



# City of Longmont Residential Building

## ***Green Points Application***

### **Remodels and Additions only**

*(Based on the 2009 IECC & LMC 16.03.110)*

## **Resource Conservation Ordinance**

City of Longmont, 385 Kimbark Street, Longmont, CO 80501

For Green Points information contact:

City of Longmont, Building Inspection Division

385 Kimbark Street, Longmont, CO 80501

Phone: 303-651-8332 Fax: 303-651-8930

Web site: <http://www.ci.longmont.co.us/bldginsp/index.htm>

1. Prior to selecting any measures, consult the Green Points Program Guidelines, which contain information on specific designs, compliance and other details. The Green Points Guidelines are available at the Building Inspection Department (see address above).

*If your project is less than 300 sq. ft., disregard this application form. You do not need to comply with the Green Points Program.*

2. Determine the floor area of the project. Then refer to the chart below to determine the number of points needed for the project (new construction, interior remodel or addition) and enter the floor area and points required in the spaces provided on the next page.

*"Floor Area" means the total square footage of all levels included within the outside perimeter of a building or portion thereof, excluding courts, garages usable exclusively for the storage of motor vehicles, and uninhabitable areas located above the highest level (attics) or below the first floor (crawl space) level.*

**Table 1: Point Requirements**

<b>Project Description</b>	<b>Thresholds</b>	<b>Points Required</b>
Interior remodel	300 to 1,000 sq. ft.	10 points
Interior remodel	1,001 to 1,800 sq. ft.	15 points
Additions	300 to 800 sq. ft.	25 points

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Total Points \_\_\_\_\_

**Table 2: Energy Code Measures/Green Points**

	Green Points		Green Points
<b>Glass R-value</b> (as determined by the National Fenestration Rating Council)		<b>Basement Insulation</b> <i>Drape/cavity</i>	
U-0.32	1	R-13/15	1
U-0.31	2	R-15/17	2
U-0.29	4	R-19/21	3
U-0.26 or less	6	R-21/23	4
		R-24 or greater	5
<b>Wall Insulation</b>		<b>Slab Insulation</b>	
R-22	1	R-12	1
R-24	2	R-13	2
R-26	3	R-14	3
R-28 or greater	4	R-16	4
<b>Ceiling Insulation</b>		<b>Crawl Space Insulation</b>	
R-42	1	R-22	1
R-46	2	R-24	2
R-48 or greater	3	R-25 or greater	3
<b>Floor Insulation over garage</b>		<b>Furnaces and Boilers</b>	
R- 32	1	90% AFUE	2
R- 34	2	94% AFUE	3
R-36 or greater	3	98% AFUE	4
		Two Stage Furnace	5
<b>Cantilever or Floor over outside</b>		<b>Air Conditioning</b>	
R-40	1	Evaporative cooler	4
R-42	2	14 SEER	2
R-44 or greater	3	16 SEER	4
		Two Stage A.C.	6

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Applicant \_\_\_\_\_ Permit \_\_\_\_\_

Project Address \_\_\_\_\_

 Single Family: \_\_\_\_\_ Sq. Ft. Area     Remodel     Addition

Points Required: \_\_\_\_\_

 Multifamily: \_\_\_\_\_ Sq. Ft. Area \_\_\_\_\_ Units     Remodel     Addition

Points Required: \_\_\_\_\_

**1 - ❖ USE OF RECYCLED MATERIALS**

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						Points awarded
<input type="checkbox"/>	5 points	1.1	Recycled Content Carpeting			
<input type="checkbox"/>	2 points	1.2	Recycled Plastic or Non-CCA Treated Deck Materials			
<input type="checkbox"/>	1 points	1.3	Recycled Content Sheathing			
<input type="checkbox"/>	3 points	1.4	Recycled Content, Fiber Cement or FSC Certified Siding			
<input type="checkbox"/>	3 points	1.5	Recycled Content Roofing			

