Ordinance No. 2021-46s

An Ordinance of the Pierce County Council Amending Title 17C of the Pierce County Code, "Construction and Infrastructure Regulations – Building and Fire Codes"; Adopting Findings of Fact; and Setting an Effective Date.

Whereas, the Chapters contained in Title 17C of the Pierce County Code (PCC) set forth the County’s building construction, fire, and maintenance standards; and

Whereas, these codes need to be periodically updated to ensure conformity with national and state building, fire, and maintenance standards; and

Whereas, Revised Code of Washington (RCW) 19.27.031 provides that the State Building Code will now include the 2018 International Building Code, 2018 International Residential Code, 2018 International Mechanical Code, and the 2018 Uniform Plumbing Code, and are applicable to all local jurisdictions in the State of Washington; and

Whereas, the "International Building Code" (Chapter 17C.20 PCC), "International Residential Code" (Chapter 17C.30 PCC), "Uniform Plumbing Code" (Chapter 17C.50 PCC), "International Fire Code" (Chapter 17C.60 PCC), "Washington State Energy Codes" (Chapter 17C.70 PCC), and "International Swimming Pool and Spa Code" (Chapter 17C.75 PCC) are published by the International Code Council, and should be amended in order to provide regulations that are consistent with state and national standards; and

Whereas, any jurisdiction may amend the State Building Code, provided the amendments do not reduce the minimum performance standards of the codes; and

Whereas, the "International Fire Code" (Chapter 17C.60 PCC) is further amended to require additional fire protection features to prevent fire spread and decrease fire damage to single-family development where structures have a separation of less than ten feet; and
Whereas, the Pierce County Sustainability 2030 plan promotes the transition to electric vehicles as a strategy for reducing transportation generated greenhouse gas emissions; and

Whereas, providing electric vehicle charging readiness at the time of construction of new one- and two-family dwellings supports increased use of electric vehicles and is more cost effective than retrofitting a structure with electric vehicle charging capability after construction is complete; and

Whereas, the cost of providing an electric vehicle ready space in new one- and two-family construction is estimated to be $50 to $300 per space; and

Whereas, retrofitting an existing structure with electric vehicle charging readiness is estimated to be 200 to 800 percent more expensive than the cost of providing electric vehicle charging readiness at the time of building construction; and

Whereas, the "International Residential Code" (Chapter 17C.30 PCC) is amended to require electric vehicle charging readiness for new one- and two-family dwellings; and

Whereas, it is in the best interest of the citizens of Pierce County and necessary and appropriate to protect the health, safety, and welfare of the citizens to adopt these amendments; Now Therefore,

BE IT ORDAINED by the Council of Pierce County:

Section 1. Title 17C of the Pierce County Code, "Construction and Infrastructure Regulations – Building and Fire Codes," is hereby amended as shown in Exhibit A, which is attached hereto and incorporated herein by reference.

Section 2. Findings of Fact are hereby adopted as shown in Exhibit B, which is attached hereto and incorporated herein by reference.

Section 3. If any provisions of this Ordinance or the amendments to the Pierce County Code are found to be illegal, invalid, or unenforceable, the remaining provisions of the Ordinance shall remain in full force and effect.
Section 4. The effective date of this Ordinance shall be July 30, 2021; except that amendments affecting single-family or multifamily residential buildings shall not become effective until approved by the State Building Code Council pursuant to the provisions of RCW 19.27.060.

PASSED this 29th day of June, 2021.

ATTEST:

Denise D. Johnson
Clerk to the Council

PIERCE COUNTY COUNCIL
Pierce County, Washington

Derek Young
Council Chair

Bruce F. Dammeier
Pierce County Executive
Approved X Vetoed ________, this ______ day of ________
2021.

Date of Publication of Notice of Public Hearing: June 2, 2021

Effective Date of Ordinance: see Section 4
Title 17C

Construction and Infrastructure Regulations – Building and Fire Codes

Chapter 17C.20

INTERNATIONAL BUILDING CODE

Sections:

17C.20.010 Adoption of International Building Code.
17C.20.020 General.
17C.20.030 Referenced Codes.
17C.20.040 Creation of Enforcement Agency.
17C.20.050 Appointment.
17C.20.060 Work Exempt from Permits.
17C.20.070 Time Limitation of Application.
17C.20.080 Expiration.
17C.20.090 Building Permit Fees.
17C.20.100 Building Permit Valuations.
17C.20.110 Work Commencing Before Permit Issuance.
17C.20.130 Board of Appeals.
17C.20.140 Violations.
17C.20.150 Premises Identification.
17C.20.160 Maximum Height of Buildings.
17C.20.170 Ground Snow Loads.
17C.20.190 Appendix G – Flood-Resistant Construction.

17C.20.020 General.

Section 101.1 of the International Building Code and shall be amended as follows:

Section 101.2 Title. These regulations shall be known as the "Building Code" of Pierce County, Washington, and referred to as "this code."

17C.20.040 Creation of Enforcement Agency.

Section 103.1 of the International Building Code and shall be deleted. See PCC 17C.10.030, "Creation of Enforcement Agency."
17C.20.140  Violations.
Section 113-114 of the International Building Code is deleted. See PCC 17C.10.050, "Violations and Penalties."

17C.20.150  Premises Identification.
Section 501.2-502.1 of the International Building Code is amended by adding a second paragraph as follows:

Signs on private roads shall be installed in accordance with Chapter 10.44 of the Pierce County Code, "Addressing and Grid System for Pierce County." The premises identification requirements of this Section must be met prior to final inspection by the Building Division.

Section 3109.1 of the International Building Code is amended by adding the following paragraph:

Swimming pools may not be located in any front yard as required by Title 18A of the Pierce County Code, nor closer than eight feet measured from the edge of the water surface to any other adjacent property line.

Section 3109.2 of the International Building Code is amended by replacing the definition of "Swimming Pools" with the following:

Swimming Pool is any structure intended for swimming or recreational bathing that contains water over 24 inches (610mm) deep. This includes in-ground, above-ground and on-ground swimming or wading pools. Commonly accepted hot tubs and spas are not included.

Section 3109.4 Residential Swimming Pools, is deleted. See Section 17C.30.010, "Adoption of the International Residential Code" and Section 17C.30.150, "Barrier Requirements."
Chapter 17C.30

INTERNATIONAL RESIDENTIAL CODE

Sections:

17C.30.010 Adoption of International Residential Code.
17C.30.020 Creation of Enforcement Agency.
17C.30.030 Appointment.
17C.30.040 Work Exempt from Permit.
17C.30.045 Determination of Damage.
17C.30.050 Time Limitation of Application.
17C.30.060 Expiration.
17C.30.070 Building Permit Fees.
17C.30.080 Building Permit Valuation.
17C.30.090 Refunds.
17C.30.100 Board of Appeals.
17C.30.110 Violation Penalties.
17C.30.120 Maximum Height of Buildings.
17C.30.125 Table R301.2(1) – Climate and Geographic Design Criteria.
17C.30.130 Fire Sprinkler Systems.
17C.30.140 Premises Identification.
17C.30.160 Appendix E – Manufactured Housing Used as Dwellings.

17C.30.090 Refunds.

Section R108.5 of the International Residential Code is deleted and replaced with the following:

Section 108.5 The Building Official is authorized to establish a refund policy.

17C.30.125 Table R301.2(1) – Climatic and Geographic Design Criteria.

Footnote "g." to Table R301.2(1) shall be deleted and replaced with the following:

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study, and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

References to coastal high-hazard areas (V or A zones) in Section R322 shall be designated as coastal flood hazard areas and any reference to zone V shall be designated as a zone X as described in Title 18E PCC.


Section R309 of the International Residential Code is supplemented as follows:
Electric vehicle charging infrastructure is required. New dwelling units classified as R-3 occupancies shall be required to provide a minimum of one electric vehicle ready parking space for each dwelling unit. This parking space shall be provided with a minimum 208/240-volt dedicated branch circuit for electric vehicle supply equipment that is terminated at a receptacle or junction box within the parking space to allow for future installation of electric vehicle supply equipment. The branch circuit shall be identified as "Electric Vehicle Ready" in the service panel or subpanel directory, and the termination location shall be marked as "Electric Vehicle Ready". Installation shall be in accordance with the National Electrical Code.
Chapter 17C.50

UNIFORM PLUMBING CODE

17C.50.020 Authority Having Jurisdiction.

Section 102.1-103.1 of the Uniform Plumbing Code is deleted. See PCC 17C.10.030, "Creation of Enforcement Agency."

17C.50.030 Violations and Penalties.

Section 102.3-106.0 of the Uniform Plumbing Code is deleted. See PCC 17C.10.050, "Violations and Penalties."

17C.50.040 Expiration.

Section 103.3.4-104.4.3 of the Uniform Plumbing Code is deleted. See PCC 17C.10.030, "Permit Expiration."

17C.50.050 Permit Fees.

Section 103.4.1-104.5 of the Uniform Plumbing Code is deleted. See PCC 17C.10.070, Table 17C.10-1-D.

17C.50.060 Plan Review Fees.

Section 103.4.2-104.3.2 of the Uniform Plumbing Code is deleted. See PCC 17C.10.070, "Fees."

17C.50.070 Expiration of Plan Review.

Section 103.4.3-104.4.3 of the Uniform Plumbing Code is deleted. See PCC 17C.10.110, "Application Expiration."

17C.50.080 Investigation Fees: Work Without a Permit.

Section 103.4.4-104.5.2 of the Uniform Plumbing Code is deleted. See PCC 17C.10.080, "Investigation Fee."

17C.50.090 Fee Refunds.

Section 103.4.5-104.5.3 of the Uniform Plumbing Code is deleted and replaced by the following:

Section 103.4.5-104.5.3 The Building Official is authorized to establish a refund policy.

17C.50.100 Means of Appeal.

