2012 Ontario Building Code Requirements for New Construction

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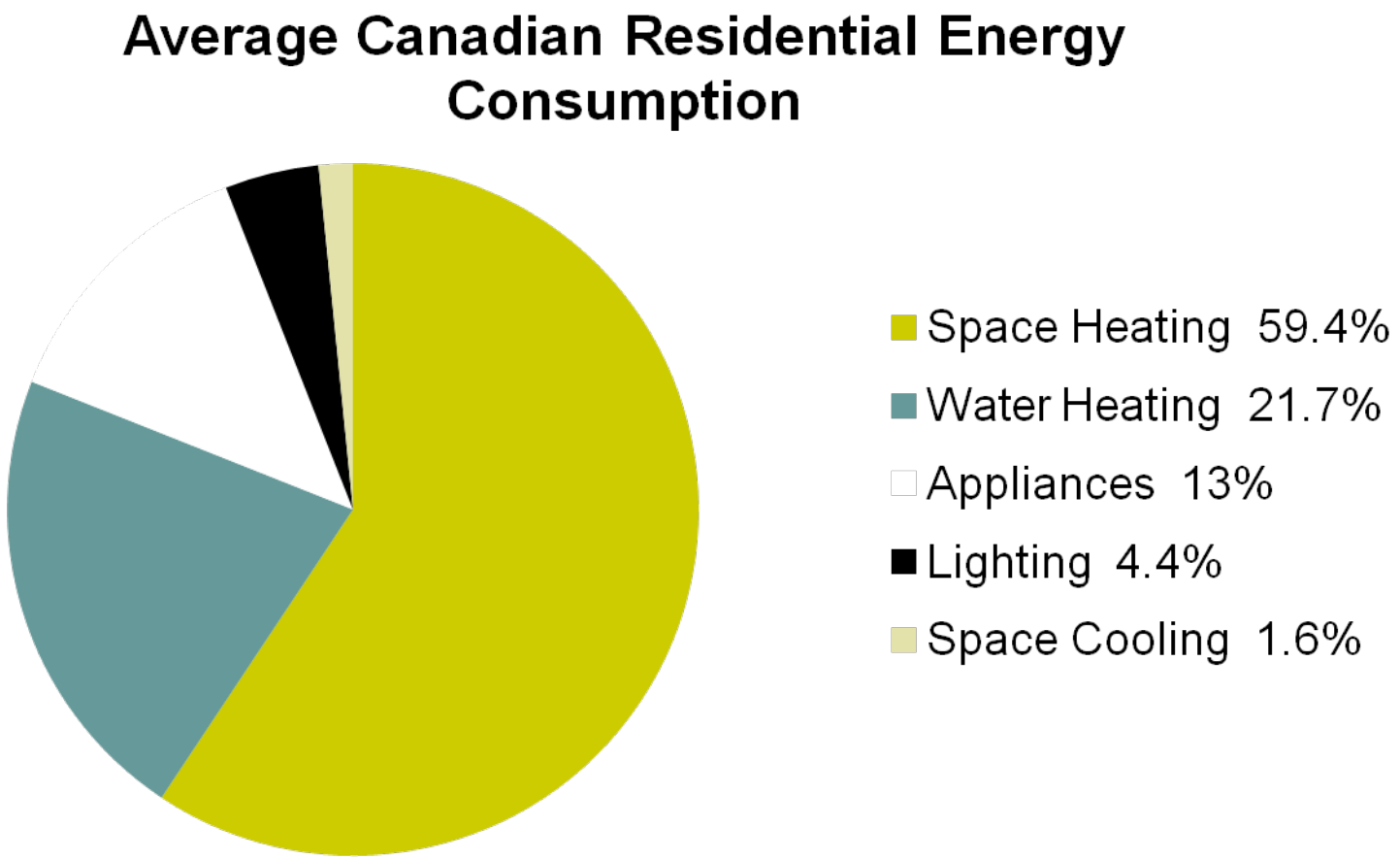
Welcome To The Home Of Your Life !

Ontario Building Code changes

Applicable to permits applied for after December 31, 2011:

- Energy efficiency for houses
- Improved air barrier requirements
- Occupancy permits for certain buildings of residential occupancy

Why so concerned about the cost of energy to run a house??



Energy Efficiency For Housing

Ontario Building Code, Division B, 12.2.1.2.(3):

"The energy efficiency of a building or part of a building of residential occupancy that is within the scope of Part 9 and is intended for occupancy on a continuing basis during the winter months shall,

(a) meet the performance level that is equal to a rating of 80 or more when evaluated in accordance with NRCan, "*EnerGuide for New Houses: Administrative and Technical Procedures*", or

(b) conform to Supplementary Standard SB-12."

Application 12.2.1.2.(3)

Energy efficiency requirements apply to:

- Detached homes,
- Semi-detached homes,
- Town homes, and
- Small apartment buildings.

They do NOT apply to:

- Large residential buildings
- Commercial, industrial, or institutional buildings

This session will deal with residential dwellings only.

Compliance Options

Building permit applications must indicate which compliance options are being proposed to achieve the energy efficiency requirements.

The Ontario Building Code prescribes the following compliance options:

- EnerGuide 80
- Supplementary Standard – 12:
  - Prescriptive Compliance Packages
  - Performance Compliance Method
  - Other Acceptable Methods (Energy Star)

Energy Efficiency For Housing Division B, 12.2.1.2.(a): *EnerGuide80*

EnerGuide 80 NRCan (EGNH January 2005):

- Standard measure of a homes energy performance
- Rating calculated based on annual energy consumption
- Energy efficiency level measured on a scale of 1 to 100

Demonstrating performance level of EnerGuide 80:

- Design – Drawings
- HOT2000 computer simulation software V-9.34c
- Blower door test to determine air leakage

EnerGuide 80 Approach

EnerGuide is a rating system to evaluate the energy efficiency of homes developed by Natural Resources Canada for new houses.

Typical EnerGuide Ratings

Type of House	Rating
New House built to previous minimum building code standards	65-72
New house with some energy-efficiency improvements	73-79
Energy-efficient new house 2012	80-90
House requiring little or no purchased energy	91-100

Responsibilities of New Home Builder:

- **The Energy Efficiency Design Summary chart must now be shown on permit drawings.** Insulation values on section drawing shall match design summary.
- EGNH Report (HOT 2000) shall be submitted to Building Division prior to passing of final building inspection.

Notes:

- If an EnerGuide rating of 80 is not achieved, remedial energy efficiency upgrades will be required, as recommended by the CEA.
- Once energy efficiency upgrades have been installed, an updated EGNH report shall be submitted, indicating an EnerGuide rating of at least 80.

