

WINNIPEG ART GALLERY MECHANICAL AND ELECTRICAL SERVICES

Winnipeg, Manitoba



Project Description

In 2003, KGS Group were retained by Winnipeg Art Gallery as their Mechanical & Electrical engineering consultant for ongoing upgrading and modernization to the building systems. To date, this work has included:

- **Conservation Lab Ventilation Upgrade** - The HVAC system for the Conservation Lab was renovated to improve its effectiveness and energy efficiency, including a new walk-in paint booth specifically designed for preserving artwork, design of exhaust system improvements and new ventilation control system.
- **Precious Metals and Artwork Vault HVAC and Controls Upgrade** - The vaults at the Art gallery are used to store precious metals and artwork when these items are not on display. KGS designed upgrades to the HVAC systems serving these vaults. Upgrades included: redesign of the HVAC system and the provision of new humidifiers for the 3 vaults; provision of a new environmental control unit for the precious metals vault; new DDC temperature and humidity controls for the 3 vaults; and environmental monitoring of temperature and humidity.
- **Art Gallery DDC Control Upgrade** - KGS designed the new DDC for air handling units, boilers, space heating system, chilled water system, pumps and environmental controls in the art display galleries
- **WAG Mechanical Systems Upgrade** – Ongoing work includes a comprehensive plan to improve energy efficiency and performance of the building mechanical systems, including a new high efficiency steam boiler, implementation of a chiller heat reclaim system, conversion of humidification systems to pure steam using reverse-osmosis water steam generators, replacement of existing steam boilers and steam converters with high efficiency hot water boilers, replacement of existing domestic water heating equipment with a higher efficiency system, and fire protection upgrades.
- **Vault Fire Protection System** - KGS designed a new fire detection and 2000 psi “Hi-Fog” fire suppression system (fine water mist) for the 3 art storage vaults at the Art Gallery.
- **Security System Upgrade**