

FLORIDA ENERGY EFFICIENCY CODE FOR BUILDING CONSTRUCTION
Residential Whole Building Performance Method A
FORM 600A-04R SOUTH 7 8 9

PROJECT NAME: AND ADDRESS:
BUILDER:
PERMITTING OFFICE:
CLIMATE ZONE: 4 5 6
OWNER:
PERMIT NO.:
JURISDICTION NO.:

- 1. New construction or addition
2. Single-family detached or Multiple-family attached
3. If Multiple-family--No. of units covered by this submission
4. Is this a worst case? (yes/no)
5. Conditioned floor area (sq. ft.)
6. Predominant eave overhang (ft.)
7. Glass type¹ and area: (Label required by 13-104.4.5 if not default)
8. Floor type and insulation:
9. Net Wall type, area and insulation:
10. Ceiling type, area and insulation:
11. Air distribution system:
12. Cooling system:
13. Heating system:
14. Hot water system:
15. Hot water credits
16. HVAC credits
17. COMPLIANCE STATUS: (PASS if As-Built Pts. Are less than Base Pts.)

Please Type CK
1.
2.
3.
4.
5. sq. ft.
6. ft.
Description Area
7a. sq. ft.
7b. sq. ft.
8a. R = , l. ft.
8b. R = , sq. ft.
8c. R = , sq. ft.
9a-1 R = , sq. ft.
9a-2 R = , sq. ft.
9a-3 R = , sq. ft.
9a-4 R = , sq. ft.
9b-1 R = , sq. ft.
9b-2 R = , sq. ft.
9b-3 R = , sq. ft.
9b-4 R = , sq. ft.
10a. sq. ft.
10b. sq. ft.
10c.
11a. R = , (cond./uncond.)
11b. R = , (cond./uncond.)
12a. Type:
12b. SEER/EER/COP:
12c. Capacity:
13a. Type:
13b. HSPF/COP/AFUE:
13c. Capacity:
14a. Type:
14b. EF:
15a.
15b.
15c.
16.
17.
17a. 17b.

I hereby certify that the plans and specifications covered by the calculation are in compliance with the Florida Energy Code.
PREPARED BY: DATE:
I hereby certify that this building is in compliance with the Florida Energy Code:
OWNER AGENT: DATE:
Review of plans and specifications covered by this calculation indicates compliance with the Florida Energy Code. Before construction is completed, this building will be inspected for compliance in accordance with Section 553.908, F.S.
BUILDING OFFICIAL:
DATE:

SUMMER POINT MULTIPLIERS (SPM)

CLIMATE ZONES 7 8 9

6A-1 SUMMER OVERHANG FACTORS (SOF) FOR SINGLE AND DOUBLE-PANE GLASS

| SELECT BY OR | OH Ratio | .00-.11 | .12-.17 | .18-.26 | .27-.35 | .36-.46 | .47-.57 | .58-.70 | .71-.83 | .84-1.18 | 1.19-1.72 | 1.73-2.73 | 2.74 & up |
|-----------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|-----------|-----------|
| | North | 1.00 | 0.993 | 0.971 | 0.932 | 0.891 | 0.847 | 0.810 | 0.774 | 0.745 | 0.692 | 0.646 | 0.606 |
| | Northeast | 1.00 | 0.995 | 0.966 | 0.909 | 0.849 | 0.782 | 0.726 | 0.673 | 0.633 | 0.561 | 0.504 | 0.459 |
| | East | 1.00 | 0.993 | 0.964 | 0.904 | 0.837 | 0.759 | 0.691 | 0.625 | 0.574 | 0.484 | 0.415 | 0.462 |
| | Southeast | 1.00 | 0.999 | 0.960 | 0.881 | 0.799 | 0.713 | 0.645 | 0.585 | 0.542 | 0.471 | 0.422 | 0.386 |
| | South | 1.00 | 0.995 | 0.945 | 0.854 | 0.770 | 0.689 | 0.630 | 0.581 | 0.546 | 0.592 | 0.455 | 0.428 |
| | Southwest | 1.00 | 0.997 | 0.958 | 0.882 | 0.805 | 0.723 | 0.657 | 0.599 | 0.555 | 0.482 | 0.427 | 0.386 |
| | West | 1.00 | 0.994 | 0.965 | 0.905 | 0.840 | 0.767 | 0.704 | 0.645 | 0.599 | 0.518 | 0.455 | 0.404 |
| | Northwest | 1.00 | 0.995 | 0.967 | 0.914 | 0.861 | 0.805 | 0.760 | 0.718 | 0.686 | 0.629 | 0.583 | 0.545 |
| | OH Length | 0.0' | 1.0' | 1.5' | 2.0' | 3.0' | 3.5' | 4.5' | 5.5' | 6.5' | 9.5' | 14.0' | 20.0' |

