# NBC(AE)2019:B:9.36. ENERGY EFFICIENCY PRESCRIPTIVE PATH SUMMARY AND CHECKLIST

### **PROJECT ADDRESS :**

#### □ PRESCRIPTIVE PATH

Complete 1A -OR- 1B and 2 to 5 below

#### □ PRESCRIPTIVE PATH TRADE-OFF OPTIONS

Complete 1A –OR– 1B and 2 to 5 below, and attach Trade–off Calculator results

For PERFORMANCE PATH, use Performance Path Summary and checklist Form Application

## **1A**

Effective thermal resistance of assemblies in buildings WITHOUT heat-recovery ventilator (HRV) 9.36.2.6.A & 9.36.2.8.A

ASSEMBLY LOCATION	MINIMUN	/ "ETR"		PROPOSED ASSEMBLY	
	(m²K/W) (RSI)			including insulation type/R-value	
ROOF					
Cathedral ceilings and flat roofs	5.02	D N/A	equal or better	🔲 less	
Ceilings under attic, including over attached garages	10.43	D N/A	equal or better	🔲 less	
ABOVE-GROUND WALLS					
Exterior wall	3.08	D N/A	equal or better	🔲 less	
Tall walls	3.08	D N/A	equal or better	🛛 less	
House-to-attached garage walls	2.92	D N/A	equal or better	🔲 less	
Other: kitchen cabinet wall(s)	3.08	D N/A	equal or better	🔲 less	
Other:	3.08	D N/A	equal or better	🔲 less	
RIM JOISTS		·			
Parallel to joists, or pony wall	3.08	D N/A	equal or better	🔲 less	
Perpendicular to joists	3.08	D N/A	equal or better	🛛 less	
ABOVE-GROUND FLOOR					
Exterior cantilever	5.02	D N/A	equal or better	🔲 less	
Over attached garage	4.86	D N/A	equal or better	🛛 less	
BELOW-GRADE WALLS					
Frostwalls, above-ground wall portions where average exposure < 0.6m	3.46	D N/A	equal or better	🔲 less	
Foundation-level above-ground wall portions where average exposure ≥ 0.6 m	3.08	D N/A	equal or better	🔲 less	
UNHEATED FLOOR: Above frost line	1.96	D N/A	equal or better	🛛 less	
ANY HEATED FLOOR: In ground contact	2.84	D N/A	equal or better	🛛 less	
SLAB ON GRADE: with integral footing	3.72	□ N/A	equal or better	🔲 less	

## **1B**

Effective thermal resistance of assemblies in buildings <u>WITH</u> heat-recovery ventilator (HRV) 9.36.2.6.B & 9.36.2.8.B

ASSEMBLY LOCATION	MINIMUN	/ "ETR"		PROPOSED ASSEMBLY			
	(m²K/W) (RSI)				including insulation type/R-value		
ROOF							
Cathedral ceilings and flat roofs	5.02	□ N/A	equal or better	🔲 less			
Ceilings under attic, including over attached garages	8.67	□ N/A	equal or better	🔲 less			
ABOVE-GROUND WALLS			·		·		
Exterior wall	2.97	□ N/A	equal or better	🔲 less			
Tall walls	2.97	□ N/A	equal or better	🛛 less			
House-to-attached garage walls	2.81	□ N/A	equal or better	🔲 less			
Other: kitchen cabinet wall(s)	2.97	□ N/A	equal or better	🔲 less			
OTHER:	2.97	□ N/A	equal or better	🛛 less			
RIM JOISTS							
Parallel to joists, or pony wall	2.97	□ N/A	equal or better	🔲 less			
Perpendicular to joists	2.97	□ N/A	equal or better	🔲 less			
ABOVE-GROUND FLOOR					·		
Exterior cantilever	5.02	D N/A	equal or better	🛛 less			
Over attached garage	4.86	□ N/A	equal or better	🛛 less			
BELOW-GRADE WALLS							
Frostwalls, above-ground wall portions where average exposure < 0.6m	2.98	D N/A	equal or better	🛛 less			
Foundation-level above-ground wall portions where average exposure ≥ 0.6 m	2.97	□ N/A	equal or better	🔲 less			
UNHEATED FLOOR above frost line	1.96	□ N/A	equal or better	🔲 less			
ANY HEATED FLOOR In ground contact	2.84	□ N/A	equal or better	🔲 less			
SLAB on GRADE with integral footing	2.84	□ N/A	equal or better	🔲 less			

