

New Home Program



Design Offer

Building a high-performance home can take more time than building a standard one. That's why we introduced our Design Offer rebate of up to **\$7,000** per home. It's available when pursuing BC Energy Step Code 4 or 5. To participate, you'll need to work with a variety of consultants, including building science and mechanical design specialists.

The rebate

The Design Offer supports early planning for building envelope consultants, mechanical design and/or Integrated Design Process (IDP). You can choose to participate in one, two or all three elements of the offer and receive up to **\$7,000** toward the cost of hiring consultants to complete the work. The rebate is available per detached home, or for each unique floorplan in a multi-family complex (to a maximum of **\$50,000** per complex).

The three elements of the Design Offer rebate are:

Elements	Rebate
Integrated Design Process (must use a pre-approved IDP facilitator)	\$1,000
Envelope design (must use a building science consultant)	Up to \$6,000 combined
Mechanical design (must use a mechanical design specialist)	

Eligibility requirements

New home construction projects must be located in FortisBC's service area and meet the following criteria:

- The project is in the early design stage (prior to permit application).
- Design assistance is provided to optimize building envelope, mechanical systems and/or IDP.
- The building design can be modified to enhance the effectiveness of the mechanical system and/or the building envelope to improve the overall energy efficiency of the home.

Design Offer elements

Envelope design

Architects and designers can have an important impact on a project by optimizing the envelope for energy performance and lower construction costs.

Deliverables include:

- envelope plans/assembly details
- effective insulation (RSI) calculations for each assembly used in the home
- details of areas with significant thermal bridges and how to address them
- airtightness details demonstrating a continuous air barrier



Mechanical design

Energy consultants are engaged to conduct heating and cooling load calculations, which conform with CSA F280 to lead to a better HVAC design. Carrying out CSA F280-12 heat loss/gain analysis will ensure properly sized heating and cooling systems, improve comfort and help reduce cost. Following these best practices can help homeowners and builders avoid the issues with HVAC equipment oversizing.

A complimentary subscription for the CSA F280 software will be available for the mechanical designer.

Deliverables include:

- mechanical design plans including detailed equipment schedule
- a start-up report that includes manufacturer requirements and best practices from TECA or HRAI industry associations (provided by mechanical system designer)

Integrated Design Process (IDP)

The IDP is a collaborative design approach intended to optimize performance, cost, occupant comfort and resilience of a residential building. It involves engaging the builder and their team—including designers, mechanical contractors, energy advisors, plumbers, electricians, framers and insulators—early in the design stage. IDP examines the needs and performance of a building throughout its lifecycle with the goal of ensuring the objectives of the builder are met.

The deliverable is a report summarizing the following:

- project overview (project location, housing type, number of units, construction timelines)
- attendees of visioning and charrette workshops
- visioning session and charrette notes
- observations of performance benchmarking activities
- modelling and design optimization results
- proposed solutions
- lessons learned, key strategies and knowledge derived from the process of performing envelope and mechanical design and/or IDP.
- a summary of the steps required to reach Step 4 or 5

How to apply

For more details and to apply, contact the New Home Program team at newhome@fortisbc.com.

Connect with us @fortisbc



Resource List

Choosing the right consultant is the first step towards starting an energy-efficient new construction. The following design consultants can help builders pursue Steps 4, or 5 to help encourage processes that will reduce time and risk while still creating high-performing homes more effectively and efficiently.

To participate in the New Home Program - Design Offer, builders are required to work with a Mechanical HVAC Designer and/or a Building Envelope Specialist

Recognizing mechanical and building envelope design may be new to some builders, this resource list serves as a starting point to identify individuals or organizations that work in these fields. Builders are not required to work with the companies listed here to participate in the Design Offer. When hiring a design consultant, it's a good practice to look for their certifications, and credentials and confirm they can meet the Design Offer deliverables.

Disclaimer

FortisBC, not being the builder-developer, designer, manufacturer, provider, or installer of the appliances, products, or equipment, makes no representation or warranty whatsoever as to the safety or fitness of, the necessity for, the quality of workmanship of, or the energy efficiency/savings of, any appliance, product, equipment or service or skill of any contractor or energy advisor.

Listings on the next page

Qualified Integrated Designed Process Facilitators

The following individuals have successfully completed and qualified to be recognized as Canadian Association of Consulting Energy Advisors (CACEA) Integrated Design Process (IDP) Facilitators

The IDP is a collaborative approach to building design, construction, and operation. With the guidance of a qualified IDP Facilitator, the process promotes innovative thinking where builders, renovators, contractors, trades, and homeowners find 'ideal' and smart building solutions.

CACEA's IDP Facilitation training included classroom training on the IDP; facilitation skills, and documentation requirements in addition to observing how candidates apply and deliver on the requirements of an IDP facilitator.

