

Lesson 4 - Assignments

1. Take a look around a structure you are in on a daily basis.
 - What is the structural floor system?
 - Find the vertical load bearings elements like walls or columns.
 - Are these elements supporting any beams, trusses or joists?
2. Look for a multistory building in your area and study the lateral load structural system.
 - What is the structural system used to resist the lateral load?
 - Find the location of shear walls and/or cross-bracing. If you needed to add an opening at the same location, what changes would you do to the structure?
 - Sketch a schematic floor plan of the structure and show on it the wind load path from the diaphragm perimeter to the lateral load resisting elements.
3. Go to a site where the foundations are under construction.
 - Identify the precautions taken by the excavation team to stabilize the site perimeter.
 - Is there a part of the building sitting on shallow foundations?
 - If deep foundations are used, find out what type of piles are used and the method of construction.

You can send your assignment answers to us at info@structuralengineeringbasics.com along with some pictures. You can also post parts of your assignments to the Structural Engineering Basics Course Facebook Group to share with everyone.