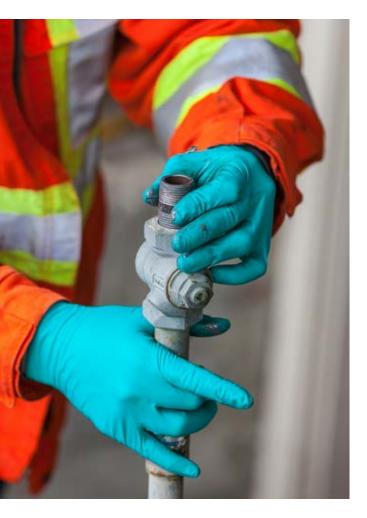


Building and developing projects with natural gas

Standards and guidelines for getting connected





Connecting a home, development or commercial building to natural gas can help you save on construction costs and offer customers the comfort, convenience and cost savings of natural gas appliances. There's a lot to consider before you get connected, but we're here to help guide and support you through the process.

Safety first

As a builder/developer you have a role to play in ensuring natural gas service is installed correctly and safely in your project. Here are some important safety considerations:

Call or click before you dig

Hitting a gas line while digging can create an unsafe situation for you, your employees and the general public. It could also seriously delay your work schedule. At least three working days before you plan to break ground on a project call **1-800-474-6886** or ***6886**, or click **BC 1 Call** to find out where the buried gas lines and other utilities are located. It's fast, free–and it's the law. Complete guidelines for excavation safety can be found at <u>fortisbc.com/safety</u> – click or call before you dig.

Working within a right of way

Buried pipelines within rights of way are indicated by distinctive marker posts and signs, often displaying the *Call or click before you dig* symbol. FortisBC rights of way must be kept clear at all times and written permission is required before work can be conducted within one. For more information about working within a right of way and how to apply for a permit, visit <u>fortisbc.com/rightofway</u>, call **1-877-599-0996** or email <u>rightofway@fortisbc.com</u>.

Meter and pipe safety

FortisBC owns and maintains the gas piping up to and including the meter. Keeping the area around the natural gas meter clear ensures that maintenance workers and first responders can reach it safely at all times. The piping past the meter–including gas lines to detached buildings with gas appliances–are the customers' responsibility. Buried piping should be periodically inspected for corrosion or leaks and repaired by a registered gas contractor if found to be in an unsafe condition. Get more information about meter and pipe safety at

fortisbc.com/builderdeveloper under safety considerations.

What to do if you smell gas

We make natural gas smell like sulphur or rotten eggs on purpose. If you smell that unmistakable rotten egg smell, or hear the sound of escaping gas, it could be a natural gas leak. Stop what you're doing, go outside and call



the FortisBC emergency line at **1-800-663-9911** or **911**. Get more information about what to do in the event of a gas leak at <u>fortisbc.com/gasodour</u>.

Preventing carbon monoxide problems

Regularly inspecting and maintaining natural gas appliances and vents is the best protection against carbon monoxide problems. Installing a carbon monoxide alarm approved by the Canadian Standards Association (CSA) will add an additional layer of safety. Read more about preventing carbon monoxide problems, the signs to watch for that may indicate you've been exposed to it and what to do in an emergency at **fortisbc.com/builderdeveloper** under safety considerations.

For more information about these and other topics related to natural gas safety, visit **fortisbc.com/safety**.

Applying for natural gas service

It's easy to apply for natural gas installation through our online service request tool: **fortisbc.com/newgasline**. Before you begin, gather all of the information you'll need. Missing information will delay, or prevent us from processing your application.

Choose your preferred installation date

When selecting your preferred installation date on the application form, keep in mind we need three to six weeks lead time to schedule your service.

Your site must be at final grade to install natural gas. That means the building is at "lock up" stage of construction: the windows and doors are in, the roof is on and the area for the running line is clear of all construction materials or debris. If the site isn't at lock up stage or clear when we arrive, your installation may be rescheduled causing project delays.



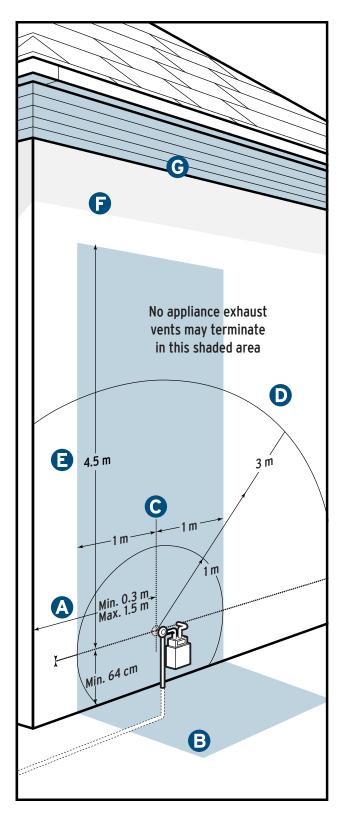
Calculate gas load

The gas load determines the size of the meter required for your building's consumption.

