The background features a dark blue gradient with technical diagrams. On the left, a large circular scale with tick marks and numbers (150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) is visible. To the right, there are several circular diagrams with arrows indicating clockwise or counter-clockwise rotation, resembling mechanical or engineering schematics.

TECHNICAL CODE AMENDMENTS PRESENTATION TO THE SEATTLE CITY COUNCIL PLUZ COMMITTEE

SEATTLE DEPARTMENT OF
CONSTRUCTION AND INSPECTIONS

SEPTEMBER 15, 2016

SDCI Purpose Statement

“As stewards and regulators of land and buildings, we preserve and enhance equity, livability, safety and health of our communities”

Legislation Adopts 7 Codes

Building
Existing Building
Residential
Energy
Mechanical
Fuel Gas
Plumbing



All will take effect on January 1, 2017

Related Codes

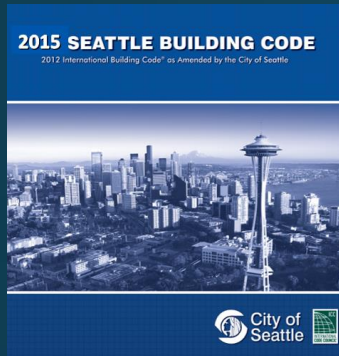
Fire Code is coordinated with the other codes but it will be presented at the Gender Equity, Safe Communities & New Americans Committee



Boiler Code draft legislation is nearly complete

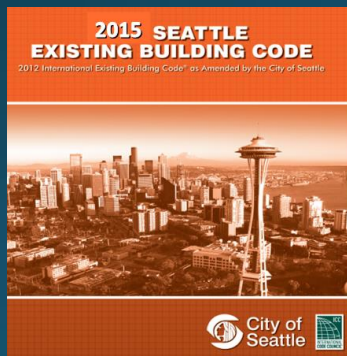
Code Scope

Building Code



Regulates new construction for all buildings except buildings within the scope of the Residential Code

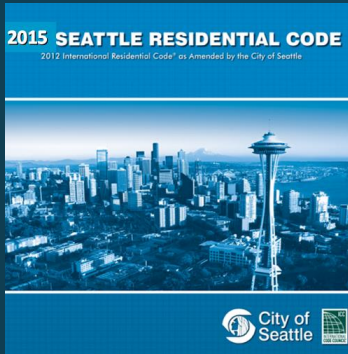
Existing Building Code



Regulates all work on existing buildings except buildings within scope of the Residential Code

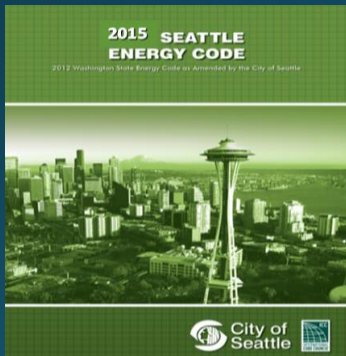
Code Scope

Residential Code



New and existing single family residences, duplexes, townhouses up to 3 stories, and buildings accessory to them

Energy Code



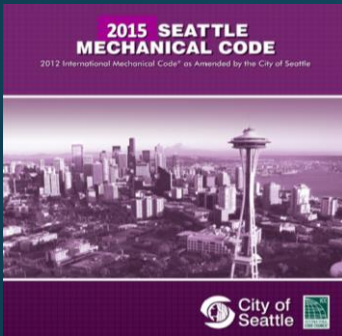
Energy conservation requirements for

- Building envelope
- HVAC equipment
- Lighting
- Service-water heating equipment and piping

Divided into 2 separate “codes” for nonresidential and residential

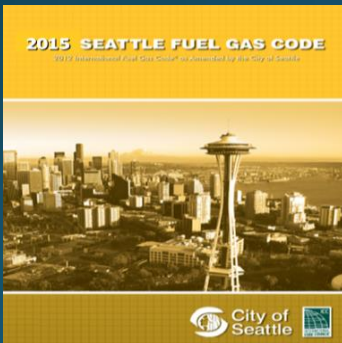
Code Scope

Mechanical Code



Applies to HVAC equipment, refrigeration systems, and other heat-producing equipment such as clothes dryers, and cooking hoods not within the scope of the Fuel Gas Code

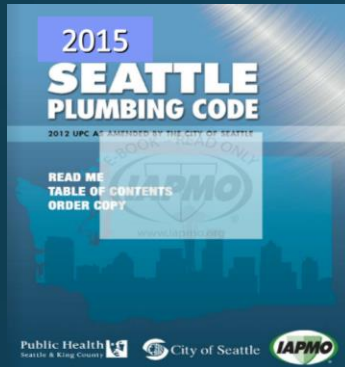
Fuel Gas Code



Applies to the same equipment as the Mechanical Code if it is powered by fuel gas

