



F17.1

MANITOBA HYDRO PLACE

WINNIPEG, AB

Client: Manitoba Hydro

Design Architect: Kuwabara Payne McKenna Blumberg

Executive Architect: Smith Carter Architects and Engineers Inc.

My friend and colleague Graham McGarva, who is both a poet and a principal at VIA Architecture in Vancouver, has a gift for distilling his more than 30 years of urban planning experience into thought provoking epigrams. One of my favourites is ‘the right building in the wrong place, is the wrong building!’ This is not a criticism that could be levelled at Manitoba Hydro Place in Winnipeg. Given the generally unadventurous nature of our corporate architecture, and the dispersed character of Prairie cities in particular, this is manifestly the right building in the right place (F17.1).

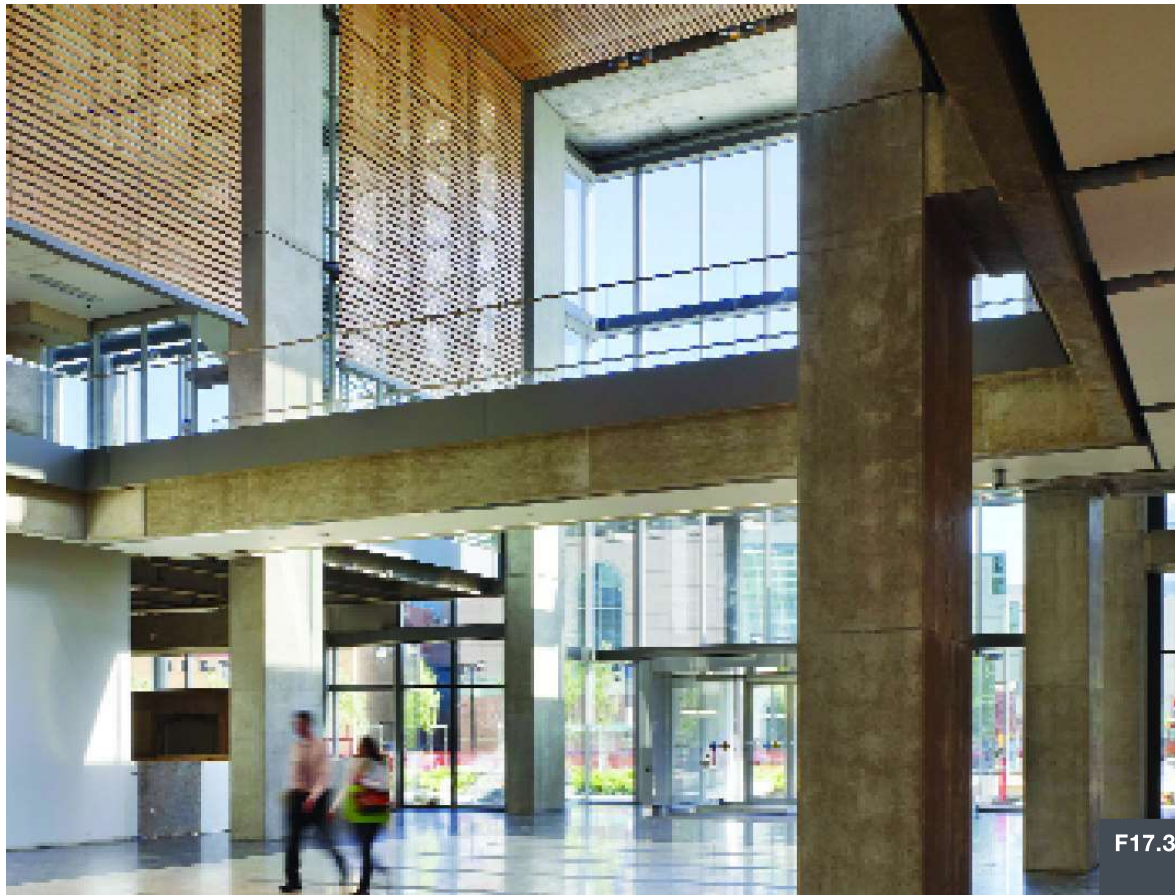


Floor plan: East and west faces have double-skin facade with occupant-controlled natural ventilation

- Contained spaces: 8'-0" demountable solid and glass partitions
- Enclosed spaces: 8'-0" demountable solid and glass partitions with glass transoms to ceiling
- Atria: North/south multiple floors atrium with connection stairs
- Core: Elevators, services and storage
- Open work stations: 50" tall panels

