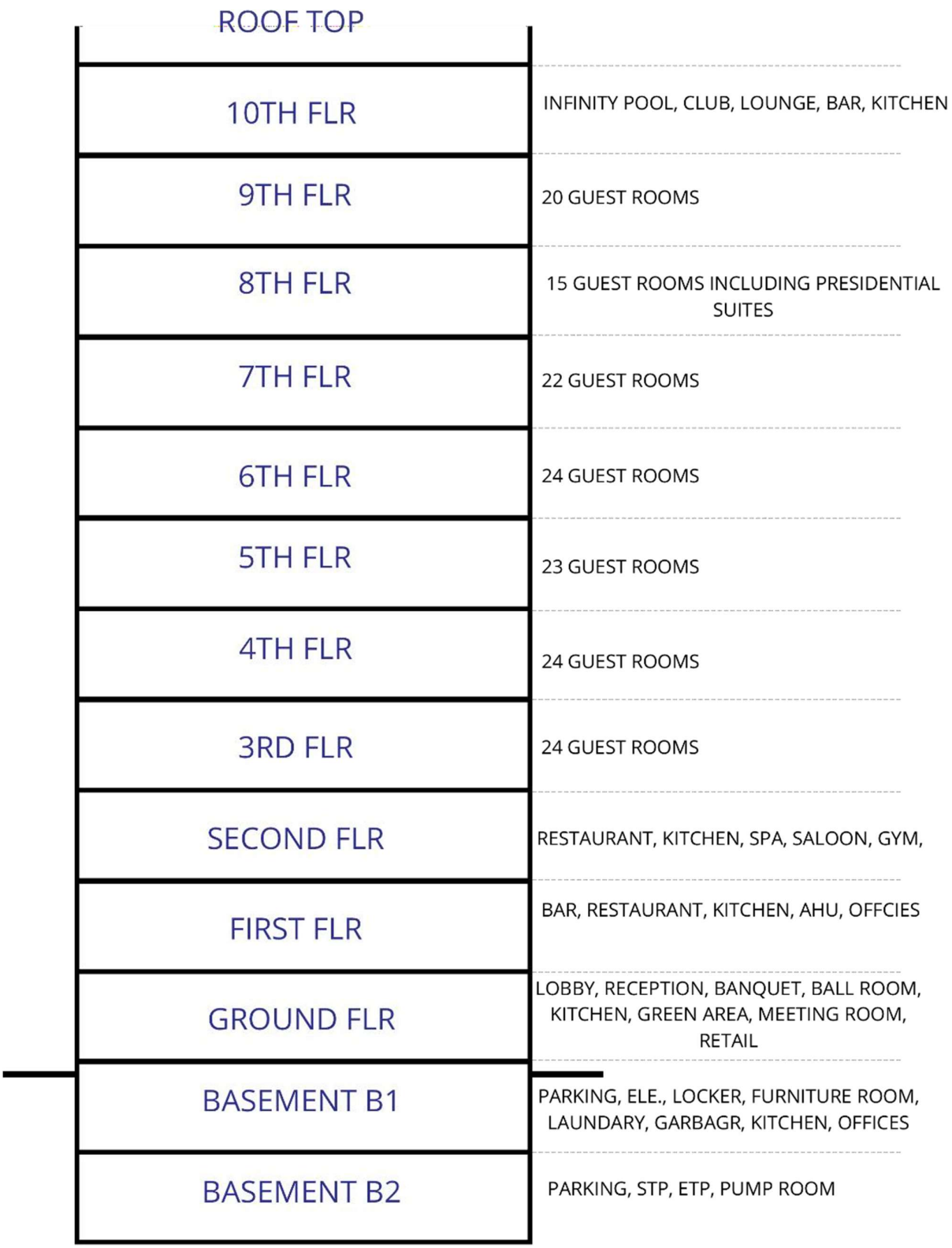
Wellness
- ✓ Fitness
- ✓ Full body massage
- ✓ Hand massage
- ✓ Head massage
- ✓ Couples massage
- ✓ Foot massage
- ✓ Neck massage
- ✓ Back massage
- ✓ Spa/wellness packages
- ✓ Spa lounge/relaxation area
- ✓ Spa facilities
- ✓ Pool/beach towels
- ✓ Massage
- ✓ Spa and wellness centre Additional charge
- ✓ Fitness centre

4.4.6 APPROACH ROAD

- An 18 m wide arterial road named Link Road number 3 connects the Taj hotel to the various locations of the city.
- A 12 m wide service lane is given on the right side of the site.



4.4.7 VERTICAL ZONING



4.4.8 AREA STATEMENT

Name		No. of Units	Area (sq.m.)	Total Area	%
	Total No. of Keys	152			
	No. of Floors	10			
A.	**Guest Room Mix**				
	Executive Suite	141	66	9306	80
	Twin Bedroom	5	33	165	10
	King bedroom	5	33	165	10
	Presidential Suite	1	152	152	
	Total Area (Sum)			**9788**	
B.	**Guest Floor Services**				
I	**Corridor Area**				
	Type Floor Corridor	1	180	**180**	30
II	**Housekeeping Static or Typical Floors**				
	Housekeeping Static or Typical Floors	1	185	**185**	32
III	**Lifts**				
	Guest Elevators	2	55	**110**	19
	Service Lift Lobby	2	55	**110**	19
IV	**Fire Protection**				
	Fire Escape Stairs	2	30	**60**	10
	Total Area (Sum)			**585**	
C.	**Public Areas**				
I	**Entrance Lobby**				
	Port Cochere	1	40	**40**	15
	Entrance Lobby Waiting Areas Front Desk	1	100	**100**	38
	Front Desk	1	40	**40**	14
	Luggage Store	1	15	**15**	6
	Bell Man	1	4	**4**	8
II	**Business Centre**				
	Store	1	36	**36**	13
			5	**5**	2
III	**Public Utilities**				
	Public Toilet	1	30	**30**	10

	Total Area (Sum)			**270**	
D.	**F&B Outlets**				
	Bar (Special) - 30 Covers	1	100	**100**	25
	Multi-Cuisine Restaurant - 120 Covers	1	300	**300**	75
	Total Area (Sum)			**400**	

E.	**Banquets**				
	Banquet Hall	2	225	**450**	62
	Pre-Function Area	2	80	**160**	22
	Conference Room	1	50	**50**	6
	Banquet Toilets	1	60	**60**	10
	Total Area (Sum)			**720**	

F.	**Recreation Facilities**				
	Swimming Pool	1	100	**100**	32
	Pool Change Room	1	50	**50**	16
	Gym	1	100	**100**	32
	Massage Room	1	6	**6**	10
	Saloon	1	50	**50**	10
	Total Area (Sum)			**306**	

G.	**Retail Archade**				
	Retail Shops	1	25	**25**	
	Total Area (Sum)			**25**	
BOH					

A.	**Material Management**				
	Truck Dock	2	20	**40**	34
	Holding Area	1	38	**38**	34
	Veg Wash	1	2.5	**2.5**	2
	Purchase & Reciving Off	1	20	**20**	15
	Purchase Office Manager	1	18	**18**	15
	Total Area (Sum)			**118.5**	

B.	**Main Store**				
	General Store	1	120	**120**	75
	Linen	1	10	**10**	6

	Unassign Store	1	10	**10**	6
	Liquor	1	10	**10**	6
	Crockery	1	6	**6**	3
	Mis	1	2	**2**	2
	Fuel	1	2	**2**	2
	Total Area (Sum)			**160**	

C.	**Garbage**				
	Loading	1	20	**20**	30
	Trash Garbage(Dry)	1	8	**8**	12
	Trash Garbage Refrigerator (wet)	1	15	**15**	24
	Garbage Truck	1	12	**12**	18
	Coal Room	1	5	**5**	8
	Circulation Space	1	5	**5**	8
	Total Area (Sum)			**65**	

D.	**Front Office : Admi/Acc/IT**				
	GM	1	151	**151**	44
	Sec to GM	1	9	**9**	2
	FO Mgr Couples as duty manager)	1	5	**5**	1
	Revenue Manager	1	8	**8**	2
	Reservation Office	1	8	**8**	2
	Work Station	1	25	**25**	8
	Discussion Room (Commom Meeting)	1	4	**4**	1
	Chief Accountant- Refer Staff Reqmnt	1	15	**15**	5
	Credit Manager	1	8	**8**	2
	Cashier	1	5	**5**	1
	Controller	1	8	**8**	2
	Payroll Manager	1	5	**5**	1
	Account Record Room	1	10	**10**	2
	Meeting room	1	10	**10**	2
	Computer Room	1	17	**17**	8
	UPS	1	35	**35**	12
	Recorde	1	10	**10**	2
	Storage and Copy8ing	1	9	**9**	2
	Total Area (Sum)			**347**	

E.	**Sales**				
	Rooms Mgr	1	8	**8**	18

	Banquet Mgr	1	8	**8**	18
	Workstation	2	5	**10**	22
	Discussion Room	1	10	**10**	22
	Storage and Copying	1	8	**8**	20
	Total Area (Sum)			**44**	

F.	**F&B**				
	Multi Cuisine Main Kitchen	1	85	**85**	**20**
	Room Services Main Kitchen	1	20	**20**	5
	Pastery	1	32	**32**	7
	Bakery	1	20	**20**	4
	Commissary prep Kitchen	1	40	**40**	9
	Common Dishwash	1	20	**20**	5
	Central Potwash	1	12	**12**	2
	Pot Store	1	8	**8**	3
	Banquet BOH & Store	1	130	**130**	30
	Cold Kitchen	1	18	**18**	4
	Café Kitchen	1	12	**12**	2
	Show Kitchen\Back Pantry Area for bar	1	8	**8**	2
	Bar Counter	1	15	**15**	3
	Chief Counter	1	5	**5**	2
	Chief Office	1	8	**8**	2
	Total Area (Sum)			**433**	

