

Abbreviated Report Form N1107.1 Heating Energy Analysis Comparison Report

Builder's Name: Project Address: City/Township/County:

PROPOSED ALTERNATIVE HOUSE	STANDARD DESIGN HOUSE
ROOF/CEILING (INC. SKYLIGHTS)	ROOF/CEILING (INC. SKYLIGHTS)
SUBTOTALS	SUBTOTALS
$A_1 \text{ ____ } / R_1 \text{ ____ } = A_1 / R_1 \text{ ____ }$ $A_2 \text{ ____ } / R_2 \text{ ____ } = A_2 / R_2 \text{ ____ }$ $A_3 \text{ ____ } / R_3 \text{ ____ } = A_3 / R_3 \text{ ____ }$ $A_1 / R_1 + A_2 / R_2 + A_3 / R_3 =$ Total Roof/Ceiling Area _____ <div style="text-align: right;">Line 1</div>	$\text{Total Roof/Ceiling Area} \times 0.0204 =$ (all zones) _____ <div style="text-align: right;">Line A</div>
GROSS WALL	GROSS WALL
Opaque Wall (Does not include band joist, windows, doors, etc.) $A_1 \text{ ____ } / R_1 \text{ ____ } = A_1 / R_1 \text{ ____ }$ $A_2 \text{ ____ } / R_2 \text{ ____ } = A_2 / R_2 \text{ ____ }$ $A_1 / R_1 + A_2 / R_2 =$ _____ <div style="text-align: right;">Line 2</div>	
Band Joist $A \text{ ____ } / R \text{ ____ } = A / R \text{ ____ } =$ _____ <div style="text-align: right;">Line 3</div>	
Fenestration and Doors, Windows $A_1 \text{ ____ } / R_1 \text{ ____ } = A_1 / R_1 \text{ ____ }$ $A_2 \text{ ____ } / R_2 \text{ ____ } = A_2 / R_2 \text{ ____ }$ $A_3 \text{ ____ } / R_3 \text{ ____ } = A_3 / R_3 \text{ ____ }$ $A_1 / R_1 + A_2 / R_2 + A_3 / R_3 =$ _____ <div style="text-align: right;">Line 4</div>	
Doors $A_1 \text{ ____ } / R_1 \text{ ____ } = A_1 / R_1 \text{ ____ }$ $A_2 \text{ ____ } / R_2 \text{ ____ } = A_2 / R_2 \text{ ____ }$ $A_1 / R_1 + A_2 / R_2 =$ _____ <div style="text-align: right;">Line 5</div>	
Other $A \text{ ____ } / R \text{ ____ } = A / R \text{ ____ } =$ _____ Total Gross Wall Area _____ <div style="text-align: right;">Line 6</div>	
GROSS WALL SUBTOTAL A/R (Lines: 2+3+4+5+6) _____ <div style="text-align: right;">Line 7</div>	

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FOUNDATION/FLOOR	SUBTOTALS	FOUNDATION/FLOOR	SUBTOTALS
Floors Over Unconditioned Spaces A _____ /R _____ = A/R _____ =	_____ Line 8	Floors Over Unconditioned Spaces _____ x 0.0204 = (all zones)	_____ Line C
Slab on Grade Floors (Area = Perimeter x 2') A _____ /R _____ = A/R _____ =	_____ Line 9	Slab on Grade (Unheated) _____ x $\begin{matrix} Z_1 0.0909 \\ Z_2 0.0769 \\ Z_3 0.050 \end{matrix}$ =	_____ Line D
Slab on Grade Floors (Area = Perimeter x 2') A _____ /R _____ = A/R _____ =	_____ Line 9	Slab on Grade (Heated) _____ x $\begin{matrix} Z_1 0.0769 \\ Z_2 0.0667 \\ Z_3 0.050 \end{matrix}$ =	_____ Line E
Crawl Space Walls (Area: Top foundation wall to average finished grade) A _____ /R _____ = A/R _____ =	_____ Line 10	Crawl Space _____ x 0.050 = (all zones)	_____ Line F
Basement Walls (Area: Top foundation wall to average finished grade) A_1 _____ / R_1 _____ = A_1 / R_1 _____ A_2 _____ / R_2 _____ = A_2 / R_2 _____ A_1 / R_1 + A_2 / R_2 =	_____ Line 11	Basement Walls _____ x $\begin{matrix} Z_1 0.090 \\ Z_2 0.090 \\ Z_3 0.055 \end{matrix}$ =	_____ Line G
Basement Windows A _____ /R _____ = A/R _____ =	_____ Line 12		
Total Gross Basement Wall Area			
FOUNDATION/FLOOR SUBTOTAL A/R (Lines: 8+9+10+11+12)	_____ Line 13	FOUNDATION/FLOOR SUBTOTAL A/R (Lines: C+D+E+F+G)	_____ Line H
PROPOSED ALTERNATIVE HOUSE SUB-TOTAL A/R (Lines: 1+7+13)	_____ Line 14	STANDARD DESIGN HOUSE SUB-TOTAL A/R (Lines: A+B+H)	_____ Line I
HEATING EQUIPMENT EFFICIENCY (If the same as Standard House, go to line 16 or 17) (Oil or Gas Fired) AFUE: _____ % Line 14: _____ = Adjusted A/R = AFUE: 0.____	_____ Line 15	HEATING EQUIPMENT EFFICIENCY (Oil or Gas Fired) AFUE: 78% Line I: _____ = Adjusted A/R = AFUE: 0.78	_____ Line J
AIR LEAKAGE RATE (If the same as Standard House, go to line 17)		AIR LEAKAGE RATE	

$\frac{\text{ACH} \times \text{ft}^3 \times 0.018}{\text{Volume of House}} =$ Air Changes per Hour	<hr/> Line 16
PROPOSED ALTERNATIVE HOUSE TOTAL (Lines: 15+16)	
Equal to or less than line L to pass	<hr/> Line 17

$0.55 \text{ ACH} \times \frac{\text{ft}^3 \times 0.018}{\text{Volume of House}} =$	<hr/> Line K
STANDARD DESIGN LIMIT TOTAL (Lines: J+K)	
	<hr/> Line L