



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

May 2018
Log No. _____

1. State Building Code to be Amended:

- International Building Code
- ICC ANSI A117.1 Accessibility Code
- International Existing Building Code
- International Residential Code
- International Fire Code
- Uniform Plumbing Code

- International Mechanical Code
- International Fuel Gas Code
- NFPA 54 National Fuel Gas Code
- NFPA 58 Liquefied Petroleum Gas Code
- Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized [energy code forms](#)

Section(s):

(New) Appendix W

Title:

Construction and Demolition Material Management

2. Proponent Name (Specific local government, organization or individual):

Proponent: Kinley Deller

Title: C&D Program Manager

Date: April 8, 2022; modified 5/25/22

3. Designated Contact Person:

Proponent: Kinley Deller

Title: C&D Program Manager

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Cell:

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4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

Code(s) International Residential Code Section(s) Appendix W (new)

Enforceable code language must be used.
Amend section to read as follows:

APPENDIX W
CONSTRUCTION AND DEMOLITION MATERIAL MANAGEMENT

SECTION W101
GENERAL

W101.1 Purpose. The purpose of this ~~code-section~~ is to increase the *reuse* and *recycling* of construction and demolition materials.

W101.2 Scope. This ~~code-section~~ applies to new *buildings and structures-construction*, *alterations* to existing *buildings and structures* and the *demolition* of existing *buildings and structures* having a work area greater than 750 square feet or *with* a project value greater than \$75,000, whichever is more restrictive.

Exception: Projects determined to be unsafe.

SECTION W102
GENERAL DEFINITIONS

Demolition. The process of razing, relocating, or removing an existing *building* or *structure*, or a portion thereof.

Divert, Diverted, or Diversion. The *reuse*, *recycling*, or beneficial use of construction and *demolition* materials.

Recycling. The process of transforming or remanufacturing waste materials into useable or marketable materials for use other than landfill disposal or incineration.

Reuse. The return of a material into the economic stream for use.

Salvage. The recovery of construction and *demolition building* material and components from a *building* or site in order to increase the *reuse* or repurpose potential of these materials and decrease the amount of material being sent to the landfill. *Salvaged* material may be sold, donated, or reused on site.

SECTION W103
CONSTRUCTION AND DEMOLITION MATERIAL MANAGEMENT

W103.1 Collection containers. All sites where *recyclable* construction and *demolition* materials are generated and transported for *recycling* must provide a separate container for *nonrecyclable* materials pursuant to WAC 173-345-040.

W103.2 Salvage assessment. A *salvage* assessment shall be submitted prior to *permit* issuance. The *salvage* assessment shall identify the *building* components of an existing *building* that, if removed, have the potential to be *reused*. ~~This assessment shall be signed by the owner and serve as an affidavit stating that the project shall be executed in compliance with the requirements of this code.~~

Exception: Projects that include only new construction.

W103.3 Waste diversion report. A waste diversion report shall be submitted prior to issuance of the Certificate of Occupancy or approval of final inspection. The waste diversion report shall identify the following:

1. Weight or volume of project-generated construction and *demolition* material;
2. Whether the material was disposed in a landfill or *diverted*;
3. The hauler of the material;
4. The receiving facility or location; and
5. The date materials were accepted by the receiving facility or location.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.

Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The intent of this new optional Appendix W is to reduce the amount of construction and demolition waste that goes to a landfill after leaving a construction site. For jurisdictions where material management is a priority, this language helps to increase the amount of material that is salvaged for reuse – or recycled. Two forms are a part of this code change proposal (the Salvage Assessment and Waste Diversion Report) which would need to be submitted to the local building department.

Prior to beginning a project, completing the salvage assessment allows the owner to thoughtfully identify possible materials, systems and appliances that might be salvageable from this building as it is dismantled. Salvaged elements can be reused on-site, another project, or sold to retailers for resale. Once identified, the owner can choose to salvage these elements, which may come as a cost benefit to them.

Salvaging materials can extend the lives of our landfills, saving a jurisdiction future expansion cost. Keeping materials in use longer has environmental benefits such as carbon sequestration and reduced carbon emissions from material not needing to be processed. An additional benefit is that material, such as wood from the 1930's, is of much greater quality than wood being retailed today.

Materials, appliances, and systems commonly salvaged in areas where reuse markets exist include:

- Wood
- Brick
- Stoves, refrigerators
- Cabinets
- Carpet, flooring
- Doors; windows meeting current code
- Lighting Fixtures; plumbing fixtures meeting current code
- Metal Roofing
- Wall Covering, insulation, wall sheathing, siding

Completing the waste diversion report at the end of a project shows what materials went to the landfill, which were recycled, and which were salvaged. If the jurisdiction has material diversion targets, this form helps the jurisdiction track the percentages of materials being diverted and can help to identify what markets or processing facility types need to be better supported. Materials commonly recycled in areas where receiving facilities exist include:

- Asphalt paving
- Brick
- Concrete
- Cardboard
- Wood
- Metal
- New drywall scrap

This code-section is appropriate as an appendix because not all communities in Washington State have salvage retail businesses or readily accessible recycling processing facilities. However, several jurisdictions in our state have carbon emission goals, where increasing the amount of material available for reuse will help toward achieving their goals. For example, the City of Shoreline and City of Seattle have enforced a similar requirement and forms since 2014. The approval of Appendix W, with the forms already developed, could become available for other interested jurisdictions to adopt without having to create their own from scratch.

