Exterior Energy Uses

This section shall apply to exterior energy uses including, but not limited to, outdoor pools and spas, snowmelt systems and heated garages. 50% of the Annual Energy Use (AEU) of all exterior systems shall be offset with on-site or off-site community renewable energy systems approved by the Chief Building Official. Calculations for this section can be found in Table 4.

Fossil fuel and electric boilers utilized for exterior energy uses shall have a minimum efficiency of 90% AFUE.

Table 3

System Type	REOP Payment Options
Snowmelt	$34.00 / SF
Swimming Pool	$136.00 / SF
Spa	$176.00 / SF
Heated Garage	$8.00 / SF

Table 4

Renewable Energy System	Allowed Credit
Solar Hot Water	$125.00 / SF
Photo-voltaic	$6.25 / watt
Ground Source Heat Pump (GSHP)	$6.75 / 100,000 BTU/yr. (System must supply 20% of peak load for building heating and all exterior energy use.)
Micro-hydro generation	Case Specific
Wind generation	Case Specific
Replacement of existing boiler	$400.00 / 1% of increased efficiency

Exemptions:

1. Single family dwelling garage aprons are allowed a 200 square feet exemption.
2. Single family driveways exceeding 8% slope. (Specific case review)
3. Commercial multi-dwelling occupancies are allowed a snowmelt exemption of 50 square feet per dwelling unit.
4. Single family spas not over 64 square feet in surface area.
5. Commercial spas not over 64 square feet in surface area or 3 square feet per dwelling unit, whichever is greater.
6. Accessible Route * (as defined in the IBC and ANSI A117.1)
    a. Site arrival points. Accessible routes (a clear and unobstructed path) within the site shall be provided from public transportation spots; accessible parking; accessible passenger loading zones; and public streets or sidewalks to the accessible building entrance served.

b. Within a site. At least one accessible route shall connect accessible buildings, accessible facilities, accessible elements and accessible spaces that are on the same site.
c. Connected spaces. When a building or a portion of a building is required to be accessible, an accessible route shall be provided to each portion of the building, to accessible building entrances connecting accessible pedestrian walkways and the public way.

For the purpose of this section, accessible stairs and their related snowmelt shall have a maximum exemption of 48" in width for the flight of stairs. All other related accessible routes shall have a maximum exemption of 36" in width for the length of the route. A 36" wide space around the perimeter of pools and spas shall be considered accessible. Final determination for the exemption of accessible routes shall be made by the Chief Building Official.

7. Pre-existing systems. Pre-existing snowmelt, pools or spas that are being altered or renovated qualify for exterior energy credit. This credit can be applied towards an installation of exterior energy on the same parcel. The calculation of the credit shall be based on Table 4 of this section. An energy cost analysis of the existing system compared to the proposed system will be required to satisfy the exemption.
8. Repairs. Repairs to building components, systems or equipment which do not increase their pre-existing energy consumption need not comply with this section. All replacement equipment shall be subject to current code provisions.
9. Appeals. An application of appeal of the Chief Building Official's final decision of exemptions shall be based on a claim that the true intent of this code or the rules legally adopted there under have been incorrectly interpreted or the provisions of this code do not fully apply. The applicant may, under these circumstances, appeal to the Building Department Board of Appeals for a hearing.

Example #1
Snowmelt area of 1200 SF:
$34.00 x 1200 / .92 (efficiency rating of boiler) = $44,347.83 x 50%= $22,173.92
#22,173.92 / $125.00 = 178 SF of solar hot water panels, OR
$22,173.92 / $6.25 = 3,548 watts of solar photo-voltaic