



## Farm (Piggery Nursery Barn)

Acton Vale



*Typical end wall installation with solar heated air distributed above central corridor*



*SolarWall® system preheating air to heat recovery ventilator*

### Background

Pork producer Daniel Messier owns and operates Acton Vale nursery barns in Sherbrooke, Quebec. These buildings require huge amounts of fresh air for ventilation—24 hours a day & 7 days a week. Heating this volume of air is tremendously expensive, especially considering that in the winter it can be -22°F outside and nurseries must be kept at a warm 84°F. SolarWall® systems have been used on hundreds of these types of agricultural applications, and have demonstrated great results in terms of slashing energy costs.

### Solution

SolarWall® systems were installed on the south end of two of Messier's nursery barns (each approximately 60ft x 100ft). The technology works by drawing fresh solar heated air through tiny perforations in the SolarWall system's outer cladding. The warmed air is pulled through the building by fans located on the north walls. A supplemental heating system was kept for very cold days.

### Results

The SolarWall system has produced excellent energy reductions by displacing over 30% of the propane usage at the farm. This has translated into annual savings of over \$4,000 (at 2007 propane prices). At the time of the project, the payback was calculated to be five years.



*Pigs enjoying their solar heated barn thanks to a SolarWall system.*

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