

# APPENDIX A—RRIO CHECKLIST



CITY OF SEATTLE DEPARTMENT OF CONSTRUCTION AND INSPECTIONS  
RENTAL REGISTRATION AND INSPECTION ORDINANCE (RRIO)

## RRIO Checklist

### Use of checklist:

Property owners will use the RRIO Checklist to confirm that their rental housing properties and units meet the requirements of the Rental Registration and Inspection Ordinance (RRIO) or, if units are vacant, they will meet the requirements prior to being rented.

Inspectors will use the checklist to validate that rental housing properties have been maintained according to the RRIO requirements.

The checklist includes specific items from the City of Seattle Housing & Building Maintenance Code (HBMC). At the beginning of each numbered checklist section is a general description of the minimum requirements for the structure or for specific rooms. Below the general description is a set of checklist items to be reviewed.

To use the checklist, review each checklist item. If the described condition is present, check the box. Once completed, if any items are checked see 1 and 2 below.

#### 1. When registering a rental property

- Items with an asterisk (\*) and in bold face type indicate a significant maintenance issue that if present, must be fixed in order to register an occupied unit or before renting an unoccupied unit.
- Items without an asterisk are also maintenance issues and must be repaired to comply with the City's HBMC, but the unit can be registered or rented if one or more of these items are present.

#### 2. When using the checklist for a RRIO inspection

- Items with an asterisk (\*) and in bold face type must be repaired before the unit can pass inspection and receive a Certificate of Compliance.
- Items without an asterisk are also maintenance issues and must be repaired to comply with the City's HBMC, but a Certificate of Compliance can be issued if one or more of these items are present.

If any requirement in this checklist is different than was authorized and constructed under a valid building permit, then the building permit requirement is the standard that must be met.

Units with shared kitchens and baths such as those in a Single Room Occupancy (SRO), rooming house, or micro-

housing property are considered individual rental housing units, and during RRIO inspections, both the individual rental housing unit and any associated common kitchen or bath areas will be inspected.

### Definitions:

As used in this checklist:

- **Habitable room:** means a space in a building occupied, used, designed, or intended to be used for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, laundry rooms, storage or utility space, and similar areas are not habitable rooms.
- **Good working order/well maintained/in good repair/safe and sound condition:** means the referenced item is functioning and can be used for its intended purpose as it is.
- **Structurally sound:** means the referenced element is capable of withstanding normal loads and forces.

### Limitations

This checklist is used solely to determine if a rental property meets the requirements of the Rental Registration and Inspection Ordinance, Seattle Municipal Code Chapter 22.214. It is not an evaluation of whether a property meets other City, State, or federal requirements. There may, however, be property conditions that should be addressed for other reasons.

# 1 Exterior: Structure, Shelter, and Maintenance

Roof, chimney, foundation, stairs, and decks are reasonably free of decay (e.g., severe cracks, soft spots, loose pieces, deterioration, or other indications that repair is needed); maintained in a safe, sound, and sanitary condition; and capable of withstanding normal loads and forces. The building and its components, including windows, should be reasonably weather-proof and damp-free.

1.1 Roof must be maintained in a safe and sound condition and in good repair based on visual inspection.

- |   |                          |
|---|--------------------------|
| * a. Roof has holes and/or structural member is broken or decayed | <input type="checkbox"/> |
| * b. Roof is not weather-proof or has clear evidence of leaking   | <input type="checkbox"/> |

1.2 Chimney is maintained in a safe and sound condition and in good repair with no major damage based on visual inspection (does not pose imminent danger).

- |   |                          |
|---|--------------------------|
| a. Loose bricks at the top and/or masonry requires repointing at top        | <input type="checkbox"/> |
| b. Loose or missing bricks or masonry in middle or at chimney base          | <input type="checkbox"/> |
| * c. Pulling away from structure, unstable, or otherwise at risk of falling | <input type="checkbox"/> |

1.3 Foundation is weather-proof, maintained, and structurally sound.

Foundation type: ☐ Post & Pier ☐ Running/continuous ☐ Concrete slab

- |  |                          |
|--|--------------------------|
| a. Standing water in crawl space   | <input type="checkbox"/> |
| * b. Foundation is failing: leaning, crumbling, missing pieces, broken, or deflected | <input type="checkbox"/> |