The total connected gas load of your building is calculated according to the type, and the number of each type, of gas appliances you plan to install– including any you plan to add in the future–and the number of British Thermal Units (BTUs) for each appliance. Talk to your certified gas fitter if you are unsure of your total connected gas load.

Calculate delivery pressure

The gas delivery pressure determines what size of regulator is placed on your meter. Your gas fitter can tell you what delivery pressure is required for the number, and type, of gas appliances you plan to install, as well as for the kind of piping the contractor plans to use in the building.



Identify meter location

Consult with your natural gas contractor to determine the best location for your meter. Indicate where you want the meter to be installed by putting a mark, or sign, on the building before FortisBC crews arrive. Your meter must be located according to the following criteria:

- **Figure A** Natural gas meters may be installed 1) at any point along the building's wall nearest the gas main, or 2) up to 1.5 metres (5 feet) past the corner of the building that is nearest to the gas main.
- **Figure B** The location of the meter must allow for a direct and unobstructed line from the meter to the gas main.
- **Figure C** All of the following must be at least one metre away from the regulator vent: non-mechanically powered air intake; non-gas appliance exhaust vent; gas dryer vent; potential sources of ignition such as an electrical outlet, electric meter or open flame barbecue; and building openings, including all windows and doors.
- **Figure D** Mechanical (fan assisted) air intakes must be 3 metres away (approximately 10 feet) from the regulator vent.
- **Figure E** Gas appliance exhaust vents must be located at least 4.5 metres (approximately 15 feet) above, or one metre to either side of, the gas meter regulator.
- **Figure F** The distance from the regulator vent to the building's overhang must be greater than the depth of the overhang **Figure G**.
- FortisBC prefers the meter be located at the gable, or pitched roof, end of the building, especially in high snowfall areas. Gas meters must be located away from the roof drip line and potential snow build-up.
- Meter locations must conform to National Standard CAN/CSA Z662 (current edition), Installation Code CAN/CGA-B149.1 (current edition), and to FortisBC Standards.

Calculate the inside property line measurement The gas service line is also known as the inside property line measurement. It's the distance from the property line to the corner of the building where the meter is to be installed. This measurement will tell the crew how far they will be digging and how much piping to bring to the site. It must be kept permanently clear of any above or below ground structures, obstructions and debris.

Special installation considerations

Customer-installed trenching/conduit requirements

Before a gas line is installed under a retaining wall or adjacent to a detached garage, a trench or conduit containing a clearly marked duct (sleeve) and a pull string is required. When the estimated service line installation costs exceed FortisBC's service line cost allowance, customers may be able to reduce their costs by providing their own trench or conduit and pull string. For complete trenching and ducting installation criteria and materials required visit

fortisbc.com/builderdeveloper or call **1-888-224-2710** and press 4 for information.

Moving or removing a natural gas line

If you need to move or remove natural gas service because you're renovating or demolishing a building, please submit your request as soon as possible. It typically takes two to six weeks to remove a natural gas line and a minimum of two to eight weeks to move it. Visit

fortisbc.com/services/natural-gas-services for full moving/removing a natural gas line details and to submit your request. **Please note:** If your home or building is older than 1990, we may require a Hazardous Materials Report prior to the start of on-site work.



Backing board requirements for multi-meter installations

A backing board installed according to FortisBC standards is required whenever the wall where the meter is to be mounted isn't suitable for a meter installation. For wall-mount meter installations other than 200/400 multi-meter manifolds, custom backing boards may be required.

Backing board installation requirements

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Wall types that require backing boards	Examples of building wall materials that cannot have the building envelope or "rain screen" compromised and are not suitable for bracketing:
	 corrugated steel cultured stone HardiePlank[®] river rock stucco styrofoam tile vinyl
Material	The material should be two, two- inch by 10-inch pieces of lumber, with 19 inches being the minimum stacked height of the assembled backing board.
Length	The length of the backing board is determined by the number of gas meters required at that location. Allow one foot for each gas meter plus an extra six inches on either end. (For example, five gas meters equals a six-foot backing board.)
Height	Height is measured from the ground at "final grade". For a single run horizontal manifold, the top edge of the backing board should be 40 inches from final grade. For a double run (stacked) manifold, the top edge of the upper run, or top backing board, should be 78 inches from final grade.
Finishing	The backing board can be painted to coordinate with the building finishes. Trim and caulking should be applied by the customer to maintain the integrity of the building envelope.



Contact us

Natural gas billing

To open, close or move your natural gas account, use our convenient online tool at fortisbc.com/accounts-billing. There, you'll also find useful information about other topics such as payment options, rates, meters and meter readings. You may also call customer service at 1-888-224-2710, Monday to Friday, 7 a.m. to 8 p.m.

We're here to help

If you have questions about getting natural gas service for your project, contact an fortisbc.com/energymanagers or call 1-888-224-2710 (choose construction services), Monday to Friday, 7 a.m. to 8 p.m.

Visit us online

All of the information you need to know about getting connected to natural gas can be found online at fortisbc.com/builderdeveloper.



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