Energy Efficiency Design Summary

Compliance Option

☐ *SB-12 Prescriptive* [SB-12 - 2.1.1.]	Table: Package:
☐ *SB-12 Performance** [SB-12 - 2.1.2.]	* Attach energy performance calculations using an approved software
☐ *Energy Star®** [SB-12 - 2.1.3.]	* Attach BOP form. House must be labeled on completion by Energy Star
☐ *EnerGuide 80®* *	* House must be evaluated by NRCan advisor and meet a rating of 80

Project Design Conditions

Climatic Zone (SB-1):	Heating Equipment Efficiency	Space Heating Fuel Source		
□ Zone 1 (< 5000 degree days)	□ ≥ 90% AFUE	□ Gas	□ Propane	□ Solid Fuel
□ Zone 2 (≥ 5000 degree days)	□ ≥ 78% < 90% AFUE	□ Oil	□ Electric	□ Earth Energy

Windows+Skylights+Glass Doors			Other Building Conditions		
Gross Wall Area =	m^2	% Windows+ _____ %	□ ICF Basement	□ Walkout Basement	□ Log/Post&Beam
Gross Window+ Area =	m^2		□ ICF Above Grade	□ Slab-on-ground	

Building Specifications

Building Component	RSI / R values	Building Component	Efficiency Ratings
Thermal Insulation		**Windows & Doors**[1]	
Ceiling with Attic Space		Windows/Sliding Glass Doors	
Ceiling without Attic Space		Skylights	
Exposed Floor		**Mechanicals**	
Walls Above Grade		Space Heating Equip.[2]	
Basement Walls		HRV Efficiency (%)	
Slab (all >600mm below grade)		DHW Heater (EF)	
Slab (edge only ≤600mm below grade)		NOTES 1. Provide U-Value in W/m2.K, or ER rating 2. Provide AFUE or indicate if condensing type combined system used	
Slab (all ≤600mm below grade, or heated)			

Performance Design Verification [complete applicable sections if *SB-12 Performance*, *Energy Star* or *EnerGuide80* options used]

SB-12 Performance:

The annual energy consumption using Subsection 2.1.1. SB-12 Package_____ is_____Gj (1 GJ =1000MJ)

The annual energy consumption of this house as designed is_____Gj

The software used to simulate the annual energy use of the building is:_____

The building is being designed using an air leakage of _____ air changes per hour @50Pa.

Energy Star: BOP form attached. The house will be labeled on completion by:

Energy Star and *EnerGuide80*:

Evaluator/Advisor/Rater Name: Evaluator/Advisor/Rater Licence #:

Tips on EnerGuide Ratings

- A Bungalow achieves a higher rating than a 2 equivalent storey house
- A full depth basement scores higher than a walkout
- There are minimal gains after R-50 in attics
- An air tight home only scores higher when an HRV is installed (Heat Recovery Ventilator)
- House orientation affects the final rating - gain up to 2 points
- Passive solar design through southern exposure
- R-20 insulation on basement frost walls
- Increased rating using 24 inch on centre stud spacing
- Avoid appliances and fireplaces with pilot lights to reduce energy consumption

Supplementary Standard SB-12 Approach

- Subsection 2.1.1 Prescriptive Compliance Package
- Subsection 2.1.2. Performance Compliance Method
- Subsection 2.1.3. Energy Star

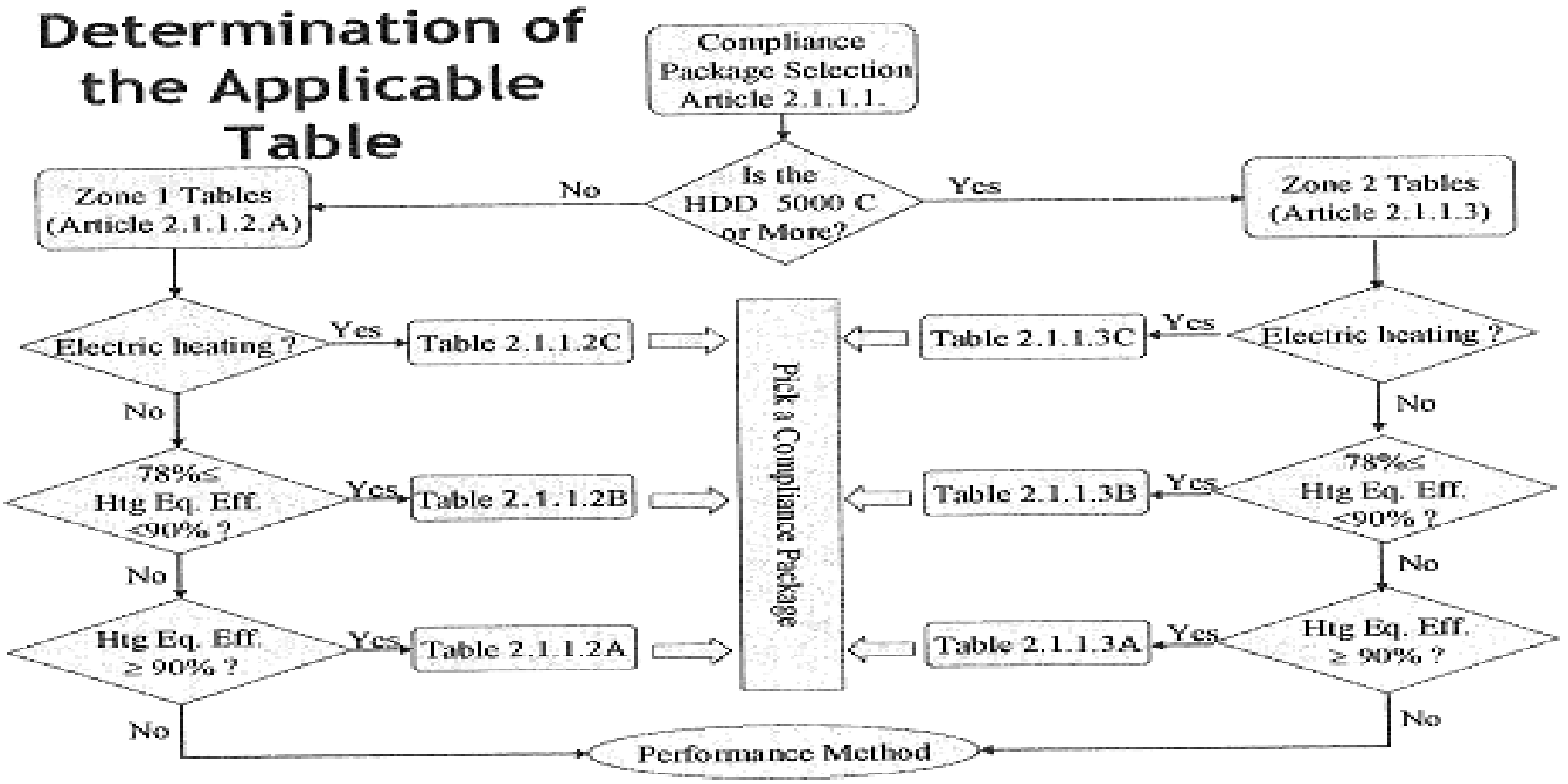
Subsection 2.1.1. SB-12 Prescriptive Requirements Approach