6A-2 WALL SUMMER POINT MULTIPLIERS (SPM)

| FRAME | | | | | CONCRETE BLOCK (NORMAL WT) | | | | FACE BRICK | | | | LOG | | |
|---------|-----|-------|------|-----|----------------------------|-----|-----|-------------|------------|---------|---------|-------|---------|-----|--------|
| WOOD | | STEEL | | | INTERIOR INSULATION | | | EXT. INSUL. | R-VALUE | WOOD FR | R-VALUE | BLOCK | 6 INCH | | 8 INCH |
| R-VALUE | EXT | ADJ | EXT | ADJ | R-VALUE | EXT | ADJ | EXT | 0-6.9 | 4.6 | 0-2.9 | 2.3 | R-VALUE | EXT | EXT |
| 0-6.9 | 8.5 | 3.4 | 11.6 | 4.4 | 0-2.9 | 4.2 | 1.9 | 4.2 | 7-10.9 | 1.3 | 3-6.9 | 1.6 | 0-2.9 | 2.8 | 1.9 |
| 7-10.9 | 3.2 | 1.3 | 5.5 | 2.1 | 3-4.9 | 2.7 | 1.3 | 1.7 | 19-25.9 | .6 | 10 & UP | .7 | 3-6.9 | 1.9 | 1.4 |
| 11-12.9 | 2.7 | 1.0 | 4.2 | 1.6 | 5-6.9 | 2.0 | 1.1 | 1.2 | 26 & UP | .3 | | | 7 & UP | 1.5 | 1.2 |
| 13-18.9 | 2.4 | .9 | 3.9 | 1.5 | 7-10.9 | 1.6 | .8 | .7 | | | | | | | |
| 19-25.9 | 1.6 | .6 | 3.4 | 1.3 | 11-18.9 | 1.0 | .6 | .3 | | | | | | | |
| 26 & UP | 1.0 | .3 | 1.9 | .7 | 19-25.9 | .5 | .3 | | | | | | | | |
| | | | | | 26 & Up | .3 | .2 | | | | | | | | |

NOTE: SEE SECTION 2.0 OF APPENDIX C FOR MULTIPLIERS OF ENVELOPE COMPONENTS NOT ON THIS FORM.

6A-3 DOOR SUMMER POINT MULTIPLIERS (SPM)

| DOOR TYPE | EXTERIOR | ADJACENT |
|-----------|----------|----------|
| WOOD | 9.4 | 3.8 |
| INSULATED | 6.4 | 2.6 |

6A-4 CEILING SUMMER POINT MULTIPLIERS (SPM)

| UNDER ATTIC | | SINGLE ASSEMBLY | | CONCRETE DECK ROOF | | |
|-------------------|-------|-----------------|-------|--------------------|---------|---------|
| R-VALUE | SPM | R-VALUE | SPM | CEILING TYPE | | |
| | | | | R-VALUE | EXPOSED | DROPPED |
| 19-21.9 | 3.72 | 10-10.9 | 13.67 | 10-13.9 | 14.73 | 13.67 |
| 22-25.9 | 3.36 | 11-12.9 | 12.90 | 14-20.9 | 10.96 | 10.46 |
| 26-29.9 | 3.02 | 13-18.9 | 11.59 | 21 & UP | 7.86 | 7.54 |
| 30-37.9 | 2.77 | 19-25.9 | 9.24 | | | |
| 38 & UP | 2.43 | 26-29.9 | 7.85 | | | |
| RBS Credit | 0.700 | 30 & Up | 7.27 | | | |
| IRCC Credit | 0.865 | | | | | |
| White Roof Credit | 0.550 | | | | | |

6A-5 FLOOR SUMMER POINT MULTIPLIERS (SPM)

| SLAB-ON-GRADE EDGE INSULATION | | RAISED CONCRETE | | RAISED WOOD | | | |
|-------------------------------|-------|-----------------|-----|---------------------------|------------------------------------|----------|-----|
| R-VALUE | SPM | R-VALUE | SPM | POST OR PIER CONSTRUCTION | STEM WALL w/UNDER FLOOR INSULATION | ADJACENT | |
| | | | | SPM | SPM | SPM | SPM |
| 0-2.9 | -20.0 | 0-2.9 | .8 | 0-6.9 | 5.02 | -4.2 | 3.4 |
| 3-4.9 | -17.4 | 3-4.9 | -.3 | 7-10.9 | 2.58 | -.9 | 1.3 |
| 5-6.9 | -16.6 | 5-6.9 | -.4 | 11-18.9 | 2.08 | -.6 | 1.0 |
| 7 & UP | -16.0 | 7 & UP | -.5 | 19 & UP | 1.58 | -.4 | .6 |

