



# Residential Green Building Program

Single Family and Two-Unit Duplex Dwellings

## How to Participate in Monterey's Green Building Program:

- Identify the category type for your project to determine the minimum total point value required (page 2) -- Residential, Non-Residential, Residential Remodel, Non-Residential Remodel
- Review the appropriate GreenPoints Checklist for options available to 'green' your project -- GreenPoints Checklist for Residential Projects, GreenPoints Checklist for Non-Residential Projects
- Determine which items you will be implementing and total the point values to comply with the minimum total points required for your project type as outlined on page 2.
- Using the **Proposed Green Building Program Schedule** (page 3), list the items you have chosen to implement into your project, including point values and totals.
- Copy your Proposed Schedule to the title page of your plans for plan check review and approval by the Permit and Inspection Services Division.
- Using the **Construction and Demolition (C&D) Schedule** (page 4), list all C&D debris you determine your project will create and how you will re-use, recycle, or dispose of this material.
- During the construction of your project, keep accurate records of your progress: *proposed* items listed on your **Proposed Green Building Program Schedule** and the *actual* items implemented. Prior to final approval of your project, submit the **Actual Green Building Program Schedule** list of items (page 12), including point values and totals, to the Permit and Inspection Services Division for a permanent record of compliance.
- For compliance of the C&D requirements (page 4), all documentation (tags) of actual type and weight of debris taken to a bonafide facility must be submitted to the Permit and Inspection Services Division.

*It's easy being GREEN in Monterey!*

\* For additional information contact the Dept. of Building Safety and Inspection at 831-646-3890.

\* For free green building advice you can "Ask an Expert" at 888-40-GREEN.



**Residential Green Building Program**

**RESIDENTIAL NEW CONSTRUCTION TOTAL POINT REQUIREMENTS**

Total Points Possible	310
<i>Action</i>	<i>Points required to receive action</i>
Receipt of Building Permit - New construction projects less than 1500 sq.ft.	40
Receipt of Building Permit - New construction projects more than 1500 sq.ft.	60
Green Building Award and Incentive Level	120

**RESIDENTIAL REMODEL TOTAL POINT REQUIREMENTS**

Total Points Possible	310
<i>Action</i>	<i>Points required to receive action</i>
Receipt of Building Permit - Kitchen or Bath remodel only projects	4
Receipt of Building Permit - Remodel projects 350-750 sq.ft.	15
Receipt of Building Permit - Remodel projects over 750 sq.ft.	25
Green Building Award and Incentive Level	120

\*\*\*Residential projects include single family dwellings and two-unit duplexes.

The following project types are exempt from the Green Building Program:

- Residential remodels less than three hundred fifty (350) square feet that do not involve kitchen or bathroom work
- Non-residential remodels of less than five hundred (500) square feet
- Re-roof projects
- Building and foundation repairs and maintenance
- Over-the-counter plumbing, electrical, and mechanical repairs
- Seismic retrofits
- Voluntary handicap accessibility upgrades
- Window replacement projects
- Retaining wall projects
- Non-habitable residential structures of less than three hundred fifty (350) square feet
- General maintenance of any structure





**Residential Green Building Program**

The Green Building Program requires 100% of non-hazardous construction material must be taken to a bonafide facility.

**CONSTRUCTION AND DEMOLITION (C&D) SCHEDULE**

1. The project developer shall report the quantities of all construction and demolition debris recycled. At a minimum, all of the materials listed in the approved recycling plan should be reported below.
2. The project developer shall attach receipts from a bonafide recycling facility or other pertinent documentation to demonstrate recycling of the materials.

Reporting Period: From \_\_\_\_\_ To \_\_\_\_\_

Waste Type	Estimate Amount Recycled (lbs./tons)	Receipt Attached (Yes or No)	Comments	Other (Reuse, deconstruction, etc.)
Concrete				
Asphalt				
Masonry				
Clean Lumber (unpainted)				
Drywall				
Metal				
Roofing Shingles				
Cardboard				
Green Waste				
Other Material				
Other Material				

Comments/Additional Information:



**Residential Green Building Program**

**GREENPOINTS CHECKLIST FOR RESIDENTIAL PROJECTS**

(Based on Build It Green’s 2007 New Home Construction Guidelines, directions can be found online at <http://www.monterey.org/building/greenbuilding>)

