



Building Permit Requirements

City of La Center, Building Division
419 E. Cedar Ave, Ste A201
Ph. 360.263.7665 FAX 360.263.7666
Inspection Line: 360.263.6702

To apply for a single family residential building permit you will need the following:

- 1 Completed Building Permit Application.
- 2 scale copies of the building plans, with dimensions, elevations, structural calculations if non-prescriptive, parking access and landscaping.
- 2 copies of a dimensioned site plan/vicinity map.
- 2 copies of a dimensioned site plan showing drainage and erosion control measures.
- 1 completed Erosion Control Information Form.
- 1 completed Sewer Connection Application.
- 1 Right of Way permit application

Prior to Issuance of a Building Permit:

1 receipt from Clark Public Utilities reflecting water connection for the address submitted on the application. Clark Public Utilities is located at 8600 NE 117th Ave., Vancouver WA. Telephone: 360-992-8022.

The **La Center School Impact Fee** is \$6991.00 for single family and \$2626.00 for Multi-family per unit. Fees are collected at Clark County Community Development which is located at 1300 Franklin Street, Vancouver, WA. Phone: 360-397-2375.

Fees Include:

- Building Permit Fee (includes mechanical, plumbing, energy code, erosion control, Right of Way)
- Plan Check Fee
- State of Washington Building Code Council Surcharge, \$4.50
- City of La Center Traffic and Park Impact Fees
- Sewer System Development Charge (SDC)

ALL PERMIT FEES ARE CHARGED PER THE LA CENTER MUNICIPAL CODE, AND THE ADOPTED CURRENT INTERNATIONAL BUILDING/RESIDENTIAL CODE, UNIFORM PLUMBING CODE, INTERNATIONAL MECHANICAL CODE, INTERNATIONAL FIRE CODE AND WASHINGTON STATE ENERGY CODE.

Electrical Permit

A State of Washington wiring permit must be obtained from the State Department of Labor and Industries for all electrical work. The local office is located at 312 Stonemill Drive, Suite 120, Vancouver, WA. Telephone 360-896-2360.

When submitting a new Building Permit Application, the applicant is to pay a Plan Check Deposit only

City of La Center Impact Fees Payable Prior to Issuance of Building Permit:

Sewer System Development charge	\$7800.00
Traffic Impact Fee	\$2838.10
Park Impact Fee	\$2042.00

Per the City of La Center Municipal Code, single family residential building permit applications are subject to a Type I process. All materials relating to the application must be submitted by the applicant in one packet.



City of La Center, Building Division
419 E. Cedar Ave, Ste A201
La Center, WA 98629
www.ci.lacenter.wa.us
Ph. 360.263.7665 Fax: 360.26.7666
Inspection Line: 360.263.6702
Building Official Direct Phone: 360.263.7664

Building Division Staff:

Building Official	David E. Johnson, P.E.
Construction Inspector	Jeromy Wirkus
Permit Technician	Naomi Hansen

All Contractors are required to obtain a City Business License prior to submittal. A City Business License can be obtained through City Hall, 214 E 4th Street, La Center, WA.

The Building Division handles:

- Commercial/Residential Building permits including remodels
- Mechanical permits
- Plumbing permits
- HVAC permits
- Sewer Connection permits
- Erosion Control permits
- Right-of-Way permits

All building permit fees are charged per the La Center Municipal Code, and Rules of the adopted current International Residential Building Code, Uniform Plumbing Code, International Mechanical Code, International Fire Code and Washington State Energy and Indoor Air Quality and Ventilation Codes.

Miscellaneous permits:

- Sign permits including banners
- Sign Marquee community event permits
- Special Event permits
- Fireworks permits



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**Building Permit Applications Are Accepted Between:
9 am - 3 pm Only
Monday through Friday**

After you have submitted your building permit application for plan check review you will need to complete the following steps prior to picking up your approved plans:

For New Construction

1. Take building permit application submittal receipt to Clark Public Utilities and obtain a Water Availability Letter for requested address.
2. Take building permit application submittal receipt to Clark County Community Development to pay your school impact fees.

For All Permits

3. Once plans have been approved, you have been notified by the building division, at that time, you will need to bring the above mentioned letter/receipt to the building division office and pay your remaining fees to the City of La Center.

