



| ✓ CMHC MLI Select - Level 3 | | Single Detached House - Laneway Suite | | | | | | | |
|---|------------|--|--|---|---|---|---|---|--|
| Created on: | 2026-01-11 | | | | | | | | |
| Upgrade against NBC | | Reference NBC 2020 Tier 1 NBC Climate Zone 5 / OBC Climate Zone 1 | Proposed Building Design: Current, 40% Target - Baseline | Proposed Building Design: New, 70% Target - Option 1 | Proposed Building Design: New, 70% Target - Option 2 | Proposed Building Design: New, 70% Target - Option 2 | Proposed Building Design: New, 70% Target - Option 2 | Proposed Building Design: New, 70% Target - Option 2 | |
| Downgrade against NBC | | | | | | | | | |
| BUILDING ENVELOPES * | | | | | | | | | |
| Ceiling with Attic Space | | Effective RSI 6.91 / R39.2 | N/A | N/A | N/A | N/A | N/A | N/A | |
| Ceiling without Attic Space | | Effective RSI 4.67 / R26.5 | R31 | R31 | R31 | R31 | R31 | R31 Spray Foam + R20 C.I. | |
| Exposed Floor | | Effective RSI 4.67 / R26.5 | N/A | N/A | N/A | N/A | N/A | N/A | |
| Above Grade Walls | | Effective RSI 2.97 / R16.9 | 2x6 Wood Stud @16" O.C. R22 Batt | 2x6 Wood Stud @16" O.C. R22 Batt + R10 C.I. | 2x6 Wood Stud @16" O.C. R22 Batt + R10 C.I. | 2x6 Wood Stud @16" O.C. R22 Batt + R10 C.I. | 2x6 Wood Stud @16" O.C. R22 Batt + R10 C.I. | 2x6 Wood Stud @16" O.C. R31 Spray Foam + R20 C.I. | |
| Rim Joist | | | | | | | | | |
| Tall Walls (2x2x6 @ 12" O.C.) | | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | |
| Basement Walls Below Grade (B.G.) | | Effective RSI 2.98 / R16.9 | N/A | N/A | N/A | N/A | N/A | N/A | |
| Below Grade Slab Entire Surface > 600 mm | | - | N/A | N/A | N/A | N/A | N/A | N/A | |
| Heated Slab or Below Grade Slab ≤ 600 mm | | | | | | | | | |
| Edge of Below Grade Slab ≤ 600 mm B.G. | | Effective RSI 1.96 / R11.1 | R10 C.I. | R10 C.I. | R10 C.I. | R10 C.I. | R10 C.I. | R20 C.I. | |
| WINDOWS & DOORS | | | | | | | | | |
| Windows/Sliding Glass Doors | | U _{ip} 0.32 (U _{si} 1.84) / ER 21 (SHGC-0.26) | U _{ip} 0.25 (U _{si} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.25 (U _{si} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.25 (U _{si} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.25 (U _{si} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.25 (U _{si} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.14 / U _{si} 0.79 (SHGC-0.26) | |
| Skylights | | U _{ip} 0.51 (U _{si} 2.92) | U _{ip} 0.49 (U _{si} 2.8) | U _{ip} 0.49 (U _{si} 2.8) | U _{ip} 0.49 (U _{si} 2.8) | U _{ip} 0.49 (U _{si} 2.8) | U _{ip} 0.49 (U _{si} 2.8) | U _{ip} 0.38 (U _{si} 2.16) | |
| Doors (1 Door permitted to be at RSI 0.38 / R2.16) | | As Per NBC (RSI 1.10 / R6.25) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Medium Density Spray Foam Core (RSI 1.14 / R6.47) | |
| MECHANICALS ** | | | | | | | | | |
| Space Heating Equipment | | 92% AFUE | ASHP (7.5 HSPF ₂ , 14.5 SEER2) - 18,000 Btu/h | ccASHP (4.57 COP _{hp} , 3.82 COP _c) - 18,000 Btu/h | ccASHP (4.57 COP _{hp} , 3.82 COP _c) - 18,000 Btu/h | ccASHP (4.57 COP _{hp} , 3.82 COP _c) - 18,000 Btu/h | ccASHP (4.57 COP _{hp} , 3.82 COP _c) - 18,000 Btu/h | ccASHP (4.57 COP _{hp} , 3.82 COP _c) - 18,000 Btu/h | |
| Space Cooling Equipment | | 14.5 SEER | w/ 96% AFUE Furnace | [Reference AHRI # 207702763 / 207702810] | [Reference AHRI # 207702763 / 207702810] | [Reference AHRI # 207702763 / 207702810] | [Reference AHRI # 207702763 / 207702810] | [Reference AHRI # 207702763 / 207702810] | |
| HRV/ERV Efficiency | | 60% SRE @ 0°C | 75% SRE @ 0°C | 75% SRE @ 0°C | 75% SRE @ 0°C | 75% SRE @ 0°C | 75% SRE @ 0°C | 90% SRE @ 0°C | |
| Domestic HWH (Thermal Eff. Or EF) | | 0.67 EF | NG Condensing Tankless, 0.95 EF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 4.50 UEF | |
| Combined Space and Water | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| Duct Work | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | |
| Thermostat | | Programmable | Programmable | Programmable | Programmable | Programmable | Programmable | Programmable | |
| ELECTRICALS | | | | | | | | | |
| Lighting (1 Bulb can be non-ENERGY STAR Certified) | | As Per NBC | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | |
| Exhaust Fans | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | |
| Electrical Savings | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | As Per NBC | |
