

From: Tiny House Cribs <tinyhousecribs@gmail.com>
Sent: Thursday, August 29, 2019 3:30 PM
To: Sedlacek, Craig L (LNI) <SEDC235@LNI.WA.GOV>; DES SBCC <sbcc@des.wa.gov>
Subject: L&I Tiny Homes Doc Revised by Tiny House Cribs, LLC

Washington State,

Tiny House Cribs, LLC has reviewed the newly created L&I Tiny Homes Document shared on the Factory Assembled Structures website. We appreciate you for creating such document for all of Washington State.

We are requesting changes to your document. The changes requested were done with the "keep tiny homes affordable" mindset. When you require licensed electricians, plumbers, engineers and architects, you make tiny homes no longer affordable. We ask that you relax this from the State Building Codes for Modular Tiny Home Construction. Factory Assembled Structures Plan Review Employees and Inspectors should determine that these areas of the Plans and Construction are met.

Currently right now the Park Model RV Construction Standards and the RCW do not require PMRV Builders to hire such licensed professionals. Many counties and cities allow PMRV's to be used as permanent residences as long as they meet WA Energy Codes and local Snow Loads.

Modular Tiny Home Construction should follow the same relaxed rules as to Park Model RV's in the WA State Building Code.

Sincerely,

Cosme Hernandez
(559) 551-9478





STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES

Factory Assembled Structures
PO Box 44430 • Olympia, Washington 98504-4430

July 25, 2019

Dear Interested Builder,

"Tiny Homes" are popular, permanent residences no larger than 400 square feet and are often built somewhere other than where they will be used. This Washington State Department of Labor & Industries (L&I) packet provides you with what you need to know before building.

This packet includes the following:

- Review of requirements including a list of state laws, rules, and building codes;
- Whether you need to go to L&I or your local building official for approvals;
- L&I plan application and checklist, and;
- L&I inspection request application.

Please be aware designing and building a Tiny Home is very detailed work. If you are unfamiliar with building codes or construction, we urge you to see a licensed architect or engineer, or a registered building contractor before starting any work.

L&I staff cannot advise or help with the design and construction of your Tiny Home. We can, however, answer questions about our requirements. Feel free to contact us at FAS1@Lni.wa.gov, or 360-902-5218. Visit our website at www.Lni.wa.gov/TinyHomes.

If you determine that you need L&I approval of your tiny home, the total cost for reviewing the plans and inspecting the home will be about \$1,500. Even with L&I approval, local building permits are still required at an additional cost.

We look forward to working with you as you go through the process to build your Tiny Home.

Sincerely, Craig Sedlacek, manager
Factory Assembled Structures Program
Washington State Department of Labor & Industries

July 27, 2019

What you need to know about “Tiny Homes”

L&I frequently receives inquiries regarding the rules and requirements for “tiny homes”.

In Washington State “tiny homes” must meet the State Building Code requirements (RCW 19.27.031). Other types of units such as Park Model RVs (PMRV), Recreational Vehicles (RV) and HUD Manufactured Homes are not tiny homes even though people may be living in them.

Please note that while L&I inspects and labels several of these types of structures, or units; cities and counties are responsible for regulating how all structures, or units, including, RV’s, PMRV’s modular buildings and manufactured homes can be used within their jurisdictions. If you have questions about using an RV, PMRV, modular building or manufactured home to live in, please contact your local building department first. **L&I can only approve the construction of RV’s, PMRV’s and modular buildings, not how they are used or where they can be located.**

Step by step – Getting your tiny home approved by L&I.

Step 1). Determine if your structure, or unit, can be approved by L&I.

- Your structure cannot be approved by L&I if:
 - The home will be used to live in as a *dwelling unit** and –
 - The home is being built on the site where it will be used or
 - The home is a HUD approved manufactured home or
 - The home is converted from something else such as a shipping container, shed or other open framed building (like those found home improvement stores, or ordered online), and the conversion is taking place on the site where it will be used.

** DWELLING UNIT. A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.*

Site built, or converted tiny homes are regulated by the local cities and counties, please contact your local building department with questions about permitting and inspections.

- Your structure can be approved by L&I as a “tiny home” modular building if:
 - The home will be used to live in as a *dwelling unit** (this is the only type of structure approved by L&I to be used as a *dwelling unit**) and –
 - The home is being constructed somewhere other than where it will be used and

- The home is **built to the State Building Code requirements**.
- The home does not exceed 400 square feet. Note: modular homes can be any size allowable by the building code.

* **DWELLING UNIT.** A single unit providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

- Your unit can be approved by L&I as a Park Model RV (PMRV) if:
 - The home is primarily designed to provide temporary living quarters for recreational, camping or seasonal use and -
 - The home is built on a single chassis, mounted on wheels so that it can be moved around. PMRV's may be wider than 8'-6" (but must be transportable on the road, contact the Washington State Patrol and Department of Transportation for more information) and
 - The unit does not exceed 400 square feet when set up. If square footage will exceed 400 square feet see the modular building requirements. NOTE: this is not a complete definition. See WAC 296-150P for complete details.
- *Your county or city allow park models to be used as permanent residence*
- Your unit can be approved by L&I as a Recreational Vehicle (RV) if:
 - The home is designed primarily for recreational camping or travel use and -
 - The home no wider than 8'-6" in travel mode and is a vehicular type unit, or built on a vehicle chassis, so that it can be moved around and
 - Does not exceed 400 square feet in area when set up. NOTE: this is not a complete definition. See WAC 296-150R for complete details.

