

# Office Building Design

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Project 3

CE 409

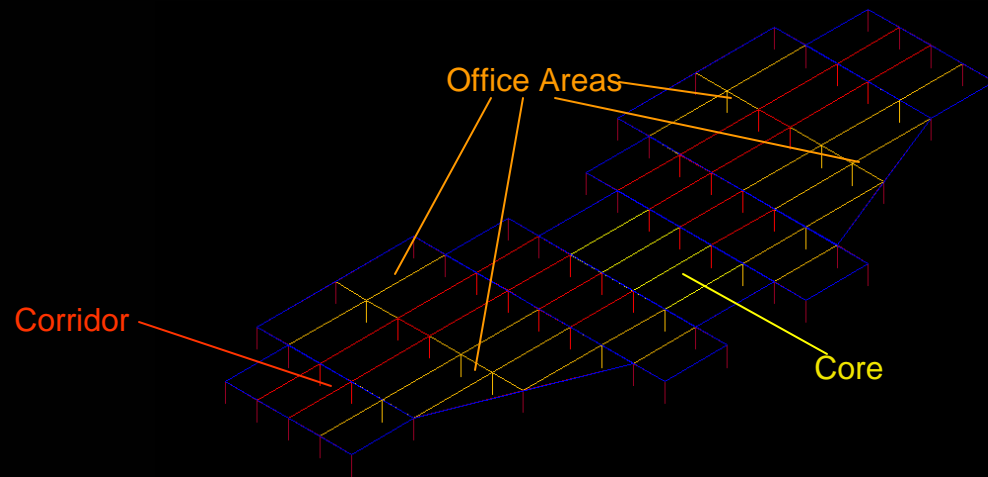
# Design Requirements

- Steel frame, using standard I or W section
  - At least 4 different types of beams
  - At least 3 different types of columns
- 4 story office building
- Story Height:
  - 15 ft for 1<sup>st</sup> floor
  - 12 ft for 2<sup>nd</sup> – 4<sup>th</sup> floor

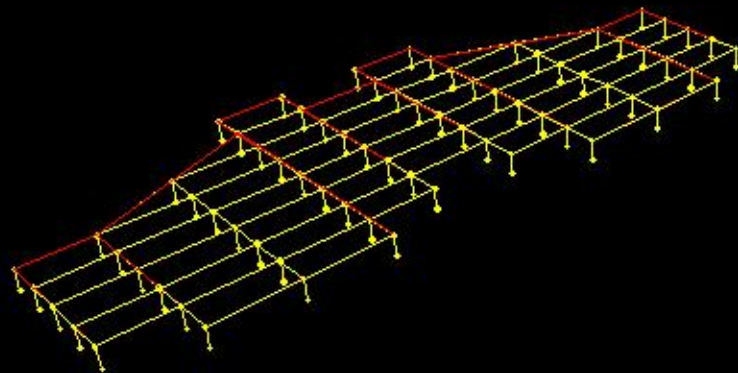
# Building Dimensions

- 4 story office building
- Total area: 410' x 160'
- Number of bays along long direction: 9
  - Bay width: 50 ft for offices and 40 ft for core
- Number of bays along short direction: 8
  - Bay width: 20 ft
- Slab thickness: 6 inches

# Floor Design



AutoCAD 2004

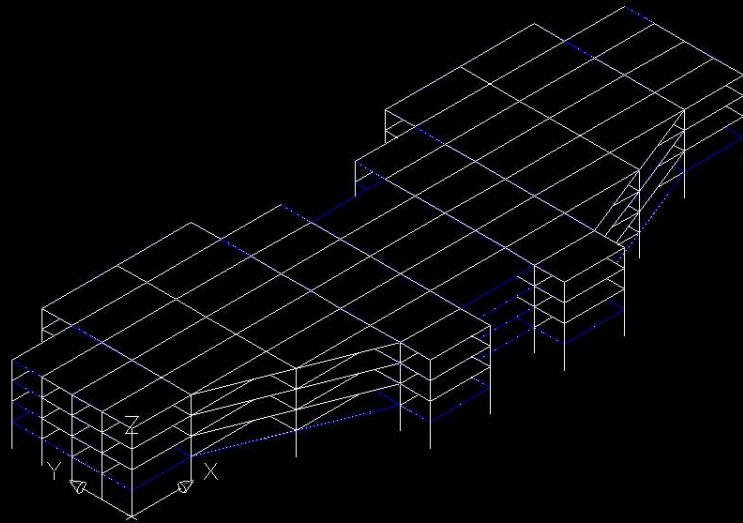


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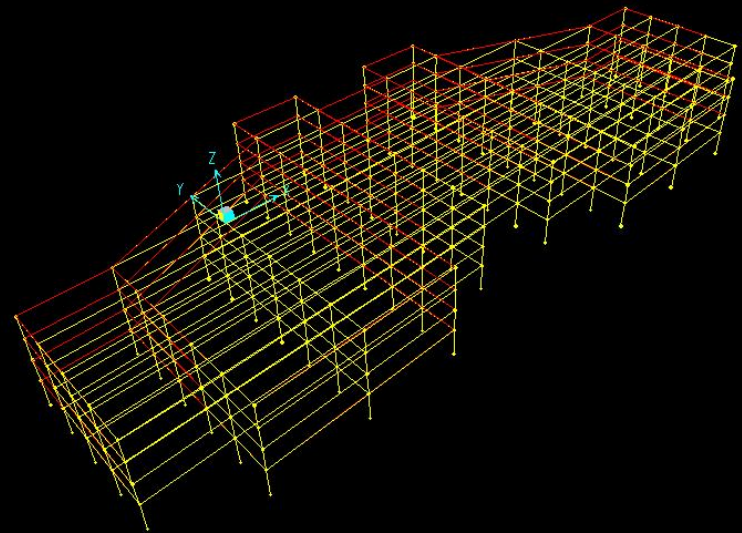
Building components (per floor):

- 4 office areas
- 1 core area
- 1 corridor

# Building Design



AutoCAD 2004



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