G.	**House Keeping**				
	Issue / Trailer / Dirties Collection	1	5	**5**	4
	House Keeper Executive	1	10	**10**	10
	House Keeping Assistant	1	8	**8**	8
	Hsk Office + House Keeper (as per Ap.)	1	16	**16**	15
	Dead Store	1	30	**30**	28
	F&B Circulatipon	1	5	**5**	5
	Guest Supply Store	1	10	**10**	10
	Bulk Lenin Store	1	5	**5**	5
	Tailor	1	10	**10**	10
	Upholestry Store	1	5	**5**	5
	Lost & Found	1	5	**5**	5
	Total Area (Sum)			**104**	

H.	**Human Resources**				

	HR Mgr	1	8	**8**	14
	Sec	1	4	**4**	7
	Traing Room	1	20	**20**	35
	Training Mgr	1	4	**4**	7
	Discussion	1	20	**20**	35
	Total Area (Sum)			**56**	

K	**Security & Time Office**				
	Staff Entry & Time Keeper/cctv	1	10	**10**	
	Security Mgr	1	8	**8**	
	Total Area (Sum)			**18**	

L.	**Repair and Maintenance**				
	Head of Engg	1	8	**8**	
	Asst Engg	1	8	**8**	
	Secured Store	1	10	**10**	
	Paint Shope	1	10	**10**	
	Engg Store	1	10	**10**	
	Carpentry	1	10	**10**	
	Spare Parts	1	5	**5**	
	Total Area (Sum)			**61**	

J.	**Staff Facility**				
	Male Toilets & Lockers	1	100	**100**	
	Male Executive Toilets and Lockers	0	0	**0**	
	Female Toilets and Lockers	1	70	**70**	
	Kitchen	1	25	**25**	
	Staff Cafeteria	1	90	**90**	
	Staff Recreation Area	1	15	**15**	
	Total Area (Sum)			**300**	

I.	**Miscelienouis**				
	Divers Rest Room	1	15	**15**	
	Drivers Toilet	1	22	**22**	
	Microbiologist	1	8	**8**	
	Total Area (Sum)			**45**	

M.	Other BOH (exer mech)				
I	**Mechanical Areas**				
	LV Room	1	56	**56**	
	Indoor Transformers	2	22	**44**	
	LT Panel	1	74	**74**	
	DG Generator Room	1	97	**97**	
	Chiller Plant Room	1	125	**125**	
	Rainwater Tank	105 Cubic Meter			
	Municipal Tank	123 Cubic Meter			
	Raw Water Tank	123 Cubic Meter			
	Fire Tank	105 Cubic Meter			
	Treated Water Tank	123 Cubic Meter			
	Salt Storage	1	12	**12**	
	Pump Room (Fire)	1	20	**20**	
	Pump Room (Raw + Soft + WTP)	1	60	**60**	
	Boiler Room with Pump and Heat	1	58	**58**	
	STP with Pump and Equipment's	1	80	**80**	
	Work Shop	1	22	**22**	
	Engineering Office	1	8	**8**	
	Engineering Store	1	10	**10**	
	Control Room	1	15	**15**	
	Underground Oil Storage Tank	1	190	**190**	
	Swimming Pool Filtration Plant	1	12	**12**	
	Total Area (Sum)			**487**	
II	**Mechanical; Areas on Terrace**				
	Cooling Towers	1	135	**135**	
	Overhead Tank	1	12	**12**	
	Ventilation/Exhaust Fans	14	12	**168**	
	Flushing Tanks/ Cooling Tower Tanks	3	9	**27**	
	Staircase Pressurisation Fans	3	11	**33**	
	Lift Pressurisation Fans	2	2.2	**4.4**	
	Sorubber for Kitchen Exhaust	1	5	**5**	
	Total Area (Sum)		186.4	**384.4**	

N.	**Parking**				
	Basement 2			1700	
	Basement 1			1420	
	Total Wall Thiockness and Circulation			**3120**	

4.4.9 FLOOR PLANS

Basement 3:

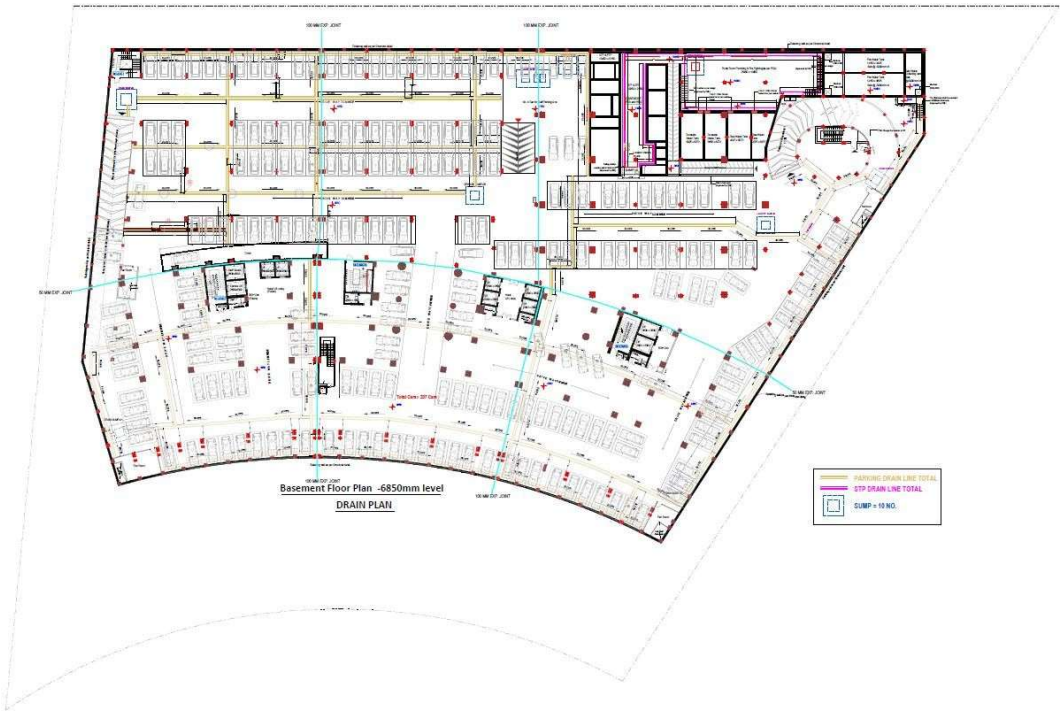
WTP, Fire Pumps, and Domestic, raw, and fire tanks

Basement 2 Plan:

Basement 2 comprises service amenities like STP, ETP, WTP, fire tank, domestic water tank, etc., and parking spaces
Car Parking Space = 350

Sump Pumps (DG) to collect groundwater and send it back to the lake to save the foundation

Water treated in the STP is sent to the chiller for gardening purposes.



Raw Water tank Capacity: 90 KL & 125 KL

Domestic Water tank Capacity: 118 KL & 123 KL

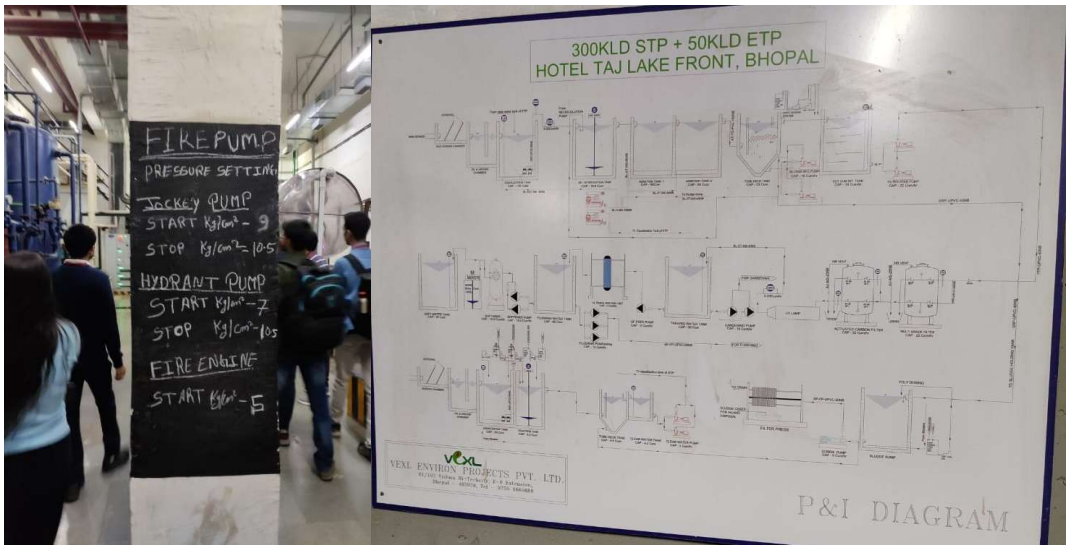
Fire-Water tank Capacity: 1. 200 KL, 2. 200 KL