Section 107.0 of the Uniform Plumbing Code is deleted. See PCC 17C.10.060, "Appeals."
Chapter 17C.60

INTERNATIONAL FIRE CODE

Sections:
17C.60.010 Adoption of International Fire Code.
17C.60.020 Conflicts with Other Codes.
17C.60.025 Code Defined Terms.
17C.60.030 Definitions.
17C.60.050 General.
17C.60.051 Appointment.
17C.60.070 Investigations.
17C.60.085 Permit Fees.
17C.60.090 Commercial Inspection Program (CIP) Inspection Fees.
17C.60.100 Building and Fire Codes Board of Appeals.
17C.60.110 Compliance with Tags.
17C.60.120 Violations and Penalties.
17C.60.121 Failure to Comply.
17C.60.130 Biodiesel Production Prohibited in Residential Occupancies.
17C.60.150 Emergency Vehicle Access.
17C.60.160 Fire Flow Requirements.
17C.60.165 Minimum Standards for Fire Flows, Water Mains and Fire Hydrants.
17C.60.180 Automatic Sprinkler Systems for Group R Occupancies.
17C.60.185 Automatic Sprinkler Systems for Other Occupancies.
17C.60.190 Sprinkler Underground.
17C.60.195 Emergency Responder Radio Coverage.
17C.60.200 Fire Alarm Systems.
17C.60.205 Gates.
17C.60.210 Dry Standpipes.
17C.60.215 Planned Development Districts (PDDs).
17C.60.220 Subdivision of Unprotected Parcels.
17C.60.222 Subdivision Plat Notes.
17C.60.225 Road Signs.
17C.60.230 Fireworks.
17C.60.240 Public Display.
17C.60.250 Severability.

17C.60.020 Conflicts with Other Codes.
In case of conflict among the Codes enumerated in PCC 17C.10.010, the first named Code shall govern over those following.

17C.60.030 Definitions.
Area Separation. Each portion of a building separated by one or more fire walls without openings, constructed in accordance with the International Building Code, are considered as separate fire-flow calculation areas. Fire walls are not permitted to reduce the fire-flow calculation area of dwellings.
**Fire Code Official.** Wherever the words "fire code official" appear in the International Fire Code or this Chapter, they shall mean Fire Marshal of the Office of Fire Prevention and Arson Control (also known as the Fire Prevention Bureau) and their duly authorized representatives.

**Fire Flow.** "Fire flow" is the quantity of water in gallons per minute (GPM) needed to control an anticipated fire in a building or group of buildings or at a facility.

**Fire Marshal.** "Fire Marshal" shall mean the Director of the Pierce County Office of Fire Prevention and Arson Control (Fire Prevention Bureau) and their duly authorized representatives.

**G.P.M.** "G.P.M." shall mean gallons per minute.

**Jurisdiction.** Wherever the word "jurisdiction" is used in the International Fire Code, it shall mean unincorporated Pierce County and contract cities and towns.

**New Additions to Existing Water Systems.** "New Additions to Existing Water Systems" shall mean all additions to existing water systems except the addition of one hydrant that will meet the flow requirement, with no line extension. New additions shall include, but not be limited to, water main extensions, additional storage facilities, and replacement of existing water mains.

**P.S.I.** "P.S.I." shall mean pounds per square inch.

**Permit, Construction.** "Permit, Construction" means a permit required by Section 105.7 of the International Fire Code for installation, modification or removal of systems and equipment.

**Permit, Prescribed.** "Permit, Prescribed" means a permit required by Section 105.6 of the International Fire Code allowing an activity, operation, practice or function within specified beginning and ending dates not to exceed one year in duration.

**Permit, Renewable.** "Permit, Renewable" means a permit required by Section 105.6 of the International Fire Code allowing a continual activity, operation, practice or function.

**Rural Area.** "Rural area" means those areas not designated as urban by the Pierce County Comprehensive Plan.

**Substantial Alteration.** "Substantial alteration" applies only to structures legally constructed prior to November 16, 1992, and is any of the following conditions:

1. **Residential Projects:**
   a. Cumulative alteration including additional square footage, replacement square footage, and/or remodel square footage addition to an existing building of 50 percent or more. All square footage included in the building permit application shall be included in this calculation. Such additions shall be cumulative (toward the substantial alteration threshold) from November 16, 1992, forward.
   b. A change in the use or character of an existing building to a more intensive use based on the proposed development column of Table 17C.60.150-1.
   c. Changing the use of a residential building (home or accessory structure) to a use requiring a license from Washington State (examples: daycares, adult family homes, group homes, etc.). Cumulative replacement or remodel of 50 percent or more of the existing square footage. Such replacement or remodel shall be cumulative (toward the substantial alteration threshold) from November 16, 1992, forward.

2. **Commercial Projects:**
   a. Cumulative alteration including additional square footage, replacement square footage, and/or remodel square footage square footage addition to an existing building of 50 percent or more. All square footage included in the building permit application shall be included in this calculation. Such additions shall be cumulative (toward the substantial alteration threshold) from November 16, 1992, forward.
b. A change in the use or character of an existing building to a more intense use based on IBC Table 503-506.2.

c. Cumulative replacement or remodel of 50 percent or more of the existing square footage. Such replacement or remodel shall be cumulative (toward the substantial alteration threshold) from November 16, 1992, forward.

d. Alteration, remodel or structural change to a building, the permit valuation for which exceeds 50 percent of the current permit valuation of the existing building. Current valuation shall be determined by the Building Official based on the cost per square foot values in effect at the time of permit application.

Unprotected Parcel. An "unprotected parcel" is a parcel that is not included in a fire protection tax district.

Urban Area. "Urban area" means those areas so designated as urban on the "Generalized Proposed Land Use Map" of the Pierce County Comprehensive Plan.

17C.60.085 Permit Fees.

Section 105.8 of the International Fire Code is added to read as follows:

A. **105.8 Permit Fees.** A fee as specified in Table 17C.60-1 shall be charged for each required permit. Construction permit fees for fire protection systems shall be in accordance with Table 17C.10-1-F.

<table>
<thead>
<tr>
<th>Permit Type</th>
<th>Fee*</th>
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<tbody>
<tr>
<td>Aerosol Products</td>
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<td>Amusement Buildings</td>
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<td>Commercial (Haunted House, etc.)</td>
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<td>School (Haunted House, etc.)</td>
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<td>Battery Systems</td>
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<td>Candles or Open Flame in Assembly Area</td>
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<td>Carnival – Commercial Fair, Bazaars, Flea-Marts:</td>
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<td>Booths or Displays:</td>
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<tr>
<td>0 – 10</td>
<td>$151.25</td>
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<td>11 – 25</td>
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<td>26 – 50</td>
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<td>50 +</td>
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<td>Cellulose Nitrate Film</td>
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<td>Permit</td>
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<tr>
<td>Combustible Dust Producing Operations</td>
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<td>Combustible Fibers</td>
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<td>Combustible Material Storage</td>
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<td>Compressed Gases</td>
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<td></td>
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<td>Covered Mall Buildings:</td>
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<td>Kiosks/Concession/Booths/etc.</td>
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<td>Use Open Flame, etc.</td>
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<td>Display Liquid or Gas Filled Equipment</td>
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<td>Cryogenic Fluids</td>
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<tr>
<td>Cutting and Welding</td>
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<td>Dry Cleaning Plants</td>
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<tr>
<td>Exhibits and Trade Shows</td>
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<tr>
<td>Booths or Displays: 0 – 25</td>
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<td>Explosives</td>
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<td>Fireworks Discharge (1.4G)</td>
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<td>Fireworks Display (1.3G)</td>
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<td>Fireworks Stand</td>
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<td>Flammable/Combustible Liquids – Pipeline, Operate</td>
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<tr>
<td>Flammable/Combustible Liquids – Store, Handle, Use</td>
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<tr>
<td>Flammable/Combustible Liquids – Remove or Abandon Tank</td>
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<tr>
<td>(Residential Heating Oil)</td>
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<td>Flammable/Combustible Liquids – Change Contents</td>
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<td>Floor Finishing</td>
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<td>Fruit and Crop Ripening</td>
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<td>Fumigation and Thermal Insecticidal Fogging</td>
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<td>Hazardous Material – Store, Handle, Use</td>
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<td>Hazardous Material – Remove, Abandon, Tank</td>
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<td>Hazardous Material – Tank, Piping, Equipment, etc./Install, alter, etc.</td>
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<td>Hazardous Material – Change Contents</td>
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<td>High Piled Combustible Storage</td>
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<td>Hot-work Operations</td>
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<td>Industrial Ovens</td>
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<td>Liquefied Petroleum Gases – Tank-Install:</td>
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<td>0 – 500 Gallons</td>
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<td>501 – 10,000</td>
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<td>Liquefied Petroleum Gases – Dispensing</td>
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<td>Liquefied Petroleum Gases – Tank Vehicle</td>
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<td>Liquid or Gas Fueled Vehicles/Equipment in Bldg.</td>
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<td>Lumber Yards and Woodworking Plants</td>
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<td>Motor Vehicle Fuel – Dispensing Construction</td>
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<td>School Carnival or Fair</td>
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<td>Other Special Event</td>
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<td>Refrigeration Equipment</td>
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<td>Repair Garages</td>
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<td>Rooftop Heliports</td>
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<td>Spraying or Dipping</td>
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<td>Temporary Membrane Structures, Tents and Canopies:</td>
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<td>2,000 square feet or less</td>
<td>Prescribed and Construction</td>
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<td>Tire-rebuilding Plants</td>
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<td>201 to 2,499 tires</td>
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<td>2,500 or more tires</td>
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<td>Waste Handling</td>
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<td>Wood Products</td>
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*The word "Included" in the fee column indicates that the fees for renewable permits are included as a part of Commercial Inspection Program fees.
17C.60.130  Biodiesel Production Prohibited in Residential Occupancies.

The production, processing or manufacturing of biodiesel fuel is hereby prohibited in all residential occupancies and their accessory structures. Biodiesel production, processing or manufacturing in any other occupancy class shall require an approved permit or permits.

17C.60.150  Emergency Vehicle Access.

Section 503.1 through 503.4 of the International Fire Code (IFC) are deleted and replaced as follows:

A. Applicability. Emergency Vehicle Access (EV Access) shall be provided and maintained in accordance with this Chapter for any parcel(s) of land improved with building(s) or facilities. EV Access shall be required for every building, portion of a building, or facility that is located more than 150 feet from the edge of the driving surface of a public or private road or shared access facility providing access, as measured in an approved route around the exterior of the building or facility. If a private road or shared access facility leading to a subject property is a dead-end longer than 300 feet without an approved turnaround, an approved turnaround is required on the subject property or approved alternative location. See Figures 17C.60.150-1 and 17C.60.150-5. When the private road easement is on the property, it is regulated under PCC 17C.60.150.