| BASELOADS ** | | | | | | | | | |
| Shower Flow Rate (L/min) | | 9.5 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | |
| Bathroom Faucet Flow Rate (L/min) | | 8.3 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | |
| Clothes Dryer (kWh/year) | | 916 | 687 | 257 | 257 | 257 | 257 | 133 | |
| Clothes Washer (kWh/year) | | 197 | 145 | 123 (Cold Water Only) | 123 (Cold Water Only) | 123 (Cold Water Only) | 123 (Cold Water Only) | 90 (Cold Water Only) | |
| Dish Washer (kWh/year) | | 260 | 260 | 260 | 260 | 260 | 260 | 210 | |
| Range (kWh/year) | | 565 | 565 | 195 | 195 | 195 | 195 | 185 | |
| Refrigerator (kWh/year) | | 639 | 639 | 446 | 446 | 446 | 446 | 310 | |
| OTHERS | | | | | | | | | |
| Drain Water Heat Recovery | | N/A | N/A | N/A | N/A | N/A | N/A | 58% Efficiency | |
| Solar PV System * | | N/A | N/A | Solar PV Capped at 15% of the Total Energy Reduction (7.43 GJ / 2,064.51 kWh) | Solar PV Capped at 15% of the Total Energy Reduction (7.43 GJ / 2,064.51 kWh) | Solar PV Capped at 15% of the Total Energy Reduction (7.43 GJ / 2,064.51 kWh) | Solar PV Capped at 15% of the Total Energy Reduction (7.43 GJ / 2,064.51 kWh) | N/A | |
| Air Tightness Target (ACH@50Pa) | | 2.5 ACH | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 1.0 ACH @ 50 Pa - Blower Door Test Required | |
| RESULTS | | Reference NBC 2020 Tier 1 | | Proposed Building Design: Current, 40% Target - Baseline | | Proposed Building Design: New, 70% Target - Option 1 | | Proposed Building Design: New, 70% Target - Option 2 | |
| Annual Energy Consumption (GJ/year) | 81.3 | - | 48.4 | 40.5% lower | 24.3 | 70.1% lower | 24.3 | 70.1% lower | |
| GHG Emissions (tonnes/year) | 2.95 | - | 1.17 | 60.3% lower | 0.34 | 88.5% lower | 0.34 | 88.5% lower | |

| Components | Baseline - Current, 40% Target | Energy Efficient Measures | Energy Consumption (GJ) | Energy Saving (GJ) | Energy Saving (%) | |
|---|---|--|--|--------------------|-------------------|-------|
| BUILDING ENVELOPES | Ceiling without Attic Space | R31 | 48.44 | 0.00 | 0.00% | |
| | | R40 | 48.20 | 0.24 | 0.49% | |
| | | R31 + R10 C.I. | 48.11 | 0.33 | 0.68% | |
| | | R31 + R20 C.I. | 47.87 | 0.57 | 1.17% | |
| | | 2x6 Wood Stud @16" O.C. R22 Batt | 48.44 | 0.00 | 0.00% | |
| | Above Grade Walls | 2x6 Wood Stud @16" O.C. R22 Batt | 2x6 Wood Stud @16" O.C. R22 Batt + R6 C.I. | 46.30 | 2.14 | 4.41% |
| | | | 2x6 Wood Stud @16" O.C. R22 Batt + R8 C.I. | 45.95 | 2.48 | 5.13% |
| | | | 2x6 Wood Stud @16" O.C. R22 Batt + R10 C.I. | 45.32 | 3.12 | 6.43% |
| | | | 2x6 Wood Stud @16" O.C. R22 Batt + R12 C.I. | 44.95 | 3.49 | 7.20% |
| | | | 2x6 Wood Stud @16" O.C. R22 Batt + R15 C.I. | 44.66 | 3.78 | 7.80% |
| | | | 2x6 Wood Stud @16" O.C. R31 Spray Foam + R20 C.I. | 43.73 | 4.71 | 9.72% |
| | | | Under Slab Insulation | R10 C.I. | R10 C.I. | 48.44 |
| R12 C.I. | 48.18 | 0.26 | | | 0.54% | |
| R15 C.I. | 48.09 | 0.34 | | | 0.71% | |
| R20 C.I. | 48.01 | 0.43 | | | 0.89% | |
| WINDOWS & DOORS | Windows/Sliding Glass Doors | U _g 0.25 (U _g 1.4) / ER 29 (SHGC-0.26) | 48.44 | 0.00 | 0.00% | |
| | | U _g 0.21 (U _g 1.2) / ER 34 (SHGC-0.26) | 47.94 | 0.50 | 1.03% | |
| | | U _g 0.18 (U _g 1.0) / ER 38 (SHGC-0.26) | 47.44 | 1.00 | 2.07% | |
| | | U _g 0.14 / U _g 0.79 (SHGC-0.26) | 46.42 | 2.02 | 4.18% | |
| | | U _g 0.49 (U _g 2.8) | 48.44 | 0.00 | 0.00% | |
| | Skylights | U _g 0.38 (U _g 2.16) | U _g 0.49 (U _g 2.80) | 48.35 | 0.09 | 0.18% |
| | | | U _g 0.38 (U _g 2.16) | 48.44 | 0.00 | 0.00% |
| | Doors | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.57) | 48.44 | 0.00 | 0.00% |
| | | | Steel Medium Density Spray Foam Core (RSI 1.14 / R6.47) | 48.41 | 0.03 | 0.07% |
| | MECHANICALS | Space Heating / Cooling Equipment | ASHP (7.5 HSPF _{2w} , 14.5 SEER2) - 18,000 Btu/h w/ 96% AFUE Furnace Backup | 48.44 | 0.00 | 0.00% |
| ccASHP (3.51 COP _s , 3.52 COP _c) - 18,000 Btu/h [Reference AHRI # 217483607] | | | 46.10 | 2.33 | 4.82% | |
| ccASHP (4.48 COP _s , 3.19 COP _c) - 18,000 Btu/h [Reference AHRI # 205663351] | | | 44.33 | 4.10 | 8.47% | |
| ccASHP (4.57 COP _s , 3.82 COP _c) - 18,000 Btu/h [Reference AHRI # 207702763 / 207702810] | | | 43.42 | 5.02 | 10.37% | |
| ccASHP (4.57 COP _s , 3.82 COP _c) - 18,000 Btu/h w/ 15% Openable Window Area [Reference AHRI # 207702763 / 207702810] | | | 41.79 | 6.65 | 13.72% | |