F17.2

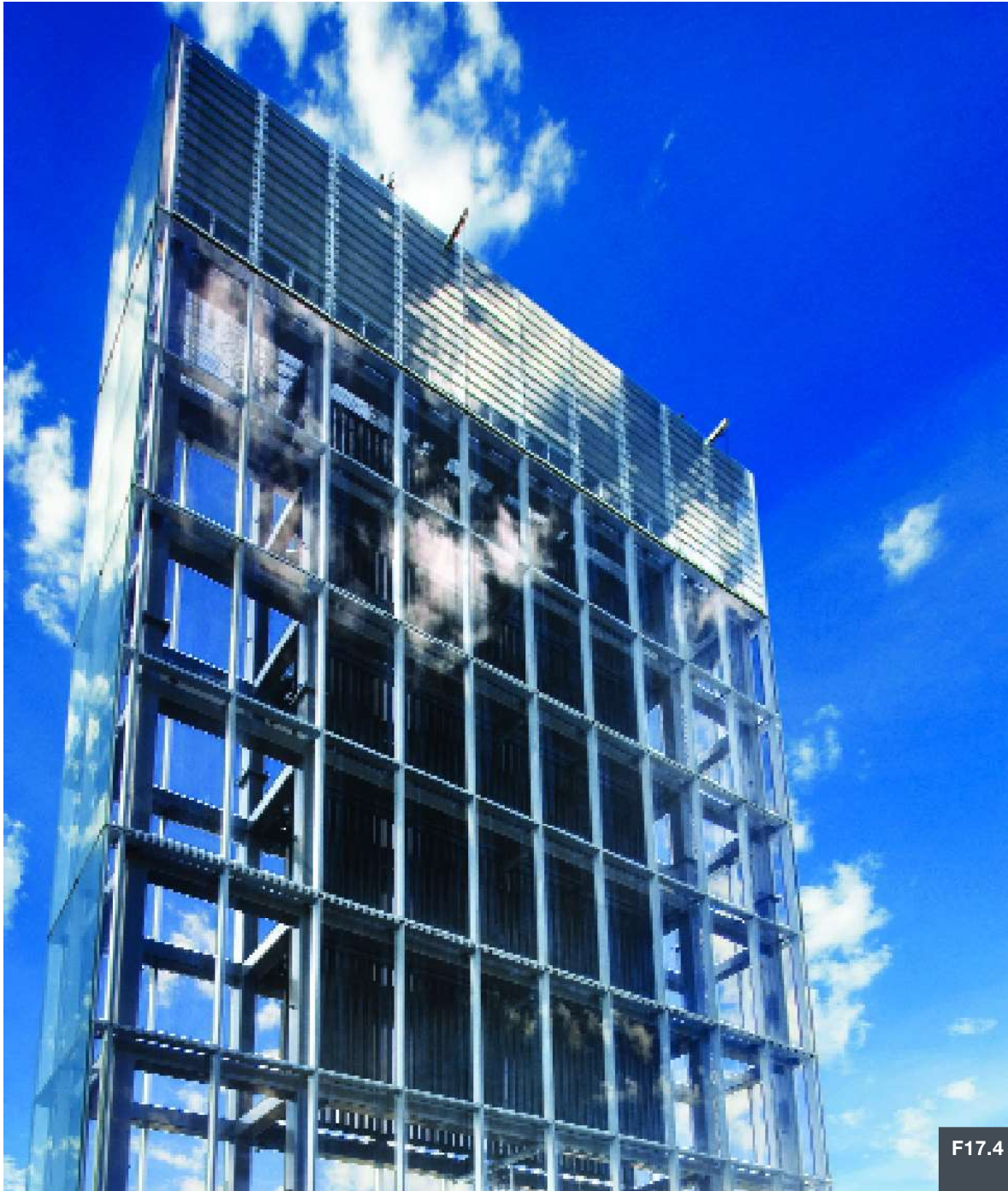
Completed in 2009, the quality and scale of the project can be seen as a first step toward reviving the intensity and dynamism of the city's Downtown, once dubbed 'the Chicago of the North.'



F17.3

The new 65,000m², 22-storey headquarters for the provincial energy utility occupies a full block in the centre of Winnipeg (F17.2), a city legendary in Canada for both its extreme climate and (perhaps born of necessity) the indomitable spirit of its citizens.

Conceived through an integrated design process, the form, orientation and massing of the building directly respond to the climate. The 'flat iron' plan comprises twin 18-storey office towers set at an angle to one another, atop a three-storey brick clad podium that respects the scale and materiality of the city's historic fabric. The podium is bisected by a public galleria that creates a sheltered route through the full city block (F17.3).

