

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1a	Soil investigation result	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1b	Proposed type of foundation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1c	Building location (fill, cut,.. etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1d	Water table	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	1e	Soil bearing capacity / pile capacities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	2	Wind tunnel test if any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	3	Third party report if any	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	4	Architecture drawings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	5	Seismic parameters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	6	Wind parameters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	7	Grade of concrete, steel ...etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LOADING						
	8	Dead load, dl & temperature T	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	9	Live load, LL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	10	Wind load, W	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	11	Seismic load, E	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	12	Uplift load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
LOAD COMBINATION						
	13	Ultimate limit state	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	14	Serviceability limit state	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	15	Special combinations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ANALYSIS / DESIGN						
	16	Appropriate codes and standards have been employed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	17	Design loading comply with brief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	18	Design methods are appropriate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	19	Design calculations are correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	20	Computer input data correctly entered	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	21	Interpretation of results is correct	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	22	Design comply with all statutory requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	23	Design materials are compatible and suitable for environments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
DESIGN COMPONENTS						
	24	Beam, minimum 10% manual calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	25	Slab, minimum 10% manual calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	26	Column, minimum 10% manual calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	27	Shear walls, minimum 10% manual calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	28	Staircase / ramp slabs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

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

CONSULTANT DETAILS

NAME			
LICENSE NO.		SIGNATURE & DATE	
TEL			
MOBILE		STAMP	