नेपाल सरकार
शहरी विकास मन्त्रालय
शहरी विकास तथा भवन निर्माण विभाग
डिभिजन कार्यालय, बागलुङ

"अस्पताल/नर्सिङ होम/शैक्षिक संस्था स्कूल, कलेज/विद्यालय/महाविद्यालय/विश्व विद्यालय/तालिम केन्द्र"

को नयाँ भवन निर्माण/नविकरण/स्थान परिवर्तन/स्तरोन्नती एवं उपयोग परिवर्तन को प्रयोजनको लागि

दरखास्त फाराम

दर्ता नं :

दर्ता गर्नेको सही :

मिति :

नेपाल सरकार
शहरी विकास मन्त्रालय
शहरी विकास तथा भवन निर्माण विभाग
डिभिजन कार्यालय बागलुङ
बागलुङ

दरखास्त फाराम

"अस्पताल/नर्सिङ होम/शैक्षिक संस्था स्कूल, कलेज/विद्यालय/महाविद्यालय/विश्व विद्यालय/तालिम केन्द्र" को नयाँ भवन निर्माण/नविकरण/स्थान परिवर्तन/स्तरोन्नती एवं उपयोग परिवर्तन को प्रयोजनको लागि

श्री शहरी विकास तथा भवन निर्माण विभाग
डिभिजन कार्यालय, बागलुङ ।

"राष्ट्रिय भवन संहिता कार्यान्वयन–कार्यविधि, २०६०" ले व्यवस्था गरेको आधारमा निम्न स्थानमा **"अस्पताल/नर्सिङ होम/शैक्षिक संस्था स्कूल, कलेज/विद्यालय/महाविद्यालय/विश्व विद्यालय/तालिम केन्द्र" को नयाँ भवन निर्माण/नविकरण/स्थान परिवर्तन/स्तरोन्नती एवं उपयोग परिवर्तनको प्रयोजन** को लागि तपसिल बमोजिमको नक्सा तथा कागजात संलग्न गरी नयाँ निर्माण भए डिजाइन सहमति र पुरानो भवनमा संचालन भइरहेको भए भवनको बनावट सम्बन्धमा Seismic Vulnerability Evaluation /Assessment गरी सिफारिस पाउन निवेदन गरेका छौ ।

भवन स्थल :–

.....जिल्ला.....न.पा/गा.वि.स/वडानं.....नक्सा नं.....कित्ता नं.....

संस्थापकको नाम :-
ठेगाना :-
फोन नं. :-
संस्थापकको तर्फबाट दस्तखत गर्नेको नाम :- संस्थापकको कार्यालयको छाप
दस्तखतः-
पद :-
मिति :-

"राष्ट्रिय भवन संहिता कार्यान्वयन–कार्याविधि, २०६०" अनुसार डिजाईन प्रयोजनको निम्त प्रयोग गरिएको भवन संहिताको किसिम कुन हो सोमा रेजा √ चिन्ह लगाउनुहोस् ।

क)	ईन्टरनेशनल स्टेट अफ आर्ट (International State of Art)	
ख)	प्रोफेसनली इन्जिनियर्ड बिल्डिङ्ग (Professionally Engineered Buildings)	
ग)	म्यान्डेटरी रुल्स अफ थम्ब (Mandatory Rules of Thumb)	
घ)	ग्रामिण क्षेत्रका लागि भवन निर्देशिका (Guidelines for Remote Rural Buildings – Low Strength Masonry / Earthen Buildings)	

संलग्न कागजातहरु :-

१) आर्किटेक्चरल नक्साहरु :-

S. No.	Drawings	No.of Sheets
1	Floor plans.	
2	Elevations.	
3	Two sections – Longitudinal Section and Cross section (One of the sections should be through staircase).	
4	Site plan.	
5	Elevation of Doors and windows showing its openings and sizes.	
6	Staircase Details.	
7	Ramp Detail	
8	Others (if any)	

२) स्ट्रक्चरल नक्साहरु :-

S. No.	Drawings For Framed Structure	No.of Sheets
1	Column Reinforcement for critical column (indicate position of the column in structure)	
2	Critical beam reinforcement (indicate position)	
3	Slab reinforcement	
4	Staircase reinforcement	
5	Trench plan and toe wall detail	
6	Critical foundation detail (indicate position)	
7	Ductile detailing of Beam and column joint	
8	Other (if any)	

