

Toronto's Humber River Hospital patients recover faster thanks to natural light and unobstructed views



North America's first fully digital hospital with individual control over patient room windows

Helps achieve sustainability goal of 40% less energy usage

Eliminates need for expensive motorized blind system

Humber River Hospital

Architect: HDR

General contractor: PCL

Glazier: Contract Glaziers, Inc.

Humber River Hospital (HRH), Toronto, ON, Canada

Reinventing patient care. It's the focus at Humber River Hospital, one of Canada's largest acute-care hospitals and the first fully digital hospital in North America. Integral to its vision of improving patient well-being, energy efficiency and environmental sustainability is 26,000 square feet of View Dynamic Glass.

Objectives HRH's goal is nothing short of revolutionizing patient care. "The new Humber River Hospital is a shared goal for a modern, high-quality hospital," says Mario Sergio, a former member of provincial parliament.

Part of HRH's aspiration is to have a patient-focused building design, eliminating the existing motorized blind system. Hospital design teams recognize that natural daylighting helps improve patients' sleep patterns and quality of sleep. Research also shows that exposure to natural light and views of the outdoors reduces patients' depression and agitation—and can even ease pain.

Hospital staff benefits, too, because natural light increases alertness and effectiveness, while decreasing fatigue and stress.

The hospital seeks to be a model of environmental sustainability. HRH's goal is to use 40 percent less energy than what is mandated by national energy standards to achieve an annual savings of \$1 per square foot in utility costs.

Solution As one of the largest installations of smart glass in the world, almost 26,000 square feet of View Dynamic Glass is installed using panels as large as 5-feet by 7-feet. The View Dynamic Glass ties into the hospital's building management system and View's intelligent controls automatically tint the glass

Team

Architect:
HDR

General contractor:
PCL

Glazier:
Contract Glaziers, Inc.

Glazing system

Project type:
New installation

System type:
Curtain Wall

Make and model:
Fulwal IV 6100 Series
Arctic Wall

IGU makeup

Overall thickness:
1"; 1¼"

Outboard lite:
6mm tempered clear with EC
on surface #2

Spacer:
½" black warm edge spacer

Inboard lite:
6mm tempered clear;
laminated



panels to maintain an optimum interior environment.

Outcome A successful building design meets both energy usage and patient-focused objectives. HRH is an energy-efficient, state-of-the-art digital hospital, providing a tranquil setting for patients, families and staff.

Payoffs

- Improves patient and staff wellness and the hospital experience
- Adjusts intelligently to prevent heat and glare
- Integrates into BMS
- Lowers energy use