- The prescriptive compliance packages tables address:
  - Minimum RSI and maximum U values for building envelope components
  - Minimum efficiency rating for space heating equipment,
  - Minimum efficiency ratings for domestic hot water heaters, and
  - Minimum efficiency rating of HRV's (in some cases)

- Three Tables for each Zone (Bradford is Zone 1=less than 5000 HDD)
  - Table A – Furnace Efficiency (AFUE) ≥ 90 %
  - Table B – Furnace Efficiency (AFUE)≥ 78 % and < 90 %
  - Table C – Furnace Efficiency Electric Space Heating

- **AFUE** = Annual Fuel Utilization Efficiency

Determination of the Applicable Table



SB-12 Prescriptive Approach

- Choose a compliance package from Table 2.1.1.2.A: Bradford and area: Zone 1, AFUE: ≥ 90%
- Determine Ratio of gross area of openings to the gross area of peripheral walls 2.1.1.1(7) to (10):
  - If glass/wall ratio ≤17%, follow compliance package requirements
  - *(8)*: If ratio >17% but ≤22%, upgrade U-values of glazing
  - *(10)*: Glass/wall ratio >22%, (Prescriptive Compliance Package cannot be used) Subsection 2.1.2. applies= **Performance Compliance only**

Note: Glazing applies to skylights but not to main entrance doors and sidelights.

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)

Component	Compliance Package												
	A	B	C	D	E	F	G	H	I	J	K[4]	L[5]	M[6]
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%
HRV Minimum Efficiency	-	-	-	-	55%	60%	60%	70%	55%	60%	-	-	-
Domestic Hot Water Heater Minimum EF	0.57[3]	0.57[3]	0.62	0.67	0.57[3]	0.57[3]	0.62	0.67	0.62	0.67	0.57[3]	0.57[3]	0.8
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 $W/(m^2 \cdot K)$.

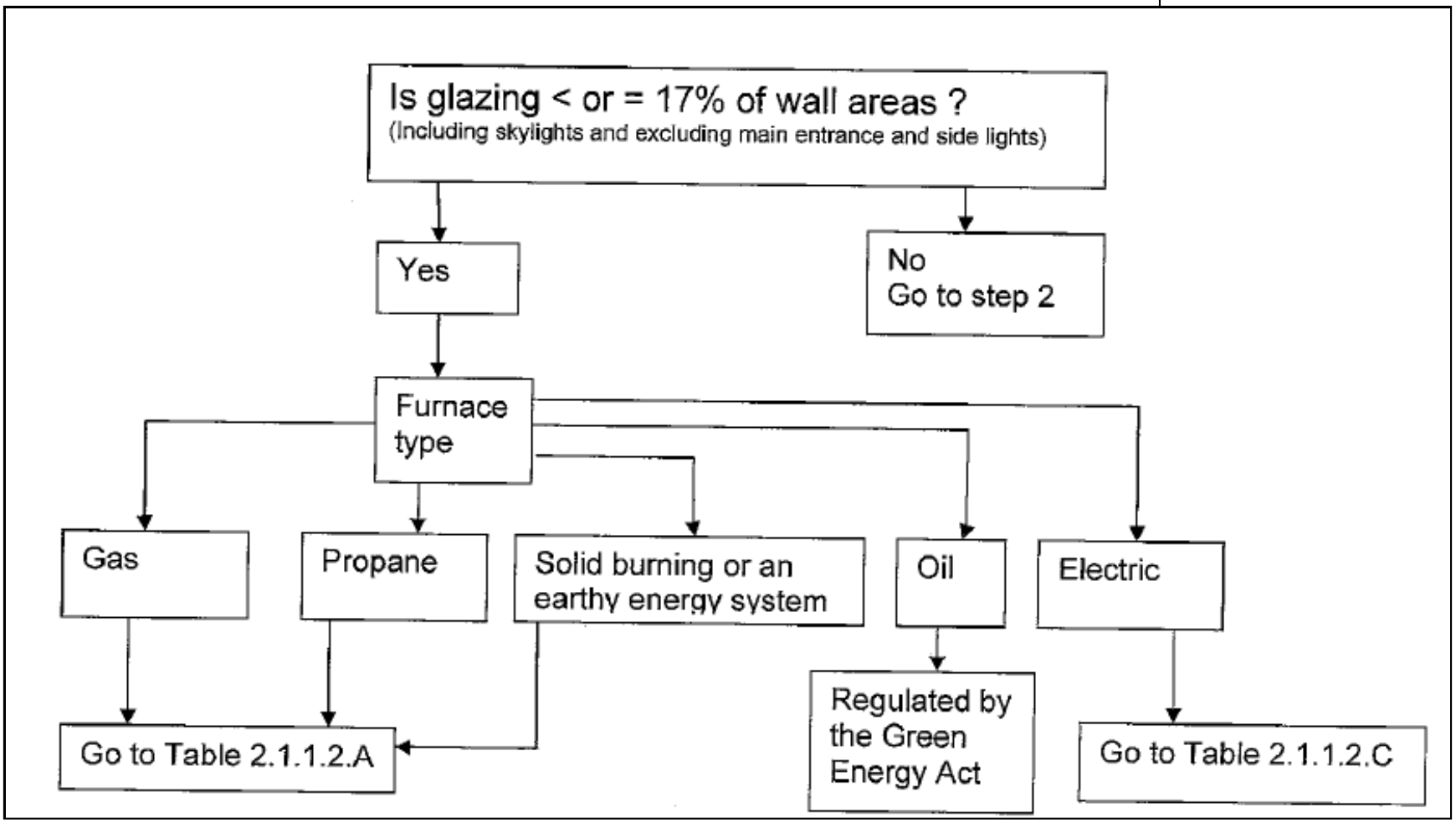
(3) Minimum efficiency regulated by *Green Energy Act, 2009*.

(4) Applies to a *building* with both ICF *basement* walls and ICF above grade walls where the thermal insulation value is the sum of the insulation value on both sides of the walls.

(5) Applies to a *building* with ICF *basement* walls only where the thermal insulation value is the sum of the insulation value on both sides of the walls.