| HRV / ERV Efficiency | | 75% SRE @ 0°C | 75% SRE @ 0°C | 48.44 | 0.00 | 0.00% |
| | | | 81% SRE @ 0°C | 48.25 | 0.19 | 0.39% |
| | | | 84% SRE @ 0°C | 48.21 | 0.23 | 0.48% |
| | | | 90% SRE @ 0°C | 48.06 | 0.38 | 0.79% |
| Domestic HWH (Thermal Eff. Or EF) | | NG Condensing Tankless, 0.95 EF | NG Condensing Tankless, 0.95 EF | 48.44 | 0.00 | 0.00% |
| | Electric Heat Pump HWT, 50 US Gal, 3.00 UEF | | 44.03 | 4.41 | 9.11% | |
| | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | | 43.50 | 4.94 | 10.19% | |
| | Electric Heat Pump HWT, 50 US Gal, 4.50 UEF | | 43.16 | 5.28 | 10.90% | |
| BASELOADS & ELECTRICALS | Lighting (1 Bulb can be non-ENERGY STAR Certified) ³ | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 48.44 | 0.00 | 0.00% |
| | Shower Flow Rate (L/min) | Ultra Low flow: 5.7 | Ultra Low flow: 5.7 | 48.44 | 0.00 | 0.00% |
| | Bathroom Faucet Flow Rate (L/min) | Ultra Low flow: 3.8 | Ultra Low flow: 3.8 | 48.44 | 0.00 | 0.00% |
| | Clothes Dryer (kWh/year) - ENERGY STAR Certified | 687 | 687 | 48.44 | 0.00 | 0.00% |
| | | | 460 | 48.07 | 0.37 | 0.76% |
| | | | 380 | 48.03 | 0.41 | 0.85% |
| | | | 257 | 47.98 | 0.46 | 0.94% |
| | | | 133 | 47.67 | 0.77 | 1.60% |
| | Clothes Washer (kWh/year) - ENERGY STAR Certified | 145 | 145 | 48.44 | 0.00 | 0.00% |
| | | | 123 | 48.39 | 0.05 | 0.11% |
| | | | 110 | 48.35 | 0.09 | 0.18% |
| | | | 100 | 48.33 | 0.11 | 0.23% |
| | | | 90 | 48.30 | 0.14 | 0.28% |
| | | | 123 (Cold Water Only) | 46.04 | 2.40 | 4.96% |
| | | | 90 (Cold Water Only) | 45.95 | 2.49 | 5.13% |
| | Dish Washer (kWh/year) - ENERGY STAR Certified | 260 | 260 | 48.44 | 0.00 | 0.00% |
| | | | 240 | 48.15 | 0.29 | 0.61% |
| | | | 210 | 48.06 | 0.37 | 0.77% |
| | Range (kWh/year) - ENERGY STAR Certified | 565 | 565 | 48.44 | 0.00 | 0.00% |
| | | | 195 | 47.83 | 0.61 | 1.25% |
| 185 | | | 47.78 | 0.66 | 1.36% | |
| Refrigerator (kWh/year) - ENERGY STAR Certified | 639 | 639 | 48.44 | 0.00 | 0.00% | |
| | | 574 | 48.22 | 0.21 | 0.44% | |
| | | 510 | 48.02 | 0.42 | 0.87% | |
| | | 446 | 48.00 | 0.44 | 0.91% | |
| | | 310 | 47.97 | 0.47 | 0.98% | |
| OTHERS | Drain Water Heat Recovery | - | 48.44 | 0.00 | 0.00% | |
| | | 42% Efficiency | 47.44 | 1.00 | 2.06% | |
| | | 46% Efficiency | 47.32 | 1.12 | 2.31% | |
| | Air Tightness Target (ACH@50Pa) | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 58% Efficiency | 47.11 | 1.32 | 2.73% |
| | | | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 48.44 | 0.00 | 0.00% |
| | | | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 47.77 | 0.67 | 1.38% |
| | | | 2.0 ACH @ 50 Pa - Blower Door Test Required | 46.74 | 1.70 | 3.50% |
| | | | 1.5 ACH @ 50 Pa - Blower Door Test Required | 46.33 | 2.11 | 4.35% |
| 1.0 ACH @ 50 Pa - Blower Door Test Required | 45.84 | 2.60 | 5.37% | | | |



| ✓ CMHC MLI Select - Level 3 | | Multi-Unit Residential Building (4 Units) - Main Building | | | | | | | |
|--|-------------------|--|---|--|--|--|-------------|--|-------------|
| Created on: 2026-01-11 | | | | | | | | | |
| Upgrade against NBC Downgrade against NBC | | Reference NBC 2020 Tier 1 NBC Climate Zone 5 / OBC Climate Zone 1 | Proposed Building Design: Current, 40% Target - Baseline | Proposed Building Design: New, 70% Target - Option 1 | Proposed Building Design: New, 70% Target - Option 2 | | | | |
| BUILDING ENVELOPES * | | | | | | | | | |
| Ceiling with Attic Space | | Effective RSI 6.91 / R39.2 | N/A | N/A | N/A | | | | |
| Ceiling without Attic Space | | Effective RSI 4.67 / R26.5 | R31 | R31 | R31 | | | | |
| Exposed Floor | | Effective RSI 4.67 / R26.5 | N/A | N/A | N/A | | | | |
| Above Grade Walls | Front & Back, 15% | Effective RSI 2.97 / R16.9 | 2x6 Wood Stud @16" O.C. R24 Batt | 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. | 2x6 Wood Stud @ 16" O.C. R24 + R12 C.I. | | | | |
| | Left & Right, 85% | | 2x6 Steel Stud @16" O.C. R24 | 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | 2x6 Steel Stud @ 16" O.C. R24 + R12 C.I. | | | | |
| Rim Joist | | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | Same as Above Grade Walls | | | | |
| Tall Walls (2x2x6 @ 12" O.C.) | | | | | | | | | |
| Basement Walls Below Grade (B.G.) | | Effective RSI 2.98 / R16.9 | 2x4 @16" O.C. R12 Batt + R10 C.I. | 2x4 @16" O.C. R12 Batt + R10 C.I. | 2x4 @16" O.C. R12 Batt + R10 C.I. | | | | |