Thank you,

City of La Center
Public Works Office
Building Division



Master Permit Application

City of La Center, Building Division
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Permit Number _____

Permit Type: New Remodel Mechanical Plumbing Other _____

Type of Project: Commercial Residential

Legal Property Owner: _____ Phone: _____

Address: _____

Applicant or Agent: _____ Phone: _____

(if different from Legal Property Owner)

Address: _____

Contractor's Name: _____ Phone: _____

Address: _____

WA State License # _____ La Center Business License # _____

Job Site Address: _____

Lot Size: _____ Total Building Sq. Ft: _____ Ratio: _____

Subdivision Name: _____ Lot # _____

Project Description:

Habitable _____ sq. ft. Unhabitable _____ sq. ft. Total sq. ft. _____

Submitted Project Valuation: \$ _____ Does the project involve asbestos? Yes No

Lender Name: _____ Phone: _____

Address: _____

** This permit becomes null and void if work or construction authorized is not commenced within 180 days from submittal, or if construction of work is suspended or abandoned for a period of 180 days at any time after work has commenced. I also understand that any request for a refund must comply with the City of La Center refund procedures. I hereby certify that I read and examined this application and know the same to be true and correct and agree to comply with City ordinances and state laws regulating the performance of construction. I certify that I am either the property owner or Washington State licensed contractor or an authorized agent applying for the permit under the explicit permission of the property owner.

