

STRUCTURAL REVIEWS - TOP 10 LIST

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1. **Structural Design Assumptions:** Include the design loads and assumptions used in the design of the building, preferably on the first page of the structural sheets. These loads include live loads, factors related to snow loads, wind loads, seismic loads, and other special loads as appropriate. [VUSBC 1603.1.1 through 1603.1.9]
2. **Geotechnical Information:** Provide information on the drawings from the geotechnical engineer, including soil bearing pressures and lateral earth pressures. [VUSBC 1603.1.6]
3. **Symbols and Abbreviations:** Verify that all symbols and abbreviations used in the structural drawings are identified in the General Notes or elsewhere on the plans. [HECOM 8.8.7]
4. **Coordinate the Drawings:** Ensure the structural drawings are complete and coordinated both internally and with other disciplines. Verify each plan callout references the correct detail. Make note of how typical details are to be used. [HECOM 8.8.6]
5. **Structural Calculations:** Provide structural calculations for all new work on a project, including changes made to the structure of an existing building. [VUSBC 109.3, HECOM 8.8.5]
6. **Structural Analysis:** Organize the calculations in such a way to account for all load effects on individual members as well as the overall structural system. Check the structure both for strength and serviceability. [VUSBC 1604.2 through 1604.4]
7. **Structural and Special Inspections:** Fill out the HECO-6a, HECO-6b, and HECO-13.1b forms as appropriate for each project. These forms relate to *Structural and Special Inspections* and ensure compliance with Chapter 17 of the VUSBC. Make note of these inspections on the drawings. [VUSBC Chapter 17, HECOM Appx K]
8. **Non-Proprietary Specifications:** Provide specifications that are either generic in nature or name at least three manufacturers with models / series for each specified product. [HECOM 8.3.5]
9. **Delegated Design Items & Deferred Submittals:** Provide sufficient information on the plans and specifications for the design and/or procurement of structural systems not detailed on the plans. Examples include steel detailing, precast concrete, pre-engineered metal buildings, etc. Require that the delegated design be performed by an engineer licensed in Virginia, be reviewed by the Engineer of Record, and be approved by the OUBO prior to installation. [FDG 1.2.2.2]
10. **Gravity:** Do not attempt to suspend the law of gravity, either locally or globally. It always prevails [VUSBC 1604.4].