WTP Process: Raw Water → Sand Filter → Activated Carbon → Hyper Filtration

↓

Kitchen/

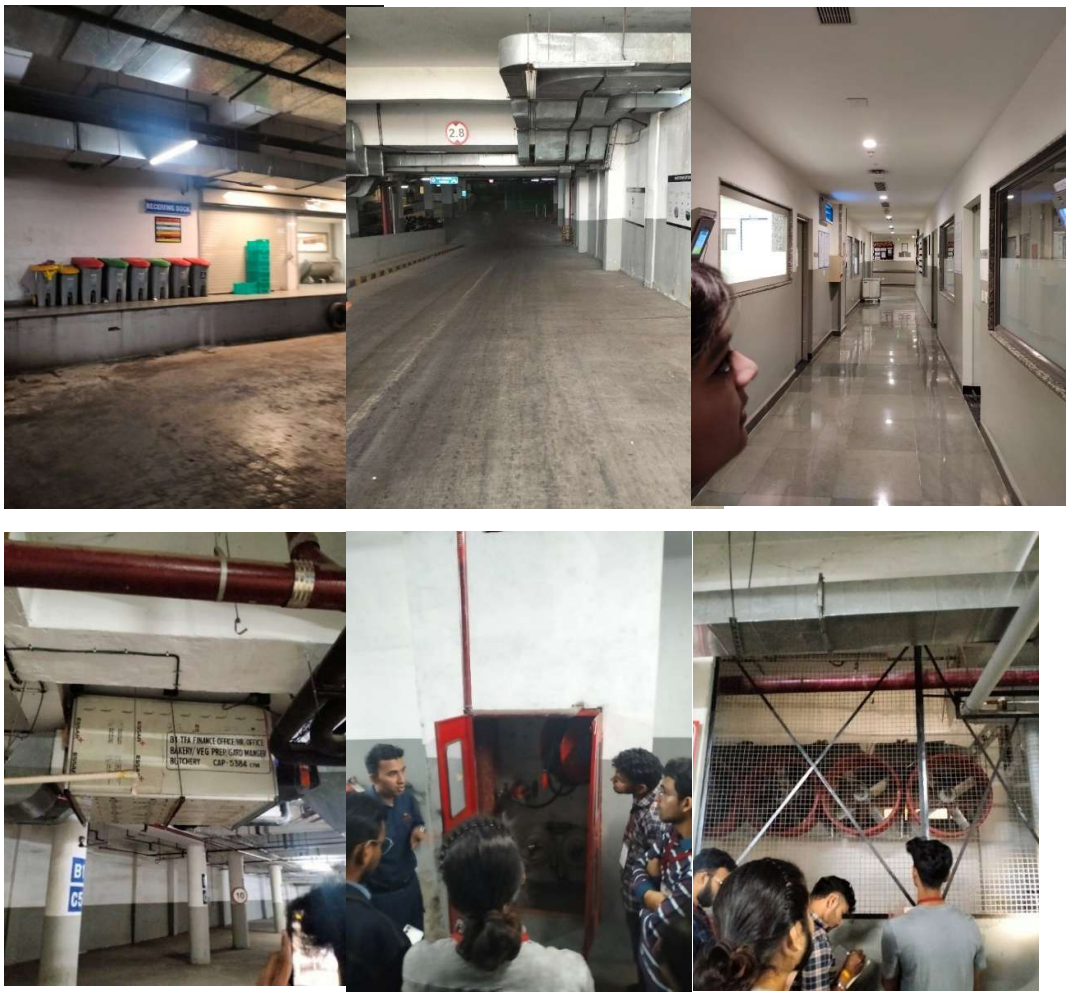
Boilers/



Basement 1 Plan:

- Basement 1 mainly consists of different types of office spaces like Housekeeping office, Finance Office, Sales office, Engg office, and Canteen, Storage, Laundry spaces, etc.
- It also has parking spaces and a service outlet.
- All the staff of Taj Lakefront use Basement 1 as an entrance and parking space, respectively.
- **Car Parking Space:** 250 ECS
- Grey Fans for fresh air, Red Fans for smoke extraction through the fire shaft

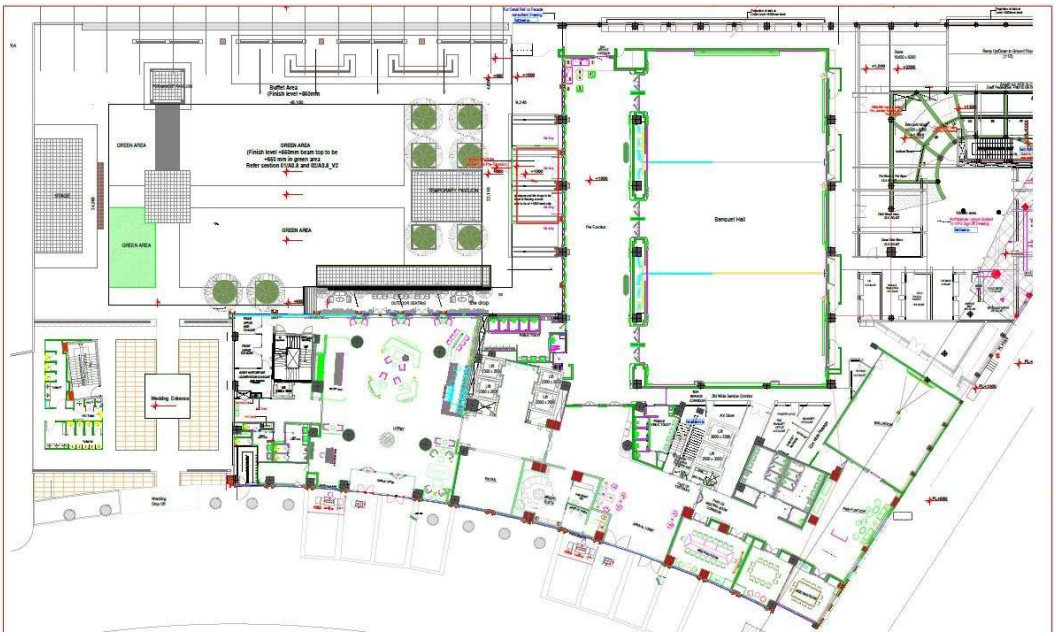




BASEMENT 1

4.4.9.1 Ground Floor Plan:

- The entrance lobby of the hotel has a grand luxury feel as it has triple-height spaces with a very attractive false ceiling that consists of cove lighting.
- There is a separate entrance has been provided, including the Banquet Hall, Meeting room, and conference rooms.
- A Banquet Hall can be divided into 3 halls by automatic temporary panels. The washroom for Banquet guests is accessible from the Pre-Function Area, which acts asa buffer space for guests.
- 2 Banquet Halls, Sheesh Mahal: Small banquet hall and Raj Mahal: Big Banquet Hall.
- 33kV Incoming line for transformer
- 2 DG, 1250 kVA and 1010 kVA, it takes 8 seconds for backup, and the DG room is soundproof with the layering of glass fibre, reducing the sound from 95 dB to 65 dB and up to 45 dB in guest floors.



