

**WAC 51-11C-40620 Section C406.2—Additional energy efficiency credit measures.**

**C406.2 Additional energy efficiency credit measures.** Each energy efficiency credit measure used to meet credit requirements for the project shall include efficiency that is greater than the energy efficiency required for the building type and configuration requirements in Sections C402 through C405. Measures installed in the project that meet the requirements in Sections C406.2.1 through C406.2.14 shall achieve the credits listed for the measure and occupancy group in Table C406.2(1) or Table C406.2(2) or where calculations required by Sections C406.2.1 through C406.2.14 create or modify the table credits, the credits achieved shall be based upon the section calculations. Projects that chose to comply with the fossil fuel pathway in Section C401.3 shall use Table C406.2(2) to achieve credits.

For mixed fuel space heating systems, the number of space heating energy efficiency credits available for measures with a prorating flag "Heat" are calculated using the following equation:

$$C_{SH} = CHP_{SH} \times B/C + CFF_{SH} \times (1 - B/C)$$

Where:

- $C_{SH}$  = Blended credits for mixed fuel systems.
- $CHP_{SH}$  = Credits available in Table C406.2(1).
- $CFF_{SH}$  = Credits available in Table C406.2(2).
- $B$  = Installed space heating capacity in kBTU/h of space heating appliances that comply with any of the exceptions to Section C403.1.4.
- $C$  = Total installed space heating capacity in kBTU/h of all space heating appliances.

For mixed fuel service water heating systems, the number of service water heating energy efficiency credits available for measures with a prorating flag "SWH" are calculated using the following equation:

$$C_{WH} = CHP_{WH} \times B/C + CFF_{WH} \times (1 - B/C)$$

Where:

- $C_{WH}$  = Blended credits for mixed fuel systems.
- $CHP_{WH}$  = Credits available in Table C406.2(1).
- $CFF_{WH}$  = Credits available in Table C406.2(2).
- $B$  = Installed service water heating capacity in kBTU/h of service water heating appliances that comply with any of the exceptions to Section C404.2.1.
- $C$  = Total installed service water heating capacity in kBTU/h of all service water heating appliances.

**Table C406.2(1)**

### Efficiency Measure Credits

Measure Title	Applicable Section	Prorating Flag	Occupancy Group					
			Group R-1	Group R-2	Group B	Group E	Group M	All Other
1. Dwelling unit HVAC control	C406.2.2	Heat	NA	7	NA	NA	NA	NA
2. Improved HVAC TSPR <sup>a</sup>	C406.2.2.1	Heat	NA	8	11	17	22	NA
3. Improve cooling and fan efficiency	C406.2.2.2	Heat	2	2	3	4	3	2
4. Improve heating efficiency	C406.2.2.3	Heat	2	3	3	10	16	7
5. Improved low-carbon district energy system (10% better)	C406.2.2.4		3	3	4	11	17	8
6. Improved low-carbon district energy system (20% better) <sup>b</sup>	C406.2.2.5		9	10	12	33	52	24
7. High performance DOAS	C406.2.2.6	Heat	31	31	21	39	40	21/ (A) 40 <sup>c</sup>
8. Fault detection & diagnostics (FDD)	C406.2.2.7	Heat	2	2	2	6	9	4
9. 10% reduced lighting power	C406.2.3.1	Heat	7	4	18	16	20	15
10. 20% reduced lighting power <sup>d</sup>	C406.2.3.2	Heat	13	8	36	32	40	29
11. Lamp efficacy improvement	C406.2.3.3	Heat	5	6	NA	NA	NA	NA
12. Residential lighting control	C406.2.4.1	Heat	NA	8	NA	NA	NA	NA
13. Enhanced lighting control	C406.2.4.2	Heat	1	1	6	6	11	6
14. Renewable energy	C406.2.5		7	12	13	13	10	11
15. Shower drain heat recovery	C406.2.6.1	SWH	9	30	NA	3	NA	NA
16. Service water heat recovery	C406.2.6.2	SWH	35	111	13	14	(Grocery) 41 <sup>e</sup>	NA
17. Heat pump water heating	C406.2.6.3	SWH	72	54	1	13	5	29 <sup>f</sup>
18. High efficiency service water heating, gas-fired	C406.2.6.4	SWH	NA	NA	NA	NA	NA	NA
19. Heat trace system	C406.2.7.1	SWH	6	13	4	1	NA	6
20. Point of use water heater	C406.2.7.2	SWH	NA	NA	19	5	NA	NA
21. Service hot water distribution right sizing	C406.2.8		13	42	NA	NA	NA	NA
22. High performance service hot water temperature maintenance system	C406.2.9		6	13	4	1	NA	6
23. High efficiency service hot water circulation system	C406.2.10		3	6	2	1	NA	4

