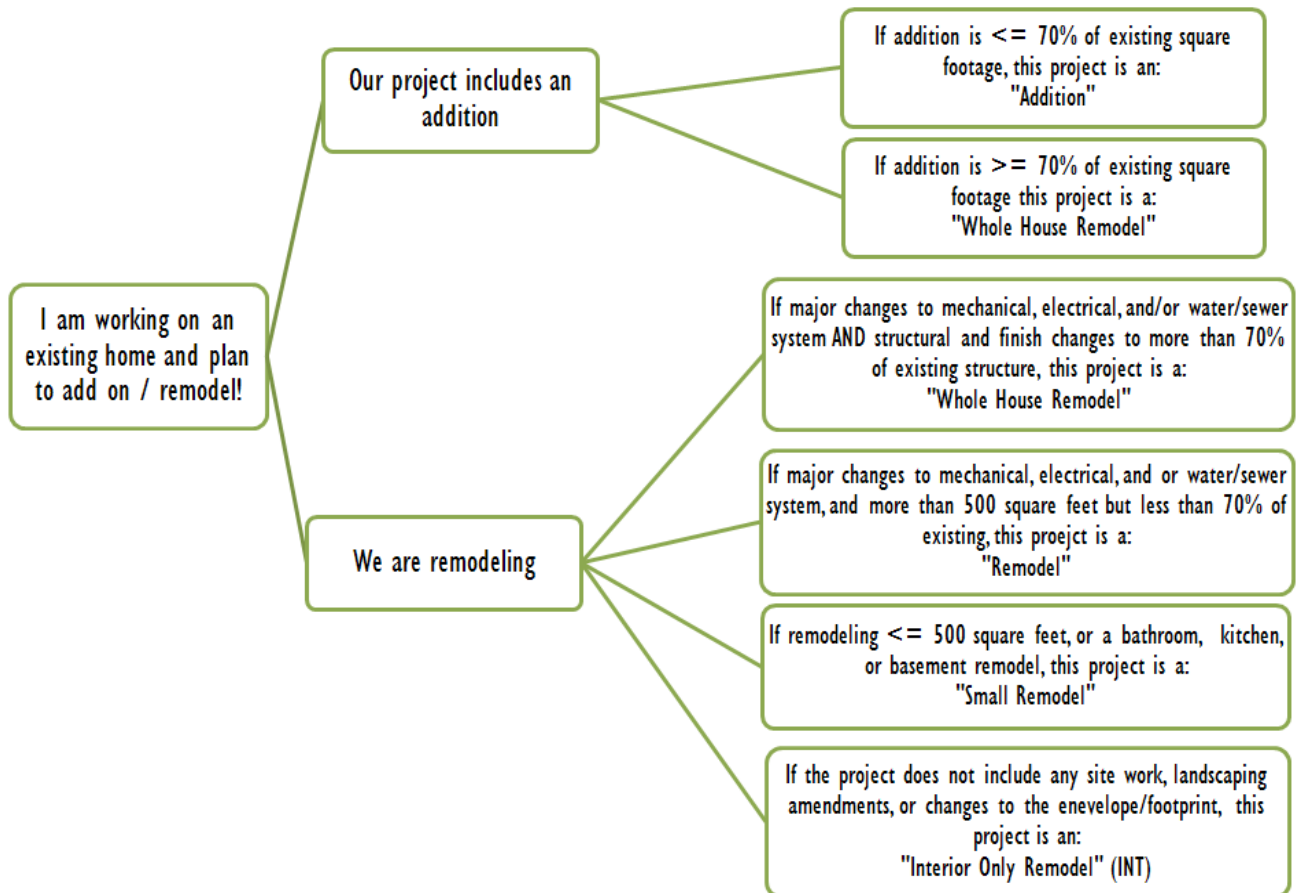


## Build Green® Remodeler Program Type of Remodel Flow Chart



## HOW TO QUALIFY YOUR PROJECT

Once you have determined the type of Remodel you are pursuing, use the Remodeler Checklist prior to construction to determine which features to include in your project. The checklist is a useful tool to engage your client in selecting the quality and performance features of their home. You might decide on achieving a certain Star-rating or focus on the customer's key interest areas, e.g. energy efficiency and indoor air quality. Alternately, you might develop packages of Action Items that you offer as standards or as upgrades.

