

**BUREAU OF INDIAN STANDARDS****AGENDA****Panel for Building Materials, CED 46:P3 : Fifth Meeting****Tuesday, 12 March 2024 : 1030 h****In Hybrid Mode from:****Chintan (Bronze Room), Bureau of Indian Standards, Manak Bhavan,  
9 Bahadur Shah Zafar Marg, New Delhi 110 002****&****Online using:**

1) Meeting link:

<https://bismanak.webex.com/bismanak/j.php?MTID=m89d88e57e0f8cc07fda935ffc1bbab6b>

2) Meeting number: 2510 852 6390

3) Password: Nbc@2025

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**Convener:** Dr. Shailesh Kumar Agrawal**Member Secretary:** Shri Arunkumar S.  
**NBC Officer:** Shri Shubham Chaudhary

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**Item 0 OPENING REMARKS****Item 1 CONFIRMATION OF MINUTES OF THE LAST MEETING**

**1.1** The Minutes of the fourth meeting of the Panel held on 08 October 2015 in New Delhi, were circulated vide BIS DG letter No. CED 46:P3/A-2.4 dated 15 January 2016. No comments have been received.

The Panel may **CONFIRM** the Minutes.

**Item 2 COMPOSITION**

**2.1** The present composition of the Panel as reconstituted by the National Building Code Sectional Committee, CED 46 is given at **Annex 1 (P- 5)**.

The Panel may **CONSIDER**.

**2.2** Co-option request has been received from M/s Hindalco Industries Ltd. [*from their Dr. Vinod K. Verma, Sr. Vice President & Head – Regulatory Affairs - nominating therein Mr. Siddharth Shetty (Head, Technical) and Ms. Snehal Mahajan (Lead Service)*] for representation on the panel.

The Panel may **CONSIDER**.

**2.3** The Panel may also **NOTE** regarding the Structural Reforms in Standardization established by BIS to bring greater efficiency in standards formulation and revision work in BIS addressing speed, skill and scale. The same relates to aspect like:

- a) technical committees of BIS having members with widely acknowledged domain area expertise and experience on the subjects
- b) optimum size of the technical committee
- c) review of membership with focus on continuity of participation including contribution by every member
- d) holding periodic meetings (physical/virtual/hybrid)
- e) decide on timelines to enable stage-wise development of the documents (draft standards)
- f) resource centre to enable share the information and documents associated with the standardization work

**2.4** Further, BIS has established in place systems such as action research projects, R&D for standards development and provision for having short-term Consultants. Also, focus should be made w.r.t developments on the subject happening world-wide including in technical events, literature, research publications, standard bodies, etc. Wherever possible research based inputs be generated including by associating with the various eminent institutions with whom BIS has entered into MoU with.

The Panel may **NOTE**.

### **Item 3 PROJECT OF REVISION OF NBC**

**3.1** Under the project of Revision of NBC, various Parts/Sections of NBC 2016 [a list of which is given in **Annex 2 (P-7)**] are being comprehensively revised, to bring out a most modern and state-of-the-art revision of the Code.

The Panel may consider revising the chapter (**Part 5 on Building Materials**) taking into cognizance the latest developments in the field. In the revision exercise, due consideration may be given to ensuring coherence among various chapters of the Code. Where required, suggestions for improvements in the other chapters of the code may also be provided.

The Panel may **NOTE**

**3.2** The Panel may therefore engage in a high-level review of the existing chapter namely 'Building Materials'. The contents of existing Part 5 'Building Materials' is

given in **Annex 3 (P-9)**. This review may involve an examination of the structure, content, and alignment of the chapters with current industry standards and practices.

The Panel may **CONSIDER**.

**3.3** To facilitate the revision process, the following working draft has been prepared and circulated to the members for their comments vide our email dated 04 March 2024:

*Working Draft of National Building Code of India: Part 5 Building Materials, Doc: CED 46 (0275)WD*

While preparing the above draft, references to various standards have been updated by including the latest versions of the specifications and test methods of various building materials and by including reference of new standards formulated on additional building materials.

Comments received on the drafts would be circulated (separately) among the members and also discussed during the meeting.

The Panel may **CONSIDER**.

#### **Item 4 COMMENTS RECEIVED ON / INPUTS RELATED TO PART 5 'BUILDING MATERIALS' OF SP7 : 2016**

**4.1** No comments were received on the above Chapter of NBC 2016.

The Panel may **NOTE**.

