

Commodity Exchange Tower

OWNER: Oxford Properties

LOCATION: Winnipeg, MB

COMPLETION DATE: 1979

DESIGN TEAM:

- Mechanical Consultants**
MCW/AGE Consulting
Professional Engineers
- Electrical Consultants**
MCW/AGE Consulting
Professional Engineers
- Architect**
Smith Carter Architects



PROJECT DESCRIPTION:

- 774,944 sq. foot class A office tower with vaulted ceiling system for 30 story tower above grade, two parking levels below grade and one commercial level near grade. MCW/AGE Engineers were the base build engineer as well as tenant fit-up Engineers for the project.

PROJECT FEATURES:

- Vaulted lighting system provided a quality illumination system based on loading 1.4 watts/sq.ft.
- Central bus duct risers to ensure quality power maintained within acceptable voltage characteristics.

MECHANICAL INNOVATION:

- Mechanical systems addressed a low lighting wattage along with 1.5 watts/ft² for miscellaneous loads.
- The lighting ballast loads are utilized through the integral floor by floor system to heat the varying outside air quantity which provides minimum 20 CFM/person.
- The total mechanical system electrical consumption is 10% or less than the total building demand.
- The use of fossil fuel is limited as the lights are planned to be left on during low ambient conditions as a heating source.
- Reclaim is applied to the exhaust air along with adiabatic cooling (humidification) in the makeup system.
- The building is presently one of the most energy efficient office buildings in Winnipeg.