B. Modifications or Exceptions.

1. Residential: EV Access shall not be required for the following:
   a. Residential accessory buildings such as private garages, carports, and sheds that are 3,000 square feet or less than 3,600 square feet, and separated from other structures by at least 10 feet.
   b. Additions, remodels, or alterations of existing structures if the proposed change is not a "Substantial Alteration" per PCC 17C.60.030.

2. Non-Residential: EV Access shall not be required for the following:
   a. Towers and water tanks.
   b. Additions, remodels, or alterations of existing structures if the proposed change is not a "Substantial Alteration" per PCC 17C.60.030.
   c. Agriculture/aquaculture buildings that meet the exemption for fire flow.
   d. Structures for the sole purpose of storing mineral products such as salt, sand or rock for maintenance purposes.
   e. Buildings that are 600 square feet or less and meet all of the following criteria:
      (1) Separated from other structures by greater than 20 feet.
      (2) Separated from property lines by greater than 10 feet.
      (3) Not classified as group R, H or I occupancies as defined by the International Building Code (IBC).

3. Sprinklered buildings or facilities are permitted to modify EV Access minimum width per Table 17C.60.150-1.

4. When an EV Access cannot be installed in conformance with these standards due to non-negotiable grades, critical areas, dimensions of the property, or other similar conditions, the Fire Marshal may allow a modification to these standards. This authorization shall be made through the "Alternate Methods or Materials" procedure established by the IFC.

C. Relationship with Road Standards. As depicted in Figure 17C.60.150-1, EV access standards contained in this Chapter are applicable within and on a subject property. Public or private roads or shared access facilities that lead to the subject property and
provide access over other properties via easements or County right-of-way shall meet the standards in Title 17B PCC, Construction and Infrastructure Regulations, and shall be maintained to standard.

Deviations from County road standards that deal with width, grade, turnaround, or other access requirements that impact fire department access/ingress and operations shall require a fire sprinkler system in all homes directly impacted by the deviation. When a deviation to County road standards that impacts fire department access/ingress is proposed, the applicant shall provide justification as to which lots are not directly impacted by the request. The Pierce County Fire Marshal will review the deviation and provide an approval, a conditional approval, or deny the request based upon the factual details of the request.

D. Administration.

1. A site plan shall be submitted to Pierce County in accordance with the site plan submittal standards for the proposed building permit. EV Access design shall be identified on the site plan and approved by the Fire Marshal prior to the issuance of the building permit.

2. The applicant shall have the EV Access constructed in compliance with the conditions of the permit before the project will receive final inspection approval.

3. Failure to construct and/or maintain the EV Access as approved shall result in the imposition of penalties under this Chapter.

E. EV Access Requirements.

1. EV Access standards are as shown in Table 17C.60.150-1 and Figures 17C.60.150-1 through -6.

2. A dead-end EV Access in excess of 150 feet in length shall be provided with a turnaround. The turnaround shall be provided within 150 feet of the end of the EV Access. See Figures 17C.60.150-4 and -5.

3. Bridges that provide EV Access must be capable of carrying a minimum design load of H-20 per "Standard Specifications for Highway Bridges", as adopted by the American Association of State Highway and Transportation Officials, AASHTO. A building permit is required by the County for the installation of a bridge. The County may require that the capacity of bridges and structures be certified by a licensed structural engineer.

4. EV Access with a gate shall meet the requirements of PCC 17B.10.102 and 17C.60.205. Gates exempt from PCC 17B.10.102 shall meet the requirements of IFC 503.5 and 503.6.

5. EV Access grades that are 12 percent or greater shall be paved per Figure 17C.60.150-2. When grades are 15 percent or greater, an approved National Fire Protection Association (NFPA) fire sprinkler system shall be provided for all habitable buildings, and a letter of understanding provided by the Fire Marshal's office shall be recorded at the Pierce County Auditor's office. EV Access that exceeds the maximum 19 percent shall meet the requirements of PCC 17C.60.150 B.4. above and have a dry standpipe installed in accordance with PCC 17C.60.210.

6. EV Access shall not be obstructed in any manner, including parking of vehicles. Minimum required widths and clearances established under these standards shall be maintained at all times. Approved signs as guided by IFC Appendix D103.6 or...
approved pavement striping shall be provided and maintained by the property owner to identify and prohibit the obstruction of fire department access for:

a. Multi-family complexes.
b. Designated one-way emergency vehicle access.
c. Schools.
d. Land use applications that create nine or more dwelling units.
e. For all other situations, these provisions will be applied at the Fire Marshal's discretion.

7. Construction of a new building shall not obstruct the EV Access to an existing building.

8. Adult family homes shall have a medical response access that is a minimum of 5-feet wide and paved from the front door to the property access or road.

9. For a commercial or multi-family building that is more than 50-feet deep where vehicular access is not available on all sides of the building, a 5-foot wide paved walking path shall be provided on the sides of the building where there is not vehicular emergency vehicle access.

   The near edge of the path shall be located away from the building in accordance with the following:

   a. When the building is less than 30 feet in height, a minimum of 5 feet.
   b. When the building is between 30 feet and 40 feet in height, a minimum 7 feet, 6 inches.
   c. When the building is 40 feet or more in height, a minimum of 10 feet.

F. Special Provisions.

1. Signing and striping. When required by the County, approved signs as guided by IFC Appendix D103.6 or approved pavement striping shall be provided and maintained by the property owner to identify and prohibit the obstruction of fire department access.

2. Traffic Control Measures. Traffic control measures such as speed bumps or speed humps shall be permitted through the "Alternate Methods or Materials" procedure established by the IFC. Example speed bump and speed hump designs can be found on the Institute of Transportation Engineers (ITE) website.

23. Access locations. When it is determined that a single EV Access may be impaired by vehicle congestion, condition of terrain, or other factors, the Fire Marshal may require multiple EV Access locations, guided by IFC Appendix D104, D106, and D107 are adopted.

   a. Emergency vehicle access shall be constructed as part of the road infrastructure with the plat or development and meet the following criteria:

      1. Gates required at both ends of the access.
      2. Locked gate meeting PCC 17C.60.205.
      3. A minimum 20-foot-wide paved surface with minimum 2-inch hot mix asphalt over 4-inch crushed surface top course.
      4. Minimum 20-foot inside turning radius.
      5. Gate shall have a minimum 20-foot clear width.
      6. Minor driveway approaches are required on both ends of access.
      7. Gates to be setback such that they do not swing into the right of way.
34. Aerial Access. Apartment, townhome and commercial structures three stories and
greater or exceeding 30 feet in height, as measured to the top of the parapet wall or
to the peak of the roof, shall have approved aerial apparatus access roads guided by
IFC Appendix D105.2 – D105.4 and. See Figure 17C.60.150-6.
   a. There shall be no carports, wires or obstructions, or plantings over 6 feet in
      height between the building and the aerial apparatus access road (AAAR).
   b. The AAAR shall be located on the front door or long side of the building and not
      be less than 25 percent of the building perimeter; except group I occupancies
      shall not be less than 50 percent of the building perimeter.
   c. The AAAR, when not continuous, shall be approved by the Fire District.
<table>
<thead>
<tr>
<th>Proposed Development</th>
<th>ADT (2)</th>
<th>Width (minimum driving surface)</th>
<th>Width (minimum driving surface with sprinklers) (6)</th>
<th>Grade %</th>
<th>Surface</th>
<th>Vertical Clearance (minimum)</th>
<th>Minimum Turning Radii</th>
<th>Figure #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single family home</td>
<td>≤10</td>
<td>15'</td>
<td>12' With 2' clear area (5, 11)</td>
<td>&lt;12</td>
<td>CSTC (3)</td>
<td>13.5'</td>
<td>Inside 20', Outside 45'</td>
<td>2,3</td>
</tr>
<tr>
<td>+ Mother-in-Law Residential Accessory Structure</td>
<td></td>
<td></td>
<td></td>
<td>≥12 to &lt;15</td>
<td>Paved (4)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3,600 sq. ft. or greater Home Occupation</td>
<td></td>
<td></td>
<td></td>
<td>≥15 to ≥19</td>
<td>Paved (4,6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single family home</td>
<td>≤20</td>
<td>15'</td>
<td>15' if one home is sprinklered, 12' with 2' clear area (5) if both are sprinklered (11)</td>
<td>&lt;12</td>
<td>CSTC (3)</td>
<td>13.5'</td>
<td>Inside 20', Outside 45'</td>
<td>2,3</td>
</tr>
<tr>
<td>+ ADU Duplex</td>
<td></td>
<td></td>
<td></td>
<td>≥12 to &lt;15</td>
<td>Paved (4)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥15 to ≥19</td>
<td>Paved (4,6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adult Family Home (10)</td>
<td>≤40</td>
<td>18'</td>
<td>18' wide driving surface (11)</td>
<td>&lt;15</td>
<td>Paved (4)</td>
<td>13.5'</td>
<td>Inside 20', Outside 45'</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥15 to ≥19</td>
<td>Paved (4,6)</td>
<td></td>
<td></td>
<td></td>
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</table>
Table 17C.60.150-1. Emergency Vehicle Access (1) Requirements

