

Guideline for Construction Use Installations

In this document you'll find what you need to know about:

- Using natural gas for residential construction heat, including preparing your site, using construction heater manifolds, using furnaces approved for construction heat (during construction stages)
- When you should be calling for initial installation inspections (finals), prior to homeowner occupancy



Builder guidelines on using residential construction heat



About residential construction heat use

Construction heat refers to the use of natural gas prior to initial installation inspections during construction and prior to homeowner occupancy. It includes the inspection of an appliance approved for construction heat as outlined by manufacturer’s certified installation instructions, local code, Technical Standards & Safety Authority (TSSA) requirements, and Enbridge Gas policy.

Using natural gas for construction heat allows your project to stay on schedule and budget. Natural gas heat is drier and provides significant cost savings compared to propane heaters. Whether you use an installed furnace or a temporary construction heater, natural gas is an efficient and cost-effective choice.

An appliance can only be used during the construction phase if it is explicitly stated in the manufacturer’s certified installation instructions that this type of use is permitted.

In order to ensure that your site is ready for Construction Heat activation, please visit enbridgegas.com/buildwithgas and refer to our Guideline for Builder Site Preparation and Construction Heat Use.

Initial putting into use/installation inspections

Once construction heat is no longer required, Enbridge Gas must conduct initial putting into use/installation Inspections on all permanent equipment intended to be installed for use, and prior to homeowner occupancy. More information on Initial Installation Inspections can be found at the end of this document and/or at enbridgegas.com/buildwithgas in the stand-alone document “Builder Guidelines – Initial Installation Inspections”.

Note: Residential construction heat is not permitted in a premises that is occupied.

Note: Any tags or conditions at the premises existing prior to or at the time of the final transfer of ownership to the homeowner remain the responsibility of the builder to complete or clear.



Builder guidelines on using residential construction heat

Construction heat: use of construction heaters

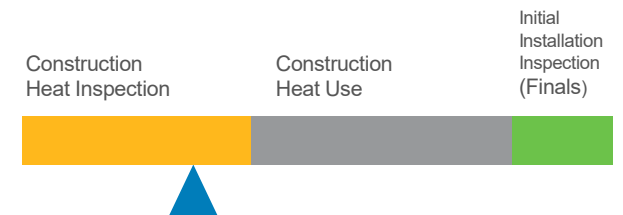
Using a temporary construction heater (TSSA requirements)

The Technical Standards & Safety Authority (TSSA) and Ontario Regulations require anyone installing, or operating a natural gas fired construction heater to hold a current “Record of Training” (ROT) certification (must be renewed every three years), or possess a G2 or G1 license (regulation 215/01).

- The ROT certification must be on hand and presented when rental companies deliver the construction heaters to the site.
- ROT Certificate information must be documented on site and provided for reference when Enbridge Gas performs meter activation for construction heat. An installation/operators tag must appear at the appliance or meter being activated and must contain the certificate holders license information. (It can be filled out on a blank test tag and zip-tied to the heater or meter outlet)
- The residential construction heater must be installed according to manufacturer’s installation instructions, the CSA B149.1—current edition (natural gas and propane Installation code), and per all local codes and regulations with regards to construction heat use.



To ensure that you follow all the requirements set out by Enbridge Gas’ Construction Heat Program we have created Technical Resources with all the procedures and policies that have been indicated above. The bulletins can be found at enbridgegas.com/buildwithgas or by contacting your local channel consultant.



Builder guidelines on using residential construction heat



Using temporary construction heaters for residential applications – standalone (applicable to swing joint meter set)

Before proceeding with any connection/installation work, ensure you are trained, qualified, and wearing all appropriate personal protective equipment (PPE).

Step 1: The gas meter will be installed with a capped meter tailpiece on the outlet side of the meter. This tailpiece has small brass fitting off the side called a “test port”. Remove the meter tailpiece with cap provided with the Enbridge Gas meter.

Once activated by Enbridge Gas the pin will be removed and a zip tie with a tag indicating that only a TSSA Certificate Holder can turn on the gas.



Note: The meter tailpiece and cap is property of Enbridge Gas and must be saved for reinstallation and use by your gas piping installer.

Caution: If the pinlock has been removed from the meter service (winglock) valve and the valve is in the on position, turn the valve off and proceed with the manifold connection. Only Enbridge Gas is authorized to activate the meter set. You must contact Builder Services to request meter set activation.