S. No.	Drawings for Load Bearing Buildings	No.of Sheets
1	Architectural plan of each floor showing vertical steel reinforcement at critical sections.	
2	Trench plan and foundation details	
3	Slab reinforcement	
4	Wall cross section	
5	Others (if any)	

३) स्यानिटरी नक्साहरु :-

S. No.	Drawings	No.of Sheets
1	Toilet detail plan (each floor)	
2	Roof plan	
3	Site plan	
4	Plans of Underground water tank, Septic tank, Soak pit & Manhole	
5	Isometric drawing (flow diagram chart)	
6	Section (toilet with duct detail)	
7	Drainage detail	
8	Fire fighting system.	
9	Others (if any)	

४) ईलेक्ट्रीकल नक्साहरु :-

S. No.	Drawings	No.of Sheets
1	Layout	
2	Wiring	
3	Schematic	
4	Others (if any)	

५) नापी नक्सा :-

६) **भवन डिजाइनमा संलग्न प्राविधिक वा परामर्शदाता/ संस्था वा व्यक्तिको नाम, ठेगाना :-**

७) **भवन निर्माणमा संलग्न प्राविधिक वा परामर्शदाता/ संस्था वा व्यक्तिको नाम, ठेगाना :-**

८) **संलग्न प्राबिधिक बिबरण फारामहरु :-**

(क) आर्किटेक्चरल डिजाइन :-	☐ छ	☐ छैन
(ख) स्ट्रक्चरल डिजाइन/Structure Assessment :-	☐ छ	☐ छैन
(ग) स्यानिटरी डिजाइन :-	☐ छ	☐ छैन
(घ) ईलेक्ट्रीकल डिजाइन :-	☐ छ	☐ छैन

नोट :

१) स्केलको हकमा सवै नक्साहरु १ :१०० वा १" = ८' हुनु पर्ने र डिटेलहरु १ :५० वा १" = ४' भन्दा कमको हुन नहुने । साईट प्लानको हकमा एक रोपनी सम्म १ :१०० वा १" = ८' र एक रोपनी देखी माथी १ :२०० वा १" = १६ ' हुनु पर्ने ।

२) डिजाईन सहमति प्रदान गर्ने क्रममा निर्माण स्थल निरक्षण गर्नु पर्ने आवश्यक भएमा सम्बन्धित प्रावधिकहरुबाट आवश्यकता अनुसार निर्माण स्थल निरीक्षण गराईने छ ।

(कुनै परामर्शदाता/ ब्यक्ति/ संस्थाबाट डिजाइन वा निर्माण सुपरीवेक्षण हुने भए मात्र ।)

३) यसै साथ संलग्न ***Architectural, Structural, Sanitary and Electrical*** नक्साहरु नेपाल ईन्जिनियरिङ परिषद् (NEA) मा दर्ता भएको व्यक्तिले दर्ता नं उल्लेख गरी दस्तखत गरेको हुनु पर्ने छ ।

४) पुरानो भवनमा संचालन भईरहेको भए भवनको Seismic Vulnerability evaluation /Assessment Report नेपाल ईन्जिनियरिङ परिषद् (NEA) मा दर्ता भएको व्यक्तिले दर्ता नं उल्लेख गरी दस्तखत गरेको हुनु पर्ने छ ।

प्राविधिक विवरण फाराम
(क) आर्किटेक्चरल डिजाइन सम्बन्धि
(सम्वन्धित प्राविधिक वा परामर्शदाता वाट भराउनु पर्ने)
Forms
for
NBC Code 206:2003- Architectural Design Requirements.
(In case of many buildings, fill up the form for main building only)

Type of Building :

