

Structural Committee

December 6, 2024 | 9:00 a.m.

Virtually via Microsoft Teams:

Join the meeting now

Meeting ID: 252 271 786 015

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Phone conference ID: 344 399 802#

In-person:

Board of Registration for Professional Engineers and Land Surveyors 605 11th Ave SE, Suite 201 Olympia, WA 98501

Committee: Dave Peden, PE, SE, Chair

Marjorie Lund, PE, SE

Chun Lau, PE, SE (pro-tem member)

Support staff: Kristina Horton, PLS, Deputy Director

Vonna Cramer, Licensing Lead

Shanan Gillespie, Regulatory Program Manager

Elizabeth Lagerberg, AAG

Discussion topics

- Review of Structural Engineer Registration Application
- NCEES SE exam results
- Decoupling of the SE Exam
- Action item review

Action Items (from August 2024)

- Action Item: Chun Lau (pro-tem member) will review CA, OR, and UT SE applications to use as references in the questions that are used in their licensure applications.
- Action Item: Requesting the board to make a recommendation to the appropriate committee to review the CA Seismic Examination (completed)
- Action Item: Marjorie Lund to send the PE civil practice exam and the CA SE exam specifications to the SE Committee. (completed)
- Action Item: Staff to send NCEES exam results to SE committee



Structural Engineer Registration Application

Fees	(check one):							
□ Ву С	Seneral Application	n (exam or initial license)– \$65						
□ Ву С	Comity (if you have a	a current SE license)-\$110						
License	es are available for	self-printing with an online accour	nt.					
If you w	ant us to print and	mail your license add a \$5 print fe	ee for eac	h copy	to you	ır paymen	t.	
□ \$0 s	elf-print license on	line.			•			
	•	d mail license. Quantity To	otal \$					
		,	· · · · · · ·					
Applic						\\\\\-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	DE !!	
ITPEO	PRINT Name (As shown	on your PE license)				vvasning	ton PE lice	nse number
Mailing a	address							
City			State	ZIP code				
City			State	ZIP COU	2			
Date of b	oirth (mm/dd/yyyy)		Social Secu	 urity numbe	er*			
1	(check if applicable)	NATIONAL DESCRIPTION OF THE PROPERTY OF THE PR		-4:				
		lilitary member	e or dome	estic par	tner			
(Area co	de) Phone number	Email						
license. If	you do not have an SS	Social Security Number (SSN) or Individua SN or ITIN, leave that section blank. If you out. U.S.C. 666(a)(13) and RCW 74.20A.320).						
Curre	nt registratio	n (for comity applicants onl	у)					
State wh	ere SE exam was taken	SE number			Issue o	date		Expiration date
Expe	rience record	summary		'		9	should v	ve ask for date?
You mu	st account for all ti	me from when you applied for you	ır Professi	onal En	ginee			
		I, or non-engineering work. Attach						
• F	For full time employ	ment of 32 or more hours/week ir	ndicate "F	T". For ı	oart tii	me under	32 hou	rs/week indicate "PT".
		be verified, indicate "No." Any exp						
	equirement.					ppening		
	·			this tak		ppormig		
Employ ment	Time period (begin with most recent) From (month-year) To (month-year)	Employer		FT c		Project to be verified: 1, 2, or 3 (or leave blank)		Vhen a project is listed of person verifying your work
1.								
2.								
3.					+			
4.					_			
-4.					-+			

Legal background

Date and place

Answer the following	
If you answer "Yes," attach a detailed explanation.	
1. Within the last 5 years, in this state or any other jurisdiction, have you had any action (fine, suspension, revocation, censure, surrender, etc.) taken against any professional or occupational license, certification, or permit held by you?	□ No
2. Within the last 5 years, in this state or any other jurisdiction, have you defaulted, or been convicted of, or entered a plea of no contest to a gross misdemeanor or felony crime? (Don't include traffic convictions)	□ No
Professional Responsibility	
1. Do you attest that you are knowledgeable of the current Washington State Building Codes and/or Bridge Design Manual, and that you will follow all local jurisdictional requirements for your projects? Yes No Certification	
Answer the following	
1. Do you authorize any business associates (past and present) and any governmental agencies (local, state, or federal) to release any information, files, or records which may be required for a background investigation, to BRPELS?	□ No
2. Do you understand that any false information in this application may constitute cause for the denial, suspension, or revocation of your license to practice in the state of Washington?	□ No
I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.	
TYPE or PRINT Name	
V	

Applicant signature



Structural Engineer Experience and Verification

BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS & LAND SURVEYORS

- why some bullet points?

Instructions for applicant

Provide complete explanations to describe the time spent on projects where you developed the knowledge, skills and abilities in the tasks typically performed in structural designs of significant structures or the structural systems integrated within significant structures. RCW 18.43.020(12).