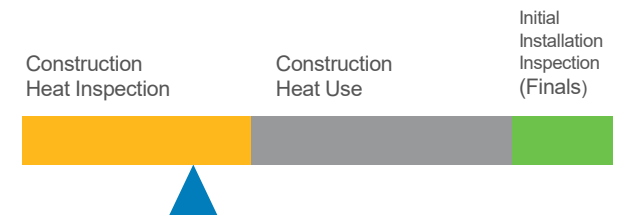


Figure 1 – Swing Joint Meter Set



Figure 2 – Tag

Note: For candy cane meter set, refer to “Construction Heat – “Proper Connection of Portable Construction Heaters” (available at enbridgegas.com/buildwithgas under the resource tab.



Builder guidelines on using residential construction heat



Using temporary construction heaters for residential applications (standalone)

Step 2: The construction heater will come with a meter manifold (see Figure 3). For connection to the meter tailpiece please refer to the “Enbridge Gas Meter Connection” guidelines before continuing with step 3.

Note: Enbridge Gas requires a test port for proper meter activation. If the construction heater’s meter manifold was supplied with an integrated test port (see Figure 4), your installer will connect the manifold directly to the meter outlet after removing the meter tailpiece. Continue with step 3.

Step 3: Your trained and licensed installer/operator will attach the construction heater manifold, all other required components, and ensure the installation meets local code (see Figure 5).

Note: The manifold and the hose must be properly secured and supported to avoid any strain on the meter set. Do not use the meter set to support the construction heater in any way.



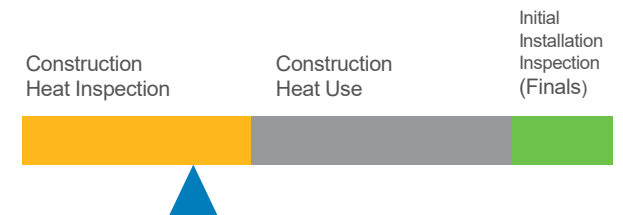
Figure 3



Figure 4



Figure 5



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (standalone)

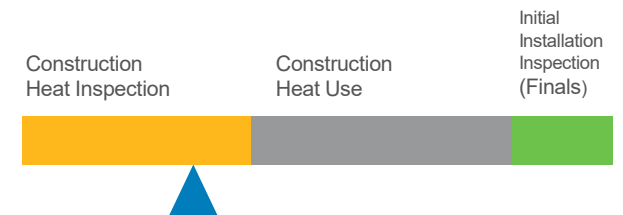
Step 4: Enbridge Gas will install the meter and activate it within 7 days of the gas service install and associated Construction Heat request date.

Step 5: Once the heater has been removed and if the permanent piping is not yet installed, replace the meter tailpiece and cap, if both of them were removed for construction heat installation purposes. If the meter is left unprotected from the elements (dirt, rain, snow), the meter will have to be exchanged. These costs will be charged to the builder.

Note: Only your licensed gas technician or TSSA registered Heating Contractor can attach the permanent piping to the meter. The meter tailpiece provided with the Enbridge Gas meter must be used to attach the permanent piping to the meter according to our standard requirements for installation (see Figure 6).



Figure 6



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (meter box)

Before proceeding with any connection/installation work, ensure you are trained, qualified, and wearing all appropriate personal protective equipment (PPE)

Step 1: The gas meter will be installed with a capped meter tailpiece on the outlet side of the meter (see Figure 1). This tailpiece has small brass fitting off the side called a “test port”. Remove the meter tailpiece cap.

Caution: If the pinlock has been removed from the meter service (winglock) valve and the valve is in the on position, turn the valve off and proceed with the manifold connection. Only Enbridge Gas is authorized to activate the meter set. You must contact Builder Services to request meter set activation.

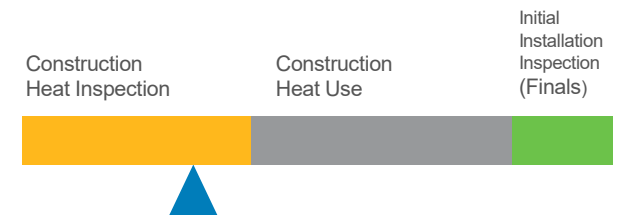
Step 2: Your trained installer will use a specially developed adapter installed to duplicate the meter tie-in above the meter box. The adapter connects to the meter tailpiece and extends through the top of the meter box to allow connection to the construction heater’s manifold. This adapter ensures that the gas regulator, meter and internal components will not be repositioned. Providing the flexibility required to rotate the manifold 180 degrees in order to accommodate the installation of the portable construction heater (see Figure 2).



