

BOROUGH OF SWARTHMORE (2014 update)

Applicant _____
Project Address _____
Contact Name/Phone _____ / _____

For Office Use Only
Points Received _____
Reviewer _____

New Construction Remodel Addition

Green Points Worksheet

PLEASE NOTE THAT GREEN POINTS WILL BE GIVEN **ONLY** FOR ITEMS THAT ARE IN EXCESS OF THE PENNSYLVANIA UNIFORM CONSTRUCTION CODE AND/OR SWARTHMORE BOROUGH SUBDIVISION AND LAND DEVELOPMENT REGULATIONS

1 CONSTRUCTION • DEMOLITION • USE OF RECYCLED MATERIALS

Deconstruction Plan Submitted with Permit Application

1 Point..... _____

Deconstructed Materials Donated to a Reseller

1 Point..... _____

Use of Reclaimed Lumber

5 Points..... _____

Construction Debris Recycled (75% + or complete demolition)

3 Points..... _____

Recycled Content Carpeting

2 Points..... _____

Recycled Plastic in Deck Material

2 Points..... _____

Recycled Content Sheathing

1 Point..... _____

Recycled Content or Fiber Cement Siding

3 Points..... _____

Recycled Content Roofing

3 Points..... _____

2 COMPACT LAND USE • WATER CONSERVATION

Compact Building Footprint (New Construction)

Lot coverage 10% less than zoning maximum

3 Points..... _____

Lot coverage 5% less than zoning maximum

2 Points..... _____

Landscaping (New Construction)

Reduction of turf areas and lawns kept to a minimum

3 Points..... _____

Appropriate use of low water demanding plants

2 Points..... _____

Zoned irrigation system separating turf from shrub areas and low water demand areas from high water demand areas that includes drip irrigation zones.

3 Points..... _____

Water Conservation by Performance Procedure (1-6 Points)

1 Point: 10,000 gallons of annual water saving..... _____

2 Points: 20,000 gallons of annual water saving..... _____

3 Points: 30,000 gallons of annual water saving..... _____

4 Points: 40,000 gallons of annual water saving..... _____

5 Points: 50,000 gallons of annual water saving..... _____

6 Points: 60,000 gallons of annual water saving..... _____

Use of Engineered Swales to Filter Storm Water Runoff (only applicable if not required by Stormwater Permit)

3 Points..... _____

Planting Two Trees beyond Required Street Trees (up to 6 points)(New Construction/Land Development)

1 point for each additional tree planted (up to 6 trees)

Total number of trees _____=total points

_____Points..... _____

3 FRAMING

Incorporate Optimal Value Engineering (OVE) Framing Techniques

2 Points..... _____

Oriented Strand Board (OSB) Subfloors

1 Point..... _____

Oriented Strand Board (OSB) Wall Sheathing

1 Point..... _____

Finger-Jointed Studs Used for Wall Framing

2 Points..... _____

Forest Stewardship Council (FSC) Certified Harvested Lumber Used for Framing

5 Points..... _____

Engineered Lumber Used (Floors)

1 Point..... _____

Engineered Lumber Used to Replace 2x10s or 2x12s for Structural Applications

1 Point..... _____

Structural Alternatives to Wood

5 Points..... _____

Structural Insulated Panels Used for Exterior Walls

4 Points..... _____

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 minimum in each of the categories specified in the table.** The applicant shall complete a form to calculate the points awarded for such incremental increases.

Insulated Assembly	Points (circle)	
Glass R / U Value (As determined by the National Fenestration Rating Council)		
2 / 0.5	0	
2.2 / .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	0
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
Total Insulation Points =	

5 PLUMBING

Tankless Domestic Hot Water Heaters

1 Point

“On Demand” Hot Water Switch

1 Point

6 ELECTRICAL

Efficient Appliances

Energy Star Dishwasher Installed (Provide Manufacturers Spec Sheet)

1 Point

Energy Star Clothes Washer Installed (Provide Manufacturers Spec Sheet)

1 Point

Energy Star Refrigerator Installed (Provide Manufacturers Spec Sheet)