Building Elements	As per Submitted Design	Remarks
1.0 Staircase		
1.1 Min. tread width of staircase	…….mm excluding nosing	
1.2 Riser height of staircase	…….mm	
1.3 Clear width of staircase	…….mm	
1.4 Height of handrail	…….mm	
1.5 Max. no of riser in one Single flight	…….Nos.	
1.6 Max. head room under staircase from the nosing of the tread	…….mm	
2.0 Exit		
2.1 Max. travel distance to exit point in each floor	…….mm	
2.2 Min. width of exit door including frame	…….mm	
2.3 Min. height of exit door including frame	…….mm	
2.4 Shutter opening of exit door to staircase & public Passage	Inside/ Outside	
2.5 Total width of exit door	…….mm	
3.0 Light and Ventilation		
3.1 Min. opening area of window for lighting largest habitable room from external wall	…….sq.m.	
3.2 Min. opening area of natural ventilator for largest habitable room from external wall	…….sq.m.	
3.3 Min. size of ventilator for water closets and bathroom	…….sq.m.	
4.0 Lifts		
4.1 Total height of building	……..mm	
4.2 Provision of lift.	Yes/ No	
4.3 No. of lift per bank	……..nos.	
5.0 Requirement for the physically disabled		
5.1 Is there a provision of separate entrance for disable people next to the primary entrance of a building	Yes / No	
5.2 Max. gradient for wheel chair ramp at entrance of building		
5.3 Min. width of wheel chair ramp at entrance of building.	……....mm	
6.0 Parapet heights		
6.1 The height of parapet wall & balcony handrail	……..mm	

Name of Architect: ..... NEC Regd. No: ..... Signature :

प्राबिधिक विवरण फारामहरु
(ख)–स्यानिटरी डिजाइन सम्बन्धि
(सम्वन्धित प्राविधिक वा परामर्शदातावाट भराउनु पर्ने)
Forms
for
NBC 208 : 2003--Sanitary and Plumbing Design Requirements

Type of Building :

Description	As per Submitted Design	Remarks
1. Water Requirement in buildings.		
1.1 Water consumption per head per day		
1.2 Storage Capacity of Underground Water Tank		
1.3 Storage Capacity of Overhead water tank		
1.4 Residual Head at Consumer's Tap		
2. Fixture Requirements		
2.1 Fire Hydrant		
a. No of floors (Indoor)		
b. Floor area (Indoor)		
c. Capacity of wet riser for underground water tank		
d. Vertical fire hydrant riser pipe size		
2.2 Toilet for one unit :		
Average family size	.....Persons	
a. Water closet		
b. Tap		
c. Wash Basin		
d.Kitchen sink & dish washers		

Name of Sanitary Engineer: ..... NEC Regd. No: ..... Signature :

प्राबिधिक विवरण फारामहरु
(ग) इलेक्ट्रिकल डिजाईन सम्वन्धि
(सम्वन्धित प्राविधिक वा परामर्शदातावाट भराउनु पर्ने)
Forms for
NBC 207 : 2003--Electrical Design Requirements

(In case of many units, fill up the form for main unit only)

S.No	Electrical Elements	As per Submitted Design	Remarks
1. Rating and sizes			
1.1	Minimum size (sq. mm.)of copper cable for light circuit	…….sq. mm.	
1.2	Minimum size (sq. mm.) of copper cable for power circuit	……..sq. mm.	
1.3	Wattage of ordinary power socket (2 pin)estimated as	……... watt	
1.4	Wattage of power socket outlet (3 pin) estimated as	……...watt	
1.5	Wall thickness of cast iron switch or regulator boxes	…….. mm.	
1.6	Wall thickness of mild steel sheet switch or regulator boxes for up to 20cm.X30cm	.... mm.	
1.7	Wall thickness of mild steel sheet switch or regulator boxes for above 20cm.X30cm	... mm.	
1.8	Depth of the switch or regulator boxes	….. mm.	
2. Maximum number of cables in a conduit			
2.1	No. of 2.5 sq. mm. cross-sectional area cable in 20 mm. dia conduit	……Nos. of cables	
2.2	No. of 4 sq. mm. cross-sectional area cable in 20 mm dia conduit	……Nos. of cables	
2.3	No. of 6 sq. mm. cross-sectional area cable in 20 mm. dia conduit	……Nos. of cables	
2.4	No. of 2.5 sq.mm. cross-sectional area cable in 25 mm. dia conduit	……Nos. of cables	
2.5	No. of 4 sq. mm cross-sectional area cable in 25 mm. dia conduit	……Nos. of cables	
2.6	No. of 6 sq. mm. cross-sectional area cable in 25 mm. dia conduit	……Nos. of cables	
2.7	No. of 2.5 sq. mm. cross-sectional area cable in 32 mm. dia conduit	……Nos. of cables	
2.8	No. of 4 sq. mm. cross-sectional area cable in 32 mm. dia conduit	……Nos. of cables	
2.9	No. of 6 sq. mm. cross-sectional area cable in 32 mm. dia conduit	……Nos. of cables	
3. Earthing			
3.1	The value of any earth system resistance unless otherwise specified		
3.2	Diameter of rod electrodes of steel or galvanized iron		
3.3	Diameter of rod electrodes of copper		
3.4	Internal diameter of pipe electrodes of galvanized iron or steel	…….. mm.	
3.5	Internal diameter of pipe electrodes of cast iron	……..mm.	
3.6	The B17length of the rod & pipe electrodes	……. mm.	
3.7	Thickness of plate electrodes of galvanized iron or steel	……. mm.	
3.8	Thickness of plate electrodes of copper	……. m.	
3.9	Size of plate electrodes of galvanized iron or steel or copper	…...mm.	
3.10	Depth of the top edge of plate electrodes buried from ground	…...mm.	
4. Testing			
4.1	Insulation resistance (M ohm) between earth and the whole system of conductor or any section thereof	..1.5 m.	
4.2	Insulation resistance (M ohm) between the metallic case and all live parts of each rheostat, appliance and sign when they are disconnected,		
4.3	Insulation resistance (M ohm) between all the conductors connected to one pole or phase conductor and all the conductor connected to the middle wire or to the neutral or to the other pole of the phase conductor		
4.4	The applied dc voltage (Volt)of meggering		
4.5	Each switch is placed in phase or neutral?	….. Mohm	