Step 2). Submit plans showing how you will build your Modular "tiny home", RV or Park Model RV. We will review your plans to the codes and standards that apply. Please see the following fact sheets RV's ([link](#)), PMRV's ([link](#)), modular homes ([link](#)) for additional information.

Step 3). Have your structure, or unit, inspected. Once your plans are approved, we will provide you instructions on how to schedule inspections. You will be charged for the time and mileage to do the inspection, normally around \$200 each trip (within the state). Two to three trips are typically required.

Modular "home" fact sheet (*also see our information specifically for tiny homes*).

Modular homes are structures, which are used as dwellings and are built somewhere other than where they will be used or installed. They can be mounted on chassis or moved by means of a separate trailer. Modular homes can be installed permanently or moved from place to place but the installation and use always requires permits from the local city our county building department. All modular buildings must meet the requirements of the Washington State Building Code and must be inspected and approved by

Labor & Industries. Any foundation system for a modular home, including types such as a chassis, post & pier, footing & stem wall, etc. must be permitted, reviewed and approved by the local building department. Modular homes can be of any size and shape within the broad limits of the building code.

To have your modular home approved by L&I, first prepare construction plans for your home showing that it will meet the requirements of the Washington State Building code. You can find out more about the codes that apply to your project at the Washington State Building Code website <https://fortress.wa.gov/ga/apps/sbcc/Default.aspx>. If you are unfamiliar with building code requirements or with construction techniques, you will need to employ a design professional such as a Professional Engineer or Architect to help you.

The plans must include floor plans, elevations, cross sections, structural details, truss drawings foundation/anchoring plans, plumbing, mechanical and electrical drawing. A packet of information with more detailed information on modular buildings can be found on the L&I website <http://www.lni.wa.gov/TradesLicensing/FAS/OtherMobileStructures/default.asp>

The structural portions of the plans must be stamped by a Washington State registered Professional Engineer or Architect and include a basic structural analysis showing the building meets the minimum structural design requirements of the building code. Other non-structural drawings such as electrical and plumbing drawings are not required to be stamped except when they have been prepared by a licensed architect or engineer.

Modular homes must also meet the requirements of the Washington State Energy Code. Information on the energy code be found at the Energy WSU website <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx>. The web site also has the compliance forms that need to be filled out and submitted with your plans.

When your plans are ready, mail us three complete sets of plans, calculations and supporting documents. Include a completed "plan application" (form F623-006-000) from our web site <http://www.lni.wa.gov/FormPub/results.asp?Section=4&SubSection=102> and the plan review fee. Please contact us at FAS1@lni.wa.gov for help figuring the plan review fee; for a small home under 400 square feet it will be around \$450. Our mailing address is on the application form. You should also include a completed Insignia request (form F623-014-000) and NLEA (form F623-013-000). The insignia/NLEA fee for a home built in one piece is \$322.70. All fees can be on the same check.

New modular plans are put in line for review and normally there is a backlog of several weeks before we start reviewing them. If the plans examiner has questions or needs additional information, we will contact you directly. Once we have reviewed and approved your plans, you will be able to have us inspect your modular home. Depending on the complexity of your home there will be two or more inspections while you are building it. Inspections are about \$200 each (in state) depending on how far the inspector has to travel. The inspector will verify that the modular home meets the requirements of the Washington State Building Code and once your home has passed inspection, he will put the Washington State Modular insignia (gold seal) on the unit.

↓ should not be required for modular tiny homes. L&I inspectors should be performing electrical & plumbing inspections.

The work on all electrical and plumbing systems must be performed by Washington State licensed electricians and plumbers with some exceptions for owners working on their own property as allowed by RCW 19.28 and RCW 18.106.

RV fact sheet for units built by an individual or small manufacturer.

Keep tiny home construction affordable

Recreational Vehicles (RV's) are trailers or motorized vehicles used for recreational camping or travel and must meet the requirements found in the NFPA 1192 Standard on Recreational Vehicles. RV's must be a licensed legal vehicle so they cannot be over 8'-6" wide or 14' in height when in travel mode and they cannot exceed 400 square feet in set up mode (fifth wheel units are limited to 430 square feet).

While most RV's are built by specialized factories, individuals can also build an RV. Whether you are building an RV for your personal use or you are a small business located in Washington State that is building RV's for in-state consumers, you will need to have your RV inspected and approved by L&I. RV's being built for sale or lease in Washington must pass L&I inspections and have a Washington State RV label. If you are building an RV for your personal use you should have it inspected and labelled by L&I so that it can be licensed and insured. Sometimes people use existing vehicles in alternate ways. L&I is only involved with vehicle conversions if systems such as 110/120V electrical, propane gas, or plumbing systems are added.

To have your RV approved by L&I, first obtain a copy of the NFPA 1192 standard and the UPA-1 plan guide from NFPA.org or the RVIA.org bookstore. Next, prepare construction plans for your RV using the UPA-1 as a guide. The plan set should include the drawings listed in the UPA-1 and show all relevant information as outlined in the guide. You can omit any information that is not applicable to your design. Your plans do not need to be stamped by an engineer or architect.

