

प्रेषक,

शंकर अग्रवाल

प्रमुख सचिव,

उत्तर प्रदेश शासन।

सेवा में,

1. **आवास आयुक्त**
उत्तर प्रदेश आवास एवं विकास पारिषद
लखनऊ।
2. **उपाध्यक्ष**
समस्त विकास प्राधिकरण
उत्तर प्रदेश।
3. **अध्यक्ष**
समस्त विशेष क्षेत्र विकास प्राधिकरण
उत्तर प्रदेश।
4. **प्रबन्ध निदेशक**
उत्तर भारतीय सहकारी आवास निगम
उत्तर प्रदेश, लखनऊ।

आवास एवं शहरी नियोजन अनुभाग-1

लखनऊ: दिनांक 05 जनवरी, 2008

विषय : प्रदेश में सुरक्षित भवन निर्माण सुनिश्चित करने के लिए नेशनल बिल्डिंग कोड-2005 (N.B.C. 2005) के अद्यावधिक प्रावधानों को बिल्डिंग बाइलॉज में अपनाये जाने के सम्बन्ध में।

महोदय,

प्रदेश में सुरक्षित भवन निर्माण सुनिश्चित करने के लिए शासन द्वारा सम्यक विचारोपरान्त यह निर्णय लिया गया है कि-

नेशनल बिल्डिंग कोड-2005 के अद्यावधिक प्राविधानों एवं इस संबंध में भारत सरकार के विशेषज्ञों की समिति द्वारा तैयार किये गये दिशा-निर्देशों एवं अन्य प्राविधानों (प्रतिलिपि संलग्न) को प्रदेश के सभी विकास प्राधिकरणों एवं अन्य विभाग, जो भवन निर्माण की अनुज्ञा प्रदान करते हैं, के द्वारा अपनाया जाये।

2. अतः मुझे यह कहने का निदेश हुआ है कि उक्त अभिकरणों के द्वारा अपनी बोर्ड बैठक बुलाकर इसे अपनाने की कार्यवाही से शासन को अवगत कराया जाये।

उक्त आदेशों का अनुपालन कड़ाई से सुनिश्चित किया जाये।

संलग्नक : यथोपरि।

भवदीय,

शंकर अग्रवाल

प्रमुख सचिव

संख्या 119(1)/आठ-1-08, तद्दिनांक।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित :-

1. अध्यक्ष, समस्त विकास प्राधिकरण/उ.प्र. आवास एवं विकास परिषद, उत्तर प्रदेश।
2. अधिशासी निदेशक, आवास बन्धु, उत्तर प्रदेश लखनऊ।
3. मुख्य नगर एवं ग्राम नियोजक, नगर एवं ग्राम नियोजन विभाग, उत्तर प्रदेश लखनऊ।
4. आवास एवं शहरी नियोजन विभाग के समस्त अनुभाग।
5. गार्ड फाइल।

आज्ञा से,

राम निरंजन

अनुसचिव।

**The
National Building
Code 2005**

Uttar Pradesh Disaster Management Authority

The National Building Code, 2005

The National Building Code, 2005 Published by the BIS represents the present state of knowledge on various aspects of building construction. The provisions in this code are intended to serve as a model for adoption by the PWD and other Govt. Construction Departments, Local bodies and other construction agencies. Existing Municipal Bye laws and other regulatory media could be either replaced by the NBC of India or suitably modified to cater to local requirements in accordance with the provisions of the code.

The Code mainly contains administrative regulations (Part 2), development control rules and general building requirements (Part 3) Fire and life safety requirements (Part 4) stipulation regarding materials (Part 5) structural design (Part 6) constructional practices and safety (Part 7) building services (Part 8) and plumbing services (Part 9). The code was first published in 1970 and then revised in 1983. Thereafter three major amendments were issued, two in 1987 and the third in 1997. Considering a series of further development in the field of building construction including the lessons learnt in the aftermath of natural calamities like devastating earthquakes and super cyclones witnessed by the country, a Project for comprehensive revision of NBC was taken up under the aegis of National Building Code sectional Committee, CED 46 of BIS and its 18 expert Panels, involving as many as 400 experts. As a culmination of the project, the revised NBC has now been brought out as National Building code of India 2005 (NBC) 205. The NBC is priced at Rs. 7550/- and is available from sales Counter at BIS Headquarters as well as various Regional and Branch offices of BIS (for address of sales centres please go to the following link –<http://www.bis.org.in/dir/sales.Htm>)

The comprehensive NBC 2005 contains 11 Parts some of which are further divided into sections totaling 26 chapters. The salient features of the revised NBC include, apart from other changes made, the changes specially in regard to further enhancing our response to meet the challenges posed by natural calamities and reflecting the state-of-the-art and contemporary applicable international practices. The contents of the NBC is listed below.