Figure 1



Figure 2



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (meter box)

Step 3: If the meter box is not accessible from the top, remove the meter tailpiece with cap provided with the Enbridge Gas meter and connect the construction heater manifold (Figure 3) projecting outside the meter box (see Figure 5). The connection is done at the meter outlet with elbows and appropriate fittings, projecting outside the meter box to connect to the portable construction heater. For connection follow the steps in the “Enbridge Gas Meter Connection” guidelines (on page 7), before continuing with step 4.

Note: If the construction heater manifold has an integrated test port (Figure 4) your installer will connect the manifold directly to the meter outlet. Before the connection can take place, the meter tailpiece must be removed and saved for later reinstallation.

Note: The manifold and the hose must be properly secured and supported to avoid any strain on the meter set. Do not use the meter set to support the construction heater in any way.



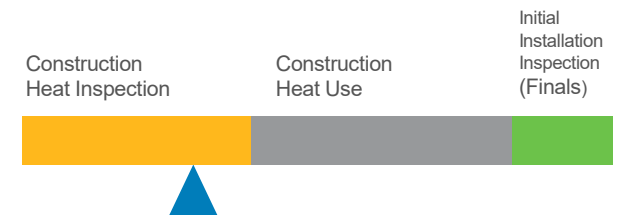
Figure 3



Figure 4



Figure 5



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (meter box)

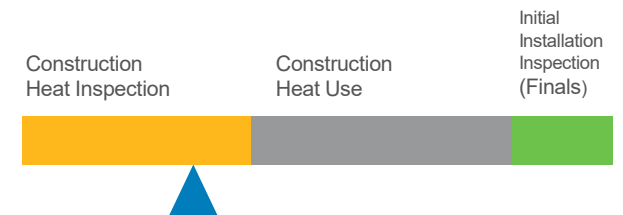
Step 4: Enbridge Gas will install the meter and activate it within 7 days of the gas service install and associated Construction Heat request date.

Step 5: Once the heater has been removed and if the permanent piping is not yet installed, replace the meter tailpiece and cap, if both were removed for construction heat purposes. If the meter is left unprotected from the elements (dirt, rain, snow), the meter will have to be exchanged. These costs will be charged to the builder.

Note: Only your licensed gas technician or TSSA registered Heating Contractor can attach the permanent piping to the meter. The meter tailpiece provided with the Enbridge Gas meter must be used to attach the permanent piping to the meter according to our standard requirements for installation (see Figure 6).



Figure 6



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (Enbridge Gas meter connection)

This section refers to properly connecting a construction heater manifold to an Enbridge Gas meter, where a test port is not provided by the construction heater manifold.

Before proceeding with any connection/installation work, ensure you are trained, qualified, and wearing all appropriate personal protective equipment (PPE).

The Enbridge Gas natural gas meter will be installed with a capped meter tailpiece on the outlet side of the meter. This tailpiece has a small brass fitting off the side called a test port. If a construction heater manifold with an integrated test port is available, you may use it instead.



Note: The Tailpiece and cap supplied by Enbridge Gas must remain with the meter, once construction heat is no longer required. It must be reinstalled on the meter as originally found.

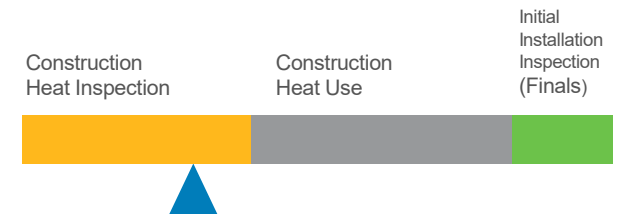


Figure 1



Figure 2

Step 1: Carefully remove the meter tailpiece with test port on the outlet side of the meter (see Figure 2).



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (Enbridge Gas meter connection)

Step 2: With two properly sized wrenches, carefully remove the cap supplied with the Enbridge Gas meter tailpiece; exposing the threads. The brass “test port” is very fragile and can break easily if pressure from the wrench is applied.

Step 3: Use two properly sized wrenches and ensure that no other components are loosened or damaged during this operation. Remove the meter tail piece that does not have the “test port” from the construction heater manifold.