When construction is complete, send a signed copy of the checklist to the MBA, confirming that the home identified in the application contains the identified features. Based upon the information you provide in the checklist, and after reviewing the application, the MBA will award the appropriate Certificate of Merit indicating that the home has received a 1-, 2-, 3-, 4-, 5-Star or ERC rating.

This Certificate can be an important part of your marketing effort. It should be given to your client/homeowner as part of the handover package, along with the Homeowner Built Green® Operations and Maintenance Tool Kit (see R-26). You might also want to refer to the Checklist when doing your final walkthrough.

For a summary of requirements to qualify your project, see *Program-at-a-Glance* on pages xvii and xviii. The table below outlines the certification process:

### **Built Green® Remodeler Program Certification Process Overview**

#### **STEP 1: Complete Checklist**

Check Action Items completed in the project to qualify for a Built Green® Star rating. Determine which Star level your project qualifies for.

#### **STEP 2: Check the Program Certification Requirements**

Refer to pages xvii and xviii for a list of required Action Items and confirm that you have met all requirements, including the minimum point levels required in each section, at the level that you wish to certify your project.

#### **STEP 3: Determine Rating**

- Refer to the point summary table on the electronic checklist to confirm your checklist score.
- Calculate the minimum point requirements for each section to ensure you've met the requirements for the desired Star level.
- Review the point thresholds for each program level (on page x and xi) and determine at which level you qualify

#### **STEP 4: Third Party Verification**

If you are completing a 4 or 5 Star project, or are pursuing points for Third Party Verification at the 1, 2, or 3 Star levels, work with your Third party verifier to prepare the required documentation.

#### **STEP 5: Submit Your Application!**

## **Program Requirements**

All projects certified by the program must have completed each starred (★) Action Item on the checklist. Starred Action Items are included in *Program Certification Requirements*.

Some Action Items may already be required by code, but are included in the checklist and assigned points due to encouragement from the Built Green® program to use some better-than-typical practices to meet code. The Part I narrative for each Action Item provides examples of such practices.

## **Star Ratings**

Star ratings are based on the number of points gained by implementing Action Items. The number of points required for each star level depends on the Type of Remodel of your project. See chart below.

**2010 Minimum Point Totals by Type of Remodel**

<b>Star Level</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
Whole House Remodel	100	175	265	340	435
Addition	100	150	220	285	365
Remodel	100	150	220	285	365
Small Remodel	100	150	220	--NA--	--NA--
Interior Only (INT)	97	145	207	--NA--	--NA--

The following table identifies the point requirements per Section and Star level for *Whole House Remodel* projects.

**2010 Minimum Points by Section for Whole House Remodel**

Star Level	1*	2*	3*	4*	5*
Section 1	5	5	10	15	18
Section 2	15	20	30	41	52
Section 3	10	20	25	30	37
Section 4	20	40	60	75	95
Section 5	25	45	65	80	102
Section 6	25	45	75	95	125
Section 7	optional	optional	optional	4	6

The following table identifies the point requirements per Section and Star level for Additions, Remodels, Small Remodels, and Interior Only Remodels (“INT”) - note that neither Small Remodels nor Interior Only Remodels can earn 4 or 5 Star certification levels).

**2010 Minimum Points by Section for Additions, Remodels, and Small Remodels  
(4 and 5 Star not available for Small Remodels or INT)**

Star Level	1*	2*	3*	4*	5*
Section 1	5	5	8	15	18
Section 2	15 (12 <sub>INT</sub> )	18 (12 <sub>INT</sub> )	25 (12 <sub>INT</sub> )	33	50
Section 3	10	15	17	27	33
Section 4	20	30	55	68	85
Section 5	25	40	50	60	73
Section 6	25	42	65	78	100
Section 7	optional	optional	optional	4	6

## ENERGY RETROFIT CHECKLIST (ERC)

The Energy Retrofit Checklist (ERC) was developed to offer remodelers the option of certifying through the Built Green® program for energy-only related measures. The ERC is integrated throughout the Remodeler Checklist and also exists as a stand-alone checklist as a separate worksheet in the Remodeler Program Excel file. As with the Remodeler Checklist, there are required items (indicated with a \*) and optional items with point values associated with them. A minimum of 15 points from ERC Action Items is required for all types of Remodels and ERC-only projects.

