



Office of the Fire Commissioner

INSTALLING YOUR GRAIN DRYER INFORMATION FOR AGRICULTURAL PRODUCERS

PHASE 1: BEFORE YOU PURCHASE A GRAIN DRYER

Determine Your Fuel– Natural Gas or Propane

NATURAL GAS:

Contact Manitoba Hydro early! A Manitoba Hydro Energy Service Advisor (ESA) can work with you to determine your natural gas requirements, whether there is an adequate supply of natural gas in your area, and if upgrades are necessary to your meter. Please call 1-888-624-9376 to speak to an ESA.

Some of the issues you may encounter in installing your grain dryer if there is not an adequate natural gas supply in your area could include:

- Limitations on the firing rate of your grain dryer
- Delays in installing your grain dryer due to the Manitoba Hydro infrastructure upgrade process (eg, approval of construction drawings, property easements, permits and clearances, volume of requests for gas services, etc.)

PROPANE:

Contact your propane supplier to determine your propane fuel needs, including the supply necessary to operate your grain dryer, the size of the storage tank(s) you will need, where tanks can be located on your property, and your line size.

Check Your Electrical Supply

It is equally important to consider your electrical service requirements prior to installation. As an example, electrical service requirements for single phase vs three phase motors are considerably different, and need to be planned carefully. An electrical permit will also need to be taken out by a person licensed under *The Electricians' Licence Act*. For more information on your electrical supply, please contact Manitoba Hydro at 1-888-624-9376 to speak with an ESA.

Manitoba Hydro's assessment and analysis of the individual requirements of your grain dryer could take up to several months, so it's a good idea to plan your potential purchase accordingly.

PHASE 2: CHOOSING YOUR GRAIN DRYER

Determine if the Grain Dryer is Certified

All grain dryers in Manitoba must bear a CSA 3.8 standard certification marking, or a field approval marking from Inspection and Technical Services (ITS) or another recognized inspection body.

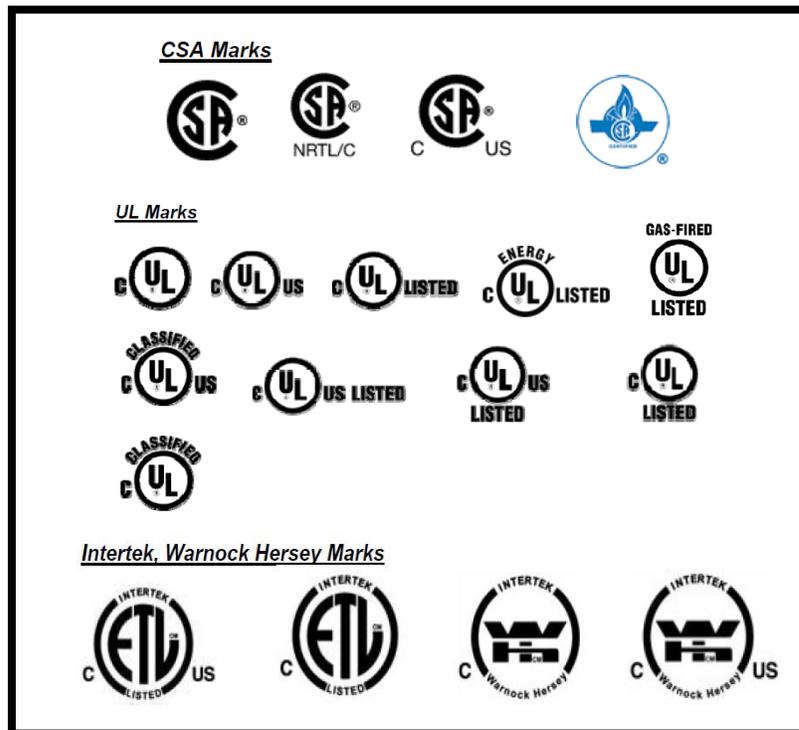
CSA 3.8 CERTIFIED GRAIN DRYERS:

The process for installing a certified grain dryer is much simpler than for installing an uncertified grain dryer. An average timeframe to complete this stage of the installation process would be about 2 weeks for a certified dryer.

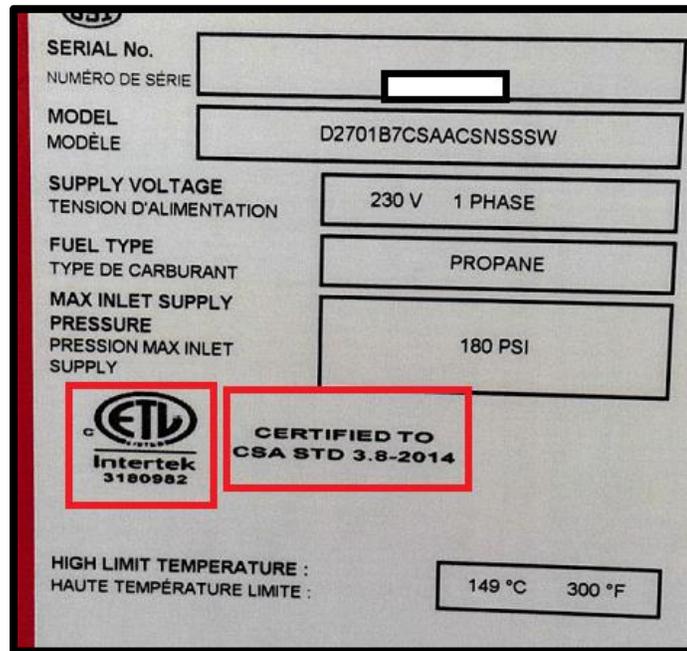
A certified grain dryer will **bear a label stating its gas burning and electrical components are certified to the CSA 3.8 standard** by a certification body recognized by the Standards Council of Canada (SCC).