#### **Item 5 PROJECT OF PROMOTION OF USE OF NBC 2016 IN ALL STATES AND UTs OF INDIA**

**5.1** An ambitious Project for Promotion of use of National Building Code of India 2016 in all States and UTs of India was earlier taken up by BIS involving a comprehensive study and review of rules and regulations governing land development and building construction in various states and union territories of India. The Project involves preparing draft regulations which are aligned with provisions in National Building Code of India 2016 (NBC 2016), for use by the States and UTs in revising their existing regulatory documents in line with the revised state-of-the-art NBC 2016. The Project had 09 deliverables as below:

<b>SI No.</b>	<b>Deliverable</b>
1	Compilation and study of existing processes, rules and regulations as existing in various States and UTs which govern the land development and building construction, and other statutory provisions which have to be complied with currently, etc

2	Classification of the Provisions in various Rules and Regulations as mandatory/recommendatory, identification of commonalities/dissimilarities, conflicts, if any
3	Mapping the existing Rules, Regulations, Processes against provisions given in NBC 2016
4	Identification of other best practices which may currently not be a part of the existing rules or of NBC 2016, which may be aspirational but will help further the Aim/Objective of this project
5	Preparation of a draft revised standardized/model Rules and Regulations aligned with the provisions of NBC 2016, for the consideration of the Bureau
6	Preparing State/UT-wise standardized/model regulatory documents, including such required documents for some metro/mega cities, which can be adopted by various authorities & obtaining approval of the Bureau as per scope of work
7	Creating pamphlets for an awareness campaign for general public
8	Creating a simplified booklet on using NBC which can be used by all stakeholders-academicians, students and professionals
9	Dissemination to designated States/UTs, the knowledge base created and presenting to them advantages of adopting the same through meetings and workshops

With the support of an external consultant, the main deliverable namely Draft Development and Building Regulations for each of the States and UTs of India was prepared. Followed by 20 number of 2-day workshops covering all the States and UTs, the inputs received as part of such workshops, the finalized regulations were shared with the respective States & UTs.

In addition, a new special publication, **SP 73 : 2023 'Standardized Development and Building Regulations, 2023'** was also published and released, which is available for access (free download) from the BIS' website and from: <https://standardsbis.bsbedge.com/>

The Panel may **NOTE**.

#### **Item 6 DATE & PLACE OF THE NEXT MEETING**

#### **Item 7 ANY OTHER BUSINESS**

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**ANNEX 1**  
(Item 2.1)

**COMPOSITION OF THE PANEL FOR BUILDING MATERIALS, CED 46:P3**

<b>SI No.</b>	<b>NAME OF THE ORGANISATION</b>	<b>REPRESENTED BY</b>
1)	Building Materials & Technology Promotion Council, New Delhi	Dr Shailesh Kumar Agrawal ( <b>Convener</b> )
2)	AEON Design & Development LLP, Noida	Ms Sheetal Rakheja
3)	Building Materials & Technology Promotion Council, New Delhi	Dr Shailesh Kr. Agrawal Shri C. N. Jha (Alternate)
4)	Central Building Research Institute (CSIR), Roorkee	Dr Neeraj Jain Dr Soumitra Maiti (Alternate I) Shri Rajesh Kumar (Alternate II)
5)	Central Public Works Department, New Delhi	Chief Engineer (CSQ) Superintending Engineering (Alternate)
6)	Construction Chemicals Manufacturers' Association, Navi Mumbai	<b>Nomination Awaited</b>
7)	Delhi Development Authority, New Delhi	Shri Sanjay Khare Shri Narender Kumar Goel (Alternate)
8)	Directorate General Border Roads, New Delhi	<b>Nomination Awaited</b>
9)	DLF Limited, Gurgaon	<b>Nomination Awaited</b>
10)	Housing and Urban Development Corporation Ltd, New Delhi	Dr Deepak Bansal Ms Pooja Nandy (Alternate I) Smt Nirmal Batra (Alternate II)
11)	Indian Institute of Technology Guwahati, Guwahati	Smt Indu Siva Ranjani Gandhi
12)	Indian Institute of Technology Madras, Chennai	Prof Amlan K Sengupta Prof Manu Santhanam (Alternate)
13)	Indian Buildings Congress, New Delhi	Shri Deepak Narayan
14)	Indian Wood Science and Technology (IPIRTI), Bengaluru	Shri K. Shyama Sundar Shri M. Pavan Kumar (Alternate)
15)	Inter-University Accelerator Centre, New Delhi	Shri M K Gupta