6A-6 INFILTRATION & INTERNAL GAINS (SPM)

| | |
|--|--------|
| Air Infiltration | 7.43 |
| Internal Gains | +11.36 |
| Infiltration/Internal Gains (Combined) | 18.79 |

6A-8 DUCT MULTIPLIERS (DM) See Table 13-610.1.ABC.2.1 for Code minimums.

| SUPPLY DUCTS IN: | DUCT R-VALUE | RETURN DUCTS IN: | | | | |
|--|--------------|---------------------|-----------|------------|------------------|-------------------|
| | | Unconditioned space | Attic/RBS | Attic/IRCC | Attic/White roof | Conditioned space |
| Unconditioned Space | 4.2 | 1.095 | 1.090 | 1.091 | 1.090 | 1.087 |
| | 6.0 | 1.073 | 1.069 | 1.070 | 1.069 | 1.067 |
| | 8.0 | 1.058 | 1.055 | 1.055 | 1.055 | 1.053 |
| Attic/Radiant Barrier (RBS) | 4.2 | 1.062 | 1.057 | — | — | 1.053 |
| | 6.0 | 1.048 | 1.044 | — | — | 1.041 |
| Attic/Interior Radiation Control Coatings (IRCC) | 8.0 | 1.039 | 1.036 | — | — | 1.033 |
| | 4.2 | 1.083 | — | 1.078 | — | 1.072 |
| | 6.0 | 1.064 | — | 1.061 | — | 1.056 |
| Attic/White Roof | 8.0 | 1.052 | — | 1.049 | — | 1.045 |
| | 4.2 | 1.059 | — | — | 1.054 | 1.051 |
| | 6.0 | 1.045 | — | — | 1.041 | 1.038 |
| Conditioned Space | 8.0 | 1.035 | — | — | 1.032 | 1.030 |
| | 4.2 | 1.005 | 1.004 | 1.006 | 1.002 | 1.000 |
| | 6.0 | 1.004 | 1.003 | 1.004 | 1.002 | 1.000 |
| | 8.0 | 1.003 | 1.003 | 1.003 | 1.001 | 1.000 |

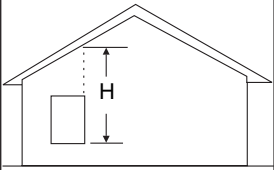
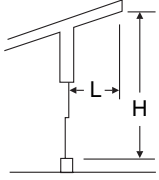
6A-9 COOLING SYSTEM MULTIPLIERS (CSM)

| SYSTEM TYPE | Rating | COOLING SYSTEM MULTIPLIERS (CSM) | | | | | | | | | |
|-------------------------|--------|----------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | 7.5-7.9 | 8.0-8.4 | 8.5-8.8 | 8.9-9.4 | 9.5-9.9 | 10.0-10.4 | 10.5-10.9 | 11.0-11.4 | 11.5-11.9 | 12.0-12.4 |
| Central Units (SEER) | CSM | .45 | .43 | .40 | .38 | .36 | .34 | .32 | .31 | .30 | .28 |
| PTAC & Room Units (EER) | Rating | 12.5-12.9 | 13.0-13.4 | 13.5-13.9 | 14.0-14.4 | 14.5-14.9 | 15.0-15.4 | 15.5-15.9 | 16.0-16.4 | 16.5-16.9 | 17.0-17.4 |
| | CSM | .27 | .26 | .25 | .24 | .24 | .23 | .22 | .21 | .21 | .20 |

WINTER CALCULATIONS

CLIMATE ZONES 7 8 9

| GLASS | ORIENTATION | OVERHANG LENGTH OH (FEET) | GLASS AREA (SQ. FT.) | SINGLE-PANE WINTER POINT MULTIPLIER | | DOUBLE-PANE WINTER POINT MULTIPLIER | | WINTER OH FACTOR (from 6A-10) | AS-BUILT GLASS WINTER PTS |
|-------|-------------|---------------------------|----------------------|-------------------------------------|-------------------|-------------------------------------|-------------------|-------------------------------|---------------------------|
| | | | | CLEAR | TINT ² | CLEAR | TINT ² | | |
| | | | | N | | | 6.03 | | |
| NE | | | 5.84 | 5.96 | 4.18 | 4.28 | | | |
| E | | | 4.77 | 5.05 | 3.30 | 3.56 | | | |
| SE | | | 4.22 | 4.57 | 2.87 | 3.20 | | | |
| S | | | 4.49 | 4.79 | 3.12 | 3.40 | | | |
| SW | | | 5.06 | 5.25 | 3.63 | 3.83 | | | |
| W | | | 5.49 | 5.65 | 3.98 | 4.12 | | | |
| NW | | | 6.00 | 6.09 | 4.35 | 4.43 | | | |
| H | | | 6.39 | 6.61 | 4.48 | 4.70 | | | |