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

Prescriptive Compliance Path



Compliance Tables Summary

- Where the ratio of gross area of glazing is more than 17% but not more than 22% of the total wall area, the building shall comply with the Tables and the U-value shall be upgraded as follows:

1.6 to 1.4	ER 25 to 29 (operable)
1.8 to 1.6	ER 21 to 25 (operable)
2.0 to 1.8	ER 17 to 21 (operable)

Table 2.1.1.2.B, AFUE>78%<90%

Component	Compliance Package					
	A	B	C	D	E	F
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)
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)
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)
Walls Above Grade Minimum RSI (R)-Value[1]	5.11 (R29)	5.11 (R29)	5.11 (R29)	4.75 (R27)	4.75 (R27)	4.75 (R27)
Basement Walls Minimum RSI (R)-Value[1]	3.52 (R20)	2.11 (R12)	3.52 (R20)	3.52 (R20)	3.52 (R20)	3.52 (R20)
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value[1]	-	-	-	-	-	-
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)
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)
Windows and Sliding Glass Doors Maximum U-Value[2]	1.6	1.6	1.8	1.6	1.6	1.8
Skylights Maximum U-Value[2]	2.8	2.8	2.8	2.8	2.8	2.8
Space Heating Equipment Minimum AFUE	78%	84%	84%	84%	78%	84%
HRV[6] Minimum Efficiency	55%	55%	70%	55%	70%	75%
Domestic Hot Water Heater Minimum EF	-	-	-	-	-	-
Column 1	2	3	4	5	6	7

Table 2.1.1.2.C
ZONE 1 - Compliance Packages for Electric Space Heating
Forming Part of Sentence 2.1.1.2.(3)

Component	Compliance Package	
	A	B
Ceiling with Attic Space Minimum RSI (R)-Value(1)	8.81 (R50)	8.81 (R50)
Ceiling Without Attic Space Minimum RSI (R)-Value(1)	5.46 (R31)	5.46 (R31)
Exposed Floor Minimum RSI (R)-Value(1)	5.46 (R31)	5.46 (R31)
Walls Above Grade Minimum RSI (R)-Value(1)	5.11 (R29)	5.11 (R29)
Basement Walls Minimum RSI (R)-Value(1)	3.52 (R20)	2.11 (R12)
Below Grade Slab Entire surface > 600 mm below grade Minimum RSI (R)-Value(1)	-	-
Edge of Below Grade Slab ≤ 600 mm below grade Minimum RSI (R)-Value(1)	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)
Windows and Sliding Glass Doors Maximum U-Value(2)	1.6	1.6
Skylights Maximum U-Value(2)	2.8	2.8
Space Heating Equipment Minimum AFUE	-	-
HRV Minimum Efficiency	55%	75%
Domestic Hot Water Heater Minimum EF	-	-
Column 1	2	3

Notes to Table 2.1.1.2.C.:
(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).

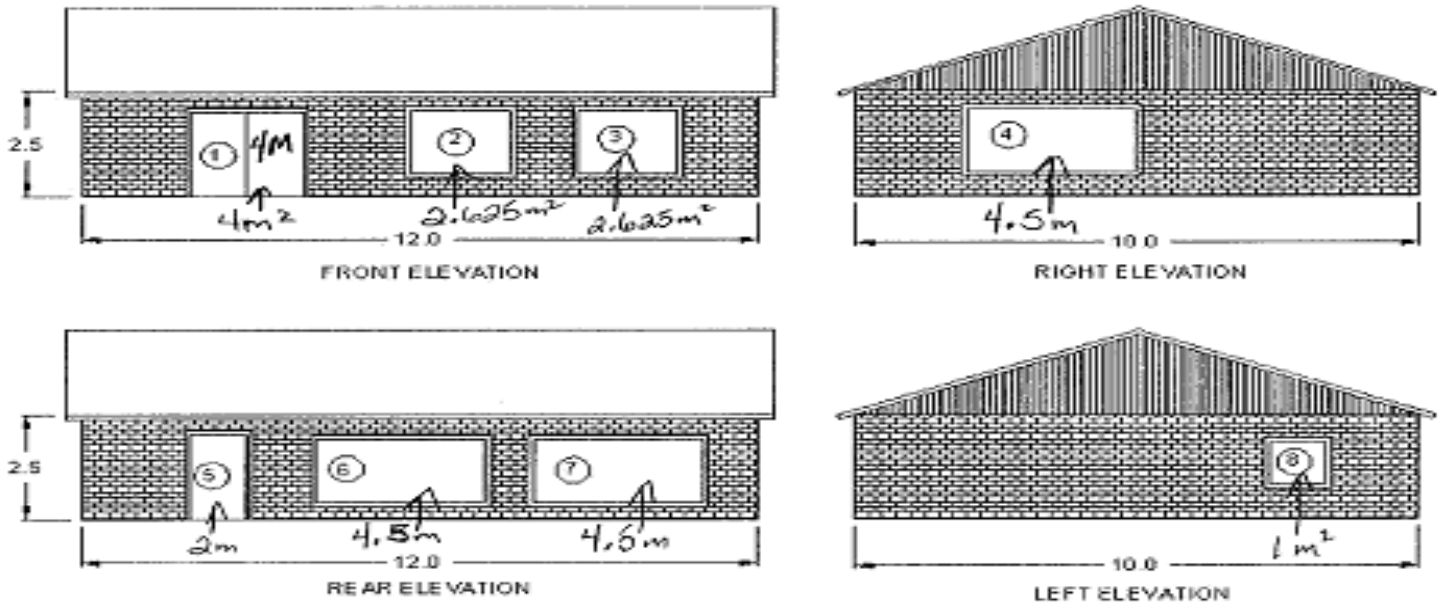
Fenestration

Determination of U-value and Energy Ratings for windows, skylights, and sliding glass doors (2.1.1.8(2)):

- CAN/CSA-A440.2, or
- NFRC 100 and NFRC 200

Table 2.1.1.8. provides minimum energy ratings for windows and sliding glass doors as an alternative to U-values in compliance packages.

Fenestration to Wall Ratio



Total wall area = 110m^2 Total window area = 23.75m^2
Ratio of glazing to walls is 21.59%

Tables in 2.1.1.2. may be used but the glazing is required to be upgraded.

Additional Requirements

- Where there is a walkout basement, the wall that contains the exterior door opening and basement walls with more than 50% exposed above grade are treated the same as above-grade walls.

- For elements that act as a thermal bridge (2.1.1.4.), a minimum of 25% of the insulation shall be outside of studs unless studs have an RSI 0.90 (R5) value or greater.

- 2 X 4 studs **do not** meet this requirement.
- 2 x 6 studs achieve R5

Additional Requirements

- Special consideration for log wall construction, post, beam, and plank construction (2.1.1.5.).
- Insulation of foundation walls to extend to within 200mm above the slab.
- Compensation for glass block used in wall (2.1.1.1.(6)).

Slabs on Ground SB-12, 2.1.1.6.(5) through (7)

- Slab edges within 600mm of exterior ground level (walkout basements) require perimeter insulation on the foundation wall extending 600mm below exterior ground;

