NCEES
advancing licensure for engineers and surveyors

Structural Buildings Depth—Lateral Forces (Wind/Seismic) Exam Specifications

Effective Beginning April 2027

- The exam is computer-based. It is closed book with electronic references. The NCEES *PE Structural Engineering Reference Handbook* is included in the exam along with the design standards shown on the last page of the specifications.
- Examinees have 6.5 hours to complete this exam, which contains 4 scenarios with a total of 48 questions. The 6.5-hour appointment time includes a tutorial and a scheduled break. The exam will contain scored and unscored (pretest) questions.
- The exam uses the US Customary System (USCS) of units.
- The exam includes alternative item types (AITs) as well as multiple-choice questions.
- All questions are equally weighted.
- Solutions to wood and masonry design questions are based on the Allowable Stress Design (ASD) method.
- Solutions to structural steel and concrete design questions are based on the Strength Design (LRFD) method.
- The exam includes seismic content of Seismic Design Category D and above and wind content of at least 140 mph.

	Number of Questions
1. General Analysis	**10–15**
A. Conceptual Design and Project Planning	
B. Seismic - Building Structure Systems	
C. Seismic - Nonstructural Components and Nonbuilding Structures	
D. Wind - Building Structure Systems	
E. Wind Non-Building Systems	
2. Steel	**11–17**
A. Conceptual Design and Project Planning	
B. Structural Loading and Analysis	
C. Design and Details of Structural Systems and Elements	
D. Design and Details of Connections	
E. Construction Administration	
3. Concrete	**11–17**
A. Conceptual Design and Project Planning	
B. Structural Loading and Analysis	
C. Design and Details of Structural Systems and Elements	
D. Design and Details of Joints and Connections	

E. Design and Details of Foundation Systems
F. Construction Administration

4. Wood and/or Masonry **8–12**

A. Conceptual Design and Project Planning
B. Structural Loading and Analysis
C. Design and Details of Structural Systems, Elements, and Components
D. Design and Details of Joints and Connections
E. Construction Administration

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Structural Buildings Depth—Lateral Forces Design Standards

Effective Beginning April 2027

In addition to the NCEES *PE Structural Engineering Reference Handbook*, the following codes and standards will be supplied in the exam as searchable, electronic pdf files with links for easy navigation. Solutions to exam questions that reference a standard of practice are scored based on this list and the revision year shown. Solutions based on other standards will not receive credit. All questions use the US Customary System (USCS) of units.

NCEES does not sell design standards or printed copies of the NCEES handbook. The NCEES handbook is accessible from your MyNCEES account.

ABBREVIATION	DESIGN STANDARD TITLE
ACI 318	*Building Code Requirements for Structural Concrete*, 2019 (2022), American Concrete Institute, Farmington Hills, MI.
AISC	*Seismic Design Manual*, 4th edition, American Institute of Steel Construction, Chicago, IL.
AISC	*Steel Construction Manual*, 16th edition, American Institute of Steel Construction, Chicago, IL.
ASCE 7	*Minimum Design Loads and Associated Criteria for Buildings and Other Structures*, 2022 edition, American Society of Civil Engineers, Reston, VA.
IBC	*International Building Code*, 2024 edition, International Code Council, Falls Church, VA.
NDS	*National Design Specification for Wood Construction* with *NDS Supplement: Design Values for Wood Construction*, 2024 edition, American Wood Council, Leesburg, VA.
NDS	*Special Design Provisions for Wind and Seismic*, 2021 edition, American Wood Council, Leesburg, VA.
TMS 402/602	*Building Code Requirements and Specification for Masonry Structures*, 2022 edition, The Masonry Society, Longmont, CO.