



Additional Resources

These links provide useful information for complying with the Washington State Energy Code, especially for those who are new to building science.

Building Components

Hot Water

- [Northwest Energy Efficiency Alliance \(NEEA\)](#):
 - [Advanced Water Heating Specification](#) for single-family residences advances higher performing electric and gas heat pump water heaters
- [Advanced Water Heater Specification Qualified Products List for HPWHs](#)
- [BetterBuiltNW](#):
 - [Heat Pump Water Heater Technical Guide](#) for detached single-family new construction and additions greater than 500 sf.
- [Energy Star version 3.2 for Washington and Oregon](#)

Insulation

- [Tip Sheet 25: Converting a Garage to Living Space](#) (includes floor insulating guidance)
- [Spray-Applied Foam Insulation](#) tip sheet from the Seattle Department of Construction and Inspections.
- [North American Insulation Manufacturers Association](#)
Empowers homeowners and professionals to make informed insulation choices.
- [Spray Polyurethane Foam Alliance](#)
Develops tools designed to educate and influence the construction industry with the benefits of spray polyurethane foam roofing, insulation, coatings, and specialty installations.
- [Foam Sheathing Coalition](#)
Educates building code officials, design professionals and residential builders about the benefits of using insulating foam sheathing products.
- [Structural Insulated Panel Association](#)

Fenestration - Windows & Doors



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- [National Fenestration Rating Council - Certified Products Directory](#)

Search for NFRC-certified windows, doors, or skylights that [match your criteria](#).

Thermal Envelope, Air Leakage & Ventilation

- [Air Barrier Association of America](#)

Creates resources to help quantify energy savings based on using air barriers and increasing the airtightness of buildings.

Equipment & Appliance Efficiency

- [AHRI Directory of Certified Product Performance - HVAC & DHW](#)
- [Energy Star - Appliances](#)

Building Codes & Best Practices

- [BetterBuiltNW](#)

Accelerating the adoption of energy-efficient building practices in residential new construction.

- [Energy Trust of Oregon](#)

- [EPS Field Guide - Advanced Efficient Homebuilding: 2020 Edition](#)

- [NEEA Codes and Standards Program](#)

Supports stakeholders to develop, adopt, and implement energy codes.

- [2019-2020 Washington Residential New Construction Code Study](#), June 2020

[2018 Washington State Energy Code Progress Toward 2030: Report to Legislature](#), Nov 2020

- [Washington Association of Building Officials \(WABO\)](#)

WABO activities include promoting building codes and standards that safeguard public health and safety, assisting in development of national and state codes, and preserving local government control of code administration.

- [Washington State Building Code Council](#)

Provides independent analysis and advice to the legislature and the Governor's Office on state building code issues.

- [Washington State Department of Commerce - Building Strategy Update](#)



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- Washington State Department of Labor and Industries
[Manufactured Home Permits and Inspections](#), [Tiny Houses](#)

Building Science Consultants & Resources

- [BetterBuiltNW](#) and [Earth Advantage](#)
Our training partners provide on-demand and live trainings that address best practices to meet and exceed code requirements.
- [HVAC Sizing Tool](#)
This free, cloud-based tool for HVAC technicians, designers and home builders provides a quick room-by-room heating and cooling design load calculator for accurate HVAC system sizing. Find additional technical resources, live and online trainings, and marketing resources to support and promote energy-efficient home building at [BetterBuiltNW](#).
- [Building America Solution Center](#)
Provides residential building professionals with access to expert information on high-performance design and construction topics, including air sealing and insulation, HVAC components, windows, indoor air quality, and much more.
- [Building Science Advisor](#): Provides expert advice on building envelope system performance from industry's best researchers and building scientists.
- [Residential Energy Services Network](#)
Strives to make the energy use of all homes transparent, thereby driving residential sector energy use toward net zero.
- [Building Performance Association](#)
[Back to Work: COVID-19 Resource Guide](#)
- [Air Conditioning Contractors of America](#)
National trade association furthering the interests of HVAC residential contracting businesses.
- [Energy & Environmental Building Alliance](#)
A building science leader that offers training and technical assistance for its members.
- [Home Ventilating Institute](#) & [HVI Certified Products Directory](#)



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- [Passive House Northwest](#)
A group of Certified Passive House Consultants and other individuals and organizations who promote highly energy efficient construction through implementing the passive house concept.
- [Wufi Passive House](#): Provides a wide range of resources about Passive House design.
- [Northwest EcoBuilding Guild](#)
Empowers people through education to transform the built environment for long-term sustainability.