Company Name	First	Last	City	Province	Email
A&J Energy Consultants	Jack	Zhou	Kitchner	ON	jack@ajec.ca
ARG Energy	Ross	Gordon	Sechelt	BC	ross@argenergy.ca
Bernhardt Consulting	Mark	Bernhardt	Victoria	BC	energy@bernhardtcontracting.com
Bow Crow Design	Kim	Walton	Sundre	AB	kim@bowcrow.com
Building Knowledge Canada	Mark	Rosen	West Vancouver	BC	mark.rosen@buildingknowledge.ca
Capital Home Energy	Luke	Dolan	Vancouver	BC	luke@capitalhomeenergy.com
E3 Eco Group	Emma	Conway	Burnaby	BC	emma@e3ecogroup.com
E3 Eco Group	Einar	Halbig	Burnaby	BC	einar@e3ecogroup.com
Ecosynergy	Amelie	Caron	Airdrie	AB	acaron@ecosynergy.ca
Egnite Sustainability Inc.	Brendon	Gray	Kelowna	BC	brendon@egnite.ca
Green Canada Home Advisors	Shahin	Arvandi	North Vancouver	BC	Arvandi.shahin@gmail.com
Homesol Building Solutions Inc.	Stephen	Magneron	Perth	ON	smagneron@homesol.ca
NRG Inspections and Consulting	Rene	Kreutzwieser	Saskatoon	SK	kreutzwieser.rene@gmail.com
ROV Consulting Inc.	Bahareh	Reza	Kelowna	BC	bahar@rovconsulting.ca
Shoreline Building Performance	Andreas	Gagnier	Nanaimo	BC	andreas@shorelinebp.ca
Shoreline Building Performance	Brett	Tracy	Kelowna	BC	brett@shorelinebp.ca
Skye Ridge Enterprises	Graham	Knights	Kamloops	BC	graham@skyeridgeteam.com
Sol Invictus Energy Services	Chelsah	Thomas	Lacombe County	AB	chelsah@sies.energy
Station Craft Building Optimization	Ben	Station	Kelowna	BC	https://stationcraft.ca
Total Home Solutions	Gilles	Lesage	Kelowna	BC	gilles@totalhome.ca

Mechanical HVAC Designer

Companies listed below have met at least one of the following criteria:

- Engineers and Geoscientists in British Columbia
- Red Seal (Gasfitter Class B or Refrigeration and Air Conditioning Mechanic)
- Completed all HRAI/TECA courses and use a Heat Loss/Heat Gain software

Company Name	Location	Phone Number	Website
Acacia Engineering Ltd.	Calgary	403-245-2200	acaciaengineering.ca
Airtight Consulting Ltd.	Chilliwack	604-855-8006	airtightconsulting.ca
Alphatec Energy Inc.	North Vancouver	604-771-5886	rasoulivan@gmail.com
BMAC Technologies and Consulting Inc	New Westminster	604-544-7564	www.bmactc.com
Building& Environment Engineering Inc	Ontario	519-856-9916	rlay@xplornet.com
Canadian Aerothermal	Penticton	1-877-663-6472	canadianaerothermal.ca
Chen Consulting Ltd	Burnaby	604-629-6755/604-722-4895	www.chenconsulting.ca
Ecolighten	North Vancouver	604-971-2088	www.ecolighten.com
Ecology Energy Management	Victoria	250-514-7087	liam@ecologyconsulting.ca
Egnite Sustainability Inc. Finesse Testing & Commissioning Inc.	Kelowna	778-940-1524	www.egnite.ca
Energy 1 Services	West Vancouver	1-844-488-3700	www.energy1services.com
Energycraft Building Consulting	Campbell River	604-791-8232	www.energycraft.ca
EnerTech Solutions Ltd.	Sooke	1-250-896-1421	enertech.solutions.com
Enforma Engineering	Kelowna	778-363-0401	enforma.ca
Epro Consultants Ltd.	Abbotsford	778-242-8111	eproconsultants.ca
Falcon Engineering/Hayley Shearer	Kelowna	250-762-9993	falcon.ca
GeoTility Geothermal Installations Corp	Kelowna	250-762-5776	www.geotility.com
Greenfoot Energy Solutions	West Kelowna	778-504-7059	greenfoot-bc.hvac-dealer.com
HVAC Systems & Solutions Ltd.	Port Coquitlam	604-944-9222	www.hvacsystems.ca
Infinity Solutions	Cranbrook	250-464-0632	infinitysolutionseng.ca
IRC Building Sciences Group	Richmond	604-671-5023	www.ircgroupp.com/en
Jade West Engineering Co Ltd	Surrey	604-671-5023	www.jadewest.com
Micah's Plumbing & Heating Ltd.	Nelson	250-551-4920	micah@micahsplumbing.com
Madonald Mechanical Inc.	Kelowna	250-681-2600	www.macdonaldmechanical.ca
McCuaig & Associates Engineering Ltd.	Vancouver	604-255-0992	www.mccuaig.net
Our Energy	Vancouver	778-939-4388	www.ourenergysadvising.com
Patan Heating & Air Ltd.	Penticton	250-462-5224	info@patanheating.com
Peakflow Energy Solutions	Comox	778-228-4828	www.gopeakflow.com
Petro Sadr Corporation	Port Coquitlam	604-474-0414/604-446-1123	petrosadr.ca
Quality Air Care Heating& Air Conditioning Ltd.	Kelowna	250-862-9063	qualityaircare.ca
Rocky Point Engineering	Langley	604-379-6193	Richard.Corra@rpeng.ca
Step 5 Solutions	Burnaby	604-616-6001	info@batta.ca
Station Craft Building Optimization	Kelowna	250- 686-2879	stationcraft.ca
TAG Engineering	Surrey	604-564-6800	www.tagengineering.ca
Vision Mechanical Ltd.	Kelowna	250-470-9552	visionplumbingandheating.com