| Below Grade Slab Entire Surface > 600 mm | | - | R10 C.I. | R10 C.I. | R10 C.I. | | | | |
| Heated Slab or Below Grade Slab ≤ 600 mm | | Effective RSI 1.96 / R11.1 | N/A | N/A | N/A | | | | |
| Edge of Below Grade Slab ≤ 600 mm B.G. | | | | | | | | | |
| WINDOWS & DOORS | | | | | | | | | |
| Windows/Sliding Glass Doors | | U _{ip} 0.32 (U _{ii} 1.84) / ER 21 (SHGC-0.26) | U _{ip} 0.25 (U _{ii} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.25 (U _{ii} 1.4) / ER 29 (SHGC-0.26) | U _{ip} 0.18 (U _{ii} 1.0) / ER 38 (SHGC-0.26) | | | | |
| Skylights | | U _{ip} 0.51 (U _{ii} 2.92) | U _{ip} 0.49 (U _{ii} 2.8) | U _{ip} 0.49 (U _{ii} 2.8) | U _{ip} 0.49 (U _{ii} 2.8) | | | | |
| Doors (1 Door permitted to be at RSI 0.38 / R2.16) | | As Per NBC (RSI 1.10 / R6.25) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | Steel Polystyrene Core (RSI 0.98 / R5.56) | | | | |
| MECHANICALS ** | | | | | | | | | |
| Space Heating Equipment | | 92% AFUE | ASHP (7.5 HSPF _{2,iv} , 14.5 SEER2) - 18,000 Btu/h x 4 Units | ccASHP (4.57 COP _h , 3.82 COP _c) - 18,000 Btu/h x 4 Units | ccASHP (4.57 COP _h , 3.82 COP _c) - 18,000 Btu/h x 4 Units | | | | |
| Space Cooling Equipment | | 14.5 SEER | w/ 96% AFUE Furnace | [Reference AHRI # 207702763 / 207702810] | [Reference AHRI # 207702763 / 207702810] | | | | |
| HRV/ERV Efficiency | | 60% SRE | 75% SRE @ 0°C | 75% SRE @ 0°C | 90% SRE @ 0°C | | | | |
| Domestic HWH (Thermal Eff. Or EF) | | 0.67 EF | NG Condensing Tankless, 0.95 EF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 4.50 UEF | | | | |
| Combined Space and Water | | N/A | N/A | N/A | N/A | | | | |
| Duct Work | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | | | | |
| Thermostat | | Programmable | Programmable | Programmable | Programmable | | | | |
| ELECTRICALS | | | | | | | | | |
| Lighting (1 Bulb can be non-ENERGY STAR Certified) | | As Per NBC | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | | | | |
| Exhaust Fans | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | | | | |
| Electrical Savings | | As Per NBC | As Per NBC | As Per NBC | As Per NBC | | | | |
| BASELOADS | | | | | | | | | |
| Shower Flow Rate (L/min) | | 9.5 | 5.7 | 5.7 | 5.7 | | | | |
| Bathroom Faucet Flow Rate (L/min) | | 8.3 | 3.8 | 3.8 | 3.8 | | | | |
| Clothes Dryer (kWh/year) | | 916 | 460 | 460 | 133 | | | | |
| Clothes Washer (kWh/year) | | 197 | 123 | 123 | 90 (Cold Water Only) | | | | |
| Dish Washer (kWh/year) | | 260 | 260 | 260 | 240 | | | | |
| Range (kWh/year) | | 565 | 565 | 195 | 195 | | | | |
| Refrigerator (kWh/year) | | 639 | 639 | 574 | 310 | | | | |
| OTHERS | | | | | | | | | |
| Drain Water Heat Recovery | | N/A | N/A | N/A | 42% Efficiency | | | | |
| Solar PV System | | N/A | N/A | Solar PV Capped at 15% of the Total Energy Reduction (20.48 GJ / 5,688.89 kWh) | N/A | | | | |
| Air Tightness Target (ACH@50Pa) | | 2.5 ACH | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 1.5 ACH @ 50 Pa - Blower Door Test Required | | | | |
| RESULTS | | Reference NBC 2020 Tier 1 | | Proposed Building Design: Current, 40% Target - Baseline | | Proposed Building Design: New, 70% Target - Option 1 | | Proposed Building Design: New, 70% Target - Option 2 | |
| Annual Energy Consumption (GJ/year) | | 224.2 | - | 134.3 | 40.1% lower | 67.1 | 70.1% lower | 67.0 | 70.1% lower |
| GHG Emissions (tonnes/year) | | 8.72 | - | 3.40 | 61.0% lower | 0.93 | 89.3% lower | 0.93 | 89.3% lower |

| Components | Baseline - Current, 40% Target | Energy Efficient Measures | Energy Consumption (GJ) | Energy Saving (GJ) | Energy Saving (%) |
|---|---|---|-------------------------|--------------------|-------------------|
| Ceiling without Attic Space | R31 | R31 | 134.33 | 0.00 | 0.00% |
| | | R40 | 133.95 | 0.38 | 0.28% |
| | | R31 + R10 C.I. | 133.82 | 0.50 | 0.37% |
| | | R31 + R20 C.I. | 133.58 | 0.75 | 0.56% |
| Above Grade Walls | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R6 C.I. | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 + R6 C.I. Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R6 C.I. | 134.33 | 0.00 | 0.00% |
| | | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | 119.99 | 14.34 | 10.67% |
| | | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 + R10 C.I. Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R10 C.I. | 116.41 | 17.91 | 13.34% |
| | | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 + R12 C.I. Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R12 C.I. | 115.50 | 18.82 | 14.01% |
| | | Front & Back, 15%: 2x6 Wood Stud @ 16" O.C. R24 + R15 C.I. Left & Right, 85%: 2x6 Steel Stud @ 16" O.C. R24 + R15 C.I. | 113.92 | 20.41 | 15.19% |
| Basement Walls Below Grade (B.G.) | 2x4 @16" O.C. R12 Batt + R10 C.I | 2x4 @16" O.C. R12 Batt + R10 C.I | 134.33 | 0.00 | 0.00% |
| | | 2x4 @16" O.C. R14 Batt + R12 C.I | 133.83 | 0.49 | 0.37% |
| | | 2x4 @16" O.C. R14 Batt + R15 C.I | 133.47 | 0.85 | 0.63% |
| | | 2x4 @16" O.C., 2" offset from wall, R30 Spray Foam | 133.56 | 0.77 | 0.57% |
| Under Slab Insulation | R10 C.I. | R10 C.I. | 134.33 | 0.00 | 0.00% |
| | | R12 C.I. | 134.22 | 0.10 | 0.08% |
| | | R15 C.I. | 134.08 | 0.25 | 0.18% |
| | | R20 C.I. | 133.86 | 0.47 | 0.35% |
| | | | | | |
| Windows/Sliding Glass Doors | U _w 0.25 (U _w 1.4) / ER 29 (SHGC-0.26) | U _w 0.25 (U _w 1.4) / ER 29 (SHGC-0.26) | 134.33 | 0.00 | 0.00% |
| | | U _w 0.21 (U _w 1.2) / ER 34 (SHGC-0.26) | 133.22 | 1.11 | 0.82% |
| | | U _w 0.18 (U _w 1.0) / ER 38 (SHGC-0.26) | 132.10 | 2.23 | 1.66% |
| Skylights | U _w 0.49 (U _w 2.8) | U _w 0.49 (U _w 2.8) | 134.33 | 0.00 | 0.00% |
| | | U _w 0.38 (U _w 2.16) | 133.92 | 0.41 | 0.30% |
| Doors | Steel Polystyrene Core (RSI 0.98 / R5.57) | Steel Polystyrene Core (RSI 0.98 / R5.57) | 134.33 | 0.00 | 0.00% |
| | | Steel Medium Density Spray Foam Core (RSI 1.14 / R6.47) | 134.05 | 0.28 | 0.21% |
| Space Heating / Cooling Equipment | ASHP (7.5 HSPF _{2,0} 14.5 SEER2) - 18,000 Btu/h x 4 Units w/ 96% AFUE Furnace | ASHP (7.5 HSPF _{2,0} 14.5 SEER2) - 18,000 Btu/h x 4 Units w/ 96% AFUE Furnace | 134.33 | 0.00 | 0.00% |
| | | ccASHP (3.51 COP _s , 3.52 COP _c) - 18,000 Btu/h x 4 Units [Reference AHRI # 217483607] | 126.37 | 7.96 | 5.92% |
| | | ccASHP (4.48 COP _s , 3.19 COP _c) - 18,000 Btu/h x 4 Units [Reference AHRI # 205663351] | 116.76 | 17.56 | 13.08% |
| | | ccASHP (4.57 COP _s , 3.82 COP _c) - 18,000 Btu/h x 4 Units [Reference AHRI # 207702763 / 207702810] | 115.62 | 18.70 | 13.92% |
| | | ccASHP (4.57 COP _s , 3.82 COP _c) - 18,000 Btu/h x 4 Units w/ 15% Operable Window Area [Reference AHRI # 207702763 / 207702810] | 113.03 | 21.30 | 15.86% |
| HRV / ERV Efficiency | 75% SRE @ 0°C | 75% SRE @ 0°C | 134.33 | 0.00 | 0.00% |
| | | 81% SRE @ 0°C | 133.89 | 0.44 | 0.33% |
| | | 84% SRE @ 0°C | 133.70 | 0.63 | 0.47% |
| | | 90% SRE @ 0°C | 133.07 | 1.25 | 0.93% |
| Domestic HWH (Thermal Eff. Or EF) | NG Condensing Tankless, 0.95 EF | NG Condensing Tankless, 0.95 EF | 134.33 | 0.00 | 0.00% |
| | | Electric Heat Pump HWT, 50 US Gal, 3.00 UEF | 122.95 | 11.38 | 8.47% |
| | | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | 121.86 | 12.47 | 9.28% |
| | | Electric Heat Pump HWT, 50 US Gal, 4.50 UEF | 121.13 | 13.20 | 9.83% |
| Lighting (1 Bulb can be non-ENERGY STAR Certified) ³ | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 134.33 | 0.00 | 0.00% |
| Shower Flow Rate (L/min) | Ultra Low flow: 5.7 | Ultra Low flow: 5.7 | 134.33 | 0.00 | 0.00% |
| Bathroom Faucet Flow Rate (L/min) | Ultra Low flow: 3.8 | Ultra Low flow: 3.8 | 134.33 | 0.00 | 0.00% |
| Clothes Dryer (kWh/year) - ENERGY STAR Certified | 460 | 460 | 134.33 | 0.00 | 0.00% |
| | | 380 | 133.83 | 0.49 | 0.37% |
| | | 317 | 133.45 | 0.88 | 0.65% |
| | | 266 | 133.12 | 1.21 | 0.90% |
| | | 217 | 132.82 | 1.51 | 1.12% |
| | | 133 | 132.30 | 2.03 | 1.51% |
| Clothes Washer (kWh/year) - ENERGY STAR Certified | 123 | 123 | 134.33 | 0.00 | 0.00% |
| | | 110 | 134.25 | 0.08 | 0.06% |
| | | 100 | 134.18 | 0.14 | 0.11% |
| | | 90 | 134.12 | 0.20 | 0.15% |
| | | 123 (Cold Water Only) | 128.06 | 6.27 | 4.67% |
| | | 90 (Cold Water Only) | 127.86 | 6.47 | 4.82% |
| Dish Washer (kWh/year) - ENERGY STAR Certified | 260 | 260 | 134.33 | 0.00 | 0.00% |
| | | 240 | 133.74 | 0.59 | 0.44% |
| | | 210 | 133.59 | 0.74 | 0.55% |
| Range (kWh/year) - ENERGY STAR Certified | 565 | 565 | 134.33 | 0.00 | 0.00% |
| | | 195 | 129.88 | 4.45 | 3.31% |
| | | 185 | 129.75 | 4.57 | 3.40% |
| Refrigerator (kWh/year) - ENERGY STAR Certified | 639 | 639 | 134.33 | 0.00 | 0.00% |
| | | 574 | 133.53 | 0.80 | 0.59% |
| | | 510 | 132.72 | 1.60 | 1.19% |
| | | 446 | 132.08 | 2.24 | 1.67% |
