

# SOLARWALL®

## Compact Appliances Ltd., Sackville, New Brunswick



*Above: SOLARWALL panels on smaller warehouse wall  
Left: SOLARWALL panels on main office building and warehouse*

### Background

During an expansion of their warehouse storage facility, Compact Appliances Ltd. decided to install a SOLARWALL air heating and ventilation system on their main office building and new warehouse addition. Previously, the warehouse had no ventilation, and no heating.

### Solution

A 1000 ft<sup>2</sup> (92 m<sup>2</sup>) dark gray SOLARWALL system was installed on the south wall of the main office and warehouse building. The panels deliver 2,000 cfm of solar heated ventilation air, divided between the original and new warehouse area, and is designed for a high temperature rise over ambient temperatures.

The panels are hooked up to one fan with one duct that distributes fresh air under the peak of the new addition, and under the ceiling of the original building. A sheet metal transition is used to connect the end of the duct in the new area to the start of the duct in the original area.

The fan has modulating dampers and gives a variable air change rate from 1.5 air changes per hour to 0.2 air changes per hour.

On the new storage addition of the warehouse, a residential designed SOLARWALL system was installed. This provides additional space heating and ventilation to the newly constructed area.

### Results

Estimated savings against fuel oil are around \$3000 per year with the two solar air heating systems.

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