

Design Codes and Specifications for reinforced concrete structures

The overall goal is to be able to design reinforced concrete structures that are:

- Safe
- Economical
- Efficient

Buildings must be designed and constructed according to the provisions of a building code, which is a legal document containing requirements related to such things as structural safety, fire safety, plumbing, ventilation, and accessibility to the physically disabled. Building codes normally do not give design procedures, but specify the design requirements and constraints that must be satisfied.

Codes for structural concrete:

1. ACI Code (American Concrete Institute) American Concrete Institute's Building Code Requirements for Structural Concrete (ACI 318). ACI commentary provides background material rational for code provisions;
2. Highway Bridges are designed according to "AASHTO" which stands for American Association of State Highway and Transportation Officials;
3. AREA stands for American Railway Engineers Association; This is manual of railway engineering.

A related document, similar in form to a building code, is ASCE 7-10, Minimum Design Loads for Buildings and other Structures. This standard is intended to provide load requirements in a format suitable for adoption by a building code.

Building Codes Examples

- *BNBC- Bangladesh National Building Code (BNBC)*
- *BOCA- National Building Code (BOCA/NBC)* by the Building Officials Code Administrators International (BOCA)
- [Uniform Building Code \(UBC\)](#) by the International Conference of Building Officials (ICBO)
- *Standard Building Code (SBC)* by the Southern Building Code Congress International (SBCCI)
- *International Building Code (IBC)*