| | | 380 | 131.24 | 3.08 | 2.29% |
| | | 310 | 130.38 | 3.94 | 2.94% |
| Drain Water Heat Recovery | - | - | 134.33 | 0.00 | 0.00% |
| | | 42% Efficiency | 131.66 | 2.66 | 1.98% |
| | | 46% Efficiency | 131.35 | 2.98 | 2.22% |
| | | 58% Efficiency | 130.77 | 3.55 | 2.65% |
| Solar PV System | - | Solar PV Capped at 15% of the Total Energy Reduction (20.48 GJ / 5,688.89 kWh) | 113.85 | 20.48 | 15.25% |
| Air Tightness Target (ACH@50Pa) | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 134.33 | 0.00 | 0.00% |
| | | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10.(9)(b) | 128.82 | 5.50 | 4.10% |
| | | 2.0 ACH @ 50 Pa - Blower Door Test Required | 125.39 | 8.94 | 6.65% |
| | | 1.5 ACH @ 50 Pa - Blower Door Test Required | 122.32 | 12.00 | 8.94% |

| ✓ CHMC MLI Select - Level 3 | | Multi-Unit Residential Building (8 Units) - Main Building | | | | | | | |
|---|---------------------|--|--|---|--|---|--|---|--|
| Created on: 2026-01-11 | | Reference NBC 2020 Tier 1 NBC Climate Zone 5 / OBC Climate Zone 1 | | Proposed Building Design: Current, 40% Target - Baseline | | Proposed Building Design: New, 70% Target - Option 1 | | Proposed Building Design: New, 70% Target - Option 2 | |
| <div style="display: flex; gap: 5px;"> <div style="width: 15px; height: 15px; background-color: #90EE90; border: 1px solid black;"></div> Upgrade against NBC <div style="width: 15px; height: 15px; background-color: #FFB6C1; border: 1px solid black;"></div> Downgrade against NBC </div> | | | | | | | | | |
| BUILDING ENVELOPES | | | | | | | | | |
| Ceiling with Attic Space | | Effective RSI 6.91 / R39.2 | | N/A | | N/A | | N/A | |
| Ceiling without Attic Space | | Effective RSI 4.67 / R26.5 | | R31 | | R75 (2lb Closed Cell SPF) | | R31 (2lb Closed Cell SPF) + R20 Batt | |
| Exposed Floor | | Effective RSI 4.67 / R26.5 | | R31 | | R31 | | R31 | |
| Above Grade Walls | Front & Back, 31.3% | Effective RSI 2.97 / R16.9 | | 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. | | 2x6 Wood Stud @ 16" O.C. R24 + R15 C.I. | | 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. | |
| | Left & Right, 68.7% | | | 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | | 2x6 Steel Stud @ 16" O.C. R24 + R15 C.I. | | 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | |
| Rim Joist | | Same as Above Grade Walls | | Same as Above Grade Walls | | Same as Above Grade Walls | | Same as Above Grade Walls | |
| Tall Walls (2x2x6 @ 12" O.C.) | | | | | | | | | |
| Basement Walls Below Grade (B.G.) | | Effective RSI 2.98 / R16.9 | | 2x4 @ 24" O.C., 2" offset from wall, R10 + R15 C.I. | | 2x4 @ 24" O.C., 2" offset from wall, R10 + R15 C.I. | | 2x4 @ 24" O.C., 2" offset from wall, R10 + R15 C.I. | |
| Below Grade Slab Entire Surface > 600 mm | | - | | R10 C.I. | | R20 C.I. | | R10 C.I. | |
| Heated Slab or Below Grade Slab ≤ 600 mm | | Effective RSI 1.96 / R11.1 | | N/A | | N/A | | N/A | |
| Edge of Below Grade Slab ≤ 600 mm B.G. | | | | | | | | | |
| WINDOWS & DOORS | | | | | | | | | |
| Windows/Sliding Glass Doors | | U _g 0.32 (U _g 1.8) / ER 21 (SHGC-0.26) | | U _g 0.25 (U _g 1.6) / ER 25 (SHGC-0.4) | | U _g 0.25 (U _g 1.4) / ER 29 (SHGC-0.4) | | U _g 0.25 (U _g 1.4) / ER 29 (SHGC-0.4) | |
| Skylights | | U _g 0.51 (U _g 2.9) | | N/A | | N/A | | N/A | |
| Doors (1 Door can be non-ENERGY STAR Certified) | | As Per NBC (RSI 1.1 / R6.25) | | Steel Polystyrene Core (RSI 0.98 / R5.57) | | Steel Polystyrene Core (RSI 0.98 / R5.57) | | Steel Polystyrene Core (RSI 0.98 / R5.57) | |
| MECHANICALS¹ | | | | | | | | | |
| Space Heating Equipment | | 92% AFUE | | ccASHP (9.5 HSPF _{iv} , 17.3 SEER) - 18,000 Btu/h x 4 units | | ccASHP (10.6 HSPF _{iv} , 20.9 SEER2) - 18,000 Btu/h x 4 units | | ccASHP (10.6 HSPF _{iv} , 20.9 SEER2) - 18,000 Btu/h x 4 units | |
| Space Cooling Equipment | | 14.5 SEER | | ccASHP (7.9 HSPF _{iv} , 14.3 SEER2) - 22,000 Btu/h x 4 units | | ccASHP (10 HSPF _{iv} , 21.2 SEER2) - 25,000 Btu/h x 4 units | | ccASHP (10 HSPF _{iv} , 21.2 SEER2) - 25,000 Btu/h x 4 units | |
| ERV Efficiency | | 60% SRE | | 70% SRE @ 0°C x 4 units 81% SRE @ 0°C x 4 units | | 70% SRE @ 0°C x 4 units 81% SRE @ 0°C x 4 units | | 70% SRE @ 0°C x 4 units 81% SRE @ 0°C x 4 units | |
| Domestic HWH (Thermal Eff. Or EF) | | 0.67 EF | | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | | Electric Heat Pump HWT, 80 US Gal, 4.0 UEF | | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | |