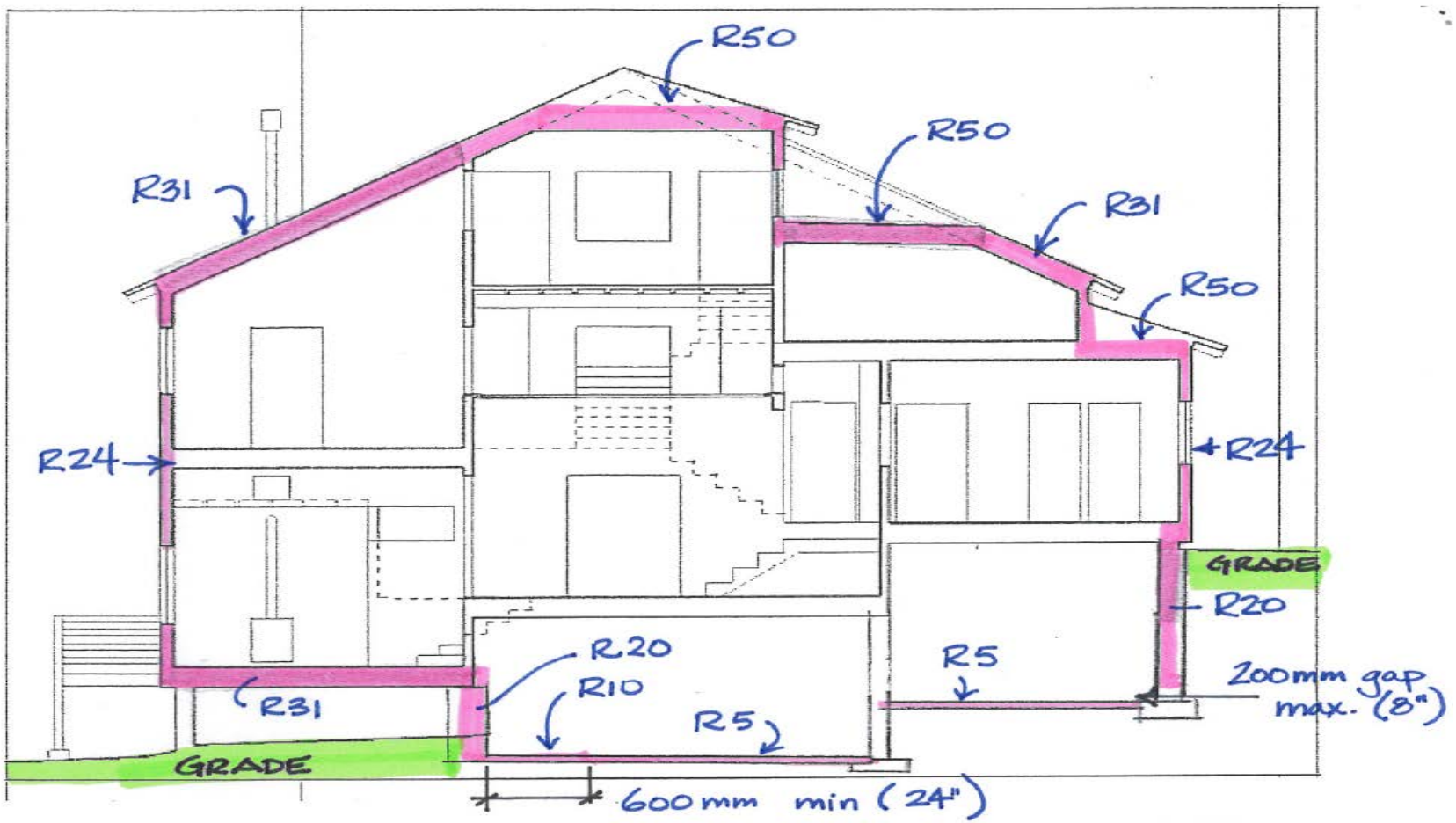
- Concrete slabs within 600mm of exterior ground require entire surface insulated (slab on ground);

- Slabs containing heating ducts, pipes, or cables must have the entire heated surface of the slab insulated.

Additions to existing buildings

- Comply with an applicable compliance package, or
- Table 2.1.1.10. no requirements for heating equipment, DHWH, or HRVs
- Rules for one storey sunrooms

Table 2.1.1.2.A –Compliance Package “A”



COMPLIANCE PACKAGE A

SB-12 Subsection 2.1.2 Performance Method

- Compares performance of the proposed design against the performance of an applicable compliance package.

- Annual energy use of a proposed design is equal or less than annual energy use of a compliance package.

- Where the ratio of gross area of glazing is more than 22% of the aggregate wall area above grade, the building shall comply with Subsection 2.1.2 (Performance Package).

SB-12 Performance Method

- Performance is measured by the annual energy use of the building.
  - Annual energy use of the building is calculated using recognized “HOT 2000” or “REM/Rate” software
- Blower Door Test is OPTIONAL
  - Air barrier requirements of Subsection 9.25.3. must be applied in addition to the requirements of the performance method
- A proposed design would have to meet the performance level of a permitted compliance package based on:
  - Zone location, energy source, and equipment efficiency

SB-12 Performance Method steps

- Pick an appropriate compliance package.

- Simulate the building's annual energy use based on the building being constructed in accordance with the selected compliance package and in accordance with the proposed design.

- Compare the results of the simulation.

Energy Use Calculations

- Energy simulation using recognized software
- Use of local climatic data
- Assumptions for the compliance package run:
  - Air leakage rate of 2.5 for detached and 3.0 for attached
  - Framing as per 2.1.2
  - Equivalent domestic hot water, appliance and other plug in loads must be used in the simulations.

Note: The thermal performance of building envelope cannot be less than 75% of that required compliance package.

ENERGY STAR Approach

2.1.3.1. Other Acceptable Compliance Methods

(1) A building shall be deemed to be in compliance with the requirements of Subsection 2.1.1. provided that the building is in compliance with the technical requirements of NRCan (January 2011), *"Energy Star for New Homes: Technical Specifications - Ontario"*

What is the ENERGY STAR for New Homes?

- Promotes energy efficiency guidelines that enable new homes to be more energy efficient than those built to minimum provincial building codes.

- Increased efficiency of these homes translates into reduced energy costs for homeowners.

- The Energy Star for New Homes initiative is currently available in many regions across Canada and is delivered in the field by a network of regional service organizations.

What Is an ENERGY STAR® Qualified Home?

- A home that has been **built by a licensed ENERGY STAR®** builder who incorporates energy efficient **features** into the home so that it can meet the ENERGY STAR® for New Homes technical specifications.
- During construction homes are evaluated by on-site by an independent (not employed by the builder) energy advisor who verifies compliance with ENERGY STAR® for New Homes technical specifications.
- After completion, the service organization issues an ENERGY STAR® for New Homes label and certificate for the house.

Division B, 12.2.1.2. (b) – *SB-12 Energy Star*

Recent amendments to the SB-12 recognize houses built to the technical specifications as specified in Energy Star for New Homes.

Key points – Energy Star for New Homes:

- OBC reference: SB-12, Chapter 2, Subsection 2.1.3. (Other acceptable compliance methods);
- Administered by Natural Resources Canada (NRCan);
- Service organization required to implement and deliver Energy Star service;
- Certified Energy Advisor (CEA) required;
- HOT2000 software required;
- Blower door test (BDT), carried out by CEA, required on every house. Service organization creates certificate and label.

