



JECRC Foundation



**JAIPUR ENGINEERING COLLEGE
AND RESEARCH CENTRE**

JAIPUR ENGINEERING COLLEGE AND RESEARCH CENTER

Class – 2nd Year - IV Semester: B.Tech. (Civil Engineering)

Subject – Building Planning

Chapter – Building Bye Laws and NBC Regulations- UNIT- 6

Presented by –Hetram Sharma (Assistant Professor)

VISSION AND MISSION OF INSTITUE

Vision

To become a renowned centre of outcome based learning, and work towards academic, professional, cultural and social enrichment of the lives of individuals and communities.

Mission

M1. Focus on evaluation of learning outcomes and motivate students to inculcate research aptitude by project based learning.

M2. Identify, based on informed perception of Indian, regional and global needs, areas of focus and provide platform to gain knowledge and solutions.

M3. Offer opportunities for interaction between academia and industry.

M4. Develop human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a range of professions.

VISSION AND MISSION OF DEPARTMENT

Vision

To become a role model in the field of Civil Engineering for the sustainable development of the society.

Mission

M1.To provide outcome base education.

M2.To create a learning environment conducive for achieving academic excellence.

M3.To prepare civil engineers for the society with high ethical values.

COURSE OUTCOME

CO-1 STUDENTS WILL BE ABLE TO UNDERSTAND TYPES OF BUILDING & APPROPRIATE SELECTION OF SITE WITH SUN CONSIDERATION.

CO-2 STUDENTS WILL BE ABLE TO UNDERSTAND ABOUT BYE-LAW AND NBC REGULATION ALONG WITH ORIENTATION, CLIMATE&COMFORT CONSIDERATION.

CO-3 STUDENTS WILL BE ABLE TO UNDERSTAND BUILDING PLANNING. STUDENTS WILL ABLE TO USE PRINCIPALS OF OF VASTU SHASTRA

CO-4 STUDENTS WILL BE ABLE TO UNDERSTAND FUNCTIONAL DESIGN AND ACCOMMODATION REQUIREMENTS OF RESIDENTIAL BUILDING AND NON-RESIDENTIAL BUILDING WITH PROVIDING DIFFERENT SERVICES

CO-PO MAPPING

Subject Code	COs	Program Outcomes (POs)											
		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	PO-7	PO-8	PO-9	PO-10	PO-11	PO-12
4CE4-07	CO-1	3	1	3	3	2	3	3	2	1	1	3	2
	CO-2	3		3	2	2	2	3	2	1	1	2	2
	CO-3	3	1	2	1	1	2	3	2	2	1	3	1
	CO-4	3	2	2	2	2	2	3	1	2	1	2	2

CONTENTS

Building Bye Laws and NBC Regulations: -

1. Objective of by-laws, regulation regarding; means of access,
2. Lines of building frontages,
3. Covered area,
4. Floor area ratio,
5. Open spaces around buildings,
6. Height & sizes of rooms,
7. Plinth regulation.

Building Bye Laws and NBC Regulations: -

Objective of building bye-laws

- pre-planning of building activity.
- allow orderly growth and prevent haphazard development.
- Provisions of by-laws usually afford safety against fire, noise, health hazard and structure failure.
- Provide proper utilization of space to achieved maximum efficiency in planning.
- They provide health, safety and comfort to the people who live in building.
- Due to these bye-laws, each building will have proper approaches, light, air and ventilation.

lines of building frontages :-

Frontage is the boundary between a plot of land or a building and the road onto which the plot or building fronts. ... In the case of contiguous buildings individual frontages are usually measured to the middle of any party wall.

Covered Area : -

This is the Actual Area under the roof. Carpet Area : As its name suggests, Carpet Area is the area where we can spread a carpet, means area calculated from inner wall to wall distance inside the house.

Floor area ratio (FAR) :-

The floor area ratio (FAR) or floor space ratio (FSR) denotes the maximum floor space that can be constructed on a given piece of land. In other words, it is a ratio between a building's total constructed floor area and the land area. It is also known as FSI (Floor Space Index) in some markets.

Open Space in Building:-

Side **open space**:

Every residential **building** may have a permanently **open air space** not less than 1m in width on one of its sides other than its front and rear and such side **open space** shall form an inseparable part of the site.

Standard Dimensions of Residential Building:-

Following are Building Bye-Laws and the Standard dimensions for various building units

Sr. No .	Name of Room	Minimum Dimension
1	Drawing Room or Living Room	4200 mm x 4800 mm
2	Bed Room or Master Bed Room	3000 mm x 3600 mm
3	Dining Room	3600 mm x 4200 mm
4	Kitchen	2500 mm x 3900 mm

PLINTH AREA AND PLINTH REGULATION OF THE BUILDING:-

Plinth Area-

The minimum area of buildings of different classes shall be governed by the following:

1. In an industrial plot, the plinth area should not exceed 60% of the site area.
2. In a market area, the plinth area should not exceed 75% of the area of site, provided sufficient off-street parking facilities for loading and unloading of vehicles are provided on the same plot as the building.
3. In residential plots, the covered areas should be as given in the table 1.

Table 1

S. No	Area of plot	Maximum permissible covered area
1	Less than 200 sq.m	66.66 % of the plot area on the ground and first floor and nothing on the second floor, except a barsati (garret) not exceeding 25% of the ground floor.
2	201 to 500 sq.m	50% of the plot area or 133 sq.m whichever is more.
3	501 to 1000 sq.m	40% of the plot area or 250 sq.m whichever is more.
4	More than 1000 sq.m	33.33 % of the plot area or 400 sq.m whichever is more.

Plinth Regulation:-

a) Main Building: No plinth or any part of a building or outhouse should be less than 30cm above the determined level of

i. the central part of the abutting street,

ii. the footpath of the abutting street,

iii. the height part of a service lane which determines the drainage of the premises,

iv. any portion of the ground within 3m distance of such a building, and

v. undulating or sloping land 1.2 m above the drainage or country water level.

in cases where adequate drainage of the premises is not assured, the plinth should be of a height approved by the authority.

b) Interior courtyards: Every courtyard should be raised atleast 15cm above the level of centre of the nearest street and should be satisfactorily drained. Common courtyards should have independent access.

c) Plinth of garages, stables and warehouses: the plinths of such constructions should not be less than 15cm above the level determined in portion (a) above for main building.



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*Thank
you!*

STAY HOME, STAY SAFE