

**The Department of Buildings welcomes you to the**

# **Structural Peer Review Training Class**

**Judith Frydland  
Commissioner**

# Structural Peer Review Training Class

Presented by:

**Hal Hutchinson**

Assistant Commissioner

and

**Lindsay Anderson**

Consultant Structural Plan Examiner

# **DOB General Information**

# Structural Peer Review Program

## Department Mission

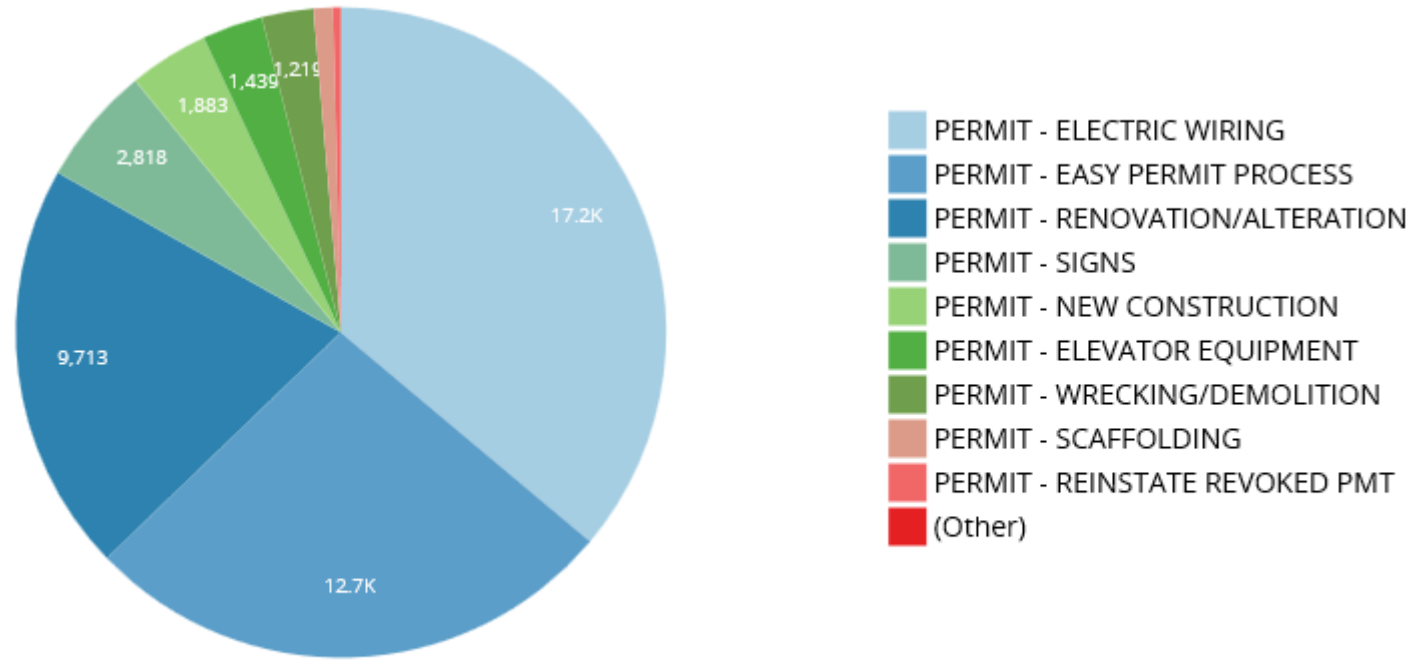
The Department of Buildings enhances safety and quality of life for residents and visitors of the City of Chicago through permitting, inspections, trade licensing and enforcement of the Chicago Building Code.



# Structural Peer Review Program

## Types of Permits

# Permits Issued in 2017: 47,623



Permits with Arch. Plans: 11,596

Developer Services: 156

# **Program Overview**

# Structural Peer Review Program

## Overview

- expedites permit process by reducing time and effort required for conventional structural plan examination by DOB staff
- voluntary with standard plan review
- may be required with self-certification
- not permitted with Developer Services