Testing Tools (envelope, duct work & HVAC commissioning)

- [Retrotec](#)
Offers blower door systems, duct testing equipment, digital manometers, and other building science resources.
- [The Energy Conservatory](#) (TEC)
Leading manufacturer of performance testing tools for the building science industry.
- [Residential Energy Dynamics](#) Tools used by home performance analysts; WAP energy auditors, inspectors, and monitors; HERS raters; design professionals; building inspectors; engineers; and building science researchers.
- [Building Energy Optimization Tool](#) (BEopt)
Evaluate residential building designs and identify cost-optimal efficiency packages at various levels of whole-house energy savings along the path to zero net energy.

Rebates & Tax Credits

- Washington State Department of Commerce - [Low-Income Energy Assistance Program](#)
- Bonneville Power Administration - [Programs and measures for residential end users](#)
- Avista - [Rebates](#) available for qualified installations of residential energy-efficient equipment.
- Puget Sound Energy - [Efficiency Boost](#) rebates can help make home energy efficiency upgrades more affordable.
- [Energy Star Product Finder](#)

Air Leakage & Duct Testing Resources

- [Air Leakage Testing](#)



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- [Benefits of Duct Sealing](#)
- [Blower Door Test Results Form](#)
- [Duct and Blower Door Test Hand Calculator](#)
- [Duct and Blower Door Test Calculator](#) (Excel)
- [Duct Testing Standard \(RS-33\)](#)
- [Duct Testing Affidavit \(New Construction\)](#)
- [Duct Testing Affidavit \(Existing Construction\)](#)
- [Getting to Know Your Vent. System: Exhaust Type](#)

Videos

These videos are old but still provide useful information.

["Duct Sealing for Comfort, Energy, and Indoor Air Quality"](#) (16:45 min.)

Air Leakage in Homes: The Invisible Thief (39.11 min)

- [Introduction](#) (2:19)
- [Why Air Seal?](#) (3:21)
- [Air Sealing For New Homes](#) (20:41)
- [Measuring Building Tightness](#) (4:28)
- [Air Sealing for Existing Homes](#) (5:12)
- [Combustion Safety](#) (2:50)
- [Final Thoughts](#) (1:40)

Fresh Air for a Healthier Home (29 min)

- [Play All - recommended](#) (29 min)
- [Why Ventilate?](#) (4:53)
- [Exhaust-only Systems](#) (5:28)
- [Integrated Systems](#) (4:07)
- [HRV/ERV Systems](#) (4:26)
- [Installation & Inspection](#) (5:10)
- [Upgrading Existing Homes](#) (5:35)

WSU Energy Code FAQs



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- [Slabs and Below-Grade Walls: Prescriptive Path](#) (December 2023)
- [U-Factors for Non-Prescriptive Constructions](#) (October 2023)
- [Conditioned Crawlspaces](#) (July 2023)
- [Fenestration: Windows, Doors and Skylights](#) (Updated: October 4, 2023)
- [Buried Ducts](#) (Updated: October, 2023)
- [Code Requirements for Heated Buildings that are Not Dwelling Units](#) (November 2022)
- [Log Walls](#) (Updated July 2023)
- [Two Heating Systems](#) (October 2022)
- [Whole House Ventilation Systems](#) (Updated: November 2022)

Hot Topics Archive

- [ACEEE Ducts Inside](#)
- [Additions and Ducts](#)
- [Comparing the Moisture Performance of Wood-Framed Wall Systems](#)
- [Efficient Water Heating](#)
- [Electric Heat Lock Out on Heat Pumps](#)
- [Energy Efficient Home Cooling](#)
- [Externally Applied Building Insulation](#)
- [Indoor Air Quality - Keeping Homes Dry](#)
- [Inspecting Attic Insulation](#)
- [Principles of Heat Transfer](#)
- [Unvented Attics](#)
- [Insuladd - Ceramic-Based Paint Additive](#)
- [UltraCBF rFOIL - Foil-Faced Bubble Wrap](#)
- [Unvented Crawl Spaces](#)
- [Ventilation and Indoor Air Quality Code](#)

Previous Energy Codes

Click [here](#) to see previous Energy Codes.



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