Responsibilities of New Home Builder

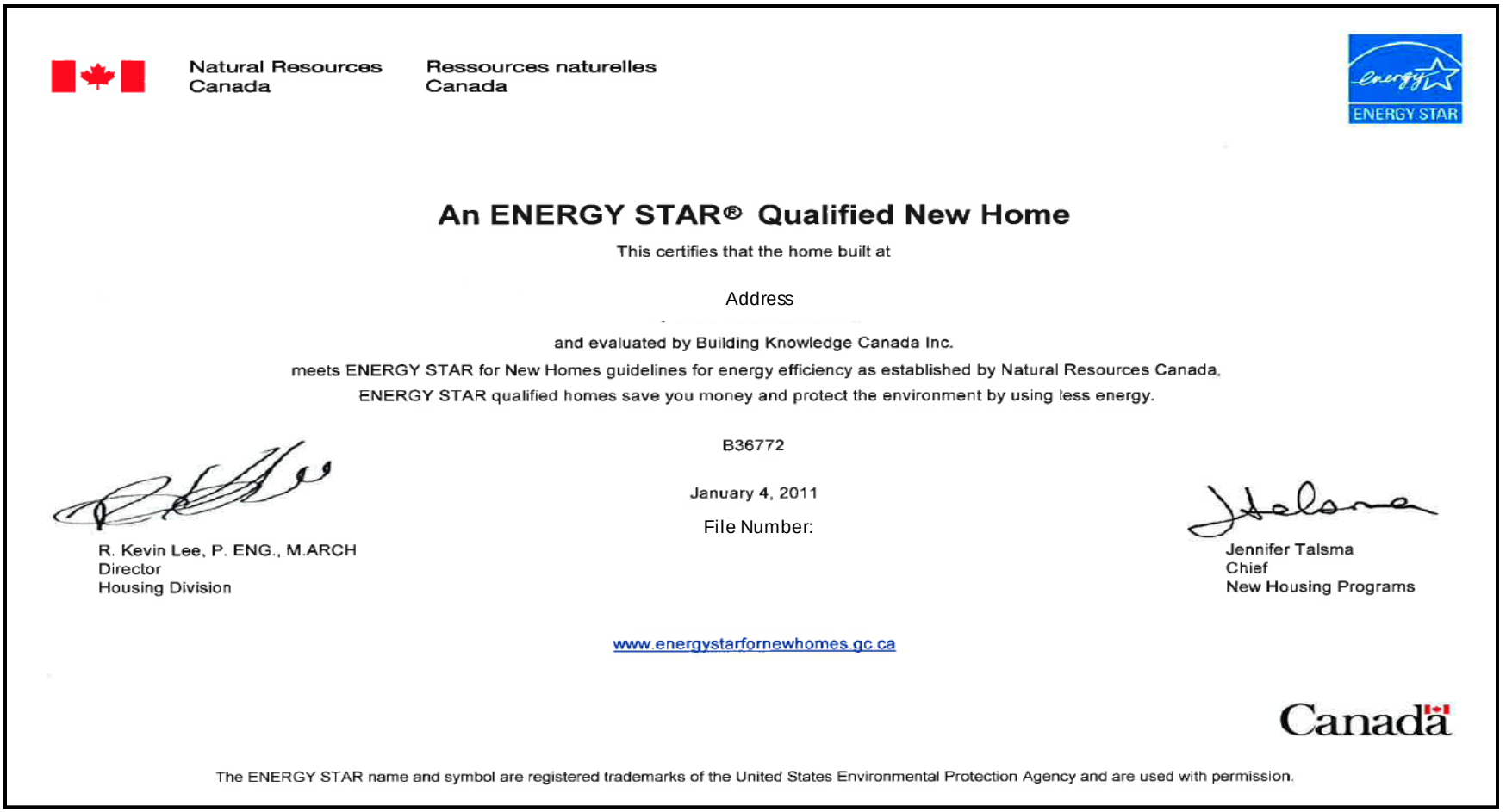
- Energy Efficiency Design Summary chart on permit drawings. Insulation values on section drawing shall match design summary.

- Energy Star for New Homes certificate shall be submitted to Building Division prior to passing of final building inspection

Notes:

- If Energy Star certificate is not obtained, remedial energy efficiency upgrades will be required, as recommended by the CEA.

Energy Star Certificate



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ENERGY STAR

An ENERGY STAR® Qualified New Home

This certifies that the home built at

Address

and evaluated by Building Knowledge Canada Inc.

meets ENERGY STAR for New Homes guidelines for energy efficiency as established by Natural Resources Canada.

ENERGY STAR qualified homes save you money and protect the environment by using less energy.

B36772

January 4, 2011

File Number:

R. Kevin Lee, P. ENG., M.ARCH
Director
Housing Division

Jennifer Talsma
Chief
New Housing Programs

www.energystarfornewhomes.gc.ca

Canada

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Articles 9.7.1.7 and Subsection 9.25.3., Measures to Control Air Infiltration

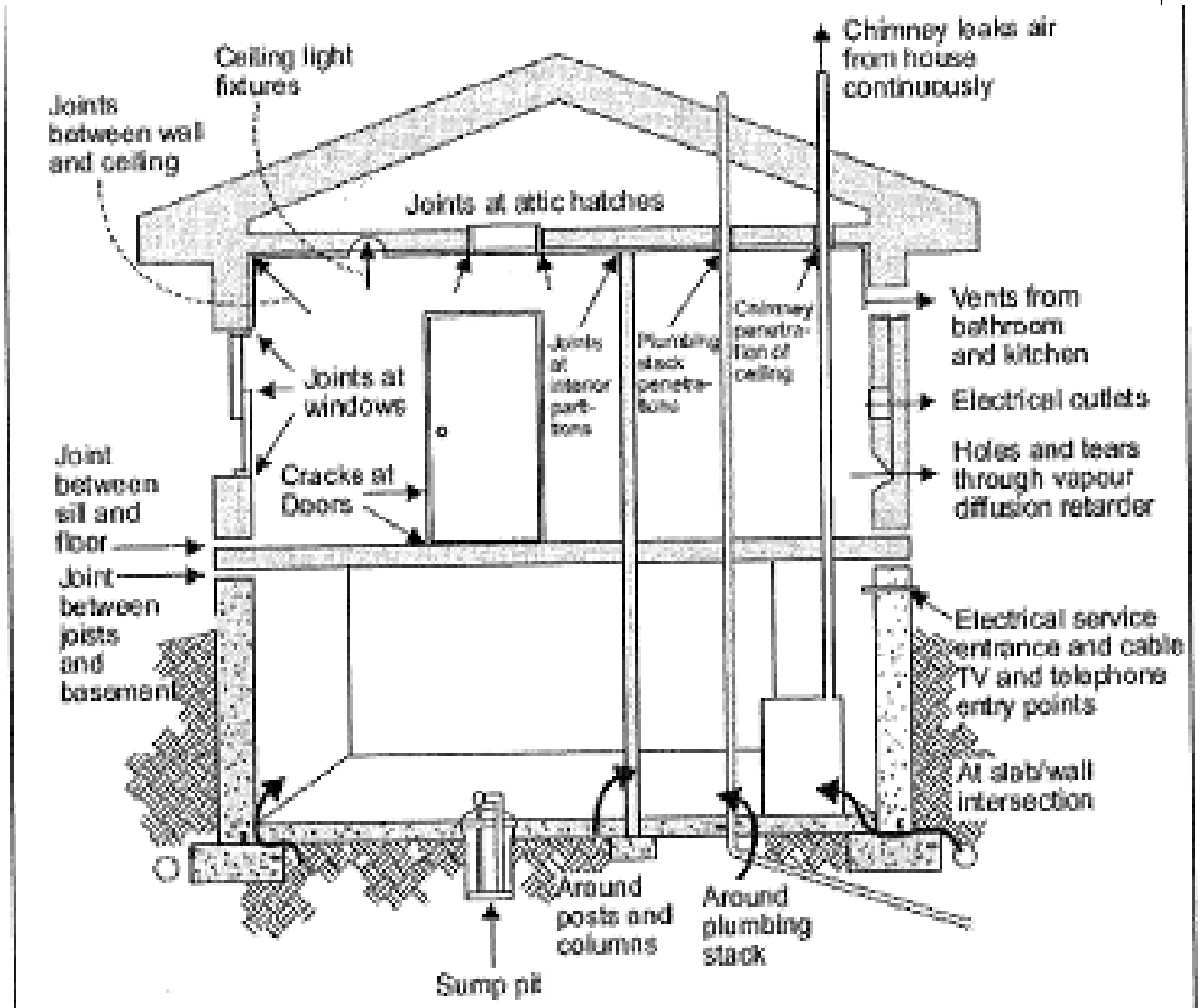
Effective January 1, 2012, Division C, Clause 1.3.5.1.(2):