1.4 Exterior stairs and decks are safe, structurally sound, and in good repair.

- |   |                          |
|---|--------------------------|
| * a. Structural members are leaning, decayed, or detached   | <input type="checkbox"/> |
| * b. Exterior decks or other platforms have broken, loose, decayed, or missing pieces   | <input type="checkbox"/> |
| * c. Exterior stairs have broken, loose, decayed, or missing pieces   | <input type="checkbox"/> |
| * d. Guardrails/intermediate rails on any landing, deck, or platform that are 30 inches or more above grade or other surfaces are missing, loose, or broken | <input type="checkbox"/> |
| * e. Handrails/intermediate rails on any flight with more than three risers are missing, loose, or broken   | <input type="checkbox"/> |

1.5 Door and window components and assemblies are weatherproof, safe, secure, and maintained in good condition.

- |  |                          |
|--|--------------------------|
| a. Weather stripping is missing or allowing air to enter   | <input type="checkbox"/> |
| b. Sills or frames have decayed wood or separated joints   | <input type="checkbox"/> |
| * c. Windows or doors have missing pieces or are cracked and allowing weather or water to get inside | <input type="checkbox"/> |

**1.6 Exterior walls** are reasonably weathertight and watertight, structurally sound, rodent proof, and kept in a safe and sound condition.

- |   |  |                          |
|---|--|--------------------------|
| * | a. Exterior walls allow water or weather penetration (e.g., seeping, leaking, coming in through a crack or hole) | <input type="checkbox"/> |
| * | b. Exterior wall is failing: leaning, crumbling, missing pieces, broken, or deflected                            | <input type="checkbox"/> |

## 2 Interior: Structure, Shelter, and Maintenance

Walls, floors, stairs, and other structural components are reasonably free of decay, maintained in a safe and sound condition, and capable of withstanding normal loads and forces. Natural and mechanical lighting and ventilation is adequate and maintained in good working order for each habitable room in the unit.

**2.1 Ventilation:** all habitable rooms and bathrooms and laundry rooms have openable windows, or passive or mechanical ventilation in good working order and vented to the exterior.

- |   |   |                          |
|---|---|--------------------------|
| * | a. Any habitable room, bathroom, or laundry room does not have an openable window or other approved ventilation   | <input type="checkbox"/> |
| * | b. Kitchen fan, if used in place of openable windows, is not operable or pulling air  | <input type="checkbox"/> |
| * | c. Bathroom and laundry room fan, if used in place of openable windows or operable passive ventilation, is not operable, pulling air, or vented to exterior | <input type="checkbox"/> |

**2.2 Structural components** such as walls and floors are maintained in a safe and sound condition and in good repair. Wall, floor, and ceiling coverings must be dry and free of moisture.

- |   |  |                          |
|---|--|--------------------------|
|   | a. Wall, floor, or ceiling coverings are broken such that framing members are visually exposed | <input type="checkbox"/> |
| * | b. Walls, floors, or ceilings are soft, spongy, or wet to the touch                            | <input type="checkbox"/> |
| * | c. Interior load-bearing walls are not maintained in a safe and sound condition                | <input type="checkbox"/> |
| * | d. Floors are not maintained in a safe and sound condition                                     | <input type="checkbox"/> |

**2.3 Interior stairs and landings** must be maintained in a safe and sound condition and in good repair.

- |   |   |                          |
|---|---|--------------------------|
| * | a. Joists or posts are leaning, decayed, or detached  | <input type="checkbox"/> |
| * | b. Landings or other platforms have broken, loose, decayed, or missing pieces                           | <input type="checkbox"/> |
| * | c. Interior stairs have loose, broken, decayed, or missing pieces                                       | <input type="checkbox"/> |
| * | d. Floors not maintained in a safe and sound condition  | <input type="checkbox"/> |
| * | e. Handrails/intermediate rails on any flight with more than three risers are missing, loose, or broken | <input type="checkbox"/> |

### 3 Emergency Escape Windows and Doors

Every sleeping room built or permitted after August 10, 1972 must have an emergency escape window or door. Emergency escape windows must open to the exterior, have a minimum opening of 5.7 square feet with a minimum dimension of at least 24 inches high and at least 20 inches wide, and must not exceed a maximum sill height of 44 inches from the floor. In order to meet the total square footage requirement, a window size of nearly 2 by 3 feet is typically required. Sleeping rooms that were built under permit prior to August 10, 1972 are exempted from this requirement.