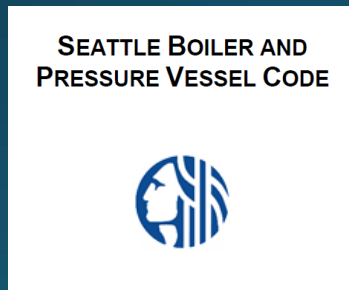
Code Scope

Plumbing Code



Applies to plumbing systems, including piping and fixtures, after the utility connection with the building's system

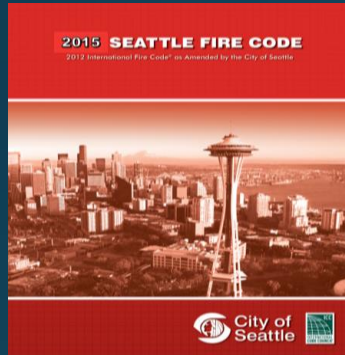
Boiler Code



Applies to the regulation of boilers and pressure vessels

Code Scope

Fire Code:



Includes provisions for fire protection systems in new buildings and requirements for operation of certain activities such as use of hazardous materials, dry cleaning, welding

Model codes

These codes are based on model codes developed by national organizations

Six codes are published by the International Code Council (ICC) and enforced by SDCI

Plumbing Code is published by the International Association of Plumbing and Mechanical Officials (IAPMO) and enforced by Public Health Seattle-King County



Code Development Process

National Code Development

National Codes are Updated Every 3 Years

2015 I-Codes published January 2015

Washington State

State Building Code Council amends and adopts 6 codes that local jurisdictions must enforce

Enforcement is mandated by:
State Building Code Act, RCW 19.27
State Energy Related Standards, RCW 19.27A

2015 State Code took effect July 1, 2016

For Seattle...

Seattle May Further Amend:

Per RCW 19.27.031
Seattle Cannot Amend:

Residential Code
Energy Code
(Residential)

Fire Building
Plumbing
Mechanical
Energy
(Commercial)

We are here

Proposed adoption date
January 1, 2017

Seattle amendments

Most amendments and model code provisions are unchanged from 2012 codes

Highlights of changes are listed in each fiscal note

Seattle codes have amendments in addition to the state codes

Seattle Amendments are written with the intent to:

- Clarify model code text
- Adopt early the revisions made to the 2018 model codes
- Codify alternative methods of compliance so all users are made aware

2015 Building Code Highlights

Occupancy classifications assigned to both marijuana growing and processing activities

Interpretation for additional exit stairways applied to buildings over 420 feet

“5 Over 3 Buildings”
allowed with limitations



2015 Building Code Highlights

Removed the requirement for vents at the top of elevator hoistways

Conflict between all-gender restroom and urinal requirements removed

Rat eradication required prior to demolition permit issuance



2015 Existing Building Code Highlights

No Notable
changes



2015 Residential Code

Within each dwelling it is no longer required to have at least one room 120 square feet or greater

Clear space required on roofs of new dwellings for the future installation of solar technology

Washington State Building Code Council must grant approval for proposed Seattle amendments

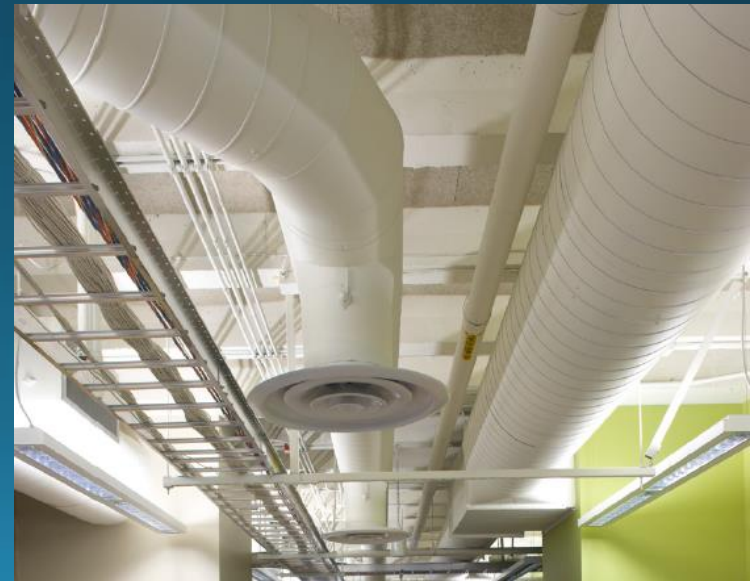


2015 Mechanical Code Highlights

Clarified requirements for kitchen exhaust hoods

Increased flexibility for protecting the structure from commercial kitchen grease hood fires

