



## HURON PERTH HEALTHCARE ALLIANCE STRATFORD GENERAL HOSPITAL

### CONSTRUCTION YEAR

2023

### HIGHLIGHTS

Annual Electricity Reduction =  
175 kWh/yr

Annual Natural Gas Reduction =  
7693 m3/yr

Annual Energy Reduction =  
81,388 ekWh/yr

Annual GHG Reduction =  
14 tons/yr

### EQUIVALENCY RESULTS

CO<sub>2</sub> Emissions From

4.284  
Passenger Vehicles

3.276  
Homes' Energy Use for One Year

9.366  
Homes' Electricity for One Year

### WEST BUILDING WINDOWS

The Stratford General Hospital (SGH), West Wing windows were at the end of life and required replacement. West Wing exterior wall assembly, constructed in the early 1950's, comprised clay face brick, clay tile back-up, built-up plaster finish and wood frame single glazed windows. The wood windows were rotting, leaking air, and experiencing condensation in the winter. The project removed existing windows and prepared openings to receive new thermally broken aluminum frames with gas filled insulated glazing units. New prefinished aluminum flashing and AVB membranes restrict water, vapour and air transmission.

### ENERGY & CARBON SAVINGS

The new aluminum window frames comply with CAN/CSA -A440 requirements for air leakage, water tightness and have a minimum U value of 0.38. The new IGU has a U value of 0.24 and a maximum 0.4. solar heat gain coefficient. The combination of flashing and AVB reduces air movement and heat loss. This results in significant improvements to the thermal performance of the exterior wall assembly. The new windows reduce the risk of mold and mildew growth, reducing the risk of hospital acquired infections.