When your plans are ready, mail us two copies along with a completed "plan application" (form F622-006-000) from our web site <http://www.lni.wa.gov/FormPub/results.asp?Section=4&SubSection=99> and the plan review fee of \$93.90. Our mailing address is on the application form. You should also include a completed RV Insignia order (form F622-021-000) and the \$25 insignia fee. Both fees can be on the same check.

New RV plans are put in line for review and normally there is a backlog of several weeks before we start reviewing them. If the plans examiner has questions or needs additional information, we will contact you directly. Once we have reviewed and approved your plans, you will be able to have us inspect your RV. Depending on the complexity of your RV there will be one or more inspections while you are building it. Inspections are about \$200 each (in state) depending on how far the inspector has to travel. The inspector will verify that the RV meets the requirements of the NFPA 1192 standard and once your RV has passed inspection, he will put the Washington State RV insignia on the unit.

You are not required to use licensed electricians and plumber for wiring and plumbing systems in RV's, however the plumbing, gas and electrical systems must still be designed, and installed, to code. If you

are not familiar with plumbing and electrical systems, you need to employ licensed professional electricians and plumbers to help you and who will make sure the work is installed to code. L&I cannot advise you on, or help you learn, how to do this work.

PMRV fact sheet for units built by an individual or small manufacturer.

Park Model Recreational Vehicles (PMRV's) are trailers that provide temporary living quarters for recreational, camping or seasonal use and must meet the requirements found in the ANSI A119.5 Park Model Recreational Vehicle Standard. PMRV's must be built on a single permanent chassis, mounted on wheels, and be transportable down the highway. If they exceed 8'-6" in width or 14' in height when in travel mode they will need special transportation permits and may be limited on where and how they can be moved over the road. PMRV's cannot exceed 400 square feet in overall floor area, including projections in set up mode.

While most PMRV's are built by specialized factories, individuals can also build a Park Model RV. Whether you are building a PMRV for your personal use or you are a small business located in Washington State that is building Park Models for in-state consumers, you will need to have your PMRV inspected and approved by L&I. Park Model RV's being built for sale or lease in Washington must pass L&I inspections and have a Washington State PMRV label. If you are building a Park Model RV for your personal use you should have it inspected and labelled by L&I so that it can be licensed and insured.

To have your Park Model RV approved by L&I, first obtain a copy of the ANSI A119.5 standard and the UPA-1 plan guide from the RVIA.org bookstore. Next, prepare construction plans for your PMRV using the UPA-1 as a guide. The plan set should include the drawings listed in the UPA-1 and show all relevant information as outlined in the guide. In addition, if your PMRV is over 8'-6" wide you need to provide structural drawings, such as cross sections, framing details, truss drawings and elevations showing that the roof, walls, floor and chassis meet the construction requirements of chapter 5 in the ANSI standard. Other structural designs can be approved, when stamped by a Washington State registered Professional Engineer or Architect.

When your plans are ready, mail us two copies along with a completed "plan application" (form F622-006-000) from our web site <http://www.lni.wa.gov/FormPub/results.asp?Section=4&SubSection=99> and the plan review fee (\$129.90 if over 8'-6" wide otherwise \$98.20). Our mailing address is on the application form. You should also include a completed RV/PMRV Insignia order (form F622-021-000) and the \$25 insignia fee. Both fees can be on the same check.

New PMRV plans are put in line for review and usually there is a backlog of several weeks before we start the review. If the plans examiner has questions or needs additional information, we will contact you directly. Once we have reviewed and approved your plans, you will be able to have us inspect your PMRV. Depending on the complexity of your PMRV there will be two or more inspections while you are building it. Inspections are about \$200 each (in state) depending on how far the inspector has to travel. The inspector will verify that the PMRV meets the requirements of the ANSI A119.5 standard and once your PMRV has passed inspection, he will put the Washington State Park Model RV insignia on the unit.

You are not required to use licensed electricians and plumber for wiring and plumbing systems in PMRV's, however the plumbing, gas and electrical systems must still be designed and installed to code.
If you are not familiar with plumbing and electrical systems, you need to employ licensed professional electricians and plumbers to help you and who will make sure the work is installed to code. L&I cannot advise you on or help you learn how to do this work.

This should apply to modular tiny homes.

What you need to know about building a Tiny Home or a Tiny Home With Wheels

If you are building a tiny home or a tiny home with wheels, you may need to have it inspected and approved by the Factory Assembled Structures (FAS) program at the Department of Labor & Industries (LNI).

What it is:

A tiny home/tiny home with wheels is a dwelling no larger than 400 square feet. The home must be built to the [Washington State Building Code](#).

What it is not:

[Recreational vehicles \(RVs\)](#), [Park Model Recreational Vehicles \(PMRV's\)](#), and [Manufactured Homes \(MH's\)](#) are not a Tiny Home/Tiny Home with wheels as defined in Washington State. Any other structure not built to the [Washington State Building Code](#) is not a Tiny Home.

What do I need to do?

- IF you are building a tiny home on the site where it will be occupied and used, then you do not need to read any further, [contact your local building department](#). You may also need an [L&I electrical inspection](#).
- IF you are building a tiny home somewhere OTHER than where it will be occupied, then **keep reading, the rest of this document is important to you**. The FAS program inspects all homes constructed off site. We will treat your "off site location" as the "factory" for the factory built housing unit.

