



ASSOCIATION OF STRUCTURAL ENGINEERS OF THE PHILIPPINES, INC. (ASEP)

CHECKLIST OF MINIMUM STRUCTURAL DESIGN DOCUMENTS

Designer:	
Project:	
Location:	
Owner:	

ITEMS		OK	N/A	REMARKS
1.0	STRUCTURAL PLANS			
1.1.	GENERAL NOTES			
1.1.1.	MATERIAL SPECIFICATIONS			
1.1.2.	TYPICAL DESIGN & CONSTRUCTION DETAILS (<i>Beam, Column, Slab Footing, Wall, Construction Joint, Rebar Splices & Bends, etc.</i>)			
1.2.	FOUNDATION PLAN; foundation details			
1.3.	FLOOR FRAMING PLANS			
1.4.	ROOF FRAMING PLAN			
1.5.	BEAM/GIRDER SCHEDULE, TYPICAL DETAILS			
1.6.	COLUMN SCHEDULE, TYPICAL DETAILS			
1.7.	FOOTING SCHEDULE, TYPICAL DETAILS			
1.8.	SLAB SCHEDULE, TYPICAL DETAILS			
1.9.	SHEAR WALL SCHEDULE, TYPICAL DETAILS			
1.10	TRUSS SCHEMATIC DIAGRAMS, TRUSS CONNECTION DETAILS			
1.11	BASEMENT WALL DETAILS			
1.12.	STAIR DETAILS			
1.13.	MISCELLANEOUS DETAILS			
1.13.1.	Connection Detail			
1.13.2.	Special Foundation Detail (<i>Driven Pile, Bored, Jet Grout, Geo Pier, etc</i>)			
2.0	STRUCTURAL CALCULATION			
2.1.	DESIGN CRITERIA			
2.1.1.	DESIGN CODE AND REFERENCES <i>NSCP, Volume I, Sixth Edition 2010 for Buildings, Towers and Other Vertical Structures</i>			
2.1.2.	Occupancy Category (Table 103-1, NSCP 2010)			
2.1.3.	DESIGN LOADS			
2.1.3.1.	DEAD LOAD			
		Selfweight of the structure		
		Roof framing and roofing system		
		Floor slab system		
		Wall partitions (exterior and interior walls)		
		Movable partitions		
		Floor finishes		
		Ceiling finishes		
		Electrical, mechanical utilities and services		
		Other miscellaneous weights		



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ITEMS			OK	N/A	REMARKS
	2.1.3.2.	LIVE LOAD			
		General occupancy			
		Hallways / corridors			
		Exterior Balcony			
		Exit Facilities			
		Toilet and Bath			
		Other			
	2.1.3.2.	SEISMIC LOAD PARAMETERS			
		Zone <i>Z</i>			
		Distance from seismic source			
		Seismic source type			
		Importance factor <i>I</i>			
		Ductility force coefficient <i>R</i>			
		Soil profile type <i>S</i>			
		Near-source factors <i>N_a, N_v</i>			
		Static Analysis			
		Dynamic Analysis			
	2.1.3.4.	WIND LOAD PARAMETERS			
		Zone <i>Z</i>			
		Basic wind speed			
		Importance factor <i>I_w</i>			
		Surface roughness category			
		Exposure category			
	2.1.3.5.	MISCELLANEOUS (<i>Fluid, Earth, Surcharge, etc</i>)			
2.1.4	MATERIAL SPECIFICATIONS				
		Minimum specified 28-day concrete compressive strength <i>f'_c</i>			
		Minimum specified yield strength of reinforcing bars <i>f_y</i>			
		Minimum specified yield strength of welded wire mesh <i>f_{yw}</i>			
		Minimum specified yield strength of structural steel (hot-rolled) <i>f_y</i>			
		Minimum specified yield strength of cold-formed steel			
		Minimum specified yield strength of prestressing steel (<i>tendons</i>) <i>f_{py}</i>			
		Welds: Electrode Classification <i>F_{xx}</i>			
		Bolts: Classification			
		Other materials			
2.2.	STRUCTURAL ANALYSIS				
	<i>Whenever Structural Engineering Software is used, 3D/2D Model Data Input shall be printed as part of the Structural Calculation Document</i>				
2.3.	STRUCTURAL DESIGN				
	<i>Whenever Structural Engineering Software is used, Detailed Design Check for Critical Members shall be printed as part of the Structural Calculation Document</i>				
2.4.	COMPUTER PROGRAMS				
	2.4.1.	NSCP 2010, Section 106.4.3. allows the use of Computer Program in Structural			
		Analysis and Design but the Engineer-of-Record still has the Full Responsibility of the Structural Design.			
		The following requirements apply to calculations which include such computer output:			



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ITEMS				OK	N/A	REMARKS
		2.4.1.1.	Drawing of the complete mathematical model used to represent the the structure in the computer-generated analysis.			
		2.4.1.2.	Program description giving the program name, the version number, and the company and its address shall be part of the computation documents.			
		2.4.1.3.	CD or DVD Archived Copy of all Computer Run in PDF format			
		2.4.1.4.	The first sheet of each computer run shall be signed and sealed by the Engineer-of-Record.			
		2.4.2	Photocopy of the Computer Program License shall be part of the Structural Calculation Documents			


Prepared By:

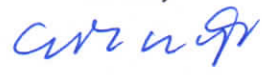

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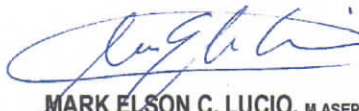

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