



## UNIVERSITY OF WATERLOO HEALTH SCIENCES CAMPUS KITCHENER, ONTARIO

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ArcelorMittal Dofasco Steel Design, 2011)

### DESIGN AND CONSTRUCTION TEAM

CLIENT: University of Waterloo

#### ARCHITECTS:

Donna Johnston, Robbie Young +  
Wright/IBI Group Architects

#### IN ASSOCIATION WITH:

Siamak Hariri, Hariri Pontarini Architects

#### GENERAL CONTRACTOR:

Ball Construction

#### STRUCTURAL:

Halcrow Yolles Partnership Inc.

#### MECHANICAL: Stantec

#### ELECTRICAL: Crossey Engineering

LANDSCAPE: GSP Group Inc. with  
Claude Cormier from Montreal

STEEL CLADDING APPLICATOR/  
INSTALLER: Semple Gooder Roofing  
Corp.

STEEL CLADDING SUPPLIER:  
Andex Metal Products

STEEL DECK INSTALLER: Commercial  
Sheet Metal Inc.

LIGHT STEEL FRAMING SUPPLIER:  
Dietrich Metal Framing

LIGHT STEEL FRAMING INSTALLER -  
SCHOOL OF PHARMACY:  
System Drywall & Acoustics

LIGHT STEEL FRAMING INSTALLER -  
SCHOOL OF MEDICINE:  
CityMark Construction & Drywall Ltd.

## Steel Provides Foundation for Downtown Renewal



When civic officials in Kitchener, Ontario were looking to rejuvenate an ailing downtown eyesore, the medicine proved to be ingenuity, effort and a heavy dose of glass, stone and ArcelorMittal Dofasco's prepainted Galvalume steel. The 11,148m<sup>2</sup> (120,000 sq. ft.) University of Waterloo School of Pharmacy opened in 2009, anchoring a new Kitchener Health Sciences campus - and replacing an old rubber factory site.

The educational facility, located at King and Victoria Streets, also houses McMaster University's 5,602m<sup>2</sup> (60,300 sq. ft.) Michael G. DeGroot School of Medicine and UW's Integrated Primary Health Care Teaching Clinic.

"The cladding materials for the School of Pharmacy - the first phase and anchor building for the campus - really established the material palette for the site. Considerable discussion was held with the City of Kitchener, who had a financial as well as an urban renewal basis of interest in the project," explains architect Donna Johnston. The buildings were designed by Robbie Young + Wright/IBI Group Architects in joint venture with Hariri Pontarini Architects.

The steel cladding features a custom designed and fabricated louvered wall system, supplied by Andex Metal Products and installed by Semple Gooder Roofing Corporation. The material is Grade 33, .76mm (.0299") prepainted Galvalume QC2624. "In this particular situation, we needed a quick delivery of a unique product. It was easier and more cost effective based on the specifics of the project to utilize pre-finished steel, rather than fabricating and post-finishing aluminum," said Semple Gooder's Sven Lavado. The School of Pharmacy contains 1,347m<sup>2</sup> (14,500 sq. ft.) of the louvered cladding, while the School of Medicine has 557m<sup>2</sup> (6,000 sq. ft.)

of exterior cladding.

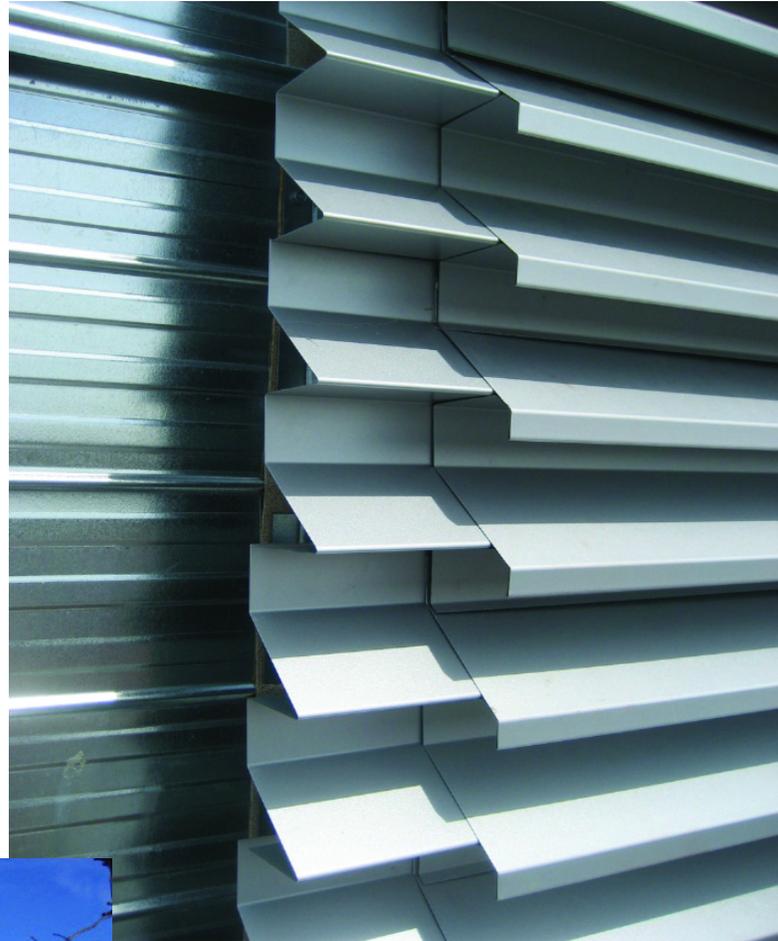
A combination of operable and inoperable louvers allow air passage for mechanical units. The louvers not only run horizontally, but are also applied vertically to give the cladding architectural strength. The pharmacy building is also covered with glass, decorated with colourful images of plants known for their medicinal qualities. The glass allows light to flood into lecture theatres, laboratories, classrooms and meeting rooms.

"I've never been on a more complicated job in my life. I was there for almost three years. It's just incredible inside; the steel, the glass, the detail is unbelievable," explains Ball Construction's Site Superintendent Claire Morwood. Morwood says every conceivable kind of steel stud was used, from 152.4mm to 41.3mm and 1.5mm to .46mm (6" to 1.625", .060" to .018") in thickness.

Commercial Sheet Metal Inc. installed the steel roof decking in both buildings, including 1,394m<sup>2</sup> (15,000 sq. ft.) of ZF075 galvalume deck 38.1mm, 1.22mm to 0.76mm (1.5", .048" to .0299") in thickness over the pharmacy building's fifth floor mechanical mezzanine and the third floor. As well, 76.2mm x 1.22mm (3" x .048") ZF075 galvalume roof deck was installed on the School of Medicine building.



The material is 22 gauge Silver Metallic QC 18624 for the Louvered Wall System and Splices, Notched Z bars are 18 gauge Galvanized G-90 and the AL315 liner panel is 24 gauge Galvanized G-90. There are louvered openings as well as both vertical and horizontal solid wall sections.



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The design concept for this site was two "L" shaped buildings, wrapped around an internal courtyard. The School of Pharmacy, as the anchor building to the campus, establishes a significant presence through the tower element, but relieves a sense of weight through significant transparency and a high level of surface detail.



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- Claire Morwood, Ball Construction



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