Step 4: Once the connection piece provided with the construction heater manifold has been removed from it, keep it aside and in a safe place for later.



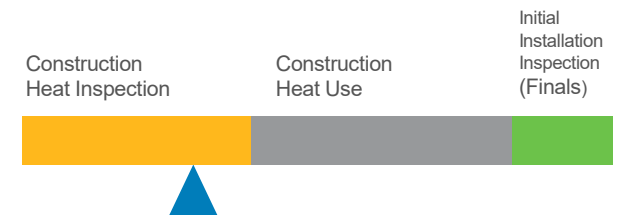
Figure 3



Figure 4



Figure 5



Builder guidelines on using residential construction heat

Using temporary construction heaters for residential applications (Enbridge Gas meter connection)

Step 5: Connecting to the manifold.

1. Apply only an approved natural gas thread sealant to the threads of the Enbridge Gas meter tailpiece.
2. Using correctly sized wrenches, carefully attach the threaded portion of the Enbridge Gas meter tailpiece to the threaded inlet of the construction heater manifold.
3. Ensure that the brass “test port” has not been damaged and will be facing the 3:00 or 6:00 position on the meter.
4. Keep all other components for later use.

Note: Be sure to use and apply an approved natural gas pipe thread sealant. Always follow instructions for use and wear proper PPE.

Step 6: Your construction heater manifold is now ready to be connected to an Enbridge Gas meter as per the steps in the previous sections “Standalone” and “Meter Boxes” connections. Please ensure that when attaching the manifold, the meter gasket ring is also installed.



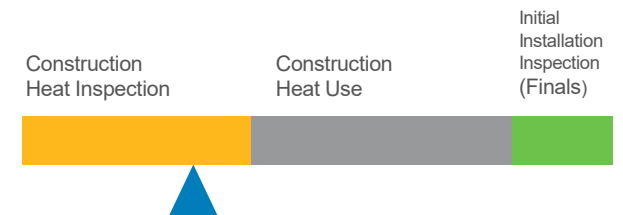
Figure 6



Figure 7



Figure 8



Builder guidelines on using residential construction heat

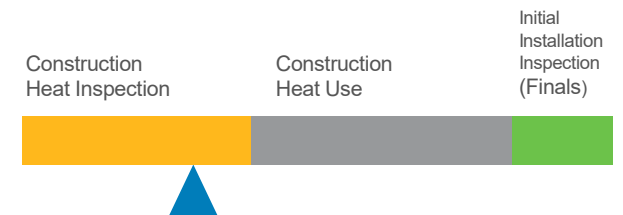
Construction heat (furnace)

Guidelines for using a furnace to heat a building or structure under construction

1. The furnace must be specifically approved for use in a building or structure under construction. This can be found in the manufacturer's certified installation instructions
2. All site requirements are met as listed within the residential temporary heat – visit enbridgegas.com/buildwithgas and reference the “Site Preparation Bulletin”.
3. Enbridge Gas will install the meter and activate it within 7 days of the gas service install and associated Construction Heat request date. No construction heat inspection is required.
4. The furnace installer shall be a G2 or G1 certified technician and shall follow all CSA B149.1 code requirements and any local code requirements as applicable for furnace installation/operation in construction heat applications.
5. All appropriate code clauses shall be met, paying particular attention to pressure testing of the piping system, venting and fresh air requirements, in addition to the provision of a thermostat that is installed on a solid bracket or wall and located in the furnace area or a location supplied with heat through ductwork from the furnace.



Caution: Only furnaces approved for construction heat as per the manufacturer’s certified installation instructions are part of the Construction Heat Program.

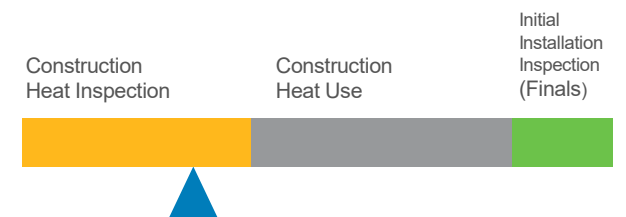


Builder guidelines on using residential construction heat

Construction heat (furnace)

Guidelines for using a furnace to heat a building or structure under construction

6. All manufacturer's certified installation instructions indicating acceptability of the furnace for construction heat use shall be met.
7. Ensure the "Appliance Installer validation form"—section B is attached and is completed in its entirety (as applicable) including sign off by TSSA registered contractor.
8. Duct work for appliances used for construction heat, should be cleaned prior to final cleaning of furnace (or any other applicable appliance) and new filter installed.
9. Once construction heat is no longer required, Enbridge Gas must conduct an "Initial Putting Into Use/Installation Inspection" (finals) of all-natural gas piping and equipment in the home prior to occupancy. This additional inspection will be completed once all equipment installations are complete, you may request the final inspection before building occupancy.

