

21 Rules to Construct earthquake resistant buildings in india- Guidelines

Construct earthquake resistant buildings in India

Hey, guys if you are going to construct earthquake-resistant buildings in India then you have to follow different criteria for the construction and analysis of the building. Nobody wants to be in the loss of their property.

You better know that if you constructed a home for your dream and living for a happy life with your family, but during construction, an earthquake came and destroyed your home. then how will your heart weep for the breaking of your sweet dream, right?? but don't worry i am providing you step by step criteria and provision for earthquake-resistant buildings. Let's read below.

Here are must important and unavoidable 21 rules according to our country (India) which should be followed. This Design of Building is based on seismic codes IS 1893 (Part 1) 2002 and IS 13920-1993

Quick Guide for Earthquake resistant buildings

- 1) Design of Building should be based on seismic codes IS 1893 (Part I) 2002 and IS 13920-1993
- 2) **Integral Action of soil-foundation-Superstructure system.**
- 3) The building should be light in weight and avoid unnecessary masses.
- 4) **The structure should not have a large height/width ratio.**
- 5) Columns and walls should be continuous without offsets from the roof to the foundation.
- 6) **Beam and column should be of equal width.**
- 7) The structure should be Ductile as far as possible.
- 8) **The structure should have a uniform floor height.**
- 9) The structure should be designed on the Strong column Weak beam concept.
- 10) **The load should be uniformly distributed.**
- 11) Columns and beams should be co-axial.
- 12) **The structure should have balanced lateral resistance.**
- 13) Shear walls should be provided for increased stiffness.
- 14) **The structure should have a low center of mass relative to the ground.**
- 15) Avoid ground floor soft storey.
- 16) **There should be a uniform distribution of mass, stiffness, and strength.**
- 17) There should be a greater emphasis on the quality of construction.
- 18) **The structure should not be large in length nor should they have a large plan area.**
- 19) Beams should be free of **offsets**.
- 20) **High-grade cement should be used properly.**
- 21) Proper curing and formwork should be done during construction.

Earthquake resistant buildings in india

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IS Code 13920-1993 (Design of Building)

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So, friends, I hope this article on “Construct earthquake resistant buildings in India” remains helpful for you. If you need further suggestions about your safe building construction plan in India then you can comment below. I will reply with the best answer as soon as possible.

Thank you.