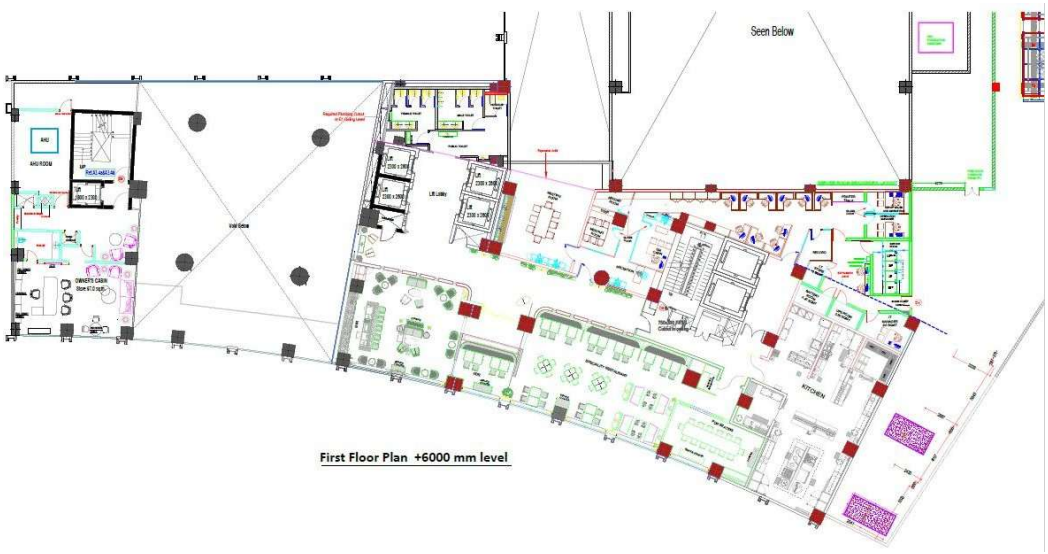


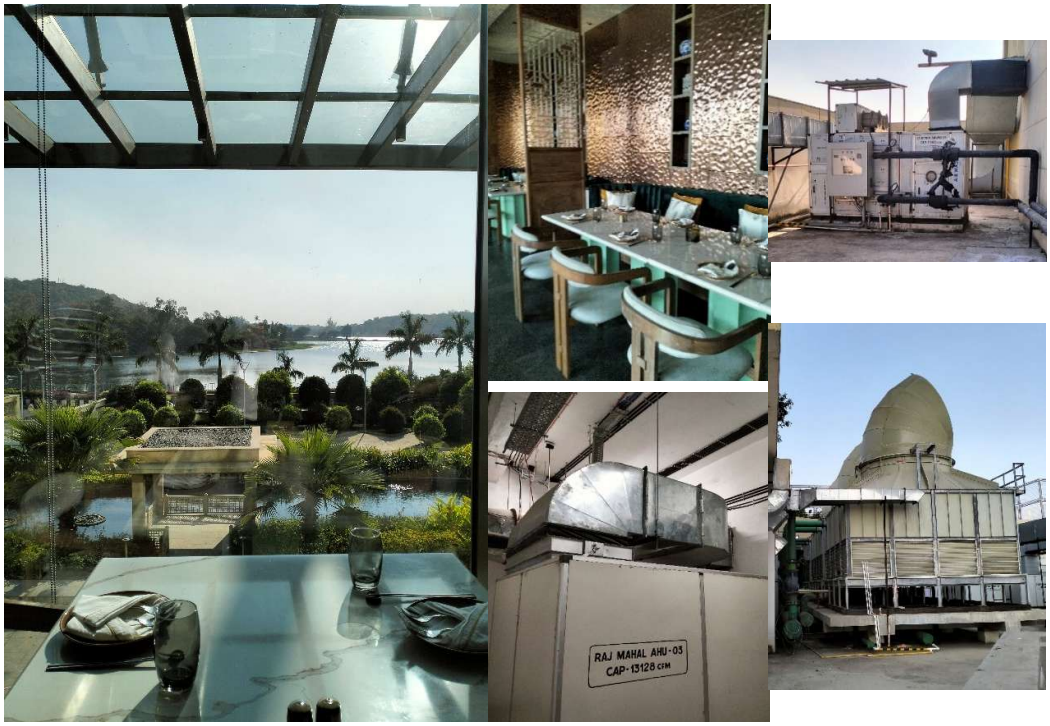


4.4.9.2 First Floor Plan:

- This floor has a Chinese Restaurant with a wonderful Chinese theme-based interior, Ming restaurant + Bar.
- Private Dining Restaurants are also provided on this floor.
- Chillers are located on the back terrace of the first floor

- 3 Chillers 350 tons each





4.4.9.3 Second Floor Plan:

- Restaurant Seating is provided on this floor. Kitchen, including cooking, storage, and washing space, has been provided. A live kitchen is also there.
- Amenities like Gym, Spa & sauna, Saloon, etc. are provided with top-classfacilities



4.4.9.4 Service Floor 2.5:





4.4.9.5 Typical Floor Plan (3rd to 7th) Floor:

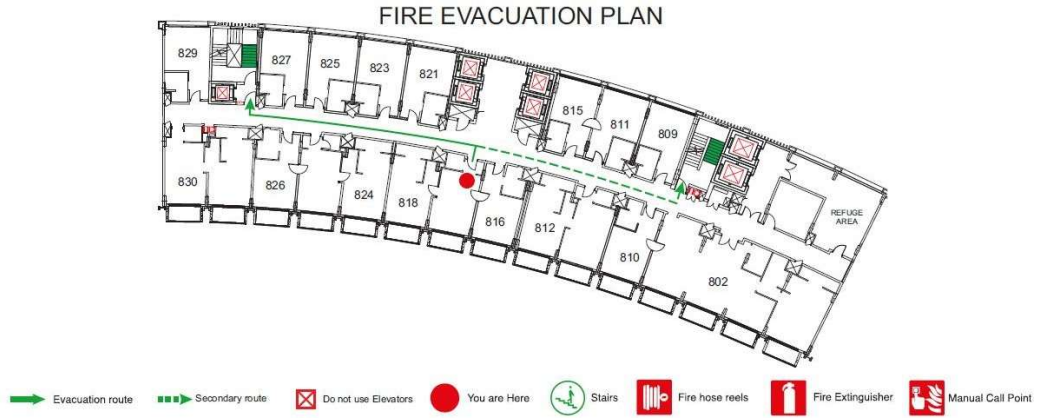
- 24 guest rooms, including Executive Suites, Twin Bedrooms, are on this floor.
- Housekeeping rooms are also there in this room for room services.
- The specialty of these typical floors is that the interior of the lobby and corridors is fullydifferent, which gives a different type of feeling on each floor. FCU in Rooms 1.5 T, Suites 2 T





4.4.9.6 8th Floor Plan :

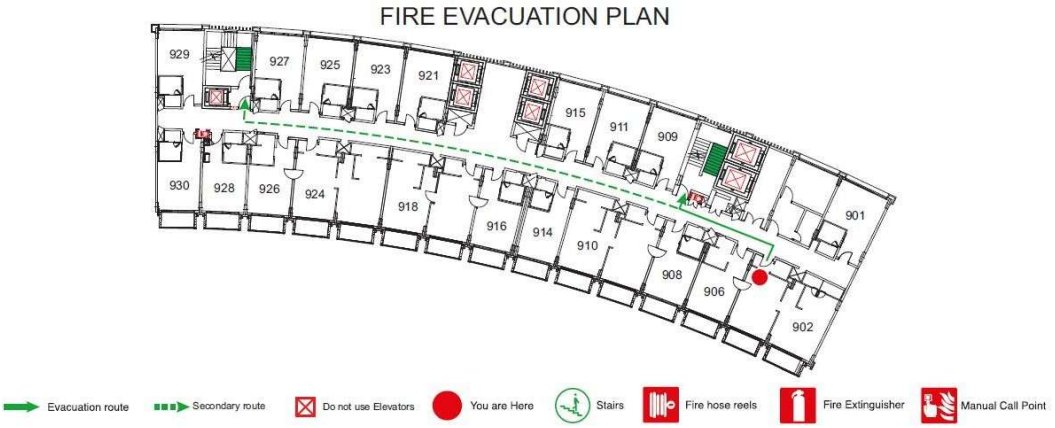
- 15 guest rooms, including Executive Suites, King Bedrooms, and 1 presidential suite, are on this floor.

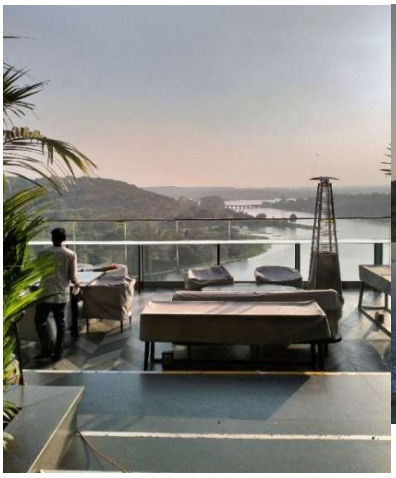


4.4.9.7 9th Floor Plan :

- 20 guest rooms, including Executive Suites, Twin Bedrooms, are on this floor.

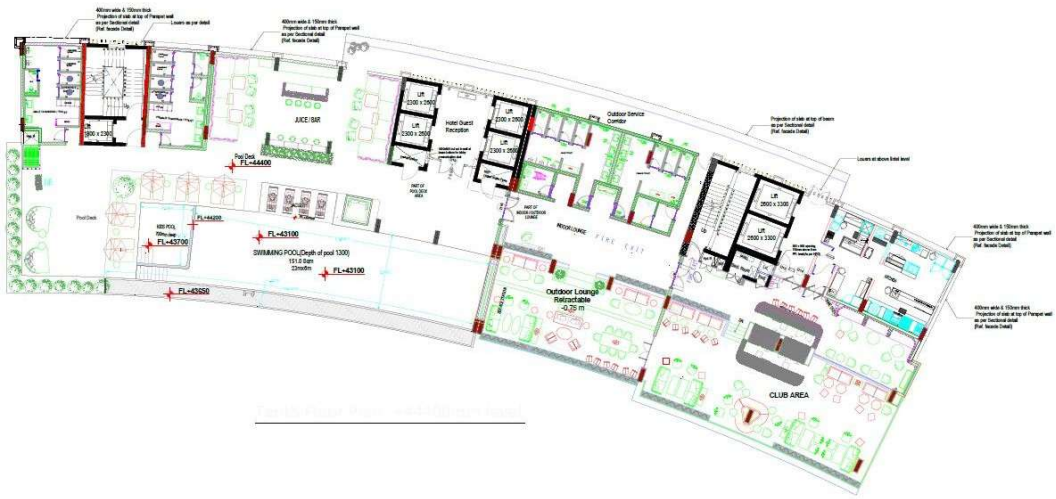
4.4.9.8 9.5th Floor: Pool filtration, plumbing shafts end here & exhaust ducts of bathrooms end here











4.4.9.9 10th Floor Plan:

An open terrace lounge, club area with a view of the swimming pool is provided on the top floor of this Hotel.

4.4.10 GUEST ROOM TYPOLOGY

In total, there are 152 rooms, which are mainly classified into 4 categories:

- Executive Suite
- Twin Room
- King Room
- Presidential Suite

Executive Suite

Tranquility and luxury unite in the Executive Suites at the Taj Lakefront, Bhopal. Extravagant and spacious, these suites, with the option of interconnecting rooms, are ideal for vacationing with family and friends. The breakfast table, the plush seating, a dressing area, and state-of-the-art- art bathrooms are the perfect setting that your memories deserve. Indulge in the breathtaking views of the lake and Taj's signature service for a truly luxurious retreat.





Size: 66 sq.m

Signature Feature: Spacious two-room suites overlooking the lake

Occupancy Details: Up to 3 guests. Max Adults: 3, Max Children: 2

OTHER CONVENIENCES

- Tea-coffee maker
- Forest Essentials bath amenities
- Air conditioning
- Separate living area
- Electronic safe.
- WiFi
- Iron & ironing board
- In-room bottled water
- Minibar
- Newspaper
- Full-length mirror, hair dryer, weighing scale
- 49-inch Smart LED TV



Twin Room

Framed by the picturesque backdrop of the hills, the Deluxe Rooms are the epitome of tranquillity and relaxation. The decor seamlessly merges the aesthetic philosophy of Madhya Pradesh with a European flair. Fully equipped with quality amenities, including digital connectivity with smart TV and Taj's signature service, the Deluxe Rooms offer an unmatched experience of comfort. Includes complimentary access to the hotel gym and wet areas.