This identical appendix and forms have been approved by the State Building Code Council as an amendment to the 2021 IBC, so approval of this appendix and forms will sync up requirements for both the 2021 IRC and IBC.

6. Specify what criteria this proposal meets. You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment clarifies the intent or application of the code.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. Is there an economic impact: Yes No

If no, state reason:

This is an optional appendix. Impacts to the owner would be the minimal time it takes to complete the 2 forms. Cost to the jurisdiction is contingent on the process they develop around this Appendix. For example, one jurisdiction could just collect the forms, whereby another could choose to review the form – it depends on how each plans to use the information provided. Again, it is an optional appendix, so a jurisdiction adopting the appendix will have researched the impacts and have determined them to be acceptable to all.

If yes, provide economic impact, costs and benefits as noted below in items a – f.

- Life Cycle Cost.** Use the OFM Life Cycle Cost Analysis tool to estimate the life cycle cost of the proposal using one or more typical examples. Reference these Instructions; use these Inputs. Webinars on the tool can be found Here and Here). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.

- b. **Construction Cost.** Provide your best estimate of the construction cost (or cost savings) of your code change proposal.

\$Click here to enter text./square foot

(For residential projects, also provide \$Click here to enter text./ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

- c. **Code Enforcement.** List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

This is an optional appendix, so only if it is adopted will it potentially impact staff. For those who adopt it, the process they develop will determine how much impact it will have to review and inspection staff. It will likely have no impact to inspection staff, and potentially a small impact to review staff.

- d. **Small Business Impact.** Describe economic impacts to small businesses:

- e. **Housing Affordability.** Describe economic impacts on housing affordability:

- f. **Other.** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Please send your completed proposal to: sbcc@des.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.

Salvage Assessment

Project Number _____ Whole Building Removal (demolition) Alterations
 Nonresidential Project Residential
 Project

Project Address _____

Parcel Number _____

Contact Name _____
Contact Name *email* *Phone*

Directions to use the Salvage Assessment:

- Completed for all permitted projects that include demolition, such as whole building removal and alterations, where the area of work is either greater than 750 square feet OR the construction value is greater than \$75,000.
- To be filled out by the owner or authorized agent.
- Using the matrix below, identify all building materials impacted by demolition that could be salvaged and reused ON or OFF-SITE instead of being sent to a landfill or recycled.
- Submit this form to the jurisdiction prior to permit issuance

By checking this box, you have determined your project does not meet either the 750 s.f. or \$75,000 threshold and do not need to complete this form.

To the best of my knowledge, I pledge that the information provided is accurate
(Owner/Agent Signature here)

Salvage Assessment Matrix

Building Component	Specific Material	Quantity	Identified for Salvage (Y/N)	Notes
Cabinets	Solid Wood (with back panel)			
	Other (with back panel)			
Carpet	Tile			
	Roll			
Doors	Interior			
	Exterior			
	Garage			
Flooring	Solid Floor			
Insulation	Batts			
Lighting Fixtures	Lighting Fixtures			
Plumbing	Bathtub/sinks			
	Piping			
	Other fixtures meeting current code			

Building Component	Specific Material	Quantity	Identified for Salvage (Y/N)	Notes
Roofing	Metal			
	Wood			
	Plywood			
	Asphalt Shingles			
Siding	Metal			
	Wood			
	Plywood			
	Vinyl			
	Composite			
Wall Covering	Drywall			
	Solid Wood Paneling			
	Plywood Paneling			
Wall Sheathing	Plywood			
	Shiplap			
	OSB			
Windows	Insulated aluminum			
	Wood			
	Vinyl			
	Composite			
Wood	Clean dimensional lumber			
	Clean scrap lumber			
	Painted/treated lumber			
Miscellaneous	Trim			
	Fence/gate			
	Countertop			
	Mechanical Equipment			
	Appliance			
	Deck			

Waste Diversion Report

Project Name _____

Permit # _____ **Parcel Number** _____

Company (if applicable) _____

Contact _____
Contact Name
email
Phone

Permitting Jurisdiction _____ **Permit #** _____

Square footage of structures to be demolished _____ **sq ft**

Directions:

- Use the "Management Method" column to denote if the material was disposed OR diverted for reuse, recycling, or a beneficial use.
- Use the "Hauler" column to identify who hauled material to the receiving facility.
- Use the "Receiving Facility" column to select the location where materials were hauled to.
- Use the Unit of Measure column to denote the material quantity with terms such as tons, pounds, cubic yards, or number of items (for salvage)

Material Type	Management Method	Quantity	Unit of Measure	Hauler <i>(Or identify "self")</i>	Receiving Facility
Asphalt paving					
Asphalt shingles					
Brick					
Carpet/padding					
Concrete					
Glass					
Gypsum/Drywall					
Metals					
Clean wood (studs/beams/rafters)					
Painted/treated wood					
C&D non-recyclables					
Other					
Other					
Other					
Other					
Other					

To the best of my knowledge, I pledge that the information provided is accurate

_____ *(Owner/Agent Signature here)*