Signature: _____ Date: _____

~~~~~CITY USE ONLY~~~~~

Occupancy Type: \_\_\_\_\_ Construction Type: \_\_\_\_\_

Deferral:  Yes  No Approval Date: \_\_\_\_\_ Staff Initials: \_\_\_\_\_ Permit Total: \_\_\_\_\_

Additional Comments: \_\_\_\_\_



# Erosion Control Permit Application

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Property Address: \_\_\_\_\_

Permit Number \_\_\_\_\_

General Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Applicant's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Owner's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Public Right of Way  Private Property

Site Runoff Drains To: Creek  Ditch  Catch Basin  Pipe

Excavation Contractor Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

24 Hour Emergency Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

## Erosion/Sedimentation Control (ESC) Measures

### Minimum ESC Requirements During Construction

- Sedimentation Facilities
- Stabilized Construction Entrance
- Perimeter Runoff Control
- Clearing and Grading Restrictions
- Cover Practices
- Construction Sequence
- Other: \_\_\_\_\_

### Minimum ESC Requirements After Construction

- Stabilized Exposure Surfaces
- Remove and Restore
- Temporary ESC Facilities
- Clean and Remove All Silt and Debris
- Ensure Operation of Permanent Facility
- Other: \_\_\_\_\_

Erosion Control Plan submittals shall be in compliance with all applicable City and State Erosion Control Guidelines. The required plan drawing must contain; construction notes, emergency contact numbers, installation schedule/staging, schedule for removal of EC measures and be reviewed and approved by the City.

I have read and will comply will all applicable Local and State regulations. I agree to construct, maintain and remove ESC measures as necessary to contain sediment on the construction site.

\_\_\_\_\_  
Owner Signature or Authorized Signer by Owner

\_\_\_\_\_  
Date

# Application to Perform Work on City Right-of-Way



City of La Center, Building Division

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La Center, WA 98629

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Inspection Line: 360.263.6702

Permit Number# \_\_\_\_\_

Job Site Address: \_\_\_\_\_

Describe Work (Required): \_\_\_\_\_

Legal Property Owner: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Contractor's Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

WA State License #: \_\_\_\_\_ La Center Business License #: \_\_\_\_\_

**Street Impacts**  Boring  Driveway Approach  Curb/Cut  Street Cut  Sidewalk  ADA Ramp  Traffic Control

Other ROW \_\_\_\_\_

**Water**  Connection/Lateral Pipe Size \_\_\_\_\_ Length \_\_\_\_\_  Main Line Pipe Size \_\_\_\_\_ Length \_\_\_\_\_

Fire Hydrant Pipe Size \_\_\_\_\_ Length \_\_\_\_\_ Meter  Domestic  Commercial Size \_\_\_\_\_

**Power, Cable, Telecommunication and Gas Utilities** Length of line installed or moved: \_\_\_\_\_

Number of poles or pedestals installed or moved: \_\_\_\_\_

**Storm Water**  Connection/Lateral Pipe Size \_\_\_\_\_ Length \_\_\_\_\_ Main Line  Pipe Size \_\_\_\_\_ Length \_\_\_\_\_

**Sanitary Sewer**  Connection/Lateral Pipe Size \_\_\_\_\_ Length \_\_\_\_\_ Main Line  Pipe Size \_\_\_\_\_ Length \_\_\_\_\_

Number of storm & sanitary manholes installed: \_\_\_\_\_

**Pavement Disturbance within ROW** New or altered road, curb or sidewalk (sq. feet): \_\_\_\_\_

Pavement Disturbance Fee \$40.00 ROW Permit Fee \$40.00

PLANS REQUIRED - The applicant shall submit two sets of plans with enough information, including Erosion Control Plan(s), to determine the scope of work. A performance bond covering all costs of the improvements may be required, as determined by the Public Works Director. All changes to the approved plans shall be re-submitted to the City of La Center for review and approval. A copy of the approved plans as well as the approved permit must be on the job site and available upon request by any City representative.

I have examined this application and certify that all information herein is true and correct. I further certify that all work performed will be in accordance with the City of La Center Ordinances, Public Works Standards and the laws of the State of Washington. I further agree to perform responsibly and in accordance with all OSHA rules and protect public and private property at all times.

I agree to indemnify and hold harmless the City of La Center, it's officers and employees against any and all loss, damage, cost, expense, including expenses of litigation and attorney fees sustained by them by reason of my actions in the construction and maintenance of facilities on, over or under the City of La Center rights-of-ways and easements. I understand that Systems Development Charges (SDC's) may be applicable and must be paid prior to the issuance of a permit and that SDC's are in addition to any other required permit fees.

Signature: \_\_\_\_\_ Date \_\_\_\_\_  Owner  Contractor

Working for which Utility: \_\_\_\_\_ Date Issued: \_\_\_\_\_ Total Fees \$ \_\_\_\_\_

Bond Required  Yes  No Surety Name \_\_\_\_\_ Phone \_\_\_\_\_

Supplemental Conditions and Requirements Attached

Public Works Approval: \_\_\_\_\_ Date: \_\_\_\_\_ Permit Expires: \_\_\_\_\_



# Sewer Permit Application

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Permit Number \_\_\_\_\_

## Property

Address and/or Tax ID Number: \_\_\_\_\_

## Applicant(s)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

## Property Owner(s)

Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

Signature(s) \_\_\_\_\_ Date: \_\_\_\_\_

## Proposed Use

\* Sewer Connection SDC fee of \$7800.00 per ERU must be collected upon approval.

\*\* Sewer billing begins the date of application approval.

\*\*\* Sewer one time connection inspection fee of \$65.00 residential/\$150.00 commercial.

This permit becomes null and void if work or construction authorized is not commenced within 180 days from submittal, or if construction work is suspended or abandoned for a period of 180 days at any time after work has commenced. I also understand that any request for a refund must comply with the City of La Center refund procedures. I hereby certify that I have read and examined this application and know the same to be true and correct and agree to comply with the City ordinances and State Laws regulating the performance of construction.

I certify that I am either the property owner or Washington State licensed contractor or an authorized agent applying for the permit under the explicit permission of the property owner.

Signature \_\_\_\_\_ Date: \_\_\_\_\_

Fees Paid: \_\_\_\_\_ Date: \_\_\_\_\_