Note :

1. When substation and external electrical works are required, designer must comply NBC 207: 2003 or/and relevent international electrical codes.
2. Designer is advised to consider lightning protection designated by international electrical codes .

Name of Electrical Engineer: ..... NEC Regd. No: ..... Signature :

प्राविधिक विवरण फारामहरु
(घ) स्ट्रक्चरल डिजाइन सम्बन्धि
(सम्वन्धित प्राविधिक वा परामर्शदातावाट भराउनु पर्ने)

Forms

for

NBC 000:1994 to NBC114:1994 Professionally Engineered Buildings

(In case of many units, fill up the form for main unit only)

Type of Building :

S.N.	Description	As per submitted design	Remarks
1. General:			
	Number of Storey		
	Total height of structure		
	Structure system	☐ Frame ☐ Load bearing ☐ Other	
	If Computer Aided Design (CAD) is used, please state the name of the package		
2. Requirements of NEPAL NATIONAL BUILDING CODE (NBC)			
2.1 NBC-000-1994 Requirements for State-of-the Art Design : An Introduction			
	Level of design:	☐ International State-of-the-art ☐ Professionally Engineered Structures ☐ Mandatory Rule of thumb ☐ Guidelines to rural buildings	
2.2 NBC 101:1994 Materials Specifications			
	Tick the listed materials that will be used in the construction	☐ Cement ☐ Coarse Aggregates ☐ Fine Aggregates (Sand) ☐ Building Lime ☐ Natural building stones ☐ Bricks ☐ Tiles ☐ Timber ☐ Metal frames ☐ Structural steel ……*	
	In what manner / way have you used NBC 101 ?		
2.3 NBC 102-1994 Unit Weight of Materials			
	Where do you plan to apply NBC 102 ? Specify the design unit weight of materials Steel Brick RCC Brick Masonry	Specifications ☐ Design Calculation ☐ Bill of Quantity ☐	
Note: *If any materials other than specified in NBC 102-1994, the designer should take responsibility that such materials are according to international standard.			
2.4 NBC 103-1994 Occupancy load (Imposed Load)			
	Proposed occupancy type (Fill in only concerning occupancy type)	Occupancy load: Uniformly Distributed load (kN/m2) / Concentrated Load (kN)	
	For Residential/Apartment Buildings		
	Rooms and Kitchen		
	Corridors, Staircase, store		
	Balcony		
2.5 NBC 104-1994 Wind load			
	Wind zone		
	Basic wind velocity	m/s	

Name of Structure Engineer: ..... NEC Regd. No: ..... Signature :

