



New Hampshire/
Vermont Chapter

Thursdays

August 15-October 3, 2019

3:30 PM - 6:00 PM

ABC Education Center, Concord, NH

\$465 ABC Members

\$665 Non ABC Members

Includes Simplified Engineering for Architects and Builders, 12th ed

This course is an elective component of the ABC Superintendent Certification Program

To Register:

- Visit the calendar on our website: www.abcnhvt.org

For questions or to learn about custom programs:

- Call or email Jennifer Landon:
603-226-4789 | jennifer@abcnhvt.org

This is an **elective course** in our Construction Superintendent Certificate program (Super Cert). Courses are offered independent of one another, therefore **registration for this class is open to all** (see reverse for more details).

Who Should Attend - Subcontractors, general contractors, construction managers, owners, field foremen, superintendents, as well as any others who are responsible for estimating and managing projects and maintaining structural integrity.

Concord programs are held at the ABC Education Center. See reverse for directions. Confirmations will be sent at least one week prior to the program start date.

**BASIC STRUCTURAL PRINCIPLES
FOR GENERAL CONTRACTORS AND SUBCONTRACTORS**

Course Topics

Code Requirements

- Live Load • Dead Load • Snow Load
- Wind Load • Seismic (Earthquake) Load

Review of Structural Design Principles & Terminology

- Moment • Bending Stress • Section Modulus
- Shear • Deflection • Moment of Inertia
- Tension • Compression

Structural Design Examples

- Load Determination • Tributary Area
- Availability of Materials • Moment Diagrams
- Concrete Footing Design
- Design of Joists, Rafters and Beams
- Steel (Bar Joists, Joist Girders and Wide Flanges)
 - * Sawn Lumber * Concrete
 - * Manufactured Lumber (Wood "T" Beams, IML's, PSL's)
- Shear Diagrams
 - * Steel (Wide Flanges, Pipes, Columns)
 - * Sawn Lumber * Concrete
- Building Stability
 - * Moment Frames * Braced Frame
 - * Shear Wall
- Concrete Walls
 - * Cantilever Retaining Walls * Foundation Wall
- Connections
 - * Rods * Welds * Nails

NOTE: This course includes up to three (3) Field Trips:

1. Wood Truss Shop
2. Steel Fabrication Shop
3. Concrete Testing Facility