## City of La Center Site Plan

### Instructions

1. Draw and dimension to scale on the form provided or other suitable format; indicate scale for example,  $\frac{1}{4}":1'$  (the scale on the form is 5 divisions per 1"). Note: A neat hand sketch may be all that is necessary if carefully prepared.
2. Indicate location of property lines and direction north.
3. Indicate slopes (1:2, etc) and direction of slope. Slopes must be indicated if greater than 4' of elevation change in 100'.
4. Show distances from proposed structure(s) to property lines, other buildings or features on your lot.
5. Show and describe easements for sewers and utilities.
6. Include features such as retaining walls, driveways, curb cuts, buried utilities, wetlands and waterways.
7. Show plan dimensions of the proposed structure's (foundation) foot print. Do not show the floor plan, just the perimeter. This is a two dimensional sketch only; do not show anything in the third dimension. Your site plan is like a map or diagram and not a "picture". No isometrics! This is not your building plans which are a separate required submittal.
8. The proposed site plan needs to convey certain essential information in its simplest terms. For most residential activities the site plan does not need to be prepared by a professional but does need to be complete enough to be evaluated for general conformance to city standards such as setbacks and other code requirements.
9. The site plan created may be also used as a template for submitting other plans such as erosion control, sanitary sewer or storm sewer.

**Vicinity Map Must Show:**

1. Location of Property.
2. Directional Arrow Indicating North.
3. Any Adjacent Property Addresses and Landmarks Near Subject Property.
4. Nearest Intersecting Roads.

A large grid area for drawing a vicinity map. The grid consists of 30 columns and 30 rows of small squares, providing a scale for the drawing.

# City of La Center Site Plan

Project \_\_\_\_\_

By \_\_\_\_\_ Date \_\_\_\_\_



## Construction Site Requirements

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### To All Builders/Contractors/Subcontractors/Suppliers:

Per requirements from the City of La Center Public Works Department, all construction is required to keep **ANY DEBRIS** from entering the street and storm drainage system. Because of this requirement, all builders/contractors/subs or suppliers are responsible for maintaining the construction site standards for La Center.

If any debris from your construction activities enters any street or storm drainage system, you need to remove it **immediately** and place it in the approved trash receptacle or remove it from the job site.

Any resulting enforcement costs such as fines, stop work orders, or Public Works staff time, incurred from cleaning up behind you will result in an appropriate back charge to you. Certificate of Occupancies will not be issued until all fines are paid. The City of La Center will be strictly enforcing these requirements. With this advanced notice, we do not anticipate problems with compliance.

We appreciate your help in addressing this concern. If you have any questions, please contact the La Center Public Works at 360.263.7665.

Thank you,

NOTE: Debris included but is not limited to:

**SOILS** tracked, eroded, or stored in the street

**GRAVEL** and sand

**CONSTRUCTION MATERIALS** (excluding lumber curb ramp for site access)

**CEMENT** from concrete work; concrete trucks cleaning out must be kept on job site

**PAINT** and Sheetrock mud/texturing materials must be kept on job site

**LANDSCAPING** materials and supplies

**Notice must be posted at job site for duration of project.**

## Washington State Energy Code Prescriptive Approach - Worksheet Instructions

For the Washington State Energy Code, the prescriptive approach is the simplest method of code compliance. However, depending on the prescriptive option and exceptions used, documentation of compliance can be quite complex.

This set of forms has been developed to assist permit applicants documenting compliance with the Washington State Energy Code, (2009 edition). **These forms are provided as a compliance tool but it is the decision of each individual jurisdiction if completion of them is a submittal requirement. These forms contain embedded formulas and links. They are intended to be completed using Excel® software.**

The following forms provide much of the required documentation for plan review. The details noted here must also be shown on the drawings (WSEC 104.2).

This form is not a substitute for the energy code itself. To obtain a copy of the energy code, go to the following web address. <http://www.energy.wsu.edu/code>

### Which worksheets do I need to complete?

There are three worksheets included in this set of forms.

*General Compliance Worksheet:*

*Glazing Schedule Worksheet:*

*Heating Sizing Worksheet:*

### Heating Sizing Worksheet:

The energy and residential code requires a heating and cooling sizing calculations for all projects. If you are using this set of worksheets to size the heating system, you will need to complete all the worksheets. **If a ACCA Manual J (or equivalent) heating and/or cooling system sizing calculation is submitted, the heating size worksheet does not need to be completed.** It is important to note that the codes also require a cooling system size calculation. This form will not provide the cooling calculation. It does not have the needed solar gains function. If a cooling system is included in the submission, perform a Manual J or equivalent calculation.

### Glazing Schedule Worksheet:

There are three reasons to complete the Glazing Schedule. **If none apply to your project, you do not need to complete the Glazing Schedule worksheet.** A glazing schedule is required to meet the following conditions.

1. *The Prescriptive option includes a glazing to floor area limit (WSEC 602.7.2)*
2. *Not all the windows, skylights or doors comply with the maximum U-factor requirement. Qualification will be demonstrated using an area weighted window, skylight or door U-factor (WSEC 602.7.2)*
3. *As part of the heating and cooling system sizing calculation (IRC M1401.3 & WSEC 503.2.2)*

### General Compliance worksheet:

The General Compliance worksheet documents the prescriptive option chosen to show compliance. It also provides a few checks on insulation compliance that need more detailed input. This worksheet is also used to document the reason for submission of the Glazing Worksheet.

If you are choosing a limited glazing area prescriptive option, completing the Glazing Schedule will be the first task.

### Completing the General Compliance Worksheet

**This is a simple fill in form.**

Fill in project information on this worksheet. It will be copied to the other worksheets.

Note what options will be chosen to show compliance.

