

Notes – CHAPTER 1 Introduction to Facility Planning

1.1 Classification of Hotel under Star Category

HRACC (Hotel and Restaurant Approval Classification Committee)

Members chosen from the government and industry Associations

- Tourism
- **FHRAI** - Federation of Hotel and Restaurant Association of India
- IATO - Indian Association of Tour Operators
- TAAI - Travel Agents Association of India
- IHM – Institute of Hotel Management

Members of HRACC

- ❖ Secretary General FHRAI - Federation of Hotel and Restaurant Association of India
- ❖ President of HAI - Hotel Association of India
- ❖ President of TAAI - Travel Agents Association of India
- ❖ President of IATO - Indian Association of Tour Operators
- ❖ Principal of IHM - Institute of Hotel Management

Star Rating

The Hotel & Restaurant Approval & Classification Committee (HRACC) inspects and assesses the hotels based on the facilities and services offered.

There are some boundaries between each star rating, which a hotel must achieve by providing services and facilities each star demands.

1 Star Hotel

- All rooms must have shower or bath tub.
- Daily room cleaning
- Color television with remote control
- Table and a chair
- Soap or body wash
- Reception service
- Fax service at reception
- Telephone for guest
- Extended Breakfast
- Beverage offer
- Deposit possibly

2 Star Hotel

- Reading light next to the bed
- Bath essence or shower gel
- Bath Towels

- Linen service
- Sanitary products
- Credit cards
- Breakfast Buffet

3 Star Hotel

- Internet access in the room
- Reception opened 14 hours and telephone service accessible 24 hours
- Luggage service
- Telephone in the room
- Heating facilities in the bathroom, Hair dryer and tissues
- Dressing mirror and luggage rack
- Sewing kit, Shoe polish, laundry and ironing services
- Additional pillow and blankets on demand
- Systematic complaint management system

4 Star Hotel

- Reception opened 18 Hours, accessible by phone 24 hours
- Lobby with seats and beverage service
- Breakfast buffet or breakfast menu card via room service
- Minibar or 24 hours beverage via room service
- Couch with side table
- Bath robe and slippers on demand
- Cosmetic products

5 Star Hotel

- Reception open 24 hours
- Multilingual staff at reception
- Concierge , Page boy
- Spacious reception hall with several seating arrangements and beverage service
- Personalized greetings for each guest with fresh flowers, gift ,welcome drink,
- Minibar & Food & Beverage offered 24 hours via room service.
- Internet access and internet terminal
- Safe in every room
- Ironing service
- Shoe polish service
- Turndown service in evening
- Mystery guest audits

1.2 Design Considerations

Room layout Types

1 Double loaded corridor

- Most economical
- Requires two staircase
- Number of rooms per floor 16 to 24 (60 ft width and length proportional)

2 Double loaded T shaped corridor

- Requires 3 staircase
- Also economical space wise

3 Single loaded corridor

- Not economical
- Desirable
- Ample space
- Number of rooms 12 to 30 with 32 ft width and proportional length

4 Square block

- Central core has all service areas like pantry
- Compact
- Useful for small sites
- Ideal in tower construction

5 Y plan

- Complicated structure
- Requires 3 staircase
- Causes problems in public area

6 Tri Arc plan

- Similar to Y plan but takes up more space
- Rooms on concave curve
- Wider bathrooms and dresser

7 Circular

- Can result in awkward inward facing rooms if not careful while planning
- Number of rooms 16 to 24 per floor

8 Circular with central core

- Similar to square block
- But awkward rooms possible if attention not paid

1.3 Structural regulation by Municipal authorities

Every city planning authority lays down rules regarding structure to be followed in case of a mishap fire or mishap or bomb scare

These to be incorporated while designing the hotel

So that evacuation is easy

Staff also to trained for handling emergencies

1 Alarms

- Any person noticing fire ,heat or smoke to report to fire brigade immediately

2 Drills

- Fire drills must be conducted as per the norms set at least once every three months
- All occupants must participate in drills
- A written record of these drills to be maintained for three years and produced at time of inspection by fire brigade

