

9. Concluding Remarks

Confined masonry buildings have performed well in several earthquakes worldwide. This construction practice is widely used in many countries and regions for the following reasons:

- It is based on traditional masonry construction practice;
- It does not require sophisticated design and detailing to perform safely nor highly qualified labour (as is the case with RC frame construction);
- Confined masonry technology falls in between that of unreinforced masonry and RC frame construction, however due to its smaller member sizes and the lesser amount of reinforcement it is more cost-effective than RC frame construction, and
- It has a broad range of applications - it can be used for single-family houses as well as for medium-rise apartment buildings.

Confined masonry construction has the following disadvantages:

- Construction is more expensive than unreinforced masonry construction and requires somewhat higher level of labour skills, however its earthquake performance is significantly better than unreinforced masonry construction, and
- It is characterized by lower strength and ductility when compared to properly built ductile RC frame construction and requires larger wall area when compared to RC frame construction.

Confined masonry construction has a great potential for saving lives and property in areas of high seismic risk in India. However, like any other construction practice, good earthquake performance is based on the following premises:

- Use of good quality materials,
- Good quality concrete and masonry construction, and
- Simple architectural design.

It is expected that this book is going to be useful to students and building professionals interested in both learning more about confined masonry construction practice and engaging in its design and construction.