\* 3.1 Emergency escape window or door is missing, blocked, or inaccessible. ☐

\* 3.2 Emergency escape windows do not meet size or sill height requirements. ☐

### 4 Room Size and Condition

All rooms used as living or sleeping rooms must meet minimum requirements for square footage and must not have dirt floors.

4.1 Dwelling unit does not have at least one habitable room that is 120 square feet (square footage requirements do not apply to units comprised of a single habitable room such as a Single Room Occupancy, rooming house, or micro-housing unit). ☐

\* 4.2 Any habitable room except the kitchen measures less than seven (7) feet in any floor dimension. ☐

\* 4.3 Any sleeping room measures smaller than 70 square feet in size. ☐

\* 4.4 Dirt floor is present in any room used as a living area. ☐

### 5 Heating System

Every bathroom and habitable room must have a functioning, properly ventilated, and permanently-installed heat source.

Note: If heat is not permanently installed in every habitable room and bathroom, then the heating system must be capable of maintaining a temperature of at least 68°F measured 3 feet above the floor in each room when the outside temperature is 24°F or higher.

5.1 Heat source in the unit is permanent, working, and in good repair.

\* a. Required permanently-installed heating equipment/device is defective or missing in any habitable room or bathroom ☐

5.2 Temperature can be maintained at a minimum of 68°F when exterior temperature is 24°F or higher.

\* a. Permanently-installed heater is not capable of maintaining required temperature in any habitable room or bathroom ☐

**5.3 Fuel-burning appliances**, where allowed, must be of an approved type, properly installed, and maintained in good working order.

- |          |   |                          |
|----------|---|--------------------------|
| <b>*</b> | a. <b>Unvented portable fuel-burning heater is present in a sleeping room or bathroom</b> | <input type="checkbox"/> |
| <b>*</b> | b. <b>Any gas, wood, or fuel-burning heat source lacks proper ventilation</b>             | <input type="checkbox"/> |

## 6 Electrical Standards

All electrical equipment and wiring must be approved and maintained in safe and sound condition and in good working order.

- |          |   |                          |
|----------|---|--------------------------|
| <b>*</b> | 6.1 <b>Exposed unprotected wiring is evident in any room.</b>   | <input type="checkbox"/> |
| <b>*</b> | 6.2 <b>Any electrical equipment (meter bays, service panel, subpanels, shutoff) is improperly installed or connected, tampered with, or unsafe.</b> | <input type="checkbox"/> |
| <b>*</b> | 6.3 <b>Any habitable room, including kitchen, does not have an operable light fixture and an electrical outlet, or two electrical outlets.</b>      | <input type="checkbox"/> |
| <b>*</b> | 6.4 <b>Any bathroom, laundry room, utility room, common hallway, stairway, or porch does not have an operable light fixture.</b>                    | <input type="checkbox"/> |

## 7 Plumbing and Hot Water

Plumbing systems must be properly installed, functional, sanitary and maintained in good condition. Water temperature reaches at least 100°F after running water for two minutes.

- |          |   |                          |
|----------|---|--------------------------|
| <b>*</b> | 7.1 <b>Running water temperature is below 100°F.</b>  | <input type="checkbox"/> |
|          | 7.2 Any individual unit water heater is set above 120°F.  | <input type="checkbox"/> |
| <b>*</b> | 7.3 <b>Evidence that plumbing is not connected to an approved sewer or not functioning properly.</b> Evidence includes, for example: strong sewer gas smell in the basement or outside of unit, major leaking of basement plumbing pipes, numerous clogged or very slow drains. | <input type="checkbox"/> |



## 8 Sanitation Standards: Bathrooms

Every unit has at least one directly accessible bathroom (primary bathroom) that includes an operable toilet, sink, and tub or shower, all in safe and sound condition and sanitary working order. Does not apply to a legally established SRO/rooming house/micro-housing unit that does not have a bathroom, although any associated common or shared bathroom must meet these standards.