Check the name plate of the grain dryer to see if it bears a certification mark. A valid certification mark will contain the following information:

1. A recognized certification mark or label (see examples below*), AND



2. A statement that the equipment is certified to the CSA 3.8 Standard.
An example of a label on a certified grain dryer is provided below:



*A complete list of all accepted [electrical](#) and [gas labels](#) is available on the Office of the Fire Commissioner's website.

PREVIOUSLY OWNED GRAIN DRYERS:

The gas and electrical components of some previously owned grain dryers may not be certified, even if they bear a recognized label. For example, if the grain dryer has undergone a major alteration, or has had its fuel source converted from propane to natural gas with conversion kits not certified by the manufacturer, its certification label may no longer be valid.

If you are considering installing or purchasing a used grain dryer, and are unsure of the it's certification or approval status, a representative from the Office of the Fire Commissioner will visit your site to conduct an assessment of the grain dryer to determine what the options are to get the grain dryer operational. Arrangements for an assessment can be made by contacting the Program Manager – Gas and Oil Inspections at 204-945-3372.

If the grain dryer is certified, please go to Phase 3: Installing Your Grain Dryer on page 5.

UNCERTIFIED GRAIN DRYERS:

Installing an uncertified grain dryer will take longer than installing a certified grain dryer, and may include more associated costs. The minimum timeframe to complete this stage of the installation process would be about 4 weeks for an uncertified grain dryer.

In order to install an uncertified grain dryer, you will need to obtain field approval for the gas and/or electrical components of the equipment. The following agencies are approved to provide field approvals of gas burning and electrical equipment in Manitoba:

<u>GAS BURNING EQUIPMENT -</u>	<u>ELECTRICAL EQUIPMENT -</u>
<ul style="list-style-type: none">• Underwriters Laboratories of Canada (ULC)• CSA Group• Enefen (Energy Efficiency Engineering Ltd.)• IRED• Office of the Fire Commissioner	<ul style="list-style-type: none">• CSA Group• INTERTEK• QPS• Office of the Fire Commissioner

Getting a Gas Field Approval

A grain dryer will need a field approval if:

- The unit has undergone an upgrade or modification (ie: converting the fuel source from propane to natural gas without a conversion kit certified by the manufacturer).
- The unit is over 12.5 million BTU and cannot be certified under the CSA 3.8 standard.
- You have combined more than one piece of certified equipment into a bin-dryer combination (where the unit as a whole has not been certified to the CSA 3.8 standard).

More information about the field approval process:

- Requests for field approval of uncertified grain drying equipment must be made by completing the following forms:
 - An application for field approval form, and
 - An Assurance of Professional Design and Commitment for Inspection form.

Both forms are available online at: www.firecomm.gov.mb.ca

- All requests for inspections are made through the Office of the Fire Commissioner's central booking process by calling 204-945-3373.
- The Office of the Fire Commissioner will make every attempt to attend all inspection requests within 2 weeks. Please note that this process can take significantly longer if required information is not provided in a timely fashion.
- The application fee for this service is \$1053.00.

Getting an Electrical Field Approval

Grain dryers do not require an electrical field approval at every initial installation. A grain dryer will require an electrical field approval if it is not certified or previously field approved. If a grain dryer is certified or field approved for electrical, the electrical certification or field approval is valid at any location. An electrical field approval would be required if the electrical system is modified.

A grain dryer does require an electrical permit at every installation. See Phase 3: Installing Your Grain Dryer for more information.

PHASE 3: INSTALLING YOUR GRAIN DRYER

Obtain the necessary approvals

Gas installation permits

A licenced gasfitter will apply to the OFC for the installation permit and will install the grain dryer. If your grain dryer is over 400,000 BTU, you will need to hire a licenced Gasfitter "A." If your grain dryer is up to or at 400,000 BTU, you can hire either a licenced Gasfitter "B" or Gasfitter "A."

The following are required as part of the installation permit application, and are to be submitted by your gasfitter:

- application to install gas burning equipment;
- piping drawing if the grain dryer is greater than 400,000 BTUH;
- Permit fees as per Part 2 of the schedule in the Gas and Oil Burner Regulation.

Electrical installation permits

Electrical installation permits are required for every installation, and would be applied for through the authority having jurisdiction.

If the grain dryer is being installed within the jurisdiction of the City of Winnipeg, a permit would be applied for with the City. Please visit their website at <http://www.winnipeg.ca/ppd/default.stm> for more information.

If the grain dryer is being installed in any other area, a permit would need to be applied for with Manitoba Hydro. Please visit their website at https://www.hydro.mb.ca/accounts_and_services/permits_and_inspections/index.shtml for more information.

For any other extenuating circumstances, please contact the Office of the Fire Commissioner at 204-945-3373 for further direction.

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