3 Signs and plans

A Signs and lift landing

- A sign in all lift landing to indicate use of staircase during an event of fire
- It should be visible on all floors
- It should be in big font and properly spaced lettering
- Contrasting color than background

B Floor number signs

- A sign indicating floor level has to be pasted on every floor
- Prominently displayed
- Big font and proper lettering
- Contrasting color than background

C Staircase and elevator identification sign

- sign indicating each elevator and stairway has to be pasted on every floor
- Prominently displayed
- Big font and proper lettering
- Contrasting color than background

D Staircase reentry sign

- A sign indicating whether reentry is allowed back on the floor or not has to be there
- Prominently displayed
- Big font and proper lettering
- Contrasting color than background
- Nearest fire station to have building floor plan

E Eco friendly practices

- System to be in place for safe disposal of solid and liquid waste
- Use of alternative source of energy like sun /wind carries extra points when seeking approval or classification

1.4 Systematic layout planning

The hotels vary by the rating, service level, cost, size, location, style, and many other parameters.

Before beginning the construction of new hotel, inn or a hotel complex, you first need to create a detailed overall hotel plan, the location plans of rooms, lobby, restaurant and other common premises and service rooms. The projects of mini-hotels must use the space particularly rational, at the same time the large hotels can afford spacious halls, banquet halls and even terraces

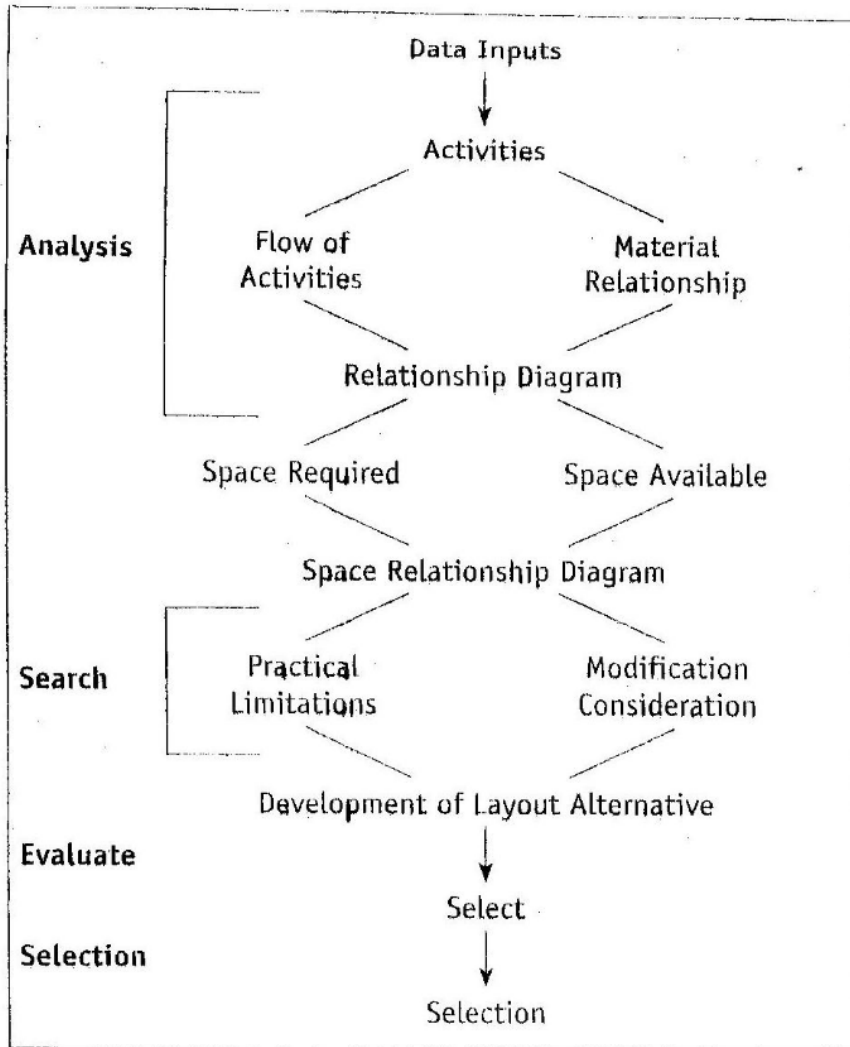
- Refers to organized, rational approach to solve any problem related to layout planning
- This requires sequential procedure to decide a course of action based on facts and do an analysis of the layout
- SLP process involves developing a concept, planning ,analyzing and implementing a process
- The process has to take into consideration interrelationships of people, materials information, equipment and method in a flow chart.
- The objective is to have an efficient layout
- The process has four planning phases : analysis, search and selection

