

4.7 The Seismic mass includes:

Damping ζ (%)	β_s	β_1
0.5	0.47	0.54
2	0.72	0.78
5	1	1
10	1.4	1.3
20	1.9	1.7
30	2.3	2.1

- 25% of live loads
- 100% live mechanical loads
- 100% dead loads

B) Steel Structure Codes:

The design of steel buildings and structures shall be according to the latest issues of American, European, or British codes and standard as detailed below

1. American Institute of Steel Construction (AISC) standards
 - AISC 360 – Specification for Structural Steel Buildings
 - AISC 341 - Seismic Provisions for Structural Steel Buildings
2. Standard Specification for Plain and Steel-Laminated Elastomeric Bearings for Bridges ASTM D4014-03
3. Standard Specification for High Load Rotational Spherical Bearings for Bridges and Structures1ASTM D5977-3
4. Load and Resistance Factor Design (LRFD) for Highway Bridge Superstructures (AASHTO LRFD)
5. Minimum Design Loads for Buildings and Other Structures (ASCE 7-05/ ASCE 7-10/ ASCE 7-16)
6. Structural Welding Code - Steel (AWS D1.1 / D1.1M)
7. Structural Welding Code – Steel Reinforcing Bars (AWS D1.4 / D1.4M)
8. Structural Welding Code - Seismic Supplement (AWS D1.8 / D1.8M)
9. Metal Building Manufacturers Association (MBMA 2006 & MBMA 2010)