# 2

Check proposed windows, doors, etc; maximum prescriptive overall thermal transmittance "u-values"

FENESTRATION & DOOR COMPONENTS	MAXIMUM "U" value (W/m²K)					
Windows ( max USI )	1.60	□ <sub>N/</sub>		equal or higher performing	lower performing	9.36.2.7.A alternative: min ER=25
Exterior doors (max USI)	1.60	□ <sub>N/</sub>		equal or higher performing	D lower performing	9.36.2.7.A
Single exterior door exception ( max USI )	2.60	□ N/		equal or higher performing	lower performing	9.36.2.7.(5), NOTE on plans
Glass block; max area: 1.85 m2 ( max USI )	2.90	□ <sub>N/</sub>		equal or higher performing	lower performing	9.36.2.7.(4), NOTE on plans
Skylights ( max USI )	2.70	□ N/		equal or higher performing	D lower performing	9.36.2.6.(4), include shaft ETR/detail
Attic/access hatches (min nom RSI = $2.6$ )	2.60	□ N/		equal or higher performing	D lower performing	9.36.2.7.(8), NOTE on plans
Garage overhead doors (min nom RSI = 1.1)	1.10	□ N/		equal or higher performing	D lower performing	9.36.2.7.(7), NOTE on plans

## 3

CHECK HVAC components/capacity/standard/minimum performance; or write 9.36.3.10. selection(s) in space below

COMPONENT/EQUIPMENT	HEATING/COOLING CAPACITY	STANDARD	MIN PERFORMANCE	
Gas-fired forced air furnace	< 65.9kW [222,000Btu/h]	CAN/CSA-P.2	≥ AFUE 92%	VES
Gas-fired boiler	≤ 88kW[300kBtu/h]	CAN/CSA-P.2	≥ AFUE 90%	VES
Gas-fired tankless combo pace/water heating	≤ 73.2kW if SWH-based ≤ 87.9kW if boiler-based	CAN/CSA-P.9	TPF = 0.65	YES
Other:				□ YES
Other:				□ YES

### 4

### CHECK Service Water Heating components/input/standard/performance; or write 9.36.4.2. selection in space below

COMPONENT	INPUT	STANDARD	PERFORMANCE REQ'T	
Gas-fired hot water tank	< 22kW [75,000Btu/h]	CAN/CSA-P.3	EF ≥ 0.67 – .0005	☐ YES
Cas fredtanklass	> 73.2kW [250,000Btu/h]		Et ≥ 80%	VES
Gas-fired tankless	≤73.2kW [250,000Btu/h]	CAN/CSA-P.7	EF ≥ 0.8	VES
Electric tank	≤ 12kW [ 50 L - 270L capacity]	CAN/CSA-C191	$SL \le 35 + 0.20V$ (top) $SL \le 40 + 0.20V$ (bottom)	T YES
Electric tankless	-	_	approaching 100%	VES
Other:				YES

PRIMARY WALL AIR BARRIER LOCATION/MATERIAL:		CEILING BELOW ATTIC/VAULT/FLAT		
Interior poly with spray foam at rim joists and cantilevers		ROOF AIR BARRIER:		
Interior poly with exterior flexible wrap at rim joists and cantilevers		Interior poly		
Interior poly with sealants/tapes at floor, window, wall and ceiling intersections		Other: (specify)		□
Exterior flexible air barrier system with all joints and edges sealed				
Exterior rigid air barrier system with all joints and edges sealed				
Other: (specify)				
Intake duct has "fail-open" motorized damper-except where disallowed by othe	er reg	gulation or where system		YES
operates continuously? [9.36.3.3.]				
Discharge duct has motorized damper, or gravity/spring-operated backflow da	mpe	r installed? [9.36.3.3.]		YES
Min 12mm thick pipe insulation for minimum 2m from inlet and outlet of water heater? [9.36.4.4]				YES
Min 12mm thick pipe insulation for all piping on recirculating service hot water system? [9.36.4.4]				
HRV conforms CAN/CSA-C439 "Rating the Performance of Heat/Energy-Reco	overy	Ventilators'' sensible HR efficiency	□ N/A	□ YES
≥60%@0°C and ≥55%@-25°C?				
A Blower Door Test Report will be submitted after construction and prior to occupancy inspection for				
energy code compliance?			D NO	□ YES