Phase 1 Determination of location of area where departments to be laid out.

Phase2 Establishing general overall layout

Phase 3 Establishing detailed layout plans

Phase 4 installing selected layout



The **systematic layout planning** (SLP) - also referred to as site layout planning^[1] - is a tool used to arrange a workplace in a plant by locating areas with high frequency and logical relationships close to each other.^[2]

The process permits the quickest material flow in processing the layout at the lowest cost and least amount of handling.

Each layout rests on three fundamentals

1 RELATIONSHIPS Degree of closeness desired among things

2 SPACE: The amount, kind, shape of configuration of the things to be laid out

3 ADJUSTMENTS – Arrangement of things into a realistic best fit

I Objective of SLP

1. Minimize investment in equipment
2. minimize production time
3. Minimize material handling cost
4. Maximize space utilization
5. Maintain flexibility of operation
6. Provide comfort to employees

Systematic layout pattern has 20 steps

1. Procure Data
2. Analyze Data
3. Design production process
4. Design material flow pattern
5. Select/ design material handling plan
6. Calculate requirement of equipment
7. Plan work areas
8. Select material handling equipment
9. Plan a group of related operations
10. Design activity relationship
11. Calculate space requirement
12. Plan service activities
13. Calculate total space requirement
14. Allocate activities to space
15. Consider building type
16. Construct model layout
17. Evaluate, adjust and check layout
18. Justify
19. Install layout
20. Nurture layout

1.5 Thumb Rules for space allocation in hotels

Where and how much space must be allocated for a particular facility such as a restaurant, or lobby, or a guest room in a hotel

Allocating space is an important aspect of planning and designing there are some ground rules related to the same which have evolved over the years based on construction study of various hotels

1 Food production	Size of hotel			
	100	200	500	1000
Number of rooms				
Food preparation	In square feet			
Main kitchen	1100	2000	9000	18000
Pantry	0	0	1200	1200
Bakery	0	0	850	1000
Room service kitchen	75	75	300	500
Chef's office	100	100	120	120
Dry food storage	150	300	1000	1800
Refrigerated food storage	100	200	500	1000
2 Food and beverage service				
Coffee shop	1200	2400	3500	4400
Specialty restaurant	0	0	2800	4000
Bar	400	800	2000	2800
3 Housekeeping				
EHK office	100	100	125	150
Secretary	0	0	100	100

Linen storage	300	500	1500	3000
Uniform storage	100	250	500	800
Supplies Storage	100	100	100	200
Lost and Found	0	100	150	200
Laundry	0	1000	2500	4000
Valet	0	100	150	200
Laundry Supervisor	0	0	100	120

4 Front office

Front office Manager Office	0	120	120	120
Bell desk storage	0	150	200	300
Safety Deposit locker	0	30	60	60
Front Desk	0	160	250	450
Reservations	0	80	200	250
Telephone Operator	0	80	200	250

Noted Architect William B Tabler's thumb rules for designing and space allocation

1. Construction cost must not exceed Rs 1000 per Re 1 of Average room rate(if ARR is Rs 1000 then construction cost of the room must not exceed Rs 10,00,000)
2. Total area of rooms must at least be equal to all public and service area combined
3. Total area of facilities must not exceed 6000sq ft
4. Hotel should not have more than one employee per room (total staff= number of rooms)
5. Land cost must not exceed 10%of cost of building
6. Rooms contribute 70 % to the profit of the hotel

