



HURON PERTH HEALTHCARE ALLIANCE STRATFORD GENERAL HOSPITAL

CONSTRUCTION YEAR

2022

HIGHLIGHTS

Annual Electricity Reduction =
32 kWh/yr

Annual Natural Gas Reduction =
9096 m3/yr

Annual Energy Reduction =
96,056 ekWh/yr

Annual GHG Reduction =
17 tons/yr

EQUIVALENCY RESULTS

CO₂ Emissions From

5.202

Passenger Vehicles

3.978

Homes' Energy Use for One Year

11.373

Homes' Electricity for One Year

WEST BUILDING BRICK AND WINDOWS

Stratford General Hospital (SGH), West Wing Levels 5, 6 & 7 exterior wall assemblies were failing. Constructed in the 1950's, the wall assembly comprised clay face brick, clay tile back-up, built-up plaster finish and wood framed single glazed windows. The brick and tile walls were spalling, windows frames rotting, moisture and air leakage in the wall assembly. The project removed existing windows. Because the existing wall assembly was weakened by spalling, vertical structural steel studs span from perimeter slab edge to slab edge were installed with 6" mineral wool insulation between studs. The studs were faced with exterior sheathing, vapour permeable air barrier protected by metal siding supported by ISO Web clips. New thermally broken aluminium.

ENERGY & CARBON SAVINGS

The new aluminium 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 have a U value of 0.24 and a maximum 0.4. solar heat gain coefficient. The combination of flashing and AVB reduce 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 mould and mildew growth, reducing the risk of hospital acquired infections.