<b>A. Site</b>		<b>Total</b>	<b>Notes</b>
1. Protect Topsoil and Minimize Disruption of Existing Plants & Trees			
a.	Protect Topsoil from Erosion and Reuse after Construction	2	
b.	Limit and Delineate Construction Footprint for Maximum Protection	1	
2. Deconstruct Instead of Demolishing Existing Buildings on Site		3	
3. Recycle Construction Waste (Including Green Waste)			
a.	100% non-hazardous construction taken to bonafide facility	Required	
b.	Re-Use up to 50% of construction debris	2	
c.	Re-Use over 50% of construction debris	2	
4. Use Recycled-Content Aggregate (Minimum 25%)			
a.	Walkway and Driveway	1	
b.	Roadway Base	1	
		<b>Site Total</b>	<b>12</b>
<b>B. Foundation</b>		<b>Total</b>	<b>Notes</b>
1. Replace Portland Cement in Concrete with Recycled Flyash or Slag			
a.	Minimum 20% Flyash or Slag	1	
b.	Minimum 25% Flyash or Slag	1	
2. Use Frost-Protected Shallow Foundation in Cold Areas (C.E.C. Climate Zone 16)		3	
3. Radon Resistant Construction (In At-Risk Locations Only)		1	
4. Design and Build Structural Pest Controls			
a.	Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections by Metal or Plastic Fasteners/Dividers	1	
b.	All New Plants Have Trunk, Base, or Stem Located at Least 36 Inches from Foundation	1	
		<b>Foundation Total</b>	<b>8</b>
<b>C. Landscaping</b>		<b>Total</b>	<b>Notes</b>
1. Construct Resource-Landscapes			
a.	No Invasive Species Listed by Cal-IPC are Planted	1	
b.	No Species Will Require Shearing	1	

c.	75% of Plants are Drought-tolerant California Natives, Mediterranean or Other Appropriate Species	3	
2. Use Fire-Safe Landscaping Techniques		1	
3. Minimize Turf Areas in Landscape Installed by Builder			
a.	All Turf Will Have a Water Requirement Less than or Equal to Tall Fescue (0.8 plant factor)	2	
b.	Turf Shall Not Be Installed on Slopes Exceeding 10% or in Areas Less than 8 Feet Wide	2	
c.	Turf is <= 33% of Landscaped Area (total 2 points)	2	
d.	Turf is <= 10% of Landscaped Area (total 4 points)	2	
4. Plant Shade Trees		3	
5. Group Plants by Water Needs (Hydrozoning)		2	
6. Install High-Efficiency Irrigation Systems			
a.	System Uses Only Drip, Bubblers, or Low-flow Sprinklers	2	
b.	System Has Smart Controllers	3	
7. Incorporate Two Inches of Compost into the Top 6 to 12 Inches of Soil		3	
8. Mulch All Planting Beds to the Greater of 2 Inches or Local Water Ordinance Requirement		2	
9. Use 50% Salvaged or Recycled-Content Materials for 50% of Non-Plant Landscape Elements		1	
10. Reduce Light Pollution from Site Lighting by Shielding Fixtures and/or Directing Light Downward		1	
<b>Landscaping Total</b>		<b>31</b>	
<b>D. Structural Frame &amp; Building Envelope</b>		<b>Total</b>	<b>Notes</b>
1. Apply Optimal Value Engineering			
a.	Place Rafters & Studs at 24-Inch on Center Framing	1	
b.	Size Door and Window Headers for Load	1	
c.	Use Only Jack and Cripple Studs Required for Load	1	
2. Use Engineered Lumber			
a.	Beams and Headers	1	
b.	Insulated Engineered Headers	1	
c.	Wood I-Joists or Web Trusses for Floors	1	
d.	Wood I-Joists for Roof Rafters	1	
e.	Engineered or Finger-Jointed Studs for Vertical Applications	1	
f.	Oriented Strand Board for Subfloor	1	
g.	Oriented Strand Board for Wall and Roof Sheathing	1	
3. Use FSC-Certified Wood			
a.	Dimensional Lumber, Studs, and Timber: Min. 40% (total 2 points)	2	