* 8.1 No fully functional or properly functioning bathroom that must include sink, toilet, and tub or shower.	<input type="checkbox"/>
8.2 The only access from a bedroom to the only bathroom is through another bedroom.	<input type="checkbox"/>
* 8.3 Tight-fitting door missing if bathroom is in a food preparation area.	<input type="checkbox"/>
* 8.4 Toilet does not flush, is broken, leaks at the base, or is not secure to the floor.	<input type="checkbox"/>
8.5 Sink:	
a. Dripping faucets, cracked or chipped porcelain, slow drain, or broken but operable handles or knobs	<input type="checkbox"/>
* b. Is not operable such as cracked through, faucet cannot turn on, or no hot and cold water	<input type="checkbox"/>
* c. Under sink plumbing pipes or connectors are leaking	<input type="checkbox"/>
8.6 Shower or bathtub:	
a. Dripping faucets, cracked or chipped porcelain, slow drain, broken but operable handles or knobs	<input type="checkbox"/>
* b. Is not operable such as cracked through, faucet cannot turn on, or no hot and cold water	<input type="checkbox"/>
* c. Plumbing pipes or connectors are leaking	<input type="checkbox"/>
8.7 Bathroom Counter is missing tile, pieces are broken, is made of a porous material, or is pulling away from the wall.	<input type="checkbox"/>
8.8 Wall, floor, or ceiling coverings:	
a. Broken such that floor, wall, or ceiling studs or joists are visually exposed	<input type="checkbox"/>
* b. Soft, spongy, or wet to the touch	<input type="checkbox"/>

## 9 Sanitation Standards: Kitchen

Every unit has a kitchen with a sink, counter, cabinets, cooking appliance, and refrigerator maintained in safe, sound, and sanitary condition. This does not apply to units comprised of a single habitable room such as a Single Room Occupancy, rooming house, or micro-housing unit when the unit does not have a kitchen. Common kitchen must meet these standards.

<b>* 9.1 Dwelling unit does not have a kitchen that must include sink, counter, cabinets, cooking appliance, and refrigerator.</b>	<input type="checkbox"/>
9.2 Counter is missing tile, pieces are broken, is made of a porous material, or is pulling away from the wall.	<input type="checkbox"/>
9.3 Refrigerator/freezer if provided by landlord:	
a. Missing a handle or seal is compromised	<input type="checkbox"/>
<b>* b. Is inoperable or not in good working condition</b>	<input type="checkbox"/>
9.4 Cooking appliance (if provided by landlord):	
a. One or more parts are inoperable or missing but appliance still has food cooking capability.	<input type="checkbox"/>
<b>* b. Not rated for indoor use or entire appliance is inoperable</b>	<input type="checkbox"/>
9.5 Sink:	
a. Dripping faucets, cracked or chipped porcelain, slow drain, or broken but operable handles or knobs	<input type="checkbox"/>
<b>* b. Not operable such as cracked through, faucet cannot turn on, or no hot and cold water</b>	<input type="checkbox"/>
<b>* c. Under sink plumbing assemblies including any piping, faucet risers, traps, or sink connectors are leaking</b>	<input type="checkbox"/>
9.6 Gas piping:	
<b>* a. Gas piping is leaking, kinked, crushed, or pulling away from the wall (NOTE: if leak detected, evacuate and call 911 immediately)</b>	<input type="checkbox"/>
b. Gas shutoff valve not located within 3 feet of appliance	<input type="checkbox"/>
9.7 Wall, floor, or ceiling coverings:	
a. Broken such that floor, wall or ceiling studs or joists are visually exposed	<input type="checkbox"/>
<b>* b. Soft, spongy, or wet to the touch</b>	<input type="checkbox"/>

## 10 Owners' Obligations

Property owners are responsible for ensuring that the property is free of excess trash; insects and rodents have been exterminated; unit and building doors lock with a deadbolt or deadlatch; and working smoke detectors are installed outside sleeping rooms.

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10.1 Garbage/rubbish is accumulated outside of trash receptacles.

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\* 10.2 Visible evidence of rodents or insects such as bedbugs, ants, cockroaches, or silverfish.

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\* 10.3 Door locks, frames, or jambs are broken and do not allow unit or building doors to close and lock securely.

☐

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\* 10.4 Smoke detectors missing, not functional, or not centrally located in hallways outside sleeping rooms.

☐

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### Other Considerations

These items are not currently part of the City's Housing and Building Maintenance Code and are not part of the RRIO inspection or registration criteria. We strongly recommend these two requirements be met in all rental housing units.

- Seattle Building Code requires that smoke detectors be installed and working in every sleeping room and centrally located outside sleeping rooms.
- Washington State law requires that carbon monoxide detectors be installed outside of each separate sleeping area, in the immediate vicinity of the bedroom and on each level of the residence.