<table>
<thead>
<tr>
<th>Proposed Development</th>
<th>ADT (2)</th>
<th>Width (minimum driving surface)</th>
<th>Width (minimum driving surface with sprinklers) (6)</th>
<th>Grade %</th>
<th>Surface</th>
<th>Vertical Clearance (minimum)</th>
<th>Minimum Turning Radii</th>
<th>Figure #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cottage Industries Adult family home- (4)</td>
<td>≤40</td>
<td>20'</td>
<td>18' driving surface (11)</td>
<td>&lt;12</td>
<td>CSTC (3)</td>
<td>13.5'</td>
<td>Inside 20' Outside 45'</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥12 to &lt;15</td>
<td>Paved (4)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>≥15 to ≥19</td>
<td>Paved (4,6)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Multi-family 3 or more units including townhomes, Commercial Use, Facilities, Mobile Home Park, Condominium Piers and public docks (9)</td>
<td>≤40</td>
<td>24' (7,8)</td>
<td>22'</td>
<td>&lt;15</td>
<td>Paved (4)</td>
<td>13.5'</td>
<td>Inside 20' Outside 45'</td>
<td>2,6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>≥15 to ≤19</td>
<td>Paved (4,6)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposed Development</td>
<td>ADT (2)</td>
<td>Width (minimum driving surface)</td>
<td>Width (minimum driving surface with sprinklers) (6)</td>
<td>Grade %</td>
<td>Surface</td>
<td>Vertical Clearance (minimum)</td>
<td>Minimum Turning Radii</td>
<td>Figure #</td>
</tr>
<tr>
<td>------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Non-residential pools, Non-residential picnic shelters, playsheds, and similar</td>
<td>N/A</td>
<td>5' medical response access</td>
<td>5' medical response access</td>
<td>≤12</td>
<td>Paved</td>
<td>13.5'</td>
<td>Inside: N/A, Outside: N/A</td>
<td></td>
</tr>
<tr>
<td>recreational structures intended for public use open on at least 3 sides and 2,500</td>
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<tr>
<td>square feet or less</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Notes:
(1) EV access driveway standards are applicable within and on a single lot, and not located within ingress/egress easements. See PCC 17B.10.040 for additional information on applicability of Construction and Infrastructure Regulations.
(2) Average Daily Trips by vehicle – typical development column shall supercede ADT for determination of applicable standards.
(3) Crushed surfacing top course gravel.
(4) Surface shall be either Portland Cement Concrete (PCC), Hot Mix Asphalt (HMA), or pervious pavement per the Pierce County Stormwater Manual. Grasscrete is not allowed.
(5) The cleared area must be maintained on each side of the minimum driving surface, be at the same grade, and be free of obstructions such as trees or large boulders. See Figure 17C.60.150-3.
(6) These structure(s) must have an approved National Fire Protection Association (NFPA) fire sprinkler system installed.
(7) One way EV access shall be a minimum of 16' when sprinklered, 20' without sprinklers. One-way EV access shall be signed and striped as "Fire Lane – No Parking".
(8) In order to accommodate ladder trucks, multi-family and commercial structures three stories and greater or over 30' in height shall have access roads in accordance with International Fire Code Appendix D105.
(9) For buildings more than 50' deep, PCC 17C.60.150 E.9. also applies.
(10) Adult family homes shall have a medical response access that is a minimum of 5’ wide and paved from the front door to the property access or road.
(11) Does not apply to structures built in the IRC which are 5,000 square feet or greater.
(12) Grade exceeding 19 percent shall meet the requirements of PCC 17C.60.150 E.5.
FIGURE 17C.60.150-1 – Applicability of Titles 17B and 17C PCC

Applicability of Pierce County Codes
Titles 17B and 17C

Building/facility
L2
L1
Fire Truck

EV Access, within and on the subject property, regulated by Title 17C.

The Emergency Vehicle Access (EVA) shall extend to within 150* feet of all portions of the exterior of the building measured by an approved route around the exterior of the building or structure.

If either L1 or L2 is longer than 150* feet, EVA per Title 17C is required on the property.

The fire truck must be able to drive to a location where a 150* foot long hose can be stretched around the entire outside of the structure or facility.

Private road or shared Access Facility, located in an easement, regulated by Title 17B.

Lot 1
Garage

Lot 2

Lot 3

Lot 4

County Road

* For a sprinklered building this distance may be increased to 200 feet.
FIGURE 17C.60.150-1 – Applicability of Titles 17B and 17C PCC

Applicability of Pierce County Codes
Titles 17B and 17C

The Emergency Vehicle Access (EVA) shall extend to within 150 feet of all portions of the exterior of the building measured by an approved route around the exterior of the building or structure.

If either L1 or L2 is longer than 150 feet, EVA per Title C is required on the property.

The fire truck must be able to drive to a location where a 150 foot long hose can be stretched around the entire outside of the structure of facility.

Serving lot 1
EV Access within and on the subject property, regulated by Title 17C.

L1

Fire Truck

Lot 2

Serving lot 3
EV Access within and on the subject property, regulated by Title 17C.

Lot 3

Serving lot 1
Private road or shared access facility, located in an easement, regulated by Title 17B.

Lot 4

County Road

Applicability of Pierce County Codes
Titles 17B and 17C

DRAWN BY: KC APPROVED BY: WW DATE: November 2, 2020 FIGURE 17C.60.150-1
FIGURE 17C.60.150-5 – EV Access Turnaround Options

1) Turnaround surfacing and construction per Table 17C.60.150-1 and Figure 17C.60.150-2.
2) Minimum width per Table 17C.60.150-1.
3) Options 1, 2, and 4 for Residential and Commercial with an approved NFPA sprinkler system installed.
4) Turnaround shall be located a minimum of 30' from the structure.

Ev Access Turnaround Options

Drawn By: LR
Approved By: WW
Date: November 2, 2020
Figure 17C.60.150-5
FIGURE 17C.60.150-6—Aerial Apparatus Access Roads (AAAR)

AAAR standards are applicable for structures that are 3 stories or greater, or exceed 30' in height. See International Fire Code Appendix D105.

Overhead utility and power lines shall not be located over the Aerial Apparatus Access Road or between the road and the building.

Country Road or standard Private Road

Pierce County
Fire Prevention Bureau

Aerial Apparatus Access Roads (AAAR)

DRAWN BY: KC  APPROVED BY: WW  DATE: JULY 28, 2015  FIGURE 17C.60.150-6
FIGURE 17C.60.150-6 – Aerial Apparatus Access Roads (AAAR)

*AAAR shall be located on the front door or long side of the building and be not less than 25% of the building perimeter; except group I occupancies shall be not less than 50% of the building perimeter.

*AAAR, when not continuous, shall be approved by the Fire District.

AAAR standards are applicable for structures that are three stories or greater or exceed 30' in height. See International Fire Code Appendix

There shall be no carports, wires, or obstructions, or plantings over 6 feet in height between the building and the aerial apparatus access road.
17C.60.160 Fire Flow Requirements.

Sections 507.3 and 507.5.1 of the International Fire Code are deleted in their entirety and replaced with the following:

A. **Scope.** This Section addresses fire flow requirements for all buildings, portions of buildings, alterations to buildings, substantial alterations to all buildings, and facilities hereafter constructed. The requirements of this Section shall supersede any conditions, notes, or requirements on any plat when the Fire Marshal finds it creates a serious threat to the public health, safety, or welfare. Nothing in this Section shall be deemed to reduce, replace or waive any water system requirements in PCC 17C.60.165 or any other Pierce County Code.

B. **Fire Flow Standards.**

1. Water mains supplying fire flow shall maintain a minimum residual pressure of not less than 20 pounds per square inch (PSI) automatically.
2. A Certificate of Water Availability and water system vicinity map that is signed by the water purveyor shall be submitted at the time of building permit application—unless waived by the Building Official or Fire Marshal.
3. The fire-flow calculation area shall be the total floor area of all floor levels within the exterior walls and under the horizontal projections of the roof of a building with consideration to the following:
   a. Buildings with Type IA and IB construction shall use the area of the three largest successive floors.
   b. Open parking garages shall be determined by the area of the largest floor.
   c. Any building constructed in the IRC located within 10 feet of another building on the same lot shall be considered as one fire flow calculation area unless separated by a fire wall without openings.
   d. Any building constructed in the IBC located within 20 feet of another building on the same lot shall be considered as one fire flow calculation area unless separated by a fire wall without openings.
   e. Each portion of a building separated by one or more fire walls without openings, constructed in accordance with the International Building Code, are considered as separate fire flow calculation areas.
   f. Fire walls are not permitted to reduce the fire flow calculation area within dwellings.

C. **Fire Flow Requirements for Facilities.** Facilities shall be provided with a minimum of 1,500 GPM for two hours. The requirement may be modified by the Fire Marshal per the International Fire Code, Appendix B.103.

D. **Fire Flow Requirements for Buildings.** Prior to the issuance of a building permit for any building, portion of a building, alteration to a building, or substantial alteration thereto, fire flow shall be provided in the amount required by this Section. Fire flow shall be automatically available and supplied at a residual pressure of not less than 20 PSI.

1. **Residential Buildings.**
   a. Dwellings and Accessory Structures with Habitable Space. The fire flow requirements for dwellings and accessory structures with habitable space shall be as follows:
      (1) Fire flow calculation area of less than 3,600 square feet shall be 750 GPM for 45 minutes;
(2) Fire flow calculation area of 3,600 square feet or more shall be 1,000 GPM for one hour.

(3) When the non-habitable portion exceeds 3,600 square feet, PCC 17C.60.160 D.1.c. applies.

(4) Fire flow calculation area of 5,000 square feet or more shall be in accordance with Table 17C.60-6.

(5) Structures with a fire flow calculation area of 5,000 square feet or greater shall be located a minimum of 20 feet from other buildings on the same property.

(6) For replacement of manufactured and mobile homes in a park, fire flow is not required if all of the following are met:
   (a) It is a like for like replacement (i.e., double wide for double wide) including existing approved structures;
   (b) The home has a Class A or B roof; and
   (c) There shall be a minimum of six 6-foot clearance between the home and any adjacent home including accessory structures within 6 feet of the home and any structure on an adjacent space.

b. Accessory structures less than 3,600 square feet of non-habitable space.
   (1) The fire flow requirements for accessory structures less than 3,600 square feet shall be 750 GPM for 45 minutes.
   (2) Exceptions to fire flow requirements:
      (a) Buildings set back from all side and rear property lines of at least 20 feet and a minimum of 30 feet from other buildings on the same lot.
      (b) Additions to legally established buildings which were constructed prior to January 1, 2017, and are a minimum of 20 feet from side and rear property lines and 10 feet from any other buildings.

c. Accessory structures 3,600 square feet or greater of non-habitable space.
   (1) The fire flow requirements for accessory structures with a fire flow calculation area of 3,600 square feet or more shall be per Table 17C.60-3.
   (2) When fire walls without openings are constructed in accordance with Chapter 7 IBC fire wall provisions area separation to reduce the size of the fire flow calculation area to less than 3,600 square feet, the fire flow requirement shall be 750 GPM for 45 minutes.

d. Agricultural Buildings.
   (1) The fire flow requirements for agricultural buildings (Group U) shall be 750 GPM for 45 minutes;
   (2) Exception to fire flow requirements:
      (a) The structure is set back from the side and rear lot lines of at least 30 feet and is at least 30 feet from other buildings on the same lot; and
      (b) The structure does not house permanently stationed employees.

e. Adult Family Homes.
   (1) The fire flow requirements for adult family homes going through a State licensing process or adding any square footage shall be 1,500 GPM for 120 minutes.
   (2) Exception to fire flow requirements:
      (a) An NFPA 13D fire sprinkler system is installed in the structure.
      (b) Ramps, window replacement, re-roof, and residing of adult family homes.
(c) An existing, licensed adult family home that is altering (adding, replacing, remodeling) less than 25 percent of the existing square footage.