| Combined Space and Water | | N/A | | N/A | | N/A | | N/A | |
| Duct Work | | As Per NBC | | As Per NBC | | As Per NBC | | As Per NBC | |
| Thermostat | | Programmable | | Programmable | | Programmable | | Programmable | |
| ELECTRICALS | | | | | | | | | |
| Lighting (1 Bulb can be non-ENERGY STAR Certified) ³ | | As Per NBC | | 100% Energy Efficient Lighting | | 100% Energy Efficient Lighting | | 100% Energy Efficient Lighting | |
| Exhaust Fans | | As Per NBC | | As Per NBC | | As Per NBC | | As Per NBC | |
| Electrical Savings | | As Per NBC | | As Per NBC | | As Per NBC | | As Per NBC | |
| BASELOADS² | | | | | | | | | |
| Shower Flow Rate (L/min) | | 9.5 | | Ultra Low flow: 5.7 | | Ultra Low flow: 5.7 | | Ultra Low flow: 5.7 | |
| Bathroom Faucet Flow Rate (L/min) | | 8.3 | | Ultra Low flow: 3.8 | | Ultra Low flow: 3.8 | | Ultra Low flow: 3.8 | |
| Clothes Dryer (kWh/year) | | 916 | | 531 | | 133 | | 133 | |
| Clothes Washer (kWh/year) | | 197 | | 123 | | 100 | | 123 (Cold Water Only) | |
| Dish Washer (kWh/year) | | 260 | | 260 | | 210 | | 210 | |
| Range (kWh/year) | | 565 | | 565 | | 195 | | 195 | |
| Refrigerator (kWh/year) | | 639 | | 639 | | 310 | | 310 | |
| OTHERS | | | | | | | | | |
| Drain Water Heat Recovery | | N/A | | N/A | | N/A | | N/A | |
| Solar PV System | | N/A | | N/A | | Solar Capped at 15% of the Total Energy Reduction (27.44 GJ / 7,621.85 kWh) | | Solar Capped at 15% of the Total Energy Reduction (27.45 GJ / 7,615.89 kWh) | |
| Air Tightness Target (ACH@50Pa) | | 2.5 ACH | | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | | 2.5 ACH - As Per NBC Section 9.36.5.10.(9)(b) | | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | |
| RESULTS | | Reference NBC 2020 Tier 1 | | Proposed Building Design: Current, 40% Target - Baseline | | Proposed Building Design: New, 70% Target - Option 1 | | Proposed Building Design: New, 70% Target - Option 2 | |
| Annual Energy Consumption (GJ) | | 300.3 | | 179.8 | | 89.9 | | 89.8 | |
| GHG Emissions (tonnes/year) | | 9.9 | | 2.5 | | 1.2 | | 1.2 | |
| | | | | 40.1% lower | | 70.1% lower | | 70.1% lower | |
| | | | | 74.7% lower | | 87.7% lower | | 87.7% lower | |

| NOTES | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| 1. The following mechanical systems for the baseline have been modelled based on the information provided in the mechanical drawings. Results may change once the final equipments specifications are confirmed and provided. <u>Space Heating/Cooling System:</u> ccASHP (9.5 HSPF _{iv} , 17.3 SEER) - 18,000 Btu/h x 4 units (MITSUBISHI ELECTRIC SUZ-KA15NAHZ); ccASHP (7.9 HSPF _{iv} , 14.3 SEER2) - 22,000 Btu/h x 4 units (MITSUBISHI ELECTRIC MX2-2C20NAHZ4-**) <u>Ventilation:</u> 70% SRE @ 0°C x 4 units (vanEE ERV-70E ECM); 81% SRE @ 0°C x 4 units (vanEE V160E75RT) <u>Domestic Hot Water:</u> Electric Heat Pump HWT - 50 US Gal, 3.75 UEF (Mits Air US3-RS1-15/190RDVN3-L3) or 80 US Gal, 4.0 UEF (Mits Air US3-RS1-15/300RDVN3-L3) | | | | | | | | | |
| 2. Baseloads upgrades include Ultra-low flow water fixtures and ENERGY STAR certified appliances. | | | | | | | | | |
| * Bolded items are additional upgrades required to meet the new CMHC MLI Select, 70% target | | | | | | | | | |

| Components | Baseline - Current, 40% Target | Energy Efficient Measures | Energy Consumption (GJ) | Energy Saving (GJ) | Energy Saving (%) |
|---|---|--|-------------------------|--------------------|-------------------|
| Ceiling without Attic Space | R31 | R31 | 179.79 | 0.00 | 0.00% |
| | | R40 | 179.14 | 0.65 | 0.36% |
| | | R31 (2lb Closed Cell SPF) + R20 Batt | 178.72 | 1.07 | 0.60% |
| | | R75 (2lb Closed Cell SPF) | 178.18 | 1.61 | 0.90% |
| | | | | | |
| Exposed Floor | R31 | R31 | 179.79 | 0.00 | 0.00% |
| | | R60 (2lb Closed Cell SPF) + R8 C.I. (2" Rigid Ins.) | 179.75 | 0.04 | 0.02% |
| | | R75 (2lb Closed Cell SPF) + R8 C.I. (2" Rigid Ins.) | 179.71 | 0.08 | 0.04% |
| Above Grade Walls | Front & Back, 31.3%; 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. Left & Right, 68.7%; 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | Front & Back, 31.3%; 2x6 Wood Stud @ 16" O.C. R24 + R8 C.I. Left & Right, 68.7%; 2x6 Steel Stud @ 16" O.C. R24 + R8 C.I. | 179.79 | 0.00 | 0.00% |