## **APPENDIX B—BOLTS PLUS STANDARDS**

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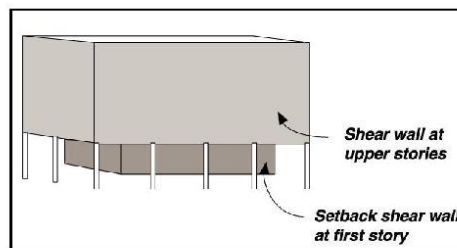
### Final report from URM Technical Committee & Proposed Retrofit Standard

November, 2011

This memo outlines a proposed standard for retrofit of unreinforced masonry buildings. The proposal was developed by the Unreinforced Masonry Building Technical Committee, with much assistance from the Structural Engineers Association of Washington Existing Buildings Committee (SEAW). The goal of the proposed standard is to establish a cost-effective retrofit requirement that would be effective in reducing the likelihood of collapse of URM buildings during an earthquake. The standard is intended to protect the lives of building inhabitants and those nearby, but would not be expected to prevent all injuries to people and buildings.

The proposal uses the current editions (2009) of the Seattle Building and Existing Building codes, and American Society of Civil Engineers (ASCE) Standards 31 and 41 as the primary methods for compliance. Buildings that meet certain criteria are given the option to use a prescriptive method based on the San Francisco retrofit ordinance, commonly referred to as "Bolts Plus". Bolts Plus was chosen as a model because it is less costly than compliance with standards used for new construction, but will provide significantly improved performance for most unreinforced masonry buildings. It requires retrofit of wall anchorage to current code standards, but addresses other structural deficiencies less comprehensively. For some buildings this amount of upgrade will provide a satisfactory increase in the likelihood the building will not completely collapse during an earthquake. The primary issue before the Technical Committee was how to determine which buildings should be allowed to use this prescriptive method.

The proposal modifies portions of the San Francisco ordinance that describe the conditions where the prescriptive method may be used. It allows buildings with diaphragm discontinuities such as split-level floors and roofs, and out-of-plane offsets in which one story is offset relative to the continuation of that element in an adjacent story (See Figure A below), to use the prescriptive method. It also allows all occupancy groups and buildings with any number of stories to use the prescriptive method.



**Figure A: Typical Building with Out-of-Plane Offset**

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The knottiest part of this proposal the question of whether Seattle should accept a potentially high level of shear wall overstress, as proposed in this draft, which is similar to the approach used in San Francisco. The alternative is to require a larger number of URM buildings to incur the additional expense of complying with the non-prescriptive methods. See Item 5 of Section 22.120.030 of the draft proposal.

To assist in this decision, SEAW analyzed 3 hypothetical building types to get more information about the affect of number of stories and length of walls, percentage of solid wall, seismic hazard, and site class. SEAW used the special procedure of ASCE 31 with the life safety standard. It should be noted that since the analysis includes only a small number of examples of hypothetical buildings, it shows trends but does not predict the performance of particular buildings. A summary of the analysis is attached. After reviewing the results of the study, SEAW recommends using a 40% solid wall as the threshold for the prescriptive method.

To be allowed to use the prescriptive method in San Francisco, a building must have 2 lines of resistance in the lateral force resisting system parallel in each direction. A wall must have solid masonry on at least 40% of its length to be considered a line of resistance.

The recommendation of the URM Technical Committee, and of SEAW, is to require 40% solid walls. The Committee considered allowing the prescriptive path to be used for 25% solid walls on most sites, and 40% solid walls for Site Class E which is the least stable site condition. However, the Committee decided that approach could result in too many buildings that would not be expected to perform well in an earthquake. Buildings that comply with ASCE 31 with a maximum design capacity ratio of 2.0 could also use the prescriptive method. The results of the SEAW analysis showed little difference between 25% and 40%.

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### URM Retrofit Proposal

This proposal locates the requirements for unreinforced masonry building retrofits in a new chapter in the Seattle Municipal Code.

#### **Chapter 22.120 Unreinforced masonry buildings.**

**22.120.010 Definition of unreinforced masonry building.** A building with one or more bearing walls made of plain clay brick or clay tile masonry that provide the primary support for vertical loads from floors or roofs that was constructed prior to May 7, 1977.

