



HOME

ABOUT US

SERVICES

GET A QUOTE

USEFUL LINKS



Building Envelope

Providing superior service to our clients, putting safety first, creating opportunities for our people, and delivering exceptional work.

HOME / SERVICES / BUILDING ENVELOPE



Building Envelope

The name "building envelope" is exactly what it sounds like: it is a barrier protecting the building's interior from the exterior elements! More specifically, the building envelope ensures that moisture, air, and other elements do not enter the confines of a building.

A building envelope is effectively a protective shell for the delicate electrical systems and interiors of a building or construction. The main function of this is to stop moisture from penetrating the interior. This can be from more common things such as rain and snow, to water freezing and expanding within the joints of the construction altering the structural validity and integrity of the building. Further, water vapor from warm and humid outdoor air coming into contact with colder inner walls or cool interior surfaces may lead to condensation, which can lead to a host of issues ranging from ruining athletics to life-threatening mold.

Another primary function of a building envelope would be the assurance of a heated or cooled interior environment resisting impact from the outside opposing temperature (sometimes referred to as a thermal envelope). This in turn also directly impacts energy efficiency as the HVAC system does not have to work as hard to maintain a constant indoor ambient temperature. Thermal values remain more constant, and that in turn saves money and energy. This thermal envelope has many factors leading to it, including insulation and the use of blower door tests. These tests are conducted to see a range of results, from the relative efficiency of a washroom exhaust fan, all the way to how well a skyscraper holds its air conditioning.

Voltas Engineering has a full department dedicated to the design and implementation of **Building Envelope Systems** in and around Vancouver. Our team focuses on making quality, well-thought-out plans for every project. We problem-solve at every corner, as we are a true one-stop shop! **Contact us** now for your building envelope needs! Feel free to request a quote through our [online application form](#).



Projects

24 UNIT MIXED DEVELOPMENT

Project Name: IK Homes
Civic Address: 20901-83rd Avenue, Langley, BC

53 UNIT TOWN HOUSE

Project Name: Lotus
Civic Address: 20860 - 76 Ave. Surrey BC

23 TOWN HOUSE

Project Name: JRG Homes
Civic Address: 14388-103 Ave. Surrey BC

21 TOWN HOUSE

Project Name: Homes
Civic Address: 6055 - 138 St. Surrey BC

ROW HOUSES

Project Name: 24 Unit Row Houses
Civic Address: 20445-20477 86th Avenue, Langley, BC

61 TOWN HOMES

Project Name: Chelsea Gale
Civic Address: 11188 - 72 Avenue, Delta, BC

24 TOWN HOMES

Project Name: Oak Terrace
Civic Address: 11767 - 89A Ave, Delta, BC

6 STOREY, 71 UNITS APARTMENT/TOWNHOUSE DEVELOPMENT

Project Name:
Civic Address: 13491-13493 94A Ave, 135 Street, Surrey, BC

4 STOREY, 71 UNITS MIXED USE DEVELOPMENT

Project Name: Dream Castle Homes
Civic Address: 5959, 144 Street, Surrey, BC

MIXED USE DEVELOPMENT

Project Name:
Civic Address: 444, Trans Canada Highway, Hope, BC

COMBINED RESTAURANT/GAS STATION

Project Name: Shandhar Gas Bar
Civic Address: 6050, Chilliwack Road, Chilliwack, BC

39-UNITS TOWNHOUSE

Project Name:
Civic Address: 19681 - 80 Avenue, Langley, BC

64 UNIT TOWNHOUSES

Project Name: OakCrest
Civic Address: 11556 72Avenue, Delta, BC

6 RESIDENTIAL UNITS

Project Name:
Civic Address: 22356 48 Avenue Langley, BC

18 UNIT TOWNHOUSES

Project Name:
Civic Address: 6989, 204 Street, Langley BC

56 ROOM HOTEL

Project Name: Quality Inn
Civic Address: 1859 Trans Canada Highway Revelstoke, BC

8-UNIT STACKHOUSE

Project Name:
Civic Address: 2663 Duke Street, Vancouver, BC

DREAM BANQUET HALL

Project Name: Dream Banquet Hall
Civic Address: 7236, 120th St. Surrey, BC

Ever since I spoke to Volta's team, I got full support from them; they have
It was a remarkable experience with Volta's Engineering team, I got full support from them; they have
Ever since I spoke to Volta's team, I got full support from them; they have

