



**Building Envelope Engineering**

"Design for a Healthier Building"™



We are Third Party Verifiers for:



2018 Washington State Energy Code - Effective Date July 1, 2020  
2018 Seattle Energy Code, adoption delayed until February 1, 2021

### 2018 Washington State Energy Code - Commercial Final

- Each space conditioning category shall demonstrate compliance separately.
- Wood framed wall Group-R requires insulation in cavity R25 (typically 2x8 framing).
- Maximum allowed air leakage is 0.25 cfm/ft@75Pa and has to pass 0.40 cfm/ft@75Pa
- C406 - 6 Credits are required. Each occupancy weights each credit differently.  
Commissioning is required for all credits:  
10. Enhance Envelope 15% improvement:
  - Groups R-1, B, E, M - 3.0 credits
  - Group R-2 - 6.0 credits (full compliance with C406, with one credit)
  - All others - 4.0 credits11. Reduced Air Infiltration 0.17 cfm/ft@75Pa:
  - Groups R-1, B, E, M - 1.0 credit
  - **Group R-2 - 2.0 credits**
  - All others - 1.0 credit
- C411 Solar Readiness is new to WA for all non-residential buildings up to 20 stories.
- All fenestrations, including metal have to meet U-0.30 (triple glazing for metal) except AW rated windows.

### 2018 Washington State Energy Code - Residential Proposals

- R406 credit requirements will be doubled.
  - Small units (1500 sq. ft.) R406 – 3.0 credits up from 1.5
  - Medium units (1500-5000sq.ft.) R406 – 6.0 credits up from 3.5
  - Large units (over 5000sq.ft.) R406 – 7.0 credits up from 4.5
  - R-2 R406 - 4.5 credits up from 2.5
- R406.2 Carbon emission equalization. Electric resistance heaters are penalized.
- Efficient Building Envelope. MAX 3 credits: Triple glazed windows U-0.18; Roof R-60; Wood framed wall R-21int + R-16ci; Floor R-48; Entire Slab R-20 OR 40% improvement in energy modeling. **Passive House**
- Air Leakage. MAX 2 credits: 0.6ACH@50Pa + Heat Recovery Ventilation. **Passive House**
- Mechanical credits more aggressive.
- **R401.3 Certificate. Insulation values, equipment efficiency, appliance information.**
- **R405 SIMULATED PERFORMANCE ALTERNATIVE (PERFORMANCE) – compliance pass**
- **R407 CERTIFIED PASSIVE HOUSE – compliance pass**