Key Steps - Plan Review, Inspections, Insignia and Delivery/Installation

You will need to submit [appropriate fees](#) and have your plans approved by us before we can inspect any of your work. The fees for inspections are based on time and travel costs. The cost for L&I approval of tiny homes will be around \$1500 if the plans and inspections pass first time. There are additional charges for re-inspections and resubmittal of plans. You do not need to purchase a specific L&I permit for your off-site tiny home, we will automatically issue a permit for the factory portion before we start inspecting your home.

Please consider your level of knowledge, skills, and abilities pertaining to the various aspects of building a tiny home. All construction work must meet the requirements of the [applicable codes](#). You will need to purchase or have access to these codes and to any [amendments or changes that Washington State Building Code Council has made to them](#).

If you are unfamiliar with construction, electrical wiring, plumbing, mechanical work or with designing and preparing plans for your home, you will need to engage the help of professionals who are. Depending on your knowledge, skills, and the design complexity of the structure, this might be engineers, architects, plumbers, electricians and contractors. For legal reasons, L&I staff cannot advise

you on or help you with the design and construction of your tiny home. Please refer all questions about how to perform various aspects of designing and constructing a tiny home to your hired professionals.

Plan Review

Your tiny home must meet the requirements of the International Residential Code, the Washington State Energy Code, the Uniform Plumbing Code and the National Electrical Code. These codes apply statewide and often there are changes or amendments made to them. Please see the [Washington State Building Code Council web site](#) for information on the current statewide building codes and amendments. Information on the current National Electrical Code is on the [L&I Electrical Program website](#).

The International Residential Code (IRC) is a "prescriptive" building code, meaning it provides a way to build a house without having to engineer it. To utilize the prescriptive path, you will need the knowledge, skills, and ability to design your building to the code requirements. With the applicable prescriptive construction details clearly identified on your plans - referencing the specific code sections, tables you are using, all required design elements (wall bracing, headers, roof framing components/methods, etc.) you may not need to have an engineer or architect stamp your plans.

L&I staff cannot "consult" on building design and will not "correct" items during the L&I review process. Please refer all questions about how to perform various aspects of designing and constructing a tiny home to your hired professionals.

Any parts of your tiny home not built to the prescriptive IRC require engineering. For example, a Tiny Home or Tiny Home with Wheels, not designed for attachment to a continuous foundation (see all IRC requirements, especially foundations, and wall bracing) will require stamping by a licensed design professional. Here are some examples drawings or documents that require stamping by a Washington licensed Professional Engineer and/or Architect

- All drawings prepared by or under the direction of a professional engineer or architect.
- ~~All structural drawings not meeting the "prescriptive" construction requirements of the International Residential Code. This would include the permanent "chassis" or transportation frame for tiny home with wheels.~~
- ~~All structural calculations.~~
- ~~All Truss drawings~~

Tiny Homes affordable!

this should all be waived and inspected by L&I Plan Review employee.

You can draft your plans by hand or on a computer. The drawings must be neat, legible, and drawn to a recognized architectural "scale". The minimum scale is $\frac{1}{4}$ " per foot. **Please see the "Tiny Home Plan Checklist" attached to the end of this document <or link>.**

Upon receipt of your plans, they are assigned a plan number. We review plans on a first come, first served basis. Normally it will be several weeks before we can start the actual review. We will notify you of the status after the review. If we need anything else, or the drawings require correction, we will email you a written list so you will know what is required for resubmittal. Once approved we will send you a set of plans with our approval stamp on it. We will also send a set of the approved plans to the local building department.

L&I does not have this

requirement for Park Model Construction. Some counties and cities permit Park models to be used as residences.

This requirement will no longer keep a tiny house affordable.

Inspections:

Once you have received your approved plan from us, you can have your tiny home inspected. You need to have the approved plan available for the inspector to use.

The inspector must inspect all parts of the home before you cover any construction. Covered construction, which has not been inspected and approved, must be opened up for inspection, so please do not proceed with work until the inspector has given you approval to do so.

To request an inspection for your home, complete either the "in state inspection request" form or the "out of state inspection request" form and send it to us using the instructions at the bottom of the form.

The inspector will invoice you for the inspection trip. If you request an inspection and you are not ready, you will still be charged for the trip. See [WAC 296-150F-3000](#) for a list of inspection fees. The inspection fee will include the time for travel and inspection and for mileage. Additionally for out of state inspections the invoice will include travel expenses such as airfare, car rental, per diem, lodging etc. Most inspection trips within Washington State are about \$250 each. Payment is due upon receipt. Payment can be on line by credit card or by mailing a copy of the invoice along with your check or money order.

The "**required tiny home inspections**" document lists all of the inspections that might be required for your home. You are responsible for knowing which inspections you need and for being sure that you request inspections in a timely manner. Some inspections on this list might not apply and many times several inspections can be done on the same trip. For most tiny homes, the inspector will need to make three inspection trips.

- The first inspection trip will be for the "floor" and will include the floor framing and insulation and any wiring or piping located there. It will also include the chassis (for units with wheels).
- The second inspection trip is a "cover" inspection and includes the framing in the walls and roof, and the insulation, wiring and plumbing in those locations.
- The third inspection trip will be a "final" inspection when the tiny home is complete and ready to ship to site.