| | | Front & Back, 31.3%; 2x6 Wood Stud @ 16" O.C. R24 + R10 C.I. Left & Right, 68.7%; 2x6 Steel Stud @ 16" O.C. R24 + R10 C.I. | 178.75 | 1.04 | 0.58% |
| | | Front & Back, 31.3%; 2x6 Wood Stud @ 16" O.C. R24 + R12 C.I. Left & Right, 68.7%; 2x6 Steel Stud @ 16" O.C. R24 + R12 C.I. | 177.85 | 1.94 | 1.08% |
| | | Front & Back, 31.3%; 2x6 Wood Stud @ 16" O.C. R24 + R15 C.I. Left & Right, 68.7%; 2x6 Steel Stud @ 16" O.C. R24 + R15 C.I. | 176.83 | 2.96 | 1.65% |
| Basement Walls Below Grade (B.G.) | 2x4 @ 24" O.C., 2" offset from wall, R10 + R15 C.I. | 2x4 @ 24" O.C., 2" offset from wall, R10 + R15 C.I. | 179.79 | 0.00 | 0.00% |
| Under Slab Insulation | R10 C.I. | R10 C.I. | 179.79 | 0.00 | 0.00% |
| | | R12 C.I. | 179.67 | 0.12 | 0.07% |
| | | R15 C.I. | 179.49 | 0.30 | 0.17% |
| | | R20 C.I. | 179.21 | 0.58 | 0.32% |
| Windows/Sliding Glass Doors | U _w 0.28 (U _w 1.6) / ER 25 (SHGC-0.4) | U _w 0.28 (U _w 1.6) / ER 25 (SHGC-0.4) | 179.79 | 0.00 | 0.00% |
| | | U _w 0.25 (U _w 1.4) / ER 29 (SHGC-0.4) | 177.86 | 1.93 | 1.08% |
| | | U _w 0.21 (U _w 1.2) / ER 34 (SHGC-0.4) | 175.99 | 3.80 | 2.12% |
| | | U _w 0.18 (U _w 1.0) / ER 38 (SHGC-0.4) | 174.16 | 5.63 | 3.13% |
| Doors (1 Door can be non-ENERGY STAR Certified) | Steel Polystyrene Core (RSI 0.98 / R5.57) | Steel Polystyrene Core (RSI 0.98 / R5.57) | 179.79 | 0.00 | 0.00% |
| | | Steel Medium Density Spray Foam Core (RSI 1.14 / R6.47) | 179.53 | 0.26 | 0.14% |
| Space Heating / Cooling Equipment | ccASHP (9.5 HSPF _{FW} , 17.3 SEER) - 18,000 Btu/h x 4 units ccASHP (7.9 HSPF _{FW} , 14.3 SEER2) - 22,000 Btu/h x 4 units | ccASHP (9.5 HSPF _{FW} , 17.3 SEER) - 18,000 Btu/h x 4 units ccASHP (7.9 HSPF _{FW} , 14.3 SEER2) - 22,000 Btu/h x 4 units | 179.79 | 0.00 | 0.00% |
| | | ccASHP (10.6 HSPF _{FW} , 20.9 SEER2) - 18,000 Btu/h x 4 units ccASHP (10 HSPF _{FW} , 21.2 SEER2) - 25,000 Btu/h x 4 units | 151.09 | 28.70 | 15.96% |
| ERV Efficiency | 70% SRE @ 0°C x 4 units 81% SRE @ 0°C x 4 units | 70% SRE @ 0°C x 4 units 81% SRE @ 0°C x 4 units | 179.79 | 0.00 | 0.00% |
| Domestic HWT (Thermal Eff. Or EF) | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | Electric Heat Pump HWT, 50 US Gal, 3.75 UEF | 179.79 | 0.00 | 0.00% |
| | | Electric Heat Pump HWT, 80 US Gal, 4.0 UEF | 179.41 | 0.38 | 0.21% |
| Lighting (1 Bulb can be non-ENERGY STAR Certified) ³ | 100% Energy Efficient Lighting | 100% Energy Efficient Lighting | 179.79 | 0.00 | 0.00% |
| Shower Flow Rate (L/min) | Ultra Low flow: 5.7 | Ultra Low flow: 5.7 | 179.79 | 0.00 | 0.00% |
| Bathroom Faucet Flow Rate (L/min) | Ultra Low flow: 3.8 | Ultra Low flow: 3.8 | 179.79 | 0.00 | 0.00% |
| Clothes Dryer (kWh/year) - ENERGY STAR Certified | 531 | 531 | 179.79 | 0.00 | 0.00% |
| | | 460 | 178.90 | 0.89 | 0.50% |
| | | 380 | 177.89 | 1.90 | 1.06% |
| | | 317 | 177.10 | 2.69 | 1.50% |
| | | 266 | 176.45 | 3.34 | 1.86% |
| | | 217 | 175.82 | 3.97 | 2.21% |
| | | 133 | 174.76 | 5.03 | 2.80% |
| Clothes Washer (kWh/year) - ENERGY STAR Certified | 123 | 123 | 179.79 | 0.00 | 0.00% |
| | | 110 | 179.63 | 0.16 | 0.09% |
| | | 100 | 179.50 | 0.29 | 0.16% |
| | | 90 | 179.37 | 0.42 | 0.23% |
| | | 123 (Cold Water Only) | 173.03 | 6.76 | 3.76% |
| Dish Washer (kWh/year) - ENERGY STAR Certified | 260 | 260 | 179.79 | 0.00 | 0.00% |
| | | 240 | 179.03 | 0.76 | 0.42% |
| | | 210 | 178.69 | 1.10 | 0.61% |
| Range (kWh/year) - ENERGY STAR Certified | 565 | 565 | 179.79 | 0.00 | 0.00% |
| | | 195 | 170.49 | 9.30 | 5.17% |
| | | 185 | 170.25 | 9.54 | 5.31% |
| Refrigerator (kWh/year) - ENERGY STAR Certified | 639 | 639 | 179.79 | 0.00 | 0.00% |
| | | 574 | 178.15 | 1.64 | 0.91% |
| | | 510 | 176.53 | 3.26 | 1.81% |
| | | 446 | 174.91 | 4.88 | 2.71% |
| | | 380 | 173.27 | 6.52 | 3.63% |
| | | 310 | 171.52 | 8.27 | 4.60% |
| Drain Water Heat Recovery | - | - | 179.79 | 0.00 | 0.00% |
| | | 42% Efficiency | 178.41 | 1.38 | 0.77% |
| | | 46% Efficiency | 178.20 | 1.59 | 0.88% |
| | | 58% Efficiency | 177.86 | 1.93 | 1.08% |
| Air Tightness Target (ACH@50Pa) | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 3.2 ACH @ 50 Pa - Default, Blower Door Test Not Required | 179.79 | 0.00 | 0.00% |
| | | 2.5 ACH @ 50 Pa - As Per NBC Section 9.36.5.10 (9)(b) | 176.26 | 3.53 | 1.97% |
| | | 2.0 ACH @ 50 Pa - Blower Door Test Required | 173.97 | 5.82 | 3.24% |