CPMTEMTS PF NBC 2005
PART 0 INTEGRATED APPROACH-PREREQUISITE
APPLYING PROVISIONS OF THE CODE
PART 1 DEFINITIONS
PART 2 ADMINISTRATION
PART 3 DEVELOPMENT CONTROL RULES AND
GENERAL BUILDING REQUIREMENTS
PART 4 FIRE AND LIFE SAFETY
PART 5 BUILDING MATERIALS
PART 6 STRUCTURAL DESIGN
PART 7 CONSTRUCTIONAL PRACTICES AND SAFETY
PART 8 BUILDING SERVICES
PART 9 PLUMBING SERVICES
PART 10 LANDSCAPING, SIGNS AND OUTDOOR
DISPLAY STRUCTURES

The salient features of NBC are :

- 1) Including of a complete philosophy and direction for successfully accomplishing the building projects through Integrated Multidisciplinary Approach right through conceptual stage to planning, designing, construction, preparation and maintenance stages.
- 2) A series of reforms in building permit process
- 3) Provisions to ensure and certification of safety of building against natural disaster by engineer and structural engineer.
- 4) Provision for two stage permit for high rise and special building.

- 5) Provision for periodic renewal certificate of occupipal buildings from structural, fire and electrical safety pint of views.
- 6) Provision for empowering engineers and architects for sanctioning plans of residential building up to 500 m².
- 7) Inclusion of detailed town planning norms for various amenities such as educational facilities, medical facilities distribution services, police, civil defense and home guards and fire services.
- 8) Revision of parking requirements for metro and megacities.
- 9) Up-dation of special requirements for low income house for urban areas.
- 10) Inclusion of special requirements for low income housing rural habitat planning.
- 11) Revision of the provisions for buildings and facilities for physically challenged.
- 12) Fire safety norms completely revamped through detailed provisions on fire prevention, Life safety and fire protection.
- 13) Inclusion of new categories or starred hotels, heritage structural and are hoolegical monuments for fire safety provisions.
- 14) Substitution of halon based fire extinguishers fire fighting system.
- 15) Promotion to new/innovative building materials/technologies.
- 16) Inclusion of latest provisions for earth quake resistant design and construction.
- 17) Inclusion of details on multi-disaster prone districts.
- 18) Inclusion of new chapter on design and construction using bamboo.
- 19) Chapter on prefabricated and composite construction for speedier construction.
- 20) Updation of provision of safety in construction.
- 21) Complee revision of provision on building and plumbing services in line with applicable international practices.
- 22) Provisions on rain water harvesting.
- 23) Inclusion of new chapter to cover landscaping needs.

NBC is an exhaustive coverage of all aspects of habitat planning and building design with safety against various hazards. However one caution needs to be issued that var4ious standards, as for example, on fire and life safety, building materials, structural designs building services and plumbing services included in NBC are as these were before the adoption of the National Building Code.

However these standards are dynamic in nature and undergo some revision every few years. There fore wile using the NBC and the data in NBC as based on & particular standard should always be compared with the standards so referred and the data and the specifications as per the latest version of the standards read to of used. This will be particularly relevant to the safety cated standards regarding earth quakes, cyclones and fire.

Introduction to

NATIONAL BUILDING CODE (NBC) 2005

(A BIS Document)

The national Building code (NBC) 2005 is a response to the series of natural disasters that have had a huge impact on the built environment. In fact, it took two main disasters. The Orissa super cyclone of 1999 and The Gujarat Earth-quake of 2001 – to make the Central Government revise the code. It took BIS over two years, with 18 expert panels and about 20,000 people associated in some way with the project to finish the job. The new building code relates to structural, health, fire and electrical safety in particular.

