

# **Planning of Residential Building & Bye LAWS**

## What is building Bye Laws ?

Minimum provisions designed from National building code by town planning authorities, urban development authorities and municipalities, to protect the safety of the public with regarding to structural sufficiency, fire hazards and health aspects are called building bye laws

- “ National Building Code (NBC) of India published in 1970 by Indian standards to maintain uniform building regulations throughout the country
- “ Revised in 1983 including comments from experts
- “ Government departments, PWD, corporation, urban development authority, local bodies suitably modified to cater the local requirements in accordance with the provisions of the code

## Objectives of building Bye laws

- “ Allow disciplined and systematic growth of building and town
- “ Prevent haphazard development
- “ Protect building against fire, noise, health hazards and structural failure
- “ Proper utilization of space
- “ Maximum efficiency in planning can be derived from these bye laws
- “ Give guide line to planner & architect in effective planning and useful in preplanning the building activities
- “ Provide health, safety and comfort
- “ Proper light, ventilation etc

# Basic Elements of Planning Residential Building

- ” Living Area
- ” Sleeping Area
- ” Service Area
- ” Other Area – profession of inhabitant
- ” Circulation area

## Living Area

- “ Usage – sitting, relaxing, watching TV
- “ Location – Front side, Near to entrance
  - » Connected to bed, bath & w/c by passage
  - » Near dining room or combined with dining
- “ Area – 16 to 32 m<sup>2</sup>
  - » Minimum area - 12.5 sq. m.
  - » Minimum Width – 3 m.
- “ Height of room = 3.0 m,
- “ Sill height – more than 0.75 m
- “ location of door, More numbers of windows
- “ Open area = 1/10 of floor area

- “ Spacious, circulation space, furniture requirements
- “ Depending upon financial condition of owner
- “ French window is preferable (Appearance & light)
- “ Decorative flooring
- “ Skirting – 15 cm height

# Sleeping Area

- “ Usage – Sleeping/ relaxing
- “ Light coloured
- “ Not to be crowded (for 5 to 6 person 2 to 3 bed rooms should be planned)
- “ Area – 10 to 20 m<sup>2</sup> ( minimum width 2.7 m.)
- “ Attached with Toilet/dressing area
- “ Space for bed, cup boards, writing table, chair, dressing area



- “ Location – near to living room through passage
- “ Location of window – NW/SW/vegetation of west side
- “ Sill height – not more than 0.6 m.
- “ Good view from window

# Service Area

- ” Kitchen
- ” Store
- ” Dining area
- ” Bath and W/C

# Kitchen

- “ Area – minimum 5.5 m<sup>2</sup> with 1.8 m. width
- “ Location – E or NE ( or on west)
- “ Preferred on front side
- “ Standing kitchen (0.8 m),
- “ working shelf(1.6 to 1.7m)
- “ Sink/cooking space/dry platform

- “ Cleaning of kitchen (smooth/non absorbent floor)
- “ Semi polished stone flooring ( not slippery)
- “ Provision of window = 15 % of floor area
- “ location of exhaust fan/natural ventilation
- “ Attached to storeroom
- “ One external door for service

## Store room

- ” Close to kitchen
- ” Adequate storage space
- ” Occasionally used for keeping rain coat, umbrella, playing equipments, vacuum cleaner, mops, brooms, brushes etc
- ” Minimum width – 1.8 m.
- ” Wall and floor should be damp proof
- ” Stone flooring
- ” Lighted and ventilated
- ” Door with jalis

## Dining Area

- “ Area – 12 sq.m. with minimum width 3.0 m.
- “ Drawing/Dining combined – 16 sq.m.
- “ Location – connected with kitchen/living area
- “ Ventilated
- “ Space for refrigerator, CB, crockery, cutlery draweres
- “ Dining table/chairs
- “ Access to bath and w/c

## **Toilet, Bath and W/C**

- “ Either attached to bedroom/dining/separate unit
- “ One side exposed to external side
- “ High level ventilator
- “ Exhaust fan, no slippery surface
- “ Size – 1.2 x 1.5 sq.m., height – 2.25 m
- “ Rear court yard
- “ Glazed tiles up to 1.5 m. (Dado)
- “ Door should be in corner/centre for toilet

## Other Areas

### ” Dressing –

- » near to bath and bed room
- » Plan for chair,
- » dressing table, cup board
- » Minimum width – 1.8 m.,
- » luxury provided in high class bldg.