# Structural Peer Review Program

## Overview

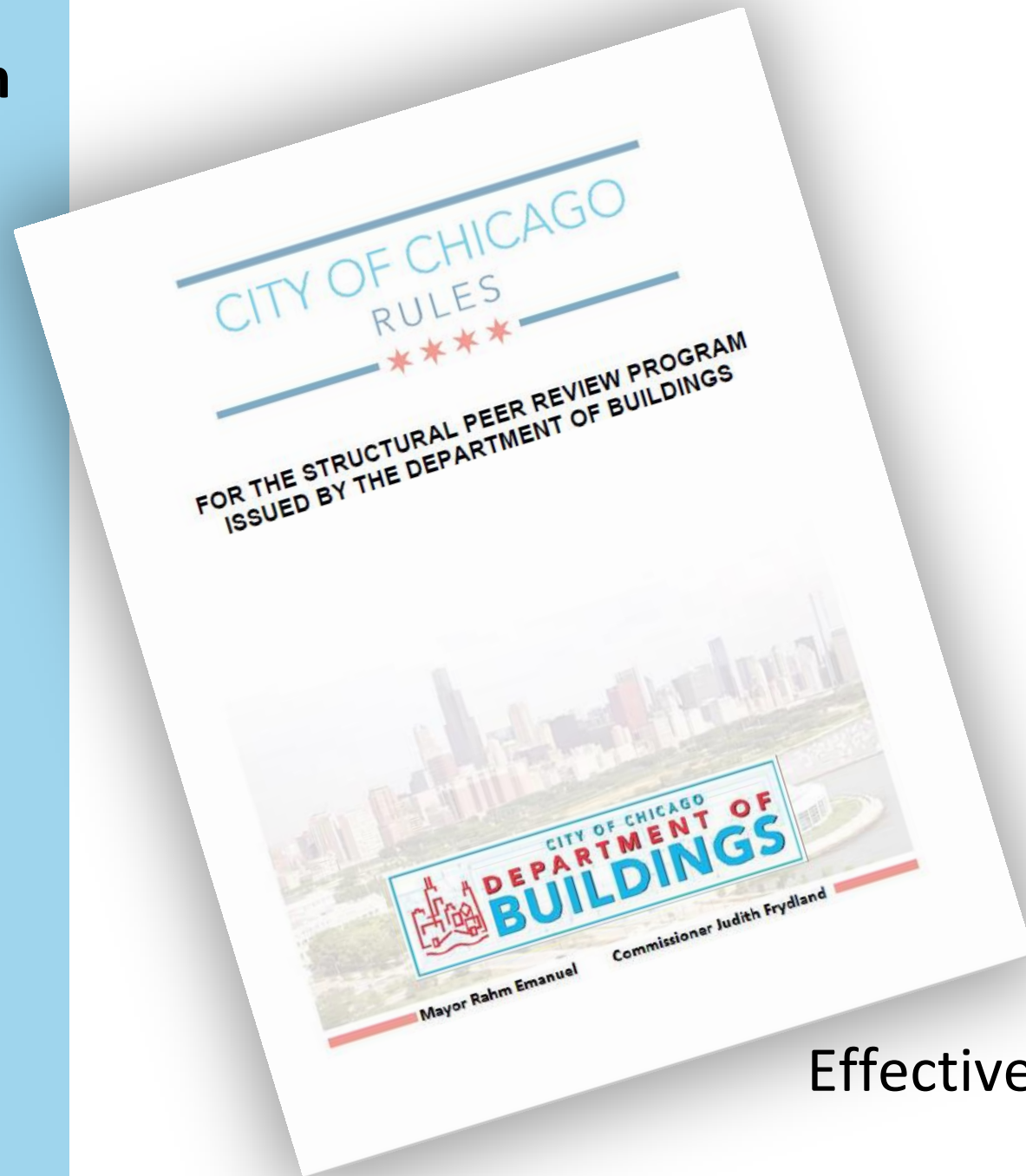
- permit applicant (owner) may select any Registered Structural Peer Reviewer (RSPR) with sufficient experience in type/scope of work
- permit applicant (owner) is responsible for cost of peer review
- use of peer review does not affect the building permit fee or inspection process