If you only have one licensed structural engineer

verifier, submit a written letter explaining why

and provide a client for the verifier of one of the

Design of these projects must have occurred after you became licensed as a PE in the applicable jurisdiction.

projects.

- One sentence descriptions are not acceptable.
- The work should be progressive in difficulty and magnitude; demonstrating sufficient breadth and scope, and be
 reflective of your ability to design and apply engineering principles where your judgments and decisions are trusted and
 relied upon.
- The work experience should show two of the four common materials used (steel, concrete, wood, and masonry) as the primary lateral force-resisting system with ductile detailing.
- Qualifying experience consists of structural design experience in:
 - 1. Determination of lateral/gravity forces —seismic and /or wind
 - 2. Selection of framing systems
 - 3. Selection of foundation systems
 - 4. Application of code requirements with emphasis on seismic provisions and ductile detailing
 - 5. Multi-story buildings or equivalent multi-level structures or bridges over 200ft

6. Project leadership and design decision management Describe your structural design experience of significant structures or the structural systems integrated within significant structures (RCW 18.43.020(12)) by listing a **minimum of three projects.** The experience projects must be submitted as part of your application with different verifiers where possible indicate whether you had full or partial responsibility. Provide detailed information for the following:

- Type of building structure or non-building structure and/or bridge with a total span (end to end) of 200 feet.
- Provide a detailed explanation of how the project incorporates the seismic provisions and ductile detailing requirements for Seismic regions similar to Washington State (SDC C or above or AASHTO Zone 3 or above)

Send the completed work experience descriptions and verification form (pages 1-9) to the persons verifying your engineering experience. Each project must be verified. The verifiers must complete their portion and send it directly from their email address to engineers@brpels.wa.gov

- Experience must be gained under the direct supervision of a licensed structural engineer, or a licensed professional engineer with the authority to practice structural engineering in their jurisdiction.
- For work experience to be accepted as satisfactory, each project must be separate and distinct.
- Missing information or poor explanations of structural experience will delay the review and could result in a denial
 of your application. Do not assume that there is a universal understanding by reviewers on how your experience
 satisfies Washington State requirements. Do not use jargon or acronyms or one-line explanations

NOTE: All items must be completed for each project listed. Each project must be summarized on the forms provided ("See Attached" is not acceptable). Additional sheets may be added, but not substituted for the form.

— this whole section should be on the top of each project page so it goes to the verifiers.
/ Work experience information—Applicant complete this section

Α	pplicant name			
E	mployed by			
				- design of this
D	ates of employment		Total hours worked on project	
F	rom	То		could move here
V	erifier name and title			

Applicant name

Work experience descriptions-Applicant complete this section

Project 1: One sentence descriptions are not acceptable	- in Washington State
Project description. Location, type, size, and define how this is a significant str	ructure or is similar in design complexity
to a significant structure. What was the approximate length of time you werked a	n this project?
General construction type/project description. Explain how your project mee or above or AASHTO Zone 3. If projects are not in these categories, provide a dincorporates the seismic provisions and ductile detailing requirements associate Zone 4.	etailed explanation of how the project
Primary gravity and Lateral force resisting system. Using two of the common wood, and masonry)	n construction materials (steel, concrete,
	ETT COLUMN
Scope of analysis and design responsibilities. Explain your specific responsi resisting systems listed above. Explain your level of involvement in seismic analy	

Structural Documentation roles/responsibilities. Explain your role & responsibilities in the project and the decisions you made. The work should be progressive in difficulty and magnitude; demonstrating sufficient breadth and scope and be reflective of your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon.
Construction phase responsibilities. Explain your construction phase responsibilities.

Applicant name					why bold, this is less — important than the previous
Instructions to person veri	ifvina work ext	erience	of applica	nt	statement
The competency of licensed engine declaring your knowledge of this appropriate for significant structures. Verifiers	eers in Washington S	State is base and your	sed on education	on, exami	
The applicant should have sent you below. After completing your verific engineers@brpels.wa.gov. Your em	ation, please return ail address must ma	the project atch the en	descriptions a nail address giv	nd your ve ven below.	erification of work experience to
Work experience verificat TYPE or PRINT Name of person completing this	<u>'</u>	rifier comp	lete this section	n. All sect	ions must be completed.
Address					
City				State	ZIP code
(Area code) Phone number Em	ail address				Project numbers being verified
Professional registration number	Expiration date	State	Branch of engine	ering	
Describe your level of supervision structural engineering work? If yo applicant and how you are able to	u are not the applicate provide this verificate	ant's super	visor, please ex	kplain you	r working relationship to the
experience and the jurisdictions we that you are verifying, how are you	where you have lawfu u able to provide this	ully practice s verificatio	ed. If you are no	ot a WA S	E and the project was in WA
During this time of employment, he and decisions?	ow long has the appl	licant been	in a position of	making s	tructural engineering judgments
years/month:	s				

