

**Borough Of Doylestown
Department of Zoning & Planning**

“Green Points”

Green Building Incentive Program

1. Purpose:

The purpose of this program is to encourage cost-effective and sustainable building methods that conserve fossil fuels, water and other natural resources, and to promote the reuse and recycling of construction materials and reduce solid waste. Because this is a voluntary program, it offers financial incentives in the form of **Building Permit Fee reductions** for new commercial and residential construction, additions, and interior remodels.

2. Qualifying For Green Points & LEED certification:

Building permit applicants may earn Green Points and qualify for permit fee reductions or waivers according to the following schedules. Each “Green Point” equals a 1% reduction in the applicable Permit Fee, unless the fee is listed as waived for applicable green building sub-systems. Sub-systems that have fees waived may also count towards overall building fee reductions. In any case, a project may only qualify for up to a maximum of 50 Green Points. Projects that have applied for **L.E.E.D.** certification and received a “**Silver**” rating or better automatically qualify for 60 Green Points and are not required to submit the Green Points worksheet forms. LEED project must, however, submit appropriate documentation of the anticipated “Silver” level Certification and provide documentation and copies of the certification when issued.

3. Green Points to Reduce Building Permit Fee

(1) Construction/Demolition and Use of Recycled Materials:

- (A) 3 points - Deconstruction Plan Submitted with permit application (additions & remodels)
- (B) 5 points - Deconstructed materials donated to a reseller.
- (C) 5 points - Use reclaimed lumber.
- (D) 5 points - Construction debris recycled.
- (E) 2 points - Recycled content carpeting.
- (F) 2 points - Recycled plastic in deck material.
- (G) 1 point - Recycled content sheathing.
- (H) 3 points - Recycled content or fiber cement siding.
- (I) 3 points - Recycled content roofing.

(2) Compact Land Use and Water Conservation:

- (A) Compact Building Footprint
 - (1) 3 points - Lot coverage 10% less than zoning maximum

(2) 2 points - Lot coverage 5% less than zoning maximum

(B) Landscaping.

(1) 3 points - Reduction of turf areas and lawns kept to a minimum.

(2) 2 points - Appropriate use of low water demanding plants.

(3) 3 points - Zoned irrigation system separating turf from shrub areas and low water demand areas from high water demand areas that includes drip irrigation zones.

(C) Up to 6 points will be awarded for items not included in the water conservation options by a performance procedure: 1 point will be awarded for every ten thousand gallons of annual water savings per dwelling unit.

(D) 3 points - Use of engineered swales to filter storm water runoff (these points are awarded only if swale is not required by site plan conditions).

(E) 3 points - For planting two trees beyond required street trees plus 1.5 points for each additional tree to a maximum of 9 total points (six trees).

(3) Framing:

(A) 3 points - Incorporate optimal value engineering (OVE) framing techniques.

(B) 2 points - Oriented strand board (OSB) subfloors.

(C) 2 points - Oriented strand board (OSB) wall sheathing.

(D) 2 points - Finger-jointed studs used for wall framing.

(E) 5 points - Forest Stewardship Council (FSC) certified sustainably harvested lumber used for framing.

(F) 5 points - Engineered lumber used (floors).

(G) 2 points - Engineered lumber used to replace 2x10s or 2x12s for structural applications.

(H) 5 points - Structural alternatives to wood.

(I) 4 points - Structural insulated panels used for exterior walls.

(4) Energy Code Measures:

The Pennsylvania Uniform Construction Code requires certain minimum measures of energy conservation for new buildings, additions, and remodels. These can be calculated using prescriptive methods for each assembly or item, or performance standards for the overall structure, or a combination. This subsection specifies how points are to be awarded under this section for incremental increase in energy efficiency above the required minima in each of the categories specified in the table. The applicant shall complete a form to calculate the points awarded for such incremental increases. For each category the form shall provide a space for the points for the actual measure which is planned to be installed, less the points which would be awarded for the minimum measure which would satisfy the energy code for that category as part of the overall energy calculation, with the resultant positive difference

being the points which are counted toward the total points required under subsection (b) of this section.

Insulated Assembly	Points
Glass R / U Value (as determined by the National Fenestration Rating Council)	
2 / 0.5	0
2.2 / 0.45	2
2.5 / 0.4	4
2.8 / 0.35	6
3.3 / 0.3	8
U-0.25 or less	10
Wall Insulation	
R-19	1
R-24	2
R-25 or greater	4
Ceiling Insulation	
R-30	0
R-34	1
R-38	2
R-42	3
R-43 or greater	5
Floor Insulation	
R-19	1
R-24	2
R-25 or greater	3
Basement Insulation	
R-10	0
R-13	1

R-19	2
R-24	3
R-25 or greater	4
Slab Insulation	
R-5	0
R-7	1
R-10	2
R-15	3
Crawl Space Insulation	
R-15	0
R-19	1
R-24	2
Heating Equipment	
Furnaces and boilers	
78% AFUE	0
84% AFUE	2
90% AFUE	4
94% AFUE	6
Air Conditioning	
11 SEER	0
12 SEER	2
13 SEER	4
14 SEER	6
15 SEER or greater	8

(5) Plumbing:

- (A) 1 point - Tankless domestic hot water heaters.
- (B) 1 point - "On-demand" hot water switch.

