Table 2.1.1.2.A
ZONE 1 - Compliance Packages for Space Heating Equipment with AFUE ≥90%
Forming Part of Sentence 2.1.1.2.(1)

PROPANE + NATURAL GAS ONLY

| Component | Compliance Package | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | I | J | K[3] | L[4] | M[5] |
| Ceiling with Attic Space Minimum RSI (R)-Value[1] | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) | 8.81 (R50) |
| Ceiling Without Attic Space Minimum RSI (R)-Value[1] | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) |
| Exposed Floor Minimum RSI (R)-Value[1] | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) | 5.46 (R31) |
| Walls Above Grade Minimum RSI (R)-Value[1] | 4.23 (R24) | 4.75 (R27) | 4.75 (R27) | 4.23 (R24) | 4.23 (R24) | 4.23 (R24) | 4.23 (R24) | 4.23 (R24) | 3.87 (R22) | 3.87 (R22) | 3.87 (R22) | 4.23 (R24) | 4.23 (R24) |
| *Basement* Walls Minimum RSI (R)-Value[1] | 3.52 (R20) | 3.52 (R20) | 3.52 (R20) | 3.52 (R20) | 3.52 (R20) | 2.11 (R12) | 2.11 (R12) | 2.11 (R12) | 3.52 (R20) | 2.11 (R12) | 3.87 (R22) | 3.87 (R22) | 3.52 (R20) |
| Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value[1] | 0.88 (R5) | - | - | - | - | - | - | - | - | - | - | - | - |
| Edge of Below Grade Slab ≤ 600 mm Below Grade Minimum RSI (R)-Value[1] | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) |
| Heated Slab or Slab ≤ 600 mm below grade Minimum RSI (R)-Value[1] | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) | 1.76 (R10) |
| Windows and Sliding Glass Doors Maximum U-Value[2] | 1.6 | 1.6 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 |
| Skylights Maximum U-Value[2] | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Space Heating Equipment Minimum AFUE | 90% | 90% | 94% | 94% | 90% | 94% | 92% | 94% | 92% | 94% | 90% | 94% | 90%[8] |
| HRV[6], [7] Minimum Efficiency | - | - | - | - | 55% | 60% | 60% | 70% | 55% | 60% | - | - | - |
| Domestic Hot Water Heater Minimum EF | 0.57 | 0.57 | 0.62 | 0.67 | 0.57 | 0.57 | 0.62 | 0.67 | 0.62 | 0.67 | 0.57 | 0.57 | 0.80[8] |
| Column 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |

**Notes to Table 2.1.1.2.A:**

(1) The values listed are minimum RSI-Values for the thermal insulation component only. RSI-Values expressed in $(m^2 \cdot K)/W$.

(2) U-Value is the overall coefficient of heat transfer expressed in $W/(m^2 \cdot K)$.

(3) Compliance package K *applies only to a building* with both ICF *basement* walls and ICF above grade walls. Alternatively, any other compliance package is permitted to be used for a *building* with both ICF *basement* walls and ICF above grade walls. The thermal insulation value of an ICF wall is the sum of the insulation value on both sides of the walls.

(4) Compliance package L *applies only to a building* with ICF *basement* walls. Alternatively, any other compliance package except compliance package K, is permitted to be used for a *building* with ICF *basement* walls. The thermal insulation value of an ICF wall is the sum of the insulation value on both sides of the walls.

(5) Applies to a *building* with combined space heating and domestic hot water heating system.

(6) Except as required in Subsection 9.32.3. of Division B in the *Building Code*, an HRV is only required as a part of the compliance package where a minimum efficiency level is specified.

(7) The minimum efficiency of an HRV shall be based on a test temperature of 0 °C. In addition, where an HRV is installed to meet the requirements of Subsection 9.32.3. of Division B in the *Building Code*, the energy efficiency of the HRV shall also meet the minimum efficiency requirements of Sentence 9.32.3.11.(2).

(8) Combined space heating and domestic hot water heating equipment shall have minimum energy efficiency ratings specified or shall be of the condensing type.

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(2) Except for solid fuel-burning space heating equipment and natural gas and propane furnaces, where the space heating equipment efficiency ranges from 78% to less than 90%, the minimum thermal performance of the *building* envelope and equipment shall conform to Table 2.1.1.2.B.