**2 - FRAMING**

<input type="checkbox"/>	3 points	2.1	Modular or standard dimensioning			
<input type="checkbox"/>	5 points	2.2	Structural Alternatives to Wood			
<input type="checkbox"/>	3 points	2.3	Incorporate Optimal Value Engineering (OVE) Framing Techniques			
<input type="checkbox"/>	2 points	2.4	Oriented Strand Board (OSB) in Subfloors			
<input type="checkbox"/>	2 points	2.5	OSB or FSC Certified Plywood in Wall Sheathing			
<input type="checkbox"/>	2 points	2.6	Finger-Jointed or Engineered Studs Used for Wall Framing			
<input type="checkbox"/>	5 points	2.7	FSC Certified Sustainably Harvested Lumber Used for Framing			
		2.8	Engineered Lumber used in Structural Framing			
<input type="checkbox"/>	1 point		Framing roof trusses or wood "I" joists			
<input type="checkbox"/>	1 point		Wood "I" joists or floor framing			
<input type="checkbox"/>	2 points		Use engineered products to replace 2x10s and 2x12s in beams and headers			
		2.9	Structural Insulated Panels (SIPs) Used for Exterior Walls and Roofs			
<input type="checkbox"/>	4 points		SIPs for exterior walls			
<input type="checkbox"/>	4 points		SIPs for roofs			

**3 - PLUMBING**

<input type="checkbox"/>	5 points	3.1	Tankless Water Heater for one water heater			
<input type="checkbox"/>	3 points		For each additional tankless hot water heater			
<input type="checkbox"/>	3 points	3.2	"On-Demand" Water Switch			
<input type="checkbox"/>	1 point	3.3	Dual flush water closet one point for each installed			

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<b>3 PLUMBING CONTINUED</b>			
<input type="checkbox"/>	1 point	3.4	Heat trap on water heater
<input type="checkbox"/>	1 point		One point for each 25' of pipe insulated to R-2 min.
<b>4 — Electrical</b>			
	1-8 points	4.1	Compact Fluorescent Bulbs Installed
<input type="checkbox"/>	1 point		6 CFL bulbs
<input type="checkbox"/>	2 points		10 CFL bulbs
<input type="checkbox"/>	3 points		16 CFL bulbs
<input type="checkbox"/>	5 points		20 CFL bulbs
<input type="checkbox"/>	8 points		More than 25 CFL bulbs
<input type="checkbox"/>	1-4 points	4.2	Energy Efficient Appliances (1 point per appliance)
	2-4 points	4.3	Efficient Light Controls Installed
<input type="checkbox"/>	1 point		2 control devices
<input type="checkbox"/>	2 points		4 control devices
<input type="checkbox"/>	1 point	4.3	Clothesline (where allowed)
<b>5 – Windows ❖ Insulation</b>			
<input type="checkbox"/>	2 points	5.1	No metal windows installed in basements
		5.2	Single-paned windows upgraded (up to 10 points allowed)
<input type="checkbox"/>	.5 point/window		Double-glazed (min U-value: 0.34) Number of windows:
<input type="checkbox"/>	1 point/window		Double-glazed with low e coating (min U-value: 0.32) Number of windows:
<input type="checkbox"/>	2 point/window		Double-glazed with argon/Heat mirror (min U-value: 0.31) Number of windows:
<input type="checkbox"/>	2 points	5.3	Wall insulation is 80% recycled material
<input type="checkbox"/>	2 points	5.4	Ceiling insulation is 80% recycled material
<input type="checkbox"/>	2 points	5.5	Wet-spray insulation in walls
<input type="checkbox"/>	2 points	5.6	Wet-spray insulation in ceiling
<input type="checkbox"/>	2 points	5.7	Install recycled content, formaldehyde-free fiberglass insulation
<input type="checkbox"/>	3 points	5.8	Existing ceiling insulated to R-48 or capacity for fixed space
<input type="checkbox"/>	3 points	5.9	Existing walls insulated to capacity or rigid insulation added to exterior
<b>6 - HEATING, VENTILATING &amp; AIR CONDITIONING (HVAC)</b>			
<input type="checkbox"/>	5 points	6.1	Natural cooling (see <i>Green Building Guide</i> for details)
<input type="checkbox"/>	2 points	6.2	Attic Fan
<input type="checkbox"/>	3 points	6.3	Hydronic Baseboard Heat
		6.4	Air Infiltration Rate Below Specified Levels (up to 8 points)
<input type="checkbox"/>	2 points		0.30 NACH
<input type="checkbox"/>	4 points		0.25 NACH
<input type="checkbox"/>	6 points		0.20 NACH
<input type="checkbox"/>	8 points		Less than 0.15 NACH