(1) When setbacks are 5 feet from a foundation to an interior property line and the cumulative distance between two home foundations is not greater than 10 feet, the following limitations apply to second and third story egress/ rescue windows and intervening fences:

(a) Fences will not be allowed between homes where they would front an egress/rescue window facing the side yard. This does not apply if the same room has an egress/rescue window to the front or rear of the home.

(b) Fences will be allowed if they start 3 feet past the proposed bedroom egress/rescue window.

(c) These fencing limitations do not apply to a side yard that is adjacent to a tract or other property that is not proposed to have a structure (i.e., park, storm, open space tracts).

(d) All developments proposing homes with sole side yard egress/access windows for rooms will have their CC&Rs reflect these limitations on fencing.

(e) Modifications from this requirement may be allowed where a NFPA 13D fire sprinkler system is installed in each home adjacent to the fence.

(2) The following are required when an interior setback distance is less than 5 feet as measured from the concrete foundation wall to the property line. In addition to the above conditions, the following shall apply:

(a) Side yard walls shall have a fire resistive rating of a minimum of a one-hour fire rating meeting all the requirements of IRC Table R302.1(1) and Table R302.1(2);

(b) Sprinkler systems that, at a minimum, meet NFPA 13D or 13R specifications;

(c) Roof shall be fire resistive materials of Class A, B, or better rating. Wood or shake shingles are not allowed; and

(d) The only allowable appurtenances into the setback requirement are:
   1. Eaves are not more than 12 inches.
   2. Gas Fireplaces do not to exceed 2 feet. This shall include direct vents and gas piping when it is black iron or copper.
   3. Propane tanks are not allowed in the setback.

2. Buildings Constructed in the International Building Code and all Townhomes and Accessory Structures 3,600 Square Feet or Greater. The fire flow and duration requirements shall be as specified in Table 17C.60-3. Reductions to the required fire flow are permitted for an approved fire sprinkler system as follows:

a. Sprinkler Reductions.

(1) Installation of an NFPA 13 fire sprinkler system reduces the fire flow requirement by 75 percent, except for H occupancies which are reduced by 50 percent.

(2) Installation of an NFPA 13R fire sprinkler system reduces the fire flow requirement by 50 percent.
(3) Installation of an NFPA 13D fire sprinkler system reduces the fire flow requirement by 25 percent.

b. R occupancies – three or more dwelling units and townhomes:
   (1) Attics shall be provided with not less than one-hour draft stops that follow the party wall line unless fire sprinklered per NFPA. When IBC identifies a higher rating for draft stops, IBC shall be followed.
   (2) Landscaping in tracts or common space that can be controlled by the builder/developer shall be designed so that it does not allow for fire spread. All new developments will have their CC&Rs reflect this same requirement and maintenance.

3. Buildings with less than 3,600 square feet may be constructed without fire flow applying the following provisions to the entire structure:
   a. NFPA 72 monitored fire alarm;
   b. Thirty-foot minimum setbacks to all property lines and buildings on the same property; and
   c. Located within a Fire District.

E. Exceptions to Fire Flow.
   The following exceptions apply to fire flow requirements for new buildings or substantial alterations thereto:
   1. Fire protection credits as described in Tables 17C.60-5 or 17C.60-6 may be used in lieu of providing fire flow on lots which are one gross acre or more.
   2. For lots less than 1 acre in size, fire protection credits as described in Table 17C.60-5 may be used in lieu of providing fire flow if a water main capable of providing at least 750 GPM of fire flow is not available. If the above fire flow can be provided by the addition of a hydrant, the hydrant shall be installed when the cost does not exceed the cost of the credits in Table 17C.60-5 or a NFPA 13D fire sprinkler system may be installed if it is not used for compliance with another code Section.
      a. When the lot is served by a private or individual well and Pierce County GIS data indicates the lot is outside a water service boundary, fire protection credits as described in Table 17C.60-5 or 17C.60-6 may be used in lieu of providing fire flow.
   3. When at least 750 GPM for a duration of 30-45 minutes is available from an approved fire hydrant, it shall be credited toward the required fire flow. The additional fire flow requirement may be provided by using fire protection credits as described in Table 17C.60-5 in lieu of providing additional fire flow. Each credit shall be worth 15 minutes or 250 GPM.

F. Exemptions from Fire Flow Requirements:
   1. Commercial buildings that are 600 square feet or less, located a minimum of 10 feet from property lines and 20 feet from structures, and not classified as Occupancy Group R, H, or I, and/or equipment structures and storage buildings, dugouts for athletic fields, and gazebos.
   2. Storage structures that are used for the sole purpose of storing mineral products such as salt, sand, and/or rock, for road maintenance, or similar purposes that meet all of the following criteria:
      a. Parking of motor vehicles in the storage shed shall be prohibited.
      b. The storage of flammable or combustible materials in the storage shed shall be prohibited.
c. The roof covering shall be of Class A or B fire resistant roofing material or meet NFPA 701.

3. Play sheds associated with schools and/or churches that meet all of the following criteria:
   a. Do not require an automatic sprinkler system based on International Building Code requirements.
   b. Open-sided, floor to ceiling, along at least 65 percent of the exterior of the structure.
   c. There shall be no restrictions to egress, i.e., benches, rails, partial walls, etc.
   d. There shall be no interior walls or partitions within the roof line.
   e. The roof covering shall be of Class A or B fire resistant roofing material.

4. Picnic shelters that are 2,500 square feet or less and meet all of the following criteria:
   a. Do not require an automatic sprinkler system based on International Building Code requirements.
   b. All cooking within the picnic shelter shall be done within approved devices provided for that purpose.
   c. There shall be no open burning within a picnic shelter except within an approved appliance or fireplace provided for that purpose.
   d. There shall be a minimum of one exit on each side of the picnic shelter.
   e. The roof covering shall be of Class A or B fire resistant roofing material.

5. Vehicle covers/carports not greater than 1,000 square feet and meet all of the following criteria:
   a. No persons shall be allowed to reside in an RV stored under a vehicle cover.
   b. The vehicle cover shall be associated with a residential use.
   c. The vehicle cover shall be located a minimum of 3 feet from property lines.
   d. The vehicle cover shall be 50 percent open.

6. Commercial buildings less than 3,600 square feet that meet all of the following criteria:
   a. The fire area building is less than 3,600 square feet.
   b. The property is located in a rural zone.
   c. A NFPA 72 monitored fire alarm is installed in the building.
   d. Thirty-foot minimum setbacks to all property lines and buildings on the same property.
   e. Located within a Fire District.
   f. Not classified as an E, A, H, I, or R occupancy.

G. **Hydrants.** These standards shall apply to all new hydrant installations and when existing hydrants are replaced.

1. The location of hydrants shall be determined by the Fire Marshal, guided by the following:
   a. The average spacing between fire hydrants for construction using the IBC and all townhomes shall not exceed that listed on Table 17C.60-4. Regardless of the average hydrant spacing, no portion of a building shall be farther from a hydrant than that distance listed in the last (far right) column of Table 17C.60-4. Distances shall be measured along approved EV Accesses and adjacent public and private roads and shared access facilities.
b. For residential buildings, the distance from the center point of lot frontage to a hydrant shall not exceed 350 feet, except as provided for in G.1.c. below.

c. Hydrants are not required on dead-end streets or shared access facilities not exceeding 600 feet in length and serving only residential buildings if there is an approved hydrant at the intersection.

d. Hydrants shall be provided along approved EV Accesses and adjacent public and private roads and shared access facilities. When practical, hydrants shall be located at street intersections. See Table 17C.60-4.

e. All new and existing approved public hydrants shall be considered available if accessible to the fire department by public or private roads, or shared access facilities, or approved on-site EV Accesses.

2. Exceptions to Hydrant Requirements. When hydrants cannot be installed in conformance with these standards due to topography, non-negotiable grades, or other similar conditions, the Fire Marshal may confer with the local Fire Chief, and may allow exceptions to these standards by requiring additional fire protection as specified in the most current edition of the International Fire Code adopted by the County.

3. Hydrant Valve Openings. Standard hydrants shall have not less than 5-inch main valve openings (MVO) with two 2½ inch National Hose (N.H.) outlet ports and one 4½ inch N.H. outlet port. All 4½ inch outlet ports shall have 5-inch storz fittings. Hydrants shall meet current American Water Works Association (A.W.W.A.) Standards.

4. System Design for Automatic Operation. Water distribution systems supplying water for fire flow to fire hydrants shall be designed to maintain the designed and/or required water volume automatically.

| TABLE 17C.60-3. Required Fire Flow for All Buildings (1)-Constructed Using the International Building Code, All Townhomes-(2), and Accessory Structures |
|-------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| DURATION (HOURS) | REQUIRED FIRE FLOW (GPM) | IA and IB | IIA and IIIB | IV-H.T. VA | IIB | VB |
| | | WHEN TOTAL FIRE-FLOW CALCULATION AREA IN SQUARE FEET IS EQUAL TO OR LESS THAN THESE VALUES |
| 2 | 1,500 | 500 | 500 | 500 | 500 | 500 |
| 2 | 1,500 | 5,500 | 3,700 | 2,600 | 2,100 | 1,600 |
| 2 | 1,500 | 11,100 | 6,800 | 4,700 | 3,500 | 2,400 |
| 2 | 1,500 | 15,900 | 9,300 | 6,200 | 4,500 | 2,900 |
| 2 | 1,500 | 22,700 | 12,700 | 8,200 | 5,900 | 3,600 |
| 2 | 1,750 | 30,200 | 17,000 | 10,900 | 7,900 | 4,800 |
| 2 | 2,000 | 38,700 | 21,800 | 12,900 | 9,800 | 6,200 |
| 2 | 2,250 | 48,300 | 24,200 | 17,400 | 12,600 | 7,700 |
| 2 | 2,500 | 59,000 | 33,200 | 21,300 | 15,400 | 9,400 |
| 2 | 2,750 | 70,900 | 39,700 | 25,500 | 18,400 | 11,300 |
### TABLE 17C.60-3. Required Fire Flow for All Buildings (1)-Constructed Using the International Building Code, All Townhomes-(2), and Accessory Structures

