loading. They prepare a slab-wall model and by using linear potentiometers and actuator they concluded that, stiffness of wall-slab joint started to decrease from 0.2% drift until 2.1% drift and lost it stiffness after 2.1% drift.

Rajesh m n and S K Prasad RC wall building modeled and analyzed using SAP 2000's pushover analysis by using layered shell elements. Various parameters such as aspect ratio of walls, reinforcement detailing aspects and presence of openings are chosen to study the seismic performance of RC walled building. Finally concluded, by providing boundary element base shear capacity increases.

4. Methodology

For this study, a residential building with lift room having a 3-meters height for each story is modeled. The section of structural elements is rectangular with common dimensions. The buildings are modeled using software ETAB v15, two different models - Conventional Structural System and Monolithic Structural System. Dead load & live load calculation is as per IS 875(1987), and Earthquake load calculation is as per IS 1893(2002) taking EQ Zone-III by using static coefficient method. The data for these frames are given below.

Seismic Zone – III, No of storeys –1 to 10, Floor Height – 3m, Thickness of Shear wall– 150 mm, Materials – M20, M25, Fe 415, Depth of Slab – 150mm, Unit Weight of RCC – 25 kN/m3,Type of soil – Medium. Size of beam 300x600 mm, Size of column 300x750 mm.

Figure 1: Building plan

5. Results

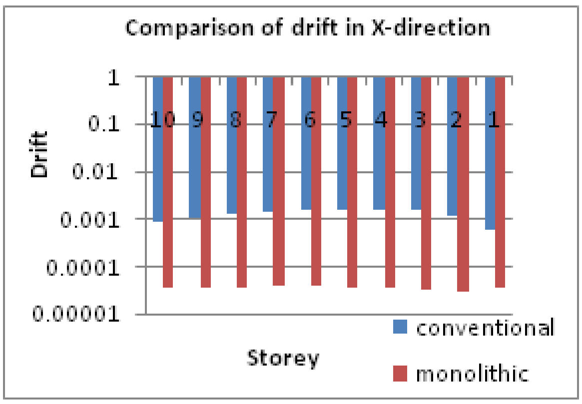

Figure 2: Comparison of drift in X-direction for G+10storey

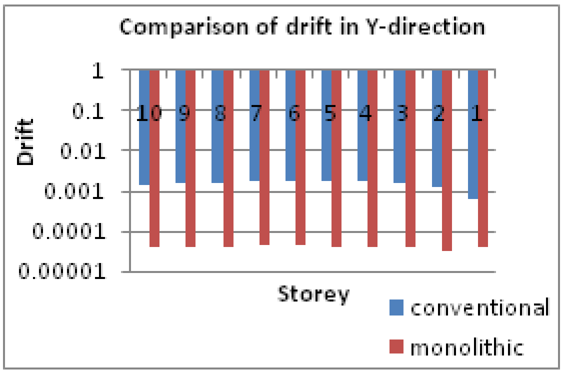

Figure 3: Comparison of drift in Y-direction for G+10storey

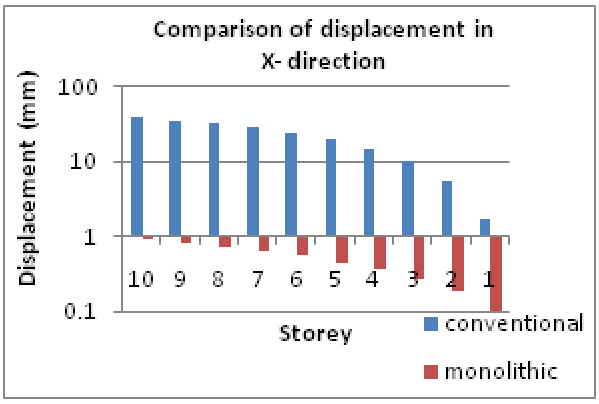

Figure 4: Comparison of displacement in X-direction for G+10 storey

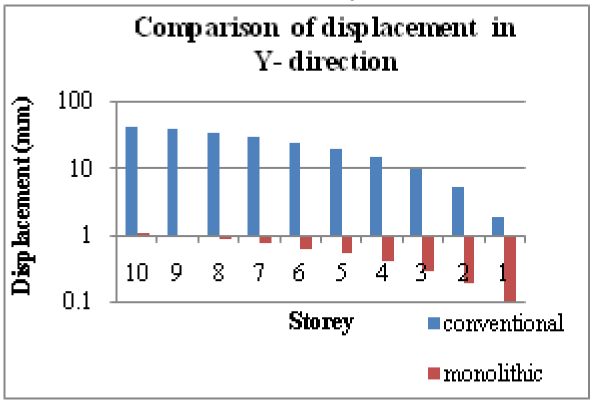

Figure 5: Comparison of displacement in Y-direction for G+10 storey

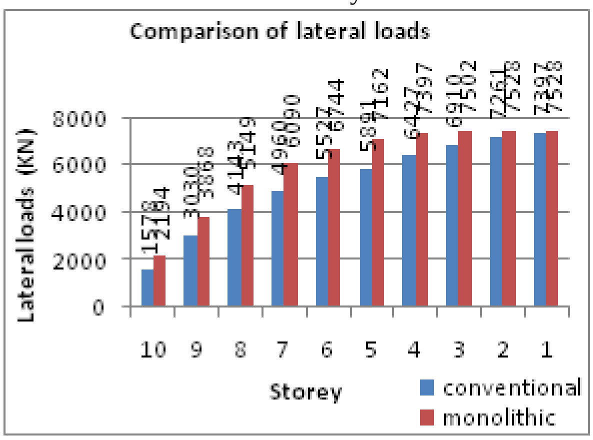

Figure 6: Comparison of lateral loads for G+10 storey

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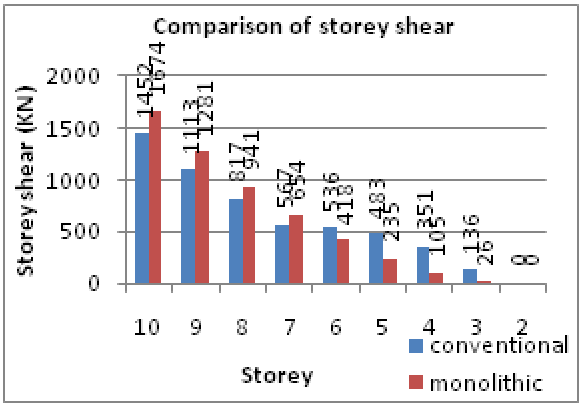

Figure 7: Comparison of storey shear for G+10 storey

Table 1: Comparison of time period and base shear

Structural system	*Conventional*	*Monolithic*
Time period	1.567 sec.	0.176 sec.
Base shear	7397 kN	7528 kN

6. Conclusion

One to ten storey conventional and monolithic system were analysed and designed as per the codal provisions and the results are compared in various aspects. It is found that storey displacement in monolithic structural System decreases as compared to conventional structural system in both the directions. Drift is also decreases in both the directions for monolithic structural system as compared to conventional structural system. As modal time period is less in monolithic structural system. Also advantages like, rapid construction work and all over project cost will be reducing.

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