(e) substantial completion of insulation and vapour barriers,

(e.1) substantial completion of air barrier systems

- A2 level windows are required.
- Air barrier system required in all assemblies, separating conditioned spaces from unconditioned spaces.
- More prescriptive requirements for continuity of air barrier systems.

Continuity of Air Barrier Systems

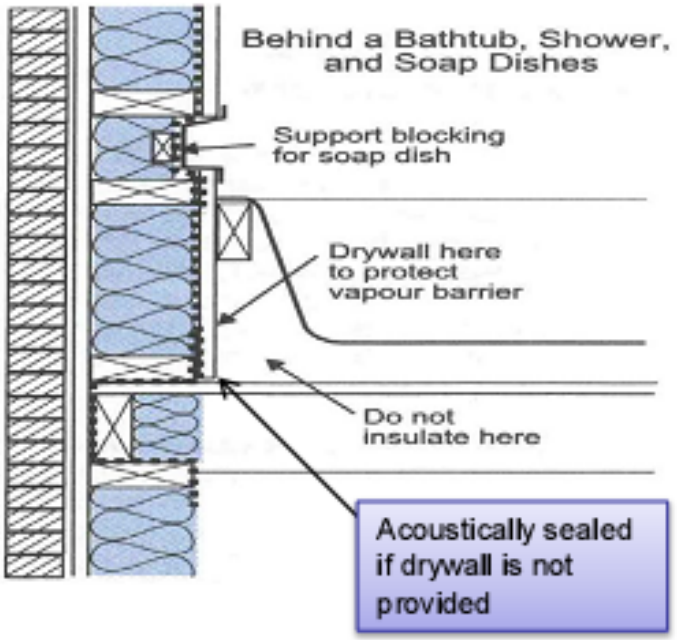


Air Barriers Continued

Division B, Sentence 9.25.3.3.(3)

- Prescriptive requirements

  Behind bath tubs, shower enclosures, fire places and other concealed spaces where the air barrier may not be fully supported.



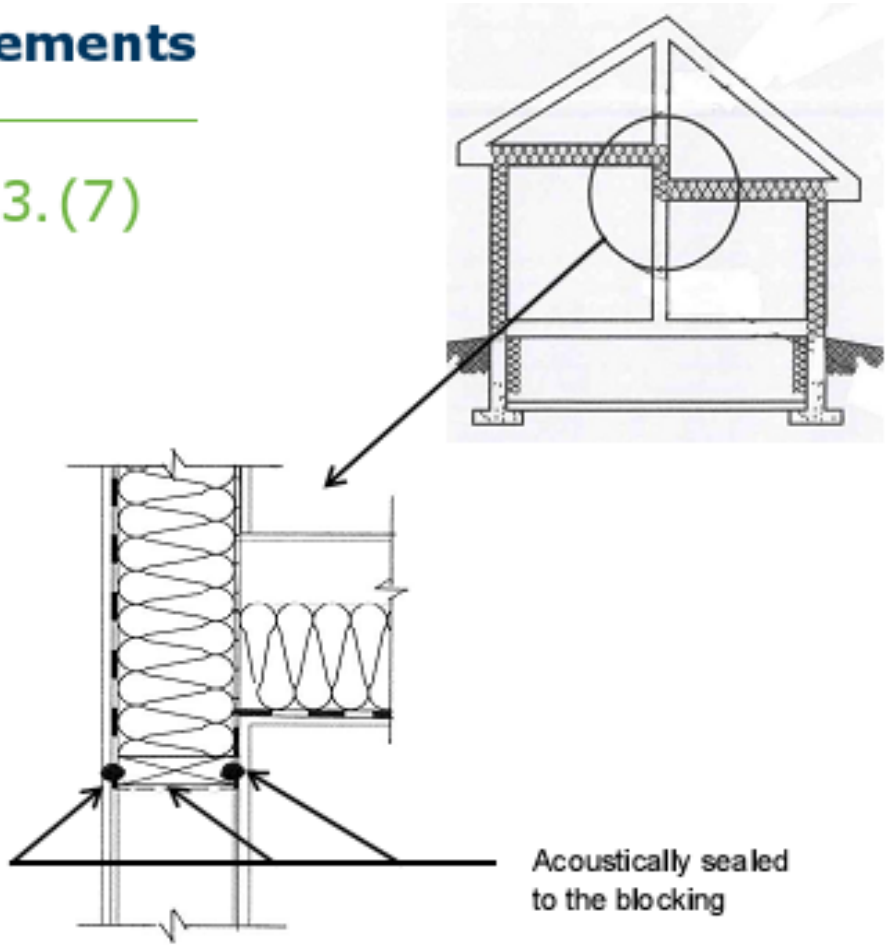
Interior Walls and Attic Access

Improved Air Barrier Requirements

Division B, Sentence 9.25.3.3.(7)

- Prescriptive requirements

Where an interior wall projects through a ceiling or extends to become an exterior wall shall be sealed each air barrier to the blocking or wrapping around the transition.