Note the glazing documentation included.

**If you are using an unlimited glazing path, all windows and doors meet the maximum U-factor requirements and a Manual J (or approved alternative) heating system size calculation is submitted, this is the only form that needs to be completed.**

## Completing the Glazing Schedule Worksheet:

### Exterior Doors:

The exterior door section is for swinging doors only. Enter sliding doors in the vertical glazing section of the worksheet.

If a swinging door includes glazing, it may be entered in the vertical glazing schedule or in the exterior door schedule.

Obtain NFRC tested U-factors from the door manufacturer or use U-factors from WSEC Tables.

*Table 10-6A Default U-Factors for Vertical Glazing (use for doors with greater than 50% glazing.)*

*Table 10-6C Default U-factors for Doors (limited to doors with less than 50% glazing.)*

Area of windows, doors and skylights are measured using the rough opening area.

Glazing area in exterior doors is added to the total glazing area of the project as follows:

*If greater than 50%, 100% of the area is entered in the door glazing area.*

*If less than or equal to 50%, only the glazed area will be entered in the door glazing area.*

Exempt Door: One door, 24 feet or less is not included in the U-factor of glazing area calculations. You must calculate the door area to assure it is 24 square feet or less. This also enters the door heat loss into the heating system size calculation.

### Vertical and Horizontal Glazing:

Obtain NFRC tested U-factors from the glazing supplier. These will give the most accurate and likely the most favorable results. If you can't obtain this data, the tables in Chapter 10 of the WSEC must be used.

*For default U-factors for vertical glazing, refer to table 10-6A*

*If window manufacturer can legitimately be claimed as a "small business" (as defined in Chapter 2 of the WSEC), you may use table 10-6B for default U-factors. Note: the term "small business" refers to the glazing manufacturer, not the builder or building owner.*

*For default U-factors for overhead glazing, refer to table 10-6E*

*If doors are being entered into the vertical glazing table, refer to table 10-6C and 10-6D.*

### Garden Window Exception Schedule

The WSEC allows double glazed, unrated garden windows with a wood or vinyl frame to be exempt from the U-factor calculation under the following rules.

*The total area of this exemption is limited to 1 percent of the conditioned floor area up to a maximum*

*The area of the glazing must be multiplied by 3 and added to the total glazing area for the project.*

## Completing the Heating System Size Worksheet

This worksheet is used to calculate the design heat load of the structure. It also calculates the maximum heating system size required by code. This worksheet does not perform required cooling load calculations. Use Manual J or equivalent for cooling system size calculations.

Go to the Outdoor Design Temperature Worksheet Tab. Locate the outdoor design temperature for a location near the project site. You need to enter the design temperature on this worksheet.

Calculate and enter the volume of the interior space in the building (floor area x ceiling height).

Measure the dimensions of each exterior building assembly, wall, attic floor etc. Enter the area next to the R-value description that matches the construction. If a construction method is selected that is not represented here, select values from Chapter 10 of the WSEC and enter it in one of the blank spaces at the end of each components section.

Enter the correction factor for duct location. If the ducts are indoors, enter 1. If the ducts are in the crawl space, attic or garage, enter 1.15.





**Overhead Glazing**

| Plan ID | Component Description | Glazing Ref. | Glazing U |
|---------|-----------------------|--------------|-----------|
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |
|         |                       |              |           |

| Qt. | Width |      | Height |      |
|-----|-------|------|--------|------|
|     | Feet  | Inch | Feet   | Inch |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |

| Area | UA |
|------|----|
|      |    |
|      |    |
|      |    |
|      |    |
|      |    |
|      |    |
|      |    |
|      |    |
|      |    |

Sum of Area and UA  
 Area Weighted U = UA/Area

|  |  |
|--|--|
|  |  |
|  |  |

**Double Glazed Garden Windows Section 602.7.2 Exception**

| Plan ID | Component Description |
|---------|-----------------------|
|         |                       |
|         |                       |
|         |                       |
|         |                       |

| Qt. | Width |      | Height |      |
|-----|-------|------|--------|------|
|     | Feet  | Inch | Feet   | Inch |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |
|     |       |      |        |      |

| Area | UA |
|------|----|
|      |    |
|      |    |
|      |    |
|      |    |

Sum of Area  
 Sum of Area X 3 (This total is automatically included in the glazing area total.)  
 Glazing UA for Heating System Size Only = Area X 0.63

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |

# Simple Heating System Size: Climate Zone 1

Project Information

|  |
|--|
|  |
|  |
|  |

Contact Information

|  |
|--|
|  |
|  |
|  |

Indoor Design Temperature 70

Outdoor Design Temperature

Design Temperature Difference ( $\Delta T$ )

$\Delta T = \text{Indoor} - \text{Outdoor Design Temp}$  70

Conditioned Floor Area

Conditioned Volume

## Glazing

Copy Sum of UA from Glazing Schedule

| Attic                | U-Factor             | X | Area                 | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| R-49                 | 0.027                |   | <input type="text"/> |   | <input type="text"/> |
| R-38 Advanced        | 0.026                |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

## Single Rafter or Joist Vaulted Ceilings

|                      | U-Factor             | X | Area                 | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| R-38 Vented          | 0.027                |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

| Above Grade Walls    | U-Factor             | X | Area                 | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| R-21                 | 0.056                |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

| Floors               | U-Factor             | X | Area                 | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| R-30                 | 0.029                |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

