



City of
Deer Park



The Building Officials representing City of Airway Heights, City of Cheney, City of Deer Park, City of Liberty Lake, City of Spokane, City of Spokane Valley and Spokane County have evaluated the 2018 Washington State Energy Code Cycle and have initiated a program for the purpose of applying Section R405 from the residential provisions of the 2018 Washington State Energy Code (WSEC-R); without the requirements for additional energy credits. This document serves as the guiding instructions as to the program requirements. The basis for this program is the Alternative Materials, Design and Methods of Construction and Equipment provisions as outlined in WSEC-R Section R102. Research has shown that the *simulated performance alternative* modeling (performed by *approved* software) has the ability to address the Fuel Normalization Credits, and to design residential structures to the worst-case scenario regarding ACCA Manual J requirements for purposes of documenting a building's energy efficiency. By using *approved* software, the design of a structure can demonstrate that it can meet or exceed the required Carbon emissions reduction, and the Energy Rating Index (ERI) as referenced in WSEC-R.

Cindy Reddekopp, City of Airway Heights Building Official

Shane Nilles, City of Cheney Building Official

Roger Krieger, City of Deer Park Building Official

Wayne Hammond, City of Liberty Lake Building Official

Murphy Dermott, City of Spokane Building Official

Jenny Nickerson, City of Spokane Valley Building Official

James Moore, Spokane County Building Official

Encl: *Simulated Performance Alternative Program*
Supporting data and modeling



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Simulated Performance Alternative Program

If the Simulated Performance Alternative is being proposed without additional energy credits per WSEC-R Section R401 and R405, the following steps must be taken to comply with this program.

- The applicant will need to engage with an *approved* third-party consultant that is also certified through International Code Council (ICC) as Residential Energy Inspector/Plans Examiner.
- The third-party consultant will utilize an *approved* software that can generate a report to demonstrate the named residential structure meets or exceeds the Fuel Normalization Credits, the reduction in CO emissions and an ERI Index from the table below; this will be required during permit plan review.
- Once the report is accepted during the plan review process it will be issued with the approved building permit.
- The third-party consultant will perform the following inspections and provide the following reports to the applicant. Applicant shall be responsible for providing documentation to the Permit Center of the permitting agency and ensuring that it is made available on-site for reference by building inspection staff:

| Final ERI Established | | | | |
|-----------------------|---|--------|---|-----|
| Primary Heat Source | Dwelling Size as defined by WSEC Section R405.3 (#1, 2, 3, 4) | | | |
| | Small | Medium | Large | R-2 |
| Electric-resistance | 57 | 52 | Contact the Authority Having Jurisdiction (AHJ) | |
| Gas | 69 | 46 | | |
| Heat-pump | 66 | 67 | | |

- **Air seal inspection**- after all penetrations in framing and building envelope have been sealed.
 - Will provide written corrections and recommendations per field inspections; final inspection results will be posted on commissioning sticker on or reasonably near the building electrical panel.
- **Insulation inspection**-after air seal, before drywall/interior wall finishes.
 - Will provide written corrections and recommendations per field inspections; final inspection results will be posted on commissioning sticker on or reasonably near the building electrical panel.



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- **Windows and Doors inspection**—after installation, prior to removal of U-Value identifiers.
 - Will provide written corrections and recommendations per field inspections; final inspection results will be posted on commissioning sticker on electrical panel.

- **Final Inspection(s)/Testing.**
 - Inspect structure when permanent doors are installed, mechanical systems and equipment are fully functional, attic and crawlspace insulation is installed, and appliances installed.
 - Perform blower door test, duct test, and mechanical system balance. Final inspections results will be posted on commissioning sticker on electrical panel. This test can be done by a separate contractor/consultant and would provide the results to third-party special inspector for inclusion in their final report.
 - Home will then be modeled/certified, documentation shall be provided at time of building permit final inspection or prior to the issuance of a Certificate of Occupancy.



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Simulated Performance Alternative Acknowledgement Form- WSEC

This form and information are accepted regionally by: City of Airway Heights, City of Cheney, City of Deer Park, City of Liberty Lake, City of Spokane, City of Spokane Valley and Spokane County

The referenced project requires special plans examination and/or special inspection in accordance with the simulated design and Washington State Energy Code – Residential Provisions (WSEC-R). This document is not intended to address all aspects or regulatory requirements for a project and should serve as a starting point for your investigation. For detailed information on a particular project, permit, or code requirement refer directly to the applicable file and/or code/regulatory documents, and the requirements of the WSEC-R Chapters 1-5 or contact the appropriate Department or staff. Please acknowledge below and return to the Authority Having Jurisdiction. This form is required to be submitted at time of permit submittal. **If separate agencies/individuals are performing the simulated performance modeling and inspection services, separate forms will be required.**

Date:

Project Address:

Project Name:

Project Owner:

Phone:

SPE/SI/Utility/Etc.:

Phone:

Address:

Contact Name:

Phone:



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STATEMENT OF UNDERSTANDING

We hereby acknowledge that we have been engaged by _____

for the purposes of conducting the Simulated Performance Alternative modeling services and field inspection on the referenced project pursuant to the provisions of the Washington State Energy Code, as it relates to the above stated project. We are aware that as an energy code reviewer/inspection agent, duties and responsibilities as set forth in this program policies (check applicable):

- Prepare and submit plan documents
- Third-Party inspection, observation and approval of work

All discrepancies shall be brought to the immediate attention of the designer/contractor for correction, then if uncorrected, to the proper design authority and to the Building Official. Any work identified as not being in conformance is required to be brought into conformance, as is acceptable to the special inspector. In addition, a final signed report is required to be submitted prior to the issuance of a Certificate of Occupancy. This report must state that all required inspections of the work and the project have been completed in conformance with the approved plans and specifications and the applicable provisions of the Washington State Energy Code – Residential Provision and all known corrections have been made.

SPE/SI/Utility Signature: _____ Certification No: _____

Owner: _____ Architect: _____

Contractor: _____