# **Program Rules**

# Structural Peer Review Program

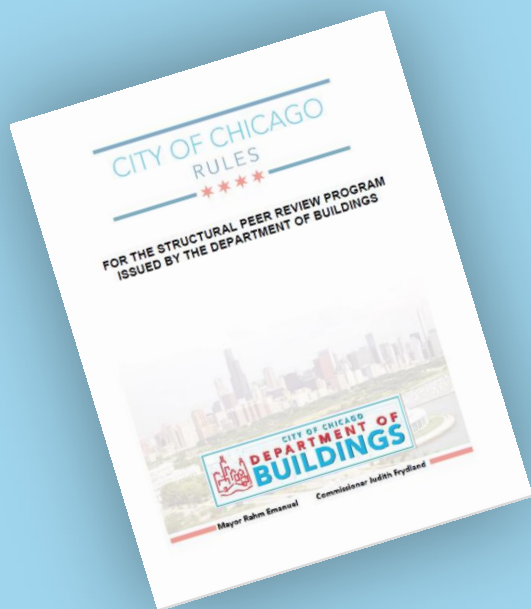
## Rules



Effective 1/1/18

# Structural Peer Review Program

## Rules

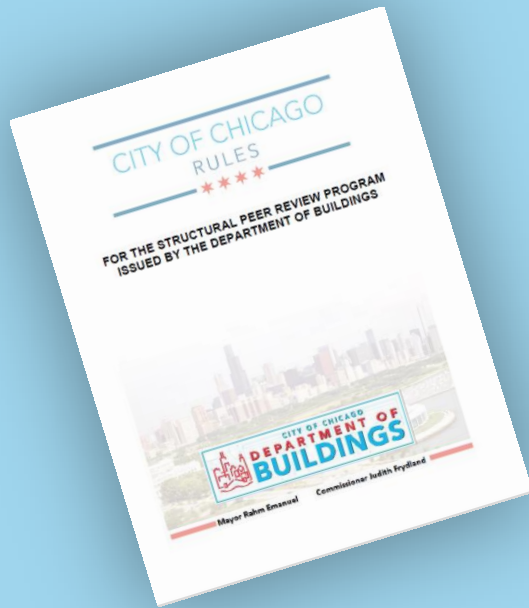


## Part I: General Provisions

- A. Definitions
- B. Scope and Effect

# Structural Peer Review Program

## Rules

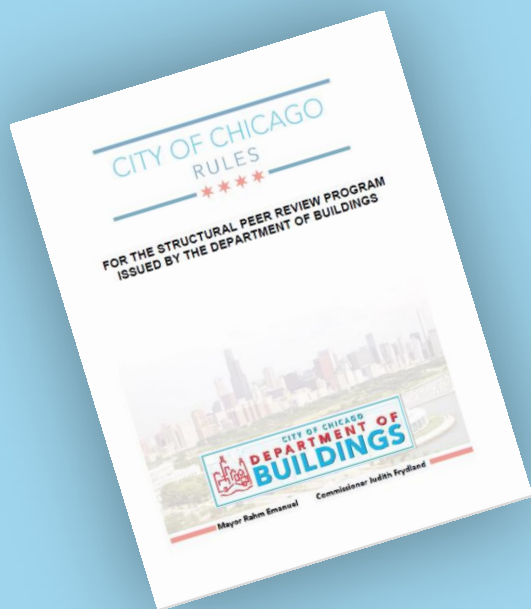


## Part II: Structural Peer Review Process

- C. Eligible Projects
- D. RSPR Selection
- E. Scope of Review by RSPR
- F. Content of Report
- G. Validity of Report
- H. Phased Submission
- I. Review by the Department
- J. Audit by the Department
- K. Use of Report
- L. Responsibility

# Structural Peer Review Program

## Rules



## Part III: Professional Registration

M. Eligibility

N. Duration of Registration

O. Training Class

P. Initial Application Procedure

Q. Renewal Procedure

R. Suspension and Revocation of  
Registration in the Program

## Rule A. Definitions

**CURRENT PERMIT DRAWINGS.** The most current version of structural and architectural drawings, calculations, and other documents uploaded to E-Plan as part of the building permit application.

**E-PLAN.** The Department's web-based system for the electronic submission and review of plans and other documents related to building permit applications.

## Rule A. Definitions

**PREPARED.** Personally prepared by the RSPR or prepared by a person over whom the RSPR exercises responsible control within the meaning of Section 14 of the Illinois Architecture Practice Act of 1989 or a person over whom the RSPR exercises personal supervision and control within the meaning of Section 12 of the Illinois Structural Engineering Practice Act of 1989, as applicable.

## Rule A. Definitions

**PROFESSIONAL OF RECORD.** The Illinois-licensed structural engineer or architect responsible for the structural design of the project.

