



SUNNYBROOK & WOMEN'S COLLEGE HEALTH SCIENCE CENTRE EXPANSION TORONTO, ONTARIO

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DESIGN AND CONSTRUCTION TEAM

OWNER:
Sunnybrook & Women's College
Health Science Centre

ARCHITECT:
Dunlop Farrow Architects

STEEL FRAMING ENGINEER:
Atkins + Van Groll Inc.

GENERAL CONTRACTOR:
Bonfield Construction

LIGHT STEEL FRAMING INSTALLER:
System Drywall

New Hospital Building has a Residential Feel



"The hospital needed a special unit to house a specific resident population. They were looking for a residential scaled building to provide the space and comfort necessary to treat specific behavioural residents."

Patients at any hospital want to feel comfortable. After all, it's their "home away from home" when being treated for an illness. Creating a residential feel to a commercial hospital building was the primary design objective of the architects involved with expansion of the Sunnybrook & Women's College Health Science Centre in Toronto. According to Mark Pitman, Design Project Manager for Dunlop Farrow Architects, "the hospital needed a special unit to house a specific resident population. They were looking for a residential scaled building to provide the space and comfort necessary to treat specific behavioural residents."

To accomplish the goal of a residential look, light steel framing (LSF) was selected for all of the building's framing, including the roof joists. Steel was the material of choice for all structural components and roofing of the 1,022 m² (11,000 ft²) building. "Although only one-storey, the building is attached to a three-storey hospital wing," explains Mark. "To separate the building from the hospital would have necessitated a separate fire route and fire safety system to the small building." As it was more economical to connect the two buildings, Mark explains the strategy was to "make the new addition a one-storey, non-combustible building. Light steel framing was used to retain the ratings, yet be used in a residential framed manner."

Atkins + Van Groll Inc., the steel framing engineers on the project, report that light gauge steel framing was used as the main roof framing and for both interior and exterior load-bearing

walls. "Aesthetically, light gauge steel allows both the interior and exterior of the building to appear as a residential building," says Raymond Van Groll. Emphasizing several advantages of using light gauge steel over other materials, he says, "It is a fast framing material so we can erect the building with greater speed. As well, the fabrication can be completed on site and the material is non-combustible and can easily be utilized for a sloped roof." Mark Pitman agrees. "The economics of the light steel framing made it attractive to use and it was faster to erect as we were able to treat it as a residential framed building."

The project construction began in April, 2000 and the new building was ready for occupancy in April, 2011. There is a great deal of pride among those associated with the project. Atkins + Van Groll Inc. report that they are "most proud of the space our firm created for the clerestory sloped roof." Dunlop Farrow Architects emphasize, "We are happy that we were able to achieve some high volume lighted spaces on the interior to make the surroundings less clinical and very comfortable for the residents."

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Light steel framing was used to create the clerestory sloped roof, which allowed the designers to achieve high volume lighted spaces for the interior to make the surroundings less clinical.



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