**22.120.020 Selection of method.** All buildings, regardless of occupancy or number of stories shall either be shown to be in compliance with or altered to comply with one of the following methods:

- (1) Section 1613 of the 2009 *Seattle Building Code*.
- (2) ASCE 31-03 *Seismic Evaluation of Existing Buildings*. Life Safety performance level.
- (3) ASCE 41-06 *Seismic Rehabilitation of Existing Buildings*, with supplement #1. Life Safety performance level.
- (4) 2009 *International Existing Building Code*, Appendix A, Chapter A1.

The BSE-1 spectral response acceleration parameters as defined in Section 1.6.1.2 of ASCE 41-06 is permitted for methods (2) through (4).

**22.120.030 Use of alternate method.** Buildings that comply with or that are altered to comply with Items (1) through (6) or with Item (7) of this section may be strengthened in compliance with Section 22.120.040.

- (1) The building does not have a vertical irregularity of Type 5A or 5B (Weak Story) as defined in ASCE 7-05 Table 12.3-2.
- (2) The building has a mortar shear strength,  $v_t$ , as determined by Section A106.3.35 of the 2009 *International Existing Building Code*, of 30 psi or more for all masonry classes.
- (3) The building has wood or plywood diaphragms at all levels above the base of the building.
- (4) The building does not have straight sheathed diaphragms without finished wood flooring with offset or perpendicular board edges.

Exception: Straight sheathed diaphragms without finished wood flooring with offset or perpendicular board edges are acceptable if any of the following conditions are met:

- a. The building has crosswalls below the non-compliant level as defined in Section A111.3 of the 2009 *International Existing Building Code* at a spacing that does not exceed 40 feet on center.
  - b. The diaphragm span is less than 24 feet and the diaphragm aspect ratio is less than 2-to-1.
- (5) The building has or will be provided with a minimum of two lines of vertical elements of the lateral force resisting system parallel to each axis. ~~Existing and new lines of resistance shall fully comply with Section 22.120.020.~~ Masonry walls shall have wall piers with a height-to-width ratio that does not exceed 2 to 1. Wall

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piers shall occupy not less than 40 percent of the wall's length for the wall to be considered as providing a line of resistance.

Exception: The above requirements for vertical elements do not apply if the owner submits a report prepared by a structural engineer licensed by the State of Washington that shows all walls comply with Section 22.120.020(2) with a maximum demand/capacity ratio of 2.0

- (6) In buildings containing one or more party walls, Section 22.120.030 shall not be used unless each building sharing a party wall individually complies with all of the limitations set forth above and the owner of each such building consents to the use of the procedure in writing.
- (7) Buildings that have undergone substantial alterations may be strengthened in compliance with Section 22.120.040 if it can be demonstrated that the building is in full compliance with the requirements of FEMA-178 Av, Aa=0.3.

### **22.120.040 Alternate method.**

Elements shall be in compliance with or altered to comply with the requirements listed in this section:

Elements	<i>2009 International Existing Building Code</i> Section
Wall Anchorage (tension bolts)	A113.1
Diaphragm Shear Transfer (shear bolts)	A113.2
Out-of-plane wall bracing	A113.5
Parapets and appendage bracing	A113.7 (A113.6 2009 IEBC)

The BSE-1 spectral response acceleration parameters as defined in Section 1.6.1.2 of ASCE 41-06 are permitted to be used.

Attachment: Summary of SEAW URM Pier Study



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## Summary of SEAW URM Pier Study

By: PWS Date: 6/13/11 Time: 12:17PM

File: C:\Users\pws\Documents\Professional\DPD\URM Policy\SEAW EBC\EBC URM 4-story.xls\Summary

### Four-Story, 120' x 120' Building

Ground Motion	Site Class	Sd1	25% Solid (4' piers)	40% Solid (4' piers)	40% Solid (7' piers)	60% Solid (10' piers)
10%/50yr (475yr)	C	0.376	2.6	2.2	1.8	1.6
20%/50yr (224yr)	C	0.269	1.9	1.5	1.3	1.1
50%/50yr (72yr)	C	0.140	1.0	0.8	0.7	0.6
10%/50yr (475yr)	D	0.463	3.2	2.6	2.2	1.9
20%/50yr (224yr)	D	0.353	2.5	2.0	1.7	1.5
50%/50yr (72yr)	D	0.197	1.4	1.1	1.0	0.8
10%/50yr (475yr)	E	0.733	4.1	3.3	2.9	2.5
20%/50yr (224yr)	F	0.544	3.6	2.9	2.5	2.1
50%/50yr (72yr)	E	0.288	2.0	1.7	1.4	1.2