| Below Grade Walls    | U-Factor             | X | Area                 | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| 2' Depth Walls       | 0.042                |   | <input type="text"/> |   | <input type="text"/> |
| 3.5' Depth Walls     | 0.041                |   | <input type="text"/> |   | <input type="text"/> |
| 7' Depth Walls       | 0.037                |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

| Slab Below Grade     | F-Factor             | X | Length               | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| 2' Depth             | 0.59                 |   | <input type="text"/> |   | <input type="text"/> |
| 3.5' Depth           | 0.64                 |   | <input type="text"/> |   | <input type="text"/> |
| 7' Depth             | 0.57                 |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

| Slab on Grade        | F-Factor             | X | Length               | = | UA                   |
|----------------------|----------------------|---|----------------------|---|----------------------|
| R-10 2' perimeter    | 0.54                 |   | <input type="text"/> |   | <input type="text"/> |
| R-10 Full - Heated   | 0.55                 |   | <input type="text"/> |   | <input type="text"/> |
| <input type="text"/> | <input type="text"/> |   | <input type="text"/> |   | <input type="text"/> |

Sum of UA

Envelope Heat Load  Btu / Hour

Sum of UA X  $\Delta T$

Air Leakage Heat Load  Btu / Hour

$((\text{Volume} \times 0.6) \times \Delta T) \times .018$

Building Design Heat Load  Btu / Hour

Air Leakage + Envelope Heat Loss

Building and Duct Heat Load  Btu / Hour

If ducts are located in unconditioned space: Sum of Building Heat Loss X 1.15

If ducts are located in conditioned space: Sum of Building Heat Loss X 1

Maximum Heat Equipment Output  Btu / Hour

150%

Building and Duct Heat Loss X 1.50

**TABLE 9-1**  
**ENERGY CREDITS (DEBITS)**

| <b><u>OPTION</u></b> | <b><u>DESCRIPTION</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b><u>CREDIT(S)</u></b> |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 1a                   | <b><u>HIGH EFFICIENCY HVAC EQUIPMENT 1:</u></b><br>Gas, propane or oil-fired furnace or boiler with minimum AFUE of 92%,<br><b>or</b><br>Air-source heat pump with minimum HSPF of 8.5.                                                                                                                                                                                                                                                                                   | <b>1</b>                |
| 1b                   | <b><u>HIGH EFFICIENCY HVAC EQUIPMENT 2:</u></b><br>Closed-loop ground source heat pump;<br>with a minimum COP of 3.3.                                                                                                                                                                                                                                                                                                                                                     | <b>2</b>                |
| 1c                   | <b><u>HIGH EFFICIENCY HVAC EQUIPMENT 3:</u></b><br><b><u>DUCTLESS SPLIT SYSTEM HEAT PUMPS, ZONAL CONTROL:</u></b><br>In home where the primary space heating system is zonal electric heating, a ductless heat pump system shall be installed and provide heating to at least one zone of the housing unit.                                                                                                                                                               | <b>1</b>                |
| 2                    | <b><u>HIGH EFFICIENCY HVAC DISTRIBUTION</u></b><br>All heating and cooling system components installed inside the conditioned space. All combustion equipment shall be direct vent or sealed combustion.<br>Locating system components in conditioned crawl spaces is not permitted under this option.<br>Electric resistance heat is not permitted under this option.<br>Direct combustion heating equipment with AFUE less than 80% is not permitted under this option. | <b>1</b>                |
| 3a                   | <b><u>EFFICIENT BUILDING ENVELOPE 1:</u></b><br>Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U = .28 floor R-38, slab on grade R-10 full, below grade slab R-10 full.<br><b>or</b><br>Component performance compliance: Reduce the Target UA from Table 5-1 by 5%, as determined using EQUATION 1.                                                                                                                  | <b>0.5</b>              |
| 3b                   | <b><u>EFFICIENT BUILDING ENVELOPE 2:</u></b><br>Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U = .25 and wall R-21 plus R-4 and R-38 floor, slab on grade R-10 full, below grade slab R-10 full, and R-21 plus R-5 below grade basement walls.<br><b>or</b><br>Component performance compliance: Reduce the Target UA from Table 5.1 by 15%, as determined using EQUATION 1.                                        | <b>1</b>                |
| 3c                   | <b><u>SUPER-EFFICIENT BUILDING ENVELOPE 3:</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                        |                         |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |            |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|    | <p>Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U = .22 and wall R-21 plus R-12 and R-38 floor, slab on grade R-10 full, below grade slab R-10 full and R-21 plus R-12 below grade basement walls and R-49 advanced ceiling and vault.</p> <p><b>or</b></p> <p>Component performance compliance: Reduce the Target UA from Table 5.1 by 30%, as determined using EQUATION 1.</p>                                                                                                                                             | <b>2</b>   |
| 4a | <p><b><u>AIR LEAKAGE CONTROL AND EFFICIENT</u></b><br/>Envelope leakage reduced to SLA of 0.00020 building<br/><b>and</b><br/>All whole house ventilation requirements as determined by Section M1508 of the Washington State Residential Code shall be met with a heat recovery ventilation system in accordance with Section M1508.7 of that Code.</p>                                                                                                                                                                                                                           | <b>0.5</b> |
| 4b | <p><b><u>ADDITIONAL AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION:</u></b><br/>Envelope leakage reduced to SLA of 0.00015 building<br/><b>and</b><br/>All whole house ventilation requirements as determined by</p>                                                                                                                                                                                                                                                                                                                                                                | <b>1</b>   |
