

# Chapter Three: Green Points

When building, it is important to look carefully at the type of project and incorporate as many green features as possible. The items listed on the Green Points represent a variety of green building opportunities; however, not all of them may apply to your project.

# Green Points

Green Points is a rating system that has been developed to offer builders, homeowners and municipalities a tool to assess how environmentally friendly or “green” a home is. The rating system is based on the various green features incorporated into the home. A home that has earned 50 points or more across the 3 main green building categories – Indoor Air Quality, Energy Efficiency and Resource Efficiency – can be considered a

“green home”. Total points required may be adjusted in the future. The rating system was developed in coordination with local builders, city planners and building officials. To simplify the system and to avoid double counting, each measure is assigned to *one* specific category, even though many of them can be placed in multiple categories.

POINTS PER CATEGORY		Resources	Energy	IAQ/Health
<b>A. Site</b>				
1.	Recycle Job Site Construction & Demolition Waste 50% Recycling Rate is Required; 65% = 1 point; 75% = 2 points; 80% = 4 points	up to 4		
2.	Donate Unused Materials	4		
3.	Protect Native Soil	2		
4.	Minimize Disruption of Existing Plants & Trees	1		
5.	Implement Construction Site Stormwater Practices	2		
6.	Protect Water Quality with Landscape Design	2		
7.	Design Resource-Efficient Landscapes	4		
8.	Reuse Materials/Use Recycled Content Materials for Landscape Areas	2		
9.	Install High-Efficiency Irrigation Systems	2		
10.	Provide for On-Site Water Catchment / Retention	2		
<b>Available Points</b>		<b>25</b>		
<b>B. Foundation</b>				
1.	Incorporate Recycled Flyash in Concrete 15% Recycled Flyash = 2 points; Add 1 point for every 10% increase of flyash, up to 5 points	up to 5		
2.	Reuse Form Boards	1		
3.	Use Aluminum Forms	3		
4.	Use Recycled Content Aggregate	2		
5.	Insulate Foundation/Slab before backfill		3	
6.	Install Rigid Foam, Insulated Concrete Forms (ICFs)		3	
<b>Available Points</b>		<b>11</b>	<b>6</b>	
<b>C. Structural Frame</b>				
1.	Substitute Solid Sawn Lumber with Engineered Lumber			
	a. Floors	1		
	b. Headers (non-structural)	1		
	c. Structural beams and headers	1		
2.	Use FSC Certified Wood for framing (For every 10% of FSC lumber used = 2 points, up to 10)	up to 10		
3.	Use Wood I-Joists for Floors and Ceilings	2		
4.	Use Steel Interior Web Trusses	2		
5.	Design Energy Heels on Trusses		2	

POINTS PER CATEGORY	Resources	Energy	IAQ/Health
<b>C. Structural Frame (continued)</b>			
6. Use OSB			
a. Subfloors	1		
b. Sheathing	1		
7. Use Finger-Jointed Studs for Non-Structural Vertical Applications	2		
8. Use Engineered Studs for Vertical Applications	2		
9. Use Recycled Content Steel Studs for Interior Framing	2		
10. Use Structural Insulated Panels (SIPs)			
a. Floors		3	
b. Wall		3	
c. Roof		3	
11. Apply Advanced Framing Techniques	4		
12. Use Reclaimed Lumber for Non-Structural Applications	3		
	<b>Available Points</b>	<b>32</b>	<b>11</b>
<b>D. Exterior Finish</b>			
1. Use Sustainable Decking Materials			
a. Recycled content	3		
b. FSC Certified Wood	3		
2. Use Non-CCA Treated Wood			1
3. Install House Wrap under Siding			1
4. Use Alternative Siding Materials			
a. Recycled content	1		
b. Fiber-cement	3		
	<b>Available Points</b>	<b>10</b>	<b>2</b>
<b>E. Plumbing</b>			
1. Insulate all Hot Water Pipes		2	
2. Install Flow Reducers			
a. Faucets (1 point each, up to 2 points)	up to 2		
b. Showerheads (1 point each, up to 2 points)	up to 2		
3. Install Ultra-Low Flush Toilets (1 point each, up to 4 points)	up to 4		
4. Install Chlorine Filter on Showerhead			4
5. Install Tankless Water Heater		2	
6. Pre-plumb for Graywater Conversion (check with local code)	4		
7. Install Water Filtration Units at Faucets (2 points each, up to 4 points)			up to 4
8. Install On-Demand Hot Water Circulation Pump	4		
	<b>Available Points</b>	<b>16</b>	<b>4</b>
			<b>8</b>
<b>F. Electrical</b>			
1. Install Compact Fluorescent Light Bulbs – CFLs. (6 bulbs=2 points, 12=4 points, up to 4 points)		up to 4	
2. Install Air-Tight Insulation-Compatible Recessed Fixtures for CFLs (1 point each, up to 5 points)		up to 5	
3. Install Lighting Controls (1 point per fixture, up to 4 points)		up to 4	
4. Install High Efficiency Ceiling Fans with CFLs (1 point each, up to 4 points)		up to 4	
	<b>Available Points</b>	<b>17</b>	
<b>G. Appliances</b>			
1. Offer Energy Star Dishwasher		1	
2. Offer Horizontal Axis Washing Machine		1	
3. Offer Energy-Efficient Refrigerator		1	
4. Install Built-In Recycling Center	3		
	<b>Available Points</b>	<b>3</b>	<b>3</b>