1.6 Feasibility Report

1. It assesses or determines that whether a project is viable (profitable) or not
2. It is an analysis that takes all of project's relevant factors into account including economic, technical ,legal and scheduling considerations to ascertain the likelihood of completing the project successfully
3. It helps to consider both pros and cons of undertaking a project before we invest a lot of time and money into it.
4. Feasibility study can provide us with crucial information that could prevent the company from entering blindly into a project/business
5. It is simply an assessment of practicality of a proposed plan or project
6. It answers following questions
 - Do we have the people , tools, technology and resources necessary to make this project succeed
 - Will the project give us the return on investment that we expect

Goals of feasibility studies

1. To understand thoroughly all aspects of a project, concept or plan
2. To become aware of any potential problems that could occur while implementing the project
3. To determine if after considering all factors of the project is it viable ie worth undertaking

Importance Of feasibility studies

- a) For business development
- b) Identifies any potential obstacles
- c) Helps in making marketing strategies
- d) Helps to convince investors and banks to invest in the project
- e) Enhances success rate

Tools for conducting feasibility study

- Feedback from all stake holders
- Solid data
- Market survey/research
- Business plan
- Projected income statement
- Opening day balance sheet

Types of feasibility study

- Technical (hardware, software, expertise)
- Economic(cost benefit analysis)
- Legal (zoning Laws)
- Operational
- Scheduling (timeline)

Particulars of a feasibility study of Hotel project

1. Technology
2. Location, land and building
3. Raw material
4. Utilities like power ,water supply ,transportation
5. Labor
6. Schedule of implementation
7. Means of finance
8. Marketing and selling arrangement
9. Profitability and cash flow
10. Government approval

Feasibility report is generally prepared by professionals /specialists like chartered accountant or consultancy firms

1.7 Blueprint

A blueprint of a building is a series of drawing showing the layout of the parts of the building ; the rooms, their size and shape ,doors and windows and other details.

We use lines, numbers symbols to make a blueprint. A good blueprint conveys all the technical details to its readers. The architect prepares the blueprint based on the promoters idea and conveys it to the draftsman.

Purpose of blueprint

1. As a starting point of any building activity.
2. It is the first talking point between owner and architect.
3. It gives detailed information to the people like contractors so they can construct a building according to the specifications.
4. A plumber, electrician , gas pipe mechanics use the blueprint for doing their job precisely.
5. Managers use the blueprint to check the performance of various contractors.
6. Blueprint can also be used at the time of refurbishing and redecorating.
7. Blueprint can be used to determine man power requirements in housekeeping and maintenance.
8. It can be used as a tool in energy management

7.3 Types of blueprint

If there's only one blueprint for entire building they will be chances of errors so there are a number of blueprints used for every building.

Combination of various blueprints and written documents is known as construction document

Different Types

1. Plan View - This is sort of a view from the top shows you the area with no ceiling or roof. The main use of this is to show room layouts And it serves a purpose for performing various calculations such as electrical outlets , security alarm systems and determination of HVAC (heating ventilation and air-conditioning).
2. Elevation View -It helps in deciding the structure of exterior. It shows the kind of material to be used on walls, balcony areas and shows the effect of balcony on the lower level.

3. Detail View - It shows the interior walls , location of equipment and position of permanent assets and can be used for future renovation of the building

4. Perspective View and Models- It is a three dimensional view of the proposed building the purpose of this is to help the owners visualize the place.

5. Section View - It may be vertical or horizontal cut of a view of a wall or foundation of building. It indicates the type of construction material to be used and where insulation should be provided. It helps in reducing energy Cost.

6. Mechanical View - This blueprint gives the idea of all mechanical and electrical systems in the building separately. It shows air-conditioning, plumbing, CCTV, fire safety etc.

7. Plot and Survey View - These drawings are made by registered surveyors. It shows the legal boundaries of the property

CADD - Computer aided design and drafting

It is a new technique which provides cost-effective drafting and designing. The turnaround time of CADD drawings is much faster than drawings done by hand. Walls partitions doors and furnishings can be moved very quickly to depict alternative use of space.