At the end of each inspection, the inspector will either approve the construction, or provide you with a report of what must be corrected. For legal reasons, L&I staff cannot advise you on, or help you with, the construction of your tiny home. Please refer all questions about how to perform various aspects of designing and constructing a tiny home to your hired professionals.

Once all corrections have been made and the home passes the final FAS factory inspection, the FAS insignia of approval (gold seal) is applied to the home.

The local building inspector, plumbing inspector and electrical inspector are responsible for all work done on site, including installation of the home on its foundation. The FAS program does not inspect work on site except when you make changes to the factory-approved units prior to issuance of the certificate of occupancy by the local building official.

Insignia and Delivery/Installation:

Once we have approved the construction at your factory location, the inspector will put an "insignia" of approval on your home. The local building department will look for the insignia to verify LNI inspections. You will need to apply for the insignia, and pay the applicable fees, prior to requesting the final inspection. It can take a number of weeks to process an insignia application, so plan accordingly. It is strongly recommended that you submit the application, and fees, with the plan approval request.

You will need all the applicable permits from the local building department (where the home will be located), before you can ship it to site.

The local building department is responsible for the following:

- Approving the foundation of the tiny home,
- Making sure it meets zoning regulations,
- The actual installation and completion of the tiny home on your property,
- Any other local requirements of the site you intend to locate the home on.

You will also need a permit from the LNI electrical program or your city electrical program to connect your tiny home to power.

A word of caution; FAS does not review the shipping requirements for your home. You are responsible for safe and legal transport over the roads and highways. This includes both size and weight restrictions and the requirements that all loads must be secure. Your home must be structurally sound so it will not collapse, fall off the chassis or fail during transport. Please consult the Washington State Patrol, and Department of Transportation regarding the movement of your home on Washington roadways.

Some Important notes about licensing requirements:

If you are going to build a tiny home there are several registration, and licensing, issues you need to be aware of and consider.

- You may need to be a registered general contractor depending where you are going to work on a tiny home, and what duties you are performing. Please contact the LNI Contractors Program to find out the requirements for our situation.
- ~~All plumbing must be installed by a Washington State licensed residential or commercial plumber.~~
- ~~All electrical work must be performed by a Washington State licensed electrical contractor and licensed electricians.~~
- There are exceptions for homeowners doing electrical and plumbing work on their own home. Please contact the plumbing program and the electrical program to determine the licensing requirements for your situation.

Please see our tiny home web site for additional information, documents and forms. <link>

modular
tiny homes
builders
do not
have to be
a licensed
contractor!

On-site
installers
do need to be a licenced contractor.

Tiny Home Plan Checklist

Tiny home construction plans must include the following drawings and information. Use this checklist to be sure your plans are complete. Incomplete plans will be returned without review. Include a copy of this checklist with your plans and applications.

Please check the box next to each document to show that it is included, or it is not applicable (N/A). If you indicate N/A, you must include an explanation. For all of the drawing items you will need to fill in the primary sheet numbers where the information can be found.

Documents and associated items:

At the front of your package, include the following:

- The combined Plan and Insignia fee of \$745.10.
- Plan approval and Insignia request form. Completed form _____ - see instructions.
- Tiny Home Plan Checklist. A copy of this checklist with each item checked.
- Notification to Local Enforcement agency form. Completed form _____ - see instructions.

Next, provide three copies of each of these:

- A completed set of Washington State Energy Code (WSEC) forms including; prescriptive or UA component worksheets, glazing schedule, heat sizing worksheet, and a compliance certificate (WSEC 2015 Certificate). WSEC forms and resources are at the <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx> website. Note: WSU energy offers a hotline number on their website if you need assistance with filling out the forms.
- ~~Engineering calculations (if applicable). Engineering calculations are required for any structural designs that do not meet the prescriptive construction requirements in the International Residential Code (IRC). A Washington State registered professional engineer (PE) or a Washington State registered Architect must stamp all engineering calculations. Calculation pages must be numbered and the professional stamp must be on each page or it can be on the title page and the index page.~~
- Truss drawings (if you are using trusses). Each type of roof or floor truss must include an engineered drawing stamped by a Washington PE. The company who is building the trusses for you provides truss drawings.

must tiny trusses are made outside, not by a truss manufacturer.

Plan sheets and associated items:

Following the documents above, include three sets of drawings. Drawings must be collated into separate sets and be in order. You can draft your plans by hand or on a computer. The drawings must be neat, legible, and drawn to a recognized architectural "scale". The minimum scale is $\frac{1}{4}$ " per foot. Each page of the drawing set needs to have a drawing name, for example; "floor plan", "details", "plumbing", etc. A drawing number and the date prepared or last revised is also required.

- Cover drawing with:
 - Information identifying the person or company submitting the plans with mailing address, phone and email contact information. Also, include the factory address. The "factory address" is the off-site location where you will be building your tiny home.