| | | | | | | |
|-------|-------|------------------|---|---------------------------|---|---------------------|
| GLASS | .18 X | COND. FLOOR AREA | X | WEIGHTED GLASS MULTIPLIER | = | BASE GLASS SUBTOTAL |
| | .18 | | | 3.60 | | |

| |
|-------------------------|
| AS-BUILT GLASS SUBTOTAL |
|-------------------------|

| COMPONENT DESCRIPTION | AREA | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-----------------------|----------|-------------------------|--------------------|
| WALL | EXTERIOR | .6 | |
| | ADJACENT | .5 | |

| COMPONENT DESCRIPTION | AREA | X | WINTER POINT MULT. (6A-11 THRU 6A-15) | = | AS-BUILT WINTER POINTS |
|-----------------------|------|---|---------------------------------------|---|------------------------|
| | | | | | |

| DOORS | EXTERIOR | ADJACENT | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------|----------|----------|-------------------------|--------------------|
| | | | 1.8 | |
| | | | 1.3 | |

| DOORS | EXTERIOR | ADJACENT | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------|----------|----------|-------------------------|--------------------|
| | | | 1.8 | |
| | | | 1.3 | |

| CEILING | UNDER ATTIC OR SINGLE ASSEMBLY | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|---------|--------------------------------|-------------------------|--------------------|
| | | .1 | |

| CEILING | RBS/IRCC/white roof ³ | WINTER POINT MULT. | AS-BUILT WINTER POINTS |
|---------|----------------------------------|--------------------|------------------------|
| | | x | |

BASE CEILING AREA EQUALS FLOOR AREA DIRECTLY UNDER CEILING, AS-BUILT CEILING AREA EQUALS ACTUAL CEILING SQUARE FOOTAGE.

| FLOOR | SLAB (PERIMETER) | RAISED (AREA) | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------|------------------|---------------|-------------------------|--------------------|
| | | | -2.1 | |
| | | | -2.28 | |

| FLOOR | SLAB (PERIMETER) | RAISED (AREA) | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------|------------------|---------------|-------------------------|--------------------|
| | | | -2.1 | |
| | | | -2.28 | |

FOR SLAB-ON-GRADE USE PERIMETER LENGTH AROUND CONDITIONED FLOOR. FOR RAISED FLOORS USE AREA OVER UNCONDITIONED SPACE.

| INFILTRATION & INTERNAL GAINS | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------------------------------|-------------------------|--------------------|
| | -0.06 | |

| INFILTRATION & INTERNAL GAINS | BASE WINTER POINT MULT. | BASE WINTER POINTS |
|-------------------------------|-------------------------|--------------------|
| | -0.06 | |

USE TOTAL FLOOR AREA OF CONDITIONED SPACE.

| |
|------------------------------------|
| TOTAL COMPONENT BASE WINTER POINTS |
|------------------------------------|

| |
|--|
| TOTAL COMPONENT AS-BUILT WINTER POINTS |
|--|

| HEATING SYSTEM | Base Heating System Multiplier | X | Total Base Winter Points | = | BASE HEATING POINTS |
|----------------|--------------------------------|---|--------------------------|---|---------------------|
| | .554 | | | | |

| TOTAL AS-BUILT WIN. PTS. | As-Built DM (6A-17) | X | As-Built DSM (6A-20) | X | As Built AHU (6A-16) | X | As Built HSM (6A-18) | X | As Built HCM (6A-21) | = | AS-BUILT HEATING POINTS |
|--------------------------|---------------------|---|----------------------|---|----------------------|---|----------------------|---|----------------------|---|-------------------------|
| | | | 1.14 or 1.0 | | | | | | | | |

| TOTAL | BASE COOLING POINTS (From P. 2) | + | BASE HEATING POINTS | + | BASE HOT WATER POINTS (From P. 2) | = | TOTAL BASE POINTS (Enter on P. 1) |
|-------|---------------------------------|---|---------------------|---|-----------------------------------|---|-----------------------------------|
| | | | | | | | |

| AS-BUILT COOLING POINTS (From P. 2) | + | AS-BUILT HEATING POINTS | + | AS-BUILT HOT WATER POINTS (From P. 2) | = | TOTAL AS-BUILT POINTS (Enter on P. 1) |
|-------------------------------------|---|-------------------------|---|---------------------------------------|---|---------------------------------------|
| | | | | | | |

¹ H = HORIZONTAL GLASS (SKYLIGHTS)

² FOR GLASS WITH KNOWN SHGC, SEE SECTION 2.1.1 APPENDIX C. TINT MULTIPLIERS MAY BE USED FOR GLASS WITH SOLAR SCREENS, FILM, OR TINT.

