

## L.4.4. FORM No 2(d)

### CERTIFICATE UNDERTAKING FOR HAZARD SAFETY REQUIREMENT

To,

REF: Proposed work of \_\_\_\_\_ (Title of project)

C.S. No./RS.NO..NO. (F.P. No. \_\_\_\_\_ In ward No. \_\_\_\_\_ at Village  
\_\_\_\_\_ Taluka \_\_\_\_\_ T.P.S. No. \_\_\_\_\_ of \_\_\_\_\_ Village/Town/City

Certified that the building plans submitted for approval satisfy the safety requirements as stipulated under Building Regulation No. 15.3 and the information given therein is factually correct to the best of our knowledge and understanding. It is also certified that the structural design including safety from hazards based on soil conditions shall be duly incorporated in the design of the building and these provisions shall be adhered to during the construction

Signature of Owner with date \_\_\_\_\_

Name in Block Letters \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Signature of the

Structural Engineer with date \_\_\_\_\_

Name in Block Letters \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Signature of the

Developer with date \_\_\_\_\_

Name in Block Letters \_\_\_\_\_

Address \_\_\_\_\_

Signature of the

Architect with date \_\_\_\_\_

Name in Block Letters \_\_\_\_\_

Address \_\_\_\_\_

To be annexed with Form 2(d)

Building Information Schedule

1 Encircle the applicable data point

2 \* means 'any other, specify'

1 Building address	Plot No.	Scheme / Colony:	Town:	District:	Initials checking staff	of	Reference	
2 Building category	2.1 Occupancy Classification							Regulation 2.9
	2.2 Type of Construction	Type 1	Type 2	Type 3	Type 4		7.1.2 of Part III & 4 of Part IV of NBC	
3 Location	3.1 Land use zoning							Regulation
	3.2 Seismic zone	V	IV	III	II		IS 1893	
	Design intensity(MM / MSK)	IX	VIII	VII	VI		Vul. Atlas	
	3.3 Wind / Cyclone zone	Wind speed+55/50/47/44/39/ 33	Cyclone prone Yes / No		Max. storm surge = m		IS 875 Part 3 Vul. Atlas	
	3.4 Flood proneness of site	River plain Unprotected / Protected	Low area inundation possible - Yes / No		Observed HFL above GL = cm		Vul. Atlas	

	3.5 Prone to land slides							IS14496(Part 2)
4 Foundati on	4.1 Site and sub-soil investigation	No. of Boreholes _____, Depth _____ m, N-values _____ B.C. Plate Load Test Yes/No						IS 1892
	4.2 Soil type at site (Note 2)	Rocky / Stiff	Medium	Soft	Liquefiable	Expansive (Black cotton)	*	IS 1904, IS 6403
	Stiff – N>30; Medium- N=10 –30; Soft- N<10; Liquefiable – Poorly graded sands with N<15, under water table ( see Note 5 of Table 1 in IS 1893)							IS 2131
4 Foundati on ( <i>contd</i> )	4.3 Depth of water table below GL							
	4.4 Bearing capacity at site (used in design)	For normal loads = t/m <sup>2</sup>	With EQ = t/m <sup>2</sup>	With wind = t/m <sup>2</sup>	With flood = t/m <sup>2</sup>		IS 1888, IS 1904, IS 6403 IS 8099(Pt 1 &2)	
	4.5 Type of footing / Foundation used	Strip	Individual column footing / Raft	Bearing piles	Friction piles	*	IS 1080 IS 1893 IS 13063	

5 Super-structure	5.1 Storeys etc	Basements 0/1/2/3	No. of storeys	Attic Yes / No	Lift house Yes / No	Water tank on roof Capacity			
	5.2 Bearing walls	Bricks	Stone	Solid block	Hollow block	Adobe	*		
	5.2.1 Mortar	C:S = 1:	C:L:S = 1: :	L:S = 1:	Clay Mud	*			
		C = Cement S = Sand L = Lime							
	5.3 Frame work	RC columns & beams	Steel columns & beams / trusses	Wood posts & trusses	*				
	5.3.1 Infill panels	Glass	Brick walls	Wood panelling	*				
	5.4 Floors	RC slabs	Stone slabs on jists	Prefab flooring elements on beams	*				
	5.5 Roof	Flat like floors / Pitched		Trussed / Raftered / 'A' frame / Sloping RC slab		*			
5.6 Roof covering	CGI sheeting	AC sheeting	Clay tiles	Wood shingle	*				
6 Building importance	6.1 Importance	Ordinary		Important		Hazardous		IS 1893	
7 Design	7.1 Factor for EQ	$\alpha_o =$	$I =$	$\beta =$	$\alpha_h =$		IS 1893		