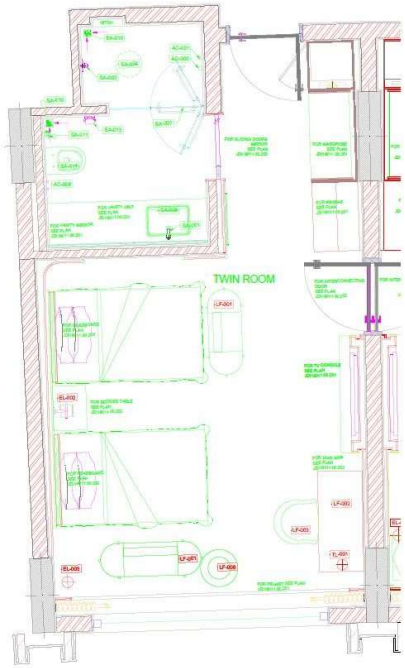




SIZE: 33 sq.m

SIGNATURE FEATURE: Spectacular vistas of the hills

Occupancy Details: Up to 3 guests. Max Adults: 3, Max Children: 2



OTHER CONVENIENCES

- Tea-coffee maker
- Forest Essentials bath amenities
- Choice of smoking & non-smoking accommodation
- Air conditioning
- WiFi
- Iron & ironing board
- In-room bottled water
- Minibar
- Newspaper
- Full-length mirror, hair dryer, weighing scale
- 49-inch Smart LED TV
- Shower Cubicle

King Room

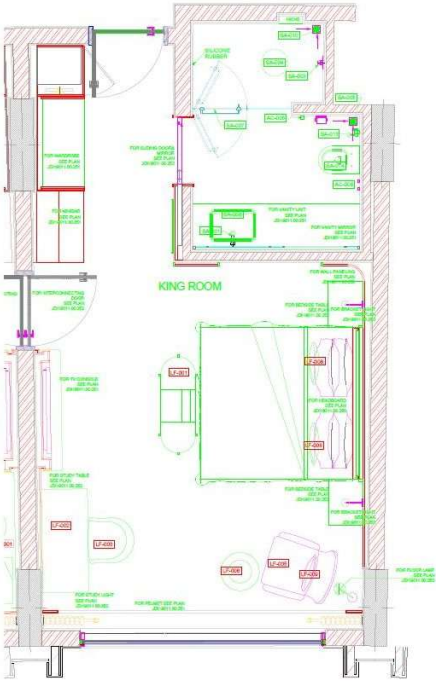
Framed by the picturesque backdrop of the hills, the Deluxe Rooms are the epitome of tranquillity and relaxation. The decor seamlessly merges the aesthetic philosophy of Madhya Pradesh with a European flair. Fully equipped with quality amenities, including digital connectivity with smart TV and Taj's signature service, the Deluxe Rooms offer an unmatched experience of comfort. Includes complimentary access to the hotel gym and wet areas.



SIZE: 33 sq.m

SIGNATURE FEATURE: Spectacular vistas of the hills

Occupancy Details: Up to 3 guests. Max Adults: 3, Max Children: 2



OTHER CONVENIENCES

- Tea-coffee maker
- Forest Essentials bath amenities
- Choice of smoking & non-smoking accommodation
- Air conditioning
- WiFi
- Iron & ironing board
- In-room bottled water
- Minibar
- Newspaper
- Full-length mirror, hair dryer, weighing scale
- 49-inch Smart LED TV
- Shower Cubicle

Presidential Suite

Bhopal is the land of the Nawabs and Begums, and epitomizing this rich culture is the Presidential Suite of the Taj Lakefront, Bhopal. With interiors that give an ethereal glimpse into the bygone era and a private balcony in every room overlooking the glorious city, the Presidential Suite is a perfect union of the

multitude of generations. A lavish experience, embodied by an elegant living room, a plush dining area, and a palatial master bedroom, awaits your presence in the opulence of the Presidential Suite at the Taj Lakefront, Bhopal.



SIZE: 152 sq.m

SIGNATURE FEATURE: A regal experience in the heart of the country

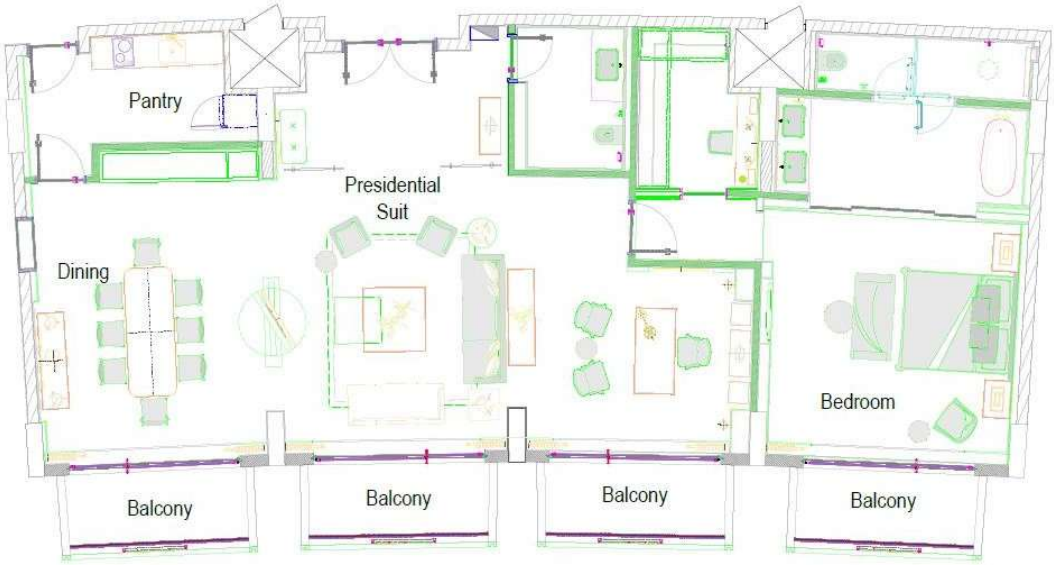
Occupancy Details: Up to 3 guests. Max Adults: 3, Max Children: 2



OTHER CONVENIENCES

- Forest Essentials bath amenities
- Air conditioning
- Bedroom with private balcony or verandah & bathroom
- Living room with dining area, bedroom & bathroom
- Electronic safe.
- Tea coffee maker
- WiFi
- Iron & ironing board
- In-room bottled water
- Minibar
- Newspaper
- Full-length mirror, hair dryer, weighing scale
- 49-inch Smart LED TV
- Lake View

- Private Pantry

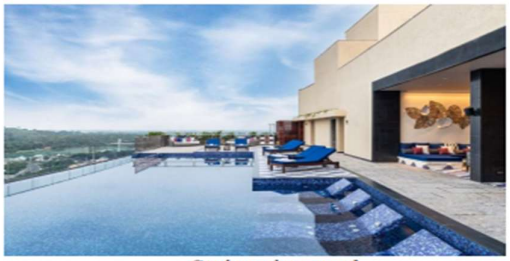


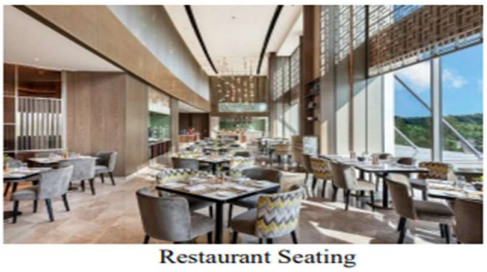
4.4.11 VIEW/INTERIOR OF SPACES

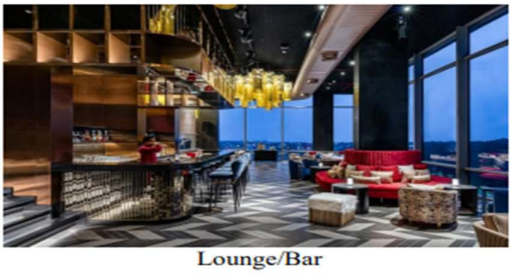

Spa & Sauna


PDR


Banquet Hall


Swimming pool


Restaurant Seating


Lounge/Bar

4.4.12 SERVICES

Electrical Services



L.T. panel room-60 sqm
Access width -4m



H.T. panel room-20 sqm



L.T. and H.T. panel room



L.T. and H.T. panel room
Height-3.9 m



Fire Fighting



Fire Fighting

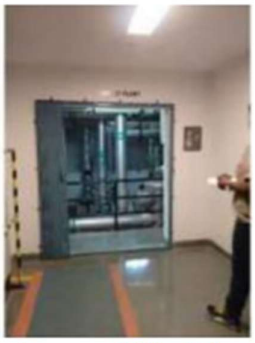


Electrical Tray

Chiller Plant



AREA –150 sqm



Access width –1.8 m



Access for machinery
Width –6

Fire Pump



Control Panel for Fire Room 70 sqm
Tank Volume –72 cum



Water Storage 20,00,000

Water Treatment



Boiler room with pump and
Heat exchange



Overhead tank





Water Storage Tank Raw 90 sqm
(area-12 sqm)



Tank for swimming Pool

STP



Cooling Towers



4.5 DESK APPRAISAL REPORT

KALDAN SAMUDHRA PALACE, MAHABALIPURAM

4.5.1. Introduction

Kaldan Samudhra Palace is a luxury beachfront resort located in Mahabalipuram (Mamallapuram), Tamil Nadu. Inspired heavily by Indo-Rajputana palace architecture, the property positions itself as a premium experiential resort aimed at destination weddings, high-end leisure travellers, and corporate retreats. This desk appraisal evaluates the resort's architectural character, planning efficiency, landscape integration, guest experience, service logistics, sustainability aspects, and operational feasibility.