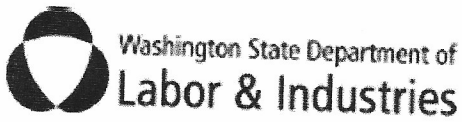
- A list of any design professionals, such as engineers and architects for the project.
- A drawing index listing all pages in the drawing set by page title and drawing number. You can choose the drawing numbers as long as each page has a unique number.
- A statement as to the codes used to design the plan. These must include the version year of each code. See the WA State Building Code Council for current information: <https://apps.des.wa.gov/sbcc/page.aspx?nid=4>
- The design criteria used for the home, such as roof load, wind load, earthquake zone etc. Most building department publish the required minimum design criteria for their area on their web site.
- List any prescriptive designs used to build the home. This would be specific code sections and table numbers from the IRC and would include but not limited to floor joists, wall studs, braced walls, wall headers, roof joists. An engineer or architect must stamp construction designs that are not prescriptive.
- Other pertinent information, such as general notes, may be included.
- Floor Plan of the main floor, and plan of any other floor levels (including lofts) in the home. The plan needs to show:
 - The locations of the exterior and interior walls.
 - Overall home dimensions and the interior dimensions for rooms and width of hallways.
 - Label each room showing its use (e.g. bedroom, living room etc...).
 - Locations and sizes of doors and windows. Identify which windows are for emergency escape (you can add "esc" to the window size callout).
 - Location of any safety glazing.
 - Cabinets, equipment, appliances and fixture locations.
 - Interior stairs, location, orientation and run.
 - Exterior porches, decks, stairs, awnings.
 - Locations of handrails and guardrails at stairs, porches, lofts etc...
- Outside Elevations showing:
 - Siding and roofing materials (call out types or products)
 - Window and door configurations and swings
 - Roof eaves and overhangs.
 - Exterior porches, decks, awnings, and guardrails.
- Cross Section(s) – a major transverse section through the home showing:
 - The main material components of the floor, wall and roof assemblies including: framing materials, sheathing type exterior coverings, type of insulation in each assembly, location/type of vapor retarder, interior finish, etc
 - Vertical and horizontal dimensions showing overall width and height and the finished floor to ceiling dimensions for all areas. Multiple sections may be required if there are areas of varying ceiling height, etc.
 - Roof eave and overhangs.
 - Locations of roof vents, baffles, etc. (including a calculation of the venting per square foot.
 - Foundation or chassis support locations under the floor of the home.
 - Cross sections should be drawn at 1/2" scale or larger.
- Framing Plans (as applicable).

- Types, locations and lengths of prescriptive braced walls (see IRC 602.10) or engineered shear-walls (requires plan to be stamped by the engineer or architect).
- Connection details for all brace walls to upper framing (roof/ceiling), and to the floor framing.
- If you are using trusses in a roof or floor, then provide a truss plan (framing drawing) showing the location of each type of truss in the assembly. These may be part of the engineered truss drawings from the truss manufacturer.
- Provide a plan view drawing for roof and floor framing, and wall framing elevations to help explain how you are building your home. These drawings may not be required if your framing is "prescriptive". Framing drawings must show the size and material grade of each type of joist, stud and rafter, and identify the same information for other major members such as beams, rims, headers and plates.
- Construction/Section Details (as needed).
 - Provide section details to help explain how you are building your home, and comply with the applicable code sections. A few examples of typical section details include; how a roof is connected to walls, walls to the floor system/foundation, flashing at door/window heads and deck ledgers, etc. They are also used to show other specially built portions of the home in a close up "detail" that explains how this part of a home is to be assembled. Section details are normally drawn at 3/4" scale or larger.
- Stair Details (if applicable).
 - If the home has an interior stair, provide a section drawing through the long dimension showing the rise and run overall and of the steps along with any landing dimensions.
 - Indicate guard, and handrail, locations either on a "stair plan" or on the main floor plan.
- Foundation - Note: L&I only reviews the foundation plan to be sure it is reasonably suitable for the general home design. The local building department where your home will be installed must approve your foundation plans.
 - Foundation wall locations with dimensions.
 - Pier and blocking locations with spacing dimensions.
 - Point load locations corresponding with the framing plans
 - Hold down/strap connection points (if applicable) corresponding to framing (brace/shear wall) plans.
 - Tie-down or special connection locations.
- Chassis (for Tiny Homes with Wheels) this drawing(s) will require an engineer's stamp and supporting calculations.
 - All frame components such as steel beams, axles, cross-members, outriggers headboard and towing hitch.
 - Welding callouts showing how each of the chassis components is welded together. The welding callouts need to show the location, type and length of each weld.
 - Additional documents showing welding procedures, welder certification and welding inspector certifications.
 - A detail or details showing how the tiny home is connected to the chassis.
 - A detail or details showing how the chassis is connected to the foundation system.
- Electrical Plan Drawing or layout of the home showing the locations of:
 - Appliances.