2.6 NBC 105-1994 Seismic Design of Buildings in Nepal			
	Method of earthquake analysis:	ˆ Seismic coefficient method ˆ Model Response Spectrum method ˆ……	
	Subsoil category		
	Fundamental transactions period		
	Basic seismic coefficient		
	Seismic zoning factor		
	Importance factor		
	Structural performance factor		
2.7 NBC 106 : 1994 Snow load			
	Snowfall area	ˆ Perennial ˆ Occasional ˆ No snowfall	
	Elevation		
	Design Depth		
	Design Density		
2.8 NBC 107: 1994 Provisional Recommendation on Fire Safety			
	Where do you plan to apply the fire safety requirements specified in NBC 107 and NBC 206 – 1994?	Specifications Design Calculation Bill of quantity	
2.9 NBC 108: 1994 Site Consideration for Seismic Hazards			
	Distance from toe/beginning of downward slope (if applicable)	m	
	Distance from river bank		
	Soil type in footing		
	Adopted safe bearing capacity		
	Type of foundation		
	Depth of foundation		
	Soil test report available?	ˆ Yes ˆ No	
Note: Soil test is advisable for all professionally engineered structures. In case, soil test is not carried out, the designer should take responsibility for assumed data concerning site consideration.			
2.10 NBC 109 : 1994 Masonry : Unreinforced			
	Concrete Grade		
	Brick crushing strength		
	Mortar ratio for load bearing masonry		
	Floor Ground floor First floor Second floor …… ……	Wall height / Wall thickness / Maximum Length	
	Opening details:		
	Least distance from inside corner		
	Does the total length of opening in any wall exceed 50 % of its length	Yes No	
	Does the horizontal distance between any two opening less than 600 mm or ½ of height of shorter opening	Yes No	
	Does the Vertical distance between two opening less than 600 mm or ½ of width of smaller opening	Yes No	
	If any of above mentioned cases do not comply, do you have provision for strengthening around opening?	Yes No	
	Bands provided:	Plinth level Lintel level Roof level Gable band	
	C/C distance of corner/tee strengthening Horizontal dowel bars		

Name of Structure Engineer: NEC Regd. No: Signature :

2.11 NBC 110 : 1994 Plain and Reinforced Concrete						
	Concrete grade					
	Reinforcement Steel Grade					
	Critical size of slab panel					
	Calculated short span to effective depth ratio (L/d) for corresponding slab					
	Permissible L/d ratio					
	Effective depth					
	Span correction factor					
	Tension reinforcement (A_{st})Percent A_{st} modification factor					
	Compression reinforcement modification factor					
	Beam characteristics	Condition of beams				
		Canti-lever	Simply supported	One side Continuous	Both side continuous	
	Maximum span/depth ratio					
	Span of corresponding beam					
	Depth of corresponding beam					
	Width of corresponding beam					
	Maximum slenderness ratio of column					
	Lateral dimension of corresponding column					
	Design Philosophy:	☐ Limit State method ☐ Working stress method ☐ Ultimate strength method				
	Load Combinations: 1: 2: 3: 4:					
2.12 NBC : 111-1994 Steel						
	Design assumption:	☐ Simple connection ☐ Semi-rigid connection Fully rigid connection				
	Yield Stress:					
	Least wall thickness					
	Exposed condition	Pipe	Webs of Standard size	Composite section		
	For Exposed Section					
	For not exposed section					
	Have you used Truss?	Yes	No			
	What is the criti cal span of purlin					
	Purlin size					
	Have you used steel post?	Yes	No			
	Slenderness ratio of the critical post					
2.13 NBC : 112 Timber						
	Name of structural wood:					
	Modulus of Elasticity:					
	Critical span of the beam element					
	Designed deflection					
	Slenderness ratio of the critical post					
	Joint type:					
2.14 NBC : 113 : 1994 Aluminium						
	Have you used aluminium as structure member?	Yes No				
	If yes, please mention the name of design code.					

Name of Structure Engineer: ..... NEC Regd. No: ..... Signature :

2.15NBC : 114 : 1994 Construction safety			
	Are you sure that all safety measures will be fulfilled in the construction site as per this code ?	Yes No	
	Safety wares use	□ Safety hard hat □ safety goggles □ Safety boots □ Safety belt □ First aid facility	

Name of Structure Engineer: ..... NEC Regd. No: ..... Signature :

मिति : .....