³ MUST MEET CRITERIA OF S.607.1A.

WINTER POINT MULTIPLIERS (WPM)

CLIMATE ZONES 7 8 9

6A-10 WINTER OVERHANG FACTORS (WOF)

| | | | | | | | | | | | | | |
|-----------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|-----------|-----------|-----------|
| SELECT BY OR | OH Ratio | .00-.11 | .12-.17 | .18-.26 | .27-.35 | .36-.46 | .47-.57 | .58-.70 | .71-.83 | .84-1.18 | 1.19-1.72 | 1.73-2.73 | 2.74 & up |
| | North | 1.00 | 0.998 | 0.995 | 0.991 | 0.986 | 0.982 | 0.977 | 0.973 | 0.969 | 0.962 | 0.955 | 0.984 |
| | Northeast | 1.00 | 0.999 | 0.999 | 0.998 | 0.997 | 0.996 | 0.994 | 0.993 | 0.991 | 0.985 | 0.978 | 0.969 |
| | East | 1.00 | 1.009 | 1.015 | 1.023 | 1.032 | 1.044 | 1.057 | 1.073 | 1.090 | 1.136 | 1.203 | 1.291 |
| | Southeast | 1.00 | 1.017 | 1.027 | 1.046 | 1.067 | 1.097 | 1.130 | 1.171 | 1.215 | 1.333 | 1.485 | 1.647 |
| | South | 1.00 | 0.994 | 1.001 | 1.024 | 1.060 | 1.115 | 1.174 | 1.238 | 1.290 | 1.376 | 1.425 | 1.443 |
| | Southwest | 1.00 | 0.999 | 1.003 | 1.012 | 1.024 | 1.041 | 1.059 | 1.078 | 1.096 | 1.132 | 1.164 | 1.191 |
| | West | 1.00 | 0.998 | 0.998 | 0.999 | 1.001 | 1.005 | 1.011 | 1.018 | 1.023 | 1.030 | 1.032 | 1.032 |
| | Northwest | 1.00 | 0.997 | 0.995 | 0.992 | 0.989 | 0.985 | 0.982 | 0.978 | 0.974 | 0.967 | 0.959 | 0.952 |
| | OH Length | 0.0' | 1.0' | 1.5' | 2.0' | 3.0' | 3.5' | 4.5' | 5.5' | 6.5' | 9.5' | 14.0' | 20.0' |

6A-11 WALL WINTER POINT MULTIPLIERS (WPM)

| FRAME | | | | | CONCRETE BLOCK (NORMAL WT) | | | | FACE BRICK | | | | LOG | | |
|---------|------|-----|-------|-----|----------------------------|---------------------|-----|-------------|------------|---------|---------|-------|---------|--------|--------|
| R-VALUE | WOOD | | STEEL | | R-VALUE | INTERIOR INSULATION | | EXT. INSUL. | R-VALUE | WOOD FR | R-VALUE | BLOCK | R-VALUE | 6 INCH | 8 INCH |
| | EXT | ADJ | EXT | ADJ | | EXT | EXT | | | | | | | EXT | EXT |
| 0-6.9 | 2.5 | 1.7 | 3.4 | 2.2 | 0-2.9 | 1.9 | .7 | 1.9 | 7-10.9 | .6 | 0-2.9 | .6 | 0-2.9 | .6 | .2 |
| 7-10.9 | .8 | .6 | 1.5 | 1.0 | 3-4.9 | 1.2 | .5 | .6 | 11-18.9 | .5 | 7-9.9 | .4 | 3-6.9 | .3 | .1 |
| 11-12.9 | .6 | .5 | 1.1 | 0.8 | 5-6.9 | .9 | .4 | .3 | 19-25.9 | .2 | 10 & UP | .2 | 7 & UP | .2 | .1 |
| 13-18.9 | .6 | .5 | 1.0 | 0.7 | 7-10.9 | .7 | .4 | .2 | 26 & UP | .1 | | | | | |
| 19-25.9 | .3 | .3 | 0.9 | 0.6 | 11-18.9 | .4 | .2 | 0 | | | | | | | |
| 26 & UP | .2 | .2 | 0.4 | 0.3 | 19-25.9 | .2 | .1 | | | | | | | | |
| | | | | | 26 & UP | .1 | 0 | | | | | | | | |

NOTE: SEE SECTION 2.0 OF APPENDIX C FOR MULTIPLIERS OF ENVELOPE COMPONENTS NOT ON THIS FORM.