16)	Larsen & Toubro Ltd, Chennai	Shri Praveen Kumar Rai
17)	Military Engineer Services, Engineer-in-Chief's Branch, Army HQ, New Delhi	Smt Rivoo Mahendru Smt Remika Sharma (Alternate)
18)	National Building Construction Corporation, New Delhi	Shri Sunil Kumar Pandey Shri Sachin Kaushik (Alternate)
19)	National Council for Cement and Building Materials, Ballabgarh	Director General Shri P. N. Ojha (Alternate)
20)	The Indian Institute of Architects, New Delhi	Prof Venu Shree Shri K. K. Asthana (Alternate I) Smt Gayatri Anand Khatau (Alternate II)
21)	The Institution of Engineers (India), Kolkata	Dr Binu Sukumar Dr A Hemamathi (Alternate)

**ANNEX 2**  
*(Item 3.1)*

***Details of Chapters of NBC 2016***

<i>Part/Section</i>	<i>Title</i>
1	<b>PART 0 INTEGRATED APPROACH – A PRE-REQUISITE FOR APPLYING THE PROVISIONS OF THE CODE</b>
2.....	<b>PART 1 DEFINITIONS</b>
3.....	<b>PART 2 ADMINISTRATION</b>
4.....	<b>PART 3 DEVELOPMENT CONTROL RULES AND GENERAL BUILDING REQUIREMENTS</b>
5.....	<b>PART 4 FIRE AND LIFE SAFETY</b>
6.....	<b>PART 5 BUILDING MATERIALS</b>
	<b>PART 6 STRUCTURAL DESIGN</b>
7.....	Section 1 Loads, Forces and Effects
8.....	Section 2 Soils and Foundations
	Section 3 Timber and Bamboo
9.....	3A Timber
10.....	3B Bamboo
11.....	Section 4 Masonry
	Section 5 Concrete
12.....	5A Plain and Reinforced Concrete
13.....	5B Prestressed Concrete
14.....	Section 6 Steel
	Section 7 Prefabrication and Systems Building and Mixed/Composite Construction
15.....	7A Prefabricated Concrete
16.....	7B Systems Building and Mixed/Composite Construction
17.....	Section 8 Glass and Glazing
18.....	<b>PART 7 CONSTRUCTIONAL PRACTICES AND SAFETY</b>
	<b>PART 8 BUILDING SERVICES</b>
19.....	Section 1 Lighting and Ventilation
20.....	Section 2 Electrical and Allied Installations
21.....	Section 3 Air-conditioning, Heating and Mechanical Ventilation
22.....	Section 4 Acoustics, Sound Insulation and Noise Control
	Section 5 Installation of Lifts and Escalators and Moving Walks
23.....	5A Lifts
24.....	5B Escalators and Moving Walks
25.....	Section 6 Information and Communication Enabled Installations

	<b>PART 9</b>	<b>PLUMBING SERVICES</b>
26.....		Section 1 Water Supply
27.....		Section 2 Drainage and Sanitation
28.....		Section 3 Solid Waste Management
29.....		Section 4 Gas Supply
	<b>PART 10</b>	<b>LANDSCAPING, SIGNS AND OUTDOOR DISPLAY STRUCTURES</b>
30.....		Section 1 Landscape Planning, Design and Development
31.....		Section 2 Signs and Outdoor Display Structures
32.....	<b>PART 11</b>	<b>APPROACH TO SUSTAINABILITY</b>
33.....	<b>PART 12</b>	<b>ASSET AND FACILITY MANAGEMENT</b>



**ANNEX 3**  
*(Item 3.2)*

**CONTENTS OF PART 5 'BUILDING MATERIALS' OF NBC**

FOREWORD

- 1 SCOPE
  - 2 MATERIALS
  - 3 SUSTAINABLE MATERIALS
  - 4 NEW OR ALTERNATIVE MATERIALS
  - 5 THIRD PARTY CERTIFICATION
  - 6 USED MATERIALS
  - 7 STORAGE OF MATERIALS
  - 8 METHODS OF TEST
- LIST OF STANDARDS

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