factors	7.2 Factor for wind	$k_1 =$	$k_2 =$	$k_3 =$	$p_h =$		IS 875 (Pt3)
8 Safety of pitched roof where used	8.1 Bracing provided	In plan Yes / No / NA	In plane of rafters Yes / No / NA	In plane of vertical columns Yes / No / NA			IS 4326 Cyclone guide
	8.2 Roof anchorage	To walls: Bolt length = cm	To RC columns: Bolt length = cm	To wooden posts, steel straps & bolts / nails....			Cyclone guide
	8.3 Connections	Covering to purlins J-bolt / ire	Purlins to rafters Bolt / Wire	Truss elements Welding / Bolts / Nails / Straps			Cyclone guide
9 Load bearing wall buildings	9.1 Building category	A $\alpha_h < 0.05$	B $\alpha_h = 0.05$ to 0.06	C $\alpha_h > 0.06$ & $< 0.08$	D $\alpha_h = 0.08$ to $< 0.12$	E $\alpha_h > 0.12$ =	IS 4326, IS 13828
	9.2 Building configuration	Plan Shape L / T / Y / C / E	Separation provided to get rect. Blocks Yes / No	Plan projection $> 0.2$ of length Yes / No			IS 4326
	9.3 Opening in walls	Control used on sizes Yes / No / NA	Control used on location Yes / No / NA	Strengthening around Yes / No / NA			IS 4326, IS 13828

	9.4 Bands provided	Plinth band Yes / No / NA	Lintel band Yes / No / NA	Eave band Yes / No / NA	Roof band Yes / No / NA	Gable band Yes / No / NA	Ridge band Yes / No / NA		IS 4326, IS 13828	
	9.5 Vertical bars	At corners of rooms Yes / No / NA		At jambs of openings Yes / No / NA		*			IS 4326, IS 13828 Cyclone guide	
	9.6 Stiffening of floors / roof with separate units	RC screed & band  Yes / No / NA	Peripheral band and connectors Yes / No / NA	Diagonal planks and band around Yes / No / NA		*			IS 4326	
	9.7 Framed thin wall construction	Bonding of columns with the wall ensured Yes / No (Fig 13 of IS 4326)								IS 4326
10 Safety of wooden buildings	10.1 Holding down	Sill beam bolted Yes / No / NA		Wood posts anchored Yes / No / NA		Framed, resting on pedestals Yes / No / NA			IS 4326 Cyclone guide	
	10.2 Bracing of wood frame	Diagonal bracing in vertical planes Yes / No / NA	Diagonal / knee bracing in plan Yes / No / NA	Stiff wall panel		Brick noggin with hold fasts			IS 4326 Cyclone guide	

	10.3 Connections	Framed with iron strips	Bolted	Nailed	*		IS 4326 Cyclone guide
11 Safety of steel / RC frame buildings	11.1 Building shape	Both axes symmetrical	One axis symmetrical		Unsymmetrical in plan or section		
	11.2 Analysis used	Equivalent static	Model		Dynamic	Torsional effects considered Yes / No	IS 1893
	11.3 Method of design used	Working stress		Limit state		Plastic theory	IS 456, IS 800 SP 6(6)
	11.4 Infills / partitions	Out of plane stability check Yes / No			In-plane stiffness considered Yes / No		IS 1893, IS 4326, Cyclone guide
	11.5 Detailing of RC frames	Beams Yes / No	Columns Yes / No	Beam – column joint Yes / No		Shear walls Yes / No	IS 13920
	11.6 Detailing of steel frames	Beams Yes / No		Columns Yes / No		Beam – column joint Yes / No	SP 6 (6)

NBC Part IV	12.1 Provision for water	Under ground tank : Provided / Not provided Capacity:	Over head tank : Provided / Not provided Capacity:	Adequate pumping system: Provided / Not provided  Capacity: l/minute  Pressure:		
	12.2 Provision for first aid fire fighting	Provided / Not provided / Not applicable				NBC Part IV
	12.3 Installation of systems	Provided / Not provided / Not applicable				NBC Part IV
	12.4 Earthing design and provision	Designed / Not designed	Provided / Not provided			IS 3043