

# 2020 NATIONAL BUILDING CODE

## 9.36 TIERED PRESCRIPTIVE ENERGY COMPLIANCE APPLICATION



Building Address:

Owner/Applicant:

Occupancy Classification:

Date:

Method: Achieve 10 points through performance upgrades that increase overall building efficiency.

<b>INCREASED INSULATION IN ABOVE GROUND WALLS - 2020 NBC 9.36.8.5</b>				
2x6 Wood Studs 16" o.c., Vinyl Siding, 7/16" OSB, House Wrap, Polyethylene Vapour Barrier, 1/2" Gyprock				
SELECT ASSEMBY	R-VALUE	FOAM INSUL. (XPS)	RSI	POINTS
	20	1"	3.76	6.2
	20	1.5"	4.20	7.7
	20	2"	4.64	10.6
	24	0"	3.11	1.6
	24	1"	3.99	7.7
	24	1.5"	4.43	9.9
	24	2"	4.87	11.6
	ICF	2.5" & 2.5"	4.14	7.7
Alternative wall assembly other than above submitted (Points TBD)				

POINTS: \_\_\_\_\_

<b>INCREASED INSULATION IN FOUNDATION WALLS BELOW GRADE - 2020 NBC 9.36.8.7</b>				
Foundation Wall plus 2x6 Wood Studs 16" o.c., Polyethylene Vapour Barrier, 1/2" Gyprock				
SELECT ASSEMBY	R-VALUE	FOAM INSUL. (XPS)	RSI	POINTS
	20	0"	2.96	0
	20	1"	3.84	0.8
	20	1.5"	4.28	1.4
	24	0"	3.28	0.2
	24	1"	4.16	1.4
	ICF	2.5" & 2.5"	3.81	0.8
Alternative wall assembly other than above submitted (Points TBD)				

POINTS: \_\_\_\_\_

<b>INCREASED ENERGY EFFICIENCY BY REDUCED BUILDING VOLUME - 2020 NBC 9.36.8.11</b>			
Building volume is measured at the interior surfaces of exterior walls, ceilings, and floors. (LxWxH) The heated space includes all storeys, including basements and excludes attached garages.			
SELECT ASSEMBY	BUILDING VOLUME (M3)	BUILDING VOLUME (FT3)	POINTS
	>390	>13,772	0
	380≤390	13,420≤13,772	1
	370≤380	13,066≤13,420	2
	360≤370	12,713≤13,066	3
	350≤360	12,360≤12,713	4
	340≤350	12,006≤12,360	5
	330≤340	11,653≤12,006	6
	320≤330	11,300≤11,653	7
	310≤320	10,947≤11,300	8
	300≤310	10,594≤10,947	9
	V≤300	V≤10,594	10

POINTS: \_\_\_\_\_

<b>INCREASED ENERGY RATING OF WINDOWS &amp; DOORS / DECREASED U-VALUE - 2020 NBC 9.36.8.6</b>			
<b>WINDOW &amp; DOOR</b>	<b>ENERGY RATING</b>	<b>MAX U-VALUE</b>	<b>POINTS</b>
	25 - 28	1.45 - 1.61	0
	29 - 33	1.23 - 1.44	1.6
	>34	<1.22	4.6
To be determined (No points awarded at application stage)			
Window & Door specification documentation attached (Required to achieve points)			

**POINTS:** \_\_\_\_\_

<b>INCREASED ENERGY EFFICIENCY OF VENTILATION SYSTEMS - 2020 NBC 9.36.8.9</b>		
<b>HEAT REC. EFF</b>	<b>HEAT-RECOVERY EFF., SRE %</b>	<b>POINTS</b>
	60≤SRE≤65	0
	65≤SRE≤75	1.6
	75≤SRE≤84	4.6
To be determined (No points awarded at application stage)		
HRV specification documentation attached (Required to achieve points)		

**POINTS:** \_\_\_\_\_

<b>INCREASED ENERGY EFFICIENT WATER HEATING EQUIPMENT - 2020 NBC 9.36.8.10</b>			
All service water heaters to meet the minimum equipment performance requirements in 9.36.4.2.			
<b>WATER HEATER</b>	<b>TYPE</b>	<b>ENERGY EFF., EF OR UEF</b>	<b>POINTS</b>
	Electric Water Heater		0
	Gas/Oil-fired Tankless	EF≥0.95 or UEF≥0.92	4.9
	Gas/Oil-fired Storage - Res.	EF≥0.80 or UEF≥0.83	4.9
	Gas/Oil-fired Storage - Comm.	UEF>0.79	2.4
		UEF≥0.85	3.2
	Heat Pump Water Heater	EF≥2.35	3.8
Water heater specification documentation attached (Required to achieve points)			

**POINTS:** \_\_\_\_\_

<b>INCREASED AIRTIGHTNESS VERIFIED BY BLOWER DOOR TEST - 2020 NBC 9.36.8.8</b>						
Airtightness through Guarded Method AL-A or Unguarded Method AL-B by qualified company						
<b>AIRTIGHTNESS GUARDED (MUD)</b>	<b>AIRTIGHTNESS UNGUARDED (SUD)</b>	<b>AIRTIGHTNESS LEVEL</b>	<b>GUARDED (A)</b>		<b>UNGUARDED (B)</b>	
			<b>ACH50</b>	<b>POINTS</b>	<b>ACH50</b>	<b>POINTS</b>
		AL-1A or AL-1B	2.5	0	3.0	0
		AL-2A or AL-2B	2	3.5	2.5	3.5
		AL-3A or AL-3B	1.5	6.9	2.0	7
		AL-4A or AL-4B	1.0	10.4	1.5	10.5
		AL-5A or AL-5B	0.6	13.3	1.0	13.4
Airtightness testing to be submitted prior to occupancy (Required to achieve points)						

**POINTS:** \_\_\_\_\_

<b>TOTAL ENERGY CONSERVATION POINTS FOR PROPOSED BUILDING - TIER 2</b>	<b>OUT OF 10</b>
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