

Granby Hospital, Granby (Quebec) / Canada



Photo: Matrix Energy

Architectural integration of solar thermal energy systems

Granby Hospital

Renovated hospital with solar collectors integrated into the building façade

PROJECT

Hospitals require large amounts of fresh air. Having worked previously on other projects, Favreau et Blais architectes specified a MatrixAir™ TR (transpired) solar fresh air heating system for one section of this newly renovated hospital. A unique, aesthetically curved 82 m² solar collector was integrated into the building to provide 4800 CFM to the cafeteria below. The black perforated absorber finish was specifically chosen to provide a stark contrast to the building's façade to highlight this energy saving building feature to the local community.



Photo: Matrix Energy

Key figures

- 82 m² solar collector
- Air volume supplied : 4800 CFM
- Energy Savings : 149.1 GJ
- Avoided CO2 emissions : 19,41 tonnes annually

Solar collector /Heating system

MatrixAir TR (Transpired) solar collector

This transpired, solar fresh air heating system demonstrates operating efficiencies upwards of 70% with payback's within five years on most new buildings. The perforated metal absorber is used to draw in heated fresh air off the surface of south-facing walls, where it is then distributed throughout the building as pre-heated ventilation air.

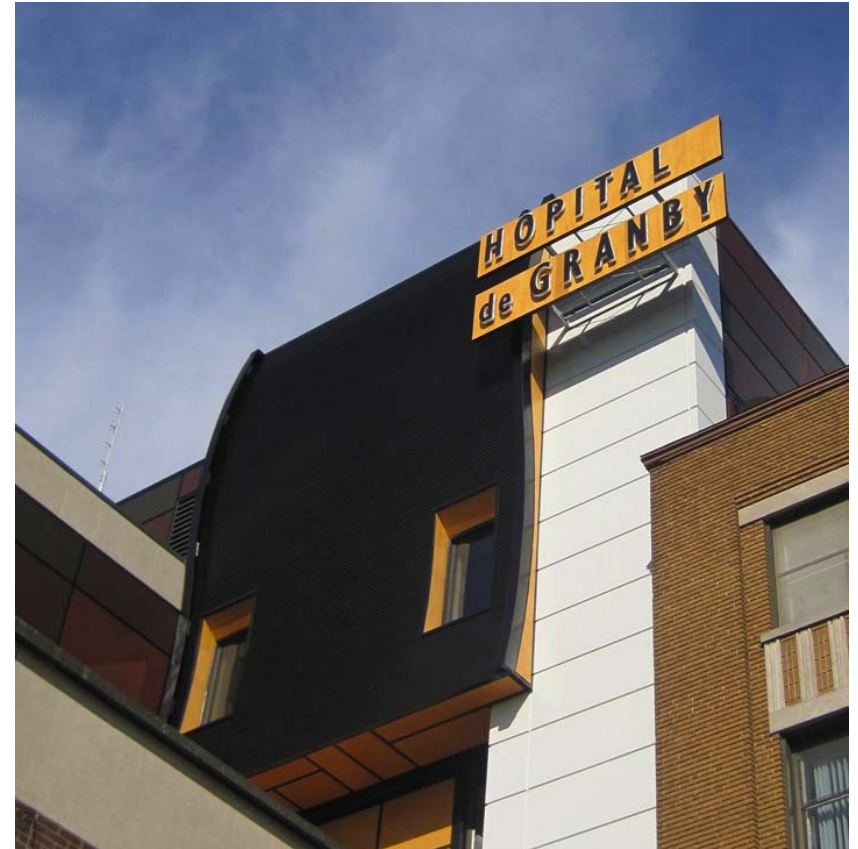


Photo: Matrix Energy

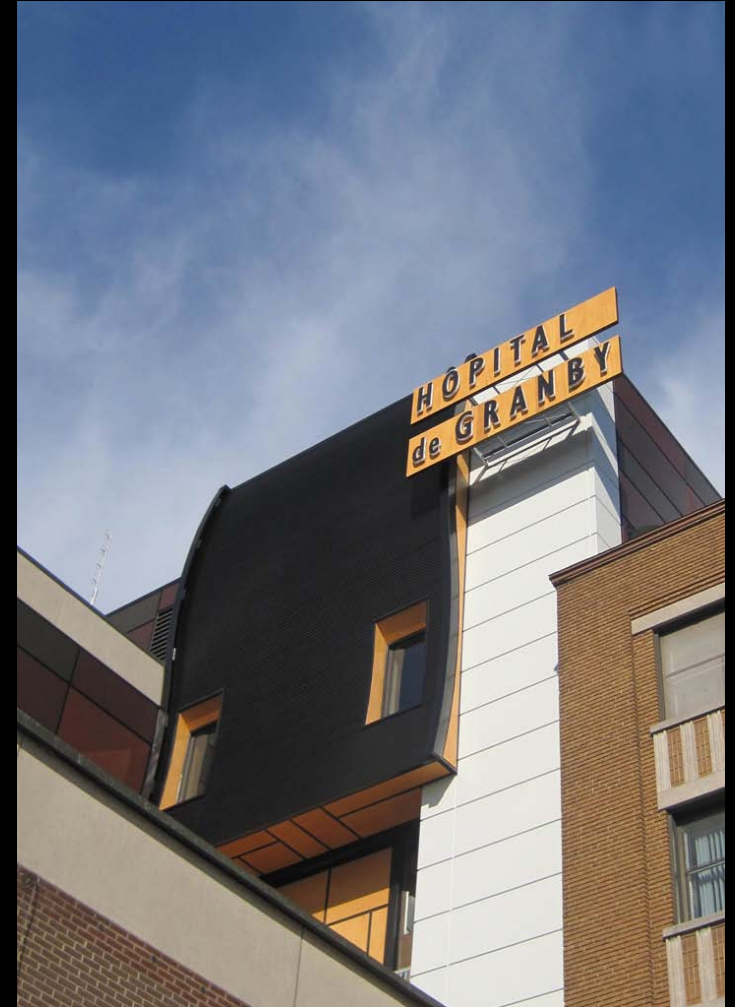
GALLERY



PHOTOS;

Matrix Energy

- Built/Completion:
2010
- Client:
Centre hospitalier de Gra
- Architect:
Favreau et Blais architectes
- Contractors:
EBC inc. / AECOM Tecslut Inc
- Engineering:
Teknika HBAs
- Address/Location:
205, boulevard Leclerc
Ouest Granby (Quebec)
J2G 1T7
- Type of project:
Institution



- Read more: <http://www.praa.qc.ca/en/projects/health/centre-hospitalier-de-granby.html>