As a reference case for coastal luxury resort design, Kaldan Samudhra provides valuable insights into how traditional palace typologies can be adapted to a contemporary 5-star hospitality program. This appraisal is based on available documentation, open-source information, design observation, spatial analysis, and comparison with industry benchmarks.

4.5.2. Project Overview

- **Property Name:** Kaldan Samudhra Palace
- **Location:** Mahabalipuram, Tamil Nadu (ECR beachfront)
- **Typology:** 5-star luxury resort, destination wedding venue
- **Architectural Style:** Rajasthani–Mughal Palace Revival
- **Site Character:** Coastal frontage along Bay of Bengal
- **Primary Target Group:** Wedding tourism, premium leisure, NRI clientele, corporate guests

4.5.3. Site Context and Location Appraisal

4.5.3.1 Macro Context

Mahabalipuram is a UNESCO World Heritage site known for its stone temples and rock-cut architecture. The ECR coastline is a tourism corridor connecting Chennai to Puducherry. The site benefits from:

- Strong tourist inflow
- Proximity to Chennai city
- Strong wedding/event market
- Scenic beachfront with sunrise views

4.5.3.2 Micro Context

Kaldan Samudhra is positioned directly on the beach with:

- A long sea-facing frontage

- Clear view corridors
- Low-rise development around the area, preventing view blockage
- Good road connectivity via ECR highway

4.5.3.3 Climatic Considerations

- Tropical humid coastal climate
- High wind loads during monsoon
- Intense solar exposure
- Saline air affecting materials

The resort addresses these through:

- Large shaded verandahs
- Deep-set balconies
- High plinths
- Use of stone cladding to resist salt corrosion

4.5.4. Architectural Appraisal

4.5.4.1 Design Style

The architectural language reflects:

- **Rajputana Palace Architecture**
    - Chhatris
    - Domes
    - Jaali screens
    - Symmetrical massing
- **Mughal influences**
    - Arched colonnades
    - Grand courtyards
    - Ornamental gateways

This creates a “palace-like” identity, ideal for wedding tourism.

4.5.4.2 Planning Organization

The resort follows a **central axis-based planning**:

1. **Grand Portal Gate** → ceremonial entry
2. **Arrival Court & Drop-off Plaza** with symmetrical landscaping

3. **Central Palace Block** with:
    - Lobby
    - Double-height halls
    - Sea-view terraces
4. Residential wings extend on both sides, forming a U-shaped plan opening to the ocean.

4.5.4.3 Spatial Hierarchy

The design establishes a clear spatial hierarchy:

- **Public Zones:** Grand lobbies, banquet foyers
- **Semi-Public Zones:** Restaurants, terraces
- **Private Guest Zones:** Rooms & suites shifted to the wings
- **Exclusive Zones:** Presidential suites with direct sea views

This aligns with international luxury hotel design standards.

4.5.5. Room & Accommodation Appraisal

4.5.5.1. Room Typologies

- Deluxe Rooms
- Sea-facing Rooms
- Palace Suites
- Presidential Suite

4.5.5.2. Strengths

- Large room sizes compared to typical Indian resorts
- High ceiling heights
- Traditional interiors with contemporary amenities
- Sea-view balconies ensuring strong experiential value

4.5.5.3. Weaknesses

- Overly ornate interior palette may limit future design flexibility
- Heavy materials increase maintenance costs in coastal weather

4.5.6. Functional Appraisal

4.5.6.1. Arrival Experience

The arrival court is a major strength of the project:

- Long ceremonial driveway

- Large palace façade
- Grand bifurcated staircase inside the lobby
- Visual drama suited for luxury events

4.5.6.2. Banqueting & Events

Kaldan Samudhra is built primarily for destination weddings.

Key features:

- Multiple indoor halls
- Large pre-function areas
- Outdoor lawns with sea backdrop
- Dedicated mandapam areas
- Service access planned behind the banquet halls

This makes it one of the strongest wedding properties on the Tamil Nadu coast.

4.5.6.3. F&B and Recreational Spaces

- Multi-cuisine restaurants
- Infinity pool overlooking the ocean
- Spa with traditional décor
- Lawn-side bars and event facilities

The F&B placement is efficient, positioned near the central block for ease of service.

4.5.7. Landscape Appraisal

4.5.7.1. Landscape Character

- Mughal-style symmetrical gardens
- Long reflecting pools
- Green lawns for events
- Palm-lined pathways
- Traditional stone planters and water features

4.5.7.2. Strengths

- Extensive landscape integrates the palace theme
- Offers large usable areas for outdoor events
- Good connection between pool, lawns, and beachfront

4.5.7.3. Weaknesses

- Some landscaping uses high-maintenance species
- Salt-tolerant planting could be increase

4.5.8. Circulation & Service Planning Appraisal

4.5.8.1 Front-of-House Circulation

Strengths:

- Grand axial circulation
- Clear guest pathways
- Balanced layout between wings
- F&B circulation properly segregated

4.5.8.2. Back-of-House (BOH)

Analysis indicates:

Strengths

- Service corridors run behind banquet halls
- Separate service entries
- Laundry and kitchen are placed at the rear

Weaknesses

- Kitchen-to-banquet distance may be long in some cases
- Vertical service connectivity appears limited

4.5.9. Sustainability & Technical Appraisal

4.5.9.1.Strengths

- Use of stone reduces repainting cycles
- Landscape buffers create natural cooling
- Low-rise massing reduces wind load risk
- Generous natural ventilation in public spaces

4.5.9.2.Weaknesses

- Large built-up area → high energy consumption
- Ornamental lighting may increase the electricity load
- No clear evidence of rainwater harvesting or STP integration in the available data

4.5.10. Operational & Market Appraisal

4.5.10.1 Market Positioning

Kaldan Samudhra is positioned as:

- **Ultra-luxury palace resort** on the coast
- **Top-tier destination wedding venue** in South India
- Competitor to:
    - Radisson Blu Temple Bay
    - InterContinental Chennai
    - Sheraton Grand ECR

4.5.10.2 Strengths

- Extremely strong scale and visual grandeur
- High wedding and MICE potential
- Iconic architecture that supports branding
- Strong ocean frontage

4.5.10.3 Weaknesses

- Heavy operating costs
- Ornate façade requires constant upkeep
- Seasonal weather challenges (cyclones, humidity)

4.5.11. SWOT Analysis

4.5.11.1 Strengths

- Unique palace architecture on beachfront
- Strong wedding and event infrastructure
- High visual and experiential appeal
- Large, symmetrical planning ideal for ceremonies

4.5.11.2. Weaknesses

- High maintenance and operational cost
- Ornamental style not universally preferred
- Coastal corrosion risks

4.5.11.3Opportunities

- Expansion of experiential tourism
- Partnership with luxury wedding planners
- International marketing as “palace by the sea.”

4.5.11.4 Threats

- Rising competition in ECR
- Coastal regulation changes
- Monsoon disruptions affecting events

4.5.12. Conclusion

Kaldan Samudhra Palace represents an exemplary fusion of royal Indian architectural vocabulary with a coastal luxury resort program. Its greatest strength lies in its identity as a **destination wedding palace on the beach**, a niche market that is rapidly expanding in India.

The planning demonstrates strong spatial hierarchy, a dramatic guest arrival sequence, and efficient public-to-private zoning. While the ornate architecture leads to high maintenance effort, its iconic character provides significant branding value and ensures strong market demand.

4.6. TAJ FISHERMAN'S COVE, CHENNAI

4.6.1. Introduction

Taj Fisherman's Cove Resort & Spa is a flagship 5-star luxury beachfront property located along the East Coast Road (ECR) near Covelong, Chennai. Developed on the ramparts of an 18th-century Belgian fort, the resort blends coastal tropical design with heritage restoration principles. Known for its bungalow-style rooms, manicured landscapes, and premium beachfront dining, the property caters to upscale leisure travellers, corporate guests, and destination wedding clientele.

This desk appraisal evaluates the resort's spatial planning, architectural character, service efficiency, landscape response, sustainability approach, and operational strengths. As one of India's earliest luxury beach resorts, Taj Fisherman's Cove is a significant precedent for coastal hospitality development, integrating heritage identity with modern luxury.

4.6.2. Project Overview

• **Property Name:** Taj Fisherman's Cove Resort & Spa
• **Location:** Covelong, East Coast Road, Chennai
• **Typology:** 5-star luxury beachfront resort
• **Architectural Style:** Tropical coastal modern + heritage fort integration
• **Site Character:** 45-acre oceanfront property on the Bay of Bengal
• **Primary Target Group:** Premium leisure travellers, corporate guests, international tourists, destination weddings

4.6.3. Site Context and Location Appraisal

4.6.3.1 Macro Context

Located on the Chennai–Mahabalipuram ECR stretch, the site benefits from:

• High tourist volume along Tamil Nadu's most popular tourism corridor
• Proximity to Chennai International Airport
• International recognition due to Taj branding
• Location between two major destinations: Chennai city and Mahabalipuram

The macro context supports both business and leisure traffic year-round.