It is the third revision compiled under the aegis of the Bureau of Indian Standard (BIS). It provides guidelines for regulating building construction activities across the country. It has the basic codes for construction materials, services, systems and processes. The NBC lays down the minimum provisions building need in order to ensure public safety with regard to structural, sufficiency, fire hazard and health aspect. It contains administrative provisions, development control rules and general building requirements.

It serves as a model code for adoption by anybody involved in construction in the public or private domain.

The National Building code (NBC) 2005 is under discussion at various forums, will be mandatory once it is notified. The 1970 and 1983 versions of the code were recommendatory in nature. NBC 2005 in addition to the technical specification for building has for the first time, focused on the techno-legal requirements, including the scope of participation of professionals in providing the built environment and also pinning responsibility on professionals for the structure that they create.

It has incorporated chapters on an integrated multi-disciplinary team approach for building planning, designing, construction, operation and maintenance.

ANNEX-A

(Foreword and clauses 2, 17, 6, 5, 6, 6, 9, 13, 12, 2, 8, 12, 3 and 12, 9)

GUIDE FOR THE QUALIFICATIONS AND COMPETENCE OF PROFESSIONALS

A-1 ESSENTIAL REQUIREMENTS

A-1.1 Every building/development work for which permission is sought under the code be planned, designed and supervised by registered professionals. The registered professionals for carrying out the various activities (a) architect, (b) engineer, (c) structural engineer, (d) supervisor, (e) town planner, (f) landscape architect, (g) urban designer, and (h) utility service engineer. Requirement of registration for various professionals by the Authority or by the body governing such profession and constituting under a statute, as applicable to practice within the local body's jurisdiction, are given in A-2.1 to A-2.5. The competence of such registered personnel to carry out various activities is also indicated in A-2.11 to A-2.5.1.

A-2.1 Architect

The minimum qualifications for an architect shall be the qualifications as provided for in the Architects Act, 1972 for registration with the Council of Architecture.

A-2.1.1 Competence

The registered architect shall be competent to carryout the work related to the building/development permit as given below:

- a) All plans and information connected with building permit except engineering servision of multistoried/special building given in 12.2.5.1
- b) Issuing certificate of supervision and completion of all buildings pertaining to architectural aspects.
- c) Preparation of sub-division/layout plans and related information connected with development permit of area ur to leatare for metro-cities and 2 hectare for other places.

A-2.2 Engineer

The minimum qualifications for an engineer shall be graduate in civil engineering/architectural engineering of recognized Indian or foreign university, or the Member of civil Engineering Division (India) of the statutory body governing such profession, as and when established.

A-2.2.1 Competence

The registered engineer shall be competent to carryout the work related to the building/development permit as given below :

- a) All plans and information connected with building permit.
- b) Structural details and calculations of buildings on plot up to 500 m² and up to 5 storeys or 16 m in height.
- c) Issuing certificate of supervision and completion for all buildings.
- d) Preparation of all services plans and related information connected with development permit.
- e) Issuing certificate of supervision for vironment of and for and area.

A-2.3 Structural Engineer

The minimum qualification for a structural engineer shall be graduate in civil engineering of recognized Indian or foreign university or corporate of Member of civil engineering Division of institution of engineers (India) and with minimum 3 years experience in structural engineering practice with deranging and field work.

Note : The 3 years experience shall be relaxed to 2 years in the case of post-graduate degree of recognized Indian or foreign university in the branch of structural engineering. In case of doctorate in structural engineering the experience required would be one year.

A.2.3.1 Competence

The registered structural engineer shall be competent to prepare the structural design, calculations and details for all buildings and supervision.

A-2.3.1.1

In case of building having special structural features, as decided by the Authority, which are within the horizontal areas and vertical limits specified in A-2.2.1 (b) and A-2.4.1 (a) shall be designed only by structural engineer.

A-2.4 Supervisor

The minimum qualifications shall be diploma in civil engineering or architectural assistantship, or the qualification in architecture or engineering equivalent to the minimum qualification prescribed for recruitment to non-gazetted service by the government of India plus 5 years experience in building design construction and supervision.

A-2.4.1 Competence

The registered supervisor be competent to carryout the work related to the building permit as given below:

- a) All plans and related information connected with building permit for residential building on plot up to 100 m² and up to two storeys or 7.5 in height.