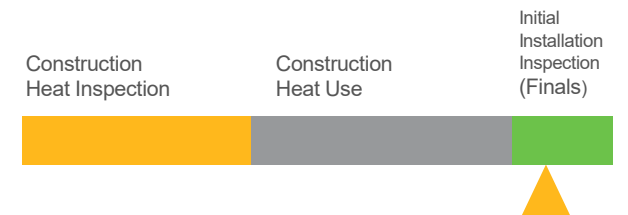


Guidelines for initial installation inspections prior to homeowner occupancy

Enbridge Gas must conduct an initial putting into use/installation inspection of all gas appliances before homeowner occupancy (Ontario Regulation 212/01). If the inspection has not taken place at the time the account is transferred from the builder to the homebuyer, the gas supply may be terminated until the inspections can be completed.

When is a home ready for initial putting into use/installation inspections?

Initial putting into use/installation inspections shall be conducted when the construction stages are completed and all-natural gas appliances are installed, in accordance with codes and regulations. This includes all appliances intended to be installed at time of occupancy.



Guidelines for initial installation inspections prior to homeowner occupancy

Minimum site requirements for initial installation inspections:

- All-natural gas equipment intended to be installed at time of occupancy is ready for activation and inspection.
- Building is substantially completed and suitable for occupancy:
 - Builder has completed all major interior construction work.
 - Ensure safe and clear access to meter set (no construction work is in progress above the meter set).
 - Builder has completed all major finishing work within the building.¹
 - Interior electrical and plumbing work has been completed.
 - The interior is cleaned of all construction and/or finishing materials (i.e. Floor, walls, counters, appliance(s), ductwork, etc.).

¹ Occasionally items such as carpet installation, change orders, minor trim work, minor floor or tiling work may not be fully completed at the time of initial installation inspection requests. Depending on the adverse effect this work may have on the operation or installation of the natural gas equipment, the inspector will choose to accept or reject the installation.

Rough-in work, which is work the occupant completes after moving in, is not considered part of ongoing construction or during initial installation inspections.

Inventory homes: Sometimes builders may develop inventory homes, which will be sold at a later date and will not have all interior finishing completed. In these situations, gas will be activated in accordance with construction heat guidelines. Initial putting into use/installation inspections should only be requested after all major interior finishing work is completed.



Guidelines for initial installation inspections prior to homeowner occupancy



Note

¹ Please refer to the Enbridge Gas Guidelines for [Builder Final Inspection](#)

Use our website to request inspections before occupancy:

enbridgegas.com/buildwithgas

Initial installation checklist ¹

- All major construction and finishing work has been completed.
- The home has been cleaned of all construction and finishing debris/materials.
- All gas equipment is fully installed as per local code.
- Furnace and ductwork are cleaned, and new filters installed to ensure there is no residual drywall and/or construction debris.
- Manufacturer's certified installation and operation instructions are present.
- The 'Appliance Installer Validation' form is completed and affixed to all gas appliances in the home, Section A and B (if applicable).
- All interior/exterior gas piping is installed in accordance with all local code.
- Pressure test tag(s) are complete and present.
- All appliance vents (combustion and air intake) are installed in accordance with all local code.
- All gas pipe and appliance vents are sealed at entrance points.
- All clearances to the natural gas meter and regulator(s) are met.

Important

Initial putting into use/installation inspections are a regulatory requirement by the distributor to ensure the safe delivery of natural gas to its customers, and that an appliance will only be operated within environments in which it was intended.

Initial putting into use/installation inspections are distributor inspections. They are not inspections for commissioning.

Appliance and/or equipment commissioning is the sole responsibility of the TSSA registered Heating Contractor.

Enbridge Gas is not responsible for final setup/commissioning of appliances under any circumstances.

All appliances not approved for construction use should be found with gas valves in the off position, appliance off and the Appliance Installer Validation Form attached. This will avoid a "Found On" condition resulting in notification to the TSSA.