**PROJECT.** The work identified in a building permit application and accompanying plans, or, with respect to a phased permitting process, the work identified in all related applications and accompanying plans.



## Rule A. Definitions

**REGISTERED STRUCTURAL PEER REVIEWER or RSPR.** A natural person currently registered and eligible under Part III of these Rules.

**STRUCTURAL PEER REVIEWER'S REPORT or REPORT.** A written report prepared by an RSPR in accordance with the requirements of Part II of these Rules.

## Rule A. Definitions

**SUITABLE FOR PERMITTING.** Containing all information that is required to be included by the Building Code and is necessary to convey the structural design for the project to a reasonable person employed in the construction industry.

## Rules

# Rule B: Scope and Effect

- The Rules do not relieve any person or entity from full compliance with any provision of the Municipal Code.
- The Commissioner reserves the right to amend these Rules at any time.
- The provisions of these Rules are severable.

## Rules

### Rule C: Eligible Projects

- A structural peer review report can be used with the Standard Plan Review or Self-Certification permit programs.
- The Structural Peer Review Program is a privilege and not a right. The Department retains the right to require conventional structural plan review, on a random or judgmental basis, in connection with any project.

## Rules

### Rule D. RSPR Selection

- The permit applicant may select any RSPR from the current list maintained by the Department. The permit applicant is responsible for costs associated with retaining the RSPR.
- The RSPR must have demonstrable technical expertise in projects similar in scope and complexity to the project to be reviewed.
- The RSPR (and the RSPR's firm) must be independent of the applicant and the design and construction team.

## Rules

### Rule E. Scope of Review by RSPR

- RSPR must exercise the level of skill and care used by an Illinois-licensed structural engineer practicing in the greater Chicagoland area acting as a structural peer reviewer on a project of similar scope and complexity.
- RSPR must review current permit drawings.
- Report must contain correspondence with professional of record (if applicable)
- RSPR must review all structural aspects of the project, including earth retention systems (if applicable).

# Structural Peer Review Program

## Rules

### Rule E. **EXCEPTION**

- When a project involves ERS, the Report submitted to the Department may be a single document consisting of two parts prepared by different RSPRs.
- Each part must independently meet the requirements for a Report.
- Label each page:

**“PART I: STRUCTURAL PEER REVIEW-  
EXCLUDING ERS”**

or

**“PART II: STRUCTURAL PEER REVIEW-  
EARTH RETENTION SYSTEM ONLY”**

## Rules

# Rule F. Content of Report

- List of at least 3 projects of similar scope and complexity where the RSPR served as professional of record, structural peer reviewer, or project lead.
- State the application number and the project address listed on the permit application.
- Certification statement, signed and sealed by the RSPR.



# Structural Peer Review Program

## Certification Statement

*I, \_\_\_\_\_, hereby certify that I have performed a structural peer review and prepared this report in accordance with the Structural Peer Review Program Rules effective January 1, 2018.*

*I possess professional experience and expertise in projects of similar scope and complexity. I performed these services consistent with the standard of care applicable to the performance of structural engineering peer review services on projects of similar size and complexity in the greater Chicagoland area.*

*The peer review was limited to a review of the extent to which the design in question complies with City of Chicago Building Code requirements. I have further determined that the structural design is in substantial compliance with the City of Chicago Building Code.*

*I further certify that neither I nor any firm with which I am affiliated has a financial or other interest in this project other than as structural peer reviewer.*

*Signature: \_\_\_\_\_*

*Date: \_\_\_\_\_*

*IL License No.: \_\_\_\_\_*

# Structural Peer Review Program

## Rules

### Rule F (continued):

- The Report must NOT include any conditions, limitations or unresolved issues.
- Include evidence that the RSPR holds professional liability insurance.
- Include a copy of the RSPR's current Illinois structural engineering license
- Include all correspondence between the RSPR and professional of record.