### Three-Story, 50' x 120' Building

Ground Motion	Site Class	Sd1	Short Wall 25% Solid	Long Wall 25% Solid	Short Wall 40% Solid	Long Wall 40% Solid	Short Wall 60% Solid
10%/50yr (475yr)	C	0.376	2.5	1.1	2.4	1.1	2.3
20%/50yr (224yr)	C	0.269	1.8	0.8	1.7	0.8	1.8
50%/50yr (72yr)	C	0.140	0.9	0.4	0.9	0.4	0.9
10%/50yr (475yr)	D	0.463					
20%/50yr (224yr)	D	0.353					
50%/50yr (72yr)	D	0.197					
10%/50yr (475yr)	E	0.733	3.7	2.1	3.6	2.1	3.6
20%/50yr (224yr)	E	0.544	3.6	1.5	3.4	1.5	3.3
50%/50yr (72yr)	E	0.288	1.9	0.8	1.8	0.8	1.9

### One-Story, 60' x 120' Building

Ground Motion	Site Class	Sd1	25% Solid	40% Solid (4' piers)	40% Solid (9' piers)	60% Solid
10%/50yr (475yr)	C	0.376	1.5	1.6	1.5	1.0
20%/50yr (224yr)	C	0.269	1.0	1.1	1.1	0.7
50%/50yr (72yr)	C	0.140	0.5	0.6	0.6	0.4
10%/50yr (475yr)	D	0.463		1.6		
20%/50yr (224yr)	D	0.353		1.2		
50%/50yr (72yr)	D	0.197				
10%/50yr (475yr)	E	0.733	1.9	2.9	1.8	1.3
20%/50yr (224yr)	E	0.544	1.8	2.0	1.8	1.3
50%/50yr (72yr)	E	0.288	1.1	1.2	1.1	0.8

## **APPENDIX C—FINANCIAL TOOLS AND INCENTIVES**

The handouts on the following pages were distributed to property owners at a workshop.

# REHABILITATING YOUR HISTORIC BUILDING: FINANCIAL TOOLS AND INCENTIVES

May 6, 2014 (revised version)

**Bold** = existing tools and incentives that can be used without any changes

C = Available to commercial bldgs

R = Available for all residential bldgs

A = Available for affordable housing

\$ = includes wage requirements

Loans	C	R	A	\$	Notes
Private loans	X	X	X		Traditional loans from banks or other financial institutions. Have credit requirements.
Housing Levy			X	X	City would need to allocate to URM buildings. Low interest rate.
Washington Housing Trust Fund			X		Available to nonprofit organizations. Housing must remain affordable for 25 years.
WCRA loan pool	X	X	X		Loan pool supports affordable housing and real estate-based economic development
Special loan pool (other than WCRA, above)	X	X	X		Multiple financial institutions would pool money to lower their risk. Low interest rate.
City credit to guarantee private loans	X	X	X		This would make banks more willing to lend money, but the City would need to approve
Loans for historic preservation	X	X	X	?	From the state for historic buildings. Under consideration, likely 7-year terms.
Bonds by public entities	X	X	X		Would have a higher interest rate

Grants	C	R	A	\$	Notes
HOMC funds			X	X	From the federal government
Grants for historic preservation	X	X	X	?	From the state or 4Culture for historic buildings
Community Development Block Grants (CDBG)	X	X	X	X	City would need to reallocate money from other projects
Foundation funding	X	X	X		Would need to convince foundations of need, would also need a nonprofit conduit
Other federal funding	X	X	X	X	Complicated to administer. Would need to convince federal agencies of need.

Tax Credits	C	R	A	\$	Notes
Low Income Housing Tax Credits			X		Competitive allocation based on state priorities. Must remain affordable for 30 years.
Historic Rehabilitation Tax Credits	X	X	X		For older and historic income-producing buildings (not owner-occupied housing)
New Markets Tax Credits	X				For large projects (\$5 million+). Possible to combine multiple projects to reach threshold?

Tax Exemptions	C	R	A	\$	Notes
Multifamily Property Tax Exemption		X	X		If building has been vacant for past year and rehab includes 20% affordable housing
Special valuation	X	X	X		For historic buildings over 10 years.
Property tax exemption		X	X		These already exist for special populations ("seniors"). Add URM buildings?