b.	Dimensional Lumber, Studs, and Timber: Min. 70% (total 4 points)	2	
c.	Panel Products: Min. 40% (total 1 point)	1	
d.	Panel Products: Min. 70% (total 2 points)	1	
4. Use Solid Wall Systems (Includes SIPs, ICFs, & Any Non-Stick Frame Assembly)			
a.	Floors	4	
b.	Walls	4	
c.	Roofs	4	
5. Reduce Pollution Entering the Home from the Garage			
a.	Tightly Seal the Air Barrier between Garage and Living Area	1	
b.	Install Garage Exhaust Fan OR Build a Detached Garage	1	
6. Design Energy Hells on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)		1	
7. Design Roof Trusses to Accommodate Ductwork		1	
8. Use Recycled-Content Steel Studs for 90% of Interior Wall Framing		1	
9. Thermal Mass Walls: 5/8-Inch Drywall on All Interior Wall or Walls Weigh more than 40 lb/cu.ft.		1	
10. Install Overhangs and Gutters			
a.	Minimum 16-Inch Overhangs and Gutters	1	
b.	Minimum 24-Inch Overhangs and Gutters	1	
<b>Structural Frame &amp; Building Envelop Total</b>		<b>36</b>	
<b>E. Exterior Finish</b>		<b>Total</b>	<b>Notes</b>
1. Use Recycled-Content (No Virgin Plastic) or FSC-Certified Decking		2	
2. Install a Rain Screen Wall System		2	
3. Use Durable and Noncombustible Siding Materials		1	
4. Use Durable and Noncombustible Roofing Materials		2	
<b>Exterior Finish Total</b>		<b>7</b>	
<b>F. Insulation</b>		<b>Total</b>	<b>Notes</b>
1. Install Insulation with 75% Recycled Content			
a.	Walls and/or Floors	1	
b.	Ceilings	1	
2. Install Insulation That is Low-Emitting (Certified CA Section 01350)			
a.	Walls and/or Floors	1	
b.	Ceilings	1	
3. Inspect Quality of Insulation Installation before Applying Drywall		1	
<b>Insulation Total</b>		<b>5</b>	

<b>G. Plumbing</b>		<b>Total</b>	<b>Notes</b>
1. Distribute Domestic Hot Water Efficiently			
a.	Insulate Hot Water Pipes from Water Heater to Kitchen	2	
b.	Insulate All Hot Water Pipes	2	
c.	Use Engineered Parallel Piping	1	
d.	Use Engineered Parallel Piping with Demand Controlled Circulation Loop	1	
e.	Use Structured Plumbing with Demand Controlled Circulation	3	
f.	Use Central Core Plumbing	4	
2. Install Only High Efficiency Toilets (Dual Flush or 1.3 gpf)		4	
<b>Plumbing Total</b>		<b>17</b>	
<b>H. Heating, Ventilation &amp; Air Conditioning</b>		<b>Total</b>	<b>Notes</b>
1. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations		4	
2. Install Sealed Combustion Units			
a.	Furnaces	2	
b.	Water Heaters	2	
3. Install Zoned, Hydronic Radiant Heating with Slab Insulation		2	
4. Install High Efficiency Air Conditioning with Environmentally Responsible Refrigerants		1	
5. Design and Install Effective Ductwork			
a.	Install HVAC Unit and Ductwork within Conditioned Space	3	
b.	Use Duct Mastic on All Duct Joints and Seams	1	
c.	Install Ductwork under Attic Insulation (Buried Ducts)	1	
d.	Pressure Balance the Ductwork System	1	
e.	Protect Ducts during Construction and Clean All Ducts before Occupancy	1	
6. Install High Efficiency HVAC Filter (MERV 64)		1	
7. Don't Install Fireplaces or Install Sealed Gas Fireplace with Efficiency Rating not Less than 60% using CSA Standards		1	
8. Install Effective Exhaust Systems in Bathrooms and Kitchens			
a.	Install ENERGY STAR Bathroom Fans Vented to the Outside	1	
b.	All Bathroom Fans are on Timer or Humidistat	1	
c.	Install Kitchen Range Hood Vented to the Outside	1	
9. Install Mechanical Ventilation System for Cooling			
a.	Install ENERGY STAR Ceiling Fans & Light Kits in Living Areas & Bedroom	1	