## “ Verandah –

- » front/rear width 1.8 to 3.0 m.,
- » waiting room, reception purpose,
- » storage,
- » protect room,
- » East/West is preferable,
- » avoid too deep verandah,
- » railing or collapsible door

## “ Porch –

- . Covered passage in front of building,
- . add beauty to building
- . Parking purpose ( size is based on size of car)

## “ Staircase –

- . riser 15 to 18 cm,
- . tread – 25 to 27 cm for residential building,
- . easily accessible from all units,
- . lighted & ventilated,
- . 1.0 m width and head room is 2.0 m. minimum

” **Study area** – private area

” **Office area** –

- . Area – 6 sq.m., width 2.4 m. ,
- . design on demand only,
- . no direct access to other rooms
- . furniture arrangement,
- . floor & walls should be pleasant,
- . enough light and ventilation,
- . front side, disconnected from other unit

“ **Guest room – (based on demand only)**

- . 7 sq.m. , 2.4 m. width,
- . independent,
- . access from verandah,
- . attached toilet,
- . may be used as study room

“ **Passage –**

- . min. 1.0 m ( too long avoided)

“ **Pantry –**

- . small room, near kitchen ,
- . cooked food storage,
- . space for cup boards, shelves, crockery

“ **Pooja –**

- . near to bedroom , centre,
- . no disturbance,
- . 1.5 x 2.0 sq.m.,
- . high level window,
- . marble flooring

“ **Garrage –**

- . backside of house, at GL

# Habitant Room

	<b>BLDG. With single habitant room</b>	<b>Building with two rooms</b>	
		<b>I<sup>st</sup> Room</b>	<b>Second Room</b>
<b>Minimum Floor Area</b>	<b>9.5 sq.m.</b>	<b>9.5 sq.m.</b>	<b>7.5 sq.m.</b>
<b>Minimum width</b>	<b>2.4 m</b>	<b>2.1 m</b>	<b>2.1 m.</b>
<b>Minimum height</b>	<b>2.75 m</b>	<b>2.75 m.</b>	<b>2.75 m.</b>

Area of windows in habitable room - not less than 1/10 of floor area

	<b>Minimum area required in sq.m.</b>
<b>Drawing room</b>	<b>13.5</b>
<b>Dining room</b>	<b>10</b>
<b>Bed room</b>	<b>11</b>
<b>Office room</b>	<b>6.5</b>
<b>Guest room</b>	<b>7</b>
<b>Kitchen</b>	<b>5.5</b>
<b>Store</b>	<b>5.5</b>
<b>Pantry</b>	<b>4.5</b>
<b>Dressing</b>	<b>5.5</b>
<b>Bath and w/c</b>	<b>2.8</b>
<b>Bath</b>	<b>1.8</b>
<b>Latrine</b>	<b>1.5</b>
<b>Servant room</b>	<b>9</b>
<b>Garrage</b>	<b>11</b>
<b>verandah</b>	<b>1.5 m wide</b>

Height of main rooms minimum	3.5/2.75 m
Height of kitchen	2.75 m
Height of servant room	2.5m

### Recommended size for kitchen

	Minimum dimensions in sq.m.	Width in m minimum
Kitchen without store	5.5	1.8
Kitchen with store	4.5	1.8
Kitchen/dining	7.5	2.1

### Recommended size for bath & w/c

	Dimension	Height in m
Bath	1.5 x 1.2 sq.m	2.25
w/c	1.1 x 1.0 sq.m.	2.25
toilet	2.1 x 1.2 sq.m.	2.25



## **Plinth Height**

- “ Plinth height for main building- 60 cm
- “ Plinth height for ordinary building – 30cm