

Ministry of Urban Development
 Department of Urban Development & Building Construction
Building Code Division
 Babarmahal, Kathmandu

NBC Compliance Check list on Structural Analysis & Design for RCC

S.No	Description	Quantity	Unit	Adopted Code	Remarks
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				
C.9	Adopted Value as per NBC 205 Table 3.1				
C.10	Site Consideration as per NBC 108?	Yes		No	
D Structural Analysis and Design Procedure:					
D.1	Structural Analysis Software:(version)				
D.2	Structural System:				
D.3	Foundation System:				
D.4	Loading Parameters:				
	i. Dead Load:	.....		(As per NBC102:1994)	
	ii. Live Load:	.....		(As per NBC 103:1994)	
	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:				
D.8.4	Fundamental Time Period(Tx/y):	.....	sec		
D.8.5	Response Reduction Factor (R):				
D.8.6	Design horizontal Seismic Coefficient(Ahx/y):				
D.8.7	Seismic Weight:				
D.8.8	Design Seismic Base Shear(Vbx/y):				
D.8.9	Base Shear from Dynamic Analysis (Response spectrum analysis or time history)				
		Rx=			
		Ry=			
D.8.10	Damping:				
D.9	Seismic Analysis Method:				
D.9.1	Seismic Anlysis method				
D.9.2	No. of modes Considered:				
D.9.3	Type of Modal Combination:				
D.9.4	Modal Mass Participation Factor:				
	In X-direction				
	In Y-direction				
D.9.5	Scale Factor				
	i. Along X-direction:				
	ii. Along Y-Direction:				
D.9.6	Total Deflection of Building:				
	i. Along X-direction:				.....permissible