(6) Electrical:

- (A) Efficient appliances.
 - (i) 1 point - Energy saving dishwasher installed.
 - (ii) 1 point - Energy saving clothes washer installed.
 - (iii) 1 point - Energy saving refrigerator installed.
 - (iv) 1 point - Energy saving freezer installed.
- (B) 1 point - Clothesline installed.
- (C) 1-3 points - 1 point for every four compact fluorescent bulbs installed, up to a maximum of 3 points.
- (D) 2 points - Install energy efficient lighting controls.

(7) Insulation:

- (A) 2 points - Wall insulation is eighty percent recycled material.
 - (B) 2 points - Ceiling insulation is eighty percent recycled material.
 - (C) 2 points - Wet-spray insulation in walls.
 - (D) 2 points - Wet-spray insulation in ceiling.
- Widows (only one category can be used: E, F, or G)
- (E) 0.5 points - per window for additions and remodels: Single-pane windows changed out for double pane (up to a maximum of 10 points).
 - (F) 0.5 point - per window for additions and remodels: Single-pane windows changed out for low emissivity window (up to a maximum of 10 points).
 - (G) 0.75 points - per window for additions and remodels: Single-pane windows changed out with argon/HM windows (up to a maximum of 10 points).
 - (H) 5 points for additions and remodels: Existing ceiling insulated to R-38 (or to capacity for fixed space). – *not to be combined with Section 4)*
 - (I) 7 points for additions and remodels: Existing walls insulated to capacity or rigid insulation added to exterior. – *not to be combined with Section 4)*
 - (J) 2 points - Install recycled-content, formaldehyde-free fiberglass insulation.
 - (K) 2 points - No metal windows used in basements.

(8) Heating, Ventilation and Air Conditioning (HVAC):

- (A) 1 point - Air destratification systems.
- (B) 5 points - Natural cooling.
- (C) 6 points - Evaporative cooling installed.
- (E) 2 points - Vapor permeable infiltration barrier.
- (F) 2 points - Whole house fan.
- (G) 10 points for additions and remodels: Convert electric heat to

gas heat.

(H) 4 points for additions and remodels: Replace electric water heater with gas water heater.

(I) 3 points - Hydronic baseboard heat.

(J) 3 points - Radiant floor heat.

(K) 8 points - Air to air heat exchanger (heat recovery ventilation).

(9) Solar:

(A) Passive solar potential preservation and solar space heating.

(i) 5 points for the following items:

a. A wall surface is provided equal to ten percent of the unit's floor area or 150 square feet, whichever is greater.

b. Which is located on the more southerly side of the unit.

c. Which is oriented within thirty degrees of a true east-west direction.

d. Which is immediately adjacent to a heated space.

e. Which is not shaded between 10:00 a.m. and 2:00 p.m. on the winter solstice; and is totally shaded between 10:00 a.m. and 2:00 p.m. on the summer solstice.

f. Which has unimpeded solar access.

The Building Official shall be authorized to make determinations as to compliance with the above criteria.

(ii) 6 points - Glazing of the south wall surface adequate to provide at least twenty percent passive solar heating.

(iii) 12 points - Glazing of the south wall surface adequate to provide at least a forty percent passive solar heating, but only if designed in conjunction with an appropriately sized thermal mass so as not to affect adversely cooling loads.

(iv) 20 points - Glazing of the south wall surface adequate to provide at least a sixty percent passive solar heating, but only if designed in conjunction with an appropriately sized thermal mass so as not to affect adversely cooling loads.

(C) 10 points - Solar hot water heating.

(D) Active solar space heating with a calculated savings fraction of.

(i) 8 points - 30%

(ii) 12 points - 40%

(iii) 16 points - 50%

(iv) 20 points - 60%

(E) 2 points - Active solar pre-plumbing.

(F) 20 points - Solar-generated electricity with a savings fraction of at least 25%.

(10) Innovation Points:

(A) 5 points - Install infrastructure to support current or future alternative fuel vehicle use

(B) Up to 10 points - Innovative product or design points (to be awarded based on demonstrated energy or resource conservation savings).

(11) Regulations: The Building Official may make reasonable interpretive and administrative Interpretations according to the following:

(A) Interpretation: A person having an interest in an interpretation by the Building Official of this section may file request on a form provided by the Building Official and containing the information required by such form, for review of that interpretation.

*For additions or renovations only a pro-rated proportion may apply and full points value may be reduced based on percentage of total floor area.

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