The ERC is organized with required items first followed by Action Items with the greatest potential energy savings (“Best”), as well as “Better” and “Good” measures.



# Energy Retrofit Checklist (ERC)

(15 ERC points required for all Remodel project types and ERC-only projects)

Place Your Logo Here.

Company Name: Enter GC Name

Project Name & Address: Enter Project Name

Number	Points	Action Item	Points Earned
<b>Required Energy Retrofit Action Items</b>			
R-13 / ERC	*	Air seal home to a minimum of 10 ACH@50 Pascals (blower door test required); if home is pre-1950s, air seal to 10 ACH <sub>50</sub> or reduce initial leakage by 30%	
R-14 / ERC	*	If home is air sealed to $\leq 7$ ACH <sub>50</sub> , the house must meet current Washington State ventilation code requirements	
R-15 / ERC	*	Insulate entire accessible attic to R-38 or better	
R-16 / ERC	*	If new HVAC equipment is installed, size according to heating and cooling loads calculated using ACCA Manual J, or equivalent	
R-17 / ERC	*	Seal all ducts with approved mastic and test to comply with state code duct leakage threshold	
<b>Best Energy Savings*</b>			
4-32 / ERC	2	Insulate all ducts in unconditioned space to at least R-11	
4-39 / ERC	1	Insulate all hot water pipes to at least R-4	
4-65 / ERC	2 to 5	Install minimum % of CFLs or LEDs (2 point for 50%, 3 points for 75%, 5 points for 100%)	
3-14 / ERC	1 to 2	Replace all existing showerheads with high efficiency models; $\leq 2.0$ gpm (1 point), $\leq 1.75$ gpm (2 points)	
4-8 / ERC	4	If re-siding, incorporate rigid foam insulation on the exterior of the house (work in conjunction with Action Item 5-32)	
4-29 / ERC	5	For ductless systems, switch from electric resistance to ductless mini-split heat pumps	
4-28 / ERC	5	For ducted heating systems, switch furnace fuel from oil to gas or to heat pump	
<b>Better Energy Savings</b>			
4-23 / ERC	4	Install ENERGY STAR® heating equipment; if gas furnace, then AFUE $\geq 90\%$	
4-42 / ERC	3	Upgrade electric water heater efficiency to EF of .93 or higher (or use 4-47 below)	
4-43 / ERC	3	Upgrade gas or propane water heater efficiency to EF of .60 (or use 4-44 below)	
4-44 / ERC	4	Upgrade gas or propane water heater to EF of .83 (alternate to 4-43 above)	
4-45 / ERC	4	Install gas-fired tankless hot water heater	
4-50 / ERC	3	If water heater is pre-1991 and is in unconditioned space, install new high efficiency water heater or gas tankless	
<b>Good Energy Savings</b>			
4-37 / ERC	2	Install ENERGY STAR® Programmable thermostats with nighttime setback (where applicable)	
4-51 / ERC	2	If refrigerator is pre-1993, upgrade to ENERGY STAR® refrigerator	
4-52 / ERC	1	Upgrade dishwasher with ENERGY STAR® dishwasher that uses $\leq 6$ gallons/cycle	
4-53 / ERC	1 to 2	Upgrade clothes washer with ENERGY STAR® clothes washer (2 points if MEF $\geq 2.0$ and WF $< 6.0$ )	
4-16 / ERC	1 to 10	If replacing windows, install windows with NFRC U-factor $\leq 0.30$ ; $u \leq 0.28$ ; $u \leq 0.25$ (see Handbook for point allocation)	

\* The resulting energy savings are project-dependent and the categories here do not guarantee actual outcomes.

