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Structural Option
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40 Mercer Street Residences
SOHO, NY, NY
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AE 482

Presentation Outline

I. Introduction(5 Slides)

- A. Self (1 Slide)
- B. Building Background (3-4 Slides)
 - Design Team
 - Location & Architecture- description of SOHO and interesting aspects of building
 - Existing Systems description
 - a. Mechanical, Electrical
 - b. Structural

II. Criteria for Evaluation (1 Slide)

- A. Improvement of Existing System?
 - Cost, Design, Feasibility, etc....

III. Structural Discussion (8-9 Slides)

- A. Deflection Research and application (1 Slide)
 - Conflicts with existing ACI specifications?
- B. Redesign of Slabs (2-3 Slides)
 - LWC vs. NWC
 - New design implications
 - Additional reinforcement vs. reduction of weight and concrete
- C. Shear Wall redesign (3-4 Slides)
 - Changes to existing layout
 - a. Benefits
 - b. Architectural considerations
 - c. New Design

IV. Leed Rating Investigation (Breadth 1) (2-3 Slides)

- A. Introduction of LEED Criteria
- B. LEED topics investigated
 - Cost vs. Benefits

V. Curtain Wall Investigation (Breadth 2) (2-3 Slides)

- A. Existing Downfalls
- B. Improvements
- C. Cost

VI. Conclusions (1-2 Slides)

VII. Acknowledgements (1 Slide)

Total 24 Slides