- b) Issuing certificate of supervision for building as per (a).

A-2.5 Town Planner

The minimum qualification for a town planner shall be Associate Membership of the institution of town planners or graduate or post graduate degree in town and country planning.

A-2.5.1 Competence

The registered town planner shall be competent to carry out the work under elements given action:

- a) Preparation of plans for land subdivision/layout and related information connected with development permit for all areas.
- b) Issuing certificate of supervision for development of land of all areas.

Note : However, for land layouts or development permit above 5 hectare in area, landscape architect shall also be associated, and for land development infrastructural services for roads, water supplies, sewerage/drainage, electrification etc, the registered engineers for utility services shall be associated.

A-2.6 Landscape Architect

The minimum qualification for a landscape architect shall be the bachelor or master's degree in landscape architecture or equivalent from recognized India or foreign university.

A-2.6.1 Competence

The registered Landscape architect shall be competent to carryout the work related to landscape design for building/development permit for land areas 5 hectares and above. In

case of metro-cities, this limit of land area shall be 2 hectares and above.

Note : For smaller areas below the limits indicated above, association of landscape architect may also be considered from the point of view of desired landscape development.

A-2.7 Urban Designer

The minimum qualification for an urban designer shall be the master's degree in urban design or equivalent from recognized Indian or foreign university.

A-2.7.1 Competence

The registered urban designer shall be competent to carryout the work related to the building permit for urban design for land areas more than 5 hectares and campus are more than 2 hectares. He/she shall also be competent to carryout the work of urban renewal for all areas.

Note : For similar area below the limits indicated above, association of urban designer may be considered from the point of view of desired urban design

A-2.8 Engineers for utility services.

For building identified in 12,2,5,1, the work of building and plumbing services shall be executed under the planning, design and supervision of competent personnel. The qualification for registered mechanical engineer (including HVAC), electrical engineer and plumbing engineers for carryout the work of air-conditioning, Heating and mechanical ventilation, Electrical installation and esarators and water.

General Specifications:

Slab : Slab of Room, Kitchen and Toilet will be Prefabricated & Prestressed.

Wall : all the walls will be 9⁷/₄¹/₂" thick Brickwork walls and shall be plastered inside and outside both with 1:6 cement and fine sand mortar.

Finishing Items :

I) Flooring :

- a) Room : Average 25 mm thick cc flooring.
- b) Kitchen : Average 25 mm thick cc flooring
- c) Bath room : Average 25 mm thick cc flooring
- d) W.C. Average 25 mm thick cc flooring.

II) Doors, Windows, Ventilators :

- a) Door : For main entrance 35 mm thick flush door with 35x35x5 Ms angle Iron frame along with 2 nos. tower bolts of length 6" or 9" as suitable with 2 Nos. handle and 1 nos. 12" MS aldrop.
- b) Toilet door will of flush door panels with angle Iron frame along with 2 Nos. tower bolts and 2 Nos. tower bolts and 2 Nos. handles.
- c) Windows : All windows will be T&Z-section.

III) Painting :

- a) Inside, the unit for wall & ceiling :- Two coat white wash for wall and ceiling.
- b) Outside : Two coast of Ordinary colour wash for walls.
- c) Door & Windows frame : Door window frame should be with one coat primer and one coat oil paint.

IV) Dado :

- a) For toilet 450 mm dado with cement punning.
- b) For kitchen 150 mm dado with cement punning.
- c) W.C. 450 mm high dado in cement punning,

V) Plumbing & Sanitary :

- a) W.C. Indian type of 18" ceramic/mosaic
- b) Two number 1/2" PVC tap of good quality in toilet.
- c) One number 1/2" PVC tap of good quality in the kitchen.
- d) Soil line, waste water line should be of 4" dia PVC pipe of 4kg/sq.cm. pressure.
- e) 4" dia PVC nahani trap with jally one in toilet & one in kitchen
- f) Heavy duty PVC solvent pipe for all water line.

VI) Electrification :

One Number fanhook and pvc conduit pipe in slab.

VII) Precast kitchen platform of size 450 mm x 1000 mm to be provided in the kitchen.

Rates :

Rates of the construction of EWS houses as per the scope of work and specification will be Rs. 575/ Sq.Ft.(Rupees Five Hundred seventy five only) of the built up area.