1 Point

Energy Star Freezer Installed (Provide Manufacturers Spec Sheet)

1 Point

Clothesline Installed

1 Point

LEDs Installed (1-3 points)(show on Lighting Plan)

1 Point: 4 LED bulbs.....

2 Points: 8 LED bulbs.....

3 Points: 12 LED bulbs.....

Energy Efficient Lighting Controls Installed (provide documentation)

2 Points.....

7 INSULATION

Wall Insulation is 80% Recycled Material and/or Wet-Spray Insulation

2 Points.....

Ceiling Insulation is 80% Recycled Material and/or Wet-Spray Insulation

2 Points.....

Windows (only one of the following three may be used)

- *Single-pane Windows Changed out for Double-pane (up to maximum 10 points)*

0.5 points per window for additions and remodels

Calculate: total number of windows _____ x 0.5 = total points _____

_____ Points.....

- *Single-pane Windows Changed out for Low Emissivity Window (up to maximum 10 points)*

1 point per window for additions and remodels

Calculate: total number of windows _____ = total points _____

_____ Points.....

- *Single-pane Windows Changed out with argon/HM Windows (up to maximum 10 points)*

1.5 points per window for additions and remodels

Calculate: total number of windows _____ x 1.5 = total points _____

_____ Points.....

Existing Ceiling Insulated to R-38 (or to capacity for fixed space – not to be combined with Section 4)

2 points for additions and remodels

5 Points.....

Existing Walls Insulated to Capacity (not to be combined with Section 4)

3 points for additions and remodels

7 Points.....

Install Recycled-Content, Formaldehyde-Free Fiberglass Insulation

2 Points.....

8 HEATING AND COOLING

Air Destratification Systems

1 Point

Natural Cooling (provide design schematics)

2 Points.....

Evaporative Cooling Installed

6 Points.....

Vapor Permeable Infiltration Barrier

1 Point.....

Whole House Fan

2 Points.....

Convert Electric Heat to Gas Heat (addition and remodels only)

5 Points.....

Replace Electric Water Heater with Gas Water Heater (additions and remodels only)

3 Points.....

Hydronic Baseboard Heat

3 Points.....

Radiant Floor Heat

3 Points.....

Geothermal Heat or Air to Air Heat Exchanger (Heat Recovery Ventilation)

8 Points.....

9 SOLAR

Passive Solar Potential Preservation and Solar Space Heating

5 Points for the Following Items:

- (i) *A wall surface is provided equal to 10% of the unit's floor area or 150 square feet—whichever is greater*
- (ii) *Which is located on the more southerly side of the unit*
- (iii) *Which is oriented within thirty degrees of a true east-west direction*
- (iv) *Which is immediately adjacent to a heated space*
- (v) *Which is not shaded between 10:00am and 2:00pm on the winter solstice; and is totally shaded between 10:00am and 2:00pm on the summer solstice*
- (vi) *Which has unimpeded solar access*
(The Building Official shall be authorized to make determinations as to compliance with the above criteria)

5 Points each.....

Glazing of the south wall surface adequate to provide at least 20% Passive Solar Heating

6 Points.....

Glazing of the south wall surface adequate to provide at least 40% Passive Solar Heating, but only if designed in conjunction with an appropriately sized thermal mass so as not to affect adversely cooling loads

12 Points.....

Glazing of the south wall surface adequate to provide at least a 60% Passive Solar Heating, but only if designed in conjunction with an appropriately sized thermal mass so as not to affect adversely cooling loads

20 Points.....

Solar Hot Water Heating

10 Points.....

Active Solar Space Heating with a calculated savings fraction of

8 Points: 30%.....

12 Points: 40%.....

16 Points: 50%.....

20 Points: 60%.....

Active Solar Pre-Plumbing

2 Points.....

Solar Generated Electricity with a Savings Fraction of at Least 25%

20 Points.....

10 INNOVATION POINTS

Install Infrastructure to Support Current or Future Alternative Fuel Vehicle Use

1 Point.....

Innovative Product or Design Points (up to 10 points)

(to be awarded based on demonstrated energy or resource conservation savings)

_____ Points.....