RC STRUCTURAL DESIGN REVIEW CHECKLIST

Plot No.		**Date**	
Location			
Owner		**Consultant**	

SECTION	S/N	ELEMENTS TO BE CHECKED	CONSULTANT		
DATA			**OK**	**NOT OK**	**N/A**
	1	Geotechnical data	☐	☐	☐
	1a	Soil investigation result	☐	☐	☐
	1b	Proposed type of foundation	☐	☐	☐
	1c	Building location (fill, cut,.. etc)	☐	☐	☐
	1d	Water table	☐	☐	☐
	1e	Soil bearing capacity / pile capacities	☐	☐	☐
	2	Wind tunnel test if any	☐	☐	☐
	3	Third party report if any	☐	☐	☐
	4	Architecture drawings	☐	☐	☐
	5	Seismic parameters	☐	☐	☐
	6	Wind parameters	☐	☐	☐
	7	Grade of concrete, steel …etc.	☐	☐	☐
LOADING					
	8	Dead load, dl & temperature T	☐	☐	☐
	9	Live load, LL	☐	☐	☐
	10	Wind load, W	☐	☐	☐
	11	Seismic load, E	☐	☐	☐
	12	Uplift load	☐	☐	☐
LOAD COMBINATION					
	13	Ultimate limit state	☐	☐	☐
	14	Serviceability limit state	☐	☐	☐
	15	Special combinations	☐	☐	☐
ANALYSIS / DESIGN					
	16	Appropriate codes and standards have been employed	☐	☐	☐
	17	Design loading comply with brief	☐	☐	☐
	18	Design methods are appropriate	☐	☐	☐
	19	Design calculations are correct	☐	☐	☐
	20	Computer input data correctly entered	☐	☐	☐
	21	Interpretation of results is correct	☐	☐	☐
	22	Design comply with all statutory requirements	☐	☐	☐
	23	Design materials are compatible and suitable for environments	☐	☐	☐
DESIGN COMPONENTS					
	24	Beam, minimum 10% manual calculation	☐	☐	☐
	25	Slab, minimum 10% manual calculation	☐	☐	☐
	26	Column, minimum 10% manual calculation	☐	☐	☐
	27	Shear walls, minimum 10% manual calculation	☐	☐	☐
	28	Staircase / ramp slabs	☐	☐	☐

	29	Roof truss if any,	☐	☐	☐
	30a	Parapet	☐	☐	☐
	30b	Steel structural members if any	☐	☐	☐
DATA			**OK**	**NOT OK**	**N/A**
	31	Pile cap/ raft/ retaining wall	☐	☐	☐
	32	Water tank support	☐	☐	☐
	33	RC swimming pool etc	☐	☐	☐
	34	Check of uplift pressure done	☐	☐	☐
DESIGN CRITERIA					
	35	Adequate cover is provided for exposure and fire ratings	☐	☐	☐
	36	Reinforcement (bending moment, shear and torsion) provided complies with calculation	☐	☐	☐
	37	Minimum steel provided	☐	☐	☐
	38	Maximum steel not exceeded	☐	☐	☐
	39	Deflection to be in compliance with requirements	☐	☐	☐
	40	Crack widths within limit	☐	☐	☐
	41	Total and story drift within limits	☐	☐	☐
	42	Expansion and movement joints provided, wherever necessary	☐	☐	☐
	43	Sufficient ties provided	☐	☐	☐
DETAILING					
	44	Arrangement of bar permits placement of concrete	☐	☐	☐
	45	Avoid congestion of bars especially at joints	☐	☐	☐
	46	Sections, bar type and numbers clearly indicated	☐	☐	☐
	47	Curtailment, anchorage length and lapping are adequate	☐	☐	☐
	48	Seismic detailing complied	☐	☐	☐
	49	Adequate notes must be provided	☐	☐	☐
DRAWINGS					
	50	Drawings are dimensionally correct	☐	☐	☐
	51	Drawings are in compliance with other disciplines	☐	☐	☐
	52	Drawings are in compliance with calculations	☐	☐	☐
	53	Specifications are correct, complete and consistent with drawings	☐	☐	☐
	54	Openings, drops ETC clearly shown	☐	☐	☐
	55	Loading plans, vertical loads layout	☐	☐	☐
	56	Specifications of structural material shown on drawings	☐	☐	☐
DOCUMENTS FOR CHECKER					
	58	Structural drawings	☐	☐	☐
	60	Calculations and mathematical models	☐	☐	☐

CONSULTANT DETAILS			
NAME		**SIGNATURE & DATE**	
LICENSE NO.			
TEL			
MOBILE		**STAMP**	