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<input type="checkbox"/>	2 points	6.5	Whole House Fan	
<b>6 HEATING CONTINUED</b>				
<input type="checkbox"/>	8 points	6.6	Air to air heat exchanger (heat recovery ventilation)	
<input type="checkbox"/>	10 points	6.7	Convert Electric Resistance Heat to Gas	
<input type="checkbox"/>	4 points	6.8	Replace Electric Water Heater with a Gas Water Heater	
<input type="checkbox"/>	1 point	6.9	Air De-stratification System	
<input type="checkbox"/>	2 points	6.10	Evaporative Cooling	
		6.11	Geo-thermal systems (up to 20 points)	
<input type="checkbox"/>	6 points		System adequate to provide 25% of required building heating	
<input type="checkbox"/>	12 points		System adequate to provide 50% of required building heating	
<input type="checkbox"/>	20 points		System adequate to provide 80% of required building heating	
<b>7 -- Solar</b>				
<input type="checkbox"/>	10 points	7.1	Solar Hot Water Heating System Installed	
		7.2	Passive Solar Space Heating (up to 20 points)	
<input type="checkbox"/>	6 points		Glazing of the protected south wall surface adequate to provide at least 20% passive solar heating fraction of the building	
<input type="checkbox"/>	12 points		Glazing of the protected south wall surface adequate to provide at least 40% passive solar heating fraction of the building, but only if designed in conjunction with an appropriately sized thermal mass so as not to adversely affect cooling loads	
	20 points		Glazing of the protected south wall surface adequate to provide at least 60% passive solar heating fraction of the building, but only if designed in conjunction with an appropriately sized thermal mass so as not to affect adversely cooling loads	
<input type="checkbox"/>	2 points	7.3	Active Solar Pre-piping	
	8-20 points	7.4	Active Solar Space Heating	
<input type="checkbox"/>	8 points		30-39 % solar heating	
<input type="checkbox"/>	12 points		40-49 % solar heating	
<input type="checkbox"/>	16 points		50-59 % solar heating	
<input type="checkbox"/>	20 points		60 % or greater solar heating	
<input type="checkbox"/>	20 points	7.5	Solar-Generated Electricity	
<b>8 – INDOOR AIR QUALITY • INTERIOR FINISHES</b>				
<input type="checkbox"/>	3 points	8.1	Install Infrastructure to Support Current or Future Alternative Vehicle Use	
		8.2	Sealed Combustion Gas Furnace/Boiler & Water Heater (up to 10 points)	
<input type="checkbox"/>	5 points		One appliance (if replaced)	
<input type="checkbox"/>	10 points		Both appliances (if replaced)	
<input type="checkbox"/>	5 points		Separate room for appliances only	
<input type="checkbox"/>	3 points	8.3	Exhaust Fan in Attached Garage or Garage is Detached	
<input type="checkbox"/>	1 point	8.4	Low Volatile Organic Compound Interior Paint	
<input type="checkbox"/>	2 points	8.5	Low Solvent Construction Adhesives	
<input type="checkbox"/>	3 points	8.6	Water-Based Wood and Floor Finishes Used	
<input type="checkbox"/>	2 points	8.7	Elimination of All Particleboard Inside Envelope of House	

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<input type="checkbox"/>	2 points	8.8	Elimination of All Medium Density Fiberboard Made with Urea-Formaldehyde	
<input type="checkbox"/>	2 points	8.9	All Exposed Particleboard and MDF Sealed with Three Coats of Low VOC, Latex Paint	
<input type="checkbox"/>	2 points	8.10	Alternative No-Formaldehyde Products Substituted for Particleboard	
<input type="checkbox"/>	3 points	8.11	Passive radon mitigation system installed	
<input type="checkbox"/>	5 points	8.12	Active radon mitigation system installed	

**9 - INNOVATION POINTS**

		9.1	Innovative Product or Design Points (up to 10 points maximum) (See Green Points Guidelines on how to calculate points)	
<input type="checkbox"/>	3 points			
<input type="checkbox"/>	3 points			
<input type="checkbox"/>	2 points			
<input type="checkbox"/>	2 points			
<input type="checkbox"/>	1 Point			

<b>Total Green Points Received:</b>	
<b>Total Green Points Required:</b>	

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