

City of Red Deer Requirements for ABC Division B Section 9.36 Compliance

Please consult the companion 9.36 Project Summary User Guide for help in completing this form.

Project Name:		Building Permit Number (completed internally)
Project Address:		
Applicant:		
Applicant Address:		

Basic Building Information

Information provided below sets the buildings geometry to establish compliance with the ABC Division B Section 9.36

Climate Zone (HDD):

Building Area (m²):

Please check the appropriate box to indicate your chosen compliance path
(select only one)

PRESCRIPTIVE

TRADE-OFF

PERFORMANCE

SUBMIT THE FOLLOWING INFORMATION WITH YOUR APPLICATION BASED ON THE COMPLIANCE PATH CHOSEN

All Compliance Paths

- Identify on the plans any/all assemblies containing heating pipes, cables, or membranes.
- Indicate if a Heat Recovery Ventilator is proposed and, if it is proposed, note the type and efficiency.
- Indicate **effective** Rsi values for all assemblies of the building envelope, both above and below ground (e.g. walls, floors, roofs, windows and doors).
- Provide the calculations used to determine the Rsi values (hand calculations or from a software program).
- Indicate the air barrier system being proposed.
- Indicate the type and equipment efficiency of the HVAC system components. Include dampers on intakes and outlets where required.
- Note the type and equipment efficiency of the Service Hot Water system components.
- Note if Hot Water recirculation is proposed, and the thickness and extent of pipe insulation in the Service Hot Water system.

Provide the following architectural details indicating continuity of insulation and air barrier:

Attic hatch, eaves/top of wall, upper floor rim joist, top of basement wall/main floor junction, slab/footing junction, cantilever, bonus room floor over attached garage including ducts, typical outlet box detail, typical window/door jamb.

And, if applicable:

Party wall meeting outside wall, electric meter/vent pipe/duct in insulated wall, skylight shaft walls, slab edges in walkouts & heated slabs, masonry chimneys and fireplaces.

Trade Off Compliance Path

In addition to the information required above, a trade-off calculation, completed in accordance with 9.36.2.11, must be submitted for any trade-off carried out for above ground assemblies.

The areas of assemblies used in the calculation shall be clearly identified on the drawings.

Performance Compliance Path (residential occupancies)			
Information provided below sets the input parameters for the energy simulation used to demonstrate compliance with ABC Division B Section 9.36 via the performance compliance path.			
Reference Model		Proposed Model	
Which direction does the front of the house face as modelled (N, NE, E, SE, S, SW, W, NW):			
Airtightness (ACH @ 50Pa)	2.5	Airtightness (ACH @ 50Pa)	3.2 2.5 other:
Solar Heat Gain Co-efficient Glazing (SHGC)	0.26	Solar Heat Gain Co-efficient Glazing (SHGC):	
Thermal Mass (MJ/m ² °C)	0.06	Thermal Mass (MJ/m ² °C):	
Solar Absorbance	0.4	Solar Absorbance:	
FDWR (%)	17 22 other:	FDWR (%):	
Area of Fenestration North Elevation (m ²):		Area of Fenestration North Elevation (m ²):	
Area of Fenestration South Elevation (m ²):		Area of Fenestration South Elevation (m ²):	
Area of Fenestration East Elevation (m ²):		Area of Fenestration East Elevation (m ²):	
Area of Fenestration West Elevation (m ²):		Area of Fenestration West Elevation (m ²):	
HVAC System Efficiency (%):		HVAC System Efficiency (%):	
HVAC System Efficiency (%):		HVAC System Efficiency (%):	
Space Cooling Equipment Efficiency (%):		Space Cooling Equipment Efficiency (%):	
Service Water Heater Efficiency (%):		Service Water Heater Efficiency (%):	
Service Water Heater Efficiency (%):		Service Water Heater Efficiency (%):	
Ventilation Rate (l/s):		Ventilation Rate (l/s):	
NOTE: If the ACH rate entered above for the proposed house is less than 2.5ACH a blower door test will be required prior to occupancy. A note to this effect shall be placed on the drawings.			
Performance Data Summary			
Target Energy Use (reference)		Calculated Energy Use (proposed)	
Software			
Software Title:		Version:	
Software Adaptations Made:			
Please attach the full modelling report generated by an ANSI/ASHRAE 140 compliant software package to this form. Failure to submit the complete report will result in your application being placed on hold.			
Declaration			
Please indicate the person responsible for preparing the calculations used to show compliance with ABC Division B Section 9.36			
Name:			
Representing Firm:			
Contact Information:	email:	tel:	
Address:			
I hereby certify that the calculations submitted were prepared in full accordance with ABC Division B Section 9.36 and the operating procedures of the software		Signature	
Nothing in this form, or the attached calculations, shall preclude the Safety Codes Officer reviewing this file and requesting an appropriate professional to stamp and sign the submission.			