Building Envelope Specialist

Companies listed below are a member of at least one of the following organizations

Architectural Institute of British Columbia
Applied Science Technologists & Technicians of British Columbia
Engineers and Geoscientists in British Columbia
Royal Architectural Institute of Canada

Company Name	Location	Phone Number	Website
APEX Building Science Inc	Abbotsford	604-575-8220	https://apexbuildingsciences.com
ATEC Building Envelope Consulting	West Vancouver	778-288-4959	https://atecconsulting.com
BAR Engineering Co. Ltd	Vernon	604-681-1844	http://www.bareng.ca
BC Building Science	New Westminster	604-520-6456	https://bcbuildingscience.com
Best West Engineers Ltd	Coquitlam	604-492-4559	http://www.bwengs.com
Bluegreen Architecture Inc	Kamloops	250-374-1112	http://www.bluegreenarchitecture.ca
BMAC Technologies and Consulting Inc	New Westminster	604-544-7564	http://www.bmactc.com
Bow Crow Design	Sundre	403-638-1341	https://bowcrow.com
Building Envelope Engineering Inc.	Calgary	403-861-4044	david@beei.ca
Detailed Inspections & Energy Advising	Kamloops	250-574-3449	http://www.detailinspections.ca
Dubas Engineering Inc	Burnaby	604-875-1930	http://www.dubasengineering.com
Energycraft Building Consulting	Campbell River	604-791-8232	http://energycraft.ca
Enforma Engineering	Kelowna	778-873-3177	http://enforma.ca
EXP services Inc	Burnaby	604-874-1245	http://www.exp.com
Berry Architecture & Associates	Red Deer	403-357-7349	http://www.berryarchitecture.ca
Hamid Design Build Ltd	Burnaby	604-603-3142	http://www.hamiddesignbuild.com
Herold Engineering	Nanaimo	250-751-8558	http://www.heroldengineering.com
i3 Building Science and Consulting Inc.	Coquitlam	604-306-7505	http://www.i3bsc.com
Inspired Architecture	North Vancouver	604-773-1015	http://www.inspiredarchitecture.ca
IRC Building Sciences Group	Richmond	604-295-8070	http://www.ircgroupp.com/en
JRS Engineering	Burnaby	778-386-3298	http://www.jrsengineering.com
McCuaig & Associates Engineering Ltd.	Vancouver	604-255-0992	http://www.mccuaig.net
Measured Architecture Inc	Vancouver	604-737-0235	https://measured.ca
Meiklejohn Architectural Design Studio Inc	Penticton	250-492-3143	http://www.madstudio.ca
Method Engineering and Building Services	Victoria	250-590-1999	http://www.methodengineering.ca
Peakflow Energy Solutions Ltd	Comox	778-228-4828	http://www.gopeakflow.com
NIDO Design Inc	Kelowna	250-448-4307	http://www.nido.design
Qualistat Building Envelope Consultants	Calgary	403-457-7828	http://qualistat.com
R340 Enterprises	Kelowna	250-86206400	https://inspectit.org
Rathco ENG Ltd	Kelowna	250-300-9612	https://rathco.pro
RDH Building Science Inc.	Burnaby	604-873-1181 ext 107	http://www.rdh.com
Read Jones Christoffersen	Vancouver	604-738-0048	http://www.rjc.ca
Richard Kadulski Architect	Vancouver	604-689-1814	kadulski@direct.ca
Sense Engineering	North Vancouver	604-319-5661	https://senseengineering.com
Spratt Emanuel Engineering Ltd.	Vancouver	604-872-1211	https://sprattmanuel.com
Station Craft Building Optimization	Kelowna	250-686-2879	https://stationcraft.ca
Strata Engineering	Burnaby	604-780-1316	https://strataengineering.ca
Studio 9 Architecture + Planning Inc	Nelson	250-354-3959	http://studio9architecture.com
Susanna Houwen Architect	Vancouver	604-836-7749	http://www.susannahouwen.com
Tri-Can Consulting Ltd	Vancouver	604-449-7789	http://www.tccltd.ca
urbanSTIX Architecture Inc.	Fernie	250-423-8800	https://urbanstix.ca/contact
Vancouver Engineering and Consulting	Vancouver	778-319-3403	https://vancouvereng.ca