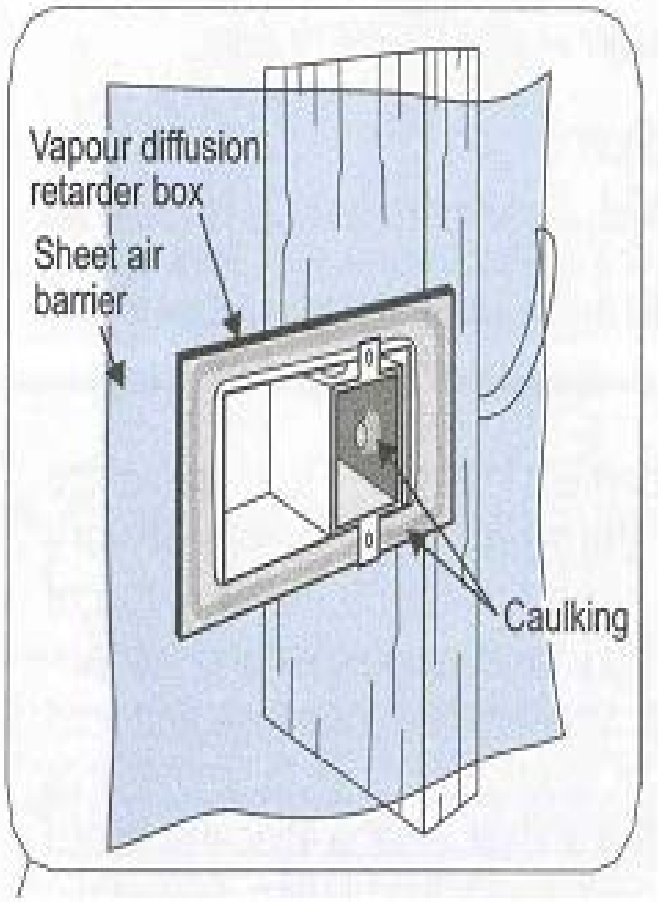


Electrical Service Penetrations

Division B, Sentence 9.25.3.3.(9)

- Prescriptive requirements

Electrical wiring, electrical boxes, piping or duct work shall be sealed with compatible material such as tape or caulking.

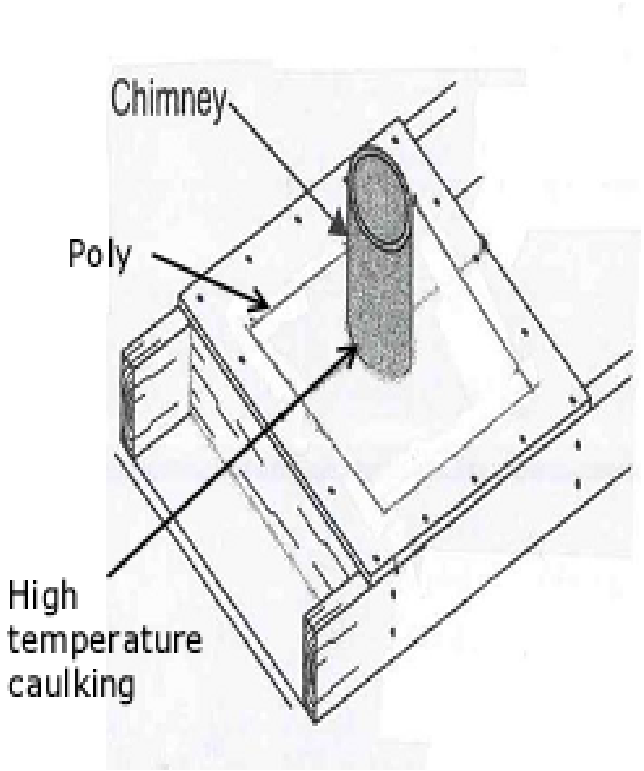


Chimney Penetrations

Division B, Sentence 9.25.3.3.(14)

- Prescriptive requirements

Chimney or gas vent penetrations shall be sealed to the air barrier with tape or another compatible material and to the vent with high temperature caulking in conformance with the manufacturer's installation instruction.



Sump Pit Covers

1.3.3.4. Occupancy Permit — Certain Buildings of Residential Occupancy

- Scope - applies to a buildings intended for residential occupancy:
  - Building height is not more than 3 storeys
  - Building area is not more than 600 sq.m
  - No dwelling unit above another dwelling unit
  - No dwelling units sharing a means of egress

- Does not apply to existing singles, semis, and row-house dwellings being materially altered or extended.

OBC Amendments
Occupancy Permits

- 1.3.3.4 (5), outlines construction requirements that must be satisfied for the issuance of an occupancy permit

- Enhanced requirements over previous conditions for residential occupancy (1.3.3.2.)
  - Structure complete
  - Building envelope substantially complete
  - Grading substantially complete
  - Required fire fighting access routes provided
  - Required electrical supply provided
  - Required plumbing fixtures substantially complete

General Requirements	N	Y	Comments
Structure of the building or part, is substantially complete structural members for dwelling unit: footings, foundations, framing (including exterior decks, porches, balconies)			
Building envelope with respect to dwelling unit is substantially complete Cladding required on all sides, Assemblies requiring fire resistance rating; required closures installed, Roofing (including flashing), Doors and windows, Blower – door test			
Insulation, vapour barriers and air barriers substantially complete Insulation (locations, RSI Value), Air barriers (locations, continuity), Vapour barriers (locations, materials)			
Walls enclosing dwelling unit to conform to s.9.25.2.3 (7), Division B of the OBC (insulation and vapour barrier to be protected from mechanical damage)			
Grading substantially complete Site graded so water will not accumulate near the building, No adverse affect to adjacent properties			
Required electrical supply provided for the dwelling unit Where services available, electrical facilities shall be provided			
Required fire fighting access routes provided and accessible Access to be provided to building by street, private roadway or yard			
Exits complete and operational for dwelling unit One exit required (sliding door permitted; Exit through garage acceptable if man door to the exterior provided)			

General Requirements	N	Y	Comments
Floor access and egress systems complete and operational for dwelling unit Clear path required from any point in the dwelling unit to an exit, Stairs (width, run, rise, tread depth, headroom)			
Handrails and Guards complete and operational for dwelling unit Substitute guards must comply with OBC requirements			
Fire Separations Complete Fire separation between units, Required fire stopping			
Exhaust fume barrier complete and operational between attached garage and dwelling unit Including self closing device, weather stripping, caulking, etc			
Water supply and sewage disposal complete and operational Connection to a municipal drinking-water system or to a drinking-water system, Connection to a public sanitary sewer, combined sewer or a private sewage disposal system			
Lighting system complete and operational Exterior lights at entrances with switches in dwelling unit, Lighting outlets with fixture controlled by a wall switch required for kitchens, bedrooms, living rooms, utility & storage rooms, laundry rooms, dining rooms, bathrooms, water closet rooms, vestibules, hallways, stairways and garages			
Heating system complete and operational ensure fuel supply, ensure appliance is sized sufficiently			
Water system, building drain & building sewer and drainage & venting system complete, operational and tested Hot and cold water, Water test (at rough-in); Air test (at rough-in); Ball test; Final test optional (requires every fixture in place)			
Required plumbing fixtures substantially complete and operational Kitchen sink, lavatory, bath tub or shower & water closet shall be provided, Laundry facilities or a space for laundry facilities provided, Floor drain to be installed in basement			

Occupancy Inspections

- 1.3.5.1. – Prescribed Notice
  - Completion of construction and installation of components required to permit the issue of an occupancy permit under 1.3.3.4.(5)

- 1.3.5.2. – Additional Notices
  - Completion of a building for which an occupancy permit is required under 1.3.3.4