| 5a | <p><b><u>EFFICIENT WATER HEATING:</u><sup>1</sup></b><br/>Water heating system shall include one of the following:<br/>Gas, propane or oil water heater with a minimum EF of 0.62.<br/><b>or</b><br/>Electric Water Heater with a minimum EF of .93.<br/><b>and for both cases</b><br/>All showerhead and kitchen sink faucets installed in the house shall meet be rated at 1.75 GPM or less. All other lavatory faucets shall be rated at 1.0 GPM or less.<sup>2</sup></p>                                                                                                       | <b>0.5</b> |
| 5b | <p><b><u>HIGH EFFICIENCY WATER HEATING:</u><sup>1</sup></b><br/>Water heating system shall include one of the following:<br/>Gas, propane or oil water heater with a minimum EF of 0.82.<br/><b>or</b><br/>Solar water heating supplementing a minimum standard water heater. Solar water heating will provide a rated minimum savings of 85 therms or 2000 kWh based on the Solar Rating and Certification Corporation (SRCC) Annual Performance of OG-300 Certified Solar Water Heating Systems.<br/><b>or</b><br/>Electric heat pump water heater with a minimum EF of 2.0.</p> | <b>1.5</b> |
| 6  | <p><b><u>SMALL DWELLING UNIT 1:</u><sup>1</sup></b><br/>Dwelling units less than 1500 square feet in floor area with less than 300 square feet of window + door area. Additions to existing building that are less than 750 square feet of heated floor area.</p>                                                                                                                                                                                                                                                                                                                  | <b>1</b>   |
| 7  | <p><b><u>LARGE DWELLING UNIT 1:</u><sup>1</sup></b><br/>Dwelling units exceeding 5000 square feet of floor area shall be assessed a deduction for purposes of complying with Section 901 of this Code.</p>                                                                                                                                                                                                                                                                                                                                                                         | <b>-1</b>  |

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 8 | <p><b><u>RENEWABLE ELECTRIC ENERGY:</u></b></p> <p>For each 1200 kWh of electrical generation provided annually by on-site wind or solar equipment a 0.5 credit shall be allowed, up to 3 credits. Generation shall be calculated as follows:</p> <p>For solar electric systems, the design shall be demonstrated to meet this requirement using the National Renewable Energy Laboratory calculator PVWATTS. Documentation noting solar access shall be included on the plans.</p> <p>For wind generation projects designs shall document annual power generation based on the following factors:<br/>The wind turbine power curve; average annual wind speed at the site; frequency distribution of the wind speed at the site and height of the tower.</p> | 0.5 |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|

Footnotes:

**1. Interior Duct Placement:** Ducts included as Option 2 of Table 9-1 shall be placed wholly within the heated envelope of the housing unit. The placement shall be inspected and certified to receive the credits associated with this option.

EXCEPTION:

Ducts complying with this section may have up to 5% of the total linear feet of ducts located in the exterior cavities or buffer spaces of the dwelling. If this exception is used the ducts will be tested to the following standards:

Post-construction test: Leakage to outdoors shall be less than or equal to 1 CFM per 100 ft<sup>2</sup> of conditioned floor area when tested at a pressure differential of 0.1 inches w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. All register boots shall be taped or otherwise sealed during the test.

**2. Plumbing Fixtures Flow Ratings.** Low flow plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following requirements:

**(a) Residential bathroom lavatory sink faucets:** Maximum flow rate - 3.8 L/min (1.0 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

**(b) Residential kitchen faucets:** Maximum flow rate - 6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1.

**(c) Residential showerheads:** Maximum flow rate - 6.6 L/min (1.75 gal/min) when tested in accordance with ASME A112.18.1/CSA B125.1



# Southwest Washington Chapter of ICC

**One- and Two-Family Dwellings - La Center, WA 98629**

## **Building Permit Application Checklist**

**Plans Examiner Approval:**

**Date:**

| Information Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Yes                      | No                       | N/A                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|-------------------------------------|
| <b>1. Land-use/zoning: Proposed use complies with zoning.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>2. Critical Areas:</b> Frequently flooded, geo-hazards, aquifer recharge areas; fish & wildlife, wetlands, if applicable. (N/A if not a critical area)                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>3. Verification of approved plat/lot.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>4. Fire Department/Fire Marshal.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>5. Septic system permit</b> or authorization for remodel. Existing system capacity:                                                                                                                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| <b>6. Sewer permit or proof of payment from utility.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>7. Water district approval or proof of payment from Clark Public Utilities.</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>8. Soils report.</b> Must carry original applicable stamp and signature on file or with application.                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>9. Erosion control</b> permit required. Submit e/c plan and application.                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>10. Submit two (2) sets of site plans drawn to scale.</b> Must show lot , building & setback dimensions; property corner elevations (if there is more than a 4-ft. elevation differential, plan must show contour lines at 2-ft. intervals); location of easements and driveway; footprint of structure (including decks and porches); location of utilities; direction indicator; lot area; building coverage area; percentage of coverage; impervious area; existing structures on site and surface drainage/approved location. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>11. Submit two (2) complete sets of legible plans.</b> Must be drawn to scale, showing conformance to applicable local and state building codes. Structural details and connections must be incorporated into the plans.<br><i>(See items 12 through 22<br/>Plan review cannot be completed if copyright violations exist)</i>                                                                                                                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>12. Foundation plan.</b> Show dimensions, anchor bolts and location, any hold-downs, connection details, vent size and location.                                                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>13. Floor plans.</b> Show dimensions, identify all rooms, include window sizes, locations of smoke detectors, water heater, furnace, ventilation fans, plumbing fixtures, balconies and decks over 30 inches above grade, etc.                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| <b>14. Cross section(s) and details.</b> Show all framing-member sizes and spacing such as floor beams, headers, joists, sub-floor, wall construction, and roof construction. More than one cross section may be required to portray construction clearly. Show details of all wall and roof sheathing, roofing, roof slope, ceiling height, siding material, footings and foundation, retaining walls, stairs, fireplace construction, thermal insulation, etc.                                                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

|                                                                                                                                                                                                                                                                                                                                                          |                          |                          |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------|--------------------------|
| <b>15. Elevation views.</b> Provide all elevations for new construction; minimum of two elevations for additions and remodels. Exterior elevations must reflect the actual grade if the change in grade is greater than four feet at building envelope. Full-sized sheet addendums showing foundation elevations with cross references maybe acceptable. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>16. Wall bracing (prescriptive path) or lateral analysis plans.</b> Must indicate details and locations; for non-prescriptive path analysis provide, specifications and calculations to engineering standards. See item 21.                                                                                                                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>17. Floor/roof framing.</b> Provide plans for all floors/roof assemblies, indicating type and member sizing, spacing, and bearing locations. Show attic ventilation.                                                                                                                                                                                  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>18. Basement and retaining walls.</b> Provide cross sections dimensions and details showing placement of rebar. For engineered systems, see item 21, "Engineer's calculations."                                                                                                                                                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>19. Provide prescriptive beam and joist sizes by code reference or submit engineering calculations and detail.</b>                                                                                                                                                                                                                                    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>20. Manufactured floor/roof truss design details. Show location &amp; type of connectors.</b>                                                                                                                                                                                                                                                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>21. Engineer's calculations.</b> When required or provided, (i.e., shear wall, roof truss) shall be stamped by an engineer or architect licensed in Washington and shall be shown to be applicable to the project under review.                                                                                                                       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>22. Energy Code compliance.</b> Identify the prescriptive path or provide calculations. List Washington State Ventilation and Indoor Air Quality Code System.                                                                                                                                                                                         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>JURISDICTIONAL SPECIFICS</b>                                                                                                                                                                                                                                                                                                                          |                          |                          |                          |
| <b>23.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>24.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>25.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>26.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>27.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <b>28.</b>                                                                                                                                                                                                                                                                                                                                               | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**Checklist must be completed before plan-review start date.**  
**Minor changes or notes on submitted plans may be in blue or black ink.**  
**Red ink is reserved for department use.**

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