**Table 2.1.1.2.B**
**ZONE 1 - Compliance Packages for Space Heating Equipment with AFUE ≥ 78 % and < 90%**
Forming Part of Sentence 2.1.1.2.(2)

(OIL ONLY)

| Component | Compliance Package | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| Ceiling with Attic Space<br>Minimum RSI (R)-Value(1) | 8.81<br>(R50) | 8.81<br>(R50) | 8.81<br>(R50) | 8.81<br>(R50) | 8.81<br>(R50) | 8.81<br>(R50) |
| Ceiling Without Attic Space<br>Minimum RSI (R)-Value(1) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) |
| Exposed Floor<br>Minimum RSI (R)-Value(1) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) | 5.46<br>(R31) |
| Walls Above Grade<br>Minimum RSI (R)-Value(1) | 5.11<br>(R29) | 5.11<br>(R29) | 5.11<br>(R29) | 4.75<br>(R27) | 4.75<br>(R27) | 4.75<br>(R27) |
| *Basement* Walls<br>Minimum RSI (R)-Value(1) | 3.52<br>(R20) | 2.11<br>(R12) | 3.52<br>(R20) | 3.52<br>(R20) | 3.52<br>(R20) | 3.52<br>(R20) |
| Below Grade Slab<br>Entire surface > 600 mm below grade<br>Minimum RSI (R)-Value(1) | - | - | - | - | - | - |
| Edge of Below Grade Slab ≤ 600 mm<br>Below Grade<br>Minimum RSI (R)-Value(1) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) |
| Heated Slab or<br>Slab ≤ 600 mm below grade<br>Minimum RSI (R)-Value(1) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) | 1.76<br>(R10) |
| Windows and Sliding Glass Doors<br>Maximum U-Value(2) | 1.6 | 1.6 | 1.8 | 1.6 | 1.6 | 1.8 |
| Skylights<br>Maximum U-Value(2) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Space Heating Equipment<br>Minimum AFUE | 78% | 84% | 84% | 84% | 78% | 84% |
| HRV(3)<br>Minimum Efficiency | 55% | 55% | 70% | 55% | 70% | 75% |
| Domestic Hot Water Heater<br>Minimum EF | - | - | - | - | - | - |
| Column 1 | 2 | 3 | 4 | 5 | 6 | 7 |

**Notes to Table 2.1.1.2.B:**
(1) The values listed are minimum RSI-Values for the thermal insulation component only. RSI-Values expressed in (m²· K)/W.
(2) U-Value is the overall coefficient of heat transfer expressed in W/(m²· K).
(3) The minimum efficiency of an HRV shall be based on a test temperature of 0 °C. In addition, where an HRV is installed to meet the requirements of Subsection 9.32.3. of Division B in the *Building Code*, the energy efficiency of the HRV shall also meet the minimum efficiency requirements of Sentence 9.32.3.11.(2).

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(4) Except for solid fuel-burning space heating equipment, where the space heating equipment efficiency is less than 78% or it cannot meet the requirements of the applicable compliance packages, energy efficiency compliance shall be achieved in accordance with Clause 1 2.2.1.2.(3)(a) of Division B in the *Building Code* or Subsection 2.1.2. of this Supplementary Standard.

(5) Except as permitted in Sentence (6), where compliance package I or J in Table 2.1.1.2.A is used, the minimum RSI value for thermal insulation in exposed above grade walls is permitted to be not less than RSI 3.52 provided that
(a) windows and sliding glass doors have a maximum U-value of 1.6, or
(b) the thermal insulation value in *basement* walls has a minimum RSI 3.52 where compliance package J is used.

(6) Where blown-in insulation or spray-applied foam insulation is used in compliance package I or J in Table 2.1.1.2.A, the minimum RSI value for thermal insulation in exposed above grade walls is permitted to be not less than RSI 3.52 provided that
(a) the thermal insulation value in a ceiling with an attic space is not less than RSI 10.55,
(b) the minimum efficiency of the HRV is increased by not less than 8 percentage points,
(c) the minimum AFUE of the space heating equipment is increased by not less than 2 percentage points,
(d) the minimum EF of the domestic hot water heater is increased by not less than 4 percentage points, or
(e) the *building* is in compliance with Sentence (5).

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(7) Except as permitted in Sentence (8), where compliance package D, E, F, G, H or M in Table 2.1.1.2.A is used, the minimum RSI value for thermal insulation of exposed above grade walls is permitted to be not less than RSI 3.52 provided that
(a) the overall coefficient of heat transfer of the glazing is upgraded in accordance with Sentence 2.1.1.1.(8) and the minimum EF of the domestic hot water heater is increased by not less than 8 percentage points, or
(b) the thermal insulation value in *basement* walls has a minimum RSI 3.52 where compliance package F, G, or H is used, and the *building* is in compliance with at least two requirements of Clauses (6)(a) to (d).

(8) Where blown-in insulation or spray-applied foam insulation is used in compliance package D, E, F, G, H or M in Table 2.1.1.2.A, the minimum RSI value for thermal insulation in exposed above grade walls is permitted to be not less than RSI 3.52 provided that
(a) the overall coefficient of heat transfer of the glazing is upgraded in accordance with Sentence 2.1.1.1.(8) or the thermal insulation value in *basement* walls has a minimum RSI 3.52 where compliance package F, G, or H is used, and
(b) the *building* is in compliance with Clause (6)(a), (b), (c) or (d).

### 2.1.1.3. Energy Efficiency for Zone 2 Buildings

(1) Except as required in Sentences (2) to (4) and permitted in Sentences (5) and (6), the minimum thermal performance of the *building* envelope and equipment shall conform to Table 2.1.1.3.A.

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