Other	C	R	A	\$	Notes
EB-5 foreign investment	X	X	X		Low-interest loans for big projects in target areas. Middlemen not always reliable. Must create jobs (construction and long term)
Transferable Development Rights (TDRs)	X	X	X		For historic buildings
Energy/water conservation incentives	X	X	X	?	More coordination required with utility companies
Local Improvement District (LID)	X	X	X	X	Would this include non-URM buildings too? Would require community organizing.
Tax Increment Financing (TIF)	X	X	X	X	Would require a change in the state constitution—difficult. A long-term strategy.

## ADDITIONAL BACKGROUND ON FINANCIAL TOOLS AND INCENTIVES

May 6, 2014

### General

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#### *Affordable housing*

Housing that is affordable to households that earn a given percentage of the Area Median Income, ranging from 30% (very low income) to 50% (low income) to 80% (workforce housing).

#### *Wage requirements*

Loans and grants from local, state, and federal governments come with higher wage requirements that can increase the cost of a project by 10 to 25 percent.

### Loans

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Interest rates and loan terms (the length of time you have to pay the loan back) vary depending on the financial institution and the degree of perceived risk.

#### *Housing Levy*

Public funding approved by voters to create affordable housing. This includes funding to produce and preserve affordable rental housing.

### Grants

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#### *HOME funds*

Seattle receives a certain amount of money from the federal funding to create affordable housing for low-income households. HOME funds can support building, buying, and/or rehabilitating affordable housing for rent or homeownership; and providing direct rental assistance to low-income people.

#### *Community Development Block Grants (CDBG)*

Similar to HOME funds, Seattle receives a certain amount of money from the federal government to help low-income households and neighborhoods. This funding is currently divided between assistance to homeless individuals, economic development, and construction and rehabilitation of affordable housing.

### Tax Credits

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Tax credits reduce the amount of money you have to pay by subtracting a given amount from your tax bill. Tax credits are different than tax deductions, which reduce the amount of money that you will be taxed on.

#### *Low Income Housing Tax Credits (LIHTC)*

Developers of residential rental projects that include a certain percentage of affordable housing units are awarded tax credits, which the developers can “sell” to investors to raise money for their projects. This reduces the amount that the developer would otherwise have to borrow. Investors get a dollar-for-dollar credit each year over 10 years, and own a part of the property for those 10 years. Low Income Housing Tax

Credits are allocated by the State. Projects that receive these tax credits must remain affordable for 30 years or longer.

#### *Historic Rehabilitation Tax Credits*

Older and historic buildings that are rented out can qualify for historic tax credits. Buildings in a designated historic district like the Chinatown ID qualify for a tax credit worth 20% of the project costs. To receive the tax credit, property owners must discuss the rehabilitation plans with the state historic agency to make sure the proposed work preserves the important historic qualities of the building. Buildings not in a historic district that were built before 1937 qualify for a tax credit worth 10% of the project costs, with fewer regulatory requirements.

#### *New Markets Tax Credits (NMTC)*

New Markets Tax Credits provide tax credits to investors that equal 39% of the investment. These tax credits are spread out over 7 years. Because they are very complicated to administer and involve high legal fees, New Markets Tax Credits are usually only used for multi-million dollar projects.

### **Tax Exemptions**

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Tax exemptions reduce the amount of property tax you pay. These are granted at the City level.

### **Other**

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#### *Transferable Development Rights (TDRs)*

TDRs allow owners of historic properties to “sell” the air rights over their buildings, up to the height limit allowed by zoning. The air rights are purchased by developers who want to build higher buildings in another part of the city. Though the City regulates these transfers, the price is determined by market demand.

#### *Tax Increment Financing (TIF)*

Tax Increment Financing is based on the idea that when improvements in an area are completed, they result in increases in the value of surrounding properties (“tax increments”). TIF borrows against the money from future tax increments and puts it toward supporting catalytic improvements. This is not currently legal in Washington.

#### *Local Improvement District (LID)*

A Local Improvement District is formed by property owners in an area who agree that they want to help pay for improvements (usually infrastructure) that will benefit all of them. A LID finances improvements by borrowing at a low interest rate. The property owners in the LID jointly pay the loan back according to the benefits their property receives.