POINTS PER CATEGORY	Resources	Energy	IAQ/Health
<b>H. Insulation</b>			
1. Upgrade Insulation to Exceed Title 24 Requirements			
a. Walls		2	
b. Ceilings		2	
2. Install Recycled-Content, Formaldehyde-Free Fiberglass Insulation			3
3. Use Advanced Infiltration Reduction Practices		2	
4. Use Cellulose Insulation			
a. Walls	4		
b. Ceilings	4		
	<b>Available Point</b>	<b>8</b>	<b>6</b>
			<b>3</b>
<b>I. Windows</b>			
1. Install Energy-Efficient Windows			
a. Double-Paneled		1	
b. Low-Emissivity (Low-E)		2	
c. Low-Conductivity Frames		2	
	<b>Available Points</b>	<b>5</b>	
<b>J. Heating Ventilation and Air Conditioning</b>			
1. Use Duct Mastic on All Duct Joints		1	
2. Install Ductwork Within Conditioned Space		3	
3. Vent Range Hood to the Outside			1
4. Clean all Ducts Before Occupancy			2
5. Install Attic Ventilation Systems		1	
6. Install Whole House Fan		4	
7. Install Sealed Combustion Units			
a. Furnaces			3
b. Water Heaters			3
8. Install 13 SEER/11EER or higher AC with a TXV		3	
9. Install AC with Non-HCFC Refrigerants	2		
10. Install 90% Annual Fuel Utilization Efficiency (AFUE) Furnace		2	
11. Eliminate Wood Burning Fireplaces			1
12. Install Zoned, Hydronic Radiant Heating		3	
13. Install High Efficiency Particulate Air (HEPA) filter			4
14. Install Heat Recovery Ventilation Unit (HRV)		5	
15. Install Separate Garage Exhaust Fan			3
	<b>Available Points</b>	<b>2</b>	<b>22</b>
			<b>17</b>
<b>K. Renewable Energy and Roofing</b>			
1. Pre-Plumb for Solar Water Heating		4	
2. Install Solar Water Heating System		10	
3. Pre-Wire for Future Photovoltaic (PV) Installation		4	
4. Install Photovoltaic (PV) Panels (1.2 kw = 6 points, 2.4 kw = 12 points, 3.6 kw = 18 points)			up to 18
5. Install Solar (PV) Walkway Lights		4	
6. Select Safe and Durable Roofing Materials	1		
7. Install Radiant Barrier Roof Sheathing		3	
	<b>Available Points</b>	<b>1</b>	<b>43</b>

POINTS PER CATEGORY	Resources	Energy	IAQ/Health
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L. Natural Heating and Cooling			
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1. Incorporate Passive Solar Heating		5	
2. Install Overhangs or Awnings on South Facing Windows		3	
3. Plant Deciduous Trees on the West and South Sides		3	
	<b>Available Points</b>	<b>11</b>	

M. Indoor Air Quality and Finishes			
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1. Install Whole House Vacuum System			3
2. Use Low/No-VOC Paint			1
3. Use Low VOC, Water-Based Wood Finishes			2
4. Use Solvent-Free Adhesives			3
5. Substitute Particleboard with Formaldehyde-Free Materials			6
6. Use Exterior Grade Plywood for Interior Uses			1
7. Use Formaldehyde-Free MDF and Materials			4
8. Seal all Exposed Particleboard or MDF			4
9. Use FSC Certified Materials for Interior Finish			4
10. Use Finger-Jointed or Recycled Content Trim	1		
	<b>Available Points</b>	<b>1</b>	<b>28</b>

N. Flooring			
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1. Select FSC Certified Wood Flooring	8		
2. Use Rapidly Renewable Flooring Materials	4		
3. Use Recycled Content Ceramic Tiles	4		
4. Install Natural Linoleum in Place of Vinyl			5
5. Use Exposed Concrete as Finished Floor	4		
6. Install Recycled Content Carpet with Low VOCs	4		
	<b>Available Points</b>	<b>24</b>	<b>5</b>

Other			
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1. Incorporate Listing of Green Features into Cover of Blueprints	1		
2. Develop Homeowner Manual of Green Features/Benefits	1		
3. Offer Coupons for Compost Bins to Homeowners (contact ACWMA, 1-877-STOPWASTE)	1		
4. Energy Ratings		up to 30	
Every % improvement in reducing energy beyond Title 24 Code - 1 point (up to 30 points). Use energy software such as EnergyPro or MicroPas, to show improvement over California Residential Energy Standards (Title 24)			
5. Innovation Points	These points are given for innovative approaches, including model zero net energy homes, new materials and methodologies, currently not identified above. These approaches must meet environmental goals identified in the Residential Green Building Guidelines. Innovation Points will be evaluated and awarded by the community/municipality where the project is located.		

MINIMUM OF 50 TOTAL POINTS	Resources	Energy	IAQ/Health	Total
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<b>Total Available Points</b>	<b>136</b>	<b>158</b>	<b>63</b>	<b>357</b>
Points Required from Each Category	10	10	10	30
Additional Points Needed from Any Category				20
<b>Minimum Points Required</b>				<b>50</b>

Project must acquire a minimum of 50 points. 10 points must be acquired, for each category. Additional 20 points can be acquired by incorporating any green features listed to reach a total of 50 points. Projects obtaining 60 points or more will receive a "Gold Level Status". Total points may be adjusted in the future or modified by individual cities.