Measure Title	Applicable Section	Prorating Flag	Occupancy Group					
			Group R-1	Group R-2	Group B	Group E	Group M	All Other
24. Low flow residential showerheads	C406.2.11	SWH	3	3	NA	NA	NA	NA
25. Enhanced envelope performance <sup>g</sup>	C406.2.12	Heat	24	20	13	5	19	14
26. Base reduced air leakage <sup>g</sup>	C406.2.13.2		29	24	6	3	9	11
27. Enhanced reduced air leakage <sup>g</sup>	C406.2.13.3	Heat	53	44	11	5	16	20
28. Enhanced commercial kitchen equipment	C406.2.14	Heat	30 <sup>h</sup>	18 <sup>h</sup>	18 <sup>h</sup>	30 <sup>h</sup>	30 <sup>h</sup>	31 <sup>h</sup>
29. Enhanced residential kitchen equipment	C406.2.15	Heat	12	19	NA	NA	NA	NA
30. Enhanced residential laundry equipment	C406.2.16	Heat	NA	6	NA	NA	NA	NA
31. Heat pump clothes dryers	C406.2.17	Heat	6	6	NA	NA	NA	NA
32. Efficient elevator equipment	C406.2.18	Heat	3	5	5	5	4	4

a Projects using Item 2 shall not use Items 3 through 5.

b Projects using C406.2.2.5 shall not use C406.2.2.4.

c For C406.2.2.6, occupancy Group A achieves 40 credits while other occupancy groups within the "all other" category achieve 21 credits.

d Projects using C406.2.3.2 shall not use C406.2.3.1.

e Service water heat recovery and heat pump water heating are available in Group M only for grocery stores larger than 10,000 ft<sup>2</sup>. Large mixed retail with full grocery and butcher sections shall achieve half the credits. This credit is not available where refrigeration recovery to heat service hot water is used to meet the requirements of Section C403.9.2.3.

f Heat pump water heating efficiency credits are available in the "all other" category only for Group A-2.

g Buildings or building areas that are exempt from the thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2, do not qualify for this package.

h Additional energy efficiency credits, up to the maximum shown in Table C406.2(1), shall be calculated according to Section C406.2.11.

**Table C406.2 (2)**  
**Efficiency Measure Credits for use with**  
**Fossil Fuel Compliance Path**

Measure Title	Applicable Section	Prorating Flag	Occupancy Group					
			Group R-1	Group R-2	Group B	Group E	Group M	All Other
1. Dwelling unit HVAC control	C406.2.2	Heat	NA	8	NA	NA	NA	NA
2. Improved HVAC TSPR <sup>a</sup>	C406.2.2.1	Heat	NA	9	12	19	24	NA
3. Improve cooling and fan efficiency	C406.2.2.2	Heat	12	8	14	8	10	10
4. Improve heating efficiency	C406.2.2.3	Heat	2	3	3	11	18	8
5. Improved low-carbon district energy system (10% better)	C406.2.2.4		3	3	4	12	19	9
6. Improved low-carbon district energy system (20% better) <sup>b</sup>	C406.2.2.5		10	11	13	36	57	26
7. High performance DOAS	C406.2.2.6	Heat	34	34	23	43	44	23/ (A) 40 <sup>c</sup>
8. Fault detection & diagnostics (FDD)	C406.2.2.7	Heat	2	2	2	6	9	4