<table>
<thead>
<tr>
<th>DURATION (HOURS)</th>
<th>REQUIRED FIRE FLOW (GPM)</th>
<th>IA and IB</th>
<th>IIA and IIIA</th>
<th>IV-H.T. VA</th>
<th>IIB IIIIB</th>
<th>VB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WHEN TOTAL FIRE-FLOW CALCULATION AREA IN SQUARE FEET IS EQUAL TO OR LESS THAN THESE VALUES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>3,000</td>
<td>83,700</td>
<td>47,100</td>
<td>30,100</td>
<td>21,800</td>
<td>3,400</td>
</tr>
<tr>
<td></td>
<td>3,250</td>
<td>97,700</td>
<td>54,900</td>
<td>35,200</td>
<td>25,900</td>
<td>15,600</td>
</tr>
<tr>
<td></td>
<td>3,500</td>
<td>112,700</td>
<td>63,400</td>
<td>40,600</td>
<td>29,300</td>
<td>18,000</td>
</tr>
<tr>
<td>3</td>
<td>3,750</td>
<td>128,700</td>
<td>72,400</td>
<td>46,400</td>
<td>33,500</td>
<td>20,600</td>
</tr>
<tr>
<td>4</td>
<td>4,000</td>
<td>145,900</td>
<td>82,100</td>
<td>52,500</td>
<td>37,900</td>
<td>23,300</td>
</tr>
<tr>
<td>4</td>
<td>4,250</td>
<td>164,200</td>
<td>92,400</td>
<td>59,100</td>
<td>42,700</td>
<td>26,300</td>
</tr>
<tr>
<td>4</td>
<td>4,500</td>
<td>184,400</td>
<td>103,100</td>
<td>66,000</td>
<td>47,700</td>
<td>29,300</td>
</tr>
<tr>
<td>4</td>
<td>4,750</td>
<td>203,700</td>
<td>114,600</td>
<td>73,300</td>
<td>53,000</td>
<td>32,600</td>
</tr>
<tr>
<td>4</td>
<td>5,000</td>
<td>225,200</td>
<td>126,700</td>
<td>81,100</td>
<td>58,600</td>
<td>36,000</td>
</tr>
<tr>
<td>4</td>
<td>5,250</td>
<td>247,700</td>
<td>139,400</td>
<td>89,200</td>
<td>65,400</td>
<td>39,600</td>
</tr>
<tr>
<td>4</td>
<td>5,500</td>
<td>271,200</td>
<td>152,600</td>
<td>97,700</td>
<td>70,600</td>
<td>43,400</td>
</tr>
<tr>
<td>4</td>
<td>5,750</td>
<td>295,900</td>
<td>166,500</td>
<td>106,500</td>
<td>77,000</td>
<td>47,400</td>
</tr>
<tr>
<td>4</td>
<td>6,000</td>
<td>GREATER</td>
<td>GREATER</td>
<td>115,800</td>
<td>83,700</td>
<td>51,500</td>
</tr>
<tr>
<td>4</td>
<td>6,250</td>
<td>GREATER</td>
<td>GREATER</td>
<td>125,500</td>
<td>90,600</td>
<td>55,700</td>
</tr>
<tr>
<td>4</td>
<td>6,500</td>
<td>GREATER</td>
<td>GREATER</td>
<td>135,500</td>
<td>97,900</td>
<td>60,200</td>
</tr>
<tr>
<td>4</td>
<td>6,750</td>
<td>GREATER</td>
<td>GREATER</td>
<td>145,800</td>
<td>106,800</td>
<td>64,800</td>
</tr>
<tr>
<td>4</td>
<td>7,000</td>
<td>156,700</td>
<td>113,200</td>
<td>69,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7,250</td>
<td>167,900</td>
<td>121,300</td>
<td>74,600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7,500</td>
<td>179,400</td>
<td>129,600</td>
<td>79,800</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>7,750</td>
<td>191,400</td>
<td>138,300</td>
<td>85,100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>8,000</td>
<td>GREATER</td>
<td>GREATER</td>
<td>GREATER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) All buildings in Fire District 25 require an approved fire sprinkler system.

(2) All townhomes with three or more units require an approved fire sprinkler system.
## TABLE 17C.60-4
Number and Distribution of Hydrants

<table>
<thead>
<tr>
<th>Minimum Fire Flow Requirement (GPM)</th>
<th>Minimum # Of Hydrants</th>
<th>Average Spacing Between Hydrants (FT (1))</th>
<th>Maximum Distance From Hydrant to Any Portion of Building (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 – 1250</td>
<td>1</td>
<td>700</td>
<td>350</td>
</tr>
<tr>
<td>1500 – 1750</td>
<td>2</td>
<td>500</td>
<td>250</td>
</tr>
<tr>
<td>2000 – 2250</td>
<td>2</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>2500 – 2750</td>
<td>3</td>
<td>450</td>
<td>225</td>
</tr>
<tr>
<td>3000 – 3250</td>
<td>3</td>
<td>400</td>
<td>225</td>
</tr>
<tr>
<td>3500 – 4250</td>
<td>4</td>
<td>350</td>
<td>210</td>
</tr>
<tr>
<td>4500 – 5250</td>
<td>5</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>5500 – 5750</td>
<td>6</td>
<td>300</td>
<td>180</td>
</tr>
<tr>
<td>6000 – 6250</td>
<td>6</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>6500 – 7250</td>
<td>7</td>
<td>250</td>
<td>150</td>
</tr>
<tr>
<td>7500 or more</td>
<td>8 or more (2)</td>
<td>200</td>
<td>120</td>
</tr>
</tbody>
</table>

(1) Where streets are provided with median dividers or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall comply with Table 17C.60-8 on both sides of the street.

(2) One hydrant for each 1000 GPM or fraction thereof.
**TABLE 17C.60-5**  
*Residential Fire Protection Credits*

<table>
<thead>
<tr>
<th>Options to Reduce Fire Flow (1)</th>
<th>% of Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA* 13 D sprinkler system</td>
<td>100%</td>
</tr>
<tr>
<td>Building less than 2,000 sq. ft. or</td>
<td>45%</td>
</tr>
<tr>
<td>Building less than 3,600 sq. ft.</td>
<td>-25%</td>
</tr>
<tr>
<td>Building less than 3,600 sq. ft and minimum 50' setbacks to side and rear property lines</td>
<td>-5%</td>
</tr>
<tr>
<td>Accessory or Agricultural Structure Less than 3,600 sq. ft. without habitable space</td>
<td>-25%</td>
</tr>
<tr>
<td>Accessory or Agricultural Structure less than 3600 sq. ft. without walls</td>
<td>-35%</td>
</tr>
<tr>
<td>30' setback to sides and rear property lines or</td>
<td>-20%</td>
</tr>
<tr>
<td>20' setback to sides and rear property lines</td>
<td>-15%</td>
</tr>
<tr>
<td>1-Hr Construction (2)</td>
<td>-15%</td>
</tr>
<tr>
<td>Class A or B roof</td>
<td>-15%</td>
</tr>
<tr>
<td>100% Brick or Stone or Approved Fiber Cement Siding(3)</td>
<td>-20%</td>
</tr>
<tr>
<td>Kitchen Hood Suppression System or Kitchen Sprinkler Head</td>
<td>-25%</td>
</tr>
</tbody>
</table>

(1) Credits used for or with substantial alterations shall be applied to the entire structure.
(2) Consists of type X drywall throughout interior.
(3) At the discretion of the Fire Marshal.
### TABLE 17C.60-6
Residential Fire Protection Credits - Greater than 5,000 Square Feet

<table>
<thead>
<tr>
<th>Options to Reduce Fire Flow (1, 2, 3)</th>
<th>% of Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA 13 D sprinkler system (1)</td>
<td>-50%</td>
</tr>
<tr>
<td>Building less than 7,500 sq. ft. or 750 gpm/45 min</td>
<td>-25%</td>
</tr>
<tr>
<td>Building less than 10,000 sq. ft. or 1,000 gpm/60 min</td>
<td>-20%</td>
</tr>
<tr>
<td>Sprinkler Protection Provided in the Garage</td>
<td>-25%</td>
</tr>
<tr>
<td>Sprinkler Protection Provided in the Attic (can only be used if garage protection is also used.)</td>
<td>-25%</td>
</tr>
<tr>
<td>50' setback to sides and rear property lines or 50%</td>
<td>-25%</td>
</tr>
<tr>
<td>30' setback to sides and rear property lines</td>
<td>-20%</td>
</tr>
<tr>
<td>Existing Hydrant – Minimum 750 gpm/45 min</td>
<td>-25%</td>
</tr>
<tr>
<td>Existing Hydrant - Minimum 1,000 gpm/60 min</td>
<td>-50%</td>
</tr>
</tbody>
</table>

(1) Installation of the NFPA 13D fire sprinkler system is always required when using this Table.
(2) For lots less than an acre in size where a main capable of supplying 750 gpm/45 minutes is available, a hydrant is required in accordance with PCC 17C.60.160 G.1.b. or 17C.60.160 G.1.c.
(3) Structure shall be located a minimum of 20' from other buildings on the same property.

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### 17C.60.165 Minimum Standards for Fire Flows, Water Mains and Fire Hydrants.

A. The purpose of this Section is to establish minimum fire flow requirements for land development and for all new and expanding public water systems in Pierce County. These fire flow requirements shall better protect the residents, inhabitants, commercial developments, and industrial developments in Pierce County against the dangers of fire due to the inadequacy of water and the inadequacy of water pressure.

Nothing in this Chapter shall be deemed to reduce, replace, or waive any requirement set forth in PCC 17C.60.160.

B. General Applicability. The following shall be subject to the requirements of this Chapter:

1. Proposed subdivisions;
2. Proposed mobile home parks;
3. New water systems or new additions to existing systems;
4. Planned development districts;
5. Binding site plans;
6. Short subdivisions;
7. Large lot divisions;
8. Plat amendments; and
9. Plat alterations.

C. Fire Flow and Water System Requirements.

1. The following activities and systems are exempt from the fire flow and water system requirements set forth in subsection 2. below.
   a. Activities identified in subsection D. shall be subject to the requirements of D. only.
   b. New water systems or new additions to existing systems when all lots to be served by such new system or new addition are one gross acre or more in size and uses are limited to single family residential.
2. Except as provided in subsection 1. above, the following fire flow and water system requirements apply to those activities identified in subsections B.1. through 6.

   a. Minimum fire flow and hydrant spacing requirements. Tables 17C.60-7 and 17C.60-8 set forth minimum fire flow and hydrant spacing requirements. Actual fire flow and hydrant spacing requirements shall be determined in accordance with PCC 17C.60.160 when application is made for a building permit.