6A-12 DOOR WINTER POINT MULTIPLIERS (WPM)

| DOOR TYPE | EXTERIOR | ADJACENT |
|-----------|----------|----------|
| WOOD | 2.8 | 1.9 |
| INSULATED | 1.8 | 1.3 |

6A-13 CEILING WINTER POINT MULTIPLIERS (WPM)

| UNDER ATTIC | | SINGLE ASSEMBLY | | CONCRETE DECK ROOF | | |
|-------------------|-------|-----------------|-----|--------------------|---------|---------|
| R-VALUE | WPM | R-VALUE | WPM | CEILING TYPE | | |
| R-VALUE | WPM | R-VALUE | WPM | R-VALUE | EXPOSED | DROPPED |
| 19-21.9 | .14 | 10-10.9 | .16 | 10-13.9 | 0.18 | 0.16 |
| 22-25.9 | .12 | 11-12.9 | .15 | 14-20.9 | 0.13 | 0.12 |
| 26-29.9 | .11 | 13-18.9 | .14 | 21 & UP | 0.09 | 0.08 |
| 30-37.9 | .10 | 19-25.9 | .11 | | | |
| 38 & UP | .08 | 26-29.9 | .09 | | | |
| RBS Credit | 0.850 | 30 & UP | .08 | | | |
| IRCC Credit | 0.899 | | | | | |
| White Roof Credit | 1.044 | | | | | |

6A-14 FLOOR WINTER POINT MULTIPLIERS (WPM)

| SLAB-ON-GRADE EDGE INSULATION | | RAISED CONCRETE | | RAISED WOOD | | | |
|-------------------------------|------|-----------------|-----|---------------------------|------------------------------------|----------|-----|
| R-VALUE | WPM | R-VALUE | WPM | POST OR PIER CONSTRUCTION | STEM WALL w/UNDER FLOOR INSULATION | ADJACENT | |
| R-VALUE | WPM | R-VALUE | WPM | R-VALUE | WPM | WPM | WPM |
| 0-2.9 | -2.1 | 0-2.9 | 1.0 | 0-6.9 | 0.99 | 0.3 | 1.7 |
| 3-4.9 | -2.6 | 3-4.9 | .3 | 7-10.9 | 0.24 | 0 | .6 |
| 5-6.9 | -2.7 | 5-6.9 | .1 | 11-18.9 | 0.12 | 0 | .5 |
| 7 & UP | -2.7 | 7 & UP | 0 | 19 & UP | -0.01 | -1 | .3 |

6A-15 INFILTRATION & INTERNAL GAINS (WPM)

| | |
|--|---------|
| Air Infiltration | 0.32 |
| Internal Gains | + -0.38 |
| Infiltration/Internal Gains (Combined) | -0.06 |

6A-17 DUCT MULTIPLIERS (DM) See Table 13-610.1.ABC.2.1 for code minimums.

| SUPPLY DUCTS IN: | DUCT R-VALUE | RETURN DUCTS IN: | | | | |
|--|--------------|---------------------|-----------|------------|------------------|-------------------|
| | | Unconditioned space | Attic/RBS | Attic/IRCC | Attic/White roof | Conditioned space |
| Unconditioned Space | 4.2 | 1.135 | 1.123 | 1.125 | 1.128 | 1.116 |
| | 6.0 | 1.099 | 1.091 | 1.092 | 1.094 | 1.085 |
| | 8.0 | 1.076 | 1.070 | 1.071 | 1.073 | 1.066 |
| Attic/Radiant Barrier (RBS) | 4.2 | 1.095 | 1.083 | — | — | 1.073 |
| | 6.0 | 1.072 | 1.063 | — | — | 1.056 |
| Attic/Interior Radiation Control Coatings (IRCC) | 8.0 | 1.057 | 1.050 | — | — | 1.044 |
| | 4.2 | 1.122 | — | 1.110 | — | 1.096 |
| Attic/White Roof | 6.0 | 1.091 | — | 1.083 | — | 1.072 |
| | 8.0 | 1.071 | — | 1.065 | — | 1.056 |
| Conditioned Space | 4.2 | 1.151 | — | — | 1.139 | 1.120 |
| | 6.0 | 1.111 | — | — | 1.102 | 1.088 |
| | 8.0 | 1.085 | — | — | 1.078 | 1.068 |
| Conditioned Space | 4.2 | 1.012 | 1.010 | 1.012 | 1.012 | 1.000 |
| | 6.0 | 1.009 | 1.008 | 1.009 | 1.009 | 1.000 |
| | 8.0 | 1.007 | 1.006 | 1.007 | 1.007 | 1.000 |