b.	Install Whole House Fan with Variable Speeds	1	
c.	Automatically Controlled Integrated System	2	
d.	Automatically Controlled Integrated System with Variable Speed Control	3	
10. Install Mechanical Fresh Air Ventilation System			
a.	Any Whole House Ventilation System that Meets ASHRAE 62.2	3	
b.	Install Air-to-Air Heat Exchanger	3	
11. Install Carbon Monoxide Alarms		1	
<b>Heating, Ventilation &amp; Air Conditioning Total</b>		<b>37</b>	
<b>I. Renewable Energy</b>		<b>Total</b>	<b>Notes</b>
1. Pre-Plumb for Solar Water Heating		4	
2. Install Solar Water Heating System		10	
3. Install Wiring Conduit for Future Photovoltaic Installation & Provide sq.ft. of South-Facing Roof		2	
4. Install Photovoltaic (PV) Panels			
a.	30% of electric needs OR 1.2kw (total 6 points)	6	
b.	60% of electric needs or 2.4kw (total 12 points)	6	
c.	90% of electric needs or 3.6kw (total 18 points)	6	
<b>Renewable Energy Total</b>		<b>34</b>	
<b>J. Building Performance</b>		<b>Total</b>	<b>Notes</b>
1. Diagnostic Evaluations			
a.	House Passes Blower Door Test	1	
b.	House Passes Combustion Safety backdraft Test	1	
2. Design and Build High Performance Homes - 15% above Title 24		30	
3. House Obtains ENERGY STAR with Indoor Air Package Certification		7	
<b>Building Performance Total</b>		<b>39</b>	
<b>K. Finishes</b>		<b>Total</b>	<b>Notes</b>
1. Design Entryways to Reduce Tracked-In Contaminants		1	
2. Use Low-VOC or Zero-VOC Paint			
a.	Low-VOC Interior Wall/Ceiling Paints (<50 gpl VOCs (Flat) and <150 gpl VOCs (Non-Flat))	1	
b.	Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs (Flat))	3	
c.	Use Low-VOC: Water-Based Wood Finishes (<250 gpl VOCs)	2	
d.	Use Low-VOC: Caulk and Construction Adhesives (<70 gpl VOCs) for All Adhesives	2	

5. Use Recycled-Content Paint		1	
6. Use Environmentally Preferable Materials for Interior Finish: A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content, or E) Finger-Jointed			
a.	Cabinets (50% Minimum)	1	
b.	Interior Trim (50% Minimum)	1	
c.	Shelving (50% Minimum)	1	
d.	Doors (50% Minimum)	1	
e.	Countertops (50% Minimum)	1	
7. Reduce Formaldehyde in Interior Finishes (CA Section 01350)			
a.	Subfloor & Stair Treads (50% Minimum)	1	
b.	Cabinets and Countertops (50% Minimum)	1	
c.	Interior Trim (50% Minimum)	1	
d.	Shelving (50% Minimum)	1	
8. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb		3	
		<b>Finishes Total</b>	<b>22</b>
<b>L. Flooring</b>		<b>Total</b>	<b>Notes</b>
1. Use Environmentally Preferable Flooring: A)FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content, E)Exposed Concrete, <i>Flooring Adhesives Must Have &lt;50 gpl VOCs</i>			
a.	Minimum 15% of Floor Area	1	
b.	Minimum 30% of Floor Area	1	
c.	Minimum 50% of Floor Area	1	
d.	Minimum 75% of Floor Area	1	
2. Thermal Mass Floors: Floor Covering Other than Carpet on 50% or More of Concrete Floors		1	
3. Flooring Meets Section 01350 or CRI Green Label Plus Requirements (50% Minimum)		2	
		<b>Flooring Total</b>	<b>7</b>
<b>M. Appliances</b>		<b>Total</b>	<b>Notes</b>
1. Install Water- and Energy-Efficient Dishwasher			
a.	ENERGY STAR	1	
b.	Dishwasher Uses No More than 5.5. Gallons/Cycle (total 2 points)	1	
2. Install Water- and Energy-Efficient Clothes Washing Machine			
a.	Meets CEE Tier 2 Requirements (modified energy factor 2.0, Water Factor 6.0) (total 3 points)	3	

b.	Meets CEE Tier 23 Requirements (modified energy factor 2.2, Water Factor 4.5 or less) (total 5 points)	2	
3. Install ENERGY STAR Refrigerator			
a.	ENERGY STAR Qualified & < 25 Cubic Feet Capacity	1	
b.	ENERGY STAR Qualified & < 20 Cubic Feet Capacity	1	
4. Install Built-In Recycling & Composting Center			
a.	Built-In Recycling Center	2	
b.	Built-In Composting Center	1	
	<b>Appliances Total</b>	<b>12</b>	
<b>N.</b>			
<b>Other</b>		<b>Total</b>	<b>Notes</b>
1.	Incorporate GreenPoint Rated Checklist in Blueprints	Required	
2.	Develop Homeowner Manual of Green Features/Benefits	3	
3.	Innovative Measures That Meet the Green Building Objectives of the Guidelines. Maximum of 20 points	20	
4.	Community Design Measures and Local Priorities: Maximum of 20 pts.	20	
	<b>Other Total</b>	<b>43</b>	
<b>Total Available Residential Points</b>		<b>310</b>	

