



Permitting and Inspections Department
Michael A. Russell, MS, Director

Shipping Containers: Procedure for Residential Structures

February 21, 2018

Purpose:

To establish a Permitting and Inspections Department (PID) policy for reviewing and approving modified shipping containers that are being changed to a habitable one- or two-family residential dwelling or addition to an existing dwelling.

There is a dearth of building regulation industry guidance for these type of structures. The challenge of regulating and ensuring their safety is compounded by the modification occurring outside of Portland, preventing the review and inspection of the normal phases of construction by City of Portland building officials. The fabricator does not have the capacity to ensure building safety standards and the code enforcement agency of origin is not inspecting the modified structures. The applicant has two options:

1. The building permit applicant contracts with a Third Party Inspector (TPI). PID will review the TPI's qualifications and work products to ensure a compliance outcome of meeting Maine Uniform Building and Energy Code (MUBEC), National Fire Protection Association (NFPA), local ordinances and other relevant safety standards.
2. The building permit applicant chooses to have the structure partially modified at the manufacturing facility. The interior remains exposed for the usual and customary local inspections and tests after delivery to Portland.

An applicant shall submit a letter of intent that includes:

- Selection of Option 1 or 2, as described above.
- Names of the TPI inspectors and the type of inspections they will conduct.
- Description of the project roles of the applicant and the manufacturer, including the scope of work to be conducted at the factory and local site. Also, please identify the permit application information each entity will provide.

Option 1 (finished containers, modified offsite):

1. Provide documents, structural and architectural plans, per the building permit application checklist for either an [addition](#) or [new dwelling](#).
2. The applicant shall submit letters from proposed Third Party Inspector(s) indicating the TPI meets the Maine Department of Public Safety, Bureau of Building Codes and Standards, Section 16-642, Chapter 2: Maine Uniform Building Code and Uniform Energy Code – Third Party Inspectors requirements. Minimally, the letter shall include the following:



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- List of relevant certifications and years of experience (include copies of certificates).
- Three professional references
- Copies of the State of Maine Third Party Inspector certificate (if applicable).
- A statement confirming that the TPI is free from conflicts of interest with the applicant, owner, and others of direct financial interest for the specified project. This does not include the fee-for-service TPI payment.

The TPI must have a minimum of 5 years of experience within each building certification area to be inspected. PID will review the submitted information and determine if the selection criteria are met. PID reserves the right to reject a TPI.

3. The manufacturer shall provide a letter and/or documentation of the following:
 - Location of where the structure was modified to its current condition.
 - Certification that the structure, as modified, conforms to all applicable codes and standards, and adopted state laws and local ordinances.
 - Documents and plans that describe the design, assembly, and installation of the manufactured structure, including the quality assurance practices.
 - Manufacturer's certification label will be permanently affixed at the electrical panel, or in a conspicuous location, listing the company name, facility's address, date of issuance, the applicable building code and year, and the State Manufactured Housing Board license number.
 - Manufacturer will provide a 1 year warranty per State statute.
 - Letters from the licensed installers and their associated credentials for plumbing, electrical and HVAC. The installers and inspectors must be different entities and free from conflicts of interest.
4. Installation and connection of plumbing, electrical, and heating components performed at the local building site will be done by licensed contractors. Permit applications must be approved by the City of Portland prior to commencement of this work.
5. Prior to the delivery and installation of the structure, each certified TPI shall submit documentation in accordance with the Construction File and Inspection Report requirements, as specified in the Maine Department of Public Safety, Bureau of Building Codes and Standards, [Section 16-642, Chapter 2](#) : Maine Uniform Building Code and Uniform Energy Code – Third Party Inspectors document. The documentation will be reviewed and approved by PID before installation may commence.



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6. Prior to a Certificate of Occupancy (CO) inspection, a notarized letter from the Master Electrician TPI must be submitted on business letterhead, signed and include:
 - Certification that the applicable system was installed in compliance with the adopted code year (current is ok) and all discrepancies were corrected.
 - Dimensions of the container structure, local project address, the entity contracting the work, dates and type of inspections.
7. A Certificate of Occupancy inspection by PID including:
 - Electrical and plumbing site hookup.
 - All construction performed on site.
8. A temporary or conditional certificate of occupancy will not be granted. All requirements must be met for the issuance of a certificate of occupancy.

Option 2 (partially modified containers, finished at the local site):

1. Provide documents, structural and architectural plans, per the building permit application checklist for an [addition](#) or [new dwelling](#). Since another entity is completing the unfinished product at the local site, it is incumbent upon that entity (or the applicant) to provide documents and plans specific to the finishes and installations.
2. TPI documentation and inspections, as described in Option 1, are required for modified elements not visible to Portland inspectors. The TPI shall submit construction files and inspection reports to PID, per Item #5 in Option 1, for review and acceptance, prior to the installation of the container on site.
3. Manufacturer letter/documentation as described in Option 1 (Item #3), except for the certification label and 1 year warranty.
4. After the required site work inspections are approved, the partially modified container can be located at the property in Portland.
5. Licensed electrical, plumbing and HVAC contractors will submit permit applications for their respective installations and assume responsibility.
6. All modifications and installations will be inspected for compliance by City of Portland officials. All required corrections will be made prior to covering the work. Additional special inspections and tests may be required by a registered design professional in responsible charge, as approved by the city.



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7. Final inspections are required for the structure and the site to confirm compliance prior to approval of occupancy.
8. A temporary or conditional certificate of occupancy will not be granted. All requirements must be met for the issuance of a certificate of occupancy.