Ministry of Urban Development Department of Urban Development & Building Constrution

Building Code Division

Babarmahal, Kathmandu

NBC Compliance Check list on Structural Analysis & Design for RCC

Code Code	emarks
A General Information:	
A.1 Owner's Name:	
Address:	
A.3 Types of Building:	
A.4 Structural Designed By:	
Consultancy Firm:	
Designers' Name:	
Nepal Engineering Council No:	
B Geometrical Configuration of Building:	
B.1 No. of Block:	
B.2 No. of Story:	
B.3 Story Height:	
Basements	
Ground Floor	
Typical	
B.4 No. of columns:	
B.5 No. of Lift:	
B.6 No. of staircase:	
B.7 Total height of structure:	
B.8 Total height for Fundamental time	
period calculation:	
B.9 Height to width ratio of building:	
B.10 Length to width ratio of building:	
B.11 Seismic joints if any:	
B.12 Floorwise Stiffness Irregularities:	
B.13 Floorwise Mass Irregularities:	
B.14 Centre of Mass:	
B.15 Centre of Rigidity:	
B.16 Eccentricity/Permissible eccentricity:	
C Geological Investigation:	
i) Geological Investigation Conducted Yes No	
If Yes	
C.1 Soil Investigation Report:	
C.2 Soil Investigation Done By:	
C.3 Allowable Bearing Capacity:	
C.4 N- value:	
C.5 Type of Soil:	
C.6 Water Table:	
C.7 Liquefaction Potential:	
C.8 Calculated Maximum Pressure in	
Foundation:	

	If No				
<u> </u>	Adopted Value as per NBC 205 Table				
C.9	3.1				
	5.1	<u> </u>			
C.10	Site Consideration as per NBC 108?	Yes		No	
D	Structural Analysis and Design Proc	edure.			
	Structural Analysis Software:(version)	cuui c.			
	Structural System:				
	Foundation System:				
	Loading Parameters:				
	i. Dead Load:			(As per NBC)	02·1994)
	ii. Live Load:			(As per NBC	
	m Erro Bows.			(FIS POT TYBE	100.133 .)
	iii. Other Load if any				
D.5	Concrete Grade Used :				Column
					Foundation, Beam, Slab
D.6	Reinforcement Grade Used:				,, ~
	Reinforcement Grade Used for shear:				
D.7	Mechanical Properties of other				
	construction materials used:				
	i. Brick				
	ii. Steel Section				
	iii. Other				
D.8	Seismic Load (AS per NBC105 or				
	IS 1893:2002) :-				
D.8.1	Zone Factor (Z):				
D.8.2	Importance Factor(I):				
D.8.3	Soil Type:				
	Fundamental Time Period(Tx/y):		sec		
	Response Reduction Factor (R):				
	Design horizontal Seismic Coefficient(Ahx/y):			
	Seismic Weight:				
	Design Seismic Base Shear(Vbx/y):				
D.8.9	Base Shear from Dynamic Analysis (R	esponse spe	ctrum ana	lysis or time hi	story)
	Rx=				
	Ry=				
D.8.10	Damping:				
			ļ		
D 0	Colomia Anglesis Medi. 1				
	Seismic Analysis Method: Seismic Anlysis method				
	No. of modes Considered:				
	Type of Modal Combination:				
	Modal Mass Participation Factor:				
J.J.4	In X-direction				
	In Y-direction				
D 9 5	Scale Factor				
5.5.5	i. Along X-direction:				
	ii. Along Y-Direction:				
D.9 6	Total Deflection of Building:				
	i. Along X-direction:				permissible

	ii. Along Y-Direction:				permissible	
	Inter Story Deflection (Drift):				permissible	
	Separation Between blocks if any:					
	Load Combination Considered:			(NBC105 or I	S 1803·2002)	
0.3.3	Load Comomation Considered.			(NDC103 01 1	3 1893.2002)	
Е	Reinforced Concrete Design					
	Concrete Design code Referred:			(15456:2000	or)	
	Ductile Detailing code Referred:			(IS456:2000 or) (IS13920:1993)		
	Typical design of structural elements			(1313920.199	3)	
E.3	foundation, slab, staircase, retaining					
	wall etc:					
	wan etc.					
E	Earthquake Resistant measures adop	atad for non	structur	al alamants:		
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	iiietc					
	IIItt					
G	Retrofitting Design, if existing buildi	ng				
	Non Destructive Test of structural elen					
0.1	i. Schmidt Hammer	TOTALS				
	ii. Rebar Detection test					
	iii. UtrasonicPulse Velocity test					
	iv. Other, if any					
G.2	Retrofitting design code refered					
	Retrofiting Analysis Method: Non					
	Linear Analysis/ Performance based					
	analysis/Conventional					
G.4	Method of retrofitting					
	Attachments:					
	Application form					
	Comprehensive Structural Design Repo	ort				
	Detailed Architectural Drawings					
	Detailed Structural Drawings with duc	tile details				
	CD of Structural Analysis					
H.6	NDT test report, Retrofit Design &drav	wing if existi	ng buildir	<u>ng</u>		
	Signature Signature					
	Owner's Name: Designer's Name:					
	Designer 5 Manie.					