4.6.3.2 Micro Context

The resort is situated directly on the coastline with:

• Wide uninterrupted beach frontage
• Dense vegetation buffer zones
• Natural dune formations
• Good connectivity to ECR highway
• Nearby fishing settlements influencing the local character

Its large land parcel enables low-density development with substantial privacy.

4.6.3.3 Climatic Considerations

• Tropical coastal climate with high humidity
• Heavy monsoon winds and occasional cyclone exposure
• Intense solar heat during summer
• Corrosion risk due to salt-laden air

The resort responds effectively through:

• Cottage-style low-rise structures
• Sloped roofs for water runoff
• Shaded verandahs and pergolas
• Use of weather-resistant materials like timber, stone, and textured plaster

4.6.4. Architectural Appraisal

4.6.4.1 Design Style

Taj Fisherman's Cove uses a **tropical coastal architecture vocabulary**, characterized by:

• Low-rise scattered cottage blocks
• Sloped terracotta/thatched roofs
• Wide overhangs
• Light pastel exterior palette

• Integration with existing fort ruins
• Open-air public spaces

The architectural language emphasizes **relaxed seafront luxury**, contrasting with the ornate palace identity of Kaldan Samudhra.

4.6.4.2 Planning Organization

The resort follows a **decentralized village-like masterplan**:

1. Arrival court and reception pavilion
2. Lobby with views to central pool and ocean
3. Cottage clusters arranged along curving pathways
4. Luxury villas with private gardens closer to the beach
5. Restaurants positioned for sea views
6. The historic fort structures converted into specialty dining zones

The distributed layout enhances privacy and creates an immersive natural environment.

4.6.4.3 Spatial Hierarchy

• **Public Zones:** Lobby, pool deck, main restaurant, fort courtyard
• **Semi-Public Zones:** Spa pavilions, garden pathways
• **Private Guest Zones:** Cottages and villas dispersed across the site
• **Exclusive Zones:** Premium villas with private sit-outs and direct beach access

The spatial hierarchy is informal and organic, reflecting a resort lifestyle rather than palace formality.

4.6.5. Room & Accommodation Appraisal

4.6.5.1 Room Typologies

• Superior Rooms (main block)
• Deluxe Cottages
• Luxury Garden Villas
• Premium Villas with sit-outs
• Sea-view Cottages

4.6.5.2 Strengths

• Cottage layout ensures privacy and exclusivity
• Strong indoor-outdoor connection

• Use of natural materials enhances coastal atmosphere
• Villas designed with curated garden spaces and ocean glimpses

4.6.5.3 Weaknesses

• Some rooms in older sections may appear dated
• Small built-up footprints limit scope for expansion of certain units
• Limited balconies in some categories

4.6.6. Functional Appraisal

4.6.6.1 Arrival Experience

Key strengths:

• Long driveway with lush tropical planting
• Open pavilion-style lobby with ocean views
• Breezy, informal ambience
• Seamless transition from arrival to pool/ocean-front

The experience emphasizes relaxation rather than grandeur.

4.6.6.2 Banqueting & Events

While not as wedding-centric as Kaldan, Fisherman's Cove has robust event capabilities:

• Well-equipped indoor banquet halls
• Large sea-facing lawn suitable for receptions
• Fort courtyard often used for themed dinners
• Beach weddings permitted in designated areas

Its unique heritage environment gives it an advantage for premium events.

4.6.6.3 F&B and Recreational Spaces

• All-day dining overlooking the Bay of Bengal
• Specialty seafood restaurant inside the fort ruins
• Beach bar and grill
• Large freeform swimming pool
• Jiva Spa
• Water sports via tie-ups

The F&B locations maximize ocean frontage and capitalize on sunset dining experiences.

4.6.7. Landscape Appraisal

4.6.7.1 Landscape Character

• Tropical coconut groves
• Native coastal shrubs
• Meandering garden paths
• Water bodies near villas
• Large open lawns for events

The landscape creates a natural and relaxed ambience rather than a formal geometry.

4.6.7.2 Strengths

• Strong harmony with the coastal ecosystem
• Effective shading through tall palms
• Soft-scape buffers create privacy
• Low-rise buildings preserve long views to the ocean

4.6.7.3 Weaknesses

• Some lawns require heavy water use
• Storm-surge vulnerability due to proximity to shoreline

4.6.8. Circulation & Service Planning Appraisal

4.6.8.1 Front-of-House Circulation

Strengths:

• Organic pedestrian pathways mimic a beach village
• Easy access between cottages, pool, and restaurants
• No visual obstruction between public zones and ocean

4.6.8.2 Back-of-House (BOH)

Strengths:

• Well-concealed service areas behind main block
• Efficient kitchen-to-restaurant access
• Laundry, staff areas placed away from guest zones

Weaknesses:

• Wide site increases travel distances for staff
• Limited centralized vertical services (due to low-rise planning)

4.6.9. Sustainability & Technical Appraisal

4.6.9.1 Strengths

• High use of natural ventilation reduces AC loads
• Native vegetation improves climate resilience
• Low-rise structures reduce heat gain
• Traditional sloped roofs ideal for coastal rains
• Use of natural materials (timber, stone)

4.6.9.2 Weaknesses

• Proximity to the shoreline increases erosion risk
• Some cottage roofs require seasonal maintenance
• As an older property, retrofitting energy-efficient technologies may be challenging

4.6.10. Operational & Market Appraisal

4.6.10.1 Market Positioning

Taj Fisherman's Cove is positioned as:

• A premium nature-integrated beach resort
• A heritage-plus-luxury coastal destination
• A strong competitor to:

- Radisson Blu Temple Bay
- InterContinental Chennai
- Sheraton Grand ECR

4.6.10.2 Strengths

• Strong brand value under Taj Hotels
• Large land parcel ensures privacy
• Authentic coastal architecture
• High international tourist appeal

4.6.10.3 Weaknesses

• Absence of palace-like grandeur may limit big-fat weddings
• Maintenance cost of cottages and thatched roofs
• Seasonal monsoons impact outdoor operations

4.6.11. SWOT Analysis

4.6.11.1 Strengths

• Iconic beachfront location
• Private cottage-based accommodation
• Strong heritage identity via fort integration
• Mature landscape creating a natural microclimate

4.6.11.2 Weaknesses

• Ageing structures require continuous upkeep
• Long internal circulation routes
• Not suitable for extremely large-scale events

4.6.11.3 Opportunities

• Growth in wellness and nature-based tourism
• Expansion of villa inventory
• Premium international branding through unique fort experiences

4.6.11.4 Threats

• Coastal erosion and CRZ restrictions
• Increasing competition on ECR
• Climate risks (cyclones, storm surges)

4.6.12. Conclusion

Taj Fisherman’s Cove stands as one of India's most successful examples of tropical coastal resort design. Its cottage-style layout, integration with historic fort structures, expansive beachfront, and understated luxury make it an iconic hospitality destination.

The resort demonstrates:

• How low-density planning enhances guest privacy
• How historic elements can be repurposed for modern F&B and events
• How natural landscape can take precedence over architectural dominance

4.7 THE OBEROI UDAIVILAS, UDAIPUR

4.8.1. Introduction

The Oberoi Udaivilas, located on the banks of Lake Pichola in Udaipur, Rajasthan, is one of India's most acclaimed luxury resorts. Designed as a modern interpretation of Mewar palace architecture, the property showcases grand courtyards, intricate domes, water gardens, and traditional craftsmanship. Positioned as an ultra-luxury experiential retreat, the resort caters to high-net-worth leisure travellers, international tourists, honeymooners, and exclusive destination wedding clientele.

This desk appraisal evaluates the architectural character, contextual responsiveness, spatial organization, landscape integration, guest experience, sustainability measures, and operational performance of The Oberoi Udaivilas. The property stands as a benchmark for culturally rooted luxury hospitality design in India.

4.8.2. Project Overview

• Property Name: The Oberoi Udaivilas
• Location: Udaipur, Rajasthan (Lake Pichola waterfront)
• Typology: 5-star ultra-luxury palace resort
• Architectural Style: Mewar Palace Revival + Mughal–Rajput influences
• Site Character: 50-acre lakeside estate with forests and waterfront
• Primary Target Group: HNIs, international luxury travellers, honeymooners, wedding clients, and wellness tourists

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4.8.3. Site Context and Location Appraisal

4.8.3.1 Macro Context

Udaipur is one of India's leading luxury tourism hubs, known for:

• Lakefront palaces and world-famous heritage
• Strong international tourist inflow
• High-end wedding and honeymoon market
• Rich Mewar cultural and architectural influence

This macro context supports ultra-luxury palace-themed hospitality.

4.8.3.2 Micro Context

The Oberoi Udaivilas occupies a prime location on the eastern bank of Lake Pichola with:

• Direct views of City Palace, Jag Mandir, and Lake Palace
• Private waterfront access
• Natural forest reserve within the estate
• Peaceful, low-density surroundings
• Accessible by dedicated approach road and boat

The micro-context significantly enhances the resort's exclusivity, serenity, and experiential richness.

4.8.3.3 Climatic Considerations

• Hot and dry summers
• Mild winters
• Short but intense monsoon season
• High solar exposure typical to Rajasthan

The resort responds through:

• Courtyards for passive cooling
• Water bodies and reflecting pools for microclimate regulation
• Thick stone walls for thermal insulation
• Shaded arched corridors to minimize heat gain

4.8.4. Architectural Appraisal

4.8.4.1 Design Style

The resort's design language reflects Mewar royal architecture, characterized by:

• Domes and cupolas
• Jharokhas (overhanging stone balconies)
• Jaali screens
• Symmetrical palatial layouts
• Ornamental gateways
• Carved sandstone and white limestone finishes

The aesthetic conveys timeless Indian luxury rooted in local heritage.