Measure Title	Applicable Section	Prorating Flag	Occupancy Group					
			Group R-1	Group R-2	Group B	Group E	Group M	All Other
9. 10% reduced lighting power	C406.2.3.1	Heat	7	4	18	16	20	15
10. 20% reduced lighting power <sup>d</sup>	C406.2.3.2	Heat	13	8	36	32	40	29
11. Lamp efficacy improvement	C406.2.3.3	Heat	5	6	NA	NA	NA	NA
12. Residential lighting control	C406.2.4.1	Heat	NA	8	NA	NA	NA	NA
13. Enhanced lighting control	C406.2.4.2	Heat	1	1	6	6	11	6
14. Renewable energy	C406.2.5		7	12	13	13	10	11
15. Shower drain heat recovery	C406.2.6.1	SWH	10	33	NA	3	NA	NA
16. Service water heat recovery	C406.2.6.2	SWH	35	111	13	14	(Grocery) 41 <sup>e</sup>	NA
17. Heat pump water heating	C406.2.6.3	SWH	135	163	17	33	(Grocery) 95 <sup>e</sup>	(A-2) 95 <sup>f</sup>
18. High efficiency service water heating, gas-fired	C406.2.6.4	SWH	59	65	6	11	18	32
19. Heat trace system	C406.2.7.1	SWH	6	13	4	1	NA	6
20. Point of use water heater	C406.2.7.2	SWH	NA	NA	19	5	NA	NA
21. Service hot water distribution right sizing	C406.2.8		13	42	NA	NA	NA	NA
22. High performance service hot water temperature maintenance system	C406.2.9		6	13	4	1	NA	6
23. High efficiency service hot water circulation system	C406.2.10		3	6	2	1	NA	4
24. Low flow residential showerheads	C406.2.11	SWH	3	3	NA	NA	NA	NA
25. Enhanced envelope performance <sup>g</sup>	C406.2.12	Heat	24	20	13	5	19	14
26. Base reduced air leakage <sup>g</sup>	C406.2.13.2		29	24	6	3	9	11
27. Enhanced reduced air leakage <sup>g</sup>	C406.2.13.3	Heat	53	44	11	5	16	20
28. Enhanced commercial kitchen equipment	C406.2.14	Heat	30 <sup>h</sup>	18 <sup>h</sup>	18 <sup>h</sup>	30 <sup>h</sup>	30 <sup>h</sup>	31 <sup>h</sup>
29. Enhanced residential kitchen equipment	C406.2.15	Heat	12	19	NA	NA	NA	NA
30. Enhanced residential laundry equipment	C406.2.16	Heat	NA	6	NA	NA	NA	NA
31. Heat pump clothes dryers	C406.2.17	Heat	6	6	NA	NA	NA	NA
32. Efficient elevator equipment	C406.2.18	Heat	3	5	5	5	4	4

<sup>a</sup> Projects using Item 2 shall not use Items 3 through 5.

- b Projects using C406.2.2.5 shall not use C406.2.2.4.
- c For C406.2.2.6, occupancy Group A achieves 40 credits while other occupancy groups within the "all other" category achieve 21 credits.
- d Projects using C406.2.3.2 shall not use C406.2.3.1.
- e Service water heat recovery and heat pump water heating are available in Group M only for grocery stores larger than 10,000 ft<sup>2</sup>. Large mixed retail with full grocery and butcher sections shall achieve half the credits. This credit is not available where refrigeration recovery to heat service hot water is used to meet the requirements of Section C403.9.2.3.
- f Heat pump water heating efficiency credits are available in the "all other" category only for Group A-2.
- g Buildings or building areas that are exempt from the thermal envelope requirements in accordance with Sections C402.1.1 and C402.1.2, do not qualify for this package.
- h Additional energy efficiency credits, up to the maximum shown in Table C406.2(2), shall be calculated according to Section C406.2.14.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160, chapters 19.27A and 19.27 RCW. WSR 24-03-085, § 51-11C-40620, filed 1/16/24, effective 3/15/24; WSR 22-14-091, 23-12-101, and 23-20-021, § 51-11C-40620, filed 7/1/22, 6/7/23, and 9/25/23, effective 3/15/24.]