

Case in Point



Impressive Boiler Room Heats State-of-the-Art Farm Building in Alberta, Canada

The owner of Fairville Farms in Alberta, Canada recently built an incredible 55,000 sq. ft. multi-purpose building. The state-of-the-art structure houses a mechanic shop, vehicle storage, truck wash, welding shop, carpentry shop, plumbing shop, field office and water treatment facility.

The equally impressive boiler room, which delivers total inputs of 1.6 million Btu/hr, provides space heating, radiant floor heating and hot water for the building, including the truck wash. The operating fluid temperature at an outdoor temperature of -40°F/C have ranged between 100°F (38°C) and 120°F (49°C); with return temperatures floating between 75°F (27°C) and 90°F (32°C)



55,000 Sq. Ft. Multi-Purpose Building

during 30% to 70% load profiles--. Peter Sraum, heating technician and department manager for B.A. Robinson worked with Fairville Farms on concepts, product brands, preliminary design and schematics. Robert Bean of Indoor Climate Consultants, Inc. was brought in to do the final engineering, drawings/specifications and site inspections for the space heating. In addition, Robert and his team also provided a feasibility study for the engineering and schematics for the exhaust and make up air systems. The boiler room is comprised of

three primary space heating boilers – Lochinvar's KNIGHT® Wall Mount units with individual inputs of 400,000 Btu/hr (WHN399) and 95 percent AFUE efficiency, along with an additional KNIGHT Wall Mount boiler for space heating and hot water for the truck wash.



A plate heat exchanger is also installed for the truck wash hot water.

Each zone includes a control valve, service valves and circuit setters. Underground distribution lines (PEXa) feed the remote floor heating manifolds. An electrical control panel allows for operation of the boilers, pumps and zone controls. The KNIGHT Boiler's on-board SMART SYSTEM™ control handles fluid temperature, priority and duty rotation.

For more information about this installation, check out www.healthyheating.com. Additional information about the KNIGHT Heating Boiler is available at www.lochinvar.com.



PROJECT:

FAIRVILLE FARMS

LOCATION: ALBERTA, CANADA

LOCHINVAR PRODUCTS INSTALLED:

- 4 – KNIGHT WALL MOUNT BOILERS (WHN399)
- 3 – KNIGHT FLOOR MOUNT BOILERS (KBN286)
- 4 – ARMOR WATER HEATERS (AWN286)

DESIGN ENGINEERING:

B.A. ROBINSON

INDOOR CLIMATE CONSULTANTS, INC.

ABOUT LOCHINVAR

Lochinvar, LLC is a leading manufacturer of high-efficiency water heaters, boilers, pool heaters and storage tanks. Based in Lebanon, TN, with facilities in Detroit, Orlando, Pompano Beach, Dallas, Phoenix and Chicago, Lochinvar stocks all products in all locations.