4.8.4.2 Planning Organization

The resort is organized as a clustered palace complex, composed of:

1. Ceremonial Gateway & Arrival Court
2. Grand Lobby Block with lake-view verandahs
3. Long Domed Corridors interlinking different zones
4. Accommodation Clusters around garden courts and water bodies

5. Luxury Suites with semi-private pools
6. Dining & Spa Areas positioned on scenic edges for maximum view advantage

This hierarchical and interconnected planning enhances guest experience while reflecting palace architecture.

4.8.4.3 Spatial Hierarchy

• Public Zones: Lobby, verandahs, entrance courts
• Semi-Public Zones: Restaurants, lounge courtyards, pool courts
• Private Guest Zones: Guest rooms overlooking garden and pool courts
• Exclusive Zones: Kohinoor Suite and lakeside luxury suites

The hierarchy reinforces privacy, grandeur, and ceremonial flow.

4.8.5. Room & Accommodation Appraisal

4.8.5.1 Room Typologies

• Premier Rooms (Garden/Pool View)
• Premier Rooms with Semi-Private Pool Access
• Luxury Suites
• Royal Suites
• Kohinoor Suite with private pool and courtyard

4.8.5.2 Strengths

• Large, luxurious rooms with handcrafted detailing
• Semi-private pools connected by water channels
• Strong indoor–outdoor relationship through courtyards
• High-quality materials ensuring timeless appeal

4.8.5.3 Weaknesses

• Traditional royal interiors may not suit minimalist preferences
• High maintenance due to ornate finishes
• Humidity control required for lake-facing rooms

4.8.6. Functional Appraisal

4.8.6.1 Arrival Experience

Strengths:

• Grand traditional welcome ceremony
• Processional movement through domed passages
• First dramatic view of Lake Pichola
• Water elements soften the desert climate

The arrival is designed to emphasize royal hospitality and theatricality.

4.8.6.2 Banqueting & Events

Udaivilas is a top-tier destination for luxury weddings and private events:

• Elegant indoor banquet halls
• Vast courtyard lawns with lake backdrop
• Waterfront mandap options
• Seamless BOH service corridors and discreet event movement

The resort specializes in intimate yet opulent celebrations.

4.8.6.3 F&B and Recreational Spaces

• All-day dining with lake-facing terraces
• Specialty Indian restaurant
• Outdoor candlelit dining decks
• Oberoi Spa with private treatment rooms
• Temperature-controlled pools
• Nature walks and lakeside pathways

Each F&B zone is optimized for sunset and lake views.

4.8.7. Landscape Appraisal

4.8.7.1 Landscape Character

• Mughal-inspired water channels
• Lotus ponds
• Frangipani-lined corridors
• Sculpted hedges
• Semi-private pool courts
• Courtyard gardens with traditional motifs

Landscape design reinforces palace architecture and enhances microclimate.

4.8.7.2 Strengths

• Water as a central climate-control and aesthetic element
• Rich biodiversity due to on-site sanctuary
• Multiple garden sequences creating layered experiences

4.8.7.3 Weaknesses

• High water consumption
• Extensive garden maintenance required

4.8.8. Circulation & Service Planning Appraisal

4.8.8.1 Front-of-House Circulation

Strengths:

• Intuitive movement through sequential courtyards
• Shaded colonnades ideal for desert climate
• Strong visual axis to lake and domes

4.8.8.2 Back-of-House (BOH)

Strengths:

• Discreet service routes behind courtyards
• Efficient kitchen placement near major dining zones
• Well-planned laundry and staff areas

Weaknesses:

• Site scale increases staff movement distance
• Water courts limit some routing options

4.8.9. Sustainability & Technical Appraisal

4.8.9.1 Strengths

• Passive cooling with water bodies and shaded verandahs
• High thermal mass from stone walls
• Use of local materials and craftsmen
• Natural ventilation in semi-open spaces

4.8.9.2 Weaknesses

• High water demand for pools and gardens
• Heavy cooling load during peak summer
• Limited scope for rooftop solar due to domes

4.8.10. Operational & Market Appraisal

4.8.10.1 Market Positioning

The Oberoi Udaivilas is positioned as:

• A global icon of luxury palace hospitality
• A premier Indian destination wedding venue
• A signature property under The Oberoi Group

Competitors include:
• Taj Lake Palace
• The Leela Palace Udaipur
• Raffles Udaipur
• Trident Udaipur (secondary competitor)

4.8.10.2 Strengths

• World-renowned service and luxury levels
• Exceptional palace architecture and landscaping
• Strong international demand
• High brand recall

4.8.10.3 Weaknesses

• High pricing limits market size
• Intense competition on Udaipur lakefront
• Significant upkeep cost for water features and décor

4.8.11. SWOT Analysis

4.8.11.1 Strengths

• Iconic palace architecture with global recognition
• Scenic lakefront setting
• Exceptional service standards
• Extensive use of traditional craftsmanship

4.8.11.2 Weaknesses

• High operational and landscape maintenance cost
• Heavy dependence on water in an arid environment
• Limited appeal for minimalist travellers

4.8.11.3 Opportunities

• Expanding luxury wedding market
• Rising international experiential tourism
• Potential for exclusive cultural programmes

4.8.11.4 Threats

• Water scarcity and regulatory restrictions
• Strong competition from nearby luxury properties
• Seasonal tourist fluctuations

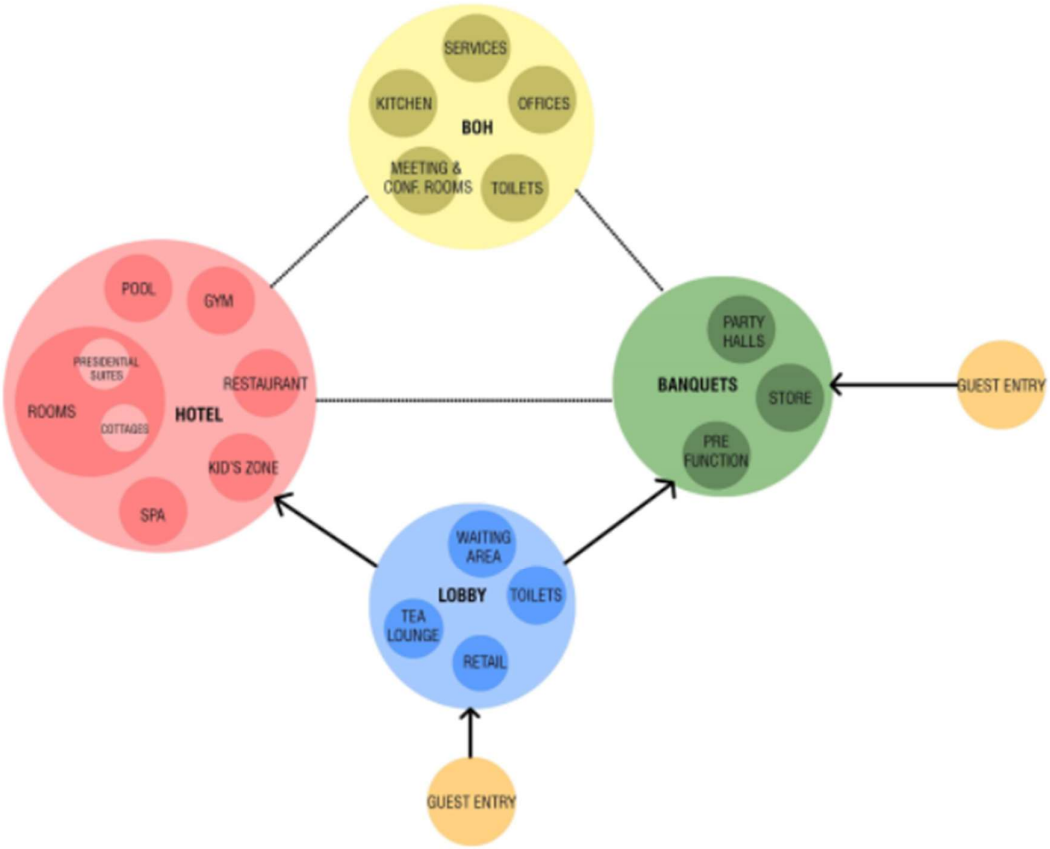
4.8.12. Conclusion

The Oberoi Udaivilas is one of the finest examples of palace-inspired luxury hospitality in India. Its architectural grandeur, interconnected water gardens, refined craftsmanship, and breathtaking lakefront setting make it a global icon. The resort demonstrates how traditional Indian architectural vocabulary can be successfully adapted to modern luxury expectations.

Chapter 5
DESIGN PROPOSAL

5.1 DESIGN THEME:
Veyara is a celebration of coastal grandeur, where South Indian vernacular charm meets the elegance of palace architecture. Inspired by the cultural tapestry of Andhra Pradesh, its design weaves together domes, jaalis, jharokhas, and cusped arches with teak colonnades, Athangudi tiles, and shaded verandas. Set along the Bay of Bengal's shimmering edge, the resort blends heritage materials with modern luxury, offering guests an immersive journey through tradition, craftsmanship, and the timeless rhythm of the sea.

5.2 BOH AND FOH RELATIONSHIP:



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THANK YOU