

Comments 2

- 1- Considering the wall panel connection to retaining wall, the overturning moments due to earthquake load needs to be considered for strength and stability check.
The load combinations in appendix J AS 4678 is recommended to be considered for strength and stability limit states.

TMK Response

Retaining wall checked for additional load from earthquake. Please refer to attached structural calculations SC215-SC220 and amended mark up on SSK 6 extracted from drawing S400.

- 2- The steel member and wall panels connections design are not included in calculations.

TMK Response

Refer to attached structural calculations SC221-SC223 for the connections to precast panel

- 3- The ductility of the shear walls according to AS 1170.4 Table 6.5(a) must be considered as limited ductile shear walls.

TMK Response

Structural performance factor and structural ductility factor took for limited ductile shear walls.
Refer to attached structural calculation SC228

- 4- The Etabs automatic calculations are based on dynamic response spectrum analysis. However, according to AS 1170.4 clause 7.2 (a,b), the site specific design response spectra based on ground motion time history and geotechnical analysis taking into account the soil profiled must be prepared and used in dynamic analysis. The automatic calculations are not accepted.
Instead of dynamic analysis, it is recommended to use equivalent static analysis. In this case, the base shear calculated according to clause 6.2.1 can be implemented in Etabs.

TMK Response

Stability of building reanalyzed based on revised limited ductile shear wall using equivalent static analysis method. Refer to attached structural calculations SC224-SC262

- 5- In case of using equivalent static analysis, the 0.148 sec period calculated by the Etabs is not acceptable and the structure period determined by the analysis shall not be less than 70% of the value calculated using equation 6.2(7) AS 1170.4.

TMK Response

.34 sec period adopted to limit the value not less than 80% from the equation 6.2(7) AS1170.4.
Refer to attached structural calculations SC228

- 6- The story drifts must be calculated according to equation 6.7(1) satisfying maximum permissible drift.

TMK Response

Expected deflection very minimal so ok – refer to attached structural calculation SC 263