- Electrical equipment such as the electrical panel.
- Heaters and water heaters.
- Smoke alarms.
- Carbon monoxide detectors.
- Receptacles, lights and switches. Indicate the proper type for all damp/wet/outdoor locations. NOTE: label all devices with a circuit number matching a circuit in the panel.
- Show the type and location of any equipment disconnects for mini split heaters, etc.
- The electrical plan needs to indicate the “wiring method” used in the home. Chapter 3 of the National Electrical Code describes wiring methods.
- Electrical panel layout showing:
 - The circuits in the panel including the size of the circuit breakers and the size of the wiring for each circuit. Please number the circuits for verification of devices served.
 - Label circuit breakers that are AFCI or GFCI rated.
 - The location and size of the main breaker or other main disconnecting means.
- A “one line service/feeder” diagram detailing how power is connected to the home showing:
 - The size and type of conduits in to the home.
 - The size and type of conductors.
 - The location of the main service disconnecting means.
- An electrical load calculations for the tiny home showing:
 - The full electrical load on the service or feeder in KVA.
- Potable water line drawing in plan or isometric view. Indicate:
 - The type of piping material.
 - All fixture locations.
 - Pipe size and locations along with changes in direction.
 - Indicate where the water service and the water heater connect along with shut off valves required in these locations.
 - Indicate the size, and type, of the water heater
 - Note seismic strapping for tank-type water heaters.
 - The pressure relief valve (PRV) with the overflow pipe discharging to the exterior of the home.
 - A tee must be installed for an expansion tank.
- Drain/waste/vent (DWV) piping system shown in isometric view. Indicate:
 - Type of pipe material.
 - The sewer connection location
 - All fixture locations.
 - All pipe runs with the pipe size, changes in direction.
 - Locations of clean-outs, traps and vents through the roof.
- Gas System. In plan or isometric view. Indicate:
 - List the type (propane or natural gas), and pressure of the gas piping system.
 - The type of pipe material.
 - Locations, length and size of each part of the gas piping system along with changes in direction.
 - Label the points where gas appliances connect to the system.
 - List the BTU input rating of each appliance connected to the system.

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- Indicate where the gas service connects to the system.
- Indicate where all shut off valves are located where required at the service and at each appliance.
- Mechanical drawing showing
 - The location of all equipment such as furnaces, heaters, heat pumps, mini-split HVAC system components. List the make, model and size of equipment.
 - Locations, type and size of ductwork and registers that are part of a forced air heating system.
 - Locations, make, model of spot ventilation fans, and the whole house fan. Show the method of control for the whole house fan –intermittent, or continuous.
 - Information on special equipment required for energy credits
 - Show termination locations of all exhausts and condensate drains.

Mail your plans to the L&I FAS program. Our mailing address is at the top left corner of the application form. When plans are received, they are logged in and assigned a plan number. Normally it will be several weeks before the review of the plans starts. Once your plans are reviewed we will send you an approved plan set or we will notify you via email of what you need to do so the plans can be approved.



Tiny Home Plan Approval & Insignia Request Form

Factory Assembled Structures
 PO Box 44430
 Olympia WA 98504-4430

If you are unfamiliar with building codes or construction, we urge you to see a licensed architect, engineer, or a registered building contractor before submitting plans or starting any work.

Mail this complete form, fees, 3 copies of your plans and other documents to the address listed above. For instructions on completing this form, see next page. Also, see the Tiny Homes Plan Checklist for help. We process plans based on the date received. We will notify you once the plans have been reviewed.

Applicant/Contact Information:

Company/Applicant Name		
Address		
City	State	Zip Code
Phone Number	Email Address	

Contact Person Name (If different than above)	
Phone Number	Email Address

Tiny Home Information:

Area of Home (sq. feet)	Roof Load (PSF Snow)	Wind Speed/Exposure	Seismic Category
Electrical Service (Amps)	IRC Prescriptive Design <input type="checkbox"/> Yes <input type="checkbox"/> No	Engineering Included <input type="checkbox"/> Yes <input type="checkbox"/> No	Climate Zone <input type="checkbox"/> 4C <input type="checkbox"/> 5B
Type of Heating System	No. of Plumbing Fixtures		
Serial/ID Number			

Note: This form is for a single module home only. For a multi-section home, contact L&I for assistance.

Fees:

- New Plan Design Fee \$422.40
- Insignia Fee \$322.70 (includes the NLEA fee)
- Addendum or Resubmittal \$146.00
- Total Fee Enclosed: \$ _____**

For Department Use Only

Application ID	Transaction ID	Fee Ledger Sheet Number
Plan Approval Number	Date Approved	Expiration Date

Instruction to complete the Tiny Home Plan Approval & Insignia Request Form

If you are sending your plans via FedEx, UPS, or other overnight service, please use our street address:

Department of Labor & Industries
Factory Assembled Structures
7273 Linderson Way S.W.
Tumwater WA 98501-5414

Note: If you are unfamiliar with building codes or construction, we urge you to see a licensed architect, engineer, or a registered building contractor before submitting plans or starting any work.

Applicant/Contact Information

Include your or your company's name and contact information such as mailing address, phone number, and email address. If the contact person information differs from the applicant, please provide it also.