6A-18 HEATING SYSTEM MULTIPLIERS (HSM)

| SYSTEM TYPE | HEATING SYSTEM MULTIPLIERS (HSM) | | | | | | | | |
|-------------------------|---|------------|-------------|-------------|-------------|-------------|------------|-----------|-----------|
| minimums | | | | | | | | | |
| Central Heat Pump Units | HSPF | 6.40-6.79 | 6.80-6.89 | 6.90-7.39 | 7.40-7.89 | 7.90-8.39 | 8.40-8.89 | 8.9-9.39 | 9.4-9.89 |
| | HSM | .53 | .50 | .49 | .46 | .43 | .41 | .38 | .36 |
| | HSPF | 9.90-10.39 | 10.40-10.89 | 10.90-11.39 | 11.40-11.89 | 11.90-12.39 | 12.40 & UP | | |
| | HSM | .34 | .33 | .31 | .30 | .29 | .28 | | |
| PTHP | COP | 2.50-2.69 | 2.70-2.89 | 2.90-3.09 | 3.10-3.29 | 3.30-3.49 | 3.50-3.69 | 3.70-3.89 | 3.90-4.19 |
| | HSM | .40 | .37 | .34 | .32 | .30 | .29 | .27 | .26 |
| Electric Strip & Gas | 1.0 (for gas credit multipliers, see Table 6A-21) | | | | | | | | |

ADDITIONAL TABLES

6A-19 COOLING CREDIT MULTIPLIERS

| SYSTEM TYPE | Cooling credit multipliers (CCM) |
|-------------------------|----------------------------------|
| Ceiling Fans | .95* |
| Cross Ventilation | .95* |
| Whole House Fan | .95* |
| Multizone | .95 |
| Programmable Thermostat | .95 |

*Credit may be taken for only one system type concurrently.

6A-20 AIR DISTRIBUTION SYSTEM CREDIT MULTIPLIERS

| TYPE CREDIT | Prescriptive requirements | Multiplier |
|--|---------------------------|------------|
| Air-tight Duct Credit ¹ | 610.1.A.1 | 1.00 |
| Factory-sealed AHU Credit ² | 610.2.A.2.1 | 0.95 |

¹Duct Sealing Multiplier (DSM) shall be 1.16 (summer) or 1.14 (winter) unless Air-tight Duct Credit is demonstrated by test report.

²Multiply Factory-sealed AHU Credit by summer (Table 6A-7) or winter (Table 6A-16) AHU multiplier. Insert total in the "AS-Built AHU" box on page 2 or 4.

6A-21 HEATING CREDIT MULTIPLIERS (HCM)

| SYSTEM TYPE | HEATING CREDIT MULTIPLIERS (HCM) | | | | | | | |
|-------------------------|----------------------------------|---------|---------|---------|---------|---------|----------|--|
| Programmable Thermostat | HCM | .95 | | | | | | |
| Multizone | HCM | .95 | | | | | | |
| Natural Gas | AFUE | .68-.72 | .73-.77 | .78-.82 | .83-.87 | .88-.92 | .93 & Up | |
| | HCM | .56 | .52 | .49 | .46 | .44 | .41 | |
| LP-Gas | HCM | .71 | .66 | .62 | .58 | .55 | .52 | |

6A-22 HOT WATER MULTIPLIERS (HWM)

| SYSTEM TYPE <small>See Table 13-612.1.ABC.3.2 for code minimums</small> | HOT WATER MULTIPLIERS (HWM) | | | | | | | | | | | |
|---|-----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|----------|
| Electric Resistance | EF | | | | | | | | | | | |
| | HWM | | | | | | | | | | | |
| Natural Gas | EF | .43-.47 | .48-.49 | .50-.51 | .52-.53 | .54-.55 | .56-.57 | .58-.59 | .60-.61 | .62-.63 | .64-.65 | .66 & Up |
| | HWM | 1848 | 1655 | 1589 | 1528 | 1471 | 1419 | 1370 | 1324 | 1281 | 1241 | 1203 |
| LP-Gas | HWM | 2353 | 2107 | 2023 | 1945 | 1874 | 1806 | 1744 | 1686 | 1631 | 1581 | 1533 |
| Ded. HP or Solar System with Tank | EF | 1.0-1.49 | 1.5-1.99 | 2.0-2.49 | 2.5-2.99 | 3.0-3.49 | 3.5-3.99 | 4.0-4.49 | 4.5-4.99 | 5.0-Up | | |
| | HWM | 2085 | 1390 | 1042 | 834 | 695 | 596 | 521 | 463 | 417 | | |