why bold, this is less

How does the applicant's descriptions of experience, including the scope and complexity of the work match your evaluation? Describe how the applicant's roles/responsibilities are progressive in difficulty and magnitude; demonstra sufficient breadth and scope and is reflective of their ability to design and apply engineering principles where their judgments and decisions are trusted and relied upon. Provide any additional information that will assist in the determination of this applicant's eligibility for licensure as a structural engineer: If declare that the statements and answers contained in this verification regarding the person named as applicant are trand correct to the best of my knowledge and the statements given regarding myself are true and correct. TYPE or PRINT Name **Signature**	Applicant name	
declare that the statements and answers contained in this verification regarding the person named as applicant are trand correct to the best of my knowledge and the statements given regarding myself are true and correct. TYPE or PRINT Name	evaluation? Describe how the applicant's roles sufficient breadth and scope and is reflective of	s/responsibilities are progressive in difficulty and magnitude; demonstrating of their ability to design and apply engineering principles where their
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nd correct to the best of my knowledge and the statements given regarding myself are true and correct. TYPE or PRINT Name X		
nd correct to the best of my knowledge and the statements given regarding myself are true and correct. TYPE or PRINT Name X		
nd correct to the best of my knowledge and the statements given regarding myself are true and correct. TYPE or PRINT Name X		
<u> </u>		
ate and place Signature		X
	ate and place	Signature

Affix Seal Here

WAC	WAC language	Application instruction language	Verification – Instructions for applicant
196-12- 047(1)	Be currently licensed as a professional engineer in Washington state	Have a current Washington State Professional Engineer (PE) license	
196-12- 047(2)	Have at least two years of progressive responsibility in structural engineering experience in addition to the eight years of engineering experience required to be registered as a professional engineer.	Demonstrate 2 years of progressive structural design experience in addition to the 8 years of experience required for registration as a professional engineer in Washington State.	
The struct	ural experience should:	L	
196-12- 047(2)(a)	Demonstrate the applicant's ability to design building structures or nonbuilding structures integrated within "significant structures" as defined in RCW 18.43.020(12)	Provide complete explanations to describe the time spent on projects where you developed the knowledge, skills, and abilities in the tasks typically performed in structural designs including; Significant structures or the structural systems integrated within significant structures. RCW 18.43.020(12)	Provide complete explanations to describe the time spent on projects where you developed the knowledge, skills and abilities in the tasks typically performed in structural designs of significant structures or the structural systems integrated within significant structures.
196-12- 047(2)(b)	Be progressive in difficulty and magnitude		*The work should be progressive in difficulty and magnitude;
196-12- 047(2)(c)	Demonstrate breadth and depth of seismic design and detailing experience for projects in seismic regions similar to those located in Washington state	Provide complete explanations to describe the time spent on projects where you developed the knowledge, skills, and abilities in the tasks typically performed in structural designs including: Detailing requirements for Seismic regions similar to Washington State (International Building Code (IBC) SDC C or above or American Association of State Highway and Transportation Officials (AASHTO) Zone 3 or above)	*demonstrating sufficient breadth and scope, Provide a detailed explanation of how the project incorporates the seismic provisions and ductile detailing requirements for Seismic regions similar to Washington State (SDC C or above or AASHTO Zone 3 or above)

^{*}Verification Instructions, second bullet says "The work should be progressive in difficulty and magnitude; demonstrating sufficient breadth and scope, and be reflective of your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon." WAC 196-12-047(2)(b),(c) & (e).

196-12- 047(2)(d) 196-12- 047(2)(e)	Incorporate two of the four common construction materials (steel, concrete, wood, and masonry) Reflect ability to design and apply structural engineering principles that show sound judgment on projects involving public health, safety, and welfare	The work experience should show two of the four common materials used (steel, concrete, wood, and masonry) as the primary lateral force-resisting system with ductile detailing. *and be reflective of your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon.
196-12- 047(2)(f)	Be supervised by a licensed professional engineer in the branch of structural engineering or a licensed professional engineer with substantial structural engineering work experience for projects in seismic regions similar to those located in Washington state	Experience must be gained under the direct supervision of a licensed structural engineer, or a licensed professional engineer with the authority to practice structural engineering in their jurisdiction.
		Qualifying experience consists of structural design experience in: 1. Determination of lateral/gravity forces — seismic and /or wind 2. Selection of framing systems 3. Selection of foundation systems 4. Application of code requirements with emphasis on seismic provisions and ductile detailing 5. Multi-story buildings or equivalent multi-level structures or bridges over 200ft

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196-12- 047(2)(d)	Incorporate two of the four common construction materials (steel, concrete, wood, and masonry)	The work experience should show two of the four common materials used (steel, concrete, wood, and masonry) as the primary lateral force-resisting system with ductile detailing.
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