<table>
<thead>
<tr>
<th>Type of Development</th>
<th>Location/Area</th>
<th>Fire Flow Required (G.P.M.) (1, 2)</th>
<th>Minimum Duration (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One- and Two-Family</td>
<td>Urban and Rural</td>
<td>750</td>
<td>45</td>
</tr>
<tr>
<td>Multi-family</td>
<td>Urban</td>
<td>1,500</td>
<td>60-120</td>
</tr>
<tr>
<td>Multi-family</td>
<td>Rural</td>
<td>750</td>
<td>45</td>
</tr>
<tr>
<td>Commercial</td>
<td>Urban</td>
<td>1,500</td>
<td>60-120</td>
</tr>
<tr>
<td>Commercial</td>
<td>Rural</td>
<td>750</td>
<td>45</td>
</tr>
<tr>
<td>Industrial</td>
<td>Urban and Rural</td>
<td>2,000</td>
<td>120</td>
</tr>
</tbody>
</table>

(1) Water systems serving multiple properties shall provide a minimum of 1,500 GPM for 120 minutes.

(2) This table represents the minimums for compliance with land subdivision. Building and facility development on said land may require fire flow GPMs in the range of 1,500 to 3,500 GPM. Specific fire flow requirements for a building will be determined at time of application for building permits.

<table>
<thead>
<tr>
<th>Minimum Fire Flow Requirement (G.P.M.)</th>
<th>Average Spacing Between Hydrants (1, 2, 3) (FT.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>750</td>
<td>700</td>
</tr>
<tr>
<td>1,500</td>
<td>500</td>
</tr>
<tr>
<td>2,000</td>
<td>450</td>
</tr>
</tbody>
</table>

(1) Hydrants shall be provided along adjacent public and private roads. When practical, hydrants shall be located at street intersections.

(2) On dead-end streets and roadways not exceeding 600 feet in length and serving property designated to be used for one- or two-family dwellings there need not be hydrants located on said dead-end street or roadway if there is an approved hydrant at the intersection.

(3) Where streets are provided with median dividers or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall comply with Table 17C.60-8 on both sides of the street.
b. **Mains.** New or replaced water mains shall be a minimum of 8 inches in diameter for dead ends, and 6 inches for circulating mains, provided that for dead end cul-de-sacs, an 8-inch main need only extend to the last required fire hydrant and domestic mains may be installed thereafter to the remaining residences. Hydrant leads less than 50 feet may be 6 inches in diameter. A dead end main which extends across a street only for the purpose of serving a hydrant shall be of a size capable of providing the required fire flow, but it shall not be less than 6 inches in diameter. All mains shall have hydrants and/or tees and valves installed to conform with this regulation, except that no hydrants, tees or valves shall be required along transmission mains. Any service connection made to a transmission main shall require that a hydrant be installed. Any extension that is more than 350 feet shall require an 8-inch main or a 6-inch loop.

When existing water mains are replaced, new water mains shall be sized in compliance with this regulation, but there shall be no requirement to replace the entire system to meet minimum fire flow requirements.

c. **Hydrants.** This standard shall apply to all new hydrant installations and when existing hydrants are replaced on public water systems required to provide fire flow. Standard hydrants shall have not less than 5-inch main valve openings (MVO) with two 2½-inch National Hose (N.H.) outlet ports and one 4½-inch N.H. outlet port. All 2½-inch ports and the 4½-inch outlet ports shall have threads that correspond with and meet the approval of the affected fire department.

All new hydrants and replaced hydrants shall be provided with 5-inch storz fittings. Hydrants shall meet the current A.W.W.A. standards.

(1) **Hydrant Locations.** Hydrant locations shall be determined by the Fire Marshal, guided by the maximum spacing indicated by Table 17C.60-8.

(2) **Auxiliary gate valve.** There shall be an auxiliary gate valve installed to permit the repair and replacement of the hydrants without disruption of water service.

(3) **Setup.** Hydrants shall stand plumb and be set to the finished grade. The bottom of the lowest outlet of the hydrant shall be no less than 18 inches above the grade. There shall be 36 inches of clear area around the hydrant for operation of a hydrant wrench on the outlets and on the control valve. The pumper port shall face the street. Where the street cannot be clearly defined or recognized, the port shall face the most likely route of approach and the location of the fire truck while pumping, as determined by the Fire Marshal.

(4) **Accessibility.** Hydrants shall be accessible for fire department pumpers.

(5) **Plans.** The location of all water mains, fire hydrants, and valves to be installed shall be properly and accurately marked on identifiable plans or drawings. Plans or drawings shall be furnished to the Fire Marshal for review and approval.

(6) **Color Coding.** Color coding, when used, shall be in accordance with NFPA 291.

D. **Requirements for Large Lot Divisions, One Acre Short Subdivisions and One Acre Formal Subdivisions (Residential).**

1. **Prior to the approval of any large lot division, short subdivision where each lot is one gross acre or more, or formal subdivision where each lot is one gross acre or more,**
and limited to single-family residential use, the following statement shall be affixed on the face of the plat:

Fire flow and/or fire protection requirements shall be determined at the time of application for building permit.

2. Prior to preliminary plat or preliminary plan approval, the applicant shall submit to the Fire Marshal a Certificate of Water Availability and water system vicinity map from the water purveyor addressing its willingness and ability to satisfy the requirements of this regulation.
   a. If there is a water main capable of providing fire flow at any portion of the property street frontage on the access side(s) of the proposed development, a hydrant shall be provided at the entrance(s) to the development. In addition, if the development is to be served by public water, fire flow shall be provided in accordance with Table 17C.60-7, Table 17C.60-8, and PCC 17C.60.165 E.2. and E.3.

2. Prior to the approval of any large lot division, short subdivision where each lot is one gross acre or more, or formal subdivision where each lot is one gross acre or more and limited to single-family residential use, the following statement shall be affixed on the face of the plat:

Fire flow and/or fire protection requirements shall be determined at the time of application for building permit.

E. Procedures for Compliance. The following shall be required for those activities identified in PCC 17C.60.165 B.1. through 6. and D.2.a-b.:

1. Prior to preliminary plat or preliminary plan approval, the applicant shall submit to the Fire Marshal a Certificate of Water Availability and water system vicinity map from the water purveyor addressing its willingness and ability to satisfy the requirements of this Regulation. The Fire Marshal may extend this requirement to prior to final plat approval.

2. Prior to final plat, final short plat or final plan approval, the following shall be required:
   a. Water system plans and specifications which comply with these Regulations shall be designed and stamped by a registered professional engineer. Said plans shall be signed by the purveyor and shall be filed with the Fire Marshal.
   b. Water system plans shall be approved in writing by the Fire Marshal.
   c. The approved water system shall be installed prior to final plat, final short plat or final plan approval provided that this requirement can be waived if a bond or other security is posted and approved prior to said approval. Bonded improvements shall be constructed within two years of final plat or final plan approval. The form of security, if other than a bond, shall be approved by the Prosecuting Attorney's Office. The amount of the bond or security shall be determined by the contractor who shall install the system. The bond or other security shall be issued to Pierce County and shall be approved by the Fire Marshal.
   d. Electronic "as built" drawings, flow test results showing the amount of fire flow available at 20 P.S.I., and a Certificate of Water Availability signed for final by the water purveyor shall be filed with the Fire Marshal.
3. When the distribution system is installed, said installation shall be under the direction of a registered professional engineer who shall certify the construction of the system is in accordance with the approved design. In the event a bond is posted, installation of the system shall be completed and operable, in accordance with this Regulation, prior to occupancy or any other use of any structure.

F. **Purveyor Requirements.**
   1. All purveyors shall comply with the Pierce County Coordinated Water System Plan.
   2. Maintenance and testing of private water systems per NFPA 25 are the responsibility of the property owner. Required inspection and test records shall be provided to the Fire Marshal.

**17C.60.180 Automatic Sprinkler Systems for Group R Occupancies.**

Section 903.2.8.1 of the International Fire Code is deleted in its entirety and replaced as follows:

903.2.8.1 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area. Approved automatic sprinkler systems shall be installed in any structure containing three or more townhouse units.

**17C.60.185 Automatic Sprinkler Systems for Other Occupancies.**

A. **One- and Two-Family Dwellings.** Section R313.2 of the International Residential Code is adopted and modified as follows. An approved automatic fire sprinkler system shall be installed in one- and two-family dwellings that meet any of the following:
   1. Fire flow calculation area exceeding 5,000 square feet;
   2. Located on an unprotected parcel;
   3. Located in Fire District 25 or Fire District 26; or
   4. Any structure containing three or more townhouse units;
   5. Located on Raft Island, Herron Island, Harstine Island, Tanglewood Island, or Ketron Island; or
   6. Less than a 5-foot setback to a property line.

B. **Accessory Structures.** An approved automatic fire sprinkler system shall be installed in new accessory structures with a fire flow calculation area exceeding 5,000 square feet.

C. **Commercial.** An approved automatic fire sprinkler system shall be installed in new commercial buildings that meet any of the following:
   1. Located in Fire District 25 or Fire District 26; or
   2. Located on an unprotected parcel and not meeting one of the criteria found in PCC 17C.60.160 D.3F.4;
   3. Installation of fire sprinklers were a condition of a land use application; or
   4. Located on Raft Island, Herron Island, Harstine Island, Tanglewood Island, or Ketron Island.

D. **Special Provisions.**
   1. One-and Two-Family Dwellings with a fire flow calculation area of 5,000 square feet or more shall comply with Table 17C.60-6.
   2. Parcels with three dwelling units shall have an approved fire sprinkler system installed and meet 17C.60.160.
      a. Exception: Legally existing mobile home parks.
3. Parcels with four or more dwelling units shall have an approved fire sprinkler system installed and meet PCC 17C.60.160 D.1.a.
   a. Exception: Legally existing mobile home parks.

E. **Existing Buildings.** When a fire sprinkler system is required by PCC 17C.60.185 A.-D. or Table 17C.60.160-6, the following provisions apply to existing buildings.
   1. Effective January 1, 2017, a one-time alteration, including additional square footage, replacement square footage, and/or remodel square footage of up to 500 square feet, is allowed before sprinklers are required by PCC 17C.60.185 A. and PCC 17C.60.185 B. or Table 17C.60.160-6.

