12. Extracts from analysis outputs: Modal mass participation ratios, tension stresses in shear/core walls and modifiers corrections, wind tunnel and code forces comparison, total and inter-story drifts calculations, vibration acceleration calculations, deflections and crack control calculations.

13. Software analyzed computer models conducted as per CED's requirements.

14. If applicable, third party report confirming the full compliance of the submitted design documents with the design provisions of the applicable codes and CED's design guidelines. The report shall be conducted as per the relevant CED's guidelines and requirements.

2.5.2.2 COMPUTER MODELS

1. The 3D model should reflect the actual geometry of the structure / building and shall be in full compliance with the design criteria and assumption.

2. The finite elements meshing shall appropriate to software used for analysis. The designer shall ensure that the analysis results are not affected by the quality of meshing.

3. The computer model shall have proper meshing of slab and wall elements. For walls and slabs. The meshing should have rectangular bias with elements of aspect ratio not exceeding 2:1. Where openings are provided in the slab or wall elements, the mesh nodes shall be located at the corners of openings.

4. The designer shall ensure proper connectivity for slab elements (Joints/Corner of one element should not be connected to edge of other element, unless appropriate calibration analysis is submitted with the model). The mesh shall also have proper connectivity with columns and walls elements.

5. Appropriately set-up auto-meshing could be used for regular rectangular buildings. Care should be given to connectivity and meshing constraints.

6. The computer model of concrete buildings shall be analyzed considering realistic base restraint conditions for cores, shear walls and columns. Adopted boundary conditions shall be reflected in the design and detailing of sub and super-structure members.

7. Modulus of elasticity shall be calculated as per the code governing the design.

8. The analyzed computer model shall be free from any major warnings or errors.

9. Section modifiers shall be applied as per clause 1910.11.1 of UBC-97.

10. Soil profile type and other seismic parameters used in seismic analysis shall be as recommended in the geotechnical investigation report.

11. Iterative method of estimating P-Delta effect shall be considered in the analysis of buildings as requested by clause 1630.1.3 of UBC 1997. Minimum of 3 iterations shall be used.

12. Structures and buildings shall be analyzed by employing Response Spectrum Analysis in full compliance with UBC 1997.

13. Tall buildings and other structures with structural system sensitive to construction sequence shall be investigated for the effects of construction sequence on internal load distribution.

14. The design seismic case shall consist of combination of two orthogonal excitation directions combined on the SRSS basis as requested by clause 1633 of UBC 1997.

2.5.2.3 GENERAL CONSIDERATIONS

1. Where the structure is composed of a flexible upper portion and lower stiffer basement/podium, the seismic scale factor shall be calibrated at foundation level to design the basement elements and at top of basement to design the tower elements.

2. The augmented section modifiers could be used to check the maximum drift and vibration acceleration only as