श्रीमान् डिभिजन प्रमुखज्यू,
शहरी विकास तथा भवन निर्माण विभाग,
डिभिजन कार्यालय मोरङ्ग ।

विषय : <u>प्रतिवद्धता पत्र ।</u>

<u>क) परामर्शदाताको तर्फबाट :</u>

संस्थापक श्री.....ले जिल्ला.....न.पा./गा.वि.स. .....वडा नं.....स्थान.....को जम्मा जग्गाको क्षेत्रफल .....रोपनी/वर्गमिटरमा भवन ऐन २०५५, भवन निमयावली २०६६, भवन निर्माण मापदण्ड २०६४, नेपाल राष्ट्रिय भवन संहिता २०६० र सो मा उल्लेख नभएका Standard सम्बन्धमा International Standard को अधिनमा रहि भवन संख्या ..... वटा भूमिगत तल्ला रहेको र सो भन्दा माथि ..... अधिकतम तल्ला भएको ..... वर्गमिटर/वर्ग फिट Built up Area भएको **<u>नयाँ भवन निर्माण/नविकरण/स्थान परिवर्तन/स्तरोन्नती एवं उपयोग परिवर्तनको प्रयोजन</u>**को Architectural/Structural/Sanitary/Electrical/Fire Safety का नक्साहरु र पुरानो भए रिपोर्टहरु Analysis, Design, Assessment, Data म/हामीबाट तयार गरी पेश गरेको छु/छौं ।

<u>Designer</u>	<u>Name</u>	<u>NEC NO.</u>	<u>Signature</u>
1. Architect :–			
2. Structural Engineer :–			
3. Sanitary Engineer :–			
4. Electrical Engineer :–			

Date : ----------

परामर्शदात्री संस्थाको नाम :-

प्रोप्राईटरको नाम तथा हस्ताक्षर :-

कम्पनीको छाप

ख) निर्माण कार्य सुपरीवेक्षकको तर्फबाट :

संस्थापक श्री.....ले जिल्ला.....न.पा./गा.वि.स. .....वडा नं.....स्थान.....मा **नयाँ भवन निर्माण/नविकरण/स्थान परिवर्तन/स्तरोन्नती एवं उपयोग परिवर्तनको प्रयोजन** गर्न लागेको, परामर्शदात्री .....का तर्फबाट श्री.....ले डिजाइन गरेको भवनको निर्माण कार्यको प्राविधिक सुपरीवेक्षणमा स्वीकृत नक्सा बमोजिम गर्ने गराउने प्रतिवद्धता पेश गरेका छु/छौ ।

Designer	Name	NEC NO.	Signature
1. Architect :–			
2. Structural Engineer :–			
3. Sanitary Engineer :–			
4. Electrical Engineer :–			

Date : ----------

सुपरीवेक्षण गर्ने संस्थाको नाम र ठेगाना :-

प्रोप्राईटरको नाम तथा हस्ताक्षर :-

कम्पनीको छाप

ग) संस्थापकको तर्फबाट :

Architectural/Structural/ Sanitary/Electrical/Fire Safety का नक्साहरु/डिजाईन अनुसार माथि उल्लेखित परामर्शदात्रीको परामर्श तथा प्राविधिक सुपरीवेक्षण लिई भवन ऐन २०५५, भवन नियमावली २०६६, भवन संहिता २०६० बमोजिम निर्दिष्ट गुणस्तर कायम राखी निर्माण कार्य गर्न, गराउन र निर्माण कार्य भएको प्रतिवद्धता जाहेर गर्दछु/गर्दछौ ।

भुठ्ठा विवरण पेश गरेको ठहरिएमा र स्वीकृत नक्सा, डिजाईन, स्टयाण्डर्डस र स्पेसिफिकेशन बमोजिम निर्माण कार्य फरक पाईएमा प्रचलित कानून वमोजिम सजायको भागिदार हुन,व्यहोर्न मञ्जुर भएको व्यहोरा समेत यसै प्रतिवद्धता पत्रद्धारा अनुरोध गर्दछु/गर्दछौ ।

संस्थापकको नाम :-
ठेगाना :-
फोन नं. :-
हस्ताक्षर :-
मिति :-

कम्पनीको छाप