Clarification of smoke detector requirements in residential high-rise buildings



2015 Plumbing & Fuel Gas Code Highlights

No notable changes



Seattle Energy Code Big Picture

Climate Action Plan

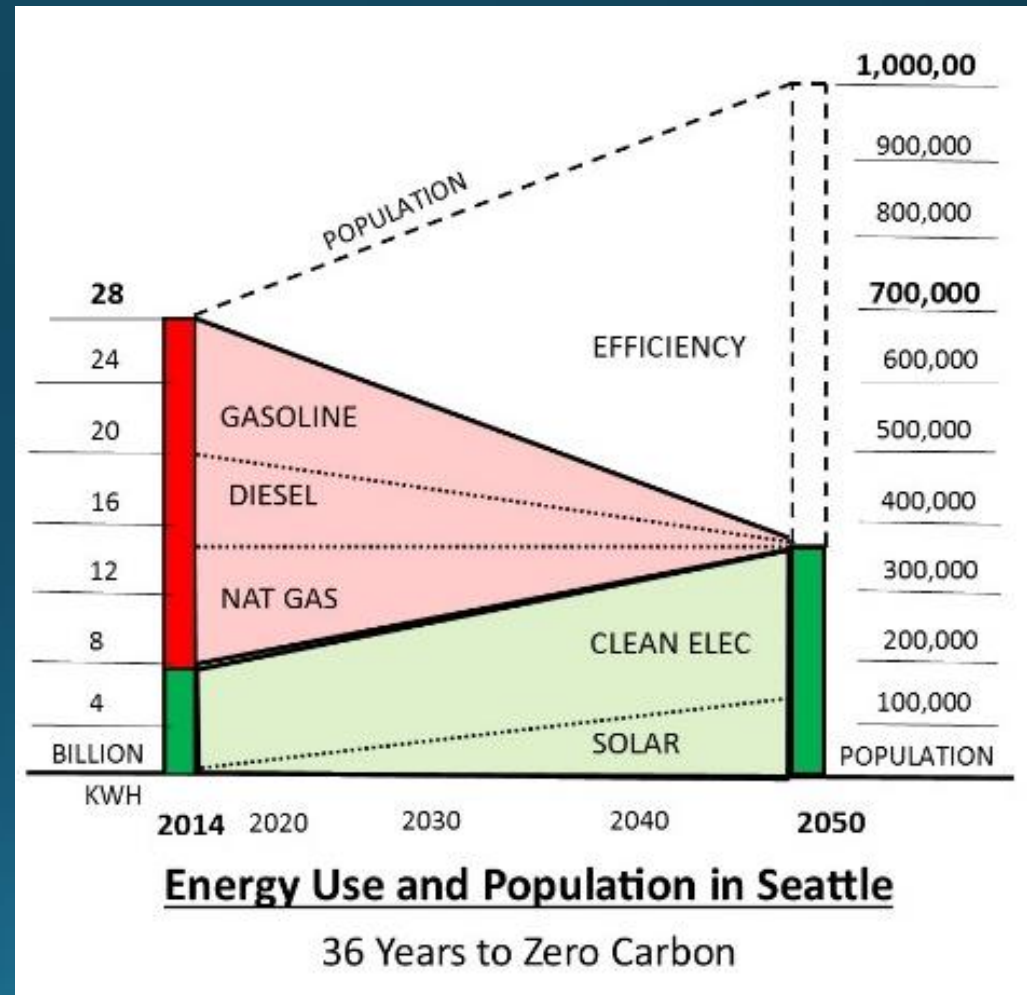
Reduction in overall Seattle annual building energy use:

- Commercial 5% by 2020, 10% by 2030
- Residential 8% by 2020, 20% by 2030

Carbon neutral city by 2050

Resolution 30280

Stay 20% better than ASHRAE 90.1



2015 Energy Code Highlights Washington State

Residential (single family & low-rise multi-family)

- “Additional Energy Efficiency Options” increased from 1.5 to 3.5 credits
- Ductless mini-split heat pump required for electric-resistance heated single-family & townhouse

Commercial Buildings (all other)

- Additional efficiency options
- Significant changes for HVAC controls
- Lighting power allowance – 20% reduction



2015 Seattle Energy Code Highlights “Commercial Buildings” Only

High-performance (heat pump) heating (2018)

- Or very high-performance glazing
- Non-residential only
- Move towards 2050 carbon-neutral goal

Air leakage testing standard: 25% tighter

- Based on testing agency experience

Lighting power allowance 10% tighter (2018)

- Anticipates continuing LED cost reductions

Solar-ready roof: extended to 20-story buildings

