

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

Green Points

2017 Green Building Incentive Program

Purpose:

The purpose of this program is to encourage cost-effective and sustainable building methods that conserve fossil fuels, water and other natural resources, 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.

Qualifying For Green Points

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.

Green Points to Reduce Building Permit Fee

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

- (A) 5 points - Use reclaimed lumber for more than 50% of wood products.
- (B) 5 points - Construction debris separated and recycled.
- (C) 2 points - Recycled plastic in deck material.

(2) Compact Land Use and Water Conservation:

- (A) Compact Land Use
 - (i) 2 points - Lot coverage 10% less than zoning maximum
 - (ii) 1 points - Lot coverage 5% less than zoning maximum
- (B) Landscaping.
 - (i) 3 points - Reduction of turf areas and lawns kept to a minimum.

(ii) 3 points - Appropriate use of native plants.

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

(D) 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) 1 points - Oriented strand board (OSB) subfloors.

(B) 1 points - Oriented strand board (OSB) wall sheathing.

(C) 2 points - Engineered lumber used to replace beams.

(D) 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
Windows (as labeled by the NFRC)	
0.35 (Meets 2009 IECC)	0
ENERGY STAR labeled	2
0.30	4
0.25 or less	6
remodeling projects: per single pane window replaced by ENERGY STAR window	1

Skylights	
U-0.60 (Meets 2009 IECC)	0
U-0.55 (Meets 2012 IECC)	2
Solar Heat Gain Coefficient (SHGC)	
0.40 (Meets 2012 IECC)	2
Wall Insulation	
R-13 (Meets 2009 IECC)	0
R-20 (Meets 2012 IECC)	4
R-13+5 (Meets 2012 IECC)	4
R-20+5 or 13+10	6
Ceiling Insulation	
R-38 (Meets 2009 IECC)	0
R-42	2
R-49 (Meets 2012 IECC)	4
Floor Insulation	
R-19 (Meets 2009 IECC)	0
R-25	2
R-30	4
Foundation Wall Insulation	
R-13 (Meets 2009 IECC)	0
R-10c (Meets 2009 IECC)	0
R-19	2
R-15c	2

Slab Insulation	
R-10, 2ft (Meets 2009 IECC)	0
R-10, 4ft	2
R-15, 2ft	3
Heating Equipment (Furnaces and Boilers)	
ENERGY STAR labeled	2
Air Source Heat Pump or Dual-Fuel Heat Pump	6
Ground Source Heat Pump	8
Air Conditioning	
ENERGY STAR labeled	2
Infiltration Rates	
7 ACH50 (Meets 2009 IECC)	0
5 ACH50	5
4 ACH50	8
3 ACH50 (Meets 2012 IECC)	10
Ventilation	
Heat Recovery Ventilation (HRV)	8

(5) Plumbing:

- (A) 1 point - Tankless domestic hot water heaters.
- (B) 1 point - "On-demand" hot water pump system.
- (C) 2 Points (each) Waterless Urinals
- (D) 2 Points - Air Source Heat Pump Water Heater

(6) Electrical:

- (A) Energy Star appliances.
 - (i) 1 point - Energy Star rated dishwasher installed.
 - (ii) 1 point - Energy Star rated clothes washer installed.
 - (iii) 1 point - Energy Star rated refrigerator installed.
 - (iv) 1 point - Energy Star rated freezer installed.
- (B) 1 point - Clothesline installed.
- (C) 1 point for every four LED lightbulbs installed, up to a maximum of 5 points. Alternatively, 3 points for using LED bulbs for 50% of the project's lighting; 5 points for installing LEDs for 100% of the project lighting.
- (D) Electric Vehicle Chargers
 - (i) 5 points for Level 1 charger
 - (ii) 10 Points for Level II or higher charger.

(7) Solar:

- (A) 5 points - Passive solar potential preservation and solar space heating
 - (i) A wall surface is provided equal to ten percent of the unit's floor area or 150 square feet, whichever is greater, and
 - Which is located on the more southerly side of the unit,
 - Which is oriented within thirty degrees of a true east-west direction,
 - Which is immediately adjacent to a heated space,
 - 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.

Note: 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.
- (B) 10 points - Solar hot water heating.
- (C) 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%.

(8) 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).

(9) 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.