6A-23 HOT WATER CREDIT MULTIPLIERS (HWCM)

| SYSTEM TYPE | HOT WATER CREDIT MULTIPLIERS (HWCM) | | | | | | | |
|---|-------------------------------------|-----------------|----------|----------|--|-----------|----------|--|
| Heat Recovery Unit | With | Air Conditioner | | | | Heat Pump | | |
| | HWCM | .84 | | | | .78 | | |
| Add-on Dedicated Heat Pump (without tank) | EF | 2.0-2.49 | 2.5-2.99 | 3.0-3.49 | | | 3.5 & Up | |
| | HWCM | .44 | .35 | .29 | | | .25 | |
| Add-on Solar Water Heater (without tank) | EF | 1.0-1.9 | 2.0-2.9 | 3.0-3.9 | | 4.0-4.9 | 5.0 & Up | |
| | HWCM | .84 | .42 | .28 | | .21 | .17 | |

NOTE: An HWM must be used in conjunction with all HWCM. See Table 6A-22. EF Means Energy Factor.

6A-24 INFILTRATION REDUCTION COMPLIANCE CHECKLIST

| COMPONENTS | SECTION | REQUIREMENTS FOR EACH PRACTICE | CHECK |
|-------------------------------|-----------------|--|-------|
| Exterior Windows & Doors | 606.1.ABC.1.1 | Max: 3 cfm/sq. ft. window area; .5cfm/sq. ft. door area. | |
| Exterior & Adjacent Walls | 606.1.ABC.1.2.1 | Caulk, gasket, weatherstrip or seal between: windows/doors & frames, surrounding wall; foundation & wall sole or sill plate; joints between exterior wall panels at corners; utility penetrations; between wall panels & top/bottom plates; between walls & floor. EXCEPTION: Frame walls where a continuous infiltration barrier is installed that extends from, and is sealed to, the foundation to the top plate. | |
| Floors | 606.1.ABC.1.2.2 | Penetrations/openings > 1/8" sealed unless backed by truss or joint members. EXCEPTION: Frame floors where a continuous infiltration barrier is installed that is sealed to the perimeter, penetrations and seams. | |
| Ceilings | 606.1.ABC.1.2.3 | Seal: Between walls & ceilings: penetrations of ceiling plane of top floor; around shafts, chases, soffits, chimneys, cabinets sealed to continuous air barrier; gaps in gyp board & top plate; attic access. EXCEPTION: Frame ceilings where a continuous infiltration barrier is installed that is sealed at the perimeter, at penetrations and seams. | |
| Recessed Lighting Fixtures | 606.1.ABC.1.2.4 | Type IC rated with no penetrations, sealed; or Type IC or non-IC rated, installed inside a sealed box with 1/2" clearance & 3" from insulation; or Type IC rated with <2.0 cfm from conditioned space, tested. | |
| Multistory Houses | 606.1.ABC.1.2.5 | Air barrier on perimeter of floor cavity between floors. | |
| Additional Infiltration reqts | 606.1.ABC.1.3 | Exhaust fans vented to outdoors, dampers; combustion space heaters comply with NFPA, have combustion air. | |

6A-25 OTHER PRESCRIPTIVE MEASURES (must be met or exceeded by all residences.)

| COMPONENTS | SECTION | REQUIREMENTS | CHECK |
|--------------------------|--------------|---|-------|
| Water Heaters | 612.1 | Comply with efficiency requirements in Table 612.1.ABC.3.2. Switch or clearly marked circuit breaker (electric) or cutoff (gas) must be provided. External or built-in heat trap required for vertical pipe risers. | |
| Swimming Pools & Spas | 612.1 | Spas & heated pools must have covers (except solar heated). Non commercial pools must have a pump timer. Gas spa & pool heaters must have a minimum thermal efficiency of 78%. | |
| Shower Heads | 612.1 | Water flow must be restricted to no more than 2.5 gallons per minute at 80. | |
| Air Distribution Systems | 610.1 | All ducts, fittings, mechanical equipment and plenum chambers shall be mechanically attached, sealed, insulated, and installed in accordance with the criteria of Section 610. Ducts in unconditioned attics: R-6 minimum insulation. | |
| HVAC Controls | 607.1 | Separate readily accessible manual or automatic thermostat for each system. | |
| Insulation | 604.1, 602.1 | Ceilings—Min. R-19. Common walls—Frame R-11 or CBS R-3 both sides. Common ceiling & floors R-11. | |