Tiny Home Information

1. **Area of Home:** This is the size of the home. Measure the area to the outside of the walls at the floor level. It must be no larger than 400 square feet.
2. **Roof Load:** This the snow load capacity of the roof in pounds per square foot (PSF).
3. **Wind Speed/Exposure:** This covers two areas – The strength of the home against wind (speed is measure in miles per hour); and the setting or exposure of the home, whether in the city, open plains, or other location.
4. **Seismic Category:** The answer should be a single letter, and may include a number, for example "D2." This describes the level of earthquake resistance.
5. **Electrical Service (Amps):** This describes the capacity of the home's electrical connection to an electrical grid or power supply as measured in amperes (Amps).
6. **IRC Prescriptive Design:** Answer "Yes" if the plans only use the prescriptive International Residential Code (IRC) requirements for tiny homes. For homes that are wholly or partially engineered, and for tiny homes with wheels, answer "No."
7. **Engineering Included:** Check "Yes", if there is engineering for all or part of the home and a professional engineer (PE) stamped the plans. For tiny homes with wheels, the wheeled portion below floor must be engineered. Engineering may be required for other parts, depending on the design.
8. **Climate Zone:** These are the two climate zones for Washington. Choose the one where you tiny home will be located. See the state Energy Code for further details.
9. **Type of Heating System:** Please show the primary type. Example answers can include, "Gas," "Electric," "Split," or similar. Note: a woodstove cannot be a primary source of heat.
10. **Number of Plumbing Fixtures:** This is the number of fixtures, such as sinks and toilets in your tiny home. See the Plumbing Code for information on how to determine the number of fixtures.
11. **Serial/ID Number:** This is your unique identifier for the planned tiny home. It can be a serial or identification (ID) number.

Fees

- If this is your initial application for your tiny home, please check the boxes "New Plan Design Fee" and "Insignia Fee" and include the total with your plans.
- If this is a resubmittal of your plans, then **only** check the "Addendum or Resubmittal" box and include that fee with your plans.



STATE OF WASHINGTON
DEPARTMENT OF LABOR AND INDUSTRIES
Field Services & Public Safety
Factory Assembled Structures
PO Box 44430 Olympia, Washington 98504-4430

To: Tiny Home Builders
From: Craig Sedlacek, FAS Program Manager

Subject: Required Inspections

WAC 296-150F-0500 When Is an inspection required? (1) Before we issue an insignia, each factory-built residential structure and tiny home must be inspected at the off-site location as many times as are required by the codes. (See WAC 296-150f-0600)

NOTE: Approved design plans; specifications, engineering analysis and test results must be available during the inspections.

Inspection may include but not be limited to the following codes:

2015 International Building Code: section 110.3

110.3.9 Special inspection. To be made as required by section 1704. (Welding inspections are required for steel chassis, steel framing and other steel construction)

2015 International Residential Code: section R109

R109.1 General. Construction for which a building permit is required shall not be covered or concealed without first obtaining the approval of the building official.

R109.1.2 Plumbing, mechanical, gas and electrical rough-in. Rough inspection of plumbing, mechanical, gas and electrical systems shall be made prior to covering or concealment.

R109.1.4 Frame inspection. To be made after the roof, all framing, fire blocking and bracing is in place and all pipes, chimneys and vents are complete and the rough electrical, plumbing, and heating wires, pipes and ducts are approved.

R109.1.5 Other inspection. In addition to the listed inspections specified above, the building official may make or require other inspections of any construction work to ascertain compliance with the provision of this code and other laws which are enforced by the code enforcement agency.

R109.1.6 Final inspection. To be made after the building is completed and ready for shipment.

2015 Uniform Plumbing Code

105.1 General. Plumbing systems for which a permit is required by this code shall be inspected by the Authority Having Jurisdiction. No portion of any plumbing system shall be concealed until inspected and approved. Neither the Authority Having Jurisdiction nor the jurisdiction shall be liable for expense entailed in the removal or replacement of material required to permit inspection. When the installation of a plumbing system is complete, an additional and final inspection shall be made. Plumbing systems regulated

by this code shall not be connected to the water, the energy fuel supply, or the sewer system until authorized by the Authority Having Jurisdiction.

2015 Washington State Energy Code: section R104

104.1 General. All construction or work for which a permit is required shall be subject to inspection by the building official and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the building official.

104.2 Approvals Required: No work shall be done on any part of the building or structure beyond the point indicated in each successive inspection without first obtaining the approval of the building official.

104.2.1 Wall Insulation Inspection: To be made after all wall insulation and vapor retarder sheet or film materials are in place, but before any wall covering is placed.

104.2.1 Final Inspection: The building shall have a final inspection.

RCW 19.28.101 & 2017 National Electrical Code

No electrical wiring or Equipment subject to this chapter may be concealed until the inspector making the inspection has approved it. If the electrical system exceeds 200 amps or single phase, the manufacturer must advise the department so that appropriate inspection personnel can be provided.

WAC 296-150F-0510 How do I request an inspection? (1) You need to contact us, and we will let you know where your request for inspection should be submitted. Our address is noted in the **definition of department**.

(2) We need to receive **IN-STATE** inspection request at least seven calendar days **prior to** the date that you want the inspection.

(3) We need to receive **OUT-OF-STATE** inspection requests at least fourteen calendar days in **WRITING** **prior to** the date that you want the inspection. With your request please submit a map and directions from the closest commercial airport to your facility. Please include on your map and directions, your manufacturers name, physical address, city, area code, phone number and contact person.

To request an out-of state inspection you need to contact:

Physical Address: Plan Review Supervisor
Department of Labor and Industries
7273 Linderson Way SW (MS: 4430)
Tumwater, WA. 98501

Mailing Address: PO Box 44430
Olympia, WA 98504-4430

Phone: 360-902-5218

Fax: 360-902-5229

Email: FAS1@lni.wa.gov

NOTE: The inspector will apply an insignia(s) on the tiny home at the manufacturing location after the final inspection.

If you have any question about the inspection process please call the Plan Review Supervisor at 360-902-5218 or Fax at 360-902-5229