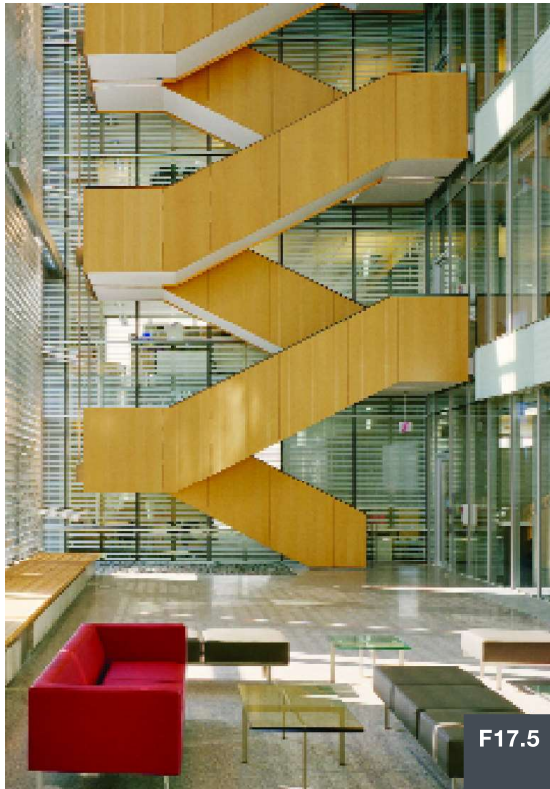


F17.4

The towers are clad in a double skin of glass; a fixed double pane outer layer and an operable single pane inner layer. At the north end of the site, the two towers converge in a solar chimney that drives the natural ventilation system — providing heating in winter and cooling in summer (F17.4). This convergence also minimizes the northern exposure of the building, whereas at the south end the towers splay out to create a light filled winter garden (F17.5). This is one of several social spaces in the building where employees can come to relax, hold informal meetings, eat lunch or take part in a variety of recreational activities (F17.6 and 17.7).

In 2012, I had the privilege of a personal tour of the building with Tom Akerstream, Manitoba Hydro's Manager of Corporate Facilities. At that time, he had just learned that the building was performing better than expected. Design models had predicted an energy intensity of 100KWh per square metre per year, a figure that would already have made Manitoba Hydro Place one of the best performing commercial buildings in North America. In fact, actual numbers after two full years in operation were 15% lower than that.

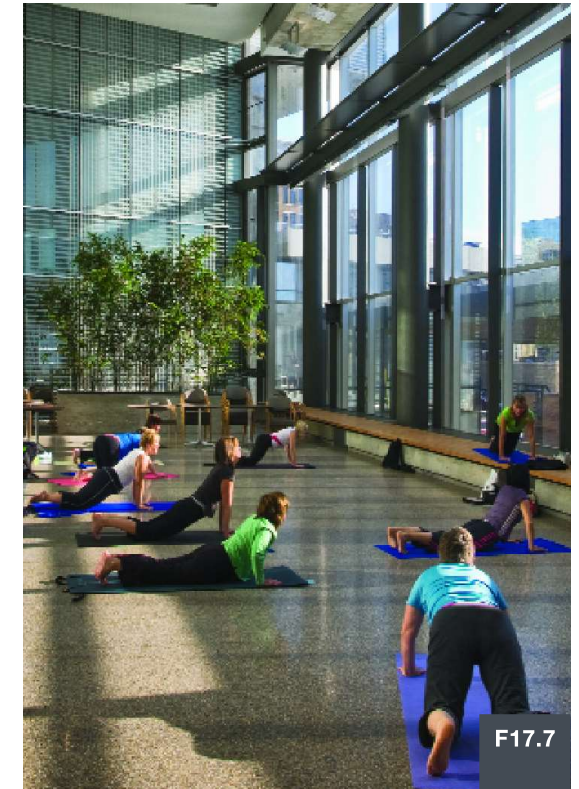
The savings are not simply seen in lower utility bills, however, but also in significantly reduced maintenance costs; as Akerstream observes, "displacement ventilation and other passive systems have few if any moving parts to break down." This of course translates into reduced greenhouse gas emissions from building operations, and improved life cycle performance.



F17.5



F17.6



F17.7

Equally important however is the reduced carbon footprint of the building occupants, that is the direct result of Manitoba Hydro's move from a suburban to a Downtown location. According to Akerstream, 90% of employees drove a vehicle to work at the previous premises, while a full 70% now take transit to the new location. In addition, another 5% ride bicycles, some of them year round. These statistics underscore the importance of Manitoba Hydro's initial decision to find 'the right place' before it even began to design 'the right building'. With one end of the galleria opening out to Portage Avenue and the other to Graham Avenue, employees have access to 95% of the city via transit that passes by one door or the other.

The galleria itself, with its water features and abundant natural light, is an attractive space for public gatherings and special occasions. With a capacity of 1000 people, it is made available at no charge to community organizations for fundraisers, socials and other events.

Last but certainly not least, Manitoba Hydro Place has brought more than 2000 additional people to the heart of Downtown five days per week, a critical mass that is beginning to have positive ripple effects: fewer 'For Lease' signs in the storefronts of Portage Avenue, and more fences going up around construction sites large and small. With the Winnipeg Jets hockey team back in action just a block away, the city will be taking on Chicago (and a few other big names) once again.