**Rules**

**Rule F(8). Contents of Report**

- a.** List all codes and standards used in the design of the project, and verify that these are appropriate;
- b.** List all structural design criteria, including loads and performance requirements, and verify that these are appropriate;
- c.** List the technical basis for design criteria that are not specified directly in applicable codes and standards, including, as applicable, reports by specialty consultants such as wind tunnel study reports and geotechnical reports, and verify that these are appropriate;

## Rules

### Rule F(8). Contents of Report

- d. Describe the documented investigation of existing site conditions performed by the professional of record, and verify that the scope of investigation is appropriate;
- e. Verify that the proposed design conforms to existing site conditions, as documented;
- f. Identify the title, sheet number, and revision date of each structural and architectural drawing for the project used to complete the Report, either individually or by reference to dated set(s);

## Rules

# Rule F(8). Contents of Report

- g.** Verify that the structural drawings are in general conformance with the architectural drawings regarding load conditions and other conditions that may affect the structure;
- h.** Verify that major mechanical items are indicated in the structural drawings and accounted for in the structural design;
- i.** Verify that the structural drawings are suitable for permitting;

**Rules**

**Rule F(8). Contents of Report**

- j.** Verify that the structural calculations documenting the design are suitable for permitting;
- k.** Verify that the notes on materials, loadings, design criteria, and conditions in the current permit drawings are suitable for permitting; and

## Rules

# Rule F(8). Contents of Report

*I.* Verify that the structural design conforms to the Building Code, by specifically reviewing:

**(1)** Overall design concepts and methods, including methods of resisting gravity and lateral loads and methods of providing for lateral stability;

**(2)** Computer programs used and the appropriateness of their application; and

**(3)** Structural analysis used to determine member forces and performance parameters, such as wind-induced deformation (either by examining methods and computer input and output or by independent analysis by RSPR);

## Rules

# Rule F(8). Contents of Report

*I.* Verify that the structural design conforms to the Building Code, by specifically ... performing:

- (1)** A general review of the reasonableness of the design of all structural systems; and
- (2)** A complete check of the design of at least 2 selected components.



## Rules

### **Rule F (continued):**

- Required information must be presented in substantially the order listed in Rule F(8).
- Each page of calculations performed by the RSPR must be clearly marked to distinguish such calculations from calculations performed by the professional of record or others (if any) included in the Report.

## Rules

### **Rule G. Validity of Report**

- The Report must be based upon the current permit drawings. Any substantive revision to the permit drawings relied upon by the RSPR in preparing a Report requires additional review and a revised Report.

### **Rule H. Phased Submission**

- A Report submitted for phased construction shall be similarly phased.

# Structural Peer Review Program

## Rules

### Rule I. Review by the Department

- The Department will review a submitted Report for completeness and compliance with these Rules.
- The Department may reject any report that does not fully comply with the Rules and require conventional structural plan review for the project.

## Rules

# Rule J. Audit by the Department

- The Department may select any permit application for which a Report has been submitted and require conventional structural plan review, on either a random or judgmental basis.
- The result of such auditing will be used to assure compliance with the structural provisions of the building code and to evaluate this program.

# Structural Peer Review Program

## Rules

### Rule K. Use of Report

- A Report submitted under this program will be retained by the Department as part of the permit application materials.
- A Report (redacted) may be reproduced and distributed by the Department for training purposes.

## Rules

# Rule L. Responsibility

- The professional of record retains sole responsibility for the structural design. The activities and reports of a RSPR do not relieve the professional of record of this responsibility.

# Questions & Answers

# Structural Peer Review Program

## Questions and Answers

What types of projects are eligible to use the Structural Peer Review Program?

- All project types and all permit processes (except Developer Services) are eligible to use the Structural Peer Review Program.

How can someone identify a Registered Structural Peer Reviewer?

- A list of Registered Structural Peer Reviewers is maintained on DOB's website.



# Structural Peer Review Program

## Questions and Answers

### Who selects and pays for the Structural Peer Reviewer?

- The owner selects and pays for the Peer Reviewer. The City of Chicago is not involved in the hiring of the Registered Structural Peer Reviewer.

### Is the Registered Structural Peer Reviewer an individual or a firm?

- Only individuals can be Registered Structural Peer Reviewers. However, there is no limit to the number of Structural Engineers that can be registered within a single firm.

# Structural Peer Review Program

## Questions and Answers

Can someone else perform the peer review for the selected Certified Structural Peer Reviewer?

- No. The Structural Peer Reviewer who is selected by the owner must perform the review, stamp and sign the report.

What, if any, structural review is performed by DOB?

- A cursory review of the report is performed by DOB to verify content, certification and completeness. Allow approximately 5 days for this review.