2. For a building that meets PCC 17C.60.185 A.-D. or Table 17C.60.160-6 and does not meet PCC 17C.60.185 E.1., sprinkler protection shall be required as follows:
   a. The kitchen(s) shall be provided with either a kitchen hood suppression system or a kitchen sprinkler head.
   b. If an addition is proposed, the addition shall be provided with sprinkler protection if it is not exempt from sprinkler protection under the applicable NFPA 13 standard. If the addition is exempt from sprinkler protection under the applicable NFPA 13 standard, a single head shall be provided at the transition between the addition and the existing.
   c. Any area being remodeled where sheetrock is being added/removed/relocated shall be provided with sprinkler protection.

3. Sprinkler systems required by PCC 17C.60.185 D.2. or PCC 17C.60.185 D.3. shall be required in the building that is being permitted. Installation of fire sprinkler systems in dwellings that are not in for a building permit are not required by this Section.

4. A substantial alteration requires installation of the approved fire sprinkler system in accordance with the applicable NFPA 13 standard.

17C.60.190  **Sprinkler Underground.**
A. **Fire Department Connections.** Fire Department Connections shall be installed in an approved location with the following considerations:
   1. Within 25 feet of a fire hydrant.
   2. On the same side of the emergency vehicle access as the hydrant.
   3. Not in a collapse zone.
   4. Locking caps required.
   5. Minimum of 50 ft from structure.
   6. Clustered when possible.

17C.60.195  **Emergency Responder Radio Coverage.**
A. **Emergency Responder Radio Coverage – New Buildings.** Emergency responder radio coverage requirements apply to new buildings where any of the following are met:
   1. Classified as an H or I occupancy;
   2. The fire area is 12,000 square feet or greater;
   3. There are more than two stories above grade plane;
   4. The building has a basement;
   5. The building is equipped with a photovoltaic system; or
   6. Radio coverage signal strength levels are not consistent with the minimum levels set forth in IFC Section 510.
Testing is required for items 1-4. Item 5 is assumed to be compliant in buildings that do not meet any of the 1-4 criteria unless the Fire Departments have reported a deficiency.

B. Emergency Responder Radio Coverage – Existing Buildings. When a building permit application is submitted in an existing multi-tenant building that requires testing, the building owner is responsible for contracting the testing and submitting the results prior to occupancy. Emergency responder radio coverage requirements apply to existing buildings where any of the following are met:

1. A building permit is submitted to Pierce County and any of the following are met:
   a. Classified as an H or I occupancy;
   b. The building is 12,000 square feet or greater;
   c. There are more than two stories above grade plane;
   d. The building has a basement;
   e. The building is equipped with a photovoltaic system; or
   f. Radio coverage signal strength levels are not consistent with the minimum levels set forth in IFC Section 510.

   Testing is required for items 1-4. Item 5 is assumed to be compliant in buildings that do not meet any of the 1-4 criteria unless the Fire Departments have reported a deficiency.

2. The local fire district has reported a deficiency.

17C.60.200 Fire Alarm Systems.

A. New fire alarm systems shall be addressable.

B. A fire alarm panel replacement shall be with an addressable panel and meet the installation requirements of the current International Fire Code for the occupancy served.

17C.60.205 Gates.

A. A gate serving a commercial facility or building is required to be an electric gate equipped with Opticom.

B. A gate serving five or more residential lots is required to be an electric gate equipped with Opticom.

C. When a manual gate is allowed it shall be equipped with a 1650 Knox box installed on the right side of the gate.

17C.60.210 Dry Standpipes.

When a dry standpipe is required for a residential structure, it shall be designed and installed in accordance with the following:

A. Hydraulically designed to provide a minimum of 750 gpm @ 250 psi.

B. The standpipe shall be designed by a Washington State Level 3 license holder or a PE.

C. In a location approved by Fire Prevention and the local fire district.

D. A 5" Storz Fire Department Connection on the supply side and a roof top connection (3 each 2 ½" gated with cap) on the discharge.

E. Locking caps required on the supply side.
17C.60.215 Planned Development Districts (PDDs).

The following criteria apply to Planned Development Districts:

A. When the PDD allows an interior setback distance that is less than 5 feet as measured from the concrete foundation wall to the property line, or less than 10 feet between buildings on the same property, all of the following shall apply:
   1. Buildings using the PDD reduced setback require installation of fire sprinkler systems.
   2. The exterior siding shall consist of brick, stone, or approved fiber cement siding.
   3. A second story rescue access that fronts on a public space shall be provided.
   4. Improvements within the side yards shall be limited:
      a. Eaves shall not exceed 12 inches.
      b. The necessary distance required to install a gas fireplace not to exceed 2 feet, this shall include direct vents and gas piping when it is black iron or copper.
      c. Propane tanks are not allowed in the 5-foot setback or between buildings.
      d. Fences and hedges are prohibited between buildings.

B. When the PDD proposes to use neighborhood street/access lanes/alleys or any deviations to Pierce County road standards that affect EV access the following are required:
   1. Installation of fire sprinkler systems in affected lots within the PDD.

C. When the PDD proposes multiple single-family detached dwelling units without property lines the following are required:
   1. Installation of fire sprinkler systems in all lots within the PDD.
   2. The exterior siding shall consist of brick, stone, or approved fiber cement siding.
   3. A second story rescue access that fronts on a public space shall be provided.
   4. Improvements within the side yards shall be limited:
      a. Eaves shall not exceed 12 inches.
      b. The necessary distance required to install a gas fireplace not to exceed 2 feet, this shall include direct vents and gas piping when it is black iron or copper.
      c. Propane tanks are not allowed in the 5-foot setback or between buildings.
      d. Fences and hedges are prohibited between buildings.

17C.60.220 Subdivision of Unprotected Parcels.

Subdivision of unprotected parcels is prohibited.

17C.60.222 Subdivision Plat Notes.

The following notes shall be on the face of the plat and in the CC&Rs:
A. "When setbacks are 5 feet from a foundation to an interior property line, and the cumulative distance between two home foundations is not greater than 10 feet, the following limitations apply to second and third story egress/rescue windows and intervening fences:
   1. Fences will not be allowed between homes where they would front an egress/rescue window facing the side yard. This does not apply if the same room has an egress/rescue window to the front or rear of the home.
   2. Fences will be allowed if they start 3 feet past the proposed bedroom egress/rescue window.
   3. These fencing limitations do not apply to a side yard that is adjacent to a tract or other property that is not proposed to have a structure (i.e., park, storm, open space tracts)."
4. Modifications from this requirement may be allowed where a NFPA 13D fire sprinkler system is installed in each home adjacent to the fence.

B. Prior to the approval of any large lot division, short subdivision where each lot is one gross acre or more, or formal subdivision where each lot is one gross acre or more and limited to single-family residential use, the following statement shall be affixed on the face of the plat:

"Fire flow and/or fire protection requirements shall be determined at the time of application for building permit."

C. For land use applications that create 9 or more dwelling units the following note is required:

"No parking shall be allowed in the fire lane." Approved signs as guided by IFC Appendix D103.6 or approved pavement striping shall be provided and maintained by the property owner to identify and prohibit the obstruction of fire department access.

D. Landscaping in tracts or common space that can be controlled by the builder/developer shall be designed so that it does not allow for fire spread. All new developments will have their CC&R's reflect this same requirement and maintenance.

17C.60.225  Road Signs.

All private roads must have private road name signs that meet the requirements outlined in this Title and the "Manual on Design Guidelines and Specifications for Road and Bridge Construction in Pierce County". All private roads shall be named and/or numbered in accordance with Chapter 10.44 PCC.
Chapter 17C.70

WASHINGTON STATE ENERGY CODES

17C.70.010 Adoption of Washington State Energy Code.

The edition of the Washington State Energy Code currently or hereafter adopted and amended by the State Building Code Council and included in Chapters 51-11C and 51-11R of the Washington Administrative Code (WAC) is adopted as the Energy Code for the unincorporated areas of Pierce County. The effective date of subsequent editions of the Washington State Energy Code in Pierce County shall coincide with the effective date of their adoption and amendment by the State Building Code Council.

17C.70.020 Violations.

WAC 51-11-C110 and WAC 51-11R-R110 are deleted. See Section PCC 17C.10.050, "Violation and Penalties."

17C.70.030 Means of Appeal.

WAC 51-11-C110 and WAC 51-11R-R110 are deleted. See PCC 17C.10.060, "Appeals."
Chapter 17C.75

INTERNATIONAL SWIMMING POOL AND SPA CODE

17C.75.010  International Swimming Pool and Spa Code Adopted.

FINDINGS OF FACT

The Pierce County Council finds that:

1. Pierce County has adopted uniform standards for building construction, fire prevention, and building maintenance. These regulations are found in Title 17C of the Pierce County Code (PCC).

2. The building, fire, and maintenance codes found in Title 17C PCC need to be periodically updated to ensure conformity with national and state standards.

3. Any jurisdiction may amend the State Building Code, provided the amendments do not reduce the minimum performance standards of the codes.

4. The Pierce County Sustainability 2030 plan promotes the transition to electric vehicles as a strategy for reducing transportation generated greenhouse gas emissions.

5. Providing electric vehicle charging readiness at the time of construction of new one- and two-family dwellings supports increased use of electric vehicles and is more cost effective than retrofitting a structure with electric vehicle charging capability after construction is complete.

6. The cost of providing an electric vehicle ready space in new one- and two-family construction is estimated to be $50 to $300 per space. Retrofitting an existing structure with electric vehicle charging readiness is estimated to be 200 to 800 percent more expensive than the cost of providing electric vehicle charging readiness at time of building construction.

7. The "International Residential Code" (Chapter 17C.30 PCC) is amended to require electric vehicle charging readiness for new one- and two-family dwellings.

8. Chapter 17C.60 PCC, International Fire Code, is amended to require additional fire protection features to prevent fire spread and decrease fire damage to single-family development where structures have a separation of less than 10 feet.

9. It is in the best interest of the citizens of Pierce County and necessary and appropriate to protect the health, safety, and welfare of the citizens to adopt these amendments.

10. The amendments are categorically exempt from SEPA as a nonproject action under RCW 43.21C.450(4), as these amendments are related to technical codes to ensure consistency with minimum standards contained in state law.
11. On June 7, 2021, the Pierce County Council Community Development Committee reviewed the proposed amendments to the Building and Fire Codes in a public hearing; and on June 7, 2021, the Pierce County Council Community Development Committee made final recommendations to the Pierce County Council in a public hearing.